

PINES_tutorial-SOLVED

October 29, 2024

Permutationally Invariant Network for Enhanced Sampling (PINES)

0.1 Importing necessary packages

```
[1]: import os
import re
import subprocess
from pathlib import Path

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from scipy import optimize
import torch
```

A simple helper class for changing directories

```
[2]: class cd:
    """Context manager for changing the current working directory"""
    def __init__(self, newPath):
        self.newPath = Path(newPath)
    def __enter__(self):
        self.savedPath = Path.cwd()
        try:
            os.chdir(self.newPath)
        except:
            raise ValueError("Path does not exist.")
    def __exit__(self, etype, value, traceback):
        os.chdir(self.savedPath)
```

0.2 Setting up path variables

```
[3]: PLUMED_EXEC = Path("export PLUMED_ROOT=/project/andrewferguson/armin/grom_new/
↳plumed-2.8.3; \
export PATH=/project/andrewferguson/armin/grom_new/plumed-2.8.3/build_gpu2/
↳bin:$PATH; \
export PKG_CONFIG_PATH=/project/andrewferguson/armin/grom_new/plumed-2.8.3/
↳build_gpu2/lib/pkgconfig:$PKG_CONFIG_PATH; \
```

```

export LD_LIBRARY_PATH=/project/andrewferguson/armin/grom_new/plumed-2.8.3/
↪build_gpu2/lib:$LD_LIBRARY_PATH; \
export LIBRARY_PATH=/project/andrewferguson/armin/grom_new/plumed-2.8.3/
↪build_gpu2/lib:$LIBRARY_PATH; \
export CPATH=/project/andrewferguson/armin/grom_new/plumed-2.8.3/build_gpu2/
↪include:$CPATH; \
export PLUMED_KERNEL=/project/andrewferguson/armin/grom_new/plumed-2.8.3/
↪build_gpu2/lib/libplumedKernel.so; \
plumed")
GMX_EXEC = Path("source /project/andrewferguson/armin/grom_new/gromacs-2021.6/
↪installed-files-gpu2/bin/GMXRC; gmx")
BASE_DIR = Path("/project2/andrewferguson/armin/pines_tutorial/notebooks/").
↪parent # where this notebook is

```

Making sure we start from BASE_DIR

```

[4]: os.chdir(BASE_DIR)
     print(os.getcwd())

```

/project2/andrewferguson/armin/pines_tutorial

0.3 1_solvate

We will use GROMACS's built-in solvate program to create a box of water.

```

[5]: SOLVATE_DIR = BASE_DIR/"data-SOLVED"/"0.unbiased"/"1_solvate"

[6]: subprocess.run(f"{GMX_EXEC} solvate -cs spc216.gro -box 2.5 -o {SOLVATE_DIR}/
     ↪box.gro -p {SOLVATE_DIR}/topol.top"
     , shell=True)

```

WARNING: Masses and atomic (Van der Waals) radii will be guessed based on residue and atom names, since they could not be definitively assigned from the information in your input files. These guessed numbers might deviate from the mass and radius of the atom type. Please check the output files if necessary.

NOTE: From version 5.0 gmx solvate uses the Van der Waals radii from the source below. This means the results may be different compared to previous GROMACS versions.

++++ PLEASE READ AND CITE THE FOLLOWING REFERENCE ++++

A. Bondi

van der Waals Volumes and Radii

J. Phys. Chem. 68 (1964) pp. 441-451

----- Thank You -----

Adding line for 510 solvent molecules with resname (SOL) to topology file
(/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/topol.top)

: -) GROMACS - gmx solvate, 2021.6-plumed-2.8.3 (-:

GROMACS is written by:

Andrey Alekseenko	Emile Apol	Rossen Apostolov
Paul Bauer	Herman J.C. Berendsen	Par Bjelkmar
Christian Blau	Viacheslav Bolnykh	Kevin Boyd
Aldert van Buuren	Rudi van Drunen	Anton Feenstra
Gilles Gouaillardet	Alan Gray	Gerrit Groenhof
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Christian Wennberg	Maarten Wolf	Artem Zhmurov

and the project leaders:

Mark Abraham, Berk Hess, Erik Lindahl, and David van der Spoel

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GROMACS: gmx solvate, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial

Command line:

gmx solvate -cs spc216.gro -box 2.5 -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/box.gro -p
/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/topol.top

Reading solvent configuration

Initialising inter-atomic distances...

Generating solvent configuration

Will generate new solvent configuration of 2x2x2 boxes

Solvent box contains 2181 atoms in 727 residues

Removed 651 solvent atoms due to solvent-solvent overlap

Sorting configuration

Found 1 molecule type:

SOL (3 atoms): 510 residues

Generated solvent containing 1530 atoms in 510 residues

Writing generated configuration to

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/box.gro

Output configuration contains 1530 atoms in 510 residues

Volume : 15.625 (nm³)

Density : 976.435 (g/l)

Number of solvent molecules: 510

Processing topology

Back Off! I just backed up /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/topol.top to

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/#topol.top.1#

GROMACS reminds you: "Ich war schwanger, mir gings zum kotzen" (Nina Hagen)

```
[6]: CompletedProcess(args='source
/project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-
gpu2/bin/GMXRC; gmx solvate -cs spc216.gro -box 2.5 -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/box.gro -p
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/topol.top', returncode=0)
```

Add a single pair of Na⁺ and Cl⁺ ions to the water box with genion

```
[7]: subprocess.run(f"{GMX_EXEC} grompp -f {SOLVATE_DIR}/ions.mdp -c {SOLVATE_DIR}/
↳ box.gro -p {SOLVATE_DIR}/topol.top -o {SOLVATE_DIR}/ions.tpr -maxwarn 2",
↳ shell=True)
subprocess.run(f""{GMX_EXEC} genion -s {SOLVATE_DIR}/ions.tpr -o {SOLVATE_DIR}/
↳ ions.gro -p {SOLVATE_DIR}/topol.top -pname NA -nname CL -np 1 -nn 1 << EOF
SOL
```

```
EOF""", shell=True)
```

Setting the LD random seed to -153211410

Generated 2211 of the 2211 non-bonded parameter combinations

Generated 2211 of the 2211 1-4 parameter combinations

Excluding 2 bonded neighbours molecule type 'SOL'

Analysing residue names:

There are: 510 Water residues

This run will generate roughly 0 Mb of data

Will try to add 1 NA ions and 1 CL ions.

Select a continuous group of solvent molecules

Selected 2: 'SOL'

Processing topology

Replacing 2 solute molecules in topology file

(/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/1_solvate/topol.top) by 1 NA and 1 CL ions.

: -) GROMACS - gmx grompp, 2021.6-plumed-2.8.3 (-:

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```
GROMACS:      gmx grompp, version 2021.6-plumed-2.8.3
Executable:   /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx
Data prefix:  /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2
Working dir:   /project2/andrewferguson/armin/pines_tutorial
Command line:
  gmx grompp -f /project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/ions.mdp -c
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/box.gro -p
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/topol.top -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/ions.tpr -maxwarn 2
```

Ignoring obsolete mdp entry 'ns_type'

NOTE 1 [file /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/1_solvate/ions.mdp]:

With Verlet lists the optimal nstlist is ≥ 10 , with GPUs ≥ 20 . Note that with the Verlet scheme, nstlist has no effect on the accuracy of your simulation.

Generating 1-4 interactions: fudge = 0.5

Number of degrees of freedom in T-Coupling group rest is 3057.00

NOTE 2 [file /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/1_solvate/ions.mdp]:

You are using a plain Coulomb cut-off, which might produce artifacts. You might want to consider using PME electrostatics.

There were 2 notes

GROMACS reminds you: "Product of optimism and knowledge is a constant." (Lev Landau)

:-) GROMACS - gmx genion, 2021.6-plumed-2.8.3 (-:

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GROMACS: gmx genion, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial

Command line:

gmx genion -s /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/ions.tpr -o

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/ions.gro -p

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/topol.top -pname NA -nname CL -np 1 -nn 1

Reading file /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/ions.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

Reading file /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/1_solvate/ions.tpr, VERSION 2021.6-plumed-2.8.3 (single

```
precision)
Group      0 (          System) has 1530 elements
Group      1 (          Water) has 1530 elements
Group      2 (          SOL) has 1530 elements
Select a group: Number of (3-atomic) solvent molecules: 510
```

```
Back Off! I just backed up /project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/topol.top to
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/#topol.top.2#
Using random seed -135023184.
Replacing solvent molecule 193 (atom 579) with NA
Replacing solvent molecule 274 (atom 822) with CL
```

GROMACS reminds you: "Product of optimism and knowledge is a constant." (Lev Landau)

```
[7]: CompletedProcess(args='source
/project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-
gpu2/bin/GMXRC; gmx genion -s
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/ions.tpr -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/ions.gro -p
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/1_solvate/topol.top -pname NA -nname CL -np 1 -nn 1 <<
EOF\nSOL\nEOF', returncode=0)
```

0.4 2_em

Minimize the structure of the simulation box we just created to relax non-physical structures.

```
[8]: EM_DIR = BASE_DIR/"data-SOLVED"/"0.unbiased"/"2_em"
```

```
[9]: subprocess.run(f"cp {SOLVATE_DIR}/ions.gro {SOLVATE_DIR}/topol.top {EM_DIR}/.",
    ↪shell=True)
subprocess.run(f"{GMX_EXEC} grompp -f {EM_DIR}/em.mdp -c {EM_DIR}/ions.gro -p
    ↪{EM_DIR}/topol.top -o {EM_DIR}/em.tpr -maxwarn 3", shell=True)
with cd(f"{EM_DIR}"):
    subprocess.run(f"{GMX_EXEC} mdrun -deffnm em", shell=True)
```

```
:-) GROMACS - gmx grompp, 2021.6-plumed-2.8.3 (-:
```

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GROMACS: gmX grompp, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial

Command line:

gmX grompp -f /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/2_em/em.mdp -c

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/2_em/ions.gro -p

/project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/2_em/topol.top -o

/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/2_em/em.tpr

-maxwarn 3

Ignoring obsolete mdp entry 'ns_type'

NOTE 1 [file /project2/andrewferguson/armin/pines_tutorial/data-

SOLVED/0.unbiased/2_em/em.mdp]:

With Verlet lists the optimal nstlist is ≥ 10 , with GPUs ≥ 20 . Note

that with the Verlet scheme, nstlist has no effect on the accuracy of your simulation.

Generating 1-4 interactions: fudge = 0.5

Number of degrees of freedom in T-Coupling group rest is 3051.00

There was 1 note

GROMACS reminds you: "Two chemists walk into a bar. The first one says, 'I'll have some H2O.'. The second one says, 'I'll have some H2O, too'. He dies."
(Anonymous)

:-) GROMACS - gmx mdrun, 2021.6-plumed-2.8.3 (-:

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GROMACS: gmx mdrun, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-

files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/2_em

Command line:

gmx mdrun -deffnm em

Setting the LD random seed to -234887313

Generated 2211 of the 2211 non-bonded parameter combinations

Generated 2211 of the 2211 1-4 parameter combinations

Excluding 2 bonded neighbours molecule type 'SOL'

Excluding 1 bonded neighbours molecule type 'NA'

Excluding 1 bonded neighbours molecule type 'CL'

Analysing residue names:

There are: 508 Water residues

There are: 2 Ion residues

Analysing residues not classified as Protein/DNA/RNA/Water and splitting into groups...

Calculating fourier grid dimensions for X Y Z

Using a fourier grid of 24x24x24, spacing 0.104 0.104 0.104

Estimate for the relative computational load of the PME mesh part: 0.27

This run will generate roughly 0 Mb of data

Reading file em.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

NOTE: Parallelization is limited by the small number of atoms,
only starting 4 thread-MPI ranks.

You can use the -nt and/or -ntmpi option to optimize the number of threads.

On host midway2-gpu03.rcc.local 4 GPUs selected for this run.

Mapping of GPU IDs to the 4 GPU tasks in the 4 ranks on this node:

PP:0,PP:1,PP:2,PP:3

PP tasks will do (non-perturbed) short-ranged interactions on the GPU

PP task will update and constrain coordinates on the CPU

Using 4 MPI threads

Using 7 OpenMP threads per tMPI thread

Steepest Descents:

Tolerance (Fmax) = 1.00000e+03

Number of steps = 50000

writing lowest energy coordinates.

Steepest Descents converged to Fmax < 1000 in 7 steps

Potential Energy = -1.8051125e+04

Maximum force = 9.7990253e+02 on atom 1525

Norm of force = 2.0293395e+02

GROMACS reminds you: "The difficulty lies, not in the new ideas, but in escaping the old ones." (John Maynard Keynes)

100 ps NVT equilibration run

```
[10]: subprocess.run(f"{GMX_EXEC} grompp -f {EM_DIR}/nvt.mdp -c {EM_DIR}/em.gro -p {EM_DIR}/topol.top -o {EM_DIR}/nvt.tpr -maxwarn 3", shell=True)
with cd(f"{EM_DIR}"):
    subprocess.run(f"{GMX_EXEC} mdrun -deffnm nvt", shell=True)

# creating the reference PDB file
subprocess.run(f"{GMX_EXEC} editconf -f {EM_DIR}/nvt.gro -o {EM_DIR}/nvt.pdb", shell=True)
```

:-) GROMACS - gmX grompp, 2021.6-plumed-2.8.3 (-:

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```
GROMACS:      gmx grompp, version 2021.6-plumed-2.8.3
Executable:   /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx
Data prefix:  /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2
Working dir:   /project2/andrewferguson/armin/pines_tutorial
Command line:
  gmx grompp -f /project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.mdp -c
/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/2_em/em.gro
-p /project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/topol.top -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.tpr -maxwarn 3
```

```
Ignoring obsolete mdp entry 'title'
Ignoring obsolete mdp entry 'ns_type'
Generating 1-4 interactions: fudge = 0.5
```

NOTE 1 [file unknown]:

You are using constraints on all bonds, whereas the forcefield has been parametrized only with constraints involving hydrogen atoms. We suggest using constraints = h-bonds instead, this will also improve performance.

Number of degrees of freedom in T-Coupling group Water_and_ions is 3051.00

There was 1 note

GROMACS reminds you: "Same sex marriage is not a gay privilege, it's equal rights. Privilege would be something like gay people not paying taxes. Like churches don't." (Ricky Gervais)

:-) GROMACS - gmx mdrun, 2021.6-plumed-2.8.3 (-:

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GROMACS: gmxdrun, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmxdrun

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/2_em

Command line:

gmxdrun -deffnm nvt

Setting the LD random seed to -1479090214

Generated 2211 of the 2211 non-bonded parameter combinations

Generated 2211 of the 2211 1-4 parameter combinations

Excluding 2 bonded neighbours molecule type 'SOL'

turning all bonds into constraints...

Excluding 1 bonded neighbours molecule type 'NA'

turning all bonds into constraints...

Excluding 1 bonded neighbours molecule type 'CL'

turning all bonds into constraints...

Setting gen_seed to 536270843

Velocities were taken from a Maxwell distribution at 300 K

Analysing residue names:

There are: 508 Water residues

There are: 2 Ion residues

Analysing residues not classified as Protein/DNA/RNA/Water and splitting into groups...

Determining Verlet buffer for a tolerance of 0.005 kJ/mol/ps at 300 K

Calculated rlist for 1x1 atom pair-list as 1.035 nm, buffer size 0.035 nm

Set rlist, assuming 4x4 atom pair-list, to 1.000 nm, buffer size 0.000 nm

Note that mdrun will redetermine rlist based on the actual pair-list setup

Calculating fourier grid dimensions for X Y Z

Using a fourier grid of 16x16x16, spacing 0.156 0.156 0.156

Estimate for the relative computational load of the PME mesh part: 0.22

This run will generate roughly 4 Mb of data

Reading file nvt.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

NOTE: Parallelization is limited by the small number of atoms,
only starting 4 thread-MPI ranks.

You can use the -nt and/or -ntmpi option to optimize the number of threads.

Changing nstlist from 10 to 100, rlist from 1 to 1.16

On host midway2-gpu03.rcc.local 4 GPUs selected for this run.

Mapping of GPU IDs to the 4 GPU tasks in the 4 ranks on this node:

PP:0,PP:1,PP:2,PP:3

PP tasks will do (non-perturbed) short-ranged interactions on the GPU

PP task will update and constrain coordinates on the CPU

Using 4 MPI threads

Using 7 OpenMP threads per tMPI thread

NOTE: DLB will not turn on during the first phase of PME tuning
starting mdrun 'Ion pair in solution in water'

50000 steps, 100.0 ps.

NOTE: DLB can now turn on, when beneficial

Writing final coordinates.

Dynamic load balancing report:

DLB was off during the run due to low measured imbalance.

Average load imbalance: 1.2%.

The balanceable part of the MD step is 51%, load imbalance is computed from this.

Part of the total run time spent waiting due to load imbalance: 0.6%.

	Core t (s)	Wall t (s)	(%)
Time:	307.625	10.987	2799.9
	(ns/day)	(hour/ns)	
Performance:	786.397	0.031	

Note that major changes are planned in future for editconf, to improve usability and utility.

Read 1526 atoms

Volume: 15.625 nm³, corresponds to roughly 7000 electrons

Velocities found

GROMACS reminds you: "Good Music Saves your Soul" (Lemmy)

:~) GROMACS - gmx editconf, 2021.6-plumed-2.8.3 (~:

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```
GROMACS:      gmx editconf, version 2021.6-plumed-2.8.3
Executable:   /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx
Data prefix:  /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2
Working dir:  /project2/andrewferguson/armin/pines_tutorial
Command line:
  gmx editconf -f /project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.gro -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.pdb
```

GROMACS reminds you: "Good Music Saves your Soul" (Lemmy)

```
[10]: CompletedProcess(args='source
/project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-
gpu2/bin/GMXRC; gmx editconf -f
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.gro -o
/project2/andrewferguson/armin/pines_tutorial/data-
SOLVED/0.unbiased/2_em/nvt.pdb', returncode=0)
```

0.5 2_md

50 ns NVT production run for seeding the autoencoder

```
[11]: MD_DIR = BASE_DIR/"data-SOLVED"/"0.unbiased"/"3_md"
```

```
[12]: subprocess.run(f"cp {EM_DIR}/nvt.gro {EM_DIR}/nvt.cpt {EM_DIR}/topol.top
↳{MD_DIR}/.", shell=True)
subprocess.run(f"{GMX_EXEC} grompp -f {MD_DIR}/md.mdp -c {MD_DIR}/nvt.gro -t
↳{MD_DIR}/nvt.cpt -p {MD_DIR}/topol.top -o {MD_DIR}/md.tpr -maxwarn 2",
↳shell=True)
with cd(f"{MD_DIR}"):

```

```
subprocess.run(f"{GMX_EXEC} mdrun -deffnm md", shell=True)
```

```
:-) GROMACS - gmx grompp, 2021.6-plumed-2.8.3 (-:
```

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GROMACS: gmx grompp, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial

Command line:

```
gmx grompp -f /project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/md.mdp -c  
/project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/nvt.gro -t  
/project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/nvt.cpt -p
```

```
/project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/topol.top -o  
/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/3_md/md.tpr  
-maxwarn 2
```

```
Ignoring obsolete mdp entry 'title'  
Ignoring obsolete mdp entry 'ns_type'  
Generating 1-4 interactions: fudge = 0.5  
Number of degrees of freedom in T-Coupling group Water_and_ions is 3051.00
```

```
Last frame          -1 time 100.000
```

GROMACS reminds you: "Every electron is sacred." (Greg McMullan, on Cryo-EM detectors)

:-) GROMACS - gmx mdrun, 2021.6-plumed-2.8.3 (-:

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GROMACS: gmx mdrun, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx
Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2
Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/3_md
Command line:
gmx mdrun -deffnm md

Setting the LD random seed to -17249

Generated 2211 of the 2211 non-bonded parameter combinations

Generated 2211 of the 2211 1-4 parameter combinations

Excluding 2 bonded neighbours molecule type 'SOL'

turning H bonds into constraints...

Excluding 1 bonded neighbours molecule type 'NA'

turning H bonds into constraints...

Excluding 1 bonded neighbours molecule type 'CL'

turning H bonds into constraints...

Analysing residue names:

There are: 508 Water residues

There are: 2 Ion residues

Analysing residues not classified as Protein/DNA/RNA/Water and splitting into groups...

Determining Verlet buffer for a tolerance of 0.005 kJ/mol/ps at 300 K

Calculated rlist for 1x1 atom pair-list as 1.035 nm, buffer size 0.035 nm

Set rlist, assuming 4x4 atom pair-list, to 1.000 nm, buffer size 0.000 nm

Note that mdrun will redetermine rlist based on the actual pair-list setup

Reading Coordinates, Velocities and Box size from old trajectory

Will read whole trajectory

Using frame at t = 100 ps

Starting time for run is 0 ps

Calculating fourier grid dimensions for X Y Z

Using a fourier grid of 16x16x16, spacing 0.156 0.156 0.156

Estimate for the relative computational load of the PME mesh part: 0.22

This run will generate roughly 141 Mb of data

Reading file md.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

NOTE: Parallelization is limited by the small number of atoms,
only starting 4 thread-MPI ranks.

You can use the -nt and/or -ntmpi option to optimize the number of
threads.

Changing nstlist from 10 to 100, rlist from 1 to 1.16

On host midway2-gpu03.rcc.local 4 GPUs selected for this run.

Mapping of GPU IDs to the 4 GPU tasks in the 4 ranks on this node:

PP:0,PP:1,PP:2,PP:3

PP tasks will do (non-perturbed) short-ranged interactions on the GPU

PP task will update and constrain coordinates on the CPU

Using 4 MPI threads

Using 7 OpenMP threads per tMPI thread

NOTE: DLB will not turn on during the first phase of PME tuning
starting mdrun 'Ion pair in solution in water'
12500000 steps, 25000.0 ps.

NOTE: DLB can now turn on, when beneficial

Writing final coordinates.

Dynamic load balancing report:

DLB was off during the run due to low measured imbalance.

Average load imbalance: 1.1%.

The balanceable part of the MD step is 58%, load imbalance is computed from
this.

Part of the total run time spent waiting due to load imbalance: 0.6%.

	Core t (s)	Wall t (s)	(%)
Time:	73412.052	2621.859	2800.0
	43:41		
	(ns/day)	(hour/ns)	
Performance:	823.843	0.029	

GROMACS reminds you: "This Puke Stinks Like Beer" (LIVE)

After running the simulations, we need to perform a pbc correction to make sure all the molecules inside the box are whole.

```
[13]: with cd(f"{MD_DIR}"):
      subprocess.run(f'"{GMX_EXEC}" trjconv -f md.xtc -s md.tpr -o md_whole.xtc_
      ↪-pbc whole << EOF
0
EOF"'
      , shell=True)
```

:-) GROMACS - gmx trjconv, 2021.6-plumed-2.8.3 (-:

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GROMACS: gmx trjconv, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/3_md

Command line:

```
gmx trjconv -f md.xtc -s md.tpr -o md_whole.xtc -pbc whole
```

Will write xtc: Compressed trajectory (portable xdr format): xtc

Reading file md.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

Reading file md.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

Group 0 (System) has 1526 elements

Group 1 (Water) has 1524 elements

Group 2 (SOL) has 1524 elements

Group 3 (non-Water) has 2 elements

Group 4 (Ion) has 2 elements

Group 5 (NA) has 1 elements

Group 6 (CL) has 1 elements

Group 7 (Water_and_ions) has 1526 elements

Reading frame 0 time 0.000

Precision of md.xtc is 0.001 (nm)

Using output precision of 0.001 (nm)

```
-> frame 11940 time 23880.000 -> frame 11000 time 22000.000
```

Note that major changes are planned in future for trjconv, to improve usability and utility.

Select group for output

Selected 0: 'System'

```
-> frame 11950 time 23900.000
```

```
-> frame 11960 time 23920.000
```

```
-> frame 11970 time 23940.000
```

```
-> frame 11980 time 23960.000
```

```
-> frame 11990 time 23980.000
```

```
Reading frame 12000 time 24000.000 -> frame 12000 time 24000.000
```

```
-> frame 12010 time 24020.000
```

```
-> frame 12020 time 24040.000
```

```
-> frame 12030 time 24060.000
```

```
-> frame 12040 time 24080.000
```

```
-> frame 12050 time 24100.000
```

```
-> frame 12060 time 24120.000
```

```
-> frame 12070 time 24140.000
```

```
-> frame 12080 time 24160.000
```

```
-> frame 12090 time 24180.000
```

```
-> frame 12100 time 24200.000
```

```
-> frame 12110 time 24220.000
```

```
-> frame 12120 time 24240.000
```

```
-> frame 12130 time 24260.000
```

```
-> frame 12140 time 24280.000
```

```
-> frame 12150 time 24300.000
-> frame 12160 time 24320.000
-> frame 12170 time 24340.000
-> frame 12180 time 24360.000
-> frame 12190 time 24380.000
-> frame 12200 time 24400.000
-> frame 12210 time 24420.000
-> frame 12220 time 24440.000
-> frame 12230 time 24460.000
-> frame 12240 time 24480.000
-> frame 12250 time 24500.000
-> frame 12260 time 24520.000
-> frame 12270 time 24540.000
-> frame 12280 time 24560.000
-> frame 12290 time 24580.000
-> frame 12300 time 24600.000
-> frame 12310 time 24620.000
-> frame 12320 time 24640.000
-> frame 12330 time 24660.000
-> frame 12340 time 24680.000
-> frame 12350 time 24700.000
-> frame 12360 time 24720.000
-> frame 12370 time 24740.000
-> frame 12380 time 24760.000
-> frame 12390 time 24780.000
-> frame 12400 time 24800.000
-> frame 12410 time 24820.000
-> frame 12420 time 24840.000
-> frame 12430 time 24860.000
-> frame 12440 time 24880.000
-> frame 12450 time 24900.000
-> frame 12460 time 24920.000
-> frame 12470 time 24940.000
-> frame 12480 time 24960.000
-> frame 12490 time 24980.000
-> frame 12500 time 25000.000
```

GROMACS reminds you: "O My God, They Killed Kenny !" (South Park)

1 Calculating PIVs

1.1 PLUMED input file

We use the PINES module in PLUMED to calculate the PIV values. We are also calculating the distance between the two ions, as well as Na's coordination number for visualization and validation later on.


```
[14]: PIV_DIR = BASE_DIR/"data-SOLVED"/"0.unbiased"/"4_calcPIV"
```

```
[15]: PLUMED_PINES = """
# Distance between Na and Cl atoms
dist: DISTANCE ATOMS=1525,1526

# Solvation of Na atom
COORDINATION ...
  LABEL=coord
  GROUPA=1525
  GROUPB=1-1524:3
  SWITCH={RATIONAL R_0=0.315 D_MAX=0.5 NN=12 MM=24}
  NLIST
  NL_CUTOFF=0.55
  NL_STRIDE=10
... COORDINATION

PINES ...
LABEL=pines
PRECISION=10000
NLIST
ONLYCROSS
REF_FILE=nvt.pdb
PINESATOMS=5
ATOMTYPES=NA,CL,OW,HW1,HW2
SFACTOR=1.0,1.0,1.0,1.0,1.0
SORT=1.0,1.0,1.0,1.0,1.0
SWITCH1={RATIONAL R_0=0.38 MM=12 NN=6}
SWITCH2={RATIONAL R_0=0.35 MM=12 NN=6}
SWITCH3={RATIONAL R_0=0.41 MM=12 NN=6}
SWITCH4={RATIONAL R_0=0.40 MM=12 NN=6}
SWITCH5={RATIONAL R_0=0.28 MM=12 NN=6}
NL_CUTOFF=5.0,1.5,1.5,1.5,1.5
NL_STRIDE=1.0,1.0,1.0,1.0,1.0
NL_SKIN=0.1,0.1,0.1,0.1,0.1
NL_CONSTANT_SIZE=15
WRITEPINESTRAJ
WRITEPINESSTRIDE=100000000
... PINES

PRINT ARG=dist,coord,pines.* FILE=colvar STRIDE=1
"""
```

```
[17]: with open(f"{PIV_DIR}/plumed_calcPIV.dat", "w") as f:
      f.write(PLUMED_PINES)
```

1.2 Run PLUMED to get PIVs

```
[18]: # copy nvt.pdb over and call plumed driver on the trajectory to get the PIVs
subprocess.run(f"cp {EM_DIR}/nvt.pdb {PIV_DIR}/nvt.pdb", shell=True)
with cd(f"{PIV_DIR}"):
    subprocess.run(f"{PLUMED_EXEC} driver --plumed plumed_calcPIV.dat --mf_xtc_
↳{MD_DIR}/md_whole.xtc >& out.out", shell=True)
```

Read in the PLUMED outputs and clean up

```
[19]: # load the colvar file as a pandas dataframe
PIVs = pd.read_csv(f"{PIV_DIR}/colvar", sep='\s+', header=None, skiprows=1)
# drop the time column
PIVs.drop([0, 1, 2], axis=1, inplace=True)
# view the result
PIVs.head(5)
```

```
[19]:
```

	3	4	5	6	7	8	9	\
0	0.0008	0.196220	0.203420	0.216922	0.234723	0.277628	0.290929	
1	0.0009	0.096110	0.097410	0.139614	0.151615	0.277728	0.279728	
2	0.0005	0.163816	0.191219	0.209821	0.223722	0.273827	0.275328	
3	0.0009	0.113511	0.120412	0.130313	0.149715	0.152315	0.176818	
4	0.0006	0.127113	0.156316	0.163516	0.170017	0.194919	0.202820	

	10	11	12	...	84	85	86	87	\
0	0.309231	0.411841	0.562356	...	0.291429	0.404040	0.517552	0.684368	
1	0.305831	0.327233	0.380538	...	0.241124	0.274327	0.468547	0.613561	
2	0.275928	0.284128	0.366537	...	0.247825	0.248325	0.263726	0.442844	
3	0.206521	0.235324	0.317732	...	0.281028	0.282328	0.574957	0.582358	
4	0.204120	0.287629	0.315032	...	0.254325	0.266627	0.268527	0.314731	

	88	89	90	91	92	93
0	0.713071	0.788279	0.799880	0.799980	0.834983	0.877588
1	0.645165	0.750775	0.763976	0.802280	0.850185	0.851985
2	0.772077	0.797480	0.837584	0.839784	0.841784	0.863086
3	0.617462	0.680268	0.778178	0.794579	0.795080	0.829283
4	0.530653	0.817182	0.822182	0.834283	0.839584	0.884688

[5 rows x 91 columns]

Save the pandas dataframe as a numpy matrix

```
[20]: np.save(f"{PIV_DIR}/PIVs.npy", PIVs.to_numpy(float))
```

2 Autoencoders: Discovering non-linear and high-variance CVs (1.nn)

```
[21]: NN_DIR = BASE_DIR/"data-SOLVED"/"1.nn"
```

2.1 Train the autoencoder

Here we use the PIVs calculated from the seeding simulations to train our autoencoder.

```
[22]: DATA_DIR = PIV_DIR/"PIVs.npy"
```

The architecture of our autoencoder is based on a typical VAE: a 91(input)x64x32x16xlatent_dimx16x32x64x91(output) FCNN with Tanh activation and batchnorm after every layer.

```
[23]: def fit_model(dim_latent):
        with cd(NN_DIR):
            subprocess.run(f"python earlyStop_train_vae.py --latent_dim_{dim_latent} --data_dir {DATA_DIR}", shell=True)
            subprocess.run(f"mv {NN_DIR}/LatentSpace.npy {NN_DIR}/{dim_latent}_LatentSpace.npy", shell=True)
            subprocess.run(f"mv {NN_DIR}/ReconstructedPIVs.npy {NN_DIR}/{dim_latent}_ReconstructedPIVs.npy", shell=True)
            subprocess.run(f"mv {NN_DIR}/lightning_logs {NN_DIR}/{dim_latent}_lightning_logs", shell=True)
            print(f"Training for latent_dim {dim_latent} done.")
```

We will need to tune the dimensionality of our latent space `latent_dim` to make sure we are capturing all the important information there is in our input data during dimensionality reduction. To do this, We will train eight models with one through eight latent dimensions to identify the elbow in the fraction of variance plots.

```
[24]: for ldim in range(1, 9):
        fit_model(ldim)
```

```
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
```

```

GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_<train/validation/test>_epoch_end` instead.
rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]

```

	Name	Type	Params
0	encoder	Sequential	8.7 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	17
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	2
13	decoder	Sequential	8.8 K
14	decoder.0	Linear	32
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K
21	decoder.7	Tanh	0
22	decoder.8	BatchNorm1d	128
23	decoder.9	Linear	5.9 K
24	decoder.10	Sigmoid	0

17.6 K	Trainable params		
0	Non-trainable params		
17.6 K	Total params		
0.070	Total estimated model params size (MB)		

Loading all data...

Training on 10000 examples, validating on 2501 examples

Sanity Checking: 0it [00:00, ?it/s]

```
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-  
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:  
PossibleUserWarning: The dataloader, val_dataloader 0, does not have many  
workers which may be a bottleneck. Consider increasing the value of the  
`num_workers` argument` (try 28 which is the number of cpus on this machine) in  
the `DataLoader` init to improve performance.  
rank_zero_warn(  

```

Sanity Checking DataLoader 0: 100%| | 2/2 [00:06<00:00,

6.30s/it]Saving samples for epoch #0...

Mapping latent space...

Epoch 0: 0%| | 0/126 [00:00<?, ?it/s]

```
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-  
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:  
PossibleUserWarning: The dataloader, train_dataloader, does not have many  
workers which may be a bottleneck. Consider increasing the value of the  
`num_workers` argument` (try 28 which is the number of cpus on this machine) in  
the `DataLoader` init to improve performance.  
rank_zero_warn(  

```

Epoch 0: 79%| | 100/126 [00:01<00:00, 61.21it/s, loss=0.105,
v_num=4.31e+7]

Validation: 0it [00:00, ?it/s]

Validation: 0%| | 0/26 [00:00<?, ?it/s]

Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]

Epoch 0: 80%| | 101/126 [00:01<00:00, 55.10it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 81%| | 102/126 [00:01<00:00, 55.23it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 82%| | 103/126 [00:01<00:00, 55.66it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 83%| | 104/126 [00:01<00:00, 56.08it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 83%| | 105/126 [00:01<00:00, 56.50it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 84%| | 106/126 [00:01<00:00, 56.92it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 85%| | 107/126 [00:01<00:00, 57.33it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 86%| | 108/126 [00:01<00:00, 57.75it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 87%| | 109/126 [00:01<00:00, 58.16it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 87%| | 110/126 [00:01<00:00, 58.58it/s, loss=0.105,
v_num=4.31e+7]

Epoch 0: 88%| | 111/126 [00:01<00:00, 58.99it/s, loss=0.105,
v_num=4.31e+7]

```

Epoch 0: 89%|      | 112/126 [00:01<00:00, 59.41it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 90%|      | 113/126 [00:01<00:00, 59.82it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 90%|      | 114/126 [00:01<00:00, 60.21it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 91%|      | 115/126 [00:01<00:00, 60.61it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 92%|      | 116/126 [00:01<00:00, 61.02it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 61.43it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 61.83it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 62.23it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 62.63it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 63.03it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 63.44it/s, loss=0.105,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.42it/s]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 63.85it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 64.26it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 64.68it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 65.09it/s, loss=0.105,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:02<00:00, 58.72it/s, loss=0.105,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:02<00:00, 55.60it/s, loss=0.105,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 77.82it/s, loss=0.103,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 69.02it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 69.38it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 69.81it/s, loss=0.103,
v_num=4.31e+7]

```

```

Epoch 1: 83%|      | 104/126 [00:01<00:00, 70.24it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 70.68it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 71.09it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 71.52it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 71.96it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 72.40it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 72.84it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 73.27it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 73.71it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 74.14it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 74.58it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 75.02it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 75.45it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 75.89it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 76.34it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 76.78it/s, loss=0.103,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.77it/s]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 77.22it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 77.66it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 78.11it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 78.58it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 79.06it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 79.54it/s, loss=0.103,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 80.01it/s, loss=0.103,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 78.42it/s, loss=0.103,

```

```

v_num=4.31e+7]
Epoch 1: 100%|          | 126/126 [00:01<00:00, 78.24it/s, loss=0.103,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|          | 100/126 [00:01<00:00, 78.82it/s, loss=0.0988,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|          | 101/126 [00:01<00:00, 70.71it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 81%|          | 102/126 [00:01<00:00, 70.55it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 82%|          | 103/126 [00:01<00:00, 71.10it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 83%|          | 104/126 [00:01<00:00, 71.61it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 83%|          | 105/126 [00:01<00:00, 72.16it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 84%|          | 106/126 [00:01<00:00, 72.68it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 85%|          | 107/126 [00:01<00:00, 73.22it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 86%|          | 108/126 [00:01<00:00, 73.70it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 87%|          | 109/126 [00:01<00:00, 74.24it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 87%|          | 110/126 [00:01<00:00, 74.75it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 88%|          | 111/126 [00:01<00:00, 75.29it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 89%|          | 112/126 [00:01<00:00, 75.79it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 90%|          | 113/126 [00:01<00:00, 76.33it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 90%|          | 114/126 [00:01<00:00, 76.83it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 91%|          | 115/126 [00:01<00:00, 77.36it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 92%|          | 116/126 [00:01<00:00, 77.86it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 93%|          | 117/126 [00:01<00:00, 78.39it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 94%|          | 118/126 [00:01<00:00, 78.89it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 94%|          | 119/126 [00:01<00:00, 79.42it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 95%|          | 120/126 [00:01<00:00, 79.90it/s, loss=0.0988,
v_num=4.31e+7]

```



```

Epoch 2: 96%|      | 121/126 [00:01<00:00, 80.39it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 80.90it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 81.43it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 81.96it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 82.48it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 83.01it/s, loss=0.0988,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 81.51it/s, loss=0.0988,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 81.40it/s, loss=0.0988,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 90.30it/s, loss=0.0907,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 77.36it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 77.43it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 77.87it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 78.31it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 78.75it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 79.20it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 79.64it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 80.09it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 80.55it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 80.96it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 81.42it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 81.88it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 82.34it/s, loss=0.0907,
v_num=4.31e+7]

```

```

Epoch 3: 90%|      | 114/126 [00:01<00:00, 82.81it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 83.27it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 83.74it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 84.21it/s, loss=0.0907,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.77it/s]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 84.67it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 85.14it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 85.61it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 86.08it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 86.57it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 87.07it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 87.58it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 88.09it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 88.60it/s, loss=0.0907,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 86.19it/s, loss=0.0907,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 86.07it/s, loss=0.0907,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 77.46it/s, loss=0.0828,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 68.11it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 68.41it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 68.81it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 69.23it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 69.65it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 70.07it/s, loss=0.0828,
v_num=4.31e+7]

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Epoch 4: 85%|      | 107/126 [00:01<00:00, 70.49it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 70.91it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 71.33it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 71.75it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 72.17it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 72.56it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 72.98it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 73.41it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 73.84it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 74.27it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 74.70it/s, loss=0.0828,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.83it/s]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 75.12it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 75.56it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 76.00it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 76.43it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 76.87it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 77.33it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 77.79it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 78.26it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 78.72it/s, loss=0.0828,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 76.86it/s, loss=0.0828,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 76.75it/s, loss=0.0828,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 73.57it/s, loss=0.0713,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|          | 101/126 [00:01<00:00, 65.29it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 81%|          | 102/126 [00:01<00:00, 65.54it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 82%|          | 103/126 [00:01<00:00, 65.94it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 83%|          | 104/126 [00:01<00:00, 66.36it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 83%|          | 105/126 [00:01<00:00, 66.76it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 84%|          | 106/126 [00:01<00:00, 67.18it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 85%|          | 107/126 [00:01<00:00, 67.60it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 86%|          | 108/126 [00:01<00:00, 68.01it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 87%|          | 109/126 [00:01<00:00, 68.43it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 87%|          | 110/126 [00:01<00:00, 68.84it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 88%|          | 111/126 [00:01<00:00, 69.26it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 89%|          | 112/126 [00:01<00:00, 69.67it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 90%|          | 113/126 [00:01<00:00, 70.09it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 90%|          | 114/126 [00:01<00:00, 70.48it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 91%|          | 115/126 [00:01<00:00, 70.90it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 92%|          | 116/126 [00:01<00:00, 71.32it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 93%|          | 117/126 [00:01<00:00, 71.73it/s, loss=0.0713,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 179.54it/s]
Epoch 5: 94%|          | 118/126 [00:01<00:00, 72.16it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 94%|          | 119/126 [00:01<00:00, 72.27it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 95%|          | 120/126 [00:01<00:00, 72.59it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 96%|          | 121/126 [00:01<00:00, 72.92it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 97%|          | 122/126 [00:01<00:00, 73.27it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 98%|          | 123/126 [00:01<00:00, 73.64it/s, loss=0.0713,

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v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 74.02it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 74.40it/s, loss=0.0713,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 74.80it/s, loss=0.0713,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 73.29it/s, loss=0.0713,
v_num=4.31e+7]

Epoch 5: 100%|     | 126/126 [00:01<00:00, 73.17it/s, loss=0.0713,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 79%|      | 100/126 [00:01<00:00, 68.77it/s, loss=0.0605,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 60.32it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 60.31it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 60.76it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 61.20it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 83%|      | 105/126 [00:01<00:00, 61.64it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 62.09it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 62.53it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 62.97it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 63.41it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 63.84it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 64.27it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 89%|      | 112/126 [00:01<00:00, 64.71it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 65.14it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 65.57it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 66.01it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 66.41it/s, loss=0.0605,

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v_num=4.31e+7]
Epoch 6: 93%|      | 117/126 [00:01<00:00, 66.84it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 67.26it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 67.69it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 95%|      | 120/126 [00:01<00:00, 68.10it/s, loss=0.0605,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 205.93it/s]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 68.52it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 68.94it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 69.38it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 69.82it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 70.25it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 70.69it/s, loss=0.0605,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 69.14it/s, loss=0.0605,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 69.05it/s, loss=0.0605,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 73.05it/s, loss=0.0487,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 64.21it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 64.14it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 64.58it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 65.02it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 65.46it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 65.90it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 66.33it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 66.75it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 67.18it/s, loss=0.0487,

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v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 67.59it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 68.01it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 68.42it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 68.84it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 69.25it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 69.66it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 70.07it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 70.48it/s, loss=0.0487,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 173.78it/s]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 70.85it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 71.25it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 71.65it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 72.05it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 72.46it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 72.88it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 73.30it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 73.73it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 74.15it/s, loss=0.0487,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 72.81it/s, loss=0.0487,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 72.71it/s, loss=0.0487,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 70.05it/s, loss=0.0415,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 62.00it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 62.29it/s, loss=0.0415,

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v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 62.70it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 63.10it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 63.50it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 63.91it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 64.32it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 64.72it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 65.13it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 65.54it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 65.96it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 66.37it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 66.79it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 67.21it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 67.63it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 68.05it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 68.47it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 68.89it/s, loss=0.0415,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.27it/s]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 69.31it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 69.70it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 70.12it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 70.55it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 71.00it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 71.44it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 71.88it/s, loss=0.0415,
v_num=4.31e+7]

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Epoch 8: 100%|      | 126/126 [00:01<00:00, 72.33it/s, loss=0.0415,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|      | 126/126 [00:01<00:00, 71.07it/s, loss=0.0415,
v_num=4.31e+7]
Epoch 8: 100%|      | 126/126 [00:01<00:00, 70.99it/s, loss=0.0415,
v_num=4.31e+7]Mapping latent space...

Epoch 9: 79%|      | 100/126 [00:01<00:00, 73.85it/s, loss=0.0333,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|      | 101/126 [00:01<00:00, 65.89it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 81%|      | 102/126 [00:01<00:00, 66.04it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 82%|      | 103/126 [00:01<00:00, 66.54it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 83%|      | 104/126 [00:01<00:00, 67.04it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 83%|      | 105/126 [00:01<00:00, 67.54it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 84%|      | 106/126 [00:01<00:00, 68.05it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 85%|      | 107/126 [00:01<00:00, 68.53it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 86%|      | 108/126 [00:01<00:00, 69.01it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 87%|      | 109/126 [00:01<00:00, 69.51it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 87%|      | 110/126 [00:01<00:00, 70.00it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 88%|      | 111/126 [00:01<00:00, 70.48it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 89%|      | 112/126 [00:01<00:00, 70.98it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 90%|      | 113/126 [00:01<00:00, 71.46it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 90%|      | 114/126 [00:01<00:00, 71.94it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 91%|      | 115/126 [00:01<00:00, 72.43it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 92%|      | 116/126 [00:01<00:00, 72.92it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 93%|      | 117/126 [00:01<00:00, 73.40it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 94%|      | 118/126 [00:01<00:00, 73.88it/s, loss=0.0333,
v_num=4.31e+7]

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Epoch 9: 94%|      | 119/126 [00:01<00:00, 74.36it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 95%|      | 120/126 [00:01<00:00, 74.85it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 96%|      | 121/126 [00:01<00:00, 75.32it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 97%|      | 122/126 [00:01<00:00, 75.78it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 98%|      | 123/126 [00:01<00:00, 76.28it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 76.78it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 77.28it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 77.78it/s, loss=0.0333,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 76.42it/s, loss=0.0333,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 76.33it/s, loss=0.0333,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 76.57it/s, loss=0.0249,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|     | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|     | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 67.05it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 81%|     | 102/126 [00:01<00:00, 67.09it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 82%|     | 103/126 [00:01<00:00, 67.28it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 83%|     | 104/126 [00:01<00:00, 67.62it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 83%|     | 105/126 [00:01<00:00, 68.02it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 84%|     | 106/126 [00:01<00:00, 68.43it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 85%|     | 107/126 [00:01<00:00, 68.85it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 86%|     | 108/126 [00:01<00:00, 69.26it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 87%|     | 109/126 [00:01<00:00, 69.67it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 87%|     | 110/126 [00:01<00:00, 70.09it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 88%|     | 111/126 [00:01<00:00, 70.51it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 89%|     | 112/126 [00:01<00:00, 70.94it/s, loss=0.0249,

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v_num=4.31e+7]
Epoch 10: 90%|      | 113/126 [00:01<00:00, 71.37it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 90%|      | 114/126 [00:01<00:00, 71.80it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 91%|      | 115/126 [00:01<00:00, 72.23it/s, loss=0.0249,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 153.75it/s]
Epoch 10: 92%|      | 116/126 [00:01<00:00, 72.66it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 93%|      | 117/126 [00:01<00:00, 73.09it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 73.53it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 73.97it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 74.41it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 74.84it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 75.29it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 75.75it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 76.21it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 76.67it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 77.14it/s, loss=0.0249,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 75.67it/s, loss=0.0249,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 75.57it/s, loss=0.0249,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 67.50it/s, loss=0.0216,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 59.88it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 60.01it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 60.46it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 60.90it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 61.34it/s, loss=0.0216,

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v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 61.79it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 62.23it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 62.67it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 63.11it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 63.54it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 63.97it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 64.40it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 64.83it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 65.27it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 65.70it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 66.13it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 66.55it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 66.98it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 67.41it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 67.83it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 68.25it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 68.67it/s, loss=0.0216,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.05it/s]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 69.11it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 69.55it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 69.98it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 70.42it/s, loss=0.0216,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 69.26it/s, loss=0.0216,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 69.18it/s, loss=0.0216,
v_num=4.31e+7]Mapping latent space...

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Epoch 12: 79%|          | 100/126 [00:01<00:00, 77.32it/s, loss=0.0215,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|          | 101/126 [00:01<00:00, 69.06it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 81%|          | 102/126 [00:01<00:00, 69.19it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 82%|          | 103/126 [00:01<00:00, 69.73it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 83%|          | 104/126 [00:01<00:00, 70.23it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 83%|          | 105/126 [00:01<00:00, 70.75it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 84%|          | 106/126 [00:01<00:00, 71.26it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 85%|          | 107/126 [00:01<00:00, 71.78it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 86%|          | 108/126 [00:01<00:00, 72.28it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 87%|          | 109/126 [00:01<00:00, 72.80it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 87%|          | 110/126 [00:01<00:00, 73.30it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 88%|          | 111/126 [00:01<00:00, 73.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 89%|          | 112/126 [00:01<00:00, 74.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 90%|          | 113/126 [00:01<00:00, 74.83it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 90%|          | 114/126 [00:01<00:00, 75.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 91%|          | 115/126 [00:01<00:00, 75.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 92%|          | 116/126 [00:01<00:00, 76.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 93%|          | 117/126 [00:01<00:00, 76.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 94%|          | 118/126 [00:01<00:00, 77.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 94%|          | 119/126 [00:01<00:00, 77.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 95%|          | 120/126 [00:01<00:00, 78.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 96%|          | 121/126 [00:01<00:00, 78.80it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 97%|          | 122/126 [00:01<00:00, 79.30it/s, loss=0.0215,

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v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 79.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 80.34it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 80.86it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 81.39it/s, loss=0.0215,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|     | 126/126 [00:01<00:00, 79.83it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 79.74it/s, loss=0.0215,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 86.31it/s, loss=0.0183,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13: 80%|      | 101/126 [00:01<00:00, 75.44it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 81%|      | 102/126 [00:01<00:00, 75.83it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 82%|      | 103/126 [00:01<00:00, 76.34it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 83%|      | 104/126 [00:01<00:00, 76.85it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 83%|      | 105/126 [00:01<00:00, 77.35it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 84%|      | 106/126 [00:01<00:00, 77.86it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 85%|      | 107/126 [00:01<00:00, 78.37it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 86%|      | 108/126 [00:01<00:00, 78.88it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 87%|      | 109/126 [00:01<00:00, 79.38it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 87%|      | 110/126 [00:01<00:00, 79.89it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 88%|      | 111/126 [00:01<00:00, 80.40it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 89%|      | 112/126 [00:01<00:00, 80.92it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 90%|      | 113/126 [00:01<00:00, 81.44it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 90%|      | 114/126 [00:01<00:00, 81.97it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 91%|      | 115/126 [00:01<00:00, 82.49it/s, loss=0.0183,
v_num=4.31e+7]

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Epoch 13: 92%|      | 116/126 [00:01<00:00, 83.01it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 93%|      | 117/126 [00:01<00:00, 83.53it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 94%|      | 118/126 [00:01<00:00, 84.05it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 94%|      | 119/126 [00:01<00:00, 84.56it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 85.08it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 85.59it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 86.11it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 86.66it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 87.22it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 87.77it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 88.32it/s, loss=0.0183,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 86.69it/s, loss=0.0183,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 86.59it/s, loss=0.0183,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 80.04it/s, loss=0.0164,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 71.72it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 71.93it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 72.46it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 72.99it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 73.51it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 74.03it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 74.55it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 75.07it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 75.59it/s, loss=0.0164,

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v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 76.10it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 76.62it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 77.13it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 90%|      | 113/126 [00:01<00:00, 77.65it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 78.16it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 78.68it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 79.19it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 79.70it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 80.21it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 80.71it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 81.22it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 81.73it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 82.24it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 82.78it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 83.31it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 83.85it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 84.39it/s, loss=0.0164,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 82.90it/s, loss=0.0164,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 82.81it/s, loss=0.0164,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 78.70it/s, loss=0.0131,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 68.37it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 68.58it/s, loss=0.0131,

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v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 69.06it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 69.54it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 83%|      | 105/126 [00:01<00:00, 70.02it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 84%|      | 106/126 [00:01<00:00, 70.50it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 70.97it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 71.45it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 71.92it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 72.38it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 88%|      | 111/126 [00:01<00:00, 72.85it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 73.31it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 73.77it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 74.23it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 74.69it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 75.15it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 75.61it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 76.06it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 76.51it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 76.96it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 77.41it/s, loss=0.0131,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.95it/s]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 77.85it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 78.33it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 78.80it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 79.28it/s, loss=0.0131,
v_num=4.31e+7]

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Epoch 15: 100%|      | 126/126 [00:01<00:00, 79.75it/s, loss=0.0131,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|      | 126/126 [00:01<00:00, 77.77it/s, loss=0.0131,
v_num=4.31e+7]
Epoch 15: 100%|      | 126/126 [00:01<00:00, 77.65it/s, loss=0.0131,
v_num=4.31e+7]Mapping latent space...
Epoch 16:  79%|      | 100/126 [00:01<00:00, 74.07it/s, loss=0.0149,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 16:  80%|      | 101/126 [00:01<00:00, 64.67it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  81%|      | 102/126 [00:01<00:00, 64.99it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  82%|      | 103/126 [00:01<00:00, 65.39it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  83%|      | 104/126 [00:01<00:00, 65.78it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  83%|      | 105/126 [00:01<00:00, 66.19it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  84%|      | 106/126 [00:01<00:00, 66.59it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  85%|      | 107/126 [00:01<00:00, 66.99it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  86%|      | 108/126 [00:01<00:00, 67.39it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  87%|      | 109/126 [00:01<00:00, 67.80it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  87%|      | 110/126 [00:01<00:00, 68.20it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  88%|      | 111/126 [00:01<00:00, 68.61it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  89%|      | 112/126 [00:01<00:00, 69.03it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  90%|      | 113/126 [00:01<00:00, 69.44it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  90%|      | 114/126 [00:01<00:00, 69.86it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  91%|      | 115/126 [00:01<00:00, 70.28it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  92%|      | 116/126 [00:01<00:00, 70.70it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16:  93%|      | 117/126 [00:01<00:00, 71.13it/s, loss=0.0149,
v_num=4.31e+7]
Validation DataLoader 0:  69%|      | 18/26 [00:00<00:00, 179.58it/s]
Epoch 16:  94%|      | 118/126 [00:01<00:00, 71.54it/s, loss=0.0149,
v_num=4.31e+7]

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Epoch 16: 94%|      | 119/126 [00:01<00:00, 71.97it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 95%|      | 120/126 [00:01<00:00, 72.39it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 96%|      | 121/126 [00:01<00:00, 72.82it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 97%|      | 122/126 [00:01<00:00, 73.25it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 73.70it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 74.15it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 74.61it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 75.06it/s, loss=0.0149,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|     | 126/126 [00:01<00:00, 73.68it/s, loss=0.0149,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 73.60it/s, loss=0.0149,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 74.14it/s, loss=0.0114,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 66.02it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 66.27it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 66.76it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 67.25it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 67.74it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 68.23it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 68.72it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 69.20it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 87%|      | 109/126 [00:01<00:00, 69.69it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 70.16it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 70.65it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 71.12it/s, loss=0.0114,

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v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 71.60it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 72.07it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 91%|      | 115/126 [00:01<00:00, 72.55it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 92%|      | 116/126 [00:01<00:00, 73.02it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 73.49it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 73.96it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 74.43it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 74.89it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 75.36it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 75.83it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 76.33it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 76.83it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 77.33it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 77.82it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 76.55it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 76.45it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 77.73it/s, loss=0.0104,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 68.88it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 69.03it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 69.56it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 70.07it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 70.60it/s, loss=0.0104,

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v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 71.10it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 71.63it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 72.13it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 72.65it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 73.14it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 73.66it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 74.15it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 74.66it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 75.16it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 75.66it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 76.16it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 76.67it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 77.16it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 77.66it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 78.16it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 78.63it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 79.12it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 79.65it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 80.17it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 80.69it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 81.22it/s, loss=0.0104,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 79.71it/s, loss=0.0104,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 79.63it/s, loss=0.0104,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 69.60it/s, loss=0.0109,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|          | 101/126 [00:01<00:00, 62.11it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 81%|          | 102/126 [00:01<00:00, 62.28it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 82%|          | 103/126 [00:01<00:00, 62.76it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 83%|          | 104/126 [00:01<00:00, 63.24it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 83%|          | 105/126 [00:01<00:00, 63.71it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 84%|          | 106/126 [00:01<00:00, 64.19it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 85%|          | 107/126 [00:01<00:00, 64.66it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 86%|          | 108/126 [00:01<00:00, 65.13it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 87%|          | 109/126 [00:01<00:00, 65.60it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 87%|          | 110/126 [00:01<00:00, 66.07it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 88%|          | 111/126 [00:01<00:00, 66.54it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 89%|          | 112/126 [00:01<00:00, 67.01it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 90%|          | 113/126 [00:01<00:00, 67.47it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 90%|          | 114/126 [00:01<00:00, 67.94it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 91%|          | 115/126 [00:01<00:00, 68.40it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 92%|          | 116/126 [00:01<00:00, 68.87it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 93%|          | 117/126 [00:01<00:00, 69.33it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 94%|          | 118/126 [00:01<00:00, 69.79it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 94%|          | 119/126 [00:01<00:00, 70.26it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 95%|          | 120/126 [00:01<00:00, 70.71it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 96%|          | 121/126 [00:01<00:00, 71.18it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 97%|          | 122/126 [00:01<00:00, 71.64it/s, loss=0.0109,
v_num=4.31e+7]

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Epoch 19: 98%|      | 123/126 [00:01<00:00, 72.12it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 98%|      | 124/126 [00:01<00:00, 72.59it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 99%|      | 125/126 [00:01<00:00, 73.07it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 73.54it/s, loss=0.0109,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 72.33it/s, loss=0.0109,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 72.19it/s, loss=0.0109,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 72.29it/s, loss=0.0113,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|      | 101/126 [00:01<00:00, 64.45it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 81%|      | 102/126 [00:01<00:00, 64.62it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 82%|      | 103/126 [00:01<00:00, 65.12it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 83%|      | 104/126 [00:01<00:00, 65.59it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 83%|      | 105/126 [00:01<00:00, 66.08it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 84%|      | 106/126 [00:01<00:00, 66.56it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 85%|      | 107/126 [00:01<00:00, 67.04it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 86%|      | 108/126 [00:01<00:00, 67.52it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 87%|      | 109/126 [00:01<00:00, 68.00it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 87%|      | 110/126 [00:01<00:00, 68.43it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 88%|      | 111/126 [00:01<00:00, 68.90it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 89%|      | 112/126 [00:01<00:00, 69.38it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 90%|      | 113/126 [00:01<00:00, 69.85it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 90%|      | 114/126 [00:01<00:00, 70.32it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 91%|      | 115/126 [00:01<00:00, 70.80it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 92%|      | 116/126 [00:01<00:00, 71.26it/s, loss=0.0113,

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v_num=4.31e+7]
Epoch 20: 93%|      | 117/126 [00:01<00:00, 71.72it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 94%|      | 118/126 [00:01<00:00, 72.18it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 94%|      | 119/126 [00:01<00:00, 72.63it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 95%|      | 120/126 [00:01<00:00, 73.09it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 96%|      | 121/126 [00:01<00:00, 73.55it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 97%|      | 122/126 [00:01<00:00, 74.01it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 98%|      | 123/126 [00:01<00:00, 74.50it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 98%|      | 124/126 [00:01<00:00, 74.98it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 75.48it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 75.97it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 72.55it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 72.43it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 79%|      | 100/126 [00:01<00:00, 76.66it/s, loss=0.0133,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 67.04it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 67.21it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 67.69it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 68.17it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 68.65it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 69.13it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 69.60it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 70.08it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 70.55it/s, loss=0.0133,
v_num=4.31e+7]

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Epoch 21: 87%|      | 110/126 [00:01<00:00, 71.02it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 71.49it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 71.96it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 72.43it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 72.90it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 73.36it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 73.82it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 74.29it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 74.75it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 75.20it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 75.66it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 76.12it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 76.58it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 77.06it/s, loss=0.0133,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.74it/s]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 77.52it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 78.00it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 78.48it/s, loss=0.0133,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 76.90it/s, loss=0.0133,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 76.81it/s, loss=0.0133,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 72.22it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 63.28it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 63.30it/s, loss=0.0107,
v_num=4.31e+7]

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Epoch 22: 82%| | 103/126 [00:01<00:00, 63.69it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 83%| | 104/126 [00:01<00:00, 64.09it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 83%| | 105/126 [00:01<00:00, 64.49it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 84%| | 106/126 [00:01<00:00, 64.89it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 85%| | 107/126 [00:01<00:00, 65.29it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 86%| | 108/126 [00:01<00:00, 65.70it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 87%| | 109/126 [00:01<00:00, 66.11it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 87%| | 110/126 [00:01<00:00, 66.52it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 88%| | 111/126 [00:01<00:00, 66.92it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 89%| | 112/126 [00:01<00:00, 67.34it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 90%| | 113/126 [00:01<00:00, 67.75it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 90%| | 114/126 [00:01<00:00, 68.17it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 91%| | 115/126 [00:01<00:00, 68.59it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 92%| | 116/126 [00:01<00:00, 69.01it/s, loss=0.0107,
 v_num=4.31e+7]
 Validation DataLoader 0: 65%| | 17/26 [00:00<00:00, 164.06it/s]
 Epoch 22: 93%| | 117/126 [00:01<00:00, 69.42it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 94%| | 118/126 [00:01<00:00, 69.84it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 94%| | 119/126 [00:01<00:00, 70.26it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 95%| | 120/126 [00:01<00:00, 70.68it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 96%| | 121/126 [00:01<00:00, 71.09it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 97%| | 122/126 [00:01<00:00, 71.52it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 98%| | 123/126 [00:01<00:00, 71.96it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 98%| | 124/126 [00:01<00:00, 72.41it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 99%| | 125/126 [00:01<00:00, 72.85it/s, loss=0.0107,
 v_num=4.31e+7]
 Epoch 22: 100%| | 126/126 [00:01<00:00, 73.30it/s, loss=0.0107,

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v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|      | 126/126 [00:01<00:00, 71.64it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 22: 100%|      | 126/126 [00:01<00:00, 71.55it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 23:  79%|      | 100/126 [00:01<00:00, 74.69it/s, loss=0.0137,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23:  80%|      | 101/126 [00:01<00:00, 65.25it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  81%|      | 102/126 [00:01<00:00, 65.51it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  82%|      | 103/126 [00:01<00:00, 65.96it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  83%|      | 104/126 [00:01<00:00, 66.41it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  83%|      | 105/126 [00:01<00:00, 66.86it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  84%|      | 106/126 [00:01<00:00, 67.30it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  85%|      | 107/126 [00:01<00:00, 67.74it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  86%|      | 108/126 [00:01<00:00, 68.18it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  87%|      | 109/126 [00:01<00:00, 68.62it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  87%|      | 110/126 [00:01<00:00, 69.05it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  88%|      | 111/126 [00:01<00:00, 69.48it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  89%|      | 112/126 [00:01<00:00, 69.91it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  90%|      | 113/126 [00:01<00:00, 70.34it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  90%|      | 114/126 [00:01<00:00, 70.77it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  91%|      | 115/126 [00:01<00:00, 71.20it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  92%|      | 116/126 [00:01<00:00, 71.63it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  93%|      | 117/126 [00:01<00:00, 72.05it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  94%|      | 118/126 [00:01<00:00, 72.48it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23:  94%|      | 119/126 [00:01<00:00, 72.89it/s, loss=0.0137,
v_num=4.31e+7]

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Epoch 23: 95%|      | 120/126 [00:01<00:00, 73.31it/s, loss=0.0137,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 202.38it/s]
Epoch 23: 96%|      | 121/126 [00:01<00:00, 73.72it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23: 97%|      | 122/126 [00:01<00:00, 74.14it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 74.58it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 75.01it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 75.44it/s, loss=0.0137,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 75.87it/s, loss=0.0137,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 74.20it/s, loss=0.0137,
v_num=4.31e+7]

Epoch 23: 100%|     | 126/126 [00:01<00:00, 74.10it/s, loss=0.0137,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 79%|      | 100/126 [00:01<00:00, 73.00it/s, loss=0.0159,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 65.24it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 65.35it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 65.83it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 66.31it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 66.78it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 67.25it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 67.73it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 68.20it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 68.67it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 69.13it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 69.59it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 70.05it/s, loss=0.0159,

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v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 70.51it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 70.97it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 71.43it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 71.89it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 72.34it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 72.79it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 73.25it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 73.70it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 74.15it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 74.60it/s, loss=0.0159,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.22it/s]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 75.06it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 75.53it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 76.00it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 76.46it/s, loss=0.0159,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 74.91it/s, loss=0.0159,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 74.77it/s, loss=0.0159,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 71.72it/s, loss=0.0103,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 63.73it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 63.95it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 64.46it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 64.93it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 65.42it/s, loss=0.0103,

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v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 65.91it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 66.40it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 66.87it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 67.35it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 67.83it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 68.30it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 68.77it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 69.26it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 69.73it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 70.20it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 70.67it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 71.14it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 71.61it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 72.09it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 72.55it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 73.01it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 73.47it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 73.96it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 74.45it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 74.93it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 75.42it/s, loss=0.0103,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 74.09it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 74.02it/s, loss=0.0103,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 73.65it/s, loss=0.0111,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|          | 101/126 [00:01<00:00, 64.94it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 81%|          | 102/126 [00:01<00:00, 65.18it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 82%|          | 103/126 [00:01<00:00, 65.66it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 83%|          | 104/126 [00:01<00:00, 66.13it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 83%|          | 105/126 [00:01<00:00, 66.60it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 84%|          | 106/126 [00:01<00:00, 67.07it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 85%|          | 107/126 [00:01<00:00, 67.54it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 86%|          | 108/126 [00:01<00:00, 68.00it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 87%|          | 109/126 [00:01<00:00, 68.47it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 87%|          | 110/126 [00:01<00:00, 68.92it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 88%|          | 111/126 [00:01<00:00, 69.38it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 89%|          | 112/126 [00:01<00:00, 69.84it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 90%|          | 113/126 [00:01<00:00, 70.29it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 90%|          | 114/126 [00:01<00:00, 70.74it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 91%|          | 115/126 [00:01<00:00, 71.19it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 92%|          | 116/126 [00:01<00:00, 71.64it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 93%|          | 117/126 [00:01<00:00, 72.09it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 94%|          | 118/126 [00:01<00:00, 72.54it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 94%|          | 119/126 [00:01<00:00, 72.99it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 95%|          | 120/126 [00:01<00:00, 73.42it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 96%|          | 121/126 [00:01<00:00, 73.86it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 97%|          | 122/126 [00:01<00:00, 74.31it/s, loss=0.0111,
v_num=4.31e+7]

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Epoch 26: 98%|      | 123/126 [00:01<00:00, 74.78it/s, loss=0.0111,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.51it/s]
Epoch 26: 98%|      | 124/126 [00:01<00:00, 75.23it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 75.69it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 76.15it/s, loss=0.0111,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 74.84it/s, loss=0.0111,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 74.75it/s, loss=0.0111,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 73.60it/s, loss=0.0105,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 64.57it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 64.89it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 65.30it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 65.70it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 66.12it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 66.53it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 66.94it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 67.35it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 67.76it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 68.17it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 68.58it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 69.00it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 69.41it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 69.83it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 70.26it/s, loss=0.0105,

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v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 70.67it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 93%|      | 117/126 [00:01<00:00, 71.09it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 94%|      | 118/126 [00:01<00:00, 71.51it/s, loss=0.0105,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.77it/s]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 71.92it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 72.34it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 72.77it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 73.20it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 73.65it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 74.10it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 74.55it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 75.00it/s, loss=0.0105,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 73.69it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 73.60it/s, loss=0.0105,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 70.34it/s, loss=0.0097,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 62.08it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 61.98it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 62.44it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 62.91it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 63.38it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 63.85it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 64.31it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 64.78it/s, loss=0.0097,

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v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 65.24it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 65.70it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 66.16it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 66.62it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 67.08it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 67.54it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 68.00it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 68.46it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 68.92it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 69.38it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 69.83it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 70.28it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 70.74it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 71.19it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 71.67it/s, loss=0.0097,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.24it/s]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 72.14it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 72.61it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 73.08it/s, loss=0.0097,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 71.95it/s, loss=0.0097,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 71.88it/s, loss=0.0097,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 78.80it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 69.27it/s, loss=0.0107,

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v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 69.62it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 70.05it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 83%|      | 104/126 [00:01<00:00, 70.48it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 70.91it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 71.34it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 71.77it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 72.20it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 87%|      | 109/126 [00:01<00:00, 72.64it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 73.06it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 73.49it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 89%|      | 112/126 [00:01<00:00, 73.93it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 74.36it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 74.81it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 75.25it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 75.69it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 76.13it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 76.57it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 77.01it/s, loss=0.0107,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.13it/s]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 77.45it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 77.89it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 78.34it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 78.81it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 79.28it/s, loss=0.0107,
v_num=4.31e+7]

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Epoch 29: 99%|      | 125/126 [00:01<00:00, 79.75it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 80.23it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 78.72it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 78.63it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 81.01it/s, loss=0.0106,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 71.47it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 71.74it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 72.16it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 72.43it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 72.81it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 73.24it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 73.67it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 74.11it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 74.54it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 74.97it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 75.39it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 75.83it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 76.26it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 76.71it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 77.15it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 77.60it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 78.04it/s, loss=0.0106,
v_num=4.31e+7]

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Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 176.07it/s]
Epoch 30: 94%|          | 118/126 [00:01<00:00, 78.48it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 94%|          | 119/126 [00:01<00:00, 78.93it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 95%|          | 120/126 [00:01<00:00, 79.38it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 96%|          | 121/126 [00:01<00:00, 79.83it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 97%|          | 122/126 [00:01<00:00, 80.29it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 98%|          | 123/126 [00:01<00:00, 80.77it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 98%|          | 124/126 [00:01<00:00, 81.25it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 99%|          | 125/126 [00:01<00:00, 81.73it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 100%|         | 126/126 [00:01<00:00, 82.21it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|         | 126/126 [00:01<00:00, 80.53it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 30: 100%|         | 126/126 [00:01<00:00, 80.43it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|          | 100/126 [00:01<00:00, 73.65it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|          | 101/126 [00:01<00:00, 65.12it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 81%|          | 102/126 [00:01<00:00, 65.27it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 82%|          | 103/126 [00:01<00:00, 65.78it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 83%|          | 104/126 [00:01<00:00, 66.27it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 83%|          | 105/126 [00:01<00:00, 66.77it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 84%|          | 106/126 [00:01<00:00, 67.26it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 85%|          | 107/126 [00:01<00:00, 67.77it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 86%|          | 108/126 [00:01<00:00, 68.25it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 87%|          | 109/126 [00:01<00:00, 68.75it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 87%|          | 110/126 [00:01<00:00, 69.23it/s, loss=0.0107,
v_num=4.31e+7]

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Epoch 31: 88%|      | 111/126 [00:01<00:00, 69.73it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 70.20it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 90%|      | 113/126 [00:01<00:00, 70.69it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 71.17it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 71.67it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 72.14it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 72.63it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 73.10it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 73.59it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 74.06it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 74.54it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 75.01it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 75.50it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 75.99it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 76.49it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 76.99it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 75.71it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 75.64it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 68.41it/s, loss=0.00961,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 60.61it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 60.84it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 61.27it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 61.70it/s, loss=0.00961,

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v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 62.12it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 62.55it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 62.98it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 63.41it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 63.84it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 64.26it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 64.68it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 89%|      | 112/126 [00:01<00:00, 65.10it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 65.52it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 65.93it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 66.35it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 92%|      | 116/126 [00:01<00:00, 66.76it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 67.17it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 67.58it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 67.99it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 68.39it/s, loss=0.00961,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.16it/s]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 68.79it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 69.19it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 69.60it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 70.02it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 70.43it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 70.84it/s, loss=0.00961,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 69.65it/s, loss=0.00961,
v_num=4.31e+7]

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Epoch 32: 100%|          | 126/126 [00:01<00:00, 69.56it/s, loss=0.00961,
v_num=4.31e+7]Mapping latent space...

Epoch 33: 79%|          | 100/126 [00:01<00:00, 67.04it/s, loss=0.0106,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|          | 101/126 [00:01<00:00, 59.70it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 81%|          | 102/126 [00:01<00:00, 59.86it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 82%|          | 103/126 [00:01<00:00, 60.34it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 83%|          | 104/126 [00:01<00:00, 60.80it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 83%|          | 105/126 [00:01<00:00, 61.27it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 84%|          | 106/126 [00:01<00:00, 61.72it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 85%|          | 107/126 [00:01<00:00, 62.18it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 86%|          | 108/126 [00:01<00:00, 62.64it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 87%|          | 109/126 [00:01<00:00, 63.10it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 87%|          | 110/126 [00:01<00:00, 63.55it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 88%|          | 111/126 [00:01<00:00, 64.01it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 89%|          | 112/126 [00:01<00:00, 64.46it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 90%|          | 113/126 [00:01<00:00, 64.92it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 90%|          | 114/126 [00:01<00:00, 65.37it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 91%|          | 115/126 [00:01<00:00, 65.83it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 92%|          | 116/126 [00:01<00:00, 66.27it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 93%|          | 117/126 [00:01<00:00, 66.73it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 94%|          | 118/126 [00:01<00:00, 67.17it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 94%|          | 119/126 [00:01<00:00, 67.62it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 95%|          | 120/126 [00:01<00:00, 68.07it/s, loss=0.0106,
v_num=4.31e+7]

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Epoch 33: 96%|      | 121/126 [00:01<00:00, 68.51it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 97%|      | 122/126 [00:01<00:00, 68.96it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 98%|      | 123/126 [00:01<00:00, 69.42it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 69.88it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 70.34it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 70.80it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 68.89it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 68.82it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 73.19it/s, loss=0.0101,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 65.04it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 65.18it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 65.69it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 66.17it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 66.67it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 67.15it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 67.65it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 68.13it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 68.63it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 69.04it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 69.54it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 70.01it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 70.50it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 70.98it/s, loss=0.0101,

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v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 71.46it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 71.94it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 72.43it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 72.89it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 73.37it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 73.84it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 74.31it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 74.78it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 75.28it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 75.77it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 76.26it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 76.76it/s, loss=0.0101,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 75.56it/s, loss=0.0101,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 75.48it/s, loss=0.0101,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 69.60it/s, loss=0.0108,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 61.34it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 61.59it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 62.03it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 62.46it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 62.89it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 63.32it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 63.75it/s, loss=0.0108,
v_num=4.31e+7]

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Epoch 35: 86%|      | 108/126 [00:01<00:00, 64.17it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 64.60it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 87%|      | 110/126 [00:01<00:00, 65.02it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 65.45it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 65.86it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 66.28it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 66.70it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 67.12it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 67.53it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 67.94it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 68.35it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 68.76it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 69.16it/s, loss=0.0108,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 201.90it/s]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 69.56it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 69.96it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 70.38it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 70.80it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 71.21it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 71.63it/s, loss=0.0108,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 70.02it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 69.93it/s, loss=0.0108,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 72.53it/s, loss=0.0108,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|          | 101/126 [00:01<00:00, 65.18it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 81%|          | 102/126 [00:01<00:00, 65.36it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 82%|          | 103/126 [00:01<00:00, 65.87it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 83%|          | 104/126 [00:01<00:00, 66.35it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 83%|          | 105/126 [00:01<00:00, 66.86it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 84%|          | 106/126 [00:01<00:00, 67.34it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 85%|          | 107/126 [00:01<00:00, 67.85it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 86%|          | 108/126 [00:01<00:00, 68.33it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 87%|          | 109/126 [00:01<00:00, 68.83it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 87%|          | 110/126 [00:01<00:00, 69.30it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 88%|          | 111/126 [00:01<00:00, 69.80it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 89%|          | 112/126 [00:01<00:00, 70.28it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 90%|          | 113/126 [00:01<00:00, 70.77it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 90%|          | 114/126 [00:01<00:00, 71.25it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 91%|          | 115/126 [00:01<00:00, 71.74it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 92%|          | 116/126 [00:01<00:00, 72.21it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 93%|          | 117/126 [00:01<00:00, 72.70it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 94%|          | 118/126 [00:01<00:00, 73.17it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 94%|          | 119/126 [00:01<00:00, 73.67it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 95%|          | 120/126 [00:01<00:00, 74.13it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 96%|          | 121/126 [00:01<00:00, 74.62it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 97%|          | 122/126 [00:01<00:00, 75.09it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 98%|          | 123/126 [00:01<00:00, 75.59it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 98%|          | 124/126 [00:01<00:00, 76.08it/s, loss=0.0108,

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v_num=4.31e+7]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 76.58it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 77.07it/s, loss=0.0108,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|     | 126/126 [00:01<00:00, 75.81it/s, loss=0.0108,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 75.73it/s, loss=0.0108,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 82.49it/s, loss=0.0112,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 72.51it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 72.55it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 73.11it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 73.63it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 74.18it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 74.70it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 75.25it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 75.77it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 76.32it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 76.82it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 77.36it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 77.88it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 78.41it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 78.92it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 79.45it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 79.96it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 80.48it/s, loss=0.0112,
v_num=4.31e+7]

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Epoch 37: 94%|      | 118/126 [00:01<00:00, 80.99it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 81.52it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 82.02it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 82.52it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 83.04it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 83.57it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 84.10it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 84.64it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 85.18it/s, loss=0.0112,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 83.72it/s, loss=0.0112,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 83.63it/s, loss=0.0112,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 68.84it/s, loss=0.00995,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 61.40it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 61.60it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 61.99it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 62.38it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 62.77it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 63.17it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 63.57it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 63.98it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 64.39it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 64.79it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 65.20it/s, loss=0.00995,

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v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 65.61it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 90%|      | 113/126 [00:01<00:00, 66.02it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 66.44it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 66.85it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 67.27it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 67.68it/s, loss=0.00995,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.01it/s]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 68.08it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 68.50it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 68.91it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 69.32it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 69.75it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 70.19it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 70.63it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 71.08it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 71.52it/s, loss=0.00995,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 70.22it/s, loss=0.00995,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 70.14it/s, loss=0.00995,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 72.99it/s, loss=0.00974,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 64.17it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 64.51it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 64.97it/s, loss=0.00974,
v_num=4.31e+7]

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Epoch 39: 83%|      | 104/126 [00:01<00:00, 65.44it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 65.90it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 66.37it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 66.83it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 67.29it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 67.76it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 68.22it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 68.68it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 69.14it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 69.60it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 70.06it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 70.51it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 70.97it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 71.42it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 71.87it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 72.31it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 72.76it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 73.20it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 73.65it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 74.11it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 74.57it/s, loss=0.00974,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 245.78it/s]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 75.03it/s, loss=0.00974,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 75.49it/s, loss=0.00974,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 74.22it/s, loss=0.00974,

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v_num=4.31e+7]
Epoch 39: 100%|      | 126/126 [00:01<00:00, 74.14it/s, loss=0.00974,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 81.43it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|      | 101/126 [00:01<00:00, 70.84it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 81%|      | 102/126 [00:01<00:00, 70.81it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 82%|      | 103/126 [00:01<00:00, 71.29it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 83%|      | 104/126 [00:01<00:00, 71.77it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 83%|      | 105/126 [00:01<00:00, 72.26it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 84%|      | 106/126 [00:01<00:00, 72.75it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 85%|      | 107/126 [00:01<00:00, 73.23it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 86%|      | 108/126 [00:01<00:00, 73.72it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 87%|      | 109/126 [00:01<00:00, 74.20it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 87%|      | 110/126 [00:01<00:00, 74.68it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 88%|      | 111/126 [00:01<00:00, 75.16it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 89%|      | 112/126 [00:01<00:00, 75.63it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 90%|      | 113/126 [00:01<00:00, 76.11it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 90%|      | 114/126 [00:01<00:00, 76.59it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 91%|      | 115/126 [00:01<00:00, 77.07it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 92%|      | 116/126 [00:01<00:00, 77.54it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 93%|      | 117/126 [00:01<00:00, 78.01it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 94%|      | 118/126 [00:01<00:00, 78.48it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 94%|      | 119/126 [00:01<00:00, 78.94it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 95%|      | 120/126 [00:01<00:00, 79.41it/s, loss=0.0107,
v_num=4.31e+7]

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Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 209.35it/s]
Epoch 40: 96%|          | 121/126 [00:01<00:00, 79.87it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 97%|          | 122/126 [00:01<00:00, 80.34it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 98%|          | 123/126 [00:01<00:00, 80.82it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 98%|          | 124/126 [00:01<00:00, 81.31it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 99%|          | 125/126 [00:01<00:00, 81.80it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 100%|         | 126/126 [00:01<00:00, 82.28it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|         | 126/126 [00:01<00:00, 80.33it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 40: 100%|         | 126/126 [00:01<00:00, 80.23it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|          | 100/126 [00:01<00:00, 73.53it/s, loss=0.0092,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|          | 101/126 [00:01<00:00, 64.48it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 81%|          | 102/126 [00:01<00:00, 64.86it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 82%|          | 103/126 [00:01<00:00, 65.26it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 83%|          | 104/126 [00:01<00:00, 65.67it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 83%|          | 105/126 [00:01<00:00, 66.07it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 84%|          | 106/126 [00:01<00:00, 66.47it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 85%|          | 107/126 [00:01<00:00, 66.88it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 86%|          | 108/126 [00:01<00:00, 67.28it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 87%|          | 109/126 [00:01<00:00, 67.69it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 87%|          | 110/126 [00:01<00:00, 68.09it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 88%|          | 111/126 [00:01<00:00, 68.51it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 89%|          | 112/126 [00:01<00:00, 68.92it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 90%|          | 113/126 [00:01<00:00, 69.34it/s, loss=0.0092,
v_num=4.31e+7]

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Epoch 41: 90%|      | 114/126 [00:01<00:00, 69.76it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 70.18it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 70.60it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 71.02it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 71.45it/s, loss=0.0092,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.01it/s]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 71.86it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 72.29it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 72.71it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 73.14it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 73.59it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 74.04it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 74.50it/s, loss=0.0092,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 74.95it/s, loss=0.0092,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 73.51it/s, loss=0.0092,
v_num=4.31e+7]

Epoch 41: 100%|     | 126/126 [00:01<00:00, 73.41it/s, loss=0.0092,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 79%|      | 100/126 [00:01<00:00, 75.87it/s, loss=0.00966,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 66.98it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 67.15it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 67.62it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 68.09it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 68.56it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 69.03it/s, loss=0.00966,

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v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 69.50it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 69.97it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 70.44it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 70.90it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 71.36it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 71.82it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 72.28it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 72.74it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 73.19it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 73.65it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 74.10it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 74.54it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 74.99it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 75.43it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 75.88it/s, loss=0.00966,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.39it/s]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 76.32it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 76.79it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 77.26it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 77.73it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 78.20it/s, loss=0.00966,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 76.36it/s, loss=0.00966,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 76.22it/s, loss=0.00966,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 70.51it/s, loss=0.0088,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|          | 101/126 [00:01<00:00, 62.08it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 81%|          | 102/126 [00:01<00:00, 62.17it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 82%|          | 103/126 [00:01<00:00, 62.62it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 83%|          | 104/126 [00:01<00:00, 63.07it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 83%|          | 105/126 [00:01<00:00, 63.53it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 84%|          | 106/126 [00:01<00:00, 63.98it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 85%|          | 107/126 [00:01<00:00, 64.43it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 86%|          | 108/126 [00:01<00:00, 64.88it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 87%|          | 109/126 [00:01<00:00, 65.32it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 87%|          | 110/126 [00:01<00:00, 65.77it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 88%|          | 111/126 [00:01<00:00, 66.21it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 89%|          | 112/126 [00:01<00:00, 66.65it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 90%|          | 113/126 [00:01<00:00, 67.09it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 90%|          | 114/126 [00:01<00:00, 67.53it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 91%|          | 115/126 [00:01<00:00, 67.97it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 92%|          | 116/126 [00:01<00:00, 68.40it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 93%|          | 117/126 [00:01<00:00, 68.84it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 94%|          | 118/126 [00:01<00:00, 69.27it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 94%|          | 119/126 [00:01<00:00, 69.70it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 95%|          | 120/126 [00:01<00:00, 70.13it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 96%|          | 121/126 [00:01<00:00, 70.56it/s, loss=0.0088,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 216.16it/s]
Epoch 43: 97%|          | 122/126 [00:01<00:00, 70.98it/s, loss=0.0088,
v_num=4.31e+7]

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Epoch 43: 98%|      | 123/126 [00:01<00:00, 71.43it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 98%|      | 124/126 [00:01<00:00, 71.88it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 99%|      | 125/126 [00:01<00:00, 72.32it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 72.77it/s, loss=0.0088,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|     | 126/126 [00:01<00:00, 71.27it/s, loss=0.0088,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 71.17it/s, loss=0.0088,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 76.22it/s, loss=0.0124,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|      | 101/126 [00:01<00:00, 67.83it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 81%|      | 102/126 [00:01<00:00, 68.16it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 82%|      | 103/126 [00:01<00:00, 68.57it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 83%|      | 104/126 [00:01<00:00, 68.99it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 83%|      | 105/126 [00:01<00:00, 69.41it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 84%|      | 106/126 [00:01<00:00, 69.83it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 85%|      | 107/126 [00:01<00:00, 70.25it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 86%|      | 108/126 [00:01<00:00, 70.67it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 87%|      | 109/126 [00:01<00:00, 71.09it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 87%|      | 110/126 [00:01<00:00, 71.51it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 88%|      | 111/126 [00:01<00:00, 71.93it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 89%|      | 112/126 [00:01<00:00, 72.35it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 90%|      | 113/126 [00:01<00:00, 72.78it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 90%|      | 114/126 [00:01<00:00, 73.21it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 91%|      | 115/126 [00:01<00:00, 73.65it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 92%|      | 116/126 [00:01<00:00, 74.08it/s, loss=0.0124,

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v_num=4.31e+7]
Epoch 44: 93%|      | 117/126 [00:01<00:00, 74.51it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 94%|      | 118/126 [00:01<00:00, 74.94it/s, loss=0.0124,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.50it/s]
Epoch 44: 94%|      | 119/126 [00:01<00:00, 75.36it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 95%|      | 120/126 [00:01<00:00, 75.80it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 96%|      | 121/126 [00:01<00:00, 76.23it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 97%|      | 122/126 [00:01<00:00, 76.68it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 98%|      | 123/126 [00:01<00:00, 77.14it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 77.60it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 78.07it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 78.54it/s, loss=0.0124,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 76.96it/s, loss=0.0124,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 76.87it/s, loss=0.0124,
v_num=4.31e+7]Mapping latent space...

Epoch 45: 79%|      | 100/126 [00:01<00:00, 79.43it/s, loss=0.0113,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 70.75it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 70.89it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 71.44it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 83%|      | 104/126 [00:01<00:00, 71.96it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 72.50it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 73.02it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 73.57it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 74.08it/s, loss=0.0113,
v_num=4.31e+7]

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Epoch 45: 87%|      | 109/126 [00:01<00:00, 74.61it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 75.11it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 75.65it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 76.16it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 76.69it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 77.19it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 77.71it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 78.21it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 78.73it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 79.22it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 79.74it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 80.24it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 80.75it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 81.23it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 81.76it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 82.29it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 82.82it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 83.35it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 81.89it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 81.81it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 80.58it/s, loss=0.011,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 70.62it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 70.82it/s, loss=0.011,

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v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 71.31it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 71.80it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 72.28it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 72.77it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 73.26it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 73.74it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 74.22it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 74.70it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 75.17it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 75.65it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 76.13it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 76.60it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 77.07it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 77.54it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 78.01it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 78.47it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 78.94it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 79.40it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 79.87it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 80.31it/s, loss=0.011,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.95it/s]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 80.79it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 81.27it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 81.76it/s, loss=0.011,
v_num=4.31e+7]

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Epoch 46: 100%|      | 126/126 [00:01<00:00, 82.25it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|      | 126/126 [00:01<00:00, 80.67it/s, loss=0.011,
v_num=4.31e+7]
Epoch 46: 100%|      | 126/126 [00:01<00:00, 80.56it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 77.16it/s, loss=0.00915,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 68.47it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 68.71it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 82%|      | 103/126 [00:01<00:00, 69.11it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 83%|      | 104/126 [00:01<00:00, 69.51it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 83%|      | 105/126 [00:01<00:00, 69.91it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 84%|      | 106/126 [00:01<00:00, 70.32it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 85%|      | 107/126 [00:01<00:00, 70.73it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 86%|      | 108/126 [00:01<00:00, 71.14it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 87%|      | 109/126 [00:01<00:00, 71.56it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 87%|      | 110/126 [00:01<00:00, 71.98it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 88%|      | 111/126 [00:01<00:00, 72.40it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 89%|      | 112/126 [00:01<00:00, 72.83it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 90%|      | 113/126 [00:01<00:00, 73.25it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 90%|      | 114/126 [00:01<00:00, 73.69it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 91%|      | 115/126 [00:01<00:00, 74.12it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 92%|      | 116/126 [00:01<00:00, 74.56it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 93%|      | 117/126 [00:01<00:00, 75.00it/s, loss=0.00915,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 175.60it/s]
Epoch 47: 94%|      | 118/126 [00:01<00:00, 75.40it/s, loss=0.00915,
v_num=4.31e+7]

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Epoch 47: 94%|      | 119/126 [00:01<00:00, 75.84it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 95%|      | 120/126 [00:01<00:00, 76.28it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 96%|      | 121/126 [00:01<00:00, 76.72it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 97%|      | 122/126 [00:01<00:00, 77.16it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 77.62it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 78.09it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 78.56it/s, loss=0.00915,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 79.03it/s, loss=0.00915,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 76.65it/s, loss=0.00915,
v_num=4.31e+7]

Epoch 47: 100%|     | 126/126 [00:01<00:00, 76.57it/s, loss=0.00915,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 79%|      | 100/126 [00:01<00:00, 73.62it/s, loss=0.0116,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 64.95it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 64.99it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 65.50it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 65.97it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 66.48it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 66.79it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 67.29it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 67.76it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 68.26it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 68.72it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 69.22it/s, loss=0.0116,
v_num=4.31e+7]

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Epoch 48: 89%|      | 112/126 [00:01<00:00, 69.69it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 70.18it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 70.64it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 71.13it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 71.60it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 72.07it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 72.54it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 73.02it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 73.48it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 73.94it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 74.41it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 74.90it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 75.39it/s, loss=0.0116,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 248.38it/s]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 75.87it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 76.36it/s, loss=0.0116,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 74.80it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 74.72it/s, loss=0.0116,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 80.33it/s, loss=0.0119,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 69.58it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 69.92it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 70.36it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 70.79it/s, loss=0.0119,
v_num=4.31e+7]

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Epoch 49: 83%|      | 105/126 [00:01<00:00, 71.22it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 71.66it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 72.10it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 72.54it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 72.98it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 73.41it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 73.85it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 74.29it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 74.74it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 75.18it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 75.64it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 76.08it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 76.53it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 76.98it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 77.43it/s, loss=0.0119,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 197.18it/s]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 77.87it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 78.32it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 78.77it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 79.24it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 79.72it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 80.20it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 80.68it/s, loss=0.0119,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.0119,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 78.97it/s, loss=0.0119,

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v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|          | 100/126 [00:01<00:00, 80.05it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|          | 101/126 [00:01<00:00, 70.76it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 81%|          | 102/126 [00:01<00:00, 70.56it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 82%|          | 103/126 [00:01<00:00, 70.99it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 83%|          | 104/126 [00:01<00:00, 71.43it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 83%|          | 105/126 [00:01<00:00, 71.87it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 84%|          | 106/126 [00:01<00:00, 72.32it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 85%|          | 107/126 [00:01<00:00, 72.76it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 86%|          | 108/126 [00:01<00:00, 73.21it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 87%|          | 109/126 [00:01<00:00, 73.65it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 87%|          | 110/126 [00:01<00:00, 74.09it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 88%|          | 111/126 [00:01<00:00, 74.54it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 89%|          | 112/126 [00:01<00:00, 74.98it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 90%|          | 113/126 [00:01<00:00, 75.42it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 90%|          | 114/126 [00:01<00:00, 75.86it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 91%|          | 115/126 [00:01<00:00, 76.30it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 92%|          | 116/126 [00:01<00:00, 76.73it/s, loss=0.0107,
v_num=4.31e+7]
Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 168.26it/s]
Epoch 50: 93%|          | 117/126 [00:01<00:00, 77.15it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 94%|          | 118/126 [00:01<00:00, 77.58it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 94%|          | 119/126 [00:01<00:00, 78.02it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 95%|          | 120/126 [00:01<00:00, 78.45it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 96%|          | 121/126 [00:01<00:00, 78.88it/s, loss=0.0107,

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v_num=4.31e+7]
Epoch 50: 97%|      | 122/126 [00:01<00:00, 79.32it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 98%|      | 123/126 [00:01<00:00, 79.78it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 80.24it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 80.70it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 81.15it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|     | 126/126 [00:01<00:00, 77.57it/s, loss=0.0107,
v_num=4.31e+7]

Epoch 50: 100%|     | 126/126 [00:01<00:00, 77.42it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 79%|      | 100/126 [00:01<00:00, 68.92it/s, loss=0.0113,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 62.05it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 61.58it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 62.08it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 62.54it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 63.02it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 63.47it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 63.96it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 64.41it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 64.89it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 65.33it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 65.81it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 66.26it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 66.74it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 67.18it/s, loss=0.0113,

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v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 67.63it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 68.09it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 68.54it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 68.98it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 69.44it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 69.87it/s, loss=0.0113,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.49it/s]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 70.31it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 70.75it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 71.23it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 71.70it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 72.17it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 72.64it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 71.29it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 71.19it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 78.48it/s, loss=0.0079,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 68.32it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 68.58it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 68.99it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 69.43it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 69.86it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 70.29it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 70.72it/s, loss=0.0079,

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v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 71.16it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 71.59it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 72.03it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 72.46it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 72.89it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 73.32it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 73.75it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 74.18it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 74.62it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 75.05it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 75.49it/s, loss=0.0079,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.95it/s]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 75.92it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 76.36it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 76.79it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 77.24it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 77.70it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 78.17it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 78.63it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 79.10it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 77.70it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 77.60it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 79.45it/s, loss=0.00908,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|          | 101/126 [00:01<00:00, 69.87it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 81%|          | 102/126 [00:01<00:00, 70.15it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 82%|          | 103/126 [00:01<00:00, 70.57it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 83%|          | 104/126 [00:01<00:00, 71.00it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 83%|          | 105/126 [00:01<00:00, 71.43it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 84%|          | 106/126 [00:01<00:00, 71.86it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 85%|          | 107/126 [00:01<00:00, 72.29it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 86%|          | 108/126 [00:01<00:00, 72.72it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 87%|          | 109/126 [00:01<00:00, 73.14it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 87%|          | 110/126 [00:01<00:00, 73.56it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 88%|          | 111/126 [00:01<00:00, 73.99it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 89%|          | 112/126 [00:01<00:00, 74.43it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 90%|          | 113/126 [00:01<00:00, 74.86it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 90%|          | 114/126 [00:01<00:00, 75.30it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 91%|          | 115/126 [00:01<00:00, 75.74it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 92%|          | 116/126 [00:01<00:00, 76.18it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 93%|          | 117/126 [00:01<00:00, 76.62it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 94%|          | 118/126 [00:01<00:00, 77.06it/s, loss=0.00908,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 185.50it/s]
Epoch 53: 94%|          | 119/126 [00:01<00:00, 77.49it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 95%|          | 120/126 [00:01<00:00, 77.94it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 96%|          | 121/126 [00:01<00:00, 78.38it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 97%|          | 122/126 [00:01<00:00, 78.84it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 98%|          | 123/126 [00:01<00:00, 79.31it/s, loss=0.00908,
v_num=4.31e+7]

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Epoch 53: 98%|      | 124/126 [00:01<00:00, 79.78it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 80.26it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 80.73it/s, loss=0.00908,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.74it/s, loss=0.00908,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.63it/s, loss=0.00908,
v_num=4.31e+7]Mapping latent space...

Epoch 54: 79%|      | 100/126 [00:01<00:00, 81.61it/s, loss=0.0114,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|      | 101/126 [00:01<00:00, 71.48it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 81%|      | 102/126 [00:01<00:00, 71.62it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 82%|      | 103/126 [00:01<00:00, 72.12it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 83%|      | 104/126 [00:01<00:00, 72.62it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 83%|      | 105/126 [00:01<00:00, 73.12it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 84%|      | 106/126 [00:01<00:00, 73.62it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 85%|      | 107/126 [00:01<00:00, 74.12it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 86%|      | 108/126 [00:01<00:00, 74.62it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 87%|      | 109/126 [00:01<00:00, 75.12it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 87%|      | 110/126 [00:01<00:00, 75.61it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 88%|      | 111/126 [00:01<00:00, 76.10it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 89%|      | 112/126 [00:01<00:00, 76.59it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 90%|      | 113/126 [00:01<00:00, 77.08it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 90%|      | 114/126 [00:01<00:00, 77.57it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 91%|      | 115/126 [00:01<00:00, 78.06it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 92%|      | 116/126 [00:01<00:00, 78.54it/s, loss=0.0114,
v_num=4.31e+7]

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Epoch 54: 93%|      | 117/126 [00:01<00:00, 79.02it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 94%|      | 118/126 [00:01<00:00, 79.50it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 94%|      | 119/126 [00:01<00:00, 79.97it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 95%|      | 120/126 [00:01<00:00, 80.45it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 96%|      | 121/126 [00:01<00:00, 80.91it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 97%|      | 122/126 [00:01<00:00, 81.39it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 81.88it/s, loss=0.0114,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.74it/s]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 82.37it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 82.86it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 83.36it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.81it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.71it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 72.49it/s, loss=0.00853,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|      | 101/126 [00:01<00:00, 64.66it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 81%|      | 102/126 [00:01<00:00, 64.81it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 82%|      | 103/126 [00:01<00:00, 65.22it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 83%|      | 104/126 [00:01<00:00, 65.64it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 83%|      | 105/126 [00:01<00:00, 66.06it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 84%|      | 106/126 [00:01<00:00, 66.48it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 85%|      | 107/126 [00:01<00:00, 66.90it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 86%|      | 108/126 [00:01<00:00, 67.32it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 87%|      | 109/126 [00:01<00:00, 67.74it/s, loss=0.00853,
v_num=4.31e+7]

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Epoch 55: 87%|      | 110/126 [00:01<00:00, 68.16it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 88%|      | 111/126 [00:01<00:00, 68.57it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 89%|      | 112/126 [00:01<00:00, 68.99it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 90%|      | 113/126 [00:01<00:00, 69.41it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 69.84it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 70.26it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 70.68it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 71.10it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 71.53it/s, loss=0.00853,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.51it/s]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 71.95it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 72.38it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 72.81it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 73.24it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 73.70it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 74.15it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 74.60it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 75.06it/s, loss=0.00853,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 73.79it/s, loss=0.00853,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 73.71it/s, loss=0.00853,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 78.37it/s, loss=0.00843,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 69.90it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 70.21it/s, loss=0.00843,
v_num=4.31e+7]

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Epoch 56: 82%| | 103/126 [00:01<00:00, 70.64it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 83%| | 104/126 [00:01<00:00, 71.07it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 83%| | 105/126 [00:01<00:00, 71.50it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 84%| | 106/126 [00:01<00:00, 71.94it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 85%| | 107/126 [00:01<00:00, 72.37it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 86%| | 108/126 [00:01<00:00, 72.81it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 87%| | 109/126 [00:01<00:00, 73.24it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 87%| | 110/126 [00:01<00:00, 73.67it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 88%| | 111/126 [00:01<00:00, 74.10it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 89%| | 112/126 [00:01<00:00, 74.52it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 90%| | 113/126 [00:01<00:00, 74.95it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 90%| | 114/126 [00:01<00:00, 75.39it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 91%| | 115/126 [00:01<00:00, 75.83it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 92%| | 116/126 [00:01<00:00, 76.27it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 93%| | 117/126 [00:01<00:00, 76.70it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 94%| | 118/126 [00:01<00:00, 77.15it/s, loss=0.00843, v_num=4.31e+7]
 Validation DataLoader 0: 73%| | 19/26 [00:00<00:00, 188.56it/s]
 Epoch 56: 94%| | 119/126 [00:01<00:00, 77.59it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 95%| | 120/126 [00:01<00:00, 78.03it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 96%| | 121/126 [00:01<00:00, 78.47it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 97%| | 122/126 [00:01<00:00, 78.93it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 98%| | 123/126 [00:01<00:00, 79.40it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 98%| | 124/126 [00:01<00:00, 79.87it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 99%| | 125/126 [00:01<00:00, 80.35it/s, loss=0.00843, v_num=4.31e+7]
 Epoch 56: 100%| | 126/126 [00:01<00:00, 80.83it/s, loss=0.00843, v_num=4.31e+7]

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v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|      | 126/126 [00:01<00:00, 79.15it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 56: 100%|      | 126/126 [00:01<00:00, 79.06it/s, loss=0.00843,
v_num=4.31e+7]Mapping latent space...

Epoch 57: 79%|      | 100/126 [00:01<00:00, 79.87it/s, loss=0.0106,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|      | 101/126 [00:01<00:00, 71.03it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 81%|      | 102/126 [00:01<00:00, 71.24it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 82%|      | 103/126 [00:01<00:00, 71.78it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 83%|      | 104/126 [00:01<00:00, 72.30it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 83%|      | 105/126 [00:01<00:00, 72.84it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 84%|      | 106/126 [00:01<00:00, 73.35it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 85%|      | 107/126 [00:01<00:00, 73.89it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 86%|      | 108/126 [00:01<00:00, 74.39it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 87%|      | 109/126 [00:01<00:00, 74.92it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 87%|      | 110/126 [00:01<00:00, 75.42it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 88%|      | 111/126 [00:01<00:00, 75.95it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 89%|      | 112/126 [00:01<00:00, 76.46it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 90%|      | 113/126 [00:01<00:00, 76.98it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 90%|      | 114/126 [00:01<00:00, 77.49it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 91%|      | 115/126 [00:01<00:00, 78.01it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 92%|      | 116/126 [00:01<00:00, 78.51it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 93%|      | 117/126 [00:01<00:00, 79.03it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 94%|      | 118/126 [00:01<00:00, 79.53it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 94%|      | 119/126 [00:01<00:00, 80.05it/s, loss=0.0106,

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v_num=4.31e+7]
Epoch 57: 95%|      | 120/126 [00:01<00:00, 80.54it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 96%|      | 121/126 [00:01<00:00, 81.06it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 97%|      | 122/126 [00:01<00:00, 81.56it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 82.09it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 82.61it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 83.14it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 83.68it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 82.26it/s, loss=0.0106,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 82.17it/s, loss=0.0106,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 74.00it/s, loss=0.00842,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 65.15it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 65.29it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 65.69it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 66.09it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 66.50it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 66.90it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 67.31it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 67.72it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 68.12it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 68.52it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 68.93it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 69.34it/s, loss=0.00842,
v_num=4.31e+7]

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Epoch 58: 90%|      | 113/126 [00:01<00:00, 69.76it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 70.17it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 70.59it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 71.02it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 93%|      | 117/126 [00:01<00:00, 71.44it/s, loss=0.00842,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 175.57it/s]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 71.85it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 72.27it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 72.70it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 73.12it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 73.55it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 74.00it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 74.45it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 74.90it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 75.36it/s, loss=0.00842,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 74.06it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 73.98it/s, loss=0.00842,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 77.55it/s, loss=0.00914,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 69.32it/s, loss=0.00914,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 69.44it/s, loss=0.00914,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 69.96it/s, loss=0.00914,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 70.47it/s, loss=0.00914,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 71.00it/s, loss=0.00914,
v_num=4.31e+7]

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Epoch 59: 84%| | 106/126 [00:01<00:00, 71.50it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 85%| | 107/126 [00:01<00:00, 72.03it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 86%| | 108/126 [00:01<00:00, 72.53it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 87%| | 109/126 [00:01<00:00, 73.05it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 87%| | 110/126 [00:01<00:00, 73.54it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 88%| | 111/126 [00:01<00:00, 74.06it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 89%| | 112/126 [00:01<00:00, 74.56it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 90%| | 113/126 [00:01<00:00, 75.08it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 90%| | 114/126 [00:01<00:00, 75.57it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 91%| | 115/126 [00:01<00:00, 76.07it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 92%| | 116/126 [00:01<00:00, 76.57it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 93%| | 117/126 [00:01<00:00, 77.09it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 94%| | 118/126 [00:01<00:00, 77.57it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 94%| | 119/126 [00:01<00:00, 78.06it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 95%| | 120/126 [00:01<00:00, 78.55it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 96%| | 121/126 [00:01<00:00, 79.04it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 97%| | 122/126 [00:01<00:00, 79.54it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 98%| | 123/126 [00:01<00:00, 80.06it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 98%| | 124/126 [00:01<00:00, 80.58it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 99%| | 125/126 [00:01<00:00, 81.10it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 100%| | 126/126 [00:01<00:00, 81.62it/s, loss=0.00914, v_num=4.31e+7] Mapping latent space..
Epoch 59: 100%| | 126/126 [00:01<00:00, 80.11it/s, loss=0.00914, v_num=4.31e+7]
Epoch 59: 100%| | 126/126 [00:01<00:00, 80.03it/s, loss=0.00914, v_num=4.31e+7] Mapping latent space..
Epoch 60: 79%| | 100/126 [00:01<00:00, 73.83it/s, loss=0.00879,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|          | 101/126 [00:01<00:00, 65.11it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 81%|          | 102/126 [00:01<00:00, 65.27it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 82%|          | 103/126 [00:01<00:00, 65.78it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 83%|          | 104/126 [00:01<00:00, 66.27it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 83%|          | 105/126 [00:01<00:00, 66.76it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 84%|          | 106/126 [00:01<00:00, 67.26it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 85%|          | 107/126 [00:01<00:00, 67.75it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 86%|          | 108/126 [00:01<00:00, 68.24it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 87%|          | 109/126 [00:01<00:00, 68.73it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 87%|          | 110/126 [00:01<00:00, 69.21it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 88%|          | 111/126 [00:01<00:00, 69.70it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 89%|          | 112/126 [00:01<00:00, 70.18it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 90%|          | 113/126 [00:01<00:00, 70.67it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 90%|          | 114/126 [00:01<00:00, 71.15it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 91%|          | 115/126 [00:01<00:00, 71.63it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 92%|          | 116/126 [00:01<00:00, 72.11it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 93%|          | 117/126 [00:01<00:00, 72.59it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 94%|          | 118/126 [00:01<00:00, 73.07it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 94%|          | 119/126 [00:01<00:00, 73.55it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 95%|          | 120/126 [00:01<00:00, 74.02it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 96%|          | 121/126 [00:01<00:00, 74.50it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 97%|          | 122/126 [00:01<00:00, 74.97it/s, loss=0.00879,
v_num=4.31e+7]

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Epoch 60: 98%|      | 123/126 [00:01<00:00, 75.47it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 75.96it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 76.45it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 76.94it/s, loss=0.00879,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|     | 126/126 [00:01<00:00, 75.40it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 75.33it/s, loss=0.00879,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 79.30it/s, loss=0.0113,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 69.98it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 69.93it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 70.48it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 70.99it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 71.53it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 72.03it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 72.56it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 73.06it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 73.58it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 74.07it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 74.58it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 75.08it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 75.60it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 76.09it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 76.58it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 77.08it/s, loss=0.0113,

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v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 77.57it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 78.06it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 78.55it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 79.04it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 79.52it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 80.01it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 80.53it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 81.06it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 81.57it/s, loss=0.0113,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.70it/s]
Epoch 61: 100%|      | 126/126 [00:01<00:00, 82.08it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|      | 126/126 [00:01<00:00, 80.65it/s, loss=0.0113,
v_num=4.31e+7]
Epoch 61: 100%|      | 126/126 [00:01<00:00, 80.57it/s, loss=0.0113,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 82.02it/s, loss=0.0102,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 71.91it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 71.74it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 72.15it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 72.58it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 73.01it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 73.45it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 73.89it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 74.34it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 74.78it/s, loss=0.0102,

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v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 75.22it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 75.67it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 76.12it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 76.57it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 77.03it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 77.49it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 77.95it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 78.41it/s, loss=0.0102,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.87it/s]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 78.87it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 79.33it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 79.80it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 80.25it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 80.72it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 81.21it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 81.70it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 82.19it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 82.69it/s, loss=0.0102,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 81.05it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 80.95it/s, loss=0.0102,
v_num=4.31e+7]Mapping latent space...

Epoch 63: 79%|      | 100/126 [00:01<00:00, 74.21it/s, loss=0.00984,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 65.21it/s, loss=0.00984,
v_num=4.31e+7]

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Epoch 63: 81%| | 102/126 [00:01<00:00, 65.42it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 82%| | 103/126 [00:01<00:00, 65.84it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 83%| | 104/126 [00:01<00:00, 66.27it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 83%| | 105/126 [00:01<00:00, 66.71it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 84%| | 106/126 [00:01<00:00, 67.14it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 85%| | 107/126 [00:01<00:00, 67.57it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 86%| | 108/126 [00:01<00:00, 68.01it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 87%| | 109/126 [00:01<00:00, 68.45it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 87%| | 110/126 [00:01<00:00, 68.88it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 88%| | 111/126 [00:01<00:00, 69.31it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 89%| | 112/126 [00:01<00:00, 69.75it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 90%| | 113/126 [00:01<00:00, 70.18it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 90%| | 114/126 [00:01<00:00, 70.62it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 91%| | 115/126 [00:01<00:00, 71.05it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 92%| | 116/126 [00:01<00:00, 71.48it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 93%| | 117/126 [00:01<00:00, 71.92it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 94%| | 118/126 [00:01<00:00, 72.35it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 94%| | 119/126 [00:01<00:00, 72.79it/s, loss=0.00984, v_num=4.31e+7]
Validation DataLoader 0: 77%| | 20/26 [00:00<00:00, 196.76it/s]
Epoch 63: 95%| | 120/126 [00:01<00:00, 73.22it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 96%| | 121/126 [00:01<00:00, 73.65it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 97%| | 122/126 [00:01<00:00, 74.09it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 98%| | 123/126 [00:01<00:00, 74.55it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 98%| | 124/126 [00:01<00:00, 75.01it/s, loss=0.00984, v_num=4.31e+7]
Epoch 63: 99%| | 125/126 [00:01<00:00, 75.47it/s, loss=0.00984, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 63: 100%|      | 126/126 [00:01<00:00, 75.93it/s, loss=0.00984,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|      | 126/126 [00:01<00:00, 74.61it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 63: 100%|      | 126/126 [00:01<00:00, 74.52it/s, loss=0.00984,
v_num=4.31e+7]Mapping latent space...
Epoch 64:  79%|      | 100/126 [00:01<00:00, 76.95it/s, loss=0.01,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 64:  80%|      | 101/126 [00:01<00:00, 68.16it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  81%|      | 102/126 [00:01<00:00, 68.37it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  82%|      | 103/126 [00:01<00:00, 68.89it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  83%|      | 104/126 [00:01<00:00, 69.36it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  83%|      | 105/126 [00:01<00:00, 69.88it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  84%|      | 106/126 [00:01<00:00, 70.37it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  85%|      | 107/126 [00:01<00:00, 70.89it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  86%|      | 108/126 [00:01<00:00, 71.37it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  87%|      | 109/126 [00:01<00:00, 71.88it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  87%|      | 110/126 [00:01<00:00, 72.36it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  88%|      | 111/126 [00:01<00:00, 72.89it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  89%|      | 112/126 [00:01<00:00, 73.33it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  90%|      | 113/126 [00:01<00:00, 73.67it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  90%|      | 114/126 [00:01<00:00, 74.03it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  91%|      | 115/126 [00:01<00:00, 74.41it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  92%|      | 116/126 [00:01<00:00, 74.79it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  93%|      | 117/126 [00:01<00:00, 75.17it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64:  94%|      | 118/126 [00:01<00:00, 75.56it/s, loss=0.01,
v_num=4.31e+7]

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Epoch 64: 94%|      | 119/126 [00:01<00:00, 75.94it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 95%|      | 120/126 [00:01<00:00, 76.34it/s, loss=0.01,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.14it/s]
Epoch 64: 96%|      | 121/126 [00:01<00:00, 76.73it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 97%|      | 122/126 [00:01<00:00, 77.14it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 98%|      | 123/126 [00:01<00:00, 77.57it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 78.00it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 78.44it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.01,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.01,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.28it/s, loss=0.01,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 67.87it/s, loss=0.00922,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 60.42it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 60.57it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 61.04it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 61.51it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 61.98it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 62.43it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 62.89it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 63.36it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 63.82it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 64.28it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 64.74it/s, loss=0.00922,
v_num=4.31e+7]

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Epoch 65: 89%|      | 112/126 [00:01<00:00, 65.21it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 65.66it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 66.12it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 66.59it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 67.04it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 93%|      | 117/126 [00:01<00:00, 67.49it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 67.94it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 68.38it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 68.84it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 96%|      | 121/126 [00:01<00:00, 69.28it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 69.74it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 70.21it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 70.68it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 71.15it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 71.62it/s, loss=0.00922,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 70.39it/s, loss=0.00922,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 70.31it/s, loss=0.00922,
v_num=4.31e+7]Mapping latent space...

Epoch 66: 79%|      | 100/126 [00:01<00:00, 77.28it/s, loss=0.011,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 67.59it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 68.01it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 68.49it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 68.97it/s, loss=0.011,
v_num=4.31e+7]

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Epoch 66: 83%|      | 105/126 [00:01<00:00, 69.45it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 69.94it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 70.42it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 86%|      | 108/126 [00:01<00:00, 70.85it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 71.33it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 71.79it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 72.26it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 72.73it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 73.20it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 90%|      | 114/126 [00:01<00:00, 73.67it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 74.13it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 74.60it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 75.06it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 75.52it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 75.99it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 76.43it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 76.88it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 77.34it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 77.81it/s, loss=0.011,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.05it/s]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 78.28it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 78.76it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 79.23it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 77.33it/s, loss=0.011,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 77.20it/s, loss=0.011,

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v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|          | 100/126 [00:01<00:00, 65.69it/s, loss=0.00791,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|          | 101/126 [00:01<00:00, 59.29it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 81%|          | 102/126 [00:01<00:00, 59.36it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 82%|          | 103/126 [00:01<00:00, 59.84it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 83%|          | 104/126 [00:01<00:00, 60.29it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 83%|          | 105/126 [00:01<00:00, 60.77it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 84%|          | 106/126 [00:01<00:00, 61.22it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 85%|          | 107/126 [00:01<00:00, 61.69it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 86%|          | 108/126 [00:01<00:00, 62.15it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 87%|          | 109/126 [00:01<00:00, 62.61it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 87%|          | 110/126 [00:01<00:00, 63.04it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 88%|          | 111/126 [00:01<00:00, 63.51it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 89%|          | 112/126 [00:01<00:00, 63.95it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 90%|          | 113/126 [00:01<00:00, 64.42it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 90%|          | 114/126 [00:01<00:00, 64.86it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 91%|          | 115/126 [00:01<00:00, 65.31it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 92%|          | 116/126 [00:01<00:00, 65.76it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 93%|          | 117/126 [00:01<00:00, 66.21it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 94%|          | 118/126 [00:01<00:00, 66.65it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 94%|          | 119/126 [00:01<00:00, 67.10it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 95%|          | 120/126 [00:01<00:00, 67.54it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 96%|          | 121/126 [00:01<00:00, 67.99it/s, loss=0.00791,
v_num=4.31e+7]

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Epoch 67: 97%|      | 122/126 [00:01<00:00, 68.43it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 98%|      | 123/126 [00:01<00:00, 68.89it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 98%|      | 124/126 [00:01<00:00, 69.35it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 99%|      | 125/126 [00:01<00:00, 69.81it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 70.27it/s, loss=0.00791,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|     | 126/126 [00:01<00:00, 69.04it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 68.98it/s, loss=0.00791,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 67.97it/s, loss=0.0102,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|      | 101/126 [00:01<00:00, 61.23it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 81%|      | 102/126 [00:01<00:00, 61.43it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 82%|      | 103/126 [00:01<00:00, 61.92it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 83%|      | 104/126 [00:01<00:00, 62.39it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 83%|      | 105/126 [00:01<00:00, 62.87it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 84%|      | 106/126 [00:01<00:00, 63.33it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 85%|      | 107/126 [00:01<00:00, 63.81it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 86%|      | 108/126 [00:01<00:00, 64.28it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 87%|      | 109/126 [00:01<00:00, 64.75it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 87%|      | 110/126 [00:01<00:00, 65.21it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 88%|      | 111/126 [00:01<00:00, 65.69it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 89%|      | 112/126 [00:01<00:00, 66.11it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 90%|      | 113/126 [00:01<00:00, 66.57it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 90%|      | 114/126 [00:01<00:00, 67.03it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 91%|      | 115/126 [00:01<00:00, 67.48it/s, loss=0.0102,

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v_num=4.31e+7]
Epoch 68: 92%|      | 116/126 [00:01<00:00, 67.94it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 93%|      | 117/126 [00:01<00:00, 68.40it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 94%|      | 118/126 [00:01<00:00, 68.85it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 94%|      | 119/126 [00:01<00:00, 69.31it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 69.76it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 70.21it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 70.67it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 71.14it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 71.61it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 72.08it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 72.55it/s, loss=0.0102,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|     | 126/126 [00:01<00:00, 71.47it/s, loss=0.0102,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 71.40it/s, loss=0.0102,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 74.15it/s, loss=0.00935,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 66.09it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 66.23it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 66.74it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 67.22it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 67.73it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 68.22it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 68.72it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 69.22it/s, loss=0.00935,

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v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 69.71it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 70.19it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 70.70it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 71.18it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 71.68it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 72.14it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 72.64it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 73.11it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 73.60it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 74.08it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 74.56it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 75.03it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 75.52it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 75.99it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 76.48it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 76.98it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 77.48it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 77.98it/s, loss=0.00935,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 76.69it/s, loss=0.00935,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 76.62it/s, loss=0.00935,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 72.03it/s, loss=0.00945,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 63.18it/s, loss=0.00945,
v_num=4.31e+7]

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Epoch 70: 81%| | 102/126 [00:01<00:00, 63.51it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 82%| | 103/126 [00:01<00:00, 63.90it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 83%| | 104/126 [00:01<00:00, 64.29it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 83%| | 105/126 [00:01<00:00, 64.68it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 84%| | 106/126 [00:01<00:00, 65.07it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 85%| | 107/126 [00:01<00:00, 65.46it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 86%| | 108/126 [00:01<00:00, 65.85it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 87%| | 109/126 [00:01<00:00, 66.25it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 87%| | 110/126 [00:01<00:00, 66.64it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 88%| | 111/126 [00:01<00:00, 67.04it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 89%| | 112/126 [00:01<00:00, 67.44it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 90%| | 113/126 [00:01<00:00, 67.85it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 90%| | 114/126 [00:01<00:00, 68.26it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 91%| | 115/126 [00:01<00:00, 68.66it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 92%| | 116/126 [00:01<00:00, 69.05it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 93%| | 117/126 [00:01<00:00, 69.46it/s, loss=0.00945,
 v_num=4.31e+7]
 Validation DataLoader 0: 69%| | 18/26 [00:00<00:00, 173.80it/s]
 Epoch 70: 94%| | 118/126 [00:01<00:00, 69.87it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 94%| | 119/126 [00:01<00:00, 70.28it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 95%| | 120/126 [00:01<00:00, 70.69it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 96%| | 121/126 [00:01<00:00, 71.10it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 97%| | 122/126 [00:01<00:00, 71.52it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 98%| | 123/126 [00:01<00:00, 71.96it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 98%| | 124/126 [00:01<00:00, 72.40it/s, loss=0.00945,
 v_num=4.31e+7]
 Epoch 70: 99%| | 125/126 [00:01<00:00, 72.84it/s, loss=0.00945,


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v_num=4.31e+7]
Epoch 70: 100%|      | 126/126 [00:01<00:00, 73.28it/s, loss=0.00945,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|      | 126/126 [00:01<00:00, 72.06it/s, loss=0.00945,
v_num=4.31e+7]
Epoch 70: 100%|      | 126/126 [00:01<00:00, 71.99it/s, loss=0.00945,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 66.27it/s, loss=0.00978,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 58.88it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 59.14it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 82%|      | 103/126 [00:01<00:00, 59.58it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 83%|      | 104/126 [00:01<00:00, 60.03it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 83%|      | 105/126 [00:01<00:00, 60.47it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 84%|      | 106/126 [00:01<00:00, 60.91it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 85%|      | 107/126 [00:01<00:00, 61.36it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 86%|      | 108/126 [00:01<00:00, 61.80it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 87%|      | 109/126 [00:01<00:00, 62.23it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 87%|      | 110/126 [00:01<00:00, 62.66it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 88%|      | 111/126 [00:01<00:00, 63.10it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 89%|      | 112/126 [00:01<00:00, 63.53it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 90%|      | 113/126 [00:01<00:00, 63.96it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 90%|      | 114/126 [00:01<00:00, 64.39it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 91%|      | 115/126 [00:01<00:00, 64.81it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 92%|      | 116/126 [00:01<00:00, 65.24it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 93%|      | 117/126 [00:01<00:00, 65.66it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 94%|      | 118/126 [00:01<00:00, 66.06it/s, loss=0.00978,
v_num=4.31e+7]

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Epoch 71: 94%|      | 119/126 [00:01<00:00, 66.49it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 95%|      | 120/126 [00:01<00:00, 66.90it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 96%|      | 121/126 [00:01<00:00, 67.32it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 97%|      | 122/126 [00:01<00:00, 67.74it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 68.18it/s, loss=0.00978,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.13it/s]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 68.61it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 69.04it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 69.47it/s, loss=0.00978,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 68.34it/s, loss=0.00978,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 68.27it/s, loss=0.00978,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 78.39it/s, loss=0.00843,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 68.34it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 68.15it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 68.63it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 69.10it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 69.57it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 70.04it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 70.51it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 70.97it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 71.44it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 71.90it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 72.37it/s, loss=0.00843,

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v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 72.83it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 73.29it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 73.74it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 74.20it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 74.65it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 75.09it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 75.54it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 75.99it/s, loss=0.00843,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 192.46it/s]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 76.40it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 76.85it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 77.29it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 77.77it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 78.24it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 78.71it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 79.18it/s, loss=0.00843,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 77.41it/s, loss=0.00843,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 77.31it/s, loss=0.00843,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 65.97it/s, loss=0.00823,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 58.14it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 58.13it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 58.56it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 58.99it/s, loss=0.00823,

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v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 59.42it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 59.86it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 60.29it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 60.72it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 61.14it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 61.56it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 61.99it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 62.41it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 62.83it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 63.25it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 63.67it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 64.09it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 64.51it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 64.92it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 65.34it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 65.75it/s, loss=0.00823,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.19it/s]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 66.16it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 66.56it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 66.99it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 67.41it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 67.84it/s, loss=0.00823,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 68.27it/s, loss=0.00823,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 66.57it/s, loss=0.00823,
v_num=4.31e+7]

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Epoch 73: 100%|      | 126/126 [00:01<00:00, 66.51it/s, loss=0.00823,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 81.27it/s, loss=0.00999,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|      | 101/126 [00:01<00:00, 71.26it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 81%|      | 102/126 [00:01<00:00, 71.41it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 82%|      | 103/126 [00:01<00:00, 71.94it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 83%|      | 104/126 [00:01<00:00, 72.47it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 83%|      | 105/126 [00:01<00:00, 73.00it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 84%|      | 106/126 [00:01<00:00, 73.52it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 85%|      | 107/126 [00:01<00:00, 74.05it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 86%|      | 108/126 [00:01<00:00, 74.58it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 87%|      | 109/126 [00:01<00:00, 75.11it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 87%|      | 110/126 [00:01<00:00, 75.63it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 88%|      | 111/126 [00:01<00:00, 76.15it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 89%|      | 112/126 [00:01<00:00, 76.67it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 90%|      | 113/126 [00:01<00:00, 77.20it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 90%|      | 114/126 [00:01<00:00, 77.71it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 91%|      | 115/126 [00:01<00:00, 78.23it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 92%|      | 116/126 [00:01<00:00, 78.74it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 93%|      | 117/126 [00:01<00:00, 79.25it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 94%|      | 118/126 [00:01<00:00, 79.76it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 94%|      | 119/126 [00:01<00:00, 80.27it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 95%|      | 120/126 [00:01<00:00, 80.77it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 96%|      | 121/126 [00:01<00:00, 81.28it/s, loss=0.00999,

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v_num=4.31e+7]
Epoch 74: 97%|      | 122/126 [00:01<00:00, 81.79it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 98%|      | 123/126 [00:01<00:00, 82.32it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 98%|      | 124/126 [00:01<00:00, 82.86it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 83.40it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 83.92it/s, loss=0.00999,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 82.44it/s, loss=0.00999,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 82.37it/s, loss=0.00999,
v_num=4.31e+7]Mapping latent space...

Epoch 75: 79%|      | 100/126 [00:01<00:00, 78.52it/s, loss=0.0118,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 68.99it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 68.55it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 69.03it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 69.50it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 69.98it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 70.46it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 70.93it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 71.41it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 71.88it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 72.35it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 88%|      | 111/126 [00:01<00:00, 72.82it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 73.29it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 73.75it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 74.22it/s, loss=0.0118,

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v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 74.54it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 74.95it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 93%|      | 117/126 [00:01<00:00, 75.41it/s, loss=0.0118,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.37it/s]
Epoch 75: 94%|      | 118/126 [00:01<00:00, 75.86it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 94%|      | 119/126 [00:01<00:00, 76.32it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 95%|      | 120/126 [00:01<00:00, 76.77it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 96%|      | 121/126 [00:01<00:00, 77.22it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 97%|      | 122/126 [00:01<00:00, 77.68it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 98%|      | 123/126 [00:01<00:00, 78.15it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 98%|      | 124/126 [00:01<00:00, 78.63it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 99%|      | 125/126 [00:01<00:00, 79.10it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 79.58it/s, loss=0.0118,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|     | 126/126 [00:01<00:00, 77.64it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 77.52it/s, loss=0.0118,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 71.37it/s, loss=0.011,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 62.69it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 62.98it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 63.45it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 83%|      | 104/126 [00:01<00:00, 63.91it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 64.37it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 64.83it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 65.29it/s, loss=0.011,

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v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 65.74it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 66.20it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 87%|      | 110/126 [00:01<00:00, 66.65it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 67.10it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 67.55it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 68.00it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 68.45it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 68.90it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 69.34it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 69.78it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 70.23it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 70.66it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 71.10it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 71.53it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 71.97it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 72.43it/s, loss=0.011,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.76it/s]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 72.88it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 73.33it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 73.79it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 70.85it/s, loss=0.011,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 70.74it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 67.72it/s, loss=0.011,
v_num=4.31e+7]
Training for latent_dim 1 done.

```



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/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_<train/validation/test>_epoch_end` instead.
    rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]

```

	Name	Type	Params

0	encoder	Sequential	8.8 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	34
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	4
13	decoder	Sequential	8.8 K
14	decoder.0	Linear	48
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K

```

21 | decoder.7 | Tanh | 0
22 | decoder.8 | BatchNorm1d | 128
23 | decoder.9 | Linear | 5.9 K
24 | decoder.10 | Sigmoid | 0
-----
17.6 K Trainable params
0 Non-trainable params
17.6 K Total params
0.070 Total estimated model params size (MB)
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, val_dataloader 0, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
    rank_zero_warn(

Loading all data...
Training on 10000 examples, validating on 2501 examples
Sanity Checking DataLoader 0: 100%| | 2/2 [00:00<00:00,
2.36it/s]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 1%| | 1/126 [00:00<00:23, 5.41it/s, loss=0.126,
v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, train_dataloader, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
    rank_zero_warn(

Epoch 0: 79%| | 100/126 [00:01<00:00, 78.27it/s, loss=0.103,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%| | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]
Epoch 0: 80%| | 101/126 [00:01<00:00, 69.68it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 81%| | 102/126 [00:01<00:00, 69.83it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 82%| | 103/126 [00:01<00:00, 70.36it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 83%| | 104/126 [00:01<00:00, 70.89it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 83%| | 105/126 [00:01<00:00, 71.41it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 84%| | 106/126 [00:01<00:00, 71.94it/s, loss=0.103,

```

```

v_num=4.31e+7]
Epoch 0: 85%|      | 107/126 [00:01<00:00, 72.47it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 86%|      | 108/126 [00:01<00:00, 72.99it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 87%|      | 109/126 [00:01<00:00, 73.51it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 87%|      | 110/126 [00:01<00:00, 74.03it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 88%|      | 111/126 [00:01<00:00, 74.56it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 89%|      | 112/126 [00:01<00:00, 75.07it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 90%|      | 113/126 [00:01<00:00, 75.57it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 90%|      | 114/126 [00:01<00:00, 76.04it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 91%|      | 115/126 [00:01<00:00, 76.55it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 92%|      | 116/126 [00:01<00:00, 77.06it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 77.56it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 78.06it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 78.56it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 79.06it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 79.56it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 80.06it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 80.59it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 81.12it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 81.65it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 82.18it/s, loss=0.103,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.94it/s, loss=0.103,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.84it/s, loss=0.103,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 89.13it/s, loss=0.0974,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|          | 101/126 [00:01<00:00, 76.76it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 81%|          | 102/126 [00:01<00:00, 76.86it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 82%|          | 103/126 [00:01<00:00, 77.26it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 83%|          | 104/126 [00:01<00:00, 77.66it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 83%|          | 105/126 [00:01<00:00, 78.02it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 84%|          | 106/126 [00:01<00:00, 78.29it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 85%|          | 107/126 [00:01<00:00, 78.67it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 86%|          | 108/126 [00:01<00:00, 79.04it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 87%|          | 109/126 [00:01<00:00, 79.43it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 87%|          | 110/126 [00:01<00:00, 79.83it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 88%|          | 111/126 [00:01<00:00, 80.23it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 89%|          | 112/126 [00:01<00:00, 80.64it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 90%|          | 113/126 [00:01<00:00, 81.06it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 90%|          | 114/126 [00:01<00:00, 81.48it/s, loss=0.0974,
v_num=4.31e+7]
Validation DataLoader 0: 58%|          | 15/26 [00:00<00:00, 147.17it/s]
Epoch 1: 91%|          | 115/126 [00:01<00:00, 81.89it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 92%|          | 116/126 [00:01<00:00, 82.31it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 93%|          | 117/126 [00:01<00:00, 82.74it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 94%|          | 118/126 [00:01<00:00, 83.17it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 94%|          | 119/126 [00:01<00:00, 83.60it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 95%|          | 120/126 [00:01<00:00, 84.04it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 96%|          | 121/126 [00:01<00:00, 84.47it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 97%|          | 122/126 [00:01<00:00, 84.92it/s, loss=0.0974,

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v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 85.40it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 85.88it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 86.36it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 86.85it/s, loss=0.0974,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 84.95it/s, loss=0.0974,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 84.82it/s, loss=0.0974,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|      | 100/126 [00:01<00:00, 83.20it/s, loss=0.0948,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|      | 101/126 [00:01<00:00, 74.07it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 81%|      | 102/126 [00:01<00:00, 74.26it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 82%|      | 103/126 [00:01<00:00, 74.80it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 83%|      | 104/126 [00:01<00:00, 75.34it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 83%|      | 105/126 [00:01<00:00, 75.87it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 84%|      | 106/126 [00:01<00:00, 76.41it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 85%|      | 107/126 [00:01<00:00, 76.95it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 86%|      | 108/126 [00:01<00:00, 77.44it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 87%|      | 109/126 [00:01<00:00, 77.98it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 87%|      | 110/126 [00:01<00:00, 78.51it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 88%|      | 111/126 [00:01<00:00, 79.04it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 89%|      | 112/126 [00:01<00:00, 79.57it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 90%|      | 113/126 [00:01<00:00, 80.10it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 90%|      | 114/126 [00:01<00:00, 80.62it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 91%|      | 115/126 [00:01<00:00, 81.15it/s, loss=0.0948,
v_num=4.31e+7]

```

```

Epoch 2: 92%|      | 116/126 [00:01<00:00, 81.66it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 93%|      | 117/126 [00:01<00:00, 82.19it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 94%|      | 118/126 [00:01<00:00, 82.71it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 94%|      | 119/126 [00:01<00:00, 83.25it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 95%|      | 120/126 [00:01<00:00, 83.77it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 96%|      | 121/126 [00:01<00:00, 84.27it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 84.79it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 85.33it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 85.88it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 86.42it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 86.97it/s, loss=0.0948,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 85.27it/s, loss=0.0948,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 85.17it/s, loss=0.0948,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 91.03it/s, loss=0.0869,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 79.50it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 79.76it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 80.33it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 80.90it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 81.47it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 82.03it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 82.60it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 83.15it/s, loss=0.0869,
v_num=4.31e+7]

```

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Epoch 3: 87%|      | 109/126 [00:01<00:00, 83.71it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 84.22it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 84.78it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 85.33it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 85.88it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 86.44it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 86.98it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 87.53it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 88.08it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 88.62it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 89.15it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 89.69it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 90.22it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 90.77it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 91.34it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 91.91it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 92.48it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 93.07it/s, loss=0.0869,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 91.19it/s, loss=0.0869,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 91.08it/s, loss=0.0869,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 71.60it/s, loss=0.0787,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 63.84it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 64.07it/s, loss=0.0787,

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v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 64.52it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 64.97it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 65.43it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 65.89it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 85%|      | 107/126 [00:01<00:00, 66.34it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 66.79it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 67.25it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 67.70it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 68.15it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 68.57it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 69.02it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 69.47it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 69.91it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 70.35it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 70.79it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 71.23it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 71.67it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 72.11it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 72.55it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 72.99it/s, loss=0.0787,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.12it/s]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 73.44it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 73.90it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 74.35it/s, loss=0.0787,
v_num=4.31e+7]

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Epoch 4: 100%|      | 126/126 [00:01<00:00, 74.81it/s, loss=0.0787,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|      | 126/126 [00:01<00:00, 72.97it/s, loss=0.0787,
v_num=4.31e+7]
Epoch 4: 100%|      | 126/126 [00:01<00:00, 72.87it/s, loss=0.0787,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 73.54it/s, loss=0.0679,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 65.77it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 81%|      | 102/126 [00:01<00:00, 64.62it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 82%|      | 103/126 [00:01<00:00, 65.07it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 83%|      | 104/126 [00:01<00:00, 65.51it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 83%|      | 105/126 [00:01<00:00, 65.97it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 84%|      | 106/126 [00:01<00:00, 66.41it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 85%|      | 107/126 [00:01<00:00, 66.86it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 86%|      | 108/126 [00:01<00:00, 67.30it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 87%|      | 109/126 [00:01<00:00, 67.75it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 87%|      | 110/126 [00:01<00:00, 68.19it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 88%|      | 111/126 [00:01<00:00, 68.64it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 89%|      | 112/126 [00:01<00:00, 69.09it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 90%|      | 113/126 [00:01<00:00, 69.53it/s, loss=0.0679,
v_num=4.31e+7]
Validation DataLoader 0: 54%|      | 14/26 [00:00<00:00, 135.43it/s]
Epoch 5: 90%|      | 114/126 [00:01<00:00, 69.95it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 91%|      | 115/126 [00:01<00:00, 70.39it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 92%|      | 116/126 [00:01<00:00, 70.84it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 93%|      | 117/126 [00:01<00:00, 71.29it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 94%|      | 118/126 [00:01<00:00, 71.73it/s, loss=0.0679,
v_num=4.31e+7]

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Epoch 5: 94%|      | 119/126 [00:01<00:00, 72.17it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 95%|      | 120/126 [00:01<00:00, 72.62it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 96%|      | 121/126 [00:01<00:00, 73.06it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 97%|      | 122/126 [00:01<00:00, 73.50it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 98%|      | 123/126 [00:01<00:00, 73.96it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 74.42it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 74.90it/s, loss=0.0679,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 75.38it/s, loss=0.0679,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 73.51it/s, loss=0.0679,
v_num=4.31e+7]

Epoch 5: 100%|     | 126/126 [00:01<00:00, 73.43it/s, loss=0.0679,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 79%|      | 100/126 [00:01<00:00, 81.18it/s, loss=0.0561,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 70.47it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 70.66it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 71.12it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 71.57it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 83%|      | 105/126 [00:01<00:00, 72.03it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 72.48it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 72.95it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 73.40it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 73.86it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 74.32it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 74.79it/s, loss=0.0561,
v_num=4.31e+7]

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Epoch 6: 89%|      | 112/126 [00:01<00:00, 75.25it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 75.72it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 76.19it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 76.66it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 77.10it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 93%|      | 117/126 [00:01<00:00, 77.56it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 78.02it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 78.48it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 95%|      | 120/126 [00:01<00:00, 78.94it/s, loss=0.0561,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 205.39it/s]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 79.39it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 79.85it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 80.33it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 80.82it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 81.30it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 81.78it/s, loss=0.0561,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 80.18it/s, loss=0.0561,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 80.07it/s, loss=0.0561,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 80.69it/s, loss=0.0455,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 71.21it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 71.50it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 72.03it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 72.54it/s, loss=0.0455,
v_num=4.31e+7]

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Epoch 7: 83%|      | 105/126 [00:01<00:00, 73.06it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 73.58it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 74.11it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 74.61it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 75.12it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 75.63it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 76.14it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 76.65it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 77.16it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 77.67it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 78.18it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 78.68it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 79.18it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 79.66it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 80.16it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 80.66it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 81.16it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 81.67it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 82.21it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 82.74it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 83.27it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 83.81it/s, loss=0.0455,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 82.25it/s, loss=0.0455,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 82.17it/s, loss=0.0455,
v_num=4.31e+7]Mapping latent space...

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Epoch 8: 79%|          | 100/126 [00:01<00:00, 88.04it/s, loss=0.0343,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|          | 101/126 [00:01<00:00, 76.00it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 81%|          | 102/126 [00:01<00:00, 76.16it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 82%|          | 103/126 [00:01<00:00, 76.68it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 83%|          | 104/126 [00:01<00:00, 77.17it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 83%|          | 105/126 [00:01<00:00, 77.67it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 84%|          | 106/126 [00:01<00:00, 78.17it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 85%|          | 107/126 [00:01<00:00, 78.67it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 86%|          | 108/126 [00:01<00:00, 79.16it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 87%|          | 109/126 [00:01<00:00, 79.66it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 87%|          | 110/126 [00:01<00:00, 80.16it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 88%|          | 111/126 [00:01<00:00, 80.64it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 89%|          | 112/126 [00:01<00:00, 81.13it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 90%|          | 113/126 [00:01<00:00, 81.62it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 90%|          | 114/126 [00:01<00:00, 82.11it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 91%|          | 115/126 [00:01<00:00, 82.59it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 92%|          | 116/126 [00:01<00:00, 83.07it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 93%|          | 117/126 [00:01<00:00, 83.55it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 94%|          | 118/126 [00:01<00:00, 84.03it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 94%|          | 119/126 [00:01<00:00, 84.50it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 95%|          | 120/126 [00:01<00:00, 84.94it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 96%|          | 121/126 [00:01<00:00, 85.40it/s, loss=0.0343,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 217.42it/s]

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Epoch 8: 97%|      | 122/126 [00:01<00:00, 85.87it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 86.38it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 86.89it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 87.40it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 87.92it/s, loss=0.0343,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 85.82it/s, loss=0.0343,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 85.70it/s, loss=0.0343,
v_num=4.31e+7]Mapping latent space...

Epoch 9: 79%|      | 100/126 [00:01<00:00, 75.26it/s, loss=0.0258,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|      | 101/126 [00:01<00:00, 67.31it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 81%|      | 102/126 [00:01<00:00, 67.40it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 82%|      | 103/126 [00:01<00:00, 67.91it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 83%|      | 104/126 [00:01<00:00, 68.41it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 83%|      | 105/126 [00:01<00:00, 68.93it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 84%|      | 106/126 [00:01<00:00, 69.43it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 85%|      | 107/126 [00:01<00:00, 69.93it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 86%|      | 108/126 [00:01<00:00, 70.43it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 87%|      | 109/126 [00:01<00:00, 70.94it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 87%|      | 110/126 [00:01<00:00, 71.43it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 88%|      | 111/126 [00:01<00:00, 71.94it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 89%|      | 112/126 [00:01<00:00, 72.43it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 90%|      | 113/126 [00:01<00:00, 72.94it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 90%|      | 114/126 [00:01<00:00, 73.42it/s, loss=0.0258,
v_num=4.31e+7]

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Epoch 9: 91%|      | 115/126 [00:01<00:00, 73.93it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 92%|      | 116/126 [00:01<00:00, 74.42it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 93%|      | 117/126 [00:01<00:00, 74.92it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 94%|      | 118/126 [00:01<00:00, 75.40it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 94%|      | 119/126 [00:01<00:00, 75.91it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 95%|      | 120/126 [00:01<00:00, 76.38it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 96%|      | 121/126 [00:01<00:00, 76.89it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 97%|      | 122/126 [00:01<00:00, 77.34it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 98%|      | 123/126 [00:01<00:00, 77.85it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 78.36it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 78.88it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 79.39it/s, loss=0.0258,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 78.00it/s, loss=0.0258,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 77.93it/s, loss=0.0258,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 72.58it/s, loss=0.0205,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|     | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|     | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 64.68it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 81%|     | 102/126 [00:01<00:00, 64.92it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 82%|     | 103/126 [00:01<00:00, 65.43it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 83%|     | 104/126 [00:01<00:00, 65.91it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 83%|     | 105/126 [00:01<00:00, 66.40it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 84%|     | 106/126 [00:01<00:00, 66.88it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 85%|     | 107/126 [00:01<00:00, 67.39it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 86%|     | 108/126 [00:01<00:00, 67.86it/s, loss=0.0205,

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v_num=4.31e+7]
Epoch 10: 87%|      | 109/126 [00:01<00:00, 68.34it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 87%|      | 110/126 [00:01<00:00, 68.83it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 88%|      | 111/126 [00:01<00:00, 69.33it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 89%|      | 112/126 [00:01<00:00, 69.79it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 90%|      | 113/126 [00:01<00:00, 70.27it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 90%|      | 114/126 [00:01<00:00, 70.75it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 91%|      | 115/126 [00:01<00:00, 71.22it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 92%|      | 116/126 [00:01<00:00, 71.69it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 93%|      | 117/126 [00:01<00:00, 72.16it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 72.63it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 73.10it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 73.56it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 74.03it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 74.50it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 74.99it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 75.48it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 75.97it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 76.47it/s, loss=0.0205,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 75.22it/s, loss=0.0205,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 75.13it/s, loss=0.0205,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 73.88it/s, loss=0.0188,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 66.00it/s, loss=0.0188,
v_num=4.31e+7]

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Epoch 11: 81%| | 102/126 [00:01<00:00, 66.13it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 82%| | 103/126 [00:01<00:00, 66.61it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 83%| | 104/126 [00:01<00:00, 67.09it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 83%| | 105/126 [00:01<00:00, 67.59it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 84%| | 106/126 [00:01<00:00, 68.08it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 85%| | 107/126 [00:01<00:00, 68.59it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 86%| | 108/126 [00:01<00:00, 69.06it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 87%| | 109/126 [00:01<00:00, 69.56it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 87%| | 110/126 [00:01<00:00, 70.04it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 88%| | 111/126 [00:01<00:00, 70.54it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 89%| | 112/126 [00:01<00:00, 71.02it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 90%| | 113/126 [00:01<00:00, 71.51it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 90%| | 114/126 [00:01<00:00, 71.99it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 91%| | 115/126 [00:01<00:00, 72.48it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 92%| | 116/126 [00:01<00:00, 72.95it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 93%| | 117/126 [00:01<00:00, 73.44it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 94%| | 118/126 [00:01<00:00, 73.91it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 94%| | 119/126 [00:01<00:00, 74.40it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 95%| | 120/126 [00:01<00:00, 74.86it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 96%| | 121/126 [00:01<00:00, 75.33it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 97%| | 122/126 [00:01<00:00, 75.81it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 98%| | 123/126 [00:01<00:00, 76.31it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 98%| | 124/126 [00:01<00:00, 76.81it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 99%| | 125/126 [00:01<00:00, 77.31it/s, loss=0.0188,
v_num=4.31e+7]

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Epoch 11: 100%|      | 126/126 [00:01<00:00, 77.81it/s, loss=0.0188,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|      | 126/126 [00:01<00:00, 76.56it/s, loss=0.0188,
v_num=4.31e+7]
Epoch 11: 100%|      | 126/126 [00:01<00:00, 76.49it/s, loss=0.0188,
v_num=4.31e+7]Mapping latent space...

Epoch 12: 79%|      | 100/126 [00:01<00:00, 68.72it/s, loss=0.015,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 61.33it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 61.61it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 82%|      | 103/126 [00:01<00:00, 62.07it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 83%|      | 104/126 [00:01<00:00, 62.52it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 83%|      | 105/126 [00:01<00:00, 62.97it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 84%|      | 106/126 [00:01<00:00, 63.42it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 85%|      | 107/126 [00:01<00:00, 63.87it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 86%|      | 108/126 [00:01<00:00, 64.32it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 87%|      | 109/126 [00:01<00:00, 64.76it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 87%|      | 110/126 [00:01<00:00, 65.21it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 88%|      | 111/126 [00:01<00:00, 65.65it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 89%|      | 112/126 [00:01<00:00, 66.09it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 90%|      | 113/126 [00:01<00:00, 66.52it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 90%|      | 114/126 [00:01<00:00, 66.96it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 91%|      | 115/126 [00:01<00:00, 67.40it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 92%|      | 116/126 [00:01<00:00, 67.83it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 93%|      | 117/126 [00:01<00:00, 68.27it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 94%|      | 118/126 [00:01<00:00, 68.69it/s, loss=0.015,
v_num=4.31e+7]

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Epoch 12: 94%|      | 119/126 [00:01<00:00, 69.12it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 95%|      | 120/126 [00:01<00:00, 69.55it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 96%|      | 121/126 [00:01<00:00, 69.98it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 97%|      | 122/126 [00:01<00:00, 70.41it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 70.85it/s, loss=0.015,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.02it/s]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 71.29it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 71.73it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 72.18it/s, loss=0.015,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|     | 126/126 [00:01<00:00, 70.91it/s, loss=0.015,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 70.83it/s, loss=0.015,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 67.98it/s, loss=0.0138,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13: 80%|      | 101/126 [00:01<00:00, 60.96it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 81%|      | 102/126 [00:01<00:00, 60.86it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 82%|      | 103/126 [00:01<00:00, 61.34it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 83%|      | 104/126 [00:01<00:00, 61.80it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 83%|      | 105/126 [00:01<00:00, 62.29it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 84%|      | 106/126 [00:01<00:00, 62.75it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 85%|      | 107/126 [00:01<00:00, 63.23it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 86%|      | 108/126 [00:01<00:00, 63.68it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 87%|      | 109/126 [00:01<00:00, 64.16it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 87%|      | 110/126 [00:01<00:00, 64.62it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 88%|      | 111/126 [00:01<00:00, 65.09it/s, loss=0.0138,
v_num=4.31e+7]

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Epoch 13: 89%|      | 112/126 [00:01<00:00, 65.54it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 90%|      | 113/126 [00:01<00:00, 66.01it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 90%|      | 114/126 [00:01<00:00, 66.47it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 91%|      | 115/126 [00:01<00:00, 66.94it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 92%|      | 116/126 [00:01<00:00, 67.39it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 93%|      | 117/126 [00:01<00:00, 67.85it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 94%|      | 118/126 [00:01<00:00, 68.30it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 94%|      | 119/126 [00:01<00:00, 68.76it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 69.20it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 69.65it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 70.11it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 70.58it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 71.04it/s, loss=0.0138,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.52it/s]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 71.51it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 71.97it/s, loss=0.0138,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 70.81it/s, loss=0.0138,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 70.74it/s, loss=0.0138,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 82.56it/s, loss=0.0117,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 72.55it/s, loss=0.0117,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 72.85it/s, loss=0.0117,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 73.39it/s, loss=0.0117,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 73.92it/s, loss=0.0117,
v_num=4.31e+7]

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Epoch 14: 83%| | 105/126 [00:01<00:00, 74.46it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 84%| | 106/126 [00:01<00:00, 74.99it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 85%| | 107/126 [00:01<00:00, 75.53it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 86%| | 108/126 [00:01<00:00, 76.06it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 87%| | 109/126 [00:01<00:00, 76.59it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 87%| | 110/126 [00:01<00:00, 77.12it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 88%| | 111/126 [00:01<00:00, 77.66it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 89%| | 112/126 [00:01<00:00, 78.17it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 90%| | 113/126 [00:01<00:00, 78.70it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 90%| | 114/126 [00:01<00:00, 79.22it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 91%| | 115/126 [00:01<00:00, 79.75it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 92%| | 116/126 [00:01<00:00, 80.27it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 93%| | 117/126 [00:01<00:00, 80.79it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 94%| | 118/126 [00:01<00:00, 81.31it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 94%| | 119/126 [00:01<00:00, 81.82it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 95%| | 120/126 [00:01<00:00, 82.33it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 96%| | 121/126 [00:01<00:00, 82.83it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 97%| | 122/126 [00:01<00:00, 83.35it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 98%| | 123/126 [00:01<00:00, 83.90it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 98%| | 124/126 [00:01<00:00, 84.44it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 99%| | 125/126 [00:01<00:00, 84.98it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 100%| | 126/126 [00:01<00:00, 85.52it/s, loss=0.0117, v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%| | 126/126 [00:01<00:00, 83.73it/s, loss=0.0117, v_num=4.31e+7]
Epoch 14: 100%| | 126/126 [00:01<00:00, 83.64it/s, loss=0.0117, v_num=4.31e+7]Mapping latent space...

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Epoch 15: 79%|          | 100/126 [00:01<00:00, 82.82it/s, loss=0.0107,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|          | 101/126 [00:01<00:00, 73.61it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 81%|          | 102/126 [00:01<00:00, 73.71it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 82%|          | 103/126 [00:01<00:00, 74.26it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 83%|          | 104/126 [00:01<00:00, 74.79it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 83%|          | 105/126 [00:01<00:00, 75.34it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 84%|          | 106/126 [00:01<00:00, 75.87it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 85%|          | 107/126 [00:01<00:00, 76.42it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 86%|          | 108/126 [00:01<00:00, 76.93it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 87%|          | 109/126 [00:01<00:00, 77.48it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 87%|          | 110/126 [00:01<00:00, 78.00it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 88%|          | 111/126 [00:01<00:00, 78.55it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 89%|          | 112/126 [00:01<00:00, 79.06it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 90%|          | 113/126 [00:01<00:00, 79.59it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 90%|          | 114/126 [00:01<00:00, 80.11it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 91%|          | 115/126 [00:01<00:00, 80.65it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 92%|          | 116/126 [00:01<00:00, 81.16it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 93%|          | 117/126 [00:01<00:00, 81.68it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 94%|          | 118/126 [00:01<00:00, 82.19it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 94%|          | 119/126 [00:01<00:00, 82.72it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 95%|          | 120/126 [00:01<00:00, 83.22it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 96%|          | 121/126 [00:01<00:00, 83.74it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 97%|          | 122/126 [00:01<00:00, 84.25it/s, loss=0.0107,

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v_num=4.31e+7]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 84.79it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 85.34it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 85.88it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 86.43it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 84.78it/s, loss=0.0107,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 84.69it/s, loss=0.0107,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|      | 100/126 [00:01<00:00, 70.41it/s, loss=0.011,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|      | 101/126 [00:01<00:00, 62.87it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 81%|      | 102/126 [00:01<00:00, 62.84it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 82%|      | 103/126 [00:01<00:00, 63.32it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 83%|      | 104/126 [00:01<00:00, 63.80it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 83%|      | 105/126 [00:01<00:00, 64.28it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 84%|      | 106/126 [00:01<00:00, 64.75it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 85%|      | 107/126 [00:01<00:00, 65.23it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 86%|      | 108/126 [00:01<00:00, 65.70it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 87%|      | 109/126 [00:01<00:00, 66.17it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 87%|      | 110/126 [00:01<00:00, 66.64it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 88%|      | 111/126 [00:01<00:00, 67.12it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 89%|      | 112/126 [00:01<00:00, 67.59it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 90%|      | 113/126 [00:01<00:00, 68.06it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 90%|      | 114/126 [00:01<00:00, 68.52it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 91%|      | 115/126 [00:01<00:00, 69.00it/s, loss=0.011,
v_num=4.31e+7]

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Epoch 16: 92%|      | 116/126 [00:01<00:00, 69.46it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 93%|      | 117/126 [00:01<00:00, 69.92it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 94%|      | 118/126 [00:01<00:00, 70.38it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 94%|      | 119/126 [00:01<00:00, 70.85it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 95%|      | 120/126 [00:01<00:00, 71.31it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 96%|      | 121/126 [00:01<00:00, 71.77it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 97%|      | 122/126 [00:01<00:00, 72.23it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 72.71it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 73.19it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 73.67it/s, loss=0.011,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.40it/s]
Epoch 16: 100%|      | 126/126 [00:01<00:00, 74.15it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|      | 126/126 [00:01<00:00, 72.96it/s, loss=0.011,
v_num=4.31e+7]
Epoch 16: 100%|      | 126/126 [00:01<00:00, 72.89it/s, loss=0.011,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 77.85it/s, loss=0.0099,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 67.88it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 68.19it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 68.61it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 69.03it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 69.46it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 69.87it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 70.29it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 70.70it/s, loss=0.0099,
v_num=4.31e+7]

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Epoch 17: 87%|      | 109/126 [00:01<00:00, 71.12it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 71.55it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 71.97it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 72.40it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 72.82it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 73.26it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 91%|      | 115/126 [00:01<00:00, 73.70it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 92%|      | 116/126 [00:01<00:00, 74.13it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 74.58it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 75.01it/s, loss=0.0099,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.39it/s]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 75.45it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 75.89it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 76.32it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 76.77it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 77.24it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 77.71it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 78.18it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 78.65it/s, loss=0.0099,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 77.15it/s, loss=0.0099,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 77.05it/s, loss=0.0099,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 69.97it/s, loss=0.00796,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 62.73it/s, loss=0.00796,

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v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 62.95it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 63.46it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 63.93it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 64.43it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 64.90it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 65.40it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 65.86it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 66.35it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 66.82it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 67.31it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 67.77it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 68.26it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 68.72it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 69.21it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 69.66it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 70.14it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 70.60it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 71.08it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 71.54it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 72.01it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 72.46it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 72.94it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 73.43it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 73.91it/s, loss=0.00796,

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v_num=4.31e+7]
Epoch 18: 100%|      | 126/126 [00:01<00:00, 74.38it/s, loss=0.00796,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|      | 126/126 [00:01<00:00, 73.20it/s, loss=0.00796,
v_num=4.31e+7]
Epoch 18: 100%|      | 126/126 [00:01<00:00, 73.13it/s, loss=0.00796,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 84.11it/s, loss=0.00865,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|      | 101/126 [00:01<00:00, 73.68it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 81%|      | 102/126 [00:01<00:00, 73.94it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 82%|      | 103/126 [00:01<00:00, 74.37it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 83%|      | 104/126 [00:01<00:00, 74.80it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 83%|      | 105/126 [00:01<00:00, 75.25it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 84%|      | 106/126 [00:01<00:00, 75.69it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 85%|      | 107/126 [00:01<00:00, 76.13it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 86%|      | 108/126 [00:01<00:00, 76.56it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 87%|      | 109/126 [00:01<00:00, 77.00it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 87%|      | 110/126 [00:01<00:00, 77.44it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 88%|      | 111/126 [00:01<00:00, 77.88it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 89%|      | 112/126 [00:01<00:00, 78.32it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 90%|      | 113/126 [00:01<00:00, 78.77it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 90%|      | 114/126 [00:01<00:00, 79.22it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 91%|      | 115/126 [00:01<00:00, 79.68it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 92%|      | 116/126 [00:01<00:00, 80.13it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 93%|      | 117/126 [00:01<00:00, 80.58it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 94%|      | 118/126 [00:01<00:00, 81.04it/s, loss=0.00865,
v_num=4.31e+7]

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Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 187.21it/s]
Epoch 19: 94%|          | 119/126 [00:01<00:00, 81.49it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 95%|          | 120/126 [00:01<00:00, 81.95it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 96%|          | 121/126 [00:01<00:00, 82.41it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 97%|          | 122/126 [00:01<00:00, 82.87it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 98%|          | 123/126 [00:01<00:00, 83.36it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 98%|          | 124/126 [00:01<00:00, 83.85it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 99%|          | 125/126 [00:01<00:00, 84.34it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 100%|         | 126/126 [00:01<00:00, 84.83it/s, loss=0.00865,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|         | 126/126 [00:01<00:00, 83.17it/s, loss=0.00865,
v_num=4.31e+7]
Epoch 19: 100%|         | 126/126 [00:01<00:00, 83.07it/s, loss=0.00865,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|          | 100/126 [00:01<00:00, 75.30it/s, loss=0.00867,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|          | 101/126 [00:01<00:00, 66.15it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 81%|          | 102/126 [00:01<00:00, 66.37it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 82%|          | 103/126 [00:01<00:00, 66.83it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 83%|          | 104/126 [00:01<00:00, 67.30it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 83%|          | 105/126 [00:01<00:00, 67.77it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 84%|          | 106/126 [00:01<00:00, 68.23it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 85%|          | 107/126 [00:01<00:00, 68.70it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 86%|          | 108/126 [00:01<00:00, 69.16it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 87%|          | 109/126 [00:01<00:00, 69.63it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 87%|          | 110/126 [00:01<00:00, 70.09it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 88%|          | 111/126 [00:01<00:00, 70.55it/s, loss=0.00867,
v_num=4.31e+7]

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Epoch 20: 89%|      | 112/126 [00:01<00:00, 71.01it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 90%|      | 113/126 [00:01<00:00, 71.47it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 90%|      | 114/126 [00:01<00:00, 71.93it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 91%|      | 115/126 [00:01<00:00, 72.38it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 92%|      | 116/126 [00:01<00:00, 72.84it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 93%|      | 117/126 [00:01<00:00, 73.29it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 94%|      | 118/126 [00:01<00:00, 73.74it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 94%|      | 119/126 [00:01<00:00, 74.18it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 95%|      | 120/126 [00:01<00:00, 74.63it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 96%|      | 121/126 [00:01<00:00, 75.07it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 97%|      | 122/126 [00:01<00:00, 75.51it/s, loss=0.00867,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.94it/s]
Epoch 20: 98%|      | 123/126 [00:01<00:00, 75.97it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 98%|      | 124/126 [00:01<00:00, 76.44it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 76.90it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00867,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 75.99it/s, loss=0.00867,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 75.90it/s, loss=0.00867,
v_num=4.31e+7]Mapping latent space...

Epoch 21: 79%|      | 100/126 [00:01<00:00, 72.45it/s, loss=0.00864,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 63.42it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 63.37it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 63.83it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 64.29it/s, loss=0.00864,

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v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 64.75it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 65.21it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 65.67it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 66.12it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 66.57it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 87%|      | 110/126 [00:01<00:00, 67.03it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 67.48it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 67.94it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 68.39it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 68.84it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 69.29it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 69.73it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 70.18it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 70.62it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 71.06it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 71.50it/s, loss=0.00864,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 209.18it/s]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 71.93it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 72.37it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 72.83it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 73.29it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 73.74it/s, loss=0.00864,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 74.20it/s, loss=0.00864,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 72.50it/s, loss=0.00864,
v_num=4.31e+7]

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Epoch 21: 100%|      | 126/126 [00:01<00:00, 72.41it/s, loss=0.00864,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 69.47it/s, loss=0.0103,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 61.98it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 62.23it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 62.72it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 63.19it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 63.68it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 64.14it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 64.63it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 65.08it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 65.56it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 66.02it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 66.51it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 66.96it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 67.44it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 67.89it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 68.36it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 68.80it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 69.28it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 69.71it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 70.18it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 70.62it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 71.08it/s, loss=0.0103,

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v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 71.52it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 72.00it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 72.48it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 72.96it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 73.44it/s, loss=0.0103,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 72.27it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 72.20it/s, loss=0.0103,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|      | 100/126 [00:01<00:00, 79.85it/s, loss=0.00702,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|      | 101/126 [00:01<00:00, 69.73it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 81%|      | 102/126 [00:01<00:00, 69.78it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 82%|      | 103/126 [00:01<00:00, 70.27it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 83%|      | 104/126 [00:01<00:00, 70.76it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 83%|      | 105/126 [00:01<00:00, 71.25it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 84%|      | 106/126 [00:01<00:00, 71.74it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 85%|      | 107/126 [00:01<00:00, 72.23it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 86%|      | 108/126 [00:01<00:00, 72.70it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 87%|      | 109/126 [00:01<00:00, 73.19it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 87%|      | 110/126 [00:01<00:00, 73.67it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 88%|      | 111/126 [00:01<00:00, 74.16it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 89%|      | 112/126 [00:01<00:00, 74.56it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 90%|      | 113/126 [00:01<00:00, 74.95it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 90%|      | 114/126 [00:01<00:00, 75.43it/s, loss=0.00702,
v_num=4.31e+7]

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Epoch 23: 91%|      | 115/126 [00:01<00:00, 75.90it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 92%|      | 116/126 [00:01<00:00, 76.38it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 93%|      | 117/126 [00:01<00:00, 76.85it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 94%|      | 118/126 [00:01<00:00, 77.32it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 94%|      | 119/126 [00:01<00:00, 77.79it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 95%|      | 120/126 [00:01<00:00, 78.26it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 96%|      | 121/126 [00:01<00:00, 78.73it/s, loss=0.00702,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.24it/s]
Epoch 23: 97%|      | 122/126 [00:01<00:00, 79.19it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 79.67it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 80.16it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 80.64it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 81.13it/s, loss=0.00702,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 79.12it/s, loss=0.00702,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 78.99it/s, loss=0.00702,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|      | 100/126 [00:01<00:00, 75.98it/s, loss=0.00728,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 67.16it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 67.21it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 67.74it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 68.23it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 68.74it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 69.24it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 69.76it/s, loss=0.00728,

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v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 70.24it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 70.76it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 71.24it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 71.75it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 72.24it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 72.75it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 73.23it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 73.72it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 74.21it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 74.72it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 75.19it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 75.68it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 76.16it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 76.64it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 77.13it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 77.63it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 78.14it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 78.64it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.00728,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 77.77it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 77.69it/s, loss=0.00728,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 72.95it/s, loss=0.00756,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 25: 80%| | 101/126 [00:01<00:00, 64.19it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 81%| | 102/126 [00:01<00:00, 64.32it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 82%| | 103/126 [00:01<00:00, 64.79it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 83%| | 104/126 [00:01<00:00, 65.25it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 83%| | 105/126 [00:01<00:00, 65.71it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 84%| | 106/126 [00:01<00:00, 66.17it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 85%| | 107/126 [00:01<00:00, 66.63it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 86%| | 108/126 [00:01<00:00, 67.08it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 87%| | 109/126 [00:01<00:00, 67.54it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 87%| | 110/126 [00:01<00:00, 67.99it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 88%| | 111/126 [00:01<00:00, 68.44it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 89%| | 112/126 [00:01<00:00, 68.89it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 90%| | 113/126 [00:01<00:00, 69.34it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 90%| | 114/126 [00:01<00:00, 69.78it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 91%| | 115/126 [00:01<00:00, 70.23it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 92%| | 116/126 [00:01<00:00, 70.67it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 93%| | 117/126 [00:01<00:00, 71.10it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 94%| | 118/126 [00:01<00:00, 71.54it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 94%| | 119/126 [00:01<00:00, 71.97it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 95%| | 120/126 [00:01<00:00, 72.40it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 96%| | 121/126 [00:01<00:00, 72.83it/s, loss=0.00756, v_num=4.31e+7]
Validation DataLoader 0: 85%| | 22/26 [00:00<00:00, 217.07it/s]
Epoch 25: 97%| | 122/126 [00:01<00:00, 73.26it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 98%| | 123/126 [00:01<00:00, 73.72it/s, loss=0.00756, v_num=4.31e+7]
Epoch 25: 98%| | 124/126 [00:01<00:00, 74.17it/s, loss=0.00756, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 74.63it/s, loss=0.00756,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 75.08it/s, loss=0.00756,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.76it/s, loss=0.00756,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.67it/s, loss=0.00756,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 69.66it/s, loss=0.00645,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|      | 101/126 [00:01<00:00, 61.92it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 81%|      | 102/126 [00:01<00:00, 62.24it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 82%|      | 103/126 [00:01<00:00, 62.64it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 83%|      | 104/126 [00:01<00:00, 63.05it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 83%|      | 105/126 [00:01<00:00, 63.45it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 84%|      | 106/126 [00:01<00:00, 63.86it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 85%|      | 107/126 [00:01<00:00, 64.27it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 86%|      | 108/126 [00:01<00:00, 64.67it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 87%|      | 109/126 [00:01<00:00, 65.08it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 87%|      | 110/126 [00:01<00:00, 65.49it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 88%|      | 111/126 [00:01<00:00, 65.89it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 89%|      | 112/126 [00:01<00:00, 66.30it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 90%|      | 113/126 [00:01<00:00, 66.71it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 90%|      | 114/126 [00:01<00:00, 67.09it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 91%|      | 115/126 [00:01<00:00, 67.49it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 92%|      | 116/126 [00:01<00:00, 67.90it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 93%|      | 117/126 [00:01<00:00, 68.31it/s, loss=0.00645,
v_num=4.31e+7]

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Epoch 26: 94%|      | 118/126 [00:01<00:00, 68.72it/s, loss=0.00645,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.74it/s]
Epoch 26: 94%|      | 119/126 [00:01<00:00, 69.12it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 95%|      | 120/126 [00:01<00:00, 69.54it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 96%|      | 121/126 [00:01<00:00, 69.95it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 97%|      | 122/126 [00:01<00:00, 70.37it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 98%|      | 123/126 [00:01<00:00, 70.81it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 98%|      | 124/126 [00:01<00:00, 71.25it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 71.69it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 72.13it/s, loss=0.00645,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 70.84it/s, loss=0.00645,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 70.75it/s, loss=0.00645,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 74.86it/s, loss=0.00788,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 66.24it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 66.58it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 66.99it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 67.40it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 67.82it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 68.24it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 68.66it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 69.07it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 69.49it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 69.91it/s, loss=0.00788,

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v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 70.33it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 70.75it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 71.17it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 71.60it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 72.02it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 72.45it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 93%|      | 117/126 [00:01<00:00, 72.88it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 94%|      | 118/126 [00:01<00:00, 73.31it/s, loss=0.00788,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.32it/s]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 73.72it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 74.16it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 74.60it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 75.03it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 75.49it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 75.95it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 76.41it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 76.87it/s, loss=0.00788,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 75.43it/s, loss=0.00788,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 75.33it/s, loss=0.00788,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 71.04it/s, loss=0.00811,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 62.80it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 63.13it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 63.57it/s, loss=0.00811,

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v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 64.00it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 64.44it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 64.88it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 65.32it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 65.74it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 66.18it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 66.61it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 67.04it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 67.46it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 67.89it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 68.32it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 68.74it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 69.16it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 69.58it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 69.99it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 70.41it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 70.82it/s, loss=0.00811,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.67it/s]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 71.23it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 71.64it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 72.06it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 72.48it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 72.91it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 73.33it/s, loss=0.00811,
v_num=4.31e+7]Mapping latent space...

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Epoch 28: 100%|      | 126/126 [00:01<00:00, 71.84it/s, loss=0.00811,
v_num=4.31e+7]
Epoch 28: 100%|      | 126/126 [00:01<00:00, 71.75it/s, loss=0.00811,
v_num=4.31e+7]Mapping latent space...
Epoch 29:  79%|      | 100/126 [00:01<00:00, 72.94it/s, loss=0.007,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29:  80%|      | 101/126 [00:01<00:00, 64.71it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  81%|      | 102/126 [00:01<00:00, 64.68it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  82%|      | 103/126 [00:01<00:00, 65.19it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  83%|      | 104/126 [00:01<00:00, 65.67it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  83%|      | 105/126 [00:01<00:00, 66.18it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  84%|      | 106/126 [00:01<00:00, 66.66it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  85%|      | 107/126 [00:01<00:00, 67.16it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  86%|      | 108/126 [00:01<00:00, 67.64it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  87%|      | 109/126 [00:01<00:00, 68.14it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  87%|      | 110/126 [00:01<00:00, 68.61it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  88%|      | 111/126 [00:01<00:00, 69.11it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  89%|      | 112/126 [00:01<00:00, 69.58it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  90%|      | 113/126 [00:01<00:00, 70.07it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  90%|      | 114/126 [00:01<00:00, 70.54it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  91%|      | 115/126 [00:01<00:00, 71.04it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  92%|      | 116/126 [00:01<00:00, 71.50it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  93%|      | 117/126 [00:01<00:00, 71.99it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  94%|      | 118/126 [00:01<00:00, 72.45it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  94%|      | 119/126 [00:01<00:00, 72.94it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29:  95%|      | 120/126 [00:01<00:00, 73.39it/s, loss=0.007,

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v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 73.87it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 74.33it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 74.82it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 75.31it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 75.80it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 76.29it/s, loss=0.007,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 75.04it/s, loss=0.007,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 74.96it/s, loss=0.007,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 75.59it/s, loss=0.00616,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 67.42it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 67.71it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 68.17it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 68.62it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 69.07it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 69.52it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 69.97it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 70.41it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 70.85it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 71.29it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 71.72it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 72.15it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 72.58it/s, loss=0.00616,

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v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 73.01it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 73.44it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 73.86it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 74.28it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 94%|      | 118/126 [00:01<00:00, 74.59it/s, loss=0.00616,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.41it/s]
Epoch 30: 94%|      | 119/126 [00:01<00:00, 74.91it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 95%|      | 120/126 [00:01<00:00, 75.25it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 96%|      | 121/126 [00:01<00:00, 75.60it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 97%|      | 122/126 [00:01<00:00, 75.96it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 98%|      | 123/126 [00:01<00:00, 76.34it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 98%|      | 124/126 [00:01<00:00, 76.73it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 99%|      | 125/126 [00:01<00:00, 77.12it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 77.53it/s, loss=0.00616,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|     | 126/126 [00:01<00:00, 75.93it/s, loss=0.00616,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 75.82it/s, loss=0.00616,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|      | 100/126 [00:01<00:00, 77.44it/s, loss=0.00664,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|      | 101/126 [00:01<00:00, 67.64it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 81%|      | 102/126 [00:01<00:00, 67.91it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 82%|      | 103/126 [00:01<00:00, 68.32it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 83%|      | 104/126 [00:01<00:00, 68.74it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 83%|      | 105/126 [00:01<00:00, 69.17it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 84%|      | 106/126 [00:01<00:00, 69.59it/s, loss=0.00664,

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v_num=4.31e+7]
Epoch 31: 85%|      | 107/126 [00:01<00:00, 70.01it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 86%|      | 108/126 [00:01<00:00, 70.43it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 87%|      | 109/126 [00:01<00:00, 70.86it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 87%|      | 110/126 [00:01<00:00, 71.29it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 88%|      | 111/126 [00:01<00:00, 71.72it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 72.14it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 90%|      | 113/126 [00:01<00:00, 72.57it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 73.01it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 73.44it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 73.88it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 74.31it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 74.75it/s, loss=0.00664,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.27it/s]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 75.17it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 75.61it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 76.04it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 76.49it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 76.95it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 77.42it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 77.89it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 78.35it/s, loss=0.00664,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 76.45it/s, loss=0.00664,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 76.36it/s, loss=0.00664,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 63.65it/s, loss=0.00848,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|          | 101/126 [00:01<00:00, 57.04it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 81%|          | 102/126 [00:01<00:00, 57.22it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 82%|          | 103/126 [00:01<00:00, 57.65it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 83%|          | 104/126 [00:01<00:00, 58.08it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 83%|          | 105/126 [00:01<00:00, 58.51it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 84%|          | 106/126 [00:01<00:00, 58.94it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 85%|          | 107/126 [00:01<00:00, 59.37it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 86%|          | 108/126 [00:01<00:00, 59.79it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 87%|          | 109/126 [00:01<00:00, 60.22it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 87%|          | 110/126 [00:01<00:00, 60.64it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 88%|          | 111/126 [00:01<00:00, 61.06it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 89%|          | 112/126 [00:01<00:00, 61.48it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 90%|          | 113/126 [00:01<00:00, 61.90it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 90%|          | 114/126 [00:01<00:00, 62.32it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 91%|          | 115/126 [00:01<00:00, 62.73it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 92%|          | 116/126 [00:01<00:00, 63.15it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 93%|          | 117/126 [00:01<00:00, 63.56it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 94%|          | 118/126 [00:01<00:00, 63.98it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 94%|          | 119/126 [00:01<00:00, 64.39it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 95%|          | 120/126 [00:01<00:00, 64.80it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 96%|          | 121/126 [00:01<00:00, 65.21it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 97%|          | 122/126 [00:01<00:00, 65.62it/s, loss=0.00848,
v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 227.47it/s]

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Epoch 32: 98%|      | 123/126 [00:01<00:00, 66.05it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 66.47it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 66.90it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 67.32it/s, loss=0.00848,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 66.31it/s, loss=0.00848,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 66.24it/s, loss=0.00848,
v_num=4.31e+7]Mapping latent space...

Epoch 33: 79%|      | 100/126 [00:01<00:00, 75.18it/s, loss=0.00802,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|      | 101/126 [00:01<00:00, 66.65it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 81%|      | 102/126 [00:01<00:00, 66.77it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 82%|      | 103/126 [00:01<00:00, 67.28it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 83%|      | 104/126 [00:01<00:00, 67.78it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 83%|      | 105/126 [00:01<00:00, 68.28it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 84%|      | 106/126 [00:01<00:00, 68.78it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 85%|      | 107/126 [00:01<00:00, 69.28it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 86%|      | 108/126 [00:01<00:00, 69.77it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 87%|      | 109/126 [00:01<00:00, 70.26it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 87%|      | 110/126 [00:01<00:00, 70.75it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 88%|      | 111/126 [00:01<00:00, 71.26it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 89%|      | 112/126 [00:01<00:00, 71.74it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 90%|      | 113/126 [00:01<00:00, 72.23it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 90%|      | 114/126 [00:01<00:00, 72.72it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 91%|      | 115/126 [00:01<00:00, 73.22it/s, loss=0.00802,
v_num=4.31e+7]

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Epoch 33: 92%|      | 116/126 [00:01<00:00, 73.69it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 93%|      | 117/126 [00:01<00:00, 74.17it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 94%|      | 118/126 [00:01<00:00, 74.65it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 94%|      | 119/126 [00:01<00:00, 75.13it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 95%|      | 120/126 [00:01<00:00, 75.61it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 96%|      | 121/126 [00:01<00:00, 76.10it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 97%|      | 122/126 [00:01<00:00, 76.58it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 98%|      | 123/126 [00:01<00:00, 77.09it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 77.59it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 78.09it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 78.60it/s, loss=0.00802,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 77.31it/s, loss=0.00802,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 77.23it/s, loss=0.00802,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 70.13it/s, loss=0.00775,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 62.79it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 63.19it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 63.68it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 64.15it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 64.62it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 65.10it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 65.57it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 66.04it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 66.51it/s, loss=0.00775,

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v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 66.98it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 67.46it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 67.92it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 68.38it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 68.85it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 69.32it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 69.79it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 70.25it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 70.71it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 71.17it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 71.64it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 72.09it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 72.56it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 73.04it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 73.52it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 74.00it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 74.47it/s, loss=0.00775,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 73.26it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 73.19it/s, loss=0.00775,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 80.98it/s, loss=0.00913,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 70.63it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 70.33it/s, loss=0.00913,
v_num=4.31e+7]

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Epoch 35: 82%| | 103/126 [00:01<00:00, 70.88it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 83%| | 104/126 [00:01<00:00, 71.39it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 83%| | 105/126 [00:01<00:00, 71.85it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 84%| | 106/126 [00:01<00:00, 72.38it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 85%| | 107/126 [00:01<00:00, 72.91it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 86%| | 108/126 [00:01<00:00, 73.41it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 87%| | 109/126 [00:01<00:00, 73.94it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 87%| | 110/126 [00:01<00:00, 74.45it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 88%| | 111/126 [00:01<00:00, 74.98it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 89%| | 112/126 [00:01<00:00, 75.48it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 90%| | 113/126 [00:01<00:00, 76.01it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 90%| | 114/126 [00:01<00:00, 76.51it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 91%| | 115/126 [00:01<00:00, 77.00it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 92%| | 116/126 [00:01<00:00, 77.50it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 93%| | 117/126 [00:01<00:00, 78.02it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 94%| | 118/126 [00:01<00:00, 78.51it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 94%| | 119/126 [00:01<00:00, 79.03it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 95%| | 120/126 [00:01<00:00, 79.52it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 96%| | 121/126 [00:01<00:00, 80.04it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 97%| | 122/126 [00:01<00:00, 80.53it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 98%| | 123/126 [00:01<00:00, 81.05it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 98%| | 124/126 [00:01<00:00, 81.58it/s, loss=0.00913, v_num=4.31e+7]
 Validation DataLoader 0: 96%| | 25/26 [00:00<00:00, 246.79it/s]
 Epoch 35: 99%| | 125/126 [00:01<00:00, 82.10it/s, loss=0.00913, v_num=4.31e+7]
 Epoch 35: 100%| | 126/126 [00:01<00:00, 82.64it/s, loss=0.00913, v_num=4.31e+7]


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v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|      | 126/126 [00:01<00:00, 81.02it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 35: 100%|      | 126/126 [00:01<00:00, 80.94it/s, loss=0.00913,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 91.99it/s, loss=0.00749,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 80.05it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 81%|      | 102/126 [00:01<00:00, 80.35it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 82%|      | 103/126 [00:01<00:00, 80.80it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 83%|      | 104/126 [00:01<00:00, 81.25it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 83%|      | 105/126 [00:01<00:00, 81.71it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 84%|      | 106/126 [00:01<00:00, 82.15it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 85%|      | 107/126 [00:01<00:00, 82.61it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 86%|      | 108/126 [00:01<00:00, 83.06it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 87%|      | 109/126 [00:01<00:00, 83.52it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 87%|      | 110/126 [00:01<00:00, 83.97it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 88%|      | 111/126 [00:01<00:00, 84.43it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 89%|      | 112/126 [00:01<00:00, 84.89it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 90%|      | 113/126 [00:01<00:00, 85.34it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 90%|      | 114/126 [00:01<00:00, 85.79it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 91%|      | 115/126 [00:01<00:00, 86.25it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 92%|      | 116/126 [00:01<00:00, 86.71it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 93%|      | 117/126 [00:01<00:00, 87.18it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 94%|      | 118/126 [00:01<00:00, 87.64it/s, loss=0.00749,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.78it/s]

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Epoch 36: 94%|      | 119/126 [00:01<00:00, 88.09it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 95%|      | 120/126 [00:01<00:00, 88.57it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 96%|      | 121/126 [00:01<00:00, 89.04it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 97%|      | 122/126 [00:01<00:00, 89.52it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 98%|      | 123/126 [00:01<00:00, 90.04it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 98%|      | 124/126 [00:01<00:00, 90.56it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 91.09it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 91.65it/s, loss=0.00749,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|     | 126/126 [00:01<00:00, 89.79it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 89.69it/s, loss=0.00749,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 79.95it/s, loss=0.00836,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 70.37it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 70.60it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 71.10it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 71.59it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 72.10it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 72.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 73.11it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 73.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 74.12it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 74.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 75.13it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 75.61it/s, loss=0.00836,

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v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 76.11it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 76.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 77.11it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 77.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 78.11it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 94%|      | 118/126 [00:01<00:00, 78.59it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 79.09it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 79.45it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 79.94it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 80.44it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 80.96it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 81.48it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 82.00it/s, loss=0.00836,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.27it/s]
Epoch 37: 100%|      | 126/126 [00:01<00:00, 82.52it/s, loss=0.00836,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|      | 126/126 [00:01<00:00, 81.06it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 37: 100%|      | 126/126 [00:01<00:00, 80.97it/s, loss=0.00836,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 75.31it/s, loss=0.00701,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 66.04it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 66.08it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 66.55it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 67.02it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 67.48it/s, loss=0.00701,

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v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 67.95it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 68.41it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 68.87it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 69.33it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 69.78it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 70.24it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 70.69it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 90%|      | 113/126 [00:01<00:00, 71.14it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 71.59it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 72.03it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 72.48it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 72.92it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 73.36it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 73.79it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 74.23it/s, loss=0.00701,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.40it/s]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 74.66it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 75.09it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 75.56it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 76.03it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 76.50it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 76.97it/s, loss=0.00701,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 75.36it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 75.28it/s, loss=0.00701,
v_num=4.31e+7]Mapping latent space...

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Epoch 39: 79%|          | 100/126 [00:01<00:00, 80.56it/s, loss=0.00825,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|          | 101/126 [00:01<00:00, 70.28it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 81%|          | 102/126 [00:01<00:00, 70.54it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 82%|          | 103/126 [00:01<00:00, 71.02it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 83%|          | 104/126 [00:01<00:00, 71.51it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 83%|          | 105/126 [00:01<00:00, 71.99it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 84%|          | 106/126 [00:01<00:00, 72.47it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 85%|          | 107/126 [00:01<00:00, 72.95it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 86%|          | 108/126 [00:01<00:00, 73.42it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 87%|          | 109/126 [00:01<00:00, 73.89it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 87%|          | 110/126 [00:01<00:00, 74.37it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 88%|          | 111/126 [00:01<00:00, 74.84it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 89%|          | 112/126 [00:01<00:00, 75.31it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 90%|          | 113/126 [00:01<00:00, 75.77it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 90%|          | 114/126 [00:01<00:00, 76.24it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 91%|          | 115/126 [00:01<00:00, 76.71it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 92%|          | 116/126 [00:01<00:00, 77.17it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 93%|          | 117/126 [00:01<00:00, 77.63it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 94%|          | 118/126 [00:01<00:00, 78.09it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 94%|          | 119/126 [00:01<00:00, 78.54it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 95%|          | 120/126 [00:01<00:00, 79.00it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 96%|          | 121/126 [00:01<00:00, 79.45it/s, loss=0.00825,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 219.81it/s]

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Epoch 39: 97%|      | 122/126 [00:01<00:00, 79.90it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 80.38it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 80.87it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 81.36it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 81.84it/s, loss=0.00825,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 80.25it/s, loss=0.00825,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 80.14it/s, loss=0.00825,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 79.64it/s, loss=0.00794,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|      | 101/126 [00:01<00:00, 70.23it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 81%|      | 102/126 [00:01<00:00, 70.48it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 82%|      | 103/126 [00:01<00:00, 71.00it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 83%|      | 104/126 [00:01<00:00, 71.53it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 83%|      | 105/126 [00:01<00:00, 72.05it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 84%|      | 106/126 [00:01<00:00, 72.57it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 85%|      | 107/126 [00:01<00:00, 73.09it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 86%|      | 108/126 [00:01<00:00, 73.60it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 87%|      | 109/126 [00:01<00:00, 74.11it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 87%|      | 110/126 [00:01<00:00, 74.63it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 88%|      | 111/126 [00:01<00:00, 75.15it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 89%|      | 112/126 [00:01<00:00, 75.67it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 90%|      | 113/126 [00:01<00:00, 76.18it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 90%|      | 114/126 [00:01<00:00, 76.69it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 91%|      | 115/126 [00:01<00:00, 77.20it/s, loss=0.00794,

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v_num=4.31e+7]
Epoch 40: 92%|      | 116/126 [00:01<00:00, 77.71it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 93%|      | 117/126 [00:01<00:00, 78.21it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 94%|      | 118/126 [00:01<00:00, 78.71it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 94%|      | 119/126 [00:01<00:00, 79.21it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 95%|      | 120/126 [00:01<00:00, 79.71it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 96%|      | 121/126 [00:01<00:00, 80.21it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 97%|      | 122/126 [00:01<00:00, 80.71it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 98%|      | 123/126 [00:01<00:00, 81.15it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 81.67it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 82.20it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 82.73it/s, loss=0.00794,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|     | 126/126 [00:01<00:00, 81.17it/s, loss=0.00794,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 81.08it/s, loss=0.00794,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 68.92it/s, loss=0.00836,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 60.64it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 60.66it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 61.07it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 61.49it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 61.91it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 62.33it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 62.75it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 63.17it/s, loss=0.00836,
v_num=4.31e+7]

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Epoch 41: 87%|      | 109/126 [00:01<00:00, 63.60it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 64.02it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 64.44it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 64.86it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 65.28it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 65.71it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 66.12it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 66.55it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 66.97it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 67.39it/s, loss=0.00836,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.18it/s]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 67.80it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 68.22it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 68.64it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 69.06it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 69.50it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 69.94it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 70.37it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 70.81it/s, loss=0.00836,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 69.61it/s, loss=0.00836,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 69.54it/s, loss=0.00836,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 70.56it/s, loss=0.00753,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 61.85it/s, loss=0.00753,

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v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 62.20it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 62.63it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 63.06it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 63.50it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 63.94it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 64.37it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 64.81it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 65.25it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 65.68it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 66.12it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 66.56it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 67.00it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 67.45it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 67.88it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 68.32it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 68.76it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 69.19it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 69.63it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 70.06it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 70.49it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 70.93it/s, loss=0.00753,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.32it/s]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 71.37it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 71.82it/s, loss=0.00753,
v_num=4.31e+7]

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Epoch 42: 99%|      | 125/126 [00:01<00:00, 72.27it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 72.72it/s, loss=0.00753,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 71.47it/s, loss=0.00753,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 71.39it/s, loss=0.00753,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 72.75it/s, loss=0.00791,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 64.50it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 81%|      | 102/126 [00:01<00:00, 64.68it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 82%|      | 103/126 [00:01<00:00, 65.15it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 83%|      | 104/126 [00:01<00:00, 65.63it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 83%|      | 105/126 [00:01<00:00, 66.10it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 84%|      | 106/126 [00:01<00:00, 66.57it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 85%|      | 107/126 [00:01<00:00, 67.04it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 86%|      | 108/126 [00:01<00:00, 67.50it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 87%|      | 109/126 [00:01<00:00, 67.96it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 87%|      | 110/126 [00:01<00:00, 68.43it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 88%|      | 111/126 [00:01<00:00, 68.88it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 89%|      | 112/126 [00:01<00:00, 69.31it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 90%|      | 113/126 [00:01<00:00, 69.75it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 90%|      | 114/126 [00:01<00:00, 70.19it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 91%|      | 115/126 [00:01<00:00, 70.65it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 92%|      | 116/126 [00:01<00:00, 71.10it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 93%|      | 117/126 [00:01<00:00, 71.55it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 94%|      | 118/126 [00:01<00:00, 72.00it/s, loss=0.00791,

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v_num=4.31e+7]
Epoch 43: 94%|      | 119/126 [00:01<00:00, 72.44it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 95%|      | 120/126 [00:01<00:00, 72.89it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 96%|      | 121/126 [00:01<00:00, 73.33it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 97%|      | 122/126 [00:01<00:00, 73.78it/s, loss=0.00791,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 229.55it/s]
Epoch 43: 98%|      | 123/126 [00:01<00:00, 74.23it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 98%|      | 124/126 [00:01<00:00, 74.69it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 99%|      | 125/126 [00:01<00:00, 75.15it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 75.62it/s, loss=0.00791,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|     | 126/126 [00:01<00:00, 74.25it/s, loss=0.00791,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 74.18it/s, loss=0.00791,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 66.45it/s, loss=0.00696,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|      | 101/126 [00:01<00:00, 58.70it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 81%|      | 102/126 [00:01<00:00, 59.05it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 82%|      | 103/126 [00:01<00:00, 59.42it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 83%|      | 104/126 [00:01<00:00, 59.79it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 83%|      | 105/126 [00:01<00:00, 60.16it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 84%|      | 106/126 [00:01<00:00, 60.54it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 85%|      | 107/126 [00:01<00:00, 60.92it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 86%|      | 108/126 [00:01<00:00, 61.29it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 87%|      | 109/126 [00:01<00:00, 61.67it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 87%|      | 110/126 [00:01<00:00, 62.06it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 88%|      | 111/126 [00:01<00:00, 62.45it/s, loss=0.00696,

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v_num=4.31e+7]
Epoch 44: 89%|      | 112/126 [00:01<00:00, 62.84it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 90%|      | 113/126 [00:01<00:00, 63.24it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 90%|      | 114/126 [00:01<00:00, 63.63it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 91%|      | 115/126 [00:01<00:00, 64.04it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 92%|      | 116/126 [00:01<00:00, 64.43it/s, loss=0.00696,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.89it/s]
Epoch 44: 93%|      | 117/126 [00:01<00:00, 64.83it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 94%|      | 118/126 [00:01<00:00, 65.23it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 94%|      | 119/126 [00:01<00:00, 65.63it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 95%|      | 120/126 [00:01<00:00, 66.03it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 96%|      | 121/126 [00:01<00:00, 66.44it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 97%|      | 122/126 [00:01<00:00, 66.84it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 98%|      | 123/126 [00:01<00:00, 67.27it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 67.69it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 68.12it/s, loss=0.00696,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 68.55it/s, loss=0.00696,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 67.28it/s, loss=0.00696,
v_num=4.31e+7]

Epoch 44: 100%|     | 126/126 [00:01<00:00, 67.21it/s, loss=0.00696,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 79%|      | 100/126 [00:01<00:00, 80.49it/s, loss=0.0078,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 70.39it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 70.68it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 71.20it/s, loss=0.0078,
v_num=4.31e+7]

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Epoch 45: 83%|      | 104/126 [00:01<00:00, 71.72it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 72.23it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 72.75it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 73.27it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 73.77it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 87%|      | 109/126 [00:01<00:00, 74.29it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 74.80it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 75.31it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 75.82it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 76.33it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 76.83it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 77.34it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 77.85it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 78.35it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 78.85it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 79.37it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 79.85it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 80.36it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 80.85it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 81.38it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 81.91it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 82.43it/s, loss=0.0078,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 82.94it/s, loss=0.0078,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 81.42it/s, loss=0.0078,
v_num=4.31e+7]

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Epoch 45: 100%|      | 126/126 [00:01<00:00, 81.34it/s, loss=0.0078,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 82.79it/s, loss=0.00716,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 73.79it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 73.88it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 74.44it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 74.95it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 75.49it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 76.03it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 76.55it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 77.05it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 77.56it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 78.07it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 78.61it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 79.11it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 79.64it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 80.14it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 80.66it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 81.16it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 81.68it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 82.18it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 82.69it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 83.18it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 83.69it/s, loss=0.00716,

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v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 84.19it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 84.73it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 85.28it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 85.82it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 86.38it/s, loss=0.00716,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 84.16it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 84.07it/s, loss=0.00716,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 71.81it/s, loss=0.0076,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 63.13it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 63.35it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 82%|      | 103/126 [00:01<00:00, 63.81it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 83%|      | 104/126 [00:01<00:00, 64.26it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 83%|      | 105/126 [00:01<00:00, 64.71it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 84%|      | 106/126 [00:01<00:00, 65.17it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 85%|      | 107/126 [00:01<00:00, 65.62it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 86%|      | 108/126 [00:01<00:00, 66.07it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 87%|      | 109/126 [00:01<00:00, 66.52it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 87%|      | 110/126 [00:01<00:00, 66.97it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 88%|      | 111/126 [00:01<00:00, 67.41it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 89%|      | 112/126 [00:01<00:00, 67.85it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 90%|      | 113/126 [00:01<00:00, 68.29it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 90%|      | 114/126 [00:01<00:00, 68.73it/s, loss=0.0076,
v_num=4.31e+7]

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Epoch 47: 91%|      | 115/126 [00:01<00:00, 69.18it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 92%|      | 116/126 [00:01<00:00, 69.61it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 93%|      | 117/126 [00:01<00:00, 70.04it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 94%|      | 118/126 [00:01<00:00, 70.48it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 94%|      | 119/126 [00:01<00:00, 70.91it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 95%|      | 120/126 [00:01<00:00, 71.34it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 96%|      | 121/126 [00:01<00:00, 71.77it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 97%|      | 122/126 [00:01<00:00, 72.20it/s, loss=0.0076,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.80it/s]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 72.65it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 73.11it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 73.56it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 74.02it/s, loss=0.0076,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 72.65it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 72.57it/s, loss=0.0076,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 74.94it/s, loss=0.00808,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 65.89it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 66.10it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 66.58it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 67.05it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 67.52it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 67.99it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 68.46it/s, loss=0.00808,

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v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 68.92it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 69.39it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 69.85it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 70.32it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 89%|      | 112/126 [00:01<00:00, 70.78it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 71.23it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 71.69it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 72.15it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 72.60it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 73.06it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 73.51it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 73.95it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 74.40it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 74.84it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 75.29it/s, loss=0.00808,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.97it/s]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 75.75it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 76.22it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 76.69it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 77.16it/s, loss=0.00808,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 75.34it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 75.24it/s, loss=0.00808,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 66.80it/s, loss=0.00786,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|          | 101/126 [00:01<00:00, 60.14it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 81%|          | 102/126 [00:01<00:00, 60.48it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 82%|          | 103/126 [00:01<00:00, 60.92it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 83%|          | 104/126 [00:01<00:00, 61.37it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 83%|          | 105/126 [00:01<00:00, 61.82it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 84%|          | 106/126 [00:01<00:00, 62.27it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 85%|          | 107/126 [00:01<00:00, 62.72it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 86%|          | 108/126 [00:01<00:00, 63.16it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 87%|          | 109/126 [00:01<00:00, 63.59it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 87%|          | 110/126 [00:01<00:00, 64.03it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 88%|          | 111/126 [00:01<00:00, 64.47it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 89%|          | 112/126 [00:01<00:00, 64.91it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 90%|          | 113/126 [00:01<00:00, 65.34it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 90%|          | 114/126 [00:01<00:00, 65.78it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 91%|          | 115/126 [00:01<00:00, 66.21it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 92%|          | 116/126 [00:01<00:00, 66.63it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 93%|          | 117/126 [00:01<00:00, 67.06it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 94%|          | 118/126 [00:01<00:00, 67.48it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 94%|          | 119/126 [00:01<00:00, 67.90it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 95%|          | 120/126 [00:01<00:00, 68.32it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 96%|          | 121/126 [00:01<00:00, 68.74it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 97%|          | 122/126 [00:01<00:00, 69.17it/s, loss=0.00786,
v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 226.90it/s]
Epoch 49: 98%|          | 123/126 [00:01<00:00, 69.60it/s, loss=0.00786,
v_num=4.31e+7]

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Epoch 49: 98%|      | 124/126 [00:01<00:00, 70.04it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 70.48it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 70.92it/s, loss=0.00786,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 69.27it/s, loss=0.00786,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 69.20it/s, loss=0.00786,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 76.10it/s, loss=0.00777,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|      | 101/126 [00:01<00:00, 66.73it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 81%|      | 102/126 [00:01<00:00, 66.85it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 82%|      | 103/126 [00:01<00:00, 67.33it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 83%|      | 104/126 [00:01<00:00, 67.82it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 83%|      | 105/126 [00:01<00:00, 68.31it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 84%|      | 106/126 [00:01<00:00, 68.80it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 85%|      | 107/126 [00:01<00:00, 69.29it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 86%|      | 108/126 [00:01<00:00, 69.78it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 87%|      | 109/126 [00:01<00:00, 70.26it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 87%|      | 110/126 [00:01<00:00, 70.75it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 88%|      | 111/126 [00:01<00:00, 71.25it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 89%|      | 112/126 [00:01<00:00, 71.72it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 90%|      | 113/126 [00:01<00:00, 72.21it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 90%|      | 114/126 [00:01<00:00, 72.69it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 91%|      | 115/126 [00:01<00:00, 73.17it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 92%|      | 116/126 [00:01<00:00, 73.65it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 93%|      | 117/126 [00:01<00:00, 74.13it/s, loss=0.00777,

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v_num=4.31e+7]
Epoch 50: 94%|      | 118/126 [00:01<00:00, 74.60it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 94%|      | 119/126 [00:01<00:00, 75.08it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 95%|      | 120/126 [00:01<00:00, 75.56it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 96%|      | 121/126 [00:01<00:00, 76.03it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 97%|      | 122/126 [00:01<00:00, 76.51it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 98%|      | 123/126 [00:01<00:00, 77.01it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 77.51it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 78.01it/s, loss=0.00777,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.44it/s]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 78.51it/s, loss=0.00777,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|      | 126/126 [00:01<00:00, 77.07it/s, loss=0.00777,
v_num=4.31e+7]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 77.00it/s, loss=0.00777,
v_num=4.31e+7]Mapping latent space...

Epoch 51: 79%|      | 100/126 [00:01<00:00, 71.91it/s, loss=0.00887,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 64.45it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 64.67it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 65.13it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 65.59it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 66.05it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 66.52it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 66.97it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 67.44it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 67.89it/s, loss=0.00887,
v_num=4.31e+7]

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Epoch 51: 87%|      | 110/126 [00:01<00:00, 68.36it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 68.81it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 69.27it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 69.72it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 70.17it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 70.62it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 71.08it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 71.52it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 71.97it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 72.41it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 72.83it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 73.25it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 73.69it/s, loss=0.00887,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.72it/s]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 74.14it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 74.60it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 75.06it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 75.52it/s, loss=0.00887,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 73.66it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 73.58it/s, loss=0.00887,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 80.79it/s, loss=0.00716,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 70.49it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 70.52it/s, loss=0.00716,
v_num=4.31e+7]

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Epoch 52: 82%|      | 103/126 [00:01<00:00, 71.01it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 71.49it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 71.97it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 72.46it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 72.95it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 73.43it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 73.87it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 74.36it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 74.84it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 75.32it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 75.80it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 76.27it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 76.74it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 77.22it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 77.69it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 78.15it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 78.61it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 79.08it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 79.54it/s, loss=0.00716,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.53it/s]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 80.00it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 80.49it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 80.98it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 81.46it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 81.96it/s, loss=0.00716,

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v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|      | 126/126 [00:01<00:00, 80.35it/s, loss=0.00716,
v_num=4.31e+7]
Epoch 52: 100%|      | 126/126 [00:01<00:00, 80.26it/s, loss=0.00716,
v_num=4.31e+7]Mapping latent space...
Epoch 53:  79%|      | 100/126 [00:01<00:00, 77.31it/s, loss=0.00744,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53:  80%|      | 101/126 [00:01<00:00, 68.42it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  81%|      | 102/126 [00:01<00:00, 68.59it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  82%|      | 103/126 [00:01<00:00, 69.07it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  83%|      | 104/126 [00:01<00:00, 69.55it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  83%|      | 105/126 [00:01<00:00, 70.02it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  84%|      | 106/126 [00:01<00:00, 70.50it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  85%|      | 107/126 [00:01<00:00, 70.98it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  86%|      | 108/126 [00:01<00:00, 71.45it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  87%|      | 109/126 [00:01<00:00, 71.92it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  87%|      | 110/126 [00:01<00:00, 72.40it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  88%|      | 111/126 [00:01<00:00, 72.88it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  89%|      | 112/126 [00:01<00:00, 73.35it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  90%|      | 113/126 [00:01<00:00, 73.81it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  90%|      | 114/126 [00:01<00:00, 74.28it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  91%|      | 115/126 [00:01<00:00, 74.74it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  92%|      | 116/126 [00:01<00:00, 75.21it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  93%|      | 117/126 [00:01<00:00, 75.67it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  94%|      | 118/126 [00:01<00:00, 76.12it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53:  94%|      | 119/126 [00:01<00:00, 76.58it/s, loss=0.00744,
v_num=4.31e+7]

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Epoch 53: 95%|      | 120/126 [00:01<00:00, 77.03it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 77.48it/s, loss=0.00744,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.37it/s]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 77.93it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 78.40it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 78.88it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 79.36it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 79.84it/s, loss=0.00744,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.23it/s, loss=0.00744,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.12it/s, loss=0.00744,
v_num=4.31e+7]Mapping latent space...

Epoch 54: 79%|      | 100/126 [00:01<00:00, 82.64it/s, loss=0.00862,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|      | 101/126 [00:01<00:00, 71.68it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 81%|      | 102/126 [00:01<00:00, 71.52it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 82%|      | 103/126 [00:01<00:00, 72.02it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 83%|      | 104/126 [00:01<00:00, 72.51it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 83%|      | 105/126 [00:01<00:00, 73.00it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 84%|      | 106/126 [00:01<00:00, 73.48it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 85%|      | 107/126 [00:01<00:00, 73.98it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 86%|      | 108/126 [00:01<00:00, 74.46it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 87%|      | 109/126 [00:01<00:00, 74.95it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 87%|      | 110/126 [00:01<00:00, 75.44it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 88%|      | 111/126 [00:01<00:00, 75.92it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 89%|      | 112/126 [00:01<00:00, 76.40it/s, loss=0.00862,

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v_num=4.31e+7]
Epoch 54: 90%|      | 113/126 [00:01<00:00, 76.89it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 90%|      | 114/126 [00:01<00:00, 77.36it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 91%|      | 115/126 [00:01<00:00, 77.84it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 92%|      | 116/126 [00:01<00:00, 78.31it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 93%|      | 117/126 [00:01<00:00, 78.79it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 94%|      | 118/126 [00:01<00:00, 79.26it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 94%|      | 119/126 [00:01<00:00, 79.72it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 95%|      | 120/126 [00:01<00:00, 80.18it/s, loss=0.00862,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.18it/s]
Epoch 54: 96%|      | 121/126 [00:01<00:00, 80.63it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 97%|      | 122/126 [00:01<00:00, 81.10it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 81.59it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 82.08it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 82.57it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 83.06it/s, loss=0.00862,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.37it/s, loss=0.00862,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.26it/s, loss=0.00862,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 83.24it/s, loss=0.00731,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|      | 101/126 [00:01<00:00, 72.07it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 81%|      | 102/126 [00:01<00:00, 72.33it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 82%|      | 103/126 [00:01<00:00, 72.83it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 83%|      | 104/126 [00:01<00:00, 73.32it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 83%|      | 105/126 [00:01<00:00, 73.82it/s, loss=0.00731,

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v_num=4.31e+7]
Epoch 55: 84%|      | 106/126 [00:01<00:00, 74.32it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 85%|      | 107/126 [00:01<00:00, 74.83it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 86%|      | 108/126 [00:01<00:00, 75.34it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 87%|      | 109/126 [00:01<00:00, 75.85it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 87%|      | 110/126 [00:01<00:00, 76.36it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 88%|      | 111/126 [00:01<00:00, 76.88it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 89%|      | 112/126 [00:01<00:00, 77.38it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 90%|      | 113/126 [00:01<00:00, 77.88it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 78.39it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 78.92it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 79.41it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 79.92it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 80.41it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 80.92it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 81.41it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 81.91it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 82.41it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 82.95it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 83.48it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 84.01it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 84.54it/s, loss=0.00731,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 82.95it/s, loss=0.00731,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 82.86it/s, loss=0.00731,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 73.74it/s, loss=0.00719,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|          | 101/126 [00:01<00:00, 65.46it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 81%|          | 102/126 [00:01<00:00, 65.57it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 82%|          | 103/126 [00:01<00:00, 66.08it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 83%|          | 104/126 [00:01<00:00, 66.55it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 83%|          | 105/126 [00:01<00:00, 67.05it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 84%|          | 106/126 [00:01<00:00, 67.52it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 85%|          | 107/126 [00:01<00:00, 68.01it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 86%|          | 108/126 [00:01<00:00, 68.49it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 87%|          | 109/126 [00:01<00:00, 68.98it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 87%|          | 110/126 [00:01<00:00, 69.45it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 88%|          | 111/126 [00:01<00:00, 69.96it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 89%|          | 112/126 [00:01<00:00, 70.42it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 90%|          | 113/126 [00:01<00:00, 70.91it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 90%|          | 114/126 [00:01<00:00, 71.38it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 91%|          | 115/126 [00:01<00:00, 71.87it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 92%|          | 116/126 [00:01<00:00, 72.33it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 93%|          | 117/126 [00:01<00:00, 72.81it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 94%|          | 118/126 [00:01<00:00, 73.27it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 94%|          | 119/126 [00:01<00:00, 73.74it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 95%|          | 120/126 [00:01<00:00, 74.19it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 96%|          | 121/126 [00:01<00:00, 74.67it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 97%|          | 122/126 [00:01<00:00, 75.13it/s, loss=0.00719,
v_num=4.31e+7]

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Epoch 56: 98%|      | 123/126 [00:01<00:00, 75.63it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 76.12it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 99%|      | 125/126 [00:01<00:00, 76.62it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 77.12it/s, loss=0.00719,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 75.74it/s, loss=0.00719,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 75.67it/s, loss=0.00719,
v_num=4.31e+7]Mapping latent space...

Epoch 57: 79%|      | 100/126 [00:01<00:00, 77.79it/s, loss=0.00698,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|      | 101/126 [00:01<00:00, 68.48it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 81%|      | 102/126 [00:01<00:00, 68.56it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 82%|      | 103/126 [00:01<00:00, 68.99it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 83%|      | 104/126 [00:01<00:00, 69.44it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 83%|      | 105/126 [00:01<00:00, 69.88it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 84%|      | 106/126 [00:01<00:00, 70.32it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 85%|      | 107/126 [00:01<00:00, 70.76it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 86%|      | 108/126 [00:01<00:00, 71.19it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 87%|      | 109/126 [00:01<00:00, 71.63it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 87%|      | 110/126 [00:01<00:00, 72.07it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 88%|      | 111/126 [00:01<00:00, 72.51it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 89%|      | 112/126 [00:01<00:00, 72.95it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 90%|      | 113/126 [00:01<00:00, 73.39it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 90%|      | 114/126 [00:01<00:00, 73.83it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 91%|      | 115/126 [00:01<00:00, 74.27it/s, loss=0.00698,
v_num=4.31e+7]

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Epoch 57: 92%|      | 116/126 [00:01<00:00, 74.71it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 93%|      | 117/126 [00:01<00:00, 75.15it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 94%|      | 118/126 [00:01<00:00, 75.58it/s, loss=0.00698,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.47it/s]
Epoch 57: 94%|      | 119/126 [00:01<00:00, 76.02it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 95%|      | 120/126 [00:01<00:00, 76.46it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 96%|      | 121/126 [00:01<00:00, 76.90it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 97%|      | 122/126 [00:01<00:00, 77.34it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 77.82it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 78.29it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 78.76it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 79.23it/s, loss=0.00698,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 77.73it/s, loss=0.00698,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 77.64it/s, loss=0.00698,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 79.98it/s, loss=0.00624,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 69.58it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 69.51it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 69.97it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 70.44it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 70.91it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 71.38it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 71.85it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 72.31it/s, loss=0.00624,
v_num=4.31e+7]

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Epoch 58: 87%|      | 109/126 [00:01<00:00, 72.78it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 73.26it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 73.73it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 74.20it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 74.67it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 75.14it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 75.60it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 76.07it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 93%|      | 117/126 [00:01<00:00, 76.54it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 77.00it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 77.46it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 77.93it/s, loss=0.00624,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.52it/s]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 78.38it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 78.85it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 79.33it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 79.81it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 80.29it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 80.77it/s, loss=0.00624,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 79.14it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 79.05it/s, loss=0.00624,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 73.74it/s, loss=0.00878,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 65.27it/s, loss=0.00878,
v_num=4.31e+7]

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Epoch 59: 81%	102/126 [00:01<00:00, 65.44it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 82%	103/126 [00:01<00:00, 65.93it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 83%	104/126 [00:01<00:00, 66.41it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 83%	105/126 [00:01<00:00, 66.89it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 84%	106/126 [00:01<00:00, 67.38it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 85%	107/126 [00:01<00:00, 67.86it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 86%	108/126 [00:01<00:00, 68.34it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 87%	109/126 [00:01<00:00, 68.82it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 87%	110/126 [00:01<00:00, 69.30it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 88%	111/126 [00:01<00:00, 69.77it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 89%	112/126 [00:01<00:00, 70.27it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 90%	113/126 [00:01<00:00, 70.73it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 90%	114/126 [00:01<00:00, 71.20it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 91%	115/126 [00:01<00:00, 71.67it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 92%	116/126 [00:01<00:00, 72.15it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 93%	117/126 [00:01<00:00, 72.62it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 94%	118/126 [00:01<00:00, 73.09it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 94%	119/126 [00:01<00:00, 73.56it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 95%	120/126 [00:01<00:00, 74.03it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 96%	121/126 [00:01<00:00, 74.50it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 97%	122/126 [00:01<00:00, 74.97it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 98%	123/126 [00:01<00:00, 75.46it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 98%	124/126 [00:01<00:00, 75.96it/s, loss=0.00878,
v_num=4.31e+7]	
Epoch 59: 99%	125/126 [00:01<00:00, 76.45it/s, loss=0.00878,
v_num=4.31e+7]	

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Epoch 59: 100%|      | 126/126 [00:01<00:00, 76.94it/s, loss=0.00878,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|      | 126/126 [00:01<00:00, 75.58it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 59: 100%|      | 126/126 [00:01<00:00, 75.51it/s, loss=0.00878,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 73.01it/s, loss=0.00736,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 64.14it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 64.37it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 64.83it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 83%|      | 104/126 [00:01<00:00, 65.28it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 83%|      | 105/126 [00:01<00:00, 65.74it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 84%|      | 106/126 [00:01<00:00, 66.20it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 85%|      | 107/126 [00:01<00:00, 66.65it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 86%|      | 108/126 [00:01<00:00, 67.11it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 87%|      | 109/126 [00:01<00:00, 67.56it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 87%|      | 110/126 [00:01<00:00, 68.01it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 88%|      | 111/126 [00:01<00:00, 68.47it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 89%|      | 112/126 [00:01<00:00, 68.91it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 90%|      | 113/126 [00:01<00:00, 69.36it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 90%|      | 114/126 [00:01<00:00, 69.81it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 91%|      | 115/126 [00:01<00:00, 70.25it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 92%|      | 116/126 [00:01<00:00, 70.69it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 93%|      | 117/126 [00:01<00:00, 71.13it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 94%|      | 118/126 [00:01<00:00, 71.57it/s, loss=0.00736,
v_num=4.31e+7]

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Epoch 60: 94%|      | 119/126 [00:01<00:00, 72.00it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 95%|      | 120/126 [00:01<00:00, 72.43it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 96%|      | 121/126 [00:01<00:00, 72.86it/s, loss=0.00736,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.44it/s]
Epoch 60: 97%|      | 122/126 [00:01<00:00, 73.29it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 98%|      | 123/126 [00:01<00:00, 73.75it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 74.20it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 74.66it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 75.11it/s, loss=0.00736,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|     | 126/126 [00:01<00:00, 73.66it/s, loss=0.00736,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 73.58it/s, loss=0.00736,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 78.96it/s, loss=0.00625,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 69.00it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 69.13it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 69.61it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 70.09it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 70.57it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 71.05it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 71.53it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 72.01it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 72.49it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 72.97it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 73.45it/s, loss=0.00625,
v_num=4.31e+7]

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Epoch 61: 89%|      | 112/126 [00:01<00:00, 73.92it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 74.40it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 74.87it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 75.34it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 75.81it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 76.27it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 76.74it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 77.20it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 77.67it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 78.13it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 78.59it/s, loss=0.00625,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.61it/s]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 79.07it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 79.55it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 80.03it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 80.52it/s, loss=0.00625,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 78.97it/s, loss=0.00625,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 78.87it/s, loss=0.00625,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 81.67it/s, loss=0.00649,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 72.97it/s, loss=0.00649,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 73.36it/s, loss=0.00649,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 73.90it/s, loss=0.00649,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 74.42it/s, loss=0.00649,
v_num=4.31e+7]

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Epoch 62: 83%| | 105/126 [00:01<00:00, 74.96it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 84%| | 106/126 [00:01<00:00, 75.49it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 85%| | 107/126 [00:01<00:00, 76.03it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 86%| | 108/126 [00:01<00:00, 76.55it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 87%| | 109/126 [00:01<00:00, 77.08it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 87%| | 110/126 [00:01<00:00, 77.60it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 88%| | 111/126 [00:01<00:00, 78.14it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 89%| | 112/126 [00:01<00:00, 78.65it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 90%| | 113/126 [00:01<00:00, 79.18it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 90%| | 114/126 [00:01<00:00, 79.70it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 91%| | 115/126 [00:01<00:00, 80.23it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 92%| | 116/126 [00:01<00:00, 80.74it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 93%| | 117/126 [00:01<00:00, 81.27it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 94%| | 118/126 [00:01<00:00, 81.77it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 94%| | 119/126 [00:01<00:00, 82.29it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 95%| | 120/126 [00:01<00:00, 82.80it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 96%| | 121/126 [00:01<00:00, 83.31it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 97%| | 122/126 [00:01<00:00, 83.83it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 98%| | 123/126 [00:01<00:00, 84.37it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 98%| | 124/126 [00:01<00:00, 84.92it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 99%| | 125/126 [00:01<00:00, 85.46it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 100%| | 126/126 [00:01<00:00, 86.00it/s, loss=0.00649, v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%| | 126/126 [00:01<00:00, 83.22it/s, loss=0.00649, v_num=4.31e+7]
Epoch 62: 100%| | 126/126 [00:01<00:00, 83.10it/s, loss=0.00649, v_num=4.31e+7]Mapping latent space...

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Epoch 63: 79%|          | 100/126 [00:01<00:00, 79.06it/s, loss=0.00808,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|          | 101/126 [00:01<00:00, 70.78it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 81%|          | 102/126 [00:01<00:00, 70.96it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 82%|          | 103/126 [00:01<00:00, 71.50it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 83%|          | 104/126 [00:01<00:00, 72.01it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 83%|          | 105/126 [00:01<00:00, 72.54it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 84%|          | 106/126 [00:01<00:00, 73.05it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 85%|          | 107/126 [00:01<00:00, 73.60it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 86%|          | 108/126 [00:01<00:00, 74.09it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 87%|          | 109/126 [00:01<00:00, 74.61it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 87%|          | 110/126 [00:01<00:00, 75.13it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 88%|          | 111/126 [00:01<00:00, 75.65it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 89%|          | 112/126 [00:01<00:00, 76.15it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 90%|          | 113/126 [00:01<00:00, 76.66it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 90%|          | 114/126 [00:01<00:00, 77.18it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 91%|          | 115/126 [00:01<00:00, 77.69it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 92%|          | 116/126 [00:01<00:00, 78.19it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 93%|          | 117/126 [00:01<00:00, 78.70it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 94%|          | 118/126 [00:01<00:00, 79.20it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 94%|          | 119/126 [00:01<00:00, 79.71it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 95%|          | 120/126 [00:01<00:00, 80.21it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 96%|          | 121/126 [00:01<00:00, 80.71it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 97%|          | 122/126 [00:01<00:00, 81.22it/s, loss=0.00808,

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v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 81.75it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 82.29it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 82.82it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 83.35it/s, loss=0.00808,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 81.83it/s, loss=0.00808,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 81.73it/s, loss=0.00808,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 79%|      | 100/126 [00:01<00:00, 90.32it/s, loss=0.00822,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|      | 101/126 [00:01<00:00, 79.35it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 81%|      | 102/126 [00:01<00:00, 79.10it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 82%|      | 103/126 [00:01<00:00, 79.52it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 83%|      | 104/126 [00:01<00:00, 79.91it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 83%|      | 105/126 [00:01<00:00, 80.35it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 84%|      | 106/126 [00:01<00:00, 80.79it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 85%|      | 107/126 [00:01<00:00, 81.24it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 86%|      | 108/126 [00:01<00:00, 81.68it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 87%|      | 109/126 [00:01<00:00, 82.14it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 87%|      | 110/126 [00:01<00:00, 82.60it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 88%|      | 111/126 [00:01<00:00, 83.06it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 89%|      | 112/126 [00:01<00:00, 83.52it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 90%|      | 113/126 [00:01<00:00, 83.98it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 90%|      | 114/126 [00:01<00:00, 84.45it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 91%|      | 115/126 [00:01<00:00, 84.92it/s, loss=0.00822,
v_num=4.31e+7]

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Epoch 64: 92%|      | 116/126 [00:01<00:00, 85.39it/s, loss=0.00822,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.58it/s]
Epoch 64: 93%|      | 117/126 [00:01<00:00, 85.85it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 94%|      | 118/126 [00:01<00:00, 86.33it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 94%|      | 119/126 [00:01<00:00, 86.80it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 95%|      | 120/126 [00:01<00:00, 87.29it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 96%|      | 121/126 [00:01<00:00, 87.76it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 97%|      | 122/126 [00:01<00:00, 88.23it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 98%|      | 123/126 [00:01<00:00, 88.75it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 89.25it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 89.77it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 90.28it/s, loss=0.00822,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 88.32it/s, loss=0.00822,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 88.21it/s, loss=0.00822,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 79.00it/s, loss=0.00651,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 70.26it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 70.30it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 70.80it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 71.31it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 71.82it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 72.32it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 72.83it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 73.33it/s, loss=0.00651,
v_num=4.31e+7]

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Epoch 65: 87%|      | 109/126 [00:01<00:00, 73.84it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 74.35it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 74.85it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 75.36it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 75.87it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 76.37it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 76.89it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 77.37it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 93%|      | 117/126 [00:01<00:00, 77.87it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 78.37it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 78.86it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 79.36it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 96%|      | 121/126 [00:01<00:00, 79.86it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 80.36it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 80.88it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 81.41it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 81.94it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 82.47it/s, loss=0.00651,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 80.99it/s, loss=0.00651,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 80.92it/s, loss=0.00651,
v_num=4.31e+7]Mapping latent space...

Epoch 66: 79%|      | 100/126 [00:01<00:00, 92.57it/s, loss=0.00749,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 80.49it/s, loss=0.00749,
v_num=4.31e+7]

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Epoch 66: 81%| | 102/126 [00:01<00:00, 80.60it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 82%| | 103/126 [00:01<00:00, 81.02it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 83%| | 104/126 [00:01<00:00, 81.47it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 83%| | 105/126 [00:01<00:00, 81.90it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 84%| | 106/126 [00:01<00:00, 82.35it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 85%| | 107/126 [00:01<00:00, 82.78it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 86%| | 108/126 [00:01<00:00, 83.19it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 87%| | 109/126 [00:01<00:00, 83.64it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 87%| | 110/126 [00:01<00:00, 84.09it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 88%| | 111/126 [00:01<00:00, 84.53it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 89%| | 112/126 [00:01<00:00, 84.99it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 90%| | 113/126 [00:01<00:00, 85.44it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 90%| | 114/126 [00:01<00:00, 85.89it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 91%| | 115/126 [00:01<00:00, 86.35it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 92%| | 116/126 [00:01<00:00, 86.81it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 93%| | 117/126 [00:01<00:00, 87.28it/s, loss=0.00749, v_num=4.31e+7]
 Validation DataLoader 0: 69%| | 18/26 [00:00<00:00, 176.28it/s]
 Epoch 66: 94%| | 118/126 [00:01<00:00, 87.72it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 94%| | 119/126 [00:01<00:00, 88.18it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 95%| | 120/126 [00:01<00:00, 88.65it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 96%| | 121/126 [00:01<00:00, 89.11it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 97%| | 122/126 [00:01<00:00, 89.60it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 98%| | 123/126 [00:01<00:00, 90.10it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 98%| | 124/126 [00:01<00:00, 90.61it/s, loss=0.00749, v_num=4.31e+7]
 Epoch 66: 99%| | 125/126 [00:01<00:00, 91.12it/s, loss=0.00749, v_num=4.31e+7]


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v_num=4.31e+7]
Epoch 66: 100%|      | 126/126 [00:01<00:00, 91.64it/s, loss=0.00749,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|      | 126/126 [00:01<00:00, 89.69it/s, loss=0.00749,
v_num=4.31e+7]
Epoch 66: 100%|      | 126/126 [00:01<00:00, 89.58it/s, loss=0.00749,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|       | 100/126 [00:01<00:00, 81.22it/s, loss=0.00752,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|       | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|       | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|      | 101/126 [00:01<00:00, 72.61it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 81%|      | 102/126 [00:01<00:00, 72.83it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 82%|      | 103/126 [00:01<00:00, 73.37it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 83%|      | 104/126 [00:01<00:00, 73.90it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 83%|      | 105/126 [00:01<00:00, 74.43it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 84%|      | 106/126 [00:01<00:00, 74.97it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 85%|      | 107/126 [00:01<00:00, 75.51it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 86%|      | 108/126 [00:01<00:00, 76.02it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 87%|      | 109/126 [00:01<00:00, 76.55it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 87%|      | 110/126 [00:01<00:00, 77.05it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 88%|      | 111/126 [00:01<00:00, 77.57it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 89%|      | 112/126 [00:01<00:00, 78.09it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 90%|      | 113/126 [00:01<00:00, 78.60it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 90%|      | 114/126 [00:01<00:00, 79.12it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 91%|      | 115/126 [00:01<00:00, 79.61it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 92%|      | 116/126 [00:01<00:00, 80.13it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 93%|      | 117/126 [00:01<00:00, 80.64it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 94%|      | 118/126 [00:01<00:00, 81.15it/s, loss=0.00752,
v_num=4.31e+7]

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Epoch 67: 94%|      | 119/126 [00:01<00:00, 81.66it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 95%|      | 120/126 [00:01<00:00, 82.17it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 96%|      | 121/126 [00:01<00:00, 82.68it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 97%|      | 122/126 [00:01<00:00, 83.18it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 98%|      | 123/126 [00:01<00:00, 83.72it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 98%|      | 124/126 [00:01<00:00, 84.26it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 99%|      | 125/126 [00:01<00:00, 84.80it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 85.34it/s, loss=0.00752,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|     | 126/126 [00:01<00:00, 83.62it/s, loss=0.00752,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 83.55it/s, loss=0.00752,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 94.29it/s, loss=0.00866,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|      | 101/126 [00:01<00:00, 82.58it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 81%|      | 102/126 [00:01<00:00, 82.46it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 82%|      | 103/126 [00:01<00:00, 83.07it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 83%|      | 104/126 [00:01<00:00, 83.64it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 83%|      | 105/126 [00:01<00:00, 84.25it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 84%|      | 106/126 [00:01<00:00, 84.81it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 85%|      | 107/126 [00:01<00:00, 85.41it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 86%|      | 108/126 [00:01<00:00, 85.95it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 87%|      | 109/126 [00:01<00:00, 86.55it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 87%|      | 110/126 [00:01<00:00, 87.10it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 88%|      | 111/126 [00:01<00:00, 87.69it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 89%|      | 112/126 [00:01<00:00, 88.22it/s, loss=0.00866,

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v_num=4.31e+7]
Epoch 68: 90%|      | 113/126 [00:01<00:00, 88.81it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 90%|      | 114/126 [00:01<00:00, 89.36it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 91%|      | 115/126 [00:01<00:00, 89.95it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 92%|      | 116/126 [00:01<00:00, 90.50it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 93%|      | 117/126 [00:01<00:00, 91.08it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 94%|      | 118/126 [00:01<00:00, 91.63it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 94%|      | 119/126 [00:01<00:00, 92.19it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 92.73it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 93.30it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 93.86it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 94.46it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 95.05it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 95.65it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 96.25it/s, loss=0.00866,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|     | 126/126 [00:01<00:00, 94.06it/s, loss=0.00866,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 93.95it/s, loss=0.00866,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 73.85it/s, loss=0.00761,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 65.43it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 65.64it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 66.09it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 66.55it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 67.01it/s, loss=0.00761,

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v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 67.46it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 67.90it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 68.35it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 68.79it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 69.23it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 69.67it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 70.11it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 70.54it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 70.95it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 71.38it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 71.81it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 72.24it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 72.66it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 73.08it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 73.51it/s, loss=0.00761,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.52it/s]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 73.92it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 74.34it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 74.77it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 75.21it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 75.64it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 76.07it/s, loss=0.00761,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 74.46it/s, loss=0.00761,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 74.37it/s, loss=0.00761,
v_num=4.31e+7]Mapping latent space...

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Epoch 70: 79%|          | 100/126 [00:01<00:00, 77.21it/s, loss=0.0068,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|          | 101/126 [00:01<00:00, 68.10it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 81%|          | 102/126 [00:01<00:00, 68.26it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 82%|          | 103/126 [00:01<00:00, 68.80it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 83%|          | 104/126 [00:01<00:00, 69.30it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 83%|          | 105/126 [00:01<00:00, 69.82it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 84%|          | 106/126 [00:01<00:00, 70.32it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 85%|          | 107/126 [00:01<00:00, 70.84it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 86%|          | 108/126 [00:01<00:00, 71.33it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 87%|          | 109/126 [00:01<00:00, 71.86it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 87%|          | 110/126 [00:01<00:00, 72.35it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 88%|          | 111/126 [00:01<00:00, 72.87it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 89%|          | 112/126 [00:01<00:00, 73.32it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 90%|          | 113/126 [00:01<00:00, 73.83it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 90%|          | 114/126 [00:01<00:00, 74.31it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 91%|          | 115/126 [00:01<00:00, 74.82it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 92%|          | 116/126 [00:01<00:00, 75.27it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 93%|          | 117/126 [00:01<00:00, 75.78it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 94%|          | 118/126 [00:01<00:00, 76.26it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 94%|          | 119/126 [00:01<00:00, 76.76it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 95%|          | 120/126 [00:01<00:00, 77.24it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 96%|          | 121/126 [00:01<00:00, 77.73it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 97%|          | 122/126 [00:01<00:00, 78.22it/s, loss=0.0068,

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v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 78.73it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 79.24it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 79.75it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 80.26it/s, loss=0.0068,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 78.74it/s, loss=0.0068,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 78.66it/s, loss=0.0068,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 75.80it/s, loss=0.00703,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 66.52it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 66.68it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 82%|      | 103/126 [00:01<00:00, 67.13it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 83%|      | 104/126 [00:01<00:00, 67.58it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 83%|      | 105/126 [00:01<00:00, 68.03it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 84%|      | 106/126 [00:01<00:00, 68.48it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 85%|      | 107/126 [00:01<00:00, 68.92it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 86%|      | 108/126 [00:01<00:00, 69.36it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 87%|      | 109/126 [00:01<00:00, 69.81it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 87%|      | 110/126 [00:01<00:00, 70.26it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 88%|      | 111/126 [00:01<00:00, 70.70it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 89%|      | 112/126 [00:01<00:00, 71.13it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 90%|      | 113/126 [00:01<00:00, 71.57it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 90%|      | 114/126 [00:01<00:00, 72.01it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 91%|      | 115/126 [00:01<00:00, 72.44it/s, loss=0.00703,
v_num=4.31e+7]

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Epoch 71: 92%|      | 116/126 [00:01<00:00, 72.87it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 93%|      | 117/126 [00:01<00:00, 73.29it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 94%|      | 118/126 [00:01<00:00, 73.69it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 94%|      | 119/126 [00:01<00:00, 74.11it/s, loss=0.00703,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 195.08it/s]
Epoch 71: 95%|      | 120/126 [00:01<00:00, 74.53it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 96%|      | 121/126 [00:01<00:00, 74.95it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 97%|      | 122/126 [00:01<00:00, 75.37it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 75.81it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 76.24it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 76.68it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 77.11it/s, loss=0.00703,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 75.67it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 75.58it/s, loss=0.00703,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 69.47it/s, loss=0.00844,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 61.39it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 61.60it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 62.01it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 62.42it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 62.83it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 63.25it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 63.66it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 64.07it/s, loss=0.00844,

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v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 64.48it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 64.89it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 65.31it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 65.72it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 66.14it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 66.55it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 66.97it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 67.38it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 67.80it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 68.22it/s, loss=0.00844,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.89it/s]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 68.63it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 69.03it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 69.44it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 69.86it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 70.30it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 70.74it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 71.18it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 71.62it/s, loss=0.00844,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 70.39it/s, loss=0.00844,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 70.32it/s, loss=0.00844,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 79.72it/s, loss=0.00759,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 69.71it/s, loss=0.00759,

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v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 69.83it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 70.32it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 70.80it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 71.29it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 71.77it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 72.26it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 72.74it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 73.21it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 73.69it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 74.16it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 74.64it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 75.11it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 75.58it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 76.04it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 76.51it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 76.97it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 77.43it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 77.89it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 78.35it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 78.81it/s, loss=0.00759,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.13it/s]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 79.24it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 79.72it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 80.20it/s, loss=0.00759,
v_num=4.31e+7]

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Epoch 73: 99%|      | 125/126 [00:01<00:00, 80.68it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 81.17it/s, loss=0.00759,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 79.59it/s, loss=0.00759,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 79.49it/s, loss=0.00759,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 69.93it/s, loss=0.00842,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|      | 101/126 [00:01<00:00, 62.15it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 81%|      | 102/126 [00:01<00:00, 62.08it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 82%|      | 103/126 [00:01<00:00, 62.47it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 83%|      | 104/126 [00:01<00:00, 62.85it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 83%|      | 105/126 [00:01<00:00, 63.24it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 84%|      | 106/126 [00:01<00:00, 63.63it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 85%|      | 107/126 [00:01<00:00, 64.02it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 86%|      | 108/126 [00:01<00:00, 64.41it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 87%|      | 109/126 [00:01<00:00, 64.81it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 87%|      | 110/126 [00:01<00:00, 65.21it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 88%|      | 111/126 [00:01<00:00, 65.62it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 89%|      | 112/126 [00:01<00:00, 66.02it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 90%|      | 113/126 [00:01<00:00, 66.43it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 90%|      | 114/126 [00:01<00:00, 66.83it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 91%|      | 115/126 [00:01<00:00, 67.24it/s, loss=0.00842,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 156.22it/s]
Epoch 74: 92%|      | 116/126 [00:01<00:00, 67.65it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 93%|      | 117/126 [00:01<00:00, 68.05it/s, loss=0.00842,
v_num=4.31e+7]

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Epoch 74: 94%|      | 118/126 [00:01<00:00, 68.47it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 94%|      | 119/126 [00:01<00:00, 68.88it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 95%|      | 120/126 [00:01<00:00, 69.29it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 96%|      | 121/126 [00:01<00:00, 69.70it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 97%|      | 122/126 [00:01<00:00, 70.12it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 98%|      | 123/126 [00:01<00:00, 70.56it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 98%|      | 124/126 [00:01<00:00, 70.99it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 71.43it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 71.87it/s, loss=0.00842,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 70.60it/s, loss=0.00842,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 70.53it/s, loss=0.00842,
v_num=4.31e+7]Mapping latent space...

Epoch 75: 79%|      | 100/126 [00:01<00:00, 70.23it/s, loss=0.00735,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 62.22it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 62.44it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 62.87it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 63.29it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 63.72it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 64.14it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 64.56it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 64.97it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 65.39it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 65.81it/s, loss=0.00735,
v_num=4.31e+7]

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Epoch 75: 88%|      | 111/126 [00:01<00:00, 66.22it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 66.64it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 67.05it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 67.46it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 67.87it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 68.28it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 93%|      | 117/126 [00:01<00:00, 68.68it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 94%|      | 118/126 [00:01<00:00, 69.08it/s, loss=0.00735,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.49it/s]
Epoch 75: 94%|      | 119/126 [00:01<00:00, 69.47it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 95%|      | 120/126 [00:01<00:00, 69.87it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 96%|      | 121/126 [00:01<00:00, 70.27it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 97%|      | 122/126 [00:01<00:00, 70.67it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 98%|      | 123/126 [00:01<00:00, 71.09it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 98%|      | 124/126 [00:01<00:00, 71.50it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 99%|      | 125/126 [00:01<00:00, 71.92it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 72.34it/s, loss=0.00735,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|     | 126/126 [00:01<00:00, 71.08it/s, loss=0.00735,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 70.99it/s, loss=0.00735,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 82.06it/s, loss=0.0079,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 71.15it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 71.17it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 71.65it/s, loss=0.0079,
v_num=4.31e+7]

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Epoch 76: 83%|      | 104/126 [00:01<00:00, 72.14it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 72.63it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 73.12it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 73.61it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 74.09it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 74.57it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 87%|      | 110/126 [00:01<00:00, 75.05it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 75.53it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 76.01it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 76.48it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 76.95it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 77.42it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 77.89it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 78.35it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 78.82it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 79.29it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 79.75it/s, loss=0.0079,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 209.54it/s]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 80.21it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 80.67it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 81.16it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 81.64it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 82.13it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 82.62it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 80.95it/s, loss=0.0079,

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v_num=4.31e+7]
Epoch 76: 100%|      | 126/126 [00:01<00:00, 80.86it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 70.90it/s, loss=0.00901,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 62.98it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 63.18it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 82%|      | 103/126 [00:01<00:00, 63.62it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 64.05it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 83%|      | 105/126 [00:01<00:00, 64.49it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 84%|      | 106/126 [00:01<00:00, 64.93it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 85%|      | 107/126 [00:01<00:00, 65.36it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 86%|      | 108/126 [00:01<00:00, 65.78it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 87%|      | 109/126 [00:01<00:00, 66.21it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 87%|      | 110/126 [00:01<00:00, 66.64it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 88%|      | 111/126 [00:01<00:00, 67.06it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 89%|      | 112/126 [00:01<00:00, 67.48it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 90%|      | 113/126 [00:01<00:00, 67.91it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 90%|      | 114/126 [00:01<00:00, 68.33it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 91%|      | 115/126 [00:01<00:00, 68.75it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 92%|      | 116/126 [00:01<00:00, 69.16it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 93%|      | 117/126 [00:01<00:00, 69.58it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 94%|      | 118/126 [00:01<00:00, 69.99it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 94%|      | 119/126 [00:01<00:00, 70.41it/s, loss=0.00901,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 196.51it/s]
Epoch 77: 95%|      | 120/126 [00:01<00:00, 70.81it/s, loss=0.00901,

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v_num=4.31e+7]
Epoch 77: 96%|      | 121/126 [00:01<00:00, 71.22it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 97%|      | 122/126 [00:01<00:00, 71.63it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 98%|      | 123/126 [00:01<00:00, 72.05it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 98%|      | 124/126 [00:01<00:00, 72.47it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 99%|      | 125/126 [00:01<00:00, 72.89it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 73.31it/s, loss=0.00901,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 100%|     | 126/126 [00:01<00:00, 72.01it/s, loss=0.00901,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 71.93it/s, loss=0.00901,
v_num=4.31e+7]Mapping latent space...

Epoch 78: 79%|      | 100/126 [00:01<00:00, 71.97it/s, loss=0.0076,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|      | 101/126 [00:01<00:00, 63.81it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 81%|      | 102/126 [00:01<00:00, 63.80it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 82%|      | 103/126 [00:01<00:00, 64.27it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 83%|      | 104/126 [00:01<00:00, 64.73it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 83%|      | 105/126 [00:01<00:00, 65.19it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 84%|      | 106/126 [00:01<00:00, 65.66it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 85%|      | 107/126 [00:01<00:00, 66.11it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 86%|      | 108/126 [00:01<00:00, 66.57it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 87%|      | 109/126 [00:01<00:00, 67.02it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 87%|      | 110/126 [00:01<00:00, 67.48it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 88%|      | 111/126 [00:01<00:00, 67.93it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 89%|      | 112/126 [00:01<00:00, 68.38it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 90%|      | 113/126 [00:01<00:00, 68.82it/s, loss=0.0076,

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v_num=4.31e+7]
Epoch 78: 90%|      | 114/126 [00:01<00:00, 69.27it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 91%|      | 115/126 [00:01<00:00, 69.72it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 92%|      | 116/126 [00:01<00:00, 70.16it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 93%|      | 117/126 [00:01<00:00, 70.61it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 94%|      | 118/126 [00:01<00:00, 71.05it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 94%|      | 119/126 [00:01<00:00, 71.49it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 95%|      | 120/126 [00:01<00:00, 71.93it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 96%|      | 121/126 [00:01<00:00, 72.37it/s, loss=0.0076,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.66it/s]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 72.80it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 73.26it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 73.72it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 99%|      | 125/126 [00:01<00:00, 74.18it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 74.64it/s, loss=0.0076,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 73.33it/s, loss=0.0076,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 73.26it/s, loss=0.0076,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 80.62it/s, loss=0.00626,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 71.90it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 72.02it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 72.57it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 73.08it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 73.62it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 74.14it/s, loss=0.00626,

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v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 74.67it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 75.18it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 75.72it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 76.22it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 76.76it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 77.26it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 90%|      | 113/126 [00:01<00:00, 77.78it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 78.29it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 78.81it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 79.32it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 79.83it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 80.34it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 80.85it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 81.36it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 81.86it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 82.36it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 82.90it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 83.44it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 83.97it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 84.51it/s, loss=0.00626,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 82.96it/s, loss=0.00626,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 82.87it/s, loss=0.00626,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 71.04it/s, loss=0.00687,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|          | 101/126 [00:01<00:00, 63.48it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 81%|          | 102/126 [00:01<00:00, 63.53it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 82%|          | 103/126 [00:01<00:00, 64.03it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 83%|          | 104/126 [00:01<00:00, 64.52it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 83%|          | 105/126 [00:01<00:00, 65.02it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 84%|          | 106/126 [00:01<00:00, 65.49it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 85%|          | 107/126 [00:01<00:00, 65.99it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 86%|          | 108/126 [00:01<00:00, 66.47it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 87%|          | 109/126 [00:01<00:00, 66.97it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 87%|          | 110/126 [00:01<00:00, 67.44it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 88%|          | 111/126 [00:01<00:00, 67.94it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 89%|          | 112/126 [00:01<00:00, 68.41it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 90%|          | 113/126 [00:01<00:00, 68.90it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 90%|          | 114/126 [00:01<00:00, 69.36it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 91%|          | 115/126 [00:01<00:00, 69.85it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 92%|          | 116/126 [00:01<00:00, 70.32it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 93%|          | 117/126 [00:01<00:00, 70.80it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 94%|          | 118/126 [00:01<00:00, 71.27it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 94%|          | 119/126 [00:01<00:00, 71.75it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 95%|          | 120/126 [00:01<00:00, 72.21it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 96%|          | 121/126 [00:01<00:00, 72.69it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 97%|          | 122/126 [00:01<00:00, 73.15it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 98%|          | 123/126 [00:01<00:00, 73.64it/s, loss=0.00687,
v_num=4.31e+7]

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Epoch 80: 98%|      | 124/126 [00:01<00:00, 74.12it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 74.60it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 75.09it/s, loss=0.00687,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|     | 126/126 [00:01<00:00, 73.84it/s, loss=0.00687,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 73.77it/s, loss=0.00687,
v_num=4.31e+7]Mapping latent space...

Epoch 81: 79%|      | 100/126 [00:01<00:00, 78.47it/s, loss=0.00834,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|      | 101/126 [00:01<00:00, 68.40it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 81%|      | 102/126 [00:01<00:00, 68.55it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 82%|      | 103/126 [00:01<00:00, 69.03it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 83%|      | 104/126 [00:01<00:00, 69.50it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 83%|      | 105/126 [00:01<00:00, 69.98it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 84%|      | 106/126 [00:01<00:00, 70.46it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 85%|      | 107/126 [00:01<00:00, 70.93it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 86%|      | 108/126 [00:01<00:00, 71.40it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 87%|      | 109/126 [00:01<00:00, 71.87it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 87%|      | 110/126 [00:01<00:00, 72.34it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 88%|      | 111/126 [00:01<00:00, 72.81it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 89%|      | 112/126 [00:01<00:00, 73.28it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 90%|      | 113/126 [00:01<00:00, 73.75it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 90%|      | 114/126 [00:01<00:00, 74.21it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 91%|      | 115/126 [00:01<00:00, 74.67it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 92%|      | 116/126 [00:01<00:00, 75.13it/s, loss=0.00834,
v_num=4.31e+7]

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Epoch 81: 93%|      | 117/126 [00:01<00:00, 75.59it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 94%|      | 118/126 [00:01<00:00, 76.05it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 94%|      | 119/126 [00:01<00:00, 76.51it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 95%|      | 120/126 [00:01<00:00, 76.96it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 96%|      | 121/126 [00:01<00:00, 77.41it/s, loss=0.00834,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.33it/s]
Epoch 81: 97%|      | 122/126 [00:01<00:00, 77.86it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 98%|      | 123/126 [00:01<00:00, 78.34it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 78.82it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 79.30it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 79.77it/s, loss=0.00834,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.21it/s, loss=0.00834,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.11it/s, loss=0.00834,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 77.24it/s, loss=0.00697,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 67.30it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 67.56it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 67.97it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 68.39it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 68.80it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 69.22it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 69.64it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 70.06it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 70.48it/s, loss=0.00697,
v_num=4.31e+7]

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Epoch 82: 87%|      | 110/126 [00:01<00:00, 70.92it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 71.34it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 71.77it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 72.21it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 72.65it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 73.08it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 73.53it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 73.96it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 94%|      | 118/126 [00:01<00:00, 74.40it/s, loss=0.00697,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.98it/s]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 74.83it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 75.27it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 75.71it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 76.16it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 76.63it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 77.10it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 77.57it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 78.04it/s, loss=0.00697,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|     | 126/126 [00:01<00:00, 76.56it/s, loss=0.00697,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 76.47it/s, loss=0.00697,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|      | 100/126 [00:01<00:00, 67.11it/s, loss=0.00743,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|      | 101/126 [00:01<00:00, 60.78it/s, loss=0.00743,
v_num=4.31e+7]
Epoch 83: 81%|      | 102/126 [00:01<00:00, 60.90it/s, loss=0.00743,
v_num=4.31e+7]

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Epoch 83: 82%| | 103/126 [00:01<00:00, 61.38it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 83%| | 104/126 [00:01<00:00, 61.84it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 83%| | 105/126 [00:01<00:00, 62.32it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 84%| | 106/126 [00:01<00:00, 62.78it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 85%| | 107/126 [00:01<00:00, 63.26it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 86%| | 108/126 [00:01<00:00, 63.71it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 87%| | 109/126 [00:01<00:00, 64.19it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 87%| | 110/126 [00:01<00:00, 64.64it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 88%| | 111/126 [00:01<00:00, 65.12it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 89%| | 112/126 [00:01<00:00, 65.57it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 90%| | 113/126 [00:01<00:00, 66.04it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 90%| | 114/126 [00:01<00:00, 66.50it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 91%| | 115/126 [00:01<00:00, 66.97it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 92%| | 116/126 [00:01<00:00, 67.41it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 93%| | 117/126 [00:01<00:00, 67.88it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 94%| | 118/126 [00:01<00:00, 68.33it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 94%| | 119/126 [00:01<00:00, 68.79it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 95%| | 120/126 [00:01<00:00, 69.23it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 96%| | 121/126 [00:01<00:00, 69.68it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 97%| | 122/126 [00:01<00:00, 70.13it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 98%| | 123/126 [00:01<00:00, 70.60it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 98%| | 124/126 [00:01<00:00, 71.07it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 99%| | 125/126 [00:01<00:00, 71.54it/s, loss=0.00743, v_num=4.31e+7]
Epoch 83: 100%| | 126/126 [00:01<00:00, 72.01it/s, loss=0.00743, v_num=4.31e+7]Mapping latent space...

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Epoch 83: 100%|      | 126/126 [00:01<00:00, 70.90it/s, loss=0.00743,
v_num=4.31e+7]
Epoch 83: 100%|      | 126/126 [00:01<00:00, 70.84it/s, loss=0.00743,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 71.50it/s, loss=0.00701,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 63.37it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 63.65it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 64.12it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 83%|      | 104/126 [00:01<00:00, 64.58it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 83%|      | 105/126 [00:01<00:00, 65.04it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 84%|      | 106/126 [00:01<00:00, 65.50it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 85%|      | 107/126 [00:01<00:00, 65.96it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 86%|      | 108/126 [00:01<00:00, 66.42it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 87%|      | 109/126 [00:01<00:00, 66.87it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 87%|      | 110/126 [00:01<00:00, 67.32it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 88%|      | 111/126 [00:01<00:00, 67.78it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 89%|      | 112/126 [00:01<00:00, 68.23it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 90%|      | 113/126 [00:01<00:00, 68.68it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 90%|      | 114/126 [00:01<00:00, 69.13it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 91%|      | 115/126 [00:01<00:00, 69.58it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 92%|      | 116/126 [00:01<00:00, 70.02it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 93%|      | 117/126 [00:01<00:00, 70.47it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 94%|      | 118/126 [00:01<00:00, 70.91it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 94%|      | 119/126 [00:01<00:00, 71.35it/s, loss=0.00701,
v_num=4.31e+7]

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Epoch 84: 95%|      | 120/126 [00:01<00:00, 71.79it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 96%|      | 121/126 [00:01<00:00, 72.22it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 97%|      | 122/126 [00:01<00:00, 72.66it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 98%|      | 123/126 [00:01<00:00, 73.12it/s, loss=0.00701,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.82it/s]
Epoch 84: 98%|      | 124/126 [00:01<00:00, 73.57it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 99%|      | 125/126 [00:01<00:00, 74.02it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 74.48it/s, loss=0.00701,
v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|     | 126/126 [00:01<00:00, 73.17it/s, loss=0.00701,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 73.09it/s, loss=0.00701,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 74.13it/s, loss=0.00658,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85: 80%|      | 101/126 [00:01<00:00, 65.15it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 81%|      | 102/126 [00:01<00:00, 65.49it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 82%|      | 103/126 [00:01<00:00, 65.97it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 83%|      | 104/126 [00:01<00:00, 66.44it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 83%|      | 105/126 [00:01<00:00, 66.91it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 84%|      | 106/126 [00:01<00:00, 67.39it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 85%|      | 107/126 [00:01<00:00, 67.85it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 86%|      | 108/126 [00:01<00:00, 68.32it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 87%|      | 109/126 [00:01<00:00, 68.78it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 87%|      | 110/126 [00:01<00:00, 69.24it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 88%|      | 111/126 [00:01<00:00, 69.70it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 89%|      | 112/126 [00:01<00:00, 70.16it/s, loss=0.00658,
v_num=4.31e+7]

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Epoch 85: 90%|      | 113/126 [00:01<00:00, 70.61it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 90%|      | 114/126 [00:01<00:00, 71.07it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 91%|      | 115/126 [00:01<00:00, 71.53it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 92%|      | 116/126 [00:01<00:00, 71.99it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 93%|      | 117/126 [00:01<00:00, 72.44it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 94%|      | 118/126 [00:01<00:00, 72.89it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 94%|      | 119/126 [00:01<00:00, 73.34it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 95%|      | 120/126 [00:01<00:00, 73.79it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 74.23it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 74.68it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 75.14it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 75.61it/s, loss=0.00658,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 243.08it/s]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 76.07it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 76.53it/s, loss=0.00658,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 75.10it/s, loss=0.00658,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 75.02it/s, loss=0.00658,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 70.89it/s, loss=0.00826,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 63.89it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 64.07it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 64.57it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 65.04it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 65.54it/s, loss=0.00826,
v_num=4.31e+7]

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Epoch 86: 84%|      | 106/126 [00:01<00:00, 66.00it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 66.49it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 66.95it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 67.44it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 67.90it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 68.39it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 89%|      | 112/126 [00:01<00:00, 68.86it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 90%|      | 113/126 [00:01<00:00, 69.34it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 69.80it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 91%|      | 115/126 [00:01<00:00, 70.28it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 70.74it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 71.22it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 94%|      | 118/126 [00:01<00:00, 71.67it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 72.15it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 72.60it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 73.07it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 73.53it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 74.02it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 74.50it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 74.99it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 75.47it/s, loss=0.00826,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 74.13it/s, loss=0.00826,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 74.06it/s, loss=0.00826,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 79%|      | 100/126 [00:01<00:00, 80.13it/s, loss=0.00737,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|          | 101/126 [00:01<00:00, 69.88it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 81%|          | 102/126 [00:01<00:00, 70.16it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 82%|          | 103/126 [00:01<00:00, 70.65it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 83%|          | 104/126 [00:01<00:00, 71.14it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 83%|          | 105/126 [00:01<00:00, 71.63it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 84%|          | 106/126 [00:01<00:00, 72.11it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 85%|          | 107/126 [00:01<00:00, 72.60it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 86%|          | 108/126 [00:01<00:00, 73.08it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 87%|          | 109/126 [00:01<00:00, 73.57it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 87%|          | 110/126 [00:01<00:00, 74.05it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 88%|          | 111/126 [00:01<00:00, 74.53it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 89%|          | 112/126 [00:01<00:00, 75.01it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 90%|          | 113/126 [00:01<00:00, 75.49it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 90%|          | 114/126 [00:01<00:00, 75.97it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 91%|          | 115/126 [00:01<00:00, 76.45it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 92%|          | 116/126 [00:01<00:00, 76.93it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 93%|          | 117/126 [00:01<00:00, 77.39it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 94%|          | 118/126 [00:01<00:00, 77.86it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 94%|          | 119/126 [00:01<00:00, 78.32it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 95%|          | 120/126 [00:01<00:00, 78.79it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 96%|          | 121/126 [00:01<00:00, 79.25it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 97%|          | 122/126 [00:01<00:00, 79.72it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 98%|          | 123/126 [00:01<00:00, 80.21it/s, loss=0.00737,

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v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.47it/s]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 80.69it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 81.18it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 81.67it/s, loss=0.00737,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 79.57it/s, loss=0.00737,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 79.48it/s, loss=0.00737,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 76.17it/s, loss=0.00642,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|      | 101/126 [00:01<00:00, 68.43it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 81%|      | 102/126 [00:01<00:00, 68.68it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 82%|      | 103/126 [00:01<00:00, 69.21it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 83%|      | 104/126 [00:01<00:00, 69.71it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 83%|      | 105/126 [00:01<00:00, 70.23it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 84%|      | 106/126 [00:01<00:00, 70.73it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 85%|      | 107/126 [00:01<00:00, 71.24it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 86%|      | 108/126 [00:01<00:00, 71.73it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 87%|      | 109/126 [00:01<00:00, 72.23it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 87%|      | 110/126 [00:01<00:00, 72.72it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 88%|      | 111/126 [00:01<00:00, 73.24it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 89%|      | 112/126 [00:01<00:00, 73.73it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 90%|      | 113/126 [00:01<00:00, 74.25it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 90%|      | 114/126 [00:01<00:00, 74.73it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 91%|      | 115/126 [00:01<00:00, 75.24it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 92%|      | 116/126 [00:01<00:00, 75.73it/s, loss=0.00642,

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v_num=4.31e+7]
Epoch 88: 93%|      | 117/126 [00:01<00:00, 76.24it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 94%|      | 118/126 [00:01<00:00, 76.71it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 94%|      | 119/126 [00:01<00:00, 77.22it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 95%|      | 120/126 [00:01<00:00, 77.69it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 96%|      | 121/126 [00:01<00:00, 78.20it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 97%|      | 122/126 [00:01<00:00, 78.56it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 98%|      | 123/126 [00:01<00:00, 78.97it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 98%|      | 124/126 [00:01<00:00, 79.38it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 99%|      | 125/126 [00:01<00:00, 79.78it/s, loss=0.00642,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 250.02it/s]
Epoch 88: 100%|      | 126/126 [00:01<00:00, 80.19it/s, loss=0.00642,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|      | 126/126 [00:01<00:00, 77.86it/s, loss=0.00642,
v_num=4.31e+7]
Epoch 88: 100%|      | 126/126 [00:01<00:00, 77.75it/s, loss=0.00642,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 73.14it/s, loss=0.00553,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 64.81it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 64.94it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 65.41it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 65.88it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 66.34it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 66.81it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 67.27it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 67.73it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 68.19it/s, loss=0.00553,

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v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 68.65it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 69.11it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 69.56it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 70.02it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 70.48it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 70.93it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 71.39it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 71.84it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 72.28it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 72.73it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 73.17it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 73.61it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 74.06it/s, loss=0.00553,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.03it/s]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 74.51it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 74.98it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 75.44it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 75.90it/s, loss=0.00553,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|     | 126/126 [00:01<00:00, 74.42it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 74.33it/s, loss=0.00553,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 75.03it/s, loss=0.00727,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 66.96it/s, loss=0.00727,
v_num=4.31e+7]

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Epoch 90: 81%	102/126 [00:01<00:00, 67.01it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 82%	103/126 [00:01<00:00, 67.52it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 83%	104/126 [00:01<00:00, 68.04it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 83%	105/126 [00:01<00:00, 68.53it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 84%	106/126 [00:01<00:00, 69.03it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 85%	107/126 [00:01<00:00, 69.53it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 86%	108/126 [00:01<00:00, 70.03it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 87%	109/126 [00:01<00:00, 70.52it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 87%	110/126 [00:01<00:00, 71.02it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 88%	111/126 [00:01<00:00, 71.51it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 89%	112/126 [00:01<00:00, 72.00it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 90%	113/126 [00:01<00:00, 72.50it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 90%	114/126 [00:01<00:00, 72.99it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 91%	115/126 [00:01<00:00, 73.48it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 92%	116/126 [00:01<00:00, 73.97it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 93%	117/126 [00:01<00:00, 74.45it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 94%	118/126 [00:01<00:00, 74.94it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 94%	119/126 [00:01<00:00, 75.42it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 95%	120/126 [00:01<00:00, 75.91it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 96%	121/126 [00:01<00:00, 76.39it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 97%	122/126 [00:01<00:00, 76.87it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 98%	123/126 [00:01<00:00, 77.37it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 98%	124/126 [00:01<00:00, 77.87it/s, loss=0.00727,
v_num=4.31e+7]	
Epoch 90: 99%	125/126 [00:01<00:00, 78.37it/s, loss=0.00727,
v_num=4.31e+7]	

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Epoch 90: 100%|      | 126/126 [00:01<00:00, 78.88it/s, loss=0.00727,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|      | 126/126 [00:01<00:00, 77.49it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 90: 100%|      | 126/126 [00:01<00:00, 77.41it/s, loss=0.00727,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 62.54it/s, loss=0.00819,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 57.16it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 81%|      | 102/126 [00:01<00:00, 57.27it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 82%|      | 103/126 [00:01<00:00, 57.73it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 83%|      | 104/126 [00:01<00:00, 58.18it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 83%|      | 105/126 [00:01<00:00, 58.64it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 84%|      | 106/126 [00:01<00:00, 59.08it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 85%|      | 107/126 [00:01<00:00, 59.54it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 86%|      | 108/126 [00:01<00:00, 59.95it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 87%|      | 109/126 [00:01<00:00, 60.41it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 87%|      | 110/126 [00:01<00:00, 60.85it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 88%|      | 111/126 [00:01<00:00, 61.31it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 89%|      | 112/126 [00:01<00:00, 61.74it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 90%|      | 113/126 [00:01<00:00, 62.19it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 90%|      | 114/126 [00:01<00:00, 62.62it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 91%|      | 115/126 [00:01<00:00, 63.07it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 92%|      | 116/126 [00:01<00:00, 63.50it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 93%|      | 117/126 [00:01<00:00, 63.94it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 94%|      | 118/126 [00:01<00:00, 64.37it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 94%|      | 119/126 [00:01<00:00, 64.80it/s, loss=0.00819,

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v_num=4.31e+7]
Epoch 91: 95%|      | 120/126 [00:01<00:00, 65.23it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 96%|      | 121/126 [00:01<00:00, 65.66it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 97%|      | 122/126 [00:01<00:00, 66.10it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 98%|      | 123/126 [00:01<00:00, 66.54it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 98%|      | 124/126 [00:01<00:00, 66.99it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 99%|      | 125/126 [00:01<00:00, 67.44it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 67.89it/s, loss=0.00819,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|     | 126/126 [00:01<00:00, 66.88it/s, loss=0.00819,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 66.83it/s, loss=0.00819,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 72.05it/s, loss=0.00886,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|      | 101/126 [00:01<00:00, 63.63it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 81%|      | 102/126 [00:01<00:00, 63.83it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 82%|      | 103/126 [00:01<00:00, 64.30it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 83%|      | 104/126 [00:01<00:00, 64.76it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 83%|      | 105/126 [00:01<00:00, 65.14it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 84%|      | 106/126 [00:01<00:00, 65.60it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 85%|      | 107/126 [00:01<00:00, 66.06it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 86%|      | 108/126 [00:01<00:00, 66.52it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 87%|      | 109/126 [00:01<00:00, 66.97it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 87%|      | 110/126 [00:01<00:00, 67.43it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 88%|      | 111/126 [00:01<00:00, 67.88it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 89%|      | 112/126 [00:01<00:00, 68.34it/s, loss=0.00886,
v_num=4.31e+7]

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Epoch 92: 90%|      | 113/126 [00:01<00:00, 68.79it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 90%|      | 114/126 [00:01<00:00, 69.24it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 91%|      | 115/126 [00:01<00:00, 69.68it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 92%|      | 116/126 [00:01<00:00, 70.13it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 93%|      | 117/126 [00:01<00:00, 70.57it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 94%|      | 118/126 [00:01<00:00, 71.02it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 71.45it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 71.89it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 96%|      | 121/126 [00:01<00:00, 72.33it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 72.77it/s, loss=0.00886,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.75it/s]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 73.22it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 73.68it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 74.13it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 74.59it/s, loss=0.00886,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 73.16it/s, loss=0.00886,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 73.08it/s, loss=0.00886,
v_num=4.31e+7]Mapping latent space...

Epoch 93: 79%|      | 100/126 [00:01<00:00, 70.26it/s, loss=0.00755,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 62.62it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 62.86it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 63.31it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 63.76it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 64.20it/s, loss=0.00755,

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v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 64.66it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 65.11it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 65.55it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 66.00it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 66.45it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 66.90it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 67.34it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 67.78it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 90%|      | 114/126 [00:01<00:00, 68.23it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 68.66it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 69.11it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 93%|      | 117/126 [00:01<00:00, 69.54it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 69.98it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 70.41it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 70.84it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 71.26it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 71.69it/s, loss=0.00755,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.67it/s]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 72.14it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 72.59it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 73.03it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 73.48it/s, loss=0.00755,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 72.17it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 72.09it/s, loss=0.00755,
v_num=4.31e+7]Mapping latent space...

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Epoch 94: 79%|          | 100/126 [00:01<00:00, 73.79it/s, loss=0.00917,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|          | 101/126 [00:01<00:00, 65.19it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 81%|          | 102/126 [00:01<00:00, 65.40it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 82%|          | 103/126 [00:01<00:00, 65.89it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 83%|          | 104/126 [00:01<00:00, 66.38it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 83%|          | 105/126 [00:01<00:00, 66.87it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 84%|          | 106/126 [00:01<00:00, 67.36it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 85%|          | 107/126 [00:01<00:00, 67.84it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 86%|          | 108/126 [00:01<00:00, 68.32it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 87%|          | 109/126 [00:01<00:00, 68.81it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 87%|          | 110/126 [00:01<00:00, 69.29it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 88%|          | 111/126 [00:01<00:00, 69.77it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 89%|          | 112/126 [00:01<00:00, 70.24it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 90%|          | 113/126 [00:01<00:00, 70.72it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 90%|          | 114/126 [00:01<00:00, 71.20it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 91%|          | 115/126 [00:01<00:00, 71.67it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 92%|          | 116/126 [00:01<00:00, 72.15it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 93%|          | 117/126 [00:01<00:00, 72.62it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 94%|          | 118/126 [00:01<00:00, 73.09it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 94%|          | 119/126 [00:01<00:00, 73.56it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 95%|          | 120/126 [00:01<00:00, 74.04it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 96%|          | 121/126 [00:01<00:00, 74.51it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 97%|          | 122/126 [00:01<00:00, 74.98it/s, loss=0.00917,

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v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 75.48it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 75.97it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 76.46it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 76.96it/s, loss=0.00917,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|     | 126/126 [00:01<00:00, 75.61it/s, loss=0.00917,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 75.53it/s, loss=0.00917,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 76.20it/s, loss=0.0075,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|      | 101/126 [00:01<00:00, 66.85it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 81%|      | 102/126 [00:01<00:00, 67.05it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 82%|      | 103/126 [00:01<00:00, 67.56it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 83%|      | 104/126 [00:01<00:00, 68.05it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 83%|      | 105/126 [00:01<00:00, 68.54it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 84%|      | 106/126 [00:01<00:00, 69.04it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 85%|      | 107/126 [00:01<00:00, 69.54it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 86%|      | 108/126 [00:01<00:00, 70.02it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 87%|      | 109/126 [00:01<00:00, 70.52it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 87%|      | 110/126 [00:01<00:00, 71.01it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 88%|      | 111/126 [00:01<00:00, 71.51it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 89%|      | 112/126 [00:01<00:00, 71.99it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 90%|      | 113/126 [00:01<00:00, 72.48it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 90%|      | 114/126 [00:01<00:00, 72.97it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 91%|      | 115/126 [00:01<00:00, 73.46it/s, loss=0.0075,
v_num=4.31e+7]

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Epoch 95: 92%|      | 116/126 [00:01<00:00, 73.95it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 93%|      | 117/126 [00:01<00:00, 74.43it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 94%|      | 118/126 [00:01<00:00, 74.92it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 94%|      | 119/126 [00:01<00:00, 75.40it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 95%|      | 120/126 [00:01<00:00, 75.88it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 96%|      | 121/126 [00:01<00:00, 76.36it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 97%|      | 122/126 [00:01<00:00, 76.85it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 98%|      | 123/126 [00:01<00:00, 77.36it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 98%|      | 124/126 [00:01<00:00, 77.87it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 78.37it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.0075,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 77.51it/s, loss=0.0075,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 77.44it/s, loss=0.0075,
v_num=4.31e+7]Mapping latent space...

Epoch 96: 79%|      | 100/126 [00:01<00:00, 92.69it/s, loss=0.00898,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|      | 101/126 [00:01<00:00, 81.20it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 81%|      | 102/126 [00:01<00:00, 81.32it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 82%|      | 103/126 [00:01<00:00, 81.85it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 83%|      | 104/126 [00:01<00:00, 82.38it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 83%|      | 105/126 [00:01<00:00, 82.91it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 84%|      | 106/126 [00:01<00:00, 83.44it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 85%|      | 107/126 [00:01<00:00, 83.97it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 86%|      | 108/126 [00:01<00:00, 84.49it/s, loss=0.00898,
v_num=4.31e+7]

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Epoch 96: 87%|      | 109/126 [00:01<00:00, 85.02it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 87%|      | 110/126 [00:01<00:00, 85.56it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 88%|      | 111/126 [00:01<00:00, 86.10it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 89%|      | 112/126 [00:01<00:00, 86.64it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 90%|      | 113/126 [00:01<00:00, 87.18it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 90%|      | 114/126 [00:01<00:00, 87.72it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 91%|      | 115/126 [00:01<00:00, 88.26it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 92%|      | 116/126 [00:01<00:00, 88.80it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 93%|      | 117/126 [00:01<00:00, 89.33it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 94%|      | 118/126 [00:01<00:00, 89.87it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 94%|      | 119/126 [00:01<00:00, 90.40it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 95%|      | 120/126 [00:01<00:00, 90.93it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 96%|      | 121/126 [00:01<00:00, 91.42it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 97%|      | 122/126 [00:01<00:00, 91.95it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 98%|      | 123/126 [00:01<00:00, 92.51it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 98%|      | 124/126 [00:01<00:00, 93.08it/s, loss=0.00898,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 248.98it/s]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 93.64it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 94.23it/s, loss=0.00898,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 92.25it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 92.14it/s, loss=0.00898,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 80.74it/s, loss=0.00653,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 71.62it/s, loss=0.00653,
v_num=4.31e+7]

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Epoch 97: 81%	102/126 [00:01<00:00, 71.87it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 82%	103/126 [00:01<00:00, 72.41it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 83%	104/126 [00:01<00:00, 72.92it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 83%	105/126 [00:01<00:00, 73.45it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 84%	106/126 [00:01<00:00, 73.96it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 85%	107/126 [00:01<00:00, 74.49it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 86%	108/126 [00:01<00:00, 75.00it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 87%	109/126 [00:01<00:00, 75.51it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 87%	110/126 [00:01<00:00, 76.04it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 88%	111/126 [00:01<00:00, 76.56it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 89%	112/126 [00:01<00:00, 77.07it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 90%	113/126 [00:01<00:00, 77.58it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 90%	114/126 [00:01<00:00, 78.10it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 91%	115/126 [00:01<00:00, 78.61it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 92%	116/126 [00:01<00:00, 79.12it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 93%	117/126 [00:01<00:00, 79.63it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 94%	118/126 [00:01<00:00, 80.13it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 94%	119/126 [00:01<00:00, 80.65it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 95%	120/126 [00:01<00:00, 81.14it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 96%	121/126 [00:01<00:00, 81.64it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 97%	122/126 [00:01<00:00, 82.15it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 98%	123/126 [00:01<00:00, 82.68it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 98%	124/126 [00:01<00:00, 83.22it/s, loss=0.00653,
v_num=4.31e+7]	
Epoch 97: 99%	125/126 [00:01<00:00, 83.75it/s, loss=0.00653,
v_num=4.31e+7]	


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Epoch 97: 100%|      | 126/126 [00:01<00:00, 84.29it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|      | 126/126 [00:01<00:00, 82.57it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 97: 100%|      | 126/126 [00:01<00:00, 82.49it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 98:  79%|      | 100/126 [00:01<00:00, 91.01it/s, loss=0.00742,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 98:  80%|      | 101/126 [00:01<00:00, 79.98it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  81%|      | 102/126 [00:01<00:00, 80.05it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  82%|      | 103/126 [00:01<00:00, 80.64it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  83%|      | 104/126 [00:01<00:00, 81.19it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  83%|      | 105/126 [00:01<00:00, 81.76it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  84%|      | 106/126 [00:01<00:00, 82.31it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  85%|      | 107/126 [00:01<00:00, 82.88it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  86%|      | 108/126 [00:01<00:00, 83.43it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  87%|      | 109/126 [00:01<00:00, 84.00it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  87%|      | 110/126 [00:01<00:00, 84.54it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  88%|      | 111/126 [00:01<00:00, 85.12it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  89%|      | 112/126 [00:01<00:00, 85.66it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  90%|      | 113/126 [00:01<00:00, 86.22it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  90%|      | 114/126 [00:01<00:00, 86.77it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  91%|      | 115/126 [00:01<00:00, 87.32it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  92%|      | 116/126 [00:01<00:00, 87.87it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  93%|      | 117/126 [00:01<00:00, 88.43it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  94%|      | 118/126 [00:01<00:00, 88.96it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98:  94%|      | 119/126 [00:01<00:00, 89.52it/s, loss=0.00742,

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v_num=4.31e+7]
Epoch 98: 95%|      | 120/126 [00:01<00:00, 90.05it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 96%|      | 121/126 [00:01<00:00, 90.60it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 97%|      | 122/126 [00:01<00:00, 91.15it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 91.72it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 92.30it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 92.88it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 93.46it/s, loss=0.00742,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 90.77it/s, loss=0.00742,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 90.66it/s, loss=0.00742,
v_num=4.31e+7]Mapping latent space...

Epoch 99: 79%|      | 100/126 [00:01<00:00, 91.58it/s, loss=0.00661,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 79.66it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 79.54it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 82%|      | 103/126 [00:01<00:00, 80.14it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 83%|      | 104/126 [00:01<00:00, 80.69it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 83%|      | 105/126 [00:01<00:00, 81.28it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 84%|      | 106/126 [00:01<00:00, 81.83it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 85%|      | 107/126 [00:01<00:00, 82.42it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 86%|      | 108/126 [00:01<00:00, 82.97it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 87%|      | 109/126 [00:01<00:00, 83.55it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 87%|      | 110/126 [00:01<00:00, 84.09it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 88%|      | 111/126 [00:01<00:00, 84.68it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 89%|      | 112/126 [00:01<00:00, 85.22it/s, loss=0.00661,

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v_num=4.31e+7]
Epoch 99: 90%|      | 113/126 [00:01<00:00, 85.78it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 90%|      | 114/126 [00:01<00:00, 86.33it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 91%|      | 115/126 [00:01<00:00, 86.90it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 92%|      | 116/126 [00:01<00:00, 87.44it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 93%|      | 117/126 [00:01<00:00, 88.00it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 94%|      | 118/126 [00:01<00:00, 88.53it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 94%|      | 119/126 [00:01<00:00, 89.09it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 95%|      | 120/126 [00:01<00:00, 89.61it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 96%|      | 121/126 [00:01<00:00, 90.15it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 97%|      | 122/126 [00:01<00:00, 90.70it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 91.28it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 91.85it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 92.43it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 93.01it/s, loss=0.00661,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 91.11it/s, loss=0.00661,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 91.02it/s, loss=0.00661,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 75.98it/s, loss=0.00829,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 67.12it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 67.22it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 67.67it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 68.17it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 68.69it/s, loss=0.00829,
v_num=4.31e+7]

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Epoch 100: 84%|      | 106/126 [00:01<00:00, 69.19it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 85%|      | 107/126 [00:01<00:00, 69.70it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 86%|      | 108/126 [00:01<00:00, 70.18it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 87%|      | 109/126 [00:01<00:00, 70.70it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 87%|      | 110/126 [00:01<00:00, 71.18it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 88%|      | 111/126 [00:01<00:00, 71.69it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 89%|      | 112/126 [00:01<00:00, 72.17it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 90%|      | 113/126 [00:01<00:00, 72.65it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 73.14it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 73.64it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 74.12it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 74.62it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 75.10it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 75.60it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 76.07it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 76.57it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 77.05it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 77.55it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 78.06it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 78.56it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 79.06it/s, loss=0.00829,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 77.62it/s, loss=0.00829,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 77.55it/s, loss=0.00829,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 78.50it/s, loss=0.00832,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|          | 101/126 [00:01<00:00, 69.59it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 81%|          | 102/126 [00:01<00:00, 69.51it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 82%|          | 103/126 [00:01<00:00, 70.05it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 83%|          | 104/126 [00:01<00:00, 70.55it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 83%|          | 105/126 [00:01<00:00, 71.08it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 84%|          | 106/126 [00:01<00:00, 71.59it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 85%|          | 107/126 [00:01<00:00, 72.12it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 86%|          | 108/126 [00:01<00:00, 72.62it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 87%|          | 109/126 [00:01<00:00, 73.15it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 87%|          | 110/126 [00:01<00:00, 73.65it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 88%|          | 111/126 [00:01<00:00, 74.18it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 89%|          | 112/126 [00:01<00:00, 74.68it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 90%|          | 113/126 [00:01<00:00, 75.20it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 90%|          | 114/126 [00:01<00:00, 75.69it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 91%|          | 115/126 [00:01<00:00, 76.21it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 92%|          | 116/126 [00:01<00:00, 76.70it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 93%|          | 117/126 [00:01<00:00, 77.20it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 94%|          | 118/126 [00:01<00:00, 77.69it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 94%|          | 119/126 [00:01<00:00, 78.19it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 95%|          | 120/126 [00:01<00:00, 78.68it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 96%|          | 121/126 [00:01<00:00, 79.17it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 97%|          | 122/126 [00:01<00:00, 79.67it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 98%|          | 123/126 [00:01<00:00, 80.19it/s, loss=0.00832,

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v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 80.71it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 99%|      | 125/126 [00:01<00:00, 81.23it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 81.76it/s, loss=0.00832,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%|     | 126/126 [00:01<00:00, 80.30it/s, loss=0.00832,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 80.23it/s, loss=0.00832,
v_num=4.31e+7]Mapping latent space...

Epoch 102: 79%|      | 100/126 [00:01<00:00, 71.74it/s, loss=0.00961,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|      | 101/126 [00:01<00:00, 63.86it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 81%|      | 102/126 [00:01<00:00, 63.97it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 82%|      | 103/126 [00:01<00:00, 64.47it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 83%|      | 104/126 [00:01<00:00, 64.95it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 83%|      | 105/126 [00:01<00:00, 65.43it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 84%|      | 106/126 [00:01<00:00, 65.92it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 85%|      | 107/126 [00:01<00:00, 66.34it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 86%|      | 108/126 [00:01<00:00, 66.82it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 87%|      | 109/126 [00:01<00:00, 67.31it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 87%|      | 110/126 [00:01<00:00, 67.79it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 88%|      | 111/126 [00:01<00:00, 68.27it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 89%|      | 112/126 [00:01<00:00, 68.75it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 90%|      | 113/126 [00:01<00:00, 69.23it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 90%|      | 114/126 [00:01<00:00, 69.70it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 91%|      | 115/126 [00:01<00:00, 70.18it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 92%|      | 116/126 [00:01<00:00, 70.65it/s, loss=0.00961,

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v_num=4.31e+7]
Epoch 102: 93%|      | 117/126 [00:01<00:00, 71.12it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 94%|      | 118/126 [00:01<00:00, 71.60it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 94%|      | 119/126 [00:01<00:00, 72.06it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 95%|      | 120/126 [00:01<00:00, 72.54it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 96%|      | 121/126 [00:01<00:00, 73.00it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 97%|      | 122/126 [00:01<00:00, 73.47it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 98%|      | 123/126 [00:01<00:00, 73.96it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 98%|      | 124/126 [00:01<00:00, 74.45it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 99%|      | 125/126 [00:01<00:00, 74.93it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 75.42it/s, loss=0.00961,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|     | 126/126 [00:01<00:00, 74.16it/s, loss=0.00961,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 74.09it/s, loss=0.00961,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 79%|      | 100/126 [00:01<00:00, 80.53it/s, loss=0.00929,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 103: 80%|      | 101/126 [00:01<00:00, 70.78it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 81%|      | 102/126 [00:01<00:00, 70.87it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 82%|      | 103/126 [00:01<00:00, 71.42it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 83%|      | 104/126 [00:01<00:00, 71.94it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 83%|      | 105/126 [00:01<00:00, 72.48it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 84%|      | 106/126 [00:01<00:00, 73.00it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 85%|      | 107/126 [00:01<00:00, 73.54it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 86%|      | 108/126 [00:01<00:00, 74.04it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 87%|      | 109/126 [00:01<00:00, 74.57it/s, loss=0.00929,
v_num=4.31e+7]

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Epoch 103: 87%|      | 110/126 [00:01<00:00, 75.09it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 88%|      | 111/126 [00:01<00:00, 75.62it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 89%|      | 112/126 [00:01<00:00, 76.12it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 90%|      | 113/126 [00:01<00:00, 76.65it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 90%|      | 114/126 [00:01<00:00, 77.16it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 91%|      | 115/126 [00:01<00:00, 77.67it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 92%|      | 116/126 [00:01<00:00, 78.18it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 93%|      | 117/126 [00:01<00:00, 78.69it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 94%|      | 118/126 [00:01<00:00, 79.18it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 94%|      | 119/126 [00:01<00:00, 79.69it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 80.19it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 80.69it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 81.19it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 81.72it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 82.25it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 82.78it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 83.31it/s, loss=0.00929,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 80.72it/s, loss=0.00929,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 80.64it/s, loss=0.00929,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 72.72it/s, loss=0.00727,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      |  0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      |  0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 63.80it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 64.04it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 64.50it/s, loss=0.00727,

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v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 64.96it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 65.42it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 65.88it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 66.34it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 66.79it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 67.24it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 67.70it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 68.14it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 68.59it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 69.04it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 69.48it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 69.93it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 70.37it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 70.81it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 71.24it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 71.68it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 72.11it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 72.54it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 72.98it/s, loss=0.00727,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.09it/s]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 73.43it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 73.88it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 74.34it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 74.79it/s, loss=0.00727,
v_num=4.31e+7]Mapping latent space...

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Epoch 104: 100%|      | 126/126 [00:01<00:00, 72.91it/s, loss=0.00727,
v_num=4.31e+7]
Epoch 104: 100%|      | 126/126 [00:01<00:00, 72.83it/s, loss=0.00727,
v_num=4.31e+7]Mapping latent space...

Epoch 105: 79%|      | 100/126 [00:01<00:00, 81.11it/s, loss=0.00956,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|      | 101/126 [00:01<00:00, 71.21it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 81%|      | 102/126 [00:01<00:00, 71.43it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 82%|      | 103/126 [00:01<00:00, 71.97it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 83%|      | 104/126 [00:01<00:00, 72.48it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 83%|      | 105/126 [00:01<00:00, 73.01it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 84%|      | 106/126 [00:01<00:00, 73.51it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 85%|      | 107/126 [00:01<00:00, 74.05it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 86%|      | 108/126 [00:01<00:00, 74.51it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 87%|      | 109/126 [00:01<00:00, 75.02it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 87%|      | 110/126 [00:01<00:00, 75.53it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 88%|      | 111/126 [00:01<00:00, 76.06it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 89%|      | 112/126 [00:01<00:00, 76.56it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 90%|      | 113/126 [00:01<00:00, 77.09it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 90%|      | 114/126 [00:01<00:00, 77.59it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 91%|      | 115/126 [00:01<00:00, 78.11it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 92%|      | 116/126 [00:01<00:00, 78.62it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 93%|      | 117/126 [00:01<00:00, 79.14it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 94%|      | 118/126 [00:01<00:00, 79.64it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 94%|      | 119/126 [00:01<00:00, 80.15it/s, loss=0.00956,
v_num=4.31e+7]

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Epoch 105: 95%|      | 120/126 [00:01<00:00, 80.66it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 96%|      | 121/126 [00:01<00:00, 81.17it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 81.67it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 82.21it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 82.74it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 83.28it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 83.81it/s, loss=0.00956,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|     | 126/126 [00:01<00:00, 82.28it/s, loss=0.00956,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 82.21it/s, loss=0.00956,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 79%|      | 100/126 [00:01<00:00, 80.53it/s, loss=0.00775,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 106: 80%|      | 101/126 [00:01<00:00, 69.85it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 81%|      | 102/126 [00:01<00:00, 70.14it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 82%|      | 103/126 [00:01<00:00, 70.59it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 83%|      | 104/126 [00:01<00:00, 71.05it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 83%|      | 105/126 [00:01<00:00, 71.51it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 84%|      | 106/126 [00:01<00:00, 71.96it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 85%|      | 107/126 [00:01<00:00, 72.42it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 86%|      | 108/126 [00:01<00:00, 72.87it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 87%|      | 109/126 [00:01<00:00, 73.33it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 87%|      | 110/126 [00:01<00:00, 73.78it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 88%|      | 111/126 [00:01<00:00, 74.23it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 89%|      | 112/126 [00:01<00:00, 74.69it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 90%|      | 113/126 [00:01<00:00, 75.14it/s, loss=0.00775,

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v_num=4.31e+7]
Epoch 106: 90%|      | 114/126 [00:01<00:00, 75.59it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 91%|      | 115/126 [00:01<00:00, 76.04it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 92%|      | 116/126 [00:01<00:00, 76.49it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 93%|      | 117/126 [00:01<00:00, 76.93it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 94%|      | 118/126 [00:01<00:00, 77.38it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 94%|      | 119/126 [00:01<00:00, 77.82it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 78.26it/s, loss=0.00775,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 205.76it/s]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 78.69it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 79.13it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 79.59it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 80.05it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 99%|      | 125/126 [00:01<00:00, 80.51it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 80.97it/s, loss=0.00775,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 79.32it/s, loss=0.00775,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 79.21it/s, loss=0.00775,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 75.68it/s, loss=0.0071,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 68.33it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 68.58it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 69.07it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 69.56it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 70.04it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 70.53it/s, loss=0.0071,

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v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 71.02it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 86%|      | 108/126 [00:01<00:00, 71.50it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 71.98it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 72.47it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 72.95it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 89%|      | 112/126 [00:01<00:00, 73.43it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 73.91it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 74.39it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 74.87it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 75.34it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 75.81it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 76.29it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 76.75it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 77.13it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 77.58it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 78.05it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 78.53it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 79.02it/s, loss=0.0071,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.31it/s]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 79.51it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 80.00it/s, loss=0.0071,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 78.54it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 78.47it/s, loss=0.0071,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 79%|      | 100/126 [00:01<00:00, 74.62it/s, loss=0.00712,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|          | 101/126 [00:01<00:00, 66.19it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 81%|          | 102/126 [00:01<00:00, 66.33it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 82%|          | 103/126 [00:01<00:00, 66.85it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 83%|          | 104/126 [00:01<00:00, 67.34it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 83%|          | 105/126 [00:01<00:00, 67.85it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 84%|          | 106/126 [00:01<00:00, 68.35it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 85%|          | 107/126 [00:01<00:00, 68.86it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 86%|          | 108/126 [00:01<00:00, 69.34it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 87%|          | 109/126 [00:01<00:00, 69.84it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 87%|          | 110/126 [00:01<00:00, 70.33it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 88%|          | 111/126 [00:01<00:00, 70.84it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 89%|          | 112/126 [00:01<00:00, 71.32it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 90%|          | 113/126 [00:01<00:00, 71.83it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 90%|          | 114/126 [00:01<00:00, 72.31it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 91%|          | 115/126 [00:01<00:00, 72.81it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 92%|          | 116/126 [00:01<00:00, 73.29it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 93%|          | 117/126 [00:01<00:00, 73.78it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 94%|          | 118/126 [00:01<00:00, 74.25it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 94%|          | 119/126 [00:01<00:00, 74.74it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 95%|          | 120/126 [00:01<00:00, 75.21it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 96%|          | 121/126 [00:01<00:00, 75.69it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 97%|          | 122/126 [00:01<00:00, 76.16it/s, loss=0.00712,
v_num=4.31e+7]

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Epoch 108: 98%|      | 123/126 [00:01<00:00, 76.63it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 77.12it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 77.62it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 78.12it/s, loss=0.00712,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 76.68it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 76.60it/s, loss=0.00712,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|      | 100/126 [00:01<00:00, 78.01it/s, loss=0.00806,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|      | 101/126 [00:01<00:00, 69.39it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 81%|      | 102/126 [00:01<00:00, 69.42it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 82%|      | 103/126 [00:01<00:00, 69.91it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 83%|      | 104/126 [00:01<00:00, 70.41it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 83%|      | 105/126 [00:01<00:00, 70.91it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 84%|      | 106/126 [00:01<00:00, 71.42it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 85%|      | 107/126 [00:01<00:00, 71.92it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 86%|      | 108/126 [00:01<00:00, 72.42it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 87%|      | 109/126 [00:01<00:00, 72.93it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 87%|      | 110/126 [00:01<00:00, 73.42it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 88%|      | 111/126 [00:01<00:00, 73.92it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 89%|      | 112/126 [00:01<00:00, 74.41it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 90%|      | 113/126 [00:01<00:00, 74.91it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 90%|      | 114/126 [00:01<00:00, 75.40it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 91%|      | 115/126 [00:01<00:00, 75.88it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 92%|      | 116/126 [00:01<00:00, 76.37it/s, loss=0.00806,

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v_num=4.31e+7]
Epoch 109: 93%|      | 117/126 [00:01<00:00, 76.87it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 94%|      | 118/126 [00:01<00:00, 77.35it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 94%|      | 119/126 [00:01<00:00, 77.85it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 95%|      | 120/126 [00:01<00:00, 78.33it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 96%|      | 121/126 [00:01<00:00, 78.83it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 97%|      | 122/126 [00:01<00:00, 79.33it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 79.84it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 80.36it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 80.87it/s, loss=0.00806,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 255.33it/s]
Epoch 109: 100%|      | 126/126 [00:01<00:00, 81.39it/s, loss=0.00806,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|      | 126/126 [00:01<00:00, 79.38it/s, loss=0.00806,
v_num=4.31e+7]
Epoch 109: 100%|      | 126/126 [00:01<00:00, 79.30it/s, loss=0.00806,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|      | 100/126 [00:01<00:00, 88.65it/s, loss=0.00734,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|      | 101/126 [00:01<00:00, 76.17it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 81%|      | 102/126 [00:01<00:00, 76.40it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 82%|      | 103/126 [00:01<00:00, 76.83it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 83%|      | 104/126 [00:01<00:00, 77.26it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 83%|      | 105/126 [00:01<00:00, 77.69it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 84%|      | 106/126 [00:01<00:00, 78.13it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 85%|      | 107/126 [00:01<00:00, 78.57it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 86%|      | 108/126 [00:01<00:00, 79.00it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 87%|      | 109/126 [00:01<00:00, 79.44it/s, loss=0.00734,

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v_num=4.31e+7]
Epoch 110: 87%|      | 110/126 [00:01<00:00, 79.89it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 88%|      | 111/126 [00:01<00:00, 80.34it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 89%|      | 112/126 [00:01<00:00, 80.79it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 90%|      | 113/126 [00:01<00:00, 81.24it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 90%|      | 114/126 [00:01<00:00, 81.70it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 91%|      | 115/126 [00:01<00:00, 82.16it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 92%|      | 116/126 [00:01<00:00, 82.61it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 93%|      | 117/126 [00:01<00:00, 83.08it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 94%|      | 118/126 [00:01<00:00, 83.54it/s, loss=0.00734,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.99it/s]
Epoch 110: 94%|      | 119/126 [00:01<00:00, 83.99it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 95%|      | 120/126 [00:01<00:00, 84.46it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 96%|      | 121/126 [00:01<00:00, 84.93it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 97%|      | 122/126 [00:01<00:00, 85.41it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 85.91it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 86.41it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 86.91it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 87.42it/s, loss=0.00734,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 85.63it/s, loss=0.00734,
v_num=4.31e+7]

Epoch 110: 100%|     | 126/126 [00:01<00:00, 85.52it/s, loss=0.00734,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 79%|      | 100/126 [00:01<00:00, 78.01it/s, loss=0.00717,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 68.00it/s, loss=0.00717,
v_num=4.31e+7]

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Epoch 111: 81%|          | 102/126 [00:01<00:00, 67.93it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 82%|          | 103/126 [00:01<00:00, 68.41it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 83%|          | 104/126 [00:01<00:00, 68.88it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 83%|          | 105/126 [00:01<00:00, 69.36it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 84%|          | 106/126 [00:01<00:00, 69.85it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 85%|          | 107/126 [00:01<00:00, 70.32it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 86%|          | 108/126 [00:01<00:00, 70.79it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 87%|          | 109/126 [00:01<00:00, 71.26it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 87%|          | 110/126 [00:01<00:00, 71.73it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 88%|          | 111/126 [00:01<00:00, 72.20it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 89%|          | 112/126 [00:01<00:00, 72.66it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 90%|          | 113/126 [00:01<00:00, 73.13it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 90%|          | 114/126 [00:01<00:00, 73.59it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 91%|          | 115/126 [00:01<00:00, 74.05it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 92%|          | 116/126 [00:01<00:00, 74.51it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 93%|          | 117/126 [00:01<00:00, 74.96it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 94%|          | 118/126 [00:01<00:00, 75.42it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 94%|          | 119/126 [00:01<00:00, 75.87it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 95%|          | 120/126 [00:01<00:00, 76.32it/s, loss=0.00717,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 206.97it/s]
Epoch 111: 96%|          | 121/126 [00:01<00:00, 76.77it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 97%|          | 122/126 [00:01<00:00, 77.23it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 98%|          | 123/126 [00:01<00:00, 77.71it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 98%|          | 124/126 [00:01<00:00, 78.18it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 99%|          | 125/126 [00:01<00:00, 78.65it/s, loss=0.00717,

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v_num=4.31e+7]
Epoch 111: 100%|      | 126/126 [00:01<00:00, 79.13it/s, loss=0.00717,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 100%|      | 126/126 [00:01<00:00, 77.21it/s, loss=0.00717,
v_num=4.31e+7]
Epoch 111: 100%|      | 126/126 [00:01<00:00, 77.12it/s, loss=0.00717,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 79%|       | 100/126 [00:01<00:00, 75.32it/s, loss=0.00758,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|        | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 112: 80%|       | 101/126 [00:01<00:00, 65.95it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 81%|       | 102/126 [00:01<00:00, 66.21it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 82%|       | 103/126 [00:01<00:00, 66.68it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 83%|       | 104/126 [00:01<00:00, 67.15it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 83%|       | 105/126 [00:01<00:00, 67.62it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 84%|       | 106/126 [00:01<00:00, 68.09it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 85%|       | 107/126 [00:01<00:00, 68.56it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 86%|       | 108/126 [00:01<00:00, 69.02it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 87%|       | 109/126 [00:01<00:00, 69.49it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 87%|       | 110/126 [00:01<00:00, 69.96it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 88%|       | 111/126 [00:01<00:00, 70.42it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 89%|       | 112/126 [00:01<00:00, 70.88it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 90%|       | 113/126 [00:01<00:00, 71.34it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 90%|       | 114/126 [00:01<00:00, 71.80it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 91%|       | 115/126 [00:01<00:00, 72.26it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 92%|       | 116/126 [00:01<00:00, 72.71it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 93%|       | 117/126 [00:01<00:00, 73.17it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 94%|       | 118/126 [00:01<00:00, 73.62it/s, loss=0.00758,
v_num=4.31e+7]

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Epoch 112: 94%|      | 119/126 [00:01<00:00, 74.06it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 95%|      | 120/126 [00:01<00:00, 74.51it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 96%|      | 121/126 [00:01<00:00, 74.95it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 75.40it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 75.87it/s, loss=0.00758,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.33it/s]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 76.33it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 76.79it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 77.26it/s, loss=0.00758,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 100%|     | 126/126 [00:01<00:00, 75.79it/s, loss=0.00758,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 75.71it/s, loss=0.00758,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|      | 100/126 [00:01<00:00, 80.07it/s, loss=0.007,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 113: 80%|      | 101/126 [00:01<00:00, 71.12it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 81%|      | 102/126 [00:01<00:00, 71.25it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 82%|      | 103/126 [00:01<00:00, 71.79it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 83%|      | 104/126 [00:01<00:00, 72.30it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 83%|      | 105/126 [00:01<00:00, 72.82it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 84%|      | 106/126 [00:01<00:00, 73.34it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 85%|      | 107/126 [00:01<00:00, 73.87it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 86%|      | 108/126 [00:01<00:00, 74.37it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 87%|      | 109/126 [00:01<00:00, 74.89it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 87%|      | 110/126 [00:01<00:00, 75.41it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 88%|      | 111/126 [00:01<00:00, 75.95it/s, loss=0.007,
v_num=4.31e+7]

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Epoch 113: 89%|      | 112/126 [00:01<00:00, 76.45it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 90%|      | 113/126 [00:01<00:00, 76.96it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 90%|      | 114/126 [00:01<00:00, 77.47it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 91%|      | 115/126 [00:01<00:00, 77.98it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 92%|      | 116/126 [00:01<00:00, 78.48it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 93%|      | 117/126 [00:01<00:00, 78.99it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 94%|      | 118/126 [00:01<00:00, 79.50it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 94%|      | 119/126 [00:01<00:00, 80.01it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 95%|      | 120/126 [00:01<00:00, 80.51it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 96%|      | 121/126 [00:01<00:00, 81.01it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 97%|      | 122/126 [00:01<00:00, 81.51it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 98%|      | 123/126 [00:01<00:00, 82.04it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 98%|      | 124/126 [00:01<00:00, 82.57it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 83.10it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 83.63it/s, loss=0.007,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 81.99it/s, loss=0.007,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 81.90it/s, loss=0.007,
v_num=4.31e+7]Mapping latent space...

Epoch 114: 79%|      | 100/126 [00:01<00:00, 66.09it/s, loss=0.00879,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 59.38it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 59.61it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 60.08it/s, loss=0.00879,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 60.54it/s, loss=0.00879,
v_num=4.31e+7]

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Epoch 114: 83%| | 105/126 [00:01<00:00, 61.01it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 84%| | 106/126 [00:01<00:00, 61.47it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 85%| | 107/126 [00:01<00:00, 61.93it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 86%| | 108/126 [00:01<00:00, 62.39it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 87%| | 109/126 [00:01<00:00, 62.85it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 87%| | 110/126 [00:01<00:00, 63.31it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 88%| | 111/126 [00:01<00:00, 63.77it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 89%| | 112/126 [00:01<00:00, 64.23it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 90%| | 113/126 [00:01<00:00, 64.68it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 90%| | 114/126 [00:01<00:00, 65.13it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 91%| | 115/126 [00:01<00:00, 65.54it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 92%| | 116/126 [00:01<00:00, 65.99it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 93%| | 117/126 [00:01<00:00, 66.44it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 94%| | 118/126 [00:01<00:00, 66.89it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 94%| | 119/126 [00:01<00:00, 67.34it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 95%| | 120/126 [00:01<00:00, 67.79it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 96%| | 121/126 [00:01<00:00, 68.24it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 97%| | 122/126 [00:01<00:00, 68.68it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 98%| | 123/126 [00:01<00:00, 69.15it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 98%| | 124/126 [00:01<00:00, 69.61it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 99%| | 125/126 [00:01<00:00, 70.07it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 100%| | 126/126 [00:01<00:00, 70.54it/s, loss=0.00879, v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%| | 126/126 [00:01<00:00, 69.43it/s, loss=0.00879, v_num=4.31e+7]
Epoch 114: 100%| | 126/126 [00:01<00:00, 69.37it/s, loss=0.00879, v_num=4.31e+7]Mapping latent space...

```

Epoch 115: 79%|          | 100/126 [00:01<00:00, 79.74it/s, loss=0.00712,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|          | 101/126 [00:01<00:00, 71.12it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 81%|          | 102/126 [00:01<00:00, 71.28it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 82%|          | 103/126 [00:01<00:00, 71.81it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 83%|          | 104/126 [00:01<00:00, 72.33it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 83%|          | 105/126 [00:01<00:00, 72.84it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 84%|          | 106/126 [00:01<00:00, 73.36it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 85%|          | 107/126 [00:01<00:00, 73.88it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 86%|          | 108/126 [00:01<00:00, 74.38it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 87%|          | 109/126 [00:01<00:00, 74.90it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 87%|          | 110/126 [00:01<00:00, 75.40it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 88%|          | 111/126 [00:01<00:00, 75.93it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 89%|          | 112/126 [00:01<00:00, 76.42it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 90%|          | 113/126 [00:01<00:00, 76.93it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 90%|          | 114/126 [00:01<00:00, 77.43it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 91%|          | 115/126 [00:01<00:00, 77.94it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 92%|          | 116/126 [00:01<00:00, 78.44it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 93%|          | 117/126 [00:01<00:00, 78.94it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 94%|          | 118/126 [00:01<00:00, 79.45it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 94%|          | 119/126 [00:01<00:00, 79.95it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 95%|          | 120/126 [00:01<00:00, 80.44it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 96%|          | 121/126 [00:01<00:00, 80.95it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 97%|          | 122/126 [00:01<00:00, 81.45it/s, loss=0.00712,

```

```

v_num=4.31e+7]
Epoch 115: 98%|      | 123/126 [00:01<00:00, 81.98it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 98%|      | 124/126 [00:01<00:00, 82.51it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 83.03it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 83.56it/s, loss=0.00712,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|     | 126/126 [00:01<00:00, 81.57it/s, loss=0.00712,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 81.48it/s, loss=0.00712,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|      | 100/126 [00:01<00:00, 90.90it/s, loss=0.00659,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|      | 101/126 [00:01<00:00, 80.41it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 81%|      | 102/126 [00:01<00:00, 80.55it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 82%|      | 103/126 [00:01<00:00, 81.10it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 83%|      | 104/126 [00:01<00:00, 81.67it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 83%|      | 105/126 [00:01<00:00, 82.24it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 84%|      | 106/126 [00:01<00:00, 82.79it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 85%|      | 107/126 [00:01<00:00, 83.34it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 86%|      | 108/126 [00:01<00:00, 83.89it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 87%|      | 109/126 [00:01<00:00, 84.45it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 87%|      | 110/126 [00:01<00:00, 85.00it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 88%|      | 111/126 [00:01<00:00, 85.56it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 89%|      | 112/126 [00:01<00:00, 86.08it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 90%|      | 113/126 [00:01<00:00, 86.63it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 90%|      | 114/126 [00:01<00:00, 87.17it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 91%|      | 115/126 [00:01<00:00, 87.72it/s, loss=0.00659,
v_num=4.31e+7]

```



```

Epoch 116: 92%|      | 116/126 [00:01<00:00, 88.26it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 93%|      | 117/126 [00:01<00:00, 88.80it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 94%|      | 118/126 [00:01<00:00, 89.34it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 94%|      | 119/126 [00:01<00:00, 89.89it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 95%|      | 120/126 [00:01<00:00, 90.41it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 96%|      | 121/126 [00:01<00:00, 90.95it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 97%|      | 122/126 [00:01<00:00, 91.48it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 98%|      | 123/126 [00:01<00:00, 92.05it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 98%|      | 124/126 [00:01<00:00, 92.61it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 99%|      | 125/126 [00:01<00:00, 93.18it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 93.61it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|     | 126/126 [00:01<00:00, 91.61it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 91.50it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|     | 126/126 [00:01<00:00, 89.39it/s, loss=0.00659,
v_num=4.31e+7]

```

Training for latent_dim 2 done.

```

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

```

```
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_<train/validation/test>_epoch_end` instead.
```

```
rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]
```

	Name	Type	Params

0	encoder	Sequential	8.8 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	51
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	6
13	decoder	Sequential	8.9 K
14	decoder.0	Linear	64
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K
21	decoder.7	Tanh	0
22	decoder.8	BatchNorm1d	128
23	decoder.9	Linear	5.9 K
24	decoder.10	Sigmoid	0

```
17.6 K    Trainable params
0         Non-trainable params
17.6 K    Total params
0.071     Total estimated model params size (MB)
```

```
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
```

```
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
```

```
PossibleUserWarning: The dataloader, val_dataloader 0, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
```

```
rank_zero_warn(
```

```
Loading all data...
```

```

Training on 10000 examples, validating on 2501 examples
Sanity Checking DataLoader 0: 100%|          | 2/2 [00:00<00:00,
2.47it/s]Saving samples for epoch #0...
Mapping latent space...
Epoch 0:  2%|          | 2/126 [00:00<00:11, 10.54it/s, loss=0.121,
v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, train_dataloader, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
    rank_zero_warn(

Epoch 0: 79%|          | 100/126 [00:01<00:00, 67.62it/s, loss=0.104,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 0: 80%|          | 101/126 [00:01<00:00, 59.77it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 81%|          | 102/126 [00:01<00:00, 60.08it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 82%|          | 103/126 [00:01<00:00, 60.47it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 83%|          | 104/126 [00:01<00:00, 60.88it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 83%|          | 105/126 [00:01<00:00, 61.29it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 84%|          | 106/126 [00:01<00:00, 61.70it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 85%|          | 107/126 [00:01<00:00, 62.11it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 86%|          | 108/126 [00:01<00:00, 62.52it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 87%|          | 109/126 [00:01<00:00, 62.93it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 87%|          | 110/126 [00:01<00:00, 63.35it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 88%|          | 111/126 [00:01<00:00, 63.75it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 89%|          | 112/126 [00:01<00:00, 64.17it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 90%|          | 113/126 [00:01<00:00, 64.58it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 90%|          | 114/126 [00:01<00:00, 64.97it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 91%|          | 115/126 [00:01<00:00, 65.38it/s, loss=0.104,

```

```

v_num=4.31e+7]
Epoch 0: 92%|      | 116/126 [00:01<00:00, 65.79it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 66.21it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 66.62it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 67.03it/s, loss=0.104,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.63it/s]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 67.44it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 67.85it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 68.26it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 68.70it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 69.13it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 69.57it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 70.00it/s, loss=0.104,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:02<00:00, 62.23it/s, loss=0.104,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:02<00:00, 62.03it/s, loss=0.104,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 68.40it/s, loss=0.0997,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 60.72it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 60.85it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 61.19it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 83%|      | 104/126 [00:01<00:00, 61.54it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 61.90it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 62.24it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 62.60it/s, loss=0.0997,

```

```

v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 62.96it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 63.34it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 63.71it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 64.09it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 64.47it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 64.85it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 65.24it/s, loss=0.0997,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 146.93it/s]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 65.61it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 66.00it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 66.39it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 66.78it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 67.17it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 67.56it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 67.95it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 68.33it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 68.74it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 69.15it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 69.55it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 69.96it/s, loss=0.0997,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 68.61it/s, loss=0.0997,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 68.48it/s, loss=0.0997,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|      | 100/126 [00:01<00:00, 69.80it/s, loss=0.0942,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

```

```

Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|          | 101/126 [00:01<00:00, 62.10it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 81%|          | 102/126 [00:01<00:00, 62.25it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 82%|          | 103/126 [00:01<00:00, 62.62it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 83%|          | 104/126 [00:01<00:00, 63.00it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 83%|          | 105/126 [00:01<00:00, 63.39it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 84%|          | 106/126 [00:01<00:00, 63.78it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 85%|          | 107/126 [00:01<00:00, 64.18it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 86%|          | 108/126 [00:01<00:00, 64.55it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 87%|          | 109/126 [00:01<00:00, 64.95it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 87%|          | 110/126 [00:01<00:00, 65.35it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 88%|          | 111/126 [00:01<00:00, 65.76it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 89%|          | 112/126 [00:01<00:00, 66.16it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 90%|          | 113/126 [00:01<00:00, 66.57it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 90%|          | 114/126 [00:01<00:00, 66.98it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 91%|          | 115/126 [00:01<00:00, 67.37it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 92%|          | 116/126 [00:01<00:00, 67.70it/s, loss=0.0942,
v_num=4.31e+7]
Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 164.36it/s]
Epoch 2: 93%|          | 117/126 [00:01<00:00, 68.10it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 94%|          | 118/126 [00:01<00:00, 68.51it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 94%|          | 119/126 [00:01<00:00, 68.90it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 95%|          | 120/126 [00:01<00:00, 69.31it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 96%|          | 121/126 [00:01<00:00, 69.71it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 97%|          | 122/126 [00:01<00:00, 70.13it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 98%|          | 123/126 [00:01<00:00, 70.57it/s, loss=0.0942,
v_num=4.31e+7]

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Epoch 2: 98%|      | 124/126 [00:01<00:00, 71.01it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 71.44it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 71.88it/s, loss=0.0942,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 70.04it/s, loss=0.0942,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 69.89it/s, loss=0.0942,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 73.68it/s, loss=0.0879,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 65.22it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 65.18it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 65.58it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 65.99it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 66.40it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 66.82it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 67.24it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 67.65it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 68.06it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 68.46it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 68.88it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 69.30it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 69.72it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 70.13it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 70.55it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 70.97it/s, loss=0.0879,
v_num=4.31e+7]

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Epoch 3: 93%|      | 117/126 [00:01<00:00, 71.38it/s, loss=0.0879,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 175.29it/s]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 71.79it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 72.21it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 72.63it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 73.05it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 73.47it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 73.92it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 74.36it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 74.81it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 75.26it/s, loss=0.0879,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 73.81it/s, loss=0.0879,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 73.67it/s, loss=0.0879,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 65.52it/s, loss=0.0783,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 58.77it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 58.91it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 59.38it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 59.83it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 60.30it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 60.75it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 85%|      | 107/126 [00:01<00:00, 61.22it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 61.65it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 62.10it/s, loss=0.0783,
v_num=4.31e+7]

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Epoch 4: 87%|      | 110/126 [00:01<00:00, 62.54it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 63.00it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 63.41it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 63.85it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 64.29it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 64.75it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 65.19it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 65.62it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 66.06it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 66.51it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 66.93it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 67.36it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 67.80it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 68.26it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 68.72it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 69.18it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 69.64it/s, loss=0.0783,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 68.53it/s, loss=0.0783,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 68.35it/s, loss=0.0783,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 79.77it/s, loss=0.0667,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 70.73it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 81%|      | 102/126 [00:01<00:00, 71.05it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 82%|      | 103/126 [00:01<00:00, 71.49it/s, loss=0.0667,

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v_num=4.31e+7]
Epoch 5: 83%|      | 104/126 [00:01<00:00, 71.93it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 83%|      | 105/126 [00:01<00:00, 72.30it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 84%|      | 106/126 [00:01<00:00, 72.69it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 85%|      | 107/126 [00:01<00:00, 73.09it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 86%|      | 108/126 [00:01<00:00, 73.49it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 87%|      | 109/126 [00:01<00:00, 73.90it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 87%|      | 110/126 [00:01<00:00, 74.32it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 88%|      | 111/126 [00:01<00:00, 74.74it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 89%|      | 112/126 [00:01<00:00, 75.16it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 90%|      | 113/126 [00:01<00:00, 75.58it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 90%|      | 114/126 [00:01<00:00, 75.98it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 91%|      | 115/126 [00:01<00:00, 76.42it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 92%|      | 116/126 [00:01<00:00, 76.85it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 93%|      | 117/126 [00:01<00:00, 77.28it/s, loss=0.0667,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.53it/s]
Epoch 5: 94%|      | 118/126 [00:01<00:00, 77.71it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 94%|      | 119/126 [00:01<00:00, 78.15it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 95%|      | 120/126 [00:01<00:00, 78.58it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 96%|      | 121/126 [00:01<00:00, 78.90it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 97%|      | 122/126 [00:01<00:00, 79.34it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 98%|      | 123/126 [00:01<00:00, 79.80it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 80.27it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 80.74it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 81.22it/s, loss=0.0667,
v_num=4.31e+7] Mapping latent space...

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Epoch 5: 100%|      | 126/126 [00:01<00:00, 79.19it/s, loss=0.0667,
v_num=4.31e+7]
Epoch 5: 100%|      | 126/126 [00:01<00:00, 79.03it/s, loss=0.0667,
v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%|      | 100/126 [00:01<00:00, 70.99it/s, loss=0.0549,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 63.74it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 63.85it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 64.36it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 64.83it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 83%|      | 105/126 [00:01<00:00, 65.34it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 65.82it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 66.32it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 66.80it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 67.30it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 67.77it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 68.27it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 89%|      | 112/126 [00:01<00:00, 68.74it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 69.24it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 69.71it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 70.18it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 70.63it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 93%|      | 117/126 [00:01<00:00, 71.11it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 71.58it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 72.06it/s, loss=0.0549,
v_num=4.31e+7]

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Epoch 6: 95%|      | 120/126 [00:01<00:00, 72.52it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 72.99it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 73.46it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 73.95it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 74.44it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 74.94it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 75.43it/s, loss=0.0549,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 73.83it/s, loss=0.0549,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 73.70it/s, loss=0.0549,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 83.08it/s, loss=0.0434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 72.51it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 72.38it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 72.92it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 73.44it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 74.00it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 74.52it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 75.07it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 75.59it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 76.14it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 76.66it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 77.20it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 77.72it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 78.26it/s, loss=0.0434,

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v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 78.77it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 79.31it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 79.82it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 80.35it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 80.82it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 81.35it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 81.85it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 82.36it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 82.87it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 83.41it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 83.96it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 84.50it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 85.05it/s, loss=0.0434,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 83.46it/s, loss=0.0434,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 83.31it/s, loss=0.0434,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 73.55it/s, loss=0.0338,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 65.52it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 65.02it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 65.50it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 65.98it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 66.48it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 66.97it/s, loss=0.0338,
v_num=4.31e+7]

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Epoch 8: 85%|      | 107/126 [00:01<00:00, 67.46it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 67.93it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 68.42it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 68.90it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 69.39it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 69.86it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 70.34it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 70.82it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 71.29it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 71.77it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 72.24it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 72.72it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 73.20it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 73.64it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 74.12it/s, loss=0.0338,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.22it/s]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 74.59it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 75.09it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 75.58it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 76.07it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 76.57it/s, loss=0.0338,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 74.41it/s, loss=0.0338,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 74.26it/s, loss=0.0338,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 79%|      | 100/126 [00:01<00:00, 75.05it/s, loss=0.026,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|          | 101/126 [00:01<00:00, 66.43it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 81%|          | 102/126 [00:01<00:00, 66.59it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 82%|          | 103/126 [00:01<00:00, 67.11it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 83%|          | 104/126 [00:01<00:00, 67.61it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 83%|          | 105/126 [00:01<00:00, 68.11it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 84%|          | 106/126 [00:01<00:00, 68.61it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 85%|          | 107/126 [00:01<00:00, 69.11it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 86%|          | 108/126 [00:01<00:00, 69.60it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 87%|          | 109/126 [00:01<00:00, 70.10it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 87%|          | 110/126 [00:01<00:00, 70.60it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 88%|          | 111/126 [00:01<00:00, 71.10it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 89%|          | 112/126 [00:01<00:00, 71.58it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 90%|          | 113/126 [00:01<00:00, 72.08it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 90%|          | 114/126 [00:01<00:00, 72.57it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 91%|          | 115/126 [00:01<00:00, 73.06it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 92%|          | 116/126 [00:01<00:00, 73.55it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 93%|          | 117/126 [00:01<00:00, 74.04it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 94%|          | 118/126 [00:01<00:00, 74.52it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 94%|          | 119/126 [00:01<00:00, 75.01it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 95%|          | 120/126 [00:01<00:00, 75.48it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 96%|          | 121/126 [00:01<00:00, 75.97it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 97%|          | 122/126 [00:01<00:00, 76.42it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 98%|          | 123/126 [00:01<00:00, 76.92it/s, loss=0.026,
v_num=4.31e+7]

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Epoch 9: 98%|      | 124/126 [00:01<00:00, 77.43it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 77.93it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 78.44it/s, loss=0.026,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 76.59it/s, loss=0.026,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 76.46it/s, loss=0.026,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 79.76it/s, loss=0.02,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|     | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|     | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 69.76it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 81%|     | 102/126 [00:01<00:00, 69.87it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 82%|     | 103/126 [00:01<00:00, 70.29it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 83%|     | 104/126 [00:01<00:00, 70.71it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 83%|     | 105/126 [00:01<00:00, 71.13it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 84%|     | 106/126 [00:01<00:00, 71.55it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 85%|     | 107/126 [00:01<00:00, 71.98it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 86%|     | 108/126 [00:01<00:00, 72.40it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 87%|     | 109/126 [00:01<00:00, 72.82it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 87%|     | 110/126 [00:01<00:00, 73.26it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 88%|     | 111/126 [00:01<00:00, 73.70it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 89%|     | 112/126 [00:01<00:00, 74.13it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 90%|     | 113/126 [00:01<00:00, 74.57it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 90%|     | 114/126 [00:01<00:00, 75.01it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 91%|     | 115/126 [00:01<00:00, 75.45it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 92%|     | 116/126 [00:01<00:00, 75.90it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 93%|     | 117/126 [00:01<00:00, 76.34it/s, loss=0.02,

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v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 76.79it/s, loss=0.02,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.80it/s]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 77.23it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 77.68it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 78.12it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 78.58it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 79.06it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 79.53it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 80.01it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 80.49it/s, loss=0.02,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 78.97it/s, loss=0.02,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 78.81it/s, loss=0.02,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 72.24it/s, loss=0.0167,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 64.43it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 64.47it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 64.98it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 65.45it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 65.95it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 66.43it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 66.92it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 67.39it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 67.89it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 68.36it/s, loss=0.0167,

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v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 68.85it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 69.31it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 69.79it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 70.27it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 70.74it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 71.21it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 71.69it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 72.16it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 72.63it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 73.10it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 73.56it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 74.03it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 74.52it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 75.01it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 75.50it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 76.00it/s, loss=0.0167,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 74.73it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 74.59it/s, loss=0.0167,
v_num=4.31e+7]Mapping latent space...

Epoch 12: 79%|      | 100/126 [00:01<00:00, 75.99it/s, loss=0.0141,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 66.42it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 66.68it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 82%|      | 103/126 [00:01<00:00, 67.10it/s, loss=0.0141,

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v_num=4.31e+7]
Epoch 12: 83%|      | 104/126 [00:01<00:00, 67.52it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 83%|      | 105/126 [00:01<00:00, 67.95it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 84%|      | 106/126 [00:01<00:00, 68.38it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 85%|      | 107/126 [00:01<00:00, 68.81it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 86%|      | 108/126 [00:01<00:00, 69.17it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 87%|      | 109/126 [00:01<00:00, 69.54it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 87%|      | 110/126 [00:01<00:00, 69.91it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 88%|      | 111/126 [00:01<00:00, 70.29it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 89%|      | 112/126 [00:01<00:00, 70.67it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 90%|      | 113/126 [00:01<00:00, 71.06it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 90%|      | 114/126 [00:01<00:00, 71.46it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 91%|      | 115/126 [00:01<00:00, 71.86it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 92%|      | 116/126 [00:01<00:00, 72.26it/s, loss=0.0141,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.40it/s]
Epoch 12: 93%|      | 117/126 [00:01<00:00, 72.65it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 94%|      | 118/126 [00:01<00:00, 73.06it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 94%|      | 119/126 [00:01<00:00, 73.47it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 95%|      | 120/126 [00:01<00:00, 73.88it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 96%|      | 121/126 [00:01<00:00, 74.29it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 97%|      | 122/126 [00:01<00:00, 74.70it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 75.14it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 75.57it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 76.02it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 76.46it/s, loss=0.0141,
v_num=4.31e+7]Mapping latent space...

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Epoch 12: 100%|      | 126/126 [00:01<00:00, 74.36it/s, loss=0.0141,
v_num=4.31e+7]
Epoch 12: 100%|      | 126/126 [00:01<00:00, 74.19it/s, loss=0.0141,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 71.54it/s, loss=0.0118,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13: 80%|      | 101/126 [00:01<00:00, 63.24it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 81%|      | 102/126 [00:01<00:00, 63.38it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 82%|      | 103/126 [00:01<00:00, 63.81it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 83%|      | 104/126 [00:01<00:00, 64.24it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 83%|      | 105/126 [00:01<00:00, 64.68it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 84%|      | 106/126 [00:01<00:00, 65.11it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 85%|      | 107/126 [00:01<00:00, 65.55it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 86%|      | 108/126 [00:01<00:00, 65.98it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 87%|      | 109/126 [00:01<00:00, 66.42it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 87%|      | 110/126 [00:01<00:00, 66.86it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 88%|      | 111/126 [00:01<00:00, 67.29it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 89%|      | 112/126 [00:01<00:00, 67.73it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 90%|      | 113/126 [00:01<00:00, 68.17it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 90%|      | 114/126 [00:01<00:00, 68.61it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 91%|      | 115/126 [00:01<00:00, 69.03it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 92%|      | 116/126 [00:01<00:00, 69.46it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 93%|      | 117/126 [00:01<00:00, 69.88it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 94%|      | 118/126 [00:01<00:00, 70.31it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 94%|      | 119/126 [00:01<00:00, 70.73it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 71.15it/s, loss=0.0118,

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v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 203.50it/s]
Epoch 13: 96%|          | 121/126 [00:01<00:00, 71.45it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 97%|          | 122/126 [00:01<00:00, 71.87it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 98%|          | 123/126 [00:01<00:00, 72.32it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 98%|          | 124/126 [00:01<00:00, 72.77it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 99%|          | 125/126 [00:01<00:00, 73.21it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 100%|         | 126/126 [00:01<00:00, 73.67it/s, loss=0.0118,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|         | 126/126 [00:01<00:00, 71.82it/s, loss=0.0118,
v_num=4.31e+7]
Epoch 13: 100%|         | 126/126 [00:01<00:00, 71.68it/s, loss=0.0118,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|          | 100/126 [00:01<00:00, 69.89it/s, loss=0.0105,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|          | 101/126 [00:01<00:00, 61.36it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 81%|          | 102/126 [00:01<00:00, 61.51it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 82%|          | 103/126 [00:01<00:00, 61.90it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 83%|          | 104/126 [00:01<00:00, 62.30it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 83%|          | 105/126 [00:01<00:00, 62.70it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 84%|          | 106/126 [00:01<00:00, 63.10it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 85%|          | 107/126 [00:01<00:00, 63.49it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 86%|          | 108/126 [00:01<00:00, 63.89it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 87%|          | 109/126 [00:01<00:00, 64.28it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 87%|          | 110/126 [00:01<00:00, 64.68it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 88%|          | 111/126 [00:01<00:00, 65.08it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 89%|          | 112/126 [00:01<00:00, 65.48it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 90%|          | 113/126 [00:01<00:00, 65.88it/s, loss=0.0105,

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v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 66.30it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 66.70it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 67.11it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 67.52it/s, loss=0.0105,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.12it/s]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 67.92it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 68.33it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 68.74it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 69.15it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 69.57it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 70.00it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 70.44it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 70.87it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 71.31it/s, loss=0.0105,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 70.04it/s, loss=0.0105,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 69.92it/s, loss=0.0105,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 62.90it/s, loss=0.00878,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 56.20it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 56.35it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 56.76it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 57.17it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 83%|      | 105/126 [00:01<00:00, 57.58it/s, loss=0.00878,
v_num=4.31e+7]

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Epoch 15: 84%|      | 106/126 [00:01<00:00, 57.99it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 58.39it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 58.79it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 59.20it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 59.60it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 88%|      | 111/126 [00:01<00:00, 60.00it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 60.40it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 60.79it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 61.19it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 61.59it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 61.97it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 62.36it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 62.75it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 63.14it/s, loss=0.00878,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 197.79it/s]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 63.52it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 63.90it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 64.29it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 64.68it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 65.08it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 65.47it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 65.86it/s, loss=0.00878,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 64.81it/s, loss=0.00878,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 64.69it/s, loss=0.00878,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|      | 100/126 [00:01<00:00, 74.69it/s, loss=0.0079,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|          | 101/126 [00:01<00:00, 66.04it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 81%|          | 102/126 [00:01<00:00, 66.05it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 82%|          | 103/126 [00:01<00:00, 66.46it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 83%|          | 104/126 [00:01<00:00, 66.88it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 83%|          | 105/126 [00:01<00:00, 67.30it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 84%|          | 106/126 [00:01<00:00, 67.73it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 85%|          | 107/126 [00:01<00:00, 68.15it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 86%|          | 108/126 [00:01<00:00, 68.57it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 87%|          | 109/126 [00:01<00:00, 69.00it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 87%|          | 110/126 [00:01<00:00, 69.43it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 88%|          | 111/126 [00:01<00:00, 69.86it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 89%|          | 112/126 [00:01<00:00, 70.29it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 90%|          | 113/126 [00:01<00:00, 70.72it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 90%|          | 114/126 [00:01<00:00, 71.16it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 91%|          | 115/126 [00:01<00:00, 71.59it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 92%|          | 116/126 [00:01<00:00, 72.03it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 93%|          | 117/126 [00:01<00:00, 72.46it/s, loss=0.0079,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 179.43it/s]
Epoch 16: 94%|          | 118/126 [00:01<00:00, 72.89it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 94%|          | 119/126 [00:01<00:00, 73.32it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 95%|          | 120/126 [00:01<00:00, 73.76it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 96%|          | 121/126 [00:01<00:00, 74.19it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 97%|          | 122/126 [00:01<00:00, 74.63it/s, loss=0.0079,

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v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 75.09it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 75.43it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 75.89it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 76.35it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|     | 126/126 [00:01<00:00, 74.83it/s, loss=0.0079,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 74.68it/s, loss=0.0079,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 67.71it/s, loss=0.00755,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 60.78it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 60.80it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 61.17it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 61.55it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 61.93it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 62.31it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 62.70it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 63.09it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 87%|      | 109/126 [00:01<00:00, 63.49it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 63.88it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 64.27it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 64.67it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 65.06it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 65.47it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 91%|      | 115/126 [00:01<00:00, 65.86it/s, loss=0.00755,
v_num=4.31e+7]

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Validation DataLoader 0: 62%|          | 16/26 [00:00<00:00, 157.37it/s]
Epoch 17: 92%|          | 116/126 [00:01<00:00, 66.26it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 93%|          | 117/126 [00:01<00:00, 66.66it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 94%|          | 118/126 [00:01<00:00, 67.06it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 94%|          | 119/126 [00:01<00:00, 67.46it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 95%|          | 120/126 [00:01<00:00, 67.86it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 96%|          | 121/126 [00:01<00:00, 68.26it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 97%|          | 122/126 [00:01<00:00, 68.67it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 98%|          | 123/126 [00:01<00:00, 69.10it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 98%|          | 124/126 [00:01<00:00, 69.54it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 99%|          | 125/126 [00:01<00:00, 69.88it/s, loss=0.00755,
v_num=4.31e+7]
Epoch 17: 100%|         | 126/126 [00:01<00:00, 70.30it/s, loss=0.00755,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|         | 126/126 [00:01<00:00, 68.94it/s, loss=0.00755,
v_num=4.31e+7]

Epoch 17: 100%|         | 126/126 [00:01<00:00, 68.81it/s, loss=0.00755,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 79%|          | 100/126 [00:01<00:00, 73.04it/s, loss=0.00793,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|          | 101/126 [00:01<00:00, 64.57it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 81%|          | 102/126 [00:01<00:00, 64.60it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 82%|          | 103/126 [00:01<00:00, 65.07it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 83%|          | 104/126 [00:01<00:00, 65.55it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 83%|          | 105/126 [00:01<00:00, 66.03it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 84%|          | 106/126 [00:01<00:00, 66.50it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 85%|          | 107/126 [00:01<00:00, 66.98it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 86%|          | 108/126 [00:01<00:00, 67.45it/s, loss=0.00793,

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v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 67.92it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 68.38it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 68.85it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 69.31it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 69.78it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 70.23it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 70.70it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 71.15it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 71.61it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 72.06it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 72.51it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 72.96it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 73.41it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 73.85it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 74.32it/s, loss=0.00793,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.42it/s]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 74.78it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 75.24it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 75.70it/s, loss=0.00793,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 74.42it/s, loss=0.00793,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 74.30it/s, loss=0.00793,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 69.65it/s, loss=0.00778,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|      | 101/126 [00:01<00:00, 62.21it/s, loss=0.00778,

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v_num=4.31e+7]
Epoch 19: 81%|      | 102/126 [00:01<00:00, 62.34it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 82%|      | 103/126 [00:01<00:00, 62.79it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 83%|      | 104/126 [00:01<00:00, 63.24it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 83%|      | 105/126 [00:01<00:00, 63.69it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 84%|      | 106/126 [00:01<00:00, 64.15it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 85%|      | 107/126 [00:01<00:00, 64.60it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 86%|      | 108/126 [00:01<00:00, 65.05it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 87%|      | 109/126 [00:01<00:00, 65.50it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 87%|      | 110/126 [00:01<00:00, 65.96it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 88%|      | 111/126 [00:01<00:00, 66.40it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 89%|      | 112/126 [00:01<00:00, 66.85it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 90%|      | 113/126 [00:01<00:00, 67.30it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 90%|      | 114/126 [00:01<00:00, 67.74it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 91%|      | 115/126 [00:01<00:00, 68.18it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 92%|      | 116/126 [00:01<00:00, 68.63it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 93%|      | 117/126 [00:01<00:00, 69.06it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 94%|      | 118/126 [00:01<00:00, 69.50it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 94%|      | 119/126 [00:01<00:00, 69.93it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 95%|      | 120/126 [00:01<00:00, 70.37it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 96%|      | 121/126 [00:01<00:00, 70.80it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 97%|      | 122/126 [00:01<00:00, 71.23it/s, loss=0.00778,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.10it/s]
Epoch 19: 98%|      | 123/126 [00:01<00:00, 71.68it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 98%|      | 124/126 [00:01<00:00, 72.12it/s, loss=0.00778,
v_num=4.31e+7]

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Epoch 19: 99%|      | 125/126 [00:01<00:00, 72.41it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 72.85it/s, loss=0.00778,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 71.45it/s, loss=0.00778,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 71.31it/s, loss=0.00778,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 79.56it/s, loss=0.00714,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|      | 101/126 [00:01<00:00, 70.27it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 81%|      | 102/126 [00:01<00:00, 70.34it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 82%|      | 103/126 [00:01<00:00, 70.87it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 83%|      | 104/126 [00:01<00:00, 71.37it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 83%|      | 105/126 [00:01<00:00, 71.91it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 84%|      | 106/126 [00:01<00:00, 72.41it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 85%|      | 107/126 [00:01<00:00, 72.94it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 86%|      | 108/126 [00:01<00:00, 73.44it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 87%|      | 109/126 [00:01<00:00, 73.96it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 87%|      | 110/126 [00:01<00:00, 74.46it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 88%|      | 111/126 [00:01<00:00, 74.99it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 89%|      | 112/126 [00:01<00:00, 75.49it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 90%|      | 113/126 [00:01<00:00, 76.01it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 90%|      | 114/126 [00:01<00:00, 76.51it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 91%|      | 115/126 [00:01<00:00, 77.03it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 92%|      | 116/126 [00:01<00:00, 77.52it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 93%|      | 117/126 [00:01<00:00, 78.03it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 94%|      | 118/126 [00:01<00:00, 78.52it/s, loss=0.00714,

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v_num=4.31e+7]
Epoch 20: 94%|      | 119/126 [00:01<00:00, 79.04it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 95%|      | 120/126 [00:01<00:00, 79.53it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 96%|      | 121/126 [00:01<00:00, 80.04it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 97%|      | 122/126 [00:01<00:00, 80.54it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 98%|      | 123/126 [00:01<00:00, 81.06it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 98%|      | 124/126 [00:01<00:00, 81.59it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 82.11it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 82.64it/s, loss=0.00714,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 80.97it/s, loss=0.00714,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 80.85it/s, loss=0.00714,
v_num=4.31e+7]Mapping latent space...

Epoch 21: 79%|      | 100/126 [00:01<00:00, 77.10it/s, loss=0.00601,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 67.92it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 67.99it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 68.52it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 69.01it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 69.54it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 70.03it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 70.55it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 71.04it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 71.55it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 87%|      | 110/126 [00:01<00:00, 72.04it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 72.56it/s, loss=0.00601,

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v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 73.05it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 73.55it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 74.04it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 74.54it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 75.03it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 75.52it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 76.02it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 76.50it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 76.99it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 77.47it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 77.94it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 78.45it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 78.96it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 79.48it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 80.00it/s, loss=0.00601,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 78.61it/s, loss=0.00601,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 78.48it/s, loss=0.00601,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 88.39it/s, loss=0.00624,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 76.77it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 76.65it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 77.09it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 77.53it/s, loss=0.00624,
v_num=4.31e+7]

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Epoch 22: 83%|      | 105/126 [00:01<00:00, 77.98it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 78.44it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 78.89it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 79.34it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 79.80it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 80.26it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 80.72it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 81.18it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 81.64it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 82.11it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 82.57it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 83.03it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 83.49it/s, loss=0.00624,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.50it/s]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 83.94it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 84.40it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 84.86it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 85.32it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 85.78it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 86.27it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 86.76it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 87.26it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 87.76it/s, loss=0.00624,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 85.97it/s, loss=0.00624,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 85.81it/s, loss=0.00624,

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v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|          | 100/126 [00:01<00:00, 62.81it/s, loss=0.00614,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|          | 101/126 [00:01<00:00, 56.84it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 81%|          | 102/126 [00:01<00:00, 56.79it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 82%|          | 103/126 [00:01<00:00, 57.25it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 83%|          | 104/126 [00:01<00:00, 57.68it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 83%|          | 105/126 [00:01<00:00, 58.14it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 84%|          | 106/126 [00:01<00:00, 58.56it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 85%|          | 107/126 [00:01<00:00, 59.02it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 86%|          | 108/126 [00:01<00:00, 59.45it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 87%|          | 109/126 [00:01<00:00, 59.90it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 87%|          | 110/126 [00:01<00:00, 60.33it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 88%|          | 111/126 [00:01<00:00, 60.78it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 89%|          | 112/126 [00:01<00:00, 61.20it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 90%|          | 113/126 [00:01<00:00, 61.65it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 90%|          | 114/126 [00:01<00:00, 62.07it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 91%|          | 115/126 [00:01<00:00, 62.52it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 92%|          | 116/126 [00:01<00:00, 62.94it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 93%|          | 117/126 [00:01<00:00, 63.38it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 94%|          | 118/126 [00:01<00:00, 63.80it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 94%|          | 119/126 [00:01<00:00, 64.24it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 95%|          | 120/126 [00:01<00:00, 64.65it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 96%|          | 121/126 [00:01<00:00, 65.09it/s, loss=0.00614,
v_num=4.31e+7]

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Epoch 23: 97%|      | 122/126 [00:01<00:00, 65.51it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 65.96it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 66.41it/s, loss=0.00614,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 246.52it/s]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 66.85it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 67.30it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 66.12it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 66.01it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|      | 100/126 [00:01<00:00, 81.57it/s, loss=0.00718,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 71.44it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 71.47it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 71.91it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 72.37it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 72.81it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 73.26it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 73.71it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 74.15it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 74.60it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 75.05it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 75.50it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 75.95it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 76.40it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 76.85it/s, loss=0.00718,

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v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 77.30it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 77.76it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 78.21it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 78.67it/s, loss=0.00718,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.27it/s]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 79.11it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 79.56it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 80.02it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 80.48it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 80.97it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 81.45it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 81.93it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 82.42it/s, loss=0.00718,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 80.78it/s, loss=0.00718,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 80.61it/s, loss=0.00718,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 73.10it/s, loss=0.00611,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 65.08it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 65.17it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 65.58it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 65.98it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 66.33it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 66.72it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 67.12it/s, loss=0.00611,

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v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 67.52it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 67.92it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 68.33it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 68.74it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 69.14it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 69.55it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 69.95it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 70.36it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 70.78it/s, loss=0.00611,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 164.55it/s]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 71.18it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 71.59it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 72.01it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 72.43it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 72.84it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 73.26it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 73.70it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 74.14it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 74.58it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 75.03it/s, loss=0.00611,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.69it/s, loss=0.00611,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.54it/s, loss=0.00611,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 70.51it/s, loss=0.00733,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|          | 101/126 [00:01<00:00, 61.69it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 81%|          | 102/126 [00:01<00:00, 61.86it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 82%|          | 103/126 [00:01<00:00, 62.24it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 83%|          | 104/126 [00:01<00:00, 62.62it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 83%|          | 105/126 [00:01<00:00, 63.01it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 84%|          | 106/126 [00:01<00:00, 63.39it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 85%|          | 107/126 [00:01<00:00, 63.78it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 86%|          | 108/126 [00:01<00:00, 64.16it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 87%|          | 109/126 [00:01<00:00, 64.56it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 87%|          | 110/126 [00:01<00:00, 64.96it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 88%|          | 111/126 [00:01<00:00, 65.36it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 89%|          | 112/126 [00:01<00:00, 65.76it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 90%|          | 113/126 [00:01<00:00, 66.17it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 90%|          | 114/126 [00:01<00:00, 66.57it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 91%|          | 115/126 [00:01<00:00, 66.98it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 92%|          | 116/126 [00:01<00:00, 67.39it/s, loss=0.00733,
v_num=4.31e+7]
Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 169.80it/s]
Epoch 26: 93%|          | 117/126 [00:01<00:00, 67.80it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 94%|          | 118/126 [00:01<00:00, 68.21it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 94%|          | 119/126 [00:01<00:00, 68.62it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 95%|          | 120/126 [00:01<00:00, 69.03it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 96%|          | 121/126 [00:01<00:00, 69.44it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 97%|          | 122/126 [00:01<00:00, 69.86it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 98%|          | 123/126 [00:01<00:00, 70.30it/s, loss=0.00733,
v_num=4.31e+7]

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Epoch 26: 98%|      | 124/126 [00:01<00:00, 70.73it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 71.17it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 71.61it/s, loss=0.00733,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 70.08it/s, loss=0.00733,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 69.95it/s, loss=0.00733,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 78.60it/s, loss=0.0061,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 68.79it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 69.01it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 69.53it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 70.05it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 70.57it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 71.08it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 71.60it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 72.10it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 72.61it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 73.12it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 73.63it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 74.12it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 74.62it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 75.13it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 75.63it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 76.12it/s, loss=0.0061,
v_num=4.31e+7]

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Epoch 27: 93%|      | 117/126 [00:01<00:00, 76.62it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 94%|      | 118/126 [00:01<00:00, 77.11it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 77.61it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 78.10it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 78.59it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 79.09it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 79.61it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 80.13it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 80.65it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 81.17it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 79.72it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 79.58it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 73.01it/s, loss=0.00581,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 63.86it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 63.90it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 64.36it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 64.82it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 65.29it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 65.75it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 66.21it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 66.66it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 67.13it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 67.58it/s, loss=0.00581,

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v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 68.04it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 68.49it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 68.94it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 69.39it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 69.84it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 70.29it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 70.74it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 71.18it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 71.63it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 72.07it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 72.51it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 72.95it/s, loss=0.00581,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.52it/s]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 73.40it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 73.86it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 74.32it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 74.78it/s, loss=0.00581,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 73.39it/s, loss=0.00581,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 73.25it/s, loss=0.00581,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 71.52it/s, loss=0.0071,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 63.05it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 63.23it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 63.63it/s, loss=0.0071,

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v_num=4.31e+7]
Epoch 29: 83%|      | 104/126 [00:01<00:00, 64.04it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 64.44it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 64.85it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 65.26it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 65.67it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 87%|      | 109/126 [00:01<00:00, 66.08it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 66.50it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 66.91it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 89%|      | 112/126 [00:01<00:00, 67.33it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 67.75it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 68.17it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 68.59it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 69.01it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 69.42it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 69.84it/s, loss=0.0071,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.61it/s]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 70.25it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 70.67it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 71.09it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 71.51it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 71.96it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 72.40it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 72.85it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 73.30it/s, loss=0.0071,
v_num=4.31e+7]Mapping latent space...

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Epoch 29: 100%|      | 126/126 [00:01<00:00, 72.02it/s, loss=0.0071,
v_num=4.31e+7]
Epoch 29: 100%|      | 126/126 [00:01<00:00, 71.88it/s, loss=0.0071,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 76.17it/s, loss=0.00557,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 67.60it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 67.65it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 68.05it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 68.46it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 68.87it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 69.28it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 69.69it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 70.10it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 70.51it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 70.92it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 71.34it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 71.76it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 72.18it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 72.60it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 73.02it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 73.45it/s, loss=0.00557,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.73it/s]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 73.86it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 94%|      | 118/126 [00:01<00:00, 74.29it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 94%|      | 119/126 [00:01<00:00, 74.72it/s, loss=0.00557,

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v_num=4.31e+7]
Epoch 30: 95%|      | 120/126 [00:01<00:00, 75.15it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 96%|      | 121/126 [00:01<00:00, 75.59it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 97%|      | 122/126 [00:01<00:00, 76.02it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 98%|      | 123/126 [00:01<00:00, 76.48it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 98%|      | 124/126 [00:01<00:00, 76.94it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 99%|      | 125/126 [00:01<00:00, 77.39it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 77.86it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|     | 126/126 [00:01<00:00, 76.32it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 76.17it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|      | 100/126 [00:01<00:00, 76.81it/s, loss=0.00622,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|      | 101/126 [00:01<00:00, 67.96it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 81%|      | 102/126 [00:01<00:00, 67.97it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 82%|      | 103/126 [00:01<00:00, 68.39it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 83%|      | 104/126 [00:01<00:00, 68.82it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 83%|      | 105/126 [00:01<00:00, 69.25it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 84%|      | 106/126 [00:01<00:00, 69.68it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 85%|      | 107/126 [00:01<00:00, 70.12it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 86%|      | 108/126 [00:01<00:00, 70.55it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 87%|      | 109/126 [00:01<00:00, 70.98it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 87%|      | 110/126 [00:01<00:00, 71.42it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 88%|      | 111/126 [00:01<00:00, 71.86it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 72.30it/s, loss=0.00622,
v_num=4.31e+7]

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Epoch 31: 90%|      | 113/126 [00:01<00:00, 72.74it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 73.18it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 73.63it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 74.07it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 74.52it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 74.97it/s, loss=0.00622,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.01it/s]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 75.41it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 75.86it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 76.30it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 76.76it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 77.23it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 77.71it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 78.17it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 78.65it/s, loss=0.00622,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 77.19it/s, loss=0.00622,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 77.04it/s, loss=0.00622,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 76.16it/s, loss=0.00569,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 67.10it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 67.22it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 67.74it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 68.23it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 68.75it/s, loss=0.00569,
v_num=4.31e+7]

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Epoch 32: 84%|      | 106/126 [00:01<00:00, 69.24it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 69.75it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 70.24it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 70.75it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 71.23it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 71.74it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 89%|      | 112/126 [00:01<00:00, 72.22it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 72.73it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 73.21it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 73.71it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 92%|      | 116/126 [00:01<00:00, 74.19it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 74.70it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 75.17it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 75.67it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 76.14it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 76.63it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 77.11it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 77.62it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 78.12it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 78.63it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 77.79it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 77.65it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 79%|      | 100/126 [00:01<00:00, 78.68it/s, loss=0.00707,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|          | 101/126 [00:01<00:00, 69.29it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 81%|          | 102/126 [00:01<00:00, 69.35it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 82%|          | 103/126 [00:01<00:00, 69.87it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 83%|          | 104/126 [00:01<00:00, 70.39it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 83%|          | 105/126 [00:01<00:00, 70.91it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 84%|          | 106/126 [00:01<00:00, 71.42it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 85%|          | 107/126 [00:01<00:00, 71.93it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 86%|          | 108/126 [00:01<00:00, 72.43it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 87%|          | 109/126 [00:01<00:00, 72.94it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 87%|          | 110/126 [00:01<00:00, 73.45it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 88%|          | 111/126 [00:01<00:00, 73.96it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 89%|          | 112/126 [00:01<00:00, 74.49it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 90%|          | 113/126 [00:01<00:00, 74.98it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 90%|          | 114/126 [00:01<00:00, 75.48it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 91%|          | 115/126 [00:01<00:00, 75.98it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 92%|          | 116/126 [00:01<00:00, 76.48it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 93%|          | 117/126 [00:01<00:00, 76.97it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 94%|          | 118/126 [00:01<00:00, 77.47it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 94%|          | 119/126 [00:01<00:00, 77.96it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 95%|          | 120/126 [00:01<00:00, 78.45it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 96%|          | 121/126 [00:01<00:00, 78.94it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 97%|          | 122/126 [00:01<00:00, 79.43it/s, loss=0.00707,
v_num=4.31e+7]

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Epoch 33: 98%|      | 123/126 [00:01<00:00, 79.94it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 80.46it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 80.97it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 81.48it/s, loss=0.00707,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 79.43it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 79.31it/s, loss=0.00707,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 81.72it/s, loss=0.00666,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 71.81it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 71.84it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 72.36it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 72.88it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 73.40it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 73.93it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 74.45it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 74.97it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 75.48it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 76.00it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 76.51it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 77.02it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 77.54it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 78.04it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 78.55it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 79.04it/s, loss=0.00666,

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v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 79.54it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 80.04it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 80.54it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 81.04it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 81.53it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 82.04it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 82.56it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 83.09it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 83.61it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 84.14it/s, loss=0.00666,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 82.37it/s, loss=0.00666,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 82.24it/s, loss=0.00666,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 73.44it/s, loss=0.00673,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 64.18it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 64.36it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 64.82it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 65.29it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 65.75it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 66.22it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 66.68it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 86%|      | 108/126 [00:01<00:00, 67.14it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 67.60it/s, loss=0.00673,
v_num=4.31e+7]

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Epoch 35: 87%|      | 110/126 [00:01<00:00, 68.06it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 68.51it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 68.95it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 69.36it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 69.81it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 70.27it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 70.72it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 71.16it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 71.61it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 72.06it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 72.50it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 72.94it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 73.39it/s, loss=0.00673,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.43it/s]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 73.85it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 74.31it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 74.76it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 75.23it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 72.55it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 72.35it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 77.69it/s, loss=0.00635,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 67.95it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 81%|      | 102/126 [00:01<00:00, 68.28it/s, loss=0.00635,

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v_num=4.31e+7]
Epoch 36: 82%|      | 103/126 [00:01<00:00, 68.74it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 83%|      | 104/126 [00:01<00:00, 69.19it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 83%|      | 105/126 [00:01<00:00, 69.66it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 84%|      | 106/126 [00:01<00:00, 70.11it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 85%|      | 107/126 [00:01<00:00, 70.57it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 86%|      | 108/126 [00:01<00:00, 71.01it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 87%|      | 109/126 [00:01<00:00, 71.47it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 87%|      | 110/126 [00:01<00:00, 71.92it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 88%|      | 111/126 [00:01<00:00, 72.37it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 89%|      | 112/126 [00:01<00:00, 72.82it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 90%|      | 113/126 [00:01<00:00, 73.26it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 90%|      | 114/126 [00:01<00:00, 73.71it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 91%|      | 115/126 [00:01<00:00, 74.15it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 92%|      | 116/126 [00:01<00:00, 74.59it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 93%|      | 117/126 [00:01<00:00, 75.03it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 94%|      | 118/126 [00:01<00:00, 75.46it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 94%|      | 119/126 [00:01<00:00, 75.90it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 95%|      | 120/126 [00:01<00:00, 76.33it/s, loss=0.00635,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.83it/s]
Epoch 36: 96%|      | 121/126 [00:01<00:00, 76.75it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 97%|      | 122/126 [00:01<00:00, 77.19it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 98%|      | 123/126 [00:01<00:00, 77.64it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 98%|      | 124/126 [00:01<00:00, 78.09it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 78.53it/s, loss=0.00635,
v_num=4.31e+7]

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Epoch 36: 100%|      | 126/126 [00:01<00:00, 78.98it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|      | 126/126 [00:01<00:00, 77.48it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 36: 100%|      | 126/126 [00:01<00:00, 77.33it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 75.00it/s, loss=0.00572,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 67.22it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 67.33it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 67.81it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 68.29it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 68.77it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 69.25it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 69.73it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 70.22it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 70.70it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 71.18it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 71.65it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 72.12it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 72.60it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 73.07it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 73.54it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 74.01it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 74.49it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 94%|      | 118/126 [00:01<00:00, 74.95it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 75.42it/s, loss=0.00572,

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v_num=4.31e+7]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 75.88it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 76.33it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 76.79it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 77.27it/s, loss=0.00572,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.87it/s]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 77.74it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 78.21it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 78.69it/s, loss=0.00572,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 77.35it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 77.23it/s, loss=0.00572,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 76.00it/s, loss=0.00541,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 66.57it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 66.66it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 67.05it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 67.53it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 68.01it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 68.49it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 68.98it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 69.45it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 69.92it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 70.39it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 70.86it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 71.33it/s, loss=0.00541,

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v_num=4.31e+7]
Epoch 38: 90%|      | 113/126 [00:01<00:00, 71.80it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 72.27it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 72.73it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 73.19it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 73.64it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 74.10it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 74.56it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 75.01it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 75.46it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 75.92it/s, loss=0.00541,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.88it/s]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 76.38it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 76.85it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 77.32it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 77.80it/s, loss=0.00541,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 76.37it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 76.23it/s, loss=0.00541,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 77.06it/s, loss=0.00619,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 67.65it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 67.89it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 68.31it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 68.75it/s, loss=0.00619,
v_num=4.31e+7]

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Epoch 39: 83%|      | 105/126 [00:01<00:00, 69.18it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 69.62it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 70.05it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 70.49it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 70.93it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 71.25it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 71.68it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 72.13it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 72.57it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 73.02it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 73.47it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 73.92it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 74.37it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 74.83it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 75.28it/s, loss=0.00619,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 195.55it/s]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 75.72it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 76.17it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 76.59it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 76.99it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 77.46it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 77.93it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 78.40it/s, loss=0.00619,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 76.85it/s, loss=0.00619,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 76.70it/s, loss=0.00619,

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v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|          | 100/126 [00:01<00:00, 77.13it/s, loss=0.0061,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|          | 101/126 [00:01<00:00, 67.97it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 81%|          | 102/126 [00:01<00:00, 68.20it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 82%|          | 103/126 [00:01<00:00, 68.71it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 83%|          | 104/126 [00:01<00:00, 69.21it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 83%|          | 105/126 [00:01<00:00, 69.72it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 84%|          | 106/126 [00:01<00:00, 70.23it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 85%|          | 107/126 [00:01<00:00, 70.73it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 86%|          | 108/126 [00:01<00:00, 71.08it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 87%|          | 109/126 [00:01<00:00, 71.57it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 87%|          | 110/126 [00:01<00:00, 72.06it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 88%|          | 111/126 [00:01<00:00, 72.56it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 89%|          | 112/126 [00:01<00:00, 73.05it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 90%|          | 113/126 [00:01<00:00, 73.55it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 90%|          | 114/126 [00:01<00:00, 74.04it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 91%|          | 115/126 [00:01<00:00, 74.53it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 92%|          | 116/126 [00:01<00:00, 75.02it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 93%|          | 117/126 [00:01<00:00, 75.50it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 94%|          | 118/126 [00:01<00:00, 75.99it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 94%|          | 119/126 [00:01<00:00, 76.48it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 95%|          | 120/126 [00:01<00:00, 76.97it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 96%|          | 121/126 [00:01<00:00, 77.46it/s, loss=0.0061,
v_num=4.31e+7]

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Epoch 40: 97%|      | 122/126 [00:01<00:00, 77.94it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 98%|      | 123/126 [00:01<00:00, 78.45it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 78.96it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 79.46it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 79.98it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|     | 126/126 [00:01<00:00, 78.51it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 78.38it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 78.66it/s, loss=0.00692,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 68.83it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 68.94it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 69.45it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 69.95it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 70.46it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 70.97it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 71.49it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 71.98it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 87%|      | 109/126 [00:01<00:00, 72.49it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 72.98it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 73.50it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 73.99it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 74.50it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 74.99it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 75.50it/s, loss=0.00692,

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v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 75.99it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 76.49it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 76.98it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 77.47it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 77.95it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 78.38it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 78.88it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 79.40it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 79.91it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 80.43it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 80.95it/s, loss=0.00692,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.36it/s, loss=0.00692,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.24it/s, loss=0.00692,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 87.90it/s, loss=0.00556,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 75.43it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 75.44it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 75.98it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 76.51it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 77.05it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 77.59it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 78.13it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 78.66it/s, loss=0.00556,

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v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 79.20it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 79.72it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 80.27it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 80.78it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 81.31it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 81.84it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 82.37it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 82.89it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 83.41it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 83.93it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 84.45it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 84.97it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 85.49it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 86.01it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 86.55it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 87.10it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 87.66it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 88.22it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 86.51it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 86.36it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 76.55it/s, loss=0.00589,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 67.05it/s, loss=0.00589,
v_num=4.31e+7]

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Epoch 43: 81%| | 102/126 [00:01<00:00, 66.89it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 82%| | 103/126 [00:01<00:00, 67.30it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 83%| | 104/126 [00:01<00:00, 67.72it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 83%| | 105/126 [00:01<00:00, 68.14it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 84%| | 106/126 [00:01<00:00, 68.56it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 85%| | 107/126 [00:01<00:00, 68.99it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 86%| | 108/126 [00:01<00:00, 69.41it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 87%| | 109/126 [00:01<00:00, 69.84it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 87%| | 110/126 [00:01<00:00, 70.27it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 88%| | 111/126 [00:01<00:00, 70.69it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 89%| | 112/126 [00:01<00:00, 71.12it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 90%| | 113/126 [00:01<00:00, 71.56it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 90%| | 114/126 [00:01<00:00, 71.99it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 91%| | 115/126 [00:01<00:00, 72.42it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 92%| | 116/126 [00:01<00:00, 72.86it/s, loss=0.00589, v_num=4.31e+7]
Validation DataLoader 0: 65%| | 17/26 [00:00<00:00, 167.18it/s]
Epoch 43: 93%| | 117/126 [00:01<00:00, 73.29it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 94%| | 118/126 [00:01<00:00, 73.72it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 94%| | 119/126 [00:01<00:00, 74.15it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 95%| | 120/126 [00:01<00:00, 74.59it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 96%| | 121/126 [00:01<00:00, 75.02it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 97%| | 122/126 [00:01<00:00, 75.46it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 98%| | 123/126 [00:01<00:00, 75.93it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 98%| | 124/126 [00:01<00:00, 76.39it/s, loss=0.00589, v_num=4.31e+7]
Epoch 43: 99%| | 125/126 [00:01<00:00, 76.85it/s, loss=0.00589, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 43: 100%|      | 126/126 [00:01<00:00, 77.32it/s, loss=0.00589,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|      | 126/126 [00:01<00:00, 75.92it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 43: 100%|      | 126/126 [00:01<00:00, 75.79it/s, loss=0.00589,
v_num=4.31e+7]Mapping latent space...
Epoch 44:  79%|      | 100/126 [00:01<00:00, 76.13it/s, loss=0.0057,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44:  80%|      | 101/126 [00:01<00:00, 66.96it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  81%|      | 102/126 [00:01<00:00, 67.06it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  82%|      | 103/126 [00:01<00:00, 67.54it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  83%|      | 104/126 [00:01<00:00, 68.03it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  83%|      | 105/126 [00:01<00:00, 68.52it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  84%|      | 106/126 [00:01<00:00, 69.01it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  85%|      | 107/126 [00:01<00:00, 69.49it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  86%|      | 108/126 [00:01<00:00, 69.96it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  87%|      | 109/126 [00:01<00:00, 70.44it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  87%|      | 110/126 [00:01<00:00, 70.92it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  88%|      | 111/126 [00:01<00:00, 71.39it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  89%|      | 112/126 [00:01<00:00, 71.86it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  90%|      | 113/126 [00:01<00:00, 72.34it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  90%|      | 114/126 [00:01<00:00, 72.80it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  91%|      | 115/126 [00:01<00:00, 73.27it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  92%|      | 116/126 [00:01<00:00, 73.73it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  93%|      | 117/126 [00:01<00:00, 74.19it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44:  94%|      | 118/126 [00:01<00:00, 74.65it/s, loss=0.0057,
v_num=4.31e+7]

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Epoch 44: 94%|      | 119/126 [00:01<00:00, 75.11it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 95%|      | 120/126 [00:01<00:00, 75.57it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 96%|      | 121/126 [00:01<00:00, 76.02it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 97%|      | 122/126 [00:01<00:00, 76.48it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 98%|      | 123/126 [00:01<00:00, 76.95it/s, loss=0.0057,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.80it/s]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 77.42it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 77.89it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 78.37it/s, loss=0.0057,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 76.95it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 76.82it/s, loss=0.0057,
v_num=4.31e+7]Mapping latent space...

Epoch 45: 79%|      | 100/126 [00:01<00:00, 78.73it/s, loss=0.00569,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 68.55it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 68.58it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 68.98it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 83%|      | 104/126 [00:01<00:00, 69.39it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 69.80it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 70.22it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 70.64it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 71.06it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 87%|      | 109/126 [00:01<00:00, 71.48it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 71.91it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 72.34it/s, loss=0.00569,

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v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 72.77it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 73.20it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 73.63it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 74.06it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 74.50it/s, loss=0.00569,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.59it/s]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 74.92it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 75.36it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 75.80it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 76.24it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 76.68it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 77.12it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 77.59it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 78.05it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 78.52it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 78.99it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 77.50it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 77.34it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 67.48it/s, loss=0.00587,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 59.74it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 59.98it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 60.43it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 60.87it/s, loss=0.00587,

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v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 61.32it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 61.76it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 62.20it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 62.64it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 63.07it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 63.51it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 63.95it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 64.39it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 64.82it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 65.25it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 65.68it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 66.12it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 66.54it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 66.97it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 67.40it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 67.82it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 68.24it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 68.67it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 69.11it/s, loss=0.00587,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 238.79it/s]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 69.54it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 69.98it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 70.42it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 69.23it/s, loss=0.00587,
v_num=4.31e+7]

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Epoch 46: 100%|      | 126/126 [00:01<00:00, 69.11it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 77.20it/s, loss=0.00573,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 67.17it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 67.24it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 82%|      | 103/126 [00:01<00:00, 67.73it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 83%|      | 104/126 [00:01<00:00, 68.21it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 83%|      | 105/126 [00:01<00:00, 68.61it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 84%|      | 106/126 [00:01<00:00, 69.09it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 85%|      | 107/126 [00:01<00:00, 69.56it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 86%|      | 108/126 [00:01<00:00, 70.03it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 87%|      | 109/126 [00:01<00:00, 70.50it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 87%|      | 110/126 [00:01<00:00, 70.97it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 88%|      | 111/126 [00:01<00:00, 71.44it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 89%|      | 112/126 [00:01<00:00, 71.90it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 90%|      | 113/126 [00:01<00:00, 72.37it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 90%|      | 114/126 [00:01<00:00, 72.83it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 91%|      | 115/126 [00:01<00:00, 73.29it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 92%|      | 116/126 [00:01<00:00, 73.74it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 93%|      | 117/126 [00:01<00:00, 74.20it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 94%|      | 118/126 [00:01<00:00, 74.65it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 94%|      | 119/126 [00:01<00:00, 75.10it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 95%|      | 120/126 [00:01<00:00, 75.55it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 96%|      | 121/126 [00:01<00:00, 75.99it/s, loss=0.00573,

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v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 219.06it/s]
Epoch 47: 97%|          | 122/126 [00:01<00:00, 76.44it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 98%|          | 123/126 [00:01<00:00, 76.91it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 98%|          | 124/126 [00:01<00:00, 77.38it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 99%|          | 125/126 [00:01<00:00, 77.85it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 100%|         | 126/126 [00:01<00:00, 78.32it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|         | 126/126 [00:01<00:00, 76.81it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 47: 100%|         | 126/126 [00:01<00:00, 76.66it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|          | 100/126 [00:01<00:00, 79.64it/s, loss=0.00655,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|          | 101/126 [00:01<00:00, 69.44it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 81%|          | 102/126 [00:01<00:00, 69.42it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 82%|          | 103/126 [00:01<00:00, 69.92it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 83%|          | 104/126 [00:01<00:00, 70.42it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 83%|          | 105/126 [00:01<00:00, 70.92it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 84%|          | 106/126 [00:01<00:00, 71.43it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 85%|          | 107/126 [00:01<00:00, 71.93it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 86%|          | 108/126 [00:01<00:00, 72.43it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 87%|          | 109/126 [00:01<00:00, 72.94it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 87%|          | 110/126 [00:01<00:00, 73.43it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 88%|          | 111/126 [00:01<00:00, 73.93it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 89%|          | 112/126 [00:01<00:00, 74.42it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 90%|          | 113/126 [00:01<00:00, 74.92it/s, loss=0.00655,
v_num=4.31e+7]

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Epoch 48: 90%|      | 114/126 [00:01<00:00, 75.41it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 75.91it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 76.40it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 76.90it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 77.40it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 77.89it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 78.38it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 78.87it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 79.37it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 79.89it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 80.41it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 80.93it/s, loss=0.00655,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.86it/s]
Epoch 48: 100%|      | 126/126 [00:01<00:00, 81.44it/s, loss=0.00655,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|      | 126/126 [00:01<00:00, 79.99it/s, loss=0.00655,
v_num=4.31e+7]
Epoch 48: 100%|      | 126/126 [00:01<00:00, 79.85it/s, loss=0.00655,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 83.41it/s, loss=0.00502,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 73.75it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 73.59it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 74.13it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 74.66it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 75.21it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 75.73it/s, loss=0.00502,
v_num=4.31e+7]

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Epoch 49: 85%|      | 107/126 [00:01<00:00, 76.27it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 76.80it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 77.33it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 77.86it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 78.38it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 78.91it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 79.44it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 79.96it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 80.49it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 81.01it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 81.53it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 82.05it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 82.57it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 83.09it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 83.60it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 84.11it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 84.66it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 85.20it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 85.74it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 86.28it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 84.64it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 84.49it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 89.95it/s, loss=0.00629,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|          | 101/126 [00:01<00:00, 76.90it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 81%|          | 102/126 [00:01<00:00, 77.01it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 82%|          | 103/126 [00:01<00:00, 77.54it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 83%|          | 104/126 [00:01<00:00, 78.06it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 83%|          | 105/126 [00:01<00:00, 78.59it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 84%|          | 106/126 [00:01<00:00, 79.13it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 85%|          | 107/126 [00:01<00:00, 79.66it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 86%|          | 108/126 [00:01<00:00, 80.19it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 87%|          | 109/126 [00:01<00:00, 80.72it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 87%|          | 110/126 [00:01<00:00, 81.25it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 88%|          | 111/126 [00:01<00:00, 81.78it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 89%|          | 112/126 [00:01<00:00, 82.31it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 90%|          | 113/126 [00:01<00:00, 82.84it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 90%|          | 114/126 [00:01<00:00, 83.36it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 91%|          | 115/126 [00:01<00:00, 83.89it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 92%|          | 116/126 [00:01<00:00, 84.40it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 93%|          | 117/126 [00:01<00:00, 84.93it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 94%|          | 118/126 [00:01<00:00, 85.45it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 94%|          | 119/126 [00:01<00:00, 85.97it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 95%|          | 120/126 [00:01<00:00, 86.48it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 96%|          | 121/126 [00:01<00:00, 86.99it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 97%|          | 122/126 [00:01<00:00, 87.52it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 98%|          | 123/126 [00:01<00:00, 88.07it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 98%|          | 124/126 [00:01<00:00, 88.63it/s, loss=0.00629,

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v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 89.19it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 89.75it/s, loss=0.00629,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|     | 126/126 [00:01<00:00, 87.64it/s, loss=0.00629,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 87.49it/s, loss=0.00629,
v_num=4.31e+7]Mapping latent space...

Epoch 51: 79%|      | 100/126 [00:01<00:00, 85.08it/s, loss=0.00703,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 74.99it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 75.04it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 75.60it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 76.13it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 76.69it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 77.22it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 77.78it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 78.30it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 78.85it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 79.38it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 79.93it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 80.45it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 80.97it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 81.49it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 82.04it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 82.55it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 83.09it/s, loss=0.00703,

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v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 83.60it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 84.13it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 84.64it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 85.17it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 85.67it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 86.22it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 86.77it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 87.32it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 87.88it/s, loss=0.00703,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 86.21it/s, loss=0.00703,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 86.06it/s, loss=0.00703,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 91.42it/s, loss=0.00612,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 78.02it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 77.89it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 78.40it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 78.91it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 79.43it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 79.95it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 80.46it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 80.96it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 81.47it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 81.97it/s, loss=0.00612,
v_num=4.31e+7]

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Epoch 52: 88%|      | 111/126 [00:01<00:00, 82.47it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 82.97it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 83.47it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 83.97it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 84.46it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 84.96it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 85.45it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 85.95it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 86.44it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 86.92it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 87.41it/s, loss=0.00612,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.63it/s]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 87.89it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 88.40it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 88.91it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 89.42it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 89.94it/s, loss=0.00612,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 87.78it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 87.59it/s, loss=0.00612,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 65.97it/s, loss=0.00573,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 58.67it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 58.72it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 82%|      | 103/126 [00:01<00:00, 59.10it/s, loss=0.00573,
v_num=4.31e+7]

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Epoch 53: 83%|      | 104/126 [00:01<00:00, 59.49it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 83%|      | 105/126 [00:01<00:00, 59.88it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 84%|      | 106/126 [00:01<00:00, 60.28it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 85%|      | 107/126 [00:01<00:00, 60.67it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 86%|      | 108/126 [00:01<00:00, 61.06it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 87%|      | 109/126 [00:01<00:00, 61.46it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 87%|      | 110/126 [00:01<00:00, 61.85it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 88%|      | 111/126 [00:01<00:00, 62.25it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 89%|      | 112/126 [00:01<00:00, 62.65it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 90%|      | 113/126 [00:01<00:00, 63.05it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 90%|      | 114/126 [00:01<00:00, 63.45it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 91%|      | 115/126 [00:01<00:00, 63.85it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 92%|      | 116/126 [00:01<00:00, 64.25it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 93%|      | 117/126 [00:01<00:00, 64.65it/s, loss=0.00573,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 173.48it/s]
Epoch 53: 94%|      | 118/126 [00:01<00:00, 65.04it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 94%|      | 119/126 [00:01<00:00, 65.45it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 95%|      | 120/126 [00:01<00:00, 65.85it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 66.25it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 66.65it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 67.08it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 67.50it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 67.93it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 68.35it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 67.13it/s, loss=0.00573,

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v_num=4.31e+7]
Epoch 53: 100%|      | 126/126 [00:01<00:00, 67.02it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 79%|      | 100/126 [00:01<00:00, 68.83it/s, loss=0.00582,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|      | 101/126 [00:01<00:00, 60.69it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 81%|      | 102/126 [00:01<00:00, 60.71it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 82%|      | 103/126 [00:01<00:00, 61.09it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 83%|      | 104/126 [00:01<00:00, 61.47it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 83%|      | 105/126 [00:01<00:00, 61.86it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 84%|      | 106/126 [00:01<00:00, 62.25it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 85%|      | 107/126 [00:01<00:00, 62.64it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 86%|      | 108/126 [00:01<00:00, 63.02it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 87%|      | 109/126 [00:01<00:00, 63.41it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 87%|      | 110/126 [00:01<00:00, 63.81it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 88%|      | 111/126 [00:01<00:00, 64.20it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 89%|      | 112/126 [00:01<00:00, 64.60it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 90%|      | 113/126 [00:01<00:00, 65.00it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 90%|      | 114/126 [00:01<00:00, 65.40it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 91%|      | 115/126 [00:01<00:00, 65.80it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 92%|      | 116/126 [00:01<00:00, 66.20it/s, loss=0.00582,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 162.81it/s]
Epoch 54: 93%|      | 117/126 [00:01<00:00, 66.60it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 94%|      | 118/126 [00:01<00:00, 67.00it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 94%|      | 119/126 [00:01<00:00, 67.41it/s, loss=0.00582,
v_num=4.31e+7]

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Epoch 54: 95%|      | 120/126 [00:01<00:00, 67.81it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 96%|      | 121/126 [00:01<00:00, 68.22it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 97%|      | 122/126 [00:01<00:00, 68.63it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 69.06it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 69.49it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 69.92it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 70.35it/s, loss=0.00582,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|     | 126/126 [00:01<00:00, 69.17it/s, loss=0.00582,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 69.04it/s, loss=0.00582,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 78.66it/s, loss=0.0063,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|      | 101/126 [00:01<00:00, 68.57it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 81%|      | 102/126 [00:01<00:00, 68.72it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 82%|      | 103/126 [00:01<00:00, 69.25it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 83%|      | 104/126 [00:01<00:00, 69.74it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 83%|      | 105/126 [00:01<00:00, 70.27it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 84%|      | 106/126 [00:01<00:00, 70.77it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 85%|      | 107/126 [00:01<00:00, 71.29it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 86%|      | 108/126 [00:01<00:00, 71.79it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 87%|      | 109/126 [00:01<00:00, 72.31it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 87%|      | 110/126 [00:01<00:00, 72.81it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 88%|      | 111/126 [00:01<00:00, 73.32it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 89%|      | 112/126 [00:01<00:00, 73.82it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 90%|      | 113/126 [00:01<00:00, 74.32it/s, loss=0.0063,

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v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 74.82it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 75.33it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 75.82it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 76.33it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 76.81it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 77.31it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 77.80it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 78.30it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 78.79it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 79.31it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 79.84it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 80.36it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 80.88it/s, loss=0.0063,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 79.47it/s, loss=0.0063,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.0063,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 89.26it/s, loss=0.00641,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 77.53it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 77.57it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 78.14it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 78.68it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 79.25it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 84%|      | 106/126 [00:01<00:00, 79.80it/s, loss=0.00641,
v_num=4.31e+7]

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Epoch 56: 85%|      | 107/126 [00:01<00:00, 80.38it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 86%|      | 108/126 [00:01<00:00, 80.92it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 87%|      | 109/126 [00:01<00:00, 81.48it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 87%|      | 110/126 [00:01<00:00, 82.03it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 88%|      | 111/126 [00:01<00:00, 82.59it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 89%|      | 112/126 [00:01<00:00, 83.13it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 90%|      | 113/126 [00:01<00:00, 83.69it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 90%|      | 114/126 [00:01<00:00, 84.23it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 91%|      | 115/126 [00:01<00:00, 84.79it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 92%|      | 116/126 [00:01<00:00, 85.32it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 93%|      | 117/126 [00:01<00:00, 85.88it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 94%|      | 118/126 [00:01<00:00, 86.40it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 94%|      | 119/126 [00:01<00:00, 86.95it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 95%|      | 120/126 [00:01<00:00, 87.47it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 96%|      | 121/126 [00:01<00:00, 88.02it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 97%|      | 122/126 [00:01<00:00, 88.53it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 98%|      | 123/126 [00:01<00:00, 89.10it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 89.66it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 99%|      | 125/126 [00:01<00:00, 90.21it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 90.78it/s, loss=0.00641,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 88.73it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 88.58it/s, loss=0.00641,
v_num=4.31e+7]Mapping latent space...

Epoch 57: 79%|      | 100/126 [00:01<00:00, 87.70it/s, loss=0.00673,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|          | 101/126 [00:01<00:00, 74.81it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 81%|          | 102/126 [00:01<00:00, 75.12it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 82%|          | 103/126 [00:01<00:00, 75.54it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 83%|          | 104/126 [00:01<00:00, 75.95it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 83%|          | 105/126 [00:01<00:00, 76.37it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 84%|          | 106/126 [00:01<00:00, 76.79it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 85%|          | 107/126 [00:01<00:00, 77.21it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 86%|          | 108/126 [00:01<00:00, 77.63it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 87%|          | 109/126 [00:01<00:00, 78.06it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 87%|          | 110/126 [00:01<00:00, 78.50it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 88%|          | 111/126 [00:01<00:00, 78.93it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 89%|          | 112/126 [00:01<00:00, 79.37it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 90%|          | 113/126 [00:01<00:00, 79.81it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 90%|          | 114/126 [00:01<00:00, 80.25it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 91%|          | 115/126 [00:01<00:00, 80.70it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 92%|          | 116/126 [00:01<00:00, 81.15it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 93%|          | 117/126 [00:01<00:00, 81.60it/s, loss=0.00673,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 179.45it/s]
Epoch 57: 94%|          | 118/126 [00:01<00:00, 82.03it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 94%|          | 119/126 [00:01<00:00, 82.49it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 95%|          | 120/126 [00:01<00:00, 82.94it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 96%|          | 121/126 [00:01<00:00, 83.39it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 97%|          | 122/126 [00:01<00:00, 83.84it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 98%|          | 123/126 [00:01<00:00, 84.34it/s, loss=0.00673,

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v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 84.83it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 85.32it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 85.83it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 83.93it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 83.74it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 66.62it/s, loss=0.00587,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 59.22it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 59.20it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 59.58it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 59.97it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 60.36it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 60.75it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 61.14it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 61.53it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 61.92it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 62.32it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 62.71it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 63.12it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 63.52it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 63.92it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 64.32it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 64.73it/s, loss=0.00587,
v_num=4.31e+7]

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Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 166.04it/s]
Epoch 58: 93%|          | 117/126 [00:01<00:00, 65.13it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 94%|          | 118/126 [00:01<00:00, 65.54it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 94%|          | 119/126 [00:01<00:00, 65.94it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 95%|          | 120/126 [00:01<00:00, 66.35it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 96%|          | 121/126 [00:01<00:00, 66.76it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 97%|          | 122/126 [00:01<00:00, 67.17it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 98%|          | 123/126 [00:01<00:00, 67.60it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 98%|          | 124/126 [00:01<00:00, 68.03it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 99%|          | 125/126 [00:01<00:00, 68.46it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 100%|         | 126/126 [00:01<00:00, 68.89it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|         | 126/126 [00:01<00:00, 67.79it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 58: 100%|         | 126/126 [00:01<00:00, 67.68it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|          | 100/126 [00:01<00:00, 73.14it/s, loss=0.00549,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|          | 101/126 [00:01<00:00, 65.08it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 81%|          | 102/126 [00:01<00:00, 65.27it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 82%|          | 103/126 [00:01<00:00, 65.69it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 83%|          | 104/126 [00:01<00:00, 66.11it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 83%|          | 105/126 [00:01<00:00, 66.54it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 84%|          | 106/126 [00:01<00:00, 66.98it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 85%|          | 107/126 [00:01<00:00, 67.41it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 86%|          | 108/126 [00:01<00:00, 67.84it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 87%|          | 109/126 [00:01<00:00, 68.27it/s, loss=0.00549,
v_num=4.31e+7]

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Epoch 59: 87%|      | 110/126 [00:01<00:00, 68.70it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 69.14it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 69.57it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 70.01it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 70.45it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 70.88it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 71.32it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 71.75it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 72.19it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 72.63it/s, loss=0.00549,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 198.19it/s]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 73.06it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 73.49it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 73.92it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 74.38it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 74.84it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 75.30it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 75.76it/s, loss=0.00549,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 74.25it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 74.13it/s, loss=0.00549,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 73.07it/s, loss=0.00538,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 65.09it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 65.18it/s, loss=0.00538,

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v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 65.65it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 83%|      | 104/126 [00:01<00:00, 66.13it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 83%|      | 105/126 [00:01<00:00, 66.62it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 84%|      | 106/126 [00:01<00:00, 67.09it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 85%|      | 107/126 [00:01<00:00, 67.57it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 86%|      | 108/126 [00:01<00:00, 68.04it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 87%|      | 109/126 [00:01<00:00, 68.52it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 87%|      | 110/126 [00:01<00:00, 68.99it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 88%|      | 111/126 [00:01<00:00, 69.46it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 89%|      | 112/126 [00:01<00:00, 69.92it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 90%|      | 113/126 [00:01<00:00, 70.39it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 90%|      | 114/126 [00:01<00:00, 70.85it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 91%|      | 115/126 [00:01<00:00, 71.31it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 92%|      | 116/126 [00:01<00:00, 71.75it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 93%|      | 117/126 [00:01<00:00, 72.21it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 94%|      | 118/126 [00:01<00:00, 72.66it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 94%|      | 119/126 [00:01<00:00, 73.11it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 95%|      | 120/126 [00:01<00:00, 73.55it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 96%|      | 121/126 [00:01<00:00, 74.01it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 97%|      | 122/126 [00:01<00:00, 74.46it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 98%|      | 123/126 [00:01<00:00, 74.93it/s, loss=0.00538,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.99it/s]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 75.39it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 75.87it/s, loss=0.00538,
v_num=4.31e+7]

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Epoch 60: 100%|      | 126/126 [00:01<00:00, 76.33it/s, loss=0.00538,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|      | 126/126 [00:01<00:00, 74.97it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 60: 100%|      | 126/126 [00:01<00:00, 74.84it/s, loss=0.00538,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 83.47it/s, loss=0.00652,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 73.79it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 73.84it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 74.34it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 74.85it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 75.37it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 75.87it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 76.38it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 76.88it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 77.39it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 77.89it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 78.40it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 78.90it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 79.40it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 79.90it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 80.40it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 80.90it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 81.39it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 81.88it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 82.37it/s, loss=0.00652,

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v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 82.85it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 83.34it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 83.82it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 84.33it/s, loss=0.00652,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.39it/s]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 84.83it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 85.33it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 85.84it/s, loss=0.00652,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 84.21it/s, loss=0.00652,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 84.07it/s, loss=0.00652,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 72.59it/s, loss=0.00588,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 64.39it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 64.48it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 64.96it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 65.42it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 65.89it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 66.36it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 66.82it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 67.28it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 67.75it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 68.21it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 68.67it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 69.13it/s, loss=0.00588,

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v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 69.59it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 70.04it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 70.50it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 70.95it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 71.40it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 71.85it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 72.30it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 72.75it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 73.19it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 73.64it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 74.10it/s, loss=0.00588,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.99it/s]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 74.56it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 75.02it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 75.48it/s, loss=0.00588,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 74.02it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 73.89it/s, loss=0.00588,
v_num=4.31e+7]Mapping latent space...

Epoch 63: 79%|      | 100/126 [00:01<00:00, 80.36it/s, loss=0.00605,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 71.29it/s, loss=0.00605,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 71.24it/s, loss=0.00605,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 71.78it/s, loss=0.00605,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 72.29it/s, loss=0.00605,
v_num=4.31e+7]

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Epoch 63: 83%| | 105/126 [00:01<00:00, 72.82it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 84%| | 106/126 [00:01<00:00, 73.34it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 85%| | 107/126 [00:01<00:00, 73.89it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 86%| | 108/126 [00:01<00:00, 74.39it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 87%| | 109/126 [00:01<00:00, 74.90it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 87%| | 110/126 [00:01<00:00, 75.41it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 88%| | 111/126 [00:01<00:00, 75.94it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 89%| | 112/126 [00:01<00:00, 76.44it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 90%| | 113/126 [00:01<00:00, 76.96it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 90%| | 114/126 [00:01<00:00, 77.46it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 91%| | 115/126 [00:01<00:00, 77.99it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 92%| | 116/126 [00:01<00:00, 78.48it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 93%| | 117/126 [00:01<00:00, 78.98it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 94%| | 118/126 [00:01<00:00, 79.49it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 94%| | 119/126 [00:01<00:00, 80.00it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 95%| | 120/126 [00:01<00:00, 80.49it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 96%| | 121/126 [00:01<00:00, 80.99it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 97%| | 122/126 [00:01<00:00, 81.48it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 98%| | 123/126 [00:01<00:00, 82.02it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 98%| | 124/126 [00:01<00:00, 82.55it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 99%| | 125/126 [00:01<00:00, 83.08it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 100%| | 126/126 [00:01<00:00, 83.61it/s, loss=0.00605, v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%| | 126/126 [00:01<00:00, 81.49it/s, loss=0.00605, v_num=4.31e+7]
Epoch 63: 100%| | 126/126 [00:01<00:00, 81.36it/s, loss=0.00605, v_num=4.31e+7]Mapping latent space...

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Epoch 64: 79%|          | 100/126 [00:01<00:00, 77.13it/s, loss=0.00561,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|          | 101/126 [00:01<00:00, 68.73it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 81%|          | 102/126 [00:01<00:00, 68.97it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 82%|          | 103/126 [00:01<00:00, 69.50it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 83%|          | 104/126 [00:01<00:00, 69.97it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 83%|          | 105/126 [00:01<00:00, 70.51it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 84%|          | 106/126 [00:01<00:00, 71.01it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 85%|          | 107/126 [00:01<00:00, 71.54it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 86%|          | 108/126 [00:01<00:00, 72.04it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 87%|          | 109/126 [00:01<00:00, 72.57it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 87%|          | 110/126 [00:01<00:00, 73.07it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 88%|          | 111/126 [00:01<00:00, 73.61it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 89%|          | 112/126 [00:01<00:00, 74.09it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 90%|          | 113/126 [00:01<00:00, 74.61it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 90%|          | 114/126 [00:01<00:00, 75.10it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 91%|          | 115/126 [00:01<00:00, 75.62it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 92%|          | 116/126 [00:01<00:00, 76.11it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 93%|          | 117/126 [00:01<00:00, 76.62it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 94%|          | 118/126 [00:01<00:00, 77.11it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 94%|          | 119/126 [00:01<00:00, 77.61it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 95%|          | 120/126 [00:01<00:00, 78.10it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 96%|          | 121/126 [00:01<00:00, 78.60it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 97%|          | 122/126 [00:01<00:00, 79.09it/s, loss=0.00561,

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v_num=4.31e+7]
Epoch 64: 98%|      | 123/126 [00:01<00:00, 79.62it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 80.14it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 80.66it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 81.19it/s, loss=0.00561,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 79.78it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 79.67it/s, loss=0.00561,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 90.44it/s, loss=0.00589,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 77.29it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 77.32it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 77.75it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 78.18it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 78.63it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 79.05it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 79.42it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 79.81it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 80.21it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 80.60it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 81.01it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 81.42it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 81.84it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 82.26it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 82.67it/s, loss=0.00589,
v_num=4.31e+7]

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Validation DataLoader 0: 62%|          | 16/26 [00:00<00:00, 158.88it/s]
Epoch 65: 92%|          | 116/126 [00:01<00:00, 83.08it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 93%|          | 117/126 [00:01<00:00, 83.51it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 94%|          | 118/126 [00:01<00:00, 83.94it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 94%|          | 119/126 [00:01<00:00, 84.38it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 95%|          | 120/126 [00:01<00:00, 84.82it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 96%|          | 121/126 [00:01<00:00, 85.25it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 97%|          | 122/126 [00:01<00:00, 85.70it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 98%|          | 123/126 [00:01<00:00, 86.18it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 98%|          | 124/126 [00:01<00:00, 86.66it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 99%|          | 125/126 [00:01<00:00, 87.14it/s, loss=0.00589,
v_num=4.31e+7]
Epoch 65: 100%|         | 126/126 [00:01<00:00, 87.63it/s, loss=0.00589,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|         | 126/126 [00:01<00:00, 85.65it/s, loss=0.00589,
v_num=4.31e+7]

Epoch 65: 100%|         | 126/126 [00:01<00:00, 85.48it/s, loss=0.00589,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 79%|          | 100/126 [00:01<00:00, 68.59it/s, loss=0.00734,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|          | 101/126 [00:01<00:00, 60.44it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 81%|          | 102/126 [00:01<00:00, 60.70it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 82%|          | 103/126 [00:01<00:00, 61.14it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 83%|          | 104/126 [00:01<00:00, 61.59it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 83%|          | 105/126 [00:01<00:00, 62.03it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 84%|          | 106/126 [00:01<00:00, 62.48it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 85%|          | 107/126 [00:01<00:00, 62.92it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 86%|          | 108/126 [00:01<00:00, 63.27it/s, loss=0.00734,

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v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 63.61it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 63.96it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 64.31it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 64.67it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 65.04it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 90%|      | 114/126 [00:01<00:00, 65.41it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 65.78it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 66.16it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 66.54it/s, loss=0.00734,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.62it/s]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 66.92it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 67.29it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 67.67it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 68.06it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 68.45it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 68.85it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 69.27it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 69.68it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 70.10it/s, loss=0.00734,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 68.87it/s, loss=0.00734,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 68.73it/s, loss=0.00734,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|      | 100/126 [00:01<00:00, 78.52it/s, loss=0.00592,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|      | 101/126 [00:01<00:00, 69.27it/s, loss=0.00592,

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v_num=4.31e+7]
Epoch 67: 81%|      | 102/126 [00:01<00:00, 69.49it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 82%|      | 103/126 [00:01<00:00, 69.99it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 83%|      | 104/126 [00:01<00:00, 70.50it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 83%|      | 105/126 [00:01<00:00, 71.03it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 84%|      | 106/126 [00:01<00:00, 71.52it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 85%|      | 107/126 [00:01<00:00, 72.04it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 86%|      | 108/126 [00:01<00:00, 72.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 87%|      | 109/126 [00:01<00:00, 73.04it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 87%|      | 110/126 [00:01<00:00, 73.53it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 88%|      | 111/126 [00:01<00:00, 74.05it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 89%|      | 112/126 [00:01<00:00, 74.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 90%|      | 113/126 [00:01<00:00, 75.04it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 90%|      | 114/126 [00:01<00:00, 75.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 91%|      | 115/126 [00:01<00:00, 76.06it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 92%|      | 116/126 [00:01<00:00, 76.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 93%|      | 117/126 [00:01<00:00, 77.05it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 94%|      | 118/126 [00:01<00:00, 77.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 94%|      | 119/126 [00:01<00:00, 78.05it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 95%|      | 120/126 [00:01<00:00, 78.54it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 96%|      | 121/126 [00:01<00:00, 79.05it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 97%|      | 122/126 [00:01<00:00, 79.53it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 98%|      | 123/126 [00:01<00:00, 80.06it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 98%|      | 124/126 [00:01<00:00, 80.57it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 99%|      | 125/126 [00:01<00:00, 81.09it/s, loss=0.00592,

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v_num=4.31e+7]
Epoch 67: 100%|      | 126/126 [00:01<00:00, 81.61it/s, loss=0.00592,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|      | 126/126 [00:01<00:00, 80.10it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 67: 100%|      | 126/126 [00:01<00:00, 79.97it/s, loss=0.00592,
v_num=4.31e+7]Mapping latent space...
Epoch 68:  79%|      | 100/126 [00:01<00:00, 78.91it/s, loss=0.00612,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68:  80%|      | 101/126 [00:01<00:00, 68.64it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  81%|      | 102/126 [00:01<00:00, 68.60it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  82%|      | 103/126 [00:01<00:00, 69.02it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  83%|      | 104/126 [00:01<00:00, 69.45it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  83%|      | 105/126 [00:01<00:00, 69.87it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  84%|      | 106/126 [00:01<00:00, 70.29it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  85%|      | 107/126 [00:01<00:00, 70.72it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  86%|      | 108/126 [00:01<00:00, 71.14it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  87%|      | 109/126 [00:01<00:00, 71.56it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  87%|      | 110/126 [00:01<00:00, 71.90it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  88%|      | 111/126 [00:01<00:00, 72.25it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  89%|      | 112/126 [00:01<00:00, 72.57it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  90%|      | 113/126 [00:01<00:00, 72.93it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  90%|      | 114/126 [00:01<00:00, 73.30it/s, loss=0.00612,
v_num=4.31e+7]
Validation DataLoader 0:  58%|      | 15/26 [00:00<00:00, 146.52it/s]
Epoch 68:  91%|      | 115/126 [00:01<00:00, 73.66it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  92%|      | 116/126 [00:01<00:00, 74.03it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  93%|      | 117/126 [00:01<00:00, 74.40it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68:  94%|      | 118/126 [00:01<00:00, 74.77it/s, loss=0.00612,

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v_num=4.31e+7]
Epoch 68: 94%|      | 119/126 [00:01<00:00, 75.15it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 75.53it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 75.92it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 76.31it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 76.73it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 77.16it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 77.58it/s, loss=0.00612,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 78.02it/s, loss=0.00612,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|     | 126/126 [00:01<00:00, 76.23it/s, loss=0.00612,
v_num=4.31e+7]

Epoch 68: 100%|     | 126/126 [00:01<00:00, 76.07it/s, loss=0.00612,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 79%|      | 100/126 [00:01<00:00, 82.25it/s, loss=0.00563,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 71.81it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 71.87it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 72.37it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 72.88it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 73.40it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 73.92it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 74.44it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 74.93it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 75.44it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 75.94it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 76.47it/s, loss=0.00563,

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v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 76.96it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 77.46it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 77.93it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 78.43it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 78.92it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 79.43it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 79.92it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 80.42it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 80.90it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 81.40it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 81.88it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 82.40it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 82.94it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 83.47it/s, loss=0.00563,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.16it/s]
Epoch 69: 100%|      | 126/126 [00:01<00:00, 84.01it/s, loss=0.00563,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|      | 126/126 [00:01<00:00, 82.49it/s, loss=0.00563,
v_num=4.31e+7]
Epoch 69: 100%|      | 126/126 [00:01<00:00, 82.36it/s, loss=0.00563,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 88.74it/s, loss=0.00746,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 76.68it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 76.74it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 77.27it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 83%|      | 104/126 [00:01<00:00, 77.80it/s, loss=0.00746,

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v_num=4.31e+7]
Epoch 70: 83%| | 105/126 [00:01<00:00, 78.33it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 84%| | 106/126 [00:01<00:00, 78.86it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 85%| | 107/126 [00:01<00:00, 79.41it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 86%| | 108/126 [00:01<00:00, 79.93it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 87%| | 109/126 [00:01<00:00, 80.47it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 87%| | 110/126 [00:01<00:00, 81.00it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 88%| | 111/126 [00:01<00:00, 81.49it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 89%| | 112/126 [00:01<00:00, 81.99it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 90%| | 113/126 [00:01<00:00, 82.52it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 90%| | 114/126 [00:01<00:00, 83.05it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 91%| | 115/126 [00:01<00:00, 83.58it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 92%| | 116/126 [00:01<00:00, 84.07it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 93%| | 117/126 [00:01<00:00, 84.59it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 94%| | 118/126 [00:01<00:00, 85.11it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 94%| | 119/126 [00:01<00:00, 85.63it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 95%| | 120/126 [00:01<00:00, 86.15it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 96%| | 121/126 [00:01<00:00, 86.67it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 97%| | 122/126 [00:01<00:00, 87.20it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 98%| | 123/126 [00:01<00:00, 87.75it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 98%| | 124/126 [00:01<00:00, 88.30it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 99%| | 125/126 [00:01<00:00, 88.86it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 100%| | 126/126 [00:01<00:00, 89.43it/s, loss=0.00746,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%| | 126/126 [00:01<00:00, 87.00it/s, loss=0.00746,
v_num=4.31e+7]
Epoch 70: 100%| | 126/126 [00:01<00:00, 86.85it/s, loss=0.00746,

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v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|          | 100/126 [00:01<00:00, 81.14it/s, loss=0.00614,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|          | 101/126 [00:01<00:00, 70.72it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 81%|          | 102/126 [00:01<00:00, 70.81it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 82%|          | 103/126 [00:01<00:00, 71.30it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 83%|          | 104/126 [00:01<00:00, 71.79it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 83%|          | 105/126 [00:01<00:00, 72.29it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 84%|          | 106/126 [00:01<00:00, 72.78it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 85%|          | 107/126 [00:01<00:00, 73.27it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 86%|          | 108/126 [00:01<00:00, 73.75it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 87%|          | 109/126 [00:01<00:00, 74.24it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 87%|          | 110/126 [00:01<00:00, 74.72it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 88%|          | 111/126 [00:01<00:00, 75.21it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 89%|          | 112/126 [00:01<00:00, 75.69it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 90%|          | 113/126 [00:01<00:00, 76.18it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 90%|          | 114/126 [00:01<00:00, 76.66it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 91%|          | 115/126 [00:01<00:00, 77.14it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 92%|          | 116/126 [00:01<00:00, 77.62it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 93%|          | 117/126 [00:01<00:00, 78.09it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 94%|          | 118/126 [00:01<00:00, 78.54it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 94%|          | 119/126 [00:01<00:00, 79.01it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 95%|          | 120/126 [00:01<00:00, 79.48it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 96%|          | 121/126 [00:01<00:00, 79.94it/s, loss=0.00614,
v_num=4.31e+7]

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Epoch 71: 97%|      | 122/126 [00:01<00:00, 80.41it/s, loss=0.00614,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.87it/s]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 80.90it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 81.38it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 81.87it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 82.36it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 79.89it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 79.72it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 77.32it/s, loss=0.00494,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 67.48it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 67.57it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 68.05it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 68.54it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 69.03it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 69.52it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 70.03it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 70.50it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 71.00it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 71.48it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 71.98it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 72.46it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 72.95it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 73.43it/s, loss=0.00494,

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v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 73.92it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 74.40it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 74.89it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 75.37it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 75.85it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 76.31it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 76.79it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 77.27it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 77.77it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 78.28it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 78.79it/s, loss=0.00494,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.52it/s]
Epoch 72: 100%|      | 126/126 [00:01<00:00, 79.30it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|      | 126/126 [00:01<00:00, 77.91it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 72: 100%|      | 126/126 [00:01<00:00, 77.78it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 78.30it/s, loss=0.00653,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 68.36it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 68.48it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 68.88it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 69.28it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 69.69it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 70.10it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 70.51it/s, loss=0.00653,

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v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 70.92it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 71.34it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 71.77it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 72.19it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 72.62it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 73.04it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 73.47it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 73.89it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 74.32it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 74.75it/s, loss=0.00653,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.30it/s]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 75.17it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 75.61it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 76.04it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 76.47it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 76.88it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 77.34it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 77.81it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 78.28it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 78.75it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 77.24it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 77.10it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 75.35it/s, loss=0.00628,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|          | 101/126 [00:01<00:00, 66.94it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 81%|          | 102/126 [00:01<00:00, 67.14it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 82%|          | 103/126 [00:01<00:00, 67.54it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 83%|          | 104/126 [00:01<00:00, 67.94it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 83%|          | 105/126 [00:01<00:00, 68.35it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 84%|          | 106/126 [00:01<00:00, 68.75it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 85%|          | 107/126 [00:01<00:00, 69.16it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 86%|          | 108/126 [00:01<00:00, 69.57it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 87%|          | 109/126 [00:01<00:00, 69.97it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 87%|          | 110/126 [00:01<00:00, 70.39it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 88%|          | 111/126 [00:01<00:00, 70.80it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 89%|          | 112/126 [00:01<00:00, 71.22it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 90%|          | 113/126 [00:01<00:00, 71.63it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 90%|          | 114/126 [00:01<00:00, 72.06it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 91%|          | 115/126 [00:01<00:00, 72.48it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 92%|          | 116/126 [00:01<00:00, 72.91it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 93%|          | 117/126 [00:01<00:00, 73.33it/s, loss=0.00628,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 176.08it/s]
Epoch 74: 94%|          | 118/126 [00:01<00:00, 73.75it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 94%|          | 119/126 [00:01<00:00, 74.18it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 95%|          | 120/126 [00:01<00:00, 74.61it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 96%|          | 121/126 [00:01<00:00, 75.04it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 97%|          | 122/126 [00:01<00:00, 75.48it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 98%|          | 123/126 [00:01<00:00, 75.94it/s, loss=0.00628,
v_num=4.31e+7]

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Epoch 74: 98%|      | 124/126 [00:01<00:00, 76.39it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 76.85it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 77.31it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 75.16it/s, loss=0.00628,
v_num=4.31e+7]

Epoch 74: 100%|     | 126/126 [00:01<00:00, 75.01it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 79%|      | 100/126 [00:01<00:00, 70.06it/s, loss=0.00587,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 61.87it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 62.16it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 62.56it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 62.96it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 63.35it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 63.75it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 64.16it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 64.56it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 64.97it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 65.37it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 88%|      | 111/126 [00:01<00:00, 65.79it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 66.20it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 66.61it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 67.02it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 67.44it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 67.85it/s, loss=0.00587,
v_num=4.31e+7]

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Epoch 75: 93%|      | 117/126 [00:01<00:00, 68.26it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 94%|      | 118/126 [00:01<00:00, 68.67it/s, loss=0.00587,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.55it/s]
Epoch 75: 94%|      | 119/126 [00:01<00:00, 69.07it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 95%|      | 120/126 [00:01<00:00, 69.47it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 96%|      | 121/126 [00:01<00:00, 69.87it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 97%|      | 122/126 [00:01<00:00, 70.27it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 98%|      | 123/126 [00:01<00:00, 70.69it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 98%|      | 124/126 [00:01<00:00, 71.10it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 99%|      | 125/126 [00:01<00:00, 71.52it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 71.93it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|     | 126/126 [00:01<00:00, 70.69it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 70.57it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 71.92it/s, loss=0.00576,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 63.58it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 63.75it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 64.19it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 83%|      | 104/126 [00:01<00:00, 64.63it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 65.07it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 65.52it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 65.96it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 66.39it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 66.73it/s, loss=0.00576,
v_num=4.31e+7]

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Epoch 76: 87%|      | 110/126 [00:01<00:00, 67.15it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 67.59it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 68.03it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 68.47it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 68.91it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 69.35it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 69.79it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 70.23it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 70.67it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 71.10it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 71.54it/s, loss=0.00576,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.06it/s]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 71.97it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 72.41it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 72.86it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 73.32it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 73.77it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 74.22it/s, loss=0.00576,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 72.88it/s, loss=0.00576,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 72.76it/s, loss=0.00576,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 79.78it/s, loss=0.00667,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 70.10it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 70.19it/s, loss=0.00667,
v_num=4.31e+7]

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Epoch 77: 82%|      | 103/126 [00:01<00:00, 70.60it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 70.93it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 83%|      | 105/126 [00:01<00:00, 71.30it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 84%|      | 106/126 [00:01<00:00, 71.67it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 85%|      | 107/126 [00:01<00:00, 72.05it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 86%|      | 108/126 [00:01<00:00, 72.43it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 87%|      | 109/126 [00:01<00:00, 72.82it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 87%|      | 110/126 [00:01<00:00, 73.22it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 88%|      | 111/126 [00:01<00:00, 73.61it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 89%|      | 112/126 [00:01<00:00, 74.02it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 90%|      | 113/126 [00:01<00:00, 74.43it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 90%|      | 114/126 [00:01<00:00, 74.84it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 91%|      | 115/126 [00:01<00:00, 75.26it/s, loss=0.00667,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 158.14it/s]
Epoch 77: 92%|      | 116/126 [00:01<00:00, 75.67it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 93%|      | 117/126 [00:01<00:00, 76.09it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 94%|      | 118/126 [00:01<00:00, 76.51it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 94%|      | 119/126 [00:01<00:00, 76.93it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 95%|      | 120/126 [00:01<00:00, 77.36it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 96%|      | 121/126 [00:01<00:00, 77.78it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 97%|      | 122/126 [00:01<00:00, 78.22it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 98%|      | 123/126 [00:01<00:00, 78.67it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 98%|      | 124/126 [00:01<00:00, 79.13it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 99%|      | 125/126 [00:01<00:00, 79.59it/s, loss=0.00667,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 80.06it/s, loss=0.00667,

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v_num=4.31e+7]Mapping latent space...
Epoch 77: 100%|      | 126/126 [00:01<00:00, 78.37it/s, loss=0.00667,
v_num=4.31e+7]

Epoch 77: 100%|      | 126/126 [00:01<00:00, 78.23it/s, loss=0.00667,
v_num=4.31e+7]Mapping latent space...
Epoch 78:  79%|      | 100/126 [00:01<00:00, 79.28it/s, loss=0.00653,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78:  80%|      | 101/126 [00:01<00:00, 70.22it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  81%|      | 102/126 [00:01<00:00, 70.32it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  82%|      | 103/126 [00:01<00:00, 70.86it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  83%|      | 104/126 [00:01<00:00, 71.36it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  83%|      | 105/126 [00:01<00:00, 71.87it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  84%|      | 106/126 [00:01<00:00, 72.38it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  85%|      | 107/126 [00:01<00:00, 72.91it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  86%|      | 108/126 [00:01<00:00, 73.40it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  87%|      | 109/126 [00:01<00:00, 73.93it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  87%|      | 110/126 [00:01<00:00, 74.42it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  88%|      | 111/126 [00:01<00:00, 74.94it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  89%|      | 112/126 [00:01<00:00, 75.43it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  90%|      | 113/126 [00:01<00:00, 75.94it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  90%|      | 114/126 [00:01<00:00, 76.44it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  91%|      | 115/126 [00:01<00:00, 76.95it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  92%|      | 116/126 [00:01<00:00, 77.45it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  93%|      | 117/126 [00:01<00:00, 77.96it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  94%|      | 118/126 [00:01<00:00, 78.44it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78:  94%|      | 119/126 [00:01<00:00, 78.95it/s, loss=0.00653,

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v_num=4.31e+7]
Epoch 78: 95%|      | 120/126 [00:01<00:00, 79.43it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 96%|      | 121/126 [00:01<00:00, 79.94it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 80.42it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 80.94it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 81.47it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 99%|      | 125/126 [00:01<00:00, 81.98it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 82.51it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 81.00it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 80.85it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 91.29it/s, loss=0.00532,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 78.91it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 79.02it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 79.61it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 80.15it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 80.74it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 81.28it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 81.87it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 82.40it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 82.98it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 83.52it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 84.09it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 84.63it/s, loss=0.00532,
v_num=4.31e+7]

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Epoch 79: 90%|      | 113/126 [00:01<00:00, 85.18it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 85.72it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 86.29it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 86.82it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 87.38it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 87.91it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 88.46it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 88.99it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 89.53it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 90.06it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 90.63it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 91.20it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 91.76it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 92.33it/s, loss=0.00532,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 89.17it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 89.02it/s, loss=0.00532,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 70.15it/s, loss=0.00575,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 63.10it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 63.30it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 63.70it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 64.09it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 64.49it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 84%|      | 106/126 [00:01<00:00, 64.90it/s, loss=0.00575,

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v_num=4.31e+7]
Epoch 80: 85%|      | 107/126 [00:01<00:00, 65.29it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 86%|      | 108/126 [00:01<00:00, 65.69it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 87%|      | 109/126 [00:01<00:00, 66.09it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 87%|      | 110/126 [00:01<00:00, 66.49it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 88%|      | 111/126 [00:01<00:00, 66.89it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 89%|      | 112/126 [00:01<00:00, 67.30it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 90%|      | 113/126 [00:01<00:00, 67.71it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 90%|      | 114/126 [00:01<00:00, 68.12it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 91%|      | 115/126 [00:01<00:00, 68.53it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 92%|      | 116/126 [00:01<00:00, 68.94it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 93%|      | 117/126 [00:01<00:00, 69.35it/s, loss=0.00575,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.34it/s]
Epoch 80: 94%|      | 118/126 [00:01<00:00, 69.76it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 94%|      | 119/126 [00:01<00:00, 70.18it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 95%|      | 120/126 [00:01<00:00, 70.59it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 96%|      | 121/126 [00:01<00:00, 71.01it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 97%|      | 122/126 [00:01<00:00, 71.43it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 98%|      | 123/126 [00:01<00:00, 71.87it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 98%|      | 124/126 [00:01<00:00, 72.31it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 72.75it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 73.20it/s, loss=0.00575,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|     | 126/126 [00:01<00:00, 71.82it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 71.70it/s, loss=0.00575,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 79%|      | 100/126 [00:01<00:00, 78.06it/s, loss=0.00558,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|          | 101/126 [00:01<00:00, 69.42it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 81%|          | 102/126 [00:01<00:00, 69.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 82%|          | 103/126 [00:01<00:00, 70.08it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 83%|          | 104/126 [00:01<00:00, 70.59it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 83%|          | 105/126 [00:01<00:00, 71.12it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 84%|          | 106/126 [00:01<00:00, 71.61it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 85%|          | 107/126 [00:01<00:00, 72.14it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 86%|          | 108/126 [00:01<00:00, 72.64it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 87%|          | 109/126 [00:01<00:00, 73.16it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 87%|          | 110/126 [00:01<00:00, 73.66it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 88%|          | 111/126 [00:01<00:00, 74.19it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 89%|          | 112/126 [00:01<00:00, 74.69it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 90%|          | 113/126 [00:01<00:00, 75.19it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 90%|          | 114/126 [00:01<00:00, 75.69it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 91%|          | 115/126 [00:01<00:00, 76.21it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 92%|          | 116/126 [00:01<00:00, 76.70it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 93%|          | 117/126 [00:01<00:00, 77.20it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 94%|          | 118/126 [00:01<00:00, 77.69it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 94%|          | 119/126 [00:01<00:00, 78.19it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 95%|          | 120/126 [00:01<00:00, 78.68it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 96%|          | 121/126 [00:01<00:00, 79.17it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 97%|          | 122/126 [00:01<00:00, 79.66it/s, loss=0.00558,
v_num=4.31e+7]

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Epoch 81: 98%|      | 123/126 [00:01<00:00, 80.18it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 80.70it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 81.21it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 81.73it/s, loss=0.00558,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 80.28it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 80.16it/s, loss=0.00558,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 91.76it/s, loss=0.00609,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 79.30it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 79.69it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 80.12it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 80.54it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 80.97it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 81.40it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 81.82it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 82.24it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 82.67it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 83.11it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 83.54it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 83.99it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 84.43it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 84.88it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 85.33it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 85.78it/s, loss=0.00609,

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v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 86.24it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 94%|      | 118/126 [00:01<00:00, 86.69it/s, loss=0.00609,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.03it/s]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 87.15it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 87.61it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 88.08it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 88.56it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 89.07it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 89.58it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 90.09it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 90.61it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|     | 126/126 [00:01<00:00, 87.44it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 87.16it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|      | 100/126 [00:01<00:00, 79.87it/s, loss=0.00688,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|      | 101/126 [00:01<00:00, 70.24it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 81%|      | 102/126 [00:01<00:00, 70.45it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 82%|      | 103/126 [00:01<00:00, 70.99it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 83%|      | 104/126 [00:01<00:00, 71.51it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 83%|      | 105/126 [00:01<00:00, 72.03it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 84%|      | 106/126 [00:01<00:00, 72.55it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 85%|      | 107/126 [00:01<00:00, 73.06it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 86%|      | 108/126 [00:01<00:00, 73.57it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 87%|      | 109/126 [00:01<00:00, 74.10it/s, loss=0.00688,

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v_num=4.31e+7]
Epoch 83: 87%|      | 110/126 [00:01<00:00, 74.61it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 88%|      | 111/126 [00:01<00:00, 75.14it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 89%|      | 112/126 [00:01<00:00, 75.64it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 90%|      | 113/126 [00:01<00:00, 76.15it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 90%|      | 114/126 [00:01<00:00, 76.66it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 91%|      | 115/126 [00:01<00:00, 77.18it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 92%|      | 116/126 [00:01<00:00, 77.69it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 93%|      | 117/126 [00:01<00:00, 78.20it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 94%|      | 118/126 [00:01<00:00, 78.70it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 94%|      | 119/126 [00:01<00:00, 79.20it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 79.70it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 80.19it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 80.70it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 81.22it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 81.75it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 82.28it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 82.81it/s, loss=0.00688,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 81.36it/s, loss=0.00688,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 81.23it/s, loss=0.00688,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 72.93it/s, loss=0.00557,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 63.76it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 61.77it/s, loss=0.00557,

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v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 62.13it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 83%|      | 104/126 [00:01<00:00, 62.49it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 83%|      | 105/126 [00:01<00:00, 62.86it/s, loss=0.00557,
v_num=4.31e+7]
Validation DataLoader 0: 23%|      | 6/26 [00:00<00:00, 59.47it/s]
Epoch 84: 84%|      | 106/126 [00:01<00:00, 63.21it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 85%|      | 107/126 [00:01<00:00, 63.59it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 86%|      | 108/126 [00:01<00:00, 63.95it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 87%|      | 109/126 [00:01<00:00, 64.33it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 87%|      | 110/126 [00:01<00:00, 64.71it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 88%|      | 111/126 [00:01<00:00, 65.09it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 89%|      | 112/126 [00:01<00:00, 65.47it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 90%|      | 113/126 [00:01<00:00, 65.86it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 90%|      | 114/126 [00:01<00:00, 66.25it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 91%|      | 115/126 [00:01<00:00, 66.64it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 92%|      | 116/126 [00:01<00:00, 67.03it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 93%|      | 117/126 [00:01<00:00, 67.43it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 94%|      | 118/126 [00:01<00:00, 67.83it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 94%|      | 119/126 [00:01<00:00, 68.22it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 95%|      | 120/126 [00:01<00:00, 68.62it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 96%|      | 121/126 [00:01<00:00, 69.02it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 97%|      | 122/126 [00:01<00:00, 69.42it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 98%|      | 123/126 [00:01<00:00, 69.85it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 98%|      | 124/126 [00:01<00:00, 70.28it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 99%|      | 125/126 [00:01<00:00, 70.71it/s, loss=0.00557,
v_num=4.31e+7]

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Epoch 84: 100%|      | 126/126 [00:01<00:00, 71.15it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|      | 126/126 [00:01<00:00, 69.93it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 84: 100%|      | 126/126 [00:01<00:00, 69.81it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 78.97it/s, loss=0.00489,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85: 80%|      | 101/126 [00:01<00:00, 69.98it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 81%|      | 102/126 [00:01<00:00, 70.10it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 82%|      | 103/126 [00:01<00:00, 70.64it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 83%|      | 104/126 [00:01<00:00, 71.14it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 83%|      | 105/126 [00:01<00:00, 71.67it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 84%|      | 106/126 [00:01<00:00, 72.17it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 85%|      | 107/126 [00:01<00:00, 72.70it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 86%|      | 108/126 [00:01<00:00, 73.20it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 87%|      | 109/126 [00:01<00:00, 73.72it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 87%|      | 110/126 [00:01<00:00, 74.22it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 88%|      | 111/126 [00:01<00:00, 74.75it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 89%|      | 112/126 [00:01<00:00, 75.24it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 90%|      | 113/126 [00:01<00:00, 75.75it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 90%|      | 114/126 [00:01<00:00, 76.24it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 91%|      | 115/126 [00:01<00:00, 76.76it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 92%|      | 116/126 [00:01<00:00, 77.25it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 93%|      | 117/126 [00:01<00:00, 77.76it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 94%|      | 118/126 [00:01<00:00, 78.25it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 94%|      | 119/126 [00:01<00:00, 78.75it/s, loss=0.00489,

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v_num=4.31e+7]
Epoch 85: 95%|      | 120/126 [00:01<00:00, 79.24it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 79.73it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 80.23it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 80.75it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 81.27it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 81.79it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 82.32it/s, loss=0.00489,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 80.86it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 80.73it/s, loss=0.00489,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 75.65it/s, loss=0.00543,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 66.85it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 67.03it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 67.44it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 67.86it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 68.27it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 84%|      | 106/126 [00:01<00:00, 68.69it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 69.12it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 69.54it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 69.96it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 70.38it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 70.80it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 89%|      | 112/126 [00:01<00:00, 71.23it/s, loss=0.00543,
v_num=4.31e+7]

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Epoch 86: 90%|      | 113/126 [00:01<00:00, 71.66it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 72.08it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 91%|      | 115/126 [00:01<00:00, 72.51it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 72.94it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 73.37it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 94%|      | 118/126 [00:01<00:00, 73.80it/s, loss=0.00543,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.03it/s]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 74.23it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 74.66it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 75.09it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 75.53it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 75.99it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 76.45it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 76.90it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00543,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 75.86it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 75.73it/s, loss=0.00543,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 79.40it/s, loss=0.00604,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 70.10it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 70.11it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 70.62it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 71.13it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 71.65it/s, loss=0.00604,

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v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 72.17it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 72.69it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 86%|      | 108/126 [00:01<00:00, 73.20it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 73.71it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 74.23it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 74.74it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 75.24it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 75.75it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 76.26it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 91%|      | 115/126 [00:01<00:00, 76.77it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 77.27it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 77.77it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 78.27it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 78.77it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 79.26it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 79.76it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 80.26it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 80.78it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 81.30it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 81.82it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 82.34it/s, loss=0.00604,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 80.88it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 80.75it/s, loss=0.00604,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 78.19it/s, loss=0.00519,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|          | 101/126 [00:01<00:00, 68.14it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 81%|          | 102/126 [00:01<00:00, 68.06it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 82%|          | 103/126 [00:01<00:00, 68.48it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 83%|          | 104/126 [00:01<00:00, 68.90it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 83%|          | 105/126 [00:01<00:00, 69.33it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 84%|          | 106/126 [00:01<00:00, 69.76it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 85%|          | 107/126 [00:01<00:00, 70.19it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 86%|          | 108/126 [00:01<00:00, 70.61it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 87%|          | 109/126 [00:01<00:00, 71.04it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 87%|          | 110/126 [00:01<00:00, 71.48it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 88%|          | 111/126 [00:01<00:00, 71.92it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 89%|          | 112/126 [00:01<00:00, 72.35it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 90%|          | 113/126 [00:01<00:00, 72.78it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 90%|          | 114/126 [00:01<00:00, 73.23it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 91%|          | 115/126 [00:01<00:00, 73.67it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 92%|          | 116/126 [00:01<00:00, 74.11it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 93%|          | 117/126 [00:01<00:00, 74.54it/s, loss=0.00519,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 174.52it/s]
Epoch 88: 94%|          | 118/126 [00:01<00:00, 74.98it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 94%|          | 119/126 [00:01<00:00, 75.42it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 95%|          | 120/126 [00:01<00:00, 75.85it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 96%|          | 121/126 [00:01<00:00, 76.28it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 97%|          | 122/126 [00:01<00:00, 76.72it/s, loss=0.00519,

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v_num=4.31e+7]
Epoch 88: 98%|      | 123/126 [00:01<00:00, 77.19it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 98%|      | 124/126 [00:01<00:00, 77.66it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 99%|      | 125/126 [00:01<00:00, 78.13it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 78.60it/s, loss=0.00519,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|     | 126/126 [00:01<00:00, 76.99it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 76.83it/s, loss=0.00519,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 79.13it/s, loss=0.00546,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 69.46it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 69.71it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 70.22it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 70.75it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 71.27it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 71.79it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 72.31it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 72.82it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 73.33it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 73.84it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 74.36it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 74.87it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 75.37it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 75.87it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 76.38it/s, loss=0.00546,
v_num=4.31e+7]

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Epoch 89: 92%|      | 116/126 [00:01<00:00, 76.88it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 77.38it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 77.88it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 78.38it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 78.88it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 79.37it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 79.87it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 80.39it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 80.90it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 81.42it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 81.95it/s, loss=0.00546,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|     | 126/126 [00:01<00:00, 80.49it/s, loss=0.00546,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 80.37it/s, loss=0.00546,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 68.53it/s, loss=0.00623,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 61.72it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 61.94it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 62.35it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 62.76it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 63.18it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 63.60it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 64.02it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 64.44it/s, loss=0.00623,
v_num=4.31e+7]

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Epoch 90: 87%|      | 109/126 [00:01<00:00, 64.86it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 65.29it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 65.71it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 66.09it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 66.45it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 90%|      | 114/126 [00:01<00:00, 66.83it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 67.20it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 67.58it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 67.96it/s, loss=0.00623,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.44it/s]
Epoch 90: 94%|      | 118/126 [00:01<00:00, 68.35it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 68.73it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 69.11it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 69.49it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 69.89it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 70.29it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 70.68it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 71.00it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 71.35it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 69.79it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 69.62it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 73.41it/s, loss=0.00672,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 64.36it/s, loss=0.00672,
v_num=4.31e+7]

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Epoch 91: 81%| | 102/126 [00:01<00:00, 64.30it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 82%| | 103/126 [00:01<00:00, 64.75it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 83%| | 104/126 [00:01<00:00, 65.20it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 83%| | 105/126 [00:01<00:00, 65.65it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 84%| | 106/126 [00:01<00:00, 66.10it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 85%| | 107/126 [00:01<00:00, 66.56it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 86%| | 108/126 [00:01<00:00, 67.00it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 87%| | 109/126 [00:01<00:00, 67.46it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 87%| | 110/126 [00:01<00:00, 67.91it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 88%| | 111/126 [00:01<00:00, 68.37it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 89%| | 112/126 [00:01<00:00, 68.82it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 90%| | 113/126 [00:01<00:00, 69.27it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 90%| | 114/126 [00:01<00:00, 69.72it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 91%| | 115/126 [00:01<00:00, 70.17it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 92%| | 116/126 [00:01<00:00, 70.61it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 93%| | 117/126 [00:01<00:00, 71.06it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 94%| | 118/126 [00:01<00:00, 71.50it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 94%| | 119/126 [00:01<00:00, 71.94it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 95%| | 120/126 [00:01<00:00, 72.38it/s, loss=0.00672, v_num=4.31e+7]
 Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 206.91it/s]
 Epoch 91: 96%| | 121/126 [00:01<00:00, 72.81it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 97%| | 122/126 [00:01<00:00, 73.26it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 98%| | 123/126 [00:01<00:00, 73.72it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 98%| | 124/126 [00:01<00:00, 74.18it/s, loss=0.00672, v_num=4.31e+7]
 Epoch 91: 99%| | 125/126 [00:01<00:00, 74.64it/s, loss=0.00672, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 91: 100%|      | 126/126 [00:01<00:00, 75.10it/s, loss=0.00672,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|      | 126/126 [00:01<00:00, 73.77it/s, loss=0.00672,
v_num=4.31e+7]
Epoch 91: 100%|      | 126/126 [00:01<00:00, 73.65it/s, loss=0.00672,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|       | 100/126 [00:01<00:00, 67.33it/s, loss=0.00631,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|       | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|       | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|       | 101/126 [00:01<00:00, 60.35it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 81%|       | 102/126 [00:01<00:00, 60.42it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 82%|       | 103/126 [00:01<00:00, 60.81it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 83%|       | 104/126 [00:01<00:00, 61.21it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 83%|       | 105/126 [00:01<00:00, 61.61it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 84%|       | 106/126 [00:01<00:00, 62.01it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 85%|       | 107/126 [00:01<00:00, 62.41it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 86%|       | 108/126 [00:01<00:00, 62.82it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 87%|       | 109/126 [00:01<00:00, 63.23it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 87%|       | 110/126 [00:01<00:00, 63.64it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 88%|       | 111/126 [00:01<00:00, 64.04it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 89%|       | 112/126 [00:01<00:00, 64.45it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 90%|       | 113/126 [00:01<00:00, 64.87it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 90%|       | 114/126 [00:01<00:00, 65.28it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 91%|       | 115/126 [00:01<00:00, 65.66it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 92%|       | 116/126 [00:01<00:00, 66.01it/s, loss=0.00631,
v_num=4.31e+7]
Validation DataLoader 0: 65%|       | 17/26 [00:00<00:00, 169.35it/s]
Epoch 92: 93%|       | 117/126 [00:01<00:00, 66.36it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 94%|       | 118/126 [00:01<00:00, 66.72it/s, loss=0.00631,

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v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 67.08it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 67.44it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 96%|      | 121/126 [00:01<00:00, 67.80it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 68.16it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 68.54it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 68.93it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 69.32it/s, loss=0.00631,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 69.71it/s, loss=0.00631,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 68.34it/s, loss=0.00631,
v_num=4.31e+7]

Epoch 92: 100%|     | 126/126 [00:01<00:00, 68.21it/s, loss=0.00631,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 79%|      | 100/126 [00:01<00:00, 69.30it/s, loss=0.00598,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 62.29it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 62.53it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 62.94it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 63.35it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 63.76it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 64.17it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 64.59it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 65.00it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 65.41it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 65.83it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 66.25it/s, loss=0.00598,

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v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 66.67it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 67.08it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 90%|      | 114/126 [00:01<00:00, 67.51it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 67.93it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 68.35it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 93%|      | 117/126 [00:01<00:00, 68.77it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 69.19it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 69.61it/s, loss=0.00598,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 194.15it/s]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 70.02it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 70.44it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 70.86it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 71.30it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 71.74it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 72.19it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 72.63it/s, loss=0.00598,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 71.36it/s, loss=0.00598,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 71.25it/s, loss=0.00598,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 73.21it/s, loss=0.00614,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 64.12it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 64.22it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 64.68it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 65.14it/s, loss=0.00614,

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v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 65.61it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 66.07it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 85%|      | 107/126 [00:01<00:00, 66.52it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 66.98it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 67.43it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 67.89it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 68.34it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 68.79it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 69.24it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 69.70it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 91%|      | 115/126 [00:01<00:00, 70.14it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 70.59it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 71.03it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 71.48it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 71.92it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 72.36it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 72.79it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 73.23it/s, loss=0.00614,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.19it/s]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 73.69it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 74.14it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 74.60it/s, loss=0.00614,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 75.06it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|     | 126/126 [00:01<00:00, 73.70it/s, loss=0.00614,
v_num=4.31e+7]

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Epoch 94: 100%|      | 126/126 [00:01<00:00, 73.57it/s, loss=0.00614,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 82.13it/s, loss=0.00604,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|      | 101/126 [00:01<00:00, 72.08it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 81%|      | 102/126 [00:01<00:00, 72.30it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 82%|      | 103/126 [00:01<00:00, 72.85it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 83%|      | 104/126 [00:01<00:00, 73.37it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 83%|      | 105/126 [00:01<00:00, 73.93it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 84%|      | 106/126 [00:01<00:00, 74.45it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 85%|      | 107/126 [00:01<00:00, 74.99it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 86%|      | 108/126 [00:01<00:00, 75.50it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 87%|      | 109/126 [00:01<00:00, 76.05it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 87%|      | 110/126 [00:01<00:00, 76.57it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 88%|      | 111/126 [00:01<00:00, 77.11it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 89%|      | 112/126 [00:01<00:00, 77.61it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 90%|      | 113/126 [00:01<00:00, 78.13it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 90%|      | 114/126 [00:01<00:00, 78.65it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 91%|      | 115/126 [00:01<00:00, 79.17it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 92%|      | 116/126 [00:01<00:00, 79.68it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 93%|      | 117/126 [00:01<00:00, 80.20it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 94%|      | 118/126 [00:01<00:00, 80.70it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 94%|      | 119/126 [00:01<00:00, 81.20it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 95%|      | 120/126 [00:01<00:00, 81.71it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 96%|      | 121/126 [00:01<00:00, 82.22it/s, loss=0.00604,

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v_num=4.31e+7]
Epoch 95: 97%|      | 122/126 [00:01<00:00, 82.72it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 98%|      | 123/126 [00:01<00:00, 83.26it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 98%|      | 124/126 [00:01<00:00, 83.79it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 84.32it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 84.86it/s, loss=0.00604,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 82.54it/s, loss=0.00604,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00604,
v_num=4.31e+7]Mapping latent space...

Epoch 96: 79%|      | 100/126 [00:01<00:00, 73.40it/s, loss=0.00591,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|      | 101/126 [00:01<00:00, 64.96it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 81%|      | 102/126 [00:01<00:00, 64.82it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 82%|      | 103/126 [00:01<00:00, 65.19it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 83%|      | 104/126 [00:01<00:00, 65.56it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 83%|      | 105/126 [00:01<00:00, 65.93it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 84%|      | 106/126 [00:01<00:00, 66.30it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 85%|      | 107/126 [00:01<00:00, 66.69it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 86%|      | 108/126 [00:01<00:00, 67.07it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 87%|      | 109/126 [00:01<00:00, 67.46it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 87%|      | 110/126 [00:01<00:00, 67.85it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 88%|      | 111/126 [00:01<00:00, 68.24it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 89%|      | 112/126 [00:01<00:00, 68.62it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 90%|      | 113/126 [00:01<00:00, 69.01it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 90%|      | 114/126 [00:01<00:00, 69.39it/s, loss=0.00591,

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v_num=4.31e+7]
Validation DataLoader 0:  58%|          | 15/26 [00:00<00:00, 148.61it/s]
Epoch 96:  91%|          | 115/126 [00:01<00:00, 69.77it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  92%|          | 116/126 [00:01<00:00, 70.15it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  93%|          | 117/126 [00:01<00:00, 70.54it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  94%|          | 118/126 [00:01<00:00, 70.93it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  94%|          | 119/126 [00:01<00:00, 71.33it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  95%|          | 120/126 [00:01<00:00, 71.72it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  96%|          | 121/126 [00:01<00:00, 72.11it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  97%|          | 122/126 [00:01<00:00, 72.50it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  98%|          | 123/126 [00:01<00:00, 72.92it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  98%|          | 124/126 [00:01<00:00, 73.34it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96:  99%|          | 125/126 [00:01<00:00, 73.76it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 100%|          | 126/126 [00:01<00:00, 74.18it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|          | 126/126 [00:01<00:00, 72.83it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 96: 100%|          | 126/126 [00:01<00:00, 72.68it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 97:  79%|          | 100/126 [00:01<00:00, 70.28it/s, loss=0.0058,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|          | 0/26 [00:00<?, ?it/s]
Epoch 97:  80%|          | 101/126 [00:01<00:00, 62.64it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  81%|          | 102/126 [00:01<00:00, 62.83it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  82%|          | 103/126 [00:01<00:00, 63.23it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  83%|          | 104/126 [00:01<00:00, 63.65it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  83%|          | 105/126 [00:01<00:00, 64.06it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  84%|          | 106/126 [00:01<00:00, 64.49it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97:  85%|          | 107/126 [00:01<00:00, 64.90it/s, loss=0.0058,

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v_num=4.31e+7]
Epoch 97: 86%|      | 108/126 [00:01<00:00, 65.31it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 65.72it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 66.15it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 66.56it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 66.99it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 67.41it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 67.83it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 68.26it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 68.68it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 69.08it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 69.48it/s, loss=0.0058,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.61it/s]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 69.89it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 70.32it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 70.74it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 71.17it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 71.62it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 72.06it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 72.51it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 72.96it/s, loss=0.0058,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 71.71it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 71.59it/s, loss=0.0058,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 68.58it/s, loss=0.00564,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|          | 101/126 [00:01<00:00, 61.54it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 81%|          | 102/126 [00:01<00:00, 61.67it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 82%|          | 103/126 [00:01<00:00, 62.09it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 83%|          | 104/126 [00:01<00:00, 62.50it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 83%|          | 105/126 [00:01<00:00, 62.92it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 84%|          | 106/126 [00:01<00:00, 63.34it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 85%|          | 107/126 [00:01<00:00, 63.76it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 86%|          | 108/126 [00:01<00:00, 64.18it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 87%|          | 109/126 [00:01<00:00, 64.60it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 87%|          | 110/126 [00:01<00:00, 65.03it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 88%|          | 111/126 [00:01<00:00, 65.45it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 89%|          | 112/126 [00:01<00:00, 65.88it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 90%|          | 113/126 [00:01<00:00, 66.30it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 90%|          | 114/126 [00:01<00:00, 66.73it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 91%|          | 115/126 [00:01<00:00, 67.15it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 92%|          | 116/126 [00:01<00:00, 67.58it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 93%|          | 117/126 [00:01<00:00, 68.01it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 94%|          | 118/126 [00:01<00:00, 68.44it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 94%|          | 119/126 [00:01<00:00, 68.86it/s, loss=0.00564,
v_num=4.31e+7]
Validation DataLoader 0:  77%|          | 20/26 [00:00<00:00, 197.77it/s]
Epoch 98: 95%|          | 120/126 [00:01<00:00, 69.28it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 96%|          | 121/126 [00:01<00:00, 69.69it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 97%|          | 122/126 [00:01<00:00, 70.12it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 98%|          | 123/126 [00:01<00:00, 70.56it/s, loss=0.00564,
v_num=4.31e+7]

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Epoch 98: 98%|      | 124/126 [00:01<00:00, 71.00it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 71.45it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 71.89it/s, loss=0.00564,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 70.69it/s, loss=0.00564,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 70.57it/s, loss=0.00564,
v_num=4.31e+7]Mapping latent space...

Epoch 99: 79%|      | 100/126 [00:01<00:00, 67.76it/s, loss=0.00654,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 59.76it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 60.02it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 82%|      | 103/126 [00:01<00:00, 60.45it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 83%|      | 104/126 [00:01<00:00, 60.89it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 83%|      | 105/126 [00:01<00:00, 61.33it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 84%|      | 106/126 [00:01<00:00, 61.78it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 85%|      | 107/126 [00:01<00:00, 62.22it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 86%|      | 108/126 [00:01<00:00, 62.65it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 87%|      | 109/126 [00:01<00:00, 63.09it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 87%|      | 110/126 [00:01<00:00, 63.53it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 88%|      | 111/126 [00:01<00:00, 63.96it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 89%|      | 112/126 [00:01<00:00, 64.40it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 90%|      | 113/126 [00:01<00:00, 64.82it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 90%|      | 114/126 [00:01<00:00, 65.26it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 91%|      | 115/126 [00:01<00:00, 65.69it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 92%|      | 116/126 [00:01<00:00, 66.12it/s, loss=0.00654,
v_num=4.31e+7]

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Epoch 99: 93%|      | 117/126 [00:01<00:00, 66.54it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 94%|      | 118/126 [00:01<00:00, 66.97it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 94%|      | 119/126 [00:01<00:00, 67.39it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 95%|      | 120/126 [00:01<00:00, 67.82it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 96%|      | 121/126 [00:01<00:00, 68.24it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 97%|      | 122/126 [00:01<00:00, 68.66it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 69.09it/s, loss=0.00654,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.76it/s]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 69.52it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 69.96it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 70.40it/s, loss=0.00654,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 69.23it/s, loss=0.00654,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 69.12it/s, loss=0.00654,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 69.53it/s, loss=0.00521,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 62.29it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 62.35it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 62.80it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 63.25it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 63.70it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 84%|     | 106/126 [00:01<00:00, 64.15it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 85%|     | 107/126 [00:01<00:00, 64.60it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 86%|     | 108/126 [00:01<00:00, 65.05it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 87%|     | 109/126 [00:01<00:00, 65.50it/s, loss=0.00521,
v_num=4.31e+7]

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Epoch 100: 87%|      | 110/126 [00:01<00:00, 65.95it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 88%|      | 111/126 [00:01<00:00, 66.40it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 89%|      | 112/126 [00:01<00:00, 66.84it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 90%|      | 113/126 [00:01<00:00, 67.29it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 67.73it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 68.17it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 68.61it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 69.05it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 69.49it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 69.92it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 70.35it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 70.78it/s, loss=0.00521,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.51it/s]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 71.21it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 71.66it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 72.11it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 72.55it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 73.00it/s, loss=0.00521,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 71.70it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 71.58it/s, loss=0.00521,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 74.31it/s, loss=0.00575,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 65.52it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 65.74it/s, loss=0.00575,
v_num=4.31e+7]

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Epoch 101: 82%|      | 103/126 [00:01<00:00, 66.23it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 66.71it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 83%|      | 105/126 [00:01<00:00, 67.21it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 84%|      | 106/126 [00:01<00:00, 67.70it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 85%|      | 107/126 [00:01<00:00, 68.20it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 86%|      | 108/126 [00:01<00:00, 68.67it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 87%|      | 109/126 [00:01<00:00, 69.16it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 87%|      | 110/126 [00:01<00:00, 69.64it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 88%|      | 111/126 [00:01<00:00, 70.14it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 89%|      | 112/126 [00:01<00:00, 70.61it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 90%|      | 113/126 [00:01<00:00, 71.11it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 90%|      | 114/126 [00:01<00:00, 71.58it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 91%|      | 115/126 [00:01<00:00, 72.08it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 92%|      | 116/126 [00:01<00:00, 72.55it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 93%|      | 117/126 [00:01<00:00, 73.03it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 94%|      | 118/126 [00:01<00:00, 73.50it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 94%|      | 119/126 [00:01<00:00, 73.98it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 95%|      | 120/126 [00:01<00:00, 74.45it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 96%|      | 121/126 [00:01<00:00, 74.92it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 97%|      | 122/126 [00:01<00:00, 75.40it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 98%|      | 123/126 [00:01<00:00, 75.90it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 76.40it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 99%|      | 125/126 [00:01<00:00, 76.89it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 100%|    | 126/126 [00:01<00:00, 77.40it/s, loss=0.00575,
v_num=4.31e+7]Mapping latent space...

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Epoch 101: 100%|      | 126/126 [00:01<00:00, 76.10it/s, loss=0.00575,
v_num=4.31e+7]
Epoch 101: 100%|      | 126/126 [00:01<00:00, 75.98it/s, loss=0.00575,
v_num=4.31e+7]Mapping latent space...

Epoch 102: 79%|      | 100/126 [00:01<00:00, 77.48it/s, loss=0.0067,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|      | 101/126 [00:01<00:00, 67.34it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 81%|      | 102/126 [00:01<00:00, 67.59it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 82%|      | 103/126 [00:01<00:00, 68.07it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 83%|      | 104/126 [00:01<00:00, 68.55it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 83%|      | 105/126 [00:01<00:00, 69.03it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 84%|      | 106/126 [00:01<00:00, 69.51it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 85%|      | 107/126 [00:01<00:00, 69.99it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 86%|      | 108/126 [00:01<00:00, 70.46it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 87%|      | 109/126 [00:01<00:00, 70.94it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 87%|      | 110/126 [00:01<00:00, 71.41it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 88%|      | 111/126 [00:01<00:00, 71.89it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 89%|      | 112/126 [00:01<00:00, 72.36it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 90%|      | 113/126 [00:01<00:00, 72.82it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 90%|      | 114/126 [00:01<00:00, 73.29it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 91%|      | 115/126 [00:01<00:00, 73.75it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 92%|      | 116/126 [00:01<00:00, 74.22it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 93%|      | 117/126 [00:01<00:00, 74.67it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 94%|      | 118/126 [00:01<00:00, 75.14it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 94%|      | 119/126 [00:01<00:00, 75.59it/s, loss=0.0067,
v_num=4.31e+7]

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Epoch 102: 95%|      | 120/126 [00:01<00:00, 76.05it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 96%|      | 121/126 [00:01<00:00, 76.50it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 97%|      | 122/126 [00:01<00:00, 76.96it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 98%|      | 123/126 [00:01<00:00, 77.43it/s, loss=0.0067,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 239.19it/s]
Epoch 102: 98%|      | 124/126 [00:01<00:00, 77.90it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 99%|      | 125/126 [00:01<00:00, 78.37it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 78.84it/s, loss=0.0067,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|     | 126/126 [00:01<00:00, 77.36it/s, loss=0.0067,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 77.22it/s, loss=0.0067,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 79%|      | 100/126 [00:01<00:00, 73.27it/s, loss=0.00547,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 103: 80%|      | 101/126 [00:01<00:00, 64.08it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 81%|      | 102/126 [00:01<00:00, 64.18it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 82%|      | 103/126 [00:01<00:00, 64.65it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 83%|      | 104/126 [00:01<00:00, 65.11it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 83%|      | 105/126 [00:01<00:00, 65.58it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 84%|      | 106/126 [00:01<00:00, 66.05it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 85%|      | 107/126 [00:01<00:00, 66.51it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 86%|      | 108/126 [00:01<00:00, 66.97it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 87%|      | 109/126 [00:01<00:00, 67.43it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 87%|      | 110/126 [00:01<00:00, 67.90it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 88%|      | 111/126 [00:01<00:00, 68.36it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 89%|      | 112/126 [00:01<00:00, 68.81it/s, loss=0.00547,
v_num=4.31e+7]

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Epoch 103: 90%|      | 113/126 [00:01<00:00, 69.27it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 90%|      | 114/126 [00:01<00:00, 69.73it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 91%|      | 115/126 [00:01<00:00, 70.18it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 92%|      | 116/126 [00:01<00:00, 70.63it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 93%|      | 117/126 [00:01<00:00, 71.08it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 94%|      | 118/126 [00:01<00:00, 71.53it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 94%|      | 119/126 [00:01<00:00, 71.98it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 72.42it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 72.86it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 73.30it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 73.77it/s, loss=0.00547,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.51it/s]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 74.22it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 74.68it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 75.14it/s, loss=0.00547,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 71.11it/s, loss=0.00547,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 70.92it/s, loss=0.00547,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 72.16it/s, loss=0.00521,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 63.40it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 63.73it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 64.15it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 64.57it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 64.96it/s, loss=0.00521,
v_num=4.31e+7]

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Epoch 104: 84%|      | 106/126 [00:01<00:00, 65.32it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 65.70it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 66.08it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 66.46it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 66.85it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 67.24it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 67.64it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 68.05it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 68.45it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 68.86it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 69.27it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 69.68it/s, loss=0.00521,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.41it/s]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 70.08it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 70.50it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 70.91it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 71.33it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 71.74it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 72.17it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 72.61it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 73.05it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 73.49it/s, loss=0.00521,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 72.21it/s, loss=0.00521,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 72.08it/s, loss=0.00521,
v_num=4.31e+7]Mapping latent space...

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Epoch 105: 79%|          | 100/126 [00:01<00:00, 76.44it/s, loss=0.00572,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|          | 101/126 [00:01<00:00, 66.66it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 81%|          | 102/126 [00:01<00:00, 66.81it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 82%|          | 103/126 [00:01<00:00, 67.29it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 83%|          | 104/126 [00:01<00:00, 67.75it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 83%|          | 105/126 [00:01<00:00, 68.23it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 84%|          | 106/126 [00:01<00:00, 68.69it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 85%|          | 107/126 [00:01<00:00, 69.16it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 86%|          | 108/126 [00:01<00:00, 69.62it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 87%|          | 109/126 [00:01<00:00, 70.08it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 87%|          | 110/126 [00:01<00:00, 70.55it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 88%|          | 111/126 [00:01<00:00, 71.01it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 89%|          | 112/126 [00:01<00:00, 71.47it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 90%|          | 113/126 [00:01<00:00, 71.93it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 90%|          | 114/126 [00:01<00:00, 72.39it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 91%|          | 115/126 [00:01<00:00, 72.84it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 92%|          | 116/126 [00:01<00:00, 73.29it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 93%|          | 117/126 [00:01<00:00, 73.75it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 94%|          | 118/126 [00:01<00:00, 74.21it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 94%|          | 119/126 [00:01<00:00, 74.66it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 95%|          | 120/126 [00:01<00:00, 75.10it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 96%|          | 121/126 [00:01<00:00, 75.55it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 97%|          | 122/126 [00:01<00:00, 76.01it/s, loss=0.00572,

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v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 226.03it/s]
Epoch 105: 98%|          | 123/126 [00:01<00:00, 76.47it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 98%|          | 124/126 [00:01<00:00, 76.94it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 99%|          | 125/126 [00:01<00:00, 77.41it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 100%|         | 126/126 [00:01<00:00, 77.88it/s, loss=0.00572,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|         | 126/126 [00:01<00:00, 75.85it/s, loss=0.00572,
v_num=4.31e+7]
Epoch 105: 100%|         | 126/126 [00:01<00:00, 75.68it/s, loss=0.00572,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 79%|          | 100/126 [00:01<00:00, 71.03it/s, loss=0.00502,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 106: 80%|          | 101/126 [00:01<00:00, 62.45it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 81%|          | 102/126 [00:01<00:00, 62.65it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 82%|          | 103/126 [00:01<00:00, 63.06it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 83%|          | 104/126 [00:01<00:00, 63.46it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 83%|          | 105/126 [00:01<00:00, 63.88it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 84%|          | 106/126 [00:01<00:00, 64.29it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 85%|          | 107/126 [00:01<00:00, 64.70it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 86%|          | 108/126 [00:01<00:00, 65.12it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 87%|          | 109/126 [00:01<00:00, 65.54it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 87%|          | 110/126 [00:01<00:00, 65.96it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 88%|          | 111/126 [00:01<00:00, 66.37it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 89%|          | 112/126 [00:01<00:00, 66.79it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 90%|          | 113/126 [00:01<00:00, 67.21it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 90%|          | 114/126 [00:01<00:00, 67.63it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 91%|          | 115/126 [00:01<00:00, 68.04it/s, loss=0.00502,

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v_num=4.31e+7]
Epoch 106: 92%|      | 116/126 [00:01<00:00, 68.47it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 93%|      | 117/126 [00:01<00:00, 68.89it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 94%|      | 118/126 [00:01<00:00, 69.31it/s, loss=0.00502,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.57it/s]
Epoch 106: 94%|      | 119/126 [00:01<00:00, 69.72it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 70.14it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 70.56it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 70.98it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 71.42it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 71.86it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 99%|      | 125/126 [00:01<00:00, 72.31it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 72.75it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 70.09it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 69.92it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 79.30it/s, loss=0.00566,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 69.04it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 69.15it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 69.66it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 70.16it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 70.67it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 71.18it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 71.69it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 86%|      | 108/126 [00:01<00:00, 72.18it/s, loss=0.00566,

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v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 72.69it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 73.19it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 73.69it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 89%|      | 112/126 [00:01<00:00, 74.19it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 74.68it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 75.17it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 75.66it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 76.16it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 76.65it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 77.14it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 77.63it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 78.11it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 78.61it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 79.09it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 79.60it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 80.12it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 80.63it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 81.15it/s, loss=0.00566,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 79.73it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 79.60it/s, loss=0.00566,
v_num=4.31e+7]Mapping latent space...

Epoch 108: 79%|      | 100/126 [00:01<00:00, 80.38it/s, loss=0.00623,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|      | 101/126 [00:01<00:00, 71.05it/s, loss=0.00623,

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v_num=4.31e+7]
Epoch 108: 81%|      | 102/126 [00:01<00:00, 70.85it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 82%|      | 103/126 [00:01<00:00, 71.39it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 83%|      | 104/126 [00:01<00:00, 71.90it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 83%|      | 105/126 [00:01<00:00, 72.42it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 84%|      | 106/126 [00:01<00:00, 72.93it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 85%|      | 107/126 [00:01<00:00, 73.46it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 86%|      | 108/126 [00:01<00:00, 73.95it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 87%|      | 109/126 [00:01<00:00, 74.46it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 87%|      | 110/126 [00:01<00:00, 74.98it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 88%|      | 111/126 [00:01<00:00, 75.49it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 89%|      | 112/126 [00:01<00:00, 75.99it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 90%|      | 113/126 [00:01<00:00, 76.50it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 90%|      | 114/126 [00:01<00:00, 77.00it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 91%|      | 115/126 [00:01<00:00, 77.51it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 92%|      | 116/126 [00:01<00:00, 78.00it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 93%|      | 117/126 [00:01<00:00, 78.50it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 94%|      | 118/126 [00:01<00:00, 79.00it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 94%|      | 119/126 [00:01<00:00, 79.49it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 95%|      | 120/126 [00:01<00:00, 79.99it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 96%|      | 121/126 [00:01<00:00, 80.48it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 97%|      | 122/126 [00:01<00:00, 80.98it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 98%|      | 123/126 [00:01<00:00, 81.51it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 82.03it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 82.55it/s, loss=0.00623,

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v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 255.02it/s]
Epoch 108: 100%|      | 126/126 [00:01<00:00, 83.08it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|      | 126/126 [00:01<00:00, 81.58it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 108: 100%|      | 126/126 [00:01<00:00, 81.46it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|      | 100/126 [00:01<00:00, 89.75it/s, loss=0.00592,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|      | 101/126 [00:01<00:00, 78.10it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 81%|      | 102/126 [00:01<00:00, 78.10it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 82%|      | 103/126 [00:01<00:00, 78.68it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 83%|      | 104/126 [00:01<00:00, 79.22it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 83%|      | 105/126 [00:01<00:00, 79.79it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 84%|      | 106/126 [00:01<00:00, 80.32it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 85%|      | 107/126 [00:01<00:00, 80.89it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 86%|      | 108/126 [00:01<00:00, 81.43it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 87%|      | 109/126 [00:01<00:00, 81.99it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 87%|      | 110/126 [00:01<00:00, 82.53it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 88%|      | 111/126 [00:01<00:00, 83.10it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 89%|      | 112/126 [00:01<00:00, 83.63it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 90%|      | 113/126 [00:01<00:00, 84.19it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 90%|      | 114/126 [00:01<00:00, 84.72it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 91%|      | 115/126 [00:01<00:00, 85.28it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 92%|      | 116/126 [00:01<00:00, 85.81it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 93%|      | 117/126 [00:01<00:00, 86.35it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 94%|      | 118/126 [00:01<00:00, 86.88it/s, loss=0.00592,

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v_num=4.31e+7]
Epoch 109: 94%|      | 119/126 [00:01<00:00, 87.42it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 95%|      | 120/126 [00:01<00:00, 87.94it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 96%|      | 121/126 [00:01<00:00, 88.47it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 97%|      | 122/126 [00:01<00:00, 89.00it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 89.56it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 90.13it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 90.69it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 91.25it/s, loss=0.00592,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 89.49it/s, loss=0.00592,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 89.34it/s, loss=0.00592,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|      | 100/126 [00:01<00:00, 74.35it/s, loss=0.006,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|      | 101/126 [00:01<00:00, 65.59it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 81%|      | 102/126 [00:01<00:00, 65.76it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 82%|      | 103/126 [00:01<00:00, 66.16it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 83%|      | 104/126 [00:01<00:00, 66.55it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 83%|      | 105/126 [00:01<00:00, 66.96it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 84%|      | 106/126 [00:01<00:00, 67.37it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 85%|      | 107/126 [00:01<00:00, 67.78it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 86%|      | 108/126 [00:01<00:00, 68.18it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 87%|      | 109/126 [00:01<00:00, 68.60it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 87%|      | 110/126 [00:01<00:00, 69.01it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 88%|      | 111/126 [00:01<00:00, 69.43it/s, loss=0.006,
v_num=4.31e+7]

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Epoch 110: 89%|      | 112/126 [00:01<00:00, 69.84it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 90%|      | 113/126 [00:01<00:00, 70.25it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 90%|      | 114/126 [00:01<00:00, 70.64it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 91%|      | 115/126 [00:01<00:00, 70.96it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 92%|      | 116/126 [00:01<00:00, 71.31it/s, loss=0.006,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 162.94it/s]
Epoch 110: 93%|      | 117/126 [00:01<00:00, 71.67it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 94%|      | 118/126 [00:01<00:00, 72.04it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 94%|      | 119/126 [00:01<00:00, 72.42it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 95%|      | 120/126 [00:01<00:00, 72.79it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 96%|      | 121/126 [00:01<00:00, 73.18it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 97%|      | 122/126 [00:01<00:00, 73.56it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 73.97it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 74.38it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 74.80it/s, loss=0.006,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 75.22it/s, loss=0.006,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 73.73it/s, loss=0.006,
v_num=4.31e+7]

Epoch 110: 100%|     | 126/126 [00:01<00:00, 73.58it/s, loss=0.006,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 79%|      | 100/126 [00:01<00:00, 66.73it/s, loss=0.00586,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 59.88it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 81%|      | 102/126 [00:01<00:00, 59.87it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 82%|      | 103/126 [00:01<00:00, 60.26it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 83%|      | 104/126 [00:01<00:00, 60.65it/s, loss=0.00586,

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v_num=4.31e+7]
Epoch 111: 83%|      | 105/126 [00:01<00:00, 61.06it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 84%|      | 106/126 [00:01<00:00, 61.45it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 85%|      | 107/126 [00:01<00:00, 61.86it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 86%|      | 108/126 [00:01<00:00, 62.26it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 87%|      | 109/126 [00:01<00:00, 62.67it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 87%|      | 110/126 [00:01<00:00, 63.09it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 88%|      | 111/126 [00:01<00:00, 63.49it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 89%|      | 112/126 [00:01<00:00, 63.90it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 90%|      | 113/126 [00:01<00:00, 64.31it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 90%|      | 114/126 [00:01<00:00, 64.73it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 91%|      | 115/126 [00:01<00:00, 65.14it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 92%|      | 116/126 [00:01<00:00, 65.55it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 93%|      | 117/126 [00:01<00:00, 65.97it/s, loss=0.00586,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.04it/s]
Epoch 111: 94%|      | 118/126 [00:01<00:00, 66.38it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 94%|      | 119/126 [00:01<00:00, 66.79it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 95%|      | 120/126 [00:01<00:00, 67.21it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 96%|      | 121/126 [00:01<00:00, 67.62it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 97%|      | 122/126 [00:01<00:00, 68.03it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 98%|      | 123/126 [00:01<00:00, 68.47it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 98%|      | 124/126 [00:01<00:00, 68.90it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 99%|      | 125/126 [00:01<00:00, 69.33it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 69.76it/s, loss=0.00586,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 100%|     | 126/126 [00:01<00:00, 68.61it/s, loss=0.00586,
v_num=4.31e+7]

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Epoch 111: 100%|      | 126/126 [00:01<00:00, 68.48it/s, loss=0.00586,
v_num=4.31e+7]Mapping latent space...
Epoch 112:  79%|      | 100/126 [00:01<00:00, 69.70it/s, loss=0.0055,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 112:  80%|      | 101/126 [00:01<00:00, 61.55it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  81%|      | 102/126 [00:01<00:00, 61.62it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  82%|      | 103/126 [00:01<00:00, 62.07it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  83%|      | 104/126 [00:01<00:00, 62.53it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  83%|      | 105/126 [00:01<00:00, 62.98it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  84%|      | 106/126 [00:01<00:00, 63.43it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  85%|      | 107/126 [00:01<00:00, 63.88it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  86%|      | 108/126 [00:01<00:00, 64.33it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  87%|      | 109/126 [00:01<00:00, 64.78it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  87%|      | 110/126 [00:01<00:00, 65.22it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  88%|      | 111/126 [00:01<00:00, 65.67it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  89%|      | 112/126 [00:01<00:00, 66.11it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  90%|      | 113/126 [00:01<00:00, 66.55it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  90%|      | 114/126 [00:01<00:00, 66.99it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  91%|      | 115/126 [00:01<00:00, 67.43it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  92%|      | 116/126 [00:01<00:00, 67.87it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  93%|      | 117/126 [00:01<00:00, 68.30it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  94%|      | 118/126 [00:01<00:00, 68.74it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  94%|      | 119/126 [00:01<00:00, 69.17it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  95%|      | 120/126 [00:01<00:00, 69.60it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112:  96%|      | 121/126 [00:01<00:00, 70.02it/s, loss=0.0055,

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v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 70.45it/s, loss=0.0055,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.28it/s]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 70.90it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 71.34it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 71.78it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 72.23it/s, loss=0.0055,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 100%|     | 126/126 [00:01<00:00, 70.93it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 70.81it/s, loss=0.0055,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|      | 100/126 [00:01<00:00, 80.17it/s, loss=0.00635,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 113: 80%|      | 101/126 [00:01<00:00, 70.24it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 81%|      | 102/126 [00:01<00:00, 70.40it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 82%|      | 103/126 [00:01<00:00, 70.82it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 83%|      | 104/126 [00:01<00:00, 71.25it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 83%|      | 105/126 [00:01<00:00, 71.67it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 84%|      | 106/126 [00:01<00:00, 72.10it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 85%|      | 107/126 [00:01<00:00, 72.53it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 86%|      | 108/126 [00:01<00:00, 72.96it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 87%|      | 109/126 [00:01<00:00, 73.39it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 87%|      | 110/126 [00:01<00:00, 73.82it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 88%|      | 111/126 [00:01<00:00, 74.25it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 89%|      | 112/126 [00:01<00:00, 74.69it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 90%|      | 113/126 [00:01<00:00, 75.12it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 90%|      | 114/126 [00:01<00:00, 75.55it/s, loss=0.00635,

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v_num=4.31e+7]
Epoch 113: 91%|      | 115/126 [00:01<00:00, 76.00it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 92%|      | 116/126 [00:01<00:00, 76.42it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 93%|      | 117/126 [00:01<00:00, 76.87it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 94%|      | 118/126 [00:01<00:00, 77.31it/s, loss=0.00635,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.02it/s]
Epoch 113: 94%|      | 119/126 [00:01<00:00, 77.75it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 95%|      | 120/126 [00:01<00:00, 78.19it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 96%|      | 121/126 [00:01<00:00, 78.64it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 97%|      | 122/126 [00:01<00:00, 79.09it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 98%|      | 123/126 [00:01<00:00, 79.56it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 98%|      | 124/126 [00:01<00:00, 80.03it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 80.51it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 80.99it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 79.46it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 79.32it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...

Epoch 114: 79%|      | 100/126 [00:01<00:00, 81.50it/s, loss=0.00561,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 72.50it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 72.75it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 73.28it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 73.81it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 83%|      | 105/126 [00:01<00:00, 74.33it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 84%|      | 106/126 [00:01<00:00, 74.86it/s, loss=0.00561,
v_num=4.31e+7]

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Epoch 114: 85%|      | 107/126 [00:01<00:00, 75.38it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 86%|      | 108/126 [00:01<00:00, 75.90it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 87%|      | 109/126 [00:01<00:00, 76.42it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 87%|      | 110/126 [00:01<00:00, 76.93it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 88%|      | 111/126 [00:01<00:00, 77.47it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 89%|      | 112/126 [00:01<00:00, 77.97it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 90%|      | 113/126 [00:01<00:00, 78.48it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 90%|      | 114/126 [00:01<00:00, 78.99it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 91%|      | 115/126 [00:01<00:00, 79.50it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 92%|      | 116/126 [00:01<00:00, 80.01it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 93%|      | 117/126 [00:01<00:00, 80.53it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 94%|      | 118/126 [00:01<00:00, 81.03it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 94%|      | 119/126 [00:01<00:00, 81.53it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 95%|      | 120/126 [00:01<00:00, 82.04it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 96%|      | 121/126 [00:01<00:00, 82.54it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 97%|      | 122/126 [00:01<00:00, 83.05it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 98%|      | 123/126 [00:01<00:00, 83.58it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 98%|      | 124/126 [00:01<00:00, 84.11it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 99%|      | 125/126 [00:01<00:00, 84.64it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 85.18it/s, loss=0.00561,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%|     | 126/126 [00:01<00:00, 83.00it/s, loss=0.00561,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 82.84it/s, loss=0.00561,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 79%|      | 100/126 [00:01<00:00, 90.15it/s, loss=0.00618,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|          | 101/126 [00:01<00:00, 78.73it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 81%|          | 102/126 [00:01<00:00, 78.70it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 82%|          | 103/126 [00:01<00:00, 79.28it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 83%|          | 104/126 [00:01<00:00, 79.82it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 83%|          | 105/126 [00:01<00:00, 80.39it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 84%|          | 106/126 [00:01<00:00, 80.95it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 85%|          | 107/126 [00:01<00:00, 81.51it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 86%|          | 108/126 [00:01<00:00, 82.05it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 87%|          | 109/126 [00:01<00:00, 82.62it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 87%|          | 110/126 [00:01<00:00, 83.15it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 88%|          | 111/126 [00:01<00:00, 83.71it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 89%|          | 112/126 [00:01<00:00, 84.24it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 90%|          | 113/126 [00:01<00:00, 84.79it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 90%|          | 114/126 [00:01<00:00, 85.32it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 91%|          | 115/126 [00:01<00:00, 85.86it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 92%|          | 116/126 [00:01<00:00, 86.40it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 93%|          | 117/126 [00:01<00:00, 86.94it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 94%|          | 118/126 [00:01<00:00, 87.48it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 94%|          | 119/126 [00:01<00:00, 88.01it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 95%|          | 120/126 [00:01<00:00, 88.53it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 96%|          | 121/126 [00:01<00:00, 89.07it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 97%|          | 122/126 [00:01<00:00, 89.60it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 98%|          | 123/126 [00:01<00:00, 90.17it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 98%|          | 124/126 [00:01<00:00, 90.73it/s, loss=0.00618,

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v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 91.30it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 91.86it/s, loss=0.00618,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|     | 126/126 [00:01<00:00, 90.06it/s, loss=0.00618,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 89.90it/s, loss=0.00618,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|      | 100/126 [00:01<00:00, 89.95it/s, loss=0.0061,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|      | 101/126 [00:01<00:00, 78.19it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 81%|      | 102/126 [00:01<00:00, 78.23it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 82%|      | 103/126 [00:01<00:00, 78.65it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 83%|      | 104/126 [00:01<00:00, 79.09it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 83%|      | 105/126 [00:01<00:00, 79.53it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 84%|      | 106/126 [00:01<00:00, 79.97it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 85%|      | 107/126 [00:01<00:00, 80.42it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 86%|      | 108/126 [00:01<00:00, 80.86it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 87%|      | 109/126 [00:01<00:00, 81.30it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 87%|      | 110/126 [00:01<00:00, 81.75it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 88%|      | 111/126 [00:01<00:00, 82.19it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 89%|      | 112/126 [00:01<00:00, 82.64it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 90%|      | 113/126 [00:01<00:00, 83.09it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 90%|      | 114/126 [00:01<00:00, 83.55it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 91%|      | 115/126 [00:01<00:00, 84.01it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 92%|      | 116/126 [00:01<00:00, 84.48it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 93%|      | 117/126 [00:01<00:00, 84.94it/s, loss=0.0061,
v_num=4.31e+7]

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Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 179.03it/s]
Epoch 116: 94%|          | 118/126 [00:01<00:00, 85.40it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 94%|          | 119/126 [00:01<00:00, 85.86it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 95%|          | 120/126 [00:01<00:00, 86.33it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 96%|          | 121/126 [00:01<00:00, 86.79it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 97%|          | 122/126 [00:01<00:00, 87.26it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 98%|          | 123/126 [00:01<00:00, 87.76it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 98%|          | 124/126 [00:01<00:00, 88.26it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 99%|          | 125/126 [00:01<00:00, 88.76it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 100%|         | 126/126 [00:01<00:00, 89.27it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|         | 126/126 [00:01<00:00, 87.42it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 116: 100%|         | 126/126 [00:01<00:00, 87.24it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...

Epoch 117: 79%|          | 100/126 [00:01<00:00, 80.74it/s, loss=0.00641,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 117: 80%|          | 101/126 [00:01<00:00, 71.43it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 81%|          | 102/126 [00:01<00:00, 69.43it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 82%|          | 103/126 [00:01<00:00, 69.88it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 83%|          | 104/126 [00:01<00:00, 70.33it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 83%|          | 105/126 [00:01<00:00, 70.78it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 84%|          | 106/126 [00:01<00:00, 71.23it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 85%|          | 107/126 [00:01<00:00, 71.68it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 86%|          | 108/126 [00:01<00:00, 72.13it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 87%|          | 109/126 [00:01<00:00, 72.59it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 87%|          | 110/126 [00:01<00:00, 73.04it/s, loss=0.00641,

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v_num=4.31e+7]
Validation DataLoader 0: 42%|          | 11/26 [00:00<00:00, 105.76it/s]
Epoch 117: 88%|          | 111/126 [00:01<00:00, 73.48it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 89%|          | 112/126 [00:01<00:00, 73.94it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 90%|          | 113/126 [00:01<00:00, 74.39it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 90%|          | 114/126 [00:01<00:00, 74.84it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 91%|          | 115/126 [00:01<00:00, 75.30it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 92%|          | 116/126 [00:01<00:00, 75.74it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 93%|          | 117/126 [00:01<00:00, 76.20it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 94%|          | 118/126 [00:01<00:00, 76.65it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 94%|          | 119/126 [00:01<00:00, 77.10it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 95%|          | 120/126 [00:01<00:00, 77.55it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 96%|          | 121/126 [00:01<00:00, 78.00it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 97%|          | 122/126 [00:01<00:00, 78.46it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 98%|          | 123/126 [00:01<00:00, 78.93it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 98%|          | 124/126 [00:01<00:00, 79.41it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 99%|          | 125/126 [00:01<00:00, 79.88it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 100%|         | 126/126 [00:01<00:00, 80.38it/s, loss=0.00641,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 100%|         | 126/126 [00:01<00:00, 78.40it/s, loss=0.00641,
v_num=4.31e+7]
Epoch 117: 100%|         | 126/126 [00:01<00:00, 78.25it/s, loss=0.00641,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 79%|          | 100/126 [00:01<00:00, 80.26it/s, loss=0.00587,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 118: 80%|          | 101/126 [00:01<00:00, 70.80it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 81%|          | 102/126 [00:01<00:00, 70.53it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 82%|          | 103/126 [00:01<00:00, 70.93it/s, loss=0.00587,

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v_num=4.31e+7]
Epoch 118: 83%|      | 104/126 [00:01<00:00, 71.34it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 83%|      | 105/126 [00:01<00:00, 71.75it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 84%|      | 106/126 [00:01<00:00, 72.16it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 85%|      | 107/126 [00:01<00:00, 72.57it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 86%|      | 108/126 [00:01<00:00, 72.98it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 87%|      | 109/126 [00:01<00:00, 73.40it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 87%|      | 110/126 [00:01<00:00, 73.82it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 88%|      | 111/126 [00:01<00:00, 74.24it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 89%|      | 112/126 [00:01<00:00, 74.65it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 90%|      | 113/126 [00:01<00:00, 75.08it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 90%|      | 114/126 [00:01<00:00, 75.50it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 91%|      | 115/126 [00:01<00:00, 75.93it/s, loss=0.00587,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 159.43it/s]
Epoch 118: 92%|      | 116/126 [00:01<00:00, 76.35it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 93%|      | 117/126 [00:01<00:00, 76.78it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 94%|      | 118/126 [00:01<00:00, 77.21it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 94%|      | 119/126 [00:01<00:00, 77.64it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 95%|      | 120/126 [00:01<00:00, 78.07it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 96%|      | 121/126 [00:01<00:00, 78.50it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 97%|      | 122/126 [00:01<00:00, 78.94it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 98%|      | 123/126 [00:01<00:00, 79.40it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 98%|      | 124/126 [00:01<00:00, 79.86it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 99%|      | 125/126 [00:01<00:00, 80.33it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 80.80it/s, loss=0.00587,
v_num=4.31e+7] Mapping latent space...

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Epoch 118: 100%|      | 126/126 [00:01<00:00, 79.09it/s, loss=0.00587,
v_num=4.31e+7]
Epoch 118: 100%|      | 126/126 [00:01<00:00, 78.93it/s, loss=0.00587,
v_num=4.31e+7]Mapping latent space...
Epoch 119:  79%|      | 100/126 [00:01<00:00, 80.09it/s, loss=0.00628,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 119:  80%|      | 101/126 [00:01<00:00, 69.84it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  81%|      | 102/126 [00:01<00:00, 70.07it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  82%|      | 103/126 [00:01<00:00, 70.49it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  83%|      | 104/126 [00:01<00:00, 70.92it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  83%|      | 105/126 [00:01<00:00, 71.34it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  84%|      | 106/126 [00:01<00:00, 71.79it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  85%|      | 107/126 [00:01<00:00, 72.23it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  86%|      | 108/126 [00:01<00:00, 72.67it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  87%|      | 109/126 [00:01<00:00, 73.12it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  87%|      | 110/126 [00:01<00:00, 73.57it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  88%|      | 111/126 [00:01<00:00, 74.02it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  89%|      | 112/126 [00:01<00:00, 74.47it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  90%|      | 113/126 [00:01<00:00, 74.92it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  90%|      | 114/126 [00:01<00:00, 75.38it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  91%|      | 115/126 [00:01<00:00, 75.83it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  92%|      | 116/126 [00:01<00:00, 76.28it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  93%|      | 117/126 [00:01<00:00, 76.74it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  94%|      | 118/126 [00:01<00:00, 77.19it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119:  94%|      | 119/126 [00:01<00:00, 77.64it/s, loss=0.00628,
v_num=4.31e+7]
Validation DataLoader 0:  77%|      | 20/26 [00:00<00:00, 197.24it/s]

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Epoch 119: 95%|      | 120/126 [00:01<00:00, 78.09it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 96%|      | 121/126 [00:01<00:00, 78.54it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 97%|      | 122/126 [00:01<00:00, 78.99it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 98%|      | 123/126 [00:01<00:00, 79.47it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 98%|      | 124/126 [00:01<00:00, 79.95it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 99%|      | 125/126 [00:01<00:00, 80.43it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 80.92it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 100%|     | 126/126 [00:01<00:00, 79.41it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 79.27it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...

Epoch 120: 79%|      | 100/126 [00:01<00:00, 72.66it/s, loss=0.00685,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      |  0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      |  0/26 [00:00<?, ?it/s]
Epoch 120: 80%|      | 101/126 [00:01<00:00, 63.74it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 81%|      | 102/126 [00:01<00:00, 60.99it/s, loss=0.00685,
v_num=4.31e+7]
Validation DataLoader 0: 12%|      |  3/26 [00:00<00:00, 29.11it/s]
Epoch 120: 82%|      | 103/126 [00:01<00:00, 61.34it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 83%|      | 104/126 [00:01<00:00, 61.69it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 83%|      | 105/126 [00:01<00:00, 62.06it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 84%|      | 106/126 [00:01<00:00, 62.42it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 85%|      | 107/126 [00:01<00:00, 62.79it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 86%|      | 108/126 [00:01<00:00, 63.16it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 87%|      | 109/126 [00:01<00:00, 63.53it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 87%|      | 110/126 [00:01<00:00, 63.91it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 88%|      | 111/126 [00:01<00:00, 64.29it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 89%|      | 112/126 [00:01<00:00, 64.67it/s, loss=0.00685,

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v_num=4.31e+7]
Epoch 120: 90%|      | 113/126 [00:01<00:00, 65.06it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 90%|      | 114/126 [00:01<00:00, 65.45it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 91%|      | 115/126 [00:01<00:00, 65.83it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 92%|      | 116/126 [00:01<00:00, 66.23it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 93%|      | 117/126 [00:01<00:00, 66.62it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 94%|      | 118/126 [00:01<00:00, 67.01it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 94%|      | 119/126 [00:01<00:00, 67.40it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 95%|      | 120/126 [00:01<00:00, 67.79it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 96%|      | 121/126 [00:01<00:00, 68.19it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 97%|      | 122/126 [00:01<00:00, 68.59it/s, loss=0.00685,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 125.80it/s]
Epoch 120: 98%|      | 123/126 [00:01<00:00, 69.01it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 98%|      | 124/126 [00:01<00:00, 69.43it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 99%|      | 125/126 [00:01<00:00, 69.86it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 70.29it/s, loss=0.00685,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 100%|     | 126/126 [00:01<00:00, 69.12it/s, loss=0.00685,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 69.00it/s, loss=0.00685,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 79%|      | 100/126 [00:01<00:00, 68.20it/s, loss=0.00635,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 121: 80%|      | 101/126 [00:01<00:00, 60.95it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 81%|      | 102/126 [00:01<00:00, 60.99it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 82%|      | 103/126 [00:01<00:00, 61.37it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 83%|      | 104/126 [00:01<00:00, 61.76it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 83%|      | 105/126 [00:01<00:00, 62.15it/s, loss=0.00635,

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v_num=4.31e+7]
Epoch 121: 84%|      | 106/126 [00:01<00:00, 62.55it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 85%|      | 107/126 [00:01<00:00, 62.95it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 86%|      | 108/126 [00:01<00:00, 63.34it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 87%|      | 109/126 [00:01<00:00, 63.74it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 87%|      | 110/126 [00:01<00:00, 64.15it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 88%|      | 111/126 [00:01<00:00, 64.55it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 89%|      | 112/126 [00:01<00:00, 64.95it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 90%|      | 113/126 [00:01<00:00, 65.35it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 90%|      | 114/126 [00:01<00:00, 65.76it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 91%|      | 115/126 [00:01<00:00, 66.16it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 92%|      | 116/126 [00:01<00:00, 66.57it/s, loss=0.00635,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.16it/s]
Epoch 121: 93%|      | 117/126 [00:01<00:00, 66.97it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 94%|      | 118/126 [00:01<00:00, 67.37it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 94%|      | 119/126 [00:01<00:00, 67.78it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 95%|      | 120/126 [00:01<00:00, 68.19it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 96%|      | 121/126 [00:01<00:00, 68.59it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 97%|      | 122/126 [00:01<00:00, 69.00it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 98%|      | 123/126 [00:01<00:00, 69.44it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 98%|      | 124/126 [00:01<00:00, 69.88it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 99%|      | 125/126 [00:01<00:00, 70.31it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 70.75it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 100%|     | 126/126 [00:01<00:00, 69.57it/s, loss=0.00635,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 69.46it/s, loss=0.00635,
v_num=4.31e+7]Mapping latent space...

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Epoch 122: 79%|          | 100/126 [00:01<00:00, 76.99it/s, loss=0.00669,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 122: 80%|          | 101/126 [00:01<00:00, 67.72it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 81%|          | 102/126 [00:01<00:00, 67.86it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 82%|          | 103/126 [00:01<00:00, 68.38it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 83%|          | 104/126 [00:01<00:00, 68.87it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 83%|          | 105/126 [00:01<00:00, 69.39it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 84%|          | 106/126 [00:01<00:00, 69.88it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 85%|          | 107/126 [00:01<00:00, 70.40it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 86%|          | 108/126 [00:01<00:00, 70.89it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 87%|          | 109/126 [00:01<00:00, 71.40it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 87%|          | 110/126 [00:01<00:00, 71.88it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 88%|          | 111/126 [00:01<00:00, 72.40it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 89%|          | 112/126 [00:01<00:00, 72.87it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 90%|          | 113/126 [00:01<00:00, 73.38it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 90%|          | 114/126 [00:01<00:00, 73.85it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 91%|          | 115/126 [00:01<00:00, 74.34it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 92%|          | 116/126 [00:01<00:00, 74.83it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 93%|          | 117/126 [00:01<00:00, 75.33it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 94%|          | 118/126 [00:01<00:00, 75.80it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 94%|          | 119/126 [00:01<00:00, 76.27it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 95%|          | 120/126 [00:01<00:00, 76.75it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 96%|          | 121/126 [00:01<00:00, 77.23it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 97%|          | 122/126 [00:01<00:00, 77.71it/s, loss=0.00669,

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v_num=4.31e+7]
Epoch 122: 98%|      | 123/126 [00:01<00:00, 78.22it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 98%|      | 124/126 [00:01<00:00, 78.74it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 99%|      | 125/126 [00:01<00:00, 79.26it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 79.78it/s, loss=0.00669,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 100%|     | 126/126 [00:01<00:00, 78.41it/s, loss=0.00669,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 78.29it/s, loss=0.00669,
v_num=4.31e+7]Mapping latent space...

Epoch 123: 79%|      | 100/126 [00:01<00:00, 75.22it/s, loss=0.00653,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 123: 80%|      | 101/126 [00:01<00:00, 67.30it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 81%|      | 102/126 [00:01<00:00, 67.27it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 82%|      | 103/126 [00:01<00:00, 67.79it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 83%|      | 104/126 [00:01<00:00, 68.30it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 83%|      | 105/126 [00:01<00:00, 68.83it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 84%|      | 106/126 [00:01<00:00, 69.33it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 85%|      | 107/126 [00:01<00:00, 69.85it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 86%|      | 108/126 [00:01<00:00, 70.35it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 87%|      | 109/126 [00:01<00:00, 70.87it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 87%|      | 110/126 [00:01<00:00, 71.36it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 88%|      | 111/126 [00:01<00:00, 71.88it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 89%|      | 112/126 [00:01<00:00, 72.36it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 90%|      | 113/126 [00:01<00:00, 72.88it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 90%|      | 114/126 [00:01<00:00, 73.36it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 91%|      | 115/126 [00:01<00:00, 73.87it/s, loss=0.00653,

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v_num=4.31e+7]
Epoch 123: 92%|      | 116/126 [00:01<00:00, 74.35it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 93%|      | 117/126 [00:01<00:00, 74.85it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 94%|      | 118/126 [00:01<00:00, 75.34it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 94%|      | 119/126 [00:01<00:00, 75.84it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 95%|      | 120/126 [00:01<00:00, 76.31it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 96%|      | 121/126 [00:01<00:00, 76.81it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 97%|      | 122/126 [00:01<00:00, 77.28it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 98%|      | 123/126 [00:01<00:00, 77.80it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 98%|      | 124/126 [00:01<00:00, 78.31it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 99%|      | 125/126 [00:01<00:00, 78.81it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 79.32it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 123: 100%|     | 126/126 [00:01<00:00, 78.00it/s, loss=0.00653,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 77.88it/s, loss=0.00653,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 79%|      | 100/126 [00:01<00:00, 84.14it/s, loss=0.00609,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 124: 80%|      | 101/126 [00:01<00:00, 72.76it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 81%|      | 102/126 [00:01<00:00, 72.80it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 82%|      | 103/126 [00:01<00:00, 73.22it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 83%|      | 104/126 [00:01<00:00, 73.64it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 83%|      | 105/126 [00:01<00:00, 74.07it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 84%|      | 106/126 [00:01<00:00, 74.50it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 85%|      | 107/126 [00:01<00:00, 74.94it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 86%|      | 108/126 [00:01<00:00, 75.37it/s, loss=0.00609,
v_num=4.31e+7]

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Epoch 124: 87%|      | 109/126 [00:01<00:00, 75.80it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 87%|      | 110/126 [00:01<00:00, 76.25it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 88%|      | 111/126 [00:01<00:00, 76.68it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 89%|      | 112/126 [00:01<00:00, 77.13it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 90%|      | 113/126 [00:01<00:00, 77.56it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 90%|      | 114/126 [00:01<00:00, 78.01it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 91%|      | 115/126 [00:01<00:00, 78.45it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 92%|      | 116/126 [00:01<00:00, 78.89it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 93%|      | 117/126 [00:01<00:00, 79.33it/s, loss=0.00609,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.51it/s]
Epoch 124: 94%|      | 118/126 [00:01<00:00, 79.77it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 94%|      | 119/126 [00:01<00:00, 80.21it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 95%|      | 120/126 [00:01<00:00, 80.65it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 96%|      | 121/126 [00:01<00:00, 81.10it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 97%|      | 122/126 [00:01<00:00, 81.55it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 98%|      | 123/126 [00:01<00:00, 82.03it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 98%|      | 124/126 [00:01<00:00, 82.52it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 99%|      | 125/126 [00:01<00:00, 83.00it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 83.48it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|     | 126/126 [00:01<00:00, 81.23it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 81.07it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 79%|      | 100/126 [00:01<00:00, 74.49it/s, loss=0.00566,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 125: 80%|      | 101/126 [00:01<00:00, 65.15it/s, loss=0.00566,
v_num=4.31e+7]

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Epoch 125: 81%|      | 102/126 [00:01<00:00, 65.27it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 82%|      | 103/126 [00:01<00:00, 65.72it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 83%|      | 104/126 [00:01<00:00, 66.18it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 83%|      | 105/126 [00:01<00:00, 66.64it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 84%|      | 106/126 [00:01<00:00, 67.10it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 85%|      | 107/126 [00:01<00:00, 67.56it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 86%|      | 108/126 [00:01<00:00, 68.01it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 87%|      | 109/126 [00:01<00:00, 68.46it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 87%|      | 110/126 [00:01<00:00, 68.91it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 88%|      | 111/126 [00:01<00:00, 69.36it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 89%|      | 112/126 [00:01<00:00, 69.81it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 90%|      | 113/126 [00:01<00:00, 70.26it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 90%|      | 114/126 [00:01<00:00, 70.71it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 91%|      | 115/126 [00:01<00:00, 71.15it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 92%|      | 116/126 [00:01<00:00, 71.59it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 93%|      | 117/126 [00:01<00:00, 72.03it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 94%|      | 118/126 [00:01<00:00, 72.47it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 94%|      | 119/126 [00:01<00:00, 72.90it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 95%|      | 120/126 [00:01<00:00, 73.34it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 96%|      | 121/126 [00:01<00:00, 73.77it/s, loss=0.00566,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.04it/s]
Epoch 125: 97%|      | 122/126 [00:01<00:00, 74.20it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 98%|      | 123/126 [00:01<00:00, 74.67it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 98%|      | 124/126 [00:01<00:00, 75.13it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 99%|      | 125/126 [00:01<00:00, 75.59it/s, loss=0.00566,

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v_num=4.31e+7]
Epoch 125: 100%|      | 126/126 [00:01<00:00, 76.06it/s, loss=0.00566,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 100%|      | 126/126 [00:01<00:00, 74.73it/s, loss=0.00566,
v_num=4.31e+7]
Epoch 125: 100%|      | 126/126 [00:01<00:00, 74.61it/s, loss=0.00566,
v_num=4.31e+7]Mapping latent space...

Epoch 126: 79%|      | 100/126 [00:01<00:00, 76.52it/s, loss=0.00567,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 126: 80%|      | 101/126 [00:01<00:00, 66.89it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 81%|      | 102/126 [00:01<00:00, 64.68it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 82%|      | 103/126 [00:01<00:00, 65.04it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 83%|      | 104/126 [00:01<00:00, 65.41it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 83%|      | 105/126 [00:01<00:00, 65.79it/s, loss=0.00567,
v_num=4.31e+7]
Validation DataLoader 0: 23%|      | 6/26 [00:00<00:00, 58.19it/s]
Epoch 126: 84%|      | 106/126 [00:01<00:00, 66.16it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 85%|      | 107/126 [00:01<00:00, 66.54it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 86%|      | 108/126 [00:01<00:00, 66.92it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 87%|      | 109/126 [00:01<00:00, 67.31it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 87%|      | 110/126 [00:01<00:00, 67.70it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 88%|      | 111/126 [00:01<00:00, 68.10it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 89%|      | 112/126 [00:01<00:00, 68.49it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 90%|      | 113/126 [00:01<00:00, 68.89it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 90%|      | 114/126 [00:01<00:00, 69.28it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 91%|      | 115/126 [00:01<00:00, 69.68it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 92%|      | 116/126 [00:01<00:00, 70.08it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 93%|      | 117/126 [00:01<00:00, 70.49it/s, loss=0.00567,
v_num=4.31e+7]

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Epoch 126: 94%|      | 118/126 [00:01<00:00, 70.89it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 94%|      | 119/126 [00:01<00:00, 71.30it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 95%|      | 120/126 [00:01<00:00, 71.70it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 96%|      | 121/126 [00:01<00:00, 72.11it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 97%|      | 122/126 [00:01<00:00, 72.52it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 98%|      | 123/126 [00:01<00:00, 72.96it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 98%|      | 124/126 [00:01<00:00, 73.40it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 99%|      | 125/126 [00:01<00:00, 73.84it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 74.29it/s, loss=0.00567,
v_num=4.31e+7]Mapping latent space...
Epoch 126: 100%|     | 126/126 [00:01<00:00, 72.99it/s, loss=0.00567,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 72.87it/s, loss=0.00567,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 79%|      | 100/126 [00:01<00:00, 73.71it/s, loss=0.00599,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 127: 80%|      | 101/126 [00:01<00:00, 64.51it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 81%|      | 102/126 [00:01<00:00, 64.56it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 82%|      | 103/126 [00:01<00:00, 65.03it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 83%|      | 104/126 [00:01<00:00, 65.50it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 83%|      | 105/126 [00:01<00:00, 65.97it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 84%|      | 106/126 [00:01<00:00, 66.43it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 85%|      | 107/126 [00:01<00:00, 66.91it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 86%|      | 108/126 [00:01<00:00, 67.35it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 87%|      | 109/126 [00:01<00:00, 67.82it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 87%|      | 110/126 [00:01<00:00, 68.28it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 88%|      | 111/126 [00:01<00:00, 68.73it/s, loss=0.00599,

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v_num=4.31e+7]
Epoch 127: 89%|      | 112/126 [00:01<00:00, 69.19it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 90%|      | 113/126 [00:01<00:00, 69.64it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 90%|      | 114/126 [00:01<00:00, 70.10it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 91%|      | 115/126 [00:01<00:00, 70.55it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 92%|      | 116/126 [00:01<00:00, 71.00it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 93%|      | 117/126 [00:01<00:00, 71.45it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 94%|      | 118/126 [00:01<00:00, 71.90it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 94%|      | 119/126 [00:01<00:00, 72.34it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 95%|      | 120/126 [00:01<00:00, 72.79it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 96%|      | 121/126 [00:01<00:00, 73.22it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 97%|      | 122/126 [00:01<00:00, 73.67it/s, loss=0.00599,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.72it/s]
Epoch 127: 98%|      | 123/126 [00:01<00:00, 74.13it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 98%|      | 124/126 [00:01<00:00, 74.59it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 99%|      | 125/126 [00:01<00:00, 75.05it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 75.51it/s, loss=0.00599,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 100%|     | 126/126 [00:01<00:00, 74.19it/s, loss=0.00599,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 74.06it/s, loss=0.00599,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 79%|      | 100/126 [00:01<00:00, 74.97it/s, loss=0.00636,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 128: 80%|      | 101/126 [00:01<00:00, 65.81it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 81%|      | 102/126 [00:01<00:00, 65.96it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 82%|      | 103/126 [00:01<00:00, 66.42it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 83%|      | 104/126 [00:01<00:00, 66.87it/s, loss=0.00636,

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v_num=4.31e+7]
Epoch 128: 83%|      | 105/126 [00:01<00:00, 67.35it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 84%|      | 106/126 [00:01<00:00, 67.82it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 85%|      | 107/126 [00:01<00:00, 68.29it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 86%|      | 108/126 [00:01<00:00, 68.77it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 87%|      | 109/126 [00:01<00:00, 69.25it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 87%|      | 110/126 [00:01<00:00, 69.73it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 88%|      | 111/126 [00:01<00:00, 70.23it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 89%|      | 112/126 [00:01<00:00, 70.69it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 90%|      | 113/126 [00:01<00:00, 71.17it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 90%|      | 114/126 [00:01<00:00, 71.64it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 91%|      | 115/126 [00:01<00:00, 72.12it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 92%|      | 116/126 [00:01<00:00, 72.59it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 93%|      | 117/126 [00:01<00:00, 73.06it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 94%|      | 118/126 [00:01<00:00, 73.53it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 94%|      | 119/126 [00:01<00:00, 73.99it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 95%|      | 120/126 [00:01<00:00, 74.46it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 96%|      | 121/126 [00:01<00:00, 74.93it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 97%|      | 122/126 [00:01<00:00, 75.40it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 98%|      | 123/126 [00:01<00:00, 75.90it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 98%|      | 124/126 [00:01<00:00, 76.39it/s, loss=0.00636,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.98it/s]
Epoch 128: 99%|      | 125/126 [00:01<00:00, 76.89it/s, loss=0.00636,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 77.39it/s, loss=0.00636,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 100%|     | 126/126 [00:01<00:00, 76.11it/s, loss=0.00636,
v_num=4.31e+7]

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Epoch 128: 100%|      | 126/126 [00:01<00:00, 76.00it/s, loss=0.00636,
v_num=4.31e+7]Mapping latent space...

Epoch 129:  79%|      | 100/126 [00:01<00:00, 68.38it/s, loss=0.00533,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 129:  80%|      | 101/126 [00:01<00:00, 61.16it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  81%|      | 102/126 [00:01<00:00, 61.23it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  82%|      | 103/126 [00:01<00:00, 61.70it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  83%|      | 104/126 [00:01<00:00, 62.16it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  83%|      | 105/126 [00:01<00:00, 62.64it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  84%|      | 106/126 [00:01<00:00, 63.08it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  85%|      | 107/126 [00:01<00:00, 63.55it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  86%|      | 108/126 [00:01<00:00, 64.02it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  87%|      | 109/126 [00:01<00:00, 64.48it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  87%|      | 110/126 [00:01<00:00, 64.95it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  88%|      | 111/126 [00:01<00:00, 65.43it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  89%|      | 112/126 [00:01<00:00, 65.88it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  90%|      | 113/126 [00:01<00:00, 66.35it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  90%|      | 114/126 [00:01<00:00, 66.81it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  91%|      | 115/126 [00:01<00:00, 67.28it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  92%|      | 116/126 [00:01<00:00, 67.73it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  93%|      | 117/126 [00:01<00:00, 68.19it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  94%|      | 118/126 [00:01<00:00, 68.64it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  94%|      | 119/126 [00:01<00:00, 69.10it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129:  95%|      | 120/126 [00:01<00:00, 69.56it/s, loss=0.00533,
v_num=4.31e+7]

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Epoch 129: 96%|      | 121/126 [00:01<00:00, 70.01it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 97%|      | 122/126 [00:01<00:00, 70.46it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 98%|      | 123/126 [00:01<00:00, 70.93it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 98%|      | 124/126 [00:01<00:00, 71.41it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 99%|      | 125/126 [00:01<00:00, 71.88it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 72.35it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 129: 100%|     | 126/126 [00:01<00:00, 71.15it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 71.02it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 79%|      | 100/126 [00:01<00:00, 76.07it/s, loss=0.00588,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 130: 80%|      | 101/126 [00:01<00:00, 67.10it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 81%|      | 102/126 [00:01<00:00, 67.12it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 82%|      | 103/126 [00:01<00:00, 67.64it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 83%|      | 104/126 [00:01<00:00, 68.13it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 83%|      | 105/126 [00:01<00:00, 68.63it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 84%|      | 106/126 [00:01<00:00, 69.12it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 85%|      | 107/126 [00:01<00:00, 69.63it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 86%|      | 108/126 [00:01<00:00, 70.09it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 87%|      | 109/126 [00:01<00:00, 70.59it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 87%|      | 110/126 [00:01<00:00, 71.07it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 88%|      | 111/126 [00:01<00:00, 71.58it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 89%|      | 112/126 [00:01<00:00, 72.05it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 90%|      | 113/126 [00:01<00:00, 72.54it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 90%|      | 114/126 [00:01<00:00, 73.02it/s, loss=0.00588,

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v_num=4.31e+7]
Epoch 130: 91%|      | 115/126 [00:01<00:00, 73.51it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 92%|      | 116/126 [00:01<00:00, 73.99it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 93%|      | 117/126 [00:01<00:00, 74.48it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 94%|      | 118/126 [00:01<00:00, 74.96it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 94%|      | 119/126 [00:01<00:00, 75.47it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 95%|      | 120/126 [00:01<00:00, 75.93it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 96%|      | 121/126 [00:01<00:00, 76.40it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 97%|      | 122/126 [00:01<00:00, 76.89it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 98%|      | 123/126 [00:01<00:00, 77.39it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 98%|      | 124/126 [00:01<00:00, 77.90it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 99%|      | 125/126 [00:01<00:00, 78.40it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 78.91it/s, loss=0.00588,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 100%|     | 126/126 [00:01<00:00, 77.46it/s, loss=0.00588,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 77.34it/s, loss=0.00588,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 79%|      | 100/126 [00:01<00:00, 69.10it/s, loss=0.00515,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 131: 80%|      | 101/126 [00:01<00:00, 61.77it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 81%|      | 102/126 [00:01<00:00, 61.93it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 82%|      | 103/126 [00:01<00:00, 62.34it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 83%|      | 104/126 [00:01<00:00, 62.75it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 83%|      | 105/126 [00:01<00:00, 63.16it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 84%|      | 106/126 [00:01<00:00, 63.57it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 85%|      | 107/126 [00:01<00:00, 63.98it/s, loss=0.00515,
v_num=4.31e+7]

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Epoch 131: 86%|      | 108/126 [00:01<00:00, 64.39it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 87%|      | 109/126 [00:01<00:00, 64.81it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 87%|      | 110/126 [00:01<00:00, 65.21it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 88%|      | 111/126 [00:01<00:00, 65.62it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 89%|      | 112/126 [00:01<00:00, 66.04it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 90%|      | 113/126 [00:01<00:00, 66.46it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 90%|      | 114/126 [00:01<00:00, 66.88it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 91%|      | 115/126 [00:01<00:00, 67.29it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 92%|      | 116/126 [00:01<00:00, 67.67it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 93%|      | 117/126 [00:01<00:00, 68.03it/s, loss=0.00515,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.76it/s]
Epoch 131: 94%|      | 118/126 [00:01<00:00, 68.39it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 94%|      | 119/126 [00:01<00:00, 68.77it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 95%|      | 120/126 [00:01<00:00, 69.15it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 96%|      | 121/126 [00:01<00:00, 69.52it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 97%|      | 122/126 [00:01<00:00, 69.90it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 98%|      | 123/126 [00:01<00:00, 70.30it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 98%|      | 124/126 [00:01<00:00, 70.69it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 99%|      | 125/126 [00:01<00:00, 71.09it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 71.50it/s, loss=0.00515,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 100%|     | 126/126 [00:01<00:00, 70.11it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 69.97it/s, loss=0.00515,
v_num=4.31e+7]Mapping latent space...

Epoch 132: 79%|      | 100/126 [00:01<00:00, 78.80it/s, loss=0.00531,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 132: 80%|          | 101/126 [00:01<00:00, 69.60it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 81%|          | 102/126 [00:01<00:00, 69.71it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 82%|          | 103/126 [00:01<00:00, 70.21it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 83%|          | 104/126 [00:01<00:00, 70.72it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 83%|          | 105/126 [00:01<00:00, 71.23it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 84%|          | 106/126 [00:01<00:00, 71.75it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 85%|          | 107/126 [00:01<00:00, 72.26it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 86%|          | 108/126 [00:01<00:00, 72.76it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 87%|          | 109/126 [00:01<00:00, 73.27it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 87%|          | 110/126 [00:01<00:00, 73.77it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 88%|          | 111/126 [00:01<00:00, 74.27it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 89%|          | 112/126 [00:01<00:00, 74.74it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 90%|          | 113/126 [00:01<00:00, 75.24it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 90%|          | 114/126 [00:01<00:00, 75.74it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 91%|          | 115/126 [00:01<00:00, 76.24it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 92%|          | 116/126 [00:01<00:00, 76.73it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 93%|          | 117/126 [00:01<00:00, 77.22it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 94%|          | 118/126 [00:01<00:00, 77.72it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 94%|          | 119/126 [00:01<00:00, 78.21it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 95%|          | 120/126 [00:01<00:00, 78.70it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 96%|          | 121/126 [00:01<00:00, 79.19it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 97%|          | 122/126 [00:01<00:00, 79.68it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 98%|          | 123/126 [00:01<00:00, 80.20it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 98%|          | 124/126 [00:01<00:00, 80.72it/s, loss=0.00531,

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v_num=4.31e+7]
Epoch 132: 99%|      | 125/126 [00:01<00:00, 81.24it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 81.76it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 132: 100%|     | 126/126 [00:01<00:00, 80.30it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 80.17it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 79%|      | 100/126 [00:01<00:00, 89.64it/s, loss=0.00499,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 133: 80%|      | 101/126 [00:01<00:00, 76.56it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 81%|      | 102/126 [00:01<00:00, 76.50it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 82%|      | 103/126 [00:01<00:00, 76.92it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 83%|      | 104/126 [00:01<00:00, 77.34it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 83%|      | 105/126 [00:01<00:00, 77.77it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 84%|      | 106/126 [00:01<00:00, 78.21it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 85%|      | 107/126 [00:01<00:00, 78.64it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 86%|      | 108/126 [00:01<00:00, 79.07it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 87%|      | 109/126 [00:01<00:00, 79.52it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 87%|      | 110/126 [00:01<00:00, 79.97it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 88%|      | 111/126 [00:01<00:00, 80.42it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 89%|      | 112/126 [00:01<00:00, 80.87it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 90%|      | 113/126 [00:01<00:00, 81.33it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 90%|      | 114/126 [00:01<00:00, 81.75it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 91%|      | 115/126 [00:01<00:00, 82.21it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 92%|      | 116/126 [00:01<00:00, 82.67it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 93%|      | 117/126 [00:01<00:00, 83.13it/s, loss=0.00499,
v_num=4.31e+7]

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Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 173.09it/s]
Epoch 133: 94%|          | 118/126 [00:01<00:00, 83.58it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 94%|          | 119/126 [00:01<00:00, 84.04it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 95%|          | 120/126 [00:01<00:00, 84.50it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 96%|          | 121/126 [00:01<00:00, 84.97it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 97%|          | 122/126 [00:01<00:00, 85.45it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 98%|          | 123/126 [00:01<00:00, 85.94it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 98%|          | 124/126 [00:01<00:00, 86.45it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 99%|          | 125/126 [00:01<00:00, 86.95it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 100%|         | 126/126 [00:01<00:00, 87.45it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 100%|         | 126/126 [00:01<00:00, 85.42it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 133: 100%|         | 126/126 [00:01<00:00, 85.14it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 134: 79%|          | 100/126 [00:01<00:00, 80.01it/s, loss=0.00549,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 134: 80%|          | 101/126 [00:01<00:00, 70.40it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 81%|          | 102/126 [00:01<00:00, 70.50it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 82%|          | 103/126 [00:01<00:00, 71.04it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 83%|          | 104/126 [00:01<00:00, 71.55it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 83%|          | 105/126 [00:01<00:00, 72.08it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 84%|          | 106/126 [00:01<00:00, 72.60it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 85%|          | 107/126 [00:01<00:00, 73.12it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 86%|          | 108/126 [00:01<00:00, 73.63it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 87%|          | 109/126 [00:01<00:00, 74.15it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 87%|          | 110/126 [00:01<00:00, 74.66it/s, loss=0.00549,
v_num=4.31e+7]

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Epoch 134: 88%|      | 111/126 [00:01<00:00, 75.18it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 89%|      | 112/126 [00:01<00:00, 75.69it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 90%|      | 113/126 [00:01<00:00, 76.20it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 90%|      | 114/126 [00:01<00:00, 76.71it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 91%|      | 115/126 [00:01<00:00, 77.22it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 92%|      | 116/126 [00:01<00:00, 77.70it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 93%|      | 117/126 [00:01<00:00, 78.20it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 94%|      | 118/126 [00:01<00:00, 78.70it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 94%|      | 119/126 [00:01<00:00, 79.20it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 95%|      | 120/126 [00:01<00:00, 79.70it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 96%|      | 121/126 [00:01<00:00, 80.19it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 97%|      | 122/126 [00:01<00:00, 80.70it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 98%|      | 123/126 [00:01<00:00, 81.22it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 98%|      | 124/126 [00:01<00:00, 81.74it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 99%|      | 125/126 [00:01<00:00, 82.26it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 82.79it/s, loss=0.00549,
v_num=4.31e+7]Mapping latent space...
Epoch 134: 100%|     | 126/126 [00:01<00:00, 81.27it/s, loss=0.00549,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 81.15it/s, loss=0.00549,
v_num=4.31e+7]Mapping latent space...

Epoch 135: 79%|      | 100/126 [00:01<00:00, 75.75it/s, loss=0.0058,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 135: 80%|      | 101/126 [00:01<00:00, 67.24it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 81%|      | 102/126 [00:01<00:00, 67.29it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 82%|      | 103/126 [00:01<00:00, 67.79it/s, loss=0.0058,
v_num=4.31e+7]

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Epoch 135: 83%|      | 104/126 [00:01<00:00, 68.29it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 83%|      | 105/126 [00:01<00:00, 68.80it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 84%|      | 106/126 [00:01<00:00, 69.31it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 85%|      | 107/126 [00:01<00:00, 69.81it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 86%|      | 108/126 [00:01<00:00, 70.31it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 87%|      | 109/126 [00:01<00:00, 70.81it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 87%|      | 110/126 [00:01<00:00, 71.31it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 88%|      | 111/126 [00:01<00:00, 71.80it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 89%|      | 112/126 [00:01<00:00, 72.30it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 90%|      | 113/126 [00:01<00:00, 72.79it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 90%|      | 114/126 [00:01<00:00, 73.28it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 91%|      | 115/126 [00:01<00:00, 73.77it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 92%|      | 116/126 [00:01<00:00, 74.26it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 93%|      | 117/126 [00:01<00:00, 74.75it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 94%|      | 118/126 [00:01<00:00, 75.22it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 94%|      | 119/126 [00:01<00:00, 75.70it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 95%|      | 120/126 [00:01<00:00, 76.18it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 96%|      | 121/126 [00:01<00:00, 76.66it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 97%|      | 122/126 [00:01<00:00, 77.15it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 98%|      | 123/126 [00:01<00:00, 77.65it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 98%|      | 124/126 [00:01<00:00, 78.16it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 99%|      | 125/126 [00:01<00:00, 78.66it/s, loss=0.0058,
v_num=4.31e+7]
Epoch 135: 100%|     | 126/126 [00:01<00:00, 79.16it/s, loss=0.0058,
v_num=4.31e+7]Mapping latent space...
Epoch 135: 100%|     | 126/126 [00:01<00:00, 77.79it/s, loss=0.0058,
v_num=4.31e+7]

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Epoch 135: 100%|      | 126/126 [00:01<00:00, 77.66it/s, loss=0.0058,
v_num=4.31e+7]Mapping latent space...
Epoch 136:  79%|      | 100/126 [00:01<00:00, 90.52it/s, loss=0.00464,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 136:  80%|      | 101/126 [00:01<00:00, 77.33it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  81%|      | 102/126 [00:01<00:00, 77.45it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  82%|      | 103/126 [00:01<00:00, 77.96it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  83%|      | 104/126 [00:01<00:00, 78.46it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  83%|      | 105/126 [00:01<00:00, 78.97it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  84%|      | 106/126 [00:01<00:00, 79.47it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  85%|      | 107/126 [00:01<00:00, 79.98it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  86%|      | 108/126 [00:01<00:00, 80.47it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  87%|      | 109/126 [00:01<00:00, 80.98it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  87%|      | 110/126 [00:01<00:00, 81.46it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  88%|      | 111/126 [00:01<00:00, 81.96it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  89%|      | 112/126 [00:01<00:00, 82.45it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  90%|      | 113/126 [00:01<00:00, 82.94it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  90%|      | 114/126 [00:01<00:00, 83.42it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  91%|      | 115/126 [00:01<00:00, 83.91it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  92%|      | 116/126 [00:01<00:00, 84.39it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  93%|      | 117/126 [00:01<00:00, 84.87it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  94%|      | 118/126 [00:01<00:00, 85.35it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  94%|      | 119/126 [00:01<00:00, 85.82it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  95%|      | 120/126 [00:01<00:00, 86.25it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136:  96%|      | 121/126 [00:01<00:00, 86.72it/s, loss=0.00464,

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v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 215.23it/s]
Epoch 136: 97%|          | 122/126 [00:01<00:00, 87.19it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136: 98%|          | 123/126 [00:01<00:00, 87.69it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136: 98%|          | 124/126 [00:01<00:00, 88.20it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136: 99%|          | 125/126 [00:01<00:00, 88.71it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136: 100%|         | 126/126 [00:01<00:00, 89.22it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 136: 100%|         | 126/126 [00:01<00:00, 87.13it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 136: 100%|         | 126/126 [00:01<00:00, 86.94it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 137: 79%|          | 100/126 [00:01<00:00, 67.24it/s, loss=0.0056,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 137: 80%|          | 101/126 [00:01<00:00, 59.80it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 81%|          | 102/126 [00:01<00:00, 59.92it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 82%|          | 103/126 [00:01<00:00, 60.34it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 83%|          | 104/126 [00:01<00:00, 60.76it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 83%|          | 105/126 [00:01<00:00, 61.18it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 84%|          | 106/126 [00:01<00:00, 61.61it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 85%|          | 107/126 [00:01<00:00, 62.03it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 86%|          | 108/126 [00:01<00:00, 62.44it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 87%|          | 109/126 [00:01<00:00, 62.86it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 87%|          | 110/126 [00:01<00:00, 63.28it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 88%|          | 111/126 [00:01<00:00, 63.69it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 89%|          | 112/126 [00:01<00:00, 64.11it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 90%|          | 113/126 [00:01<00:00, 64.52it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 90%|          | 114/126 [00:01<00:00, 64.92it/s, loss=0.0056,

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v_num=4.31e+7]
Epoch 137: 91%|      | 115/126 [00:01<00:00, 65.33it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 92%|      | 116/126 [00:01<00:00, 65.74it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 93%|      | 117/126 [00:01<00:00, 66.14it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 94%|      | 118/126 [00:01<00:00, 66.54it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 94%|      | 119/126 [00:01<00:00, 66.95it/s, loss=0.0056,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 196.42it/s]
Epoch 137: 95%|      | 120/126 [00:01<00:00, 67.34it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 96%|      | 121/126 [00:01<00:00, 67.73it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 97%|      | 122/126 [00:01<00:00, 68.11it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 98%|      | 123/126 [00:01<00:00, 68.52it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 98%|      | 124/126 [00:01<00:00, 68.93it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 99%|      | 125/126 [00:01<00:00, 69.34it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 137: 100%|     | 126/126 [00:01<00:00, 69.75it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 137: 100%|     | 126/126 [00:01<00:00, 68.56it/s, loss=0.0056,
v_num=4.31e+7]

Epoch 137: 100%|     | 126/126 [00:01<00:00, 68.44it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 138: 79%|      | 100/126 [00:01<00:00, 78.58it/s, loss=0.00659,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 138: 80%|      | 101/126 [00:01<00:00, 68.76it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 81%|      | 102/126 [00:01<00:00, 68.97it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 82%|      | 103/126 [00:01<00:00, 69.46it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 83%|      | 104/126 [00:01<00:00, 69.95it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 83%|      | 105/126 [00:01<00:00, 70.45it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 84%|      | 106/126 [00:01<00:00, 70.95it/s, loss=0.00659,
v_num=4.31e+7]

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Epoch 138: 85%|      | 107/126 [00:01<00:00, 71.45it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 86%|      | 108/126 [00:01<00:00, 71.94it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 87%|      | 109/126 [00:01<00:00, 72.44it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 87%|      | 110/126 [00:01<00:00, 72.93it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 88%|      | 111/126 [00:01<00:00, 73.42it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 89%|      | 112/126 [00:01<00:00, 73.92it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 90%|      | 113/126 [00:01<00:00, 74.41it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 90%|      | 114/126 [00:01<00:00, 74.90it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 91%|      | 115/126 [00:01<00:00, 75.40it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 92%|      | 116/126 [00:01<00:00, 75.88it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 93%|      | 117/126 [00:01<00:00, 76.38it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 94%|      | 118/126 [00:01<00:00, 76.86it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 94%|      | 119/126 [00:01<00:00, 77.35it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 95%|      | 120/126 [00:01<00:00, 77.83it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 96%|      | 121/126 [00:01<00:00, 78.32it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 97%|      | 122/126 [00:01<00:00, 78.80it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 98%|      | 123/126 [00:01<00:00, 79.31it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 98%|      | 124/126 [00:01<00:00, 79.82it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 99%|      | 125/126 [00:01<00:00, 80.34it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 100%|     | 126/126 [00:01<00:00, 80.86it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 138: 100%|     | 126/126 [00:01<00:00, 79.46it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 138: 100%|     | 126/126 [00:01<00:00, 79.33it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 139: 79%|      | 100/126 [00:01<00:00, 81.60it/s, loss=0.00526,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      |  0/26 [00:00<?, ?it/s]

```

```

Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 139: 80%|          | 101/126 [00:01<00:00, 71.05it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 81%|          | 102/126 [00:01<00:00, 71.21it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 82%|          | 103/126 [00:01<00:00, 71.63it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 83%|          | 104/126 [00:01<00:00, 72.07it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 83%|          | 105/126 [00:01<00:00, 72.50it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 84%|          | 106/126 [00:01<00:00, 72.93it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 85%|          | 107/126 [00:01<00:00, 73.37it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 86%|          | 108/126 [00:01<00:00, 73.79it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 87%|          | 109/126 [00:01<00:00, 74.23it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 87%|          | 110/126 [00:01<00:00, 74.67it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 88%|          | 111/126 [00:01<00:00, 75.10it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 89%|          | 112/126 [00:01<00:00, 75.54it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 90%|          | 113/126 [00:01<00:00, 75.97it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 90%|          | 114/126 [00:01<00:00, 76.41it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 91%|          | 115/126 [00:01<00:00, 76.85it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 92%|          | 116/126 [00:01<00:00, 77.29it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 93%|          | 117/126 [00:01<00:00, 77.74it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 94%|          | 118/126 [00:01<00:00, 78.18it/s, loss=0.00526,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 185.31it/s]
Epoch 139: 94%|          | 119/126 [00:01<00:00, 78.62it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 95%|          | 120/126 [00:01<00:00, 79.07it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 96%|          | 121/126 [00:01<00:00, 79.51it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 97%|          | 122/126 [00:01<00:00, 79.97it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 98%|          | 123/126 [00:01<00:00, 80.45it/s, loss=0.00526,
v_num=4.31e+7]

```

```
Epoch 139: 98%|      | 124/126 [00:01<00:00, 80.93it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 99%|      | 125/126 [00:01<00:00, 81.41it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 100%|     | 126/126 [00:01<00:00, 81.89it/s, loss=0.00526,
v_num=4.31e+7]Mapping latent space...
Epoch 139: 100%|     | 126/126 [00:01<00:00, 80.26it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 139: 100%|     | 126/126 [00:01<00:00, 80.11it/s, loss=0.00526,
v_num=4.31e+7]Mapping latent space...
Epoch 139: 100%|     | 126/126 [00:01<00:00, 77.83it/s, loss=0.00526,
v_num=4.31e+7]
```

Training for latent_dim 3 done.

```
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_<train/validation/test>_epoch_end` instead.
    rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]
```

	Name	Type	Params
0	encoder	Sequential	8.8 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64

7		encoder.6		Linear		528
8		encoder.7		Tanh		0
9		encoder.8		BatchNorm1d		32
10		encoder.9		Linear		68
11		encoder.10		Tanh		0
12		encoder.11		BatchNorm1d		8
13		decoder		Sequential		8.9 K
14		decoder.0		Linear		80
15		decoder.1		Tanh		0
16		decoder.2		BatchNorm1d		32
17		decoder.3		Linear		544
18		decoder.4		Tanh		0
19		decoder.5		BatchNorm1d		64
20		decoder.6		Linear		2.1 K
21		decoder.7		Tanh		0
22		decoder.8		BatchNorm1d		128
23		decoder.9		Linear		5.9 K
24		decoder.10		Sigmoid		0

17.7 K Trainable params

0 Non-trainable params

17.7 K Total params

0.071 Total estimated model params size (MB)

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, val_dataloader 0, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

rank_zero_warn(

Loading all data...

Training on 10000 examples, validating on 2501 examples

Sanity Checking DataLoader 0: 100%| | 2/2 [00:00<00:00,

2.96it/s]Saving samples for epoch #0...

Mapping latent space...

Epoch 0: 2%| | 3/126 [00:00<00:07, 15.62it/s, loss=0.122, v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, train_dataloader, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

rank_zero_warn(

Epoch 0: 79%| | 100/126 [00:01<00:00, 81.08it/s, loss=0.0992, v_num=4.31e+7]

```

Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 0: 80%|          | 101/126 [00:01<00:00, 71.65it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 81%|          | 102/126 [00:01<00:00, 71.78it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 82%|          | 103/126 [00:01<00:00, 72.31it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 83%|          | 104/126 [00:01<00:00, 72.83it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 83%|          | 105/126 [00:01<00:00, 73.35it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 84%|          | 106/126 [00:01<00:00, 73.87it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 85%|          | 107/126 [00:01<00:00, 74.38it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 86%|          | 108/126 [00:01<00:00, 74.90it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 87%|          | 109/126 [00:01<00:00, 75.42it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 87%|          | 110/126 [00:01<00:00, 75.93it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 88%|          | 111/126 [00:01<00:00, 76.45it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 89%|          | 112/126 [00:01<00:00, 76.58it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 90%|          | 113/126 [00:01<00:00, 77.07it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 90%|          | 114/126 [00:01<00:00, 77.53it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 91%|          | 115/126 [00:01<00:00, 78.03it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 92%|          | 116/126 [00:01<00:00, 78.53it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 93%|          | 117/126 [00:01<00:00, 79.02it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 94%|          | 118/126 [00:01<00:00, 79.54it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 94%|          | 119/126 [00:01<00:00, 80.01it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 95%|          | 120/126 [00:01<00:00, 80.51it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 96%|          | 121/126 [00:01<00:00, 80.99it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 97%|          | 122/126 [00:01<00:00, 81.49it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 98%|          | 123/126 [00:01<00:00, 82.02it/s, loss=0.0992,

```

```

v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 82.55it/s, loss=0.0992,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 245.25it/s]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 83.08it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 83.60it/s, loss=0.0992,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 74.57it/s, loss=0.0992,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 74.39it/s, loss=0.0992,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 77.16it/s, loss=0.0937,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 69.06it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 69.25it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 69.76it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 83%|      | 104/126 [00:01<00:00, 70.27it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 70.79it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 71.25it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 71.76it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 72.27it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 72.78it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 73.28it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 73.79it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 74.29it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 74.79it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 75.28it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 75.81it/s, loss=0.0937,

```

```

v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 76.28it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 76.77it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 77.26it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 77.74it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 78.23it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 78.71it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 79.20it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 79.73it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 80.24it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 80.76it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 81.28it/s, loss=0.0937,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 79.89it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 79.81it/s, loss=0.0937,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|      | 100/126 [00:01<00:00, 90.54it/s, loss=0.0889,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|      | 101/126 [00:01<00:00, 78.18it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 81%|      | 102/126 [00:01<00:00, 78.16it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 82%|      | 103/126 [00:01<00:00, 78.68it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 83%|      | 104/126 [00:01<00:00, 79.19it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 83%|      | 105/126 [00:01<00:00, 79.70it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 84%|      | 106/126 [00:01<00:00, 80.21it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 85%|      | 107/126 [00:01<00:00, 80.74it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 86%|      | 108/126 [00:01<00:00, 81.22it/s, loss=0.0889,
v_num=4.31e+7]

```

```

Epoch 2: 87%|      | 109/126 [00:01<00:00, 81.76it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 87%|      | 110/126 [00:01<00:00, 82.29it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 88%|      | 111/126 [00:01<00:00, 82.85it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 89%|      | 112/126 [00:01<00:00, 83.37it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 90%|      | 113/126 [00:01<00:00, 83.90it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 90%|      | 114/126 [00:01<00:00, 84.41it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 91%|      | 115/126 [00:01<00:00, 84.94it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 92%|      | 116/126 [00:01<00:00, 85.45it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 93%|      | 117/126 [00:01<00:00, 85.97it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 94%|      | 118/126 [00:01<00:00, 86.48it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 94%|      | 119/126 [00:01<00:00, 87.04it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 95%|      | 120/126 [00:01<00:00, 87.53it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 96%|      | 121/126 [00:01<00:00, 88.06it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 88.57it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 89.13it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 89.70it/s, loss=0.0889,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 248.18it/s]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 90.26it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 90.83it/s, loss=0.0889,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 89.13it/s, loss=0.0889,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 89.03it/s, loss=0.0889,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 88.09it/s, loss=0.0818,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 75.87it/s, loss=0.0818,

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v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 75.99it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 76.52it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 77.05it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 77.57it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 78.10it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 78.63it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 79.15it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 79.69it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 80.17it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 80.70it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 81.22it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 81.74it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 82.26it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 82.78it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 83.30it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 83.82it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 84.33it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 84.84it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 85.35it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 85.87it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 86.38it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 86.93it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 87.49it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 88.04it/s, loss=0.0818,

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v_num=4.31e+7]
Epoch 3: 100%|      | 126/126 [00:01<00:00, 88.60it/s, loss=0.0818,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|      | 126/126 [00:01<00:00, 86.96it/s, loss=0.0818,
v_num=4.31e+7]
Epoch 3: 100%|      | 126/126 [00:01<00:00, 86.86it/s, loss=0.0818,
v_num=4.31e+7]Mapping latent space...
Epoch 4:  79%|      | 100/126 [00:01<00:00, 89.44it/s, loss=0.0737,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4:  80%|      | 101/126 [00:01<00:00, 76.65it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  81%|      | 102/126 [00:01<00:00, 76.61it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  82%|      | 103/126 [00:01<00:00, 77.12it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  83%|      | 104/126 [00:01<00:00, 77.63it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  83%|      | 105/126 [00:01<00:00, 78.15it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  84%|      | 106/126 [00:01<00:00, 78.66it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  85%|      | 107/126 [00:01<00:00, 79.17it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  86%|      | 108/126 [00:01<00:00, 79.67it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  87%|      | 109/126 [00:01<00:00, 80.18it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  87%|      | 110/126 [00:01<00:00, 80.69it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  88%|      | 111/126 [00:01<00:00, 81.19it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  89%|      | 112/126 [00:01<00:00, 81.66it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  90%|      | 113/126 [00:01<00:00, 82.16it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  90%|      | 114/126 [00:01<00:00, 82.65it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  91%|      | 115/126 [00:01<00:00, 83.15it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  92%|      | 116/126 [00:01<00:00, 83.63it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  93%|      | 117/126 [00:01<00:00, 84.13it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4:  94%|      | 118/126 [00:01<00:00, 84.61it/s, loss=0.0737,
v_num=4.31e+7]

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Epoch 4: 94%|      | 119/126 [00:01<00:00, 85.10it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 85.58it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 86.06it/s, loss=0.0737,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 217.94it/s]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 86.54it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 87.04it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 87.54it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 88.05it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 88.56it/s, loss=0.0737,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 86.72it/s, loss=0.0737,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 86.60it/s, loss=0.0737,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 71.65it/s, loss=0.0633,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 64.28it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 81%|      | 102/126 [00:01<00:00, 64.30it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 82%|      | 103/126 [00:01<00:00, 64.80it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 83%|      | 104/126 [00:01<00:00, 65.28it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 83%|      | 105/126 [00:01<00:00, 65.78it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 84%|      | 106/126 [00:01<00:00, 66.25it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 85%|      | 107/126 [00:01<00:00, 66.75it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 86%|      | 108/126 [00:01<00:00, 67.22it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 87%|      | 109/126 [00:01<00:00, 67.72it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 87%|      | 110/126 [00:01<00:00, 68.19it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 88%|      | 111/126 [00:01<00:00, 68.68it/s, loss=0.0633,
v_num=4.31e+7]

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Epoch 5: 89%|      | 112/126 [00:01<00:00, 69.15it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 90%|      | 113/126 [00:01<00:00, 69.65it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 90%|      | 114/126 [00:01<00:00, 70.08it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 91%|      | 115/126 [00:01<00:00, 70.56it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 92%|      | 116/126 [00:01<00:00, 71.02it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 93%|      | 117/126 [00:01<00:00, 71.51it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 94%|      | 118/126 [00:01<00:00, 71.97it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 94%|      | 119/126 [00:01<00:00, 72.46it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 95%|      | 120/126 [00:01<00:00, 72.91it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 96%|      | 121/126 [00:01<00:00, 73.39it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 97%|      | 122/126 [00:01<00:00, 73.85it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 98%|      | 123/126 [00:01<00:00, 74.34it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 74.82it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 75.31it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 75.79it/s, loss=0.0633,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 74.58it/s, loss=0.0633,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 74.51it/s, loss=0.0633,
v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%|      | 100/126 [00:01<00:00, 76.63it/s, loss=0.0512,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 66.92it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 67.23it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 67.63it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 68.04it/s, loss=0.0512,
v_num=4.31e+7]

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Epoch 6: 83%|      | 105/126 [00:01<00:00, 68.44it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 68.85it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 69.25it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 69.66it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 70.07it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 70.49it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 70.91it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 89%|      | 112/126 [00:01<00:00, 71.33it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 71.75it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 72.17it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 72.60it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 72.99it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 93%|      | 117/126 [00:01<00:00, 73.42it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 73.85it/s, loss=0.0512,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.74it/s]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 74.27it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 95%|      | 120/126 [00:01<00:00, 74.70it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 75.13it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 75.57it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 76.02it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 76.49it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 76.94it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 77.41it/s, loss=0.0512,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 75.63it/s, loss=0.0512,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 75.52it/s, loss=0.0512,

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v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 69.25it/s, loss=0.0406,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 61.57it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 61.72it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 62.09it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 62.48it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 62.86it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 63.25it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 63.64it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 64.02it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 64.41it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 64.80it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 65.20it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 65.59it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 65.99it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 66.38it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 66.78it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 67.18it/s, loss=0.0406,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.12it/s]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 67.57it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 67.94it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 68.34it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 68.74it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 69.14it/s, loss=0.0406,

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v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 69.54it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 69.97it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 70.40it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 70.83it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 71.27it/s, loss=0.0406,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 70.03it/s, loss=0.0406,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 69.95it/s, loss=0.0406,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 73.13it/s, loss=0.0302,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 65.15it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 65.26it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 65.77it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 66.25it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 66.75it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 67.23it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 67.73it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 68.21it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 68.71it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 69.18it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 69.68it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 70.15it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 70.64it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 71.11it/s, loss=0.0302,
v_num=4.31e+7]

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Epoch 8: 91%|      | 115/126 [00:01<00:00, 71.60it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 72.07it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 72.55it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 73.02it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 73.49it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 73.93it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 74.41it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 74.87it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 75.37it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 75.86it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 76.35it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 76.84it/s, loss=0.0302,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 75.55it/s, loss=0.0302,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 75.48it/s, loss=0.0302,
v_num=4.31e+7]Mapping latent space...

Epoch 9: 79%|      | 100/126 [00:01<00:00, 75.16it/s, loss=0.023,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|      | 101/126 [00:01<00:00, 66.89it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 81%|      | 102/126 [00:01<00:00, 67.03it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 82%|      | 103/126 [00:01<00:00, 67.55it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 83%|      | 104/126 [00:01<00:00, 68.04it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 83%|      | 105/126 [00:01<00:00, 68.56it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 84%|      | 106/126 [00:01<00:00, 69.05it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 85%|      | 107/126 [00:01<00:00, 69.55it/s, loss=0.023,
v_num=4.31e+7]

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Epoch 9: 86%|      | 108/126 [00:01<00:00, 70.05it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 87%|      | 109/126 [00:01<00:00, 70.55it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 87%|      | 110/126 [00:01<00:00, 71.03it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 88%|      | 111/126 [00:01<00:00, 71.54it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 89%|      | 112/126 [00:01<00:00, 72.02it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 90%|      | 113/126 [00:01<00:00, 72.53it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 90%|      | 114/126 [00:01<00:00, 73.00it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 91%|      | 115/126 [00:01<00:00, 73.49it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 92%|      | 116/126 [00:01<00:00, 73.97it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 93%|      | 117/126 [00:01<00:00, 74.46it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 94%|      | 118/126 [00:01<00:00, 74.94it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 94%|      | 119/126 [00:01<00:00, 75.42it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 95%|      | 120/126 [00:01<00:00, 75.90it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 96%|      | 121/126 [00:01<00:00, 76.38it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 97%|      | 122/126 [00:01<00:00, 76.84it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 98%|      | 123/126 [00:01<00:00, 77.34it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 77.84it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 78.35it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 78.86it/s, loss=0.023,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 77.53it/s, loss=0.023,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 77.45it/s, loss=0.023,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 90.07it/s, loss=0.0173,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|     | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|     | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 78.03it/s, loss=0.0173,

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v_num=4.31e+7]
Epoch 10: 81%|      | 102/126 [00:01<00:00, 78.21it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 82%|      | 103/126 [00:01<00:00, 78.66it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 83%|      | 104/126 [00:01<00:00, 79.13it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 83%|      | 105/126 [00:01<00:00, 79.58it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 84%|      | 106/126 [00:01<00:00, 80.04it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 85%|      | 107/126 [00:01<00:00, 80.50it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 86%|      | 108/126 [00:01<00:00, 80.96it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 87%|      | 109/126 [00:01<00:00, 81.42it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 87%|      | 110/126 [00:01<00:00, 81.88it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 88%|      | 111/126 [00:01<00:00, 82.34it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 89%|      | 112/126 [00:01<00:00, 82.80it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 90%|      | 113/126 [00:01<00:00, 83.27it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 90%|      | 114/126 [00:01<00:00, 83.74it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 91%|      | 115/126 [00:01<00:00, 84.20it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 92%|      | 116/126 [00:01<00:00, 84.67it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 93%|      | 117/126 [00:01<00:00, 85.14it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 85.61it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 86.08it/s, loss=0.0173,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 196.42it/s]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 86.55it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 87.02it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 87.50it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 88.01it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 88.52it/s, loss=0.0173,
v_num=4.31e+7]

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Epoch 10: 99%|      | 125/126 [00:01<00:00, 89.03it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 89.54it/s, loss=0.0173,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 87.63it/s, loss=0.0173,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 87.51it/s, loss=0.0173,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 79.91it/s, loss=0.0147,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 69.60it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 69.85it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 70.32it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 70.79it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 71.25it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 71.72it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 72.19it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 72.65it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 73.12it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 73.59it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 74.06it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 74.53it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 75.00it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 75.46it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 75.93it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 76.39it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 76.85it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 77.31it/s, loss=0.0147,

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v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 77.76it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 78.21it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 78.66it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 79.12it/s, loss=0.0147,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 222.76it/s]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 79.59it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 80.07it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 80.55it/s, loss=0.0147,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 81.03it/s, loss=0.0147,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 77.19it/s, loss=0.0147,
v_num=4.31e+7]

Epoch 11: 100%|     | 126/126 [00:01<00:00, 77.04it/s, loss=0.0147,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 79%|      | 100/126 [00:01<00:00, 67.85it/s, loss=0.0116,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 60.29it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 60.28it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 82%|      | 103/126 [00:01<00:00, 60.72it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 83%|      | 104/126 [00:01<00:00, 61.16it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 83%|      | 105/126 [00:01<00:00, 61.60it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 84%|      | 106/126 [00:01<00:00, 62.04it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 85%|      | 107/126 [00:01<00:00, 62.48it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 86%|      | 108/126 [00:01<00:00, 62.92it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 87%|      | 109/126 [00:01<00:00, 63.35it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 87%|      | 110/126 [00:01<00:00, 63.78it/s, loss=0.0116,
v_num=4.31e+7]

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Epoch 12: 88%|      | 111/126 [00:01<00:00, 64.22it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 89%|      | 112/126 [00:01<00:00, 64.65it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 90%|      | 113/126 [00:01<00:00, 65.08it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 90%|      | 114/126 [00:01<00:00, 65.51it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 91%|      | 115/126 [00:01<00:00, 65.94it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 92%|      | 116/126 [00:01<00:00, 66.38it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 93%|      | 117/126 [00:01<00:00, 66.80it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 94%|      | 118/126 [00:01<00:00, 67.23it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 94%|      | 119/126 [00:01<00:00, 67.65it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 95%|      | 120/126 [00:01<00:00, 68.07it/s, loss=0.0116,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.85it/s]
Epoch 12: 96%|      | 121/126 [00:01<00:00, 68.48it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 97%|      | 122/126 [00:01<00:00, 68.90it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 69.34it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 69.77it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 70.21it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 70.64it/s, loss=0.0116,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|     | 126/126 [00:01<00:00, 69.36it/s, loss=0.0116,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 69.28it/s, loss=0.0116,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 73.84it/s, loss=0.00913,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13: 80%|      | 101/126 [00:01<00:00, 65.04it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 81%|      | 102/126 [00:01<00:00, 65.14it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 82%|      | 103/126 [00:01<00:00, 65.53it/s, loss=0.00913,
v_num=4.31e+7]

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Epoch 13: 83%|      | 104/126 [00:01<00:00, 65.93it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 83%|      | 105/126 [00:01<00:00, 66.33it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 84%|      | 106/126 [00:01<00:00, 66.73it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 85%|      | 107/126 [00:01<00:00, 67.14it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 86%|      | 108/126 [00:01<00:00, 67.53it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 87%|      | 109/126 [00:01<00:00, 67.93it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 87%|      | 110/126 [00:01<00:00, 68.34it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 88%|      | 111/126 [00:01<00:00, 68.75it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 89%|      | 112/126 [00:01<00:00, 69.15it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 90%|      | 113/126 [00:01<00:00, 69.56it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 90%|      | 114/126 [00:01<00:00, 69.98it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 91%|      | 115/126 [00:01<00:00, 70.40it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 92%|      | 116/126 [00:01<00:00, 70.82it/s, loss=0.00913,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.95it/s]
Epoch 13: 93%|      | 117/126 [00:01<00:00, 71.22it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 94%|      | 118/126 [00:01<00:00, 71.64it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 94%|      | 119/126 [00:01<00:00, 72.03it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 72.32it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 72.64it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 72.97it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 73.33it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 73.70it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 74.06it/s, loss=0.00913,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 74.45it/s, loss=0.00913,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 72.90it/s, loss=0.00913,

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v_num=4.31e+7]
Epoch 13: 100%|      | 126/126 [00:01<00:00, 72.78it/s, loss=0.00913,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 76.87it/s, loss=0.00898,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 67.77it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 68.08it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 68.48it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 68.88it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 69.28it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 69.69it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 70.09it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 70.50it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 70.91it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 71.33it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 71.75it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 72.17it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 90%|      | 113/126 [00:01<00:00, 72.59it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 73.02it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 73.45it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 73.89it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 74.32it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 74.76it/s, loss=0.00898,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.51it/s]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 75.18it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 75.62it/s, loss=0.00898,

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v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 76.05it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 76.50it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 76.96it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 77.42it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 77.88it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 78.34it/s, loss=0.00898,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 76.87it/s, loss=0.00898,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 76.77it/s, loss=0.00898,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 76.45it/s, loss=0.00861,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 66.93it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 67.05it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 67.53it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 68.01it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 83%|      | 105/126 [00:01<00:00, 68.49it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 84%|      | 106/126 [00:01<00:00, 68.96it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 69.44it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 69.90it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 70.37it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 70.84it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 88%|      | 111/126 [00:01<00:00, 71.31it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 71.78it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 72.24it/s, loss=0.00861,

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v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 72.71it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 73.17it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 73.63it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 74.09it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 74.54it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 75.00it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 75.45it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 75.90it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 76.35it/s, loss=0.00861,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.20it/s]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 76.82it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 77.29it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 77.76it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 78.23it/s, loss=0.00861,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 76.78it/s, loss=0.00861,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 76.69it/s, loss=0.00861,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|      | 100/126 [00:01<00:00, 73.78it/s, loss=0.00708,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|      | 101/126 [00:01<00:00, 65.44it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 81%|      | 102/126 [00:01<00:00, 65.30it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 82%|      | 103/126 [00:01<00:00, 65.71it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 83%|      | 104/126 [00:01<00:00, 66.12it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 83%|      | 105/126 [00:01<00:00, 66.52it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 84%|      | 106/126 [00:01<00:00, 66.93it/s, loss=0.00708,

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v_num=4.31e+7]
Epoch 16: 85%|      | 107/126 [00:01<00:00, 67.34it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 86%|      | 108/126 [00:01<00:00, 67.74it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 87%|      | 109/126 [00:01<00:00, 68.15it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 87%|      | 110/126 [00:01<00:00, 68.56it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 88%|      | 111/126 [00:01<00:00, 68.97it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 89%|      | 112/126 [00:01<00:00, 69.39it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 90%|      | 113/126 [00:01<00:00, 69.80it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 90%|      | 114/126 [00:01<00:00, 70.22it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 91%|      | 115/126 [00:01<00:00, 70.63it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 92%|      | 116/126 [00:01<00:00, 71.05it/s, loss=0.00708,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 163.62it/s]
Epoch 16: 93%|      | 117/126 [00:01<00:00, 71.46it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 94%|      | 118/126 [00:01<00:00, 71.88it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 94%|      | 119/126 [00:01<00:00, 72.30it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 95%|      | 120/126 [00:01<00:00, 72.72it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 96%|      | 121/126 [00:01<00:00, 73.14it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 97%|      | 122/126 [00:01<00:00, 73.57it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 74.01it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 74.46it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 74.91it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 75.36it/s, loss=0.00708,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|     | 126/126 [00:01<00:00, 74.05it/s, loss=0.00708,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 73.96it/s, loss=0.00708,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 71.27it/s, loss=0.00728,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|          | 101/126 [00:01<00:00, 62.73it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 81%|          | 102/126 [00:01<00:00, 62.89it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 82%|          | 103/126 [00:01<00:00, 63.29it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 83%|          | 104/126 [00:01<00:00, 63.69it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 83%|          | 105/126 [00:01<00:00, 64.08it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 84%|          | 106/126 [00:01<00:00, 64.47it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 85%|          | 107/126 [00:01<00:00, 64.86it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 86%|          | 108/126 [00:01<00:00, 65.27it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 87%|          | 109/126 [00:01<00:00, 65.67it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 87%|          | 110/126 [00:01<00:00, 66.08it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 88%|          | 111/126 [00:01<00:00, 66.48it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 89%|          | 112/126 [00:01<00:00, 66.89it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 90%|          | 113/126 [00:01<00:00, 67.30it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 90%|          | 114/126 [00:01<00:00, 67.71it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 91%|          | 115/126 [00:01<00:00, 68.12it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 92%|          | 116/126 [00:01<00:00, 68.54it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 93%|          | 117/126 [00:01<00:00, 68.95it/s, loss=0.00728,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 176.36it/s]
Epoch 17: 94%|          | 118/126 [00:01<00:00, 69.37it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 94%|          | 119/126 [00:01<00:00, 69.78it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 95%|          | 120/126 [00:01<00:00, 70.20it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 96%|          | 121/126 [00:01<00:00, 70.62it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 97%|          | 122/126 [00:01<00:00, 71.04it/s, loss=0.00728,
v_num=4.31e+7]

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Epoch 17: 98%|      | 123/126 [00:01<00:00, 71.48it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 71.92it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 72.36it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 72.81it/s, loss=0.00728,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 71.50it/s, loss=0.00728,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 71.43it/s, loss=0.00728,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 75.42it/s, loss=0.00628,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 67.12it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 67.24it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 67.76it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 68.25it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 68.77it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 69.26it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 69.79it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 70.28it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 70.79it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 71.28it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 71.79it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 72.28it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 72.79it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 73.28it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 73.78it/s, loss=0.00628,
v_num=4.31e+7]

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Epoch 18: 92%|      | 116/126 [00:01<00:00, 74.27it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 74.75it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 75.24it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 75.73it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 76.22it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 76.71it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 77.19it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 77.70it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 78.21it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 78.72it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 79.23it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 77.93it/s, loss=0.00628,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 77.85it/s, loss=0.00628,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 81.69it/s, loss=0.00623,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|      | 101/126 [00:01<00:00, 72.55it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 81%|      | 102/126 [00:01<00:00, 72.65it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 82%|      | 103/126 [00:01<00:00, 73.20it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 83%|      | 104/126 [00:01<00:00, 73.72it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 83%|      | 105/126 [00:01<00:00, 74.25it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 84%|      | 106/126 [00:01<00:00, 74.78it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 85%|      | 107/126 [00:01<00:00, 75.32it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 86%|      | 108/126 [00:01<00:00, 75.83it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 87%|      | 109/126 [00:01<00:00, 76.37it/s, loss=0.00623,

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v_num=4.31e+7]
Epoch 19: 87%|      | 110/126 [00:01<00:00, 76.89it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 88%|      | 111/126 [00:01<00:00, 77.42it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 89%|      | 112/126 [00:01<00:00, 77.92it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 90%|      | 113/126 [00:01<00:00, 78.45it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 90%|      | 114/126 [00:01<00:00, 78.96it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 91%|      | 115/126 [00:01<00:00, 79.48it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 92%|      | 116/126 [00:01<00:00, 80.00it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 93%|      | 117/126 [00:01<00:00, 80.52it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 94%|      | 118/126 [00:01<00:00, 81.03it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 94%|      | 119/126 [00:01<00:00, 81.54it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 95%|      | 120/126 [00:01<00:00, 82.04it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 96%|      | 121/126 [00:01<00:00, 82.54it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 97%|      | 122/126 [00:01<00:00, 83.05it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 98%|      | 123/126 [00:01<00:00, 83.59it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 98%|      | 124/126 [00:01<00:00, 84.13it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 99%|      | 125/126 [00:01<00:00, 84.66it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 85.20it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 83.62it/s, loss=0.00623,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 83.53it/s, loss=0.00623,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 70.66it/s, loss=0.00586,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|      | 101/126 [00:01<00:00, 63.20it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 20: 81%|      | 102/126 [00:01<00:00, 63.37it/s, loss=0.00586,
v_num=4.31e+7]

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Epoch 20: 82%| | 103/126 [00:01<00:00, 63.84it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 83%| | 104/126 [00:01<00:00, 64.30it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 83%| | 105/126 [00:01<00:00, 64.77it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 84%| | 106/126 [00:01<00:00, 65.23it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 85%| | 107/126 [00:01<00:00, 65.69it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 86%| | 108/126 [00:01<00:00, 66.14it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 87%| | 109/126 [00:01<00:00, 66.60it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 87%| | 110/126 [00:01<00:00, 67.05it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 88%| | 111/126 [00:01<00:00, 67.50it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 89%| | 112/126 [00:01<00:00, 67.96it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 90%| | 113/126 [00:01<00:00, 68.41it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 90%| | 114/126 [00:01<00:00, 68.86it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 91%| | 115/126 [00:01<00:00, 69.31it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 92%| | 116/126 [00:01<00:00, 69.75it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 93%| | 117/126 [00:01<00:00, 70.20it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 94%| | 118/126 [00:01<00:00, 70.64it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 94%| | 119/126 [00:01<00:00, 71.05it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 95%| | 120/126 [00:01<00:00, 71.35it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 96%| | 121/126 [00:01<00:00, 71.67it/s, loss=0.00586, v_num=4.31e+7]
 Validation DataLoader 0: 85%| | 22/26 [00:00<00:00, 211.92it/s]
 Epoch 20: 97%| | 122/126 [00:01<00:00, 72.00it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 98%| | 123/126 [00:01<00:00, 72.36it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 98%| | 124/126 [00:01<00:00, 72.73it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 99%| | 125/126 [00:01<00:00, 73.10it/s, loss=0.00586, v_num=4.31e+7]
 Epoch 20: 100%| | 126/126 [00:01<00:00, 73.49it/s, loss=0.00586, v_num=4.31e+7]

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v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|      | 126/126 [00:01<00:00, 72.03it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 20: 100%|      | 126/126 [00:01<00:00, 71.93it/s, loss=0.00586,
v_num=4.31e+7]Mapping latent space...

Epoch 21: 79%|      | 100/126 [00:01<00:00, 66.12it/s, loss=0.00533,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 58.90it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 59.12it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 59.51it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 59.89it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 60.27it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 60.65it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 61.04it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 61.43it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 61.82it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 87%|      | 110/126 [00:01<00:00, 62.22it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 62.61it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 63.02it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 63.42it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 63.82it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 64.23it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 64.63it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 65.04it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 65.44it/s, loss=0.00533,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.50it/s]

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Epoch 21: 94%|      | 119/126 [00:01<00:00, 65.84it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 66.25it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 66.65it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 67.06it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 67.48it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 67.91it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 68.33it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 68.76it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 67.63it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 67.56it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 72.07it/s, loss=0.006,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 63.83it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 64.09it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 64.55it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 65.00it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 65.45it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 65.91it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 66.35it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 66.80it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 67.24it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 67.70it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 68.14it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 68.59it/s, loss=0.006,

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v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 69.03it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 69.47it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 69.90it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 70.34it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 70.78it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 71.21it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 71.64it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 72.07it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 72.49it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 72.93it/s, loss=0.006,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.33it/s]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 73.37it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 73.82it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 74.28it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 74.73it/s, loss=0.006,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 73.42it/s, loss=0.006,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 73.34it/s, loss=0.006,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|      | 100/126 [00:01<00:00, 66.97it/s, loss=0.0056,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|      | 101/126 [00:01<00:00, 59.60it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 81%|      | 102/126 [00:01<00:00, 59.86it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 82%|      | 103/126 [00:01<00:00, 60.24it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 83%|      | 104/126 [00:01<00:00, 60.62it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 83%|      | 105/126 [00:01<00:00, 61.01it/s, loss=0.0056,

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v_num=4.31e+7]
Epoch 23: 84%|      | 106/126 [00:01<00:00, 61.39it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 85%|      | 107/126 [00:01<00:00, 61.78it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 86%|      | 108/126 [00:01<00:00, 62.16it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 87%|      | 109/126 [00:01<00:00, 62.54it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 87%|      | 110/126 [00:01<00:00, 62.94it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 88%|      | 111/126 [00:01<00:00, 63.33it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 89%|      | 112/126 [00:01<00:00, 63.73it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 90%|      | 113/126 [00:01<00:00, 64.13it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 90%|      | 114/126 [00:01<00:00, 64.52it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 91%|      | 115/126 [00:01<00:00, 64.92it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 92%|      | 116/126 [00:01<00:00, 65.33it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 93%|      | 117/126 [00:01<00:00, 65.73it/s, loss=0.0056,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.94it/s]
Epoch 23: 94%|      | 118/126 [00:01<00:00, 66.12it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 94%|      | 119/126 [00:01<00:00, 66.53it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 95%|      | 120/126 [00:01<00:00, 66.93it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 96%|      | 121/126 [00:01<00:00, 67.34it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 97%|      | 122/126 [00:01<00:00, 67.75it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 68.17it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 68.60it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 69.02it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 69.45it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 68.30it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 68.19it/s, loss=0.0056,

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v_num=4.31e+7]Mapping latent space...
Epoch 24: 79%|          | 100/126 [00:01<00:00, 67.47it/s, loss=0.00617,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|          | 101/126 [00:01<00:00, 59.72it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 81%|          | 102/126 [00:01<00:00, 59.70it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 82%|          | 103/126 [00:01<00:00, 60.14it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 83%|          | 104/126 [00:01<00:00, 60.58it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 83%|          | 105/126 [00:01<00:00, 61.02it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 84%|          | 106/126 [00:01<00:00, 61.46it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 85%|          | 107/126 [00:01<00:00, 61.90it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 86%|          | 108/126 [00:01<00:00, 62.33it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 87%|          | 109/126 [00:01<00:00, 62.76it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 87%|          | 110/126 [00:01<00:00, 63.19it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 88%|          | 111/126 [00:01<00:00, 63.62it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 89%|          | 112/126 [00:01<00:00, 64.05it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 90%|          | 113/126 [00:01<00:00, 64.49it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 90%|          | 114/126 [00:01<00:00, 64.91it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 91%|          | 115/126 [00:01<00:00, 65.34it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 92%|          | 116/126 [00:01<00:00, 65.76it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 93%|          | 117/126 [00:01<00:00, 66.18it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 94%|          | 118/126 [00:01<00:00, 66.60it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 94%|          | 119/126 [00:01<00:00, 67.02it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 95%|          | 120/126 [00:01<00:00, 67.44it/s, loss=0.00617,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 207.25it/s]
Epoch 24: 96%|          | 121/126 [00:01<00:00, 67.85it/s, loss=0.00617,

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v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 68.27it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 68.71it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 69.14it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 69.58it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 70.01it/s, loss=0.00617,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 68.84it/s, loss=0.00617,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 68.69it/s, loss=0.00617,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 78.55it/s, loss=0.00559,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 69.31it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 69.34it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 69.87it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 70.38it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 70.90it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 71.41it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 71.93it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 72.43it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 72.94it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 73.45it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 73.97it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 74.47it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 74.97it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 75.48it/s, loss=0.00559,
v_num=4.31e+7]

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Epoch 25: 91%|      | 115/126 [00:01<00:00, 75.98it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 76.48it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 76.98it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 77.47it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 77.95it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 78.44it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 78.93it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 79.42it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 79.94it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 80.45it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 80.97it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 81.48it/s, loss=0.00559,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 80.00it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 79.92it/s, loss=0.00559,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 75.59it/s, loss=0.00568,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|      | 101/126 [00:01<00:00, 66.06it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 81%|      | 102/126 [00:01<00:00, 65.32it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 82%|      | 103/126 [00:01<00:00, 65.75it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 83%|      | 104/126 [00:01<00:00, 66.20it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 83%|      | 105/126 [00:01<00:00, 66.64it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 84%|      | 106/126 [00:01<00:00, 67.10it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 85%|      | 107/126 [00:01<00:00, 67.54it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 86%|      | 108/126 [00:01<00:00, 67.98it/s, loss=0.00568,

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v_num=4.31e+7]
Epoch 26: 87%|      | 109/126 [00:01<00:00, 68.43it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 87%|      | 110/126 [00:01<00:00, 68.88it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 88%|      | 111/126 [00:01<00:00, 69.32it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 89%|      | 112/126 [00:01<00:00, 69.76it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 90%|      | 113/126 [00:01<00:00, 70.20it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 90%|      | 114/126 [00:01<00:00, 70.64it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 91%|      | 115/126 [00:01<00:00, 71.08it/s, loss=0.00568,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 156.13it/s]
Epoch 26: 92%|      | 116/126 [00:01<00:00, 71.51it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 93%|      | 117/126 [00:01<00:00, 71.94it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 94%|      | 118/126 [00:01<00:00, 72.37it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 94%|      | 119/126 [00:01<00:00, 72.80it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 95%|      | 120/126 [00:01<00:00, 73.23it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 96%|      | 121/126 [00:01<00:00, 73.66it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 97%|      | 122/126 [00:01<00:00, 74.10it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 98%|      | 123/126 [00:01<00:00, 74.55it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 98%|      | 124/126 [00:01<00:00, 75.00it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 75.46it/s, loss=0.00568,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 75.92it/s, loss=0.00568,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 74.39it/s, loss=0.00568,
v_num=4.31e+7]

Epoch 26: 100%|     | 126/126 [00:01<00:00, 74.24it/s, loss=0.00568,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 79%|      | 100/126 [00:01<00:00, 72.51it/s, loss=0.00494,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 27: 80%	101/126 [00:01<00:00, 65.22it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 81%	102/126 [00:01<00:00, 65.31it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 82%	103/126 [00:01<00:00, 65.81it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 83%	104/126 [00:01<00:00, 66.29it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 83%	105/126 [00:01<00:00, 66.80it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 84%	106/126 [00:01<00:00, 67.27it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 85%	107/126 [00:01<00:00, 67.78it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 86%	108/126 [00:01<00:00, 68.25it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 87%	109/126 [00:01<00:00, 68.75it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 87%	110/126 [00:01<00:00, 69.22it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 88%	111/126 [00:01<00:00, 69.71it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 89%	112/126 [00:01<00:00, 70.19it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 90%	113/126 [00:01<00:00, 70.68it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 90%	114/126 [00:01<00:00, 71.15it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 91%	115/126 [00:01<00:00, 71.64it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 92%	116/126 [00:01<00:00, 72.10it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 93%	117/126 [00:01<00:00, 72.60it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 94%	118/126 [00:01<00:00, 73.06it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 94%	119/126 [00:01<00:00, 73.54it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 95%	120/126 [00:01<00:00, 74.00it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 96%	121/126 [00:01<00:00, 74.48it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 97%	122/126 [00:01<00:00, 74.94it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 98%	123/126 [00:01<00:00, 75.44it/s, loss=0.00494,
v_num=4.31e+7]	
Epoch 27: 98%	124/126 [00:01<00:00, 75.93it/s, loss=0.00494,
v_num=4.31e+7]	

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Epoch 27: 99%|      | 125/126 [00:01<00:00, 76.42it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 76.92it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 75.67it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 75.60it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 81.07it/s, loss=0.00556,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 71.77it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 71.67it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 72.22it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 72.74it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 73.29it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 73.81it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 74.36it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 74.86it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 75.38it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 75.88it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 76.42it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 76.92it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 77.44it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 77.95it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 78.46it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 78.97it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 79.47it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 79.97it/s, loss=0.00556,

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v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 80.49it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 80.97it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 81.47it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 81.97it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 82.50it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 83.03it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 83.56it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 84.10it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 82.56it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 82.47it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 69.42it/s, loss=0.00578,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 62.53it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 62.67it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 63.17it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 83%|      | 104/126 [00:01<00:00, 63.64it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 64.13it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 64.60it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 65.09it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 65.56it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 87%|      | 109/126 [00:01<00:00, 66.05it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 66.52it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 67.01it/s, loss=0.00578,
v_num=4.31e+7]

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Epoch 29: 89%|      | 112/126 [00:01<00:00, 67.48it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 67.96it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 68.43it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 68.92it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 69.38it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 69.86it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 70.32it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 70.79it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 71.24it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 71.70it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 72.16it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 72.64it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 73.12it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 73.60it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 74.08it/s, loss=0.00578,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 72.87it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 72.80it/s, loss=0.00578,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 80.13it/s, loss=0.00526,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 70.92it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 71.09it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 71.61it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 72.14it/s, loss=0.00526,
v_num=4.31e+7]

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Epoch 30: 83%| | 105/126 [00:01<00:00, 72.66it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 84%| | 106/126 [00:01<00:00, 73.18it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 85%| | 107/126 [00:01<00:00, 73.70it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 86%| | 108/126 [00:01<00:00, 74.21it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 87%| | 109/126 [00:01<00:00, 74.73it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 87%| | 110/126 [00:01<00:00, 75.24it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 88%| | 111/126 [00:01<00:00, 75.77it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 89%| | 112/126 [00:01<00:00, 76.27it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 90%| | 113/126 [00:01<00:00, 76.79it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 90%| | 114/126 [00:01<00:00, 77.29it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 91%| | 115/126 [00:01<00:00, 77.80it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 92%| | 116/126 [00:01<00:00, 78.31it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 93%| | 117/126 [00:01<00:00, 78.81it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 94%| | 118/126 [00:01<00:00, 79.32it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 94%| | 119/126 [00:01<00:00, 79.82it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 95%| | 120/126 [00:01<00:00, 80.32it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 96%| | 121/126 [00:01<00:00, 80.81it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 97%| | 122/126 [00:01<00:00, 81.31it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 98%| | 123/126 [00:01<00:00, 81.84it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 98%| | 124/126 [00:01<00:00, 82.36it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 99%| | 125/126 [00:01<00:00, 82.89it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 100%| | 126/126 [00:01<00:00, 83.42it/s, loss=0.00526, v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%| | 126/126 [00:01<00:00, 81.90it/s, loss=0.00526, v_num=4.31e+7]
Epoch 30: 100%| | 126/126 [00:01<00:00, 81.82it/s, loss=0.00526, v_num=4.31e+7]Mapping latent space...

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Epoch 31: 79%|          | 100/126 [00:01<00:00, 91.02it/s, loss=0.00543,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|          | 101/126 [00:01<00:00, 78.45it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 81%|          | 102/126 [00:01<00:00, 78.42it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 82%|          | 103/126 [00:01<00:00, 78.97it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 83%|          | 104/126 [00:01<00:00, 79.51it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 83%|          | 105/126 [00:01<00:00, 80.06it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 84%|          | 106/126 [00:01<00:00, 80.61it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 85%|          | 107/126 [00:01<00:00, 81.15it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 86%|          | 108/126 [00:01<00:00, 81.69it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 87%|          | 109/126 [00:01<00:00, 82.24it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 87%|          | 110/126 [00:01<00:00, 82.77it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 88%|          | 111/126 [00:01<00:00, 83.32it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 89%|          | 112/126 [00:01<00:00, 83.85it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 90%|          | 113/126 [00:01<00:00, 84.40it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 90%|          | 114/126 [00:01<00:00, 84.93it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 91%|          | 115/126 [00:01<00:00, 85.47it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 92%|          | 116/126 [00:01<00:00, 86.01it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 93%|          | 117/126 [00:01<00:00, 86.54it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 94%|          | 118/126 [00:01<00:00, 87.07it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 94%|          | 119/126 [00:01<00:00, 87.60it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 95%|          | 120/126 [00:01<00:00, 88.13it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 96%|          | 121/126 [00:01<00:00, 88.65it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 97%|          | 122/126 [00:01<00:00, 89.18it/s, loss=0.00543,

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v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 89.75it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 90.31it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 90.87it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 91.44it/s, loss=0.00543,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 89.73it/s, loss=0.00543,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 89.62it/s, loss=0.00543,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 89.28it/s, loss=0.00506,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 78.33it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 78.41it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 78.96it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 79.52it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 80.08it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 80.62it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 81.18it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 81.72it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 82.28it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 82.82it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 83.37it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 89%|      | 112/126 [00:01<00:00, 83.91it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 84.45it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 84.99it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 85.53it/s, loss=0.00506,
v_num=4.31e+7]

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Epoch 32: 92%|      | 116/126 [00:01<00:00, 86.07it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 86.61it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 87.14it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 87.68it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 88.21it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 88.74it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 89.28it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 89.84it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 90.41it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 90.98it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 91.55it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 89.78it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 89.68it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...

Epoch 33: 79%|      | 100/126 [00:01<00:00, 88.72it/s, loss=0.00586,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|      | 101/126 [00:01<00:00, 78.09it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 81%|      | 102/126 [00:01<00:00, 78.19it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 82%|      | 103/126 [00:01<00:00, 78.75it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 83%|      | 104/126 [00:01<00:00, 79.31it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 83%|      | 105/126 [00:01<00:00, 79.87it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 84%|      | 106/126 [00:01<00:00, 80.43it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 85%|      | 107/126 [00:01<00:00, 80.99it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 86%|      | 108/126 [00:01<00:00, 81.53it/s, loss=0.00586,
v_num=4.31e+7]

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Epoch 33: 87%|      | 109/126 [00:01<00:00, 82.09it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 87%|      | 110/126 [00:01<00:00, 82.65it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 88%|      | 111/126 [00:01<00:00, 83.20it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 89%|      | 112/126 [00:01<00:00, 83.74it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 90%|      | 113/126 [00:01<00:00, 84.29it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 90%|      | 114/126 [00:01<00:00, 84.84it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 91%|      | 115/126 [00:01<00:00, 85.39it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 92%|      | 116/126 [00:01<00:00, 85.93it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 93%|      | 117/126 [00:01<00:00, 86.48it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 94%|      | 118/126 [00:01<00:00, 87.02it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 94%|      | 119/126 [00:01<00:00, 87.56it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 95%|      | 120/126 [00:01<00:00, 88.10it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 96%|      | 121/126 [00:01<00:00, 88.63it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 97%|      | 122/126 [00:01<00:00, 89.15it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 98%|      | 123/126 [00:01<00:00, 89.71it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 90.27it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 90.84it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 91.41it/s, loss=0.00586,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 89.64it/s, loss=0.00586,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 89.55it/s, loss=0.00586,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 89.19it/s, loss=0.00526,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 77.98it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 78.01it/s, loss=0.00526,

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v_num=4.31e+7]
Epoch 34: 82%| | 103/126 [00:01<00:00, 78.58it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 83%| | 104/126 [00:01<00:00, 79.13it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 83%| | 105/126 [00:01<00:00, 79.70it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 84%| | 106/126 [00:01<00:00, 80.24it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 85%| | 107/126 [00:01<00:00, 80.81it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 86%| | 108/126 [00:01<00:00, 81.35it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 87%| | 109/126 [00:01<00:00, 81.92it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 87%| | 110/126 [00:01<00:00, 82.46it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 88%| | 111/126 [00:01<00:00, 83.03it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 89%| | 112/126 [00:01<00:00, 83.56it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 90%| | 113/126 [00:01<00:00, 84.11it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 90%| | 114/126 [00:01<00:00, 84.65it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 91%| | 115/126 [00:01<00:00, 85.20it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 92%| | 116/126 [00:01<00:00, 85.73it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 93%| | 117/126 [00:01<00:00, 86.27it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 94%| | 118/126 [00:01<00:00, 86.80it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 94%| | 119/126 [00:01<00:00, 87.34it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 95%| | 120/126 [00:01<00:00, 87.87it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 96%| | 121/126 [00:01<00:00, 88.41it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 97%| | 122/126 [00:01<00:00, 88.94it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 98%| | 123/126 [00:01<00:00, 89.50it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 98%| | 124/126 [00:01<00:00, 90.07it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 99%| | 125/126 [00:01<00:00, 90.63it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 100%| | 126/126 [00:01<00:00, 91.20it/s, loss=0.00526,

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v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|      | 126/126 [00:01<00:00, 89.47it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 34: 100%|      | 126/126 [00:01<00:00, 89.36it/s, loss=0.00526,
v_num=4.31e+7]Mapping latent space...
Epoch 35:  79%|      | 100/126 [00:01<00:00, 82.14it/s, loss=0.00515,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35:  80%|      | 101/126 [00:01<00:00, 71.36it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  81%|      | 102/126 [00:01<00:00, 71.32it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  82%|      | 103/126 [00:01<00:00, 71.82it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  83%|      | 104/126 [00:01<00:00, 72.32it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  83%|      | 105/126 [00:01<00:00, 72.82it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  84%|      | 106/126 [00:01<00:00, 73.32it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  85%|      | 107/126 [00:01<00:00, 73.82it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  86%|      | 108/126 [00:01<00:00, 74.30it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  87%|      | 109/126 [00:01<00:00, 74.80it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  87%|      | 110/126 [00:01<00:00, 75.29it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  88%|      | 111/126 [00:01<00:00, 75.78it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  89%|      | 112/126 [00:01<00:00, 76.27it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  90%|      | 113/126 [00:01<00:00, 76.76it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  90%|      | 114/126 [00:01<00:00, 77.24it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  91%|      | 115/126 [00:01<00:00, 77.73it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  92%|      | 116/126 [00:01<00:00, 78.21it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  93%|      | 117/126 [00:01<00:00, 78.69it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  94%|      | 118/126 [00:01<00:00, 79.16it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35:  94%|      | 119/126 [00:01<00:00, 79.62it/s, loss=0.00515,
v_num=4.31e+7]

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Epoch 35: 95%|      | 120/126 [00:01<00:00, 80.09it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 80.55it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 81.03it/s, loss=0.00515,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.48it/s]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 81.51it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 82.00it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 82.49it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 82.99it/s, loss=0.00515,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 81.32it/s, loss=0.00515,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 81.23it/s, loss=0.00515,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 75.35it/s, loss=0.00526,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 67.58it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 81%|      | 102/126 [00:01<00:00, 67.57it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 82%|      | 103/126 [00:01<00:00, 68.09it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 83%|      | 104/126 [00:01<00:00, 68.58it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 83%|      | 105/126 [00:01<00:00, 69.10it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 84%|      | 106/126 [00:01<00:00, 69.60it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 85%|      | 107/126 [00:01<00:00, 70.11it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 86%|      | 108/126 [00:01<00:00, 70.60it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 87%|      | 109/126 [00:01<00:00, 71.10it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 87%|      | 110/126 [00:01<00:00, 71.60it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 88%|      | 111/126 [00:01<00:00, 72.11it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 89%|      | 112/126 [00:01<00:00, 72.60it/s, loss=0.00526,

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v_num=4.31e+7]
Epoch 36: 90%|      | 113/126 [00:01<00:00, 73.11it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 90%|      | 114/126 [00:01<00:00, 73.59it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 91%|      | 115/126 [00:01<00:00, 74.10it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 92%|      | 116/126 [00:01<00:00, 74.59it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 93%|      | 117/126 [00:01<00:00, 75.10it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 94%|      | 118/126 [00:01<00:00, 75.58it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 94%|      | 119/126 [00:01<00:00, 76.08it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 95%|      | 120/126 [00:01<00:00, 76.56it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 96%|      | 121/126 [00:01<00:00, 77.06it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 97%|      | 122/126 [00:01<00:00, 77.53it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 98%|      | 123/126 [00:01<00:00, 78.04it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 98%|      | 124/126 [00:01<00:00, 78.54it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 79.06it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 79.57it/s, loss=0.00526,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|     | 126/126 [00:01<00:00, 78.21it/s, loss=0.00526,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 78.13it/s, loss=0.00526,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 85.55it/s, loss=0.00506,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 74.11it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 74.41it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 74.86it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 75.29it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 75.74it/s, loss=0.00506,
v_num=4.31e+7]

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Epoch 37: 84%|      | 106/126 [00:01<00:00, 76.19it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 76.64it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 77.08it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 77.53it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 77.97it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 78.42it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 78.87it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 79.32it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 79.77it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 80.23it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 80.69it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 81.15it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 94%|      | 118/126 [00:01<00:00, 81.61it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 82.07it/s, loss=0.00506,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 197.14it/s]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 82.52it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 82.99it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 83.46it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 83.95it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 84.45it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 84.94it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 85.44it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 83.73it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 83.60it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 80.37it/s, loss=0.00472,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|          | 101/126 [00:01<00:00, 69.98it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 81%|          | 102/126 [00:01<00:00, 70.10it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 82%|          | 103/126 [00:01<00:00, 70.59it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 83%|          | 104/126 [00:01<00:00, 71.07it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 83%|          | 105/126 [00:01<00:00, 71.55it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 84%|          | 106/126 [00:01<00:00, 72.03it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 85%|          | 107/126 [00:01<00:00, 72.51it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 86%|          | 108/126 [00:01<00:00, 72.99it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 87%|          | 109/126 [00:01<00:00, 73.47it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 87%|          | 110/126 [00:01<00:00, 73.94it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 88%|          | 111/126 [00:01<00:00, 74.41it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 89%|          | 112/126 [00:01<00:00, 74.88it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 90%|          | 113/126 [00:01<00:00, 75.35it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 90%|          | 114/126 [00:01<00:00, 75.82it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 91%|          | 115/126 [00:01<00:00, 76.28it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 92%|          | 116/126 [00:01<00:00, 76.75it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 93%|          | 117/126 [00:01<00:00, 77.21it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 94%|          | 118/126 [00:01<00:00, 77.67it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 94%|          | 119/126 [00:01<00:00, 78.12it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 95%|          | 120/126 [00:01<00:00, 78.58it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 96%|          | 121/126 [00:01<00:00, 79.02it/s, loss=0.00472,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 218.04it/s]
Epoch 38: 97%|          | 122/126 [00:01<00:00, 79.48it/s, loss=0.00472,

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v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 79.95it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 80.43it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 80.91it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 81.39it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 79.82it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 79.72it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 70.92it/s, loss=0.00553,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 62.90it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 62.94it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 63.39it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 63.85it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 64.30it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 64.75it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 65.20it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 65.64it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 66.09it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 66.54it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 66.99it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 67.43it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 67.87it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 68.31it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 68.75it/s, loss=0.00553,

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v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 69.18it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 69.62it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 70.05it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 70.48it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 70.90it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 71.33it/s, loss=0.00553,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.13it/s]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 71.75it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 72.20it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 72.65it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 73.10it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 73.55it/s, loss=0.00553,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 72.26it/s, loss=0.00553,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 72.18it/s, loss=0.00553,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 66.58it/s, loss=0.00505,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|      | 101/126 [00:01<00:00, 59.66it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 81%|      | 102/126 [00:01<00:00, 59.75it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 82%|      | 103/126 [00:01<00:00, 60.20it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 83%|      | 104/126 [00:01<00:00, 60.65it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 83%|      | 105/126 [00:01<00:00, 61.11it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 84%|      | 106/126 [00:01<00:00, 61.56it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 85%|      | 107/126 [00:01<00:00, 62.01it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 86%|      | 108/126 [00:01<00:00, 62.46it/s, loss=0.00505,

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v_num=4.31e+7]
Epoch 40: 87%|      | 109/126 [00:01<00:00, 62.92it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 87%|      | 110/126 [00:01<00:00, 63.37it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 88%|      | 111/126 [00:01<00:00, 63.83it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 89%|      | 112/126 [00:01<00:00, 64.27it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 90%|      | 113/126 [00:01<00:00, 64.73it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 90%|      | 114/126 [00:01<00:00, 65.17it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 91%|      | 115/126 [00:01<00:00, 65.62it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 92%|      | 116/126 [00:01<00:00, 66.06it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 93%|      | 117/126 [00:01<00:00, 66.51it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 94%|      | 118/126 [00:01<00:00, 66.95it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 94%|      | 119/126 [00:01<00:00, 67.39it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 95%|      | 120/126 [00:01<00:00, 67.83it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 96%|      | 121/126 [00:01<00:00, 68.27it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 97%|      | 122/126 [00:01<00:00, 68.71it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 98%|      | 123/126 [00:01<00:00, 69.17it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 69.63it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 70.09it/s, loss=0.00505,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.27it/s]
Epoch 40: 100%|      | 126/126 [00:01<00:00, 70.55it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|      | 126/126 [00:01<00:00, 69.52it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 40: 100%|      | 126/126 [00:01<00:00, 69.46it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 79.31it/s, loss=0.00468,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 69.79it/s, loss=0.00468,

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v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 69.94it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 70.48it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 70.98it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 71.50it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 72.00it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 72.47it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 72.87it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 87%|      | 109/126 [00:01<00:00, 73.29it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 73.71it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 74.13it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 74.56it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 74.98it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 75.41it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 75.84it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 76.27it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 76.70it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 77.13it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 77.55it/s, loss=0.00468,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.72it/s]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 77.96it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 78.39it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 78.82it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 79.27it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 79.73it/s, loss=0.00468,
v_num=4.31e+7]

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Epoch 41: 99%|      | 125/126 [00:01<00:00, 80.18it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 80.64it/s, loss=0.00468,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.00468,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.06it/s, loss=0.00468,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 72.43it/s, loss=0.00472,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 64.35it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 64.47it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 64.92it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 65.38it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 65.84it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 66.30it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 66.75it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 67.21it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 67.67it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 68.13it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 68.59it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 69.04it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 69.49it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 69.95it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 70.40it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 70.84it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 71.29it/s, loss=0.00472,
v_num=4.31e+7]

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Epoch 42: 94%|      | 118/126 [00:01<00:00, 71.73it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 72.17it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 72.61it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 73.05it/s, loss=0.00472,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.88it/s]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 73.48it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 73.94it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 74.40it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 74.85it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 75.31it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 73.94it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 73.86it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 78.12it/s, loss=0.0052,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 69.14it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 81%|      | 102/126 [00:01<00:00, 69.09it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 82%|      | 103/126 [00:01<00:00, 69.60it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 83%|      | 104/126 [00:01<00:00, 70.12it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 83%|      | 105/126 [00:01<00:00, 70.63it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 84%|      | 106/126 [00:01<00:00, 71.15it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 85%|      | 107/126 [00:01<00:00, 71.66it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 86%|      | 108/126 [00:01<00:00, 72.16it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 87%|      | 109/126 [00:01<00:00, 72.67it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 87%|      | 110/126 [00:01<00:00, 73.18it/s, loss=0.0052,
v_num=4.31e+7]

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Epoch 43: 88%|      | 111/126 [00:01<00:00, 73.69it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 89%|      | 112/126 [00:01<00:00, 74.19it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 90%|      | 113/126 [00:01<00:00, 74.70it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 90%|      | 114/126 [00:01<00:00, 75.20it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 91%|      | 115/126 [00:01<00:00, 75.71it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 92%|      | 116/126 [00:01<00:00, 76.21it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 93%|      | 117/126 [00:01<00:00, 76.71it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 94%|      | 118/126 [00:01<00:00, 77.20it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 94%|      | 119/126 [00:01<00:00, 77.70it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 95%|      | 120/126 [00:01<00:00, 78.20it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 96%|      | 121/126 [00:01<00:00, 78.70it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 97%|      | 122/126 [00:01<00:00, 79.20it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 98%|      | 123/126 [00:01<00:00, 79.71it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 98%|      | 124/126 [00:01<00:00, 80.23it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 99%|      | 125/126 [00:01<00:00, 80.74it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 81.26it/s, loss=0.0052,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|     | 126/126 [00:01<00:00, 79.86it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 79.77it/s, loss=0.0052,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 72.89it/s, loss=0.00562,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|      | 101/126 [00:01<00:00, 64.77it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 81%|      | 102/126 [00:01<00:00, 64.89it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 82%|      | 103/126 [00:01<00:00, 65.38it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 83%|      | 104/126 [00:01<00:00, 65.87it/s, loss=0.00562,

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v_num=4.31e+7]
Epoch 44: 83%| | 105/126 [00:01<00:00, 66.37it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 84%| | 106/126 [00:01<00:00, 66.85it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 85%| | 107/126 [00:01<00:00, 67.35it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 86%| | 108/126 [00:01<00:00, 67.82it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 87%| | 109/126 [00:01<00:00, 68.32it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 87%| | 110/126 [00:01<00:00, 68.80it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 88%| | 111/126 [00:01<00:00, 69.29it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 89%| | 112/126 [00:01<00:00, 69.77it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 90%| | 113/126 [00:01<00:00, 70.26it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 90%| | 114/126 [00:01<00:00, 70.73it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 91%| | 115/126 [00:01<00:00, 71.22it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 92%| | 116/126 [00:01<00:00, 71.69it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 93%| | 117/126 [00:01<00:00, 72.18it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 94%| | 118/126 [00:01<00:00, 72.65it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 94%| | 119/126 [00:01<00:00, 73.14it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 95%| | 120/126 [00:01<00:00, 73.60it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 96%| | 121/126 [00:01<00:00, 74.08it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 97%| | 122/126 [00:01<00:00, 74.56it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 98%| | 123/126 [00:01<00:00, 75.05it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 98%| | 124/126 [00:01<00:00, 75.53it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 99%| | 125/126 [00:01<00:00, 76.02it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 100%| | 126/126 [00:01<00:00, 76.51it/s, loss=0.00562,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%| | 126/126 [00:01<00:00, 75.28it/s, loss=0.00562,
v_num=4.31e+7]
Epoch 44: 100%| | 126/126 [00:01<00:00, 75.21it/s, loss=0.00562,

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v_num=4.31e+7]Mapping latent space...

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Epoch 45: 79%|          | 100/126 [00:01<00:00, 77.58it/s, loss=0.0055,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|          | 101/126 [00:01<00:00, 68.58it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 81%|          | 102/126 [00:01<00:00, 68.66it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 82%|          | 103/126 [00:01<00:00, 69.19it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 83%|          | 104/126 [00:01<00:00, 69.69it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 83%|          | 105/126 [00:01<00:00, 70.20it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 84%|          | 106/126 [00:01<00:00, 70.70it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 85%|          | 107/126 [00:01<00:00, 71.21it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 86%|          | 108/126 [00:01<00:00, 71.69it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 87%|          | 109/126 [00:01<00:00, 72.21it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 87%|          | 110/126 [00:01<00:00, 72.69it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 88%|          | 111/126 [00:01<00:00, 73.20it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 89%|          | 112/126 [00:01<00:00, 73.67it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 90%|          | 113/126 [00:01<00:00, 74.18it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 90%|          | 114/126 [00:01<00:00, 74.66it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 91%|          | 115/126 [00:01<00:00, 75.17it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 92%|          | 116/126 [00:01<00:00, 75.64it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 93%|          | 117/126 [00:01<00:00, 76.15it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 94%|          | 118/126 [00:01<00:00, 76.61it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 94%|          | 119/126 [00:01<00:00, 77.12it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 95%|          | 120/126 [00:01<00:00, 77.58it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 96%|          | 121/126 [00:01<00:00, 78.09it/s, loss=0.0055,
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v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 78.55it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 79.07it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 79.58it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 80.09it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 80.60it/s, loss=0.0055,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 79.22it/s, loss=0.0055,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 79.14it/s, loss=0.0055,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 82.19it/s, loss=0.00496,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 72.05it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 72.11it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 72.53it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 72.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 73.39it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 73.83it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 74.26it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 74.68it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 75.11it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 75.55it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 75.98it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 76.42it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 76.85it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 77.30it/s, loss=0.00496,
v_num=4.31e+7]

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Epoch 46: 91%|      | 115/126 [00:01<00:00, 77.73it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 78.17it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 78.61it/s, loss=0.00496,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.51it/s]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 79.04it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 79.48it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 79.92it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 80.36it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 80.81it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 81.29it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 81.77it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 82.25it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 82.73it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 81.19it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 81.09it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 71.69it/s, loss=0.00482,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 63.59it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 63.55it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 82%|      | 103/126 [00:01<00:00, 63.93it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 83%|      | 104/126 [00:01<00:00, 64.30it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 83%|      | 105/126 [00:01<00:00, 64.68it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 84%|      | 106/126 [00:01<00:00, 65.06it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 85%|      | 107/126 [00:01<00:00, 65.45it/s, loss=0.00482,
v_num=4.31e+7]

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Epoch 47: 86%|      | 108/126 [00:01<00:00, 65.83it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 87%|      | 109/126 [00:01<00:00, 66.23it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 87%|      | 110/126 [00:01<00:00, 66.63it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 88%|      | 111/126 [00:01<00:00, 67.03it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 89%|      | 112/126 [00:01<00:00, 67.43it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 90%|      | 113/126 [00:01<00:00, 67.83it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 90%|      | 114/126 [00:01<00:00, 68.24it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 91%|      | 115/126 [00:01<00:00, 68.64it/s, loss=0.00482,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 154.59it/s]
Epoch 47: 92%|      | 116/126 [00:01<00:00, 69.03it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 93%|      | 117/126 [00:01<00:00, 69.44it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 94%|      | 118/126 [00:01<00:00, 69.85it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 94%|      | 119/126 [00:01<00:00, 70.26it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 95%|      | 120/126 [00:01<00:00, 70.67it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 96%|      | 121/126 [00:01<00:00, 71.08it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 97%|      | 122/126 [00:01<00:00, 71.50it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 71.94it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 72.38it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 72.82it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 73.26it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 71.92it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 71.83it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 66.76it/s, loss=0.00573,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|          | 101/126 [00:01<00:00, 59.68it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 81%|          | 102/126 [00:01<00:00, 59.75it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 82%|          | 103/126 [00:01<00:00, 60.17it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 83%|          | 104/126 [00:01<00:00, 60.59it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 83%|          | 105/126 [00:01<00:00, 61.01it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 84%|          | 106/126 [00:01<00:00, 61.43it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 85%|          | 107/126 [00:01<00:00, 61.85it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 86%|          | 108/126 [00:01<00:00, 62.26it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 87%|          | 109/126 [00:01<00:00, 62.68it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 87%|          | 110/126 [00:01<00:00, 63.09it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 88%|          | 111/126 [00:01<00:00, 63.50it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 89%|          | 112/126 [00:01<00:00, 63.91it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 90%|          | 113/126 [00:01<00:00, 64.32it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 90%|          | 114/126 [00:01<00:00, 64.73it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 91%|          | 115/126 [00:01<00:00, 65.14it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 92%|          | 116/126 [00:01<00:00, 65.54it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 93%|          | 117/126 [00:01<00:00, 65.94it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 94%|          | 118/126 [00:01<00:00, 66.34it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 94%|          | 119/126 [00:01<00:00, 66.74it/s, loss=0.00573,
v_num=4.31e+7]
Validation DataLoader 0: 77%|          | 20/26 [00:00<00:00, 192.05it/s]
Epoch 48: 95%|          | 120/126 [00:01<00:00, 67.13it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 96%|          | 121/126 [00:01<00:00, 67.52it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 97%|          | 122/126 [00:01<00:00, 67.92it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 98%|          | 123/126 [00:01<00:00, 68.32it/s, loss=0.00573,
v_num=4.31e+7]

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Epoch 48: 98%|      | 124/126 [00:01<00:00, 68.73it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 69.14it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 69.55it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 68.35it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 68.27it/s, loss=0.00573,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 64.63it/s, loss=0.00574,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 57.51it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 57.74it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 58.16it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 58.59it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 59.01it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 59.44it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 59.85it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 60.26it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 60.68it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 61.10it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 61.50it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 61.91it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 62.32it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 62.73it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 63.13it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 63.53it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 63.94it/s, loss=0.00574,

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v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 64.34it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 64.74it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 65.14it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 65.53it/s, loss=0.00574,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.38it/s]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 65.93it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 66.35it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 66.77it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 67.19it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 67.61it/s, loss=0.00574,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 66.55it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 66.48it/s, loss=0.00574,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 74.26it/s, loss=0.00559,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|      | 101/126 [00:01<00:00, 64.94it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 81%|      | 102/126 [00:01<00:00, 65.00it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 82%|      | 103/126 [00:01<00:00, 65.40it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 83%|      | 104/126 [00:01<00:00, 65.80it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 83%|      | 105/126 [00:01<00:00, 66.19it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 84%|      | 106/126 [00:01<00:00, 66.59it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 85%|      | 107/126 [00:01<00:00, 66.98it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 86%|      | 108/126 [00:01<00:00, 67.39it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 87%|      | 109/126 [00:01<00:00, 67.80it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 87%|      | 110/126 [00:01<00:00, 68.22it/s, loss=0.00559,

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v_num=4.31e+7]
Epoch 50: 88%|      | 111/126 [00:01<00:00, 68.64it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 89%|      | 112/126 [00:01<00:00, 69.05it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 90%|      | 113/126 [00:01<00:00, 69.47it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 90%|      | 114/126 [00:01<00:00, 69.90it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 91%|      | 115/126 [00:01<00:00, 70.32it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 92%|      | 116/126 [00:01<00:00, 70.75it/s, loss=0.00559,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.87it/s]
Epoch 50: 93%|      | 117/126 [00:01<00:00, 71.16it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 94%|      | 118/126 [00:01<00:00, 71.59it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 94%|      | 119/126 [00:01<00:00, 72.02it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 95%|      | 120/126 [00:01<00:00, 72.44it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 96%|      | 121/126 [00:01<00:00, 72.87it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 97%|      | 122/126 [00:01<00:00, 73.30it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 98%|      | 123/126 [00:01<00:00, 73.75it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 74.20it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 74.66it/s, loss=0.00559,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 75.11it/s, loss=0.00559,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|     | 126/126 [00:01<00:00, 72.93it/s, loss=0.00559,
v_num=4.31e+7]

Epoch 50: 100%|     | 126/126 [00:01<00:00, 72.84it/s, loss=0.00559,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 79%|      | 100/126 [00:01<00:00, 76.93it/s, loss=0.00519,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 67.85it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 67.98it/s, loss=0.00519,
v_num=4.31e+7]

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Epoch 51: 82%|      | 103/126 [00:01<00:00, 68.39it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 68.80it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 69.22it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 69.64it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 70.06it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 70.47it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 70.90it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 71.33it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 71.75it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 72.19it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 72.61it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 73.05it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 73.48it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 73.92it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 74.35it/s, loss=0.00519,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.42it/s]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 74.78it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 75.22it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 75.65it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 76.08it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 76.52it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 76.99it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 77.45it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 77.91it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 78.38it/s, loss=0.00519,

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v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|      | 126/126 [00:01<00:00, 77.00it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 51: 100%|      | 126/126 [00:01<00:00, 76.92it/s, loss=0.00519,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 70.61it/s, loss=0.00418,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 62.85it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 62.89it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 63.29it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 63.69it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 64.10it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 64.51it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 64.91it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 65.32it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 65.72it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 66.14it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 66.54it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 66.96it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 67.37it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 67.78it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 68.19it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 68.60it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 69.01it/s, loss=0.00418,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.40it/s]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 69.42it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 69.83it/s, loss=0.00418,

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v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 70.24it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 70.65it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 71.07it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 71.51it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 71.94it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 72.37it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 72.81it/s, loss=0.00418,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 71.61it/s, loss=0.00418,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 71.53it/s, loss=0.00418,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 65.73it/s, loss=0.00505,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 58.27it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 58.32it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 82%|      | 103/126 [00:01<00:00, 58.70it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 83%|      | 104/126 [00:01<00:00, 59.08it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 83%|      | 105/126 [00:01<00:00, 59.47it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 84%|      | 106/126 [00:01<00:00, 59.86it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 85%|      | 107/126 [00:01<00:00, 60.24it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 86%|      | 108/126 [00:01<00:00, 60.62it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 87%|      | 109/126 [00:01<00:00, 61.00it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 87%|      | 110/126 [00:01<00:00, 61.39it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 88%|      | 111/126 [00:01<00:00, 61.77it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 89%|      | 112/126 [00:01<00:00, 62.16it/s, loss=0.00505,
v_num=4.31e+7]

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Epoch 53: 90%|      | 113/126 [00:01<00:00, 62.55it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 90%|      | 114/126 [00:01<00:00, 62.94it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 91%|      | 115/126 [00:01<00:00, 63.34it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 92%|      | 116/126 [00:01<00:00, 63.73it/s, loss=0.00505,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.76it/s]
Epoch 53: 93%|      | 117/126 [00:01<00:00, 64.12it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 94%|      | 118/126 [00:01<00:00, 64.52it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 94%|      | 119/126 [00:01<00:00, 64.91it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 95%|      | 120/126 [00:01<00:00, 65.31it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 65.71it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 66.11it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 66.53it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 66.95it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 67.37it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 67.79it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 66.58it/s, loss=0.00505,
v_num=4.31e+7]

Epoch 53: 100%|     | 126/126 [00:01<00:00, 66.52it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 79%|      | 100/126 [00:01<00:00, 79.22it/s, loss=0.00485,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|      | 101/126 [00:01<00:00, 70.52it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 81%|      | 102/126 [00:01<00:00, 70.62it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 82%|      | 103/126 [00:01<00:00, 71.13it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 83%|      | 104/126 [00:01<00:00, 71.63it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 83%|      | 105/126 [00:01<00:00, 72.13it/s, loss=0.00485,

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v_num=4.31e+7]
Epoch 54: 84%|      | 106/126 [00:01<00:00, 72.63it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 85%|      | 107/126 [00:01<00:00, 73.14it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 86%|      | 108/126 [00:01<00:00, 73.64it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 87%|      | 109/126 [00:01<00:00, 74.15it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 87%|      | 110/126 [00:01<00:00, 74.65it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 88%|      | 111/126 [00:01<00:00, 75.16it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 89%|      | 112/126 [00:01<00:00, 75.66it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 90%|      | 113/126 [00:01<00:00, 76.15it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 90%|      | 114/126 [00:01<00:00, 76.65it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 91%|      | 115/126 [00:01<00:00, 77.15it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 92%|      | 116/126 [00:01<00:00, 77.64it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 93%|      | 117/126 [00:01<00:00, 78.15it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 94%|      | 118/126 [00:01<00:00, 78.63it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 94%|      | 119/126 [00:01<00:00, 79.13it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 95%|      | 120/126 [00:01<00:00, 79.60it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 96%|      | 121/126 [00:01<00:00, 80.08it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 97%|      | 122/126 [00:01<00:00, 80.57it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 81.10it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 81.63it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 82.16it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 82.69it/s, loss=0.00485,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.24it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.17it/s, loss=0.00485,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 71.77it/s, loss=0.0045,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|          | 101/126 [00:01<00:00, 63.74it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 81%|          | 102/126 [00:01<00:00, 63.75it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 82%|          | 103/126 [00:01<00:00, 64.14it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 83%|          | 104/126 [00:01<00:00, 64.56it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 83%|          | 105/126 [00:01<00:00, 64.97it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 84%|          | 106/126 [00:01<00:00, 65.39it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 85%|          | 107/126 [00:01<00:00, 65.80it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 86%|          | 108/126 [00:01<00:00, 66.22it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 87%|          | 109/126 [00:01<00:00, 66.63it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 87%|          | 110/126 [00:01<00:00, 67.05it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 88%|          | 111/126 [00:01<00:00, 67.46it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 89%|          | 112/126 [00:01<00:00, 67.88it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 90%|          | 113/126 [00:01<00:00, 68.29it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 90%|          | 114/126 [00:01<00:00, 68.71it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 91%|          | 115/126 [00:01<00:00, 69.12it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 92%|          | 116/126 [00:01<00:00, 69.54it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 93%|          | 117/126 [00:01<00:00, 69.96it/s, loss=0.0045,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 173.64it/s]
Epoch 55: 94%|          | 118/126 [00:01<00:00, 70.38it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 94%|          | 119/126 [00:01<00:00, 70.79it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 95%|          | 120/126 [00:01<00:00, 71.21it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 96%|          | 121/126 [00:01<00:00, 71.63it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 97%|          | 122/126 [00:01<00:00, 72.05it/s, loss=0.0045,

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v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 72.50it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 72.95it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 73.39it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 73.84it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 72.29it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 72.22it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 78.87it/s, loss=0.00531,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 69.77it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 69.70it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 70.17it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 70.64it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 71.10it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 84%|      | 106/126 [00:01<00:00, 71.57it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 85%|      | 107/126 [00:01<00:00, 72.04it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 86%|      | 108/126 [00:01<00:00, 72.50it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 87%|      | 109/126 [00:01<00:00, 72.97it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 87%|      | 110/126 [00:01<00:00, 73.44it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 88%|      | 111/126 [00:01<00:00, 73.90it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 89%|      | 112/126 [00:01<00:00, 74.36it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 90%|      | 113/126 [00:01<00:00, 74.82it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 90%|      | 114/126 [00:01<00:00, 75.22it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 91%|      | 115/126 [00:01<00:00, 75.55it/s, loss=0.00531,
v_num=4.31e+7]

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Epoch 56: 92%|      | 116/126 [00:01<00:00, 75.90it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 93%|      | 117/126 [00:01<00:00, 76.27it/s, loss=0.00531,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.59it/s]
Epoch 56: 94%|      | 118/126 [00:01<00:00, 76.62it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 94%|      | 119/126 [00:01<00:00, 77.00it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 95%|      | 120/126 [00:01<00:00, 77.37it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 96%|      | 121/126 [00:01<00:00, 77.75it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 97%|      | 122/126 [00:01<00:00, 78.14it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 98%|      | 123/126 [00:01<00:00, 78.56it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 78.98it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 99%|      | 125/126 [00:01<00:00, 79.40it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 79.83it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 78.12it/s, loss=0.00531,
v_num=4.31e+7]

Epoch 56: 100%|     | 126/126 [00:01<00:00, 78.01it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 79%|      | 100/126 [00:01<00:00, 77.62it/s, loss=0.00519,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|      | 101/126 [00:01<00:00, 67.97it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 81%|      | 102/126 [00:01<00:00, 67.95it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 82%|      | 103/126 [00:01<00:00, 68.42it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 83%|      | 104/126 [00:01<00:00, 68.88it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 83%|      | 105/126 [00:01<00:00, 69.35it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 84%|      | 106/126 [00:01<00:00, 69.82it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 85%|      | 107/126 [00:01<00:00, 70.28it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 86%|      | 108/126 [00:01<00:00, 70.74it/s, loss=0.00519,

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v_num=4.31e+7]
Epoch 57: 87%|      | 109/126 [00:01<00:00, 71.21it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 87%|      | 110/126 [00:01<00:00, 71.67it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 88%|      | 111/126 [00:01<00:00, 72.13it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 89%|      | 112/126 [00:01<00:00, 72.59it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 90%|      | 113/126 [00:01<00:00, 73.04it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 90%|      | 114/126 [00:01<00:00, 73.50it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 91%|      | 115/126 [00:01<00:00, 73.95it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 92%|      | 116/126 [00:01<00:00, 74.40it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 93%|      | 117/126 [00:01<00:00, 74.84it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 94%|      | 118/126 [00:01<00:00, 75.29it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 94%|      | 119/126 [00:01<00:00, 75.73it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 95%|      | 120/126 [00:01<00:00, 76.16it/s, loss=0.00519,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.31it/s]
Epoch 57: 96%|      | 121/126 [00:01<00:00, 76.59it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 97%|      | 122/126 [00:01<00:00, 77.04it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 77.50it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 77.97it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 78.44it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 78.91it/s, loss=0.00519,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 77.50it/s, loss=0.00519,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 77.41it/s, loss=0.00519,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 69.61it/s, loss=0.00454,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 61.86it/s, loss=0.00454,

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v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 61.80it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 62.18it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 62.56it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 62.94it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 63.32it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 63.71it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 64.09it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 64.47it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 64.86it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 65.25it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 65.64it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 66.04it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 66.44it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 66.84it/s, loss=0.00454,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 157.81it/s]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 67.23it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 93%|      | 117/126 [00:01<00:00, 67.63it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 68.04it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 68.44it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 68.84it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 69.24it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 69.65it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 70.08it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 70.50it/s, loss=0.00454,
v_num=4.31e+7]

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Epoch 58: 99%|      | 125/126 [00:01<00:00, 70.93it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.37it/s, loss=0.00454,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 70.19it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 70.11it/s, loss=0.00454,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 75.53it/s, loss=0.00493,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 66.67it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 66.73it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 67.22it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 67.70it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 68.19it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 84%|      | 106/126 [00:01<00:00, 68.68it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 85%|      | 107/126 [00:01<00:00, 69.16it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 86%|      | 108/126 [00:01<00:00, 69.63it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 87%|      | 109/126 [00:01<00:00, 70.11it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 87%|      | 110/126 [00:01<00:00, 70.59it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 71.07it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 71.55it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 72.02it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 72.50it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 72.96it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 73.43it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 73.90it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 74.37it/s, loss=0.00493,

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v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 74.83it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 75.30it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 75.75it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 76.21it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 76.68it/s, loss=0.00493,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 239.03it/s]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 77.15it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 77.63it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 78.11it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 76.66it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 76.59it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 82.44it/s, loss=0.00565,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 71.71it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 71.81it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 72.30it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 83%|      | 104/126 [00:01<00:00, 72.78it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 83%|      | 105/126 [00:01<00:00, 73.27it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 84%|      | 106/126 [00:01<00:00, 73.74it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 85%|      | 107/126 [00:01<00:00, 74.22it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 86%|      | 108/126 [00:01<00:00, 74.69it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 87%|      | 109/126 [00:01<00:00, 75.16it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 87%|      | 110/126 [00:01<00:00, 75.64it/s, loss=0.00565,
v_num=4.31e+7]

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Epoch 60: 88%|      | 111/126 [00:01<00:00, 76.11it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 89%|      | 112/126 [00:01<00:00, 76.57it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 90%|      | 113/126 [00:01<00:00, 77.04it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 90%|      | 114/126 [00:01<00:00, 77.50it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 91%|      | 115/126 [00:01<00:00, 77.96it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 92%|      | 116/126 [00:01<00:00, 78.42it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 93%|      | 117/126 [00:01<00:00, 78.88it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 94%|      | 118/126 [00:01<00:00, 79.33it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 94%|      | 119/126 [00:01<00:00, 79.78it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 95%|      | 120/126 [00:01<00:00, 80.24it/s, loss=0.00565,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 209.53it/s]
Epoch 60: 96%|      | 121/126 [00:01<00:00, 80.68it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 97%|      | 122/126 [00:01<00:00, 81.13it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 98%|      | 123/126 [00:01<00:00, 81.62it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 82.11it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 82.59it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 83.07it/s, loss=0.00565,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|     | 126/126 [00:01<00:00, 81.44it/s, loss=0.00565,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 81.35it/s, loss=0.00565,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 82.06it/s, loss=0.00477,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 72.49it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 72.54it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 73.07it/s, loss=0.00477,
v_num=4.31e+7]

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Epoch 61: 83%|      | 104/126 [00:01<00:00, 73.61it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 74.14it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 74.66it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 75.19it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 75.71it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 76.23it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 76.75it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 77.28it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 77.80it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 78.31it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 78.83it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 79.34it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 79.86it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 80.36it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 80.87it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 81.38it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 81.88it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 82.38it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 82.74it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 83.26it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 83.79it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 84.32it/s, loss=0.00477,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 84.86it/s, loss=0.00477,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 83.26it/s, loss=0.00477,
v_num=4.31e+7]

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Epoch 61: 100%|      | 126/126 [00:01<00:00, 83.17it/s, loss=0.00477,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 64.67it/s, loss=0.00472,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 57.58it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 57.56it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 58.00it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 58.41it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 58.84it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 59.27it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 59.69it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 60.11it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 60.53it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 60.95it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 61.37it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 61.78it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 62.20it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 62.61it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 63.02it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 63.44it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 63.84it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 64.25it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 64.65it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 65.06it/s, loss=0.00472,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.41it/s]

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Epoch 62: 96%|      | 121/126 [00:01<00:00, 65.46it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 65.87it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 66.29it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 66.71it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 67.12it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 67.55it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 66.41it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 66.35it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...

Epoch 63: 79%|      | 100/126 [00:01<00:00, 65.07it/s, loss=0.00539,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 58.10it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 58.13it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 58.52it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 58.92it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 83%|      | 105/126 [00:01<00:00, 59.30it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 84%|      | 106/126 [00:01<00:00, 59.70it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 85%|      | 107/126 [00:01<00:00, 60.08it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 86%|      | 108/126 [00:01<00:00, 60.47it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 87%|      | 109/126 [00:01<00:00, 60.86it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 87%|      | 110/126 [00:01<00:00, 61.25it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 88%|      | 111/126 [00:01<00:00, 61.64it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 89%|      | 112/126 [00:01<00:00, 62.04it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 90%|      | 113/126 [00:01<00:00, 62.43it/s, loss=0.00539,
v_num=4.31e+7]

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Epoch 63: 90%|      | 114/126 [00:01<00:00, 62.83it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 91%|      | 115/126 [00:01<00:00, 63.23it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 92%|      | 116/126 [00:01<00:00, 63.63it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 93%|      | 117/126 [00:01<00:00, 64.02it/s, loss=0.00539,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 163.47it/s]
Epoch 63: 94%|      | 118/126 [00:01<00:00, 64.17it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 94%|      | 119/126 [00:01<00:00, 64.55it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 95%|      | 120/126 [00:01<00:00, 64.94it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 96%|      | 121/126 [00:01<00:00, 65.34it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 97%|      | 122/126 [00:01<00:00, 65.74it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 66.15it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 66.57it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 66.99it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 67.41it/s, loss=0.00539,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 66.36it/s, loss=0.00539,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 66.30it/s, loss=0.00539,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 79%|      | 100/126 [00:01<00:00, 79.04it/s, loss=0.00525,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|      | 101/126 [00:01<00:00, 68.94it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 81%|      | 102/126 [00:01<00:00, 68.98it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 82%|      | 103/126 [00:01<00:00, 69.47it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 83%|      | 104/126 [00:01<00:00, 69.90it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 83%|      | 105/126 [00:01<00:00, 70.38it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 84%|      | 106/126 [00:01<00:00, 70.86it/s, loss=0.00525,
v_num=4.31e+7]

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Epoch 64: 85%|      | 107/126 [00:01<00:00, 71.34it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 86%|      | 108/126 [00:01<00:00, 71.82it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 87%|      | 109/126 [00:01<00:00, 72.29it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 87%|      | 110/126 [00:01<00:00, 72.76it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 88%|      | 111/126 [00:01<00:00, 73.24it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 89%|      | 112/126 [00:01<00:00, 73.70it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 90%|      | 113/126 [00:01<00:00, 74.18it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 90%|      | 114/126 [00:01<00:00, 74.64it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 91%|      | 115/126 [00:01<00:00, 75.11it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 92%|      | 116/126 [00:01<00:00, 75.57it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 93%|      | 117/126 [00:01<00:00, 76.03it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 94%|      | 118/126 [00:01<00:00, 76.49it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 94%|      | 119/126 [00:01<00:00, 76.94it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 95%|      | 120/126 [00:01<00:00, 77.39it/s, loss=0.00525,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.63it/s]
Epoch 64: 96%|      | 121/126 [00:01<00:00, 77.84it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 97%|      | 122/126 [00:01<00:00, 78.30it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 98%|      | 123/126 [00:01<00:00, 78.77it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 79.25it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 79.72it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 80.19it/s, loss=0.00525,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.92it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.82it/s, loss=0.00525,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 72.55it/s, loss=0.00453,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|          | 101/126 [00:01<00:00, 63.94it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 81%|          | 102/126 [00:01<00:00, 63.81it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 82%|          | 103/126 [00:01<00:00, 64.24it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 83%|          | 104/126 [00:01<00:00, 64.67it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 83%|          | 105/126 [00:01<00:00, 65.11it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 84%|          | 106/126 [00:01<00:00, 65.52it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 85%|          | 107/126 [00:01<00:00, 65.84it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 86%|          | 108/126 [00:01<00:00, 66.27it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 87%|          | 109/126 [00:01<00:00, 66.70it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 87%|          | 110/126 [00:01<00:00, 67.13it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 88%|          | 111/126 [00:01<00:00, 67.56it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 89%|          | 112/126 [00:01<00:00, 67.99it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 90%|          | 113/126 [00:01<00:00, 68.41it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 90%|          | 114/126 [00:01<00:00, 68.84it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 91%|          | 115/126 [00:01<00:00, 69.26it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 92%|          | 116/126 [00:01<00:00, 69.68it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 93%|          | 117/126 [00:01<00:00, 70.10it/s, loss=0.00453,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 173.89it/s]
Epoch 65: 94%|          | 118/126 [00:01<00:00, 70.51it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 94%|          | 119/126 [00:01<00:00, 70.93it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 95%|          | 120/126 [00:01<00:00, 71.34it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 96%|          | 121/126 [00:01<00:00, 71.75it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 97%|          | 122/126 [00:01<00:00, 72.16it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 98%|          | 123/126 [00:01<00:00, 72.59it/s, loss=0.00453,

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v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 73.01it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 73.43it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 73.86it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 72.47it/s, loss=0.00453,
v_num=4.31e+7]

Epoch 65: 100%|     | 126/126 [00:01<00:00, 72.37it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 79%|      | 100/126 [00:01<00:00, 70.65it/s, loss=0.00505,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 61.98it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 62.14it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 62.59it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 63.05it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 83%|      | 105/126 [00:01<00:00, 63.50it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 63.95it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 64.40it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 86%|      | 108/126 [00:01<00:00, 64.83it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 65.27it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 65.72it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 66.16it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 66.61it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 67.05it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 90%|      | 114/126 [00:01<00:00, 67.49it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 67.93it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 68.37it/s, loss=0.00505,

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v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 68.81it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 69.24it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 69.68it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 70.10it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 70.53it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 70.96it/s, loss=0.00505,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.80it/s]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 71.40it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 71.85it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 72.29it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 72.74it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 71.32it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 71.24it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|      | 100/126 [00:01<00:00, 75.15it/s, loss=0.00433,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|      | 101/126 [00:01<00:00, 66.20it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 81%|      | 102/126 [00:01<00:00, 66.29it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 82%|      | 103/126 [00:01<00:00, 66.80it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 83%|      | 104/126 [00:01<00:00, 67.29it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 83%|      | 105/126 [00:01<00:00, 67.79it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 84%|      | 106/126 [00:01<00:00, 68.28it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 85%|      | 107/126 [00:01<00:00, 68.77it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 86%|      | 108/126 [00:01<00:00, 69.26it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 87%|      | 109/126 [00:01<00:00, 69.75it/s, loss=0.00433,

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v_num=4.31e+7]
Epoch 67: 87%|      | 110/126 [00:01<00:00, 70.21it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 88%|      | 111/126 [00:01<00:00, 70.71it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 89%|      | 112/126 [00:01<00:00, 71.19it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 90%|      | 113/126 [00:01<00:00, 71.68it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 90%|      | 114/126 [00:01<00:00, 72.16it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 91%|      | 115/126 [00:01<00:00, 72.64it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 92%|      | 116/126 [00:01<00:00, 73.12it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 93%|      | 117/126 [00:01<00:00, 73.60it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 94%|      | 118/126 [00:01<00:00, 74.08it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 94%|      | 119/126 [00:01<00:00, 74.56it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 95%|      | 120/126 [00:01<00:00, 75.03it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 96%|      | 121/126 [00:01<00:00, 75.51it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 97%|      | 122/126 [00:01<00:00, 75.99it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 98%|      | 123/126 [00:01<00:00, 76.49it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 98%|      | 124/126 [00:01<00:00, 76.99it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 99%|      | 125/126 [00:01<00:00, 77.49it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 77.99it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|     | 126/126 [00:01<00:00, 76.71it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 76.64it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 88.16it/s, loss=0.00532,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|      | 101/126 [00:01<00:00, 75.94it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 68: 81%|      | 102/126 [00:01<00:00, 75.71it/s, loss=0.00532,
v_num=4.31e+7]

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Epoch 68: 82%| | 103/126 [00:01<00:00, 76.22it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 83%| | 104/126 [00:01<00:00, 76.72it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 83%| | 105/126 [00:01<00:00, 77.22it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 84%| | 106/126 [00:01<00:00, 77.72it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 85%| | 107/126 [00:01<00:00, 78.22it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 86%| | 108/126 [00:01<00:00, 78.71it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 87%| | 109/126 [00:01<00:00, 79.20it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 87%| | 110/126 [00:01<00:00, 79.70it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 88%| | 111/126 [00:01<00:00, 80.20it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 89%| | 112/126 [00:01<00:00, 80.66it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 90%| | 113/126 [00:01<00:00, 81.15it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 90%| | 114/126 [00:01<00:00, 81.63it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 91%| | 115/126 [00:01<00:00, 82.12it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 92%| | 116/126 [00:01<00:00, 82.60it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 93%| | 117/126 [00:01<00:00, 83.09it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 94%| | 118/126 [00:01<00:00, 83.57it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 94%| | 119/126 [00:01<00:00, 84.04it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 95%| | 120/126 [00:01<00:00, 84.52it/s, loss=0.00532, v_num=4.31e+7]
 Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 204.57it/s]
 Epoch 68: 96%| | 121/126 [00:01<00:00, 84.99it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 97%| | 122/126 [00:01<00:00, 85.47it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 98%| | 123/126 [00:01<00:00, 85.97it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 98%| | 124/126 [00:01<00:00, 86.48it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 99%| | 125/126 [00:01<00:00, 86.98it/s, loss=0.00532, v_num=4.31e+7]
 Epoch 68: 100%| | 126/126 [00:01<00:00, 87.49it/s, loss=0.00532, v_num=4.31e+7]

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v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|      | 126/126 [00:01<00:00, 85.72it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 68: 100%|      | 126/126 [00:01<00:00, 85.59it/s, loss=0.00532,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 79.66it/s, loss=0.0051,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 69.77it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 69.94it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 70.48it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 70.86it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 71.33it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 71.84it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 72.36it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 72.87it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 73.39it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 73.89it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 74.41it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 74.91it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 75.42it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 75.89it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 76.39it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 76.89it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 77.39it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 77.88it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 78.38it/s, loss=0.0051,

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v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 78.87it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 79.35it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 79.85it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 80.37it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 80.89it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 81.42it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 81.94it/s, loss=0.0051,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 80.10it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 80.00it/s, loss=0.0051,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 71.19it/s, loss=0.00444,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 63.28it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 63.37it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 63.75it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 83%|      | 104/126 [00:01<00:00, 64.14it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 83%|      | 105/126 [00:01<00:00, 64.52it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 84%|      | 106/126 [00:01<00:00, 64.92it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 85%|      | 107/126 [00:01<00:00, 65.31it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 86%|      | 108/126 [00:01<00:00, 65.71it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 87%|      | 109/126 [00:01<00:00, 66.11it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 87%|      | 110/126 [00:01<00:00, 66.51it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 88%|      | 111/126 [00:01<00:00, 66.92it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 89%|      | 112/126 [00:01<00:00, 67.33it/s, loss=0.00444,
v_num=4.31e+7]

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Epoch 70: 90%|      | 113/126 [00:01<00:00, 67.74it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 90%|      | 114/126 [00:01<00:00, 68.16it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 91%|      | 115/126 [00:01<00:00, 68.58it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 92%|      | 116/126 [00:01<00:00, 68.98it/s, loss=0.00444,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 167.97it/s]
Epoch 70: 93%|      | 117/126 [00:01<00:00, 69.39it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 94%|      | 118/126 [00:01<00:00, 69.81it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 94%|      | 119/126 [00:01<00:00, 70.23it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 95%|      | 120/126 [00:01<00:00, 70.65it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 96%|      | 121/126 [00:01<00:00, 71.07it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 97%|      | 122/126 [00:01<00:00, 71.50it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 71.95it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 72.39it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 72.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 73.29it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 69.44it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 69.33it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 73.18it/s, loss=0.00501,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 65.66it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 65.80it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 82%|      | 103/126 [00:01<00:00, 66.28it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 83%|      | 104/126 [00:01<00:00, 66.75it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 83%|      | 105/126 [00:01<00:00, 67.23it/s, loss=0.00501,
v_num=4.31e+7]

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Epoch 71: 84%|      | 106/126 [00:01<00:00, 67.70it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 85%|      | 107/126 [00:01<00:00, 68.19it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 86%|      | 108/126 [00:01<00:00, 68.66it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 87%|      | 109/126 [00:01<00:00, 69.15it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 87%|      | 110/126 [00:01<00:00, 69.63it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 88%|      | 111/126 [00:01<00:00, 70.12it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 89%|      | 112/126 [00:01<00:00, 70.59it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 90%|      | 113/126 [00:01<00:00, 71.07it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 90%|      | 114/126 [00:01<00:00, 71.54it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 91%|      | 115/126 [00:01<00:00, 72.02it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 92%|      | 116/126 [00:01<00:00, 72.49it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 93%|      | 117/126 [00:01<00:00, 72.97it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 94%|      | 118/126 [00:01<00:00, 73.42it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 94%|      | 119/126 [00:01<00:00, 73.89it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 95%|      | 120/126 [00:01<00:00, 74.35it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 96%|      | 121/126 [00:01<00:00, 74.82it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 97%|      | 122/126 [00:01<00:00, 75.29it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 75.78it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 76.28it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 76.77it/s, loss=0.00501,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.01it/s]
Epoch 71: 100%|      | 126/126 [00:01<00:00, 77.27it/s, loss=0.00501,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|      | 126/126 [00:01<00:00, 76.00it/s, loss=0.00501,
v_num=4.31e+7]
Epoch 71: 100%|      | 126/126 [00:01<00:00, 75.93it/s, loss=0.00501,
v_num=4.31e+7]Mapping latent space...

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Epoch 72: 79%|          | 100/126 [00:01<00:00, 86.28it/s, loss=0.00486,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|          | 101/126 [00:01<00:00, 75.59it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 81%|          | 102/126 [00:01<00:00, 75.69it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 82%|          | 103/126 [00:01<00:00, 76.24it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 83%|          | 104/126 [00:01<00:00, 76.78it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 83%|          | 105/126 [00:01<00:00, 77.33it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 84%|          | 106/126 [00:01<00:00, 77.87it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 85%|          | 107/126 [00:01<00:00, 78.43it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 86%|          | 108/126 [00:01<00:00, 78.96it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 87%|          | 109/126 [00:01<00:00, 79.52it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 87%|          | 110/126 [00:01<00:00, 80.06it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 88%|          | 111/126 [00:01<00:00, 80.61it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 89%|          | 112/126 [00:01<00:00, 81.14it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 90%|          | 113/126 [00:01<00:00, 81.68it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 90%|          | 114/126 [00:01<00:00, 82.21it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 91%|          | 115/126 [00:01<00:00, 82.75it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 92%|          | 116/126 [00:01<00:00, 83.27it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 93%|          | 117/126 [00:01<00:00, 83.82it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 94%|          | 118/126 [00:01<00:00, 84.33it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 94%|          | 119/126 [00:01<00:00, 84.86it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 95%|          | 120/126 [00:01<00:00, 85.35it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 96%|          | 121/126 [00:01<00:00, 85.87it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 97%|          | 122/126 [00:01<00:00, 86.39it/s, loss=0.00486,

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v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 86.94it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 87.49it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 88.04it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 88.60it/s, loss=0.00486,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 86.92it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 86.84it/s, loss=0.00486,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 88.15it/s, loss=0.00517,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 76.70it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 76.92it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 77.47it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 78.02it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 78.58it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 79.12it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 79.67it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 80.21it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 80.77it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 81.30it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 81.86it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 82.39it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 82.93it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 83.46it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 84.00it/s, loss=0.00517,
v_num=4.31e+7]

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Epoch 73: 92%|      | 116/126 [00:01<00:00, 84.53it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 85.06it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 85.59it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 86.13it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 86.64it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 87.16it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 87.65it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 88.21it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 88.76it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 89.33it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 89.90it/s, loss=0.00517,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 88.14it/s, loss=0.00517,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 88.04it/s, loss=0.00517,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 91.34it/s, loss=0.00439,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|      | 101/126 [00:01<00:00, 79.55it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 81%|      | 102/126 [00:01<00:00, 79.89it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 82%|      | 103/126 [00:01<00:00, 80.33it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 83%|      | 104/126 [00:01<00:00, 80.78it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 83%|      | 105/126 [00:01<00:00, 81.22it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 84%|      | 106/126 [00:01<00:00, 81.66it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 85%|      | 107/126 [00:01<00:00, 82.11it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 86%|      | 108/126 [00:01<00:00, 82.55it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 87%|      | 109/126 [00:01<00:00, 83.01it/s, loss=0.00439,

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v_num=4.31e+7]
Epoch 74: 87%|      | 110/126 [00:01<00:00, 83.46it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 88%|      | 111/126 [00:01<00:00, 83.91it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 89%|      | 112/126 [00:01<00:00, 84.37it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 90%|      | 113/126 [00:01<00:00, 84.83it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 90%|      | 114/126 [00:01<00:00, 85.29it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 91%|      | 115/126 [00:01<00:00, 85.76it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 92%|      | 116/126 [00:01<00:00, 86.23it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 93%|      | 117/126 [00:01<00:00, 86.69it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 94%|      | 118/126 [00:01<00:00, 87.15it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 94%|      | 119/126 [00:01<00:00, 87.62it/s, loss=0.00439,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.53it/s]
Epoch 74: 95%|      | 120/126 [00:01<00:00, 88.09it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 96%|      | 121/126 [00:01<00:00, 88.56it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 97%|      | 122/126 [00:01<00:00, 89.04it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 98%|      | 123/126 [00:01<00:00, 89.55it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 98%|      | 124/126 [00:01<00:00, 90.06it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 90.57it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 91.08it/s, loss=0.00439,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 89.01it/s, loss=0.00439,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 88.88it/s, loss=0.00439,
v_num=4.31e+7]Mapping latent space...

Epoch 75: 79%|      | 100/126 [00:01<00:00, 74.82it/s, loss=0.00542,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 65.73it/s, loss=0.00542,
v_num=4.31e+7]

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Epoch 75: 81%| | 102/126 [00:01<00:00, 65.84it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 82%| | 103/126 [00:01<00:00, 66.30it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 83%| | 104/126 [00:01<00:00, 66.76it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 83%| | 105/126 [00:01<00:00, 67.23it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 84%| | 106/126 [00:01<00:00, 67.69it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 85%| | 107/126 [00:01<00:00, 68.15it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 86%| | 108/126 [00:01<00:00, 68.60it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 87%| | 109/126 [00:01<00:00, 69.07it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 87%| | 110/126 [00:01<00:00, 69.53it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 88%| | 111/126 [00:01<00:00, 69.98it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 89%| | 112/126 [00:01<00:00, 70.44it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 90%| | 113/126 [00:01<00:00, 70.89it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 90%| | 114/126 [00:01<00:00, 71.34it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 91%| | 115/126 [00:01<00:00, 71.79it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 92%| | 116/126 [00:01<00:00, 72.24it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 93%| | 117/126 [00:01<00:00, 72.69it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 94%| | 118/126 [00:01<00:00, 73.13it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 94%| | 119/126 [00:01<00:00, 73.58it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 95%| | 120/126 [00:01<00:00, 74.02it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 96%| | 121/126 [00:01<00:00, 74.46it/s, loss=0.00542, v_num=4.31e+7]
Validation DataLoader 0: 85%| | 22/26 [00:00<00:00, 216.63it/s]
Epoch 75: 97%| | 122/126 [00:01<00:00, 74.90it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 98%| | 123/126 [00:01<00:00, 75.35it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 98%| | 124/126 [00:01<00:00, 75.82it/s, loss=0.00542, v_num=4.31e+7]
Epoch 75: 99%| | 125/126 [00:01<00:00, 76.27it/s, loss=0.00542, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 75: 100%|      | 126/126 [00:01<00:00, 76.74it/s, loss=0.00542,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|      | 126/126 [00:01<00:00, 75.37it/s, loss=0.00542,
v_num=4.31e+7]
Epoch 75: 100%|      | 126/126 [00:01<00:00, 75.28it/s, loss=0.00542,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 72.88it/s, loss=0.00511,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 64.36it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 64.63it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 65.03it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 83%|      | 104/126 [00:01<00:00, 65.43it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 65.83it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 66.23it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 66.64it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 67.04it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 67.45it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 87%|      | 110/126 [00:01<00:00, 67.86it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 68.26it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 68.67it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 69.08it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 69.49it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 69.90it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 70.32it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 70.73it/s, loss=0.00511,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.81it/s]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 71.14it/s, loss=0.00511,

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v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 71.56it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 71.98it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 72.39it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 72.82it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 73.26it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 73.71it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 74.15it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 74.60it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 73.34it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 73.26it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 78.26it/s, loss=0.00438,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 69.04it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 69.13it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 82%|      | 103/126 [00:01<00:00, 69.66it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 70.17it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 83%|      | 105/126 [00:01<00:00, 70.68it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 84%|      | 106/126 [00:01<00:00, 71.19it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 85%|      | 107/126 [00:01<00:00, 71.71it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 86%|      | 108/126 [00:01<00:00, 72.21it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 87%|      | 109/126 [00:01<00:00, 72.72it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 87%|      | 110/126 [00:01<00:00, 73.23it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 88%|      | 111/126 [00:01<00:00, 73.75it/s, loss=0.00438,
v_num=4.31e+7]

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Epoch 77: 89%|      | 112/126 [00:01<00:00, 74.24it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 90%|      | 113/126 [00:01<00:00, 74.75it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 90%|      | 114/126 [00:01<00:00, 75.25it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 91%|      | 115/126 [00:01<00:00, 75.75it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 92%|      | 116/126 [00:01<00:00, 76.25it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 93%|      | 117/126 [00:01<00:00, 76.75it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 94%|      | 118/126 [00:01<00:00, 77.24it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 94%|      | 119/126 [00:01<00:00, 77.73it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 95%|      | 120/126 [00:01<00:00, 78.22it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 96%|      | 121/126 [00:01<00:00, 78.71it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 97%|      | 122/126 [00:01<00:00, 79.20it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 98%|      | 123/126 [00:01<00:00, 79.71it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 98%|      | 124/126 [00:01<00:00, 80.23it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 99%|      | 125/126 [00:01<00:00, 80.75it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 81.27it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 100%|     | 126/126 [00:01<00:00, 79.43it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...

Epoch 78: 79%|      | 100/126 [00:01<00:00, 81.54it/s, loss=0.00573,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|      | 101/126 [00:01<00:00, 71.35it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 78: 81%|      | 102/126 [00:01<00:00, 71.37it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 78: 82%|      | 103/126 [00:01<00:00, 71.91it/s, loss=0.00573,
v_num=4.31e+7]
Epoch 78: 83%|      | 104/126 [00:01<00:00, 72.42it/s, loss=0.00573,
v_num=4.31e+7]

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Epoch 78: 83%| | 105/126 [00:01<00:00, 72.95it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 84%| | 106/126 [00:01<00:00, 73.46it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 85%| | 107/126 [00:01<00:00, 73.99it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 86%| | 108/126 [00:01<00:00, 74.49it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 87%| | 109/126 [00:01<00:00, 75.00it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 87%| | 110/126 [00:01<00:00, 75.51it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 88%| | 111/126 [00:01<00:00, 76.04it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 89%| | 112/126 [00:01<00:00, 76.53it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 90%| | 113/126 [00:01<00:00, 77.05it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 90%| | 114/126 [00:01<00:00, 77.54it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 91%| | 115/126 [00:01<00:00, 78.06it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 92%| | 116/126 [00:01<00:00, 78.55it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 93%| | 117/126 [00:01<00:00, 79.06it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 94%| | 118/126 [00:01<00:00, 79.56it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 94%| | 119/126 [00:01<00:00, 80.07it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 95%| | 120/126 [00:01<00:00, 80.56it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 96%| | 121/126 [00:01<00:00, 81.07it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 97%| | 122/126 [00:01<00:00, 81.56it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 98%| | 123/126 [00:01<00:00, 82.09it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 98%| | 124/126 [00:01<00:00, 82.61it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 99%| | 125/126 [00:01<00:00, 83.14it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 100%| | 126/126 [00:01<00:00, 83.67it/s, loss=0.00573, v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%| | 126/126 [00:01<00:00, 82.16it/s, loss=0.00573, v_num=4.31e+7]
Epoch 78: 100%| | 126/126 [00:01<00:00, 82.08it/s, loss=0.00573, v_num=4.31e+7]Mapping latent space...

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Epoch 79: 79%|          | 100/126 [00:01<00:00, 90.07it/s, loss=0.00444,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|          | 101/126 [00:01<00:00, 78.40it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 81%|          | 102/126 [00:01<00:00, 78.29it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 82%|          | 103/126 [00:01<00:00, 78.86it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 83%|          | 104/126 [00:01<00:00, 79.42it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 83%|          | 105/126 [00:01<00:00, 79.98it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 84%|          | 106/126 [00:01<00:00, 80.54it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 85%|          | 107/126 [00:01<00:00, 81.10it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 86%|          | 108/126 [00:01<00:00, 81.65it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 87%|          | 109/126 [00:01<00:00, 82.21it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 87%|          | 110/126 [00:01<00:00, 82.77it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 88%|          | 111/126 [00:01<00:00, 83.32it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 89%|          | 112/126 [00:01<00:00, 83.87it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 90%|          | 113/126 [00:01<00:00, 84.42it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 90%|          | 114/126 [00:01<00:00, 84.97it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 91%|          | 115/126 [00:01<00:00, 85.51it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 92%|          | 116/126 [00:01<00:00, 86.06it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 93%|          | 117/126 [00:01<00:00, 86.60it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 94%|          | 118/126 [00:01<00:00, 87.14it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 94%|          | 119/126 [00:01<00:00, 87.68it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 95%|          | 120/126 [00:01<00:00, 88.21it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 96%|          | 121/126 [00:01<00:00, 88.74it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 97%|          | 122/126 [00:01<00:00, 89.28it/s, loss=0.00444,

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v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 89.85it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 90.42it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 90.99it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 91.56it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 89.80it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 89.69it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 90.42it/s, loss=0.00431,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 77.82it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 77.84it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 78.38it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 78.93it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 79.47it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 84%|      | 106/126 [00:01<00:00, 80.02it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 85%|      | 107/126 [00:01<00:00, 80.55it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 86%|      | 108/126 [00:01<00:00, 81.08it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 87%|      | 109/126 [00:01<00:00, 81.62it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 87%|      | 110/126 [00:01<00:00, 82.16it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 88%|      | 111/126 [00:01<00:00, 82.69it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 89%|      | 112/126 [00:01<00:00, 83.26it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 90%|      | 113/126 [00:01<00:00, 83.77it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 90%|      | 114/126 [00:01<00:00, 84.30it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 91%|      | 115/126 [00:01<00:00, 84.82it/s, loss=0.00431,
v_num=4.31e+7]

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Epoch 80: 92%|      | 116/126 [00:01<00:00, 85.35it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 93%|      | 117/126 [00:01<00:00, 85.86it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 94%|      | 118/126 [00:01<00:00, 86.38it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 94%|      | 119/126 [00:01<00:00, 86.89it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 95%|      | 120/126 [00:01<00:00, 87.39it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 96%|      | 121/126 [00:01<00:00, 87.90it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 97%|      | 122/126 [00:01<00:00, 88.41it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 98%|      | 123/126 [00:01<00:00, 88.96it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 98%|      | 124/126 [00:01<00:00, 89.52it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 90.08it/s, loss=0.00431,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.91it/s]
Epoch 80: 100%|      | 126/126 [00:01<00:00, 90.63it/s, loss=0.00431,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|      | 126/126 [00:01<00:00, 88.79it/s, loss=0.00431,
v_num=4.31e+7]

Epoch 80: 100%|      | 126/126 [00:01<00:00, 88.70it/s, loss=0.00431,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 79%|      | 100/126 [00:01<00:00, 79.88it/s, loss=0.00433,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|      | 101/126 [00:01<00:00, 69.74it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 81%|      | 102/126 [00:01<00:00, 69.83it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 82%|      | 103/126 [00:01<00:00, 70.24it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 83%|      | 104/126 [00:01<00:00, 70.65it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 83%|      | 105/126 [00:01<00:00, 71.07it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 84%|      | 106/126 [00:01<00:00, 71.49it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 85%|      | 107/126 [00:01<00:00, 71.91it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 86%|      | 108/126 [00:01<00:00, 72.33it/s, loss=0.00433,

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v_num=4.31e+7]
Epoch 81: 87%|      | 109/126 [00:01<00:00, 72.75it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 87%|      | 110/126 [00:01<00:00, 73.19it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 88%|      | 111/126 [00:01<00:00, 73.62it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 89%|      | 112/126 [00:01<00:00, 74.05it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 90%|      | 113/126 [00:01<00:00, 74.49it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 90%|      | 114/126 [00:01<00:00, 74.92it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 91%|      | 115/126 [00:01<00:00, 75.37it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 92%|      | 116/126 [00:01<00:00, 75.81it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 93%|      | 117/126 [00:01<00:00, 76.25it/s, loss=0.00433,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.08it/s]
Epoch 81: 94%|      | 118/126 [00:01<00:00, 76.68it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 94%|      | 119/126 [00:01<00:00, 77.12it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 95%|      | 120/126 [00:01<00:00, 77.56it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 96%|      | 121/126 [00:01<00:00, 78.00it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 97%|      | 122/126 [00:01<00:00, 78.45it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 98%|      | 123/126 [00:01<00:00, 78.93it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 79.40it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 79.88it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 80.35it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.43it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.35it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 79.92it/s, loss=0.00558,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 70.52it/s, loss=0.00558,

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v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 70.41it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 70.94it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 71.44it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 71.97it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 72.48it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 73.00it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 73.51it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 74.03it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 74.53it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 75.05it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 75.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 76.06it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 76.57it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 77.06it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 77.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 78.06it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 94%|      | 118/126 [00:01<00:00, 78.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 79.06it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 79.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 80.05it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 80.56it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 81.08it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 81.60it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 82.13it/s, loss=0.00558,

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v_num=4.31e+7]
Epoch 82: 100%|      | 126/126 [00:01<00:00, 82.65it/s, loss=0.00558,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|      | 126/126 [00:01<00:00, 81.10it/s, loss=0.00558,
v_num=4.31e+7]
Epoch 82: 100%|      | 126/126 [00:01<00:00, 81.03it/s, loss=0.00558,
v_num=4.31e+7]Mapping latent space...
Epoch 83:  79%|      | 100/126 [00:01<00:00, 88.59it/s, loss=0.00447,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83:  80%|      | 101/126 [00:01<00:00, 77.77it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  81%|      | 102/126 [00:01<00:00, 77.75it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  82%|      | 103/126 [00:01<00:00, 78.30it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  83%|      | 104/126 [00:01<00:00, 78.85it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  83%|      | 105/126 [00:01<00:00, 79.40it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  84%|      | 106/126 [00:01<00:00, 79.95it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  85%|      | 107/126 [00:01<00:00, 80.50it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  86%|      | 108/126 [00:01<00:00, 81.03it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  87%|      | 109/126 [00:01<00:00, 81.59it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  87%|      | 110/126 [00:01<00:00, 82.11it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  88%|      | 111/126 [00:01<00:00, 82.65it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  89%|      | 112/126 [00:01<00:00, 83.19it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  90%|      | 113/126 [00:01<00:00, 83.73it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  90%|      | 114/126 [00:01<00:00, 84.27it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  91%|      | 115/126 [00:01<00:00, 84.80it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  92%|      | 116/126 [00:01<00:00, 85.34it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  93%|      | 117/126 [00:01<00:00, 85.87it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83:  94%|      | 118/126 [00:01<00:00, 86.40it/s, loss=0.00447,
v_num=4.31e+7]

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Epoch 83: 94%|      | 119/126 [00:01<00:00, 86.94it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 87.46it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 87.99it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 88.53it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 89.09it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 89.64it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 90.20it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 90.76it/s, loss=0.00447,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 89.01it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 88.91it/s, loss=0.00447,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 89.78it/s, loss=0.00493,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 78.47it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 78.17it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 78.74it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 83%|      | 104/126 [00:01<00:00, 79.28it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 83%|      | 105/126 [00:01<00:00, 79.84it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 84%|      | 106/126 [00:01<00:00, 80.38it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 85%|      | 107/126 [00:01<00:00, 80.94it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 86%|      | 108/126 [00:01<00:00, 81.48it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 87%|      | 109/126 [00:01<00:00, 82.04it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 87%|      | 110/126 [00:01<00:00, 82.58it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 88%|      | 111/126 [00:01<00:00, 83.15it/s, loss=0.00493,
v_num=4.31e+7]

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Epoch 84: 89%|      | 112/126 [00:01<00:00, 83.67it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 90%|      | 113/126 [00:01<00:00, 84.22it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 90%|      | 114/126 [00:01<00:00, 84.76it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 91%|      | 115/126 [00:01<00:00, 85.30it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 92%|      | 116/126 [00:01<00:00, 85.84it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 93%|      | 117/126 [00:01<00:00, 86.37it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 94%|      | 118/126 [00:01<00:00, 86.89it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 94%|      | 119/126 [00:01<00:00, 87.42it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 95%|      | 120/126 [00:01<00:00, 87.95it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 96%|      | 121/126 [00:01<00:00, 88.47it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 97%|      | 122/126 [00:01<00:00, 88.99it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 98%|      | 123/126 [00:01<00:00, 89.55it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 98%|      | 124/126 [00:01<00:00, 90.10it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 99%|      | 125/126 [00:01<00:00, 90.64it/s, loss=0.00493,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 254.02it/s]
Epoch 84: 100%|      | 126/126 [00:01<00:00, 91.18it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|      | 126/126 [00:01<00:00, 89.40it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 84: 100%|      | 126/126 [00:01<00:00, 89.29it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 90.14it/s, loss=0.00436,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85: 80%|      | 101/126 [00:01<00:00, 78.44it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 81%|      | 102/126 [00:01<00:00, 78.45it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 82%|      | 103/126 [00:01<00:00, 78.87it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 83%|      | 104/126 [00:01<00:00, 79.30it/s, loss=0.00436,
v_num=4.31e+7]

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Epoch 85: 83%|      | 105/126 [00:01<00:00, 79.73it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 84%|      | 106/126 [00:01<00:00, 80.16it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 85%|      | 107/126 [00:01<00:00, 80.59it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 86%|      | 108/126 [00:01<00:00, 81.02it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 87%|      | 109/126 [00:01<00:00, 81.46it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 87%|      | 110/126 [00:01<00:00, 81.90it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 88%|      | 111/126 [00:01<00:00, 82.34it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 89%|      | 112/126 [00:01<00:00, 82.77it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 90%|      | 113/126 [00:01<00:00, 83.22it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 90%|      | 114/126 [00:01<00:00, 83.67it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 91%|      | 115/126 [00:01<00:00, 84.11it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 92%|      | 116/126 [00:01<00:00, 84.56it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 93%|      | 117/126 [00:01<00:00, 85.01it/s, loss=0.00436,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 172.49it/s]
Epoch 85: 94%|      | 118/126 [00:01<00:00, 85.45it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 94%|      | 119/126 [00:01<00:00, 85.91it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 95%|      | 120/126 [00:01<00:00, 86.36it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 86.81it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 87.27it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 87.77it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 88.26it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 88.77it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 89.27it/s, loss=0.00436,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 87.34it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 87.23it/s, loss=0.00436,

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v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|          | 100/126 [00:01<00:00, 79.51it/s, loss=0.00453,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|          | 101/126 [00:01<00:00, 70.99it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 81%|          | 102/126 [00:01<00:00, 70.99it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 82%|          | 103/126 [00:01<00:00, 71.52it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 83%|          | 104/126 [00:01<00:00, 72.03it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 83%|          | 105/126 [00:01<00:00, 72.56it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 84%|          | 106/126 [00:01<00:00, 73.09it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 85%|          | 107/126 [00:01<00:00, 73.59it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 86%|          | 108/126 [00:01<00:00, 74.10it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 87%|          | 109/126 [00:01<00:00, 74.61it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 87%|          | 110/126 [00:01<00:00, 75.12it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 88%|          | 111/126 [00:01<00:00, 75.65it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 89%|          | 112/126 [00:01<00:00, 76.15it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 90%|          | 113/126 [00:01<00:00, 76.66it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 90%|          | 114/126 [00:01<00:00, 77.17it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 91%|          | 115/126 [00:01<00:00, 77.67it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 92%|          | 116/126 [00:01<00:00, 78.18it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 93%|          | 117/126 [00:01<00:00, 78.67it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 94%|          | 118/126 [00:01<00:00, 79.18it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 94%|          | 119/126 [00:01<00:00, 79.68it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 95%|          | 120/126 [00:01<00:00, 80.17it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 96%|          | 121/126 [00:01<00:00, 80.67it/s, loss=0.00453,
v_num=4.31e+7]

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Epoch 86: 97%|      | 122/126 [00:01<00:00, 81.17it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 81.69it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 82.22it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 82.75it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 83.28it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 80.65it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 80.53it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 78.24it/s, loss=0.0048,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 69.71it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 69.97it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 70.48it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 70.99it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 71.50it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 72.00it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 72.51it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 86%|      | 108/126 [00:01<00:00, 73.01it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 73.51it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 74.02it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 74.53it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 75.03it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 75.53it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 76.03it/s, loss=0.0048,
v_num=4.31e+7]

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Epoch 87: 91%|      | 115/126 [00:01<00:00, 76.52it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 77.02it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 77.52it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 78.01it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 78.50it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 78.99it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 79.48it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 79.97it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 80.48it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 81.00it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 81.52it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 82.05it/s, loss=0.0048,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 80.64it/s, loss=0.0048,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 80.56it/s, loss=0.0048,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 90.13it/s, loss=0.00591,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|      | 101/126 [00:01<00:00, 78.28it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 81%|      | 102/126 [00:01<00:00, 75.70it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 82%|      | 103/126 [00:01<00:00, 76.11it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 83%|      | 104/126 [00:01<00:00, 76.54it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 83%|      | 105/126 [00:01<00:00, 76.98it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 84%|      | 106/126 [00:01<00:00, 77.42it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 85%|      | 107/126 [00:01<00:00, 77.86it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 86%|      | 108/126 [00:01<00:00, 78.30it/s, loss=0.00591,

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v_num=4.31e+7]
Validation DataLoader 0: 35%|          | 9/26 [00:00<00:00, 88.04it/s]
Epoch 88: 87%|          | 109/126 [00:01<00:00, 78.73it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 87%|          | 110/126 [00:01<00:00, 79.17it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 88%|          | 111/126 [00:01<00:00, 79.61it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 89%|          | 112/126 [00:01<00:00, 80.06it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 90%|          | 113/126 [00:01<00:00, 80.50it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 90%|          | 114/126 [00:01<00:00, 80.95it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 91%|          | 115/126 [00:01<00:00, 81.39it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 92%|          | 116/126 [00:01<00:00, 81.84it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 93%|          | 117/126 [00:01<00:00, 82.28it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 94%|          | 118/126 [00:01<00:00, 82.72it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 94%|          | 119/126 [00:01<00:00, 83.17it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 95%|          | 120/126 [00:01<00:00, 83.62it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 96%|          | 121/126 [00:01<00:00, 84.07it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 97%|          | 122/126 [00:01<00:00, 84.52it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 98%|          | 123/126 [00:01<00:00, 85.00it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 98%|          | 124/126 [00:01<00:00, 85.49it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 99%|          | 125/126 [00:01<00:00, 85.97it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 100%|         | 126/126 [00:01<00:00, 86.47it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|         | 126/126 [00:01<00:00, 84.65it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 88: 100%|         | 126/126 [00:01<00:00, 84.53it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|          | 100/126 [00:01<00:00, 78.98it/s, loss=0.0047,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|          | 101/126 [00:01<00:00, 69.89it/s, loss=0.0047,

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v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 69.91it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 70.45it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 70.96it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 71.49it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 71.99it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 72.51it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 73.02it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 73.53it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 74.05it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 74.57it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 75.07it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 75.57it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 76.07it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 76.58it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 77.08it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 77.59it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 78.09it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 78.59it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 79.07it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 79.57it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 80.07it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 80.59it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 81.11it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 81.63it/s, loss=0.0047,

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v_num=4.31e+7]
Epoch 89: 100%|      | 126/126 [00:01<00:00, 82.16it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|      | 126/126 [00:01<00:00, 80.66it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 89: 100%|      | 126/126 [00:01<00:00, 80.58it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 87.88it/s, loss=0.00466,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 76.91it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 76.96it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 77.37it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 77.78it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 78.19it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 78.61it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 79.03it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 79.45it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 87%|      | 109/126 [00:01<00:00, 79.86it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 80.29it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 80.70it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 81.14it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 81.56it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 90%|      | 114/126 [00:01<00:00, 81.99it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 82.42it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 82.86it/s, loss=0.00466,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 165.94it/s]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 83.28it/s, loss=0.00466,
v_num=4.31e+7]

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Epoch 90: 94%|      | 118/126 [00:01<00:00, 83.72it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 84.16it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 84.59it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 85.03it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 85.49it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 85.98it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 86.47it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 86.96it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 87.46it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 85.52it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 85.42it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 77.97it/s, loss=0.0054,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 69.79it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 81%|      | 102/126 [00:01<00:00, 69.85it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 82%|      | 103/126 [00:01<00:00, 70.36it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 83%|      | 104/126 [00:01<00:00, 70.87it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 83%|      | 105/126 [00:01<00:00, 71.38it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 84%|      | 106/126 [00:01<00:00, 71.89it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 85%|      | 107/126 [00:01<00:00, 72.40it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 86%|      | 108/126 [00:01<00:00, 72.90it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 87%|      | 109/126 [00:01<00:00, 73.41it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 87%|      | 110/126 [00:01<00:00, 73.91it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 88%|      | 111/126 [00:01<00:00, 74.42it/s, loss=0.0054,

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v_num=4.31e+7]
Epoch 91: 89%|      | 112/126 [00:01<00:00, 74.92it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 90%|      | 113/126 [00:01<00:00, 75.42it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 90%|      | 114/126 [00:01<00:00, 75.92it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 91%|      | 115/126 [00:01<00:00, 76.42it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 92%|      | 116/126 [00:01<00:00, 76.92it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 93%|      | 117/126 [00:01<00:00, 77.41it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 94%|      | 118/126 [00:01<00:00, 77.91it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 94%|      | 119/126 [00:01<00:00, 78.40it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 95%|      | 120/126 [00:01<00:00, 78.89it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 96%|      | 121/126 [00:01<00:00, 79.38it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 97%|      | 122/126 [00:01<00:00, 79.87it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 98%|      | 123/126 [00:01<00:00, 80.38it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 98%|      | 124/126 [00:01<00:00, 80.90it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 99%|      | 125/126 [00:01<00:00, 81.40it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 81.91it/s, loss=0.0054,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|     | 126/126 [00:01<00:00, 80.48it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 80.41it/s, loss=0.0054,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 71.22it/s, loss=0.00458,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|      | 101/126 [00:01<00:00, 63.84it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 81%|      | 102/126 [00:01<00:00, 64.03it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 82%|      | 103/126 [00:01<00:00, 64.49it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 83%|      | 104/126 [00:01<00:00, 64.95it/s, loss=0.00458,
v_num=4.31e+7]

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Epoch 92: 83%|      | 105/126 [00:01<00:00, 65.41it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 84%|      | 106/126 [00:01<00:00, 65.87it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 85%|      | 107/126 [00:01<00:00, 66.32it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 86%|      | 108/126 [00:01<00:00, 66.77it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 87%|      | 109/126 [00:01<00:00, 67.23it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 87%|      | 110/126 [00:01<00:00, 67.68it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 88%|      | 111/126 [00:01<00:00, 68.13it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 89%|      | 112/126 [00:01<00:00, 68.58it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 90%|      | 113/126 [00:01<00:00, 69.03it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 90%|      | 114/126 [00:01<00:00, 69.47it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 91%|      | 115/126 [00:01<00:00, 69.92it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 92%|      | 116/126 [00:01<00:00, 70.36it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 93%|      | 117/126 [00:01<00:00, 70.80it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 94%|      | 118/126 [00:01<00:00, 71.23it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 71.67it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 72.11it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 96%|      | 121/126 [00:01<00:00, 72.53it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 72.97it/s, loss=0.00458,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.58it/s]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 73.42it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 73.88it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 74.33it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 74.78it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 73.50it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 73.41it/s, loss=0.00458,

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v_num=4.31e+7]Mapping latent space...

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Epoch 93: 79%|          | 100/126 [00:01<00:00, 82.09it/s, loss=0.0051,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|          | 101/126 [00:01<00:00, 71.84it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 81%|          | 102/126 [00:01<00:00, 71.86it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 82%|          | 103/126 [00:01<00:00, 72.40it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 83%|          | 104/126 [00:01<00:00, 72.91it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 83%|          | 105/126 [00:01<00:00, 73.46it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 84%|          | 106/126 [00:01<00:00, 73.97it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 85%|          | 107/126 [00:01<00:00, 74.52it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 86%|          | 108/126 [00:01<00:00, 75.02it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 87%|          | 109/126 [00:01<00:00, 75.56it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 87%|          | 110/126 [00:01<00:00, 76.07it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 88%|          | 111/126 [00:01<00:00, 76.61it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 89%|          | 112/126 [00:01<00:00, 77.12it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 90%|          | 113/126 [00:01<00:00, 77.66it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 90%|          | 114/126 [00:01<00:00, 78.16it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 91%|          | 115/126 [00:01<00:00, 78.69it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 92%|          | 116/126 [00:01<00:00, 79.20it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 93%|          | 117/126 [00:01<00:00, 79.72it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 94%|          | 118/126 [00:01<00:00, 80.22it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 94%|          | 119/126 [00:01<00:00, 80.73it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 95%|          | 120/126 [00:01<00:00, 81.23it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 96%|          | 121/126 [00:01<00:00, 81.74it/s, loss=0.0051,
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v_num=4.31e+7]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 82.24it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 82.77it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 83.31it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 83.85it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 84.39it/s, loss=0.0051,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 82.72it/s, loss=0.0051,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 82.63it/s, loss=0.0051,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 79.11it/s, loss=0.00556,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 69.94it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 69.75it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 70.27it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 70.78it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 71.30it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 71.82it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 85%|      | 107/126 [00:01<00:00, 72.34it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 72.84it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 73.35it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 73.86it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 74.37it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 74.88it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 75.38it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 75.89it/s, loss=0.00556,
v_num=4.31e+7]

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Epoch 94: 91%|      | 115/126 [00:01<00:00, 76.39it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 76.89it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 77.39it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 77.88it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 78.38it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 78.87it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 79.37it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 79.84it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 80.35it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 80.88it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 81.39it/s, loss=0.00556,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 255.27it/s]
Epoch 94: 100%|      | 126/126 [00:01<00:00, 81.91it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|      | 126/126 [00:01<00:00, 80.46it/s, loss=0.00556,
v_num=4.31e+7]
Epoch 94: 100%|      | 126/126 [00:01<00:00, 80.37it/s, loss=0.00556,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 67.05it/s, loss=0.00487,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|      | 101/126 [00:01<00:00, 59.87it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 81%|      | 102/126 [00:01<00:00, 60.02it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 82%|      | 103/126 [00:01<00:00, 60.46it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 83%|      | 104/126 [00:01<00:00, 60.90it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 83%|      | 105/126 [00:01<00:00, 61.34it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 84%|      | 106/126 [00:01<00:00, 61.78it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 85%|      | 107/126 [00:01<00:00, 62.21it/s, loss=0.00487,
v_num=4.31e+7]

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Epoch 95: 86%|      | 108/126 [00:01<00:00, 62.65it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 87%|      | 109/126 [00:01<00:00, 63.09it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 87%|      | 110/126 [00:01<00:00, 63.52it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 88%|      | 111/126 [00:01<00:00, 63.95it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 89%|      | 112/126 [00:01<00:00, 64.38it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 90%|      | 113/126 [00:01<00:00, 64.81it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 90%|      | 114/126 [00:01<00:00, 65.23it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 91%|      | 115/126 [00:01<00:00, 65.66it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 92%|      | 116/126 [00:01<00:00, 66.08it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 93%|      | 117/126 [00:01<00:00, 66.50it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 94%|      | 118/126 [00:01<00:00, 66.93it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 94%|      | 119/126 [00:01<00:00, 67.35it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 95%|      | 120/126 [00:01<00:00, 67.77it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 96%|      | 121/126 [00:01<00:00, 68.18it/s, loss=0.00487,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.12it/s]
Epoch 95: 97%|      | 122/126 [00:01<00:00, 68.59it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 98%|      | 123/126 [00:01<00:00, 69.03it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 98%|      | 124/126 [00:01<00:00, 69.46it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 69.89it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 70.33it/s, loss=0.00487,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 68.76it/s, loss=0.00487,
v_num=4.31e+7]

Epoch 95: 100%|     | 126/126 [00:01<00:00, 68.65it/s, loss=0.00487,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 79%|      | 100/126 [00:01<00:00, 73.30it/s, loss=0.00531,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|          | 101/126 [00:01<00:00, 65.15it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 81%|          | 102/126 [00:01<00:00, 65.17it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 82%|          | 103/126 [00:01<00:00, 65.64it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 83%|          | 104/126 [00:01<00:00, 66.12it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 83%|          | 105/126 [00:01<00:00, 66.59it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 84%|          | 106/126 [00:01<00:00, 67.07it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 85%|          | 107/126 [00:01<00:00, 67.54it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 86%|          | 108/126 [00:01<00:00, 68.01it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 87%|          | 109/126 [00:01<00:00, 68.47it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 87%|          | 110/126 [00:01<00:00, 68.94it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 88%|          | 111/126 [00:01<00:00, 69.40it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 89%|          | 112/126 [00:01<00:00, 69.87it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 90%|          | 113/126 [00:01<00:00, 70.33it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 90%|          | 114/126 [00:01<00:00, 70.79it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 91%|          | 115/126 [00:01<00:00, 71.24it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 92%|          | 116/126 [00:01<00:00, 71.69it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 93%|          | 117/126 [00:01<00:00, 72.15it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 94%|          | 118/126 [00:01<00:00, 72.60it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 94%|          | 119/126 [00:01<00:00, 73.05it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 95%|          | 120/126 [00:01<00:00, 73.50it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 96%|          | 121/126 [00:01<00:00, 73.95it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 97%|          | 122/126 [00:01<00:00, 74.40it/s, loss=0.00531,
v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 228.31it/s]
Epoch 96: 98%|          | 123/126 [00:01<00:00, 74.87it/s, loss=0.00531,
v_num=4.31e+7]

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Epoch 96: 98%|      | 124/126 [00:01<00:00, 75.34it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 75.81it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 76.27it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 74.91it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 74.84it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 84.59it/s, loss=0.00498,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 73.12it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 81%|      | 102/126 [00:01<00:00, 73.29it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 82%|      | 103/126 [00:01<00:00, 73.76it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 83%|      | 104/126 [00:01<00:00, 74.25it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 83%|      | 105/126 [00:01<00:00, 74.75it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 84%|      | 106/126 [00:01<00:00, 75.24it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 85%|      | 107/126 [00:01<00:00, 75.74it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 86%|      | 108/126 [00:01<00:00, 76.22it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 76.71it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 77.20it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 77.69it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 78.17it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 78.53it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 79.01it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 79.49it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 79.97it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 80.46it/s, loss=0.00498,

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v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 80.93it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 81.42it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 81.89it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 82.38it/s, loss=0.00498,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.52it/s]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 82.85it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 83.36it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 83.86it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 84.36it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 84.86it/s, loss=0.00498,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 83.36it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 83.26it/s, loss=0.00498,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 79.08it/s, loss=0.00527,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|      | 101/126 [00:01<00:00, 69.38it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 81%|      | 102/126 [00:01<00:00, 69.28it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 82%|      | 103/126 [00:01<00:00, 69.75it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 83%|      | 104/126 [00:01<00:00, 70.22it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 83%|      | 105/126 [00:01<00:00, 70.69it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 84%|      | 106/126 [00:01<00:00, 71.16it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 85%|      | 107/126 [00:01<00:00, 71.63it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 86%|      | 108/126 [00:01<00:00, 72.09it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 87%|      | 109/126 [00:01<00:00, 72.56it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 87%|      | 110/126 [00:01<00:00, 73.02it/s, loss=0.00527,

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v_num=4.31e+7]
Epoch 98: 88%|      | 111/126 [00:01<00:00, 73.49it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 89%|      | 112/126 [00:01<00:00, 73.95it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 90%|      | 113/126 [00:01<00:00, 74.41it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 90%|      | 114/126 [00:01<00:00, 74.88it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 91%|      | 115/126 [00:01<00:00, 75.33it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 92%|      | 116/126 [00:01<00:00, 75.78it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 93%|      | 117/126 [00:01<00:00, 76.24it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 94%|      | 118/126 [00:01<00:00, 76.69it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 94%|      | 119/126 [00:01<00:00, 77.14it/s, loss=0.00527,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.46it/s]
Epoch 98: 95%|      | 120/126 [00:01<00:00, 77.57it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 96%|      | 121/126 [00:01<00:00, 78.02it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 97%|      | 122/126 [00:01<00:00, 78.47it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 78.94it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 79.42it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 79.89it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 80.37it/s, loss=0.00527,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.00527,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 78.80it/s, loss=0.00527,
v_num=4.31e+7]Mapping latent space...

Epoch 99: 79%|      | 100/126 [00:01<00:00, 79.22it/s, loss=0.00462,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 69.27it/s, loss=0.00462,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 69.35it/s, loss=0.00462,
v_num=4.31e+7]

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Epoch 99: 82%| | 103/126 [00:01<00:00, 69.83it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 83%| | 104/126 [00:01<00:00, 70.31it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 83%| | 105/126 [00:01<00:00, 70.80it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 84%| | 106/126 [00:01<00:00, 71.28it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 85%| | 107/126 [00:01<00:00, 71.76it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 86%| | 108/126 [00:01<00:00, 72.24it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 87%| | 109/126 [00:01<00:00, 72.71it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 87%| | 110/126 [00:01<00:00, 73.19it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 88%| | 111/126 [00:01<00:00, 73.66it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 89%| | 112/126 [00:01<00:00, 74.13it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 90%| | 113/126 [00:01<00:00, 74.60it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 90%| | 114/126 [00:01<00:00, 75.07it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 91%| | 115/126 [00:01<00:00, 75.54it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 92%| | 116/126 [00:01<00:00, 76.00it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 93%| | 117/126 [00:01<00:00, 76.46it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 94%| | 118/126 [00:01<00:00, 76.92it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 94%| | 119/126 [00:01<00:00, 77.38it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 95%| | 120/126 [00:01<00:00, 77.84it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 96%| | 121/126 [00:01<00:00, 78.29it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 97%| | 122/126 [00:01<00:00, 78.75it/s, loss=0.00462, v_num=4.31e+7]
 Validation DataLoader 0: 88%| | 23/26 [00:00<00:00, 222.95it/s]
 Epoch 99: 98%| | 123/126 [00:01<00:00, 79.23it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 98%| | 124/126 [00:01<00:00, 79.70it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 99%| | 125/126 [00:01<00:00, 80.18it/s, loss=0.00462, v_num=4.31e+7]
 Epoch 99: 100%| | 126/126 [00:01<00:00, 80.66it/s, loss=0.00462, v_num=4.31e+7]

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v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|      | 126/126 [00:01<00:00, 79.04it/s, loss=0.00462,
v_num=4.31e+7]
Epoch 99: 100%|      | 126/126 [00:01<00:00, 78.95it/s, loss=0.00462,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|      | 100/126 [00:01<00:00, 64.43it/s, loss=0.00532,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|      | 101/126 [00:01<00:00, 57.41it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 81%|      | 102/126 [00:01<00:00, 57.69it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 82%|      | 103/126 [00:01<00:00, 58.06it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 83%|      | 104/126 [00:01<00:00, 58.42it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 83%|      | 105/126 [00:01<00:00, 58.77it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 84%|      | 106/126 [00:01<00:00, 59.08it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 85%|      | 107/126 [00:01<00:00, 59.45it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 86%|      | 108/126 [00:01<00:00, 59.83it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 87%|      | 109/126 [00:01<00:00, 60.21it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 87%|      | 110/126 [00:01<00:00, 60.59it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 88%|      | 111/126 [00:01<00:00, 60.97it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 89%|      | 112/126 [00:01<00:00, 61.36it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 90%|      | 113/126 [00:01<00:00, 61.74it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 62.13it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 62.52it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 62.90it/s, loss=0.00532,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.39it/s]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 63.28it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 63.67it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 64.06it/s, loss=0.00532,

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v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 64.45it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 64.84it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 65.23it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 65.64it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 66.06it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 66.48it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 66.89it/s, loss=0.00532,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 65.80it/s, loss=0.00532,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 65.72it/s, loss=0.00532,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 74.50it/s, loss=0.0061,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 66.44it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 66.69it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 82%|      | 103/126 [00:01<00:00, 67.20it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 67.69it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 83%|      | 105/126 [00:01<00:00, 68.20it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 84%|      | 106/126 [00:01<00:00, 68.69it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 85%|      | 107/126 [00:01<00:00, 69.18it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 86%|      | 108/126 [00:01<00:00, 69.67it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 87%|      | 109/126 [00:01<00:00, 70.16it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 87%|      | 110/126 [00:01<00:00, 70.65it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 88%|      | 111/126 [00:01<00:00, 71.15it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 89%|      | 112/126 [00:01<00:00, 71.63it/s, loss=0.0061,
v_num=4.31e+7]

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Epoch 101: 90%|      | 113/126 [00:01<00:00, 72.13it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 90%|      | 114/126 [00:01<00:00, 72.60it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 91%|      | 115/126 [00:01<00:00, 73.09it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 92%|      | 116/126 [00:01<00:00, 73.58it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 93%|      | 117/126 [00:01<00:00, 74.07it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 94%|      | 118/126 [00:01<00:00, 74.55it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 94%|      | 119/126 [00:01<00:00, 75.03it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 95%|      | 120/126 [00:01<00:00, 75.51it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 96%|      | 121/126 [00:01<00:00, 75.99it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 97%|      | 122/126 [00:01<00:00, 76.47it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 98%|      | 123/126 [00:01<00:00, 76.97it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 77.48it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 99%|      | 125/126 [00:01<00:00, 77.98it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 78.49it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%|     | 126/126 [00:01<00:00, 77.20it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 77.12it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...

Epoch 102: 79%|      | 100/126 [00:01<00:00, 83.49it/s, loss=0.00591,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|      | 101/126 [00:01<00:00, 72.39it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 81%|      | 102/126 [00:01<00:00, 72.19it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 82%|      | 103/126 [00:01<00:00, 72.63it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 83%|      | 104/126 [00:01<00:00, 73.07it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 83%|      | 105/126 [00:01<00:00, 73.52it/s, loss=0.00591,
v_num=4.31e+7]

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Epoch 102: 84%|      | 106/126 [00:01<00:00, 73.97it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 85%|      | 107/126 [00:01<00:00, 74.43it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 86%|      | 108/126 [00:01<00:00, 74.88it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 87%|      | 109/126 [00:01<00:00, 75.34it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 87%|      | 110/126 [00:01<00:00, 75.79it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 88%|      | 111/126 [00:01<00:00, 76.26it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 89%|      | 112/126 [00:01<00:00, 76.71it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 90%|      | 113/126 [00:01<00:00, 77.17it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 90%|      | 114/126 [00:01<00:00, 77.64it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 91%|      | 115/126 [00:01<00:00, 78.10it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 92%|      | 116/126 [00:01<00:00, 78.56it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 93%|      | 117/126 [00:01<00:00, 79.02it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 94%|      | 118/126 [00:01<00:00, 79.49it/s, loss=0.00591,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.02it/s]
Epoch 102: 94%|      | 119/126 [00:01<00:00, 79.95it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 95%|      | 120/126 [00:01<00:00, 80.40it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 96%|      | 121/126 [00:01<00:00, 80.87it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 97%|      | 122/126 [00:01<00:00, 81.33it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 98%|      | 123/126 [00:01<00:00, 81.81it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 98%|      | 124/126 [00:01<00:00, 82.29it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 99%|      | 125/126 [00:01<00:00, 82.78it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 83.26it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|     | 126/126 [00:01<00:00, 81.49it/s, loss=0.00591,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 81.39it/s, loss=0.00591,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 79%|      | 100/126 [00:01<00:00, 68.86it/s, loss=0.00475,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 103: 80%|          | 101/126 [00:01<00:00, 61.84it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 81%|          | 102/126 [00:01<00:00, 62.02it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 82%|          | 103/126 [00:01<00:00, 62.43it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 83%|          | 104/126 [00:01<00:00, 62.83it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 83%|          | 105/126 [00:01<00:00, 63.24it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 84%|          | 106/126 [00:01<00:00, 63.64it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 85%|          | 107/126 [00:01<00:00, 64.06it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 86%|          | 108/126 [00:01<00:00, 64.46it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 87%|          | 109/126 [00:01<00:00, 64.87it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 87%|          | 110/126 [00:01<00:00, 65.29it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 88%|          | 111/126 [00:01<00:00, 65.70it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 89%|          | 112/126 [00:01<00:00, 66.11it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 90%|          | 113/126 [00:01<00:00, 66.52it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 90%|          | 114/126 [00:01<00:00, 66.93it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 91%|          | 115/126 [00:01<00:00, 67.34it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 92%|          | 116/126 [00:01<00:00, 67.76it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 93%|          | 117/126 [00:01<00:00, 68.17it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 94%|          | 118/126 [00:01<00:00, 68.58it/s, loss=0.00475,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 187.68it/s]
Epoch 103: 94%|          | 119/126 [00:01<00:00, 68.99it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 95%|          | 120/126 [00:01<00:00, 69.40it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 96%|          | 121/126 [00:01<00:00, 69.82it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 97%|          | 122/126 [00:01<00:00, 70.23it/s, loss=0.00475,

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v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 70.67it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 71.10it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 71.54it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 71.97it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 70.72it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 70.64it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 74.06it/s, loss=0.00434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 65.13it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 65.22it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 65.68it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 66.14it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 66.59it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 67.05it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 67.51it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 67.96it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 68.42it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 68.88it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 69.33it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 69.78it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 70.24it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 70.67it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 71.11it/s, loss=0.00434,
v_num=4.31e+7]

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Epoch 104: 92%|      | 116/126 [00:01<00:00, 71.54it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 71.97it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 72.40it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 72.84it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 73.26it/s, loss=0.00434,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.90it/s]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 73.68it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 74.11it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 74.57it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 75.02it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 75.48it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 75.94it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 74.56it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 74.48it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...

Epoch 105: 79%|      | 100/126 [00:01<00:00, 67.09it/s, loss=0.00483,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|      | 101/126 [00:01<00:00, 60.46it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 81%|      | 102/126 [00:01<00:00, 60.62it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 82%|      | 103/126 [00:01<00:00, 61.04it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 83%|      | 104/126 [00:01<00:00, 61.46it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 83%|      | 105/126 [00:01<00:00, 61.89it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 84%|      | 106/126 [00:01<00:00, 62.31it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 85%|      | 107/126 [00:01<00:00, 62.73it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 86%|      | 108/126 [00:01<00:00, 63.14it/s, loss=0.00483,

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v_num=4.31e+7]
Epoch 105: 87%|      | 109/126 [00:01<00:00, 63.56it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 87%|      | 110/126 [00:01<00:00, 63.98it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 88%|      | 111/126 [00:01<00:00, 64.39it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 89%|      | 112/126 [00:01<00:00, 64.81it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 90%|      | 113/126 [00:01<00:00, 65.23it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 90%|      | 114/126 [00:01<00:00, 65.65it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 91%|      | 115/126 [00:01<00:00, 66.07it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 92%|      | 116/126 [00:01<00:00, 66.49it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 93%|      | 117/126 [00:01<00:00, 66.91it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 94%|      | 118/126 [00:01<00:00, 67.33it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 94%|      | 119/126 [00:01<00:00, 67.75it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 95%|      | 120/126 [00:01<00:00, 68.16it/s, loss=0.00483,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 202.75it/s]
Epoch 105: 96%|      | 121/126 [00:01<00:00, 68.58it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 69.00it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 69.44it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 69.87it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 70.31it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 70.74it/s, loss=0.00483,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|     | 126/126 [00:01<00:00, 69.56it/s, loss=0.00483,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 69.50it/s, loss=0.00483,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 79%|      | 100/126 [00:01<00:00, 67.76it/s, loss=0.00453,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 106: 80%|      | 101/126 [00:01<00:00, 60.94it/s, loss=0.00453,

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v_num=4.31e+7]
Epoch 106: 81%|      | 102/126 [00:01<00:00, 60.97it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 82%|      | 103/126 [00:01<00:00, 61.37it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 83%|      | 104/126 [00:01<00:00, 61.77it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 83%|      | 105/126 [00:01<00:00, 62.16it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 84%|      | 106/126 [00:01<00:00, 62.56it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 85%|      | 107/126 [00:01<00:00, 62.96it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 86%|      | 108/126 [00:01<00:00, 63.36it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 87%|      | 109/126 [00:01<00:00, 63.75it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 87%|      | 110/126 [00:01<00:00, 64.16it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 88%|      | 111/126 [00:01<00:00, 64.55it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 89%|      | 112/126 [00:01<00:00, 64.96it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 90%|      | 113/126 [00:01<00:00, 65.35it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 90%|      | 114/126 [00:01<00:00, 65.76it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 91%|      | 115/126 [00:01<00:00, 66.16it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 92%|      | 116/126 [00:01<00:00, 66.56it/s, loss=0.00453,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.76it/s]
Epoch 106: 93%|      | 117/126 [00:01<00:00, 66.96it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 94%|      | 118/126 [00:01<00:00, 67.36it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 94%|      | 119/126 [00:01<00:00, 67.77it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 68.17it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 68.58it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 68.99it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 69.42it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 69.85it/s, loss=0.00453,
v_num=4.31e+7]

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Epoch 106: 99%|      | 125/126 [00:01<00:00, 70.28it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 70.71it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 69.55it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 69.48it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 66.53it/s, loss=0.00456,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 60.20it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 60.34it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 60.81it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 61.27it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 61.74it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 62.19it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 62.67it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 86%|      | 108/126 [00:01<00:00, 63.12it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 63.59it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 64.05it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 64.52it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 89%|      | 112/126 [00:01<00:00, 64.96it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 65.42it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 65.87it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 66.33it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 66.78it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 67.23it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 67.68it/s, loss=0.00456,

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v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 68.13it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 68.57it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 69.02it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 69.47it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 69.93it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 70.39it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 70.86it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 71.32it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.22it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.14it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...

Epoch 108: 79%|      | 100/126 [00:01<00:00, 76.12it/s, loss=0.00419,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|      | 101/126 [00:01<00:00, 66.93it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 81%|      | 102/126 [00:01<00:00, 67.02it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 82%|      | 103/126 [00:01<00:00, 67.53it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 83%|      | 104/126 [00:01<00:00, 68.02it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 83%|      | 105/126 [00:01<00:00, 68.53it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 84%|      | 106/126 [00:01<00:00, 69.02it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 85%|      | 107/126 [00:01<00:00, 69.53it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 86%|      | 108/126 [00:01<00:00, 70.01it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 87%|      | 109/126 [00:01<00:00, 70.50it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 87%|      | 110/126 [00:01<00:00, 70.99it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 88%|      | 111/126 [00:01<00:00, 71.50it/s, loss=0.00419,

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v_num=4.31e+7]
Epoch 108: 89%|      | 112/126 [00:01<00:00, 71.98it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 90%|      | 113/126 [00:01<00:00, 72.47it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 90%|      | 114/126 [00:01<00:00, 72.96it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 91%|      | 115/126 [00:01<00:00, 73.45it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 92%|      | 116/126 [00:01<00:00, 73.94it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 93%|      | 117/126 [00:01<00:00, 74.42it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 94%|      | 118/126 [00:01<00:00, 74.90it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 94%|      | 119/126 [00:01<00:00, 75.38it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 95%|      | 120/126 [00:01<00:00, 75.86it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 96%|      | 121/126 [00:01<00:00, 76.34it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 97%|      | 122/126 [00:01<00:00, 76.82it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 98%|      | 123/126 [00:01<00:00, 77.33it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 77.83it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 78.33it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 78.84it/s, loss=0.00419,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 77.06it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 76.97it/s, loss=0.00419,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|      | 100/126 [00:01<00:00, 62.54it/s, loss=0.00438,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|      | 101/126 [00:01<00:00, 56.44it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 81%|      | 102/126 [00:01<00:00, 56.70it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 82%|      | 103/126 [00:01<00:00, 57.12it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 83%|      | 104/126 [00:01<00:00, 57.54it/s, loss=0.00438,
v_num=4.31e+7]

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Epoch 109: 83%|      | 105/126 [00:01<00:00, 57.97it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 84%|      | 106/126 [00:01<00:00, 58.39it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 85%|      | 107/126 [00:01<00:00, 58.81it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 86%|      | 108/126 [00:01<00:00, 59.23it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 87%|      | 109/126 [00:01<00:00, 59.63it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 87%|      | 110/126 [00:01<00:00, 60.05it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 88%|      | 111/126 [00:01<00:00, 60.45it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 89%|      | 112/126 [00:01<00:00, 60.85it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 90%|      | 113/126 [00:01<00:00, 61.26it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 90%|      | 114/126 [00:01<00:00, 61.67it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 91%|      | 115/126 [00:01<00:00, 62.07it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 92%|      | 116/126 [00:01<00:00, 62.48it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 93%|      | 117/126 [00:01<00:00, 62.88it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 94%|      | 118/126 [00:01<00:00, 63.28it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 94%|      | 119/126 [00:01<00:00, 63.68it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 95%|      | 120/126 [00:01<00:00, 64.07it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 96%|      | 121/126 [00:01<00:00, 64.47it/s, loss=0.00438,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.30it/s]
Epoch 109: 97%|      | 122/126 [00:01<00:00, 64.87it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 65.28it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 65.70it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 66.12it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 66.54it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 65.51it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 65.45it/s, loss=0.00438,

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v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|          | 100/126 [00:01<00:00, 71.57it/s, loss=0.00444,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|          | 101/126 [00:01<00:00, 63.35it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 81%|          | 102/126 [00:01<00:00, 63.47it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 82%|          | 103/126 [00:01<00:00, 63.93it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 83%|          | 104/126 [00:01<00:00, 64.39it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 83%|          | 105/126 [00:01<00:00, 64.85it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 84%|          | 106/126 [00:01<00:00, 65.31it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 85%|          | 107/126 [00:01<00:00, 65.77it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 86%|          | 108/126 [00:01<00:00, 66.22it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 87%|          | 109/126 [00:01<00:00, 66.67it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 87%|          | 110/126 [00:01<00:00, 67.12it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 88%|          | 111/126 [00:01<00:00, 67.57it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 89%|          | 112/126 [00:01<00:00, 68.02it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 90%|          | 113/126 [00:01<00:00, 68.46it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 90%|          | 114/126 [00:01<00:00, 68.90it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 91%|          | 115/126 [00:01<00:00, 69.35it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 92%|          | 116/126 [00:01<00:00, 69.79it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 93%|          | 117/126 [00:01<00:00, 70.23it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 94%|          | 118/126 [00:01<00:00, 70.67it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 94%|          | 119/126 [00:01<00:00, 71.10it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 95%|          | 120/126 [00:01<00:00, 71.53it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 96%|          | 121/126 [00:01<00:00, 71.96it/s, loss=0.00444,
v_num=4.31e+7]

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Epoch 110: 97%|      | 122/126 [00:01<00:00, 72.40it/s, loss=0.00444,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.87it/s]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 72.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 73.29it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 73.74it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 74.20it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 72.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 72.76it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...

Epoch 111: 79%|      | 100/126 [00:01<00:00, 81.29it/s, loss=0.00425,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 70.48it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 81%|      | 102/126 [00:01<00:00, 70.66it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 82%|      | 103/126 [00:01<00:00, 71.16it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 83%|      | 104/126 [00:01<00:00, 71.65it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 83%|      | 105/126 [00:01<00:00, 72.15it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 84%|      | 106/126 [00:01<00:00, 72.64it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 85%|      | 107/126 [00:01<00:00, 73.13it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 86%|      | 108/126 [00:01<00:00, 73.61it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 87%|      | 109/126 [00:01<00:00, 74.10it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 87%|      | 110/126 [00:01<00:00, 74.58it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 88%|      | 111/126 [00:01<00:00, 75.07it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 89%|      | 112/126 [00:01<00:00, 75.55it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 90%|      | 113/126 [00:01<00:00, 76.03it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 90%|      | 114/126 [00:01<00:00, 76.51it/s, loss=0.00425,

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v_num=4.31e+7]
Epoch 111: 91%|      | 115/126 [00:01<00:00, 76.99it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 92%|      | 116/126 [00:01<00:00, 77.47it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 93%|      | 117/126 [00:01<00:00, 77.94it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 94%|      | 118/126 [00:01<00:00, 78.41it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 94%|      | 119/126 [00:01<00:00, 78.87it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 95%|      | 120/126 [00:01<00:00, 79.34it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 96%|      | 121/126 [00:01<00:00, 79.80it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 97%|      | 122/126 [00:01<00:00, 80.27it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 98%|      | 123/126 [00:01<00:00, 80.76it/s, loss=0.00425,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.35it/s]
Epoch 111: 98%|      | 124/126 [00:01<00:00, 81.24it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 99%|      | 125/126 [00:01<00:00, 81.72it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 82.21it/s, loss=0.00425,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 100%|     | 126/126 [00:01<00:00, 80.67it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 80.58it/s, loss=0.00425,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 79%|      | 100/126 [00:01<00:00, 81.56it/s, loss=0.00466,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 112: 80%|      | 101/126 [00:01<00:00, 71.64it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 81%|      | 102/126 [00:01<00:00, 71.80it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 82%|      | 103/126 [00:01<00:00, 72.32it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 83%|      | 104/126 [00:01<00:00, 72.83it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 83%|      | 105/126 [00:01<00:00, 73.33it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 84%|      | 106/126 [00:01<00:00, 73.84it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 85%|      | 107/126 [00:01<00:00, 74.36it/s, loss=0.00466,

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v_num=4.31e+7]
Epoch 112: 86%|      | 108/126 [00:01<00:00, 74.86it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 87%|      | 109/126 [00:01<00:00, 75.36it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 87%|      | 110/126 [00:01<00:00, 75.86it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 88%|      | 111/126 [00:01<00:00, 76.37it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 89%|      | 112/126 [00:01<00:00, 76.86it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 90%|      | 113/126 [00:01<00:00, 77.37it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 90%|      | 114/126 [00:01<00:00, 77.87it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 91%|      | 115/126 [00:01<00:00, 78.38it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 92%|      | 116/126 [00:01<00:00, 78.88it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 93%|      | 117/126 [00:01<00:00, 79.38it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 94%|      | 118/126 [00:01<00:00, 79.86it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 94%|      | 119/126 [00:01<00:00, 80.36it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 95%|      | 120/126 [00:01<00:00, 80.85it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 96%|      | 121/126 [00:01<00:00, 81.35it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 81.85it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 82.38it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 82.91it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 83.45it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 83.99it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 100%|     | 126/126 [00:01<00:00, 82.50it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|      | 100/126 [00:01<00:00, 91.23it/s, loss=0.00496,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 113: 80%| | 101/126 [00:01<00:00, 78.08it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 81%| | 102/126 [00:01<00:00, 78.18it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 82%| | 103/126 [00:01<00:00, 78.70it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 83%| | 104/126 [00:01<00:00, 79.23it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 83%| | 105/126 [00:01<00:00, 79.74it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 84%| | 106/126 [00:01<00:00, 80.27it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 85%| | 107/126 [00:01<00:00, 80.78it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 86%| | 108/126 [00:01<00:00, 81.29it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 87%| | 109/126 [00:01<00:00, 81.81it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 87%| | 110/126 [00:01<00:00, 82.32it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 88%| | 111/126 [00:01<00:00, 82.82it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 89%| | 112/126 [00:01<00:00, 83.32it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 90%| | 113/126 [00:01<00:00, 83.83it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 90%| | 114/126 [00:01<00:00, 84.33it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 91%| | 115/126 [00:01<00:00, 84.82it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 92%| | 116/126 [00:01<00:00, 85.32it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 93%| | 117/126 [00:01<00:00, 85.81it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 94%| | 118/126 [00:01<00:00, 86.30it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 94%| | 119/126 [00:01<00:00, 86.78it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 95%| | 120/126 [00:01<00:00, 87.27it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 96%| | 121/126 [00:01<00:00, 87.75it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 97%| | 122/126 [00:01<00:00, 88.25it/s, loss=0.00496, v_num=4.31e+7]
Validation DataLoader 0: 88%| | 23/26 [00:00<00:00, 226.38it/s]
Epoch 113: 98%| | 123/126 [00:01<00:00, 88.75it/s, loss=0.00496, v_num=4.31e+7]
Epoch 113: 98%| | 124/126 [00:01<00:00, 89.27it/s, loss=0.00496,

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v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 89.78it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 90.30it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 88.49it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 88.37it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...

Epoch 114: 79%|      | 100/126 [00:01<00:00, 68.63it/s, loss=0.00544,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 61.20it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 61.34it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 61.76it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 62.19it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 83%|      | 105/126 [00:01<00:00, 62.61it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 84%|      | 106/126 [00:01<00:00, 63.03it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 85%|      | 107/126 [00:01<00:00, 63.45it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 86%|      | 108/126 [00:01<00:00, 63.87it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 87%|      | 109/126 [00:01<00:00, 64.29it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 87%|      | 110/126 [00:01<00:00, 64.71it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 88%|      | 111/126 [00:01<00:00, 65.13it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 89%|      | 112/126 [00:01<00:00, 65.54it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 90%|      | 113/126 [00:01<00:00, 65.96it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 90%|      | 114/126 [00:01<00:00, 66.38it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 91%|      | 115/126 [00:01<00:00, 66.79it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 92%|      | 116/126 [00:01<00:00, 67.20it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 93%|      | 117/126 [00:01<00:00, 67.61it/s, loss=0.00544,

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v_num=4.31e+7]
Epoch 114: 94%|      | 118/126 [00:01<00:00, 68.01it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 94%|      | 119/126 [00:01<00:00, 68.41it/s, loss=0.00544,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 192.53it/s]
Epoch 114: 95%|      | 120/126 [00:01<00:00, 68.81it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 96%|      | 121/126 [00:01<00:00, 69.21it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 97%|      | 122/126 [00:01<00:00, 69.61it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 98%|      | 123/126 [00:01<00:00, 70.03it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 98%|      | 124/126 [00:01<00:00, 70.44it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 99%|      | 125/126 [00:01<00:00, 70.85it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 71.27it/s, loss=0.00544,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%|     | 126/126 [00:01<00:00, 69.99it/s, loss=0.00544,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 69.91it/s, loss=0.00544,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 79%|      | 100/126 [00:01<00:00, 66.76it/s, loss=0.00458,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|      | 101/126 [00:01<00:00, 58.95it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 81%|      | 102/126 [00:01<00:00, 59.12it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 82%|      | 103/126 [00:01<00:00, 59.56it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 83%|      | 104/126 [00:01<00:00, 60.00it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 83%|      | 105/126 [00:01<00:00, 60.44it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 84%|      | 106/126 [00:01<00:00, 60.87it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 85%|      | 107/126 [00:01<00:00, 61.31it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 86%|      | 108/126 [00:01<00:00, 61.74it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 87%|      | 109/126 [00:01<00:00, 62.17it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 87%|      | 110/126 [00:01<00:00, 62.61it/s, loss=0.00458,

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v_num=4.31e+7]
Epoch 115: 88%|      | 111/126 [00:01<00:00, 63.03it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 89%|      | 112/126 [00:01<00:00, 63.46it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 90%|      | 113/126 [00:01<00:00, 63.89it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 90%|      | 114/126 [00:01<00:00, 64.32it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 91%|      | 115/126 [00:01<00:00, 64.74it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 92%|      | 116/126 [00:01<00:00, 65.17it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 93%|      | 117/126 [00:01<00:00, 65.58it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 94%|      | 118/126 [00:01<00:00, 66.00it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 94%|      | 119/126 [00:01<00:00, 66.42it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 95%|      | 120/126 [00:01<00:00, 66.83it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 96%|      | 121/126 [00:01<00:00, 67.24it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 97%|      | 122/126 [00:01<00:00, 67.65it/s, loss=0.00458,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.55it/s]
Epoch 115: 98%|      | 123/126 [00:01<00:00, 68.07it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 98%|      | 124/126 [00:01<00:00, 68.50it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 68.93it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 69.36it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|     | 126/126 [00:01<00:00, 68.24it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 68.17it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|      | 100/126 [00:01<00:00, 70.42it/s, loss=0.00569,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|      | 101/126 [00:01<00:00, 62.44it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 81%|      | 102/126 [00:01<00:00, 62.66it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 82%|      | 103/126 [00:01<00:00, 63.12it/s, loss=0.00569,

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v_num=4.31e+7]
Epoch 116: 83%|      | 104/126 [00:01<00:00, 63.58it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 83%|      | 105/126 [00:01<00:00, 64.03it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 84%|      | 106/126 [00:01<00:00, 64.49it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 85%|      | 107/126 [00:01<00:00, 64.95it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 86%|      | 108/126 [00:01<00:00, 65.40it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 87%|      | 109/126 [00:01<00:00, 65.85it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 87%|      | 110/126 [00:01<00:00, 66.30it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 88%|      | 111/126 [00:01<00:00, 66.75it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 89%|      | 112/126 [00:01<00:00, 67.19it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 90%|      | 113/126 [00:01<00:00, 67.64it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 90%|      | 114/126 [00:01<00:00, 68.09it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 91%|      | 115/126 [00:01<00:00, 68.53it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 92%|      | 116/126 [00:01<00:00, 68.97it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 93%|      | 117/126 [00:01<00:00, 69.41it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 94%|      | 118/126 [00:01<00:00, 69.85it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 94%|      | 119/126 [00:01<00:00, 70.28it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 95%|      | 120/126 [00:01<00:00, 70.72it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 96%|      | 121/126 [00:01<00:00, 71.15it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 97%|      | 122/126 [00:01<00:00, 71.58it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 98%|      | 123/126 [00:01<00:00, 72.04it/s, loss=0.00569,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.67it/s]
Epoch 116: 98%|      | 124/126 [00:01<00:00, 72.48it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 99%|      | 125/126 [00:01<00:00, 72.93it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 73.38it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...

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Epoch 116: 100%|      | 126/126 [00:01<00:00, 71.99it/s, loss=0.00569,
v_num=4.31e+7]
Epoch 116: 100%|      | 126/126 [00:01<00:00, 71.92it/s, loss=0.00569,
v_num=4.31e+7]Mapping latent space...

Epoch 117: 79%|      | 100/126 [00:01<00:00, 78.47it/s, loss=0.00504,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 117: 80%|      | 101/126 [00:01<00:00, 70.01it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 81%|      | 102/126 [00:01<00:00, 70.24it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 82%|      | 103/126 [00:01<00:00, 70.77it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 83%|      | 104/126 [00:01<00:00, 71.28it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 83%|      | 105/126 [00:01<00:00, 71.80it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 84%|      | 106/126 [00:01<00:00, 72.32it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 85%|      | 107/126 [00:01<00:00, 72.83it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 86%|      | 108/126 [00:01<00:00, 73.35it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 87%|      | 109/126 [00:01<00:00, 73.87it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 87%|      | 110/126 [00:01<00:00, 74.38it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 88%|      | 111/126 [00:01<00:00, 74.90it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 89%|      | 112/126 [00:01<00:00, 75.40it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 90%|      | 113/126 [00:01<00:00, 75.91it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 90%|      | 114/126 [00:01<00:00, 76.42it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 91%|      | 115/126 [00:01<00:00, 76.93it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 92%|      | 116/126 [00:01<00:00, 77.44it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 93%|      | 117/126 [00:01<00:00, 77.94it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 94%|      | 118/126 [00:01<00:00, 78.44it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 94%|      | 119/126 [00:01<00:00, 78.94it/s, loss=0.00504,
v_num=4.31e+7]

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Epoch 117: 95%|      | 120/126 [00:01<00:00, 79.44it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 96%|      | 121/126 [00:01<00:00, 79.94it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 97%|      | 122/126 [00:01<00:00, 80.33it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 98%|      | 123/126 [00:01<00:00, 80.84it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 98%|      | 124/126 [00:01<00:00, 81.36it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 99%|      | 125/126 [00:01<00:00, 81.88it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00504,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 100%|     | 126/126 [00:01<00:00, 80.87it/s, loss=0.00504,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 80.78it/s, loss=0.00504,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 79%|      | 100/126 [00:01<00:00, 91.26it/s, loss=0.0053,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 118: 80%|      | 101/126 [00:01<00:00, 79.06it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 81%|      | 102/126 [00:01<00:00, 79.10it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 82%|      | 103/126 [00:01<00:00, 79.67it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 83%|      | 104/126 [00:01<00:00, 80.23it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 83%|      | 105/126 [00:01<00:00, 80.79it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 84%|      | 106/126 [00:01<00:00, 81.35it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 85%|      | 107/126 [00:01<00:00, 81.92it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 86%|      | 108/126 [00:01<00:00, 82.46it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 87%|      | 109/126 [00:01<00:00, 83.02it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 87%|      | 110/126 [00:01<00:00, 83.57it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 88%|      | 111/126 [00:01<00:00, 84.11it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 89%|      | 112/126 [00:01<00:00, 84.66it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 90%|      | 113/126 [00:01<00:00, 85.20it/s, loss=0.0053,

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v_num=4.31e+7]
Epoch 118: 90%|      | 114/126 [00:01<00:00, 85.74it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 91%|      | 115/126 [00:01<00:00, 86.29it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 92%|      | 116/126 [00:01<00:00, 86.84it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 93%|      | 117/126 [00:01<00:00, 87.38it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 94%|      | 118/126 [00:01<00:00, 87.92it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 94%|      | 119/126 [00:01<00:00, 88.46it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 95%|      | 120/126 [00:01<00:00, 88.99it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 96%|      | 121/126 [00:01<00:00, 89.53it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 97%|      | 122/126 [00:01<00:00, 90.04it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 98%|      | 123/126 [00:01<00:00, 90.61it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 98%|      | 124/126 [00:01<00:00, 91.17it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 99%|      | 125/126 [00:01<00:00, 91.74it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 92.31it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 100%|     | 126/126 [00:01<00:00, 90.48it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 90.39it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 79%|      | 100/126 [00:01<00:00, 76.85it/s, loss=0.0054,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 119: 80%|      | 101/126 [00:01<00:00, 67.35it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 81%|      | 102/126 [00:01<00:00, 67.37it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 82%|      | 103/126 [00:01<00:00, 67.85it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 83%|      | 104/126 [00:01<00:00, 68.31it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 83%|      | 105/126 [00:01<00:00, 68.78it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 84%|      | 106/126 [00:01<00:00, 69.24it/s, loss=0.0054,
v_num=4.31e+7]

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Epoch 119: 85%|      | 107/126 [00:01<00:00, 69.70it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 86%|      | 108/126 [00:01<00:00, 70.17it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 87%|      | 109/126 [00:01<00:00, 70.63it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 87%|      | 110/126 [00:01<00:00, 71.09it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 88%|      | 111/126 [00:01<00:00, 71.55it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 89%|      | 112/126 [00:01<00:00, 72.01it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 90%|      | 113/126 [00:01<00:00, 72.46it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 90%|      | 114/126 [00:01<00:00, 72.92it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 91%|      | 115/126 [00:01<00:00, 73.37it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 92%|      | 116/126 [00:01<00:00, 73.82it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 93%|      | 117/126 [00:01<00:00, 74.27it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 94%|      | 118/126 [00:01<00:00, 74.72it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 94%|      | 119/126 [00:01<00:00, 75.16it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 95%|      | 120/126 [00:01<00:00, 75.60it/s, loss=0.0054,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.94it/s]
Epoch 119: 96%|      | 121/126 [00:01<00:00, 76.03it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 97%|      | 122/126 [00:01<00:00, 76.47it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 98%|      | 123/126 [00:01<00:00, 76.94it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 98%|      | 124/126 [00:01<00:00, 77.41it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 99%|      | 125/126 [00:01<00:00, 77.88it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 78.36it/s, loss=0.0054,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 100%|     | 126/126 [00:01<00:00, 76.92it/s, loss=0.0054,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 76.84it/s, loss=0.0054,
v_num=4.31e+7]Mapping latent space...

Epoch 120: 79%|      | 100/126 [00:01<00:00, 76.13it/s, loss=0.00506,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 120: 80%|          | 101/126 [00:01<00:00, 66.79it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 81%|          | 102/126 [00:01<00:00, 67.07it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 82%|          | 103/126 [00:01<00:00, 67.54it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 83%|          | 104/126 [00:01<00:00, 68.02it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 83%|          | 105/126 [00:01<00:00, 68.49it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 84%|          | 106/126 [00:01<00:00, 68.97it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 85%|          | 107/126 [00:01<00:00, 69.44it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 86%|          | 108/126 [00:01<00:00, 69.90it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 87%|          | 109/126 [00:01<00:00, 70.37it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 87%|          | 110/126 [00:01<00:00, 70.84it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 88%|          | 111/126 [00:01<00:00, 71.31it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 89%|          | 112/126 [00:01<00:00, 71.77it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 90%|          | 113/126 [00:01<00:00, 72.24it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 90%|          | 114/126 [00:01<00:00, 72.58it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 91%|          | 115/126 [00:01<00:00, 73.00it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 92%|          | 116/126 [00:01<00:00, 73.46it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 93%|          | 117/126 [00:01<00:00, 73.91it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 94%|          | 118/126 [00:01<00:00, 74.37it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 94%|          | 119/126 [00:01<00:00, 74.82it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 95%|          | 120/126 [00:01<00:00, 75.27it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 96%|          | 121/126 [00:01<00:00, 75.72it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 97%|          | 122/126 [00:01<00:00, 76.17it/s, loss=0.00506,
v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 227.82it/s]

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Epoch 120: 98%|      | 123/126 [00:01<00:00, 76.63it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 98%|      | 124/126 [00:01<00:00, 77.09it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 99%|      | 125/126 [00:01<00:00, 77.56it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 78.03it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 100%|     | 126/126 [00:01<00:00, 76.43it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 76.33it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 79%|      | 100/126 [00:01<00:00, 78.50it/s, loss=0.00496,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 121: 80%|      | 101/126 [00:01<00:00, 69.37it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 81%|      | 102/126 [00:01<00:00, 69.39it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 82%|      | 103/126 [00:01<00:00, 69.91it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 83%|      | 104/126 [00:01<00:00, 70.43it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 83%|      | 105/126 [00:01<00:00, 70.94it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 84%|      | 106/126 [00:01<00:00, 71.47it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 85%|      | 107/126 [00:01<00:00, 71.96it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 86%|      | 108/126 [00:01<00:00, 72.46it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 87%|      | 109/126 [00:01<00:00, 72.96it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 87%|      | 110/126 [00:01<00:00, 73.47it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 88%|      | 111/126 [00:01<00:00, 73.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 89%|      | 112/126 [00:01<00:00, 74.47it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 90%|      | 113/126 [00:01<00:00, 74.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 90%|      | 114/126 [00:01<00:00, 75.47it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 91%|      | 115/126 [00:01<00:00, 75.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 92%|      | 116/126 [00:01<00:00, 76.47it/s, loss=0.00496,

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v_num=4.31e+7]
Epoch 121: 93%|      | 117/126 [00:01<00:00, 76.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 94%|      | 118/126 [00:01<00:00, 77.46it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 94%|      | 119/126 [00:01<00:00, 77.96it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 95%|      | 120/126 [00:01<00:00, 78.45it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 96%|      | 121/126 [00:01<00:00, 78.93it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 97%|      | 122/126 [00:01<00:00, 79.43it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 98%|      | 123/126 [00:01<00:00, 79.94it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 98%|      | 124/126 [00:01<00:00, 80.46it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 99%|      | 125/126 [00:01<00:00, 80.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 81.49it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 100%|     | 126/126 [00:01<00:00, 80.05it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 79.96it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 79%|      | 100/126 [00:01<00:00, 90.77it/s, loss=0.00522,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 122: 80%|      | 101/126 [00:01<00:00, 78.59it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 81%|      | 102/126 [00:01<00:00, 78.78it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 82%|      | 103/126 [00:01<00:00, 79.22it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 83%|      | 104/126 [00:01<00:00, 79.65it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 83%|      | 105/126 [00:01<00:00, 80.09it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 84%|      | 106/126 [00:01<00:00, 80.53it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 85%|      | 107/126 [00:01<00:00, 80.97it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 86%|      | 108/126 [00:01<00:00, 81.41it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 87%|      | 109/126 [00:01<00:00, 81.86it/s, loss=0.00522,
v_num=4.31e+7]

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Epoch 122: 87%|      | 110/126 [00:01<00:00, 82.30it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 88%|      | 111/126 [00:01<00:00, 82.74it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 89%|      | 112/126 [00:01<00:00, 83.19it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 90%|      | 113/126 [00:01<00:00, 83.64it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 90%|      | 114/126 [00:01<00:00, 84.10it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 91%|      | 115/126 [00:01<00:00, 84.55it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 92%|      | 116/126 [00:01<00:00, 85.01it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 93%|      | 117/126 [00:01<00:00, 85.47it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 94%|      | 118/126 [00:01<00:00, 85.94it/s, loss=0.00522,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.39it/s]
Epoch 122: 94%|      | 119/126 [00:01<00:00, 86.39it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 95%|      | 120/126 [00:01<00:00, 86.86it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 96%|      | 121/126 [00:01<00:00, 87.33it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 97%|      | 122/126 [00:01<00:00, 87.80it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 98%|      | 123/126 [00:01<00:00, 88.30it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 98%|      | 124/126 [00:01<00:00, 88.80it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 99%|      | 125/126 [00:01<00:00, 89.31it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 89.82it/s, loss=0.00522,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 100%|     | 126/126 [00:01<00:00, 87.91it/s, loss=0.00522,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 87.80it/s, loss=0.00522,
v_num=4.31e+7]Mapping latent space...

Epoch 123: 79%|      | 100/126 [00:01<00:00, 78.48it/s, loss=0.00536,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 123: 80%|      | 101/126 [00:01<00:00, 69.99it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 81%|      | 102/126 [00:01<00:00, 70.03it/s, loss=0.00536,

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v_num=4.31e+7]
Epoch 123: 82%|      | 103/126 [00:01<00:00, 70.55it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 83%|      | 104/126 [00:01<00:00, 71.08it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 83%|      | 105/126 [00:01<00:00, 71.59it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 84%|      | 106/126 [00:01<00:00, 72.12it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 85%|      | 107/126 [00:01<00:00, 72.64it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 86%|      | 108/126 [00:01<00:00, 73.15it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 87%|      | 109/126 [00:01<00:00, 73.67it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 87%|      | 110/126 [00:01<00:00, 74.18it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 88%|      | 111/126 [00:01<00:00, 74.69it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 89%|      | 112/126 [00:01<00:00, 75.20it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 90%|      | 113/126 [00:01<00:00, 75.71it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 90%|      | 114/126 [00:01<00:00, 76.21it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 91%|      | 115/126 [00:01<00:00, 76.72it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 92%|      | 116/126 [00:01<00:00, 77.22it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 93%|      | 117/126 [00:01<00:00, 77.72it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 94%|      | 118/126 [00:01<00:00, 78.22it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 94%|      | 119/126 [00:01<00:00, 78.71it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 95%|      | 120/126 [00:01<00:00, 79.21it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 96%|      | 121/126 [00:01<00:00, 79.70it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 97%|      | 122/126 [00:01<00:00, 80.19it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 98%|      | 123/126 [00:01<00:00, 80.71it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 98%|      | 124/126 [00:01<00:00, 81.23it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 99%|      | 125/126 [00:01<00:00, 81.75it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 100%|    | 126/126 [00:01<00:00, 82.28it/s, loss=0.00536,

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v_num=4.31e+7]Mapping latent space...
Epoch 123: 100%|      | 126/126 [00:01<00:00, 80.77it/s, loss=0.00536,
v_num=4.31e+7]
Epoch 123: 100%|      | 126/126 [00:01<00:00, 80.69it/s, loss=0.00536,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 79%|      | 100/126 [00:01<00:00, 90.30it/s, loss=0.00531,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 124: 80%|      | 101/126 [00:01<00:00, 77.38it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 81%|      | 102/126 [00:01<00:00, 77.33it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 82%|      | 103/126 [00:01<00:00, 77.67it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 83%|      | 104/126 [00:01<00:00, 78.03it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 83%|      | 105/126 [00:01<00:00, 78.40it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 84%|      | 106/126 [00:01<00:00, 78.77it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 85%|      | 107/126 [00:01<00:00, 79.16it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 86%|      | 108/126 [00:01<00:00, 79.55it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 87%|      | 109/126 [00:01<00:00, 79.95it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 87%|      | 110/126 [00:01<00:00, 80.35it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 88%|      | 111/126 [00:01<00:00, 80.76it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 89%|      | 112/126 [00:01<00:00, 81.17it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 90%|      | 113/126 [00:01<00:00, 81.59it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 90%|      | 114/126 [00:01<00:00, 82.01it/s, loss=0.00531,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 145.73it/s]
Epoch 124: 91%|      | 115/126 [00:01<00:00, 82.42it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 92%|      | 116/126 [00:01<00:00, 82.85it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 93%|      | 117/126 [00:01<00:00, 83.28it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 94%|      | 118/126 [00:01<00:00, 83.71it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 94%|      | 119/126 [00:01<00:00, 84.14it/s, loss=0.00531,

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v_num=4.31e+7]
Epoch 124: 95%|      | 120/126 [00:01<00:00, 84.57it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 96%|      | 121/126 [00:01<00:00, 84.99it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 97%|      | 122/126 [00:01<00:00, 85.42it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 98%|      | 123/126 [00:01<00:00, 85.88it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 98%|      | 124/126 [00:01<00:00, 86.34it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 99%|      | 125/126 [00:01<00:00, 86.79it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 87.26it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|     | 126/126 [00:01<00:00, 85.43it/s, loss=0.00531,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 85.31it/s, loss=0.00531,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 79%|      | 100/126 [00:01<00:00, 76.75it/s, loss=0.00489,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 125: 80%|      | 101/126 [00:01<00:00, 67.18it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 81%|      | 102/126 [00:01<00:00, 67.42it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 82%|      | 103/126 [00:01<00:00, 67.92it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 83%|      | 104/126 [00:01<00:00, 68.42it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 83%|      | 105/126 [00:01<00:00, 68.93it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 84%|      | 106/126 [00:01<00:00, 69.42it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 85%|      | 107/126 [00:01<00:00, 69.92it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 86%|      | 108/126 [00:01<00:00, 70.41it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 87%|      | 109/126 [00:01<00:00, 70.90it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 87%|      | 110/126 [00:01<00:00, 71.40it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 88%|      | 111/126 [00:01<00:00, 71.89it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 89%|      | 112/126 [00:01<00:00, 72.38it/s, loss=0.00489,
v_num=4.31e+7]

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Epoch 125: 90%|      | 113/126 [00:01<00:00, 72.87it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 90%|      | 114/126 [00:01<00:00, 73.37it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 91%|      | 115/126 [00:01<00:00, 73.84it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 92%|      | 116/126 [00:01<00:00, 74.32it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 93%|      | 117/126 [00:01<00:00, 74.80it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 94%|      | 118/126 [00:01<00:00, 75.28it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 94%|      | 119/126 [00:01<00:00, 75.76it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 95%|      | 120/126 [00:01<00:00, 76.24it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 96%|      | 121/126 [00:01<00:00, 76.71it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 97%|      | 122/126 [00:01<00:00, 77.19it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 98%|      | 123/126 [00:01<00:00, 77.70it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 98%|      | 124/126 [00:01<00:00, 78.20it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 99%|      | 125/126 [00:01<00:00, 78.58it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 125: 100%|     | 126/126 [00:01<00:00, 79.06it/s, loss=0.00489,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 100%|     | 126/126 [00:01<00:00, 77.59it/s, loss=0.00489,
v_num=4.31e+7]

Epoch 125: 100%|     | 126/126 [00:01<00:00, 77.50it/s, loss=0.00489,
v_num=4.31e+7]Mapping latent space...
Epoch 126: 79%|      | 100/126 [00:01<00:00, 77.44it/s, loss=0.00482,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 126: 80%|      | 101/126 [00:01<00:00, 67.82it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 81%|      | 102/126 [00:01<00:00, 67.79it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 82%|      | 103/126 [00:01<00:00, 68.29it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 83%|      | 104/126 [00:01<00:00, 68.74it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 83%|      | 105/126 [00:01<00:00, 69.22it/s, loss=0.00482,
v_num=4.31e+7]

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Epoch 126: 84%|      | 106/126 [00:01<00:00, 69.69it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 85%|      | 107/126 [00:01<00:00, 70.17it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 86%|      | 108/126 [00:01<00:00, 70.63it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 87%|      | 109/126 [00:01<00:00, 71.10it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 87%|      | 110/126 [00:01<00:00, 71.57it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 88%|      | 111/126 [00:01<00:00, 72.03it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 89%|      | 112/126 [00:01<00:00, 72.49it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 90%|      | 113/126 [00:01<00:00, 72.95it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 90%|      | 114/126 [00:01<00:00, 73.41it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 91%|      | 115/126 [00:01<00:00, 73.87it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 92%|      | 116/126 [00:01<00:00, 74.32it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 93%|      | 117/126 [00:01<00:00, 74.77it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 94%|      | 118/126 [00:01<00:00, 75.23it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 94%|      | 119/126 [00:01<00:00, 75.67it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 95%|      | 120/126 [00:01<00:00, 76.12it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 96%|      | 121/126 [00:01<00:00, 76.56it/s, loss=0.00482,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.04it/s]
Epoch 126: 97%|      | 122/126 [00:01<00:00, 77.01it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 98%|      | 123/126 [00:01<00:00, 77.48it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 98%|      | 124/126 [00:01<00:00, 77.95it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 99%|      | 125/126 [00:01<00:00, 78.41it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...
Epoch 126: 100%|     | 126/126 [00:01<00:00, 77.46it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 79%|      | 100/126 [00:01<00:00, 72.78it/s, loss=0.00525,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 127: 80%|          | 101/126 [00:01<00:00, 63.96it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 81%|          | 102/126 [00:01<00:00, 63.88it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 82%|          | 103/126 [00:01<00:00, 64.25it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 83%|          | 104/126 [00:01<00:00, 64.58it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 83%|          | 105/126 [00:01<00:00, 64.94it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 84%|          | 106/126 [00:01<00:00, 65.31it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 85%|          | 107/126 [00:01<00:00, 65.68it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 86%|          | 108/126 [00:01<00:00, 66.05it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 87%|          | 109/126 [00:01<00:00, 66.45it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 87%|          | 110/126 [00:01<00:00, 66.83it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 88%|          | 111/126 [00:01<00:00, 67.22it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 89%|          | 112/126 [00:01<00:00, 67.62it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 90%|          | 113/126 [00:01<00:00, 68.02it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 90%|          | 114/126 [00:01<00:00, 68.42it/s, loss=0.00525,
v_num=4.31e+7]
Validation DataLoader 0: 58%|          | 15/26 [00:00<00:00, 148.78it/s]
Epoch 127: 91%|          | 115/126 [00:01<00:00, 68.80it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 92%|          | 116/126 [00:01<00:00, 69.19it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 93%|          | 117/126 [00:01<00:00, 69.59it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 94%|          | 118/126 [00:01<00:00, 69.99it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 94%|          | 119/126 [00:01<00:00, 70.38it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 95%|          | 120/126 [00:01<00:00, 70.68it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 96%|          | 121/126 [00:01<00:00, 71.08it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 97%|          | 122/126 [00:01<00:00, 71.48it/s, loss=0.00525,

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v_num=4.31e+7]
Epoch 127: 98%|      | 123/126 [00:01<00:00, 71.92it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 98%|      | 124/126 [00:01<00:00, 72.36it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 99%|      | 125/126 [00:01<00:00, 72.79it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 73.23it/s, loss=0.00525,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 100%|     | 126/126 [00:01<00:00, 71.91it/s, loss=0.00525,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 71.82it/s, loss=0.00525,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 79%|      | 100/126 [00:01<00:00, 73.95it/s, loss=0.00538,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 128: 80%|      | 101/126 [00:01<00:00, 64.69it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 81%|      | 102/126 [00:01<00:00, 64.79it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 82%|      | 103/126 [00:01<00:00, 65.25it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 83%|      | 104/126 [00:01<00:00, 65.68it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 83%|      | 105/126 [00:01<00:00, 66.14it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 84%|      | 106/126 [00:01<00:00, 66.58it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 85%|      | 107/126 [00:01<00:00, 67.02it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 86%|      | 108/126 [00:01<00:00, 67.47it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 87%|      | 109/126 [00:01<00:00, 67.91it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 87%|      | 110/126 [00:01<00:00, 68.36it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 88%|      | 111/126 [00:01<00:00, 68.80it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 89%|      | 112/126 [00:01<00:00, 69.24it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 90%|      | 113/126 [00:01<00:00, 69.68it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 90%|      | 114/126 [00:01<00:00, 70.12it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 91%|      | 115/126 [00:01<00:00, 70.56it/s, loss=0.00538,
v_num=4.31e+7]

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Epoch 128: 92%|      | 116/126 [00:01<00:00, 71.00it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 93%|      | 117/126 [00:01<00:00, 71.43it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 94%|      | 118/126 [00:01<00:00, 71.87it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 94%|      | 119/126 [00:01<00:00, 72.30it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 95%|      | 120/126 [00:01<00:00, 72.73it/s, loss=0.00538,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 205.58it/s]
Epoch 128: 96%|      | 121/126 [00:01<00:00, 73.16it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 97%|      | 122/126 [00:01<00:00, 73.59it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 98%|      | 123/126 [00:01<00:00, 74.05it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 98%|      | 124/126 [00:01<00:00, 74.51it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 99%|      | 125/126 [00:01<00:00, 74.97it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 75.43it/s, loss=0.00538,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 100%|     | 126/126 [00:01<00:00, 74.00it/s, loss=0.00538,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 73.92it/s, loss=0.00538,
v_num=4.31e+7]Mapping latent space...

Epoch 129: 79%|      | 100/126 [00:01<00:00, 77.75it/s, loss=0.00423,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 129: 80%|      | 101/126 [00:01<00:00, 67.99it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 81%|      | 102/126 [00:01<00:00, 67.97it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 82%|      | 103/126 [00:01<00:00, 68.45it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 83%|      | 104/126 [00:01<00:00, 68.92it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 83%|      | 105/126 [00:01<00:00, 69.40it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 84%|      | 106/126 [00:01<00:00, 69.85it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 85%|      | 107/126 [00:01<00:00, 70.33it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 86%|      | 108/126 [00:01<00:00, 70.80it/s, loss=0.00423,

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v_num=4.31e+7]
Epoch 129: 87%|      | 109/126 [00:01<00:00, 71.27it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 87%|      | 110/126 [00:01<00:00, 71.74it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 88%|      | 111/126 [00:01<00:00, 72.20it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 89%|      | 112/126 [00:01<00:00, 72.67it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 90%|      | 113/126 [00:01<00:00, 73.13it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 90%|      | 114/126 [00:01<00:00, 73.60it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 91%|      | 115/126 [00:01<00:00, 74.07it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 92%|      | 116/126 [00:01<00:00, 74.51it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 93%|      | 117/126 [00:01<00:00, 74.97it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 94%|      | 118/126 [00:01<00:00, 75.43it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 94%|      | 119/126 [00:01<00:00, 75.88it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 95%|      | 120/126 [00:01<00:00, 76.34it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 96%|      | 121/126 [00:01<00:00, 76.78it/s, loss=0.00423,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.98it/s]
Epoch 129: 97%|      | 122/126 [00:01<00:00, 77.24it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 98%|      | 123/126 [00:01<00:00, 77.71it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 98%|      | 124/126 [00:01<00:00, 78.18it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 99%|      | 125/126 [00:01<00:00, 78.66it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 79.13it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 129: 100%|     | 126/126 [00:01<00:00, 77.71it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 77.61it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 79%|      | 100/126 [00:01<00:00, 71.45it/s, loss=0.0053,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 130: 80%|      | 101/126 [00:01<00:00, 63.08it/s, loss=0.0053,

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v_num=4.31e+7]
Epoch 130: 81%|      | 102/126 [00:01<00:00, 63.31it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 82%|      | 103/126 [00:01<00:00, 63.77it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 83%|      | 104/126 [00:01<00:00, 64.25it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 83%|      | 105/126 [00:01<00:00, 64.73it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 84%|      | 106/126 [00:01<00:00, 65.19it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 85%|      | 107/126 [00:01<00:00, 65.66it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 86%|      | 108/126 [00:01<00:00, 66.10it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 87%|      | 109/126 [00:01<00:00, 66.56it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 87%|      | 110/126 [00:01<00:00, 67.03it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 88%|      | 111/126 [00:01<00:00, 67.50it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 89%|      | 112/126 [00:01<00:00, 67.96it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 90%|      | 113/126 [00:01<00:00, 68.43it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 90%|      | 114/126 [00:01<00:00, 68.89it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 91%|      | 115/126 [00:01<00:00, 69.35it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 92%|      | 116/126 [00:01<00:00, 69.81it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 93%|      | 117/126 [00:01<00:00, 70.27it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 94%|      | 118/126 [00:01<00:00, 70.73it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 94%|      | 119/126 [00:01<00:00, 71.21it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 95%|      | 120/126 [00:01<00:00, 71.65it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 96%|      | 121/126 [00:01<00:00, 72.09it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 97%|      | 122/126 [00:01<00:00, 72.55it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 98%|      | 123/126 [00:01<00:00, 73.04it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 98%|      | 124/126 [00:01<00:00, 73.52it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 99%|      | 125/126 [00:01<00:00, 74.00it/s, loss=0.0053,

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v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.47it/s]
Epoch 130: 100%|      | 126/126 [00:01<00:00, 74.47it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 100%|      | 126/126 [00:01<00:00, 73.22it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 130: 100%|      | 126/126 [00:01<00:00, 73.06it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 79%|      | 100/126 [00:01<00:00, 78.67it/s, loss=0.00499,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 131: 80%|      | 101/126 [00:01<00:00, 69.25it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 81%|      | 102/126 [00:01<00:00, 69.27it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 82%|      | 103/126 [00:01<00:00, 69.79it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 83%|      | 104/126 [00:01<00:00, 70.29it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 83%|      | 105/126 [00:01<00:00, 70.81it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 84%|      | 106/126 [00:01<00:00, 71.31it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 85%|      | 107/126 [00:01<00:00, 71.82it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 86%|      | 108/126 [00:01<00:00, 72.33it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 87%|      | 109/126 [00:01<00:00, 72.83it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 87%|      | 110/126 [00:01<00:00, 73.32it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 88%|      | 111/126 [00:01<00:00, 73.83it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 89%|      | 112/126 [00:01<00:00, 74.33it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 90%|      | 113/126 [00:01<00:00, 74.83it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 90%|      | 114/126 [00:01<00:00, 75.33it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 91%|      | 115/126 [00:01<00:00, 75.82it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 92%|      | 116/126 [00:01<00:00, 76.32it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 93%|      | 117/126 [00:01<00:00, 76.81it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 94%|      | 118/126 [00:01<00:00, 77.30it/s, loss=0.00499,

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v_num=4.31e+7]
Epoch 131: 94%|      | 119/126 [00:01<00:00, 77.79it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 95%|      | 120/126 [00:01<00:00, 78.28it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 96%|      | 121/126 [00:01<00:00, 78.76it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 97%|      | 122/126 [00:01<00:00, 79.26it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 98%|      | 123/126 [00:01<00:00, 79.77it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 98%|      | 124/126 [00:01<00:00, 80.28it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 99%|      | 125/126 [00:01<00:00, 80.79it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 81.31it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 100%|     | 126/126 [00:01<00:00, 79.82it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 79.75it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...

Epoch 132: 79%|      | 100/126 [00:01<00:00, 67.07it/s, loss=0.00499,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 132: 80%|      | 101/126 [00:01<00:00, 59.97it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 81%|      | 102/126 [00:01<00:00, 60.15it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 82%|      | 103/126 [00:01<00:00, 60.52it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 83%|      | 104/126 [00:01<00:00, 60.89it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 83%|      | 105/126 [00:01<00:00, 61.27it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 84%|      | 106/126 [00:01<00:00, 61.64it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 85%|      | 107/126 [00:01<00:00, 62.02it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 86%|      | 108/126 [00:01<00:00, 62.40it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 87%|      | 109/126 [00:01<00:00, 62.78it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 87%|      | 110/126 [00:01<00:00, 63.17it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 88%|      | 111/126 [00:01<00:00, 63.56it/s, loss=0.00499,

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v_num=4.31e+7]
Epoch 132: 89%|      | 112/126 [00:01<00:00, 63.93it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 90%|      | 113/126 [00:01<00:00, 64.32it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 90%|      | 114/126 [00:01<00:00, 64.72it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 91%|      | 115/126 [00:01<00:00, 65.11it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 92%|      | 116/126 [00:01<00:00, 65.51it/s, loss=0.00499,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 164.75it/s]
Epoch 132: 93%|      | 117/126 [00:01<00:00, 65.89it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 94%|      | 118/126 [00:01<00:00, 66.29it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 94%|      | 119/126 [00:01<00:00, 66.69it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 95%|      | 120/126 [00:01<00:00, 67.09it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 96%|      | 121/126 [00:01<00:00, 67.50it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 97%|      | 122/126 [00:01<00:00, 67.90it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 98%|      | 123/126 [00:01<00:00, 68.32it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 98%|      | 124/126 [00:01<00:00, 68.75it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 99%|      | 125/126 [00:01<00:00, 69.17it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 69.60it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 132: 100%|     | 126/126 [00:01<00:00, 68.41it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 68.34it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 79%|      | 100/126 [00:01<00:00, 70.70it/s, loss=0.00489,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 133: 80%|      | 101/126 [00:01<00:00, 62.45it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 81%|      | 102/126 [00:01<00:00, 62.50it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 82%|      | 103/126 [00:01<00:00, 62.95it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 83%|      | 104/126 [00:01<00:00, 63.41it/s, loss=0.00489,

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v_num=4.31e+7]
Epoch 133: 83%|      | 105/126 [00:01<00:00, 63.86it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 84%|      | 106/126 [00:01<00:00, 64.32it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 85%|      | 107/126 [00:01<00:00, 64.77it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 86%|      | 108/126 [00:01<00:00, 65.22it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 87%|      | 109/126 [00:01<00:00, 65.67it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 87%|      | 110/126 [00:01<00:00, 66.12it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 88%|      | 111/126 [00:01<00:00, 66.56it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 89%|      | 112/126 [00:01<00:00, 67.00it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 90%|      | 113/126 [00:01<00:00, 67.45it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 90%|      | 114/126 [00:01<00:00, 67.87it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 91%|      | 115/126 [00:01<00:00, 68.31it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 92%|      | 116/126 [00:01<00:00, 68.75it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 93%|      | 117/126 [00:01<00:00, 69.18it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 94%|      | 118/126 [00:01<00:00, 69.62it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 94%|      | 119/126 [00:01<00:00, 70.05it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 95%|      | 120/126 [00:01<00:00, 70.48it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 96%|      | 121/126 [00:01<00:00, 70.91it/s, loss=0.00489,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.56it/s]
Epoch 133: 97%|      | 122/126 [00:01<00:00, 71.34it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 98%|      | 123/126 [00:01<00:00, 71.79it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 98%|      | 124/126 [00:01<00:00, 72.24it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 99%|      | 125/126 [00:01<00:00, 72.68it/s, loss=0.00489,
v_num=4.31e+7]
Epoch 133: 100%|     | 126/126 [00:01<00:00, 73.13it/s, loss=0.00489,
v_num=4.31e+7] Mapping latent space...
Epoch 133: 100%|     | 126/126 [00:01<00:00, 71.87it/s, loss=0.00489,
v_num=4.31e+7]

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Epoch 133: 100%|      | 126/126 [00:01<00:00, 71.70it/s, loss=0.00489,
v_num=4.31e+7]Mapping latent space...
Epoch 134:  79%|      | 100/126 [00:01<00:00, 74.79it/s, loss=0.00444,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 134:  80%|      | 101/126 [00:01<00:00, 66.43it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  81%|      | 102/126 [00:01<00:00, 66.48it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  82%|      | 103/126 [00:01<00:00, 67.00it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  83%|      | 104/126 [00:01<00:00, 67.49it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  83%|      | 105/126 [00:01<00:00, 68.00it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  84%|      | 106/126 [00:01<00:00, 68.49it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  85%|      | 107/126 [00:01<00:00, 69.00it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  86%|      | 108/126 [00:01<00:00, 69.48it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  87%|      | 109/126 [00:01<00:00, 69.99it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  87%|      | 110/126 [00:01<00:00, 70.47it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  88%|      | 111/126 [00:01<00:00, 70.97it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  89%|      | 112/126 [00:01<00:00, 71.45it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  90%|      | 113/126 [00:01<00:00, 71.96it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  90%|      | 114/126 [00:01<00:00, 72.43it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  91%|      | 115/126 [00:01<00:00, 72.93it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  92%|      | 116/126 [00:01<00:00, 73.38it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  93%|      | 117/126 [00:01<00:00, 73.86it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  94%|      | 118/126 [00:01<00:00, 74.34it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  94%|      | 119/126 [00:01<00:00, 74.82it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  95%|      | 120/126 [00:01<00:00, 75.29it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134:  96%|      | 121/126 [00:01<00:00, 75.76it/s, loss=0.00444,

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v_num=4.31e+7]
Epoch 134: 97%|      | 122/126 [00:01<00:00, 76.24it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134: 98%|      | 123/126 [00:01<00:00, 76.74it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134: 98%|      | 124/126 [00:01<00:00, 77.23it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134: 99%|      | 125/126 [00:01<00:00, 77.72it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 78.22it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 134: 100%|     | 126/126 [00:01<00:00, 76.76it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 76.68it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...

Epoch 135: 79%|      | 100/126 [00:01<00:00, 68.14it/s, loss=0.00551,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 135: 80%|      | 101/126 [00:01<00:00, 60.96it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 81%|      | 102/126 [00:01<00:00, 61.16it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 82%|      | 103/126 [00:01<00:00, 61.63it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 83%|      | 104/126 [00:01<00:00, 62.09it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 83%|      | 105/126 [00:01<00:00, 62.55it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 84%|      | 106/126 [00:01<00:00, 63.02it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 85%|      | 107/126 [00:01<00:00, 63.49it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 86%|      | 108/126 [00:01<00:00, 63.95it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 87%|      | 109/126 [00:01<00:00, 64.42it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 87%|      | 110/126 [00:01<00:00, 64.88it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 88%|      | 111/126 [00:01<00:00, 65.35it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 89%|      | 112/126 [00:01<00:00, 65.81it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 90%|      | 113/126 [00:01<00:00, 66.27it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 90%|      | 114/126 [00:01<00:00, 66.74it/s, loss=0.00551,

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v_num=4.31e+7]
Epoch 135: 91%|      | 115/126 [00:01<00:00, 67.20it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 92%|      | 116/126 [00:01<00:00, 67.66it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 93%|      | 117/126 [00:01<00:00, 68.12it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 94%|      | 118/126 [00:01<00:00, 68.55it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 94%|      | 119/126 [00:01<00:00, 69.00it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 95%|      | 120/126 [00:01<00:00, 69.46it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 96%|      | 121/126 [00:01<00:00, 69.91it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 97%|      | 122/126 [00:01<00:00, 70.37it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 98%|      | 123/126 [00:01<00:00, 70.83it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 98%|      | 124/126 [00:01<00:00, 71.30it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 99%|      | 125/126 [00:01<00:00, 71.77it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 100%|     | 126/126 [00:01<00:00, 72.24it/s, loss=0.00551,
v_num=4.31e+7]Mapping latent space...
Epoch 135: 100%|     | 126/126 [00:01<00:00, 71.06it/s, loss=0.00551,
v_num=4.31e+7]
Epoch 135: 100%|     | 126/126 [00:01<00:00, 70.88it/s, loss=0.00551,
v_num=4.31e+7]Mapping latent space...
Epoch 136: 79%|      | 100/126 [00:01<00:00, 68.45it/s, loss=0.00557,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 136: 80%|      | 101/126 [00:01<00:00, 60.78it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 81%|      | 102/126 [00:01<00:00, 60.94it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 82%|      | 103/126 [00:01<00:00, 61.37it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 83%|      | 104/126 [00:01<00:00, 61.80it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 83%|      | 105/126 [00:01<00:00, 62.23it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 84%|      | 106/126 [00:01<00:00, 62.66it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 85%|      | 107/126 [00:01<00:00, 63.09it/s, loss=0.00557,
v_num=4.31e+7]

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Epoch 136: 86%|      | 108/126 [00:01<00:00, 63.51it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 87%|      | 109/126 [00:01<00:00, 63.93it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 87%|      | 110/126 [00:01<00:00, 64.36it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 88%|      | 111/126 [00:01<00:00, 64.79it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 89%|      | 112/126 [00:01<00:00, 65.22it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 90%|      | 113/126 [00:01<00:00, 65.58it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 90%|      | 114/126 [00:01<00:00, 66.01it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 91%|      | 115/126 [00:01<00:00, 66.44it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 92%|      | 116/126 [00:01<00:00, 66.87it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 93%|      | 117/126 [00:01<00:00, 67.30it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 94%|      | 118/126 [00:01<00:00, 67.73it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 94%|      | 119/126 [00:01<00:00, 68.15it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 95%|      | 120/126 [00:01<00:00, 68.56it/s, loss=0.00557,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 205.96it/s]
Epoch 136: 96%|      | 121/126 [00:01<00:00, 68.98it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 97%|      | 122/126 [00:01<00:00, 69.40it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 98%|      | 123/126 [00:01<00:00, 69.84it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 98%|      | 124/126 [00:01<00:00, 70.28it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 99%|      | 125/126 [00:01<00:00, 70.72it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 100%|     | 126/126 [00:01<00:00, 71.16it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 136: 100%|     | 126/126 [00:01<00:00, 70.00it/s, loss=0.00557,
v_num=4.31e+7]
Epoch 136: 100%|     | 126/126 [00:01<00:00, 69.92it/s, loss=0.00557,
v_num=4.31e+7]Mapping latent space...
Epoch 137: 79%|      | 100/126 [00:01<00:00, 76.80it/s, loss=0.00434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 137: 80%|      | 101/126 [00:01<00:00, 67.33it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 81%|      | 102/126 [00:01<00:00, 67.10it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 82%|      | 103/126 [00:01<00:00, 67.58it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 83%|      | 104/126 [00:01<00:00, 68.05it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 83%|      | 105/126 [00:01<00:00, 68.53it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 84%|      | 106/126 [00:01<00:00, 69.00it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 85%|      | 107/126 [00:01<00:00, 69.47it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 86%|      | 108/126 [00:01<00:00, 69.94it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 87%|      | 109/126 [00:01<00:00, 70.41it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 87%|      | 110/126 [00:01<00:00, 70.87it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 88%|      | 111/126 [00:01<00:00, 71.34it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 89%|      | 112/126 [00:01<00:00, 71.80it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 90%|      | 113/126 [00:01<00:00, 72.26it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 90%|      | 114/126 [00:01<00:00, 72.72it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 91%|      | 115/126 [00:01<00:00, 73.18it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 92%|      | 116/126 [00:01<00:00, 73.63it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 93%|      | 117/126 [00:01<00:00, 74.08it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 94%|      | 118/126 [00:01<00:00, 74.54it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 94%|      | 119/126 [00:01<00:00, 74.99it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 95%|      | 120/126 [00:01<00:00, 75.45it/s, loss=0.00434,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.38it/s]
Epoch 137: 96%|      | 121/126 [00:01<00:00, 75.89it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 97%|      | 122/126 [00:01<00:00, 76.31it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 98%|      | 123/126 [00:01<00:00, 76.78it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 98%|      | 124/126 [00:01<00:00, 77.25it/s, loss=0.00434,

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v_num=4.31e+7]
Epoch 137: 99%|      | 125/126 [00:01<00:00, 77.72it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 100%|     | 126/126 [00:01<00:00, 78.19it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 137: 100%|     | 126/126 [00:01<00:00, 76.25it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 137: 100%|     | 126/126 [00:01<00:00, 76.16it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...

Epoch 138: 79%|      | 100/126 [00:01<00:00, 80.25it/s, loss=0.0046,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 138: 80%|      | 101/126 [00:01<00:00, 71.47it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 81%|      | 102/126 [00:01<00:00, 71.67it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 82%|      | 103/126 [00:01<00:00, 72.20it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 83%|      | 104/126 [00:01<00:00, 72.72it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 83%|      | 105/126 [00:01<00:00, 73.25it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 84%|      | 106/126 [00:01<00:00, 73.76it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 85%|      | 107/126 [00:01<00:00, 74.29it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 86%|      | 108/126 [00:01<00:00, 74.79it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 87%|      | 109/126 [00:01<00:00, 75.31it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 87%|      | 110/126 [00:01<00:00, 75.82it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 88%|      | 111/126 [00:01<00:00, 76.34it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 89%|      | 112/126 [00:01<00:00, 76.85it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 90%|      | 113/126 [00:01<00:00, 77.36it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 90%|      | 114/126 [00:01<00:00, 77.86it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 91%|      | 115/126 [00:01<00:00, 78.38it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 92%|      | 116/126 [00:01<00:00, 78.88it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 93%|      | 117/126 [00:01<00:00, 79.39it/s, loss=0.0046,

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v_num=4.31e+7]
Epoch 138: 94%|      | 118/126 [00:01<00:00, 79.90it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 94%|      | 119/126 [00:01<00:00, 80.40it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 95%|      | 120/126 [00:01<00:00, 80.89it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 96%|      | 121/126 [00:01<00:00, 81.39it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 97%|      | 122/126 [00:01<00:00, 81.90it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 98%|      | 123/126 [00:01<00:00, 82.43it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 98%|      | 124/126 [00:01<00:00, 82.95it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 99%|      | 125/126 [00:01<00:00, 83.48it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 100%|     | 126/126 [00:01<00:00, 84.02it/s, loss=0.0046,
v_num=4.31e+7]Mapping latent space...
Epoch 138: 100%|     | 126/126 [00:01<00:00, 82.51it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 138: 100%|     | 126/126 [00:01<00:00, 82.42it/s, loss=0.0046,
v_num=4.31e+7]Mapping latent space...
Epoch 139: 79%|      | 100/126 [00:01<00:00, 71.74it/s, loss=0.00511,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 139: 80%|      | 101/126 [00:01<00:00, 63.63it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 81%|      | 102/126 [00:01<00:00, 63.56it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 82%|      | 103/126 [00:01<00:00, 64.01it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 83%|      | 104/126 [00:01<00:00, 64.45it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 83%|      | 105/126 [00:01<00:00, 64.89it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 84%|      | 106/126 [00:01<00:00, 65.33it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 85%|      | 107/126 [00:01<00:00, 65.78it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 86%|      | 108/126 [00:01<00:00, 66.21it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 87%|      | 109/126 [00:01<00:00, 66.65it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 87%|      | 110/126 [00:01<00:00, 67.10it/s, loss=0.00511,
v_num=4.31e+7]

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Epoch 139: 88%|      | 111/126 [00:01<00:00, 67.53it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 89%|      | 112/126 [00:01<00:00, 67.97it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 90%|      | 113/126 [00:01<00:00, 68.41it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 90%|      | 114/126 [00:01<00:00, 68.84it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 91%|      | 115/126 [00:01<00:00, 69.27it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 92%|      | 116/126 [00:01<00:00, 69.71it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 93%|      | 117/126 [00:01<00:00, 70.14it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 94%|      | 118/126 [00:01<00:00, 70.57it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 94%|      | 119/126 [00:01<00:00, 71.00it/s, loss=0.00511,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 196.72it/s]
Epoch 139: 95%|      | 120/126 [00:01<00:00, 71.42it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 96%|      | 121/126 [00:01<00:00, 71.84it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 97%|      | 122/126 [00:01<00:00, 72.27it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 98%|      | 123/126 [00:01<00:00, 72.72it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 98%|      | 124/126 [00:01<00:00, 73.17it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 99%|      | 125/126 [00:01<00:00, 73.62it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 100%|     | 126/126 [00:01<00:00, 74.08it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 139: 100%|     | 126/126 [00:01<00:00, 72.72it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 139: 100%|     | 126/126 [00:01<00:00, 72.65it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 140: 79%|      | 100/126 [00:01<00:00, 72.87it/s, loss=0.00493,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 140: 80%|      | 101/126 [00:01<00:00, 64.65it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 81%|      | 102/126 [00:01<00:00, 64.56it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 82%|      | 103/126 [00:01<00:00, 65.07it/s, loss=0.00493,
v_num=4.31e+7]

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Epoch 140: 83%|      | 104/126 [00:01<00:00, 65.54it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 83%|      | 105/126 [00:01<00:00, 66.03it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 84%|      | 106/126 [00:01<00:00, 66.52it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 85%|      | 107/126 [00:01<00:00, 67.00it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 86%|      | 108/126 [00:01<00:00, 67.48it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 87%|      | 109/126 [00:01<00:00, 67.97it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 87%|      | 110/126 [00:01<00:00, 68.44it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 88%|      | 111/126 [00:01<00:00, 68.94it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 89%|      | 112/126 [00:01<00:00, 69.41it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 90%|      | 113/126 [00:01<00:00, 69.89it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 90%|      | 114/126 [00:01<00:00, 70.37it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 91%|      | 115/126 [00:01<00:00, 70.84it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 92%|      | 116/126 [00:01<00:00, 71.32it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 93%|      | 117/126 [00:01<00:00, 71.79it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 94%|      | 118/126 [00:01<00:00, 72.26it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 94%|      | 119/126 [00:01<00:00, 72.73it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 95%|      | 120/126 [00:01<00:00, 73.20it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 96%|      | 121/126 [00:01<00:00, 73.67it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 97%|      | 122/126 [00:01<00:00, 74.13it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 98%|      | 123/126 [00:01<00:00, 74.62it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 98%|      | 124/126 [00:01<00:00, 75.11it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 140: 99%|      | 125/126 [00:01<00:00, 75.60it/s, loss=0.00493,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.20it/s]
Epoch 140: 100%|      | 126/126 [00:01<00:00, 76.08it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 140: 100%|      | 126/126 [00:01<00:00, 74.77it/s, loss=0.00493,

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v_num=4.31e+7]
Epoch 140: 100%|      | 126/126 [00:01<00:00, 74.70it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...

Epoch 141: 79%|      | 100/126 [00:01<00:00, 70.66it/s, loss=0.00499,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 141: 80%|      | 101/126 [00:01<00:00, 62.64it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 81%|      | 102/126 [00:01<00:00, 62.80it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 82%|      | 103/126 [00:01<00:00, 63.24it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 83%|      | 104/126 [00:01<00:00, 63.68it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 83%|      | 105/126 [00:01<00:00, 64.12it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 84%|      | 106/126 [00:01<00:00, 64.56it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 85%|      | 107/126 [00:01<00:00, 65.00it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 86%|      | 108/126 [00:01<00:00, 65.44it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 87%|      | 109/126 [00:01<00:00, 65.89it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 87%|      | 110/126 [00:01<00:00, 66.33it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 88%|      | 111/126 [00:01<00:00, 66.78it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 89%|      | 112/126 [00:01<00:00, 67.22it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 90%|      | 113/126 [00:01<00:00, 67.67it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 90%|      | 114/126 [00:01<00:00, 68.11it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 91%|      | 115/126 [00:01<00:00, 68.55it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 92%|      | 116/126 [00:01<00:00, 68.99it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 93%|      | 117/126 [00:01<00:00, 69.43it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 94%|      | 118/126 [00:01<00:00, 69.87it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 94%|      | 119/126 [00:01<00:00, 70.30it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 95%|      | 120/126 [00:01<00:00, 70.73it/s, loss=0.00499,

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v_num=4.31e+7]
Epoch 141: 96%|      | 121/126 [00:01<00:00, 71.16it/s, loss=0.00499,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 217.35it/s]
Epoch 141: 97%|      | 122/126 [00:01<00:00, 71.59it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 98%|      | 123/126 [00:01<00:00, 72.04it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 98%|      | 124/126 [00:01<00:00, 72.48it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 99%|      | 125/126 [00:01<00:00, 72.93it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 100%|     | 126/126 [00:01<00:00, 73.38it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 141: 100%|     | 126/126 [00:01<00:00, 72.11it/s, loss=0.00499,
v_num=4.31e+7]
Epoch 141: 100%|     | 126/126 [00:01<00:00, 72.03it/s, loss=0.00499,
v_num=4.31e+7]Mapping latent space...
Epoch 142: 79%|      | 100/126 [00:01<00:00, 72.51it/s, loss=0.00502,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 142: 80%|      | 101/126 [00:01<00:00, 64.45it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 81%|      | 102/126 [00:01<00:00, 64.35it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 82%|      | 103/126 [00:01<00:00, 64.73it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 83%|      | 104/126 [00:01<00:00, 65.11it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 83%|      | 105/126 [00:01<00:00, 65.50it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 84%|      | 106/126 [00:01<00:00, 65.90it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 85%|      | 107/126 [00:01<00:00, 66.29it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 86%|      | 108/126 [00:01<00:00, 66.68it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 87%|      | 109/126 [00:01<00:00, 67.09it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 87%|      | 110/126 [00:01<00:00, 67.49it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 88%|      | 111/126 [00:01<00:00, 67.89it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 89%|      | 112/126 [00:01<00:00, 68.30it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 90%|      | 113/126 [00:01<00:00, 68.70it/s, loss=0.00502,

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v_num=4.31e+7]
Epoch 142: 90%|      | 114/126 [00:01<00:00, 69.10it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 91%|      | 115/126 [00:01<00:00, 69.51it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 92%|      | 116/126 [00:01<00:00, 69.91it/s, loss=0.00502,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 162.59it/s]
Epoch 142: 93%|      | 117/126 [00:01<00:00, 70.31it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 94%|      | 118/126 [00:01<00:00, 70.71it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 94%|      | 119/126 [00:01<00:00, 71.12it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 95%|      | 120/126 [00:01<00:00, 71.53it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 96%|      | 121/126 [00:01<00:00, 71.93it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 97%|      | 122/126 [00:01<00:00, 72.35it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 98%|      | 123/126 [00:01<00:00, 72.79it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 98%|      | 124/126 [00:01<00:00, 73.22it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 99%|      | 125/126 [00:01<00:00, 73.66it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 100%|     | 126/126 [00:01<00:00, 74.10it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 142: 100%|     | 126/126 [00:01<00:00, 72.81it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 142: 100%|     | 126/126 [00:01<00:00, 72.72it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 143: 79%|      | 100/126 [00:01<00:00, 71.91it/s, loss=0.00471,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 143: 80%|      | 101/126 [00:01<00:00, 63.78it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 81%|      | 102/126 [00:01<00:00, 63.88it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 82%|      | 103/126 [00:01<00:00, 64.34it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 83%|      | 104/126 [00:01<00:00, 64.81it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 83%|      | 105/126 [00:01<00:00, 65.30it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 84%|      | 106/126 [00:01<00:00, 65.77it/s, loss=0.00471,

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v_num=4.31e+7]
Epoch 143: 85%|      | 107/126 [00:01<00:00, 66.25it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 86%|      | 108/126 [00:01<00:00, 66.72it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 87%|      | 109/126 [00:01<00:00, 67.20it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 87%|      | 110/126 [00:01<00:00, 67.67it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 88%|      | 111/126 [00:01<00:00, 68.15it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 89%|      | 112/126 [00:01<00:00, 68.64it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 90%|      | 113/126 [00:01<00:00, 69.09it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 90%|      | 114/126 [00:01<00:00, 69.56it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 91%|      | 115/126 [00:01<00:00, 70.03it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 92%|      | 116/126 [00:01<00:00, 70.49it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 93%|      | 117/126 [00:01<00:00, 70.96it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 94%|      | 118/126 [00:01<00:00, 71.42it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 94%|      | 119/126 [00:01<00:00, 71.88it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 95%|      | 120/126 [00:01<00:00, 72.34it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 96%|      | 121/126 [00:01<00:00, 72.81it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 97%|      | 122/126 [00:01<00:00, 73.26it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 98%|      | 123/126 [00:01<00:00, 73.75it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 98%|      | 124/126 [00:01<00:00, 74.24it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 99%|      | 125/126 [00:01<00:00, 74.72it/s, loss=0.00471,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.94it/s]
Epoch 143: 100%|      | 126/126 [00:01<00:00, 75.20it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...
Epoch 143: 100%|      | 126/126 [00:01<00:00, 73.96it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 143: 100%|      | 126/126 [00:01<00:00, 73.84it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...
Epoch 144: 79%|      | 100/126 [00:01<00:00, 68.66it/s, loss=0.00456,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 144: 80%|          | 101/126 [00:01<00:00, 60.77it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 81%|          | 102/126 [00:01<00:00, 60.74it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 82%|          | 103/126 [00:01<00:00, 61.18it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 83%|          | 104/126 [00:01<00:00, 61.62it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 83%|          | 105/126 [00:01<00:00, 62.06it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 84%|          | 106/126 [00:01<00:00, 62.50it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 85%|          | 107/126 [00:01<00:00, 62.94it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 86%|          | 108/126 [00:01<00:00, 63.38it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 87%|          | 109/126 [00:01<00:00, 63.82it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 87%|          | 110/126 [00:01<00:00, 64.26it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 88%|          | 111/126 [00:01<00:00, 64.69it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 89%|          | 112/126 [00:01<00:00, 65.12it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 90%|          | 113/126 [00:01<00:00, 65.56it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 90%|          | 114/126 [00:01<00:00, 65.99it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 91%|          | 115/126 [00:01<00:00, 66.41it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 92%|          | 116/126 [00:01<00:00, 66.84it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 93%|          | 117/126 [00:01<00:00, 67.27it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 94%|          | 118/126 [00:01<00:00, 67.69it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 94%|          | 119/126 [00:01<00:00, 68.11it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 95%|          | 120/126 [00:01<00:00, 68.53it/s, loss=0.00456,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 205.56it/s]
Epoch 144: 96%|          | 121/126 [00:01<00:00, 68.94it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 97%|          | 122/126 [00:01<00:00, 69.36it/s, loss=0.00456,

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v_num=4.31e+7]
Epoch 144: 98%|      | 123/126 [00:01<00:00, 69.79it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 98%|      | 124/126 [00:01<00:00, 70.23it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 99%|      | 125/126 [00:01<00:00, 70.66it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 100%|     | 126/126 [00:01<00:00, 71.10it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...
Epoch 144: 100%|     | 126/126 [00:01<00:00, 69.57it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 144: 100%|     | 126/126 [00:01<00:00, 69.45it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...
Epoch 145: 79%|      | 100/126 [00:01<00:00, 76.73it/s, loss=0.00533,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 145: 80%|      | 101/126 [00:01<00:00, 67.77it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 81%|      | 102/126 [00:01<00:00, 67.81it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 82%|      | 103/126 [00:01<00:00, 68.32it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 83%|      | 104/126 [00:01<00:00, 68.83it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 83%|      | 105/126 [00:01<00:00, 69.34it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 84%|      | 106/126 [00:01<00:00, 69.85it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 85%|      | 107/126 [00:01<00:00, 70.37it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 86%|      | 108/126 [00:01<00:00, 70.87it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 87%|      | 109/126 [00:01<00:00, 71.38it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 87%|      | 110/126 [00:01<00:00, 71.88it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 88%|      | 111/126 [00:01<00:00, 72.38it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 89%|      | 112/126 [00:01<00:00, 72.88it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 90%|      | 113/126 [00:01<00:00, 73.37it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 90%|      | 114/126 [00:01<00:00, 73.87it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 91%|      | 115/126 [00:01<00:00, 74.37it/s, loss=0.00533,
v_num=4.31e+7]

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Epoch 145: 92%|      | 116/126 [00:01<00:00, 74.85it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 93%|      | 117/126 [00:01<00:00, 75.34it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 94%|      | 118/126 [00:01<00:00, 75.83it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 94%|      | 119/126 [00:01<00:00, 76.32it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 95%|      | 120/126 [00:01<00:00, 76.81it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 96%|      | 121/126 [00:01<00:00, 77.30it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 97%|      | 122/126 [00:01<00:00, 77.79it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 98%|      | 123/126 [00:01<00:00, 78.30it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 98%|      | 124/126 [00:01<00:00, 78.80it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 99%|      | 125/126 [00:01<00:00, 79.31it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 100%|     | 126/126 [00:01<00:00, 79.81it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 145: 100%|     | 126/126 [00:01<00:00, 78.41it/s, loss=0.00533,
v_num=4.31e+7]
Epoch 145: 100%|     | 126/126 [00:01<00:00, 78.27it/s, loss=0.00533,
v_num=4.31e+7]Mapping latent space...
Epoch 146: 79%|      | 100/126 [00:01<00:00, 73.57it/s, loss=0.0053,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 146: 80%|      | 101/126 [00:01<00:00, 66.01it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 81%|      | 102/126 [00:01<00:00, 66.27it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 82%|      | 103/126 [00:01<00:00, 66.71it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 83%|      | 104/126 [00:01<00:00, 67.16it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 83%|      | 105/126 [00:01<00:00, 67.60it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 84%|      | 106/126 [00:01<00:00, 68.04it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 85%|      | 107/126 [00:01<00:00, 68.49it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 86%|      | 108/126 [00:01<00:00, 68.95it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 87%|      | 109/126 [00:01<00:00, 69.41it/s, loss=0.0053,

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v_num=4.31e+7]
Epoch 146: 87%|      | 110/126 [00:01<00:00, 69.87it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 88%|      | 111/126 [00:01<00:00, 70.33it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 89%|      | 112/126 [00:01<00:00, 70.79it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 90%|      | 113/126 [00:01<00:00, 71.24it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 90%|      | 114/126 [00:01<00:00, 71.69it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 91%|      | 115/126 [00:01<00:00, 72.14it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 92%|      | 116/126 [00:01<00:00, 72.59it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 93%|      | 117/126 [00:01<00:00, 73.04it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 94%|      | 118/126 [00:01<00:00, 73.48it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 94%|      | 119/126 [00:01<00:00, 73.92it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 95%|      | 120/126 [00:01<00:00, 74.37it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 96%|      | 121/126 [00:01<00:00, 74.82it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 97%|      | 122/126 [00:01<00:00, 75.27it/s, loss=0.0053,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 222.99it/s]
Epoch 146: 98%|      | 123/126 [00:01<00:00, 75.73it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 98%|      | 124/126 [00:01<00:00, 76.20it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 99%|      | 125/126 [00:01<00:00, 76.68it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 100%|     | 126/126 [00:01<00:00, 77.16it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...
Epoch 146: 100%|     | 126/126 [00:01<00:00, 75.88it/s, loss=0.0053,
v_num=4.31e+7]
Epoch 146: 100%|     | 126/126 [00:01<00:00, 75.81it/s, loss=0.0053,
v_num=4.31e+7]Mapping latent space...

Epoch 147: 79%|      | 100/126 [00:01<00:00, 77.93it/s, loss=0.00476,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 147: 80%|      | 101/126 [00:01<00:00, 69.56it/s, loss=0.00476,
v_num=4.31e+7]

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Epoch 147: 81%	102/126 [00:01<00:00, 69.76it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 82%	103/126 [00:01<00:00, 70.29it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 83%	104/126 [00:01<00:00, 70.79it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 83%	105/126 [00:01<00:00, 71.30it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 84%	106/126 [00:01<00:00, 71.80it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 85%	107/126 [00:01<00:00, 72.32it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 86%	108/126 [00:01<00:00, 72.81it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 87%	109/126 [00:01<00:00, 73.32it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 87%	110/126 [00:01<00:00, 73.81it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 88%	111/126 [00:01<00:00, 74.33it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 89%	112/126 [00:01<00:00, 74.82it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 90%	113/126 [00:01<00:00, 75.33it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 90%	114/126 [00:01<00:00, 75.82it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 91%	115/126 [00:01<00:00, 76.32it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 92%	116/126 [00:01<00:00, 76.81it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 93%	117/126 [00:01<00:00, 77.31it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 94%	118/126 [00:01<00:00, 77.80it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 94%	119/126 [00:01<00:00, 78.29it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 95%	120/126 [00:01<00:00, 78.78it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 96%	121/126 [00:01<00:00, 79.27it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 97%	122/126 [00:01<00:00, 79.76it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 98%	123/126 [00:01<00:00, 80.28it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 98%	124/126 [00:01<00:00, 80.80it/s, loss=0.00476,
v_num=4.31e+7]	
Epoch 147: 99%	125/126 [00:01<00:00, 81.31it/s, loss=0.00476,
v_num=4.31e+7]	


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Epoch 147: 100%|      | 126/126 [00:01<00:00, 81.84it/s, loss=0.00476,
v_num=4.31e+7]Mapping latent space...
Epoch 147: 100%|      | 126/126 [00:01<00:00, 80.39it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 147: 100%|      | 126/126 [00:01<00:00, 80.31it/s, loss=0.00476,
v_num=4.31e+7]Mapping latent space...
Epoch 148:  79%|      | 100/126 [00:01<00:00, 63.32it/s, loss=0.0056,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 148:  80%|      | 101/126 [00:01<00:00, 55.94it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  81%|      | 102/126 [00:01<00:00, 55.87it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  82%|      | 103/126 [00:01<00:00, 56.23it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  83%|      | 104/126 [00:01<00:00, 56.59it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  83%|      | 105/126 [00:01<00:00, 56.95it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  84%|      | 106/126 [00:01<00:00, 57.27it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  85%|      | 107/126 [00:01<00:00, 57.61it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  86%|      | 108/126 [00:01<00:00, 57.95it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  87%|      | 109/126 [00:01<00:00, 58.30it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  87%|      | 110/126 [00:01<00:00, 58.66it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  88%|      | 111/126 [00:01<00:00, 59.02it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  89%|      | 112/126 [00:01<00:00, 59.38it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  90%|      | 113/126 [00:01<00:00, 59.75it/s, loss=0.0056,
v_num=4.31e+7]
Validation DataLoader 0:  54%|      | 14/26 [00:00<00:00, 135.45it/s]
Epoch 148:  90%|      | 114/126 [00:01<00:00, 60.11it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  91%|      | 115/126 [00:01<00:00, 60.48it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  92%|      | 116/126 [00:01<00:00, 60.85it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  93%|      | 117/126 [00:01<00:00, 61.22it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148:  94%|      | 118/126 [00:01<00:00, 61.59it/s, loss=0.0056,
v_num=4.31e+7]

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Epoch 148: 94%|      | 119/126 [00:01<00:00, 61.97it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 95%|      | 120/126 [00:01<00:00, 62.35it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 96%|      | 121/126 [00:01<00:00, 62.73it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 97%|      | 122/126 [00:01<00:00, 63.11it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 98%|      | 123/126 [00:01<00:00, 63.51it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 98%|      | 124/126 [00:01<00:00, 63.90it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 99%|      | 125/126 [00:01<00:00, 64.30it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 100%|     | 126/126 [00:01<00:00, 64.70it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 148: 100%|     | 126/126 [00:01<00:00, 63.66it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 148: 100%|     | 126/126 [00:01<00:00, 63.60it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 149: 79%|      | 100/126 [00:01<00:00, 76.56it/s, loss=0.00456,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 149: 80%|      | 101/126 [00:01<00:00, 67.53it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 81%|      | 102/126 [00:01<00:00, 67.63it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 82%|      | 103/126 [00:01<00:00, 68.14it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 83%|      | 104/126 [00:01<00:00, 68.64it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 83%|      | 105/126 [00:01<00:00, 69.15it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 84%|      | 106/126 [00:01<00:00, 69.65it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 85%|      | 107/126 [00:01<00:00, 70.16it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 86%|      | 108/126 [00:01<00:00, 70.65it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 87%|      | 109/126 [00:01<00:00, 71.15it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 87%|      | 110/126 [00:01<00:00, 71.65it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 88%|      | 111/126 [00:01<00:00, 72.17it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 89%|      | 112/126 [00:01<00:00, 72.66it/s, loss=0.00456,

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v_num=4.31e+7]
Epoch 149: 90%|      | 113/126 [00:01<00:00, 73.17it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 90%|      | 114/126 [00:01<00:00, 73.66it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 91%|      | 115/126 [00:01<00:00, 74.16it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 92%|      | 116/126 [00:01<00:00, 74.65it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 93%|      | 117/126 [00:01<00:00, 75.14it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 94%|      | 118/126 [00:01<00:00, 75.63it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 94%|      | 119/126 [00:01<00:00, 76.10it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 95%|      | 120/126 [00:01<00:00, 76.59it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 96%|      | 121/126 [00:01<00:00, 77.07it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 97%|      | 122/126 [00:01<00:00, 77.56it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 98%|      | 123/126 [00:01<00:00, 78.07it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 98%|      | 124/126 [00:01<00:00, 78.59it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 99%|      | 125/126 [00:01<00:00, 79.10it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 100%|     | 126/126 [00:01<00:00, 79.61it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...
Epoch 149: 100%|     | 126/126 [00:01<00:00, 77.84it/s, loss=0.00456,
v_num=4.31e+7]
Epoch 149: 100%|     | 126/126 [00:01<00:00, 77.77it/s, loss=0.00456,
v_num=4.31e+7]Mapping latent space...

Epoch 150: 79%|      | 100/126 [00:01<00:00, 72.99it/s, loss=0.00471,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 150: 80%|      | 101/126 [00:01<00:00, 63.67it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 81%|      | 102/126 [00:01<00:00, 63.81it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 82%|      | 103/126 [00:01<00:00, 64.27it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 83%|      | 104/126 [00:01<00:00, 64.73it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 83%|      | 105/126 [00:01<00:00, 65.18it/s, loss=0.00471,

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v_num=4.31e+7]
Epoch 150: 84%|      | 106/126 [00:01<00:00, 65.64it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 85%|      | 107/126 [00:01<00:00, 66.09it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 86%|      | 108/126 [00:01<00:00, 66.54it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 87%|      | 109/126 [00:01<00:00, 66.99it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 87%|      | 110/126 [00:01<00:00, 67.44it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 88%|      | 111/126 [00:01<00:00, 67.89it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 89%|      | 112/126 [00:01<00:00, 68.34it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 90%|      | 113/126 [00:01<00:00, 68.78it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 90%|      | 114/126 [00:01<00:00, 69.24it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 91%|      | 115/126 [00:01<00:00, 69.68it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 92%|      | 116/126 [00:01<00:00, 70.12it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 93%|      | 117/126 [00:01<00:00, 70.56it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 94%|      | 118/126 [00:01<00:00, 71.01it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 94%|      | 119/126 [00:01<00:00, 71.44it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 95%|      | 120/126 [00:01<00:00, 71.88it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 96%|      | 121/126 [00:01<00:00, 72.31it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 97%|      | 122/126 [00:01<00:00, 72.75it/s, loss=0.00471,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.10it/s]
Epoch 150: 98%|      | 123/126 [00:01<00:00, 73.20it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 98%|      | 124/126 [00:01<00:00, 73.66it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 99%|      | 125/126 [00:01<00:00, 74.11it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 100%|     | 126/126 [00:01<00:00, 74.57it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...
Epoch 150: 100%|     | 126/126 [00:01<00:00, 72.19it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 150: 100%|     | 126/126 [00:01<00:00, 72.10it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...

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Epoch 151: 79%|          | 100/126 [00:01<00:00, 69.83it/s, loss=0.00438,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 151: 80%|          | 101/126 [00:01<00:00, 62.20it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 81%|          | 102/126 [00:01<00:00, 61.71it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 82%|          | 103/126 [00:01<00:00, 62.16it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 83%|          | 104/126 [00:01<00:00, 62.61it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 83%|          | 105/126 [00:01<00:00, 63.06it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 84%|          | 106/126 [00:01<00:00, 63.52it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 85%|          | 107/126 [00:01<00:00, 63.96it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 86%|          | 108/126 [00:01<00:00, 64.41it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 87%|          | 109/126 [00:01<00:00, 64.85it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 87%|          | 110/126 [00:01<00:00, 65.30it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 88%|          | 111/126 [00:01<00:00, 65.74it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 89%|          | 112/126 [00:01<00:00, 66.18it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 90%|          | 113/126 [00:01<00:00, 66.62it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 90%|          | 114/126 [00:01<00:00, 67.06it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 91%|          | 115/126 [00:01<00:00, 67.50it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 92%|          | 116/126 [00:01<00:00, 67.93it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 93%|          | 117/126 [00:01<00:00, 68.36it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 94%|          | 118/126 [00:01<00:00, 68.80it/s, loss=0.00438,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 183.30it/s]
Epoch 151: 94%|          | 119/126 [00:01<00:00, 69.22it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 95%|          | 120/126 [00:01<00:00, 69.65it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 96%|          | 121/126 [00:01<00:00, 70.07it/s, loss=0.00438,
v_num=4.31e+7]

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Epoch 151: 97%|      | 122/126 [00:01<00:00, 70.50it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 98%|      | 123/126 [00:01<00:00, 70.95it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 98%|      | 124/126 [00:01<00:00, 71.39it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 99%|      | 125/126 [00:01<00:00, 71.83it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 100%|     | 126/126 [00:01<00:00, 72.28it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 151: 100%|     | 126/126 [00:01<00:00, 71.05it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 151: 100%|     | 126/126 [00:01<00:00, 70.97it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 152: 79%|      | 100/126 [00:01<00:00, 75.04it/s, loss=0.0057,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 152: 80%|      | 101/126 [00:01<00:00, 65.93it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 81%|      | 102/126 [00:01<00:00, 66.00it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 82%|      | 103/126 [00:01<00:00, 66.51it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 83%|      | 104/126 [00:01<00:00, 67.00it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 83%|      | 105/126 [00:01<00:00, 67.51it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 84%|      | 106/126 [00:01<00:00, 67.99it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 85%|      | 107/126 [00:01<00:00, 68.50it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 86%|      | 108/126 [00:01<00:00, 68.98it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 87%|      | 109/126 [00:01<00:00, 69.48it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 87%|      | 110/126 [00:01<00:00, 69.94it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 88%|      | 111/126 [00:01<00:00, 70.43it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 89%|      | 112/126 [00:01<00:00, 70.89it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 90%|      | 113/126 [00:01<00:00, 71.37it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 90%|      | 114/126 [00:01<00:00, 71.84it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 91%|      | 115/126 [00:01<00:00, 72.33it/s, loss=0.0057,

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v_num=4.31e+7]
Epoch 152: 92%|      | 116/126 [00:01<00:00, 72.79it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 93%|      | 117/126 [00:01<00:00, 73.27it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 94%|      | 118/126 [00:01<00:00, 73.73it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 94%|      | 119/126 [00:01<00:00, 74.20it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 95%|      | 120/126 [00:01<00:00, 74.66it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 96%|      | 121/126 [00:01<00:00, 75.12it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 97%|      | 122/126 [00:01<00:00, 75.58it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 98%|      | 123/126 [00:01<00:00, 76.08it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 98%|      | 124/126 [00:01<00:00, 76.58it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 99%|      | 125/126 [00:01<00:00, 77.09it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 100%|     | 126/126 [00:01<00:00, 77.59it/s, loss=0.0057,
v_num=4.31e+7]Mapping latent space...
Epoch 152: 100%|     | 126/126 [00:01<00:00, 75.88it/s, loss=0.0057,
v_num=4.31e+7]
Epoch 152: 100%|     | 126/126 [00:01<00:00, 75.77it/s, loss=0.0057,
v_num=4.31e+7]Mapping latent space...

Epoch 153: 79%|      | 100/126 [00:01<00:00, 81.96it/s, loss=0.00423,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 153: 80%|      | 101/126 [00:01<00:00, 72.04it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 81%|      | 102/126 [00:01<00:00, 72.18it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 82%|      | 103/126 [00:01<00:00, 72.71it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 83%|      | 104/126 [00:01<00:00, 73.23it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 83%|      | 105/126 [00:01<00:00, 73.76it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 84%|      | 106/126 [00:01<00:00, 74.28it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 85%|      | 107/126 [00:01<00:00, 74.81it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 86%|      | 108/126 [00:01<00:00, 75.32it/s, loss=0.00423,

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v_num=4.31e+7]
Epoch 153: 87%|      | 109/126 [00:01<00:00, 75.85it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 87%|      | 110/126 [00:01<00:00, 76.35it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 88%|      | 111/126 [00:01<00:00, 76.86it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 89%|      | 112/126 [00:01<00:00, 77.38it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 90%|      | 113/126 [00:01<00:00, 77.90it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 90%|      | 114/126 [00:01<00:00, 78.41it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 91%|      | 115/126 [00:01<00:00, 78.92it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 92%|      | 116/126 [00:01<00:00, 79.43it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 93%|      | 117/126 [00:01<00:00, 79.94it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 94%|      | 118/126 [00:01<00:00, 80.45it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 94%|      | 119/126 [00:01<00:00, 80.95it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 95%|      | 120/126 [00:01<00:00, 81.46it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 96%|      | 121/126 [00:01<00:00, 81.96it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 97%|      | 122/126 [00:01<00:00, 82.47it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 98%|      | 123/126 [00:01<00:00, 83.00it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 98%|      | 124/126 [00:01<00:00, 83.53it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 99%|      | 125/126 [00:01<00:00, 84.05it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 100%|     | 126/126 [00:01<00:00, 84.59it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 153: 100%|     | 126/126 [00:01<00:00, 83.02it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 153: 100%|     | 126/126 [00:01<00:00, 82.95it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 154: 79%|      | 100/126 [00:01<00:00, 79.00it/s, loss=0.0047,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 154: 80%|      | 101/126 [00:01<00:00, 68.54it/s, loss=0.0047,
v_num=4.31e+7]

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Epoch 154: 81%|          | 102/126 [00:01<00:00, 68.06it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 82%|          | 103/126 [00:01<00:00, 68.42it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 83%|          | 104/126 [00:01<00:00, 68.81it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 83%|          | 105/126 [00:01<00:00, 69.20it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 84%|          | 106/126 [00:01<00:00, 69.50it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 85%|          | 107/126 [00:01<00:00, 69.89it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 86%|          | 108/126 [00:01<00:00, 70.27it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 87%|          | 109/126 [00:01<00:00, 70.66it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 87%|          | 110/126 [00:01<00:00, 71.06it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 88%|          | 111/126 [00:01<00:00, 71.45it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 89%|          | 112/126 [00:01<00:00, 71.85it/s, loss=0.0047,
v_num=4.31e+7]
Validation DataLoader 0: 50%|          | 13/26 [00:00<00:00, 126.55it/s]
Epoch 154: 90%|          | 113/126 [00:01<00:00, 72.25it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 90%|          | 114/126 [00:01<00:00, 72.66it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 91%|          | 115/126 [00:01<00:00, 73.07it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 92%|          | 116/126 [00:01<00:00, 73.49it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 93%|          | 117/126 [00:01<00:00, 73.90it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 94%|          | 118/126 [00:01<00:00, 74.31it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 94%|          | 119/126 [00:01<00:00, 74.73it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 95%|          | 120/126 [00:01<00:00, 75.15it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 96%|          | 121/126 [00:01<00:00, 75.56it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 97%|          | 122/126 [00:01<00:00, 75.98it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 98%|          | 123/126 [00:01<00:00, 76.44it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 98%|          | 124/126 [00:01<00:00, 76.89it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 99%|          | 125/126 [00:01<00:00, 77.34it/s, loss=0.0047,

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v_num=4.31e+7]
Epoch 154: 100%|      | 126/126 [00:01<00:00, 77.81it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 154: 100%|      | 126/126 [00:01<00:00, 73.31it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 154: 100%|      | 126/126 [00:01<00:00, 73.18it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 155: 79%|      | 100/126 [00:01<00:00, 72.67it/s, loss=0.00469,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 155: 80%|      | 101/126 [00:01<00:00, 64.14it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 81%|      | 102/126 [00:01<00:00, 64.20it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 82%|      | 103/126 [00:01<00:00, 64.70it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 83%|      | 104/126 [00:01<00:00, 65.18it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 83%|      | 105/126 [00:01<00:00, 65.68it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 84%|      | 106/126 [00:01<00:00, 66.15it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 85%|      | 107/126 [00:01<00:00, 66.65it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 86%|      | 108/126 [00:01<00:00, 67.12it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 87%|      | 109/126 [00:01<00:00, 67.62it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 87%|      | 110/126 [00:01<00:00, 68.09it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 88%|      | 111/126 [00:01<00:00, 68.58it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 89%|      | 112/126 [00:01<00:00, 69.05it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 90%|      | 113/126 [00:01<00:00, 69.53it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 90%|      | 114/126 [00:01<00:00, 70.00it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 91%|      | 115/126 [00:01<00:00, 70.49it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 92%|      | 116/126 [00:01<00:00, 70.95it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 93%|      | 117/126 [00:01<00:00, 71.44it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 94%|      | 118/126 [00:01<00:00, 71.90it/s, loss=0.00469,
v_num=4.31e+7]

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Epoch 155: 94%|      | 119/126 [00:01<00:00, 72.38it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 95%|      | 120/126 [00:01<00:00, 72.84it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 96%|      | 121/126 [00:01<00:00, 73.32it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 97%|      | 122/126 [00:01<00:00, 73.79it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 98%|      | 123/126 [00:01<00:00, 74.27it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 98%|      | 124/126 [00:01<00:00, 74.76it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 99%|      | 125/126 [00:01<00:00, 75.25it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 100%|     | 126/126 [00:01<00:00, 75.74it/s, loss=0.00469,
v_num=4.31e+7]Mapping latent space...
Epoch 155: 100%|     | 126/126 [00:01<00:00, 74.51it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 155: 100%|     | 126/126 [00:01<00:00, 74.44it/s, loss=0.00469,
v_num=4.31e+7]Mapping latent space...

Epoch 156: 79%|      | 100/126 [00:01<00:00, 61.97it/s, loss=0.00491,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 156: 80%|      | 101/126 [00:01<00:00, 55.26it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 81%|      | 102/126 [00:01<00:00, 55.48it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 82%|      | 103/126 [00:01<00:00, 55.84it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 83%|      | 104/126 [00:01<00:00, 56.21it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 83%|      | 105/126 [00:01<00:00, 56.59it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 84%|      | 106/126 [00:01<00:00, 56.96it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 85%|      | 107/126 [00:01<00:00, 57.34it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 86%|      | 108/126 [00:01<00:00, 57.72it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 87%|      | 109/126 [00:01<00:00, 58.10it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 87%|      | 110/126 [00:01<00:00, 58.48it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 88%|      | 111/126 [00:01<00:00, 58.86it/s, loss=0.00491,
v_num=4.31e+7]

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Epoch 156: 89%|      | 112/126 [00:01<00:00, 59.25it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 90%|      | 113/126 [00:01<00:00, 59.64it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 90%|      | 114/126 [00:01<00:00, 60.03it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 91%|      | 115/126 [00:01<00:00, 60.41it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 92%|      | 116/126 [00:01<00:00, 60.79it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 93%|      | 117/126 [00:01<00:00, 61.17it/s, loss=0.00491,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.29it/s]
Epoch 156: 94%|      | 118/126 [00:01<00:00, 61.55it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 94%|      | 119/126 [00:01<00:00, 61.93it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 95%|      | 120/126 [00:01<00:00, 62.31it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 96%|      | 121/126 [00:01<00:00, 62.69it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 97%|      | 122/126 [00:01<00:00, 63.06it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 98%|      | 123/126 [00:01<00:00, 63.45it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 98%|      | 124/126 [00:01<00:00, 63.84it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 99%|      | 125/126 [00:01<00:00, 64.23it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 100%|     | 126/126 [00:01<00:00, 64.62it/s, loss=0.00491,
v_num=4.31e+7]Mapping latent space...
Epoch 156: 100%|     | 126/126 [00:01<00:00, 63.53it/s, loss=0.00491,
v_num=4.31e+7]
Epoch 156: 100%|     | 126/126 [00:01<00:00, 63.46it/s, loss=0.00491,
v_num=4.31e+7]Mapping latent space...
Epoch 157: 79%|      | 100/126 [00:01<00:00, 72.40it/s, loss=0.00494,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 157: 80%|      | 101/126 [00:01<00:00, 63.56it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 81%|      | 102/126 [00:01<00:00, 63.67it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 82%|      | 103/126 [00:01<00:00, 64.07it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 83%|      | 104/126 [00:01<00:00, 64.48it/s, loss=0.00494,
v_num=4.31e+7]

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Epoch 157: 83%|      | 105/126 [00:01<00:00, 64.88it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 84%|      | 106/126 [00:01<00:00, 65.29it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 85%|      | 107/126 [00:01<00:00, 65.69it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 86%|      | 108/126 [00:01<00:00, 66.10it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 87%|      | 109/126 [00:01<00:00, 66.50it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 87%|      | 110/126 [00:01<00:00, 66.92it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 88%|      | 111/126 [00:01<00:00, 67.33it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 89%|      | 112/126 [00:01<00:00, 67.75it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 90%|      | 113/126 [00:01<00:00, 68.16it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 90%|      | 114/126 [00:01<00:00, 68.58it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 91%|      | 115/126 [00:01<00:00, 68.99it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 92%|      | 116/126 [00:01<00:00, 69.41it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 93%|      | 117/126 [00:01<00:00, 69.83it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 94%|      | 118/126 [00:01<00:00, 70.25it/s, loss=0.00494,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.41it/s]
Epoch 157: 94%|      | 119/126 [00:01<00:00, 70.66it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 95%|      | 120/126 [00:01<00:00, 71.08it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 96%|      | 121/126 [00:01<00:00, 71.50it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 97%|      | 122/126 [00:01<00:00, 71.93it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 98%|      | 123/126 [00:01<00:00, 72.37it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 98%|      | 124/126 [00:01<00:00, 72.82it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 99%|      | 125/126 [00:01<00:00, 73.26it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 100%|     | 126/126 [00:01<00:00, 73.71it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 157: 100%|     | 126/126 [00:01<00:00, 72.33it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 157: 100%|     | 126/126 [00:01<00:00, 72.25it/s, loss=0.00494,

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v_num=4.31e+7]Mapping latent space...
Epoch 158: 79%|          | 100/126 [00:01<00:00, 80.37it/s, loss=0.00441,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 158: 80%|          | 101/126 [00:01<00:00, 69.78it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 81%|          | 102/126 [00:01<00:00, 69.89it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 82%|          | 103/126 [00:01<00:00, 70.36it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 83%|          | 104/126 [00:01<00:00, 70.82it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 83%|          | 105/126 [00:01<00:00, 71.29it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 84%|          | 106/126 [00:01<00:00, 71.76it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 85%|          | 107/126 [00:01<00:00, 72.23it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 86%|          | 108/126 [00:01<00:00, 72.69it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 87%|          | 109/126 [00:01<00:00, 73.16it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 87%|          | 110/126 [00:01<00:00, 73.63it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 88%|          | 111/126 [00:01<00:00, 74.10it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 89%|          | 112/126 [00:01<00:00, 74.58it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 90%|          | 113/126 [00:01<00:00, 75.04it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 90%|          | 114/126 [00:01<00:00, 75.51it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 91%|          | 115/126 [00:01<00:00, 75.98it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 92%|          | 116/126 [00:01<00:00, 76.45it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 93%|          | 117/126 [00:01<00:00, 76.91it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 94%|          | 118/126 [00:01<00:00, 77.37it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 94%|          | 119/126 [00:01<00:00, 77.83it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 95%|          | 120/126 [00:01<00:00, 78.28it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 96%|          | 121/126 [00:01<00:00, 78.74it/s, loss=0.00441,
v_num=4.31e+7]

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Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 213.71it/s]
Epoch 158: 97%|          | 122/126 [00:01<00:00, 79.19it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 98%|          | 123/126 [00:01<00:00, 79.67it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 98%|          | 124/126 [00:01<00:00, 80.14it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 99%|          | 125/126 [00:01<00:00, 80.62it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 100%|         | 126/126 [00:01<00:00, 81.10it/s, loss=0.00441,
v_num=4.31e+7]Mapping latent space...
Epoch 158: 100%|         | 126/126 [00:01<00:00, 79.51it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 158: 100%|         | 126/126 [00:01<00:00, 79.42it/s, loss=0.00441,
v_num=4.31e+7]Mapping latent space...

Epoch 159: 79%|          | 100/126 [00:01<00:00, 73.26it/s, loss=0.00453,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 159: 80%|          | 101/126 [00:01<00:00, 65.28it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 81%|          | 102/126 [00:01<00:00, 65.15it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 82%|          | 103/126 [00:01<00:00, 65.66it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 83%|          | 104/126 [00:01<00:00, 66.13it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 83%|          | 105/126 [00:01<00:00, 66.64it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 84%|          | 106/126 [00:01<00:00, 67.13it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 85%|          | 107/126 [00:01<00:00, 67.63it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 86%|          | 108/126 [00:01<00:00, 68.11it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 87%|          | 109/126 [00:01<00:00, 68.62it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 87%|          | 110/126 [00:01<00:00, 69.10it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 88%|          | 111/126 [00:01<00:00, 69.60it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 89%|          | 112/126 [00:01<00:00, 70.07it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 90%|          | 113/126 [00:01<00:00, 70.57it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 90%|          | 114/126 [00:01<00:00, 71.03it/s, loss=0.00453,

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v_num=4.31e+7]
Epoch 159: 91%|      | 115/126 [00:01<00:00, 71.52it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 92%|      | 116/126 [00:01<00:00, 71.99it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 93%|      | 117/126 [00:01<00:00, 72.48it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 94%|      | 118/126 [00:01<00:00, 72.94it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 94%|      | 119/126 [00:01<00:00, 73.42it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 95%|      | 120/126 [00:01<00:00, 73.88it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 96%|      | 121/126 [00:01<00:00, 74.36it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 97%|      | 122/126 [00:01<00:00, 74.83it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 98%|      | 123/126 [00:01<00:00, 75.32it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 98%|      | 124/126 [00:01<00:00, 75.81it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 99%|      | 125/126 [00:01<00:00, 76.30it/s, loss=0.00453,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.22it/s]
Epoch 159: 100%|      | 126/126 [00:01<00:00, 76.79it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 159: 100%|      | 126/126 [00:01<00:00, 75.55it/s, loss=0.00453,
v_num=4.31e+7]
Epoch 159: 100%|      | 126/126 [00:01<00:00, 75.48it/s, loss=0.00453,
v_num=4.31e+7]Mapping latent space...
Epoch 160: 79%|      | 100/126 [00:01<00:00, 80.64it/s, loss=0.00475,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 160: 80%|      | 101/126 [00:01<00:00, 72.24it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 81%|      | 102/126 [00:01<00:00, 72.11it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 82%|      | 103/126 [00:01<00:00, 72.66it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 83%|      | 104/126 [00:01<00:00, 73.18it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 83%|      | 105/126 [00:01<00:00, 73.73it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 84%|      | 106/126 [00:01<00:00, 74.24it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 85%|      | 107/126 [00:01<00:00, 74.78it/s, loss=0.00475,

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v_num=4.31e+7]
Epoch 160: 86%|      | 108/126 [00:01<00:00, 75.28it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 87%|      | 109/126 [00:01<00:00, 75.83it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 87%|      | 110/126 [00:01<00:00, 76.34it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 88%|      | 111/126 [00:01<00:00, 76.88it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 89%|      | 112/126 [00:01<00:00, 77.38it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 90%|      | 113/126 [00:01<00:00, 77.90it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 90%|      | 114/126 [00:01<00:00, 78.40it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 91%|      | 115/126 [00:01<00:00, 78.93it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 92%|      | 116/126 [00:01<00:00, 79.43it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 93%|      | 117/126 [00:01<00:00, 79.96it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 94%|      | 118/126 [00:01<00:00, 80.45it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 94%|      | 119/126 [00:01<00:00, 80.96it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 95%|      | 120/126 [00:01<00:00, 81.46it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 96%|      | 121/126 [00:01<00:00, 81.96it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 97%|      | 122/126 [00:01<00:00, 82.46it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 98%|      | 123/126 [00:01<00:00, 82.99it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 98%|      | 124/126 [00:01<00:00, 83.52it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 99%|      | 125/126 [00:01<00:00, 83.93it/s, loss=0.00475,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.48it/s]
Epoch 160: 100%|      | 126/126 [00:01<00:00, 84.43it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...
Epoch 160: 100%|      | 126/126 [00:01<00:00, 82.73it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 160: 100%|      | 126/126 [00:01<00:00, 82.64it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...
Epoch 161: 79%|      | 100/126 [00:01<00:00, 73.96it/s, loss=0.00485,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 161: 80%|          | 101/126 [00:01<00:00, 65.90it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 81%|          | 102/126 [00:01<00:00, 65.79it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 82%|          | 103/126 [00:01<00:00, 66.31it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 83%|          | 104/126 [00:01<00:00, 66.79it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 83%|          | 105/126 [00:01<00:00, 67.31it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 84%|          | 106/126 [00:01<00:00, 67.79it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 85%|          | 107/126 [00:01<00:00, 68.30it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 86%|          | 108/126 [00:01<00:00, 68.77it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 87%|          | 109/126 [00:01<00:00, 69.28it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 87%|          | 110/126 [00:01<00:00, 69.75it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 88%|          | 111/126 [00:01<00:00, 70.24it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 89%|          | 112/126 [00:01<00:00, 70.71it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 90%|          | 113/126 [00:01<00:00, 71.21it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 90%|          | 114/126 [00:01<00:00, 71.67it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 91%|          | 115/126 [00:01<00:00, 72.17it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 92%|          | 116/126 [00:01<00:00, 72.63it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 93%|          | 117/126 [00:01<00:00, 73.12it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 94%|          | 118/126 [00:01<00:00, 73.58it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 94%|          | 119/126 [00:01<00:00, 74.06it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 95%|          | 120/126 [00:01<00:00, 74.46it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 96%|          | 121/126 [00:01<00:00, 74.75it/s, loss=0.00485,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 219.99it/s]
Epoch 161: 97%|          | 122/126 [00:01<00:00, 75.06it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 98%|          | 123/126 [00:01<00:00, 75.41it/s, loss=0.00485,
v_num=4.31e+7]

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Epoch 161: 98%|      | 124/126 [00:01<00:00, 75.77it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 99%|      | 125/126 [00:01<00:00, 76.13it/s, loss=0.00485,
v_num=4.31e+7]
Epoch 161: 100%|     | 126/126 [00:01<00:00, 76.51it/s, loss=0.00485,
v_num=4.31e+7]Mapping latent space...
Epoch 161: 100%|     | 126/126 [00:01<00:00, 74.85it/s, loss=0.00485,
v_num=4.31e+7]

Epoch 161: 100%|     | 126/126 [00:01<00:00, 74.74it/s, loss=0.00485,
v_num=4.31e+7]Mapping latent space...
Epoch 162: 79%|      | 100/126 [00:01<00:00, 75.45it/s, loss=0.00486,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 162: 80%|      | 101/126 [00:01<00:00, 66.73it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 81%|      | 102/126 [00:01<00:00, 66.83it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 82%|      | 103/126 [00:01<00:00, 67.34it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 83%|      | 104/126 [00:01<00:00, 67.83it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 83%|      | 105/126 [00:01<00:00, 68.33it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 84%|      | 106/126 [00:01<00:00, 68.82it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 85%|      | 107/126 [00:01<00:00, 69.31it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 86%|      | 108/126 [00:01<00:00, 69.79it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 87%|      | 109/126 [00:01<00:00, 70.29it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 87%|      | 110/126 [00:01<00:00, 70.76it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 88%|      | 111/126 [00:01<00:00, 71.25it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 89%|      | 112/126 [00:01<00:00, 71.72it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 90%|      | 113/126 [00:01<00:00, 72.20it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 90%|      | 114/126 [00:01<00:00, 72.68it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 91%|      | 115/126 [00:01<00:00, 73.18it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 92%|      | 116/126 [00:01<00:00, 73.64it/s, loss=0.00486,
v_num=4.31e+7]

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Epoch 162: 93%|      | 117/126 [00:01<00:00, 74.12it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 94%|      | 118/126 [00:01<00:00, 74.59it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 94%|      | 119/126 [00:01<00:00, 75.06it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 95%|      | 120/126 [00:01<00:00, 75.52it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 96%|      | 121/126 [00:01<00:00, 75.99it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 97%|      | 122/126 [00:01<00:00, 76.45it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 98%|      | 123/126 [00:01<00:00, 76.96it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 98%|      | 124/126 [00:01<00:00, 77.46it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 99%|      | 125/126 [00:01<00:00, 77.97it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 100%|     | 126/126 [00:01<00:00, 78.47it/s, loss=0.00486,
v_num=4.31e+7]Mapping latent space...
Epoch 162: 100%|     | 126/126 [00:01<00:00, 77.18it/s, loss=0.00486,
v_num=4.31e+7]
Epoch 162: 100%|     | 126/126 [00:01<00:00, 77.10it/s, loss=0.00486,
v_num=4.31e+7]Mapping latent space...
Epoch 163: 79%|      | 100/126 [00:01<00:00, 84.70it/s, loss=0.00481,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 163: 80%|      | 101/126 [00:01<00:00, 73.34it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 81%|      | 102/126 [00:01<00:00, 73.32it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 82%|      | 103/126 [00:01<00:00, 73.82it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 83%|      | 104/126 [00:01<00:00, 74.32it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 83%|      | 105/126 [00:01<00:00, 74.82it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 84%|      | 106/126 [00:01<00:00, 75.32it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 85%|      | 107/126 [00:01<00:00, 75.82it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 86%|      | 108/126 [00:01<00:00, 76.31it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 87%|      | 109/126 [00:01<00:00, 76.80it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 87%|      | 110/126 [00:01<00:00, 77.29it/s, loss=0.00481,

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v_num=4.31e+7]
Epoch 163: 88%|      | 111/126 [00:01<00:00, 77.78it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 89%|      | 112/126 [00:01<00:00, 78.27it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 90%|      | 113/126 [00:01<00:00, 78.75it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 90%|      | 114/126 [00:01<00:00, 79.24it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 91%|      | 115/126 [00:01<00:00, 79.72it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 92%|      | 116/126 [00:01<00:00, 80.20it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 93%|      | 117/126 [00:01<00:00, 80.68it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 94%|      | 118/126 [00:01<00:00, 81.15it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 94%|      | 119/126 [00:01<00:00, 81.63it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 95%|      | 120/126 [00:01<00:00, 82.09it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 96%|      | 121/126 [00:01<00:00, 82.56it/s, loss=0.00481,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.26it/s]
Epoch 163: 97%|      | 122/126 [00:01<00:00, 83.03it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 98%|      | 123/126 [00:01<00:00, 83.53it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 98%|      | 124/126 [00:01<00:00, 84.02it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 99%|      | 125/126 [00:01<00:00, 84.52it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 100%|     | 126/126 [00:01<00:00, 85.01it/s, loss=0.00481,
v_num=4.31e+7]Mapping latent space...
Epoch 163: 100%|     | 126/126 [00:01<00:00, 77.56it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 163: 100%|     | 126/126 [00:01<00:00, 77.41it/s, loss=0.00481,
v_num=4.31e+7]Mapping latent space...
Epoch 164: 79%|      | 100/126 [00:01<00:00, 65.85it/s, loss=0.00455,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 164: 80%|      | 101/126 [00:01<00:00, 59.03it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 81%|      | 102/126 [00:01<00:00, 58.93it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 82%|      | 103/126 [00:01<00:00, 59.38it/s, loss=0.00455,

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v_num=4.31e+7]
Epoch 164: 83%|      | 104/126 [00:01<00:00, 59.84it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 83%|      | 105/126 [00:01<00:00, 60.30it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 84%|      | 106/126 [00:01<00:00, 60.75it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 85%|      | 107/126 [00:01<00:00, 61.21it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 86%|      | 108/126 [00:01<00:00, 61.66it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 87%|      | 109/126 [00:01<00:00, 62.11it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 87%|      | 110/126 [00:01<00:00, 62.56it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 88%|      | 111/126 [00:01<00:00, 63.01it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 89%|      | 112/126 [00:01<00:00, 63.46it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 90%|      | 113/126 [00:01<00:00, 63.91it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 90%|      | 114/126 [00:01<00:00, 64.36it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 91%|      | 115/126 [00:01<00:00, 64.81it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 92%|      | 116/126 [00:01<00:00, 65.25it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 93%|      | 117/126 [00:01<00:00, 65.69it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 94%|      | 118/126 [00:01<00:00, 66.14it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 94%|      | 119/126 [00:01<00:00, 66.58it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 95%|      | 120/126 [00:01<00:00, 67.01it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 96%|      | 121/126 [00:01<00:00, 67.45it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 97%|      | 122/126 [00:01<00:00, 67.89it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 98%|      | 123/126 [00:01<00:00, 68.35it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 98%|      | 124/126 [00:01<00:00, 68.80it/s, loss=0.00455,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 245.44it/s]
Epoch 164: 99%|      | 125/126 [00:01<00:00, 69.25it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 100%|     | 126/126 [00:01<00:00, 69.70it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...

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Epoch 164: 100%|      | 126/126 [00:01<00:00, 68.64it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 164: 100%|      | 126/126 [00:01<00:00, 68.58it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...

Epoch 165: 79%|      | 100/126 [00:01<00:00, 71.65it/s, loss=0.00508,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 165: 80%|      | 101/126 [00:01<00:00, 63.17it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 81%|      | 102/126 [00:01<00:00, 63.57it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 82%|      | 103/126 [00:01<00:00, 63.98it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 83%|      | 104/126 [00:01<00:00, 64.39it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 83%|      | 105/126 [00:01<00:00, 64.81it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 84%|      | 106/126 [00:01<00:00, 65.22it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 85%|      | 107/126 [00:01<00:00, 65.64it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 86%|      | 108/126 [00:01<00:00, 66.06it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 87%|      | 109/126 [00:01<00:00, 66.47it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 87%|      | 110/126 [00:01<00:00, 66.89it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 88%|      | 111/126 [00:01<00:00, 67.31it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 89%|      | 112/126 [00:01<00:00, 67.72it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 90%|      | 113/126 [00:01<00:00, 68.14it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 90%|      | 114/126 [00:01<00:00, 68.56it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 91%|      | 115/126 [00:01<00:00, 68.99it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 92%|      | 116/126 [00:01<00:00, 69.39it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 93%|      | 117/126 [00:01<00:00, 69.80it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 94%|      | 118/126 [00:01<00:00, 70.21it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 94%|      | 119/126 [00:01<00:00, 70.63it/s, loss=0.00508,
v_num=4.31e+7]

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Validation DataLoader 0: 77%|          | 20/26 [00:00<00:00, 196.48it/s]
Epoch 165: 95%|          | 120/126 [00:01<00:00, 71.03it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 96%|          | 121/126 [00:01<00:00, 71.45it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 97%|          | 122/126 [00:01<00:00, 71.87it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 98%|          | 123/126 [00:01<00:00, 72.31it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 98%|          | 124/126 [00:01<00:00, 72.76it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 99%|          | 125/126 [00:01<00:00, 73.20it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 100%|         | 126/126 [00:01<00:00, 73.65it/s, loss=0.00508,
v_num=4.31e+7]Mapping latent space...
Epoch 165: 100%|         | 126/126 [00:01<00:00, 72.34it/s, loss=0.00508,
v_num=4.31e+7]
Epoch 165: 100%|         | 126/126 [00:01<00:00, 72.27it/s, loss=0.00508,
v_num=4.31e+7]Mapping latent space...
Epoch 166: 79%|          | 100/126 [00:01<00:00, 68.41it/s, loss=0.00464,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 166: 80%|          | 101/126 [00:01<00:00, 59.97it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 81%|          | 102/126 [00:01<00:00, 60.22it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 82%|          | 103/126 [00:01<00:00, 60.66it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 83%|          | 104/126 [00:01<00:00, 61.11it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 83%|          | 105/126 [00:01<00:00, 61.55it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 84%|          | 106/126 [00:01<00:00, 61.99it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 85%|          | 107/126 [00:01<00:00, 62.43it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 86%|          | 108/126 [00:01<00:00, 62.86it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 87%|          | 109/126 [00:01<00:00, 63.30it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 87%|          | 110/126 [00:01<00:00, 63.73it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 88%|          | 111/126 [00:01<00:00, 64.16it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 89%|          | 112/126 [00:01<00:00, 64.59it/s, loss=0.00464,
v_num=4.31e+7]

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Epoch 166: 90%|      | 113/126 [00:01<00:00, 65.02it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 90%|      | 114/126 [00:01<00:00, 65.45it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 91%|      | 115/126 [00:01<00:00, 65.88it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 92%|      | 116/126 [00:01<00:00, 66.30it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 93%|      | 117/126 [00:01<00:00, 66.73it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 94%|      | 118/126 [00:01<00:00, 67.15it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 94%|      | 119/126 [00:01<00:00, 67.57it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 95%|      | 120/126 [00:01<00:00, 67.98it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 96%|      | 121/126 [00:01<00:00, 68.40it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 97%|      | 122/126 [00:01<00:00, 68.82it/s, loss=0.00464,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.83it/s]
Epoch 166: 98%|      | 123/126 [00:01<00:00, 69.25it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 98%|      | 124/126 [00:01<00:00, 69.69it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 99%|      | 125/126 [00:01<00:00, 70.12it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 100%|     | 126/126 [00:01<00:00, 70.56it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 166: 100%|     | 126/126 [00:01<00:00, 69.24it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 166: 100%|     | 126/126 [00:01<00:00, 69.16it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 167: 79%|      | 100/126 [00:01<00:00, 79.26it/s, loss=0.0049,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 167: 80%|      | 101/126 [00:01<00:00, 69.08it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 81%|      | 102/126 [00:01<00:00, 69.10it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 82%|      | 103/126 [00:01<00:00, 69.57it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 83%|      | 104/126 [00:01<00:00, 70.05it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 83%|      | 105/126 [00:01<00:00, 70.53it/s, loss=0.0049,
v_num=4.31e+7]

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Epoch 167: 84%|      | 106/126 [00:01<00:00, 71.00it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 85%|      | 107/126 [00:01<00:00, 71.48it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 86%|      | 108/126 [00:01<00:00, 71.94it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 87%|      | 109/126 [00:01<00:00, 72.42it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 87%|      | 110/126 [00:01<00:00, 72.89it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 88%|      | 111/126 [00:01<00:00, 73.36it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 89%|      | 112/126 [00:01<00:00, 73.83it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 90%|      | 113/126 [00:01<00:00, 74.30it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 90%|      | 114/126 [00:01<00:00, 74.77it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 91%|      | 115/126 [00:01<00:00, 75.24it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 92%|      | 116/126 [00:01<00:00, 75.70it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 93%|      | 117/126 [00:01<00:00, 76.05it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 94%|      | 118/126 [00:01<00:00, 76.50it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 94%|      | 119/126 [00:01<00:00, 76.95it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 95%|      | 120/126 [00:01<00:00, 77.41it/s, loss=0.0049,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.46it/s]
Epoch 167: 96%|      | 121/126 [00:01<00:00, 77.85it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 97%|      | 122/126 [00:01<00:00, 78.30it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 98%|      | 123/126 [00:01<00:00, 78.78it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 98%|      | 124/126 [00:01<00:00, 79.25it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 99%|      | 125/126 [00:01<00:00, 79.72it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 100%|     | 126/126 [00:01<00:00, 80.19it/s, loss=0.0049,
v_num=4.31e+7]Mapping latent space...
Epoch 167: 100%|     | 126/126 [00:01<00:00, 78.61it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 167: 100%|     | 126/126 [00:01<00:00, 78.52it/s, loss=0.0049,
v_num=4.31e+7]Mapping latent space...

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Epoch 168: 79%|          | 100/126 [00:01<00:00, 73.23it/s, loss=0.00402,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 168: 80%|          | 101/126 [00:01<00:00, 64.49it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 81%|          | 102/126 [00:01<00:00, 64.49it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 82%|          | 103/126 [00:01<00:00, 64.98it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 83%|          | 104/126 [00:01<00:00, 65.46it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 83%|          | 105/126 [00:01<00:00, 65.95it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 84%|          | 106/126 [00:01<00:00, 66.43it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 85%|          | 107/126 [00:01<00:00, 66.91it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 86%|          | 108/126 [00:01<00:00, 67.38it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 87%|          | 109/126 [00:01<00:00, 67.86it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 87%|          | 110/126 [00:01<00:00, 68.34it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 88%|          | 111/126 [00:01<00:00, 68.81it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 89%|          | 112/126 [00:01<00:00, 69.28it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 90%|          | 113/126 [00:01<00:00, 69.75it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 90%|          | 114/126 [00:01<00:00, 70.23it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 91%|          | 115/126 [00:01<00:00, 70.70it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 92%|          | 116/126 [00:01<00:00, 71.17it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 93%|          | 117/126 [00:01<00:00, 71.64it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 94%|          | 118/126 [00:01<00:00, 72.11it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 94%|          | 119/126 [00:01<00:00, 72.58it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 95%|          | 120/126 [00:01<00:00, 73.04it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 96%|          | 121/126 [00:01<00:00, 73.50it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 97%|          | 122/126 [00:01<00:00, 73.96it/s, loss=0.00402,

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v_num=4.31e+7]
Epoch 168: 98%|      | 123/126 [00:01<00:00, 74.45it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 98%|      | 124/126 [00:01<00:00, 74.93it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 99%|      | 125/126 [00:01<00:00, 75.42it/s, loss=0.00402,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 254.05it/s]
Epoch 168: 100%|      | 126/126 [00:01<00:00, 75.90it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...
Epoch 168: 100%|      | 126/126 [00:01<00:00, 74.63it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 168: 100%|      | 126/126 [00:01<00:00, 74.55it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...
Epoch 169: 79%|      | 100/126 [00:01<00:00, 72.98it/s, loss=0.00451,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 169: 80%|      | 101/126 [00:01<00:00, 65.07it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 81%|      | 102/126 [00:01<00:00, 64.88it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 82%|      | 103/126 [00:01<00:00, 65.23it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 83%|      | 104/126 [00:01<00:00, 65.58it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 83%|      | 105/126 [00:01<00:00, 65.95it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 84%|      | 106/126 [00:01<00:00, 66.31it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 85%|      | 107/126 [00:01<00:00, 66.68it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 86%|      | 108/126 [00:01<00:00, 67.05it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 87%|      | 109/126 [00:01<00:00, 67.43it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 87%|      | 110/126 [00:01<00:00, 67.81it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 88%|      | 111/126 [00:01<00:00, 68.20it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 89%|      | 112/126 [00:01<00:00, 68.59it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 90%|      | 113/126 [00:01<00:00, 68.97it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 90%|      | 114/126 [00:01<00:00, 69.36it/s, loss=0.00451,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 142.76it/s]

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Epoch 169: 91%|      | 115/126 [00:01<00:00, 69.74it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 92%|      | 116/126 [00:01<00:00, 70.12it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 93%|      | 117/126 [00:01<00:00, 70.51it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 94%|      | 118/126 [00:01<00:00, 70.90it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 94%|      | 119/126 [00:01<00:00, 71.28it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 95%|      | 120/126 [00:01<00:00, 71.68it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 96%|      | 121/126 [00:01<00:00, 72.07it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 97%|      | 122/126 [00:01<00:00, 72.46it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 98%|      | 123/126 [00:01<00:00, 72.88it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 98%|      | 124/126 [00:01<00:00, 73.29it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 99%|      | 125/126 [00:01<00:00, 73.71it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 100%|     | 126/126 [00:01<00:00, 74.12it/s, loss=0.00451,
v_num=4.31e+7]Mapping latent space...
Epoch 169: 100%|     | 126/126 [00:01<00:00, 72.70it/s, loss=0.00451,
v_num=4.31e+7]
Epoch 169: 100%|     | 126/126 [00:01<00:00, 72.61it/s, loss=0.00451,
v_num=4.31e+7]Mapping latent space...
Epoch 170: 79%|      | 100/126 [00:01<00:00, 70.61it/s, loss=0.00469,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 170: 80%|      | 101/126 [00:01<00:00, 63.40it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 81%|      | 102/126 [00:01<00:00, 63.51it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 82%|      | 103/126 [00:01<00:00, 63.98it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 83%|      | 104/126 [00:01<00:00, 64.44it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 83%|      | 105/126 [00:01<00:00, 64.91it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 84%|      | 106/126 [00:01<00:00, 65.37it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 85%|      | 107/126 [00:01<00:00, 65.82it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 86%|      | 108/126 [00:01<00:00, 66.28it/s, loss=0.00469,

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v_num=4.31e+7]
Epoch 170: 87%|      | 109/126 [00:01<00:00, 66.74it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 87%|      | 110/126 [00:01<00:00, 67.20it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 88%|      | 111/126 [00:01<00:00, 67.65it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 89%|      | 112/126 [00:01<00:00, 68.09it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 90%|      | 113/126 [00:01<00:00, 68.54it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 90%|      | 114/126 [00:01<00:00, 68.99it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 91%|      | 115/126 [00:01<00:00, 69.44it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 92%|      | 116/126 [00:01<00:00, 69.89it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 93%|      | 117/126 [00:01<00:00, 70.33it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 94%|      | 118/126 [00:01<00:00, 70.67it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 94%|      | 119/126 [00:01<00:00, 71.11it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 95%|      | 120/126 [00:01<00:00, 71.55it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 96%|      | 121/126 [00:01<00:00, 71.99it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 97%|      | 122/126 [00:01<00:00, 72.42it/s, loss=0.00469,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.32it/s]
Epoch 170: 98%|      | 123/126 [00:01<00:00, 72.88it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 98%|      | 124/126 [00:01<00:00, 73.33it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 99%|      | 125/126 [00:01<00:00, 73.79it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 100%|     | 126/126 [00:01<00:00, 74.25it/s, loss=0.00469,
v_num=4.31e+7]Mapping latent space...
Epoch 170: 100%|     | 126/126 [00:01<00:00, 73.06it/s, loss=0.00469,
v_num=4.31e+7]
Epoch 170: 100%|     | 126/126 [00:01<00:00, 72.99it/s, loss=0.00469,
v_num=4.31e+7]Mapping latent space...

Epoch 171: 79%|      | 100/126 [00:01<00:00, 67.90it/s, loss=0.0046,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 171: 80%	101/126 [00:01<00:00, 60.95it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 81%	102/126 [00:01<00:00, 61.07it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 82%	103/126 [00:01<00:00, 61.56it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 83%	104/126 [00:01<00:00, 62.03it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 83%	105/126 [00:01<00:00, 62.51it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 84%	106/126 [00:01<00:00, 62.98it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 85%	107/126 [00:01<00:00, 63.46it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 86%	108/126 [00:01<00:00, 63.92it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 87%	109/126 [00:01<00:00, 64.41it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 87%	110/126 [00:01<00:00, 64.87it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 88%	111/126 [00:01<00:00, 65.35it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 89%	112/126 [00:01<00:00, 65.80it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 90%	113/126 [00:01<00:00, 66.27it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 90%	114/126 [00:01<00:00, 66.73it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 91%	115/126 [00:01<00:00, 67.19it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 92%	116/126 [00:01<00:00, 67.65it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 93%	117/126 [00:01<00:00, 68.11it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 94%	118/126 [00:01<00:00, 68.57it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 94%	119/126 [00:01<00:00, 69.03it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 95%	120/126 [00:01<00:00, 69.47it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 96%	121/126 [00:01<00:00, 69.93it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 97%	122/126 [00:01<00:00, 70.38it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 98%	123/126 [00:01<00:00, 70.85it/s, loss=0.0046,
v_num=4.31e+7]	
Epoch 171: 98%	124/126 [00:01<00:00, 71.32it/s, loss=0.0046,
v_num=4.31e+7]	

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Epoch 171: 99%|      | 125/126 [00:01<00:00, 71.79it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 171: 100%|     | 126/126 [00:01<00:00, 72.26it/s, loss=0.0046,
v_num=4.31e+7]Mapping latent space...
Epoch 171: 100%|     | 126/126 [00:01<00:00, 71.04it/s, loss=0.0046,
v_num=4.31e+7]
Epoch 171: 100%|     | 126/126 [00:01<00:00, 70.97it/s, loss=0.0046,
v_num=4.31e+7]Mapping latent space...
Epoch 172: 79%|      | 100/126 [00:01<00:00, 79.20it/s, loss=0.00493,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 172: 80%|      | 101/126 [00:01<00:00, 69.34it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 81%|      | 102/126 [00:01<00:00, 69.53it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 82%|      | 103/126 [00:01<00:00, 70.00it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 83%|      | 104/126 [00:01<00:00, 70.48it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 83%|      | 105/126 [00:01<00:00, 70.96it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 84%|      | 106/126 [00:01<00:00, 71.44it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 85%|      | 107/126 [00:01<00:00, 71.92it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 86%|      | 108/126 [00:01<00:00, 72.40it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 87%|      | 109/126 [00:01<00:00, 72.84it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 87%|      | 110/126 [00:01<00:00, 73.24it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 88%|      | 111/126 [00:01<00:00, 73.54it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 89%|      | 112/126 [00:01<00:00, 73.93it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 90%|      | 113/126 [00:01<00:00, 74.33it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 90%|      | 114/126 [00:01<00:00, 74.73it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 91%|      | 115/126 [00:01<00:00, 75.13it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 92%|      | 116/126 [00:01<00:00, 75.54it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 93%|      | 117/126 [00:01<00:00, 75.94it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 94%|      | 118/126 [00:01<00:00, 76.34it/s, loss=0.00493,

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v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 184.10it/s]
Epoch 172: 94%|          | 119/126 [00:01<00:00, 76.73it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 95%|          | 120/126 [00:01<00:00, 77.13it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 96%|          | 121/126 [00:01<00:00, 77.54it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 97%|          | 122/126 [00:01<00:00, 77.95it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 98%|          | 123/126 [00:01<00:00, 78.39it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 98%|          | 124/126 [00:01<00:00, 78.82it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 99%|          | 125/126 [00:01<00:00, 79.27it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 100%|         | 126/126 [00:01<00:00, 79.71it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 172: 100%|         | 126/126 [00:01<00:00, 78.13it/s, loss=0.00493,
v_num=4.31e+7]
Epoch 172: 100%|         | 126/126 [00:01<00:00, 78.02it/s, loss=0.00493,
v_num=4.31e+7]Mapping latent space...
Epoch 173: 79%|          | 100/126 [00:01<00:00, 79.11it/s, loss=0.00511,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 173: 80%|          | 101/126 [00:01<00:00, 68.52it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 81%|          | 102/126 [00:01<00:00, 68.90it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 82%|          | 103/126 [00:01<00:00, 69.30it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 83%|          | 104/126 [00:01<00:00, 69.70it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 83%|          | 105/126 [00:01<00:00, 70.11it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 84%|          | 106/126 [00:01<00:00, 70.52it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 85%|          | 107/126 [00:01<00:00, 70.93it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 86%|          | 108/126 [00:01<00:00, 71.34it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 87%|          | 109/126 [00:01<00:00, 71.77it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 87%|          | 110/126 [00:01<00:00, 72.19it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 88%|          | 111/126 [00:01<00:00, 72.62it/s, loss=0.00511,

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v_num=4.31e+7]
Epoch 173: 89%|      | 112/126 [00:01<00:00, 73.05it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 90%|      | 113/126 [00:01<00:00, 73.48it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 90%|      | 114/126 [00:01<00:00, 73.91it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 91%|      | 115/126 [00:01<00:00, 74.34it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 92%|      | 116/126 [00:01<00:00, 74.76it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 93%|      | 117/126 [00:01<00:00, 75.21it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 94%|      | 118/126 [00:01<00:00, 75.64it/s, loss=0.00511,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.45it/s]
Epoch 173: 94%|      | 119/126 [00:01<00:00, 76.07it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 95%|      | 120/126 [00:01<00:00, 76.51it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 96%|      | 121/126 [00:01<00:00, 76.95it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 97%|      | 122/126 [00:01<00:00, 77.39it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 98%|      | 123/126 [00:01<00:00, 77.86it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 98%|      | 124/126 [00:01<00:00, 78.33it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 99%|      | 125/126 [00:01<00:00, 78.79it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 173: 100%|     | 126/126 [00:01<00:00, 79.09it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 173: 100%|     | 126/126 [00:01<00:00, 77.14it/s, loss=0.00511,
v_num=4.31e+7]

Epoch 173: 100%|     | 126/126 [00:01<00:00, 77.01it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 174: 79%|      | 100/126 [00:01<00:00, 67.83it/s, loss=0.00487,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 174: 80%|      | 101/126 [00:01<00:00, 59.99it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 81%|      | 102/126 [00:01<00:00, 60.12it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 82%|      | 103/126 [00:01<00:00, 60.53it/s, loss=0.00487,
v_num=4.31e+7]

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Epoch 174: 83%|      | 104/126 [00:01<00:00, 60.94it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 83%|      | 105/126 [00:01<00:00, 61.36it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 84%|      | 106/126 [00:01<00:00, 61.77it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 85%|      | 107/126 [00:01<00:00, 62.19it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 86%|      | 108/126 [00:01<00:00, 62.60it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 87%|      | 109/126 [00:01<00:00, 63.02it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 87%|      | 110/126 [00:01<00:00, 63.44it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 88%|      | 111/126 [00:01<00:00, 63.86it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 89%|      | 112/126 [00:01<00:00, 64.19it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 90%|      | 113/126 [00:01<00:00, 64.61it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 90%|      | 114/126 [00:01<00:00, 65.03it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 91%|      | 115/126 [00:01<00:00, 65.45it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 92%|      | 116/126 [00:01<00:00, 65.87it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 93%|      | 117/126 [00:01<00:00, 66.29it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 94%|      | 118/126 [00:01<00:00, 66.71it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 94%|      | 119/126 [00:01<00:00, 67.13it/s, loss=0.00487,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 194.48it/s]
Epoch 174: 95%|      | 120/126 [00:01<00:00, 67.54it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 96%|      | 121/126 [00:01<00:00, 67.96it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 97%|      | 122/126 [00:01<00:00, 68.38it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 98%|      | 123/126 [00:01<00:00, 68.81it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 98%|      | 124/126 [00:01<00:00, 69.24it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 99%|      | 125/126 [00:01<00:00, 69.67it/s, loss=0.00487,
v_num=4.31e+7]
Epoch 174: 100%|     | 126/126 [00:01<00:00, 70.11it/s, loss=0.00487,
v_num=4.31e+7]Mapping latent space...
Epoch 174: 100%|     | 126/126 [00:01<00:00, 67.95it/s, loss=0.00487,

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v_num=4.31e+7]
Epoch 174: 100%|      | 126/126 [00:01<00:00, 67.88it/s, loss=0.00487,
v_num=4.31e+7]Mapping latent space...
Epoch 175: 79%|      | 100/126 [00:01<00:00, 76.98it/s, loss=0.00424,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 175: 80%|      | 101/126 [00:01<00:00, 68.83it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 81%|      | 102/126 [00:01<00:00, 69.03it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 82%|      | 103/126 [00:01<00:00, 69.44it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 83%|      | 104/126 [00:01<00:00, 69.85it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 83%|      | 105/126 [00:01<00:00, 70.27it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 84%|      | 106/126 [00:01<00:00, 70.68it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 85%|      | 107/126 [00:01<00:00, 71.09it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 86%|      | 108/126 [00:01<00:00, 71.50it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 87%|      | 109/126 [00:01<00:00, 71.92it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 87%|      | 110/126 [00:01<00:00, 72.33it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 88%|      | 111/126 [00:01<00:00, 72.75it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 89%|      | 112/126 [00:01<00:00, 73.17it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 90%|      | 113/126 [00:01<00:00, 73.59it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 90%|      | 114/126 [00:01<00:00, 74.01it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 91%|      | 115/126 [00:01<00:00, 74.44it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 92%|      | 116/126 [00:01<00:00, 74.87it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 93%|      | 117/126 [00:01<00:00, 75.29it/s, loss=0.00424,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.08it/s]
Epoch 175: 94%|      | 118/126 [00:01<00:00, 75.71it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 94%|      | 119/126 [00:01<00:00, 76.13it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 95%|      | 120/126 [00:01<00:00, 76.55it/s, loss=0.00424,

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v_num=4.31e+7]
Epoch 175: 96%|      | 121/126 [00:01<00:00, 76.98it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 97%|      | 122/126 [00:01<00:00, 77.41it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 98%|      | 123/126 [00:01<00:00, 77.87it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 98%|      | 124/126 [00:01<00:00, 78.33it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 99%|      | 125/126 [00:01<00:00, 78.79it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 100%|     | 126/126 [00:01<00:00, 79.25it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 175: 100%|     | 126/126 [00:01<00:00, 77.68it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 175: 100%|     | 126/126 [00:01<00:00, 77.60it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 176: 79%|      | 100/126 [00:01<00:00, 74.50it/s, loss=0.00514,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 176: 80%|      | 101/126 [00:01<00:00, 66.61it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 81%|      | 102/126 [00:01<00:00, 66.84it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 82%|      | 103/126 [00:01<00:00, 67.32it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 83%|      | 104/126 [00:01<00:00, 67.80it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 83%|      | 105/126 [00:01<00:00, 68.27it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 84%|      | 106/126 [00:01<00:00, 68.75it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 85%|      | 107/126 [00:01<00:00, 69.22it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 86%|      | 108/126 [00:01<00:00, 69.69it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 87%|      | 109/126 [00:01<00:00, 70.16it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 87%|      | 110/126 [00:01<00:00, 70.63it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 88%|      | 111/126 [00:01<00:00, 71.09it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 89%|      | 112/126 [00:01<00:00, 71.55it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 90%|      | 113/126 [00:01<00:00, 72.01it/s, loss=0.00514,
v_num=4.31e+7]

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Epoch 176: 90%|      | 114/126 [00:01<00:00, 72.47it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 91%|      | 115/126 [00:01<00:00, 72.92it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 92%|      | 116/126 [00:01<00:00, 73.38it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 93%|      | 117/126 [00:01<00:00, 73.83it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 94%|      | 118/126 [00:01<00:00, 74.28it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 94%|      | 119/126 [00:01<00:00, 74.73it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 95%|      | 120/126 [00:01<00:00, 75.18it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 96%|      | 121/126 [00:01<00:00, 75.63it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 97%|      | 122/126 [00:01<00:00, 76.09it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 98%|      | 123/126 [00:01<00:00, 76.58it/s, loss=0.00514,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 238.71it/s]
Epoch 176: 98%|      | 124/126 [00:01<00:00, 77.06it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 99%|      | 125/126 [00:01<00:00, 77.55it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 100%|     | 126/126 [00:01<00:00, 78.05it/s, loss=0.00514,
v_num=4.31e+7]Mapping latent space...
Epoch 176: 100%|     | 126/126 [00:01<00:00, 76.73it/s, loss=0.00514,
v_num=4.31e+7]
Epoch 176: 100%|     | 126/126 [00:01<00:00, 76.66it/s, loss=0.00514,
v_num=4.31e+7]Mapping latent space...

Epoch 177: 79%|      | 100/126 [00:01<00:00, 84.70it/s, loss=0.0049,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 177: 80%|      | 101/126 [00:01<00:00, 74.87it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 81%|      | 102/126 [00:01<00:00, 75.01it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 82%|      | 103/126 [00:01<00:00, 75.55it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 83%|      | 104/126 [00:01<00:00, 76.09it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 83%|      | 105/126 [00:01<00:00, 76.62it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 84%|      | 106/126 [00:01<00:00, 77.16it/s, loss=0.0049,

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v_num=4.31e+7]
Epoch 177: 85%|      | 107/126 [00:01<00:00, 77.69it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 86%|      | 108/126 [00:01<00:00, 78.22it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 87%|      | 109/126 [00:01<00:00, 78.74it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 87%|      | 110/126 [00:01<00:00, 79.26it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 88%|      | 111/126 [00:01<00:00, 79.79it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 89%|      | 112/126 [00:01<00:00, 80.31it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 90%|      | 113/126 [00:01<00:00, 80.84it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 90%|      | 114/126 [00:01<00:00, 81.36it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 91%|      | 115/126 [00:01<00:00, 81.88it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 92%|      | 116/126 [00:01<00:00, 82.41it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 93%|      | 117/126 [00:01<00:00, 82.93it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 94%|      | 118/126 [00:01<00:00, 83.45it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 94%|      | 119/126 [00:01<00:00, 83.97it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 95%|      | 120/126 [00:01<00:00, 84.49it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 96%|      | 121/126 [00:01<00:00, 85.00it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 97%|      | 122/126 [00:01<00:00, 85.52it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 98%|      | 123/126 [00:01<00:00, 85.92it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 98%|      | 124/126 [00:01<00:00, 86.46it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 99%|      | 125/126 [00:01<00:00, 87.01it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 100%|     | 126/126 [00:01<00:00, 87.56it/s, loss=0.0049,
v_num=4.31e+7]Mapping latent space...
Epoch 177: 100%|     | 126/126 [00:01<00:00, 85.95it/s, loss=0.0049,
v_num=4.31e+7]
Epoch 177: 100%|     | 126/126 [00:01<00:00, 85.85it/s, loss=0.0049,
v_num=4.31e+7]Mapping latent space...
Epoch 178: 79%|      | 100/126 [00:01<00:00, 72.52it/s, loss=0.00488,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 178: 80%|          | 101/126 [00:01<00:00, 64.34it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 81%|          | 102/126 [00:01<00:00, 64.30it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 82%|          | 103/126 [00:01<00:00, 64.70it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 83%|          | 104/126 [00:01<00:00, 65.11it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 83%|          | 105/126 [00:01<00:00, 65.52it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 84%|          | 106/126 [00:01<00:00, 65.93it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 85%|          | 107/126 [00:01<00:00, 66.34it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 86%|          | 108/126 [00:01<00:00, 66.75it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 87%|          | 109/126 [00:01<00:00, 67.17it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 87%|          | 110/126 [00:01<00:00, 67.59it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 88%|          | 111/126 [00:01<00:00, 68.01it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 89%|          | 112/126 [00:01<00:00, 68.43it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 90%|          | 113/126 [00:01<00:00, 68.85it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 90%|          | 114/126 [00:01<00:00, 69.27it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 91%|          | 115/126 [00:01<00:00, 69.68it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 92%|          | 116/126 [00:01<00:00, 70.10it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 93%|          | 117/126 [00:01<00:00, 70.52it/s, loss=0.00488,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 176.94it/s]
Epoch 178: 94%|          | 118/126 [00:01<00:00, 70.93it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 94%|          | 119/126 [00:01<00:00, 71.35it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 95%|          | 120/126 [00:01<00:00, 71.76it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 96%|          | 121/126 [00:01<00:00, 72.18it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 97%|          | 122/126 [00:01<00:00, 72.60it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 98%|          | 123/126 [00:01<00:00, 73.05it/s, loss=0.00488,

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v_num=4.31e+7]
Epoch 178: 98%|      | 124/126 [00:01<00:00, 73.49it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 99%|      | 125/126 [00:01<00:00, 73.93it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 100%|     | 126/126 [00:01<00:00, 74.38it/s, loss=0.00488,
v_num=4.31e+7]Mapping latent space...
Epoch 178: 100%|     | 126/126 [00:01<00:00, 72.65it/s, loss=0.00488,
v_num=4.31e+7]
Epoch 178: 100%|     | 126/126 [00:01<00:00, 72.57it/s, loss=0.00488,
v_num=4.31e+7]Mapping latent space...
Epoch 179: 79%|      | 100/126 [00:01<00:00, 78.50it/s, loss=0.0045,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 179: 80%|      | 101/126 [00:01<00:00, 69.23it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 81%|      | 102/126 [00:01<00:00, 69.44it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 82%|      | 103/126 [00:01<00:00, 69.96it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 83%|      | 104/126 [00:01<00:00, 70.47it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 83%|      | 105/126 [00:01<00:00, 70.99it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 84%|      | 106/126 [00:01<00:00, 71.51it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 85%|      | 107/126 [00:01<00:00, 72.03it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 86%|      | 108/126 [00:01<00:00, 72.53it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 87%|      | 109/126 [00:01<00:00, 73.05it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 87%|      | 110/126 [00:01<00:00, 73.56it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 88%|      | 111/126 [00:01<00:00, 74.07it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 89%|      | 112/126 [00:01<00:00, 74.57it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 90%|      | 113/126 [00:01<00:00, 75.08it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 90%|      | 114/126 [00:01<00:00, 75.59it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 91%|      | 115/126 [00:01<00:00, 76.09it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 92%|      | 116/126 [00:01<00:00, 76.60it/s, loss=0.0045,
v_num=4.31e+7]

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Epoch 179: 93%|      | 117/126 [00:01<00:00, 77.09it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 94%|      | 118/126 [00:01<00:00, 77.59it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 94%|      | 119/126 [00:01<00:00, 78.08it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 95%|      | 120/126 [00:01<00:00, 78.57it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 96%|      | 121/126 [00:01<00:00, 79.06it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 97%|      | 122/126 [00:01<00:00, 79.56it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 98%|      | 123/126 [00:01<00:00, 80.08it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 98%|      | 124/126 [00:01<00:00, 80.60it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 99%|      | 125/126 [00:01<00:00, 81.11it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 100%|     | 126/126 [00:01<00:00, 81.63it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...
Epoch 179: 100%|     | 126/126 [00:01<00:00, 79.42it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 179: 100%|     | 126/126 [00:01<00:00, 79.34it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...

Epoch 180: 79%|      | 100/126 [00:01<00:00, 78.51it/s, loss=0.00512,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 180: 80%|      | 101/126 [00:01<00:00, 69.67it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 81%|      | 102/126 [00:01<00:00, 69.76it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 82%|      | 103/126 [00:01<00:00, 70.29it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 83%|      | 104/126 [00:01<00:00, 70.81it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 83%|      | 105/126 [00:01<00:00, 71.33it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 84%|      | 106/126 [00:01<00:00, 71.85it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 85%|      | 107/126 [00:01<00:00, 72.36it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 86%|      | 108/126 [00:01<00:00, 72.87it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 87%|      | 109/126 [00:01<00:00, 73.39it/s, loss=0.00512,
v_num=4.31e+7]

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Epoch 180: 87%|      | 110/126 [00:01<00:00, 73.90it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 88%|      | 111/126 [00:01<00:00, 74.42it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 89%|      | 112/126 [00:01<00:00, 74.92it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 90%|      | 113/126 [00:01<00:00, 75.43it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 90%|      | 114/126 [00:01<00:00, 75.94it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 91%|      | 115/126 [00:01<00:00, 76.45it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 92%|      | 116/126 [00:01<00:00, 76.95it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 93%|      | 117/126 [00:01<00:00, 77.45it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 94%|      | 118/126 [00:01<00:00, 77.94it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 94%|      | 119/126 [00:01<00:00, 78.44it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 95%|      | 120/126 [00:01<00:00, 78.94it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 96%|      | 121/126 [00:01<00:00, 79.43it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 97%|      | 122/126 [00:01<00:00, 79.93it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 98%|      | 123/126 [00:01<00:00, 80.45it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 98%|      | 124/126 [00:01<00:00, 80.97it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 99%|      | 125/126 [00:01<00:00, 81.49it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 100%|     | 126/126 [00:01<00:00, 82.02it/s, loss=0.00512,
v_num=4.31e+7]Mapping latent space...
Epoch 180: 100%|     | 126/126 [00:01<00:00, 80.56it/s, loss=0.00512,
v_num=4.31e+7]
Epoch 180: 100%|     | 126/126 [00:01<00:00, 80.48it/s, loss=0.00512,
v_num=4.31e+7]Mapping latent space...
Epoch 181: 79%|      | 100/126 [00:01<00:00, 85.36it/s, loss=0.00545,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 181: 80%|      | 101/126 [00:01<00:00, 73.80it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 81%|      | 102/126 [00:01<00:00, 73.90it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 82%|      | 103/126 [00:01<00:00, 74.40it/s, loss=0.00545,

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v_num=4.31e+7]
Epoch 181: 83%|      | 104/126 [00:01<00:00, 74.91it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 83%|      | 105/126 [00:01<00:00, 75.42it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 84%|      | 106/126 [00:01<00:00, 75.92it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 85%|      | 107/126 [00:01<00:00, 76.33it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 86%|      | 108/126 [00:01<00:00, 76.83it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 87%|      | 109/126 [00:01<00:00, 77.33it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 87%|      | 110/126 [00:01<00:00, 77.82it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 88%|      | 111/126 [00:01<00:00, 78.31it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 89%|      | 112/126 [00:01<00:00, 78.80it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 90%|      | 113/126 [00:01<00:00, 79.29it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 90%|      | 114/126 [00:01<00:00, 79.78it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 91%|      | 115/126 [00:01<00:00, 80.27it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 92%|      | 116/126 [00:01<00:00, 80.76it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 93%|      | 117/126 [00:01<00:00, 81.24it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 94%|      | 118/126 [00:01<00:00, 81.71it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 94%|      | 119/126 [00:01<00:00, 82.19it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 95%|      | 120/126 [00:01<00:00, 82.66it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 96%|      | 121/126 [00:01<00:00, 83.13it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 97%|      | 122/126 [00:01<00:00, 83.61it/s, loss=0.00545,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.00it/s]
Epoch 181: 98%|      | 123/126 [00:01<00:00, 84.10it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 98%|      | 124/126 [00:01<00:00, 84.60it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 99%|      | 125/126 [00:01<00:00, 85.10it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 100%|     | 126/126 [00:01<00:00, 85.60it/s, loss=0.00545,
v_num=4.31e+7]Mapping latent space...

```

```

Epoch 181: 100%|      | 126/126 [00:01<00:00, 81.63it/s, loss=0.00545,
v_num=4.31e+7]
Epoch 181: 100%|      | 126/126 [00:01<00:00, 81.49it/s, loss=0.00545,
v_num=4.31e+7]Mapping latent space...
Epoch 182: 79%|      | 100/126 [00:01<00:00, 69.88it/s, loss=0.00414,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 182: 80%|      | 101/126 [00:01<00:00, 61.30it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 81%|      | 102/126 [00:01<00:00, 61.49it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 82%|      | 103/126 [00:01<00:00, 61.88it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 83%|      | 104/126 [00:01<00:00, 62.27it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 83%|      | 105/126 [00:01<00:00, 62.65it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 84%|      | 106/126 [00:01<00:00, 63.04it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 85%|      | 107/126 [00:01<00:00, 63.43it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 86%|      | 108/126 [00:01<00:00, 63.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 87%|      | 109/126 [00:01<00:00, 64.22it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 87%|      | 110/126 [00:01<00:00, 64.62it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 88%|      | 111/126 [00:01<00:00, 65.02it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 89%|      | 112/126 [00:01<00:00, 65.43it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 90%|      | 113/126 [00:01<00:00, 65.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 90%|      | 114/126 [00:01<00:00, 66.23it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 91%|      | 115/126 [00:01<00:00, 66.63it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 92%|      | 116/126 [00:01<00:00, 67.04it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 93%|      | 117/126 [00:01<00:00, 67.45it/s, loss=0.00414,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.00it/s]
Epoch 182: 94%|      | 118/126 [00:01<00:00, 67.86it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 94%|      | 119/126 [00:01<00:00, 68.26it/s, loss=0.00414,
v_num=4.31e+7]

```

```

Epoch 182: 95%|      | 120/126 [00:01<00:00, 68.67it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 96%|      | 121/126 [00:01<00:00, 69.09it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 97%|      | 122/126 [00:01<00:00, 69.50it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 98%|      | 123/126 [00:01<00:00, 69.93it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 98%|      | 124/126 [00:01<00:00, 70.37it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 99%|      | 125/126 [00:01<00:00, 70.80it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 100%|     | 126/126 [00:01<00:00, 71.24it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 182: 100%|     | 126/126 [00:01<00:00, 70.02it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 182: 100%|     | 126/126 [00:01<00:00, 69.94it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...

Epoch 183: 79%|      | 100/126 [00:01<00:00, 69.38it/s, loss=0.00511,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 183: 80%|      | 101/126 [00:01<00:00, 61.26it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 81%|      | 102/126 [00:01<00:00, 61.33it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 82%|      | 103/126 [00:01<00:00, 61.77it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 83%|      | 104/126 [00:01<00:00, 62.20it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 83%|      | 105/126 [00:01<00:00, 62.64it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 84%|      | 106/126 [00:01<00:00, 63.08it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 85%|      | 107/126 [00:01<00:00, 63.52it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 86%|      | 108/126 [00:01<00:00, 63.96it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 87%|      | 109/126 [00:01<00:00, 64.41it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 87%|      | 110/126 [00:01<00:00, 64.85it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 88%|      | 111/126 [00:01<00:00, 65.28it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 89%|      | 112/126 [00:01<00:00, 65.72it/s, loss=0.00511,
v_num=4.31e+7]

```

```

Epoch 183: 90%|      | 113/126 [00:01<00:00, 66.16it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 90%|      | 114/126 [00:01<00:00, 66.60it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 91%|      | 115/126 [00:01<00:00, 67.04it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 92%|      | 116/126 [00:01<00:00, 67.47it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 93%|      | 117/126 [00:01<00:00, 67.91it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 94%|      | 118/126 [00:01<00:00, 68.34it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 94%|      | 119/126 [00:01<00:00, 68.77it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 95%|      | 120/126 [00:01<00:00, 69.20it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 96%|      | 121/126 [00:01<00:00, 69.63it/s, loss=0.00511,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.91it/s]
Epoch 183: 97%|      | 122/126 [00:01<00:00, 70.05it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 98%|      | 123/126 [00:01<00:00, 70.50it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 98%|      | 124/126 [00:01<00:00, 70.94it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 99%|      | 125/126 [00:01<00:00, 71.38it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 100%|     | 126/126 [00:01<00:00, 71.83it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 183: 100%|     | 126/126 [00:01<00:00, 69.68it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 183: 100%|     | 126/126 [00:01<00:00, 69.61it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 183: 100%|     | 126/126 [00:01<00:00, 68.21it/s, loss=0.00511,
v_num=4.31e+7]

```

Training for latent_dim 4 done.

```

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`

```

directly to the Trainer's `callbacks` argument instead.

```
rank_zero_deprecation(  
GPU available: True, used: True  
TPU available: False, using: 0 TPU cores  
IPU available: False, using: 0 IPUs  
HPU available: False, using: 0 HPUs  
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-  
packages/pytorch_lightning/trainer/configuration_validator.py:307:  
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was  
deprecated in v1.6 and will be removed in v1.8. Please use  
`LightningModule.on_{train/validation/test}_epoch_end` instead.  
rank_zero_deprecation(  
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]
```

	Name	Type	Params
0	encoder	Sequential	8.8 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	85
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	10
13	decoder	Sequential	8.9 K
14	decoder.0	Linear	96
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K
21	decoder.7	Tanh	0
22	decoder.8	BatchNorm1d	128
23	decoder.9	Linear	5.9 K
24	decoder.10	Sigmoid	0

```
-----  
17.7 K    Trainable params  
0         Non-trainable params  
17.7 K    Total params  
0.071     Total estimated model params size (MB)  
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-  
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
```


PossibleUserWarning: The dataloader, val_dataloader 0, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

rank_zero_warn(

Loading all data...

Training on 10000 examples, validating on 2501 examples

Sanity Checking DataLoader 0: 100%| | 2/2 [00:00<00:00,

2.81it/s]Saving samples for epoch #0...

Mapping latent space...

Epoch 0: 2%| | 2/126 [00:00<00:11, 10.66it/s, loss=0.122,

v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, train_dataloader, does not have many workers which may be a bottleneck. Consider increasing the value of the

`num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

rank_zero_warn(

Epoch 0: 79%| | 100/126 [00:01<00:00, 70.01it/s, loss=0.106,

v_num=4.31e+7]

Validation: 0it [00:00, ?it/s]

Validation: 0%| | 0/26 [00:00<?, ?it/s]

Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]

Epoch 0: 80%| | 101/126 [00:01<00:00, 62.91it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 81%| | 102/126 [00:01<00:00, 62.86it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 82%| | 103/126 [00:01<00:00, 63.24it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 83%| | 104/126 [00:01<00:00, 63.63it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 83%| | 105/126 [00:01<00:00, 64.03it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 84%| | 106/126 [00:01<00:00, 64.43it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 85%| | 107/126 [00:01<00:00, 64.83it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 86%| | 108/126 [00:01<00:00, 65.23it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 87%| | 109/126 [00:01<00:00, 65.63it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 87%| | 110/126 [00:01<00:00, 66.04it/s, loss=0.106,

v_num=4.31e+7]

Epoch 0: 88%| | 111/126 [00:01<00:00, 66.43it/s, loss=0.106,

v_num=4.31e+7]

```

Epoch 0: 89%|      | 112/126 [00:01<00:00, 66.84it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 90%|      | 113/126 [00:01<00:00, 67.24it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 90%|      | 114/126 [00:01<00:00, 67.62it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 91%|      | 115/126 [00:01<00:00, 68.02it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 92%|      | 116/126 [00:01<00:00, 68.43it/s, loss=0.106,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.09it/s]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 68.82it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 69.23it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 69.63it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 70.04it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 70.45it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 70.86it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 71.28it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 71.71it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 72.14it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.57it/s, loss=0.106,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 65.05it/s, loss=0.106,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 64.89it/s, loss=0.106,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 70.36it/s, loss=0.0979,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 63.56it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 62.89it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 63.28it/s, loss=0.0979,
v_num=4.31e+7]

```

```

Epoch 1: 83%|      | 104/126 [00:01<00:00, 63.68it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 64.08it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 64.47it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 64.88it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 65.29it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 65.70it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 66.12it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 66.53it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 66.93it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 67.34it/s, loss=0.0979,
v_num=4.31e+7]
Validation DataLoader 0: 54%|      | 14/26 [00:00<00:00, 136.83it/s]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 67.75it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 68.15it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 68.56it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 68.96it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 69.37it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 69.79it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 70.20it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 70.61it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 71.03it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 71.46it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 71.90it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 72.34it/s, loss=0.0979,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 72.78it/s, loss=0.0979,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 71.44it/s, loss=0.0979,

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v_num=4.31e+7]
Epoch 1: 100%|          | 126/126 [00:01<00:00, 71.32it/s, loss=0.0979,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|          | 100/126 [00:01<00:00, 80.65it/s, loss=0.0935,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|          | 101/126 [00:01<00:00, 69.67it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 81%|          | 102/126 [00:01<00:00, 69.75it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 82%|          | 103/126 [00:01<00:00, 70.25it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 83%|          | 104/126 [00:01<00:00, 70.74it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 83%|          | 105/126 [00:01<00:00, 71.22it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 84%|          | 106/126 [00:01<00:00, 71.71it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 85%|          | 107/126 [00:01<00:00, 72.20it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 86%|          | 108/126 [00:01<00:00, 72.66it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 87%|          | 109/126 [00:01<00:00, 73.15it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 87%|          | 110/126 [00:01<00:00, 73.63it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 88%|          | 111/126 [00:01<00:00, 74.11it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 89%|          | 112/126 [00:01<00:00, 74.58it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 90%|          | 113/126 [00:01<00:00, 75.06it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 90%|          | 114/126 [00:01<00:00, 75.53it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 91%|          | 115/126 [00:01<00:00, 76.00it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 92%|          | 116/126 [00:01<00:00, 76.47it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 93%|          | 117/126 [00:01<00:00, 76.93it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 94%|          | 118/126 [00:01<00:00, 77.40it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 94%|          | 119/126 [00:01<00:00, 77.86it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 95%|          | 120/126 [00:01<00:00, 78.32it/s, loss=0.0935,
v_num=4.31e+7]

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Epoch 2: 96%|      | 121/126 [00:01<00:00, 78.77it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 79.23it/s, loss=0.0935,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.83it/s]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 79.71it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 80.19it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 80.67it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 81.15it/s, loss=0.0935,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 79.62it/s, loss=0.0935,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 79.48it/s, loss=0.0935,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 68.85it/s, loss=0.0863,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 61.73it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 61.95it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 62.43it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 62.90it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 63.37it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 63.83it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 64.31it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 64.78it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 65.24it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 65.69it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 66.16it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 66.63it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 67.09it/s, loss=0.0863,

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v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 67.55it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 68.01it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 68.48it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 68.93it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 69.39it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 69.85it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 70.30it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 70.76it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 71.22it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 71.69it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 72.16it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 72.64it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 73.12it/s, loss=0.0863,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 71.98it/s, loss=0.0863,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 71.89it/s, loss=0.0863,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 80.67it/s, loss=0.0773,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 72.68it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 72.71it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 73.26it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 73.79it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 74.32it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 74.85it/s, loss=0.0773,
v_num=4.31e+7]

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Epoch 4: 85%|      | 107/126 [00:01<00:00, 75.38it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 75.91it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 76.44it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 76.96it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 77.50it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 77.97it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 78.49it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 79.00it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 79.52it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 80.03it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 80.54it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 81.05it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 81.56it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 82.06it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 82.57it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 83.07it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 83.60it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 84.13it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 84.67it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 85.20it/s, loss=0.0773,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 83.63it/s, loss=0.0773,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 83.51it/s, loss=0.0773,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 82.32it/s, loss=0.0654,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|          | 101/126 [00:01<00:00, 72.66it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 81%|          | 102/126 [00:01<00:00, 72.76it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 82%|          | 103/126 [00:01<00:00, 73.18it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 83%|          | 104/126 [00:01<00:00, 73.61it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 83%|          | 105/126 [00:01<00:00, 74.04it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 84%|          | 106/126 [00:01<00:00, 74.47it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 85%|          | 107/126 [00:01<00:00, 74.91it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 86%|          | 108/126 [00:01<00:00, 75.34it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 87%|          | 109/126 [00:01<00:00, 75.78it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 87%|          | 110/126 [00:01<00:00, 76.21it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 88%|          | 111/126 [00:01<00:00, 76.64it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 89%|          | 112/126 [00:01<00:00, 77.08it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 90%|          | 113/126 [00:01<00:00, 77.52it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 90%|          | 114/126 [00:01<00:00, 77.94it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 91%|          | 115/126 [00:01<00:00, 78.39it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 92%|          | 116/126 [00:01<00:00, 78.83it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 93%|          | 117/126 [00:01<00:00, 79.27it/s, loss=0.0654,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 177.13it/s]
Epoch 5: 94%|          | 118/126 [00:01<00:00, 79.71it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 94%|          | 119/126 [00:01<00:00, 80.16it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 95%|          | 120/126 [00:01<00:00, 80.60it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 96%|          | 121/126 [00:01<00:00, 81.05it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 97%|          | 122/126 [00:01<00:00, 81.51it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 98%|          | 123/126 [00:01<00:00, 81.99it/s, loss=0.0654,
v_num=4.31e+7]

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Epoch 5: 98%|      | 124/126 [00:01<00:00, 82.48it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 82.96it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 83.46it/s, loss=0.0654,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 81.53it/s, loss=0.0654,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 81.39it/s, loss=0.0654,
v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%|      | 100/126 [00:01<00:00, 73.40it/s, loss=0.053,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 66.09it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 66.21it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 66.72it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 67.21it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 83%|      | 105/126 [00:01<00:00, 67.71it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 68.20it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 68.71it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 69.19it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 69.68it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 70.16it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 70.67it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 89%|      | 112/126 [00:01<00:00, 71.14it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 71.63it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 72.11it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 72.60it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 73.06it/s, loss=0.053,
v_num=4.31e+7]

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Epoch 6: 93%|      | 117/126 [00:01<00:00, 73.54it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 74.01it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 74.50it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 95%|      | 120/126 [00:01<00:00, 74.97it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 75.45it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 75.92it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 76.43it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 76.93it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 77.42it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 77.93it/s, loss=0.053,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 76.65it/s, loss=0.053,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 76.55it/s, loss=0.053,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 81.34it/s, loss=0.0418,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 72.14it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 72.38it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 72.93it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 73.45it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 73.99it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 74.51it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 75.05it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 75.57it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 76.10it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 76.62it/s, loss=0.0418,

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v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 77.16it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 77.67it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 78.20it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 78.70it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 79.22it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 79.67it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 80.18it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 80.66it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 81.18it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 81.68it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 82.18it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 82.69it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 83.23it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 83.76it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 84.29it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 84.83it/s, loss=0.0418,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 82.67it/s, loss=0.0418,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 82.55it/s, loss=0.0418,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 82.05it/s, loss=0.0314,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 73.09it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 73.32it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 73.87it/s, loss=0.0314,
v_num=4.31e+7]

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Epoch 8: 83%|      | 104/126 [00:01<00:00, 74.39it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 74.92it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 75.45it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 75.99it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 76.51it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 77.06it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 77.58it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 78.12it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 78.63it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 79.15it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 79.67it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 80.19it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 80.71it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 81.23it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 81.74it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 82.25it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 82.74it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 83.25it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 83.76it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 84.30it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 84.84it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 85.37it/s, loss=0.0314,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 85.91it/s, loss=0.0314,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 84.39it/s, loss=0.0314,
v_num=4.31e+7]

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Epoch 8: 100%|      | 126/126 [00:01<00:00, 84.27it/s, loss=0.0314,
v_num=4.31e+7]Mapping latent space...
Epoch 9:  79%|      | 100/126 [00:01<00:00, 72.88it/s, loss=0.0238,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 9:  80%|      | 101/126 [00:01<00:00, 64.00it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  81%|      | 102/126 [00:01<00:00, 64.22it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  82%|      | 103/126 [00:01<00:00, 64.67it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  83%|      | 104/126 [00:01<00:00, 65.13it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  83%|      | 105/126 [00:01<00:00, 65.57it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  84%|      | 106/126 [00:01<00:00, 66.04it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  85%|      | 107/126 [00:01<00:00, 66.47it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  86%|      | 108/126 [00:01<00:00, 66.92it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  87%|      | 109/126 [00:01<00:00, 67.37it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  87%|      | 110/126 [00:01<00:00, 67.82it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  88%|      | 111/126 [00:01<00:00, 68.27it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  89%|      | 112/126 [00:01<00:00, 68.72it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  90%|      | 113/126 [00:01<00:00, 69.16it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  90%|      | 114/126 [00:01<00:00, 69.61it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  91%|      | 115/126 [00:01<00:00, 70.05it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  92%|      | 116/126 [00:01<00:00, 70.50it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  93%|      | 117/126 [00:01<00:00, 70.93it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  94%|      | 118/126 [00:01<00:00, 71.38it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  94%|      | 119/126 [00:01<00:00, 71.81it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  95%|      | 120/126 [00:01<00:00, 72.25it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9:  96%|      | 121/126 [00:01<00:00, 72.68it/s, loss=0.0238,

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v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 218.87it/s]
Epoch 9: 97%|          | 122/126 [00:01<00:00, 73.09it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9: 98%|          | 123/126 [00:01<00:00, 73.54it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9: 98%|          | 124/126 [00:01<00:00, 73.99it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9: 99%|          | 125/126 [00:01<00:00, 74.44it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9: 100%|         | 126/126 [00:01<00:00, 74.90it/s, loss=0.0238,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|         | 126/126 [00:01<00:00, 73.64it/s, loss=0.0238,
v_num=4.31e+7]
Epoch 9: 100%|         | 126/126 [00:01<00:00, 73.53it/s, loss=0.0238,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|         | 100/126 [00:01<00:00, 72.17it/s, loss=0.018,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|         | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|         | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|         | 101/126 [00:01<00:00, 63.28it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 81%|         | 102/126 [00:01<00:00, 63.65it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 82%|         | 103/126 [00:01<00:00, 64.11it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 83%|         | 104/126 [00:01<00:00, 64.57it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 83%|         | 105/126 [00:01<00:00, 65.03it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 84%|         | 106/126 [00:01<00:00, 65.49it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 85%|         | 107/126 [00:01<00:00, 65.94it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 86%|         | 108/126 [00:01<00:00, 66.40it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 87%|         | 109/126 [00:01<00:00, 66.86it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 87%|         | 110/126 [00:01<00:00, 67.32it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 88%|         | 111/126 [00:01<00:00, 67.77it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 89%|         | 112/126 [00:01<00:00, 68.22it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 90%|         | 113/126 [00:01<00:00, 68.67it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 90%|         | 114/126 [00:01<00:00, 69.12it/s, loss=0.018,

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v_num=4.31e+7]
Epoch 10: 91%|      | 115/126 [00:01<00:00, 69.56it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 92%|      | 116/126 [00:01<00:00, 70.00it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 93%|      | 117/126 [00:01<00:00, 70.44it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 70.88it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 71.32it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 71.76it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 72.19it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 72.63it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 73.08it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 73.53it/s, loss=0.018,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 242.77it/s]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 73.98it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 74.43it/s, loss=0.018,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 73.13it/s, loss=0.018,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 73.01it/s, loss=0.018,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 75.14it/s, loss=0.0143,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 66.41it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 66.37it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 66.78it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 67.19it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 67.60it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 68.01it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 68.43it/s, loss=0.0143,

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v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 68.86it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 69.29it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 69.71it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 70.14it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 70.57it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 71.01it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 71.44it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 71.87it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 72.31it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 72.75it/s, loss=0.0143,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.46it/s]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 73.18it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 73.62it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 74.05it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 74.48it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 74.93it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 75.40it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 75.86it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 76.32it/s, loss=0.0143,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 76.79it/s, loss=0.0143,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 75.36it/s, loss=0.0143,
v_num=4.31e+7]

Epoch 11: 100%|     | 126/126 [00:01<00:00, 75.24it/s, loss=0.0143,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 79%|      | 100/126 [00:01<00:00, 73.63it/s, loss=0.0114,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|          | 101/126 [00:01<00:00, 65.29it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 81%|          | 102/126 [00:01<00:00, 65.56it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 82%|          | 103/126 [00:01<00:00, 66.04it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 83%|          | 104/126 [00:01<00:00, 66.51it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 83%|          | 105/126 [00:01<00:00, 66.97it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 84%|          | 106/126 [00:01<00:00, 67.37it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 85%|          | 107/126 [00:01<00:00, 67.84it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 86%|          | 108/126 [00:01<00:00, 68.31it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 87%|          | 109/126 [00:01<00:00, 68.78it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 87%|          | 110/126 [00:01<00:00, 69.24it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 88%|          | 111/126 [00:01<00:00, 69.71it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 89%|          | 112/126 [00:01<00:00, 70.17it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 90%|          | 113/126 [00:01<00:00, 70.62it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 90%|          | 114/126 [00:01<00:00, 71.08it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 91%|          | 115/126 [00:01<00:00, 71.54it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 92%|          | 116/126 [00:01<00:00, 71.99it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 93%|          | 117/126 [00:01<00:00, 72.44it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 94%|          | 118/126 [00:01<00:00, 72.89it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 94%|          | 119/126 [00:01<00:00, 73.34it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 95%|          | 120/126 [00:01<00:00, 73.78it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 96%|          | 121/126 [00:01<00:00, 74.22it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 97%|          | 122/126 [00:01<00:00, 74.68it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 98%|          | 123/126 [00:01<00:00, 75.14it/s, loss=0.0114,
v_num=4.31e+7]

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Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.35it/s]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 75.60it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 76.06it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 76.53it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|     | 126/126 [00:01<00:00, 75.10it/s, loss=0.0114,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 74.98it/s, loss=0.0114,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 74.01it/s, loss=0.00969,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13: 80%|      | 101/126 [00:01<00:00, 66.29it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 81%|      | 102/126 [00:01<00:00, 66.48it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 82%|      | 103/126 [00:01<00:00, 66.99it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 83%|      | 104/126 [00:01<00:00, 67.49it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 83%|      | 105/126 [00:01<00:00, 68.00it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 84%|      | 106/126 [00:01<00:00, 68.49it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 85%|      | 107/126 [00:01<00:00, 69.00it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 86%|      | 108/126 [00:01<00:00, 69.49it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 87%|      | 109/126 [00:01<00:00, 70.00it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 87%|      | 110/126 [00:01<00:00, 70.48it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 88%|      | 111/126 [00:01<00:00, 70.99it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 89%|      | 112/126 [00:01<00:00, 71.48it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 90%|      | 113/126 [00:01<00:00, 71.98it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 90%|      | 114/126 [00:01<00:00, 72.46it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 91%|      | 115/126 [00:01<00:00, 72.94it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 92%|      | 116/126 [00:01<00:00, 73.42it/s, loss=0.00969,
v_num=4.31e+7]

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Epoch 13: 93%|      | 117/126 [00:01<00:00, 73.91it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 94%|      | 118/126 [00:01<00:00, 74.38it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 94%|      | 119/126 [00:01<00:00, 74.86it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 75.34it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 75.81it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 76.30it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 76.80it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 77.29it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 77.79it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 78.28it/s, loss=0.00969,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 76.07it/s, loss=0.00969,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 75.95it/s, loss=0.00969,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 74.15it/s, loss=0.00799,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 66.26it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 66.49it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 66.91it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 67.34it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 67.75it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 68.18it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 68.60it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 69.03it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 69.46it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 69.89it/s, loss=0.00799,

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v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 70.32it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 70.74it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 90%|      | 113/126 [00:01<00:00, 71.17it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 71.60it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 72.02it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 72.45it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 72.89it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 73.32it/s, loss=0.00799,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.28it/s]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 73.75it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 74.19it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 74.62it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 75.07it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 75.53it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 75.99it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 76.45it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 76.91it/s, loss=0.00799,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 75.54it/s, loss=0.00799,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 75.42it/s, loss=0.00799,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 67.69it/s, loss=0.00757,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 61.47it/s, loss=0.00757,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 61.60it/s, loss=0.00757,
v_num=4.31e+7]

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Epoch 15: 82%| | 103/126 [00:01<00:00, 62.09it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 83%| | 104/126 [00:01<00:00, 62.55it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 83%| | 105/126 [00:01<00:00, 63.01it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 84%| | 106/126 [00:01<00:00, 63.49it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 85%| | 107/126 [00:01<00:00, 63.96it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 86%| | 108/126 [00:01<00:00, 64.42it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 87%| | 109/126 [00:01<00:00, 64.89it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 87%| | 110/126 [00:01<00:00, 65.36it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 88%| | 111/126 [00:01<00:00, 65.82it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 89%| | 112/126 [00:01<00:00, 66.28it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 90%| | 113/126 [00:01<00:00, 66.75it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 90%| | 114/126 [00:01<00:00, 67.20it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 91%| | 115/126 [00:01<00:00, 67.66it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 92%| | 116/126 [00:01<00:00, 68.12it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 93%| | 117/126 [00:01<00:00, 68.58it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 94%| | 118/126 [00:01<00:00, 69.04it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 94%| | 119/126 [00:01<00:00, 69.49it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 95%| | 120/126 [00:01<00:00, 69.94it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 96%| | 121/126 [00:01<00:00, 70.40it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 97%| | 122/126 [00:01<00:00, 70.85it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 98%| | 123/126 [00:01<00:00, 71.33it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 98%| | 124/126 [00:01<00:00, 71.80it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 99%| | 125/126 [00:01<00:00, 72.27it/s, loss=0.00757, v_num=4.31e+7]
Epoch 15: 100%| | 126/126 [00:01<00:00, 72.75it/s, loss=0.00757, v_num=4.31e+7]Mapping latent space...

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Epoch 15: 100%|      | 126/126 [00:01<00:00, 70.50it/s, loss=0.00757,
v_num=4.31e+7]
Epoch 15: 100%|      | 126/126 [00:01<00:00, 70.39it/s, loss=0.00757,
v_num=4.31e+7]Mapping latent space...
Epoch 16:  79%|      | 100/126 [00:01<00:00, 68.93it/s, loss=0.00673,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 16:  80%|      | 101/126 [00:01<00:00, 62.07it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  81%|      | 102/126 [00:01<00:00, 61.87it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  82%|      | 103/126 [00:01<00:00, 62.34it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  83%|      | 104/126 [00:01<00:00, 62.82it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  83%|      | 105/126 [00:01<00:00, 63.29it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  84%|      | 106/126 [00:01<00:00, 63.76it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  85%|      | 107/126 [00:01<00:00, 64.23it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  86%|      | 108/126 [00:01<00:00, 64.70it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  87%|      | 109/126 [00:01<00:00, 65.16it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  87%|      | 110/126 [00:01<00:00, 65.63it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  88%|      | 111/126 [00:01<00:00, 66.09it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  89%|      | 112/126 [00:01<00:00, 66.55it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  90%|      | 113/126 [00:01<00:00, 67.01it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  90%|      | 114/126 [00:01<00:00, 67.47it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  91%|      | 115/126 [00:01<00:00, 67.93it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  92%|      | 116/126 [00:01<00:00, 68.40it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  93%|      | 117/126 [00:01<00:00, 68.86it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  94%|      | 118/126 [00:01<00:00, 69.32it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  94%|      | 119/126 [00:01<00:00, 69.78it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16:  95%|      | 120/126 [00:01<00:00, 70.24it/s, loss=0.00673,

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v_num=4.31e+7]
Epoch 16: 96%|      | 121/126 [00:01<00:00, 70.70it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16: 97%|      | 122/126 [00:01<00:00, 71.16it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 71.64it/s, loss=0.00673,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 239.68it/s]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 72.11it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 72.59it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 73.06it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|     | 126/126 [00:01<00:00, 71.73it/s, loss=0.00673,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 71.63it/s, loss=0.00673,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 83.61it/s, loss=0.00693,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 71.92it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 72.19it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 72.62it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 73.04it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 73.47it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 73.90it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 74.33it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 74.77it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 87%|      | 109/126 [00:01<00:00, 75.21it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 75.65it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 76.09it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 76.54it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 76.98it/s, loss=0.00693,

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v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 77.44it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 91%|      | 115/126 [00:01<00:00, 77.89it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 92%|      | 116/126 [00:01<00:00, 78.34it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 78.79it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 79.24it/s, loss=0.00693,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.76it/s]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 79.68it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 80.14it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 80.60it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 81.05it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 81.54it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 82.02it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 82.51it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 82.99it/s, loss=0.00693,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 81.47it/s, loss=0.00693,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 81.33it/s, loss=0.00693,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 75.52it/s, loss=0.00583,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 67.52it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 67.72it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 68.23it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 68.73it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 69.23it/s, loss=0.00583,
v_num=4.31e+7]

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Epoch 18: 84%|      | 106/126 [00:01<00:00, 69.73it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 70.23it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 70.72it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 71.22it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 71.71it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 72.21it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 72.69it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 73.19it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 73.68it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 74.17it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 74.66it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 75.15it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 75.64it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 76.12it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 76.61it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 77.09it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 77.57it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 78.08it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 78.58it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 79.08it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 79.59it/s, loss=0.00583,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 78.09it/s, loss=0.00583,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 77.99it/s, loss=0.00583,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 85.51it/s, loss=0.00659,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|          | 101/126 [00:01<00:00, 75.37it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 81%|          | 102/126 [00:01<00:00, 75.33it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 82%|          | 103/126 [00:01<00:00, 75.89it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 83%|          | 104/126 [00:01<00:00, 76.42it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 83%|          | 105/126 [00:01<00:00, 76.96it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 84%|          | 106/126 [00:01<00:00, 77.50it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 85%|          | 107/126 [00:01<00:00, 78.04it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 86%|          | 108/126 [00:01<00:00, 78.58it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 87%|          | 109/126 [00:01<00:00, 79.14it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 87%|          | 110/126 [00:01<00:00, 79.66it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 88%|          | 111/126 [00:01<00:00, 80.21it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 89%|          | 112/126 [00:01<00:00, 80.73it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 90%|          | 113/126 [00:01<00:00, 81.27it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 90%|          | 114/126 [00:01<00:00, 81.80it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 91%|          | 115/126 [00:01<00:00, 82.33it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 92%|          | 116/126 [00:01<00:00, 82.85it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 93%|          | 117/126 [00:01<00:00, 83.38it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 94%|          | 118/126 [00:01<00:00, 83.90it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 94%|          | 119/126 [00:01<00:00, 84.43it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 95%|          | 120/126 [00:01<00:00, 84.94it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 96%|          | 121/126 [00:01<00:00, 85.45it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 97%|          | 122/126 [00:01<00:00, 85.97it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 98%|          | 123/126 [00:01<00:00, 86.52it/s, loss=0.00659,

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v_num=4.31e+7]
Epoch 19: 98%|      | 124/126 [00:01<00:00, 87.07it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 99%|      | 125/126 [00:01<00:00, 87.61it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 88.16it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 86.48it/s, loss=0.00659,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 86.35it/s, loss=0.00659,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 83.33it/s, loss=0.00609,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|      | 101/126 [00:01<00:00, 74.88it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 81%|      | 102/126 [00:01<00:00, 75.13it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 82%|      | 103/126 [00:01<00:00, 75.69it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 83%|      | 104/126 [00:01<00:00, 76.22it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 83%|      | 105/126 [00:01<00:00, 76.76it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 84%|      | 106/126 [00:01<00:00, 77.30it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 85%|      | 107/126 [00:01<00:00, 77.85it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 86%|      | 108/126 [00:01<00:00, 78.38it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 87%|      | 109/126 [00:01<00:00, 78.93it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 87%|      | 110/126 [00:01<00:00, 79.46it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 88%|      | 111/126 [00:01<00:00, 80.01it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 89%|      | 112/126 [00:01<00:00, 80.53it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 90%|      | 113/126 [00:01<00:00, 81.06it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 90%|      | 114/126 [00:01<00:00, 81.59it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 91%|      | 115/126 [00:01<00:00, 82.11it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 92%|      | 116/126 [00:01<00:00, 82.63it/s, loss=0.00609,
v_num=4.31e+7]

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Epoch 20: 93%|      | 117/126 [00:01<00:00, 83.16it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 94%|      | 118/126 [00:01<00:00, 83.67it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 94%|      | 119/126 [00:01<00:00, 84.19it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 95%|      | 120/126 [00:01<00:00, 84.70it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 96%|      | 121/126 [00:01<00:00, 85.21it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 97%|      | 122/126 [00:01<00:00, 85.73it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 98%|      | 123/126 [00:01<00:00, 86.28it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 98%|      | 124/126 [00:01<00:00, 86.83it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 87.37it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 87.93it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 86.33it/s, loss=0.00609,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 86.20it/s, loss=0.00609,
v_num=4.31e+7]Mapping latent space...

Epoch 21: 79%|      | 100/126 [00:01<00:00, 85.34it/s, loss=0.00506,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 76.19it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 76.20it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 76.77it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 77.30it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 77.84it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 78.38it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 78.94it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 79.47it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 80.02it/s, loss=0.00506,
v_num=4.31e+7]

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Epoch 21: 87%|      | 110/126 [00:01<00:00, 80.47it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 81.02it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 81.53it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 82.08it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 82.60it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 83.13it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 83.66it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 84.18it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 84.70it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 85.22it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 85.74it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 86.26it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 86.78it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 87.33it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 87.88it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 88.43it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 88.98it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 87.32it/s, loss=0.00506,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 87.20it/s, loss=0.00506,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 85.88it/s, loss=0.00524,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 75.95it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 76.15it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 76.71it/s, loss=0.00524,

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v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 77.25it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 77.79it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 78.33it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 78.87it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 79.41it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 79.95it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 80.49it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 81.04it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 81.56it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 82.10it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 82.64it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 83.16it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 83.70it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 84.22it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 84.75it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 85.28it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 85.80it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 86.32it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 86.84it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 87.39it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 87.94it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 88.50it/s, loss=0.00524,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 89.06it/s, loss=0.00524,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 87.36it/s, loss=0.00524,

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v_num=4.31e+7]
Epoch 22: 100%|      | 126/126 [00:01<00:00, 87.22it/s, loss=0.00524,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|      | 100/126 [00:01<00:00, 71.74it/s, loss=0.00496,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|      | 101/126 [00:01<00:00, 63.60it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 81%|      | 102/126 [00:01<00:00, 63.59it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 82%|      | 103/126 [00:01<00:00, 64.05it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 83%|      | 104/126 [00:01<00:00, 64.51it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 83%|      | 105/126 [00:01<00:00, 64.96it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 84%|      | 106/126 [00:01<00:00, 65.42it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 85%|      | 107/126 [00:01<00:00, 65.88it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 86%|      | 108/126 [00:01<00:00, 66.33it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 87%|      | 109/126 [00:01<00:00, 66.79it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 87%|      | 110/126 [00:01<00:00, 67.24it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 88%|      | 111/126 [00:01<00:00, 67.69it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 89%|      | 112/126 [00:01<00:00, 68.11it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 90%|      | 113/126 [00:01<00:00, 68.53it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 90%|      | 114/126 [00:01<00:00, 68.97it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 91%|      | 115/126 [00:01<00:00, 69.42it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 92%|      | 116/126 [00:01<00:00, 69.86it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 93%|      | 117/126 [00:01<00:00, 70.30it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 94%|      | 118/126 [00:01<00:00, 70.75it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 94%|      | 119/126 [00:01<00:00, 71.19it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 95%|      | 120/126 [00:01<00:00, 71.63it/s, loss=0.00496,
v_num=4.31e+7]

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Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 208.73it/s]
Epoch 23: 96%|          | 121/126 [00:01<00:00, 72.06it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 97%|          | 122/126 [00:01<00:00, 72.50it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 98%|          | 123/126 [00:01<00:00, 72.96it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 98%|          | 124/126 [00:01<00:00, 73.42it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 99%|          | 125/126 [00:01<00:00, 73.87it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 100%|         | 126/126 [00:01<00:00, 74.33it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|         | 126/126 [00:01<00:00, 72.40it/s, loss=0.00496,
v_num=4.31e+7]
Epoch 23: 100%|         | 126/126 [00:01<00:00, 72.27it/s, loss=0.00496,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|          | 100/126 [00:01<00:00, 79.26it/s, loss=0.00476,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|          | 101/126 [00:01<00:00, 70.67it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 81%|          | 102/126 [00:01<00:00, 70.32it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 82%|          | 103/126 [00:01<00:00, 70.72it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 83%|          | 104/126 [00:01<00:00, 71.13it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 83%|          | 105/126 [00:01<00:00, 71.54it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 84%|          | 106/126 [00:01<00:00, 71.96it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 85%|          | 107/126 [00:01<00:00, 72.39it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 86%|          | 108/126 [00:01<00:00, 72.82it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 87%|          | 109/126 [00:01<00:00, 73.25it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 87%|          | 110/126 [00:01<00:00, 73.68it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 88%|          | 111/126 [00:01<00:00, 74.02it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 89%|          | 112/126 [00:01<00:00, 74.45it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 90%|          | 113/126 [00:01<00:00, 74.88it/s, loss=0.00476,

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v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 75.31it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 75.74it/s, loss=0.00476,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 158.54it/s]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 76.17it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 76.61it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 77.04it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 77.48it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 77.92it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 78.36it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 78.81it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 79.28it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 79.74it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 80.21it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 80.68it/s, loss=0.00476,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 79.19it/s, loss=0.00476,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 79.06it/s, loss=0.00476,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 79.79it/s, loss=0.00445,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 71.35it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 71.63it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 72.17it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 72.69it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 73.21it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 73.73it/s, loss=0.00445,

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v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 74.25it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 74.77it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 75.31it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 75.81it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 76.34it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 76.84it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 77.36it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 77.87it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 78.38it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 78.89it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 79.40it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 79.90it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 80.42it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 80.92it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 81.43it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 81.93it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 82.46it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 82.99it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 83.52it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 84.05it/s, loss=0.00445,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 81.90it/s, loss=0.00445,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 81.78it/s, loss=0.00445,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 71.03it/s, loss=0.00447,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|          | 101/126 [00:01<00:00, 63.26it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 81%|          | 102/126 [00:01<00:00, 63.34it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 82%|          | 103/126 [00:01<00:00, 63.72it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 83%|          | 104/126 [00:01<00:00, 64.11it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 83%|          | 105/126 [00:01<00:00, 64.49it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 84%|          | 106/126 [00:01<00:00, 64.89it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 85%|          | 107/126 [00:01<00:00, 65.29it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 86%|          | 108/126 [00:01<00:00, 65.70it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 87%|          | 109/126 [00:01<00:00, 66.10it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 87%|          | 110/126 [00:01<00:00, 66.51it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 88%|          | 111/126 [00:01<00:00, 66.92it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 89%|          | 112/126 [00:01<00:00, 67.32it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 90%|          | 113/126 [00:01<00:00, 67.74it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 90%|          | 114/126 [00:01<00:00, 68.15it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 91%|          | 115/126 [00:01<00:00, 68.56it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 92%|          | 116/126 [00:01<00:00, 68.98it/s, loss=0.00447,
v_num=4.31e+7]
Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 164.69it/s]
Epoch 26: 93%|          | 117/126 [00:01<00:00, 69.39it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 94%|          | 118/126 [00:01<00:00, 69.81it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 94%|          | 119/126 [00:01<00:00, 70.22it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 95%|          | 120/126 [00:01<00:00, 70.64it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 96%|          | 121/126 [00:01<00:00, 71.06it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 97%|          | 122/126 [00:01<00:00, 71.48it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 98%|          | 123/126 [00:01<00:00, 71.93it/s, loss=0.00447,

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v_num=4.31e+7]
Epoch 26: 98%|      | 124/126 [00:01<00:00, 72.37it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 72.82it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 73.26it/s, loss=0.00447,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 72.02it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 71.91it/s, loss=0.00447,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 78.99it/s, loss=0.00502,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 68.83it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 68.89it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 69.37it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 69.85it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 70.33it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 70.81it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 71.29it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 71.76it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 72.24it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 72.71it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 73.19it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 73.66it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 74.12it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 74.59it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 75.05it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 75.52it/s, loss=0.00502,

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v_num=4.31e+7]
Epoch 27: 93%|      | 117/126 [00:01<00:00, 75.87it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 94%|      | 118/126 [00:01<00:00, 76.32it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 76.77it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 77.22it/s, loss=0.00502,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.55it/s]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 77.66it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 78.12it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 78.60it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 79.07it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 79.55it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 80.02it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 78.27it/s, loss=0.00502,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 78.13it/s, loss=0.00502,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 81.15it/s, loss=0.0047,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 71.69it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 72.00it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 72.49it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 72.99it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 73.47it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 73.96it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 74.45it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 74.94it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 75.43it/s, loss=0.0047,

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v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 75.92it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 76.40it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 76.88it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 77.36it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 77.84it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 78.32it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 78.80it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 79.27it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 79.75it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 80.21it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 80.68it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 81.15it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 81.62it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 82.11it/s, loss=0.0047,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.31it/s]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 82.60it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 83.09it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 83.58it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 81.76it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 81.61it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 74.30it/s, loss=0.00494,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 65.80it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 65.78it/s, loss=0.00494,

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v_num=4.31e+7]
Epoch 29: 82%| | 103/126 [00:01<00:00, 66.29it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 83%| | 104/126 [00:01<00:00, 66.77it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 83%| | 105/126 [00:01<00:00, 67.28it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 84%| | 106/126 [00:01<00:00, 67.77it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 85%| | 107/126 [00:01<00:00, 68.28it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 86%| | 108/126 [00:01<00:00, 68.76it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 87%| | 109/126 [00:01<00:00, 69.26it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 87%| | 110/126 [00:01<00:00, 69.75it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 88%| | 111/126 [00:01<00:00, 70.25it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 89%| | 112/126 [00:01<00:00, 70.73it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 90%| | 113/126 [00:01<00:00, 71.22it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 90%| | 114/126 [00:01<00:00, 71.70it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 91%| | 115/126 [00:01<00:00, 72.20it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 92%| | 116/126 [00:01<00:00, 72.67it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 93%| | 117/126 [00:01<00:00, 73.15it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 94%| | 118/126 [00:01<00:00, 73.63it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 94%| | 119/126 [00:01<00:00, 74.11it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 95%| | 120/126 [00:01<00:00, 74.57it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 96%| | 121/126 [00:01<00:00, 75.05it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 97%| | 122/126 [00:01<00:00, 75.52it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 98%| | 123/126 [00:01<00:00, 76.01it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 98%| | 124/126 [00:01<00:00, 76.51it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 99%| | 125/126 [00:01<00:00, 77.00it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 100%| | 126/126 [00:01<00:00, 77.50it/s, loss=0.00494,

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v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|      | 126/126 [00:01<00:00, 76.12it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 29: 100%|      | 126/126 [00:01<00:00, 76.00it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 71.99it/s, loss=0.00434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 63.14it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 63.41it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 63.85it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 64.28it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 64.72it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 65.16it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 65.60it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 66.03it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 66.47it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 66.90it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 67.33it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 67.75it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 68.18it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 68.60it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 69.02it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 69.44it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 69.86it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 94%|      | 118/126 [00:01<00:00, 70.27it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 94%|      | 119/126 [00:01<00:00, 70.68it/s, loss=0.00434,

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v_num=4.31e+7]
Epoch 30: 95%|      | 120/126 [00:01<00:00, 71.09it/s, loss=0.00434,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.74it/s]
Epoch 30: 96%|      | 121/126 [00:01<00:00, 71.49it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 97%|      | 122/126 [00:01<00:00, 71.90it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 98%|      | 123/126 [00:01<00:00, 72.32it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 98%|      | 124/126 [00:01<00:00, 72.74it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 99%|      | 125/126 [00:01<00:00, 73.13it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 73.53it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|     | 126/126 [00:01<00:00, 71.95it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 71.81it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|      | 100/126 [00:01<00:00, 76.26it/s, loss=0.00413,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|      | 101/126 [00:01<00:00, 68.27it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 81%|      | 102/126 [00:01<00:00, 68.30it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 82%|      | 103/126 [00:01<00:00, 68.76it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 83%|      | 104/126 [00:01<00:00, 69.22it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 83%|      | 105/126 [00:01<00:00, 69.67it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 84%|      | 106/126 [00:01<00:00, 70.13it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 85%|      | 107/126 [00:01<00:00, 70.59it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 86%|      | 108/126 [00:01<00:00, 71.05it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 87%|      | 109/126 [00:01<00:00, 71.51it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 87%|      | 110/126 [00:01<00:00, 71.97it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 88%|      | 111/126 [00:01<00:00, 72.42it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 72.88it/s, loss=0.00413,

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v_num=4.31e+7]
Epoch 31: 90%|      | 113/126 [00:01<00:00, 73.33it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 73.78it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 74.23it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 74.68it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 75.13it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 75.58it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 76.02it/s, loss=0.00413,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.50it/s]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 76.45it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 76.89it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 77.34it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 77.82it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 78.30it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 78.77it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 79.25it/s, loss=0.00413,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 77.69it/s, loss=0.00413,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 77.57it/s, loss=0.00413,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 79.68it/s, loss=0.00421,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 71.04it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 71.34it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 71.85it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 72.37it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 72.90it/s, loss=0.00421,

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v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 73.41it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 73.92it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 74.44it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 74.97it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 75.47it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 75.99it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 89%|      | 112/126 [00:01<00:00, 76.48it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 76.99it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 77.50it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 78.01it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 92%|      | 116/126 [00:01<00:00, 78.51it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 79.01it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 79.51it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 80.02it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 80.51it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 81.01it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 81.52it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 82.04it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 82.57it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 83.09it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 83.62it/s, loss=0.00421,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 82.11it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 82.00it/s, loss=0.00421,
v_num=4.31e+7]Mapping latent space...

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Epoch 33: 79%|          | 100/126 [00:01<00:00, 74.29it/s, loss=0.00455,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|          | 101/126 [00:01<00:00, 65.58it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 81%|          | 102/126 [00:01<00:00, 65.75it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 82%|          | 103/126 [00:01<00:00, 66.17it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 83%|          | 104/126 [00:01<00:00, 66.60it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 83%|          | 105/126 [00:01<00:00, 67.02it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 84%|          | 106/126 [00:01<00:00, 67.45it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 85%|          | 107/126 [00:01<00:00, 67.88it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 86%|          | 108/126 [00:01<00:00, 68.31it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 87%|          | 109/126 [00:01<00:00, 68.73it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 87%|          | 110/126 [00:01<00:00, 69.16it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 88%|          | 111/126 [00:01<00:00, 69.59it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 89%|          | 112/126 [00:01<00:00, 70.01it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 90%|          | 113/126 [00:01<00:00, 70.44it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 90%|          | 114/126 [00:01<00:00, 70.87it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 91%|          | 115/126 [00:01<00:00, 71.30it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 92%|          | 116/126 [00:01<00:00, 71.73it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 93%|          | 117/126 [00:01<00:00, 72.16it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 94%|          | 118/126 [00:01<00:00, 72.59it/s, loss=0.00455,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 189.44it/s]
Epoch 33: 94%|          | 119/126 [00:01<00:00, 73.02it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 95%|          | 120/126 [00:01<00:00, 73.45it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 96%|          | 121/126 [00:01<00:00, 73.88it/s, loss=0.00455,
v_num=4.31e+7]

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Epoch 33: 97%|      | 122/126 [00:01<00:00, 74.32it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 98%|      | 123/126 [00:01<00:00, 74.78it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 75.24it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 75.70it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 76.15it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 74.79it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 74.61it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 75.41it/s, loss=0.00454,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 66.74it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 66.87it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 67.35it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 67.83it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 68.31it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 68.79it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 69.27it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 69.75it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 70.23it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 70.71it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 71.18it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 71.65it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 72.11it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 72.59it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 73.05it/s, loss=0.00454,

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v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 73.52it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 73.98it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 74.44it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 74.90it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 75.37it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 75.82it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 76.28it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 76.76it/s, loss=0.00454,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.92it/s]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 77.23it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 77.71it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 78.19it/s, loss=0.00454,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 76.90it/s, loss=0.00454,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 76.80it/s, loss=0.00454,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 83.12it/s, loss=0.00443,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 73.56it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 74.02it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 74.49it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 74.96it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 75.42it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 75.90it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 76.37it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 86%|      | 108/126 [00:01<00:00, 76.85it/s, loss=0.00443,

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v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 77.31it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 87%|      | 110/126 [00:01<00:00, 77.79it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 78.25it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 78.72it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 79.19it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 79.66it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 80.12it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 80.59it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 81.05it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 81.52it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 81.98it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 82.45it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 82.90it/s, loss=0.00443,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.26it/s]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 83.36it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 83.86it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 84.35it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 84.84it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 85.34it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 83.54it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 83.37it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 77.93it/s, loss=0.00441,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 36: 80%| | 101/126 [00:01<00:00, 68.52it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 81%| | 102/126 [00:01<00:00, 68.54it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 82%| | 103/126 [00:01<00:00, 69.05it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 83%| | 104/126 [00:01<00:00, 69.54it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 83%| | 105/126 [00:01<00:00, 70.04it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 84%| | 106/126 [00:01<00:00, 70.54it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 85%| | 107/126 [00:01<00:00, 71.06it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 86%| | 108/126 [00:01<00:00, 71.39it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 87%| | 109/126 [00:01<00:00, 71.89it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 87%| | 110/126 [00:01<00:00, 72.38it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 88%| | 111/126 [00:01<00:00, 72.89it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 89%| | 112/126 [00:01<00:00, 73.37it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 90%| | 113/126 [00:01<00:00, 73.87it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 90%| | 114/126 [00:01<00:00, 74.37it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 91%| | 115/126 [00:01<00:00, 74.86it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 92%| | 116/126 [00:01<00:00, 75.35it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 93%| | 117/126 [00:01<00:00, 75.84it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 94%| | 118/126 [00:01<00:00, 76.33it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 94%| | 119/126 [00:01<00:00, 76.82it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 95%| | 120/126 [00:01<00:00, 77.30it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 96%| | 121/126 [00:01<00:00, 77.79it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 97%| | 122/126 [00:01<00:00, 78.28it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 98%| | 123/126 [00:01<00:00, 78.80it/s, loss=0.00441, v_num=4.31e+7]
Epoch 36: 98%| | 124/126 [00:01<00:00, 79.31it/s, loss=0.00441, v_num=4.31e+7]


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Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 247.25it/s]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 79.82it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 80.33it/s, loss=0.00441,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|     | 126/126 [00:01<00:00, 78.98it/s, loss=0.00441,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.00441,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 90.88it/s, loss=0.00494,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 78.61it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 78.61it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 79.18it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 79.74it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 80.29it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 80.86it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 81.42it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 81.98it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 82.54it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 83.09it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 83.65it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 84.20it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 84.76it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 85.31it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 85.87it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 86.41it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 86.96it/s, loss=0.00494,
v_num=4.31e+7]

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Epoch 37: 94%|      | 118/126 [00:01<00:00, 87.50it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 88.04it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 88.58it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 89.12it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 89.65it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 90.22it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 90.79it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 91.36it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 91.94it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 90.15it/s, loss=0.00494,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 90.01it/s, loss=0.00494,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 88.79it/s, loss=0.00443,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 77.13it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 77.40it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 77.91it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 78.43it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 78.94it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 79.45it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 79.96it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 80.48it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 80.99it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 81.52it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 82.05it/s, loss=0.00443,

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v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 82.57it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 90%|      | 113/126 [00:01<00:00, 83.10it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 83.62it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 84.14it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 84.66it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 85.18it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 85.70it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 86.22it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 86.73it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 87.25it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 87.77it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 88.32it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 88.87it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 89.43it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 89.99it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 88.24it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 88.13it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 80.83it/s, loss=0.00449,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 71.99it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 72.22it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 72.65it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 73.09it/s, loss=0.00449,

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v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 73.52it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 73.96it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 74.39it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 74.84it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 75.27it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 75.71it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 76.15it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 76.59it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 77.03it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 77.47it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 77.91it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 78.36it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 78.81it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 79.26it/s, loss=0.00449,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.08it/s]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 79.70it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 80.15it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 80.60it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 81.06it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 81.54it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 82.02it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 82.51it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 82.99it/s, loss=0.00449,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 81.42it/s, loss=0.00449,
v_num=4.31e+7]

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Epoch 39: 100%|      | 126/126 [00:01<00:00, 81.29it/s, loss=0.00449,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 80.78it/s, loss=0.0047,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|      | 101/126 [00:01<00:00, 70.32it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 81%|      | 102/126 [00:01<00:00, 70.72it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 82%|      | 103/126 [00:01<00:00, 71.13it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 83%|      | 104/126 [00:01<00:00, 71.55it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 83%|      | 105/126 [00:01<00:00, 71.96it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 84%|      | 106/126 [00:01<00:00, 72.39it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 85%|      | 107/126 [00:01<00:00, 72.81it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 86%|      | 108/126 [00:01<00:00, 73.23it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 87%|      | 109/126 [00:01<00:00, 73.66it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 87%|      | 110/126 [00:01<00:00, 74.08it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 88%|      | 111/126 [00:01<00:00, 74.51it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 89%|      | 112/126 [00:01<00:00, 74.95it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 90%|      | 113/126 [00:01<00:00, 75.38it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 90%|      | 114/126 [00:01<00:00, 75.82it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 91%|      | 115/126 [00:01<00:00, 76.25it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 92%|      | 116/126 [00:01<00:00, 76.69it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 93%|      | 117/126 [00:01<00:00, 77.13it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 94%|      | 118/126 [00:01<00:00, 77.58it/s, loss=0.0047,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.64it/s]
Epoch 40: 94%|      | 119/126 [00:01<00:00, 78.01it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 95%|      | 120/126 [00:01<00:00, 78.45it/s, loss=0.0047,
v_num=4.31e+7]

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Epoch 40: 96%|      | 121/126 [00:01<00:00, 78.90it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 97%|      | 122/126 [00:01<00:00, 79.35it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 98%|      | 123/126 [00:01<00:00, 79.83it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 80.30it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 80.78it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 81.27it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|     | 126/126 [00:01<00:00, 79.62it/s, loss=0.0047,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 79.49it/s, loss=0.0047,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 78.22it/s, loss=0.00475,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 68.33it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 68.49it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 68.97it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 69.46it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 69.94it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 70.42it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 70.90it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 71.39it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 87%|      | 109/126 [00:01<00:00, 71.86it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 72.34it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 72.82it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 73.29it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 73.76it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 74.23it/s, loss=0.00475,

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v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 74.70it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 75.17it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 75.63it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 76.10it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 76.56it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 77.01it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 77.47it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 77.93it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 78.41it/s, loss=0.00475,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.14it/s]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 78.88it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 79.36it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.84it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 78.39it/s, loss=0.00475,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 78.26it/s, loss=0.00475,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 67.78it/s, loss=0.00407,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 60.48it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 60.72it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 61.11it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 61.51it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 61.90it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 62.30it/s, loss=0.00407,
v_num=4.31e+7]

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Epoch 42: 85%|      | 107/126 [00:01<00:00, 62.70it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 63.10it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 63.50it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 63.90it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 64.29it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 64.69it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 65.09it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 65.50it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 65.90it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 66.31it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 66.71it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 67.12it/s, loss=0.00407,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.73it/s]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 67.51it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 67.92it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 68.33it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 68.74it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 69.17it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 69.60it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 70.03it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 70.46it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 69.34it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 69.24it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 78.71it/s, loss=0.00434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|          | 101/126 [00:01<00:00, 68.34it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 81%|          | 102/126 [00:01<00:00, 68.49it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 82%|          | 103/126 [00:01<00:00, 68.98it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 83%|          | 104/126 [00:01<00:00, 69.47it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 83%|          | 105/126 [00:01<00:00, 69.94it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 84%|          | 106/126 [00:01<00:00, 70.43it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 85%|          | 107/126 [00:01<00:00, 70.91it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 86%|          | 108/126 [00:01<00:00, 71.39it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 87%|          | 109/126 [00:01<00:00, 71.87it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 87%|          | 110/126 [00:01<00:00, 72.35it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 88%|          | 111/126 [00:01<00:00, 72.82it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 89%|          | 112/126 [00:01<00:00, 73.30it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 90%|          | 113/126 [00:01<00:00, 73.77it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 90%|          | 114/126 [00:01<00:00, 74.24it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 91%|          | 115/126 [00:01<00:00, 74.71it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 92%|          | 116/126 [00:01<00:00, 75.18it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 93%|          | 117/126 [00:01<00:00, 75.64it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 94%|          | 118/126 [00:01<00:00, 76.11it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 94%|          | 119/126 [00:01<00:00, 76.57it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 95%|          | 120/126 [00:01<00:00, 77.03it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 96%|          | 121/126 [00:01<00:00, 77.48it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 97%|          | 122/126 [00:01<00:00, 77.95it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 98%|          | 123/126 [00:01<00:00, 78.42it/s, loss=0.00434,
v_num=4.31e+7]

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Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.73it/s]
Epoch 43: 98%|      | 124/126 [00:01<00:00, 78.90it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 99%|      | 125/126 [00:01<00:00, 79.38it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 79.86it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|     | 126/126 [00:01<00:00, 78.29it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 78.18it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 68.27it/s, loss=0.00457,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|      | 101/126 [00:01<00:00, 60.24it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 81%|      | 102/126 [00:01<00:00, 60.42it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 82%|      | 103/126 [00:01<00:00, 60.80it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 83%|      | 104/126 [00:01<00:00, 61.18it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 83%|      | 105/126 [00:01<00:00, 61.55it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 84%|      | 106/126 [00:01<00:00, 61.82it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 85%|      | 107/126 [00:01<00:00, 62.18it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 86%|      | 108/126 [00:01<00:00, 62.57it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 87%|      | 109/126 [00:01<00:00, 62.96it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 87%|      | 110/126 [00:01<00:00, 63.35it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 88%|      | 111/126 [00:01<00:00, 63.75it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 89%|      | 112/126 [00:01<00:00, 64.15it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 90%|      | 113/126 [00:01<00:00, 64.54it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 90%|      | 114/126 [00:01<00:00, 64.95it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 91%|      | 115/126 [00:01<00:00, 65.35it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 92%|      | 116/126 [00:01<00:00, 65.76it/s, loss=0.00457,
v_num=4.31e+7]

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Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 163.85it/s]
Epoch 44: 93%|          | 117/126 [00:01<00:00, 66.16it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 94%|          | 118/126 [00:01<00:00, 66.57it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 94%|          | 119/126 [00:01<00:00, 66.97it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 95%|          | 120/126 [00:01<00:00, 67.38it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 96%|          | 121/126 [00:01<00:00, 67.78it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 97%|          | 122/126 [00:01<00:00, 68.19it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 98%|          | 123/126 [00:01<00:00, 68.62it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 98%|          | 124/126 [00:01<00:00, 69.05it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 99%|          | 125/126 [00:01<00:00, 69.48it/s, loss=0.00457,
v_num=4.31e+7]
Epoch 44: 100%|         | 126/126 [00:01<00:00, 69.91it/s, loss=0.00457,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|         | 126/126 [00:01<00:00, 68.81it/s, loss=0.00457,
v_num=4.31e+7]

Epoch 44: 100%|         | 126/126 [00:01<00:00, 68.70it/s, loss=0.00457,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 79%|          | 100/126 [00:01<00:00, 74.86it/s, loss=0.00403,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|          | 101/126 [00:01<00:00, 65.38it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 81%|          | 102/126 [00:01<00:00, 65.57it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 82%|          | 103/126 [00:01<00:00, 66.04it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 83%|          | 104/126 [00:01<00:00, 66.52it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 83%|          | 105/126 [00:01<00:00, 66.98it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 84%|          | 106/126 [00:01<00:00, 67.45it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 85%|          | 107/126 [00:01<00:00, 67.91it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 86%|          | 108/126 [00:01<00:00, 68.38it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 87%|          | 109/126 [00:01<00:00, 68.84it/s, loss=0.00403,

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v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 69.30it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 69.76it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 70.22it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 70.68it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 71.14it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 71.59it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 72.04it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 72.49it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 72.94it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 73.39it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 73.83it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 74.28it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 74.72it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 75.19it/s, loss=0.00403,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 232.82it/s]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 75.65it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 76.11it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 76.57it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 75.21it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 75.09it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 77.56it/s, loss=0.00447,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 68.88it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 68.99it/s, loss=0.00447,

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v_num=4.31e+7]
Epoch 46: 82%| | 103/126 [00:01<00:00, 69.51it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 83%| | 104/126 [00:01<00:00, 70.02it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 83%| | 105/126 [00:01<00:00, 70.52it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 84%| | 106/126 [00:01<00:00, 71.04it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 85%| | 107/126 [00:01<00:00, 71.56it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 86%| | 108/126 [00:01<00:00, 72.06it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 87%| | 109/126 [00:01<00:00, 72.57it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 87%| | 110/126 [00:01<00:00, 73.08it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 88%| | 111/126 [00:01<00:00, 73.58it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 89%| | 112/126 [00:01<00:00, 74.09it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 90%| | 113/126 [00:01<00:00, 74.59it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 90%| | 114/126 [00:01<00:00, 75.09it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 91%| | 115/126 [00:01<00:00, 75.58it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 92%| | 116/126 [00:01<00:00, 76.08it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 93%| | 117/126 [00:01<00:00, 76.58it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 94%| | 118/126 [00:01<00:00, 77.07it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 94%| | 119/126 [00:01<00:00, 77.55it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 95%| | 120/126 [00:01<00:00, 78.04it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 96%| | 121/126 [00:01<00:00, 78.53it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 97%| | 122/126 [00:01<00:00, 79.02it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 98%| | 123/126 [00:01<00:00, 79.54it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 98%| | 124/126 [00:01<00:00, 80.06it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 99%| | 125/126 [00:01<00:00, 80.57it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 100%| | 126/126 [00:01<00:00, 81.09it/s, loss=0.00447,

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v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|      | 126/126 [00:01<00:00, 79.68it/s, loss=0.00447,
v_num=4.31e+7]
Epoch 46: 100%|      | 126/126 [00:01<00:00, 79.56it/s, loss=0.00447,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 77.37it/s, loss=0.00394,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 68.11it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 68.16it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 82%|      | 103/126 [00:01<00:00, 68.64it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 83%|      | 104/126 [00:01<00:00, 69.12it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 83%|      | 105/126 [00:01<00:00, 69.60it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 84%|      | 106/126 [00:01<00:00, 70.08it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 85%|      | 107/126 [00:01<00:00, 70.56it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 86%|      | 108/126 [00:01<00:00, 71.03it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 87%|      | 109/126 [00:01<00:00, 71.51it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 87%|      | 110/126 [00:01<00:00, 71.98it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 88%|      | 111/126 [00:01<00:00, 72.44it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 89%|      | 112/126 [00:01<00:00, 72.91it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 90%|      | 113/126 [00:01<00:00, 73.37it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 90%|      | 114/126 [00:01<00:00, 73.84it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 91%|      | 115/126 [00:01<00:00, 74.30it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 92%|      | 116/126 [00:01<00:00, 74.76it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 93%|      | 117/126 [00:01<00:00, 75.21it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 94%|      | 118/126 [00:01<00:00, 75.67it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 94%|      | 119/126 [00:01<00:00, 76.12it/s, loss=0.00394,
v_num=4.31e+7]

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Epoch 47: 95%|      | 120/126 [00:01<00:00, 76.57it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 96%|      | 121/126 [00:01<00:00, 77.01it/s, loss=0.00394,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.09it/s]
Epoch 47: 97%|      | 122/126 [00:01<00:00, 77.46it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 77.93it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 78.40it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 78.87it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 79.34it/s, loss=0.00394,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 77.83it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 77.69it/s, loss=0.00394,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 77.96it/s, loss=0.00374,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 69.54it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 69.82it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 70.32it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 70.81it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 71.30it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 71.80it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 72.31it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 72.80it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 73.30it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 73.79it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 74.29it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 89%|      | 112/126 [00:01<00:00, 74.79it/s, loss=0.00374,

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v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 75.29it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 75.79it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 76.28it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 76.78it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 77.27it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 77.76it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 78.24it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 78.73it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 79.22it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 79.72it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 80.23it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 80.76it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 81.28it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 81.81it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 80.39it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 80.27it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 70.00it/s, loss=0.00481,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 62.61it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 62.58it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 62.92it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 63.27it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 63.62it/s, loss=0.00481,
v_num=4.31e+7]

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Epoch 49: 84%|      | 106/126 [00:01<00:00, 63.99it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 64.35it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 64.72it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 65.10it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 65.48it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 65.86it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 66.24it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 66.51it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 66.88it/s, loss=0.00481,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 144.14it/s]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 67.26it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 67.65it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 68.04it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 68.43it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 68.82it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 69.21it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 69.61it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 70.00it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 70.41it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 70.83it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 71.24it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 71.65it/s, loss=0.00481,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 70.41it/s, loss=0.00481,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 70.31it/s, loss=0.00481,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 74.11it/s, loss=0.00435,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|          | 101/126 [00:01<00:00, 66.07it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 81%|          | 102/126 [00:01<00:00, 66.22it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 82%|          | 103/126 [00:01<00:00, 66.73it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 83%|          | 104/126 [00:01<00:00, 67.21it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 83%|          | 105/126 [00:01<00:00, 67.70it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 84%|          | 106/126 [00:01<00:00, 68.19it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 85%|          | 107/126 [00:01<00:00, 68.70it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 86%|          | 108/126 [00:01<00:00, 69.18it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 87%|          | 109/126 [00:01<00:00, 69.69it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 87%|          | 110/126 [00:01<00:00, 70.16it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 88%|          | 111/126 [00:01<00:00, 70.67it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 89%|          | 112/126 [00:01<00:00, 71.14it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 90%|          | 113/126 [00:01<00:00, 71.63it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 90%|          | 114/126 [00:01<00:00, 72.10it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 91%|          | 115/126 [00:01<00:00, 72.58it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 92%|          | 116/126 [00:01<00:00, 73.06it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 93%|          | 117/126 [00:01<00:00, 73.54it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 94%|          | 118/126 [00:01<00:00, 74.02it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 94%|          | 119/126 [00:01<00:00, 74.49it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 95%|          | 120/126 [00:01<00:00, 74.97it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 96%|          | 121/126 [00:01<00:00, 75.44it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 97%|          | 122/126 [00:01<00:00, 75.91it/s, loss=0.00435,
v_num=4.31e+7]

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Epoch 50: 98%|      | 123/126 [00:01<00:00, 76.41it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 76.91it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 77.41it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 77.90it/s, loss=0.00435,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|     | 126/126 [00:01<00:00, 76.63it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 50: 100%|     | 126/126 [00:01<00:00, 76.53it/s, loss=0.00435,
v_num=4.31e+7]Mapping latent space...

Epoch 51: 79%|      | 100/126 [00:01<00:00, 79.68it/s, loss=0.00417,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 70.02it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 69.97it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 70.51it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 71.02it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 71.55it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 72.05it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 72.58it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 73.09it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 73.62it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 74.11it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 74.64it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 75.13it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 75.66it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 76.14it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 76.66it/s, loss=0.00417,
v_num=4.31e+7]

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Epoch 51: 92%|      | 116/126 [00:01<00:00, 77.15it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 77.66it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 78.15it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 78.66it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 79.13it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 79.64it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 80.13it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 80.65it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 81.17it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 81.69it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 82.21it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 80.72it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 80.60it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 77.06it/s, loss=0.00466,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 68.69it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 68.97it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 69.39it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 69.81it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 70.23it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 70.66it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 71.09it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 71.52it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 71.95it/s, loss=0.00466,

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v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 72.37it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 72.79it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 73.22it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 73.64it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 74.08it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 74.51it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 74.95it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 75.38it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 75.82it/s, loss=0.00466,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.16it/s]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 76.26it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 76.70it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 77.14it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 77.58it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 78.05it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 78.51it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 78.98it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 79.45it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 77.63it/s, loss=0.00466,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 77.51it/s, loss=0.00466,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 69.00it/s, loss=0.00427,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 62.12it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 62.25it/s, loss=0.00427,

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v_num=4.31e+7]
Epoch 53: 82%| | 103/126 [00:01<00:00, 62.74it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 83%| | 104/126 [00:01<00:00, 63.20it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 83%| | 105/126 [00:01<00:00, 63.68it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 84%| | 106/126 [00:01<00:00, 64.15it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 85%| | 107/126 [00:01<00:00, 64.63it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 86%| | 108/126 [00:01<00:00, 65.11it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 87%| | 109/126 [00:01<00:00, 65.58it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 87%| | 110/126 [00:01<00:00, 66.05it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 88%| | 111/126 [00:01<00:00, 66.53it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 89%| | 112/126 [00:01<00:00, 66.99it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 90%| | 113/126 [00:01<00:00, 67.47it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 90%| | 114/126 [00:01<00:00, 67.93it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 91%| | 115/126 [00:01<00:00, 68.41it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 92%| | 116/126 [00:01<00:00, 68.86it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 93%| | 117/126 [00:01<00:00, 69.33it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 94%| | 118/126 [00:01<00:00, 69.79it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 94%| | 119/126 [00:01<00:00, 70.26it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 95%| | 120/126 [00:01<00:00, 70.71it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 96%| | 121/126 [00:01<00:00, 71.17it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 97%| | 122/126 [00:01<00:00, 71.63it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 98%| | 123/126 [00:01<00:00, 72.11it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 98%| | 124/126 [00:01<00:00, 72.58it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 99%| | 125/126 [00:01<00:00, 73.06it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 100%| | 126/126 [00:01<00:00, 73.53it/s, loss=0.00427,

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v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|      | 126/126 [00:01<00:00, 72.43it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 53: 100%|      | 126/126 [00:01<00:00, 72.34it/s, loss=0.00427,
v_num=4.31e+7]Mapping latent space...
Epoch 54:  79%|      | 100/126 [00:01<00:00, 75.88it/s, loss=0.00423,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54:  80%|      | 101/126 [00:01<00:00, 66.77it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  81%|      | 102/126 [00:01<00:00, 66.90it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  82%|      | 103/126 [00:01<00:00, 67.35it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  83%|      | 104/126 [00:01<00:00, 67.80it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  83%|      | 105/126 [00:01<00:00, 68.24it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  84%|      | 106/126 [00:01<00:00, 68.69it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  85%|      | 107/126 [00:01<00:00, 69.14it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  86%|      | 108/126 [00:01<00:00, 69.59it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  87%|      | 109/126 [00:01<00:00, 70.04it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  87%|      | 110/126 [00:01<00:00, 70.48it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  88%|      | 111/126 [00:01<00:00, 70.92it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  89%|      | 112/126 [00:01<00:00, 71.36it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  90%|      | 113/126 [00:01<00:00, 71.80it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  90%|      | 114/126 [00:01<00:00, 72.24it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  91%|      | 115/126 [00:01<00:00, 72.66it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  92%|      | 116/126 [00:01<00:00, 73.09it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  93%|      | 117/126 [00:01<00:00, 73.52it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  94%|      | 118/126 [00:01<00:00, 73.95it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54:  94%|      | 119/126 [00:01<00:00, 74.37it/s, loss=0.00423,
v_num=4.31e+7]

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Validation DataLoader 0: 77%|          | 20/26 [00:00<00:00, 197.17it/s]
Epoch 54: 95%|          | 120/126 [00:01<00:00, 74.79it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 96%|          | 121/126 [00:01<00:00, 75.20it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 97%|          | 122/126 [00:01<00:00, 75.62it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 98%|          | 123/126 [00:01<00:00, 76.05it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 98%|          | 124/126 [00:01<00:00, 76.49it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 99%|          | 125/126 [00:01<00:00, 76.92it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 100%|         | 126/126 [00:01<00:00, 77.36it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|         | 126/126 [00:01<00:00, 75.87it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 54: 100%|         | 126/126 [00:01<00:00, 75.75it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|          | 100/126 [00:01<00:00, 70.61it/s, loss=0.00474,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|          | 101/126 [00:01<00:00, 62.50it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 81%|          | 102/126 [00:01<00:00, 62.70it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 82%|          | 103/126 [00:01<00:00, 63.15it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 83%|          | 104/126 [00:01<00:00, 63.61it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 83%|          | 105/126 [00:01<00:00, 64.06it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 84%|          | 106/126 [00:01<00:00, 64.52it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 85%|          | 107/126 [00:01<00:00, 64.97it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 86%|          | 108/126 [00:01<00:00, 65.42it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 87%|          | 109/126 [00:01<00:00, 65.87it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 87%|          | 110/126 [00:01<00:00, 66.33it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 88%|          | 111/126 [00:01<00:00, 66.78it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 89%|          | 112/126 [00:01<00:00, 67.23it/s, loss=0.00474,
v_num=4.31e+7]

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Epoch 55: 90%|      | 113/126 [00:01<00:00, 67.67it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 68.12it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 68.56it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 69.01it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 69.44it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 69.88it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 70.31it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 70.75it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 71.18it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 71.62it/s, loss=0.00474,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 229.24it/s]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 72.06it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 72.51it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 72.96it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 73.41it/s, loss=0.00474,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 72.11it/s, loss=0.00474,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 72.00it/s, loss=0.00474,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 67.11it/s, loss=0.00442,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 60.75it/s, loss=0.00442,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 60.97it/s, loss=0.00442,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 61.45it/s, loss=0.00442,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 61.92it/s, loss=0.00442,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 62.40it/s, loss=0.00442,
v_num=4.31e+7]

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Epoch 56: 84%| | 106/126 [00:01<00:00, 62.86it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 85%| | 107/126 [00:01<00:00, 63.34it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 86%| | 108/126 [00:01<00:00, 63.80it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 87%| | 109/126 [00:01<00:00, 64.28it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 87%| | 110/126 [00:01<00:00, 64.74it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 88%| | 111/126 [00:01<00:00, 65.21it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 89%| | 112/126 [00:01<00:00, 65.67it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 90%| | 113/126 [00:01<00:00, 66.14it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 90%| | 114/126 [00:01<00:00, 66.60it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 91%| | 115/126 [00:01<00:00, 67.06it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 92%| | 116/126 [00:01<00:00, 67.51it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 93%| | 117/126 [00:01<00:00, 67.98it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 94%| | 118/126 [00:01<00:00, 68.43it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 94%| | 119/126 [00:01<00:00, 68.89it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 95%| | 120/126 [00:01<00:00, 69.33it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 96%| | 121/126 [00:01<00:00, 69.79it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 97%| | 122/126 [00:01<00:00, 70.24it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 98%| | 123/126 [00:01<00:00, 70.71it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 98%| | 124/126 [00:01<00:00, 71.18it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 99%| | 125/126 [00:01<00:00, 71.65it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 100%| | 126/126 [00:01<00:00, 72.12it/s, loss=0.00442, v_num=4.31e+7] Mapping latent space..
Epoch 56: 100%| | 126/126 [00:01<00:00, 70.95it/s, loss=0.00442, v_num=4.31e+7]
Epoch 56: 100%| | 126/126 [00:01<00:00, 70.86it/s, loss=0.00442, v_num=4.31e+7] Mapping latent space..
Epoch 57: 79%| | 100/126 [00:01<00:00, 79.82it/s, loss=0.00424,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|          | 101/126 [00:01<00:00, 69.77it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 81%|          | 102/126 [00:01<00:00, 69.82it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 82%|          | 103/126 [00:01<00:00, 70.31it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 83%|          | 104/126 [00:01<00:00, 70.79it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 83%|          | 105/126 [00:01<00:00, 71.26it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 84%|          | 106/126 [00:01<00:00, 71.75it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 85%|          | 107/126 [00:01<00:00, 72.23it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 86%|          | 108/126 [00:01<00:00, 72.70it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 87%|          | 109/126 [00:01<00:00, 73.18it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 87%|          | 110/126 [00:01<00:00, 73.65it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 88%|          | 111/126 [00:01<00:00, 74.12it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 89%|          | 112/126 [00:01<00:00, 74.59it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 90%|          | 113/126 [00:01<00:00, 75.06it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 90%|          | 114/126 [00:01<00:00, 75.53it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 91%|          | 115/126 [00:01<00:00, 76.00it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 92%|          | 116/126 [00:01<00:00, 76.46it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 93%|          | 117/126 [00:01<00:00, 76.92it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 94%|          | 118/126 [00:01<00:00, 77.37it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 94%|          | 119/126 [00:01<00:00, 77.83it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 95%|          | 120/126 [00:01<00:00, 78.28it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 96%|          | 121/126 [00:01<00:00, 78.73it/s, loss=0.00424,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 213.74it/s]
Epoch 57: 97%|          | 122/126 [00:01<00:00, 79.18it/s, loss=0.00424,

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v_num=4.31e+7]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 79.66it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 80.14it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 80.61it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 81.09it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 79.64it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 79.51it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 71.35it/s, loss=0.00479,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 62.39it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 62.81it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 63.23it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 63.65it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 64.08it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 64.50it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 64.93it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 65.37it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 65.80it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 66.23it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 66.66it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 67.09it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 67.52it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 67.95it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 68.38it/s, loss=0.00479,
v_num=4.31e+7]

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Epoch 58: 92%|      | 116/126 [00:01<00:00, 68.81it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 93%|      | 117/126 [00:01<00:00, 69.24it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 69.67it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 70.10it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 70.53it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 70.95it/s, loss=0.00479,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.42it/s]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 71.37it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 71.82it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 72.26it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 72.71it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 73.15it/s, loss=0.00479,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.93it/s, loss=0.00479,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.81it/s, loss=0.00479,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 72.56it/s, loss=0.00419,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 64.69it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 64.59it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 65.08it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 65.57it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 65.93it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 84%|      | 106/126 [00:01<00:00, 66.40it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 85%|      | 107/126 [00:01<00:00, 66.89it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 86%|      | 108/126 [00:01<00:00, 67.38it/s, loss=0.00419,
v_num=4.31e+7]

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Epoch 59: 87%|      | 109/126 [00:01<00:00, 67.87it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 87%|      | 110/126 [00:01<00:00, 68.35it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 68.83it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 69.31it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 69.79it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 70.27it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 70.74it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 71.21it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 71.69it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 72.16it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 72.63it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 73.10it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 73.56it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 74.04it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 74.52it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 75.01it/s, loss=0.00419,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.29it/s]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 75.49it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 75.98it/s, loss=0.00419,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 74.70it/s, loss=0.00419,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 74.60it/s, loss=0.00419,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 79.07it/s, loss=0.0038,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 69.07it/s, loss=0.0038,

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v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 69.08it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 69.60it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 83%|      | 104/126 [00:01<00:00, 70.12it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 83%|      | 105/126 [00:01<00:00, 70.64it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 84%|      | 106/126 [00:01<00:00, 71.15it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 85%|      | 107/126 [00:01<00:00, 71.67it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 86%|      | 108/126 [00:01<00:00, 72.17it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 87%|      | 109/126 [00:01<00:00, 72.69it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 87%|      | 110/126 [00:01<00:00, 73.19it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 88%|      | 111/126 [00:01<00:00, 73.71it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 89%|      | 112/126 [00:01<00:00, 74.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 90%|      | 113/126 [00:01<00:00, 74.71it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 90%|      | 114/126 [00:01<00:00, 75.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 91%|      | 115/126 [00:01<00:00, 75.72it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 92%|      | 116/126 [00:01<00:00, 76.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 93%|      | 117/126 [00:01<00:00, 76.71it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 94%|      | 118/126 [00:01<00:00, 77.19it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 94%|      | 119/126 [00:01<00:00, 77.69it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 95%|      | 120/126 [00:01<00:00, 78.17it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 96%|      | 121/126 [00:01<00:00, 78.66it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 97%|      | 122/126 [00:01<00:00, 79.15it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 98%|      | 123/126 [00:01<00:00, 79.66it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 80.17it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 80.68it/s, loss=0.0038,

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v_num=4.31e+7]
Epoch 60: 100%|      | 126/126 [00:01<00:00, 81.20it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|      | 126/126 [00:01<00:00, 79.79it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 60: 100%|      | 126/126 [00:01<00:00, 79.68it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|       | 100/126 [00:01<00:00, 79.68it/s, loss=0.0038,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|       | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|       | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 69.71it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 69.74it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 70.28it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 70.79it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 71.32it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 71.83it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 72.37it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 72.87it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 73.41it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 73.91it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 74.41it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 74.89it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 75.42it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 75.91it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 76.43it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 76.92it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 77.44it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 77.93it/s, loss=0.0038,
v_num=4.31e+7]

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Epoch 61: 94%|      | 119/126 [00:01<00:00, 78.43it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 78.91it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 79.41it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 79.90it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 80.42it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 80.93it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 81.45it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 81.97it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 80.52it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 80.40it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 81.69it/s, loss=0.00428,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 71.72it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 71.57it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 72.13it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 72.64it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 73.18it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 73.70it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 74.25it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 74.76it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 75.31it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 75.82it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 76.36it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 76.87it/s, loss=0.00428,

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v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 77.40it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 77.91it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 78.43it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 78.93it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 79.46it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 79.96it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 80.48it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 80.97it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 81.47it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 81.97it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 82.50it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 83.02it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 83.55it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 84.08it/s, loss=0.00428,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 82.61it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 82.49it/s, loss=0.00428,
v_num=4.31e+7]Mapping latent space...

Epoch 63: 79%|      | 100/126 [00:01<00:00, 70.31it/s, loss=0.00407,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 61.90it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 61.94it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 62.39it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 62.83it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 83%|      | 105/126 [00:01<00:00, 63.27it/s, loss=0.00407,

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v_num=4.31e+7]
Epoch 63: 84%|      | 106/126 [00:01<00:00, 63.71it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 85%|      | 107/126 [00:01<00:00, 64.16it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 86%|      | 108/126 [00:01<00:00, 64.59it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 87%|      | 109/126 [00:01<00:00, 65.03it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 87%|      | 110/126 [00:01<00:00, 65.47it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 88%|      | 111/126 [00:01<00:00, 65.91it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 89%|      | 112/126 [00:01<00:00, 66.34it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 90%|      | 113/126 [00:01<00:00, 66.78it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 90%|      | 114/126 [00:01<00:00, 67.20it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 91%|      | 115/126 [00:01<00:00, 67.64it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 92%|      | 116/126 [00:01<00:00, 68.06it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 93%|      | 117/126 [00:01<00:00, 68.49it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 94%|      | 118/126 [00:01<00:00, 68.92it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 94%|      | 119/126 [00:01<00:00, 69.34it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 95%|      | 120/126 [00:01<00:00, 69.77it/s, loss=0.00407,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.83it/s]
Epoch 63: 96%|      | 121/126 [00:01<00:00, 70.18it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 97%|      | 122/126 [00:01<00:00, 70.61it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 71.05it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 71.50it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 71.94it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 72.39it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 71.20it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 71.11it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...

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Epoch 64: 79%|          | 100/126 [00:01<00:00, 77.42it/s, loss=0.00417,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|          | 101/126 [00:01<00:00, 69.50it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 81%|          | 102/126 [00:01<00:00, 69.34it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 82%|          | 103/126 [00:01<00:00, 69.76it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 83%|          | 104/126 [00:01<00:00, 70.16it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 83%|          | 105/126 [00:01<00:00, 70.57it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 84%|          | 106/126 [00:01<00:00, 71.01it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 85%|          | 107/126 [00:01<00:00, 71.45it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 86%|          | 108/126 [00:01<00:00, 71.88it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 87%|          | 109/126 [00:01<00:00, 72.32it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 87%|          | 110/126 [00:01<00:00, 72.75it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 88%|          | 111/126 [00:01<00:00, 73.19it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 89%|          | 112/126 [00:01<00:00, 73.62it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 90%|          | 113/126 [00:01<00:00, 74.06it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 90%|          | 114/126 [00:01<00:00, 74.50it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 91%|          | 115/126 [00:01<00:00, 74.94it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 92%|          | 116/126 [00:01<00:00, 75.38it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 93%|          | 117/126 [00:01<00:00, 75.82it/s, loss=0.00417,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 177.57it/s]
Epoch 64: 94%|          | 118/126 [00:01<00:00, 76.25it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 94%|          | 119/126 [00:01<00:00, 76.69it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 95%|          | 120/126 [00:01<00:00, 77.12it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 96%|          | 121/126 [00:01<00:00, 77.56it/s, loss=0.00417,
v_num=4.31e+7]

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Epoch 64: 97%|      | 122/126 [00:01<00:00, 78.00it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 98%|      | 123/126 [00:01<00:00, 78.46it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 78.93it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 79.39it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 79.86it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.68it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 77.54it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 70.81it/s, loss=0.00448,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 62.08it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 62.05it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 62.50it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 62.95it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 63.39it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 63.81it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 64.16it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 64.61it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 65.05it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 65.49it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 65.94it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 66.38it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 66.81it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 67.25it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 67.70it/s, loss=0.00448,

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v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 68.12it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 93%|      | 117/126 [00:01<00:00, 68.56it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 68.99it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 69.42it/s, loss=0.00448,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.29it/s]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 69.84it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 96%|      | 121/126 [00:01<00:00, 70.26it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 70.69it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 71.13it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 71.57it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 72.02it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 72.46it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 70.87it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 70.70it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...

Epoch 66: 79%|      | 100/126 [00:01<00:00, 71.77it/s, loss=0.00408,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 63.04it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 62.97it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 63.43it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 63.88it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 83%|      | 105/126 [00:01<00:00, 64.34it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 64.79it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 65.25it/s, loss=0.00408,
v_num=4.31e+7]

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Epoch 66: 86%|      | 108/126 [00:01<00:00, 65.68it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 66.14it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 66.58it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 67.03it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 67.48it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 67.92it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 90%|      | 114/126 [00:01<00:00, 68.36it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 68.81it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 69.24it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 69.68it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 70.12it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 70.56it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 70.98it/s, loss=0.00408,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.04it/s]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 71.41it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 71.85it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 72.30it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 72.75it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 73.20it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 73.64it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 72.14it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 71.95it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|      | 100/126 [00:01<00:00, 79.49it/s, loss=0.00422,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 67: 80%	101/126 [00:01<00:00, 70.01it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 81%	102/126 [00:01<00:00, 69.99it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 82%	103/126 [00:01<00:00, 70.51it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 83%	104/126 [00:01<00:00, 71.03it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 83%	105/126 [00:01<00:00, 71.56it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 84%	106/126 [00:01<00:00, 72.07it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 85%	107/126 [00:01<00:00, 72.60it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 86%	108/126 [00:01<00:00, 73.10it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 87%	109/126 [00:01<00:00, 73.62it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 87%	110/126 [00:01<00:00, 74.09it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 88%	111/126 [00:01<00:00, 74.62it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 89%	112/126 [00:01<00:00, 75.12it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 90%	113/126 [00:01<00:00, 75.64it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 90%	114/126 [00:01<00:00, 76.13it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 91%	115/126 [00:01<00:00, 76.65it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 92%	116/126 [00:01<00:00, 77.15it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 93%	117/126 [00:01<00:00, 77.66it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 94%	118/126 [00:01<00:00, 78.16it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 94%	119/126 [00:01<00:00, 78.67it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 95%	120/126 [00:01<00:00, 79.15it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 96%	121/126 [00:01<00:00, 79.66it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 97%	122/126 [00:01<00:00, 80.15it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 98%	123/126 [00:01<00:00, 80.68it/s, loss=0.00422,
v_num=4.31e+7]	
Epoch 67: 98%	124/126 [00:01<00:00, 81.20it/s, loss=0.00422,
v_num=4.31e+7]	


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Epoch 67: 99%|      | 125/126 [00:01<00:00, 81.73it/s, loss=0.00422,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 82.25it/s, loss=0.00422,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|     | 126/126 [00:01<00:00, 80.85it/s, loss=0.00422,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 80.74it/s, loss=0.00422,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 81.54it/s, loss=0.00472,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|      | 101/126 [00:01<00:00, 71.67it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 81%|      | 102/126 [00:01<00:00, 71.94it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 82%|      | 103/126 [00:01<00:00, 72.43it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 83%|      | 104/126 [00:01<00:00, 72.76it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 83%|      | 105/126 [00:01<00:00, 73.21it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 84%|      | 106/126 [00:01<00:00, 73.70it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 85%|      | 107/126 [00:01<00:00, 74.19it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 86%|      | 108/126 [00:01<00:00, 74.69it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 87%|      | 109/126 [00:01<00:00, 75.18it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 87%|      | 110/126 [00:01<00:00, 75.67it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 88%|      | 111/126 [00:01<00:00, 76.15it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 89%|      | 112/126 [00:01<00:00, 76.61it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 90%|      | 113/126 [00:01<00:00, 77.09it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 90%|      | 114/126 [00:01<00:00, 77.57it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 91%|      | 115/126 [00:01<00:00, 78.05it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 92%|      | 116/126 [00:01<00:00, 78.52it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 93%|      | 117/126 [00:01<00:00, 78.99it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 94%|      | 118/126 [00:01<00:00, 79.46it/s, loss=0.00472,

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v_num=4.31e+7]
Epoch 68: 94%|      | 119/126 [00:01<00:00, 79.93it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 80.40it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 80.86it/s, loss=0.00472,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.17it/s]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 81.32it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 81.81it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 82.30it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 82.79it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 83.28it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|     | 126/126 [00:01<00:00, 81.66it/s, loss=0.00472,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 81.52it/s, loss=0.00472,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 78.51it/s, loss=0.00378,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 68.39it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 68.49it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 68.97it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 69.46it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 69.94it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 70.42it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 70.91it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 71.39it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 71.86it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 72.34it/s, loss=0.00378,
v_num=4.31e+7]

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Epoch 69: 88%|      | 111/126 [00:01<00:00, 72.80it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 73.27it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 73.74it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 74.18it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 74.64it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 75.10it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 75.56it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 76.02it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 76.48it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 76.93it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 77.38it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 77.84it/s, loss=0.00378,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.54it/s]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 78.32it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 78.79it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 79.27it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 79.74it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 78.27it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 78.14it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 65.05it/s, loss=0.00432,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 58.13it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 58.49it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 58.91it/s, loss=0.00432,
v_num=4.31e+7]

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Epoch 70: 83%|      | 104/126 [00:01<00:00, 59.33it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 83%|      | 105/126 [00:01<00:00, 59.74it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 84%|      | 106/126 [00:01<00:00, 60.15it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 85%|      | 107/126 [00:01<00:00, 60.57it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 86%|      | 108/126 [00:01<00:00, 60.98it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 87%|      | 109/126 [00:01<00:00, 61.39it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 87%|      | 110/126 [00:01<00:00, 61.81it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 88%|      | 111/126 [00:01<00:00, 62.20it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 89%|      | 112/126 [00:01<00:00, 62.61it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 90%|      | 113/126 [00:01<00:00, 63.01it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 90%|      | 114/126 [00:01<00:00, 63.42it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 91%|      | 115/126 [00:01<00:00, 63.82it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 92%|      | 116/126 [00:01<00:00, 64.21it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 93%|      | 117/126 [00:01<00:00, 64.61it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 94%|      | 118/126 [00:01<00:00, 65.00it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 94%|      | 119/126 [00:01<00:00, 65.40it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 95%|      | 120/126 [00:01<00:00, 65.79it/s, loss=0.00432,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.44it/s]
Epoch 70: 96%|      | 121/126 [00:01<00:00, 66.18it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 97%|      | 122/126 [00:01<00:00, 66.57it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 66.97it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 67.37it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 67.77it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 68.17it/s, loss=0.00432,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 67.06it/s, loss=0.00432,

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v_num=4.31e+7]
Epoch 70: 100%|      | 126/126 [00:01<00:00, 66.96it/s, loss=0.00432,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 77.83it/s, loss=0.00361,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 67.91it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 67.83it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 82%|      | 103/126 [00:01<00:00, 68.31it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 83%|      | 104/126 [00:01<00:00, 68.80it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 83%|      | 105/126 [00:01<00:00, 69.30it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 84%|      | 106/126 [00:01<00:00, 69.79it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 85%|      | 107/126 [00:01<00:00, 70.29it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 86%|      | 108/126 [00:01<00:00, 70.77it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 87%|      | 109/126 [00:01<00:00, 71.27it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 87%|      | 110/126 [00:01<00:00, 71.76it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 88%|      | 111/126 [00:01<00:00, 72.25it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 89%|      | 112/126 [00:01<00:00, 72.73it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 90%|      | 113/126 [00:01<00:00, 73.21it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 90%|      | 114/126 [00:01<00:00, 73.69it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 91%|      | 115/126 [00:01<00:00, 74.18it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 92%|      | 116/126 [00:01<00:00, 74.66it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 93%|      | 117/126 [00:01<00:00, 75.15it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 94%|      | 118/126 [00:01<00:00, 75.60it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 94%|      | 119/126 [00:01<00:00, 76.08it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 95%|      | 120/126 [00:01<00:00, 76.55it/s, loss=0.00361,
v_num=4.31e+7]

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Epoch 71: 96%|      | 121/126 [00:01<00:00, 77.03it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 97%|      | 122/126 [00:01<00:00, 77.52it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 78.02it/s, loss=0.00361,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.54it/s]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 78.52it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 79.02it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 79.53it/s, loss=0.00361,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 78.16it/s, loss=0.00361,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 78.06it/s, loss=0.00361,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 75.46it/s, loss=0.00416,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 66.77it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 66.95it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 67.48it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 67.96it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 68.47it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 68.95it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 69.47it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 69.94it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 70.46it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 70.93it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 71.45it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 71.92it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 72.42it/s, loss=0.00416,

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v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 72.90it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 73.37it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 73.84it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 74.33it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 74.79it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 75.30it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 75.74it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 76.23it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 76.69it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 77.20it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 77.70it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 78.21it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 78.71it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 77.31it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 77.20it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 75.12it/s, loss=0.00437,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 65.36it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 65.58it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 65.99it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 66.39it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 66.79it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 67.20it/s, loss=0.00437,
v_num=4.31e+7]

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Epoch 73: 85%|      | 107/126 [00:01<00:00, 67.60it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 68.01it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 68.43it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 68.85it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 69.26it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 69.68it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 69.99it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 70.34it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 70.76it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 71.19it/s, loss=0.00437,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.86it/s]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 71.60it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 72.03it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 72.45it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 72.88it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 73.30it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 73.71it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 74.16it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 74.62it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 75.07it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 75.52it/s, loss=0.00437,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 74.18it/s, loss=0.00437,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 74.05it/s, loss=0.00437,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 73.55it/s, loss=0.00389,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|          | 101/126 [00:01<00:00, 65.32it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 81%|          | 102/126 [00:01<00:00, 65.28it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 82%|          | 103/126 [00:01<00:00, 65.69it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 83%|          | 104/126 [00:01<00:00, 66.11it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 83%|          | 105/126 [00:01<00:00, 66.52it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 84%|          | 106/126 [00:01<00:00, 66.95it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 85%|          | 107/126 [00:01<00:00, 67.37it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 86%|          | 108/126 [00:01<00:00, 67.80it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 87%|          | 109/126 [00:01<00:00, 68.23it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 87%|          | 110/126 [00:01<00:00, 68.65it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 88%|          | 111/126 [00:01<00:00, 69.07it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 89%|          | 112/126 [00:01<00:00, 69.50it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 90%|          | 113/126 [00:01<00:00, 69.92it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 90%|          | 114/126 [00:01<00:00, 70.35it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 91%|          | 115/126 [00:01<00:00, 70.77it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 92%|          | 116/126 [00:01<00:00, 71.19it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 93%|          | 117/126 [00:01<00:00, 71.61it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 94%|          | 118/126 [00:01<00:00, 72.03it/s, loss=0.00389,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 183.33it/s]
Epoch 74: 94%|          | 119/126 [00:01<00:00, 72.45it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 95%|          | 120/126 [00:01<00:00, 72.87it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 96%|          | 121/126 [00:01<00:00, 73.30it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 97%|          | 122/126 [00:01<00:00, 73.73it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 98%|          | 123/126 [00:01<00:00, 74.18it/s, loss=0.00389,

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v_num=4.31e+7]
Epoch 74: 98%|      | 124/126 [00:01<00:00, 74.62it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 75.07it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 75.53it/s, loss=0.00389,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 74.27it/s, loss=0.00389,
v_num=4.31e+7]

Epoch 74: 100%|     | 126/126 [00:01<00:00, 74.17it/s, loss=0.00389,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 79%|      | 100/126 [00:01<00:00, 74.90it/s, loss=0.004,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 66.49it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 66.59it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 67.10it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 67.61it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 68.11it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 68.61it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 69.11it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 69.61it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 70.11it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 70.61it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 88%|      | 111/126 [00:01<00:00, 71.11it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 71.61it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 72.10it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 72.59it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 73.08it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 73.57it/s, loss=0.004,

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v_num=4.31e+7]
Epoch 75: 93%|      | 117/126 [00:01<00:00, 74.06it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 94%|      | 118/126 [00:01<00:00, 74.55it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 94%|      | 119/126 [00:01<00:00, 75.03it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 95%|      | 120/126 [00:01<00:00, 75.52it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 96%|      | 121/126 [00:01<00:00, 76.00it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 97%|      | 122/126 [00:01<00:00, 76.48it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 98%|      | 123/126 [00:01<00:00, 76.98it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 98%|      | 124/126 [00:01<00:00, 77.49it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 99%|      | 125/126 [00:01<00:00, 77.99it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 78.50it/s, loss=0.004,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|     | 126/126 [00:01<00:00, 77.11it/s, loss=0.004,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 77.01it/s, loss=0.004,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 89.55it/s, loss=0.00387,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 79.08it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 79.23it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 79.81it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 83%|      | 104/126 [00:01<00:00, 80.36it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 80.93it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 81.48it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 82.05it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 82.60it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 83.16it/s, loss=0.00387,
v_num=4.31e+7]

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Epoch 76: 87%|      | 110/126 [00:01<00:00, 83.71it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 84.28it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 84.82it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 85.38it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 85.93it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 86.48it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 87.03it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 87.59it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 88.12it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 88.67it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 89.20it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 89.75it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 90.28it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 90.85it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 91.42it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 91.99it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 92.56it/s, loss=0.00387,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 90.88it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 90.73it/s, loss=0.00387,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 69.22it/s, loss=0.00473,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 61.60it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 61.76it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 82%|      | 103/126 [00:01<00:00, 62.16it/s, loss=0.00473,

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v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 62.56it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 83%|      | 105/126 [00:01<00:00, 62.95it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 84%|      | 106/126 [00:01<00:00, 63.35it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 85%|      | 107/126 [00:01<00:00, 63.75it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 86%|      | 108/126 [00:01<00:00, 64.16it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 87%|      | 109/126 [00:01<00:00, 64.57it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 87%|      | 110/126 [00:01<00:00, 64.97it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 88%|      | 111/126 [00:01<00:00, 65.38it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 89%|      | 112/126 [00:01<00:00, 65.79it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 90%|      | 113/126 [00:01<00:00, 66.21it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 90%|      | 114/126 [00:01<00:00, 66.62it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 91%|      | 115/126 [00:01<00:00, 67.04it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 92%|      | 116/126 [00:01<00:00, 67.46it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 93%|      | 117/126 [00:01<00:00, 67.87it/s, loss=0.00473,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.04it/s]
Epoch 77: 94%|      | 118/126 [00:01<00:00, 68.29it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 94%|      | 119/126 [00:01<00:00, 68.70it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 95%|      | 120/126 [00:01<00:00, 69.12it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 96%|      | 121/126 [00:01<00:00, 69.54it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 97%|      | 122/126 [00:01<00:00, 69.96it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 98%|      | 123/126 [00:01<00:00, 70.41it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 98%|      | 124/126 [00:01<00:00, 70.85it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 99%|      | 125/126 [00:01<00:00, 71.29it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 71.73it/s, loss=0.00473,
v_num=4.31e+7]Mapping latent space...

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Epoch 77: 100%|      | 126/126 [00:01<00:00, 70.53it/s, loss=0.00473,
v_num=4.31e+7]
Epoch 77: 100%|      | 126/126 [00:01<00:00, 70.44it/s, loss=0.00473,
v_num=4.31e+7]Mapping latent space...

Epoch 78: 79%|      | 100/126 [00:01<00:00, 79.81it/s, loss=0.00404,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|      | 101/126 [00:01<00:00, 70.38it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 81%|      | 102/126 [00:01<00:00, 70.68it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 82%|      | 103/126 [00:01<00:00, 71.22it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 83%|      | 104/126 [00:01<00:00, 71.73it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 83%|      | 105/126 [00:01<00:00, 72.26it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 84%|      | 106/126 [00:01<00:00, 72.76it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 85%|      | 107/126 [00:01<00:00, 73.29it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 86%|      | 108/126 [00:01<00:00, 73.79it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 87%|      | 109/126 [00:01<00:00, 74.32it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 87%|      | 110/126 [00:01<00:00, 74.81it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 88%|      | 111/126 [00:01<00:00, 75.35it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 89%|      | 112/126 [00:01<00:00, 75.84it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 90%|      | 113/126 [00:01<00:00, 76.36it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 90%|      | 114/126 [00:01<00:00, 76.85it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 91%|      | 115/126 [00:01<00:00, 77.36it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 92%|      | 116/126 [00:01<00:00, 77.85it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 93%|      | 117/126 [00:01<00:00, 78.36it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 94%|      | 118/126 [00:01<00:00, 78.85it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 94%|      | 119/126 [00:01<00:00, 79.34it/s, loss=0.00404,
v_num=4.31e+7]

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Epoch 78: 95%|      | 120/126 [00:01<00:00, 79.82it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 96%|      | 121/126 [00:01<00:00, 80.31it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 80.82it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 81.34it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 81.87it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 99%|      | 125/126 [00:01<00:00, 82.39it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 82.93it/s, loss=0.00404,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 81.33it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 81.22it/s, loss=0.00404,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 91.05it/s, loss=0.00424,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 79.56it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 79.64it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 80.21it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 80.77it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 81.33it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 81.89it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 82.45it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 83.01it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 83.58it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 84.14it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 84.70it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 85.24it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 90%|      | 113/126 [00:01<00:00, 85.79it/s, loss=0.00424,

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v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 86.34it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 86.89it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 87.44it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 87.99it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 88.54it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 89.09it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 89.62it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 90.16it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 90.71it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 91.29it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 91.86it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 92.44it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 93.02it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 90.99it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 90.85it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 91.54it/s, loss=0.00427,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 77.69it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 77.86it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 78.24it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 78.62it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 79.01it/s, loss=0.00427,
v_num=4.31e+7]
Epoch 80: 84%|      | 106/126 [00:01<00:00, 79.41it/s, loss=0.00427,
v_num=4.31e+7]

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Epoch 80: 85%| | 107/126 [00:01<00:00, 79.83it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 86%| | 108/126 [00:01<00:00, 80.25it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 87%| | 109/126 [00:01<00:00, 80.67it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 87%| | 110/126 [00:01<00:00, 81.10it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 88%| | 111/126 [00:01<00:00, 81.53it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 89%| | 112/126 [00:01<00:00, 81.97it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 90%| | 113/126 [00:01<00:00, 82.42it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 90%| | 114/126 [00:01<00:00, 82.86it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 91%| | 115/126 [00:01<00:00, 83.30it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 92%| | 116/126 [00:01<00:00, 83.75it/s, loss=0.00427, v_num=4.31e+7]
 Validation DataLoader 0: 65%| | 17/26 [00:00<00:00, 166.41it/s]
 Epoch 80: 93%| | 117/126 [00:01<00:00, 84.19it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 94%| | 118/126 [00:01<00:00, 84.65it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 94%| | 119/126 [00:01<00:00, 85.10it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 95%| | 120/126 [00:01<00:00, 85.56it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 96%| | 121/126 [00:01<00:00, 86.02it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 97%| | 122/126 [00:01<00:00, 86.49it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 98%| | 123/126 [00:01<00:00, 86.98it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 98%| | 124/126 [00:01<00:00, 87.48it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 99%| | 125/126 [00:01<00:00, 87.97it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 100%| | 126/126 [00:01<00:00, 88.47it/s, loss=0.00427, v_num=4.31e+7] Mapping latent space...
 Epoch 80: 100%| | 126/126 [00:01<00:00, 86.52it/s, loss=0.00427, v_num=4.31e+7]
 Epoch 80: 100%| | 126/126 [00:01<00:00, 86.35it/s, loss=0.00427, v_num=4.31e+7] Mapping latent space...
 Epoch 81: 79%| | 100/126 [00:01<00:00, 78.31it/s, loss=0.00429, v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|          | 101/126 [00:01<00:00, 69.40it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 81%|          | 102/126 [00:01<00:00, 69.34it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 82%|          | 103/126 [00:01<00:00, 69.86it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 83%|          | 104/126 [00:01<00:00, 70.34it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 83%|          | 105/126 [00:01<00:00, 70.84it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 84%|          | 106/126 [00:01<00:00, 71.33it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 85%|          | 107/126 [00:01<00:00, 71.83it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 86%|          | 108/126 [00:01<00:00, 72.33it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 87%|          | 109/126 [00:01<00:00, 72.84it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 87%|          | 110/126 [00:01<00:00, 73.33it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 88%|          | 111/126 [00:01<00:00, 73.82it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 89%|          | 112/126 [00:01<00:00, 74.31it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 90%|          | 113/126 [00:01<00:00, 74.80it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 90%|          | 114/126 [00:01<00:00, 75.28it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 91%|          | 115/126 [00:01<00:00, 75.76it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 92%|          | 116/126 [00:01<00:00, 76.25it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 93%|          | 117/126 [00:01<00:00, 76.74it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 94%|          | 118/126 [00:01<00:00, 77.23it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 94%|          | 119/126 [00:01<00:00, 77.72it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 95%|          | 120/126 [00:01<00:00, 78.16it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 96%|          | 121/126 [00:01<00:00, 78.51it/s, loss=0.00429,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 219.46it/s]
Epoch 81: 97%|          | 122/126 [00:01<00:00, 78.85it/s, loss=0.00429,
v_num=4.31e+7]

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Epoch 81: 98%|      | 123/126 [00:01<00:00, 79.24it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 79.64it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 80.04it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 80.45it/s, loss=0.00429,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 77.55it/s, loss=0.00429,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 77.39it/s, loss=0.00429,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 78.70it/s, loss=0.00541,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 69.86it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 69.69it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 70.09it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 70.50it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 70.90it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 71.32it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 71.73it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 72.07it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 72.49it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 72.90it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 73.33it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 73.75it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 74.17it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 74.60it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 75.02it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 75.45it/s, loss=0.00541,

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v_num=4.31e+7]
Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 164.02it/s]
Epoch 82: 93%|          | 117/126 [00:01<00:00, 75.87it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 94%|          | 118/126 [00:01<00:00, 76.30it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 94%|          | 119/126 [00:01<00:00, 76.73it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 95%|          | 120/126 [00:01<00:00, 77.16it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 96%|          | 121/126 [00:01<00:00, 77.59it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 97%|          | 122/126 [00:01<00:00, 78.03it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 98%|          | 123/126 [00:01<00:00, 78.49it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 98%|          | 124/126 [00:01<00:00, 78.95it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 99%|          | 125/126 [00:01<00:00, 79.41it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 100%|         | 126/126 [00:01<00:00, 79.88it/s, loss=0.00541,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|         | 126/126 [00:01<00:00, 76.78it/s, loss=0.00541,
v_num=4.31e+7]
Epoch 82: 100%|         | 126/126 [00:01<00:00, 76.60it/s, loss=0.00541,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|          | 100/126 [00:01<00:00, 75.40it/s, loss=0.00388,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|          | 101/126 [00:01<00:00, 67.21it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 81%|          | 102/126 [00:01<00:00, 67.45it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 82%|          | 103/126 [00:01<00:00, 67.95it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 83%|          | 104/126 [00:01<00:00, 68.45it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 83%|          | 105/126 [00:01<00:00, 68.95it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 84%|          | 106/126 [00:01<00:00, 69.45it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 85%|          | 107/126 [00:01<00:00, 69.94it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 86%|          | 108/126 [00:01<00:00, 70.44it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 87%|          | 109/126 [00:01<00:00, 70.94it/s, loss=0.00388,

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v_num=4.31e+7]
Epoch 83: 87%|      | 110/126 [00:01<00:00, 71.43it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 88%|      | 111/126 [00:01<00:00, 71.93it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 89%|      | 112/126 [00:01<00:00, 72.42it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 90%|      | 113/126 [00:01<00:00, 72.90it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 90%|      | 114/126 [00:01<00:00, 73.39it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 91%|      | 115/126 [00:01<00:00, 73.87it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 92%|      | 116/126 [00:01<00:00, 74.36it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 93%|      | 117/126 [00:01<00:00, 74.84it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 94%|      | 118/126 [00:01<00:00, 75.33it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 94%|      | 119/126 [00:01<00:00, 75.81it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 76.29it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 76.77it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 77.25it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 77.76it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 78.26it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 78.76it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 79.26it/s, loss=0.00388,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 77.94it/s, loss=0.00388,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 77.83it/s, loss=0.00388,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 80.87it/s, loss=0.00436,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 70.91it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 70.94it/s, loss=0.00436,

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v_num=4.31e+7]
Epoch 84: 82%| | 103/126 [00:01<00:00, 71.46it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 83%| | 104/126 [00:01<00:00, 71.98it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 83%| | 105/126 [00:01<00:00, 72.50it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 84%| | 106/126 [00:01<00:00, 73.02it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 85%| | 107/126 [00:01<00:00, 73.54it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 86%| | 108/126 [00:01<00:00, 74.06it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 87%| | 109/126 [00:01<00:00, 74.57it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 87%| | 110/126 [00:01<00:00, 75.09it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 88%| | 111/126 [00:01<00:00, 75.60it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 89%| | 112/126 [00:01<00:00, 76.12it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 90%| | 113/126 [00:01<00:00, 76.63it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 90%| | 114/126 [00:01<00:00, 77.14it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 91%| | 115/126 [00:01<00:00, 77.64it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 92%| | 116/126 [00:01<00:00, 78.15it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 93%| | 117/126 [00:01<00:00, 78.66it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 94%| | 118/126 [00:01<00:00, 79.16it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 94%| | 119/126 [00:01<00:00, 79.66it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 95%| | 120/126 [00:01<00:00, 80.16it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 96%| | 121/126 [00:01<00:00, 80.66it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 97%| | 122/126 [00:01<00:00, 81.16it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 98%| | 123/126 [00:01<00:00, 81.68it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 98%| | 124/126 [00:01<00:00, 82.20it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 99%| | 125/126 [00:01<00:00, 82.72it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 100%| | 126/126 [00:01<00:00, 83.25it/s, loss=0.00436,

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v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|      | 126/126 [00:01<00:00, 81.07it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 84: 100%|      | 126/126 [00:01<00:00, 80.95it/s, loss=0.00436,
v_num=4.31e+7]Mapping latent space...
Epoch 85:  79%|      | 100/126 [00:01<00:00, 76.27it/s, loss=0.0045,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85:  80%|      | 101/126 [00:01<00:00, 67.56it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  81%|      | 102/126 [00:01<00:00, 67.42it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  82%|      | 103/126 [00:01<00:00, 67.92it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  83%|      | 104/126 [00:01<00:00, 68.43it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  83%|      | 105/126 [00:01<00:00, 68.93it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  84%|      | 106/126 [00:01<00:00, 69.43it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  85%|      | 107/126 [00:01<00:00, 69.94it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  86%|      | 108/126 [00:01<00:00, 70.45it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  87%|      | 109/126 [00:01<00:00, 70.95it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  87%|      | 110/126 [00:01<00:00, 71.45it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  88%|      | 111/126 [00:01<00:00, 71.95it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  89%|      | 112/126 [00:01<00:00, 72.44it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  90%|      | 113/126 [00:01<00:00, 72.94it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  90%|      | 114/126 [00:01<00:00, 73.43it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  91%|      | 115/126 [00:01<00:00, 73.91it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  92%|      | 116/126 [00:01<00:00, 74.41it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  93%|      | 117/126 [00:01<00:00, 74.90it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  94%|      | 118/126 [00:01<00:00, 75.39it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85:  94%|      | 119/126 [00:01<00:00, 75.87it/s, loss=0.0045,
v_num=4.31e+7]

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Epoch 85: 95%|      | 120/126 [00:01<00:00, 76.36it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 76.84it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 77.33it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 77.83it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 78.34it/s, loss=0.0045,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.66it/s]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 78.84it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 77.76it/s, loss=0.0045,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 77.64it/s, loss=0.0045,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 90.58it/s, loss=0.00401,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 77.51it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 77.66it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 78.17it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 78.68it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 79.19it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 84%|      | 106/126 [00:01<00:00, 79.70it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 80.22it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 80.75it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 81.28it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 81.80it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 82.32it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 89%|      | 112/126 [00:01<00:00, 82.84it/s, loss=0.00401,
v_num=4.31e+7]

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Epoch 86: 90%|      | 113/126 [00:01<00:00, 83.36it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 83.88it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 91%|      | 115/126 [00:01<00:00, 84.40it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 84.92it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 85.43it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 94%|      | 118/126 [00:01<00:00, 85.94it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 86.46it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 86.97it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 87.48it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 88.00it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 88.55it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 89.10it/s, loss=0.00401,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 248.85it/s]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 89.64it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 90.20it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 88.35it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 88.21it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 81.82it/s, loss=0.00399,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 72.66it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 72.78it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 73.33it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 73.85it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 74.40it/s, loss=0.00399,

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v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 74.91it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 75.46it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 86%|      | 108/126 [00:01<00:00, 75.97it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 76.51it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 77.02it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 77.56it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 78.06it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 78.59it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 79.11it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 91%|      | 115/126 [00:01<00:00, 79.63it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 80.14it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 80.67it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 81.17it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 81.69it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 82.19it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 82.70it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 83.21it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 83.74it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 84.28it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 84.81it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 85.34it/s, loss=0.00399,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 83.83it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 83.71it/s, loss=0.00399,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 92.10it/s, loss=0.0042,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|          | 101/126 [00:01<00:00, 81.08it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 81%|          | 102/126 [00:01<00:00, 81.31it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 82%|          | 103/126 [00:01<00:00, 81.89it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 83%|          | 104/126 [00:01<00:00, 82.42it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 83%|          | 105/126 [00:01<00:00, 82.97it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 84%|          | 106/126 [00:01<00:00, 83.51it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 85%|          | 107/126 [00:01<00:00, 84.07it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 86%|          | 108/126 [00:01<00:00, 84.62it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 87%|          | 109/126 [00:01<00:00, 85.17it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 87%|          | 110/126 [00:01<00:00, 85.71it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 88%|          | 111/126 [00:01<00:00, 86.27it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 89%|          | 112/126 [00:01<00:00, 86.80it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 90%|          | 113/126 [00:01<00:00, 87.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 90%|          | 114/126 [00:01<00:00, 87.90it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 91%|          | 115/126 [00:01<00:00, 88.46it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 92%|          | 116/126 [00:01<00:00, 88.98it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 93%|          | 117/126 [00:01<00:00, 89.52it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 94%|          | 118/126 [00:01<00:00, 90.05it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 94%|          | 119/126 [00:01<00:00, 90.60it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 95%|          | 120/126 [00:01<00:00, 91.10it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 96%|          | 121/126 [00:01<00:00, 91.65it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 97%|          | 122/126 [00:01<00:00, 92.15it/s, loss=0.0042,
v_num=4.31e+7]

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Epoch 88: 98%|      | 123/126 [00:01<00:00, 92.73it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 98%|      | 124/126 [00:01<00:00, 93.31it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 99%|      | 125/126 [00:01<00:00, 93.88it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 94.46it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|     | 126/126 [00:01<00:00, 84.48it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 84.27it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 78.87it/s, loss=0.00377,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 70.59it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 70.47it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 71.01it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 71.51it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 72.04it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 72.54it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 73.07it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 73.57it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 74.09it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 74.59it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 75.12it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 75.61it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 76.12it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 76.62it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 77.12it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 77.62it/s, loss=0.00377,

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v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 78.12it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 78.62it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 79.12it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 79.61it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 80.11it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 80.60it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 81.13it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 81.65it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 82.17it/s, loss=0.00377,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.44it/s]
Epoch 89: 100%|      | 126/126 [00:01<00:00, 82.70it/s, loss=0.00377,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|      | 126/126 [00:01<00:00, 81.25it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 89: 100%|      | 126/126 [00:01<00:00, 81.15it/s, loss=0.00377,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 76.52it/s, loss=0.00449,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 67.45it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 67.65it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 68.04it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 68.43it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 68.83it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 69.24it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 69.65it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 70.07it/s, loss=0.00449,
v_num=4.31e+7]

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Epoch 90: 87%|      | 109/126 [00:01<00:00, 70.49it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 70.91it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 71.34it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 71.76it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 72.19it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 90%|      | 114/126 [00:01<00:00, 72.63it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 73.06it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 73.50it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 73.94it/s, loss=0.00449,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.37it/s]
Epoch 90: 94%|      | 118/126 [00:01<00:00, 74.37it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 74.81it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 75.24it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 75.68it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 76.12it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 76.59it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 77.05it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 77.52it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 77.98it/s, loss=0.00449,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 76.61it/s, loss=0.00449,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 76.50it/s, loss=0.00449,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 80.55it/s, loss=0.00458,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 71.34it/s, loss=0.00458,
v_num=4.31e+7]

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Epoch 91: 81%| | 102/126 [00:01<00:00, 71.57it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 82%| | 103/126 [00:01<00:00, 72.10it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 83%| | 104/126 [00:01<00:00, 72.62it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 83%| | 105/126 [00:01<00:00, 73.14it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 84%| | 106/126 [00:01<00:00, 73.66it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 85%| | 107/126 [00:01<00:00, 74.18it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 86%| | 108/126 [00:01<00:00, 74.70it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 87%| | 109/126 [00:01<00:00, 75.22it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 87%| | 110/126 [00:01<00:00, 75.74it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 88%| | 111/126 [00:01<00:00, 76.27it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 89%| | 112/126 [00:01<00:00, 76.77it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 90%| | 113/126 [00:01<00:00, 77.28it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 90%| | 114/126 [00:01<00:00, 77.79it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 91%| | 115/126 [00:01<00:00, 78.31it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 92%| | 116/126 [00:01<00:00, 78.82it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 93%| | 117/126 [00:01<00:00, 79.33it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 94%| | 118/126 [00:01<00:00, 79.84it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 94%| | 119/126 [00:01<00:00, 80.34it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 95%| | 120/126 [00:01<00:00, 80.84it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 96%| | 121/126 [00:01<00:00, 81.33it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 97%| | 122/126 [00:01<00:00, 81.84it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 98%| | 123/126 [00:01<00:00, 82.37it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 98%| | 124/126 [00:01<00:00, 82.90it/s, loss=0.00458, v_num=4.31e+7]
Epoch 91: 99%| | 125/126 [00:01<00:00, 83.43it/s, loss=0.00458, v_num=4.31e+7]

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Epoch 91: 100%|      | 126/126 [00:01<00:00, 83.96it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|      | 126/126 [00:01<00:00, 82.55it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 91: 100%|      | 126/126 [00:01<00:00, 82.43it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 86.21it/s, loss=0.00371,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|      | 101/126 [00:01<00:00, 76.01it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 81%|      | 102/126 [00:01<00:00, 76.21it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 82%|      | 103/126 [00:01<00:00, 76.77it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 83%|      | 104/126 [00:01<00:00, 77.31it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 83%|      | 105/126 [00:01<00:00, 77.85it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 84%|      | 106/126 [00:01<00:00, 78.40it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 85%|      | 107/126 [00:01<00:00, 78.95it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 86%|      | 108/126 [00:01<00:00, 79.48it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 87%|      | 109/126 [00:01<00:00, 80.03it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 87%|      | 110/126 [00:01<00:00, 80.56it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 88%|      | 111/126 [00:01<00:00, 81.10it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 89%|      | 112/126 [00:01<00:00, 81.63it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 90%|      | 113/126 [00:01<00:00, 82.16it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 90%|      | 114/126 [00:01<00:00, 82.70it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 91%|      | 115/126 [00:01<00:00, 83.23it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 92%|      | 116/126 [00:01<00:00, 83.76it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 93%|      | 117/126 [00:01<00:00, 84.28it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 94%|      | 118/126 [00:01<00:00, 84.80it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 85.32it/s, loss=0.00371,

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v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 85.84it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 96%|      | 121/126 [00:01<00:00, 86.35it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 86.88it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 87.42it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 87.97it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 88.52it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 89.07it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 87.48it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 87.36it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...

Epoch 93: 79%|      | 100/126 [00:01<00:00, 73.49it/s, loss=0.00408,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 64.37it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 64.43it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 64.83it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 65.23it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 65.62it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 66.03it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 66.43it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 66.83it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 67.24it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 67.65it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 68.06it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 68.48it/s, loss=0.00408,

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v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 68.90it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 90%|      | 114/126 [00:01<00:00, 69.32it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 69.74it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 70.15it/s, loss=0.00408,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.43it/s]
Epoch 93: 93%|      | 117/126 [00:01<00:00, 70.56it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 70.98it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 71.40it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 71.83it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 72.25it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 72.68it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 73.13it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 73.58it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 74.02it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 74.47it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 73.18it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 73.07it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 80.36it/s, loss=0.00375,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 71.12it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 71.47it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 71.92it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 72.36it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 72.81it/s, loss=0.00375,

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v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 73.26it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 85%|      | 107/126 [00:01<00:00, 73.71it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 74.15it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 74.61it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 75.06it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 75.51it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 75.97it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 76.43it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 76.88it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 91%|      | 115/126 [00:01<00:00, 77.34it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 77.80it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 78.26it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 78.72it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 79.18it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 79.63it/s, loss=0.00375,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.30it/s]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 80.08it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 80.55it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 81.03it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 81.51it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 82.00it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 82.48it/s, loss=0.00375,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|     | 126/126 [00:01<00:00, 79.80it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 79.61it/s, loss=0.00375,
v_num=4.31e+7]Mapping latent space...

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Epoch 95: 79%|          | 100/126 [00:01<00:00, 74.08it/s, loss=0.00397,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|          | 101/126 [00:01<00:00, 65.53it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 81%|          | 102/126 [00:01<00:00, 65.69it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 82%|          | 103/126 [00:01<00:00, 66.16it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 83%|          | 104/126 [00:01<00:00, 66.64it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 83%|          | 105/126 [00:01<00:00, 67.10it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 84%|          | 106/126 [00:01<00:00, 67.57it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 85%|          | 107/126 [00:01<00:00, 68.04it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 86%|          | 108/126 [00:01<00:00, 68.50it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 87%|          | 109/126 [00:01<00:00, 68.96it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 87%|          | 110/126 [00:01<00:00, 69.42it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 88%|          | 111/126 [00:01<00:00, 69.88it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 89%|          | 112/126 [00:01<00:00, 70.34it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 90%|          | 113/126 [00:01<00:00, 70.79it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 90%|          | 114/126 [00:01<00:00, 71.25it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 91%|          | 115/126 [00:01<00:00, 71.70it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 92%|          | 116/126 [00:01<00:00, 72.15it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 93%|          | 117/126 [00:01<00:00, 72.60it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 94%|          | 118/126 [00:01<00:00, 73.04it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 94%|          | 119/126 [00:01<00:00, 73.48it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 95%|          | 120/126 [00:01<00:00, 73.93it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 96%|          | 121/126 [00:01<00:00, 74.37it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 97%|          | 122/126 [00:01<00:00, 74.81it/s, loss=0.00397,

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v_num=4.31e+7]
Validation DataLoader 0: 88%|          | 23/26 [00:00<00:00, 224.85it/s]
Epoch 95: 98%|          | 123/126 [00:01<00:00, 75.27it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 98%|          | 124/126 [00:01<00:00, 75.73it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 99%|          | 125/126 [00:01<00:00, 76.19it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 100%|         | 126/126 [00:01<00:00, 76.65it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|         | 126/126 [00:01<00:00, 75.29it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 95: 100%|         | 126/126 [00:01<00:00, 75.18it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...

Epoch 96: 79%|          | 100/126 [00:01<00:00, 72.59it/s, loss=0.00424,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|          | 101/126 [00:01<00:00, 63.53it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 81%|          | 102/126 [00:01<00:00, 63.85it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 82%|          | 103/126 [00:01<00:00, 64.26it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 83%|          | 104/126 [00:01<00:00, 64.67it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 83%|          | 105/126 [00:01<00:00, 65.07it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 84%|          | 106/126 [00:01<00:00, 65.48it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 85%|          | 107/126 [00:01<00:00, 65.90it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 86%|          | 108/126 [00:01<00:00, 66.32it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 87%|          | 109/126 [00:01<00:00, 66.74it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 87%|          | 110/126 [00:01<00:00, 67.17it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 88%|          | 111/126 [00:01<00:00, 67.59it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 89%|          | 112/126 [00:01<00:00, 68.01it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 90%|          | 113/126 [00:01<00:00, 68.43it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 90%|          | 114/126 [00:01<00:00, 68.86it/s, loss=0.00424,
v_num=4.31e+7]

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Epoch 96: 91%|      | 115/126 [00:01<00:00, 69.28it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 92%|      | 116/126 [00:01<00:00, 69.70it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 93%|      | 117/126 [00:01<00:00, 70.10it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 94%|      | 118/126 [00:01<00:00, 70.52it/s, loss=0.00424,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.76it/s]
Epoch 96: 94%|      | 119/126 [00:01<00:00, 70.91it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 95%|      | 120/126 [00:01<00:00, 71.34it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 96%|      | 121/126 [00:01<00:00, 71.77it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 97%|      | 122/126 [00:01<00:00, 72.20it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 98%|      | 123/126 [00:01<00:00, 72.65it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 98%|      | 124/126 [00:01<00:00, 73.11it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 73.55it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 74.01it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 72.39it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 72.27it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 80.70it/s, loss=0.00434,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 71.03it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 81%|      | 102/126 [00:01<00:00, 71.23it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 82%|      | 103/126 [00:01<00:00, 71.77it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 83%|      | 104/126 [00:01<00:00, 72.28it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 83%|      | 105/126 [00:01<00:00, 72.80it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 84%|      | 106/126 [00:01<00:00, 73.33it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 85%|      | 107/126 [00:01<00:00, 73.86it/s, loss=0.00434,
v_num=4.31e+7]

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Epoch 97: 86%|      | 108/126 [00:01<00:00, 74.37it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 74.89it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 75.41it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 75.93it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 76.43it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 76.95it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 77.46it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 77.98it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 78.48it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 78.99it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 79.50it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 80.00it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 80.50it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 81.00it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 81.50it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 82.03it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 82.56it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 83.08it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 83.61it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 82.06it/s, loss=0.00434,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 81.95it/s, loss=0.00434,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 91.66it/s, loss=0.0044,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|      | 101/126 [00:01<00:00, 80.61it/s, loss=0.0044,

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v_num=4.31e+7]
Epoch 98: 81%|      | 102/126 [00:01<00:00, 80.53it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 82%|      | 103/126 [00:01<00:00, 81.08it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 83%|      | 104/126 [00:01<00:00, 81.62it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 83%|      | 105/126 [00:01<00:00, 82.18it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 84%|      | 106/126 [00:01<00:00, 82.74it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 85%|      | 107/126 [00:01<00:00, 83.30it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 86%|      | 108/126 [00:01<00:00, 83.86it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 87%|      | 109/126 [00:01<00:00, 84.44it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 87%|      | 110/126 [00:01<00:00, 84.99it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 88%|      | 111/126 [00:01<00:00, 85.56it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 89%|      | 112/126 [00:01<00:00, 86.11it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 90%|      | 113/126 [00:01<00:00, 86.66it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 90%|      | 114/126 [00:01<00:00, 87.21it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 91%|      | 115/126 [00:01<00:00, 87.78it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 92%|      | 116/126 [00:01<00:00, 88.32it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 93%|      | 117/126 [00:01<00:00, 88.87it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 94%|      | 118/126 [00:01<00:00, 89.41it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 94%|      | 119/126 [00:01<00:00, 89.96it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 95%|      | 120/126 [00:01<00:00, 90.49it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 96%|      | 121/126 [00:01<00:00, 91.03it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 97%|      | 122/126 [00:01<00:00, 91.57it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 92.14it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 92.71it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 93.28it/s, loss=0.0044,

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v_num=4.31e+7]
Epoch 98: 100%|      | 126/126 [00:01<00:00, 93.86it/s, loss=0.0044,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|      | 126/126 [00:01<00:00, 91.99it/s, loss=0.0044,
v_num=4.31e+7]
Epoch 98: 100%|      | 126/126 [00:01<00:00, 91.85it/s, loss=0.0044,
v_num=4.31e+7]Mapping latent space...

Epoch 99: 79%|      | 100/126 [00:01<00:00, 93.17it/s, loss=0.00461,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 81.67it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 81.74it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 82%|      | 103/126 [00:01<00:00, 82.31it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 83%|      | 104/126 [00:01<00:00, 82.89it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 83%|      | 105/126 [00:01<00:00, 83.46it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 84%|      | 106/126 [00:01<00:00, 84.02it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 85%|      | 107/126 [00:01<00:00, 84.59it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 86%|      | 108/126 [00:01<00:00, 85.16it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 87%|      | 109/126 [00:01<00:00, 85.73it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 87%|      | 110/126 [00:01<00:00, 86.30it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 88%|      | 111/126 [00:01<00:00, 86.86it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 89%|      | 112/126 [00:01<00:00, 87.42it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 90%|      | 113/126 [00:01<00:00, 87.98it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 90%|      | 114/126 [00:01<00:00, 88.54it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 91%|      | 115/126 [00:01<00:00, 89.10it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 92%|      | 116/126 [00:01<00:00, 89.65it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 93%|      | 117/126 [00:01<00:00, 90.20it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 94%|      | 118/126 [00:01<00:00, 90.75it/s, loss=0.00461,

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v_num=4.31e+7]
Epoch 99: 94%|      | 119/126 [00:01<00:00, 91.30it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 95%|      | 120/126 [00:01<00:00, 91.84it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 96%|      | 121/126 [00:01<00:00, 92.38it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 97%|      | 122/126 [00:01<00:00, 92.93it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 93.51it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 94.09it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 94.66it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 95.24it/s, loss=0.00461,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 93.26it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 93.08it/s, loss=0.00461,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 80.34it/s, loss=0.00379,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|     | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|     | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 69.71it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 69.52it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 69.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 70.40it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 70.84it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 84%|     | 106/126 [00:01<00:00, 71.29it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 85%|     | 107/126 [00:01<00:00, 71.74it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 86%|     | 108/126 [00:01<00:00, 72.19it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 87%|     | 109/126 [00:01<00:00, 72.65it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 87%|     | 110/126 [00:01<00:00, 73.10it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 88%|     | 111/126 [00:01<00:00, 73.56it/s, loss=0.00379,
v_num=4.31e+7]

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Epoch 100: 89%|      | 112/126 [00:01<00:00, 74.02it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 90%|      | 113/126 [00:01<00:00, 74.48it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 74.95it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 75.39it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 75.84it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 76.29it/s, loss=0.00379,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.53it/s]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 76.73it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 77.18it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 77.62it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 78.07it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 78.52it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 79.00it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 79.48it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 79.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 80.44it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 78.87it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 78.75it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 75.69it/s, loss=0.00389,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 66.65it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 66.73it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 101: 82%|      | 103/126 [00:01<00:00, 67.25it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 67.73it/s, loss=0.00389,
v_num=4.31e+7]

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Epoch 101: 83%| | 105/126 [00:01<00:00, 68.23it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 84%| | 106/126 [00:01<00:00, 68.73it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 85%| | 107/126 [00:01<00:00, 69.24it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 86%| | 108/126 [00:01<00:00, 69.72it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 87%| | 109/126 [00:01<00:00, 70.22it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 87%| | 110/126 [00:01<00:00, 70.71it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 88%| | 111/126 [00:01<00:00, 71.22it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 89%| | 112/126 [00:01<00:00, 71.69it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 90%| | 113/126 [00:01<00:00, 72.19it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 90%| | 114/126 [00:01<00:00, 72.67it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 91%| | 115/126 [00:01<00:00, 73.17it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 92%| | 116/126 [00:01<00:00, 73.64it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 93%| | 117/126 [00:01<00:00, 74.14it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 94%| | 118/126 [00:01<00:00, 74.60it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 94%| | 119/126 [00:01<00:00, 75.10it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 95%| | 120/126 [00:01<00:00, 75.56it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 96%| | 121/126 [00:01<00:00, 76.05it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 97%| | 122/126 [00:01<00:00, 76.52it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 98%| | 123/126 [00:01<00:00, 77.02it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 98%| | 124/126 [00:01<00:00, 77.52it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 99%| | 125/126 [00:01<00:00, 78.02it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 100%| | 126/126 [00:01<00:00, 78.52it/s, loss=0.00389, v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%| | 126/126 [00:01<00:00, 76.67it/s, loss=0.00389, v_num=4.31e+7]
Epoch 101: 100%| | 126/126 [00:01<00:00, 76.49it/s, loss=0.00389, v_num=4.31e+7]Mapping latent space...

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Epoch 102: 79%|          | 100/126 [00:01<00:00, 78.69it/s, loss=0.00421,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|          | 101/126 [00:01<00:00, 69.25it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 81%|          | 102/126 [00:01<00:00, 69.30it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 82%|          | 103/126 [00:01<00:00, 69.82it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 83%|          | 104/126 [00:01<00:00, 70.32it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 83%|          | 105/126 [00:01<00:00, 70.82it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 84%|          | 106/126 [00:01<00:00, 71.33it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 85%|          | 107/126 [00:01<00:00, 71.84it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 86%|          | 108/126 [00:01<00:00, 72.35it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 87%|          | 109/126 [00:01<00:00, 72.85it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 87%|          | 110/126 [00:01<00:00, 73.35it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 88%|          | 111/126 [00:01<00:00, 73.86it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 89%|          | 112/126 [00:01<00:00, 74.35it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 90%|          | 113/126 [00:01<00:00, 74.84it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 90%|          | 114/126 [00:01<00:00, 75.34it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 91%|          | 115/126 [00:01<00:00, 75.84it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 92%|          | 116/126 [00:01<00:00, 76.33it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 93%|          | 117/126 [00:01<00:00, 76.83it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 94%|          | 118/126 [00:01<00:00, 77.32it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 94%|          | 119/126 [00:01<00:00, 77.81it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 95%|          | 120/126 [00:01<00:00, 78.30it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 96%|          | 121/126 [00:01<00:00, 78.78it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 97%|          | 122/126 [00:01<00:00, 79.28it/s, loss=0.00421,

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v_num=4.31e+7]
Epoch 102: 98%|      | 123/126 [00:01<00:00, 79.79it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 98%|      | 124/126 [00:01<00:00, 80.31it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 99%|      | 125/126 [00:01<00:00, 80.83it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 81.35it/s, loss=0.00421,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|     | 126/126 [00:01<00:00, 79.94it/s, loss=0.00421,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 79.83it/s, loss=0.00421,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 79%|      | 100/126 [00:01<00:00, 77.48it/s, loss=0.00436,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 103: 80%|      | 101/126 [00:01<00:00, 67.57it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 81%|      | 102/126 [00:01<00:00, 67.88it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 82%|      | 103/126 [00:01<00:00, 68.31it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 83%|      | 104/126 [00:01<00:00, 68.73it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 83%|      | 105/126 [00:01<00:00, 69.15it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 84%|      | 106/126 [00:01<00:00, 69.58it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 85%|      | 107/126 [00:01<00:00, 70.01it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 86%|      | 108/126 [00:01<00:00, 70.43it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 87%|      | 109/126 [00:01<00:00, 70.86it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 87%|      | 110/126 [00:01<00:00, 71.28it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 88%|      | 111/126 [00:01<00:00, 71.71it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 89%|      | 112/126 [00:01<00:00, 72.15it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 90%|      | 113/126 [00:01<00:00, 72.57it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 90%|      | 114/126 [00:01<00:00, 73.00it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 91%|      | 115/126 [00:01<00:00, 73.43it/s, loss=0.00436,
v_num=4.31e+7]

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Epoch 103: 92%|      | 116/126 [00:01<00:00, 73.86it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 93%|      | 117/126 [00:01<00:00, 74.30it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 94%|      | 118/126 [00:01<00:00, 74.74it/s, loss=0.00436,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.56it/s]
Epoch 103: 94%|      | 119/126 [00:01<00:00, 75.16it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 75.60it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 76.04it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 76.49it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 76.87it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 77.33it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 77.79it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 78.26it/s, loss=0.00436,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 76.26it/s, loss=0.00436,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 76.15it/s, loss=0.00436,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 73.54it/s, loss=0.0042,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 64.13it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 64.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 64.81it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 65.25it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 65.69it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 66.14it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 66.58it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 67.03it/s, loss=0.0042,
v_num=4.31e+7]

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Epoch 104: 87%|      | 109/126 [00:01<00:00, 67.47it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 67.92it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 68.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 68.82it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 69.26it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 69.71it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 70.16it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 70.60it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 71.05it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 71.49it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 71.93it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 72.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 72.80it/s, loss=0.0042,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.42it/s]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 73.24it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 73.70it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 74.16it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 74.62it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 75.08it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 73.72it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 73.62it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...

Epoch 105: 79%|      | 100/126 [00:01<00:00, 80.71it/s, loss=0.0041,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|      | 101/126 [00:01<00:00, 71.58it/s, loss=0.0041,

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v_num=4.31e+7]
Epoch 105: 81%|      | 102/126 [00:01<00:00, 71.76it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 82%|      | 103/126 [00:01<00:00, 72.29it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 83%|      | 104/126 [00:01<00:00, 72.80it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 83%|      | 105/126 [00:01<00:00, 73.32it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 84%|      | 106/126 [00:01<00:00, 73.84it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 85%|      | 107/126 [00:01<00:00, 74.36it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 86%|      | 108/126 [00:01<00:00, 74.88it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 87%|      | 109/126 [00:01<00:00, 75.40it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 87%|      | 110/126 [00:01<00:00, 75.92it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 88%|      | 111/126 [00:01<00:00, 76.45it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 89%|      | 112/126 [00:01<00:00, 76.95it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 90%|      | 113/126 [00:01<00:00, 77.47it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 90%|      | 114/126 [00:01<00:00, 77.98it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 91%|      | 115/126 [00:01<00:00, 78.48it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 92%|      | 116/126 [00:01<00:00, 79.00it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 93%|      | 117/126 [00:01<00:00, 79.51it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 94%|      | 118/126 [00:01<00:00, 80.01it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 94%|      | 119/126 [00:01<00:00, 80.52it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 95%|      | 120/126 [00:01<00:00, 81.03it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 96%|      | 121/126 [00:01<00:00, 81.53it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 82.04it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 82.57it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 83.10it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 83.64it/s, loss=0.0041,

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v_num=4.31e+7]
Epoch 105: 100%|      | 126/126 [00:01<00:00, 84.18it/s, loss=0.0041,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|      | 126/126 [00:01<00:00, 82.76it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 105: 100%|      | 126/126 [00:01<00:00, 82.65it/s, loss=0.0041,
v_num=4.31e+7]Mapping latent space...
Epoch 106:  79%|      | 100/126 [00:01<00:00, 71.61it/s, loss=0.00371,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 106:  80%|      | 101/126 [00:01<00:00, 62.93it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  81%|      | 102/126 [00:01<00:00, 61.64it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  82%|      | 103/126 [00:01<00:00, 62.00it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  83%|      | 104/126 [00:01<00:00, 62.36it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  83%|      | 105/126 [00:01<00:00, 62.71it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  84%|      | 106/126 [00:01<00:00, 63.08it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  85%|      | 107/126 [00:01<00:00, 63.45it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  86%|      | 108/126 [00:01<00:00, 63.83it/s, loss=0.00371,
v_num=4.31e+7]
Validation DataLoader 0:  35%|      | 9/26 [00:00<00:00, 87.38it/s]
Epoch 106:  87%|      | 109/126 [00:01<00:00, 64.20it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  87%|      | 110/126 [00:01<00:00, 64.57it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  88%|      | 111/126 [00:01<00:00, 64.95it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  89%|      | 112/126 [00:01<00:00, 65.33it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  90%|      | 113/126 [00:01<00:00, 65.72it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  90%|      | 114/126 [00:01<00:00, 66.11it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  91%|      | 115/126 [00:01<00:00, 66.50it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  92%|      | 116/126 [00:01<00:00, 66.89it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  93%|      | 117/126 [00:01<00:00, 67.28it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106:  94%|      | 118/126 [00:01<00:00, 67.68it/s, loss=0.00371,

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v_num=4.31e+7]
Epoch 106: 94%|      | 119/126 [00:01<00:00, 68.07it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 68.46it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 68.86it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 69.26it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 69.69it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 70.12it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 99%|      | 125/126 [00:01<00:00, 70.54it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 70.97it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 69.63it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 69.53it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 68.75it/s, loss=0.00455,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 60.57it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 60.52it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 60.96it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 61.41it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 61.85it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 62.29it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 62.73it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 86%|      | 108/126 [00:01<00:00, 63.17it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 63.61it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 64.05it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 64.48it/s, loss=0.00455,
v_num=4.31e+7]

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Epoch 107: 89%|      | 112/126 [00:01<00:00, 64.92it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 65.35it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 65.79it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 66.22it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 66.65it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 67.07it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 67.50it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 67.92it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 68.34it/s, loss=0.00455,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.73it/s]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 68.76it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 69.18it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 69.62it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 70.05it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 70.49it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 70.93it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.73it/s, loss=0.00455,
v_num=4.31e+7]

Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.56it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 79%|      | 100/126 [00:01<00:00, 80.21it/s, loss=0.00359,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|      | 101/126 [00:01<00:00, 71.49it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 81%|      | 102/126 [00:01<00:00, 71.72it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 82%|      | 103/126 [00:01<00:00, 72.27it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 83%|      | 104/126 [00:01<00:00, 72.80it/s, loss=0.00359,

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v_num=4.31e+7]
Epoch 108: 83%|      | 105/126 [00:01<00:00, 73.35it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 84%|      | 106/126 [00:01<00:00, 73.86it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 85%|      | 107/126 [00:01<00:00, 74.41it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 86%|      | 108/126 [00:01<00:00, 74.93it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 87%|      | 109/126 [00:01<00:00, 75.47it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 87%|      | 110/126 [00:01<00:00, 75.98it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 88%|      | 111/126 [00:01<00:00, 76.52it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 89%|      | 112/126 [00:01<00:00, 77.02it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 90%|      | 113/126 [00:01<00:00, 77.55it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 90%|      | 114/126 [00:01<00:00, 78.06it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 91%|      | 115/126 [00:01<00:00, 78.59it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 92%|      | 116/126 [00:01<00:00, 79.09it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 93%|      | 117/126 [00:01<00:00, 79.60it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 94%|      | 118/126 [00:01<00:00, 80.11it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 94%|      | 119/126 [00:01<00:00, 80.61it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 95%|      | 120/126 [00:01<00:00, 81.11it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 96%|      | 121/126 [00:01<00:00, 81.61it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 97%|      | 122/126 [00:01<00:00, 82.12it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 98%|      | 123/126 [00:01<00:00, 82.65it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 83.18it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 83.71it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 84.24it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 82.12it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 82.02it/s, loss=0.00359,

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v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|          | 100/126 [00:01<00:00, 74.51it/s, loss=0.00435,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|          | 101/126 [00:01<00:00, 67.14it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 81%|          | 102/126 [00:01<00:00, 67.38it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 82%|          | 103/126 [00:01<00:00, 67.88it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 83%|          | 104/126 [00:01<00:00, 68.38it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 83%|          | 105/126 [00:01<00:00, 68.87it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 84%|          | 106/126 [00:01<00:00, 69.38it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 85%|          | 107/126 [00:01<00:00, 69.85it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 86%|          | 108/126 [00:01<00:00, 70.36it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 87%|          | 109/126 [00:01<00:00, 70.84it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 87%|          | 110/126 [00:01<00:00, 71.34it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 88%|          | 111/126 [00:01<00:00, 71.82it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 89%|          | 112/126 [00:01<00:00, 72.32it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 90%|          | 113/126 [00:01<00:00, 72.80it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 90%|          | 114/126 [00:01<00:00, 73.28it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 91%|          | 115/126 [00:01<00:00, 73.76it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 92%|          | 116/126 [00:01<00:00, 74.25it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 93%|          | 117/126 [00:01<00:00, 74.72it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 94%|          | 118/126 [00:01<00:00, 75.21it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 94%|          | 119/126 [00:01<00:00, 75.67it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 95%|          | 120/126 [00:01<00:00, 76.16it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 96%|          | 121/126 [00:01<00:00, 76.62it/s, loss=0.00435,
v_num=4.31e+7]

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Epoch 109: 97%|      | 122/126 [00:01<00:00, 77.10it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 77.61it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 78.12it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 78.63it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 79.14it/s, loss=0.00435,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 77.68it/s, loss=0.00435,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 77.58it/s, loss=0.00435,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|      | 100/126 [00:01<00:00, 87.77it/s, loss=0.00498,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|      | 101/126 [00:01<00:00, 77.34it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 81%|      | 102/126 [00:01<00:00, 77.65it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 82%|      | 103/126 [00:01<00:00, 78.21it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 83%|      | 104/126 [00:01<00:00, 78.76it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 83%|      | 105/126 [00:01<00:00, 79.32it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 84%|      | 106/126 [00:01<00:00, 79.86it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 85%|      | 107/126 [00:01<00:00, 80.41it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 86%|      | 108/126 [00:01<00:00, 80.95it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 87%|      | 109/126 [00:01<00:00, 81.50it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 87%|      | 110/126 [00:01<00:00, 82.05it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 88%|      | 111/126 [00:01<00:00, 82.60it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 89%|      | 112/126 [00:01<00:00, 83.14it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 90%|      | 113/126 [00:01<00:00, 83.66it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 90%|      | 114/126 [00:01<00:00, 84.19it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 91%|      | 115/126 [00:01<00:00, 84.70it/s, loss=0.00498,

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v_num=4.31e+7]
Epoch 110: 92%|      | 116/126 [00:01<00:00, 85.24it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 93%|      | 117/126 [00:01<00:00, 85.77it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 94%|      | 118/126 [00:01<00:00, 86.29it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 94%|      | 119/126 [00:01<00:00, 86.82it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 95%|      | 120/126 [00:01<00:00, 87.35it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 96%|      | 121/126 [00:01<00:00, 87.87it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 97%|      | 122/126 [00:01<00:00, 88.41it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 88.97it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 89.53it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 90.09it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 90.65it/s, loss=0.00498,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 88.89it/s, loss=0.00498,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 88.77it/s, loss=0.00498,
v_num=4.31e+7]Mapping latent space...

Epoch 111: 79%|      | 100/126 [00:01<00:00, 72.65it/s, loss=0.00355,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 63.72it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 81%|      | 102/126 [00:01<00:00, 63.93it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 82%|      | 103/126 [00:01<00:00, 64.40it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 83%|      | 104/126 [00:01<00:00, 64.86it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 83%|      | 105/126 [00:01<00:00, 65.32it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 84%|      | 106/126 [00:01<00:00, 65.78it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 85%|      | 107/126 [00:01<00:00, 66.24it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 86%|      | 108/126 [00:01<00:00, 66.69it/s, loss=0.00355,

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v_num=4.31e+7]
Epoch 111: 87%|      | 109/126 [00:01<00:00, 67.15it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 87%|      | 110/126 [00:01<00:00, 67.60it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 88%|      | 111/126 [00:01<00:00, 68.05it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 89%|      | 112/126 [00:01<00:00, 68.50it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 90%|      | 113/126 [00:01<00:00, 68.94it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 90%|      | 114/126 [00:01<00:00, 69.38it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 91%|      | 115/126 [00:01<00:00, 69.83it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 92%|      | 116/126 [00:01<00:00, 70.27it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 93%|      | 117/126 [00:01<00:00, 70.71it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 94%|      | 118/126 [00:01<00:00, 71.15it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 94%|      | 119/126 [00:01<00:00, 71.59it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 95%|      | 120/126 [00:01<00:00, 72.03it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 96%|      | 121/126 [00:01<00:00, 72.46it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 97%|      | 122/126 [00:01<00:00, 72.89it/s, loss=0.00355,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.13it/s]
Epoch 111: 98%|      | 123/126 [00:01<00:00, 73.34it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 98%|      | 124/126 [00:01<00:00, 73.79it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 99%|      | 125/126 [00:01<00:00, 74.24it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 74.70it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 100%|     | 126/126 [00:01<00:00, 73.40it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 73.28it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 79%|      | 100/126 [00:01<00:00, 74.74it/s, loss=0.0043,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 112: 80%|      | 101/126 [00:01<00:00, 66.03it/s, loss=0.0043,

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v_num=4.31e+7]
Epoch 112: 81%|      | 102/126 [00:01<00:00, 66.04it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 82%|      | 103/126 [00:01<00:00, 66.56it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 83%|      | 104/126 [00:01<00:00, 67.05it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 83%|      | 105/126 [00:01<00:00, 67.56it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 84%|      | 106/126 [00:01<00:00, 68.05it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 85%|      | 107/126 [00:01<00:00, 68.56it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 86%|      | 108/126 [00:01<00:00, 69.05it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 87%|      | 109/126 [00:01<00:00, 69.55it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 87%|      | 110/126 [00:01<00:00, 70.04it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 88%|      | 111/126 [00:01<00:00, 70.54it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 89%|      | 112/126 [00:01<00:00, 71.02it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 90%|      | 113/126 [00:01<00:00, 71.52it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 90%|      | 114/126 [00:01<00:00, 72.00it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 91%|      | 115/126 [00:01<00:00, 72.50it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 92%|      | 116/126 [00:01<00:00, 72.97it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 93%|      | 117/126 [00:01<00:00, 73.47it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 94%|      | 118/126 [00:01<00:00, 73.94it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 94%|      | 119/126 [00:01<00:00, 74.42it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 95%|      | 120/126 [00:01<00:00, 74.89it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 96%|      | 121/126 [00:01<00:00, 75.38it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 75.85it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 76.35it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 76.85it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 77.34it/s, loss=0.0043,

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v_num=4.31e+7]
Epoch 112: 100%|      | 126/126 [00:01<00:00, 77.85it/s, loss=0.0043,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 100%|      | 126/126 [00:01<00:00, 76.52it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 112: 100%|      | 126/126 [00:01<00:00, 76.43it/s, loss=0.0043,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|       | 100/126 [00:01<00:00, 75.33it/s, loss=0.0041,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|        | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 113: 80%|       | 101/126 [00:01<00:00, 66.10it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 81%|       | 102/126 [00:01<00:00, 66.33it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 82%|       | 103/126 [00:01<00:00, 66.80it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 83%|       | 104/126 [00:01<00:00, 67.26it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 83%|       | 105/126 [00:01<00:00, 67.73it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 84%|       | 106/126 [00:01<00:00, 68.20it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 85%|       | 107/126 [00:01<00:00, 68.67it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 86%|       | 108/126 [00:01<00:00, 69.13it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 87%|       | 109/126 [00:01<00:00, 69.60it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 87%|       | 110/126 [00:01<00:00, 70.07it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 88%|       | 111/126 [00:01<00:00, 70.53it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 89%|       | 112/126 [00:01<00:00, 70.99it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 90%|       | 113/126 [00:01<00:00, 71.45it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 90%|       | 114/126 [00:01<00:00, 71.91it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 91%|       | 115/126 [00:01<00:00, 72.36it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 92%|       | 116/126 [00:01<00:00, 72.82it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 93%|       | 117/126 [00:01<00:00, 73.27it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 94%|       | 118/126 [00:01<00:00, 73.72it/s, loss=0.0041,
v_num=4.31e+7]

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Epoch 113: 94%|      | 119/126 [00:01<00:00, 74.16it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 95%|      | 120/126 [00:01<00:00, 74.61it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 96%|      | 121/126 [00:01<00:00, 75.06it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 97%|      | 122/126 [00:01<00:00, 75.50it/s, loss=0.0041,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.87it/s]
Epoch 113: 98%|      | 123/126 [00:01<00:00, 75.96it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 98%|      | 124/126 [00:01<00:00, 76.43it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 76.89it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 77.36it/s, loss=0.0041,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 75.43it/s, loss=0.0041,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 75.32it/s, loss=0.0041,
v_num=4.31e+7]Mapping latent space...

Epoch 114: 79%|      | 100/126 [00:01<00:00, 78.70it/s, loss=0.00444,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 70.05it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 70.21it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 70.73it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 71.24it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 83%|      | 105/126 [00:01<00:00, 71.76it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 84%|      | 106/126 [00:01<00:00, 72.27it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 85%|      | 107/126 [00:01<00:00, 72.79it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 86%|      | 108/126 [00:01<00:00, 73.30it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 87%|      | 109/126 [00:01<00:00, 73.81it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 87%|      | 110/126 [00:01<00:00, 74.32it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 88%|      | 111/126 [00:01<00:00, 74.84it/s, loss=0.00444,

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v_num=4.31e+7]
Epoch 114: 89%|      | 112/126 [00:01<00:00, 75.33it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 90%|      | 113/126 [00:01<00:00, 75.83it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 90%|      | 114/126 [00:01<00:00, 76.34it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 91%|      | 115/126 [00:01<00:00, 76.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 92%|      | 116/126 [00:01<00:00, 77.34it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 93%|      | 117/126 [00:01<00:00, 77.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 94%|      | 118/126 [00:01<00:00, 78.34it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 94%|      | 119/126 [00:01<00:00, 78.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 95%|      | 120/126 [00:01<00:00, 79.33it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 96%|      | 121/126 [00:01<00:00, 79.82it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 97%|      | 122/126 [00:01<00:00, 80.32it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 98%|      | 123/126 [00:01<00:00, 80.84it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 98%|      | 124/126 [00:01<00:00, 81.36it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 99%|      | 125/126 [00:01<00:00, 81.88it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%|     | 126/126 [00:01<00:00, 80.99it/s, loss=0.00444,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 80.88it/s, loss=0.00444,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 79%|      | 100/126 [00:01<00:00, 93.07it/s, loss=0.00423,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|      | 101/126 [00:01<00:00, 80.96it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 81%|      | 102/126 [00:01<00:00, 80.99it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 82%|      | 103/126 [00:01<00:00, 81.52it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 83%|      | 104/126 [00:01<00:00, 82.05it/s, loss=0.00423,
v_num=4.31e+7]

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Epoch 115: 83%|      | 105/126 [00:01<00:00, 82.57it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 84%|      | 106/126 [00:01<00:00, 83.10it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 85%|      | 107/126 [00:01<00:00, 83.64it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 86%|      | 108/126 [00:01<00:00, 84.19it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 87%|      | 109/126 [00:01<00:00, 84.73it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 87%|      | 110/126 [00:01<00:00, 85.27it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 88%|      | 111/126 [00:01<00:00, 85.81it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 89%|      | 112/126 [00:01<00:00, 86.35it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 90%|      | 113/126 [00:01<00:00, 86.89it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 90%|      | 114/126 [00:01<00:00, 87.43it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 91%|      | 115/126 [00:01<00:00, 87.97it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 92%|      | 116/126 [00:01<00:00, 88.51it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 93%|      | 117/126 [00:01<00:00, 89.04it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 94%|      | 118/126 [00:01<00:00, 89.58it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 94%|      | 119/126 [00:01<00:00, 90.11it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 95%|      | 120/126 [00:01<00:00, 90.64it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 96%|      | 121/126 [00:01<00:00, 91.17it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 97%|      | 122/126 [00:01<00:00, 91.71it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 98%|      | 123/126 [00:01<00:00, 92.28it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 98%|      | 124/126 [00:01<00:00, 92.86it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 93.43it/s, loss=0.00423,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 255.83it/s]
Epoch 115: 100%|      | 126/126 [00:01<00:00, 94.00it/s, loss=0.00423,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|      | 126/126 [00:01<00:00, 91.98it/s, loss=0.00423,
v_num=4.31e+7]
Epoch 115: 100%|      | 126/126 [00:01<00:00, 91.83it/s, loss=0.00423,

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v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|          | 100/126 [00:01<00:00, 94.61it/s, loss=0.00409,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|          | 101/126 [00:01<00:00, 82.27it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 81%|          | 102/126 [00:01<00:00, 82.41it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 82%|          | 103/126 [00:01<00:00, 82.99it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 83%|          | 104/126 [00:01<00:00, 83.55it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 83%|          | 105/126 [00:01<00:00, 84.12it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 84%|          | 106/126 [00:01<00:00, 84.68it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 85%|          | 107/126 [00:01<00:00, 85.25it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 86%|          | 108/126 [00:01<00:00, 85.81it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 87%|          | 109/126 [00:01<00:00, 86.38it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 87%|          | 110/126 [00:01<00:00, 86.94it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 88%|          | 111/126 [00:01<00:00, 87.50it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 89%|          | 112/126 [00:01<00:00, 88.05it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 90%|          | 113/126 [00:01<00:00, 88.60it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 90%|          | 114/126 [00:01<00:00, 89.16it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 91%|          | 115/126 [00:01<00:00, 89.72it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 92%|          | 116/126 [00:01<00:00, 90.28it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 93%|          | 117/126 [00:01<00:00, 90.82it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 94%|          | 118/126 [00:01<00:00, 91.36it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 94%|          | 119/126 [00:01<00:00, 91.91it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 95%|          | 120/126 [00:01<00:00, 92.45it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 96%|          | 121/126 [00:01<00:00, 92.99it/s, loss=0.00409,
v_num=4.31e+7]

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Epoch 116: 97%|      | 122/126 [00:01<00:00, 93.54it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 98%|      | 123/126 [00:01<00:00, 94.12it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 98%|      | 124/126 [00:01<00:00, 94.70it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 99%|      | 125/126 [00:01<00:00, 95.28it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 95.86it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|     | 126/126 [00:01<00:00, 93.96it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 93.83it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...

Epoch 117: 79%|      | 100/126 [00:01<00:00, 91.65it/s, loss=0.00448,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 117: 80%|      | 101/126 [00:01<00:00, 80.05it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 81%|      | 102/126 [00:01<00:00, 80.24it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 82%|      | 103/126 [00:01<00:00, 80.80it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 83%|      | 104/126 [00:01<00:00, 81.36it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 83%|      | 105/126 [00:01<00:00, 81.92it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 84%|      | 106/126 [00:01<00:00, 82.47it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 85%|      | 107/126 [00:01<00:00, 83.03it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 86%|      | 108/126 [00:01<00:00, 83.59it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 87%|      | 109/126 [00:01<00:00, 84.15it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 87%|      | 110/126 [00:01<00:00, 84.69it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 88%|      | 111/126 [00:01<00:00, 85.26it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 89%|      | 112/126 [00:01<00:00, 85.79it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 90%|      | 113/126 [00:01<00:00, 86.34it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 90%|      | 114/126 [00:01<00:00, 86.89it/s, loss=0.00448,
v_num=4.31e+7]

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Epoch 117: 91%|      | 115/126 [00:01<00:00, 87.43it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 92%|      | 116/126 [00:01<00:00, 87.98it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 93%|      | 117/126 [00:01<00:00, 88.51it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 94%|      | 118/126 [00:01<00:00, 89.05it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 94%|      | 119/126 [00:01<00:00, 89.59it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 95%|      | 120/126 [00:01<00:00, 90.13it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 96%|      | 121/126 [00:01<00:00, 90.67it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 97%|      | 122/126 [00:01<00:00, 91.20it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 98%|      | 123/126 [00:01<00:00, 91.77it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 98%|      | 124/126 [00:01<00:00, 92.34it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 99%|      | 125/126 [00:01<00:00, 92.92it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 93.49it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 100%|     | 126/126 [00:01<00:00, 91.67it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 91.54it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 79%|      | 100/126 [00:01<00:00, 72.29it/s, loss=0.00387,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 118: 80%|      | 101/126 [00:01<00:00, 64.03it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 81%|      | 102/126 [00:01<00:00, 64.09it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 82%|      | 103/126 [00:01<00:00, 64.55it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 83%|      | 104/126 [00:01<00:00, 65.01it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 83%|      | 105/126 [00:01<00:00, 65.47it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 84%|      | 106/126 [00:01<00:00, 65.93it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 85%|      | 107/126 [00:01<00:00, 66.40it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 86%|      | 108/126 [00:01<00:00, 66.86it/s, loss=0.00387,

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v_num=4.31e+7]
Epoch 118: 87%|      | 109/126 [00:01<00:00, 67.32it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 87%|      | 110/126 [00:01<00:00, 67.77it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 88%|      | 111/126 [00:01<00:00, 68.23it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 89%|      | 112/126 [00:01<00:00, 68.68it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 90%|      | 113/126 [00:01<00:00, 69.14it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 90%|      | 114/126 [00:01<00:00, 69.59it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 91%|      | 115/126 [00:01<00:00, 70.04it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 92%|      | 116/126 [00:01<00:00, 70.49it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 93%|      | 117/126 [00:01<00:00, 70.94it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 94%|      | 118/126 [00:01<00:00, 71.39it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 94%|      | 119/126 [00:01<00:00, 71.83it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 95%|      | 120/126 [00:01<00:00, 72.27it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 96%|      | 121/126 [00:01<00:00, 72.71it/s, loss=0.00387,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.47it/s]
Epoch 118: 97%|      | 122/126 [00:01<00:00, 73.15it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 98%|      | 123/126 [00:01<00:00, 73.61it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 98%|      | 124/126 [00:01<00:00, 74.07it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 99%|      | 125/126 [00:01<00:00, 74.52it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 74.98it/s, loss=0.00387,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 100%|     | 126/126 [00:01<00:00, 73.49it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 73.39it/s, loss=0.00387,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 79%|      | 100/126 [00:01<00:00, 72.74it/s, loss=0.00396,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 119: 80%|      | 101/126 [00:01<00:00, 64.26it/s, loss=0.00396,

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v_num=4.31e+7]
Epoch 119: 81%|      | 102/126 [00:01<00:00, 64.42it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 82%|      | 103/126 [00:01<00:00, 64.89it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 83%|      | 104/126 [00:01<00:00, 65.36it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 83%|      | 105/126 [00:01<00:00, 65.82it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 84%|      | 106/126 [00:01<00:00, 66.28it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 85%|      | 107/126 [00:01<00:00, 66.74it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 86%|      | 108/126 [00:01<00:00, 67.21it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 87%|      | 109/126 [00:01<00:00, 67.67it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 87%|      | 110/126 [00:01<00:00, 68.13it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 88%|      | 111/126 [00:01<00:00, 68.58it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 89%|      | 112/126 [00:01<00:00, 69.04it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 90%|      | 113/126 [00:01<00:00, 69.49it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 90%|      | 114/126 [00:01<00:00, 69.94it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 91%|      | 115/126 [00:01<00:00, 70.39it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 92%|      | 116/126 [00:01<00:00, 70.84it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 93%|      | 117/126 [00:01<00:00, 71.28it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 94%|      | 118/126 [00:01<00:00, 71.73it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 94%|      | 119/126 [00:01<00:00, 72.17it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 95%|      | 120/126 [00:01<00:00, 72.61it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 96%|      | 121/126 [00:01<00:00, 73.05it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 97%|      | 122/126 [00:01<00:00, 73.49it/s, loss=0.00396,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.47it/s]
Epoch 119: 98%|      | 123/126 [00:01<00:00, 73.94it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 98%|      | 124/126 [00:01<00:00, 74.40it/s, loss=0.00396,
v_num=4.31e+7]

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Epoch 119: 99%|      | 125/126 [00:01<00:00, 74.86it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 75.32it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 100%|     | 126/126 [00:01<00:00, 73.92it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 73.82it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...

Epoch 120: 79%|      | 100/126 [00:01<00:00, 75.03it/s, loss=0.00443,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 120: 80%|      | 101/126 [00:01<00:00, 67.42it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 81%|      | 102/126 [00:01<00:00, 67.47it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 82%|      | 103/126 [00:01<00:00, 67.99it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 83%|      | 104/126 [00:01<00:00, 68.49it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 83%|      | 105/126 [00:01<00:00, 68.99it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 84%|      | 106/126 [00:01<00:00, 69.49it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 85%|      | 107/126 [00:01<00:00, 70.01it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 86%|      | 108/126 [00:01<00:00, 70.49it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 87%|      | 109/126 [00:01<00:00, 71.00it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 87%|      | 110/126 [00:01<00:00, 71.49it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 88%|      | 111/126 [00:01<00:00, 72.00it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 89%|      | 112/126 [00:01<00:00, 72.48it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 90%|      | 113/126 [00:01<00:00, 72.97it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 90%|      | 114/126 [00:01<00:00, 73.47it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 91%|      | 115/126 [00:01<00:00, 73.97it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 92%|      | 116/126 [00:01<00:00, 74.45it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 93%|      | 117/126 [00:01<00:00, 74.94it/s, loss=0.00443,
v_num=4.31e+7]

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Epoch 120: 94%|      | 118/126 [00:01<00:00, 75.43it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 94%|      | 119/126 [00:01<00:00, 75.92it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 95%|      | 120/126 [00:01<00:00, 76.40it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 96%|      | 121/126 [00:01<00:00, 76.88it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 97%|      | 122/126 [00:01<00:00, 77.37it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 98%|      | 123/126 [00:01<00:00, 77.88it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 98%|      | 124/126 [00:01<00:00, 78.38it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 99%|      | 125/126 [00:01<00:00, 78.89it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 79.40it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 100%|     | 126/126 [00:01<00:00, 77.46it/s, loss=0.00443,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00443,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 79%|      | 100/126 [00:01<00:00, 69.85it/s, loss=0.0042,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 121: 80%|      | 101/126 [00:01<00:00, 61.80it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 81%|      | 102/126 [00:01<00:00, 61.99it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 82%|      | 103/126 [00:01<00:00, 62.43it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 83%|      | 104/126 [00:01<00:00, 62.87it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 83%|      | 105/126 [00:01<00:00, 63.31it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 84%|      | 106/126 [00:01<00:00, 63.75it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 85%|      | 107/126 [00:01<00:00, 64.19it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 86%|      | 108/126 [00:01<00:00, 64.63it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 87%|      | 109/126 [00:01<00:00, 65.07it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 87%|      | 110/126 [00:01<00:00, 65.51it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 88%|      | 111/126 [00:01<00:00, 65.94it/s, loss=0.0042,

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v_num=4.31e+7]
Epoch 121: 89%|      | 112/126 [00:01<00:00, 66.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 90%|      | 113/126 [00:01<00:00, 66.80it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 90%|      | 114/126 [00:01<00:00, 67.23it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 91%|      | 115/126 [00:01<00:00, 67.66it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 92%|      | 116/126 [00:01<00:00, 68.09it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 93%|      | 117/126 [00:01<00:00, 68.52it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 94%|      | 118/126 [00:01<00:00, 68.94it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 94%|      | 119/126 [00:01<00:00, 69.37it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 95%|      | 120/126 [00:01<00:00, 69.79it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 96%|      | 121/126 [00:01<00:00, 70.21it/s, loss=0.0042,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.32it/s]
Epoch 121: 97%|      | 122/126 [00:01<00:00, 70.63it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 98%|      | 123/126 [00:01<00:00, 71.07it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 98%|      | 124/126 [00:01<00:00, 71.51it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 99%|      | 125/126 [00:01<00:00, 71.95it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 72.40it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 100%|     | 126/126 [00:01<00:00, 71.13it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 71.03it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 79%|      | 100/126 [00:01<00:00, 78.10it/s, loss=0.00428,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 122: 80%|      | 101/126 [00:01<00:00, 67.39it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 81%|      | 102/126 [00:01<00:00, 67.71it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 82%|      | 103/126 [00:01<00:00, 68.14it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 83%|      | 104/126 [00:01<00:00, 68.58it/s, loss=0.00428,

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v_num=4.31e+7]
Epoch 122: 83%|      | 105/126 [00:01<00:00, 69.00it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 84%|      | 106/126 [00:01<00:00, 69.44it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 85%|      | 107/126 [00:01<00:00, 69.88it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 86%|      | 108/126 [00:01<00:00, 70.32it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 87%|      | 109/126 [00:01<00:00, 70.76it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 87%|      | 110/126 [00:01<00:00, 71.20it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 88%|      | 111/126 [00:01<00:00, 71.65it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 89%|      | 112/126 [00:01<00:00, 72.09it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 90%|      | 113/126 [00:01<00:00, 72.53it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 90%|      | 114/126 [00:01<00:00, 72.98it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 91%|      | 115/126 [00:01<00:00, 73.43it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 92%|      | 116/126 [00:01<00:00, 73.87it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 93%|      | 117/126 [00:01<00:00, 74.32it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 94%|      | 118/126 [00:01<00:00, 74.76it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 94%|      | 119/126 [00:01<00:00, 75.21it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 95%|      | 120/126 [00:01<00:00, 75.65it/s, loss=0.00428,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 204.58it/s]
Epoch 122: 96%|      | 121/126 [00:01<00:00, 76.09it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 97%|      | 122/126 [00:01<00:00, 76.55it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 98%|      | 123/126 [00:01<00:00, 77.01it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 98%|      | 124/126 [00:01<00:00, 77.48it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 99%|      | 125/126 [00:01<00:00, 77.95it/s, loss=0.00428,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 78.42it/s, loss=0.00428,
v_num=4.31e+7] Mapping latent space...
Epoch 122: 100%|     | 126/126 [00:01<00:00, 77.02it/s, loss=0.00428,
v_num=4.31e+7]

```

```

Epoch 122: 100%|      | 126/126 [00:01<00:00, 76.89it/s, loss=0.00428,
v_num=4.31e+7]Mapping latent space...
Epoch 123:  79%|      | 100/126 [00:01<00:00, 70.28it/s, loss=0.00461,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 123:  80%|      | 101/126 [00:01<00:00, 62.50it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  81%|      | 102/126 [00:01<00:00, 62.88it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  82%|      | 103/126 [00:01<00:00, 63.29it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  83%|      | 104/126 [00:01<00:00, 63.70it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  83%|      | 105/126 [00:01<00:00, 64.11it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  84%|      | 106/126 [00:01<00:00, 64.52it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  85%|      | 107/126 [00:01<00:00, 64.94it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  86%|      | 108/126 [00:01<00:00, 65.36it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  87%|      | 109/126 [00:01<00:00, 65.79it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  87%|      | 110/126 [00:01<00:00, 66.21it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  88%|      | 111/126 [00:01<00:00, 66.63it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  89%|      | 112/126 [00:01<00:00, 67.06it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  90%|      | 113/126 [00:01<00:00, 67.49it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  90%|      | 114/126 [00:01<00:00, 67.92it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  91%|      | 115/126 [00:01<00:00, 68.35it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  92%|      | 116/126 [00:01<00:00, 68.72it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  93%|      | 117/126 [00:01<00:00, 69.15it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  94%|      | 118/126 [00:01<00:00, 69.58it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  94%|      | 119/126 [00:01<00:00, 70.01it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123:  95%|      | 120/126 [00:01<00:00, 70.44it/s, loss=0.00461,
v_num=4.31e+7]
Validation DataLoader 0:  81%|      | 21/26 [00:00<00:00, 203.43it/s]

```



```

Epoch 123: 96%|      | 121/126 [00:01<00:00, 70.87it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 97%|      | 122/126 [00:01<00:00, 71.31it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 98%|      | 123/126 [00:01<00:00, 71.75it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 98%|      | 124/126 [00:01<00:00, 72.20it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 99%|      | 125/126 [00:01<00:00, 72.65it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 73.10it/s, loss=0.00461,
v_num=4.31e+7]Mapping latent space...
Epoch 123: 100%|     | 126/126 [00:01<00:00, 71.86it/s, loss=0.00461,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 71.76it/s, loss=0.00461,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 79%|      | 100/126 [00:01<00:00, 69.40it/s, loss=0.00381,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 124: 80%|      | 101/126 [00:01<00:00, 61.57it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 81%|      | 102/126 [00:01<00:00, 61.70it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 82%|      | 103/126 [00:01<00:00, 62.15it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 83%|      | 104/126 [00:01<00:00, 62.61it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 83%|      | 105/126 [00:01<00:00, 63.05it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 84%|      | 106/126 [00:01<00:00, 63.51it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 85%|      | 107/126 [00:01<00:00, 63.96it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 86%|      | 108/126 [00:01<00:00, 64.41it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 87%|      | 109/126 [00:01<00:00, 64.85it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 87%|      | 110/126 [00:01<00:00, 65.30it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 88%|      | 111/126 [00:01<00:00, 65.74it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 89%|      | 112/126 [00:01<00:00, 66.19it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 90%|      | 113/126 [00:01<00:00, 66.63it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 90%|      | 114/126 [00:01<00:00, 67.07it/s, loss=0.00381,

```

```

v_num=4.31e+7]
Epoch 124: 91%|      | 115/126 [00:01<00:00, 67.50it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 92%|      | 116/126 [00:01<00:00, 67.94it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 93%|      | 117/126 [00:01<00:00, 68.38it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 94%|      | 118/126 [00:01<00:00, 68.81it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 94%|      | 119/126 [00:01<00:00, 69.25it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 95%|      | 120/126 [00:01<00:00, 69.67it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 96%|      | 121/126 [00:01<00:00, 70.10it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 97%|      | 122/126 [00:01<00:00, 70.53it/s, loss=0.00381,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.17it/s]
Epoch 124: 98%|      | 123/126 [00:01<00:00, 70.97it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 98%|      | 124/126 [00:01<00:00, 71.41it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 99%|      | 125/126 [00:01<00:00, 71.86it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 72.30it/s, loss=0.00381,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|     | 126/126 [00:01<00:00, 71.06it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 70.96it/s, loss=0.00381,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|     | 126/126 [00:01<00:00, 68.94it/s, loss=0.00381,
v_num=4.31e+7]
Training for latent_dim 5 done.

```

```

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
GPU available: True, used: True

```

```

TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_<train/validation/test>_epoch_end` instead.
rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]

```

	Name	Type	Params

0	encoder	Sequential	8.8 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	102
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	12
13	decoder	Sequential	8.9 K
14	decoder.0	Linear	112
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K
21	decoder.7	Tanh	0
22	decoder.8	BatchNorm1d	128
23	decoder.9	Linear	5.9 K
24	decoder.10	Sigmoid	0

```

17.7 K    Trainable params
0         Non-trainable params
17.7 K    Total params
0.071     Total estimated model params size (MB)
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, val_dataloader 0, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in

```

```

the `DataLoader` init to improve performance.
    rank_zero_warn(

Loading all data...
Training on 10000 examples, validating on 2501 examples
Sanity Checking DataLoader 0: 100%|      | 2/2 [00:00<00:00,
2.87it/s]Saving samples for epoch #0...
Mapping latent space...
Epoch 0:   1%|      | 1/126 [00:00<00:23,  5.36it/s, loss=0.122,
v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, train_dataloader, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
    rank_zero_warn(

Epoch 0:  79%|      | 100/126 [00:01<00:00, 70.29it/s, loss=0.102,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 0:  80%|      | 101/126 [00:01<00:00, 62.34it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  81%|      | 102/126 [00:01<00:00, 62.33it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  82%|      | 103/126 [00:01<00:00, 62.79it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  83%|      | 104/126 [00:01<00:00, 63.24it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  83%|      | 105/126 [00:01<00:00, 63.69it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  84%|      | 106/126 [00:01<00:00, 64.15it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  85%|      | 107/126 [00:01<00:00, 64.60it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  86%|      | 108/126 [00:01<00:00, 65.05it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  87%|      | 109/126 [00:01<00:00, 65.50it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  87%|      | 110/126 [00:01<00:00, 65.95it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  88%|      | 111/126 [00:01<00:00, 66.40it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  89%|      | 112/126 [00:01<00:00, 66.84it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0:  90%|      | 113/126 [00:01<00:00, 67.29it/s, loss=0.102,

```

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v_num=4.31e+7]
Epoch 0: 90%|      | 114/126 [00:01<00:00, 67.71it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 91%|      | 115/126 [00:01<00:00, 68.15it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 92%|      | 116/126 [00:01<00:00, 68.59it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 69.03it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 69.46it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 69.89it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 70.33it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 70.76it/s, loss=0.102,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.54it/s]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 71.18it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 71.63it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 72.08it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 72.53it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.98it/s, loss=0.102,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 64.88it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 64.69it/s, loss=0.102,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 75.42it/s, loss=0.0955,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 65.73it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 66.13it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 66.53it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 83%|      | 104/126 [00:01<00:00, 66.94it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 67.35it/s, loss=0.0955,

```

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v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 67.71it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 68.12it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 68.52it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 68.93it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 69.34it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 69.76it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 70.18it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 70.60it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 71.03it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 71.45it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 71.87it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 72.30it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 72.73it/s, loss=0.0955,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.68it/s]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 73.16it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 73.59it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 74.02it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 74.46it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 74.92it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 75.37it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 75.83it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 76.30it/s, loss=0.0955,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 74.92it/s, loss=0.0955,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 74.78it/s, loss=0.0955,
v_num=4.31e+7]Mapping latent space...

```

```

Epoch 2: 79%|          | 100/126 [00:01<00:00, 80.83it/s, loss=0.0905,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|          | 101/126 [00:01<00:00, 71.89it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 81%|          | 102/126 [00:01<00:00, 72.12it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 82%|          | 103/126 [00:01<00:00, 72.65it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 83%|          | 104/126 [00:01<00:00, 73.18it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 83%|          | 105/126 [00:01<00:00, 73.71it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 84%|          | 106/126 [00:01<00:00, 74.24it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 85%|          | 107/126 [00:01<00:00, 74.77it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 86%|          | 108/126 [00:01<00:00, 75.26it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 87%|          | 109/126 [00:01<00:00, 75.79it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 87%|          | 110/126 [00:01<00:00, 76.30it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 88%|          | 111/126 [00:01<00:00, 76.84it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 89%|          | 112/126 [00:01<00:00, 77.35it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 90%|          | 113/126 [00:01<00:00, 77.87it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 90%|          | 114/126 [00:01<00:00, 78.38it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 91%|          | 115/126 [00:01<00:00, 78.90it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 92%|          | 116/126 [00:01<00:00, 79.41it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 93%|          | 117/126 [00:01<00:00, 79.92it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 94%|          | 118/126 [00:01<00:00, 80.43it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 94%|          | 119/126 [00:01<00:00, 80.97it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 95%|          | 120/126 [00:01<00:00, 81.45it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 96%|          | 121/126 [00:01<00:00, 81.96it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 97%|          | 122/126 [00:01<00:00, 82.47it/s, loss=0.0905,

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v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 83.01it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 83.54it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 84.08it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 84.62it/s, loss=0.0905,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 83.00it/s, loss=0.0905,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 82.85it/s, loss=0.0905,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 94.33it/s, loss=0.0842,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 82.65it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 82.78it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 83.38it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 83.94it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 84.54it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 85.10it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 85.70it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 86.26it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 86.85it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 87.37it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 87.96it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 88.51it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 89.08it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 89.65it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 90.23it/s, loss=0.0842,

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v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 90.78it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 91.36it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 94%|      | 118/126 [00:01<00:00, 91.89it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 92.47it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 93.01it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 93.58it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 94.13it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 94.72it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 95.30it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 95.89it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 96.48it/s, loss=0.0842,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 94.54it/s, loss=0.0842,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 94.35it/s, loss=0.0842,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 71.36it/s, loss=0.0752,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 63.40it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 63.44it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 63.90it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 64.35it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 64.81it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 65.27it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 85%|      | 107/126 [00:01<00:00, 65.73it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 66.18it/s, loss=0.0752,
v_num=4.31e+7]

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Epoch 4: 87%|      | 109/126 [00:01<00:00, 66.63it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 67.09it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 67.54it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 67.96it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 68.41it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 68.85it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 69.30it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 69.74it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 70.17it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 70.61it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 71.04it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 71.48it/s, loss=0.0752,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.31it/s]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 71.90it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 72.34it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 72.80it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 73.25it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 73.70it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 74.16it/s, loss=0.0752,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 72.88it/s, loss=0.0752,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 72.74it/s, loss=0.0752,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 75.23it/s, loss=0.0645,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 66.12it/s, loss=0.0645,
v_num=4.31e+7]

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Epoch 5: 81%| | 102/126 [00:01<00:00, 66.32it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 82%| | 103/126 [00:01<00:00, 66.80it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 83%| | 104/126 [00:01<00:00, 67.28it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 83%| | 105/126 [00:01<00:00, 67.76it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 84%| | 106/126 [00:01<00:00, 68.24it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 85%| | 107/126 [00:01<00:00, 68.71it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 86%| | 108/126 [00:01<00:00, 69.18it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 87%| | 109/126 [00:01<00:00, 69.65it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 87%| | 110/126 [00:01<00:00, 70.12it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 88%| | 111/126 [00:01<00:00, 70.59it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 89%| | 112/126 [00:01<00:00, 71.06it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 90%| | 113/126 [00:01<00:00, 71.53it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 90%| | 114/126 [00:01<00:00, 71.96it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 91%| | 115/126 [00:01<00:00, 72.42it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 92%| | 116/126 [00:01<00:00, 72.88it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 93%| | 117/126 [00:01<00:00, 73.34it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 94%| | 118/126 [00:01<00:00, 73.79it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 94%| | 119/126 [00:01<00:00, 74.25it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 95%| | 120/126 [00:01<00:00, 74.70it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 96%| | 121/126 [00:01<00:00, 75.15it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 97%| | 122/126 [00:01<00:00, 75.60it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 98%| | 123/126 [00:01<00:00, 76.07it/s, loss=0.0645,
 v_num=4.31e+7]
 Validation DataLoader 0: 92%| | 24/26 [00:00<00:00, 234.89it/s]
 Epoch 5: 98%| | 124/126 [00:01<00:00, 76.54it/s, loss=0.0645,
 v_num=4.31e+7]
 Epoch 5: 99%| | 125/126 [00:01<00:00, 77.01it/s, loss=0.0645,

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v_num=4.31e+7]
Epoch 5: 100%|      | 126/126 [00:01<00:00, 77.48it/s, loss=0.0645,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|      | 126/126 [00:01<00:00, 76.04it/s, loss=0.0645,
v_num=4.31e+7]
Epoch 5: 100%|      | 126/126 [00:01<00:00, 75.89it/s, loss=0.0645,
v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%|      | 100/126 [00:01<00:00, 80.47it/s, loss=0.0519,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 71.04it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 81%|      | 102/126 [00:01<00:00, 71.04it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 82%|      | 103/126 [00:01<00:00, 71.57it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 83%|      | 104/126 [00:01<00:00, 72.08it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 83%|      | 105/126 [00:01<00:00, 72.61it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 84%|      | 106/126 [00:01<00:00, 73.12it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 85%|      | 107/126 [00:01<00:00, 73.65it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 86%|      | 108/126 [00:01<00:00, 74.15it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 87%|      | 109/126 [00:01<00:00, 74.68it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 87%|      | 110/126 [00:01<00:00, 75.18it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 88%|      | 111/126 [00:01<00:00, 75.70it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 89%|      | 112/126 [00:01<00:00, 76.21it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 90%|      | 113/126 [00:01<00:00, 76.72it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 90%|      | 114/126 [00:01<00:00, 77.22it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 91%|      | 115/126 [00:01<00:00, 77.75it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 92%|      | 116/126 [00:01<00:00, 78.22it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 93%|      | 117/126 [00:01<00:00, 78.74it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 94%|      | 118/126 [00:01<00:00, 79.24it/s, loss=0.0519,

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v_num=4.31e+7]
Epoch 6: 94%|      | 119/126 [00:01<00:00, 79.75it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 95%|      | 120/126 [00:01<00:00, 80.25it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 96%|      | 121/126 [00:01<00:00, 80.76it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 97%|      | 122/126 [00:01<00:00, 81.25it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 98%|      | 123/126 [00:01<00:00, 81.78it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 98%|      | 124/126 [00:01<00:00, 82.31it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 99%|      | 125/126 [00:01<00:00, 82.84it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 83.37it/s, loss=0.0519,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|     | 126/126 [00:01<00:00, 81.79it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 100%|     | 126/126 [00:01<00:00, 81.64it/s, loss=0.0519,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 83.85it/s, loss=0.0403,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 74.66it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 74.80it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 75.37it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 75.90it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 76.45it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 76.99it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 77.55it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 78.07it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 78.63it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 79.16it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 79.71it/s, loss=0.0403,
v_num=4.31e+7]

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Epoch 7: 89%|      | 112/126 [00:01<00:00, 80.24it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 80.79it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 81.30it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 81.84it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 82.36it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 82.89it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 83.38it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 83.90it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 84.41it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 84.94it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 85.45it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 86.01it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 86.56it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 87.11it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 87.66it/s, loss=0.0403,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 86.03it/s, loss=0.0403,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 85.87it/s, loss=0.0403,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 77.53it/s, loss=0.0307,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 67.55it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 67.74it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 68.17it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 68.60it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 69.03it/s, loss=0.0307,

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v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 69.45it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 69.88it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 70.21it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 70.64it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 71.07it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 71.51it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 71.94it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 72.38it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 72.81it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 73.25it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 73.69it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 74.13it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 74.58it/s, loss=0.0307,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.09it/s]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 75.01it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 75.42it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 75.86it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 76.31it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 76.78it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 77.25it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 77.71it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 78.18it/s, loss=0.0307,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 76.75it/s, loss=0.0307,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 76.61it/s, loss=0.0307,
v_num=4.31e+7]Mapping latent space...

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Epoch 9: 79%|          | 100/126 [00:01<00:00, 69.72it/s, loss=0.0225,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|          | 101/126 [00:01<00:00, 61.86it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 81%|          | 102/126 [00:01<00:00, 61.99it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 82%|          | 103/126 [00:01<00:00, 62.48it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 83%|          | 104/126 [00:01<00:00, 62.94it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 83%|          | 105/126 [00:01<00:00, 63.43it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 84%|          | 106/126 [00:01<00:00, 63.90it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 85%|          | 107/126 [00:01<00:00, 64.39it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 86%|          | 108/126 [00:01<00:00, 64.85it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 87%|          | 109/126 [00:01<00:00, 65.33it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 87%|          | 110/126 [00:01<00:00, 65.79it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 88%|          | 111/126 [00:01<00:00, 66.28it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 89%|          | 112/126 [00:01<00:00, 66.74it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 90%|          | 113/126 [00:01<00:00, 67.23it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 90%|          | 114/126 [00:01<00:00, 67.68it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 91%|          | 115/126 [00:01<00:00, 68.16it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 92%|          | 116/126 [00:01<00:00, 68.61it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 93%|          | 117/126 [00:01<00:00, 69.08it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 94%|          | 118/126 [00:01<00:00, 69.53it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 94%|          | 119/126 [00:01<00:00, 69.99it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 95%|          | 120/126 [00:01<00:00, 70.45it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 96%|          | 121/126 [00:01<00:00, 70.90it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 97%|          | 122/126 [00:01<00:00, 71.33it/s, loss=0.0225,

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v_num=4.31e+7]
Epoch 9: 98%|      | 123/126 [00:01<00:00, 71.81it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 72.28it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 72.77it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 73.25it/s, loss=0.0225,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 71.43it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 71.24it/s, loss=0.0225,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 71.26it/s, loss=0.0167,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 62.21it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 81%|     | 102/126 [00:01<00:00, 62.41it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 82%|     | 103/126 [00:01<00:00, 62.84it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 83%|     | 104/126 [00:01<00:00, 63.26it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 83%|     | 105/126 [00:01<00:00, 63.68it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 84%|     | 106/126 [00:01<00:00, 64.10it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 85%|     | 107/126 [00:01<00:00, 64.52it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 86%|     | 108/126 [00:01<00:00, 64.93it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 87%|     | 109/126 [00:01<00:00, 65.35it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 87%|     | 110/126 [00:01<00:00, 65.78it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 88%|     | 111/126 [00:01<00:00, 66.20it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 89%|     | 112/126 [00:01<00:00, 66.62it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 90%|     | 113/126 [00:01<00:00, 67.05it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 90%|     | 114/126 [00:01<00:00, 67.47it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 91%|     | 115/126 [00:01<00:00, 67.90it/s, loss=0.0167,
v_num=4.31e+7]

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Epoch 10: 92%|      | 116/126 [00:01<00:00, 68.32it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 93%|      | 117/126 [00:01<00:00, 68.75it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 69.17it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 69.60it/s, loss=0.0167,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 194.94it/s]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 70.02it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 70.44it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 70.87it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 71.31it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 71.76it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 72.20it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 72.65it/s, loss=0.0167,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 71.36it/s, loss=0.0167,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 71.23it/s, loss=0.0167,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 71.32it/s, loss=0.0134,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 62.66it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 62.91it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 63.37it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 63.83it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 64.29it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 64.75it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 65.21it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 65.65it/s, loss=0.0134,
v_num=4.31e+7]

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Epoch 11: 87%|      | 109/126 [00:01<00:00, 66.10it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 66.55it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 67.00it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 67.44it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 67.89it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 68.33it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 68.77it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 69.21it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 69.65it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 70.08it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 70.52it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 70.95it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 71.38it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 71.82it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 72.27it/s, loss=0.0134,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.02it/s]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 72.72it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 73.17it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 73.62it/s, loss=0.0134,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 72.33it/s, loss=0.0134,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 72.20it/s, loss=0.0134,
v_num=4.31e+7]Mapping latent space...

Epoch 12: 79%|      | 100/126 [00:01<00:00, 77.48it/s, loss=0.00998,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 69.07it/s, loss=0.00998,

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v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 69.19it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 82%|      | 103/126 [00:01<00:00, 69.71it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 83%|      | 104/126 [00:01<00:00, 70.21it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 83%|      | 105/126 [00:01<00:00, 70.74it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 84%|      | 106/126 [00:01<00:00, 71.23it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 85%|      | 107/126 [00:01<00:00, 71.76it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 86%|      | 108/126 [00:01<00:00, 72.24it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 87%|      | 109/126 [00:01<00:00, 72.77it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 87%|      | 110/126 [00:01<00:00, 73.26it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 88%|      | 111/126 [00:01<00:00, 73.78it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 89%|      | 112/126 [00:01<00:00, 74.27it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 90%|      | 113/126 [00:01<00:00, 74.77it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 90%|      | 114/126 [00:01<00:00, 75.27it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 91%|      | 115/126 [00:01<00:00, 75.78it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 92%|      | 116/126 [00:01<00:00, 76.27it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 93%|      | 117/126 [00:01<00:00, 76.76it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 94%|      | 118/126 [00:01<00:00, 77.26it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 94%|      | 119/126 [00:01<00:00, 77.76it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 95%|      | 120/126 [00:01<00:00, 78.25it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 96%|      | 121/126 [00:01<00:00, 78.74it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 97%|      | 122/126 [00:01<00:00, 79.25it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 79.76it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 80.28it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 80.80it/s, loss=0.00998,

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v_num=4.31e+7]
Epoch 12: 100%|      | 126/126 [00:01<00:00, 81.32it/s, loss=0.00998,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|      | 126/126 [00:01<00:00, 79.81it/s, loss=0.00998,
v_num=4.31e+7]
Epoch 12: 100%|      | 126/126 [00:01<00:00, 79.67it/s, loss=0.00998,
v_num=4.31e+7]Mapping latent space...
Epoch 13:  79%|      | 100/126 [00:01<00:00, 92.51it/s, loss=0.00887,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13:  80%|      | 101/126 [00:01<00:00, 80.33it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  81%|      | 102/126 [00:01<00:00, 80.54it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  82%|      | 103/126 [00:01<00:00, 81.11it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  83%|      | 104/126 [00:01<00:00, 81.65it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  83%|      | 105/126 [00:01<00:00, 82.23it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  84%|      | 106/126 [00:01<00:00, 82.76it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  85%|      | 107/126 [00:01<00:00, 83.33it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  86%|      | 108/126 [00:01<00:00, 83.85it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  87%|      | 109/126 [00:01<00:00, 84.44it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  87%|      | 110/126 [00:01<00:00, 84.96it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  88%|      | 111/126 [00:01<00:00, 85.54it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  89%|      | 112/126 [00:01<00:00, 86.06it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  90%|      | 113/126 [00:01<00:00, 86.64it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  90%|      | 114/126 [00:01<00:00, 87.17it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  91%|      | 115/126 [00:01<00:00, 87.74it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  92%|      | 116/126 [00:01<00:00, 88.26it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  93%|      | 117/126 [00:01<00:00, 88.83it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13:  94%|      | 118/126 [00:01<00:00, 89.35it/s, loss=0.00887,
v_num=4.31e+7]

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Epoch 13: 94%|      | 119/126 [00:01<00:00, 89.92it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 95%|      | 120/126 [00:01<00:00, 90.43it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 91.00it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 91.51it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 92.10it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 92.69it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 93.27it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 93.86it/s, loss=0.00887,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 91.91it/s, loss=0.00887,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 91.74it/s, loss=0.00887,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 88.43it/s, loss=0.00713,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 75.35it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 75.75it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 76.17it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 76.60it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 77.02it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 77.44it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 77.86it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 78.28it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 78.71it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 79.15it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 79.59it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 80.04it/s, loss=0.00713,

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v_num=4.31e+7]
Epoch 14: 90%|      | 113/126 [00:01<00:00, 80.48it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 80.94it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 81.38it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 81.84it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 82.29it/s, loss=0.00713,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.75it/s]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 82.75it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 83.20it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 83.58it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 84.04it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 84.51it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 85.01it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 85.50it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 86.00it/s, loss=0.00713,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 86.51it/s, loss=0.00713,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 84.65it/s, loss=0.00713,
v_num=4.31e+7]

Epoch 14: 100%|     | 126/126 [00:01<00:00, 84.46it/s, loss=0.00713,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 79%|      | 100/126 [00:01<00:00, 70.23it/s, loss=0.00679,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 61.78it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 61.98it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 62.43it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 62.89it/s, loss=0.00679,
v_num=4.31e+7]

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Epoch 15: 83%|      | 105/126 [00:01<00:00, 63.34it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 84%|      | 106/126 [00:01<00:00, 63.80it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 64.25it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 64.70it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 65.14it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 65.59it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 88%|      | 111/126 [00:01<00:00, 66.04it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 66.48it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 66.93it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 67.37it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 67.81it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 68.23it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 68.65it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 69.08it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 69.52it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 69.95it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 70.38it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 70.82it/s, loss=0.00679,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.84it/s]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 71.27it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 71.72it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 72.17it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 72.62it/s, loss=0.00679,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 71.33it/s, loss=0.00679,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 71.20it/s, loss=0.00679,

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v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|          | 100/126 [00:01<00:00, 68.98it/s, loss=0.00578,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|          | 101/126 [00:01<00:00, 60.82it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 81%|          | 102/126 [00:01<00:00, 61.03it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 82%|          | 103/126 [00:01<00:00, 61.45it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 83%|          | 104/126 [00:01<00:00, 61.87it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 83%|          | 105/126 [00:01<00:00, 62.30it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 84%|          | 106/126 [00:01<00:00, 62.73it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 85%|          | 107/126 [00:01<00:00, 63.15it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 86%|          | 108/126 [00:01<00:00, 63.58it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 87%|          | 109/126 [00:01<00:00, 64.00it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 87%|          | 110/126 [00:01<00:00, 64.44it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 88%|          | 111/126 [00:01<00:00, 64.87it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 89%|          | 112/126 [00:01<00:00, 65.30it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 90%|          | 113/126 [00:01<00:00, 65.73it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 90%|          | 114/126 [00:01<00:00, 66.16it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 91%|          | 115/126 [00:01<00:00, 66.59it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 92%|          | 116/126 [00:01<00:00, 67.02it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 93%|          | 117/126 [00:01<00:00, 67.45it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 94%|          | 118/126 [00:01<00:00, 67.87it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 94%|          | 119/126 [00:01<00:00, 68.30it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 95%|          | 120/126 [00:01<00:00, 68.72it/s, loss=0.00578,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 207.22it/s]
Epoch 16: 96%|          | 121/126 [00:01<00:00, 69.14it/s, loss=0.00578,

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v_num=4.31e+7]
Epoch 16: 97%|      | 122/126 [00:01<00:00, 69.56it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 98%|      | 123/126 [00:01<00:00, 70.00it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 98%|      | 124/126 [00:01<00:00, 70.45it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 99%|      | 125/126 [00:01<00:00, 70.89it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 71.33it/s, loss=0.00578,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|     | 126/126 [00:01<00:00, 70.16it/s, loss=0.00578,
v_num=4.31e+7]
Epoch 16: 100%|     | 126/126 [00:01<00:00, 70.04it/s, loss=0.00578,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 79.53it/s, loss=0.00574,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 71.15it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 71.23it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 71.77it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 72.29it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 72.82it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 73.34it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 73.86it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 74.38it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 87%|      | 109/126 [00:01<00:00, 74.90it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 75.42it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 75.95it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 76.45it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 76.97it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 77.48it/s, loss=0.00574,
v_num=4.31e+7]

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Epoch 17: 91%|      | 115/126 [00:01<00:00, 77.99it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 92%|      | 116/126 [00:01<00:00, 78.50it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 79.00it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 79.51it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 80.02it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 80.52it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 81.02it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 81.52it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 82.05it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 82.58it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 83.11it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 83.64it/s, loss=0.00574,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 82.18it/s, loss=0.00574,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 82.05it/s, loss=0.00574,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 70.97it/s, loss=0.0052,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 63.10it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 63.19it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 63.65it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 64.11it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 64.57it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 65.02it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 65.47it/s, loss=0.0052,
v_num=4.31e+7]

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Epoch 18: 86%|      | 108/126 [00:01<00:00, 65.92it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 66.38it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 66.83it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 67.28it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 67.72it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 68.17it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 68.62it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 69.06it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 69.49it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 69.93it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 70.36it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 70.80it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 71.23it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 71.66it/s, loss=0.0052,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 217.64it/s]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 72.09it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 72.55it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 73.00it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 73.45it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 73.91it/s, loss=0.0052,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 72.59it/s, loss=0.0052,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 72.44it/s, loss=0.0052,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 76.40it/s, loss=0.00462,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 19: 80%| | 101/126 [00:01<00:00, 67.18it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 81%| | 102/126 [00:01<00:00, 67.24it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 82%| | 103/126 [00:01<00:00, 67.74it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 83%| | 104/126 [00:01<00:00, 68.24it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 83%| | 105/126 [00:01<00:00, 68.75it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 84%| | 106/126 [00:01<00:00, 69.25it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 85%| | 107/126 [00:01<00:00, 69.75it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 86%| | 108/126 [00:01<00:00, 70.25it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 87%| | 109/126 [00:01<00:00, 70.75it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 87%| | 110/126 [00:01<00:00, 71.25it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 88%| | 111/126 [00:01<00:00, 71.74it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 89%| | 112/126 [00:01<00:00, 72.23it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 90%| | 113/126 [00:01<00:00, 72.72it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 90%| | 114/126 [00:01<00:00, 73.22it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 91%| | 115/126 [00:01<00:00, 73.71it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 92%| | 116/126 [00:01<00:00, 74.21it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 93%| | 117/126 [00:01<00:00, 74.70it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 94%| | 118/126 [00:01<00:00, 75.18it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 94%| | 119/126 [00:01<00:00, 75.66it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 95%| | 120/126 [00:01<00:00, 76.15it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 96%| | 121/126 [00:01<00:00, 76.63it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 97%| | 122/126 [00:01<00:00, 77.12it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 98%| | 123/126 [00:01<00:00, 77.63it/s, loss=0.00462, v_num=4.31e+7]
Epoch 19: 98%| | 124/126 [00:01<00:00, 78.14it/s, loss=0.00462, v_num=4.31e+7]

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Epoch 19: 99%|      | 125/126 [00:01<00:00, 78.64it/s, loss=0.00462,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.00462,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 77.40it/s, loss=0.00462,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 77.27it/s, loss=0.00462,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 91.45it/s, loss=0.00446,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|      | 101/126 [00:01<00:00, 77.38it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 81%|      | 102/126 [00:01<00:00, 77.68it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 82%|      | 103/126 [00:01<00:00, 78.13it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 83%|      | 104/126 [00:01<00:00, 78.58it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 83%|      | 105/126 [00:01<00:00, 79.04it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 84%|      | 106/126 [00:01<00:00, 79.48it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 85%|      | 107/126 [00:01<00:00, 79.93it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 86%|      | 108/126 [00:01<00:00, 80.37it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 87%|      | 109/126 [00:01<00:00, 80.83it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 87%|      | 110/126 [00:01<00:00, 81.29it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 88%|      | 111/126 [00:01<00:00, 81.75it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 89%|      | 112/126 [00:01<00:00, 82.21it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 90%|      | 113/126 [00:01<00:00, 82.68it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 90%|      | 114/126 [00:01<00:00, 83.15it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 91%|      | 115/126 [00:01<00:00, 83.62it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 92%|      | 116/126 [00:01<00:00, 84.09it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 93%|      | 117/126 [00:01<00:00, 84.56it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 94%|      | 118/126 [00:01<00:00, 85.02it/s, loss=0.00446,

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v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 188.29it/s]
Epoch 20: 94%|          | 119/126 [00:01<00:00, 85.49it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 95%|          | 120/126 [00:01<00:00, 85.96it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 96%|          | 121/126 [00:01<00:00, 86.43it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 97%|          | 122/126 [00:01<00:00, 86.91it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 98%|          | 123/126 [00:01<00:00, 87.43it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 98%|          | 124/126 [00:01<00:00, 87.94it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 99%|          | 125/126 [00:01<00:00, 88.44it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 20: 100%|         | 126/126 [00:01<00:00, 88.95it/s, loss=0.00446,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|         | 126/126 [00:01<00:00, 86.45it/s, loss=0.00446,
v_num=4.31e+7]

Epoch 20: 100%|         | 126/126 [00:01<00:00, 86.21it/s, loss=0.00446,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 79%|          | 100/126 [00:01<00:00, 68.37it/s, loss=0.00431,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|          | 101/126 [00:01<00:00, 60.75it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 81%|          | 102/126 [00:01<00:00, 60.82it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 82%|          | 103/126 [00:01<00:00, 61.24it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 83%|          | 104/126 [00:01<00:00, 61.66it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 83%|          | 105/126 [00:01<00:00, 62.08it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 84%|          | 106/126 [00:01<00:00, 62.50it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 85%|          | 107/126 [00:01<00:00, 62.93it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 86%|          | 108/126 [00:01<00:00, 63.35it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 87%|          | 109/126 [00:01<00:00, 63.77it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 87%|          | 110/126 [00:01<00:00, 64.19it/s, loss=0.00431,
v_num=4.31e+7]

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Epoch 21: 88%|      | 111/126 [00:01<00:00, 64.62it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 65.04it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 65.47it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 65.89it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 66.32it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 66.75it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 67.17it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 67.60it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 68.02it/s, loss=0.00431,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 195.00it/s]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 68.44it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 68.85it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 69.28it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 69.72it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 70.16it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 70.60it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 71.04it/s, loss=0.00431,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 69.78it/s, loss=0.00431,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 69.64it/s, loss=0.00431,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 79.55it/s, loss=0.00458,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 69.11it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 69.17it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 69.66it/s, loss=0.00458,
v_num=4.31e+7]

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Epoch 22: 83%|      | 104/126 [00:01<00:00, 70.15it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 70.65it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 71.13it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 71.62it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 72.10it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 72.56it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 73.02it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 73.50it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 73.97it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 74.44it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 74.91it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 75.39it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 75.85it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 76.32it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 76.78it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 77.24it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 77.70it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 78.15it/s, loss=0.00458,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.78it/s]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 78.61it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 79.09it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 79.57it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 80.05it/s, loss=0.00458,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 80.53it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 78.49it/s, loss=0.00458,

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v_num=4.31e+7]
Epoch 22: 100%|      | 126/126 [00:01<00:00, 78.31it/s, loss=0.00458,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|      | 100/126 [00:01<00:00, 80.71it/s, loss=0.00433,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|      | 101/126 [00:01<00:00, 71.15it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 81%|      | 102/126 [00:01<00:00, 71.17it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 82%|      | 103/126 [00:01<00:00, 71.71it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 83%|      | 104/126 [00:01<00:00, 72.22it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 83%|      | 105/126 [00:01<00:00, 72.75it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 84%|      | 106/126 [00:01<00:00, 73.26it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 85%|      | 107/126 [00:01<00:00, 73.79it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 86%|      | 108/126 [00:01<00:00, 74.29it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 87%|      | 109/126 [00:01<00:00, 74.83it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 87%|      | 110/126 [00:01<00:00, 75.33it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 88%|      | 111/126 [00:01<00:00, 75.86it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 89%|      | 112/126 [00:01<00:00, 76.37it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 90%|      | 113/126 [00:01<00:00, 76.89it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 90%|      | 114/126 [00:01<00:00, 77.39it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 91%|      | 115/126 [00:01<00:00, 77.92it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 92%|      | 116/126 [00:01<00:00, 78.42it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 93%|      | 117/126 [00:01<00:00, 78.95it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 94%|      | 118/126 [00:01<00:00, 79.44it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 94%|      | 119/126 [00:01<00:00, 79.96it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 95%|      | 120/126 [00:01<00:00, 80.45it/s, loss=0.00433,
v_num=4.31e+7]

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Epoch 23: 96%|      | 121/126 [00:01<00:00, 80.97it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 97%|      | 122/126 [00:01<00:00, 81.46it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 81.99it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 82.53it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 83.05it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 83.59it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 82.06it/s, loss=0.00433,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 81.91it/s, loss=0.00433,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|      | 100/126 [00:01<00:00, 68.95it/s, loss=0.0042,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 62.07it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 62.23it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 62.73it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 63.19it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 63.68it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 64.15it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 64.64it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 65.09it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 65.58it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 66.04it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 66.52it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 66.98it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 67.46it/s, loss=0.0042,
v_num=4.31e+7]

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Epoch 24: 90%|      | 114/126 [00:01<00:00, 67.91it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 68.39it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 68.85it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 69.32it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 69.78it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 70.24it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 70.69it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 71.16it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 71.61it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 72.09it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 72.56it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 73.04it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 73.52it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 71.90it/s, loss=0.0042,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 71.76it/s, loss=0.0042,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 72.13it/s, loss=0.00404,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 63.71it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 63.73it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 64.20it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 64.66it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 65.12it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 65.58it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 66.05it/s, loss=0.00404,

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v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 66.50it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 66.96it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 67.42it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 67.88it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 68.33it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 68.78it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 69.23it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 69.67it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 70.11it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 70.56it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 71.00it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 71.43it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 71.87it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 72.30it/s, loss=0.00404,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.23it/s]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 72.74it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 73.20it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 73.65it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 74.11it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 74.56it/s, loss=0.00404,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.14it/s, loss=0.00404,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 73.00it/s, loss=0.00404,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 71.87it/s, loss=0.00368,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|          | 101/126 [00:01<00:00, 63.63it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 81%|          | 102/126 [00:01<00:00, 63.74it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 82%|          | 103/126 [00:01<00:00, 64.23it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 83%|          | 104/126 [00:01<00:00, 64.72it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 83%|          | 105/126 [00:01<00:00, 65.20it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 84%|          | 106/126 [00:01<00:00, 65.69it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 85%|          | 107/126 [00:01<00:00, 66.17it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 86%|          | 108/126 [00:01<00:00, 66.65it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 87%|          | 109/126 [00:01<00:00, 67.14it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 87%|          | 110/126 [00:01<00:00, 67.61it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 88%|          | 111/126 [00:01<00:00, 68.09it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 89%|          | 112/126 [00:01<00:00, 68.57it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 90%|          | 113/126 [00:01<00:00, 68.98it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 90%|          | 114/126 [00:01<00:00, 69.45it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 91%|          | 115/126 [00:01<00:00, 69.93it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 92%|          | 116/126 [00:01<00:00, 70.40it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 93%|          | 117/126 [00:01<00:00, 70.88it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 94%|          | 118/126 [00:01<00:00, 71.35it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 94%|          | 119/126 [00:01<00:00, 71.82it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 95%|          | 120/126 [00:01<00:00, 72.29it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 96%|          | 121/126 [00:01<00:00, 72.76it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 97%|          | 122/126 [00:01<00:00, 73.23it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 98%|          | 123/126 [00:01<00:00, 73.72it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 98%|          | 124/126 [00:01<00:00, 74.20it/s, loss=0.00368,

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v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 74.70it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 75.19it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|     | 126/126 [00:01<00:00, 73.92it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 26: 100%|     | 126/126 [00:01<00:00, 73.80it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 72.58it/s, loss=0.00455,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 63.45it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 63.66it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 64.12it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 64.58it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 65.04it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 65.50it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 65.96it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 66.41it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 66.87it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 67.32it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 67.77it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 68.21it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 68.66it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 69.11it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 69.55it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 69.98it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 93%|      | 117/126 [00:01<00:00, 70.42it/s, loss=0.00455,

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v_num=4.31e+7]
Epoch 27: 94%|      | 118/126 [00:01<00:00, 70.85it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 71.29it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 71.72it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 72.15it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 72.58it/s, loss=0.00455,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.08it/s]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 73.03it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 73.48it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 73.93it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 74.39it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 72.53it/s, loss=0.00455,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 72.37it/s, loss=0.00455,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 66.49it/s, loss=0.00401,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 59.26it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 59.49it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 59.97it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 60.42it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 60.90it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 61.35it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 61.82it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 62.27it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 62.74it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 63.18it/s, loss=0.00401,

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v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 63.65it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 64.10it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 64.57it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 65.01it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 65.48it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 65.92it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 66.39it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 66.82it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 67.28it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 67.71it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 68.17it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 68.61it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 69.07it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 69.53it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 69.99it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 70.45it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.37it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.28it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 78.67it/s, loss=0.00407,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 68.18it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 68.31it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 68.77it/s, loss=0.00407,
v_num=4.31e+7]

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Epoch 29: 83%|      | 104/126 [00:01<00:00, 69.23it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 69.68it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 70.14it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 70.60it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 71.06it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 87%|      | 109/126 [00:01<00:00, 71.52it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 71.98it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 72.44it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 89%|      | 112/126 [00:01<00:00, 72.90it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 73.36it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 73.82it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 74.28it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 74.74it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 75.20it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 75.66it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 76.11it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 76.57it/s, loss=0.00407,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.23it/s]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 77.01it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 77.46it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 77.94it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 78.42it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 78.89it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 79.37it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 77.81it/s, loss=0.00407,

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v_num=4.31e+7]
Epoch 29: 100%|      | 126/126 [00:01<00:00, 77.65it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 64.32it/s, loss=0.00407,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 57.10it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 57.33it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 57.75it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 58.17it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 58.60it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 59.02it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 59.45it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 59.87it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 60.29it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 60.71it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 61.14it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 61.56it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 61.98it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 62.40it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 62.81it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 63.23it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 63.65it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 94%|      | 118/126 [00:01<00:00, 64.06it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 94%|      | 119/126 [00:01<00:00, 64.47it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 95%|      | 120/126 [00:01<00:00, 64.88it/s, loss=0.00407,

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v_num=4.31e+7]
Epoch 30: 96%|      | 121/126 [00:01<00:00, 65.29it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 97%|      | 122/126 [00:01<00:00, 65.70it/s, loss=0.00407,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.79it/s]
Epoch 30: 98%|      | 123/126 [00:01<00:00, 66.12it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 98%|      | 124/126 [00:01<00:00, 66.55it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 99%|      | 125/126 [00:01<00:00, 66.98it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 67.40it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|     | 126/126 [00:01<00:00, 66.31it/s, loss=0.00407,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 66.19it/s, loss=0.00407,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|      | 100/126 [00:01<00:00, 72.78it/s, loss=0.00438,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|      | 101/126 [00:01<00:00, 64.58it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 81%|      | 102/126 [00:01<00:00, 64.73it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 82%|      | 103/126 [00:01<00:00, 65.23it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 83%|      | 104/126 [00:01<00:00, 65.72it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 83%|      | 105/126 [00:01<00:00, 66.22it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 84%|      | 106/126 [00:01<00:00, 66.71it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 85%|      | 107/126 [00:01<00:00, 67.21it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 86%|      | 108/126 [00:01<00:00, 67.70it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 87%|      | 109/126 [00:01<00:00, 68.19it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 87%|      | 110/126 [00:01<00:00, 68.68it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 88%|      | 111/126 [00:01<00:00, 69.17it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 69.66it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 90%|      | 113/126 [00:01<00:00, 70.14it/s, loss=0.00438,

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v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 70.62it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 71.10it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 71.59it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 72.06it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 72.54it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 73.01it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 73.49it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 73.95it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 74.43it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 74.92it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 75.41it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 75.90it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 76.40it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 75.09it/s, loss=0.00438,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 74.97it/s, loss=0.00438,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 72.47it/s, loss=0.00355,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 64.98it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 65.03it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 65.50it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 65.96it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 66.43it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 66.90it/s, loss=0.00355,
v_num=4.31e+7]

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Epoch 32: 85%| | 107/126 [00:01<00:00, 67.36it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 86%| | 108/126 [00:01<00:00, 67.82it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 87%| | 109/126 [00:01<00:00, 68.29it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 87%| | 110/126 [00:01<00:00, 68.75it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 88%| | 111/126 [00:01<00:00, 69.20it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 89%| | 112/126 [00:01<00:00, 69.66it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 90%| | 113/126 [00:01<00:00, 70.11it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 90%| | 114/126 [00:01<00:00, 70.56it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 91%| | 115/126 [00:01<00:00, 71.02it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 92%| | 116/126 [00:01<00:00, 71.46it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 93%| | 117/126 [00:01<00:00, 71.91it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 94%| | 118/126 [00:01<00:00, 72.35it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 94%| | 119/126 [00:01<00:00, 72.79it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 95%| | 120/126 [00:01<00:00, 73.23it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 96%| | 121/126 [00:01<00:00, 73.67it/s, loss=0.00355, v_num=4.31e+7]
Validation DataLoader 0: 85%| | 22/26 [00:00<00:00, 215.82it/s]
Epoch 32: 97%| | 122/126 [00:01<00:00, 74.11it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 98%| | 123/126 [00:01<00:00, 74.57it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 98%| | 124/126 [00:01<00:00, 75.03it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 99%| | 125/126 [00:01<00:00, 75.48it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 100%| | 126/126 [00:01<00:00, 75.94it/s, loss=0.00355, v_num=4.31e+7] Mapping latent space..
Epoch 32: 100%| | 126/126 [00:01<00:00, 74.57it/s, loss=0.00355, v_num=4.31e+7]
Epoch 32: 100%| | 126/126 [00:01<00:00, 74.42it/s, loss=0.00355, v_num=4.31e+7] Mapping latent space..
Epoch 33: 79%| | 100/126 [00:01<00:00, 82.04it/s, loss=0.00424, v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|          | 101/126 [00:01<00:00, 71.09it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 81%|          | 102/126 [00:01<00:00, 71.42it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 82%|          | 103/126 [00:01<00:00, 71.92it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 83%|          | 104/126 [00:01<00:00, 72.42it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 83%|          | 105/126 [00:01<00:00, 72.92it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 84%|          | 106/126 [00:01<00:00, 73.41it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 85%|          | 107/126 [00:01<00:00, 73.91it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 86%|          | 108/126 [00:01<00:00, 74.39it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 87%|          | 109/126 [00:01<00:00, 74.87it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 87%|          | 110/126 [00:01<00:00, 75.36it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 88%|          | 111/126 [00:01<00:00, 75.84it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 89%|          | 112/126 [00:01<00:00, 76.33it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 90%|          | 113/126 [00:01<00:00, 76.81it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 90%|          | 114/126 [00:01<00:00, 77.29it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 91%|          | 115/126 [00:01<00:00, 77.77it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 92%|          | 116/126 [00:01<00:00, 78.25it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 93%|          | 117/126 [00:01<00:00, 78.72it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 94%|          | 118/126 [00:01<00:00, 79.19it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 94%|          | 119/126 [00:01<00:00, 79.66it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 95%|          | 120/126 [00:01<00:00, 80.13it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 96%|          | 121/126 [00:01<00:00, 80.59it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 97%|          | 122/126 [00:01<00:00, 81.05it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 98%|          | 123/126 [00:01<00:00, 81.55it/s, loss=0.00424,

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v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 238.29it/s]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 82.03it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 82.51it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 83.01it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 80.83it/s, loss=0.00424,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 80.65it/s, loss=0.00424,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 70.25it/s, loss=0.00341,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 62.39it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 62.25it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 62.75it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 63.22it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 63.72it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 64.19it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 64.68it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 65.14it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 65.64it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 66.10it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 66.59it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 67.05it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 67.54it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 67.99it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 68.48it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 68.94it/s, loss=0.00341,

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v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 69.41it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 69.86it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 70.32it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 70.78it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 71.25it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 71.70it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 72.18it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 72.66it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 73.14it/s, loss=0.00341,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 254.04it/s]
Epoch 34: 100%|      | 126/126 [00:01<00:00, 73.61it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|      | 126/126 [00:01<00:00, 72.43it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 34: 100%|      | 126/126 [00:01<00:00, 72.31it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 81.64it/s, loss=0.00366,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 71.17it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 70.99it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 71.54it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 72.05it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 72.59it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 73.10it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 73.64it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 86%|      | 108/126 [00:01<00:00, 74.14it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 74.67it/s, loss=0.00366,

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v_num=4.31e+7]
Epoch 35: 87%|      | 110/126 [00:01<00:00, 75.18it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 75.72it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 76.22it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 76.74it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 77.24it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 77.76it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 78.28it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 78.76it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 79.29it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 79.78it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 80.28it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 80.78it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 81.28it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 81.80it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 82.32it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 82.85it/s, loss=0.00366,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.05it/s]
Epoch 35: 100%|      | 126/126 [00:01<00:00, 83.38it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|      | 126/126 [00:01<00:00, 81.87it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 35: 100%|      | 126/126 [00:01<00:00, 81.73it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 68.18it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 60.83it/s, loss=0.00383,
v_num=4.31e+7]

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Epoch 36: 81%	102/126 [00:01<00:00, 60.93it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 82%	103/126 [00:01<00:00, 61.41it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 83%	104/126 [00:01<00:00, 61.88it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 83%	105/126 [00:01<00:00, 62.36it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 84%	106/126 [00:01<00:00, 62.82it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 85%	107/126 [00:01<00:00, 63.30it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 86%	108/126 [00:01<00:00, 63.75it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 87%	109/126 [00:01<00:00, 64.23it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 87%	110/126 [00:01<00:00, 64.69it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 88%	111/126 [00:01<00:00, 65.17it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 89%	112/126 [00:01<00:00, 65.62it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 90%	113/126 [00:01<00:00, 66.10it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 90%	114/126 [00:01<00:00, 66.55it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 91%	115/126 [00:01<00:00, 67.02it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 92%	116/126 [00:01<00:00, 67.47it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 93%	117/126 [00:01<00:00, 67.94it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 94%	118/126 [00:01<00:00, 68.39it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 94%	119/126 [00:01<00:00, 68.85it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 95%	120/126 [00:01<00:00, 69.30it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 96%	121/126 [00:01<00:00, 69.76it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 97%	122/126 [00:01<00:00, 70.21it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 98%	123/126 [00:01<00:00, 70.68it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 98%	124/126 [00:01<00:00, 71.15it/s, loss=0.00383,
v_num=4.31e+7]	
Epoch 36: 99%	125/126 [00:01<00:00, 71.62it/s, loss=0.00383,
v_num=4.31e+7]	

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Epoch 36: 100%|      | 126/126 [00:01<00:00, 72.09it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|      | 126/126 [00:01<00:00, 70.96it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 36: 100%|      | 126/126 [00:01<00:00, 70.85it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 69.71it/s, loss=0.0043,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 61.75it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 61.82it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 62.32it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 62.77it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 63.26it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 63.72it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 64.21it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 64.66it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 65.15it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 65.61it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 66.09it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 66.55it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 67.03it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 67.49it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 67.97it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 68.43it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 68.90it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 94%|      | 118/126 [00:01<00:00, 69.35it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 69.82it/s, loss=0.0043,

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v_num=4.31e+7]
Epoch 37: 95%|      | 120/126 [00:01<00:00, 70.27it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 70.74it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 71.19it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 71.67it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 72.14it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 72.62it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 73.10it/s, loss=0.0043,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 71.96it/s, loss=0.0043,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 71.85it/s, loss=0.0043,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 74.48it/s, loss=0.00396,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 66.41it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 66.50it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 67.03it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 67.53it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 68.05it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 68.54it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 69.06it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 69.54it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 70.06it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 70.54it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 71.05it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 71.53it/s, loss=0.00396,
v_num=4.31e+7]

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Epoch 38: 90%|      | 113/126 [00:01<00:00, 72.05it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 72.53it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 73.04it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 73.52it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 74.03it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 74.50it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 75.01it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 75.48it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 75.98it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 76.45it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 76.96it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 77.46it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 77.96it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 78.46it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 77.11it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 77.00it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 81.47it/s, loss=0.00409,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 71.10it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 71.12it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 71.67it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 72.18it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 72.73it/s, loss=0.00409,
v_num=4.31e+7]

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Epoch 39: 84%|      | 106/126 [00:01<00:00, 73.27it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 73.77it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 74.32it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 74.82it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 75.34it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 75.88it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 76.38it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 76.92it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 77.41it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 77.92it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 78.43it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 78.95it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 79.45it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 79.97it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 80.46it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 80.95it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 81.45it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 81.98it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 82.51it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 83.04it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 83.57it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 82.01it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 81.87it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 68.31it/s, loss=0.00359,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|          | 101/126 [00:01<00:00, 61.15it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 81%|          | 102/126 [00:01<00:00, 61.44it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 82%|          | 103/126 [00:01<00:00, 61.84it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 83%|          | 104/126 [00:01<00:00, 62.24it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 83%|          | 105/126 [00:01<00:00, 62.64it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 84%|          | 106/126 [00:01<00:00, 63.05it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 85%|          | 107/126 [00:01<00:00, 63.45it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 86%|          | 108/126 [00:01<00:00, 63.85it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 87%|          | 109/126 [00:01<00:00, 64.25it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 87%|          | 110/126 [00:01<00:00, 64.66it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 88%|          | 111/126 [00:01<00:00, 65.07it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 89%|          | 112/126 [00:01<00:00, 65.47it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 90%|          | 113/126 [00:01<00:00, 65.88it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 90%|          | 114/126 [00:01<00:00, 66.30it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 91%|          | 115/126 [00:01<00:00, 66.71it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 92%|          | 116/126 [00:01<00:00, 67.12it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 93%|          | 117/126 [00:01<00:00, 67.52it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 94%|          | 118/126 [00:01<00:00, 67.94it/s, loss=0.00359,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 186.70it/s]
Epoch 40: 94%|          | 119/126 [00:01<00:00, 68.34it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 95%|          | 120/126 [00:01<00:00, 68.75it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 96%|          | 121/126 [00:01<00:00, 69.16it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 97%|          | 122/126 [00:01<00:00, 69.58it/s, loss=0.00359,
v_num=4.31e+7]

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Epoch 40: 98%|      | 123/126 [00:01<00:00, 70.02it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 70.45it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 70.89it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 71.33it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|     | 126/126 [00:01<00:00, 70.13it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 70.01it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 78.73it/s, loss=0.00396,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 69.84it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 69.98it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 70.51it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 71.02it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 71.55it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 72.06it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 72.58it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 73.07it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 87%|      | 109/126 [00:01<00:00, 73.59it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 74.10it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 74.61it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 75.11it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 75.62it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 76.12it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 76.63it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 77.13it/s, loss=0.00396,

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v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 77.64it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 78.14it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 78.63it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 79.13it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 79.62it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 80.13it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 80.65it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 81.18it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 81.69it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 82.21it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 80.68it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 80.55it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 92.79it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 80.91it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 80.85it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 81.30it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 81.75it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 82.20it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 82.65it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 83.10it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 83.54it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 84.00it/s, loss=0.00383,

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v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 84.46it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 84.91it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 85.37it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 85.83it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 86.30it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 86.76it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 87.24it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 87.71it/s, loss=0.00383,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.76it/s]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 88.17it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 88.64it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 89.12it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 89.59it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 90.08it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 90.59it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 91.10it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 91.62it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 92.14it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 90.18it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 90.00it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 75.23it/s, loss=0.00379,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 66.23it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 81%|      | 102/126 [00:01<00:00, 66.46it/s, loss=0.00379,

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v_num=4.31e+7]
Epoch 43: 82%| | 103/126 [00:01<00:00, 66.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 83%| | 104/126 [00:01<00:00, 67.46it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 83%| | 105/126 [00:01<00:00, 67.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 84%| | 106/126 [00:01<00:00, 68.46it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 85%| | 107/126 [00:01<00:00, 68.95it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 86%| | 108/126 [00:01<00:00, 69.45it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 87%| | 109/126 [00:01<00:00, 69.93it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 87%| | 110/126 [00:01<00:00, 70.43it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 88%| | 111/126 [00:01<00:00, 70.93it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 89%| | 112/126 [00:01<00:00, 71.41it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 90%| | 113/126 [00:01<00:00, 71.90it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 90%| | 114/126 [00:01<00:00, 72.38it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 91%| | 115/126 [00:01<00:00, 72.87it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 92%| | 116/126 [00:01<00:00, 73.35it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 93%| | 117/126 [00:01<00:00, 73.84it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 94%| | 118/126 [00:01<00:00, 74.31it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 94%| | 119/126 [00:01<00:00, 74.79it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 95%| | 120/126 [00:01<00:00, 75.27it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 96%| | 121/126 [00:01<00:00, 75.75it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 97%| | 122/126 [00:01<00:00, 76.23it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 98%| | 123/126 [00:01<00:00, 76.73it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 98%| | 124/126 [00:01<00:00, 77.23it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 99%| | 125/126 [00:01<00:00, 77.73it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 100%| | 126/126 [00:01<00:00, 78.23it/s, loss=0.00379,

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v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|      | 126/126 [00:01<00:00, 76.89it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 43: 100%|      | 126/126 [00:01<00:00, 76.75it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 44:  79%|      | 100/126 [00:01<00:00, 79.03it/s, loss=0.00402,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44:  80%|      | 101/126 [00:01<00:00, 68.87it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  81%|      | 102/126 [00:01<00:00, 69.03it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  82%|      | 103/126 [00:01<00:00, 69.50it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  83%|      | 104/126 [00:01<00:00, 69.96it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  83%|      | 105/126 [00:01<00:00, 70.42it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  84%|      | 106/126 [00:01<00:00, 70.89it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  85%|      | 107/126 [00:01<00:00, 71.35it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  86%|      | 108/126 [00:01<00:00, 71.80it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  87%|      | 109/126 [00:01<00:00, 72.26it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  87%|      | 110/126 [00:01<00:00, 72.72it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  88%|      | 111/126 [00:01<00:00, 73.17it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  89%|      | 112/126 [00:01<00:00, 73.62it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  90%|      | 113/126 [00:01<00:00, 74.06it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  90%|      | 114/126 [00:01<00:00, 74.51it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  91%|      | 115/126 [00:01<00:00, 74.95it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  92%|      | 116/126 [00:01<00:00, 75.39it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  93%|      | 117/126 [00:01<00:00, 75.83it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  94%|      | 118/126 [00:01<00:00, 76.27it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44:  94%|      | 119/126 [00:01<00:00, 76.71it/s, loss=0.00402,
v_num=4.31e+7]

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Epoch 44: 95%|      | 120/126 [00:01<00:00, 77.14it/s, loss=0.00402,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 202.80it/s]
Epoch 44: 96%|      | 121/126 [00:01<00:00, 77.56it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 97%|      | 122/126 [00:01<00:00, 77.99it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 98%|      | 123/126 [00:01<00:00, 78.44it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 78.88it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 79.32it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 79.77it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 78.22it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 78.06it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...

Epoch 45: 79%|      | 100/126 [00:01<00:00, 74.64it/s, loss=0.00446,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 67.13it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 67.31it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 67.79it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 83%|      | 104/126 [00:01<00:00, 68.28it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 68.76it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 69.25it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 69.73it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 70.21it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 87%|      | 109/126 [00:01<00:00, 70.69it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 71.17it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 71.65it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 72.12it/s, loss=0.00446,

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v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 72.59it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 73.06it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 73.53it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 74.01it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 74.47it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 74.94it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 75.39it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 75.85it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 76.31it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 76.77it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 77.25it/s, loss=0.00446,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 239.72it/s]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 77.72it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 78.20it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 78.68it/s, loss=0.00446,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00446,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 77.24it/s, loss=0.00446,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 67.58it/s, loss=0.00351,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 59.55it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 59.53it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 59.97it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 60.41it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 60.85it/s, loss=0.00351,

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v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 61.29it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 61.73it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 62.16it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 62.60it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 63.04it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 63.47it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 63.90it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 64.33it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 64.76it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 65.19it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 65.62it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 66.04it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 66.46it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 66.88it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 67.28it/s, loss=0.00351,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.37it/s]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 67.68it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 68.09it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 68.52it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 68.95it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 69.39it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 69.82it/s, loss=0.00351,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 68.37it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 68.24it/s, loss=0.00351,
v_num=4.31e+7]Mapping latent space...

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Epoch 47: 79%|          | 100/126 [00:01<00:00, 81.02it/s, loss=0.00405,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|          | 101/126 [00:01<00:00, 71.64it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 81%|          | 102/126 [00:01<00:00, 71.70it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 82%|          | 103/126 [00:01<00:00, 72.25it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 83%|          | 104/126 [00:01<00:00, 72.77it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 83%|          | 105/126 [00:01<00:00, 73.31it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 84%|          | 106/126 [00:01<00:00, 73.83it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 85%|          | 107/126 [00:01<00:00, 74.36it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 86%|          | 108/126 [00:01<00:00, 74.87it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 87%|          | 109/126 [00:01<00:00, 75.41it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 87%|          | 110/126 [00:01<00:00, 75.92it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 88%|          | 111/126 [00:01<00:00, 76.45it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 89%|          | 112/126 [00:01<00:00, 76.96it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 90%|          | 113/126 [00:01<00:00, 77.49it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 90%|          | 114/126 [00:01<00:00, 78.00it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 91%|          | 115/126 [00:01<00:00, 78.52it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 92%|          | 116/126 [00:01<00:00, 79.02it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 93%|          | 117/126 [00:01<00:00, 79.55it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 94%|          | 118/126 [00:01<00:00, 80.05it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 94%|          | 119/126 [00:01<00:00, 80.56it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 95%|          | 120/126 [00:01<00:00, 81.06it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 96%|          | 121/126 [00:01<00:00, 81.57it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 97%|          | 122/126 [00:01<00:00, 82.08it/s, loss=0.00405,

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v_num=4.31e+7]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 82.61it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 83.14it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 83.68it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 84.22it/s, loss=0.00405,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 82.25it/s, loss=0.00405,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 72.53it/s, loss=0.00391,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 64.52it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 64.71it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 65.17it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 65.64it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 66.10it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 66.57it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 67.03it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 67.49it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 67.95it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 68.41it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 68.87it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 89%|      | 112/126 [00:01<00:00, 69.32it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 69.78it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 70.24it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 70.69it/s, loss=0.00391,

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v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 71.14it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 71.59it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 72.04it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 72.48it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 72.93it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 73.37it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 73.81it/s, loss=0.00391,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.33it/s]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 74.27it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 74.73it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 75.19it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 75.66it/s, loss=0.00391,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 74.28it/s, loss=0.00391,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 74.14it/s, loss=0.00391,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 80.34it/s, loss=0.00357,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 72.30it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 72.40it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 72.96it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 73.48it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 74.04it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 74.56it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 75.11it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 75.62it/s, loss=0.00357,

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v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 76.17it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 76.67it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 77.21it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 77.72it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 78.25it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 78.75it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 79.29it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 79.78it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 80.30it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 80.80it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 81.33it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 81.81it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 82.32it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 82.82it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 83.36it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 83.89it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 84.43it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 84.97it/s, loss=0.00357,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 83.42it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 83.28it/s, loss=0.00357,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 64.26it/s, loss=0.00329,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|      | 101/126 [00:01<00:00, 58.00it/s, loss=0.00329,
v_num=4.31e+7]

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Epoch 50: 81%|      | 102/126 [00:01<00:00, 58.22it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 82%|      | 103/126 [00:01<00:00, 58.65it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 83%|      | 104/126 [00:01<00:00, 59.08it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 83%|      | 105/126 [00:01<00:00, 59.49it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 84%|      | 106/126 [00:01<00:00, 59.91it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 85%|      | 107/126 [00:01<00:00, 60.33it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 86%|      | 108/126 [00:01<00:00, 60.75it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 87%|      | 109/126 [00:01<00:00, 61.16it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 87%|      | 110/126 [00:01<00:00, 61.58it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 88%|      | 111/126 [00:01<00:00, 62.00it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 89%|      | 112/126 [00:01<00:00, 62.42it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 90%|      | 113/126 [00:01<00:00, 62.83it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 90%|      | 114/126 [00:01<00:00, 63.25it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 91%|      | 115/126 [00:01<00:00, 63.66it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 92%|      | 116/126 [00:01<00:00, 64.07it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 93%|      | 117/126 [00:01<00:00, 64.48it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 94%|      | 118/126 [00:01<00:00, 64.89it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 94%|      | 119/126 [00:01<00:00, 65.29it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 95%|      | 120/126 [00:01<00:00, 65.70it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 96%|      | 121/126 [00:01<00:00, 66.10it/s, loss=0.00329,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.80it/s]
Epoch 50: 97%|      | 122/126 [00:01<00:00, 66.50it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 98%|      | 123/126 [00:01<00:00, 66.93it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 67.36it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 67.78it/s, loss=0.00329,

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v_num=4.31e+7]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 68.21it/s, loss=0.00329,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|      | 126/126 [00:01<00:00, 67.12it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 67.02it/s, loss=0.00329,
v_num=4.31e+7]Mapping latent space...

Epoch 51: 79%|      | 100/126 [00:01<00:00, 62.21it/s, loss=0.00359,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 55.56it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 55.69it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 56.11it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 56.53it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 56.95it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 57.37it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 57.79it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 58.20it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 58.62it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 59.04it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 59.45it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 59.86it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 60.28it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 60.68it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 61.10it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 61.50it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 61.91it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 62.31it/s, loss=0.00359,

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v_num=4.31e+7]
Epoch 51: 94%|      | 119/126 [00:01<00:00, 62.72it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 63.12it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 63.52it/s, loss=0.00359,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 217.07it/s]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 63.92it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 64.34it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 64.75it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 65.16it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 65.58it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 64.57it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 64.47it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 80.73it/s, loss=0.00366,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 72.00it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 72.16it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 72.70it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 73.22it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 73.75it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 74.27it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 74.80it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 75.30it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 75.83it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 76.33it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 76.86it/s, loss=0.00366,

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v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 77.36it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 77.87it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 78.38it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 78.89it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 79.39it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 79.89it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 80.40it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 80.92it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 81.40it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 81.91it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 82.41it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 82.94it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 83.48it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 84.01it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 84.55it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 82.99it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 82.85it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 74.85it/s, loss=0.00399,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 65.49it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 65.86it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 82%|      | 103/126 [00:01<00:00, 66.33it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 83%|      | 104/126 [00:01<00:00, 66.81it/s, loss=0.00399,
v_num=4.31e+7]

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Epoch 53: 83%|      | 105/126 [00:01<00:00, 67.27it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 84%|      | 106/126 [00:01<00:00, 67.75it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 85%|      | 107/126 [00:01<00:00, 68.22it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 86%|      | 108/126 [00:01<00:00, 68.68it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 87%|      | 109/126 [00:01<00:00, 69.15it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 87%|      | 110/126 [00:01<00:00, 69.62it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 88%|      | 111/126 [00:01<00:00, 70.08it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 89%|      | 112/126 [00:01<00:00, 70.54it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 90%|      | 113/126 [00:01<00:00, 71.00it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 90%|      | 114/126 [00:01<00:00, 71.46it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 91%|      | 115/126 [00:01<00:00, 71.92it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 92%|      | 116/126 [00:01<00:00, 72.38it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 93%|      | 117/126 [00:01<00:00, 72.83it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 94%|      | 118/126 [00:01<00:00, 73.28it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 94%|      | 119/126 [00:01<00:00, 73.73it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 95%|      | 120/126 [00:01<00:00, 74.18it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 74.62it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 75.08it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 75.54it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 76.01it/s, loss=0.00399,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 242.60it/s]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 76.47it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 76.94it/s, loss=0.00399,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 75.43it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 75.30it/s, loss=0.00399,

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v_num=4.31e+7]Mapping latent space...

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Epoch 54: 79%|          | 100/126 [00:01<00:00, 73.37it/s, loss=0.00369,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|          | 101/126 [00:01<00:00, 64.23it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 81%|          | 102/126 [00:01<00:00, 64.32it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 82%|          | 103/126 [00:01<00:00, 64.78it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 83%|          | 104/126 [00:01<00:00, 65.24it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 83%|          | 105/126 [00:01<00:00, 65.70it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 84%|          | 106/126 [00:01<00:00, 66.16it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 85%|          | 107/126 [00:01<00:00, 66.62it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 86%|          | 108/126 [00:01<00:00, 67.07it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 87%|          | 109/126 [00:01<00:00, 67.53it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 87%|          | 110/126 [00:01<00:00, 67.98it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 88%|          | 111/126 [00:01<00:00, 68.44it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 89%|          | 112/126 [00:01<00:00, 68.89it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 90%|          | 113/126 [00:01<00:00, 69.34it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 90%|          | 114/126 [00:01<00:00, 69.80it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 91%|          | 115/126 [00:01<00:00, 70.25it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 92%|          | 116/126 [00:01<00:00, 70.70it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 93%|          | 117/126 [00:01<00:00, 71.15it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 94%|          | 118/126 [00:01<00:00, 71.60it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 94%|          | 119/126 [00:01<00:00, 72.04it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 95%|          | 120/126 [00:01<00:00, 72.49it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 96%|          | 121/126 [00:01<00:00, 72.93it/s, loss=0.00369,
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v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 218.40it/s]
Epoch 54: 97%|          | 122/126 [00:01<00:00, 73.38it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 98%|          | 123/126 [00:01<00:00, 73.85it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 98%|          | 124/126 [00:01<00:00, 74.31it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 99%|          | 125/126 [00:01<00:00, 74.78it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 100%|         | 126/126 [00:01<00:00, 75.24it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|         | 126/126 [00:01<00:00, 73.94it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 54: 100%|         | 126/126 [00:01<00:00, 73.80it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|          | 100/126 [00:01<00:00, 70.29it/s, loss=0.00379,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|          | 101/126 [00:01<00:00, 61.54it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 81%|          | 102/126 [00:01<00:00, 61.51it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 82%|          | 103/126 [00:01<00:00, 61.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 83%|          | 104/126 [00:01<00:00, 62.41it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 83%|          | 105/126 [00:01<00:00, 62.87it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 84%|          | 106/126 [00:01<00:00, 63.31it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 85%|          | 107/126 [00:01<00:00, 63.76it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 86%|          | 108/126 [00:01<00:00, 64.20it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 87%|          | 109/126 [00:01<00:00, 64.65it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 87%|          | 110/126 [00:01<00:00, 65.09it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 88%|          | 111/126 [00:01<00:00, 65.53it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 89%|          | 112/126 [00:01<00:00, 65.97it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 90%|          | 113/126 [00:01<00:00, 66.41it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 90%|          | 114/126 [00:01<00:00, 66.85it/s, loss=0.00379,

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v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 67.29it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 67.72it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 68.15it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 68.58it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 69.01it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 69.44it/s, loss=0.00379,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.01it/s]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 69.85it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 70.29it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 70.73it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 71.17it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 71.62it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 72.06it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 70.81it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 70.68it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 74.20it/s, loss=0.00376,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 65.63it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 65.63it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 66.15it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 66.64it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 67.15it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 84%|      | 106/126 [00:01<00:00, 67.63it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 85%|      | 107/126 [00:01<00:00, 68.14it/s, loss=0.00376,

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v_num=4.31e+7]
Epoch 56: 86%|      | 108/126 [00:01<00:00, 68.61it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 87%|      | 109/126 [00:01<00:00, 69.12it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 87%|      | 110/126 [00:01<00:00, 69.59it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 88%|      | 111/126 [00:01<00:00, 70.10it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 89%|      | 112/126 [00:01<00:00, 70.57it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 90%|      | 113/126 [00:01<00:00, 71.08it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 90%|      | 114/126 [00:01<00:00, 71.55it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 91%|      | 115/126 [00:01<00:00, 72.05it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 92%|      | 116/126 [00:01<00:00, 72.53it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 93%|      | 117/126 [00:01<00:00, 73.02it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 94%|      | 118/126 [00:01<00:00, 73.49it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 94%|      | 119/126 [00:01<00:00, 73.97it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 95%|      | 120/126 [00:01<00:00, 74.44it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 96%|      | 121/126 [00:01<00:00, 74.93it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 97%|      | 122/126 [00:01<00:00, 75.40it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 98%|      | 123/126 [00:01<00:00, 75.90it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 76.39it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 99%|      | 125/126 [00:01<00:00, 76.88it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 77.38it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 76.01it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 75.88it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...

Epoch 57: 79%|      | 100/126 [00:01<00:00, 81.21it/s, loss=0.00381,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|          | 101/126 [00:01<00:00, 71.09it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 81%|          | 102/126 [00:01<00:00, 71.36it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 82%|          | 103/126 [00:01<00:00, 71.78it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 83%|          | 104/126 [00:01<00:00, 72.21it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 83%|          | 105/126 [00:01<00:00, 72.65it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 84%|          | 106/126 [00:01<00:00, 73.08it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 85%|          | 107/126 [00:01<00:00, 73.52it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 86%|          | 108/126 [00:01<00:00, 73.95it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 87%|          | 109/126 [00:01<00:00, 74.39it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 87%|          | 110/126 [00:01<00:00, 74.83it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 88%|          | 111/126 [00:01<00:00, 75.27it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 89%|          | 112/126 [00:01<00:00, 75.71it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 90%|          | 113/126 [00:01<00:00, 76.15it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 90%|          | 114/126 [00:01<00:00, 76.59it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 91%|          | 115/126 [00:01<00:00, 77.04it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 92%|          | 116/126 [00:01<00:00, 77.47it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 93%|          | 117/126 [00:01<00:00, 77.91it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 94%|          | 118/126 [00:01<00:00, 78.36it/s, loss=0.00381,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 186.23it/s]
Epoch 57: 94%|          | 119/126 [00:01<00:00, 78.79it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 95%|          | 120/126 [00:01<00:00, 79.24it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 96%|          | 121/126 [00:01<00:00, 79.68it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 97%|          | 122/126 [00:01<00:00, 80.14it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 98%|          | 123/126 [00:01<00:00, 80.61it/s, loss=0.00381,
v_num=4.31e+7]

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Epoch 57: 98%|      | 124/126 [00:01<00:00, 81.09it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 81.57it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 82.06it/s, loss=0.00381,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 80.40it/s, loss=0.00381,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 80.23it/s, loss=0.00381,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 70.59it/s, loss=0.00414,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 62.59it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 62.63it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 63.02it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 63.42it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 63.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 64.21it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 64.61it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 65.01it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 65.41it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 65.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 66.23it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 66.65it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 67.06it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 67.48it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 67.89it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 68.31it/s, loss=0.00414,
v_num=4.31e+7]
Validation DataLoader 0: 65%|     | 17/26 [00:00<00:00, 167.59it/s]

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Epoch 58: 93%|      | 117/126 [00:01<00:00, 68.72it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 69.14it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 69.56it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 69.98it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 70.40it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 70.83it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 71.27it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 71.71it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 72.16it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 72.61it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.35it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.23it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 67.29it/s, loss=0.00364,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 60.42it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 60.62it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 61.07it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 61.53it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 61.98it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 84%|      | 106/126 [00:01<00:00, 62.43it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 85%|      | 107/126 [00:01<00:00, 62.87it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 86%|      | 108/126 [00:01<00:00, 63.31it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 87%|      | 109/126 [00:01<00:00, 63.76it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 87%|      | 110/126 [00:01<00:00, 64.20it/s, loss=0.00364,

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v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 64.64it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 65.08it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 65.51it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 65.95it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 66.38it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 66.82it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 67.25it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 67.68it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 68.11it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 68.53it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 68.95it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 69.38it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 69.82it/s, loss=0.00364,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.65it/s]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 70.26it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 70.70it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 71.14it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 69.87it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 69.76it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 77.60it/s, loss=0.00408,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 69.62it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 69.85it/s, loss=0.00408,
v_num=4.31e+7]

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Epoch 60: 82%| | 103/126 [00:01<00:00, 70.38it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 83%| | 104/126 [00:01<00:00, 70.89it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 83%| | 105/126 [00:01<00:00, 71.42it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 84%| | 106/126 [00:01<00:00, 71.93it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 85%| | 107/126 [00:01<00:00, 72.45it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 86%| | 108/126 [00:01<00:00, 72.96it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 87%| | 109/126 [00:01<00:00, 73.48it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 87%| | 110/126 [00:01<00:00, 74.00it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 88%| | 111/126 [00:01<00:00, 74.52it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 89%| | 112/126 [00:01<00:00, 75.02it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 90%| | 113/126 [00:01<00:00, 75.53it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 90%| | 114/126 [00:01<00:00, 76.04it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 91%| | 115/126 [00:01<00:00, 76.55it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 92%| | 116/126 [00:01<00:00, 77.05it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 93%| | 117/126 [00:01<00:00, 77.56it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 94%| | 118/126 [00:01<00:00, 78.06it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 94%| | 119/126 [00:01<00:00, 78.57it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 95%| | 120/126 [00:01<00:00, 79.07it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 96%| | 121/126 [00:01<00:00, 79.57it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 97%| | 122/126 [00:01<00:00, 80.07it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 98%| | 123/126 [00:01<00:00, 80.59it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 98%| | 124/126 [00:01<00:00, 81.12it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 99%| | 125/126 [00:01<00:00, 81.65it/s, loss=0.00408, v_num=4.31e+7]
Epoch 60: 100%| | 126/126 [00:01<00:00, 82.18it/s, loss=0.00408, v_num=4.31e+7]Mapping latent space...

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Epoch 60: 100%|      | 126/126 [00:01<00:00, 80.73it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 60: 100%|      | 126/126 [00:01<00:00, 80.60it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 91.44it/s, loss=0.00416,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 80.34it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 80.24it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 80.83it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 81.38it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 81.96it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 82.52it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 83.09it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 83.65it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 84.22it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 84.77it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 85.34it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 85.88it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 86.42it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 86.97it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 87.54it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 88.07it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 88.62it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 89.17it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 89.70it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 90.24it/s, loss=0.00416,

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v_num=4.31e+7]
Epoch 61: 96%|      | 121/126 [00:01<00:00, 90.78it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 91.31it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 91.89it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 92.46it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 93.03it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 93.60it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 91.68it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 91.51it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 67.53it/s, loss=0.00471,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 60.28it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 60.56it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 60.95it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 61.33it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 61.73it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 62.13it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 62.52it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 62.91it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 63.31it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 63.71it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 64.11it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 64.52it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 64.92it/s, loss=0.00471,
v_num=4.31e+7]

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Epoch 62: 90%|      | 114/126 [00:01<00:00, 65.33it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 65.73it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 66.14it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 66.54it/s, loss=0.00471,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.55it/s]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 66.95it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 67.35it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 67.76it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 68.17it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 68.58it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 69.01it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 69.44it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 69.88it/s, loss=0.00471,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 70.31it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 69.03it/s, loss=0.00471,
v_num=4.31e+7]

Epoch 62: 100%|     | 126/126 [00:01<00:00, 68.86it/s, loss=0.00471,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 79%|      | 100/126 [00:01<00:00, 76.97it/s, loss=0.00364,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 67.39it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 67.32it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 67.79it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 68.26it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 83%|      | 105/126 [00:01<00:00, 68.74it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 84%|      | 106/126 [00:01<00:00, 69.21it/s, loss=0.00364,

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v_num=4.31e+7]
Epoch 63: 85%|      | 107/126 [00:01<00:00, 69.70it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 86%|      | 108/126 [00:01<00:00, 70.14it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 87%|      | 109/126 [00:01<00:00, 70.61it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 87%|      | 110/126 [00:01<00:00, 71.08it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 88%|      | 111/126 [00:01<00:00, 71.55it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 89%|      | 112/126 [00:01<00:00, 72.01it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 90%|      | 113/126 [00:01<00:00, 72.47it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 90%|      | 114/126 [00:01<00:00, 72.93it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 91%|      | 115/126 [00:01<00:00, 73.39it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 92%|      | 116/126 [00:01<00:00, 73.84it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 93%|      | 117/126 [00:01<00:00, 74.30it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 94%|      | 118/126 [00:01<00:00, 74.75it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 94%|      | 119/126 [00:01<00:00, 75.20it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 95%|      | 120/126 [00:01<00:00, 75.65it/s, loss=0.00364,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.32it/s]
Epoch 63: 96%|      | 121/126 [00:01<00:00, 76.09it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 97%|      | 122/126 [00:01<00:00, 76.55it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 77.02it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 77.50it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 77.97it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 78.44it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 77.01it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 76.85it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 79%|      | 100/126 [00:01<00:00, 72.07it/s, loss=0.00382,
v_num=4.31e+7]

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Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|          | 101/126 [00:01<00:00, 63.99it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 81%|          | 102/126 [00:01<00:00, 64.06it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 82%|          | 103/126 [00:01<00:00, 64.53it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 83%|          | 104/126 [00:01<00:00, 64.97it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 83%|          | 105/126 [00:01<00:00, 65.45it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 84%|          | 106/126 [00:01<00:00, 65.93it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 85%|          | 107/126 [00:01<00:00, 66.40it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 86%|          | 108/126 [00:01<00:00, 66.87it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 87%|          | 109/126 [00:01<00:00, 67.35it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 87%|          | 110/126 [00:01<00:00, 67.82it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 88%|          | 111/126 [00:01<00:00, 68.31it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 89%|          | 112/126 [00:01<00:00, 68.76it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 90%|          | 113/126 [00:01<00:00, 69.23it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 90%|          | 114/126 [00:01<00:00, 69.70it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 91%|          | 115/126 [00:01<00:00, 70.17it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 92%|          | 116/126 [00:01<00:00, 70.64it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 93%|          | 117/126 [00:01<00:00, 71.10it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 94%|          | 118/126 [00:01<00:00, 71.57it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 94%|          | 119/126 [00:01<00:00, 72.03it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 95%|          | 120/126 [00:01<00:00, 72.49it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 96%|          | 121/126 [00:01<00:00, 72.96it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 97%|          | 122/126 [00:01<00:00, 73.42it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 98%|          | 123/126 [00:01<00:00, 73.90it/s, loss=0.00382,

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v_num=4.31e+7]
Epoch 64: 98%|      | 124/126 [00:01<00:00, 74.39it/s, loss=0.00382,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.12it/s]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 74.87it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 75.35it/s, loss=0.00382,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 74.14it/s, loss=0.00382,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 74.02it/s, loss=0.00382,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 73.69it/s, loss=0.00348,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 64.84it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 65.06it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 65.48it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 65.90it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 66.32it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 66.71it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 67.12it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 67.54it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 67.96it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 68.38it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 68.79it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 69.21it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 69.63it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 70.04it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 70.45it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 70.86it/s, loss=0.00348,

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v_num=4.31e+7]
Epoch 65: 93%|      | 117/126 [00:01<00:00, 71.27it/s, loss=0.00348,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.27it/s]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 71.67it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 72.07it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 72.47it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 96%|      | 121/126 [00:01<00:00, 72.86it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 73.27it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 73.69it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 74.12it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 74.54it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 74.97it/s, loss=0.00348,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 73.48it/s, loss=0.00348,
v_num=4.31e+7]

Epoch 65: 100%|     | 126/126 [00:01<00:00, 73.35it/s, loss=0.00348,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 79%|      | 100/126 [00:01<00:00, 66.86it/s, loss=0.00346,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 58.96it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 59.21it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 59.65it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 60.09it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 83%|      | 105/126 [00:01<00:00, 60.53it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 60.97it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 61.41it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 86%|      | 108/126 [00:01<00:00, 61.81it/s, loss=0.00346,
v_num=4.31e+7]

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Epoch 66: 87%|      | 109/126 [00:01<00:00, 62.25it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 62.68it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 63.11it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 63.53it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 63.96it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 90%|      | 114/126 [00:01<00:00, 64.38it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 64.81it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 65.23it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 65.65it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 66.07it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 66.49it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 66.89it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 67.31it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 67.73it/s, loss=0.00346,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.49it/s]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 68.16it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 68.59it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 69.02it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 69.45it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 67.96it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 67.83it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|      | 100/126 [00:01<00:00, 72.40it/s, loss=0.00338,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|      | 101/126 [00:01<00:00, 63.76it/s, loss=0.00338,
v_num=4.31e+7]

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Epoch 67: 81%| | 102/126 [00:01<00:00, 63.80it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 82%| | 103/126 [00:01<00:00, 64.22it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 83%| | 104/126 [00:01<00:00, 64.64it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 83%| | 105/126 [00:01<00:00, 65.06it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 84%| | 106/126 [00:01<00:00, 65.48it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 85%| | 107/126 [00:01<00:00, 65.90it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 86%| | 108/126 [00:01<00:00, 66.33it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 87%| | 109/126 [00:01<00:00, 66.75it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 87%| | 110/126 [00:01<00:00, 67.14it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 88%| | 111/126 [00:01<00:00, 67.56it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 89%| | 112/126 [00:01<00:00, 67.98it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 90%| | 113/126 [00:01<00:00, 68.40it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 90%| | 114/126 [00:01<00:00, 68.82it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 91%| | 115/126 [00:01<00:00, 69.25it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 92%| | 116/126 [00:01<00:00, 69.66it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 93%| | 117/126 [00:01<00:00, 70.08it/s, loss=0.00338, v_num=4.31e+7]
 Validation DataLoader 0: 69%| | 18/26 [00:00<00:00, 175.49it/s]
 Epoch 67: 94%| | 118/126 [00:01<00:00, 70.50it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 94%| | 119/126 [00:01<00:00, 70.92it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 95%| | 120/126 [00:01<00:00, 71.34it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 96%| | 121/126 [00:01<00:00, 71.76it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 97%| | 122/126 [00:01<00:00, 72.19it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 98%| | 123/126 [00:01<00:00, 72.64it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 98%| | 124/126 [00:01<00:00, 73.09it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 99%| | 125/126 [00:01<00:00, 73.54it/s, loss=0.00338, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 67: 100%|      | 126/126 [00:01<00:00, 73.99it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|      | 126/126 [00:01<00:00, 72.63it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 67: 100%|      | 126/126 [00:01<00:00, 72.49it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 68:  79%|      | 100/126 [00:01<00:00, 69.93it/s, loss=0.0037,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68:  80%|      | 101/126 [00:01<00:00, 62.16it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  81%|      | 102/126 [00:01<00:00, 62.15it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  82%|      | 103/126 [00:01<00:00, 62.64it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  83%|      | 104/126 [00:01<00:00, 63.11it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  83%|      | 105/126 [00:01<00:00, 63.61it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  84%|      | 106/126 [00:01<00:00, 64.07it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  85%|      | 107/126 [00:01<00:00, 64.56it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  86%|      | 108/126 [00:01<00:00, 65.03it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  87%|      | 109/126 [00:01<00:00, 65.52it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  87%|      | 110/126 [00:01<00:00, 65.98it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  88%|      | 111/126 [00:01<00:00, 66.47it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  89%|      | 112/126 [00:01<00:00, 66.90it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  90%|      | 113/126 [00:01<00:00, 67.39it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  90%|      | 114/126 [00:01<00:00, 67.84it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  91%|      | 115/126 [00:01<00:00, 68.32it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  92%|      | 116/126 [00:01<00:00, 68.77it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  93%|      | 117/126 [00:01<00:00, 69.25it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68:  94%|      | 118/126 [00:01<00:00, 69.70it/s, loss=0.0037,
v_num=4.31e+7]

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Epoch 68: 94%|      | 119/126 [00:01<00:00, 70.17it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 70.62it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 71.09it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 71.54it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 72.02it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 72.49it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 72.97it/s, loss=0.0037,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.17it/s]
Epoch 68: 100%|      | 126/126 [00:01<00:00, 73.44it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|      | 126/126 [00:01<00:00, 71.93it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 68: 100%|      | 126/126 [00:01<00:00, 71.81it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 80.83it/s, loss=0.0037,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 70.65it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 70.93it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 71.35it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 71.78it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 72.21it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 72.65it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 73.08it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 73.50it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 73.93it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 74.37it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 74.81it/s, loss=0.0037,

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v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 75.25it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 75.68it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 76.10it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 76.55it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 76.99it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 77.43it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 77.89it/s, loss=0.0037,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.75it/s]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 78.33it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 78.78it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 79.23it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 79.68it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 80.16it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 80.64it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 81.12it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 81.61it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 79.98it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 79.83it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 77.41it/s, loss=0.00393,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 67.62it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 67.84it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 68.33it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 83%|      | 104/126 [00:01<00:00, 68.81it/s, loss=0.00393,

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v_num=4.31e+7]
Epoch 70: 83%|      | 105/126 [00:01<00:00, 69.30it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 84%|      | 106/126 [00:01<00:00, 69.78it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 85%|      | 107/126 [00:01<00:00, 70.26it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 86%|      | 108/126 [00:01<00:00, 70.73it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 87%|      | 109/126 [00:01<00:00, 71.20it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 87%|      | 110/126 [00:01<00:00, 71.68it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 88%|      | 111/126 [00:01<00:00, 72.16it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 89%|      | 112/126 [00:01<00:00, 72.63it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 90%|      | 113/126 [00:01<00:00, 73.10it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 90%|      | 114/126 [00:01<00:00, 73.57it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 91%|      | 115/126 [00:01<00:00, 74.03it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 92%|      | 116/126 [00:01<00:00, 74.48it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 93%|      | 117/126 [00:01<00:00, 74.94it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 94%|      | 118/126 [00:01<00:00, 75.40it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 94%|      | 119/126 [00:01<00:00, 75.86it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 95%|      | 120/126 [00:01<00:00, 76.32it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 96%|      | 121/126 [00:01<00:00, 76.77it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 97%|      | 122/126 [00:01<00:00, 77.23it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 77.71it/s, loss=0.00393,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.53it/s]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 78.18it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 78.66it/s, loss=0.00393,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 79.14it/s, loss=0.00393,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 77.62it/s, loss=0.00393,
v_num=4.31e+7]

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Epoch 70: 100%|      | 126/126 [00:01<00:00, 77.47it/s, loss=0.00393,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 79.59it/s, loss=0.00368,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 70.10it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 70.13it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 82%|      | 103/126 [00:01<00:00, 70.62it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 83%|      | 104/126 [00:01<00:00, 71.11it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 83%|      | 105/126 [00:01<00:00, 71.63it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 84%|      | 106/126 [00:01<00:00, 72.13it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 85%|      | 107/126 [00:01<00:00, 72.65it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 86%|      | 108/126 [00:01<00:00, 73.13it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 87%|      | 109/126 [00:01<00:00, 73.63it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 87%|      | 110/126 [00:01<00:00, 74.12it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 88%|      | 111/126 [00:01<00:00, 74.64it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 89%|      | 112/126 [00:01<00:00, 75.12it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 90%|      | 113/126 [00:01<00:00, 75.62it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 90%|      | 114/126 [00:01<00:00, 76.10it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 91%|      | 115/126 [00:01<00:00, 76.61it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 92%|      | 116/126 [00:01<00:00, 77.09it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 93%|      | 117/126 [00:01<00:00, 77.60it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 94%|      | 118/126 [00:01<00:00, 78.04it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 94%|      | 119/126 [00:01<00:00, 78.52it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 95%|      | 120/126 [00:01<00:00, 79.00it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 96%|      | 121/126 [00:01<00:00, 79.50it/s, loss=0.00368,

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v_num=4.31e+7]
Epoch 71: 97%|      | 122/126 [00:01<00:00, 79.98it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 80.50it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 81.03it/s, loss=0.00368,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 245.03it/s]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 81.55it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 82.08it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 80.65it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 80.51it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 76.13it/s, loss=0.00415,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 66.30it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 66.41it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 66.88it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 67.36it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 67.82it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 68.29it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 68.76it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 69.23it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 69.69it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 70.15it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 70.61it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 71.07it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 71.53it/s, loss=0.00415,
v_num=4.31e+7]

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Epoch 72: 90%|      | 114/126 [00:01<00:00, 71.98it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 72.44it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 72.89it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 73.34it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 73.79it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 74.23it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 74.65it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 75.09it/s, loss=0.00415,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.99it/s]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 75.54it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 76.01it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 76.48it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 76.94it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 77.41it/s, loss=0.00415,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 75.99it/s, loss=0.00415,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 75.71it/s, loss=0.00415,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 67.42it/s, loss=0.00354,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 59.33it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 59.39it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 59.76it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 60.14it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 60.51it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 60.89it/s, loss=0.00354,
v_num=4.31e+7]

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Epoch 73: 85%|      | 107/126 [00:01<00:00, 61.27it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 61.65it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 62.04it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 62.43it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 62.82it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 63.21it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 63.61it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 64.00it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 64.40it/s, loss=0.00354,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 158.24it/s]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 64.79it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 65.19it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 65.60it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 66.00it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 66.40it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 66.80it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 67.19it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 67.61it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 68.04it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 68.46it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 68.89it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 67.35it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 67.23it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 77.40it/s, loss=0.00397,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|          | 101/126 [00:01<00:00, 68.45it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 81%|          | 102/126 [00:01<00:00, 68.66it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 82%|          | 103/126 [00:01<00:00, 69.19it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 83%|          | 104/126 [00:01<00:00, 69.69it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 83%|          | 105/126 [00:01<00:00, 70.20it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 84%|          | 106/126 [00:01<00:00, 70.70it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 85%|          | 107/126 [00:01<00:00, 71.22it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 86%|          | 108/126 [00:01<00:00, 71.71it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 87%|          | 109/126 [00:01<00:00, 72.22it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 87%|          | 110/126 [00:01<00:00, 72.71it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 88%|          | 111/126 [00:01<00:00, 73.22it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 89%|          | 112/126 [00:01<00:00, 73.71it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 90%|          | 113/126 [00:01<00:00, 74.21it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 90%|          | 114/126 [00:01<00:00, 74.70it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 91%|          | 115/126 [00:01<00:00, 75.19it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 92%|          | 116/126 [00:01<00:00, 75.69it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 93%|          | 117/126 [00:01<00:00, 76.18it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 94%|          | 118/126 [00:01<00:00, 76.67it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 94%|          | 119/126 [00:01<00:00, 77.16it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 95%|          | 120/126 [00:01<00:00, 77.65it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 96%|          | 121/126 [00:01<00:00, 78.14it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 97%|          | 122/126 [00:01<00:00, 78.63it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 98%|          | 123/126 [00:01<00:00, 79.15it/s, loss=0.00397,
v_num=4.31e+7]

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Epoch 74: 98%|      | 124/126 [00:01<00:00, 79.66it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 80.18it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 80.70it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 79.27it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...

Epoch 75: 79%|      | 100/126 [00:01<00:00, 90.62it/s, loss=0.00392,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 77.15it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 77.10it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 77.52it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 77.96it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 78.38it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 78.82it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 79.26it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 79.69it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 80.14it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 80.59it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 88%|      | 111/126 [00:01<00:00, 81.05it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 81.50it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 81.95it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 82.25it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 82.70it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 83.17it/s, loss=0.00392,
v_num=4.31e+7]

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Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 163.59it/s]
Epoch 75: 93%|          | 117/126 [00:01<00:00, 83.61it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 94%|          | 118/126 [00:01<00:00, 84.08it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 94%|          | 119/126 [00:01<00:00, 84.54it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 95%|          | 120/126 [00:01<00:00, 85.01it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 96%|          | 121/126 [00:01<00:00, 85.47it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 97%|          | 122/126 [00:01<00:00, 85.95it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 98%|          | 123/126 [00:01<00:00, 86.45it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 98%|          | 124/126 [00:01<00:00, 86.96it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 99%|          | 125/126 [00:01<00:00, 87.47it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 100%|         | 126/126 [00:01<00:00, 87.97it/s, loss=0.00392,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|         | 126/126 [00:01<00:00, 85.64it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 75: 100%|         | 126/126 [00:01<00:00, 85.44it/s, loss=0.00392,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|          | 100/126 [00:01<00:00, 70.37it/s, loss=0.00356,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|          | 101/126 [00:01<00:00, 61.34it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 81%|          | 102/126 [00:01<00:00, 61.73it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 82%|          | 103/126 [00:01<00:00, 62.13it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 83%|          | 104/126 [00:01<00:00, 62.55it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 83%|          | 105/126 [00:01<00:00, 62.97it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 84%|          | 106/126 [00:01<00:00, 63.39it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 85%|          | 107/126 [00:01<00:00, 63.81it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 86%|          | 108/126 [00:01<00:00, 64.23it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 87%|          | 109/126 [00:01<00:00, 64.65it/s, loss=0.00356,
v_num=4.31e+7]

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Epoch 76: 87%|      | 110/126 [00:01<00:00, 65.07it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 65.50it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 65.92it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 66.35it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 66.78it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 67.20it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 67.63it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 68.06it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 68.49it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 68.92it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 69.34it/s, loss=0.00356,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.11it/s]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 69.77it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 70.20it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 70.64it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 71.09it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 71.54it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 71.99it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 70.65it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 70.50it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 80.85it/s, loss=0.00377,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 70.10it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 70.33it/s, loss=0.00377,
v_num=4.31e+7]

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Epoch 77: 82%| | 103/126 [00:01<00:00, 70.59it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 83%| | 104/126 [00:01<00:00, 71.00it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 83%| | 105/126 [00:01<00:00, 71.42it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 84%| | 106/126 [00:01<00:00, 71.85it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 85%| | 107/126 [00:01<00:00, 72.28it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 86%| | 108/126 [00:01<00:00, 72.71it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 87%| | 109/126 [00:01<00:00, 73.15it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 87%| | 110/126 [00:01<00:00, 73.60it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 88%| | 111/126 [00:01<00:00, 74.04it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 89%| | 112/126 [00:01<00:00, 74.50it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 90%| | 113/126 [00:01<00:00, 74.94it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 90%| | 114/126 [00:01<00:00, 75.40it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 91%| | 115/126 [00:01<00:00, 75.85it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 92%| | 116/126 [00:01<00:00, 76.31it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 93%| | 117/126 [00:01<00:00, 76.76it/s, loss=0.00377, v_num=4.31e+7]
 Validation DataLoader 0: 69%| | 18/26 [00:00<00:00, 179.40it/s]
 Epoch 77: 94%| | 118/126 [00:01<00:00, 77.21it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 94%| | 119/126 [00:01<00:00, 77.66it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 95%| | 120/126 [00:01<00:00, 78.12it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 96%| | 121/126 [00:01<00:00, 78.57it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 97%| | 122/126 [00:01<00:00, 79.04it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 98%| | 123/126 [00:01<00:00, 79.52it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 98%| | 124/126 [00:01<00:00, 80.00it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 99%| | 125/126 [00:01<00:00, 80.48it/s, loss=0.00377, v_num=4.31e+7]
 Epoch 77: 100%| | 126/126 [00:01<00:00, 80.96it/s, loss=0.00377, v_num=4.31e+7]


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v_num=4.31e+7]Mapping latent space...
Epoch 77: 100%|      | 126/126 [00:01<00:00, 79.32it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 77: 100%|      | 126/126 [00:01<00:00, 79.17it/s, loss=0.00377,
v_num=4.31e+7]Mapping latent space...

Epoch 78: 79%|      | 100/126 [00:01<00:00, 84.67it/s, loss=0.00356,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|      | 101/126 [00:01<00:00, 75.12it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 81%|      | 102/126 [00:01<00:00, 75.25it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 82%|      | 103/126 [00:01<00:00, 75.80it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 83%|      | 104/126 [00:01<00:00, 76.34it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 83%|      | 105/126 [00:01<00:00, 76.89it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 84%|      | 106/126 [00:01<00:00, 77.42it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 85%|      | 107/126 [00:01<00:00, 77.97it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 86%|      | 108/126 [00:01<00:00, 78.50it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 87%|      | 109/126 [00:01<00:00, 79.04it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 87%|      | 110/126 [00:01<00:00, 79.59it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 88%|      | 111/126 [00:01<00:00, 80.12it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 89%|      | 112/126 [00:01<00:00, 80.64it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 90%|      | 113/126 [00:01<00:00, 81.17it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 90%|      | 114/126 [00:01<00:00, 81.69it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 91%|      | 115/126 [00:01<00:00, 82.22it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 92%|      | 116/126 [00:01<00:00, 82.75it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 93%|      | 117/126 [00:01<00:00, 83.27it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 94%|      | 118/126 [00:01<00:00, 83.79it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 94%|      | 119/126 [00:01<00:00, 84.32it/s, loss=0.00356,

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v_num=4.31e+7]
Epoch 78: 95%|      | 120/126 [00:01<00:00, 84.83it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 96%|      | 121/126 [00:01<00:00, 85.34it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 85.86it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 86.41it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 86.95it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 99%|      | 125/126 [00:01<00:00, 87.50it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 88.06it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 86.30it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 86.14it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 81.71it/s, loss=0.0036,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 71.07it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 70.98it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 71.47it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 71.96it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 72.45it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 72.93it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 73.42it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 73.90it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 74.39it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 74.90it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 75.37it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 75.85it/s, loss=0.0036,
v_num=4.31e+7]

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Epoch 79: 90%|      | 113/126 [00:01<00:00, 76.33it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 76.81it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 77.29it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 77.76it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 78.23it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 78.72it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 79.17it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 79.64it/s, loss=0.0036,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.97it/s]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 80.10it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 80.56it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 81.05it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 81.54it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 82.02it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 82.51it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 80.44it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 80.15it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 64.78it/s, loss=0.0033,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 57.51it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 57.74it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 58.17it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 58.60it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 59.03it/s, loss=0.0033,
v_num=4.31e+7]

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Epoch 80: 84%|      | 106/126 [00:01<00:00, 59.45it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 85%|      | 107/126 [00:01<00:00, 59.88it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 86%|      | 108/126 [00:01<00:00, 60.31it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 87%|      | 109/126 [00:01<00:00, 60.73it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 87%|      | 110/126 [00:01<00:00, 61.16it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 88%|      | 111/126 [00:01<00:00, 61.58it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 89%|      | 112/126 [00:01<00:00, 62.00it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 90%|      | 113/126 [00:01<00:00, 62.42it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 90%|      | 114/126 [00:01<00:00, 62.85it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 91%|      | 115/126 [00:01<00:00, 63.27it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 92%|      | 116/126 [00:01<00:00, 63.69it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 93%|      | 117/126 [00:01<00:00, 64.10it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 94%|      | 118/126 [00:01<00:00, 64.52it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 94%|      | 119/126 [00:01<00:00, 64.93it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 95%|      | 120/126 [00:01<00:00, 65.34it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 96%|      | 121/126 [00:01<00:00, 65.75it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 97%|      | 122/126 [00:01<00:00, 66.17it/s, loss=0.0033,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.17it/s]
Epoch 80: 98%|      | 123/126 [00:01<00:00, 66.59it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 98%|      | 124/126 [00:01<00:00, 67.02it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 67.45it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 67.88it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|     | 126/126 [00:01<00:00, 66.69it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 66.58it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...

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Epoch 81: 79%|          | 100/126 [00:01<00:00, 76.46it/s, loss=0.0038,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|          | 101/126 [00:01<00:00, 68.51it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 81%|          | 102/126 [00:01<00:00, 68.70it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 82%|          | 103/126 [00:01<00:00, 69.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 83%|          | 104/126 [00:01<00:00, 69.69it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 83%|          | 105/126 [00:01<00:00, 70.19it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 84%|          | 106/126 [00:01<00:00, 70.70it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 85%|          | 107/126 [00:01<00:00, 71.21it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 86%|          | 108/126 [00:01<00:00, 71.70it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 87%|          | 109/126 [00:01<00:00, 72.21it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 87%|          | 110/126 [00:01<00:00, 72.71it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 88%|          | 111/126 [00:01<00:00, 73.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 89%|          | 112/126 [00:01<00:00, 73.70it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 90%|          | 113/126 [00:01<00:00, 74.20it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 90%|          | 114/126 [00:01<00:00, 74.69it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 91%|          | 115/126 [00:01<00:00, 75.19it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 92%|          | 116/126 [00:01<00:00, 75.68it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 93%|          | 117/126 [00:01<00:00, 76.18it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 94%|          | 118/126 [00:01<00:00, 76.66it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 94%|          | 119/126 [00:01<00:00, 77.15it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 95%|          | 120/126 [00:01<00:00, 77.64it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 96%|          | 121/126 [00:01<00:00, 78.12it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 97%|          | 122/126 [00:01<00:00, 78.61it/s, loss=0.0038,

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v_num=4.31e+7]
Epoch 81: 98%|      | 123/126 [00:01<00:00, 79.13it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 79.64it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 80.15it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 80.67it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 79.28it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 89.33it/s, loss=0.0037,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 77.94it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 77.91it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 78.46it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 79.01it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 79.56it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 80.10it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 80.65it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 81.18it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 81.73it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 82.26it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 82.80it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 83.33it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 83.87it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 84.32it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 84.84it/s, loss=0.0037,
v_num=4.31e+7]

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Epoch 82: 92%|      | 116/126 [00:01<00:00, 85.38it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 85.91it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 94%|      | 118/126 [00:01<00:00, 86.44it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 86.97it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 87.50it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 88.03it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 88.57it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 89.13it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 89.69it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 90.24it/s, loss=0.0037,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 254.71it/s]
Epoch 82: 100%|      | 126/126 [00:01<00:00, 90.81it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|      | 126/126 [00:01<00:00, 88.93it/s, loss=0.0037,
v_num=4.31e+7]
Epoch 82: 100%|      | 126/126 [00:01<00:00, 88.78it/s, loss=0.0037,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|      | 100/126 [00:01<00:00, 84.92it/s, loss=0.00329,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|      | 101/126 [00:01<00:00, 73.92it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 81%|      | 102/126 [00:01<00:00, 74.12it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 82%|      | 103/126 [00:01<00:00, 74.63it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 83%|      | 104/126 [00:01<00:00, 75.13it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 83%|      | 105/126 [00:01<00:00, 75.63it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 84%|      | 106/126 [00:01<00:00, 76.13it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 85%|      | 107/126 [00:01<00:00, 76.63it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 86%|      | 108/126 [00:01<00:00, 77.13it/s, loss=0.00329,
v_num=4.31e+7]

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Epoch 83: 87%|      | 109/126 [00:01<00:00, 77.63it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 87%|      | 110/126 [00:01<00:00, 78.13it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 88%|      | 111/126 [00:01<00:00, 78.62it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 89%|      | 112/126 [00:01<00:00, 79.11it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 90%|      | 113/126 [00:01<00:00, 79.60it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 90%|      | 114/126 [00:01<00:00, 80.10it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 91%|      | 115/126 [00:01<00:00, 80.59it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 92%|      | 116/126 [00:01<00:00, 81.08it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 93%|      | 117/126 [00:01<00:00, 81.57it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 94%|      | 118/126 [00:01<00:00, 82.05it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 94%|      | 119/126 [00:01<00:00, 82.53it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 83.01it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 83.49it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 83.97it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 84.47it/s, loss=0.00329,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.57it/s]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 84.97it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 85.47it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 85.97it/s, loss=0.00329,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 84.27it/s, loss=0.00329,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 84.09it/s, loss=0.00329,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 79.84it/s, loss=0.0036,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 71.07it/s, loss=0.0036,

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v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 71.38it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 71.72it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 83%|      | 104/126 [00:01<00:00, 72.16it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 83%|      | 105/126 [00:01<00:00, 72.60it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 84%|      | 106/126 [00:01<00:00, 73.04it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 85%|      | 107/126 [00:01<00:00, 73.48it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 86%|      | 108/126 [00:01<00:00, 73.91it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 87%|      | 109/126 [00:01<00:00, 74.35it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 87%|      | 110/126 [00:01<00:00, 74.79it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 88%|      | 111/126 [00:01<00:00, 75.23it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 89%|      | 112/126 [00:01<00:00, 75.67it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 90%|      | 113/126 [00:01<00:00, 76.12it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 90%|      | 114/126 [00:01<00:00, 76.57it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 91%|      | 115/126 [00:01<00:00, 77.02it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 92%|      | 116/126 [00:01<00:00, 77.47it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 93%|      | 117/126 [00:01<00:00, 77.92it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 94%|      | 118/126 [00:01<00:00, 78.37it/s, loss=0.0036,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.58it/s]
Epoch 84: 94%|      | 119/126 [00:01<00:00, 78.81it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 95%|      | 120/126 [00:01<00:00, 79.27it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 96%|      | 121/126 [00:01<00:00, 79.73it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 97%|      | 122/126 [00:01<00:00, 80.19it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 98%|      | 123/126 [00:01<00:00, 80.68it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 98%|      | 124/126 [00:01<00:00, 81.16it/s, loss=0.0036,
v_num=4.31e+7]

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Epoch 84: 99%|      | 125/126 [00:01<00:00, 81.65it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 82.14it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|     | 126/126 [00:01<00:00, 80.57it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 80.42it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 80.19it/s, loss=0.00365,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85: 80%|      | 101/126 [00:01<00:00, 70.79it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 81%|      | 102/126 [00:01<00:00, 71.00it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 82%|      | 103/126 [00:01<00:00, 71.54it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 83%|      | 104/126 [00:01<00:00, 72.05it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 83%|      | 105/126 [00:01<00:00, 72.58it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 84%|      | 106/126 [00:01<00:00, 73.09it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 85%|      | 107/126 [00:01<00:00, 73.63it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 86%|      | 108/126 [00:01<00:00, 74.13it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 87%|      | 109/126 [00:01<00:00, 74.65it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 87%|      | 110/126 [00:01<00:00, 75.15it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 88%|      | 111/126 [00:01<00:00, 75.68it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 89%|      | 112/126 [00:01<00:00, 76.17it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 90%|      | 113/126 [00:01<00:00, 76.71it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 90%|      | 114/126 [00:01<00:00, 77.20it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 91%|      | 115/126 [00:01<00:00, 77.72it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 92%|      | 116/126 [00:01<00:00, 78.20it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 93%|      | 117/126 [00:01<00:00, 78.72it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 94%|      | 118/126 [00:01<00:00, 79.21it/s, loss=0.00365,

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v_num=4.31e+7]
Epoch 85: 94%|      | 119/126 [00:01<00:00, 79.72it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 95%|      | 120/126 [00:01<00:00, 80.20it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 80.70it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 81.19it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 81.71it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 82.23it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 82.75it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 83.27it/s, loss=0.00365,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 81.26it/s, loss=0.00365,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 81.12it/s, loss=0.00365,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 81.20it/s, loss=0.00367,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 71.10it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 71.46it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 71.89it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 72.32it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 72.75it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 84%|      | 106/126 [00:01<00:00, 73.18it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 73.62it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 74.05it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 74.49it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 74.92it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 75.36it/s, loss=0.00367,
v_num=4.31e+7]

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Epoch 86: 89%|      | 112/126 [00:01<00:00, 75.79it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 90%|      | 113/126 [00:01<00:00, 76.23it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 76.67it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 91%|      | 115/126 [00:01<00:00, 77.11it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 77.56it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 78.00it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 94%|      | 118/126 [00:01<00:00, 78.44it/s, loss=0.00367,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.37it/s]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 78.88it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 79.33it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 79.77it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 80.22it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 80.70it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 81.18it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 81.66it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 82.15it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 80.56it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 80.39it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 81.34it/s, loss=0.00334,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 72.00it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 72.31it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 72.75it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 73.19it/s, loss=0.00334,

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v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 73.64it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 74.08it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 74.53it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 86%|      | 108/126 [00:01<00:00, 74.96it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 75.41it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 75.86it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 76.30it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 76.75it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 77.20it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 77.66it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 91%|      | 115/126 [00:01<00:00, 78.10it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 78.56it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 79.01it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 79.46it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 79.92it/s, loss=0.00334,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 195.48it/s]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 80.37it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 80.82it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 81.28it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 81.77it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 82.26it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 82.75it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 83.24it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 81.64it/s, loss=0.00334,
v_num=4.31e+7]

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Epoch 87: 100%|      | 126/126 [00:01<00:00, 81.47it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 81.19it/s, loss=0.00389,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|      | 101/126 [00:01<00:00, 71.62it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 81%|      | 102/126 [00:01<00:00, 71.73it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 82%|      | 103/126 [00:01<00:00, 72.28it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 83%|      | 104/126 [00:01<00:00, 72.80it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 83%|      | 105/126 [00:01<00:00, 73.34it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 84%|      | 106/126 [00:01<00:00, 73.86it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 85%|      | 107/126 [00:01<00:00, 74.39it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 86%|      | 108/126 [00:01<00:00, 74.90it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 87%|      | 109/126 [00:01<00:00, 75.43it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 87%|      | 110/126 [00:01<00:00, 75.95it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 88%|      | 111/126 [00:01<00:00, 76.49it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 89%|      | 112/126 [00:01<00:00, 77.00it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 90%|      | 113/126 [00:01<00:00, 77.52it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 90%|      | 114/126 [00:01<00:00, 78.03it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 91%|      | 115/126 [00:01<00:00, 78.55it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 92%|      | 116/126 [00:01<00:00, 79.07it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 93%|      | 117/126 [00:01<00:00, 79.57it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 94%|      | 118/126 [00:01<00:00, 80.07it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 94%|      | 119/126 [00:01<00:00, 80.58it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 95%|      | 120/126 [00:01<00:00, 81.08it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 96%|      | 121/126 [00:01<00:00, 81.58it/s, loss=0.00389,

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v_num=4.31e+7]
Epoch 88: 97%|      | 122/126 [00:01<00:00, 82.10it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 98%|      | 123/126 [00:01<00:00, 82.63it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 98%|      | 124/126 [00:01<00:00, 83.17it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 99%|      | 125/126 [00:01<00:00, 83.71it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 84.25it/s, loss=0.00389,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|     | 126/126 [00:01<00:00, 82.75it/s, loss=0.00389,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 82.61it/s, loss=0.00389,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 76.74it/s, loss=0.00296,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 67.53it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 67.61it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 68.09it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 68.57it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 69.04it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 69.52it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 70.00it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 70.47it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 70.95it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 71.42it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 71.89it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 72.36it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 72.82it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 73.29it/s, loss=0.00296,
v_num=4.31e+7]

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Epoch 89: 91%|      | 115/126 [00:01<00:00, 73.75it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 74.22it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 74.68it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 75.14it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 75.60it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 76.06it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 76.51it/s, loss=0.00296,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.47it/s]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 76.96it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 77.44it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 77.92it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 78.40it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.00296,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|     | 126/126 [00:01<00:00, 77.37it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 77.22it/s, loss=0.00296,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 76.93it/s, loss=0.00359,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 69.10it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 69.33it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 69.82it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 70.32it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 70.82it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 71.32it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 71.82it/s, loss=0.00359,

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v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 72.32it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 87%|      | 109/126 [00:01<00:00, 72.83it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 73.33it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 73.83it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 74.33it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 74.83it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 90%|      | 114/126 [00:01<00:00, 75.32it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 75.82it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 76.31it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 76.80it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 94%|      | 118/126 [00:01<00:00, 77.30it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 77.78it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 78.27it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 78.76it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 79.25it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 79.77it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 80.29it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 80.81it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 81.34it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 79.94it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 79.81it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 71.82it/s, loss=0.00368,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 91: 80%| | 101/126 [00:01<00:00, 63.27it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 81%| | 102/126 [00:01<00:00, 63.35it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 82%| | 103/126 [00:01<00:00, 63.80it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 83%| | 104/126 [00:01<00:00, 64.25it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 83%| | 105/126 [00:01<00:00, 64.71it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 84%| | 106/126 [00:01<00:00, 65.16it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 85%| | 107/126 [00:01<00:00, 65.62it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 86%| | 108/126 [00:01<00:00, 66.06it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 87%| | 109/126 [00:01<00:00, 66.52it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 87%| | 110/126 [00:01<00:00, 66.97it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 88%| | 111/126 [00:01<00:00, 67.42it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 89%| | 112/126 [00:01<00:00, 67.86it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 90%| | 113/126 [00:01<00:00, 68.31it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 90%| | 114/126 [00:01<00:00, 68.75it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 91%| | 115/126 [00:01<00:00, 69.20it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 92%| | 116/126 [00:01<00:00, 69.64it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 93%| | 117/126 [00:01<00:00, 70.08it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 94%| | 118/126 [00:01<00:00, 70.52it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 94%| | 119/126 [00:01<00:00, 70.95it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 95%| | 120/126 [00:01<00:00, 71.39it/s, loss=0.00368, v_num=4.31e+7]
 Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 204.17it/s]
 Epoch 91: 96%| | 121/126 [00:01<00:00, 71.82it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 97%| | 122/126 [00:01<00:00, 72.25it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 98%| | 123/126 [00:01<00:00, 72.71it/s, loss=0.00368, v_num=4.31e+7]
 Epoch 91: 98%| | 124/126 [00:01<00:00, 73.16it/s, loss=0.00368, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 91: 99%|      | 125/126 [00:01<00:00, 73.61it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 74.06it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|     | 126/126 [00:01<00:00, 72.66it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 72.50it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 76.22it/s, loss=0.00386,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|      | 101/126 [00:01<00:00, 66.79it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 81%|      | 102/126 [00:01<00:00, 66.85it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 82%|      | 103/126 [00:01<00:00, 67.33it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 83%|      | 104/126 [00:01<00:00, 67.81it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 83%|      | 105/126 [00:01<00:00, 68.28it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 84%|      | 106/126 [00:01<00:00, 68.76it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 85%|      | 107/126 [00:01<00:00, 69.23it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 86%|      | 108/126 [00:01<00:00, 69.69it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 87%|      | 109/126 [00:01<00:00, 70.16it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 87%|      | 110/126 [00:01<00:00, 70.63it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 88%|      | 111/126 [00:01<00:00, 71.10it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 89%|      | 112/126 [00:01<00:00, 71.56it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 90%|      | 113/126 [00:01<00:00, 72.02it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 90%|      | 114/126 [00:01<00:00, 72.48it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 91%|      | 115/126 [00:01<00:00, 72.93it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 92%|      | 116/126 [00:01<00:00, 73.39it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 93%|      | 117/126 [00:01<00:00, 73.85it/s, loss=0.00386,
v_num=4.31e+7]

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Epoch 92: 94%|      | 118/126 [00:01<00:00, 74.30it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 74.75it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 75.20it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 96%|      | 121/126 [00:01<00:00, 75.65it/s, loss=0.00386,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.85it/s]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 76.09it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 76.57it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 77.03it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 77.50it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 77.98it/s, loss=0.00386,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 76.47it/s, loss=0.00386,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 76.32it/s, loss=0.00386,
v_num=4.31e+7]Mapping latent space...

Epoch 93: 79%|      | 100/126 [00:01<00:00, 75.00it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 65.34it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 65.55it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 66.00it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 66.45it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 66.90it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 67.36it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 67.82it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 68.27it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 68.73it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 69.19it/s, loss=0.00331,

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v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 69.65it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 70.10it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 70.56it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 90%|      | 114/126 [00:01<00:00, 71.02it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 71.48it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 71.93it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 93%|      | 117/126 [00:01<00:00, 72.38it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 72.84it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 73.29it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 73.74it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 74.19it/s, loss=0.00331,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.76it/s]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 74.64it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 75.11it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 75.59it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 76.06it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 76.53it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 75.14it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 75.01it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 68.72it/s, loss=0.00403,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 61.22it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 61.21it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 61.68it/s, loss=0.00403,

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v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 62.14it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 62.60it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 63.06it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 85%|      | 107/126 [00:01<00:00, 63.53it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 63.99it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 64.45it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 64.91it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 65.37it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 65.82it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 66.28it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 66.74it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 91%|      | 115/126 [00:01<00:00, 67.19it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 67.65it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 68.10it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 68.55it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 69.00it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 69.45it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 69.90it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 70.35it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 70.82it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 71.28it/s, loss=0.00403,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.15it/s]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 71.75it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 72.22it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...

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Epoch 94: 100%|      | 126/126 [00:01<00:00, 71.08it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 94: 100%|      | 126/126 [00:01<00:00, 70.98it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 88.27it/s, loss=0.00409,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|      | 101/126 [00:01<00:00, 75.47it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 81%|      | 102/126 [00:01<00:00, 75.42it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 82%|      | 103/126 [00:01<00:00, 75.84it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 83%|      | 104/126 [00:01<00:00, 76.26it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 83%|      | 105/126 [00:01<00:00, 76.69it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 84%|      | 106/126 [00:01<00:00, 77.12it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 85%|      | 107/126 [00:01<00:00, 77.54it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 86%|      | 108/126 [00:01<00:00, 77.98it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 87%|      | 109/126 [00:01<00:00, 78.42it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 87%|      | 110/126 [00:01<00:00, 78.86it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 88%|      | 111/126 [00:01<00:00, 79.30it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 89%|      | 112/126 [00:01<00:00, 79.75it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 90%|      | 113/126 [00:01<00:00, 80.21it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 90%|      | 114/126 [00:01<00:00, 80.67it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 91%|      | 115/126 [00:01<00:00, 81.13it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 92%|      | 116/126 [00:01<00:00, 81.59it/s, loss=0.00409,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.96it/s]
Epoch 95: 93%|      | 117/126 [00:01<00:00, 82.04it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 94%|      | 118/126 [00:01<00:00, 82.50it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 94%|      | 119/126 [00:01<00:00, 82.96it/s, loss=0.00409,
v_num=4.31e+7]

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Epoch 95: 95%|      | 120/126 [00:01<00:00, 83.42it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 96%|      | 121/126 [00:01<00:00, 83.89it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 97%|      | 122/126 [00:01<00:00, 84.35it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 98%|      | 123/126 [00:01<00:00, 84.85it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 98%|      | 124/126 [00:01<00:00, 85.35it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 85.84it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 86.35it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 84.59it/s, loss=0.00409,
v_num=4.31e+7]

Epoch 95: 100%|     | 126/126 [00:01<00:00, 84.41it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 79%|      | 100/126 [00:01<00:00, 66.16it/s, loss=0.00343,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|      | 101/126 [00:01<00:00, 58.76it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 81%|      | 102/126 [00:01<00:00, 58.88it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 82%|      | 103/126 [00:01<00:00, 59.31it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 83%|      | 104/126 [00:01<00:00, 59.75it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 83%|      | 105/126 [00:01<00:00, 60.18it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 84%|      | 106/126 [00:01<00:00, 60.62it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 85%|      | 107/126 [00:01<00:00, 61.05it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 86%|      | 108/126 [00:01<00:00, 61.48it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 87%|      | 109/126 [00:01<00:00, 61.91it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 87%|      | 110/126 [00:01<00:00, 62.34it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 88%|      | 111/126 [00:01<00:00, 62.77it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 89%|      | 112/126 [00:01<00:00, 63.20it/s, loss=0.00343,
v_num=4.31e+7]

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Epoch 96: 90%|      | 113/126 [00:01<00:00, 63.62it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 90%|      | 114/126 [00:01<00:00, 64.05it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 91%|      | 115/126 [00:01<00:00, 64.47it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 92%|      | 116/126 [00:01<00:00, 64.86it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 93%|      | 117/126 [00:01<00:00, 65.19it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 94%|      | 118/126 [00:01<00:00, 65.53it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 94%|      | 119/126 [00:01<00:00, 65.88it/s, loss=0.00343,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.74it/s]
Epoch 96: 95%|      | 120/126 [00:01<00:00, 66.22it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 96%|      | 121/126 [00:01<00:00, 66.56it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 97%|      | 122/126 [00:01<00:00, 66.92it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 98%|      | 123/126 [00:01<00:00, 67.29it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 98%|      | 124/126 [00:01<00:00, 67.67it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 68.05it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 68.44it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 67.13it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 66.99it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 73.73it/s, loss=0.00385,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 64.90it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 81%|      | 102/126 [00:01<00:00, 65.22it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 82%|      | 103/126 [00:01<00:00, 65.62it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 83%|      | 104/126 [00:01<00:00, 66.03it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 83%|      | 105/126 [00:01<00:00, 66.44it/s, loss=0.00385,
v_num=4.31e+7]

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Epoch 97: 84%|      | 106/126 [00:01<00:00, 66.85it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 85%|      | 107/126 [00:01<00:00, 67.26it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 86%|      | 108/126 [00:01<00:00, 67.67it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 68.09it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 68.51it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 68.93it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 69.36it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 69.78it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 70.21it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 70.64it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 71.07it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 71.50it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 71.92it/s, loss=0.00385,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.01it/s]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 72.35it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 72.78it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 73.21it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 73.64it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 74.10it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 74.55it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 75.01it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 75.47it/s, loss=0.00385,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 74.12it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 73.99it/s, loss=0.00385,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 74.22it/s, loss=0.00369,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|          | 101/126 [00:01<00:00, 65.28it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 81%|          | 102/126 [00:01<00:00, 65.32it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 82%|          | 103/126 [00:01<00:00, 65.74it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 83%|          | 104/126 [00:01<00:00, 66.17it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 83%|          | 105/126 [00:01<00:00, 66.59it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 84%|          | 106/126 [00:01<00:00, 67.01it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 85%|          | 107/126 [00:01<00:00, 67.43it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 86%|          | 108/126 [00:01<00:00, 67.85it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 87%|          | 109/126 [00:01<00:00, 68.27it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 87%|          | 110/126 [00:01<00:00, 68.69it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 88%|          | 111/126 [00:01<00:00, 69.12it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 89%|          | 112/126 [00:01<00:00, 69.54it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 90%|          | 113/126 [00:01<00:00, 69.97it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 90%|          | 114/126 [00:01<00:00, 70.39it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 91%|          | 115/126 [00:01<00:00, 70.82it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 92%|          | 116/126 [00:01<00:00, 71.24it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 93%|          | 117/126 [00:01<00:00, 71.66it/s, loss=0.00369,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 174.86it/s]
Epoch 98: 94%|          | 118/126 [00:01<00:00, 72.08it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 94%|          | 119/126 [00:01<00:00, 72.51it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 95%|          | 120/126 [00:01<00:00, 72.93it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 96%|          | 121/126 [00:01<00:00, 73.35it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 97%|          | 122/126 [00:01<00:00, 73.78it/s, loss=0.00369,

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v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 74.24it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 74.70it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 75.15it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 75.61it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 73.85it/s, loss=0.00369,
v_num=4.31e+7]

Epoch 98: 100%|     | 126/126 [00:01<00:00, 73.69it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 79%|      | 100/126 [00:01<00:00, 69.77it/s, loss=0.0038,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 62.44it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 62.40it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 82%|      | 103/126 [00:01<00:00, 62.85it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 83%|      | 104/126 [00:01<00:00, 63.30it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 83%|      | 105/126 [00:01<00:00, 63.75it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 84%|      | 106/126 [00:01<00:00, 64.21it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 85%|      | 107/126 [00:01<00:00, 64.66it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 86%|      | 108/126 [00:01<00:00, 65.11it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 87%|      | 109/126 [00:01<00:00, 65.55it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 87%|      | 110/126 [00:01<00:00, 66.01it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 88%|      | 111/126 [00:01<00:00, 66.45it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 89%|      | 112/126 [00:01<00:00, 66.90it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 90%|      | 113/126 [00:01<00:00, 67.34it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 90%|      | 114/126 [00:01<00:00, 67.79it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 91%|      | 115/126 [00:01<00:00, 68.23it/s, loss=0.0038,

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v_num=4.31e+7]
Epoch 99: 92%|      | 116/126 [00:01<00:00, 68.67it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 93%|      | 117/126 [00:01<00:00, 69.11it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 94%|      | 118/126 [00:01<00:00, 69.55it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 94%|      | 119/126 [00:01<00:00, 69.98it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 95%|      | 120/126 [00:01<00:00, 70.42it/s, loss=0.0038,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.17it/s]
Epoch 99: 96%|      | 121/126 [00:01<00:00, 70.85it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 97%|      | 122/126 [00:01<00:00, 71.28it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 71.74it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 72.19it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 72.64it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 73.09it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 71.76it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 71.61it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 80.32it/s, loss=0.0032,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 70.40it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 70.81it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 71.24it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 71.67it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 72.11it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 84%|     | 106/126 [00:01<00:00, 72.54it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 85%|     | 107/126 [00:01<00:00, 72.98it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 86%|     | 108/126 [00:01<00:00, 73.41it/s, loss=0.0032,

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v_num=4.31e+7]
Epoch 100: 87%|      | 109/126 [00:01<00:00, 73.85it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 87%|      | 110/126 [00:01<00:00, 74.29it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 88%|      | 111/126 [00:01<00:00, 74.72it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 89%|      | 112/126 [00:01<00:00, 75.17it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 90%|      | 113/126 [00:01<00:00, 75.61it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 76.06it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 76.50it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 76.95it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 77.39it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 77.85it/s, loss=0.0032,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.05it/s]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 78.28it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 78.73it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 79.18it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 79.63it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 80.11it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 80.58it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 81.06it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 81.55it/s, loss=0.0032,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 79.90it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 79.75it/s, loss=0.0032,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 78.75it/s, loss=0.00402,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 69.69it/s, loss=0.00402,

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v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 69.95it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 82%|      | 103/126 [00:01<00:00, 70.39it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 70.83it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 83%|      | 105/126 [00:01<00:00, 71.27it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 84%|      | 106/126 [00:01<00:00, 71.71it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 85%|      | 107/126 [00:01<00:00, 72.16it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 86%|      | 108/126 [00:01<00:00, 72.61it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 87%|      | 109/126 [00:01<00:00, 73.06it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 87%|      | 110/126 [00:01<00:00, 73.51it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 88%|      | 111/126 [00:01<00:00, 73.96it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 89%|      | 112/126 [00:01<00:00, 74.42it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 90%|      | 113/126 [00:01<00:00, 74.87it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 90%|      | 114/126 [00:01<00:00, 75.33it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 91%|      | 115/126 [00:01<00:00, 75.78it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 92%|      | 116/126 [00:01<00:00, 76.24it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 93%|      | 117/126 [00:01<00:00, 76.69it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 94%|      | 118/126 [00:01<00:00, 77.15it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 94%|      | 119/126 [00:01<00:00, 77.60it/s, loss=0.00402,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 198.56it/s]
Epoch 101: 95%|      | 120/126 [00:01<00:00, 78.06it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 96%|      | 121/126 [00:01<00:00, 78.51it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 97%|      | 122/126 [00:01<00:00, 78.98it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 98%|      | 123/126 [00:01<00:00, 79.46it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 79.94it/s, loss=0.00402,
v_num=4.31e+7]

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Epoch 101: 99%|      | 125/126 [00:01<00:00, 80.42it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 80.91it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%|     | 126/126 [00:01<00:00, 79.45it/s, loss=0.00402,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 79.31it/s, loss=0.00402,
v_num=4.31e+7]Mapping latent space...

Epoch 102: 79%|      | 100/126 [00:01<00:00, 65.42it/s, loss=0.00363,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|      | 101/126 [00:01<00:00, 57.86it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 81%|      | 102/126 [00:01<00:00, 58.14it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 82%|      | 103/126 [00:01<00:00, 58.52it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 83%|      | 104/126 [00:01<00:00, 58.90it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 83%|      | 105/126 [00:01<00:00, 59.28it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 84%|      | 106/126 [00:01<00:00, 59.67it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 85%|      | 107/126 [00:01<00:00, 60.05it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 86%|      | 108/126 [00:01<00:00, 60.43it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 87%|      | 109/126 [00:01<00:00, 60.82it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 87%|      | 110/126 [00:01<00:00, 61.21it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 88%|      | 111/126 [00:01<00:00, 61.61it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 89%|      | 112/126 [00:01<00:00, 62.00it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 90%|      | 113/126 [00:01<00:00, 62.40it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 90%|      | 114/126 [00:01<00:00, 62.80it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 91%|      | 115/126 [00:01<00:00, 63.20it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 92%|      | 116/126 [00:01<00:00, 63.60it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 93%|      | 117/126 [00:01<00:00, 64.00it/s, loss=0.00363,
v_num=4.31e+7]

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Epoch 102: 94%|      | 118/126 [00:01<00:00, 64.41it/s, loss=0.00363,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.23it/s]
Epoch 102: 94%|      | 119/126 [00:01<00:00, 64.80it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 95%|      | 120/126 [00:01<00:00, 65.20it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 96%|      | 121/126 [00:01<00:00, 65.60it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 97%|      | 122/126 [00:01<00:00, 66.01it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 98%|      | 123/126 [00:01<00:00, 66.43it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 98%|      | 124/126 [00:01<00:00, 66.85it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 99%|      | 125/126 [00:01<00:00, 67.28it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 67.70it/s, loss=0.00363,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|     | 126/126 [00:01<00:00, 66.58it/s, loss=0.00363,
v_num=4.31e+7]
Epoch 102: 100%|     | 126/126 [00:01<00:00, 66.47it/s, loss=0.00363,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 79%|      | 100/126 [00:01<00:00, 77.08it/s, loss=0.00322,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 103: 80%|      | 101/126 [00:01<00:00, 69.28it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 81%|      | 102/126 [00:01<00:00, 69.40it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 82%|      | 103/126 [00:01<00:00, 69.94it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 83%|      | 104/126 [00:01<00:00, 70.44it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 83%|      | 105/126 [00:01<00:00, 70.97it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 84%|      | 106/126 [00:01<00:00, 71.47it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 85%|      | 107/126 [00:01<00:00, 72.00it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 86%|      | 108/126 [00:01<00:00, 72.50it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 87%|      | 109/126 [00:01<00:00, 73.02it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 87%|      | 110/126 [00:01<00:00, 73.53it/s, loss=0.00322,
v_num=4.31e+7]

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Epoch 103: 88%|      | 111/126 [00:01<00:00, 74.06it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 89%|      | 112/126 [00:01<00:00, 74.55it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 90%|      | 113/126 [00:01<00:00, 75.07it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 90%|      | 114/126 [00:01<00:00, 75.56it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 91%|      | 115/126 [00:01<00:00, 76.08it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 92%|      | 116/126 [00:01<00:00, 76.57it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 93%|      | 117/126 [00:01<00:00, 77.07it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 94%|      | 118/126 [00:01<00:00, 77.57it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 94%|      | 119/126 [00:01<00:00, 78.08it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 78.56it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 79.06it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 79.55it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 80.06it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 80.58it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 81.10it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 81.63it/s, loss=0.00322,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 80.18it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 80.05it/s, loss=0.00322,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 74.90it/s, loss=0.00368,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 66.92it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 67.19it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 67.59it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 67.98it/s, loss=0.00368,

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v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 68.38it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 68.78it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 69.18it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 69.57it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 69.97it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 70.37it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 70.78it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 71.19it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 71.61it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 72.02it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 72.44it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 72.86it/s, loss=0.00368,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.30it/s]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 73.27it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 73.70it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 74.11it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 74.53it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 74.95it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 75.38it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 75.83it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 76.28it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 76.74it/s, loss=0.00368,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 77.20it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 75.78it/s, loss=0.00368,
v_num=4.31e+7]

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Epoch 104: 100%|      | 126/126 [00:01<00:00, 75.63it/s, loss=0.00368,
v_num=4.31e+7]Mapping latent space...
Epoch 105:  79%|      | 100/126 [00:01<00:00, 79.73it/s, loss=0.00352,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105:  80%|      | 101/126 [00:01<00:00, 69.67it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  81%|      | 102/126 [00:01<00:00, 69.85it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  82%|      | 103/126 [00:01<00:00, 70.39it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  83%|      | 104/126 [00:01<00:00, 70.89it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  83%|      | 105/126 [00:01<00:00, 71.42it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  84%|      | 106/126 [00:01<00:00, 71.92it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  85%|      | 107/126 [00:01<00:00, 72.45it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  86%|      | 108/126 [00:01<00:00, 72.94it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  87%|      | 109/126 [00:01<00:00, 73.46it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  87%|      | 110/126 [00:01<00:00, 73.96it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  88%|      | 111/126 [00:01<00:00, 74.49it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  89%|      | 112/126 [00:01<00:00, 74.98it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  90%|      | 113/126 [00:01<00:00, 75.48it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  90%|      | 114/126 [00:01<00:00, 75.99it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  91%|      | 115/126 [00:01<00:00, 76.51it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  92%|      | 116/126 [00:01<00:00, 76.99it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  93%|      | 117/126 [00:01<00:00, 77.50it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  94%|      | 118/126 [00:01<00:00, 77.99it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  94%|      | 119/126 [00:01<00:00, 78.49it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  95%|      | 120/126 [00:01<00:00, 78.97it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105:  96%|      | 121/126 [00:01<00:00, 79.48it/s, loss=0.00352,

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v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 79.97it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 80.49it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 81.01it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 81.53it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 82.06it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|     | 126/126 [00:01<00:00, 80.65it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 80.53it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 79%|      | 100/126 [00:01<00:00, 90.36it/s, loss=0.00373,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 106: 80%|      | 101/126 [00:01<00:00, 79.37it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 81%|      | 102/126 [00:01<00:00, 79.37it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 82%|      | 103/126 [00:01<00:00, 79.79it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 83%|      | 104/126 [00:01<00:00, 80.21it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 83%|      | 105/126 [00:01<00:00, 80.64it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 84%|      | 106/126 [00:01<00:00, 81.08it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 85%|      | 107/126 [00:01<00:00, 81.51it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 86%|      | 108/126 [00:01<00:00, 81.94it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 87%|      | 109/126 [00:01<00:00, 82.37it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 87%|      | 110/126 [00:01<00:00, 82.80it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 88%|      | 111/126 [00:01<00:00, 83.23it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 89%|      | 112/126 [00:01<00:00, 83.67it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 90%|      | 113/126 [00:01<00:00, 84.12it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 90%|      | 114/126 [00:01<00:00, 84.57it/s, loss=0.00373,
v_num=4.31e+7]

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Epoch 106: 91%|      | 115/126 [00:01<00:00, 85.03it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 92%|      | 116/126 [00:01<00:00, 85.49it/s, loss=0.00373,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.51it/s]
Epoch 106: 93%|      | 117/126 [00:01<00:00, 85.94it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 94%|      | 118/126 [00:01<00:00, 86.39it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 94%|      | 119/126 [00:01<00:00, 86.86it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 87.32it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 87.79it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 88.26it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 88.76it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 89.27it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 99%|      | 125/126 [00:01<00:00, 89.77it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 90.28it/s, loss=0.00373,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 88.35it/s, loss=0.00373,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 88.17it/s, loss=0.00373,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 66.74it/s, loss=0.00378,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 59.79it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 60.06it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 60.51it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 60.96it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 61.40it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 61.84it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 62.28it/s, loss=0.00378,
v_num=4.31e+7]

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Epoch 107: 86%|      | 108/126 [00:01<00:00, 62.72it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 63.16it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 63.60it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 64.04it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 89%|      | 112/126 [00:01<00:00, 64.48it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 64.91it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 65.35it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 65.78it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 66.21it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 66.64it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 67.06it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 67.48it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 67.90it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 68.32it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 68.75it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 69.19it/s, loss=0.00378,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.24it/s]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 69.62it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 70.06it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 70.50it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.30it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 69.19it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...

Epoch 108: 79%|      | 100/126 [00:01<00:00, 74.43it/s, loss=0.0038,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|          | 101/126 [00:01<00:00, 65.41it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 81%|          | 102/126 [00:01<00:00, 65.49it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 82%|          | 103/126 [00:01<00:00, 65.96it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 83%|          | 104/126 [00:01<00:00, 66.42it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 83%|          | 105/126 [00:01<00:00, 66.89it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 84%|          | 106/126 [00:01<00:00, 67.36it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 85%|          | 107/126 [00:01<00:00, 67.83it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 86%|          | 108/126 [00:01<00:00, 68.28it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 87%|          | 109/126 [00:01<00:00, 68.75it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 87%|          | 110/126 [00:01<00:00, 69.21it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 88%|          | 111/126 [00:01<00:00, 69.68it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 89%|          | 112/126 [00:01<00:00, 70.13it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 90%|          | 113/126 [00:01<00:00, 70.59it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 90%|          | 114/126 [00:01<00:00, 71.04it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 91%|          | 115/126 [00:01<00:00, 71.50it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 92%|          | 116/126 [00:01<00:00, 71.95it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 93%|          | 117/126 [00:01<00:00, 72.39it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 94%|          | 118/126 [00:01<00:00, 72.84it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 94%|          | 119/126 [00:01<00:00, 73.28it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 95%|          | 120/126 [00:01<00:00, 73.73it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 96%|          | 121/126 [00:01<00:00, 74.17it/s, loss=0.0038,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 216.55it/s]
Epoch 108: 97%|          | 122/126 [00:01<00:00, 74.61it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 98%|          | 123/126 [00:01<00:00, 75.07it/s, loss=0.0038,
v_num=4.31e+7]

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Epoch 108: 98%|      | 124/126 [00:01<00:00, 75.53it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 75.99it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 76.46it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 74.96it/s, loss=0.0038,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 74.71it/s, loss=0.0038,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|      | 100/126 [00:01<00:00, 77.64it/s, loss=0.00425,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|      | 101/126 [00:01<00:00, 67.63it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 81%|      | 102/126 [00:01<00:00, 67.73it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 82%|      | 103/126 [00:01<00:00, 68.20it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 83%|      | 104/126 [00:01<00:00, 68.68it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 83%|      | 105/126 [00:01<00:00, 69.15it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 84%|      | 106/126 [00:01<00:00, 69.63it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 85%|      | 107/126 [00:01<00:00, 70.11it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 86%|      | 108/126 [00:01<00:00, 70.58it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 87%|      | 109/126 [00:01<00:00, 71.05it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 87%|      | 110/126 [00:01<00:00, 71.52it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 88%|      | 111/126 [00:01<00:00, 71.99it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 89%|      | 112/126 [00:01<00:00, 72.45it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 90%|      | 113/126 [00:01<00:00, 72.91it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 90%|      | 114/126 [00:01<00:00, 73.37it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 91%|      | 115/126 [00:01<00:00, 73.83it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 92%|      | 116/126 [00:01<00:00, 74.29it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 93%|      | 117/126 [00:01<00:00, 74.75it/s, loss=0.00425,

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v_num=4.31e+7]
Epoch 109: 94%|      | 118/126 [00:01<00:00, 75.20it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 94%|      | 119/126 [00:01<00:00, 75.66it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 95%|      | 120/126 [00:01<00:00, 76.11it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 96%|      | 121/126 [00:01<00:00, 76.55it/s, loss=0.00425,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.17it/s]
Epoch 109: 97%|      | 122/126 [00:01<00:00, 77.00it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 77.47it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 77.95it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 78.42it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 78.90it/s, loss=0.00425,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 77.02it/s, loss=0.00425,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 76.80it/s, loss=0.00425,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|      | 100/126 [00:01<00:00, 78.52it/s, loss=0.00416,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|      | 101/126 [00:01<00:00, 69.63it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 81%|      | 102/126 [00:01<00:00, 69.00it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 82%|      | 103/126 [00:01<00:00, 69.52it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 83%|      | 104/126 [00:01<00:00, 70.01it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 83%|      | 105/126 [00:01<00:00, 70.55it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 84%|      | 106/126 [00:01<00:00, 71.04it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 85%|      | 107/126 [00:01<00:00, 71.57it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 86%|      | 108/126 [00:01<00:00, 72.06it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 87%|      | 109/126 [00:01<00:00, 72.57it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 87%|      | 110/126 [00:01<00:00, 73.06it/s, loss=0.00416,

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v_num=4.31e+7]
Epoch 110: 88%|      | 111/126 [00:01<00:00, 73.56it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 89%|      | 112/126 [00:01<00:00, 74.05it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 90%|      | 113/126 [00:01<00:00, 74.55it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 90%|      | 114/126 [00:01<00:00, 75.02it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 91%|      | 115/126 [00:01<00:00, 75.51it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 92%|      | 116/126 [00:01<00:00, 75.99it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 93%|      | 117/126 [00:01<00:00, 76.47it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 94%|      | 118/126 [00:01<00:00, 76.94it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 94%|      | 119/126 [00:01<00:00, 77.44it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 95%|      | 120/126 [00:01<00:00, 77.91it/s, loss=0.00416,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.72it/s]
Epoch 110: 96%|      | 121/126 [00:01<00:00, 78.39it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 97%|      | 122/126 [00:01<00:00, 78.87it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 79.39it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 79.91it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 80.43it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 80.94it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.00416,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 79.19it/s, loss=0.00416,
v_num=4.31e+7]Mapping latent space...

Epoch 111: 79%|      | 100/126 [00:01<00:00, 82.89it/s, loss=0.00337,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 72.52it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 111: 81%|      | 102/126 [00:01<00:00, 72.74it/s, loss=0.00337,
v_num=4.31e+7]

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Epoch 111: 82%| | 103/126 [00:01<00:00, 73.27it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 83%| | 104/126 [00:01<00:00, 73.80it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 83%| | 105/126 [00:01<00:00, 74.32it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 84%| | 106/126 [00:01<00:00, 74.84it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 85%| | 107/126 [00:01<00:00, 75.36it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 86%| | 108/126 [00:01<00:00, 75.87it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 87%| | 109/126 [00:01<00:00, 76.39it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 87%| | 110/126 [00:01<00:00, 76.90it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 88%| | 111/126 [00:01<00:00, 77.41it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 89%| | 112/126 [00:01<00:00, 77.95it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 90%| | 113/126 [00:01<00:00, 78.45it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 90%| | 114/126 [00:01<00:00, 78.99it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 91%| | 115/126 [00:01<00:00, 79.49it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 92%| | 116/126 [00:01<00:00, 80.01it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 93%| | 117/126 [00:01<00:00, 80.51it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 94%| | 118/126 [00:01<00:00, 81.03it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 94%| | 119/126 [00:01<00:00, 81.51it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 95%| | 120/126 [00:01<00:00, 82.03it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 96%| | 121/126 [00:01<00:00, 82.53it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 97%| | 122/126 [00:01<00:00, 83.04it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 98%| | 123/126 [00:01<00:00, 83.58it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 98%| | 124/126 [00:01<00:00, 84.13it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 99%| | 125/126 [00:01<00:00, 84.67it/s, loss=0.00337, v_num=4.31e+7]
Epoch 111: 100%| | 126/126 [00:01<00:00, 85.22it/s, loss=0.00337, v_num=4.31e+7] Mapping latent space...

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Epoch 111: 100%|      | 126/126 [00:01<00:00, 83.67it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 111: 100%|      | 126/126 [00:01<00:00, 83.52it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 79%|      | 100/126 [00:01<00:00, 74.89it/s, loss=0.00417,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 112: 80%|      | 101/126 [00:01<00:00, 67.31it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 81%|      | 102/126 [00:01<00:00, 67.16it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 82%|      | 103/126 [00:01<00:00, 67.56it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 83%|      | 104/126 [00:01<00:00, 67.97it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 83%|      | 105/126 [00:01<00:00, 68.39it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 84%|      | 106/126 [00:01<00:00, 68.80it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 85%|      | 107/126 [00:01<00:00, 69.22it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 86%|      | 108/126 [00:01<00:00, 69.63it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 87%|      | 109/126 [00:01<00:00, 70.05it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 87%|      | 110/126 [00:01<00:00, 70.48it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 88%|      | 111/126 [00:01<00:00, 70.89it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 89%|      | 112/126 [00:01<00:00, 71.32it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 90%|      | 113/126 [00:01<00:00, 71.74it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 90%|      | 114/126 [00:01<00:00, 72.17it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 91%|      | 115/126 [00:01<00:00, 72.59it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 92%|      | 116/126 [00:01<00:00, 73.01it/s, loss=0.00417,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.57it/s]
Epoch 112: 93%|      | 117/126 [00:01<00:00, 73.42it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 94%|      | 118/126 [00:01<00:00, 73.84it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 94%|      | 119/126 [00:01<00:00, 74.26it/s, loss=0.00417,
v_num=4.31e+7]

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Epoch 112: 95%|      | 120/126 [00:01<00:00, 74.68it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 96%|      | 121/126 [00:01<00:00, 75.11it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 75.54it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 75.98it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 76.44it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 76.89it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 77.34it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 100%|     | 126/126 [00:01<00:00, 75.83it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 75.69it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|      | 100/126 [00:01<00:00, 74.08it/s, loss=0.00364,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 113: 80%|      | 101/126 [00:01<00:00, 65.80it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 81%|      | 102/126 [00:01<00:00, 66.12it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 82%|      | 103/126 [00:01<00:00, 66.48it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 83%|      | 104/126 [00:01<00:00, 66.83it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 83%|      | 105/126 [00:01<00:00, 67.19it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 84%|      | 106/126 [00:01<00:00, 67.56it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 85%|      | 107/126 [00:01<00:00, 67.93it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 86%|      | 108/126 [00:01<00:00, 68.30it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 87%|      | 109/126 [00:01<00:00, 68.68it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 87%|      | 110/126 [00:01<00:00, 69.07it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 88%|      | 111/126 [00:01<00:00, 69.46it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 89%|      | 112/126 [00:01<00:00, 69.85it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 90%|      | 113/126 [00:01<00:00, 70.24it/s, loss=0.00364,

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v_num=4.31e+7]
Epoch 113: 90%|      | 114/126 [00:01<00:00, 70.64it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 91%|      | 115/126 [00:01<00:00, 71.04it/s, loss=0.00364,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 152.82it/s]
Epoch 113: 92%|      | 116/126 [00:01<00:00, 71.43it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 93%|      | 117/126 [00:01<00:00, 71.84it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 94%|      | 118/126 [00:01<00:00, 72.25it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 94%|      | 119/126 [00:01<00:00, 72.65it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 95%|      | 120/126 [00:01<00:00, 73.06it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 96%|      | 121/126 [00:01<00:00, 73.47it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 97%|      | 122/126 [00:01<00:00, 73.89it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 98%|      | 123/126 [00:01<00:00, 74.32it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 98%|      | 124/126 [00:01<00:00, 74.74it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 75.17it/s, loss=0.00364,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 75.60it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 74.21it/s, loss=0.00364,
v_num=4.31e+7]

Epoch 113: 100%|     | 126/126 [00:01<00:00, 74.07it/s, loss=0.00364,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 79%|      | 100/126 [00:01<00:00, 70.24it/s, loss=0.00409,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 61.64it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 61.80it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 62.18it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 62.58it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 83%|      | 105/126 [00:01<00:00, 62.97it/s, loss=0.00409,
v_num=4.31e+7]

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Epoch 114: 84%|      | 106/126 [00:01<00:00, 63.37it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 85%|      | 107/126 [00:01<00:00, 63.76it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 86%|      | 108/126 [00:01<00:00, 64.15it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 87%|      | 109/126 [00:01<00:00, 64.55it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 87%|      | 110/126 [00:01<00:00, 64.95it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 88%|      | 111/126 [00:01<00:00, 65.36it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 89%|      | 112/126 [00:01<00:00, 65.76it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 90%|      | 113/126 [00:01<00:00, 66.16it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 90%|      | 114/126 [00:01<00:00, 66.57it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 91%|      | 115/126 [00:01<00:00, 66.98it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 92%|      | 116/126 [00:01<00:00, 67.39it/s, loss=0.00409,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.88it/s]
Epoch 114: 93%|      | 117/126 [00:01<00:00, 67.79it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 94%|      | 118/126 [00:01<00:00, 68.20it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 94%|      | 119/126 [00:01<00:00, 68.61it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 95%|      | 120/126 [00:01<00:00, 69.01it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 96%|      | 121/126 [00:01<00:00, 69.42it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 97%|      | 122/126 [00:01<00:00, 69.84it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 98%|      | 123/126 [00:01<00:00, 70.28it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 98%|      | 124/126 [00:01<00:00, 70.71it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 99%|      | 125/126 [00:01<00:00, 71.15it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 71.59it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%|     | 126/126 [00:01<00:00, 70.35it/s, loss=0.00409,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 70.23it/s, loss=0.00409,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 79%|      | 100/126 [00:01<00:00, 67.19it/s, loss=0.00325,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|          | 101/126 [00:01<00:00, 59.32it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 81%|          | 102/126 [00:01<00:00, 59.58it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 82%|          | 103/126 [00:01<00:00, 60.03it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 83%|          | 104/126 [00:01<00:00, 60.47it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 83%|          | 105/126 [00:01<00:00, 60.91it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 84%|          | 106/126 [00:01<00:00, 61.35it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 85%|          | 107/126 [00:01<00:00, 61.79it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 86%|          | 108/126 [00:01<00:00, 62.22it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 87%|          | 109/126 [00:01<00:00, 62.66it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 87%|          | 110/126 [00:01<00:00, 63.09it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 88%|          | 111/126 [00:01<00:00, 63.53it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 89%|          | 112/126 [00:01<00:00, 63.96it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 90%|          | 113/126 [00:01<00:00, 64.39it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 90%|          | 114/126 [00:01<00:00, 64.82it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 91%|          | 115/126 [00:01<00:00, 65.25it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 92%|          | 116/126 [00:01<00:00, 65.68it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 93%|          | 117/126 [00:01<00:00, 66.10it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 94%|          | 118/126 [00:01<00:00, 66.52it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 94%|          | 119/126 [00:01<00:00, 66.94it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 95%|          | 120/126 [00:01<00:00, 67.36it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 96%|          | 121/126 [00:01<00:00, 67.77it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 97%|          | 122/126 [00:01<00:00, 68.20it/s, loss=0.00325,
v_num=4.31e+7]

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Epoch 115: 98%|      | 123/126 [00:01<00:00, 68.63it/s, loss=0.00325,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.06it/s]
Epoch 115: 98%|      | 124/126 [00:01<00:00, 69.06it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 69.50it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 69.94it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|     | 126/126 [00:01<00:00, 68.32it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 68.20it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|      | 100/126 [00:01<00:00, 78.02it/s, loss=0.00362,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|      | 101/126 [00:01<00:00, 68.05it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 81%|      | 102/126 [00:01<00:00, 68.32it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 82%|      | 103/126 [00:01<00:00, 68.69it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 83%|      | 104/126 [00:01<00:00, 69.06it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 83%|      | 105/126 [00:01<00:00, 69.44it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 84%|      | 106/126 [00:01<00:00, 69.82it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 85%|      | 107/126 [00:01<00:00, 70.21it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 86%|      | 108/126 [00:01<00:00, 70.59it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 87%|      | 109/126 [00:01<00:00, 70.99it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 87%|      | 110/126 [00:01<00:00, 71.39it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 88%|      | 111/126 [00:01<00:00, 71.79it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 89%|      | 112/126 [00:01<00:00, 72.20it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 90%|      | 113/126 [00:01<00:00, 72.61it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 90%|      | 114/126 [00:01<00:00, 73.02it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 91%|      | 115/126 [00:01<00:00, 73.44it/s, loss=0.00362,
v_num=4.31e+7]

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Validation DataLoader 0: 62%|          | 16/26 [00:00<00:00, 158.35it/s]
Epoch 116: 92%|          | 116/126 [00:01<00:00, 73.85it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 93%|          | 117/126 [00:01<00:00, 74.27it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 94%|          | 118/126 [00:01<00:00, 74.69it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 94%|          | 119/126 [00:01<00:00, 75.11it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 95%|          | 120/126 [00:01<00:00, 75.53it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 96%|          | 121/126 [00:01<00:00, 75.96it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 97%|          | 122/126 [00:01<00:00, 76.38it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 98%|          | 123/126 [00:01<00:00, 76.82it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 98%|          | 124/126 [00:01<00:00, 77.26it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 99%|          | 125/126 [00:01<00:00, 77.69it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 116: 100%|         | 126/126 [00:01<00:00, 78.13it/s, loss=0.00362,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|         | 126/126 [00:01<00:00, 76.59it/s, loss=0.00362,
v_num=4.31e+7]

Epoch 116: 100%|         | 126/126 [00:01<00:00, 76.44it/s, loss=0.00362,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 79%|          | 100/126 [00:01<00:00, 70.63it/s, loss=0.00367,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 117: 80%|          | 101/126 [00:01<00:00, 62.57it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 81%|          | 102/126 [00:01<00:00, 62.69it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 82%|          | 103/126 [00:01<00:00, 63.19it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 83%|          | 104/126 [00:01<00:00, 63.66it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 83%|          | 105/126 [00:01<00:00, 64.16it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 84%|          | 106/126 [00:01<00:00, 64.63it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 85%|          | 107/126 [00:01<00:00, 65.12it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 86%|          | 108/126 [00:01<00:00, 65.58it/s, loss=0.00367,

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v_num=4.31e+7]
Epoch 117: 87%|      | 109/126 [00:01<00:00, 66.07it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 87%|      | 110/126 [00:01<00:00, 66.54it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 88%|      | 111/126 [00:01<00:00, 67.03it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 89%|      | 112/126 [00:01<00:00, 67.49it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 90%|      | 113/126 [00:01<00:00, 67.98it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 90%|      | 114/126 [00:01<00:00, 68.44it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 91%|      | 115/126 [00:01<00:00, 68.92it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 92%|      | 116/126 [00:01<00:00, 69.38it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 93%|      | 117/126 [00:01<00:00, 69.86it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 94%|      | 118/126 [00:01<00:00, 70.31it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 94%|      | 119/126 [00:01<00:00, 70.78it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 95%|      | 120/126 [00:01<00:00, 71.23it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 96%|      | 121/126 [00:01<00:00, 71.69it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 97%|      | 122/126 [00:01<00:00, 72.14it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 98%|      | 123/126 [00:01<00:00, 72.63it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 98%|      | 124/126 [00:01<00:00, 73.10it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 99%|      | 125/126 [00:01<00:00, 73.58it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 74.07it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 100%|     | 126/126 [00:01<00:00, 72.89it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 72.78it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 79%|      | 100/126 [00:01<00:00, 77.21it/s, loss=0.00352,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 118: 80%|      | 101/126 [00:01<00:00, 68.48it/s, loss=0.00352,
v_num=4.31e+7]

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Epoch 118: 81%| | 102/126 [00:01<00:00, 68.80it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 82%| | 103/126 [00:01<00:00, 69.23it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 83%| | 104/126 [00:01<00:00, 69.68it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 83%| | 105/126 [00:01<00:00, 70.12it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 84%| | 106/126 [00:01<00:00, 70.56it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 85%| | 107/126 [00:01<00:00, 71.00it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 86%| | 108/126 [00:01<00:00, 71.43it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 87%| | 109/126 [00:01<00:00, 71.87it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 87%| | 110/126 [00:01<00:00, 72.31it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 88%| | 111/126 [00:01<00:00, 72.76it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 89%| | 112/126 [00:01<00:00, 73.20it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 90%| | 113/126 [00:01<00:00, 73.64it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 90%| | 114/126 [00:01<00:00, 74.08it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 91%| | 115/126 [00:01<00:00, 74.53it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 92%| | 116/126 [00:01<00:00, 74.98it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 93%| | 117/126 [00:01<00:00, 75.41it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 94%| | 118/126 [00:01<00:00, 75.86it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 94%| | 119/126 [00:01<00:00, 76.30it/s, loss=0.00352, v_num=4.31e+7]
Validation DataLoader 0: 77%| | 20/26 [00:00<00:00, 198.72it/s]
Epoch 118: 95%| | 120/126 [00:01<00:00, 76.74it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 96%| | 121/126 [00:01<00:00, 77.19it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 97%| | 122/126 [00:01<00:00, 77.65it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 98%| | 123/126 [00:01<00:00, 78.12it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 98%| | 124/126 [00:01<00:00, 78.60it/s, loss=0.00352, v_num=4.31e+7]
Epoch 118: 99%| | 125/126 [00:01<00:00, 79.08it/s, loss=0.00352, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 118: 100%|      | 126/126 [00:01<00:00, 79.56it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 100%|      | 126/126 [00:01<00:00, 77.90it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 118: 100%|      | 126/126 [00:01<00:00, 77.74it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 79%|       | 100/126 [00:01<00:00, 69.12it/s, loss=0.00376,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|        | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 119: 80%|       | 101/126 [00:01<00:00, 63.07it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 81%|       | 102/126 [00:01<00:00, 63.26it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 82%|       | 103/126 [00:01<00:00, 63.73it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 83%|       | 104/126 [00:01<00:00, 64.20it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 83%|       | 105/126 [00:01<00:00, 64.67it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 84%|       | 106/126 [00:01<00:00, 65.14it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 85%|       | 107/126 [00:01<00:00, 65.60it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 86%|       | 108/126 [00:01<00:00, 66.07it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 87%|       | 109/126 [00:01<00:00, 66.53it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 87%|       | 110/126 [00:01<00:00, 66.99it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 88%|       | 111/126 [00:01<00:00, 67.45it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 89%|       | 112/126 [00:01<00:00, 67.90it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 90%|       | 113/126 [00:01<00:00, 68.35it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 90%|       | 114/126 [00:01<00:00, 68.81it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 91%|       | 115/126 [00:01<00:00, 69.26it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 92%|       | 116/126 [00:01<00:00, 69.71it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 93%|       | 117/126 [00:01<00:00, 70.15it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 94%|       | 118/126 [00:01<00:00, 70.59it/s, loss=0.00376,
v_num=4.31e+7]

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Epoch 119: 94%|      | 119/126 [00:01<00:00, 71.04it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 95%|      | 120/126 [00:01<00:00, 71.48it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 96%|      | 121/126 [00:01<00:00, 71.92it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 97%|      | 122/126 [00:01<00:00, 72.37it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 98%|      | 123/126 [00:01<00:00, 72.83it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 98%|      | 124/126 [00:01<00:00, 73.29it/s, loss=0.00376,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.44it/s]

Epoch 119: 99%|      | 125/126 [00:01<00:00, 73.75it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 74.21it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 100%|     | 126/126 [00:01<00:00, 72.95it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 72.83it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 79%|      | 100/126 [00:01<00:00, 77.56it/s, loss=0.00301,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 120: 80%|      | 101/126 [00:01<00:00, 68.69it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 81%|      | 102/126 [00:01<00:00, 68.90it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 82%|      | 103/126 [00:01<00:00, 69.43it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 83%|      | 104/126 [00:01<00:00, 69.93it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 83%|      | 105/126 [00:01<00:00, 70.43it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 84%|      | 106/126 [00:01<00:00, 70.92it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 85%|      | 107/126 [00:01<00:00, 71.43it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 86%|      | 108/126 [00:01<00:00, 71.91it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 87%|      | 109/126 [00:01<00:00, 72.41it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 87%|      | 110/126 [00:01<00:00, 72.90it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 88%|      | 111/126 [00:01<00:00, 73.41it/s, loss=0.00301,

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v_num=4.31e+7]
Epoch 120: 89%|      | 112/126 [00:01<00:00, 73.89it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 90%|      | 113/126 [00:01<00:00, 74.38it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 90%|      | 114/126 [00:01<00:00, 74.78it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 91%|      | 115/126 [00:01<00:00, 75.27it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 92%|      | 116/126 [00:01<00:00, 75.71it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 93%|      | 117/126 [00:01<00:00, 76.20it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 94%|      | 118/126 [00:01<00:00, 76.68it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 94%|      | 119/126 [00:01<00:00, 77.16it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 95%|      | 120/126 [00:01<00:00, 77.64it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 96%|      | 121/126 [00:01<00:00, 78.12it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 97%|      | 122/126 [00:01<00:00, 78.60it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 98%|      | 123/126 [00:01<00:00, 79.12it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 98%|      | 124/126 [00:01<00:00, 79.63it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 99%|      | 125/126 [00:01<00:00, 80.16it/s, loss=0.00301,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.43it/s]
Epoch 120: 100%|      | 126/126 [00:01<00:00, 80.67it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 100%|      | 126/126 [00:01<00:00, 79.28it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 120: 100%|      | 126/126 [00:01<00:00, 79.15it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 79%|      | 100/126 [00:01<00:00, 79.74it/s, loss=0.00377,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 121: 80%|      | 101/126 [00:01<00:00, 69.80it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 81%|      | 102/126 [00:01<00:00, 69.62it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 82%|      | 103/126 [00:01<00:00, 70.01it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 83%|      | 104/126 [00:01<00:00, 70.42it/s, loss=0.00377,

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v_num=4.31e+7]
Epoch 121: 83%|      | 105/126 [00:01<00:00, 70.83it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 84%|      | 106/126 [00:01<00:00, 71.24it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 85%|      | 107/126 [00:01<00:00, 71.64it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 86%|      | 108/126 [00:01<00:00, 72.04it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 87%|      | 109/126 [00:01<00:00, 72.45it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 87%|      | 110/126 [00:01<00:00, 72.86it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 88%|      | 111/126 [00:01<00:00, 73.27it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 89%|      | 112/126 [00:01<00:00, 73.69it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 90%|      | 113/126 [00:01<00:00, 74.10it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 90%|      | 114/126 [00:01<00:00, 74.53it/s, loss=0.00377,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 148.64it/s]
Epoch 121: 91%|      | 115/126 [00:01<00:00, 74.94it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 92%|      | 116/126 [00:01<00:00, 75.37it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 93%|      | 117/126 [00:01<00:00, 75.79it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 94%|      | 118/126 [00:01<00:00, 76.21it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 94%|      | 119/126 [00:01<00:00, 76.64it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 95%|      | 120/126 [00:01<00:00, 77.07it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 96%|      | 121/126 [00:01<00:00, 77.50it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 97%|      | 122/126 [00:01<00:00, 77.94it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 98%|      | 123/126 [00:01<00:00, 78.41it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 98%|      | 124/126 [00:01<00:00, 78.88it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 99%|      | 125/126 [00:01<00:00, 79.35it/s, loss=0.00377,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 79.82it/s, loss=0.00377,
v_num=4.31e+7] Mapping latent space...
Epoch 121: 100%|     | 126/126 [00:01<00:00, 78.24it/s, loss=0.00377,
v_num=4.31e+7]

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Epoch 121: 100%|      | 126/126 [00:01<00:00, 78.09it/s, loss=0.00377,
v_num=4.31e+7]Mapping latent space...
Epoch 122:  79%|      | 100/126 [00:01<00:00, 76.55it/s, loss=0.00399,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 122:  80%|      | 101/126 [00:01<00:00, 68.03it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  81%|      | 102/126 [00:01<00:00, 68.26it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  82%|      | 103/126 [00:01<00:00, 68.79it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  83%|      | 104/126 [00:01<00:00, 69.30it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  83%|      | 105/126 [00:01<00:00, 69.82it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  84%|      | 106/126 [00:01<00:00, 70.32it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  85%|      | 107/126 [00:01<00:00, 70.85it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  86%|      | 108/126 [00:01<00:00, 71.34it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  87%|      | 109/126 [00:01<00:00, 71.86it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  87%|      | 110/126 [00:01<00:00, 72.35it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  88%|      | 111/126 [00:01<00:00, 72.87it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  89%|      | 112/126 [00:01<00:00, 73.36it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  90%|      | 113/126 [00:01<00:00, 73.87it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  90%|      | 114/126 [00:01<00:00, 74.35it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  91%|      | 115/126 [00:01<00:00, 74.85it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  92%|      | 116/126 [00:01<00:00, 75.35it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  93%|      | 117/126 [00:01<00:00, 75.85it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  94%|      | 118/126 [00:01<00:00, 76.34it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  94%|      | 119/126 [00:01<00:00, 76.84it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  95%|      | 120/126 [00:01<00:00, 77.32it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122:  96%|      | 121/126 [00:01<00:00, 77.82it/s, loss=0.00399,

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v_num=4.31e+7]
Epoch 122: 97%|      | 122/126 [00:01<00:00, 78.30it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122: 98%|      | 123/126 [00:01<00:00, 78.82it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122: 98%|      | 124/126 [00:01<00:00, 79.33it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122: 99%|      | 125/126 [00:01<00:00, 79.84it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 80.36it/s, loss=0.00399,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 100%|     | 126/126 [00:01<00:00, 79.01it/s, loss=0.00399,
v_num=4.31e+7]
Epoch 122: 100%|     | 126/126 [00:01<00:00, 78.89it/s, loss=0.00399,
v_num=4.31e+7]Mapping latent space...

Epoch 123: 79%|      | 100/126 [00:01<00:00, 74.09it/s, loss=0.00397,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 123: 80%|      | 101/126 [00:01<00:00, 65.04it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 81%|      | 102/126 [00:01<00:00, 65.32it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 82%|      | 103/126 [00:01<00:00, 65.79it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 83%|      | 104/126 [00:01<00:00, 66.26it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 83%|      | 105/126 [00:01<00:00, 66.73it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 84%|      | 106/126 [00:01<00:00, 67.20it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 85%|      | 107/126 [00:01<00:00, 67.67it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 86%|      | 108/126 [00:01<00:00, 68.13it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 87%|      | 109/126 [00:01<00:00, 68.60it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 87%|      | 110/126 [00:01<00:00, 69.06it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 88%|      | 111/126 [00:01<00:00, 69.52it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 89%|      | 112/126 [00:01<00:00, 69.98it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 90%|      | 113/126 [00:01<00:00, 70.43it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 90%|      | 114/126 [00:01<00:00, 70.88it/s, loss=0.00397,

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v_num=4.31e+7]
Epoch 123: 91%|      | 115/126 [00:01<00:00, 71.33it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 92%|      | 116/126 [00:01<00:00, 71.78it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 93%|      | 117/126 [00:01<00:00, 72.23it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 94%|      | 118/126 [00:01<00:00, 72.68it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 94%|      | 119/126 [00:01<00:00, 73.13it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 95%|      | 120/126 [00:01<00:00, 73.56it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 96%|      | 121/126 [00:01<00:00, 74.00it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 97%|      | 122/126 [00:01<00:00, 74.45it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 98%|      | 123/126 [00:01<00:00, 74.92it/s, loss=0.00397,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 232.89it/s]
Epoch 123: 98%|      | 124/126 [00:01<00:00, 75.37it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 99%|      | 125/126 [00:01<00:00, 75.84it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 76.30it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...
Epoch 123: 100%|     | 126/126 [00:01<00:00, 74.96it/s, loss=0.00397,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 74.82it/s, loss=0.00397,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 79%|      | 100/126 [00:01<00:00, 74.31it/s, loss=0.00346,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 124: 80%|      | 101/126 [00:01<00:00, 67.01it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 81%|      | 102/126 [00:01<00:00, 66.93it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 82%|      | 103/126 [00:01<00:00, 67.42it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 83%|      | 104/126 [00:01<00:00, 67.93it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 83%|      | 105/126 [00:01<00:00, 68.41it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 84%|      | 106/126 [00:01<00:00, 68.92it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 85%|      | 107/126 [00:01<00:00, 69.40it/s, loss=0.00346,

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v_num=4.31e+7]
Epoch 124: 86%|      | 108/126 [00:01<00:00, 69.90it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 87%|      | 109/126 [00:01<00:00, 70.38it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 87%|      | 110/126 [00:01<00:00, 70.89it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 88%|      | 111/126 [00:01<00:00, 71.37it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 89%|      | 112/126 [00:01<00:00, 71.88it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 90%|      | 113/126 [00:01<00:00, 72.35it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 90%|      | 114/126 [00:01<00:00, 72.83it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 91%|      | 115/126 [00:01<00:00, 73.31it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 92%|      | 116/126 [00:01<00:00, 73.79it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 93%|      | 117/126 [00:01<00:00, 74.27it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 94%|      | 118/126 [00:01<00:00, 74.74it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 94%|      | 119/126 [00:01<00:00, 75.21it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 95%|      | 120/126 [00:01<00:00, 75.69it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 96%|      | 121/126 [00:01<00:00, 76.15it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 97%|      | 122/126 [00:01<00:00, 76.63it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 98%|      | 123/126 [00:01<00:00, 77.15it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 98%|      | 124/126 [00:01<00:00, 77.65it/s, loss=0.00346,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 247.85it/s]
Epoch 124: 99%|      | 125/126 [00:01<00:00, 78.15it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 78.66it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|     | 126/126 [00:01<00:00, 77.18it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 124: 100%|     | 126/126 [00:01<00:00, 77.05it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 79%|      | 100/126 [00:01<00:00, 68.17it/s, loss=0.00346,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 125: 80%|          | 101/126 [00:01<00:00, 61.36it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 81%|          | 102/126 [00:01<00:00, 61.52it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 82%|          | 103/126 [00:01<00:00, 62.01it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 83%|          | 104/126 [00:01<00:00, 62.48it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 83%|          | 105/126 [00:01<00:00, 62.97it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 84%|          | 106/126 [00:01<00:00, 63.43it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 85%|          | 107/126 [00:01<00:00, 63.92it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 86%|          | 108/126 [00:01<00:00, 64.38it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 87%|          | 109/126 [00:01<00:00, 64.86it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 87%|          | 110/126 [00:01<00:00, 65.33it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 88%|          | 111/126 [00:01<00:00, 65.81it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 89%|          | 112/126 [00:01<00:00, 66.27it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 90%|          | 113/126 [00:01<00:00, 66.74it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 90%|          | 114/126 [00:01<00:00, 67.20it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 91%|          | 115/126 [00:01<00:00, 67.68it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 92%|          | 116/126 [00:01<00:00, 68.13it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 93%|          | 117/126 [00:01<00:00, 68.61it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 94%|          | 118/126 [00:01<00:00, 69.06it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 94%|          | 119/126 [00:01<00:00, 69.52it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 95%|          | 120/126 [00:01<00:00, 69.97it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 96%|          | 121/126 [00:01<00:00, 70.43it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 97%|          | 122/126 [00:01<00:00, 70.87it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 98%|          | 123/126 [00:01<00:00, 71.35it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 98%|          | 124/126 [00:01<00:00, 71.82it/s, loss=0.00346,

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v_num=4.31e+7]
Epoch 125: 99%|      | 125/126 [00:01<00:00, 72.30it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 100%|     | 126/126 [00:01<00:00, 72.77it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 100%|     | 126/126 [00:01<00:00, 71.61it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 125: 100%|     | 126/126 [00:01<00:00, 71.49it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...

Epoch 126: 79%|      | 100/126 [00:01<00:00, 64.68it/s, loss=0.0039,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 126: 80%|      | 101/126 [00:01<00:00, 57.64it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 81%|      | 102/126 [00:01<00:00, 57.87it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 82%|      | 103/126 [00:01<00:00, 58.30it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 83%|      | 104/126 [00:01<00:00, 58.72it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 83%|      | 105/126 [00:01<00:00, 59.15it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 84%|      | 106/126 [00:01<00:00, 59.58it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 85%|      | 107/126 [00:01<00:00, 60.01it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 86%|      | 108/126 [00:01<00:00, 60.43it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 87%|      | 109/126 [00:01<00:00, 60.86it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 87%|      | 110/126 [00:01<00:00, 61.28it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 88%|      | 111/126 [00:01<00:00, 61.70it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 89%|      | 112/126 [00:01<00:00, 62.13it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 90%|      | 113/126 [00:01<00:00, 62.55it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 90%|      | 114/126 [00:01<00:00, 62.97it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 91%|      | 115/126 [00:01<00:00, 63.39it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 92%|      | 116/126 [00:01<00:00, 63.81it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 93%|      | 117/126 [00:01<00:00, 64.22it/s, loss=0.0039,

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v_num=4.31e+7]
Epoch 126: 94%|      | 118/126 [00:01<00:00, 64.63it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 94%|      | 119/126 [00:01<00:00, 65.04it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 95%|      | 120/126 [00:01<00:00, 65.45it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 96%|      | 121/126 [00:01<00:00, 65.86it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 97%|      | 122/126 [00:01<00:00, 66.28it/s, loss=0.0039,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.49it/s]
Epoch 126: 98%|      | 123/126 [00:01<00:00, 66.70it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 98%|      | 124/126 [00:01<00:00, 67.12it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 99%|      | 125/126 [00:01<00:00, 67.55it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 67.97it/s, loss=0.0039,
v_num=4.31e+7]Mapping latent space...
Epoch 126: 100%|     | 126/126 [00:01<00:00, 66.86it/s, loss=0.0039,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 66.75it/s, loss=0.0039,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 79%|      | 100/126 [00:01<00:00, 76.87it/s, loss=0.00392,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 127: 80%|      | 101/126 [00:01<00:00, 69.37it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 81%|      | 102/126 [00:01<00:00, 69.61it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 82%|      | 103/126 [00:01<00:00, 70.14it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 83%|      | 104/126 [00:01<00:00, 70.64it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 83%|      | 105/126 [00:01<00:00, 71.17it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 84%|      | 106/126 [00:01<00:00, 71.67it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 85%|      | 107/126 [00:01<00:00, 72.21it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 86%|      | 108/126 [00:01<00:00, 72.70it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 87%|      | 109/126 [00:01<00:00, 73.21it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 87%|      | 110/126 [00:01<00:00, 73.72it/s, loss=0.00392,

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v_num=4.31e+7]
Epoch 127: 88%|      | 111/126 [00:01<00:00, 74.23it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 89%|      | 112/126 [00:01<00:00, 74.72it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 90%|      | 113/126 [00:01<00:00, 75.23it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 90%|      | 114/126 [00:01<00:00, 75.73it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 91%|      | 115/126 [00:01<00:00, 76.23it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 92%|      | 116/126 [00:01<00:00, 76.73it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 93%|      | 117/126 [00:01<00:00, 77.22it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 94%|      | 118/126 [00:01<00:00, 77.72it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 94%|      | 119/126 [00:01<00:00, 78.22it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 95%|      | 120/126 [00:01<00:00, 78.71it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 96%|      | 121/126 [00:01<00:00, 79.21it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 97%|      | 122/126 [00:01<00:00, 79.70it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 98%|      | 123/126 [00:01<00:00, 80.22it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 98%|      | 124/126 [00:01<00:00, 80.73it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 99%|      | 125/126 [00:01<00:00, 81.25it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 81.77it/s, loss=0.00392,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 100%|     | 126/126 [00:01<00:00, 80.20it/s, loss=0.00392,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 80.07it/s, loss=0.00392,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 79%|      | 100/126 [00:01<00:00, 73.27it/s, loss=0.00387,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 128: 80%|      | 101/126 [00:01<00:00, 64.79it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 81%|      | 102/126 [00:01<00:00, 64.82it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 82%|      | 103/126 [00:01<00:00, 65.23it/s, loss=0.00387,
v_num=4.31e+7]

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Epoch 128: 83%|      | 104/126 [00:01<00:00, 65.63it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 83%|      | 105/126 [00:01<00:00, 66.05it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 84%|      | 106/126 [00:01<00:00, 66.47it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 85%|      | 107/126 [00:01<00:00, 66.84it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 86%|      | 108/126 [00:01<00:00, 67.25it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 87%|      | 109/126 [00:01<00:00, 67.68it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 87%|      | 110/126 [00:01<00:00, 68.11it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 88%|      | 111/126 [00:01<00:00, 68.53it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 89%|      | 112/126 [00:01<00:00, 68.96it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 90%|      | 113/126 [00:01<00:00, 69.38it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 90%|      | 114/126 [00:01<00:00, 69.79it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 91%|      | 115/126 [00:01<00:00, 70.21it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 92%|      | 116/126 [00:01<00:00, 70.64it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 93%|      | 117/126 [00:01<00:00, 71.08it/s, loss=0.00387,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.18it/s]
Epoch 128: 94%|      | 118/126 [00:01<00:00, 71.51it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 94%|      | 119/126 [00:01<00:00, 71.94it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 95%|      | 120/126 [00:01<00:00, 72.38it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 96%|      | 121/126 [00:01<00:00, 72.81it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 97%|      | 122/126 [00:01<00:00, 73.26it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 98%|      | 123/126 [00:01<00:00, 73.71it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 98%|      | 124/126 [00:01<00:00, 74.17it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 99%|      | 125/126 [00:01<00:00, 74.63it/s, loss=0.00387,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 75.09it/s, loss=0.00387,
v_num=4.31e+7] Mapping latent space...
Epoch 128: 100%|     | 126/126 [00:01<00:00, 73.68it/s, loss=0.00387,

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v_num=4.31e+7]

Epoch 128: 100%| | 126/126 [00:01<00:00, 73.54it/s, loss=0.00387,
v_num=4.31e+7]Mapping latent space..
Epoch 129: 79%| | 100/126 [00:01<00:00, 79.07it/s, loss=0.00357,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%| | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]
Epoch 129: 80%| | 101/126 [00:01<00:00, 70.63it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 81%| | 102/126 [00:01<00:00, 70.68it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 82%| | 103/126 [00:01<00:00, 71.21it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 83%| | 104/126 [00:01<00:00, 71.74it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 83%| | 105/126 [00:01<00:00, 72.27it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 84%| | 106/126 [00:01<00:00, 72.77it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 85%| | 107/126 [00:01<00:00, 73.30it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 86%| | 108/126 [00:01<00:00, 73.82it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 87%| | 109/126 [00:01<00:00, 74.34it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 87%| | 110/126 [00:01<00:00, 74.86it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 88%| | 111/126 [00:01<00:00, 75.39it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 89%| | 112/126 [00:01<00:00, 75.91it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 90%| | 113/126 [00:01<00:00, 76.42it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 90%| | 114/126 [00:01<00:00, 76.94it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 91%| | 115/126 [00:01<00:00, 77.48it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 92%| | 116/126 [00:01<00:00, 77.98it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 93%| | 117/126 [00:01<00:00, 78.49it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 94%| | 118/126 [00:01<00:00, 79.00it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 94%| | 119/126 [00:01<00:00, 79.51it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 95%| | 120/126 [00:01<00:00, 80.01it/s, loss=0.00357,

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v_num=4.31e+7]
Epoch 129: 96%|      | 121/126 [00:01<00:00, 80.52it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 97%|      | 122/126 [00:01<00:00, 81.03it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 98%|      | 123/126 [00:01<00:00, 81.57it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 98%|      | 124/126 [00:01<00:00, 82.10it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 99%|      | 125/126 [00:01<00:00, 82.56it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 83.09it/s, loss=0.00357,
v_num=4.31e+7]Mapping latent space...
Epoch 129: 100%|     | 126/126 [00:01<00:00, 81.59it/s, loss=0.00357,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 81.46it/s, loss=0.00357,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 79%|      | 100/126 [00:01<00:00, 73.72it/s, loss=0.00408,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 130: 80%|      | 101/126 [00:01<00:00, 64.70it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 81%|      | 102/126 [00:01<00:00, 64.72it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 82%|      | 103/126 [00:01<00:00, 65.23it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 83%|      | 104/126 [00:01<00:00, 65.71it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 83%|      | 105/126 [00:01<00:00, 66.21it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 84%|      | 106/126 [00:01<00:00, 66.70it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 85%|      | 107/126 [00:01<00:00, 67.19it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 86%|      | 108/126 [00:01<00:00, 67.64it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 87%|      | 109/126 [00:01<00:00, 68.14it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 87%|      | 110/126 [00:01<00:00, 68.62it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 88%|      | 111/126 [00:01<00:00, 69.11it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 89%|      | 112/126 [00:01<00:00, 69.59it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 90%|      | 113/126 [00:01<00:00, 70.08it/s, loss=0.00408,
v_num=4.31e+7]

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Epoch 130: 90%|      | 114/126 [00:01<00:00, 70.56it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 91%|      | 115/126 [00:01<00:00, 71.04it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 92%|      | 116/126 [00:01<00:00, 71.52it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 93%|      | 117/126 [00:01<00:00, 72.00it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 94%|      | 118/126 [00:01<00:00, 72.47it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 94%|      | 119/126 [00:01<00:00, 72.96it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 95%|      | 120/126 [00:01<00:00, 73.43it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 96%|      | 121/126 [00:01<00:00, 73.89it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 97%|      | 122/126 [00:01<00:00, 74.37it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 98%|      | 123/126 [00:01<00:00, 74.86it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 98%|      | 124/126 [00:01<00:00, 75.35it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 99%|      | 125/126 [00:01<00:00, 75.84it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 76.33it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 100%|     | 126/126 [00:01<00:00, 74.90it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 74.67it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 79%|      | 100/126 [00:01<00:00, 79.07it/s, loss=0.00396,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 131: 80%|      | 101/126 [00:01<00:00, 68.73it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 81%|      | 102/126 [00:01<00:00, 68.93it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 82%|      | 103/126 [00:01<00:00, 69.42it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 83%|      | 104/126 [00:01<00:00, 69.91it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 83%|      | 105/126 [00:01<00:00, 70.39it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 84%|      | 106/126 [00:01<00:00, 70.88it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 85%|      | 107/126 [00:01<00:00, 71.36it/s, loss=0.00396,

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v_num=4.31e+7]
Epoch 131: 86%|      | 108/126 [00:01<00:00, 71.84it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 87%|      | 109/126 [00:01<00:00, 72.32it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 87%|      | 110/126 [00:01<00:00, 72.78it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 88%|      | 111/126 [00:01<00:00, 73.25it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 89%|      | 112/126 [00:01<00:00, 73.73it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 90%|      | 113/126 [00:01<00:00, 74.20it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 90%|      | 114/126 [00:01<00:00, 74.67it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 91%|      | 115/126 [00:01<00:00, 75.14it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 92%|      | 116/126 [00:01<00:00, 75.61it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 93%|      | 117/126 [00:01<00:00, 76.07it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 94%|      | 118/126 [00:01<00:00, 76.54it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 94%|      | 119/126 [00:01<00:00, 77.00it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 95%|      | 120/126 [00:01<00:00, 77.46it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 96%|      | 121/126 [00:01<00:00, 77.91it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 97%|      | 122/126 [00:01<00:00, 78.37it/s, loss=0.00396,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.37it/s]
Epoch 131: 98%|      | 123/126 [00:01<00:00, 78.85it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 98%|      | 124/126 [00:01<00:00, 79.33it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 99%|      | 125/126 [00:01<00:00, 79.81it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 80.29it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 100%|     | 126/126 [00:01<00:00, 78.77it/s, loss=0.00396,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 78.62it/s, loss=0.00396,
v_num=4.31e+7]Mapping latent space...

Epoch 132: 79%|      | 100/126 [00:01<00:00, 73.85it/s, loss=0.00376,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 132: 80%|          | 101/126 [00:01<00:00, 64.33it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 81%|          | 102/126 [00:01<00:00, 64.48it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 82%|          | 103/126 [00:01<00:00, 64.95it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 83%|          | 104/126 [00:01<00:00, 65.42it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 83%|          | 105/126 [00:01<00:00, 65.88it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 84%|          | 106/126 [00:01<00:00, 66.35it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 85%|          | 107/126 [00:01<00:00, 66.81it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 86%|          | 108/126 [00:01<00:00, 67.27it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 87%|          | 109/126 [00:01<00:00, 67.72it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 87%|          | 110/126 [00:01<00:00, 68.18it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 88%|          | 111/126 [00:01<00:00, 68.63it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 89%|          | 112/126 [00:01<00:00, 69.06it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 90%|          | 113/126 [00:01<00:00, 69.51it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 90%|          | 114/126 [00:01<00:00, 69.96it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 91%|          | 115/126 [00:01<00:00, 70.41it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 92%|          | 116/126 [00:01<00:00, 70.86it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 93%|          | 117/126 [00:01<00:00, 71.30it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 94%|          | 118/126 [00:01<00:00, 71.74it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 94%|          | 119/126 [00:01<00:00, 72.17it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 95%|          | 120/126 [00:01<00:00, 72.61it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 96%|          | 121/126 [00:01<00:00, 73.05it/s, loss=0.00376,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 218.61it/s]
Epoch 132: 97%|          | 122/126 [00:01<00:00, 73.49it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 98%|          | 123/126 [00:01<00:00, 73.95it/s, loss=0.00376,

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v_num=4.31e+7]
Epoch 132: 98%|      | 124/126 [00:01<00:00, 74.40it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 99%|      | 125/126 [00:01<00:00, 74.86it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 75.32it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...
Epoch 132: 100%|     | 126/126 [00:01<00:00, 73.81it/s, loss=0.00376,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 73.67it/s, loss=0.00376,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 79%|      | 100/126 [00:01<00:00, 73.32it/s, loss=0.00337,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 133: 80%|      | 101/126 [00:01<00:00, 63.87it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 81%|      | 102/126 [00:01<00:00, 64.04it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 82%|      | 103/126 [00:01<00:00, 64.37it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 83%|      | 104/126 [00:01<00:00, 64.77it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 83%|      | 105/126 [00:01<00:00, 65.18it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 84%|      | 106/126 [00:01<00:00, 65.58it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 85%|      | 107/126 [00:01<00:00, 66.00it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 86%|      | 108/126 [00:01<00:00, 66.40it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 87%|      | 109/126 [00:01<00:00, 66.82it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 87%|      | 110/126 [00:01<00:00, 67.24it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 88%|      | 111/126 [00:01<00:00, 67.66it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 89%|      | 112/126 [00:01<00:00, 68.08it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 90%|      | 113/126 [00:01<00:00, 68.50it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 90%|      | 114/126 [00:01<00:00, 68.89it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 91%|      | 115/126 [00:01<00:00, 69.31it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 92%|      | 116/126 [00:01<00:00, 69.74it/s, loss=0.00337,
v_num=4.31e+7]

```



```

Validation DataLoader 0: 65%|          | 17/26 [00:00<00:00, 167.16it/s]
Epoch 133: 93%|          | 117/126 [00:01<00:00, 70.15it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 94%|          | 118/126 [00:01<00:00, 70.58it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 94%|          | 119/126 [00:01<00:00, 71.00it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 95%|          | 120/126 [00:01<00:00, 71.42it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 96%|          | 121/126 [00:01<00:00, 71.84it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 97%|          | 122/126 [00:01<00:00, 72.28it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 98%|          | 123/126 [00:01<00:00, 72.73it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 98%|          | 124/126 [00:01<00:00, 73.18it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 99%|          | 125/126 [00:01<00:00, 73.63it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 100%|         | 126/126 [00:01<00:00, 74.08it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 100%|         | 126/126 [00:01<00:00, 72.54it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 133: 100%|         | 126/126 [00:01<00:00, 72.32it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 100%|         | 126/126 [00:01<00:00, 70.12it/s, loss=0.00337,
v_num=4.31e+7]
Training for latent_dim 6 done.

```

```

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
    from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
    rank_zero_deprecation(
GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:

```

LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was deprecated in v1.6 and will be removed in v1.8. Please use `LightningModule.on_<train/validation/test>_epoch_end` instead.

```
rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]
```

	Name	Type	Params

0	encoder	Sequential	8.9 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0
3	encoder.2	BatchNorm1d	128
4	encoder.3	Linear	2.1 K
5	encoder.4	Tanh	0
6	encoder.5	BatchNorm1d	64
7	encoder.6	Linear	528
8	encoder.7	Tanh	0
9	encoder.8	BatchNorm1d	32
10	encoder.9	Linear	119
11	encoder.10	Tanh	0
12	encoder.11	BatchNorm1d	14
13	decoder	Sequential	8.9 K
14	decoder.0	Linear	128
15	decoder.1	Tanh	0
16	decoder.2	BatchNorm1d	32
17	decoder.3	Linear	544
18	decoder.4	Tanh	0
19	decoder.5	BatchNorm1d	64
20	decoder.6	Linear	2.1 K
21	decoder.7	Tanh	0
22	decoder.8	BatchNorm1d	128
23	decoder.9	Linear	5.9 K
24	decoder.10	Sigmoid	0

17.8 K Trainable params

0 Non-trainable params

17.8 K Total params

0.071 Total estimated model params size (MB)

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, val_dataloader 0, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

```
rank_zero_warn(
```

Loading all data...

Training on 10000 examples, validating on 2501 examples

```

Sanity Checking DataLoader 0: 100%|          | 2/2 [00:00<00:00,
2.80it/s]Saving samples for epoch #0...
Mapping latent space...
Epoch 0:  2%|          | 2/126 [00:00<00:11, 11.03it/s, loss=0.118,
v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/data_connector.py:240:
PossibleUserWarning: The dataloader, train_dataloader, does not have many
workers which may be a bottleneck. Consider increasing the value of the
`num_workers` argument` (try 28 which is the number of cpus on this machine) in
the `DataLoader` init to improve performance.
    rank_zero_warn(

Epoch 0: 79%|          | 100/126 [00:01<00:00, 77.00it/s, loss=0.102,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 0: 80%|          | 101/126 [00:01<00:00, 68.49it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 81%|          | 102/126 [00:01<00:00, 68.56it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 82%|          | 103/126 [00:01<00:00, 69.08it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 83%|          | 104/126 [00:01<00:00, 69.59it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 83%|          | 105/126 [00:01<00:00, 70.12it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 84%|          | 106/126 [00:01<00:00, 70.62it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 85%|          | 107/126 [00:01<00:00, 71.13it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 86%|          | 108/126 [00:01<00:00, 71.63it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 87%|          | 109/126 [00:01<00:00, 72.15it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 87%|          | 110/126 [00:01<00:00, 72.65it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 88%|          | 111/126 [00:01<00:00, 73.17it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 89%|          | 112/126 [00:01<00:00, 73.66it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 90%|          | 113/126 [00:01<00:00, 74.18it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 90%|          | 114/126 [00:01<00:00, 74.65it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 91%|          | 115/126 [00:01<00:00, 75.16it/s, loss=0.102,
v_num=4.31e+7]

```

```

Epoch 0: 92%|      | 116/126 [00:01<00:00, 75.64it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 93%|      | 117/126 [00:01<00:00, 76.14it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 94%|      | 118/126 [00:01<00:00, 76.63it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 94%|      | 119/126 [00:01<00:00, 77.13it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 95%|      | 120/126 [00:01<00:00, 77.60it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 96%|      | 121/126 [00:01<00:00, 78.10it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 78.58it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 79.09it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 79.61it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 80.12it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 80.63it/s, loss=0.102,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.24it/s, loss=0.102,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 72.12it/s, loss=0.102,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 66.02it/s, loss=0.0954,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 59.44it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 59.71it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 60.15it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 83%|      | 104/126 [00:01<00:00, 60.60it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 61.04it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 61.47it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 61.91it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 62.36it/s, loss=0.0954,

```

```

v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 62.79it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 63.23it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 63.66it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 64.10it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 64.53it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 64.97it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 65.41it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 65.83it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 66.27it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 66.70it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 67.13it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 67.56it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 67.98it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 68.41it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 68.85it/s, loss=0.0954,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 239.47it/s]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 69.28it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 69.73it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 70.17it/s, loss=0.0954,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 69.14it/s, loss=0.0954,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 69.07it/s, loss=0.0954,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|      | 100/126 [00:01<00:00, 74.18it/s, loss=0.0912,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|      | 101/126 [00:01<00:00, 65.70it/s, loss=0.0912,

```

```

v_num=4.31e+7]
Epoch 2: 81%|      | 102/126 [00:01<00:00, 65.89it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 82%|      | 103/126 [00:01<00:00, 66.37it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 83%|      | 104/126 [00:01<00:00, 66.84it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 83%|      | 105/126 [00:01<00:00, 67.31it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 84%|      | 106/126 [00:01<00:00, 67.78it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 85%|      | 107/126 [00:01<00:00, 68.26it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 86%|      | 108/126 [00:01<00:00, 68.70it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 87%|      | 109/126 [00:01<00:00, 69.17it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 87%|      | 110/126 [00:01<00:00, 69.63it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 88%|      | 111/126 [00:01<00:00, 70.09it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 89%|      | 112/126 [00:01<00:00, 70.55it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 90%|      | 113/126 [00:01<00:00, 71.01it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 90%|      | 114/126 [00:01<00:00, 71.47it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 91%|      | 115/126 [00:01<00:00, 71.93it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 92%|      | 116/126 [00:01<00:00, 72.24it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 93%|      | 117/126 [00:01<00:00, 72.69it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 94%|      | 118/126 [00:01<00:00, 73.15it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 94%|      | 119/126 [00:01<00:00, 73.59it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 95%|      | 120/126 [00:01<00:00, 74.03it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 96%|      | 121/126 [00:01<00:00, 74.48it/s, loss=0.0912,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 217.78it/s]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 74.92it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 75.39it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 75.85it/s, loss=0.0912,
v_num=4.31e+7]

```

```

Epoch 2: 99%|      | 125/126 [00:01<00:00, 76.31it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 76.78it/s, loss=0.0912,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 74.93it/s, loss=0.0912,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 74.82it/s, loss=0.0912,
v_num=4.31e+7]Mapping latent space...

Epoch 3: 79%|      | 100/126 [00:01<00:00, 68.40it/s, loss=0.0841,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|      | 101/126 [00:01<00:00, 61.81it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 81%|      | 102/126 [00:01<00:00, 62.00it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 82%|      | 103/126 [00:01<00:00, 62.48it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 83%|      | 104/126 [00:01<00:00, 62.96it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 83%|      | 105/126 [00:01<00:00, 63.44it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 84%|      | 106/126 [00:01<00:00, 63.91it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 85%|      | 107/126 [00:01<00:00, 64.39it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 86%|      | 108/126 [00:01<00:00, 64.86it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 87%|      | 109/126 [00:01<00:00, 65.33it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 87%|      | 110/126 [00:01<00:00, 65.77it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 88%|      | 111/126 [00:01<00:00, 66.24it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 89%|      | 112/126 [00:01<00:00, 66.70it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 90%|      | 113/126 [00:01<00:00, 67.17it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 90%|      | 114/126 [00:01<00:00, 67.63it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 91%|      | 115/126 [00:01<00:00, 68.09it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 92%|      | 116/126 [00:01<00:00, 68.56it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 93%|      | 117/126 [00:01<00:00, 69.03it/s, loss=0.0841,
v_num=4.31e+7]

```

```

Epoch 3: 94%|      | 118/126 [00:01<00:00, 69.49it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 94%|      | 119/126 [00:01<00:00, 69.95it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 95%|      | 120/126 [00:01<00:00, 70.40it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 96%|      | 121/126 [00:01<00:00, 70.85it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 97%|      | 122/126 [00:01<00:00, 71.31it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 71.79it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 72.26it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 72.74it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 73.22it/s, loss=0.0841,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 72.08it/s, loss=0.0841,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 72.02it/s, loss=0.0841,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 74.54it/s, loss=0.0742,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 65.00it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 65.38it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 65.78it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 66.18it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 66.57it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 66.98it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 85%|      | 107/126 [00:01<00:00, 67.39it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 67.80it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 68.20it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 68.61it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 69.02it/s, loss=0.0742,

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v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 69.40it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 69.81it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 70.23it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 70.64it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 92%|      | 116/126 [00:01<00:00, 71.06it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 71.48it/s, loss=0.0742,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 175.84it/s]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 71.90it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 72.32it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 72.74it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 73.16it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 73.58it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 74.04it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 74.49it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 74.94it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 75.40it/s, loss=0.0742,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 74.09it/s, loss=0.0742,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 73.99it/s, loss=0.0742,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 77.34it/s, loss=0.0626,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 68.18it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 81%|      | 102/126 [00:01<00:00, 68.49it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 82%|      | 103/126 [00:01<00:00, 69.00it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 83%|      | 104/126 [00:01<00:00, 69.49it/s, loss=0.0626,

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v_num=4.31e+7]
Epoch 5: 83%|      | 105/126 [00:01<00:00, 69.99it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 84%|      | 106/126 [00:01<00:00, 70.49it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 85%|      | 107/126 [00:01<00:00, 70.99it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 86%|      | 108/126 [00:01<00:00, 71.48it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 87%|      | 109/126 [00:01<00:00, 71.97it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 87%|      | 110/126 [00:01<00:00, 72.47it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 88%|      | 111/126 [00:01<00:00, 72.99it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 89%|      | 112/126 [00:01<00:00, 73.47it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 90%|      | 113/126 [00:01<00:00, 73.97it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 90%|      | 114/126 [00:01<00:00, 74.44it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 91%|      | 115/126 [00:01<00:00, 74.93it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 92%|      | 116/126 [00:01<00:00, 75.41it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 93%|      | 117/126 [00:01<00:00, 75.90it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 94%|      | 118/126 [00:01<00:00, 76.39it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 94%|      | 119/126 [00:01<00:00, 76.87it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 95%|      | 120/126 [00:01<00:00, 77.35it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 96%|      | 121/126 [00:01<00:00, 77.82it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 97%|      | 122/126 [00:01<00:00, 78.30it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 98%|      | 123/126 [00:01<00:00, 78.81it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 79.32it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 79.82it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 80.34it/s, loss=0.0626,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 79.04it/s, loss=0.0626,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 78.96it/s, loss=0.0626,

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v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%| | 100/126 [00:01<00:00, 90.74it/s, loss=0.0502,
v_num=4.31e+7]

Validation: 0it [00:00, ?it/s]

Validation: 0%| | 0/26 [00:00<?, ?it/s]

Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]

Epoch 6: 80%| | 101/126 [00:01<00:00, 78.21it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 81%| | 102/126 [00:01<00:00, 78.06it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 82%| | 103/126 [00:01<00:00, 78.60it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 83%| | 104/126 [00:01<00:00, 79.16it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 83%| | 105/126 [00:01<00:00, 79.71it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 84%| | 106/126 [00:01<00:00, 80.26it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 85%| | 107/126 [00:01<00:00, 80.81it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 86%| | 108/126 [00:01<00:00, 81.36it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 87%| | 109/126 [00:01<00:00, 81.90it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 87%| | 110/126 [00:01<00:00, 82.44it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 88%| | 111/126 [00:01<00:00, 82.99it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 89%| | 112/126 [00:01<00:00, 83.54it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 90%| | 113/126 [00:01<00:00, 84.07it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 90%| | 114/126 [00:01<00:00, 84.60it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 91%| | 115/126 [00:01<00:00, 85.13it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 92%| | 116/126 [00:01<00:00, 85.60it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 93%| | 117/126 [00:01<00:00, 85.98it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 94%| | 118/126 [00:01<00:00, 86.37it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 94%| | 119/126 [00:01<00:00, 86.78it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 95%| | 120/126 [00:01<00:00, 87.18it/s, loss=0.0502,
v_num=4.31e+7]

Epoch 6: 96%| | 121/126 [00:01<00:00, 87.59it/s, loss=0.0502,

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v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 212.05it/s]
Epoch 6: 97%|          | 122/126 [00:01<00:00, 88.00it/s, loss=0.0502,
v_num=4.31e+7]
Epoch 6: 98%|          | 123/126 [00:01<00:00, 88.45it/s, loss=0.0502,
v_num=4.31e+7]
Epoch 6: 98%|          | 124/126 [00:01<00:00, 88.90it/s, loss=0.0502,
v_num=4.31e+7]
Epoch 6: 99%|          | 125/126 [00:01<00:00, 89.36it/s, loss=0.0502,
v_num=4.31e+7]
Epoch 6: 100%|         | 126/126 [00:01<00:00, 89.83it/s, loss=0.0502,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|         | 126/126 [00:01<00:00, 87.69it/s, loss=0.0502,
v_num=4.31e+7]
Epoch 6: 100%|         | 126/126 [00:01<00:00, 87.55it/s, loss=0.0502,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|          | 100/126 [00:01<00:00, 74.54it/s, loss=0.0387,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|          | 101/126 [00:01<00:00, 66.93it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 81%|          | 102/126 [00:01<00:00, 67.00it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 82%|          | 103/126 [00:01<00:00, 67.48it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 83%|          | 104/126 [00:01<00:00, 67.96it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 83%|          | 105/126 [00:01<00:00, 68.46it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 84%|          | 106/126 [00:01<00:00, 68.95it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 85%|          | 107/126 [00:01<00:00, 69.44it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 86%|          | 108/126 [00:01<00:00, 69.93it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 87%|          | 109/126 [00:01<00:00, 70.43it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 87%|          | 110/126 [00:01<00:00, 70.91it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 88%|          | 111/126 [00:01<00:00, 71.40it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 89%|          | 112/126 [00:01<00:00, 71.89it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 90%|          | 113/126 [00:01<00:00, 72.37it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 90%|          | 114/126 [00:01<00:00, 72.86it/s, loss=0.0387,

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v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 73.34it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 73.82it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 74.30it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 74.76it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 94%|      | 119/126 [00:01<00:00, 75.23it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 75.70it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 76.18it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 76.66it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 77.15it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 77.65it/s, loss=0.0387,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 248.75it/s]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 78.15it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 78.65it/s, loss=0.0387,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 77.33it/s, loss=0.0387,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 77.24it/s, loss=0.0387,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 83.76it/s, loss=0.0286,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 72.84it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 73.01it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 73.50it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 73.99it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 74.47it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 74.97it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 75.46it/s, loss=0.0286,

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v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 75.95it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 76.45it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 76.94it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 77.44it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 89%|      | 112/126 [00:01<00:00, 77.92it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 78.41it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 78.89it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 79.38it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 79.87it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 80.35it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 80.83it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 81.30it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 81.74it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 82.21it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 82.69it/s, loss=0.0286,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.68it/s]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 83.18it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 83.67it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 84.17it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 84.66it/s, loss=0.0286,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 83.09it/s, loss=0.0286,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 82.97it/s, loss=0.0286,
v_num=4.31e+7]Mapping latent space...

Epoch 9: 79%|      | 100/126 [00:01<00:00, 70.29it/s, loss=0.0215,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|          | 101/126 [00:01<00:00, 62.31it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 81%|          | 102/126 [00:01<00:00, 62.46it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 82%|          | 103/126 [00:01<00:00, 62.91it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 83%|          | 104/126 [00:01<00:00, 63.37it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 83%|          | 105/126 [00:01<00:00, 63.82it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 84%|          | 106/126 [00:01<00:00, 64.28it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 85%|          | 107/126 [00:01<00:00, 64.73it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 86%|          | 108/126 [00:01<00:00, 65.18it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 87%|          | 109/126 [00:01<00:00, 65.63it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 87%|          | 110/126 [00:01<00:00, 66.08it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 88%|          | 111/126 [00:01<00:00, 66.52it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 89%|          | 112/126 [00:01<00:00, 66.96it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 90%|          | 113/126 [00:01<00:00, 67.40it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 90%|          | 114/126 [00:01<00:00, 67.85it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 91%|          | 115/126 [00:01<00:00, 68.27it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 92%|          | 116/126 [00:01<00:00, 68.70it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 93%|          | 117/126 [00:01<00:00, 69.11it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 94%|          | 118/126 [00:01<00:00, 69.53it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 94%|          | 119/126 [00:01<00:00, 69.96it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 95%|          | 120/126 [00:01<00:00, 70.37it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 96%|          | 121/126 [00:01<00:00, 70.79it/s, loss=0.0215,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 212.41it/s]
Epoch 9: 97%|          | 122/126 [00:01<00:00, 71.18it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 98%|          | 123/126 [00:01<00:00, 71.63it/s, loss=0.0215,

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v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 72.07it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 72.51it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 72.96it/s, loss=0.0215,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 71.77it/s, loss=0.0215,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 71.69it/s, loss=0.0215,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|     | 100/126 [00:01<00:00, 76.82it/s, loss=0.0163,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|     | 101/126 [00:01<00:00, 67.34it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 81%|     | 102/126 [00:01<00:00, 67.65it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 82%|     | 103/126 [00:01<00:00, 68.14it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 83%|     | 104/126 [00:01<00:00, 68.63it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 83%|     | 105/126 [00:01<00:00, 69.14it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 84%|     | 106/126 [00:01<00:00, 69.63it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 85%|     | 107/126 [00:01<00:00, 70.12it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 86%|     | 108/126 [00:01<00:00, 70.62it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 87%|     | 109/126 [00:01<00:00, 71.12it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 87%|     | 110/126 [00:01<00:00, 71.60it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 88%|     | 111/126 [00:01<00:00, 72.11it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 89%|     | 112/126 [00:01<00:00, 72.59it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 90%|     | 113/126 [00:01<00:00, 73.09it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 90%|     | 114/126 [00:01<00:00, 73.57it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 91%|     | 115/126 [00:01<00:00, 74.07it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 92%|     | 116/126 [00:01<00:00, 74.55it/s, loss=0.0163,
v_num=4.31e+7]

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Epoch 10: 93%|      | 117/126 [00:01<00:00, 75.04it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 94%|      | 118/126 [00:01<00:00, 75.51it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 94%|      | 119/126 [00:01<00:00, 76.00it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 95%|      | 120/126 [00:01<00:00, 76.48it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 96%|      | 121/126 [00:01<00:00, 76.96it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 97%|      | 122/126 [00:01<00:00, 77.44it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 77.95it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 78.46it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 78.97it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 79.48it/s, loss=0.0163,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 78.11it/s, loss=0.0163,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 78.02it/s, loss=0.0163,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 88.72it/s, loss=0.0129,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 77.15it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 76.58it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 77.13it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 77.67it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 78.21it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 78.76it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 79.31it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 79.84it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 80.38it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 80.92it/s, loss=0.0129,

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v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 81.45it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 81.99it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 82.52it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 83.04it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 83.58it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 84.10it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 84.64it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 85.15it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 85.67it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 86.18it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 86.69it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 87.21it/s, loss=0.0129,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.10it/s]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 87.75it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 88.30it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 88.84it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 89.38it/s, loss=0.0129,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 87.68it/s, loss=0.0129,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 87.58it/s, loss=0.0129,
v_num=4.31e+7]Mapping latent space...

Epoch 12: 79%|      | 100/126 [00:01<00:00, 88.19it/s, loss=0.0103,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 74.78it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 75.03it/s, loss=0.0103,
v_num=4.31e+7]

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Epoch 12: 82%| | 103/126 [00:01<00:00, 75.44it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 83%| | 104/126 [00:01<00:00, 75.86it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 83%| | 105/126 [00:01<00:00, 76.28it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 84%| | 106/126 [00:01<00:00, 76.72it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 85%| | 107/126 [00:01<00:00, 77.15it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 86%| | 108/126 [00:01<00:00, 77.59it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 87%| | 109/126 [00:01<00:00, 78.04it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 87%| | 110/126 [00:01<00:00, 78.49it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 88%| | 111/126 [00:01<00:00, 78.93it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 89%| | 112/126 [00:01<00:00, 79.39it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 90%| | 113/126 [00:01<00:00, 79.84it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 90%| | 114/126 [00:01<00:00, 80.29it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 91%| | 115/126 [00:01<00:00, 80.75it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 92%| | 116/126 [00:01<00:00, 81.20it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 93%| | 117/126 [00:01<00:00, 81.66it/s, loss=0.0103, v_num=4.31e+7]
Validation DataLoader 0: 69%| | 18/26 [00:00<00:00, 178.98it/s]
Epoch 12: 94%| | 118/126 [00:01<00:00, 82.11it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 94%| | 119/126 [00:01<00:00, 82.57it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 95%| | 120/126 [00:01<00:00, 83.03it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 96%| | 121/126 [00:01<00:00, 83.48it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 97%| | 122/126 [00:01<00:00, 83.95it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 98%| | 123/126 [00:01<00:00, 84.45it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 98%| | 124/126 [00:01<00:00, 84.95it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 99%| | 125/126 [00:01<00:00, 85.44it/s, loss=0.0103, v_num=4.31e+7]
Epoch 12: 100%| | 126/126 [00:01<00:00, 85.94it/s, loss=0.0103, v_num=4.31e+7]

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v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|      | 126/126 [00:01<00:00, 83.69it/s, loss=0.0103,
v_num=4.31e+7]
Epoch 12: 100%|      | 126/126 [00:01<00:00, 83.53it/s, loss=0.0103,
v_num=4.31e+7]Mapping latent space...
Epoch 13:  79%|      | 100/126 [00:01<00:00, 75.98it/s, loss=0.0084,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 13:  80%|      | 101/126 [00:01<00:00, 67.04it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  81%|      | 102/126 [00:01<00:00, 67.28it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  82%|      | 103/126 [00:01<00:00, 67.78it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  83%|      | 104/126 [00:01<00:00, 68.27it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  83%|      | 105/126 [00:01<00:00, 68.76it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  84%|      | 106/126 [00:01<00:00, 69.25it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  85%|      | 107/126 [00:01<00:00, 69.74it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  86%|      | 108/126 [00:01<00:00, 70.23it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  87%|      | 109/126 [00:01<00:00, 70.72it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  87%|      | 110/126 [00:01<00:00, 71.20it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  88%|      | 111/126 [00:01<00:00, 71.69it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  89%|      | 112/126 [00:01<00:00, 72.17it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  90%|      | 113/126 [00:01<00:00, 72.65it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  90%|      | 114/126 [00:01<00:00, 73.14it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  91%|      | 115/126 [00:01<00:00, 73.62it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  92%|      | 116/126 [00:01<00:00, 74.09it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  93%|      | 117/126 [00:01<00:00, 74.58it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  94%|      | 118/126 [00:01<00:00, 75.05it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13:  94%|      | 119/126 [00:01<00:00, 75.53it/s, loss=0.0084,
v_num=4.31e+7]

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Epoch 13: 95%|      | 120/126 [00:01<00:00, 76.00it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 96%|      | 121/126 [00:01<00:00, 76.47it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 97%|      | 122/126 [00:01<00:00, 76.95it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 98%|      | 123/126 [00:01<00:00, 77.45it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 98%|      | 124/126 [00:01<00:00, 77.94it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 99%|      | 125/126 [00:01<00:00, 78.42it/s, loss=0.0084,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.77it/s]
Epoch 13: 100%|      | 126/126 [00:01<00:00, 78.91it/s, loss=0.0084,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|      | 126/126 [00:01<00:00, 77.65it/s, loss=0.0084,
v_num=4.31e+7]
Epoch 13: 100%|      | 126/126 [00:01<00:00, 77.56it/s, loss=0.0084,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 72.66it/s, loss=0.00707,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 63.88it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 64.33it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 64.81it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 65.29it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 65.76it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 66.24it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 66.71it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 67.18it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 67.66it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 68.13it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 68.61it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 69.08it/s, loss=0.00707,
v_num=4.31e+7]

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Epoch 14: 90%|      | 113/126 [00:01<00:00, 69.55it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 70.02it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 70.49it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 70.95it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 71.41it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 71.88it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 72.34it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 72.80it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 73.26it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 73.72it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 74.21it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 74.70it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 75.18it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 75.67it/s, loss=0.00707,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|     | 126/126 [00:01<00:00, 73.95it/s, loss=0.00707,
v_num=4.31e+7]
Epoch 14: 100%|     | 126/126 [00:01<00:00, 73.88it/s, loss=0.00707,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 75.89it/s, loss=0.0061,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 65.85it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 66.22it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 66.65it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 67.10it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 83%|      | 105/126 [00:01<00:00, 67.54it/s, loss=0.0061,
v_num=4.31e+7]

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Epoch 15: 84%|      | 106/126 [00:01<00:00, 67.98it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 68.42it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 68.87it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 69.32it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 69.77it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 88%|      | 111/126 [00:01<00:00, 70.21it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 70.66it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 71.11it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 71.56it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 72.01it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 72.47it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 72.91it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 73.36it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 73.80it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 74.24it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 74.69it/s, loss=0.0061,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.09it/s]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 75.13it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 75.60it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 76.06it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 76.52it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 76.99it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 75.62it/s, loss=0.0061,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 75.53it/s, loss=0.0061,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|      | 100/126 [00:01<00:00, 76.92it/s, loss=0.00537,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|          | 101/126 [00:01<00:00, 68.45it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 81%|          | 102/126 [00:01<00:00, 68.27it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 82%|          | 103/126 [00:01<00:00, 68.77it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 83%|          | 104/126 [00:01<00:00, 69.27it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 83%|          | 105/126 [00:01<00:00, 69.78it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 84%|          | 106/126 [00:01<00:00, 70.28it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 85%|          | 107/126 [00:01<00:00, 70.78it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 86%|          | 108/126 [00:01<00:00, 71.28it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 87%|          | 109/126 [00:01<00:00, 71.77it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 87%|          | 110/126 [00:01<00:00, 72.25it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 88%|          | 111/126 [00:01<00:00, 72.74it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 89%|          | 112/126 [00:01<00:00, 73.22it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 90%|          | 113/126 [00:01<00:00, 73.71it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 90%|          | 114/126 [00:01<00:00, 74.20it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 91%|          | 115/126 [00:01<00:00, 74.68it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 92%|          | 116/126 [00:01<00:00, 75.16it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 93%|          | 117/126 [00:01<00:00, 75.63it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 94%|          | 118/126 [00:01<00:00, 76.10it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 94%|          | 119/126 [00:01<00:00, 76.57it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 95%|          | 120/126 [00:01<00:00, 77.04it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 96%|          | 121/126 [00:01<00:00, 77.51it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 97%|          | 122/126 [00:01<00:00, 77.99it/s, loss=0.00537,
v_num=4.31e+7]

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Validation DataLoader 0:  88%|          | 23/26 [00:00<00:00, 227.68it/s]
Epoch 16: 98%|          | 123/126 [00:01<00:00, 78.49it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 98%|          | 124/126 [00:01<00:00, 79.00it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 99%|          | 125/126 [00:01<00:00, 79.51it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 100%|         | 126/126 [00:01<00:00, 80.02it/s, loss=0.00537,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 100%|         | 126/126 [00:01<00:00, 78.67it/s, loss=0.00537,
v_num=4.31e+7]
Epoch 16: 100%|         | 126/126 [00:01<00:00, 78.59it/s, loss=0.00537,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|          | 100/126 [00:01<00:00, 81.37it/s, loss=0.00552,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|          | 101/126 [00:01<00:00, 70.82it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 81%|          | 102/126 [00:01<00:00, 70.95it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 82%|          | 103/126 [00:01<00:00, 71.43it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 83%|          | 104/126 [00:01<00:00, 71.93it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 83%|          | 105/126 [00:01<00:00, 72.42it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 84%|          | 106/126 [00:01<00:00, 72.90it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 85%|          | 107/126 [00:01<00:00, 73.39it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 86%|          | 108/126 [00:01<00:00, 73.88it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 87%|          | 109/126 [00:01<00:00, 74.36it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 87%|          | 110/126 [00:01<00:00, 74.86it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 88%|          | 111/126 [00:01<00:00, 75.37it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 89%|          | 112/126 [00:01<00:00, 75.86it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 90%|          | 113/126 [00:01<00:00, 76.35it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 90%|          | 114/126 [00:01<00:00, 76.85it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 91%|          | 115/126 [00:01<00:00, 77.34it/s, loss=0.00552,
v_num=4.31e+7]

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Epoch 17: 92%|      | 116/126 [00:01<00:00, 77.83it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 78.33it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 78.81it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 79.30it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 79.79it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 80.27it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 80.76it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 81.28it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 81.80it/s, loss=0.00552,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.33it/s]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 82.32it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 82.84it/s, loss=0.00552,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 79.76it/s, loss=0.00552,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 79.65it/s, loss=0.00552,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 81.14it/s, loss=0.00505,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 71.89it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 72.00it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 72.54it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 73.06it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 73.58it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 74.10it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 74.64it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 75.15it/s, loss=0.00505,

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v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 75.68it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 76.19it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 76.72it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 77.23it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 77.74it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 90%|      | 114/126 [00:01<00:00, 78.25it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 78.77it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 79.27it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 79.79it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 80.29it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 80.79it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 81.29it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 81.80it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 82.30it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 82.83it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 83.36it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 83.89it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 84.43it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 82.94it/s, loss=0.00505,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 82.86it/s, loss=0.00505,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 88.73it/s, loss=0.00482,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|      | 101/126 [00:01<00:00, 77.01it/s, loss=0.00482,
v_num=4.31e+7]

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Epoch 19: 81%	102/126 [00:01<00:00, 76.87it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 82%	103/126 [00:01<00:00, 77.45it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 83%	104/126 [00:01<00:00, 77.99it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 83%	105/126 [00:01<00:00, 78.57it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 84%	106/126 [00:01<00:00, 79.11it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 85%	107/126 [00:01<00:00, 79.68it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 86%	108/126 [00:01<00:00, 80.23it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 87%	109/126 [00:01<00:00, 80.79it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 87%	110/126 [00:01<00:00, 81.33it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 88%	111/126 [00:01<00:00, 81.89it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 89%	112/126 [00:01<00:00, 82.42it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 90%	113/126 [00:01<00:00, 82.96it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 90%	114/126 [00:01<00:00, 83.50it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 91%	115/126 [00:01<00:00, 84.04it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 92%	116/126 [00:01<00:00, 84.57it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 93%	117/126 [00:01<00:00, 85.10it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 94%	118/126 [00:01<00:00, 85.63it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 94%	119/126 [00:01<00:00, 86.16it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 95%	120/126 [00:01<00:00, 86.68it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 96%	121/126 [00:01<00:00, 87.21it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 97%	122/126 [00:01<00:00, 87.73it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 98%	123/126 [00:01<00:00, 88.29it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 98%	124/126 [00:01<00:00, 88.85it/s, loss=0.00482,
v_num=4.31e+7]	
Epoch 19: 99%	125/126 [00:01<00:00, 89.41it/s, loss=0.00482,
v_num=4.31e+7]	

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Epoch 19: 100%|      | 126/126 [00:01<00:00, 89.97it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|      | 126/126 [00:01<00:00, 88.29it/s, loss=0.00482,
v_num=4.31e+7]
Epoch 19: 100%|      | 126/126 [00:01<00:00, 88.20it/s, loss=0.00482,
v_num=4.31e+7]Mapping latent space...
Epoch 20:  79%|      | 100/126 [00:01<00:00, 74.36it/s, loss=0.00448,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 20:  80%|      | 101/126 [00:01<00:00, 65.83it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  81%|      | 102/126 [00:01<00:00, 66.08it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  82%|      | 103/126 [00:01<00:00, 66.55it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  83%|      | 104/126 [00:01<00:00, 67.02it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  83%|      | 105/126 [00:01<00:00, 67.50it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  84%|      | 106/126 [00:01<00:00, 67.96it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  85%|      | 107/126 [00:01<00:00, 68.46it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  86%|      | 108/126 [00:01<00:00, 68.93it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  87%|      | 109/126 [00:01<00:00, 69.42it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  87%|      | 110/126 [00:01<00:00, 69.89it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  88%|      | 111/126 [00:01<00:00, 70.40it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  89%|      | 112/126 [00:01<00:00, 70.86it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  90%|      | 113/126 [00:01<00:00, 71.36it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  90%|      | 114/126 [00:01<00:00, 71.82it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  91%|      | 115/126 [00:01<00:00, 72.32it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  92%|      | 116/126 [00:01<00:00, 72.78it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  93%|      | 117/126 [00:01<00:00, 73.27it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  94%|      | 118/126 [00:01<00:00, 73.73it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20:  94%|      | 119/126 [00:01<00:00, 74.22it/s, loss=0.00448,

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v_num=4.31e+7]
Epoch 20: 95%|      | 120/126 [00:01<00:00, 74.67it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 96%|      | 121/126 [00:01<00:00, 75.15it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 97%|      | 122/126 [00:01<00:00, 75.62it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 98%|      | 123/126 [00:01<00:00, 76.11it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 98%|      | 124/126 [00:01<00:00, 76.61it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 77.10it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 77.60it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 76.37it/s, loss=0.00448,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 76.29it/s, loss=0.00448,
v_num=4.31e+7]Mapping latent space...

Epoch 21: 79%|      | 100/126 [00:01<00:00, 68.35it/s, loss=0.00432,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 60.41it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 60.58it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 61.03it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 61.48it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 61.92it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 62.37it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 62.82it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 63.27it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 63.71it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 87%|      | 110/126 [00:01<00:00, 64.15it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 64.59it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 65.03it/s, loss=0.00432,

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v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 65.47it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 65.90it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 66.34it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 66.77it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 93%|      | 117/126 [00:01<00:00, 67.20it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 67.63it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 68.06it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 68.48it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 68.90it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 69.33it/s, loss=0.00432,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.65it/s]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 69.77it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 70.21it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 70.65it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 71.09it/s, loss=0.00432,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 69.99it/s, loss=0.00432,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 69.92it/s, loss=0.00432,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 70.35it/s, loss=0.00406,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 62.25it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 62.58it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 63.03it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 63.47it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 63.92it/s, loss=0.00406,

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v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 64.37it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 64.81it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 65.26it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 65.71it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 87%|      | 110/126 [00:01<00:00, 66.15it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 66.60it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 67.04it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 67.48it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 67.92it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 68.37it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 68.81it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 69.25it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 69.68it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 70.12it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 70.55it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 70.98it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 71.42it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 71.87it/s, loss=0.00406,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 232.39it/s]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 72.31it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 72.75it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 73.19it/s, loss=0.00406,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 71.69it/s, loss=0.00406,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 71.60it/s, loss=0.00406,
v_num=4.31e+7]Mapping latent space...

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Epoch 23: 79%|          | 100/126 [00:01<00:00, 80.14it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|          | 101/126 [00:01<00:00, 71.43it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 81%|          | 102/126 [00:01<00:00, 71.57it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 82%|          | 103/126 [00:01<00:00, 72.09it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 83%|          | 104/126 [00:01<00:00, 72.62it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 83%|          | 105/126 [00:01<00:00, 73.15it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 84%|          | 106/126 [00:01<00:00, 73.67it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 85%|          | 107/126 [00:01<00:00, 74.19it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 86%|          | 108/126 [00:01<00:00, 74.71it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 87%|          | 109/126 [00:01<00:00, 75.22it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 87%|          | 110/126 [00:01<00:00, 75.74it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 88%|          | 111/126 [00:01<00:00, 76.26it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 89%|          | 112/126 [00:01<00:00, 76.77it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 90%|          | 113/126 [00:01<00:00, 77.28it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 90%|          | 114/126 [00:01<00:00, 77.78it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 91%|          | 115/126 [00:01<00:00, 78.29it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 92%|          | 116/126 [00:01<00:00, 78.80it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 93%|          | 117/126 [00:01<00:00, 79.31it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 94%|          | 118/126 [00:01<00:00, 79.81it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 94%|          | 119/126 [00:01<00:00, 80.31it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 95%|          | 120/126 [00:01<00:00, 80.80it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 96%|          | 121/126 [00:01<00:00, 81.30it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 97%|          | 122/126 [00:01<00:00, 81.81it/s, loss=0.00383,

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v_num=4.31e+7]
Epoch 23: 98%|      | 123/126 [00:01<00:00, 82.34it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 98%|      | 124/126 [00:01<00:00, 82.87it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 99%|      | 125/126 [00:01<00:00, 83.39it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 83.92it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 100%|     | 126/126 [00:01<00:00, 82.41it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 23: 100%|     | 126/126 [00:01<00:00, 82.33it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|      | 100/126 [00:01<00:00, 88.04it/s, loss=0.00417,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 75.64it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 75.81it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 76.32it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 76.82it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 77.33it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 77.85it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 78.36it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 78.86it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 79.36it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 79.73it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 80.22it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 80.72it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 81.21it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 81.70it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 82.19it/s, loss=0.00417,

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v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 82.68it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 83.16it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 83.65it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 84.13it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 95%|      | 120/126 [00:01<00:00, 84.60it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 85.08it/s, loss=0.00417,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.55it/s]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 85.55it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 86.06it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 86.56it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 87.07it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 87.57it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 85.74it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 85.62it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 77.25it/s, loss=0.00426,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 67.90it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 68.19it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 68.67it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 69.15it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 69.63it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 70.12it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 70.60it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 71.07it/s, loss=0.00426,

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v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 71.55it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 72.03it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 72.50it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 72.97it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 73.44it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 73.91it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 74.37it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 74.84it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 75.30it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 75.76it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 76.14it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 76.59it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 77.04it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 77.50it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 77.98it/s, loss=0.00426,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.11it/s]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 78.45it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 78.93it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 79.40it/s, loss=0.00426,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 77.88it/s, loss=0.00426,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 77.77it/s, loss=0.00426,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 78.97it/s, loss=0.00401,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|      | 101/126 [00:01<00:00, 70.43it/s, loss=0.00401,

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v_num=4.31e+7]
Epoch 26: 81%| | 102/126 [00:01<00:00, 70.79it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 82%| | 103/126 [00:01<00:00, 71.32it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 83%| | 104/126 [00:01<00:00, 71.84it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 83%| | 105/126 [00:01<00:00, 72.36it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 84%| | 106/126 [00:01<00:00, 72.87it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 85%| | 107/126 [00:01<00:00, 73.39it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 86%| | 108/126 [00:01<00:00, 73.90it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 87%| | 109/126 [00:01<00:00, 74.42it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 87%| | 110/126 [00:01<00:00, 74.93it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 88%| | 111/126 [00:01<00:00, 75.45it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 89%| | 112/126 [00:01<00:00, 75.95it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 90%| | 113/126 [00:01<00:00, 76.46it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 90%| | 114/126 [00:01<00:00, 76.97it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 91%| | 115/126 [00:01<00:00, 77.47it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 92%| | 116/126 [00:01<00:00, 77.97it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 93%| | 117/126 [00:01<00:00, 78.47it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 94%| | 118/126 [00:01<00:00, 78.97it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 94%| | 119/126 [00:01<00:00, 79.46it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 95%| | 120/126 [00:01<00:00, 79.95it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 96%| | 121/126 [00:01<00:00, 80.43it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 97%| | 122/126 [00:01<00:00, 80.93it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 98%| | 123/126 [00:01<00:00, 81.45it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 98%| | 124/126 [00:01<00:00, 81.98it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 99%| | 125/126 [00:01<00:00, 82.50it/s, loss=0.00401,

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v_num=4.31e+7]
Epoch 26: 100%|      | 126/126 [00:01<00:00, 83.03it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|      | 126/126 [00:01<00:00, 81.51it/s, loss=0.00401,
v_num=4.31e+7]
Epoch 26: 100%|      | 126/126 [00:01<00:00, 81.41it/s, loss=0.00401,
v_num=4.31e+7]Mapping latent space...

Epoch 27: 79%|      | 100/126 [00:01<00:00, 89.59it/s, loss=0.00405,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|      | 101/126 [00:01<00:00, 78.59it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 81%|      | 102/126 [00:01<00:00, 79.01it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 82%|      | 103/126 [00:01<00:00, 79.44it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 83%|      | 104/126 [00:01<00:00, 79.87it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 83%|      | 105/126 [00:01<00:00, 80.30it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 84%|      | 106/126 [00:01<00:00, 80.74it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 85%|      | 107/126 [00:01<00:00, 81.17it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 86%|      | 108/126 [00:01<00:00, 81.61it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 87%|      | 109/126 [00:01<00:00, 82.03it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 87%|      | 110/126 [00:01<00:00, 82.47it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 88%|      | 111/126 [00:01<00:00, 82.90it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 89%|      | 112/126 [00:01<00:00, 83.33it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 90%|      | 113/126 [00:01<00:00, 83.77it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 90%|      | 114/126 [00:01<00:00, 84.21it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 91%|      | 115/126 [00:01<00:00, 84.66it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 92%|      | 116/126 [00:01<00:00, 85.10it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 93%|      | 117/126 [00:01<00:00, 85.54it/s, loss=0.00405,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 177.97it/s]

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Epoch 27: 94%|      | 118/126 [00:01<00:00, 85.97it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 94%|      | 119/126 [00:01<00:00, 86.42it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 95%|      | 120/126 [00:01<00:00, 86.87it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 96%|      | 121/126 [00:01<00:00, 87.32it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 97%|      | 122/126 [00:01<00:00, 87.78it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 98%|      | 123/126 [00:01<00:00, 88.28it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 88.78it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 89.28it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 89.79it/s, loss=0.00405,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|     | 126/126 [00:01<00:00, 87.84it/s, loss=0.00405,
v_num=4.31e+7]
Epoch 27: 100%|     | 126/126 [00:01<00:00, 87.71it/s, loss=0.00405,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 69.54it/s, loss=0.00359,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 61.34it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 61.64it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 62.06it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 62.48it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 62.90it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 63.33it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 63.75it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 64.15it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 64.53it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 64.92it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 65.30it/s, loss=0.00359,

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v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 65.69it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 66.07it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 66.46it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 66.84it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 92%|      | 116/126 [00:01<00:00, 67.24it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 67.63it/s, loss=0.00359,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.82it/s]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 68.01it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 68.41it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 68.80it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 69.20it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 69.60it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 70.03it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 70.45it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 70.88it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 71.31it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.80it/s, loss=0.00359,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.73it/s, loss=0.00359,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 75.08it/s, loss=0.00371,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 65.73it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 66.09it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 66.50it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 83%|      | 104/126 [00:01<00:00, 66.92it/s, loss=0.00371,

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v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 67.33it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 67.75it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 68.17it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 68.60it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 87%|      | 109/126 [00:01<00:00, 69.02it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 69.45it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 69.87it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 89%|      | 112/126 [00:01<00:00, 70.30it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 70.73it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 71.16it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 71.59it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 72.02it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 72.45it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 72.89it/s, loss=0.00371,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 189.49it/s]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 73.30it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 73.73it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 74.16it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 74.60it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 75.06it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 75.52it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 75.98it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 76.44it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 74.25it/s, loss=0.00371,
v_num=4.31e+7]

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Epoch 29: 100%|      | 126/126 [00:01<00:00, 74.11it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 79%|      | 100/126 [00:01<00:00, 78.79it/s, loss=0.00353,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 70.38it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 81%|      | 102/126 [00:01<00:00, 70.53it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 82%|      | 103/126 [00:01<00:00, 70.95it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 83%|      | 104/126 [00:01<00:00, 71.38it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 83%|      | 105/126 [00:01<00:00, 71.81it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 84%|      | 106/126 [00:01<00:00, 72.24it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 85%|      | 107/126 [00:01<00:00, 72.67it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 86%|      | 108/126 [00:01<00:00, 73.11it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 87%|      | 109/126 [00:01<00:00, 73.55it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 87%|      | 110/126 [00:01<00:00, 73.98it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 88%|      | 111/126 [00:01<00:00, 74.41it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 89%|      | 112/126 [00:01<00:00, 74.85it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 90%|      | 113/126 [00:01<00:00, 75.29it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 90%|      | 114/126 [00:01<00:00, 75.73it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 91%|      | 115/126 [00:01<00:00, 76.16it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 92%|      | 116/126 [00:01<00:00, 76.60it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 93%|      | 117/126 [00:01<00:00, 77.03it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 94%|      | 118/126 [00:01<00:00, 77.47it/s, loss=0.00353,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.32it/s]
Epoch 30: 94%|      | 119/126 [00:01<00:00, 77.90it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 95%|      | 120/126 [00:01<00:00, 78.33it/s, loss=0.00353,
v_num=4.31e+7]

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Epoch 30: 96%|      | 121/126 [00:01<00:00, 78.77it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 97%|      | 122/126 [00:01<00:00, 79.21it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 98%|      | 123/126 [00:01<00:00, 79.67it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 98%|      | 124/126 [00:01<00:00, 80.14it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 99%|      | 125/126 [00:01<00:00, 80.61it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 81.09it/s, loss=0.00353,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|     | 126/126 [00:01<00:00, 79.42it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 30: 100%|     | 126/126 [00:01<00:00, 79.32it/s, loss=0.00353,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|      | 100/126 [00:01<00:00, 78.76it/s, loss=0.00414,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|      | 101/126 [00:01<00:00, 68.65it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 81%|      | 102/126 [00:01<00:00, 68.90it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 82%|      | 103/126 [00:01<00:00, 69.38it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 83%|      | 104/126 [00:01<00:00, 69.85it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 83%|      | 105/126 [00:01<00:00, 70.33it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 84%|      | 106/126 [00:01<00:00, 70.81it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 85%|      | 107/126 [00:01<00:00, 71.27it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 86%|      | 108/126 [00:01<00:00, 71.75it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 87%|      | 109/126 [00:01<00:00, 72.21it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 87%|      | 110/126 [00:01<00:00, 72.68it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 88%|      | 111/126 [00:01<00:00, 73.14it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 89%|      | 112/126 [00:01<00:00, 73.61it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 90%|      | 113/126 [00:01<00:00, 74.07it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 90%|      | 114/126 [00:01<00:00, 74.54it/s, loss=0.00414,

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v_num=4.31e+7]
Epoch 31: 91%|      | 115/126 [00:01<00:00, 75.00it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 92%|      | 116/126 [00:01<00:00, 75.45it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 93%|      | 117/126 [00:01<00:00, 75.91it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 94%|      | 118/126 [00:01<00:00, 76.36it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 76.81it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 77.26it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 77.71it/s, loss=0.00414,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.36it/s]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 78.16it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 78.64it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 79.11it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 79.59it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 80.07it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 78.61it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 78.51it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 73.66it/s, loss=0.00354,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 64.76it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 64.69it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 65.15it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 65.62it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 66.08it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 66.55it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 67.01it/s, loss=0.00354,

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v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 67.47it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 67.93it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 68.39it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 68.85it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 89%|      | 112/126 [00:01<00:00, 69.30it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 69.75it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 70.21it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 70.66it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 92%|      | 116/126 [00:01<00:00, 71.11it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 71.56it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 72.00it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 72.44it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 72.87it/s, loss=0.00354,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 206.73it/s]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 73.31it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 73.75it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 74.21it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 74.67it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 75.13it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 75.59it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 74.07it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 73.97it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...

Epoch 33: 79%|      | 100/126 [00:01<00:00, 70.67it/s, loss=0.00408,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|          | 101/126 [00:01<00:00, 62.64it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 81%|          | 102/126 [00:01<00:00, 62.59it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 82%|          | 103/126 [00:01<00:00, 63.03it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 83%|          | 104/126 [00:01<00:00, 63.48it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 83%|          | 105/126 [00:01<00:00, 63.92it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 84%|          | 106/126 [00:01<00:00, 64.37it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 85%|          | 107/126 [00:01<00:00, 64.81it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 86%|          | 108/126 [00:01<00:00, 65.25it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 87%|          | 109/126 [00:01<00:00, 65.70it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 87%|          | 110/126 [00:01<00:00, 66.14it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 88%|          | 111/126 [00:01<00:00, 66.58it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 89%|          | 112/126 [00:01<00:00, 67.02it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 90%|          | 113/126 [00:01<00:00, 67.45it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 90%|          | 114/126 [00:01<00:00, 67.89it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 91%|          | 115/126 [00:01<00:00, 68.32it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 92%|          | 116/126 [00:01<00:00, 68.76it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 93%|          | 117/126 [00:01<00:00, 69.19it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 94%|          | 118/126 [00:01<00:00, 69.62it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 94%|          | 119/126 [00:01<00:00, 70.05it/s, loss=0.00408,
v_num=4.31e+7]
Validation DataLoader 0: 77%|          | 20/26 [00:00<00:00, 196.81it/s]
Epoch 33: 95%|          | 120/126 [00:01<00:00, 70.47it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 96%|          | 121/126 [00:01<00:00, 70.89it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 97%|          | 122/126 [00:01<00:00, 71.32it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 98%|          | 123/126 [00:01<00:00, 71.77it/s, loss=0.00408,

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v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 72.22it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 72.67it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 73.12it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 71.89it/s, loss=0.00408,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 71.80it/s, loss=0.00408,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 68.01it/s, loss=0.00342,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 60.36it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 60.70it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 61.14it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 61.58it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 62.02it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 62.46it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 62.90it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 63.34it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 63.78it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 64.22it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 64.66it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 65.09it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 65.52it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 65.96it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 66.39it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 66.82it/s, loss=0.00342,
v_num=4.31e+7]

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Epoch 34: 93%|      | 117/126 [00:01<00:00, 67.25it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 67.68it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 68.10it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 68.52it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 96%|      | 121/126 [00:01<00:00, 68.95it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 69.38it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 69.82it/s, loss=0.00342,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 233.12it/s]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 70.25it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 70.69it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 71.13it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 69.84it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 69.76it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 76.11it/s, loss=0.00343,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 67.17it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 67.46it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 67.93it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 68.39it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 68.86it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 69.33it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 69.79it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 86%|      | 108/126 [00:01<00:00, 70.26it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 70.73it/s, loss=0.00343,
v_num=4.31e+7]

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Epoch 35: 87%|      | 110/126 [00:01<00:00, 71.19it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 71.65it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 72.11it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 72.57it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 73.03it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 73.49it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 73.95it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 74.40it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 74.85it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 75.30it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 75.73it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 76.18it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 76.63it/s, loss=0.00343,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.44it/s]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 77.09it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 77.56it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 78.03it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 78.50it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 77.10it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 77.01it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 78.18it/s, loss=0.00414,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 68.95it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 81%|      | 102/126 [00:01<00:00, 69.29it/s, loss=0.00414,

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v_num=4.31e+7]
Epoch 36: 82%| | 103/126 [00:01<00:00, 69.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 83%| | 104/126 [00:01<00:00, 70.33it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 83%| | 105/126 [00:01<00:00, 70.75it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 84%| | 106/126 [00:01<00:00, 71.26it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 85%| | 107/126 [00:01<00:00, 71.78it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 86%| | 108/126 [00:01<00:00, 72.30it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 87%| | 109/126 [00:01<00:00, 72.81it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 87%| | 110/126 [00:01<00:00, 73.32it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 88%| | 111/126 [00:01<00:00, 73.83it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 89%| | 112/126 [00:01<00:00, 74.33it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 90%| | 113/126 [00:01<00:00, 74.84it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 90%| | 114/126 [00:01<00:00, 75.34it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 91%| | 115/126 [00:01<00:00, 75.85it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 92%| | 116/126 [00:01<00:00, 76.35it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 93%| | 117/126 [00:01<00:00, 76.85it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 94%| | 118/126 [00:01<00:00, 77.34it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 94%| | 119/126 [00:01<00:00, 77.84it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 95%| | 120/126 [00:01<00:00, 78.33it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 96%| | 121/126 [00:01<00:00, 78.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 97%| | 122/126 [00:01<00:00, 79.32it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 98%| | 123/126 [00:01<00:00, 79.83it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 98%| | 124/126 [00:01<00:00, 80.35it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 99%| | 125/126 [00:01<00:00, 80.86it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 100%| | 126/126 [00:01<00:00, 81.38it/s, loss=0.00414,

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v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|      | 126/126 [00:01<00:00, 79.82it/s, loss=0.00414,
v_num=4.31e+7]
Epoch 36: 100%|      | 126/126 [00:01<00:00, 79.74it/s, loss=0.00414,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 85.89it/s, loss=0.00375,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 37: 80%|      | 101/126 [00:01<00:00, 74.21it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 81%|      | 102/126 [00:01<00:00, 74.38it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 82%|      | 103/126 [00:01<00:00, 74.89it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 83%|      | 104/126 [00:01<00:00, 75.30it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 83%|      | 105/126 [00:01<00:00, 75.80it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 84%|      | 106/126 [00:01<00:00, 76.31it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 85%|      | 107/126 [00:01<00:00, 76.81it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 86%|      | 108/126 [00:01<00:00, 77.31it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 87%|      | 109/126 [00:01<00:00, 77.81it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 87%|      | 110/126 [00:01<00:00, 78.31it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 88%|      | 111/126 [00:01<00:00, 78.80it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 89%|      | 112/126 [00:01<00:00, 79.30it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 90%|      | 113/126 [00:01<00:00, 79.79it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 90%|      | 114/126 [00:01<00:00, 80.29it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 91%|      | 115/126 [00:01<00:00, 80.78it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 92%|      | 116/126 [00:01<00:00, 81.27it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 93%|      | 117/126 [00:01<00:00, 81.76it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 94%|      | 118/126 [00:01<00:00, 82.24it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 94%|      | 119/126 [00:01<00:00, 82.73it/s, loss=0.00375,
v_num=4.31e+7]

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Epoch 37: 95%|      | 120/126 [00:01<00:00, 83.21it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 96%|      | 121/126 [00:01<00:00, 83.69it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 97%|      | 122/126 [00:01<00:00, 84.18it/s, loss=0.00375,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.09it/s]
Epoch 37: 98%|      | 123/126 [00:01<00:00, 84.68it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 98%|      | 124/126 [00:01<00:00, 85.19it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 85.70it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 86.21it/s, loss=0.00375,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 84.06it/s, loss=0.00375,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 83.94it/s, loss=0.00375,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 79.59it/s, loss=0.00324,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 70.50it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 70.91it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 71.33it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 71.77it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 72.20it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 72.63it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 73.06it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 73.50it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 73.93it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 74.36it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 74.79it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 75.22it/s, loss=0.00324,
v_num=4.31e+7]

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Epoch 38: 90%|      | 113/126 [00:01<00:00, 75.65it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 76.09it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 76.52it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 76.96it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 77.40it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 77.84it/s, loss=0.00324,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.26it/s]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 78.26it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 78.70it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 79.14it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 79.59it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 80.06it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 80.54it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 81.01it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 81.49it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 79.80it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 79.70it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...

Epoch 39: 79%|      | 100/126 [00:01<00:00, 75.26it/s, loss=0.00367,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 67.72it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 68.04it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 68.56it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 69.06it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 69.58it/s, loss=0.00367,

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v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 70.08it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 70.58it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 71.09it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 71.60it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 72.10it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 72.61it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 73.10it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 73.59it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 74.09it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 74.58it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 75.07it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 75.56it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 75.97it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 76.45it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 76.92it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 77.41it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 77.89it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 78.40it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 78.90it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 79.40it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 79.92it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 78.58it/s, loss=0.00367,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 78.49it/s, loss=0.00367,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 73.51it/s, loss=0.00325,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|          | 101/126 [00:01<00:00, 64.97it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 81%|          | 102/126 [00:01<00:00, 65.19it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 82%|          | 103/126 [00:01<00:00, 65.66it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 83%|          | 104/126 [00:01<00:00, 66.13it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 83%|          | 105/126 [00:01<00:00, 66.59it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 84%|          | 106/126 [00:01<00:00, 67.06it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 85%|          | 107/126 [00:01<00:00, 67.52it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 86%|          | 108/126 [00:01<00:00, 67.98it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 87%|          | 109/126 [00:01<00:00, 68.44it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 87%|          | 110/126 [00:01<00:00, 68.90it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 88%|          | 111/126 [00:01<00:00, 69.35it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 89%|          | 112/126 [00:01<00:00, 69.81it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 90%|          | 113/126 [00:01<00:00, 70.26it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 90%|          | 114/126 [00:01<00:00, 70.71it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 91%|          | 115/126 [00:01<00:00, 71.16it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 92%|          | 116/126 [00:01<00:00, 71.61it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 93%|          | 117/126 [00:01<00:00, 72.05it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 94%|          | 118/126 [00:01<00:00, 72.49it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 94%|          | 119/126 [00:01<00:00, 72.93it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 95%|          | 120/126 [00:01<00:00, 73.36it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 96%|          | 121/126 [00:01<00:00, 73.79it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 97%|          | 122/126 [00:01<00:00, 74.24it/s, loss=0.00325,
v_num=4.31e+7]

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Validation DataLoader 0:  88%|          | 23/26 [00:00<00:00, 222.83it/s]
Epoch 40: 98%|          | 123/126 [00:01<00:00, 74.69it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 98%|          | 124/126 [00:01<00:00, 75.15it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 99%|          | 125/126 [00:01<00:00, 75.61it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 100%|         | 126/126 [00:01<00:00, 76.07it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|         | 126/126 [00:01<00:00, 74.58it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 40: 100%|         | 126/126 [00:01<00:00, 74.42it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|          | 100/126 [00:01<00:00, 74.21it/s, loss=0.00341,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|          | 101/126 [00:01<00:00, 65.81it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 81%|          | 102/126 [00:01<00:00, 66.01it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 82%|          | 103/126 [00:01<00:00, 66.53it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 83%|          | 104/126 [00:01<00:00, 67.02it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 83%|          | 105/126 [00:01<00:00, 67.51it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 84%|          | 106/126 [00:01<00:00, 68.01it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 85%|          | 107/126 [00:01<00:00, 68.50it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 86%|          | 108/126 [00:01<00:00, 68.99it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 87%|          | 109/126 [00:01<00:00, 69.48it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 87%|          | 110/126 [00:01<00:00, 69.97it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 88%|          | 111/126 [00:01<00:00, 70.46it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 89%|          | 112/126 [00:01<00:00, 70.94it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 90%|          | 113/126 [00:01<00:00, 71.43it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 90%|          | 114/126 [00:01<00:00, 71.91it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 91%|          | 115/126 [00:01<00:00, 72.40it/s, loss=0.00341,
v_num=4.31e+7]

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Epoch 41: 92%|      | 116/126 [00:01<00:00, 72.89it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 73.37it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 73.85it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 74.33it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 74.80it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 96%|      | 121/126 [00:01<00:00, 75.28it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 75.76it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 76.25it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 76.76it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 77.26it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 77.77it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 76.49it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 76.42it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 75.73it/s, loss=0.00326,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 67.21it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 67.60it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 68.02it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 68.45it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 68.87it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 69.30it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 69.73it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 70.16it/s, loss=0.00326,
v_num=4.31e+7]

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Epoch 42: 87%|      | 109/126 [00:01<00:00, 70.59it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 71.02it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 71.44it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 71.87it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 72.31it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 72.75it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 73.18it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 73.62it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 74.05it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 74.49it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 74.92it/s, loss=0.00326,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.67it/s]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 75.35it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 75.79it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 76.23it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 76.70it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 77.16it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 77.63it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 78.10it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 76.74it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 76.66it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 74.03it/s, loss=0.00374,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 65.87it/s, loss=0.00374,
v_num=4.31e+7]

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Epoch 43: 81%	102/126 [00:01<00:00, 66.13it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 82%	103/126 [00:01<00:00, 66.62it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 83%	104/126 [00:01<00:00, 67.11it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 83%	105/126 [00:01<00:00, 67.61it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 84%	106/126 [00:01<00:00, 68.10it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 85%	107/126 [00:01<00:00, 68.60it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 86%	108/126 [00:01<00:00, 69.08it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 87%	109/126 [00:01<00:00, 69.58it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 87%	110/126 [00:01<00:00, 70.07it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 88%	111/126 [00:01<00:00, 70.57it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 89%	112/126 [00:01<00:00, 71.04it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 90%	113/126 [00:01<00:00, 71.54it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 90%	114/126 [00:01<00:00, 72.01it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 91%	115/126 [00:01<00:00, 72.49it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 92%	116/126 [00:01<00:00, 72.97it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 93%	117/126 [00:01<00:00, 73.46it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 94%	118/126 [00:01<00:00, 73.93it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 94%	119/126 [00:01<00:00, 74.42it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 95%	120/126 [00:01<00:00, 74.88it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 96%	121/126 [00:01<00:00, 75.37it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 97%	122/126 [00:01<00:00, 75.73it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 98%	123/126 [00:01<00:00, 76.23it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 98%	124/126 [00:01<00:00, 76.72it/s, loss=0.00374,
v_num=4.31e+7]	
Epoch 43: 99%	125/126 [00:01<00:00, 77.22it/s, loss=0.00374,
v_num=4.31e+7]	

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Epoch 43: 100%|      | 126/126 [00:01<00:00, 77.72it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|      | 126/126 [00:01<00:00, 76.43it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 43: 100%|      | 126/126 [00:01<00:00, 76.35it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 79.96it/s, loss=0.00315,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|      | 101/126 [00:01<00:00, 70.21it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 81%|      | 102/126 [00:01<00:00, 70.64it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 82%|      | 103/126 [00:01<00:00, 71.09it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 83%|      | 104/126 [00:01<00:00, 71.54it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 83%|      | 105/126 [00:01<00:00, 71.99it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 84%|      | 106/126 [00:01<00:00, 72.45it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 85%|      | 107/126 [00:01<00:00, 72.90it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 86%|      | 108/126 [00:01<00:00, 73.36it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 87%|      | 109/126 [00:01<00:00, 73.81it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 87%|      | 110/126 [00:01<00:00, 74.26it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 88%|      | 111/126 [00:01<00:00, 74.71it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 89%|      | 112/126 [00:01<00:00, 75.16it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 90%|      | 113/126 [00:01<00:00, 75.62it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 90%|      | 114/126 [00:01<00:00, 76.07it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 91%|      | 115/126 [00:01<00:00, 76.52it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 92%|      | 116/126 [00:01<00:00, 76.98it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 93%|      | 117/126 [00:01<00:00, 77.44it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 94%|      | 118/126 [00:01<00:00, 77.90it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 94%|      | 119/126 [00:01<00:00, 78.36it/s, loss=0.00315,

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v_num=4.31e+7]
Epoch 44: 95%|      | 120/126 [00:01<00:00, 78.81it/s, loss=0.00315,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 208.75it/s]
Epoch 44: 96%|      | 121/126 [00:01<00:00, 79.26it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 97%|      | 122/126 [00:01<00:00, 79.73it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 98%|      | 123/126 [00:01<00:00, 80.21it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 80.70it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 81.19it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 81.69it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 80.00it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 79.92it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...

Epoch 45: 79%|      | 100/126 [00:01<00:00, 84.37it/s, loss=0.00371,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 73.33it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 73.70it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 74.14it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 83%|      | 104/126 [00:01<00:00, 74.59it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 75.04it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 75.49it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 75.95it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 76.40it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 87%|      | 109/126 [00:01<00:00, 76.85it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 77.29it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 77.74it/s, loss=0.00371,
v_num=4.31e+7]

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Epoch 45: 89%|      | 112/126 [00:01<00:00, 78.19it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 78.64it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 79.09it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 79.54it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 80.00it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 80.45it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 80.90it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 81.35it/s, loss=0.00371,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 196.33it/s]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 81.80it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 82.26it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 82.73it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 83.22it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 83.71it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 84.20it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 84.70it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 83.09it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 82.99it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 79.45it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 70.59it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 70.69it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 71.11it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 71.54it/s, loss=0.00383,
v_num=4.31e+7]

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Epoch 46: 83%|      | 105/126 [00:01<00:00, 71.97it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 72.40it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 72.83it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 73.26it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 73.69it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 74.12it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 74.56it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 74.99it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 75.43it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 75.86it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 76.30it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 76.75it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 77.19it/s, loss=0.00383,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.45it/s]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 77.62it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 78.06it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 78.50it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 78.95it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 79.40it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 79.88it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 80.35it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 80.83it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 81.31it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 79.86it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 79.76it/s, loss=0.00383,

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v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|          | 100/126 [00:01<00:00, 77.83it/s, loss=0.00351,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|          | 101/126 [00:01<00:00, 69.29it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 81%|          | 102/126 [00:01<00:00, 69.60it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 82%|          | 103/126 [00:01<00:00, 70.12it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 83%|          | 104/126 [00:01<00:00, 70.63it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 83%|          | 105/126 [00:01<00:00, 71.15it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 84%|          | 106/126 [00:01<00:00, 71.66it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 85%|          | 107/126 [00:01<00:00, 72.18it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 86%|          | 108/126 [00:01<00:00, 72.69it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 87%|          | 109/126 [00:01<00:00, 73.20it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 87%|          | 110/126 [00:01<00:00, 73.71it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 88%|          | 111/126 [00:01<00:00, 74.21it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 89%|          | 112/126 [00:01<00:00, 74.71it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 90%|          | 113/126 [00:01<00:00, 75.21it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 90%|          | 114/126 [00:01<00:00, 75.72it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 91%|          | 115/126 [00:01<00:00, 76.20it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 92%|          | 116/126 [00:01<00:00, 76.70it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 93%|          | 117/126 [00:01<00:00, 77.19it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 94%|          | 118/126 [00:01<00:00, 77.68it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 94%|          | 119/126 [00:01<00:00, 78.18it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 95%|          | 120/126 [00:01<00:00, 78.66it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 96%|          | 121/126 [00:01<00:00, 79.15it/s, loss=0.00351,
v_num=4.31e+7]

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Epoch 47: 97%|      | 122/126 [00:01<00:00, 79.64it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 98%|      | 123/126 [00:01<00:00, 80.15it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 98%|      | 124/126 [00:01<00:00, 80.67it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 99%|      | 125/126 [00:01<00:00, 81.19it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 81.70it/s, loss=0.00351,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|     | 126/126 [00:01<00:00, 80.31it/s, loss=0.00351,
v_num=4.31e+7]
Epoch 47: 100%|     | 126/126 [00:01<00:00, 80.24it/s, loss=0.00351,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 93.10it/s, loss=0.00354,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 80.17it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 80.27it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 80.86it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 81.40it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 81.98it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 82.52it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 83.10it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 83.65it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 84.23it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 84.78it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 85.35it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 89%|      | 112/126 [00:01<00:00, 85.88it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 86.45it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 86.98it/s, loss=0.00354,
v_num=4.31e+7]

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Epoch 48: 91%|      | 115/126 [00:01<00:00, 87.53it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 88.07it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 88.62it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 89.16it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 89.70it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 90.23it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 90.77it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 91.31it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 91.88it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 92.45it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 93.02it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 93.59it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 91.82it/s, loss=0.00354,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 91.73it/s, loss=0.00354,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 92.53it/s, loss=0.00296,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 80.23it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 80.65it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 81.19it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 81.74it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 82.29it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 82.85it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 83.40it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 83.96it/s, loss=0.00296,

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v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 84.51it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 85.06it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 85.61it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 86.16it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 86.70it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 87.25it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 87.79it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 88.33it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 88.86it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 89.40it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 89.93it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 90.46it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 90.99it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 91.53it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 92.11it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 92.68it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 93.25it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 93.83it/s, loss=0.00296,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 92.04it/s, loss=0.00296,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 91.93it/s, loss=0.00296,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 90.96it/s, loss=0.00339,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|      | 101/126 [00:01<00:00, 79.73it/s, loss=0.00339,
v_num=4.31e+7]

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Epoch 50: 81%| | 102/126 [00:01<00:00, 80.11it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 82%| | 103/126 [00:01<00:00, 80.67it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 83%| | 104/126 [00:01<00:00, 81.23it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 83%| | 105/126 [00:01<00:00, 81.79it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 84%| | 106/126 [00:01<00:00, 82.35it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 85%| | 107/126 [00:01<00:00, 82.91it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 86%| | 108/126 [00:01<00:00, 83.46it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 87%| | 109/126 [00:01<00:00, 84.01it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 87%| | 110/126 [00:01<00:00, 84.56it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 88%| | 111/126 [00:01<00:00, 85.12it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 89%| | 112/126 [00:01<00:00, 85.66it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 90%| | 113/126 [00:01<00:00, 86.20it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 90%| | 114/126 [00:01<00:00, 86.75it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 91%| | 115/126 [00:01<00:00, 87.30it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 92%| | 116/126 [00:01<00:00, 87.85it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 93%| | 117/126 [00:01<00:00, 88.40it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 94%| | 118/126 [00:01<00:00, 88.94it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 94%| | 119/126 [00:01<00:00, 89.48it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 95%| | 120/126 [00:01<00:00, 90.00it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 96%| | 121/126 [00:01<00:00, 90.53it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 97%| | 122/126 [00:01<00:00, 91.08it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 98%| | 123/126 [00:01<00:00, 91.65it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 98%| | 124/126 [00:01<00:00, 92.21it/s, loss=0.00339, v_num=4.31e+7]
Epoch 50: 99%| | 125/126 [00:01<00:00, 92.77it/s, loss=0.00339, v_num=4.31e+7]

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Epoch 50: 100%|      | 126/126 [00:01<00:00, 93.34it/s, loss=0.00339,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|      | 126/126 [00:01<00:00, 89.97it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 89.85it/s, loss=0.00339,
v_num=4.31e+7]Mapping latent space...

Epoch 51: 79%|      | 100/126 [00:01<00:00, 80.43it/s, loss=0.00403,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|      | 101/126 [00:01<00:00, 71.08it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 81%|      | 102/126 [00:01<00:00, 71.35it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 82%|      | 103/126 [00:01<00:00, 71.88it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 83%|      | 104/126 [00:01<00:00, 72.37it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 83%|      | 105/126 [00:01<00:00, 72.88it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 84%|      | 106/126 [00:01<00:00, 73.39it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 85%|      | 107/126 [00:01<00:00, 73.90it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 86%|      | 108/126 [00:01<00:00, 74.40it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 87%|      | 109/126 [00:01<00:00, 74.90it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 87%|      | 110/126 [00:01<00:00, 75.40it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 88%|      | 111/126 [00:01<00:00, 75.90it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 89%|      | 112/126 [00:01<00:00, 76.39it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 90%|      | 113/126 [00:01<00:00, 76.89it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 90%|      | 114/126 [00:01<00:00, 77.39it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 91%|      | 115/126 [00:01<00:00, 77.88it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 92%|      | 116/126 [00:01<00:00, 78.38it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 93%|      | 117/126 [00:01<00:00, 78.87it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 94%|      | 118/126 [00:01<00:00, 79.36it/s, loss=0.00403,
v_num=4.31e+7]

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Epoch 51: 94%|      | 119/126 [00:01<00:00, 79.85it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 95%|      | 120/126 [00:01<00:00, 80.32it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 96%|      | 121/126 [00:01<00:00, 80.81it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 97%|      | 122/126 [00:01<00:00, 81.30it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 81.82it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 82.34it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 82.87it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 83.39it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 81.85it/s, loss=0.00403,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 81.78it/s, loss=0.00403,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 80.69it/s, loss=0.00342,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 71.41it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 71.55it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 72.09it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 72.60it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 73.12it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 73.64it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 74.16it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 74.67it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 75.20it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 75.71it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 76.24it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 76.74it/s, loss=0.00342,

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v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 77.25it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 77.76it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 78.29it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 92%|      | 116/126 [00:01<00:00, 78.79it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 79.30it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 79.80it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 80.30it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 80.80it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 81.30it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 81.81it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 82.33it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 82.85it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 83.37it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 83.90it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 81.82it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 81.73it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 78.21it/s, loss=0.0033,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 69.74it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 70.01it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 82%|      | 103/126 [00:01<00:00, 70.44it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 83%|      | 104/126 [00:01<00:00, 70.86it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 83%|      | 105/126 [00:01<00:00, 71.29it/s, loss=0.0033,
v_num=4.31e+7]

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Epoch 53: 84%|      | 106/126 [00:01<00:00, 71.72it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 85%|      | 107/126 [00:01<00:00, 72.15it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 86%|      | 108/126 [00:01<00:00, 72.59it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 87%|      | 109/126 [00:01<00:00, 73.02it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 87%|      | 110/126 [00:01<00:00, 73.45it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 88%|      | 111/126 [00:01<00:00, 73.89it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 89%|      | 112/126 [00:01<00:00, 74.32it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 90%|      | 113/126 [00:01<00:00, 74.76it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 90%|      | 114/126 [00:01<00:00, 75.20it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 91%|      | 115/126 [00:01<00:00, 75.63it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 92%|      | 116/126 [00:01<00:00, 76.07it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 93%|      | 117/126 [00:01<00:00, 76.50it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 94%|      | 118/126 [00:01<00:00, 76.94it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 94%|      | 119/126 [00:01<00:00, 77.38it/s, loss=0.0033,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.48it/s]
Epoch 53: 95%|      | 120/126 [00:01<00:00, 77.80it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 78.24it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 78.68it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 79.15it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 79.62it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 80.08it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 80.55it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.19it/s, loss=0.0033,
v_num=4.31e+7]

Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.10it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...

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Epoch 54: 79%|          | 100/126 [00:01<00:00, 80.61it/s, loss=0.00307,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|          | 101/126 [00:01<00:00, 71.58it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 81%|          | 102/126 [00:01<00:00, 71.76it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 82%|          | 103/126 [00:01<00:00, 72.25it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 83%|          | 104/126 [00:01<00:00, 72.73it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 83%|          | 105/126 [00:01<00:00, 73.21it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 84%|          | 106/126 [00:01<00:00, 73.70it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 85%|          | 107/126 [00:01<00:00, 74.18it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 86%|          | 108/126 [00:01<00:00, 74.67it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 87%|          | 109/126 [00:01<00:00, 75.14it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 87%|          | 110/126 [00:01<00:00, 75.62it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 88%|          | 111/126 [00:01<00:00, 76.09it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 89%|          | 112/126 [00:01<00:00, 76.57it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 90%|          | 113/126 [00:01<00:00, 77.04it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 90%|          | 114/126 [00:01<00:00, 77.52it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 91%|          | 115/126 [00:01<00:00, 77.98it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 92%|          | 116/126 [00:01<00:00, 78.45it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 93%|          | 117/126 [00:01<00:00, 78.91it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 94%|          | 118/126 [00:01<00:00, 79.37it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 94%|          | 119/126 [00:01<00:00, 79.83it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 95%|          | 120/126 [00:01<00:00, 80.28it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 96%|          | 121/126 [00:01<00:00, 80.74it/s, loss=0.00307,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 215.24it/s]

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Epoch 54: 97%|      | 122/126 [00:01<00:00, 81.19it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 81.67it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 82.16it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 82.64it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 83.13it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.44it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 54: 100%|     | 126/126 [00:01<00:00, 81.35it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 78.14it/s, loss=0.00385,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|      | 101/126 [00:01<00:00, 68.15it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 81%|      | 102/126 [00:01<00:00, 68.27it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 82%|      | 103/126 [00:01<00:00, 68.75it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 83%|      | 104/126 [00:01<00:00, 69.23it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 83%|      | 105/126 [00:01<00:00, 69.71it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 84%|      | 106/126 [00:01<00:00, 70.18it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 85%|      | 107/126 [00:01<00:00, 70.67it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 86%|      | 108/126 [00:01<00:00, 71.14it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 87%|      | 109/126 [00:01<00:00, 71.62it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 87%|      | 110/126 [00:01<00:00, 72.09it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 88%|      | 111/126 [00:01<00:00, 72.56it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 89%|      | 112/126 [00:01<00:00, 73.03it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 90%|      | 113/126 [00:01<00:00, 73.49it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 73.96it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 74.42it/s, loss=0.00385,

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v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 74.88it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 75.33it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 75.79it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 94%|      | 119/126 [00:01<00:00, 76.25it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 76.70it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 77.15it/s, loss=0.00385,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 218.40it/s]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 77.60it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 78.08it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 78.56it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 79.03it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 79.51it/s, loss=0.00385,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 78.08it/s, loss=0.00385,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 77.98it/s, loss=0.00385,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 82.15it/s, loss=0.00321,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 72.52it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 72.91it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 73.41it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 73.91it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 74.41it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 84%|      | 106/126 [00:01<00:00, 74.93it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 85%|      | 107/126 [00:01<00:00, 75.44it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 86%|      | 108/126 [00:01<00:00, 75.96it/s, loss=0.00321,

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v_num=4.31e+7]
Epoch 56: 87%|      | 109/126 [00:01<00:00, 76.49it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 87%|      | 110/126 [00:01<00:00, 77.00it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 88%|      | 111/126 [00:01<00:00, 77.54it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 89%|      | 112/126 [00:01<00:00, 78.03it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 90%|      | 113/126 [00:01<00:00, 78.55it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 90%|      | 114/126 [00:01<00:00, 79.05it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 91%|      | 115/126 [00:01<00:00, 79.58it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 92%|      | 116/126 [00:01<00:00, 80.08it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 93%|      | 117/126 [00:01<00:00, 80.59it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 94%|      | 118/126 [00:01<00:00, 81.09it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 94%|      | 119/126 [00:01<00:00, 81.61it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 95%|      | 120/126 [00:01<00:00, 82.10it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 96%|      | 121/126 [00:01<00:00, 82.59it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 97%|      | 122/126 [00:01<00:00, 83.10it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 98%|      | 123/126 [00:01<00:00, 83.65it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 84.19it/s, loss=0.00321,
v_num=4.31e+7]

Epoch 56: 99%|      | 125/126 [00:01<00:00, 84.73it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 85.28it/s, loss=0.00321,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 83.42it/s, loss=0.00321,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 83.33it/s, loss=0.00321,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 79%|      | 100/126 [00:01<00:00, 84.88it/s, loss=0.00336,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|      | 101/126 [00:01<00:00, 73.12it/s, loss=0.00336,

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v_num=4.31e+7]
Epoch 57: 81%|      | 102/126 [00:01<00:00, 73.51it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 82%|      | 103/126 [00:01<00:00, 74.01it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 83%|      | 104/126 [00:01<00:00, 74.51it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 83%|      | 105/126 [00:01<00:00, 75.01it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 84%|      | 106/126 [00:01<00:00, 75.50it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 85%|      | 107/126 [00:01<00:00, 75.99it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 86%|      | 108/126 [00:01<00:00, 76.48it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 87%|      | 109/126 [00:01<00:00, 76.96it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 87%|      | 110/126 [00:01<00:00, 77.45it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 88%|      | 111/126 [00:01<00:00, 77.92it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 89%|      | 112/126 [00:01<00:00, 78.41it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 90%|      | 113/126 [00:01<00:00, 78.87it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 90%|      | 114/126 [00:01<00:00, 79.35it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 91%|      | 115/126 [00:01<00:00, 79.81it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 92%|      | 116/126 [00:01<00:00, 80.28it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 93%|      | 117/126 [00:01<00:00, 80.74it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 94%|      | 118/126 [00:01<00:00, 81.21it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 94%|      | 119/126 [00:01<00:00, 81.66it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 95%|      | 120/126 [00:01<00:00, 82.12it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 96%|      | 121/126 [00:01<00:00, 82.58it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 97%|      | 122/126 [00:01<00:00, 83.04it/s, loss=0.00336,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.18it/s]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 83.53it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 84.03it/s, loss=0.00336,
v_num=4.31e+7]

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Epoch 57: 99%|      | 125/126 [00:01<00:00, 84.52it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 85.02it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 83.41it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 83.31it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 79%|      | 100/126 [00:01<00:00, 68.43it/s, loss=0.00339,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|      | 101/126 [00:01<00:00, 60.33it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 81%|      | 102/126 [00:01<00:00, 60.76it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 82%|      | 103/126 [00:01<00:00, 61.21it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 83%|      | 104/126 [00:01<00:00, 61.66it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 83%|      | 105/126 [00:01<00:00, 62.11it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 84%|      | 106/126 [00:01<00:00, 62.56it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 85%|      | 107/126 [00:01<00:00, 63.00it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 86%|      | 108/126 [00:01<00:00, 63.45it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 87%|      | 109/126 [00:01<00:00, 63.89it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 87%|      | 110/126 [00:01<00:00, 64.33it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 88%|      | 111/126 [00:01<00:00, 64.76it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 89%|      | 112/126 [00:01<00:00, 65.20it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 90%|      | 113/126 [00:01<00:00, 65.64it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 90%|      | 114/126 [00:01<00:00, 66.07it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 91%|      | 115/126 [00:01<00:00, 66.50it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 92%|      | 116/126 [00:01<00:00, 66.93it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 93%|      | 117/126 [00:01<00:00, 67.36it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 94%|      | 118/126 [00:01<00:00, 67.79it/s, loss=0.00339,

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v_num=4.31e+7]
Epoch 58: 94%|      | 119/126 [00:01<00:00, 68.21it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 95%|      | 120/126 [00:01<00:00, 68.63it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 96%|      | 121/126 [00:01<00:00, 69.05it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 97%|      | 122/126 [00:01<00:00, 69.48it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 69.92it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 70.36it/s, loss=0.00339,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 245.17it/s]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 70.79it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 71.23it/s, loss=0.00339,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 70.06it/s, loss=0.00339,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 69.99it/s, loss=0.00339,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 72.99it/s, loss=0.0035,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 64.58it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 64.84it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 65.29it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 65.75it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 66.20it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 84%|      | 106/126 [00:01<00:00, 66.65it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 85%|      | 107/126 [00:01<00:00, 67.10it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 86%|      | 108/126 [00:01<00:00, 67.55it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 87%|      | 109/126 [00:01<00:00, 68.00it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 87%|      | 110/126 [00:01<00:00, 68.44it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 68.89it/s, loss=0.0035,

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v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 69.33it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 69.58it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 69.99it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 70.42it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 70.86it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 71.28it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 71.71it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 72.14it/s, loss=0.0035,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 198.51it/s]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 72.56it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 72.98it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 73.41it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 73.87it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 74.32it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 74.78it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 75.23it/s, loss=0.0035,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 73.67it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 73.58it/s, loss=0.0035,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 76.41it/s, loss=0.00362,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 67.48it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 67.66it/s, loss=0.00362,
v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 68.18it/s, loss=0.00362,
v_num=4.31e+7]

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Epoch 60: 83%| | 104/126 [00:01<00:00, 68.67it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 83%| | 105/126 [00:01<00:00, 69.17it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 84%| | 106/126 [00:01<00:00, 69.67it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 85%| | 107/126 [00:01<00:00, 70.18it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 86%| | 108/126 [00:01<00:00, 70.68it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 87%| | 109/126 [00:01<00:00, 71.18it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 87%| | 110/126 [00:01<00:00, 71.67it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 88%| | 111/126 [00:01<00:00, 72.18it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 89%| | 112/126 [00:01<00:00, 72.66it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 90%| | 113/126 [00:01<00:00, 73.16it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 90%| | 114/126 [00:01<00:00, 73.64it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 91%| | 115/126 [00:01<00:00, 74.13it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 92%| | 116/126 [00:01<00:00, 74.62it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 93%| | 117/126 [00:01<00:00, 75.11it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 94%| | 118/126 [00:01<00:00, 75.60it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 94%| | 119/126 [00:01<00:00, 76.08it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 95%| | 120/126 [00:01<00:00, 76.56it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 96%| | 121/126 [00:01<00:00, 77.05it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 97%| | 122/126 [00:01<00:00, 77.54it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 98%| | 123/126 [00:01<00:00, 78.04it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 98%| | 124/126 [00:01<00:00, 78.55it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 99%| | 125/126 [00:01<00:00, 79.05it/s, loss=0.00362, v_num=4.31e+7]
Epoch 60: 100%| | 126/126 [00:01<00:00, 79.56it/s, loss=0.00362, v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%| | 126/126 [00:01<00:00, 75.75it/s, loss=0.00362, v_num=4.31e+7]

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Epoch 60: 100%|      | 126/126 [00:01<00:00, 75.65it/s, loss=0.00362,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 81.57it/s, loss=0.00334,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 61: 80%|      | 101/126 [00:01<00:00, 71.90it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 81%|      | 102/126 [00:01<00:00, 72.23it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 82%|      | 103/126 [00:01<00:00, 72.66it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 83%|      | 104/126 [00:01<00:00, 73.09it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 83%|      | 105/126 [00:01<00:00, 73.52it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 84%|      | 106/126 [00:01<00:00, 73.96it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 85%|      | 107/126 [00:01<00:00, 74.41it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 86%|      | 108/126 [00:01<00:00, 74.85it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 87%|      | 109/126 [00:01<00:00, 75.29it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 87%|      | 110/126 [00:01<00:00, 75.73it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 88%|      | 111/126 [00:01<00:00, 76.16it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 89%|      | 112/126 [00:01<00:00, 76.61it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 90%|      | 113/126 [00:01<00:00, 77.05it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 90%|      | 114/126 [00:01<00:00, 77.50it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 91%|      | 115/126 [00:01<00:00, 77.94it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 92%|      | 116/126 [00:01<00:00, 78.40it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 93%|      | 117/126 [00:01<00:00, 78.84it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 94%|      | 118/126 [00:01<00:00, 79.30it/s, loss=0.00334,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.95it/s]
Epoch 61: 94%|      | 119/126 [00:01<00:00, 79.73it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 95%|      | 120/126 [00:01<00:00, 80.18it/s, loss=0.00334,
v_num=4.31e+7]

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Epoch 61: 96%|      | 121/126 [00:01<00:00, 80.62it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 97%|      | 122/126 [00:01<00:00, 81.08it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 98%|      | 123/126 [00:01<00:00, 81.56it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 98%|      | 124/126 [00:01<00:00, 82.04it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 99%|      | 125/126 [00:01<00:00, 82.51it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 83.00it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|     | 126/126 [00:01<00:00, 81.49it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 61: 100%|     | 126/126 [00:01<00:00, 81.39it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 78.06it/s, loss=0.00327,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 69.38it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 69.37it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 69.91it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 70.41it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 70.93it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 71.44it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 71.95it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 72.45it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 72.96it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 73.46it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 73.98it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 74.46it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 74.97it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 75.46it/s, loss=0.00327,

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v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 75.98it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 76.46it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 76.95it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 94%|      | 118/126 [00:01<00:00, 77.44it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 77.93it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 78.41it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 78.90it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 79.39it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 79.91it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 80.42it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 80.94it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 81.46it/s, loss=0.00327,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 80.16it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 80.08it/s, loss=0.00327,
v_num=4.31e+7]Mapping latent space...

Epoch 63: 79%|      | 100/126 [00:01<00:00, 79.98it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 71.13it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 69.50it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 69.93it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 70.36it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 83%|      | 105/126 [00:01<00:00, 70.80it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 84%|      | 106/126 [00:01<00:00, 71.24it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 85%|      | 107/126 [00:01<00:00, 71.66it/s, loss=0.00331,

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v_num=4.31e+7]
Epoch 63: 86%|      | 108/126 [00:01<00:00, 72.09it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 87%|      | 109/126 [00:01<00:00, 72.53it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 87%|      | 110/126 [00:01<00:00, 72.97it/s, loss=0.00331,
v_num=4.31e+7]
Validation DataLoader 0: 42%|      | 11/26 [00:00<00:00, 108.72it/s]
Epoch 63: 88%|      | 111/126 [00:01<00:00, 73.40it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 89%|      | 112/126 [00:01<00:00, 73.84it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 90%|      | 113/126 [00:01<00:00, 74.27it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 90%|      | 114/126 [00:01<00:00, 74.72it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 91%|      | 115/126 [00:01<00:00, 75.16it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 92%|      | 116/126 [00:01<00:00, 75.61it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 93%|      | 117/126 [00:01<00:00, 76.05it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 94%|      | 118/126 [00:01<00:00, 76.50it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 94%|      | 119/126 [00:01<00:00, 76.94it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 95%|      | 120/126 [00:01<00:00, 77.39it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 96%|      | 121/126 [00:01<00:00, 77.83it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 97%|      | 122/126 [00:01<00:00, 78.29it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 78.76it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 79.24it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 79.74it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 80.24it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 78.89it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 78.81it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 79%|      | 100/126 [00:01<00:00, 73.76it/s, loss=0.00374,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|          | 101/126 [00:01<00:00, 65.17it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 81%|          | 102/126 [00:01<00:00, 65.54it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 82%|          | 103/126 [00:01<00:00, 65.94it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 83%|          | 104/126 [00:01<00:00, 66.31it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 83%|          | 105/126 [00:01<00:00, 66.71it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 84%|          | 106/126 [00:01<00:00, 67.11it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 85%|          | 107/126 [00:01<00:00, 67.51it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 86%|          | 108/126 [00:01<00:00, 67.91it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 87%|          | 109/126 [00:01<00:00, 68.33it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 87%|          | 110/126 [00:01<00:00, 68.74it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 88%|          | 111/126 [00:01<00:00, 69.15it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 89%|          | 112/126 [00:01<00:00, 69.55it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 90%|          | 113/126 [00:01<00:00, 69.97it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 90%|          | 114/126 [00:01<00:00, 70.39it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 91%|          | 115/126 [00:01<00:00, 70.81it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 92%|          | 116/126 [00:01<00:00, 71.23it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 93%|          | 117/126 [00:01<00:00, 71.65it/s, loss=0.00374,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 174.38it/s]
Epoch 64: 94%|          | 118/126 [00:01<00:00, 72.07it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 94%|          | 119/126 [00:01<00:00, 72.49it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 95%|          | 120/126 [00:01<00:00, 72.91it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 96%|          | 121/126 [00:01<00:00, 73.33it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 97%|          | 122/126 [00:01<00:00, 73.76it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 98%|          | 123/126 [00:01<00:00, 74.21it/s, loss=0.00374,
v_num=4.31e+7]

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Epoch 64: 98%|      | 124/126 [00:01<00:00, 74.66it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 99%|      | 125/126 [00:01<00:00, 75.11it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 75.57it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 100%|     | 126/126 [00:01<00:00, 74.29it/s, loss=0.00374,
v_num=4.31e+7]
Epoch 64: 100%|     | 126/126 [00:01<00:00, 74.21it/s, loss=0.00374,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 80.94it/s, loss=0.00346,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 70.46it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 70.70it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 71.10it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 71.33it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 71.72it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 72.11it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 72.53it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 72.95it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 73.38it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 73.80it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 74.24it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 74.67it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 75.11it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 75.55it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 75.99it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 76.44it/s, loss=0.00346,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 165.69it/s]

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Epoch 65: 93%|      | 117/126 [00:01<00:00, 76.87it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 77.32it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 77.76it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 78.20it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 96%|      | 121/126 [00:01<00:00, 78.64it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 79.10it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 79.58it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 80.05it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 80.53it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 81.01it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 79.45it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...

Epoch 66: 79%|      | 100/126 [00:01<00:00, 78.11it/s, loss=0.00289,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 69.10it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 69.14it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 69.67it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 70.18it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 83%|      | 105/126 [00:01<00:00, 70.71it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 71.21it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 71.74it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 86%|      | 108/126 [00:01<00:00, 72.22it/s, loss=0.00289,
v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 72.74it/s, loss=0.00289,
v_num=4.31e+7]

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Epoch 66: 87%| | 110/126 [00:01<00:00, 73.24it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 88%| | 111/126 [00:01<00:00, 73.76it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 89%| | 112/126 [00:01<00:00, 74.25it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 90%| | 113/126 [00:01<00:00, 74.77it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 90%| | 114/126 [00:01<00:00, 75.26it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 91%| | 115/126 [00:01<00:00, 75.76it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 92%| | 116/126 [00:01<00:00, 76.27it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 93%| | 117/126 [00:01<00:00, 76.66it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 94%| | 118/126 [00:01<00:00, 77.13it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 94%| | 119/126 [00:01<00:00, 77.64it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 95%| | 120/126 [00:01<00:00, 78.11it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 96%| | 121/126 [00:01<00:00, 78.60it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 97%| | 122/126 [00:01<00:00, 79.09it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 98%| | 123/126 [00:01<00:00, 79.60it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 98%| | 124/126 [00:01<00:00, 80.11it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 99%| | 125/126 [00:01<00:00, 80.61it/s, loss=0.00289, v_num=4.31e+7]
 Validation DataLoader 0: 100%| | 26/26 [00:00<00:00, 259.39it/s]
 Epoch 66: 100%| | 126/126 [00:01<00:00, 81.12it/s, loss=0.00289, v_num=4.31e+7] Mapping latent space...
 Epoch 66: 100%| | 126/126 [00:01<00:00, 79.71it/s, loss=0.00289, v_num=4.31e+7]
 Epoch 66: 100%| | 126/126 [00:01<00:00, 79.63it/s, loss=0.00289, v_num=4.31e+7] Mapping latent space...
 Epoch 67: 79%| | 100/126 [00:01<00:00, 77.74it/s, loss=0.00338, v_num=4.31e+7]
 Validation: 0it [00:00, ?it/s]
 Validation: 0%| | 0/26 [00:00<?, ?it/s]
 Validation DataLoader 0: 0%| | 0/26 [00:00<?, ?it/s]
 Epoch 67: 80%| | 101/126 [00:01<00:00, 68.91it/s, loss=0.00338, v_num=4.31e+7]
 Epoch 67: 81%| | 102/126 [00:01<00:00, 69.31it/s, loss=0.00338, v_num=4.31e+7]

Epoch 67: 82%| | 103/126 [00:01<00:00, 69.83it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 83%| | 104/126 [00:01<00:00, 70.33it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 83%| | 105/126 [00:01<00:00, 70.84it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 84%| | 106/126 [00:01<00:00, 71.35it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 85%| | 107/126 [00:01<00:00, 71.86it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 86%| | 108/126 [00:01<00:00, 72.36it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 87%| | 109/126 [00:01<00:00, 72.86it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 87%| | 110/126 [00:01<00:00, 73.33it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 88%| | 111/126 [00:01<00:00, 73.83it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 89%| | 112/126 [00:01<00:00, 74.34it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 90%| | 113/126 [00:01<00:00, 74.82it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 90%| | 114/126 [00:01<00:00, 75.32it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 91%| | 115/126 [00:01<00:00, 75.80it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 92%| | 116/126 [00:01<00:00, 76.30it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 93%| | 117/126 [00:01<00:00, 76.78it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 94%| | 118/126 [00:01<00:00, 77.27it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 94%| | 119/126 [00:01<00:00, 77.76it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 95%| | 120/126 [00:01<00:00, 78.25it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 96%| | 121/126 [00:01<00:00, 78.73it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 97%| | 122/126 [00:01<00:00, 79.22it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 98%| | 123/126 [00:01<00:00, 79.74it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 98%| | 124/126 [00:01<00:00, 80.25it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 99%| | 125/126 [00:01<00:00, 80.75it/s, loss=0.00338, v_num=4.31e+7]
Epoch 67: 100%| | 126/126 [00:01<00:00, 81.26it/s, loss=0.00338, v_num=4.31e+7]Mapping latent space...

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Epoch 67: 100%|      | 126/126 [00:01<00:00, 79.86it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 67: 100%|      | 126/126 [00:01<00:00, 79.78it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 90.37it/s, loss=0.00342,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|      | 101/126 [00:01<00:00, 78.62it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 81%|      | 102/126 [00:01<00:00, 78.56it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 82%|      | 103/126 [00:01<00:00, 79.13it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 83%|      | 104/126 [00:01<00:00, 79.67it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 83%|      | 105/126 [00:01<00:00, 80.23it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 84%|      | 106/126 [00:01<00:00, 80.77it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 85%|      | 107/126 [00:01<00:00, 81.32it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 86%|      | 108/126 [00:01<00:00, 81.85it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 87%|      | 109/126 [00:01<00:00, 82.40it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 87%|      | 110/126 [00:01<00:00, 82.93it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 88%|      | 111/126 [00:01<00:00, 83.50it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 89%|      | 112/126 [00:01<00:00, 83.98it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 90%|      | 113/126 [00:01<00:00, 84.51it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 90%|      | 114/126 [00:01<00:00, 85.04it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 91%|      | 115/126 [00:01<00:00, 85.57it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 92%|      | 116/126 [00:01<00:00, 86.09it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 93%|      | 117/126 [00:01<00:00, 86.63it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 94%|      | 118/126 [00:01<00:00, 87.15it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 94%|      | 119/126 [00:01<00:00, 87.68it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 95%|      | 120/126 [00:01<00:00, 88.19it/s, loss=0.00342,

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v_num=4.31e+7]
Epoch 68: 96%|      | 121/126 [00:01<00:00, 88.71it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 97%|      | 122/126 [00:01<00:00, 89.23it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 98%|      | 123/126 [00:01<00:00, 89.81it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 98%|      | 124/126 [00:01<00:00, 90.38it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 90.95it/s, loss=0.00342,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.11it/s]
Epoch 68: 100%|      | 126/126 [00:01<00:00, 91.51it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|      | 126/126 [00:01<00:00, 89.79it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 68: 100%|      | 126/126 [00:01<00:00, 89.70it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 90.99it/s, loss=0.00312,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 78.60it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 78.89it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 79.33it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 79.76it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 80.20it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 80.65it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 81.09it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 81.53it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 81.97it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 82.41it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 82.85it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 83.30it/s, loss=0.00312,
v_num=4.31e+7]

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Epoch 69: 90%|      | 113/126 [00:01<00:00, 83.76it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 84.19it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 84.64it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 85.10it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 93%|      | 117/126 [00:01<00:00, 85.56it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 86.02it/s, loss=0.00312,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.59it/s]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 86.46it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 86.92it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 87.38it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 87.85it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 88.35it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 88.85it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 89.35it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 89.86it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 88.04it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 87.93it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 77.93it/s, loss=0.00369,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 68.53it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 68.73it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 69.21it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 83%|      | 104/126 [00:01<00:00, 69.68it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 83%|      | 105/126 [00:01<00:00, 70.15it/s, loss=0.00369,
v_num=4.31e+7]

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Epoch 70: 84%|      | 106/126 [00:01<00:00, 70.61it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 85%|      | 107/126 [00:01<00:00, 71.07it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 86%|      | 108/126 [00:01<00:00, 71.54it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 87%|      | 109/126 [00:01<00:00, 72.00it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 87%|      | 110/126 [00:01<00:00, 72.46it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 88%|      | 111/126 [00:01<00:00, 72.92it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 89%|      | 112/126 [00:01<00:00, 73.37it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 90%|      | 113/126 [00:01<00:00, 73.83it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 90%|      | 114/126 [00:01<00:00, 74.28it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 91%|      | 115/126 [00:01<00:00, 74.73it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 92%|      | 116/126 [00:01<00:00, 75.14it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 93%|      | 117/126 [00:01<00:00, 75.59it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 94%|      | 118/126 [00:01<00:00, 76.03it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 94%|      | 119/126 [00:01<00:00, 76.48it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 95%|      | 120/126 [00:01<00:00, 76.91it/s, loss=0.00369,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 207.04it/s]
Epoch 70: 96%|      | 121/126 [00:01<00:00, 77.34it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 97%|      | 122/126 [00:01<00:00, 77.78it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 78.25it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 78.72it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 79.19it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 79.66it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 78.27it/s, loss=0.00369,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 78.19it/s, loss=0.00369,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 76.80it/s, loss=0.00355,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|          | 101/126 [00:01<00:00, 67.79it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 81%|          | 102/126 [00:01<00:00, 68.11it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 82%|          | 103/126 [00:01<00:00, 68.53it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 83%|          | 104/126 [00:01<00:00, 68.95it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 83%|          | 105/126 [00:01<00:00, 69.37it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 84%|          | 106/126 [00:01<00:00, 69.80it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 85%|          | 107/126 [00:01<00:00, 70.22it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 86%|          | 108/126 [00:01<00:00, 70.64it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 87%|          | 109/126 [00:01<00:00, 71.07it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 87%|          | 110/126 [00:01<00:00, 71.48it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 88%|          | 111/126 [00:01<00:00, 71.91it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 89%|          | 112/126 [00:01<00:00, 72.34it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 90%|          | 113/126 [00:01<00:00, 72.77it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 90%|          | 114/126 [00:01<00:00, 73.19it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 91%|          | 115/126 [00:01<00:00, 73.63it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 92%|          | 116/126 [00:01<00:00, 74.05it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 93%|          | 117/126 [00:01<00:00, 74.47it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 94%|          | 118/126 [00:01<00:00, 74.87it/s, loss=0.00355,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 184.87it/s]
Epoch 71: 94%|          | 119/126 [00:01<00:00, 75.29it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 95%|          | 120/126 [00:01<00:00, 75.72it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 96%|          | 121/126 [00:01<00:00, 76.15it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 97%|          | 122/126 [00:01<00:00, 76.59it/s, loss=0.00355,

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v_num=4.31e+7]
Epoch 71: 98%|      | 123/126 [00:01<00:00, 77.05it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 98%|      | 124/126 [00:01<00:00, 77.52it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 99%|      | 125/126 [00:01<00:00, 77.98it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 71: 100%|     | 126/126 [00:01<00:00, 78.45it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 100%|     | 126/126 [00:01<00:00, 77.10it/s, loss=0.00355,
v_num=4.31e+7]

Epoch 71: 100%|     | 126/126 [00:01<00:00, 77.01it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 79%|      | 100/126 [00:01<00:00, 69.48it/s, loss=0.00326,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 61.88it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 62.23it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 62.69it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 63.15it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 63.60it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 64.06it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 64.51it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 64.97it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 65.41it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 65.86it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 66.31it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 66.75it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 67.19it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 67.63it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 68.07it/s, loss=0.00326,

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v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 68.50it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 68.94it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 69.37it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 69.80it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 70.20it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 70.63it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 71.06it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 71.51it/s, loss=0.00326,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.94it/s]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 71.95it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 72.39it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 72.84it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 71.67it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 71.60it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 75.29it/s, loss=0.00282,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 67.01it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 67.42it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 67.85it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 68.28it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 68.70it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 69.12it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 69.56it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 69.98it/s, loss=0.00282,

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v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 70.41it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 70.84it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 71.26it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 71.69it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 90%|      | 113/126 [00:01<00:00, 72.11it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 72.55it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 72.95it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 73.38it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 73.80it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 74.22it/s, loss=0.00282,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 188.80it/s]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 74.63it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 75.05it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 75.47it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 75.87it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 76.33it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 76.79it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 77.25it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 77.71it/s, loss=0.00282,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 76.36it/s, loss=0.00282,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 76.28it/s, loss=0.00282,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 74.91it/s, loss=0.00335,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|      | 101/126 [00:01<00:00, 67.44it/s, loss=0.00335,

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v_num=4.31e+7]
Epoch 74: 81%| | 102/126 [00:01<00:00, 67.71it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 82%| | 103/126 [00:01<00:00, 68.22it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 83%| | 104/126 [00:01<00:00, 68.72it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 83%| | 105/126 [00:01<00:00, 69.23it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 84%| | 106/126 [00:01<00:00, 69.73it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 85%| | 107/126 [00:01<00:00, 70.23it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 86%| | 108/126 [00:01<00:00, 70.73it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 87%| | 109/126 [00:01<00:00, 71.23it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 87%| | 110/126 [00:01<00:00, 71.72it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 88%| | 111/126 [00:01<00:00, 72.22it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 89%| | 112/126 [00:01<00:00, 72.72it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 90%| | 113/126 [00:01<00:00, 73.21it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 90%| | 114/126 [00:01<00:00, 73.70it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 91%| | 115/126 [00:01<00:00, 74.19it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 92%| | 116/126 [00:01<00:00, 74.68it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 93%| | 117/126 [00:01<00:00, 75.17it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 94%| | 118/126 [00:01<00:00, 75.65it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 94%| | 119/126 [00:01<00:00, 76.14it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 95%| | 120/126 [00:01<00:00, 76.62it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 96%| | 121/126 [00:01<00:00, 77.10it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 97%| | 122/126 [00:01<00:00, 77.59it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 98%| | 123/126 [00:01<00:00, 78.10it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 98%| | 124/126 [00:01<00:00, 78.61it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 99%| | 125/126 [00:01<00:00, 79.12it/s, loss=0.00335,

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v_num=4.31e+7]
Epoch 74: 100%|      | 126/126 [00:01<00:00, 79.63it/s, loss=0.00335,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|      | 126/126 [00:01<00:00, 78.31it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 74: 100%|      | 126/126 [00:01<00:00, 78.24it/s, loss=0.00335,
v_num=4.31e+7]Mapping latent space...

Epoch 75: 79%|      | 100/126 [00:01<00:00, 70.45it/s, loss=0.00344,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|      | 101/126 [00:01<00:00, 62.35it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 81%|      | 102/126 [00:01<00:00, 62.67it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 82%|      | 103/126 [00:01<00:00, 63.13it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 83%|      | 104/126 [00:01<00:00, 63.59it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 83%|      | 105/126 [00:01<00:00, 64.05it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 84%|      | 106/126 [00:01<00:00, 64.51it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 85%|      | 107/126 [00:01<00:00, 64.97it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 86%|      | 108/126 [00:01<00:00, 65.42it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 87%|      | 109/126 [00:01<00:00, 65.88it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 87%|      | 110/126 [00:01<00:00, 66.33it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 88%|      | 111/126 [00:01<00:00, 66.78it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 89%|      | 112/126 [00:01<00:00, 67.23it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 90%|      | 113/126 [00:01<00:00, 67.67it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 90%|      | 114/126 [00:01<00:00, 68.12it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 91%|      | 115/126 [00:01<00:00, 68.56it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 92%|      | 116/126 [00:01<00:00, 69.00it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 93%|      | 117/126 [00:01<00:00, 69.33it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 94%|      | 118/126 [00:01<00:00, 69.34it/s, loss=0.00344,

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v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 188.90it/s]
Epoch 75: 94%|          | 119/126 [00:01<00:00, 69.57it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 95%|          | 120/126 [00:01<00:00, 69.90it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 96%|          | 121/126 [00:01<00:00, 70.24it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 97%|          | 122/126 [00:01<00:00, 70.59it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 98%|          | 123/126 [00:01<00:00, 70.97it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 98%|          | 124/126 [00:01<00:00, 71.35it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 99%|          | 125/126 [00:01<00:00, 71.73it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 100%|         | 126/126 [00:01<00:00, 72.12it/s, loss=0.00344,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|         | 126/126 [00:01<00:00, 70.74it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 75: 100%|         | 126/126 [00:01<00:00, 70.63it/s, loss=0.00344,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|          | 100/126 [00:01<00:00, 73.37it/s, loss=0.00325,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|          | 101/126 [00:01<00:00, 64.84it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 81%|          | 102/126 [00:01<00:00, 65.03it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 82%|          | 103/126 [00:01<00:00, 65.53it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 83%|          | 104/126 [00:01<00:00, 66.02it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 83%|          | 105/126 [00:01<00:00, 66.51it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 84%|          | 106/126 [00:01<00:00, 67.00it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 85%|          | 107/126 [00:01<00:00, 67.49it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 86%|          | 108/126 [00:01<00:00, 67.97it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 87%|          | 109/126 [00:01<00:00, 68.46it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 87%|          | 110/126 [00:01<00:00, 68.94it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 88%|          | 111/126 [00:01<00:00, 69.42it/s, loss=0.00325,

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v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 69.90it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 70.38it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 70.85it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 71.33it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 71.81it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 72.28it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 72.75it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 73.23it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 73.69it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 74.16it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 74.63it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 75.12it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 75.61it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 76.10it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 76.60it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 75.34it/s, loss=0.00325,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 75.26it/s, loss=0.00325,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 74.24it/s, loss=0.00334,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 65.05it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 65.39it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 77: 82%|      | 103/126 [00:01<00:00, 65.84it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 66.28it/s, loss=0.00334,
v_num=4.31e+7]

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Epoch 77: 83%| | 105/126 [00:01<00:00, 66.72it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 84%| | 106/126 [00:01<00:00, 67.17it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 85%| | 107/126 [00:01<00:00, 67.61it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 86%| | 108/126 [00:01<00:00, 68.05it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 87%| | 109/126 [00:01<00:00, 68.48it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 87%| | 110/126 [00:01<00:00, 68.92it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 88%| | 111/126 [00:01<00:00, 69.35it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 89%| | 112/126 [00:01<00:00, 69.78it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 90%| | 113/126 [00:01<00:00, 70.22it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 90%| | 114/126 [00:01<00:00, 70.64it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 91%| | 115/126 [00:01<00:00, 71.07it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 92%| | 116/126 [00:01<00:00, 71.50it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 93%| | 117/126 [00:01<00:00, 71.92it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 94%| | 118/126 [00:01<00:00, 72.34it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 94%| | 119/126 [00:01<00:00, 72.76it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 95%| | 120/126 [00:01<00:00, 73.17it/s, loss=0.00334, v_num=4.31e+7]
 Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 204.45it/s]
 Epoch 77: 96%| | 121/126 [00:01<00:00, 73.58it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 97%| | 122/126 [00:01<00:00, 73.99it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 98%| | 123/126 [00:01<00:00, 74.42it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 98%| | 124/126 [00:01<00:00, 74.85it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 99%| | 125/126 [00:01<00:00, 75.28it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 100%| | 126/126 [00:01<00:00, 75.71it/s, loss=0.00334, v_num=4.31e+7] Mapping latent space...
 Epoch 77: 100%| | 126/126 [00:01<00:00, 74.38it/s, loss=0.00334, v_num=4.31e+7]
 Epoch 77: 100%| | 126/126 [00:01<00:00, 74.30it/s, loss=0.00334, v_num=4.31e+7]

v_num=4.31e+7]Mapping latent space...

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Epoch 78: 79%|          | 100/126 [00:01<00:00, 67.01it/s, loss=0.00352,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|          | 101/126 [00:01<00:00, 59.28it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 81%|          | 102/126 [00:01<00:00, 59.67it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 82%|          | 103/126 [00:01<00:00, 60.11it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 83%|          | 104/126 [00:01<00:00, 60.55it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 83%|          | 105/126 [00:01<00:00, 60.98it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 84%|          | 106/126 [00:01<00:00, 61.42it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 85%|          | 107/126 [00:01<00:00, 61.86it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 86%|          | 108/126 [00:01<00:00, 62.29it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 87%|          | 109/126 [00:01<00:00, 62.73it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 87%|          | 110/126 [00:01<00:00, 63.16it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 88%|          | 111/126 [00:01<00:00, 63.59it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 89%|          | 112/126 [00:01<00:00, 64.02it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 90%|          | 113/126 [00:01<00:00, 64.44it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 90%|          | 114/126 [00:01<00:00, 64.87it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 91%|          | 115/126 [00:01<00:00, 65.29it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 92%|          | 116/126 [00:01<00:00, 65.71it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 93%|          | 117/126 [00:01<00:00, 66.13it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 94%|          | 118/126 [00:01<00:00, 66.55it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 94%|          | 119/126 [00:01<00:00, 66.97it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 95%|          | 120/126 [00:01<00:00, 67.38it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 96%|          | 121/126 [00:01<00:00, 67.80it/s, loss=0.00352,
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v_num=4.31e+7]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 68.22it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 68.65it/s, loss=0.00352,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 235.14it/s]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 69.08it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 99%|      | 125/126 [00:01<00:00, 69.52it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 69.95it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 67.62it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 67.50it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 76.30it/s, loss=0.00349,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 68.07it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 68.26it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 68.76it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 69.27it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 69.77it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 70.27it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 70.77it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 71.27it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 71.77it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 72.27it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 72.77it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 73.26it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 90%|      | 113/126 [00:01<00:00, 73.75it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 74.25it/s, loss=0.00349,

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v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 74.74it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 75.22it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 75.71it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 76.19it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 76.68it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 77.15it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 77.64it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 78.12it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 78.64it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 79.16it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 79.68it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 80.19it/s, loss=0.00349,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 78.88it/s, loss=0.00349,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 78.81it/s, loss=0.00349,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 91.20it/s, loss=0.00299,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 77.66it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 77.83it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 78.35it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 78.87it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 79.39it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 84%|      | 106/126 [00:01<00:00, 79.90it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 85%|      | 107/126 [00:01<00:00, 80.41it/s, loss=0.00299,
v_num=4.31e+7]

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Epoch 80: 86%|      | 108/126 [00:01<00:00, 80.92it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 87%|      | 109/126 [00:01<00:00, 81.43it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 87%|      | 110/126 [00:01<00:00, 81.93it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 88%|      | 111/126 [00:01<00:00, 82.44it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 89%|      | 112/126 [00:01<00:00, 82.93it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 90%|      | 113/126 [00:01<00:00, 83.39it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 90%|      | 114/126 [00:01<00:00, 83.89it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 91%|      | 115/126 [00:01<00:00, 84.38it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 92%|      | 116/126 [00:01<00:00, 84.87it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 93%|      | 117/126 [00:01<00:00, 85.37it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 94%|      | 118/126 [00:01<00:00, 85.86it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 94%|      | 119/126 [00:01<00:00, 86.34it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 95%|      | 120/126 [00:01<00:00, 86.82it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 96%|      | 121/126 [00:01<00:00, 87.30it/s, loss=0.00299,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.59it/s]
Epoch 80: 97%|      | 122/126 [00:01<00:00, 87.79it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 98%|      | 123/126 [00:01<00:00, 88.30it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 98%|      | 124/126 [00:01<00:00, 88.81it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 89.32it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 89.84it/s, loss=0.00299,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|     | 126/126 [00:01<00:00, 88.00it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 87.90it/s, loss=0.00299,
v_num=4.31e+7]Mapping latent space...

Epoch 81: 79%|      | 100/126 [00:01<00:00, 75.27it/s, loss=0.00343,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|          | 101/126 [00:01<00:00, 67.30it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 81%|          | 102/126 [00:01<00:00, 67.49it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 82%|          | 103/126 [00:01<00:00, 68.00it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 83%|          | 104/126 [00:01<00:00, 68.50it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 83%|          | 105/126 [00:01<00:00, 69.00it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 84%|          | 106/126 [00:01<00:00, 69.51it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 85%|          | 107/126 [00:01<00:00, 70.00it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 86%|          | 108/126 [00:01<00:00, 70.51it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 87%|          | 109/126 [00:01<00:00, 71.01it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 87%|          | 110/126 [00:01<00:00, 71.50it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 88%|          | 111/126 [00:01<00:00, 72.01it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 89%|          | 112/126 [00:01<00:00, 72.49it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 90%|          | 113/126 [00:01<00:00, 72.98it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 90%|          | 114/126 [00:01<00:00, 73.48it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 91%|          | 115/126 [00:01<00:00, 73.97it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 92%|          | 116/126 [00:01<00:00, 74.46it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 93%|          | 117/126 [00:01<00:00, 74.95it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 94%|          | 118/126 [00:01<00:00, 75.43it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 94%|          | 119/126 [00:01<00:00, 75.92it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 95%|          | 120/126 [00:01<00:00, 76.39it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 96%|          | 121/126 [00:01<00:00, 76.87it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 97%|          | 122/126 [00:01<00:00, 77.37it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 98%|          | 123/126 [00:01<00:00, 77.88it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 98%|          | 124/126 [00:01<00:00, 78.38it/s, loss=0.00343,

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v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 78.89it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 79.40it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.11it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 78.04it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 75.87it/s, loss=0.00272,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 68.17it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 68.35it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 68.88it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 69.38it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 69.89it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 70.40it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 70.91it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 71.41it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 71.93it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 72.43it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 72.95it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 73.44it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 73.94it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 74.43it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 74.93it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 75.42it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 75.92it/s, loss=0.00272,
v_num=4.31e+7]

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Epoch 82: 94%|      | 118/126 [00:01<00:00, 76.41it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 76.91it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 77.39it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 77.88it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 78.37it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 78.89it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 79.40it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 79.91it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 80.43it/s, loss=0.00272,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|     | 126/126 [00:01<00:00, 79.11it/s, loss=0.00272,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 79.02it/s, loss=0.00272,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|      | 100/126 [00:01<00:00, 91.49it/s, loss=0.00305,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|      | 101/126 [00:01<00:00, 79.58it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 81%|      | 102/126 [00:01<00:00, 79.44it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 82%|      | 103/126 [00:01<00:00, 79.96it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 83%|      | 104/126 [00:01<00:00, 80.48it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 83%|      | 105/126 [00:01<00:00, 81.01it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 84%|      | 106/126 [00:01<00:00, 81.53it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 85%|      | 107/126 [00:01<00:00, 82.08it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 86%|      | 108/126 [00:01<00:00, 82.61it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 87%|      | 109/126 [00:01<00:00, 83.15it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 87%|      | 110/126 [00:01<00:00, 83.68it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 88%|      | 111/126 [00:01<00:00, 84.24it/s, loss=0.00305,

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v_num=4.31e+7]
Epoch 83: 89%|      | 112/126 [00:01<00:00, 84.76it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 90%|      | 113/126 [00:01<00:00, 85.31it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 90%|      | 114/126 [00:01<00:00, 85.83it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 91%|      | 115/126 [00:01<00:00, 86.37it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 92%|      | 116/126 [00:01<00:00, 86.90it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 93%|      | 117/126 [00:01<00:00, 87.44it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 94%|      | 118/126 [00:01<00:00, 87.96it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 94%|      | 119/126 [00:01<00:00, 88.50it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 89.01it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 89.55it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 90.07it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 90.64it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 91.20it/s, loss=0.00305,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 243.88it/s]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 91.76it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 92.34it/s, loss=0.00305,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 90.65it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 90.54it/s, loss=0.00305,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 90.23it/s, loss=0.00318,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 79.08it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 79.50it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 80.03it/s, loss=0.00318,
v_num=4.31e+7]

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Epoch 84: 83%| | 104/126 [00:01<00:00, 80.57it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 83%| | 105/126 [00:01<00:00, 81.11it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 84%| | 106/126 [00:01<00:00, 81.66it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 85%| | 107/126 [00:01<00:00, 82.20it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 86%| | 108/126 [00:01<00:00, 82.76it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 87%| | 109/126 [00:01<00:00, 83.31it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 87%| | 110/126 [00:01<00:00, 83.85it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 88%| | 111/126 [00:01<00:00, 84.41it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 89%| | 112/126 [00:01<00:00, 84.83it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 90%| | 113/126 [00:01<00:00, 85.37it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 90%| | 114/126 [00:01<00:00, 85.91it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 91%| | 115/126 [00:01<00:00, 86.45it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 92%| | 116/126 [00:01<00:00, 86.98it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 93%| | 117/126 [00:01<00:00, 87.52it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 94%| | 118/126 [00:01<00:00, 88.06it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 94%| | 119/126 [00:01<00:00, 88.60it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 95%| | 120/126 [00:01<00:00, 89.12it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 96%| | 121/126 [00:01<00:00, 89.65it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 97%| | 122/126 [00:01<00:00, 90.19it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 98%| | 123/126 [00:01<00:00, 90.76it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 98%| | 124/126 [00:01<00:00, 91.33it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 99%| | 125/126 [00:01<00:00, 91.89it/s, loss=0.00318, v_num=4.31e+7]
Epoch 84: 100%| | 126/126 [00:01<00:00, 92.46it/s, loss=0.00318, v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%| | 126/126 [00:01<00:00, 90.61it/s, loss=0.00318, v_num=4.31e+7]


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Epoch 84: 100%|      | 126/126 [00:01<00:00, 90.52it/s, loss=0.00318,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 82.31it/s, loss=0.00345,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 85: 80%|      | 101/126 [00:01<00:00, 73.29it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 81%|      | 102/126 [00:01<00:00, 73.44it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 82%|      | 103/126 [00:01<00:00, 73.98it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 83%|      | 104/126 [00:01<00:00, 74.51it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 83%|      | 105/126 [00:01<00:00, 75.04it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 84%|      | 106/126 [00:01<00:00, 75.57it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 85%|      | 107/126 [00:01<00:00, 76.10it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 86%|      | 108/126 [00:01<00:00, 76.63it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 87%|      | 109/126 [00:01<00:00, 77.16it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 87%|      | 110/126 [00:01<00:00, 77.68it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 88%|      | 111/126 [00:01<00:00, 78.21it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 89%|      | 112/126 [00:01<00:00, 78.73it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 90%|      | 113/126 [00:01<00:00, 79.25it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 90%|      | 114/126 [00:01<00:00, 79.77it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 91%|      | 115/126 [00:01<00:00, 80.29it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 92%|      | 116/126 [00:01<00:00, 80.81it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 93%|      | 117/126 [00:01<00:00, 81.32it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 94%|      | 118/126 [00:01<00:00, 81.83it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 94%|      | 119/126 [00:01<00:00, 82.34it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 95%|      | 120/126 [00:01<00:00, 82.84it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 96%|      | 121/126 [00:01<00:00, 83.34it/s, loss=0.00345,

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v_num=4.31e+7]
Epoch 85: 97%|      | 122/126 [00:01<00:00, 83.85it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 98%|      | 123/126 [00:01<00:00, 84.39it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 98%|      | 124/126 [00:01<00:00, 84.93it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 85.46it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 86.01it/s, loss=0.00345,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 84.51it/s, loss=0.00345,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 84.42it/s, loss=0.00345,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 80.33it/s, loss=0.00332,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 71.56it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 71.79it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 72.33it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 72.85it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 73.37it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 84%|      | 106/126 [00:01<00:00, 73.89it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 74.41it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 74.92it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 75.44it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 75.95it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 76.48it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 89%|      | 112/126 [00:01<00:00, 76.99it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 90%|      | 113/126 [00:01<00:00, 77.50it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 78.00it/s, loss=0.00332,
v_num=4.31e+7]

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Epoch 86: 91%|      | 115/126 [00:01<00:00, 78.52it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 79.02it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 79.53it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 94%|      | 118/126 [00:01<00:00, 80.03it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 80.53it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 81.03it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 81.53it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 82.03it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 82.56it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 83.09it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 83.62it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 84.15it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 82.64it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 82.57it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 92.62it/s, loss=0.00332,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 81.26it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 81.68it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 82.11it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 82.54it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 82.98it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 83.44it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 83.88it/s, loss=0.00332,
v_num=4.31e+7]

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Epoch 87: 86%|      | 108/126 [00:01<00:00, 84.33it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 84.78it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 85.21it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 85.66it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 86.11it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 86.56it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 87.02it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 91%|      | 115/126 [00:01<00:00, 87.48it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 87.94it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 88.41it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 88.88it/s, loss=0.00332,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.17it/s]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 89.34it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 89.81it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 90.28it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 90.77it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 91.28it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 91.79it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 92.30it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 92.82it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 90.60it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 90.47it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 81.89it/s, loss=0.00358,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 88: 80%| | 101/126 [00:01<00:00, 70.59it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 81%| | 102/126 [00:01<00:00, 71.02it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 82%| | 103/126 [00:01<00:00, 71.45it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 83%| | 104/126 [00:01<00:00, 71.89it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 83%| | 105/126 [00:01<00:00, 72.34it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 84%| | 106/126 [00:01<00:00, 72.78it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 85%| | 107/126 [00:01<00:00, 73.23it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 86%| | 108/126 [00:01<00:00, 73.68it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 87%| | 109/126 [00:01<00:00, 74.13it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 87%| | 110/126 [00:01<00:00, 74.58it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 88%| | 111/126 [00:01<00:00, 75.02it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 89%| | 112/126 [00:01<00:00, 75.47it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 90%| | 113/126 [00:01<00:00, 75.92it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 90%| | 114/126 [00:01<00:00, 76.37it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 91%| | 115/126 [00:01<00:00, 76.82it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 92%| | 116/126 [00:01<00:00, 77.27it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 93%| | 117/126 [00:01<00:00, 77.72it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 94%| | 118/126 [00:01<00:00, 78.17it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 94%| | 119/126 [00:01<00:00, 78.62it/s, loss=0.00358, v_num=4.31e+7]
 Validation DataLoader 0: 77%| | 20/26 [00:00<00:00, 194.35it/s]
 Epoch 88: 95%| | 120/126 [00:01<00:00, 79.05it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 96%| | 121/126 [00:01<00:00, 79.49it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 97%| | 122/126 [00:01<00:00, 79.87it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 98%| | 123/126 [00:01<00:00, 80.18it/s, loss=0.00358, v_num=4.31e+7]
 Epoch 88: 98%| | 124/126 [00:01<00:00, 80.53it/s, loss=0.00358, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 88: 99%|      | 125/126 [00:01<00:00, 80.88it/s, loss=0.00358,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 81.26it/s, loss=0.00358,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%|     | 126/126 [00:01<00:00, 79.42it/s, loss=0.00358,
v_num=4.31e+7]
Epoch 88: 100%|     | 126/126 [00:01<00:00, 79.31it/s, loss=0.00358,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 79.27it/s, loss=0.00348,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 69.12it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 69.30it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 69.78it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 70.26it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 70.74it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 71.23it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 71.71it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 72.19it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 72.67it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 73.14it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 73.62it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 74.09it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 74.56it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 75.03it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 75.49it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 75.96it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 76.42it/s, loss=0.00348,
v_num=4.31e+7]

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Epoch 89: 94%|      | 118/126 [00:01<00:00, 76.88it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 77.34it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 77.79it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 96%|      | 121/126 [00:01<00:00, 78.25it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 78.71it/s, loss=0.00348,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.54it/s]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 79.18it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 79.66it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 80.13it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 80.61it/s, loss=0.00348,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|     | 126/126 [00:01<00:00, 78.56it/s, loss=0.00348,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 78.47it/s, loss=0.00348,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 80.70it/s, loss=0.00336,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 71.49it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 71.53it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 72.06it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 72.58it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 73.10it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 73.62it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 74.15it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 74.66it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 87%|      | 109/126 [00:01<00:00, 75.18it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 75.69it/s, loss=0.00336,

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v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 76.23it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 76.73it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 77.25it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 90%|      | 114/126 [00:01<00:00, 77.76it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 78.27it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 78.78it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 79.29it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 94%|      | 118/126 [00:01<00:00, 79.79it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 80.30it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 80.80it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 81.30it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 81.80it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 82.32it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 82.85it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 83.38it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 83.90it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 82.31it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 82.23it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 81.25it/s, loss=0.00311,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 71.63it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 81%|      | 102/126 [00:01<00:00, 71.39it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 82%|      | 103/126 [00:01<00:00, 71.78it/s, loss=0.00311,
v_num=4.31e+7]

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Epoch 91: 83%|      | 104/126 [00:01<00:00, 72.19it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 83%|      | 105/126 [00:01<00:00, 72.60it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 84%|      | 106/126 [00:01<00:00, 73.00it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 85%|      | 107/126 [00:01<00:00, 73.42it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 86%|      | 108/126 [00:01<00:00, 73.82it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 87%|      | 109/126 [00:01<00:00, 74.24it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 87%|      | 110/126 [00:01<00:00, 74.65it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 88%|      | 111/126 [00:01<00:00, 75.07it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 89%|      | 112/126 [00:01<00:00, 75.49it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 90%|      | 113/126 [00:01<00:00, 75.91it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 90%|      | 114/126 [00:01<00:00, 76.34it/s, loss=0.00311,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 148.81it/s]
Epoch 91: 91%|      | 115/126 [00:01<00:00, 76.76it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 92%|      | 116/126 [00:01<00:00, 77.20it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 93%|      | 117/126 [00:01<00:00, 77.63it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 94%|      | 118/126 [00:01<00:00, 78.07it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 94%|      | 119/126 [00:01<00:00, 78.51it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 95%|      | 120/126 [00:01<00:00, 78.94it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 96%|      | 121/126 [00:01<00:00, 79.38it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 97%|      | 122/126 [00:01<00:00, 79.82it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 98%|      | 123/126 [00:01<00:00, 80.29it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 98%|      | 124/126 [00:01<00:00, 80.76it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 99%|      | 125/126 [00:01<00:00, 81.23it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 81.70it/s, loss=0.00311,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|     | 126/126 [00:01<00:00, 80.01it/s, loss=0.00311,

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v_num=4.31e+7]
Epoch 91: 100%|      | 126/126 [00:01<00:00, 79.91it/s, loss=0.00311,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 72.49it/s, loss=0.0032,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|      | 101/126 [00:01<00:00, 64.56it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 81%|      | 102/126 [00:01<00:00, 64.79it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 82%|      | 103/126 [00:01<00:00, 65.28it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 83%|      | 104/126 [00:01<00:00, 65.76it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 83%|      | 105/126 [00:01<00:00, 66.25it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 84%|      | 106/126 [00:01<00:00, 66.73it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 85%|      | 107/126 [00:01<00:00, 67.21it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 86%|      | 108/126 [00:01<00:00, 67.69it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 87%|      | 109/126 [00:01<00:00, 68.17it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 87%|      | 110/126 [00:01<00:00, 68.65it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 88%|      | 111/126 [00:01<00:00, 69.13it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 89%|      | 112/126 [00:01<00:00, 69.60it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 90%|      | 113/126 [00:01<00:00, 70.08it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 90%|      | 114/126 [00:01<00:00, 70.55it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 91%|      | 115/126 [00:01<00:00, 71.03it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 92%|      | 116/126 [00:01<00:00, 71.50it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 93%|      | 117/126 [00:01<00:00, 71.96it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 94%|      | 118/126 [00:01<00:00, 72.43it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 94%|      | 119/126 [00:01<00:00, 72.90it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 95%|      | 120/126 [00:01<00:00, 73.36it/s, loss=0.0032,
v_num=4.31e+7]

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Epoch 92: 96%|      | 121/126 [00:01<00:00, 73.83it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 97%|      | 122/126 [00:01<00:00, 74.30it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 98%|      | 123/126 [00:01<00:00, 74.79it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 98%|      | 124/126 [00:01<00:00, 75.28it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 75.77it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 76.27it/s, loss=0.0032,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 75.07it/s, loss=0.0032,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 75.01it/s, loss=0.0032,
v_num=4.31e+7]Mapping latent space...

Epoch 93: 79%|      | 100/126 [00:01<00:00, 79.11it/s, loss=0.00334,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 69.87it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 70.30it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 70.76it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 71.21it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 71.66it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 72.12it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 72.57it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 73.03it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 73.48it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 73.94it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 74.39it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 74.85it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 75.31it/s, loss=0.00334,
v_num=4.31e+7]

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Epoch 93: 90%|      | 114/126 [00:01<00:00, 75.77it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 76.24it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 76.70it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 93%|      | 117/126 [00:01<00:00, 77.16it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 77.63it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 78.09it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 78.54it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 79.00it/s, loss=0.00334,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 216.06it/s]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 79.46it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 79.95it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 80.43it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 80.91it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 81.40it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 79.95it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 79.85it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 68.95it/s, loss=0.00337,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 61.55it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 61.76it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 62.18it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 62.56it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 62.96it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 63.35it/s, loss=0.00337,
v_num=4.31e+7]

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Epoch 94: 85%|      | 107/126 [00:01<00:00, 63.75it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 64.14it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 64.54it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 64.93it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 65.33it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 65.72it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 66.11it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 66.51it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 91%|      | 115/126 [00:01<00:00, 66.91it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 67.31it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 67.72it/s, loss=0.00337,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.03it/s]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 68.12it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 68.52it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 68.92it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 69.33it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 69.74it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 70.17it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 70.59it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 71.02it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 71.45it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|     | 126/126 [00:01<00:00, 70.20it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 70.13it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 79.01it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|          | 101/126 [00:01<00:00, 69.46it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 81%|          | 102/126 [00:01<00:00, 69.45it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 82%|          | 103/126 [00:01<00:00, 69.98it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 83%|          | 104/126 [00:01<00:00, 70.49it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 83%|          | 105/126 [00:01<00:00, 71.02it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 84%|          | 106/126 [00:01<00:00, 71.52it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 85%|          | 107/126 [00:01<00:00, 72.04it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 86%|          | 108/126 [00:01<00:00, 72.55it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 87%|          | 109/126 [00:01<00:00, 73.07it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 87%|          | 110/126 [00:01<00:00, 73.56it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 88%|          | 111/126 [00:01<00:00, 74.09it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 89%|          | 112/126 [00:01<00:00, 74.58it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 90%|          | 113/126 [00:01<00:00, 75.10it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 90%|          | 114/126 [00:01<00:00, 75.59it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 91%|          | 115/126 [00:01<00:00, 76.11it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 92%|          | 116/126 [00:01<00:00, 76.60it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 93%|          | 117/126 [00:01<00:00, 77.11it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 94%|          | 118/126 [00:01<00:00, 77.60it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 94%|          | 119/126 [00:01<00:00, 78.10it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 95%|          | 120/126 [00:01<00:00, 78.58it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 96%|          | 121/126 [00:01<00:00, 79.08it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 97%|          | 122/126 [00:01<00:00, 79.56it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 98%|          | 123/126 [00:01<00:00, 79.98it/s, loss=0.00331,
v_num=4.31e+7]

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Epoch 95: 98%|      | 124/126 [00:01<00:00, 80.50it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 81.02it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 81.54it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 80.14it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 80.07it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...

Epoch 96: 79%|      | 100/126 [00:01<00:00, 78.17it/s, loss=0.00332,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|      | 101/126 [00:01<00:00, 69.62it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 81%|      | 102/126 [00:01<00:00, 69.95it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 82%|      | 103/126 [00:01<00:00, 70.44it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 83%|      | 104/126 [00:01<00:00, 70.93it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 83%|      | 105/126 [00:01<00:00, 71.42it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 84%|      | 106/126 [00:01<00:00, 71.92it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 85%|      | 107/126 [00:01<00:00, 72.42it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 86%|      | 108/126 [00:01<00:00, 72.92it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 87%|      | 109/126 [00:01<00:00, 73.42it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 87%|      | 110/126 [00:01<00:00, 73.91it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 88%|      | 111/126 [00:01<00:00, 74.41it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 89%|      | 112/126 [00:01<00:00, 74.90it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 90%|      | 113/126 [00:01<00:00, 75.39it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 90%|      | 114/126 [00:01<00:00, 75.88it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 91%|      | 115/126 [00:01<00:00, 76.38it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 92%|      | 116/126 [00:01<00:00, 76.87it/s, loss=0.00332,
v_num=4.31e+7]

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Epoch 96: 93%|      | 117/126 [00:01<00:00, 77.36it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 94%|      | 118/126 [00:01<00:00, 77.85it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 94%|      | 119/126 [00:01<00:00, 78.34it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 95%|      | 120/126 [00:01<00:00, 78.82it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 96%|      | 121/126 [00:01<00:00, 79.30it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 97%|      | 122/126 [00:01<00:00, 79.79it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 98%|      | 123/126 [00:01<00:00, 80.30it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 98%|      | 124/126 [00:01<00:00, 80.82it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 81.33it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 81.85it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 79.75it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 79.67it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 91.96it/s, loss=0.00378,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 80.46it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 81%|      | 102/126 [00:01<00:00, 80.52it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 82%|      | 103/126 [00:01<00:00, 81.09it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 83%|      | 104/126 [00:01<00:00, 81.66it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 83%|      | 105/126 [00:01<00:00, 82.23it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 84%|      | 106/126 [00:01<00:00, 82.80it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 85%|      | 107/126 [00:01<00:00, 83.37it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 86%|      | 108/126 [00:01<00:00, 83.92it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 84.49it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 85.05it/s, loss=0.00378,

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v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 85.62it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 86.16it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 86.71it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 87.26it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 87.81it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 88.35it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 88.89it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 89.43it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 89.97it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 90.50it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 91.03it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 91.57it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 92.13it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 92.71it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 93.28it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 93.85it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 90.65it/s, loss=0.00378,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 90.56it/s, loss=0.00378,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 90.28it/s, loss=0.00344,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|      | 101/126 [00:01<00:00, 78.29it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 81%|      | 102/126 [00:01<00:00, 78.70it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 82%|      | 103/126 [00:01<00:00, 79.13it/s, loss=0.00344,
v_num=4.31e+7]

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Epoch 98: 83%|      | 104/126 [00:01<00:00, 79.56it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 83%|      | 105/126 [00:01<00:00, 80.00it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 84%|      | 106/126 [00:01<00:00, 80.44it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 85%|      | 107/126 [00:01<00:00, 80.88it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 86%|      | 108/126 [00:01<00:00, 81.32it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 87%|      | 109/126 [00:01<00:00, 81.76it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 87%|      | 110/126 [00:01<00:00, 82.21it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 88%|      | 111/126 [00:01<00:00, 82.65it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 89%|      | 112/126 [00:01<00:00, 83.10it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 90%|      | 113/126 [00:01<00:00, 83.55it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 90%|      | 114/126 [00:01<00:00, 84.00it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 91%|      | 115/126 [00:01<00:00, 84.45it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 92%|      | 116/126 [00:01<00:00, 84.91it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 93%|      | 117/126 [00:01<00:00, 85.36it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 94%|      | 118/126 [00:01<00:00, 85.81it/s, loss=0.00344,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.48it/s]
Epoch 98: 94%|      | 119/126 [00:01<00:00, 86.26it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 95%|      | 120/126 [00:01<00:00, 86.71it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 96%|      | 121/126 [00:01<00:00, 87.16it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 97%|      | 122/126 [00:01<00:00, 87.63it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 88.14it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 88.64it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 89.14it/s, loss=0.00344,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 89.65it/s, loss=0.00344,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 85.38it/s, loss=0.00344,

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v_num=4.31e+7]
Epoch 98: 100%|      | 126/126 [00:01<00:00, 85.23it/s, loss=0.00344,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 79%|      | 100/126 [00:01<00:00, 78.83it/s, loss=0.00337,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|      | 101/126 [00:01<00:00, 69.66it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 81%|      | 102/126 [00:01<00:00, 70.07it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 82%|      | 103/126 [00:01<00:00, 70.49it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 83%|      | 104/126 [00:01<00:00, 70.91it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 83%|      | 105/126 [00:01<00:00, 71.34it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 84%|      | 106/126 [00:01<00:00, 71.77it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 85%|      | 107/126 [00:01<00:00, 72.19it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 86%|      | 108/126 [00:01<00:00, 72.62it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 87%|      | 109/126 [00:01<00:00, 73.04it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 87%|      | 110/126 [00:01<00:00, 73.47it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 88%|      | 111/126 [00:01<00:00, 73.89it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 89%|      | 112/126 [00:01<00:00, 74.32it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 90%|      | 113/126 [00:01<00:00, 74.75it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 90%|      | 114/126 [00:01<00:00, 75.19it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 91%|      | 115/126 [00:01<00:00, 75.62it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 92%|      | 116/126 [00:01<00:00, 76.06it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 93%|      | 117/126 [00:01<00:00, 76.49it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 94%|      | 118/126 [00:01<00:00, 76.93it/s, loss=0.00337,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.34it/s]
Epoch 99: 94%|      | 119/126 [00:01<00:00, 77.36it/s, loss=0.00337,
v_num=4.31e+7]

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Epoch 99: 95%|      | 120/126 [00:01<00:00, 77.80it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 96%|      | 121/126 [00:01<00:00, 78.23it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 97%|      | 122/126 [00:01<00:00, 78.69it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 79.16it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 79.63it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 80.10it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 80.58it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 79.07it/s, loss=0.00337,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 78.97it/s, loss=0.00337,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 68.85it/s, loss=0.00313,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 62.19it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 62.29it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 62.77it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 63.26it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 63.71it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 84%|     | 106/126 [00:01<00:00, 64.17it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 85%|     | 107/126 [00:01<00:00, 64.63it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 86%|     | 108/126 [00:01<00:00, 65.11it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 87%|     | 109/126 [00:01<00:00, 65.56it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 87%|     | 110/126 [00:01<00:00, 66.04it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 88%|     | 111/126 [00:01<00:00, 66.49it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 89%|     | 112/126 [00:01<00:00, 66.96it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 90%|     | 113/126 [00:01<00:00, 67.41it/s, loss=0.00313,

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v_num=4.31e+7]
Epoch 100: 90%|      | 114/126 [00:01<00:00, 67.88it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 91%|      | 115/126 [00:01<00:00, 68.33it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 92%|      | 116/126 [00:01<00:00, 68.80it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 69.24it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 69.71it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 70.15it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 70.59it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 71.03it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 71.48it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 71.96it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 72.43it/s, loss=0.00313,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 242.42it/s]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 72.73it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 73.07it/s, loss=0.00313,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 71.39it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 71.27it/s, loss=0.00313,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 66.75it/s, loss=0.00333,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 59.45it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 59.68it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 82%|      | 103/126 [00:01<00:00, 60.12it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 60.56it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 83%|      | 105/126 [00:01<00:00, 61.00it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 84%|      | 106/126 [00:01<00:00, 61.44it/s, loss=0.00333,

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v_num=4.31e+7]
Epoch 101: 85%|      | 107/126 [00:01<00:00, 61.88it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 86%|      | 108/126 [00:01<00:00, 62.31it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 87%|      | 109/126 [00:01<00:00, 62.75it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 87%|      | 110/126 [00:01<00:00, 63.18it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 88%|      | 111/126 [00:01<00:00, 63.61it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 89%|      | 112/126 [00:01<00:00, 64.04it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 90%|      | 113/126 [00:01<00:00, 64.46it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 90%|      | 114/126 [00:01<00:00, 64.89it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 91%|      | 115/126 [00:01<00:00, 65.31it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 92%|      | 116/126 [00:01<00:00, 65.73it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 93%|      | 117/126 [00:01<00:00, 66.15it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 94%|      | 118/126 [00:01<00:00, 66.57it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 94%|      | 119/126 [00:01<00:00, 66.98it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 95%|      | 120/126 [00:01<00:00, 67.39it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 96%|      | 121/126 [00:01<00:00, 67.81it/s, loss=0.00333,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.99it/s]
Epoch 101: 97%|      | 122/126 [00:01<00:00, 68.23it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 98%|      | 123/126 [00:01<00:00, 68.66it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 69.09it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 99%|      | 125/126 [00:01<00:00, 69.52it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 69.96it/s, loss=0.00333,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%|     | 126/126 [00:01<00:00, 68.84it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 68.78it/s, loss=0.00333,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 79%|      | 100/126 [00:01<00:00, 71.15it/s, loss=0.00366,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|          | 101/126 [00:01<00:00, 63.15it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 81%|          | 102/126 [00:01<00:00, 63.46it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 82%|          | 103/126 [00:01<00:00, 63.92it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 83%|          | 104/126 [00:01<00:00, 64.37it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 83%|          | 105/126 [00:01<00:00, 64.82it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 84%|          | 106/126 [00:01<00:00, 65.28it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 85%|          | 107/126 [00:01<00:00, 65.74it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 86%|          | 108/126 [00:01<00:00, 66.19it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 87%|          | 109/126 [00:01<00:00, 66.64it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 87%|          | 110/126 [00:01<00:00, 67.09it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 88%|          | 111/126 [00:01<00:00, 67.54it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 89%|          | 112/126 [00:01<00:00, 67.99it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 90%|          | 113/126 [00:01<00:00, 68.43it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 90%|          | 114/126 [00:01<00:00, 68.88it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 91%|          | 115/126 [00:01<00:00, 69.32it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 92%|          | 116/126 [00:01<00:00, 69.76it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 93%|          | 117/126 [00:01<00:00, 70.20it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 94%|          | 118/126 [00:01<00:00, 70.63it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 94%|          | 119/126 [00:01<00:00, 71.06it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 95%|          | 120/126 [00:01<00:00, 71.48it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 96%|          | 121/126 [00:01<00:00, 71.91it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 97%|          | 122/126 [00:01<00:00, 72.35it/s, loss=0.00366,
v_num=4.31e+7]

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Validation DataLoader 0:  88%|          | 23/26 [00:00<00:00, 227.19it/s]
Epoch 102:  98%|          | 123/126 [00:01<00:00, 72.79it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102:  98%|          | 124/126 [00:01<00:00, 73.24it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102:  99%|          | 125/126 [00:01<00:00, 73.69it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 100%|          | 126/126 [00:01<00:00, 74.15it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|          | 126/126 [00:01<00:00, 72.90it/s, loss=0.00366,
v_num=4.31e+7]
Epoch 102: 100%|          | 126/126 [00:01<00:00, 72.83it/s, loss=0.00366,
v_num=4.31e+7]Mapping latent space...
Epoch 103:  79%|          | 100/126 [00:01<00:00, 76.33it/s, loss=0.00352,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|          | 0/26 [00:00<?, ?it/s]
Epoch 103:  80%|          | 101/126 [00:01<00:00, 67.36it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  81%|          | 102/126 [00:01<00:00, 67.62it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  82%|          | 103/126 [00:01<00:00, 68.14it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  83%|          | 104/126 [00:01<00:00, 68.64it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  83%|          | 105/126 [00:01<00:00, 69.17it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  84%|          | 106/126 [00:01<00:00, 69.65it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  85%|          | 107/126 [00:01<00:00, 70.18it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  86%|          | 108/126 [00:01<00:00, 70.67it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  87%|          | 109/126 [00:01<00:00, 71.17it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  87%|          | 110/126 [00:01<00:00, 71.67it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  88%|          | 111/126 [00:01<00:00, 72.18it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  89%|          | 112/126 [00:01<00:00, 72.67it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  90%|          | 113/126 [00:01<00:00, 73.17it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  90%|          | 114/126 [00:01<00:00, 73.66it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103:  91%|          | 115/126 [00:01<00:00, 74.15it/s, loss=0.00352,
v_num=4.31e+7]

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Epoch 103: 92%|      | 116/126 [00:01<00:00, 74.64it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 93%|      | 117/126 [00:01<00:00, 75.13it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 94%|      | 118/126 [00:01<00:00, 75.62it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 94%|      | 119/126 [00:01<00:00, 76.11it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 76.58it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 77.07it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 77.55it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 78.06it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 78.57it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 79.08it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 79.59it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 78.29it/s, loss=0.00352,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 78.23it/s, loss=0.00352,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 88.88it/s, loss=0.00315,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 77.46it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 77.76it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 78.28it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 78.80it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 79.30it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 79.82it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 80.33it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 80.86it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 81.40it/s, loss=0.00315,

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v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 81.93it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 82.48it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 83.00it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 83.53it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 84.06it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 84.59it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 85.12it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 85.65it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 86.18it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 86.70it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 87.21it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 87.73it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 88.26it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 88.82it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 89.38it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 89.93it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 90.50it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 88.83it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 88.74it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...

Epoch 105: 79%|      | 100/126 [00:01<00:00, 67.28it/s, loss=0.00312,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|      | 101/126 [00:01<00:00, 60.27it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 81%|      | 102/126 [00:01<00:00, 60.37it/s, loss=0.00312,

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v_num=4.31e+7]
Epoch 105: 82%|      | 103/126 [00:01<00:00, 60.80it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 83%|      | 104/126 [00:01<00:00, 61.23it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 83%|      | 105/126 [00:01<00:00, 61.65it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 84%|      | 106/126 [00:01<00:00, 62.08it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 85%|      | 107/126 [00:01<00:00, 62.50it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 86%|      | 108/126 [00:01<00:00, 62.92it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 87%|      | 109/126 [00:01<00:00, 63.35it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 87%|      | 110/126 [00:01<00:00, 63.76it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 88%|      | 111/126 [00:01<00:00, 64.17it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 89%|      | 112/126 [00:01<00:00, 64.59it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 90%|      | 113/126 [00:01<00:00, 65.00it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 90%|      | 114/126 [00:01<00:00, 65.41it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 91%|      | 115/126 [00:01<00:00, 65.82it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 92%|      | 116/126 [00:01<00:00, 66.23it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 93%|      | 117/126 [00:01<00:00, 66.63it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 94%|      | 118/126 [00:01<00:00, 67.04it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 94%|      | 119/126 [00:01<00:00, 67.44it/s, loss=0.00312,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 192.99it/s]
Epoch 105: 95%|      | 120/126 [00:01<00:00, 67.83it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 96%|      | 121/126 [00:01<00:00, 68.22it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 68.62it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 69.03it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 69.44it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 69.85it/s, loss=0.00312,
v_num=4.31e+7]

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Epoch 105: 100%|      | 126/126 [00:01<00:00, 70.25it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|      | 126/126 [00:01<00:00, 69.02it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 105: 100%|      | 126/126 [00:01<00:00, 68.95it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 106:  79%|      | 100/126 [00:01<00:00, 69.45it/s, loss=0.00342,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 106:  80%|      | 101/126 [00:01<00:00, 60.92it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  81%|      | 102/126 [00:01<00:00, 60.99it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  82%|      | 103/126 [00:01<00:00, 61.42it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  83%|      | 104/126 [00:01<00:00, 61.77it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  83%|      | 105/126 [00:01<00:00, 62.21it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  84%|      | 106/126 [00:01<00:00, 62.64it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  85%|      | 107/126 [00:01<00:00, 63.08it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  86%|      | 108/126 [00:01<00:00, 63.51it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  87%|      | 109/126 [00:01<00:00, 63.95it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  87%|      | 110/126 [00:01<00:00, 64.39it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  88%|      | 111/126 [00:01<00:00, 64.83it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  89%|      | 112/126 [00:01<00:00, 65.27it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  90%|      | 113/126 [00:01<00:00, 65.71it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  90%|      | 114/126 [00:01<00:00, 66.14it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  91%|      | 115/126 [00:01<00:00, 66.58it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  92%|      | 116/126 [00:01<00:00, 67.01it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  93%|      | 117/126 [00:01<00:00, 67.44it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  94%|      | 118/126 [00:01<00:00, 67.87it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106:  94%|      | 119/126 [00:01<00:00, 68.30it/s, loss=0.00342,

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v_num=4.31e+7]
Epoch 106: 95%|      | 120/126 [00:01<00:00, 68.73it/s, loss=0.00342,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 203.41it/s]
Epoch 106: 96%|      | 121/126 [00:01<00:00, 69.15it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 97%|      | 122/126 [00:01<00:00, 69.58it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 98%|      | 123/126 [00:01<00:00, 70.02it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 98%|      | 124/126 [00:01<00:00, 70.46it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 99%|      | 125/126 [00:01<00:00, 70.90it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 71.34it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|     | 126/126 [00:01<00:00, 70.25it/s, loss=0.00342,
v_num=4.31e+7]
Epoch 106: 100%|     | 126/126 [00:01<00:00, 70.18it/s, loss=0.00342,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|      | 100/126 [00:01<00:00, 81.09it/s, loss=0.00346,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|      | 101/126 [00:01<00:00, 71.73it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 81%|      | 102/126 [00:01<00:00, 71.81it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 82%|      | 103/126 [00:01<00:00, 72.36it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 83%|      | 104/126 [00:01<00:00, 72.86it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 83%|      | 105/126 [00:01<00:00, 73.40it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 84%|      | 106/126 [00:01<00:00, 73.91it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 85%|      | 107/126 [00:01<00:00, 74.44it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 86%|      | 108/126 [00:01<00:00, 74.96it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 87%|      | 109/126 [00:01<00:00, 75.50it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 87%|      | 110/126 [00:01<00:00, 76.00it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 88%|      | 111/126 [00:01<00:00, 76.54it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 89%|      | 112/126 [00:01<00:00, 77.04it/s, loss=0.00346,

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v_num=4.31e+7]
Epoch 107: 90%|      | 113/126 [00:01<00:00, 77.56it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 90%|      | 114/126 [00:01<00:00, 78.07it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 91%|      | 115/126 [00:01<00:00, 78.59it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 79.10it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 79.60it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 80.11it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 80.61it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 81.11it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 81.62it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 82.12it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 82.66it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 83.19it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 83.73it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 84.27it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 82.84it/s, loss=0.00346,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 82.77it/s, loss=0.00346,
v_num=4.31e+7]Mapping latent space...

Epoch 108: 79%|      | 100/126 [00:01<00:00, 74.83it/s, loss=0.00324,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|      | 101/126 [00:01<00:00, 65.67it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 81%|      | 102/126 [00:01<00:00, 65.89it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 82%|      | 103/126 [00:01<00:00, 66.36it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 83%|      | 104/126 [00:01<00:00, 66.84it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 83%|      | 105/126 [00:01<00:00, 67.31it/s, loss=0.00324,

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v_num=4.31e+7]
Epoch 108: 84%|      | 106/126 [00:01<00:00, 67.78it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 85%|      | 107/126 [00:01<00:00, 68.24it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 86%|      | 108/126 [00:01<00:00, 68.71it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 87%|      | 109/126 [00:01<00:00, 69.17it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 87%|      | 110/126 [00:01<00:00, 69.64it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 88%|      | 111/126 [00:01<00:00, 70.10it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 89%|      | 112/126 [00:01<00:00, 70.56it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 90%|      | 113/126 [00:01<00:00, 71.01it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 90%|      | 114/126 [00:01<00:00, 71.47it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 91%|      | 115/126 [00:01<00:00, 71.92it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 92%|      | 116/126 [00:01<00:00, 72.37it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 93%|      | 117/126 [00:01<00:00, 72.82it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 94%|      | 118/126 [00:01<00:00, 73.27it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 94%|      | 119/126 [00:01<00:00, 73.71it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 95%|      | 120/126 [00:01<00:00, 74.15it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 96%|      | 121/126 [00:01<00:00, 74.60it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 97%|      | 122/126 [00:01<00:00, 75.04it/s, loss=0.00324,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 226.66it/s]
Epoch 108: 98%|      | 123/126 [00:01<00:00, 75.50it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 75.96it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 76.42it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 76.89it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 75.56it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 75.48it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...

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Epoch 109: 79%|          | 100/126 [00:01<00:00, 79.38it/s, loss=0.00298,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 109: 80%|          | 101/126 [00:01<00:00, 69.79it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 81%|          | 102/126 [00:01<00:00, 69.84it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 82%|          | 103/126 [00:01<00:00, 70.36it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 83%|          | 104/126 [00:01<00:00, 70.85it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 83%|          | 105/126 [00:01<00:00, 71.36it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 84%|          | 106/126 [00:01<00:00, 71.86it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 85%|          | 107/126 [00:01<00:00, 72.37it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 86%|          | 108/126 [00:01<00:00, 72.86it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 87%|          | 109/126 [00:01<00:00, 73.37it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 87%|          | 110/126 [00:01<00:00, 73.87it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 88%|          | 111/126 [00:01<00:00, 74.38it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 89%|          | 112/126 [00:01<00:00, 74.86it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 90%|          | 113/126 [00:01<00:00, 75.36it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 90%|          | 114/126 [00:01<00:00, 75.85it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 91%|          | 115/126 [00:01<00:00, 76.35it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 92%|          | 116/126 [00:01<00:00, 76.84it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 93%|          | 117/126 [00:01<00:00, 77.33it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 94%|          | 118/126 [00:01<00:00, 77.82it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 94%|          | 119/126 [00:01<00:00, 78.33it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 95%|          | 120/126 [00:01<00:00, 78.80it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 96%|          | 121/126 [00:01<00:00, 79.28it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 97%|          | 122/126 [00:01<00:00, 79.78it/s, loss=0.00298,

```



```

v_num=4.31e+7]
Epoch 109: 98%|      | 123/126 [00:01<00:00, 80.29it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 98%|      | 124/126 [00:01<00:00, 80.81it/s, loss=0.00298,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.64it/s]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 81.32it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 81.84it/s, loss=0.00298,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 80.52it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 80.45it/s, loss=0.00298,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 72.60it/s, loss=0.00298,
v_num=4.31e+7]
Training for latent_dim 7 done.

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/core/lightning.py:2067: DeprecationWarning:
`torch.distributed._sharded_tensor` will be deprecated, use
`torch.distributed._shard.sharded_tensor` instead
  from torch.distributed._sharded_tensor import pre_load_state_dict_hook,
state_dict_hook
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/connectors/callback_connector.py:191:
LightningDeprecationWarning: Setting `Trainer(weights_summary=full)` is
deprecated in v1.5 and will be removed in v1.7. Please pass
`pytorch_lightning.callbacks.model_summary.ModelSummary` with `max_depth`
directly to the Trainer's `callbacks` argument instead.
  rank_zero_deprecation(
GPU available: True, used: True
TPU available: False, using: 0 TPU cores
IPU available: False, using: 0 IPUs
HPU available: False, using: 0 HPUs
/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-
packages/pytorch_lightning/trainer/configuration_validator.py:307:
LightningDeprecationWarning: The `LightningModule.on_epoch_end` hook was
deprecated in v1.6 and will be removed in v1.8. Please use
`LightningModule.on_train/validation/test_epoch_end` instead.
  rank_zero_deprecation(
LOCAL_RANK: 0 - CUDA_VISIBLE_DEVICES: [0,1,2,3]

```

	Name	Type	Params
0	encoder	Sequential	8.9 K
1	encoder.0	Linear	5.9 K
2	encoder.1	Tanh	0

3		encoder.2		BatchNorm1d		128
4		encoder.3		Linear		2.1 K
5		encoder.4		Tanh		0
6		encoder.5		BatchNorm1d		64
7		encoder.6		Linear		528
8		encoder.7		Tanh		0
9		encoder.8		BatchNorm1d		32
10		encoder.9		Linear		136
11		encoder.10		Tanh		0
12		encoder.11		BatchNorm1d		16
13		decoder		Sequential		8.9 K
14		decoder.0		Linear		144
15		decoder.1		Tanh		0
16		decoder.2		BatchNorm1d		32
17		decoder.3		Linear		544
18		decoder.4		Tanh		0
19		decoder.5		BatchNorm1d		64
20		decoder.6		Linear		2.1 K
21		decoder.7		Tanh		0
22		decoder.8		BatchNorm1d		128
23		decoder.9		Linear		5.9 K
24		decoder.10		Sigmoid		0

17.8 K Trainable params

0 Non-trainable params

17.8 K Total params

0.071 Total estimated model params size (MB)

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, val_dataloader 0, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

rank_zero_warn(

Loading all data...

Training on 10000 examples, validating on 2501 examples

Sanity Checking DataLoader 0: 100%| | 2/2 [00:00<00:00,

2.76it/s]Saving samples for epoch #0...

Mapping latent space...

Epoch 0: 2%| | 2/126 [00:00<00:11, 10.69it/s, loss=0.118,

v_num=4.31e+7]

/scratch/midway2/arminsh/envs/torch2/lib/python3.11/site-

packages/pytorch_lightning/trainer/connectors/data_connector.py:240:

PossibleUserWarning: The dataloader, train_dataloader, does not have many workers which may be a bottleneck. Consider increasing the value of the `num_workers` argument` (try 28 which is the number of cpus on this machine) in the `DataLoader` init to improve performance.

```

rank_zero_warn(
Epoch 0: 79%|          | 100/126 [00:01<00:00, 76.93it/s, loss=0.1,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 0: 80%|          | 101/126 [00:01<00:00, 67.87it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 81%|          | 102/126 [00:01<00:00, 67.95it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 82%|          | 103/126 [00:01<00:00, 68.43it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 83%|          | 104/126 [00:01<00:00, 68.90it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 83%|          | 105/126 [00:01<00:00, 69.37it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 84%|          | 106/126 [00:01<00:00, 69.85it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 85%|          | 107/126 [00:01<00:00, 70.32it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 86%|          | 108/126 [00:01<00:00, 70.79it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 87%|          | 109/126 [00:01<00:00, 71.26it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 87%|          | 110/126 [00:01<00:00, 71.72it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 88%|          | 111/126 [00:01<00:00, 72.18it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 89%|          | 112/126 [00:01<00:00, 72.64it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 90%|          | 113/126 [00:01<00:00, 73.10it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 90%|          | 114/126 [00:01<00:00, 73.53it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 91%|          | 115/126 [00:01<00:00, 73.99it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 92%|          | 116/126 [00:01<00:00, 74.44it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 93%|          | 117/126 [00:01<00:00, 74.89it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 94%|          | 118/126 [00:01<00:00, 75.34it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 94%|          | 119/126 [00:01<00:00, 75.79it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 95%|          | 120/126 [00:01<00:00, 76.24it/s, loss=0.1,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 209.97it/s]

```

```

Epoch 0: 96%|      | 121/126 [00:01<00:00, 76.67it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 97%|      | 122/126 [00:01<00:00, 77.13it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 98%|      | 123/126 [00:01<00:00, 77.60it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 98%|      | 124/126 [00:01<00:00, 78.07it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 99%|      | 125/126 [00:01<00:00, 78.55it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 79.02it/s, loss=0.1,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 0: 100%|     | 126/126 [00:01<00:00, 69.48it/s, loss=0.1,
v_num=4.31e+7]
Epoch 0: 100%|     | 126/126 [00:01<00:00, 69.29it/s, loss=0.1,
v_num=4.31e+7]Saving samples for epoch #0...
Mapping latent space...
Epoch 1: 79%|      | 100/126 [00:01<00:00, 81.58it/s, loss=0.0937,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 1: 80%|      | 101/126 [00:01<00:00, 70.80it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 81%|      | 102/126 [00:01<00:00, 70.93it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 82%|      | 103/126 [00:01<00:00, 71.43it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 83%|      | 104/126 [00:01<00:00, 71.92it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 83%|      | 105/126 [00:01<00:00, 72.42it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 84%|      | 106/126 [00:01<00:00, 72.88it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 85%|      | 107/126 [00:01<00:00, 73.38it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 86%|      | 108/126 [00:01<00:00, 73.87it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 87%|      | 109/126 [00:01<00:00, 74.36it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 87%|      | 110/126 [00:01<00:00, 74.84it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 88%|      | 111/126 [00:01<00:00, 75.32it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 89%|      | 112/126 [00:01<00:00, 75.81it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 90%|      | 113/126 [00:01<00:00, 76.28it/s, loss=0.0937,

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v_num=4.31e+7]
Epoch 1: 90%|      | 114/126 [00:01<00:00, 76.77it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 91%|      | 115/126 [00:01<00:00, 77.26it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 92%|      | 116/126 [00:01<00:00, 77.71it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 93%|      | 117/126 [00:01<00:00, 78.18it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 94%|      | 118/126 [00:01<00:00, 78.64it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 94%|      | 119/126 [00:01<00:00, 79.10it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 95%|      | 120/126 [00:01<00:00, 79.57it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 96%|      | 121/126 [00:01<00:00, 80.03it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 97%|      | 122/126 [00:01<00:00, 80.50it/s, loss=0.0937,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 225.86it/s]
Epoch 1: 98%|      | 123/126 [00:01<00:00, 80.98it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 98%|      | 124/126 [00:01<00:00, 81.47it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 99%|      | 125/126 [00:01<00:00, 81.96it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 82.45it/s, loss=0.0937,
v_num=4.31e+7]Mapping latent space...
Epoch 1: 100%|     | 126/126 [00:01<00:00, 80.78it/s, loss=0.0937,
v_num=4.31e+7]
Epoch 1: 100%|     | 126/126 [00:01<00:00, 80.65it/s, loss=0.0937,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 79%|      | 100/126 [00:01<00:00, 69.24it/s, loss=0.0894,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 2: 80%|      | 101/126 [00:01<00:00, 61.84it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 81%|      | 102/126 [00:01<00:00, 62.07it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 82%|      | 103/126 [00:01<00:00, 62.49it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 83%|      | 104/126 [00:01<00:00, 62.92it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 83%|      | 105/126 [00:01<00:00, 63.35it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 84%|      | 106/126 [00:01<00:00, 63.78it/s, loss=0.0894,

```

```

v_num=4.31e+7]
Epoch 2: 85%|      | 107/126 [00:01<00:00, 64.22it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 86%|      | 108/126 [00:01<00:00, 64.64it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 87%|      | 109/126 [00:01<00:00, 65.08it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 87%|      | 110/126 [00:01<00:00, 65.52it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 88%|      | 111/126 [00:01<00:00, 65.95it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 89%|      | 112/126 [00:01<00:00, 66.39it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 90%|      | 113/126 [00:01<00:00, 66.82it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 90%|      | 114/126 [00:01<00:00, 67.25it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 91%|      | 115/126 [00:01<00:00, 67.69it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 92%|      | 116/126 [00:01<00:00, 68.12it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 93%|      | 117/126 [00:01<00:00, 68.55it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 94%|      | 118/126 [00:01<00:00, 68.99it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 94%|      | 119/126 [00:01<00:00, 69.41it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 95%|      | 120/126 [00:01<00:00, 69.84it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 96%|      | 121/126 [00:01<00:00, 70.27it/s, loss=0.0894,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.48it/s]
Epoch 2: 97%|      | 122/126 [00:01<00:00, 70.70it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 98%|      | 123/126 [00:01<00:00, 71.15it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 98%|      | 124/126 [00:01<00:00, 71.60it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 99%|      | 125/126 [00:01<00:00, 72.05it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 72.51it/s, loss=0.0894,
v_num=4.31e+7]Mapping latent space...
Epoch 2: 100%|     | 126/126 [00:01<00:00, 71.26it/s, loss=0.0894,
v_num=4.31e+7]
Epoch 2: 100%|     | 126/126 [00:01<00:00, 71.17it/s, loss=0.0894,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 79%|      | 100/126 [00:01<00:00, 80.96it/s, loss=0.0836,

```

```

v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 3: 80%|          | 101/126 [00:01<00:00, 71.25it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 81%|          | 102/126 [00:01<00:00, 70.91it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 82%|          | 103/126 [00:01<00:00, 71.31it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 83%|          | 104/126 [00:01<00:00, 71.72it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 83%|          | 105/126 [00:01<00:00, 72.12it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 84%|          | 106/126 [00:01<00:00, 72.54it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 85%|          | 107/126 [00:01<00:00, 72.96it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 86%|          | 108/126 [00:01<00:00, 73.38it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 87%|          | 109/126 [00:01<00:00, 73.81it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 87%|          | 110/126 [00:01<00:00, 74.21it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 88%|          | 111/126 [00:01<00:00, 74.65it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 89%|          | 112/126 [00:01<00:00, 75.08it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 90%|          | 113/126 [00:01<00:00, 75.53it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 90%|          | 114/126 [00:01<00:00, 75.98it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 91%|          | 115/126 [00:01<00:00, 76.41it/s, loss=0.0836,
v_num=4.31e+7]
Validation DataLoader 0: 62%|          | 16/26 [00:00<00:00, 158.31it/s]
Epoch 3: 92%|          | 116/126 [00:01<00:00, 76.86it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 93%|          | 117/126 [00:01<00:00, 77.31it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 94%|          | 118/126 [00:01<00:00, 77.76it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 94%|          | 119/126 [00:01<00:00, 78.21it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 95%|          | 120/126 [00:01<00:00, 78.66it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 96%|          | 121/126 [00:01<00:00, 79.11it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 97%|          | 122/126 [00:01<00:00, 79.56it/s, loss=0.0836,

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v_num=4.31e+7]
Epoch 3: 98%|      | 123/126 [00:01<00:00, 80.03it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 98%|      | 124/126 [00:01<00:00, 80.51it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 99%|      | 125/126 [00:01<00:00, 80.98it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 81.45it/s, loss=0.0836,
v_num=4.31e+7]Mapping latent space...
Epoch 3: 100%|     | 126/126 [00:01<00:00, 79.78it/s, loss=0.0836,
v_num=4.31e+7]
Epoch 3: 100%|     | 126/126 [00:01<00:00, 79.65it/s, loss=0.0836,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 79%|      | 100/126 [00:01<00:00, 77.03it/s, loss=0.0749,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 4: 80%|      | 101/126 [00:01<00:00, 68.25it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 81%|      | 102/126 [00:01<00:00, 68.41it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 82%|      | 103/126 [00:01<00:00, 68.92it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 83%|      | 104/126 [00:01<00:00, 69.43it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 83%|      | 105/126 [00:01<00:00, 69.95it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 84%|      | 106/126 [00:01<00:00, 70.44it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 85%|      | 107/126 [00:01<00:00, 70.96it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 86%|      | 108/126 [00:01<00:00, 71.46it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 87%|      | 109/126 [00:01<00:00, 71.96it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 87%|      | 110/126 [00:01<00:00, 72.46it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 88%|      | 111/126 [00:01<00:00, 72.98it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 89%|      | 112/126 [00:01<00:00, 73.44it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 90%|      | 113/126 [00:01<00:00, 73.94it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 90%|      | 114/126 [00:01<00:00, 74.43it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 91%|      | 115/126 [00:01<00:00, 74.93it/s, loss=0.0749,
v_num=4.31e+7]

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Epoch 4: 92%|      | 116/126 [00:01<00:00, 75.42it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 93%|      | 117/126 [00:01<00:00, 75.91it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 94%|      | 118/126 [00:01<00:00, 76.40it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 94%|      | 119/126 [00:01<00:00, 76.89it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 95%|      | 120/126 [00:01<00:00, 77.38it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 96%|      | 121/126 [00:01<00:00, 77.87it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 97%|      | 122/126 [00:01<00:00, 78.36it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 98%|      | 123/126 [00:01<00:00, 78.87it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 98%|      | 124/126 [00:01<00:00, 79.39it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 99%|      | 125/126 [00:01<00:00, 79.90it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 80.42it/s, loss=0.0749,
v_num=4.31e+7]Mapping latent space...
Epoch 4: 100%|     | 126/126 [00:01<00:00, 73.79it/s, loss=0.0749,
v_num=4.31e+7]
Epoch 4: 100%|     | 126/126 [00:01<00:00, 73.64it/s, loss=0.0749,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 79%|      | 100/126 [00:01<00:00, 75.29it/s, loss=0.0635,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 5: 80%|      | 101/126 [00:01<00:00, 66.07it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 81%|      | 102/126 [00:01<00:00, 66.29it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 82%|      | 103/126 [00:01<00:00, 66.76it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 83%|      | 104/126 [00:01<00:00, 67.24it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 83%|      | 105/126 [00:01<00:00, 67.71it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 84%|      | 106/126 [00:01<00:00, 68.19it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 85%|      | 107/126 [00:01<00:00, 68.66it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 86%|      | 108/126 [00:01<00:00, 69.13it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 87%|      | 109/126 [00:01<00:00, 69.59it/s, loss=0.0635,

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v_num=4.31e+7]
Epoch 5: 87%|      | 110/126 [00:01<00:00, 70.06it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 88%|      | 111/126 [00:01<00:00, 70.52it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 89%|      | 112/126 [00:01<00:00, 70.98it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 90%|      | 113/126 [00:01<00:00, 71.44it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 90%|      | 114/126 [00:01<00:00, 71.87it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 91%|      | 115/126 [00:01<00:00, 72.33it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 92%|      | 116/126 [00:01<00:00, 72.79it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 93%|      | 117/126 [00:01<00:00, 73.24it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 94%|      | 118/126 [00:01<00:00, 73.69it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 94%|      | 119/126 [00:01<00:00, 74.14it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 95%|      | 120/126 [00:01<00:00, 74.59it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 96%|      | 121/126 [00:01<00:00, 75.03it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 97%|      | 122/126 [00:01<00:00, 75.48it/s, loss=0.0635,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.54it/s]
Epoch 5: 98%|      | 123/126 [00:01<00:00, 75.95it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 98%|      | 124/126 [00:01<00:00, 76.42it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 99%|      | 125/126 [00:01<00:00, 76.88it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 77.35it/s, loss=0.0635,
v_num=4.31e+7]Mapping latent space...
Epoch 5: 100%|     | 126/126 [00:01<00:00, 75.94it/s, loss=0.0635,
v_num=4.31e+7]
Epoch 5: 100%|     | 126/126 [00:01<00:00, 75.82it/s, loss=0.0635,
v_num=4.31e+7]Mapping latent space...

Epoch 6: 79%|      | 100/126 [00:01<00:00, 76.70it/s, loss=0.0519,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 6: 80%|      | 101/126 [00:01<00:00, 67.93it/s, loss=0.0519,
v_num=4.31e+7]

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Epoch 6: 81%|          | 102/126 [00:01<00:00, 66.96it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 82%|          | 103/126 [00:01<00:00, 67.35it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 83%|          | 104/126 [00:01<00:00, 67.74it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 83%|          | 105/126 [00:01<00:00, 68.13it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 84%|          | 106/126 [00:01<00:00, 68.52it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 85%|          | 107/126 [00:01<00:00, 68.91it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 86%|          | 108/126 [00:01<00:00, 69.31it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 87%|          | 109/126 [00:01<00:00, 69.71it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 87%|          | 110/126 [00:01<00:00, 70.11it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 88%|          | 111/126 [00:01<00:00, 70.52it/s, loss=0.0519,
v_num=4.31e+7]
Validation DataLoader 0: 46%|          | 12/26 [00:00<00:00, 117.69it/s]
Epoch 6: 89%|          | 112/126 [00:01<00:00, 70.92it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 90%|          | 113/126 [00:01<00:00, 71.34it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 90%|          | 114/126 [00:01<00:00, 71.75it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 91%|          | 115/126 [00:01<00:00, 72.17it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 92%|          | 116/126 [00:01<00:00, 72.57it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 93%|          | 117/126 [00:01<00:00, 72.99it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 94%|          | 118/126 [00:01<00:00, 73.41it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 94%|          | 119/126 [00:01<00:00, 73.83it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 95%|          | 120/126 [00:01<00:00, 74.25it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 96%|          | 121/126 [00:01<00:00, 74.68it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 97%|          | 122/126 [00:01<00:00, 75.11it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 98%|          | 123/126 [00:01<00:00, 75.56it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 98%|          | 124/126 [00:01<00:00, 76.01it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 99%|          | 125/126 [00:01<00:00, 76.46it/s, loss=0.0519,

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v_num=4.31e+7]
Epoch 6: 100%|      | 126/126 [00:01<00:00, 76.92it/s, loss=0.0519,
v_num=4.31e+7]Mapping latent space...
Epoch 6: 100%|      | 126/126 [00:01<00:00, 75.40it/s, loss=0.0519,
v_num=4.31e+7]
Epoch 6: 100%|      | 126/126 [00:01<00:00, 75.28it/s, loss=0.0519,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 79%|      | 100/126 [00:01<00:00, 76.67it/s, loss=0.0404,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 7: 80%|      | 101/126 [00:01<00:00, 67.74it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 81%|      | 102/126 [00:01<00:00, 68.12it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 82%|      | 103/126 [00:01<00:00, 68.60it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 83%|      | 104/126 [00:01<00:00, 69.07it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 83%|      | 105/126 [00:01<00:00, 69.54it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 84%|      | 106/126 [00:01<00:00, 70.01it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 85%|      | 107/126 [00:01<00:00, 70.48it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 86%|      | 108/126 [00:01<00:00, 70.95it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 87%|      | 109/126 [00:01<00:00, 71.42it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 87%|      | 110/126 [00:01<00:00, 71.88it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 88%|      | 111/126 [00:01<00:00, 72.34it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 89%|      | 112/126 [00:01<00:00, 72.80it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 90%|      | 113/126 [00:01<00:00, 73.26it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 90%|      | 114/126 [00:01<00:00, 73.72it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 91%|      | 115/126 [00:01<00:00, 74.17it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 92%|      | 116/126 [00:01<00:00, 74.62it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 93%|      | 117/126 [00:01<00:00, 75.07it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 94%|      | 118/126 [00:01<00:00, 75.48it/s, loss=0.0404,
v_num=4.31e+7]

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Epoch 7: 94%|      | 119/126 [00:01<00:00, 75.93it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 95%|      | 120/126 [00:01<00:00, 76.37it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 96%|      | 121/126 [00:01<00:00, 76.80it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 97%|      | 122/126 [00:01<00:00, 77.25it/s, loss=0.0404,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.04it/s]
Epoch 7: 98%|      | 123/126 [00:01<00:00, 77.72it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 98%|      | 124/126 [00:01<00:00, 78.19it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 99%|      | 125/126 [00:01<00:00, 78.66it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 79.14it/s, loss=0.0404,
v_num=4.31e+7]Mapping latent space...
Epoch 7: 100%|     | 126/126 [00:01<00:00, 77.61it/s, loss=0.0404,
v_num=4.31e+7]
Epoch 7: 100%|     | 126/126 [00:01<00:00, 77.47it/s, loss=0.0404,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 79%|      | 100/126 [00:01<00:00, 81.16it/s, loss=0.031,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 8: 80%|      | 101/126 [00:01<00:00, 72.49it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 81%|      | 102/126 [00:01<00:00, 72.50it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 82%|      | 103/126 [00:01<00:00, 73.05it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 83%|      | 104/126 [00:01<00:00, 73.56it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 83%|      | 105/126 [00:01<00:00, 74.09it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 84%|      | 106/126 [00:01<00:00, 74.61it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 85%|      | 107/126 [00:01<00:00, 75.13it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 86%|      | 108/126 [00:01<00:00, 75.65it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 87%|      | 109/126 [00:01<00:00, 76.17it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 87%|      | 110/126 [00:01<00:00, 76.68it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 88%|      | 111/126 [00:01<00:00, 77.21it/s, loss=0.031,
v_num=4.31e+7]

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Epoch 8: 89%|      | 112/126 [00:01<00:00, 77.71it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 90%|      | 113/126 [00:01<00:00, 78.23it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 90%|      | 114/126 [00:01<00:00, 78.74it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 91%|      | 115/126 [00:01<00:00, 79.25it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 92%|      | 116/126 [00:01<00:00, 79.77it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 93%|      | 117/126 [00:01<00:00, 80.27it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 94%|      | 118/126 [00:01<00:00, 80.77it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 94%|      | 119/126 [00:01<00:00, 81.29it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 95%|      | 120/126 [00:01<00:00, 81.76it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 96%|      | 121/126 [00:01<00:00, 82.26it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 97%|      | 122/126 [00:01<00:00, 82.76it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 98%|      | 123/126 [00:01<00:00, 83.29it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 98%|      | 124/126 [00:01<00:00, 83.83it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 99%|      | 125/126 [00:01<00:00, 84.36it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 84.90it/s, loss=0.031,
v_num=4.31e+7]Mapping latent space...
Epoch 8: 100%|     | 126/126 [00:01<00:00, 83.37it/s, loss=0.031,
v_num=4.31e+7]
Epoch 8: 100%|     | 126/126 [00:01<00:00, 83.25it/s, loss=0.031,
v_num=4.31e+7]Mapping latent space...

Epoch 9: 79%|      | 100/126 [00:01<00:00, 88.66it/s, loss=0.0225,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 9: 80%|      | 101/126 [00:01<00:00, 76.29it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 81%|      | 102/126 [00:01<00:00, 76.29it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 82%|      | 103/126 [00:01<00:00, 76.81it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 83%|      | 104/126 [00:01<00:00, 77.33it/s, loss=0.0225,
v_num=4.31e+7]

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Epoch 9: 83%|      | 105/126 [00:01<00:00, 77.84it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 84%|      | 106/126 [00:01<00:00, 78.36it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 85%|      | 107/126 [00:01<00:00, 78.87it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 86%|      | 108/126 [00:01<00:00, 79.39it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 87%|      | 109/126 [00:01<00:00, 79.90it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 87%|      | 110/126 [00:01<00:00, 80.27it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 88%|      | 111/126 [00:01<00:00, 80.65it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 89%|      | 112/126 [00:01<00:00, 81.05it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 90%|      | 113/126 [00:01<00:00, 81.46it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 90%|      | 114/126 [00:01<00:00, 81.88it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 91%|      | 115/126 [00:01<00:00, 82.30it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 92%|      | 116/126 [00:01<00:00, 82.72it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 93%|      | 117/126 [00:01<00:00, 83.14it/s, loss=0.0225,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.76it/s]
Epoch 9: 94%|      | 118/126 [00:01<00:00, 83.37it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 94%|      | 119/126 [00:01<00:00, 83.64it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 95%|      | 120/126 [00:01<00:00, 83.92it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 96%|      | 121/126 [00:01<00:00, 84.20it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 97%|      | 122/126 [00:01<00:00, 84.46it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 98%|      | 123/126 [00:01<00:00, 84.79it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 98%|      | 124/126 [00:01<00:00, 85.14it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 99%|      | 125/126 [00:01<00:00, 85.48it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 85.85it/s, loss=0.0225,
v_num=4.31e+7]Mapping latent space...
Epoch 9: 100%|     | 126/126 [00:01<00:00, 83.53it/s, loss=0.0225,
v_num=4.31e+7]
Epoch 9: 100%|     | 126/126 [00:01<00:00, 83.35it/s, loss=0.0225,

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v_num=4.31e+7]Mapping latent space...
Epoch 10: 79%|          | 100/126 [00:01<00:00, 79.83it/s, loss=0.0165,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 10: 80%|          | 101/126 [00:01<00:00, 70.02it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 81%|          | 102/126 [00:01<00:00, 70.10it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 82%|          | 103/126 [00:01<00:00, 70.64it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 83%|          | 104/126 [00:01<00:00, 71.15it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 83%|          | 105/126 [00:01<00:00, 71.67it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 84%|          | 106/126 [00:01<00:00, 72.19it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 85%|          | 107/126 [00:01<00:00, 72.72it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 86%|          | 108/126 [00:01<00:00, 73.22it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 87%|          | 109/126 [00:01<00:00, 73.75it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 87%|          | 110/126 [00:01<00:00, 74.25it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 88%|          | 111/126 [00:01<00:00, 74.77it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 89%|          | 112/126 [00:01<00:00, 75.27it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 90%|          | 113/126 [00:01<00:00, 75.78it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 90%|          | 114/126 [00:01<00:00, 76.28it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 91%|          | 115/126 [00:01<00:00, 76.79it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 92%|          | 116/126 [00:01<00:00, 77.29it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 93%|          | 117/126 [00:01<00:00, 77.79it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 94%|          | 118/126 [00:01<00:00, 78.29it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 94%|          | 119/126 [00:01<00:00, 78.79it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 95%|          | 120/126 [00:01<00:00, 79.28it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 96%|          | 121/126 [00:01<00:00, 79.78it/s, loss=0.0165,
v_num=4.31e+7]

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Epoch 10: 97%|      | 122/126 [00:01<00:00, 80.28it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 98%|      | 123/126 [00:01<00:00, 80.80it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 98%|      | 124/126 [00:01<00:00, 81.33it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 99%|      | 125/126 [00:01<00:00, 81.85it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 82.37it/s, loss=0.0165,
v_num=4.31e+7]Mapping latent space...
Epoch 10: 100%|     | 126/126 [00:01<00:00, 80.93it/s, loss=0.0165,
v_num=4.31e+7]
Epoch 10: 100%|     | 126/126 [00:01<00:00, 80.83it/s, loss=0.0165,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 79%|      | 100/126 [00:01<00:00, 77.35it/s, loss=0.0126,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 11: 80%|      | 101/126 [00:01<00:00, 67.86it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 81%|      | 102/126 [00:01<00:00, 68.02it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 82%|      | 103/126 [00:01<00:00, 68.50it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 83%|      | 104/126 [00:01<00:00, 68.97it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 83%|      | 105/126 [00:01<00:00, 69.45it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 84%|      | 106/126 [00:01<00:00, 69.94it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 85%|      | 107/126 [00:01<00:00, 70.42it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 86%|      | 108/126 [00:01<00:00, 70.90it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 87%|      | 109/126 [00:01<00:00, 71.37it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 87%|      | 110/126 [00:01<00:00, 71.85it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 88%|      | 111/126 [00:01<00:00, 72.13it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 89%|      | 112/126 [00:01<00:00, 72.44it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 90%|      | 113/126 [00:01<00:00, 72.76it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 90%|      | 114/126 [00:01<00:00, 73.10it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 91%|      | 115/126 [00:01<00:00, 73.44it/s, loss=0.0126,

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v_num=4.31e+7]
Epoch 11: 92%|      | 116/126 [00:01<00:00, 73.79it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 93%|      | 117/126 [00:01<00:00, 74.14it/s, loss=0.0126,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 170.63it/s]
Epoch 11: 94%|      | 118/126 [00:01<00:00, 74.48it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 94%|      | 119/126 [00:01<00:00, 74.84it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 95%|      | 120/126 [00:01<00:00, 75.20it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 96%|      | 121/126 [00:01<00:00, 75.57it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 97%|      | 122/126 [00:01<00:00, 75.95it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 98%|      | 123/126 [00:01<00:00, 76.35it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 98%|      | 124/126 [00:01<00:00, 76.76it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 99%|      | 125/126 [00:01<00:00, 77.16it/s, loss=0.0126,
v_num=4.31e+7]
Epoch 11: 100%|     | 126/126 [00:01<00:00, 77.58it/s, loss=0.0126,
v_num=4.31e+7]Mapping latent space...
Epoch 11: 100%|     | 126/126 [00:01<00:00, 76.09it/s, loss=0.0126,
v_num=4.31e+7]

Epoch 11: 100%|     | 126/126 [00:01<00:00, 75.96it/s, loss=0.0126,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 79%|      | 100/126 [00:01<00:00, 75.23it/s, loss=0.00984,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 12: 80%|      | 101/126 [00:01<00:00, 65.55it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 81%|      | 102/126 [00:01<00:00, 65.62it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 82%|      | 103/126 [00:01<00:00, 66.09it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 83%|      | 104/126 [00:01<00:00, 66.53it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 83%|      | 105/126 [00:01<00:00, 66.97it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 84%|      | 106/126 [00:01<00:00, 67.43it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 85%|      | 107/126 [00:01<00:00, 67.89it/s, loss=0.00984,
v_num=4.31e+7]

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Epoch 12: 86%|      | 108/126 [00:01<00:00, 68.35it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 87%|      | 109/126 [00:01<00:00, 68.81it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 87%|      | 110/126 [00:01<00:00, 69.26it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 88%|      | 111/126 [00:01<00:00, 69.72it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 89%|      | 112/126 [00:01<00:00, 70.17it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 90%|      | 113/126 [00:01<00:00, 70.62it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 90%|      | 114/126 [00:01<00:00, 71.07it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 91%|      | 115/126 [00:01<00:00, 71.51it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 92%|      | 116/126 [00:01<00:00, 71.96it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 93%|      | 117/126 [00:01<00:00, 72.41it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 94%|      | 118/126 [00:01<00:00, 72.85it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 94%|      | 119/126 [00:01<00:00, 73.29it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 95%|      | 120/126 [00:01<00:00, 73.73it/s, loss=0.00984,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 209.40it/s]
Epoch 12: 96%|      | 121/126 [00:01<00:00, 74.16it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 97%|      | 122/126 [00:01<00:00, 74.60it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 98%|      | 123/126 [00:01<00:00, 75.07it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 98%|      | 124/126 [00:01<00:00, 75.53it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 99%|      | 125/126 [00:01<00:00, 75.99it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 76.46it/s, loss=0.00984,
v_num=4.31e+7]Mapping latent space...
Epoch 12: 100%|     | 126/126 [00:01<00:00, 74.96it/s, loss=0.00984,
v_num=4.31e+7]
Epoch 12: 100%|     | 126/126 [00:01<00:00, 74.84it/s, loss=0.00984,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 79%|      | 100/126 [00:01<00:00, 77.46it/s, loss=0.00782,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 13: 80%	101/126 [00:01<00:00, 68.51it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 81%	102/126 [00:01<00:00, 68.75it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 82%	103/126 [00:01<00:00, 69.29it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 83%	104/126 [00:01<00:00, 69.78it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 83%	105/126 [00:01<00:00, 70.32it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 84%	106/126 [00:01<00:00, 70.80it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 85%	107/126 [00:01<00:00, 71.33it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 86%	108/126 [00:01<00:00, 71.82it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 87%	109/126 [00:01<00:00, 72.32it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 87%	110/126 [00:01<00:00, 72.82it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 88%	111/126 [00:01<00:00, 73.32it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 89%	112/126 [00:01<00:00, 73.82it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 90%	113/126 [00:01<00:00, 74.34it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 90%	114/126 [00:01<00:00, 74.82it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 91%	115/126 [00:01<00:00, 75.32it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 92%	116/126 [00:01<00:00, 75.81it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 93%	117/126 [00:01<00:00, 76.30it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 94%	118/126 [00:01<00:00, 76.78it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 94%	119/126 [00:01<00:00, 77.28it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 95%	120/126 [00:01<00:00, 77.74it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 96%	121/126 [00:01<00:00, 78.23it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 97%	122/126 [00:01<00:00, 78.72it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 98%	123/126 [00:01<00:00, 79.24it/s, loss=0.00782,
v_num=4.31e+7]	
Epoch 13: 98%	124/126 [00:01<00:00, 79.76it/s, loss=0.00782,
v_num=4.31e+7]	

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Epoch 13: 99%|      | 125/126 [00:01<00:00, 80.28it/s, loss=0.00782,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 80.80it/s, loss=0.00782,
v_num=4.31e+7]Mapping latent space...
Epoch 13: 100%|     | 126/126 [00:01<00:00, 79.40it/s, loss=0.00782,
v_num=4.31e+7]
Epoch 13: 100%|     | 126/126 [00:01<00:00, 79.29it/s, loss=0.00782,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 79%|      | 100/126 [00:01<00:00, 90.55it/s, loss=0.00689,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 14: 80%|      | 101/126 [00:01<00:00, 78.51it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 81%|      | 102/126 [00:01<00:00, 78.48it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 82%|      | 103/126 [00:01<00:00, 79.03it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 83%|      | 104/126 [00:01<00:00, 79.57it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 83%|      | 105/126 [00:01<00:00, 80.11it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 84%|      | 106/126 [00:01<00:00, 80.65it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 85%|      | 107/126 [00:01<00:00, 81.19it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 86%|      | 108/126 [00:01<00:00, 81.73it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 87%|      | 109/126 [00:01<00:00, 82.26it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 87%|      | 110/126 [00:01<00:00, 82.79it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 88%|      | 111/126 [00:01<00:00, 83.34it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 89%|      | 112/126 [00:01<00:00, 83.85it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 90%|      | 113/126 [00:01<00:00, 84.38it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 90%|      | 114/126 [00:01<00:00, 84.92it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 91%|      | 115/126 [00:01<00:00, 85.44it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 92%|      | 116/126 [00:01<00:00, 85.97it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 93%|      | 117/126 [00:01<00:00, 86.49it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 94%|      | 118/126 [00:01<00:00, 87.00it/s, loss=0.00689,

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v_num=4.31e+7]
Epoch 14: 94%|      | 119/126 [00:01<00:00, 87.53it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 95%|      | 120/126 [00:01<00:00, 88.04it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 96%|      | 121/126 [00:01<00:00, 88.55it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 97%|      | 122/126 [00:01<00:00, 89.07it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 98%|      | 123/126 [00:01<00:00, 89.65it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 98%|      | 124/126 [00:01<00:00, 90.23it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 99%|      | 125/126 [00:01<00:00, 90.79it/s, loss=0.00689,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.72it/s]
Epoch 14: 100%|      | 126/126 [00:01<00:00, 91.36it/s, loss=0.00689,
v_num=4.31e+7]Mapping latent space...
Epoch 14: 100%|      | 126/126 [00:01<00:00, 89.60it/s, loss=0.00689,
v_num=4.31e+7]
Epoch 14: 100%|      | 126/126 [00:01<00:00, 89.47it/s, loss=0.00689,
v_num=4.31e+7]Mapping latent space...

Epoch 15: 79%|      | 100/126 [00:01<00:00, 70.06it/s, loss=0.00595,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 15: 80%|      | 101/126 [00:01<00:00, 62.00it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 81%|      | 102/126 [00:01<00:00, 62.09it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 82%|      | 103/126 [00:01<00:00, 62.49it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 83%|      | 104/126 [00:01<00:00, 62.89it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 83%|      | 105/126 [00:01<00:00, 63.28it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 84%|      | 106/126 [00:01<00:00, 63.68it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 85%|      | 107/126 [00:01<00:00, 64.08it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 86%|      | 108/126 [00:01<00:00, 64.48it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 87%|      | 109/126 [00:01<00:00, 64.89it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 87%|      | 110/126 [00:01<00:00, 65.30it/s, loss=0.00595,
v_num=4.31e+7]

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Epoch 15: 88%|      | 111/126 [00:01<00:00, 65.70it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 89%|      | 112/126 [00:01<00:00, 66.11it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 90%|      | 113/126 [00:01<00:00, 66.52it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 90%|      | 114/126 [00:01<00:00, 66.94it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 91%|      | 115/126 [00:01<00:00, 67.35it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 92%|      | 116/126 [00:01<00:00, 67.76it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 93%|      | 117/126 [00:01<00:00, 68.18it/s, loss=0.00595,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 173.18it/s]
Epoch 15: 94%|      | 118/126 [00:01<00:00, 68.59it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 94%|      | 119/126 [00:01<00:00, 69.01it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 95%|      | 120/126 [00:01<00:00, 69.42it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 96%|      | 121/126 [00:01<00:00, 69.84it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 97%|      | 122/126 [00:01<00:00, 70.27it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 98%|      | 123/126 [00:01<00:00, 70.71it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 98%|      | 124/126 [00:01<00:00, 71.15it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 99%|      | 125/126 [00:01<00:00, 71.59it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 72.03it/s, loss=0.00595,
v_num=4.31e+7]Mapping latent space...
Epoch 15: 100%|     | 126/126 [00:01<00:00, 70.79it/s, loss=0.00595,
v_num=4.31e+7]
Epoch 15: 100%|     | 126/126 [00:01<00:00, 70.68it/s, loss=0.00595,
v_num=4.31e+7]Mapping latent space...
Epoch 16: 79%|      | 100/126 [00:01<00:00, 78.47it/s, loss=0.0056,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 16: 80%|      | 101/126 [00:01<00:00, 69.99it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 16: 81%|      | 102/126 [00:01<00:00, 70.14it/s, loss=0.0056,
v_num=4.31e+7]
Epoch 16: 82%|      | 103/126 [00:01<00:00, 70.68it/s, loss=0.0056,
v_num=4.31e+7]

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Epoch 16: 83%| | 104/126 [00:01<00:00, 71.19it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 83%| | 105/126 [00:01<00:00, 71.72it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 84%| | 106/126 [00:01<00:00, 72.23it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 85%| | 107/126 [00:01<00:00, 72.76it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 86%| | 108/126 [00:01<00:00, 73.27it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 87%| | 109/126 [00:01<00:00, 73.80it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 87%| | 110/126 [00:01<00:00, 74.29it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 88%| | 111/126 [00:01<00:00, 74.82it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 89%| | 112/126 [00:01<00:00, 75.32it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 90%| | 113/126 [00:01<00:00, 75.83it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 90%| | 114/126 [00:01<00:00, 76.34it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 91%| | 115/126 [00:01<00:00, 76.85it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 92%| | 116/126 [00:01<00:00, 77.35it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 93%| | 117/126 [00:01<00:00, 77.87it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 94%| | 118/126 [00:01<00:00, 78.36it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 94%| | 119/126 [00:01<00:00, 78.86it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 95%| | 120/126 [00:01<00:00, 79.36it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 96%| | 121/126 [00:01<00:00, 79.87it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 97%| | 122/126 [00:01<00:00, 80.36it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 98%| | 123/126 [00:01<00:00, 80.89it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 98%| | 124/126 [00:01<00:00, 81.42it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 99%| | 125/126 [00:01<00:00, 81.94it/s, loss=0.0056, v_num=4.31e+7]
Epoch 16: 100%| | 126/126 [00:01<00:00, 82.46it/s, loss=0.0056, v_num=4.31e+7] Mapping latent space...
Epoch 16: 100%| | 126/126 [00:01<00:00, 80.48it/s, loss=0.0056, v_num=4.31e+7]


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Epoch 16: 100%|      | 126/126 [00:01<00:00, 80.37it/s, loss=0.0056,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 79%|      | 100/126 [00:01<00:00, 66.06it/s, loss=0.00511,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 17: 80%|      | 101/126 [00:01<00:00, 58.66it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 81%|      | 102/126 [00:01<00:00, 58.81it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 82%|      | 103/126 [00:01<00:00, 59.24it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 83%|      | 104/126 [00:01<00:00, 59.68it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 83%|      | 105/126 [00:01<00:00, 60.12it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 84%|      | 106/126 [00:01<00:00, 60.57it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 85%|      | 107/126 [00:01<00:00, 61.00it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 86%|      | 108/126 [00:01<00:00, 61.44it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 87%|      | 109/126 [00:01<00:00, 61.87it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 87%|      | 110/126 [00:01<00:00, 62.31it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 88%|      | 111/126 [00:01<00:00, 62.74it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 89%|      | 112/126 [00:01<00:00, 63.17it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 90%|      | 113/126 [00:01<00:00, 63.60it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 90%|      | 114/126 [00:01<00:00, 64.03it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 91%|      | 115/126 [00:01<00:00, 64.46it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 92%|      | 116/126 [00:01<00:00, 64.89it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 93%|      | 117/126 [00:01<00:00, 65.31it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 94%|      | 118/126 [00:01<00:00, 65.74it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 94%|      | 119/126 [00:01<00:00, 66.16it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 95%|      | 120/126 [00:01<00:00, 66.58it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 96%|      | 121/126 [00:01<00:00, 67.00it/s, loss=0.00511,

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v_num=4.31e+7]
Epoch 17: 97%|      | 122/126 [00:01<00:00, 67.42it/s, loss=0.00511,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.54it/s]
Epoch 17: 98%|      | 123/126 [00:01<00:00, 67.85it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 98%|      | 124/126 [00:01<00:00, 68.28it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 99%|      | 125/126 [00:01<00:00, 68.71it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 69.15it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...
Epoch 17: 100%|     | 126/126 [00:01<00:00, 68.04it/s, loss=0.00511,
v_num=4.31e+7]
Epoch 17: 100%|     | 126/126 [00:01<00:00, 67.94it/s, loss=0.00511,
v_num=4.31e+7]Mapping latent space...

Epoch 18: 79%|      | 100/126 [00:01<00:00, 80.17it/s, loss=0.00464,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 18: 80%|      | 101/126 [00:01<00:00, 69.04it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 81%|      | 102/126 [00:01<00:00, 68.95it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 82%|      | 103/126 [00:01<00:00, 69.31it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 83%|      | 104/126 [00:01<00:00, 69.69it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 83%|      | 105/126 [00:01<00:00, 70.09it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 84%|      | 106/126 [00:01<00:00, 70.48it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 85%|      | 107/126 [00:01<00:00, 70.89it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 86%|      | 108/126 [00:01<00:00, 71.29it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 87%|      | 109/126 [00:01<00:00, 71.69it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 87%|      | 110/126 [00:01<00:00, 72.10it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 88%|      | 111/126 [00:01<00:00, 72.50it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 89%|      | 112/126 [00:01<00:00, 72.92it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 90%|      | 113/126 [00:01<00:00, 73.33it/s, loss=0.00464,
v_num=4.31e+7]

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Epoch 18: 90%|      | 114/126 [00:01<00:00, 73.75it/s, loss=0.00464,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 149.53it/s]
Epoch 18: 91%|      | 115/126 [00:01<00:00, 74.16it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 92%|      | 116/126 [00:01<00:00, 74.58it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 93%|      | 117/126 [00:01<00:00, 74.83it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 94%|      | 118/126 [00:01<00:00, 75.26it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 94%|      | 119/126 [00:01<00:00, 75.69it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 95%|      | 120/126 [00:01<00:00, 76.13it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 96%|      | 121/126 [00:01<00:00, 76.56it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 97%|      | 122/126 [00:01<00:00, 76.99it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 98%|      | 123/126 [00:01<00:00, 77.46it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 98%|      | 124/126 [00:01<00:00, 77.92it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 99%|      | 125/126 [00:01<00:00, 78.37it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 78.84it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 18: 100%|     | 126/126 [00:01<00:00, 77.31it/s, loss=0.00464,
v_num=4.31e+7]
Epoch 18: 100%|     | 126/126 [00:01<00:00, 77.17it/s, loss=0.00464,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 79%|      | 100/126 [00:01<00:00, 80.91it/s, loss=0.00417,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 19: 80%|      | 101/126 [00:01<00:00, 71.13it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 81%|      | 102/126 [00:01<00:00, 71.41it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 82%|      | 103/126 [00:01<00:00, 71.95it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 83%|      | 104/126 [00:01<00:00, 72.47it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 83%|      | 105/126 [00:01<00:00, 73.01it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 84%|      | 106/126 [00:01<00:00, 73.52it/s, loss=0.00417,
v_num=4.31e+7]

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Epoch 19: 85%|      | 107/126 [00:01<00:00, 74.05it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 86%|      | 108/126 [00:01<00:00, 74.57it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 87%|      | 109/126 [00:01<00:00, 75.09it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 87%|      | 110/126 [00:01<00:00, 75.61it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 88%|      | 111/126 [00:01<00:00, 76.15it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 89%|      | 112/126 [00:01<00:00, 76.65it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 90%|      | 113/126 [00:01<00:00, 77.17it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 90%|      | 114/126 [00:01<00:00, 77.69it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 91%|      | 115/126 [00:01<00:00, 78.20it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 92%|      | 116/126 [00:01<00:00, 78.71it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 93%|      | 117/126 [00:01<00:00, 79.22it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 94%|      | 118/126 [00:01<00:00, 79.73it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 94%|      | 119/126 [00:01<00:00, 80.23it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 95%|      | 120/126 [00:01<00:00, 80.73it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 96%|      | 121/126 [00:01<00:00, 81.23it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 97%|      | 122/126 [00:01<00:00, 81.75it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 98%|      | 123/126 [00:01<00:00, 82.28it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 98%|      | 124/126 [00:01<00:00, 82.81it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 99%|      | 125/126 [00:01<00:00, 83.33it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 83.87it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 19: 100%|     | 126/126 [00:01<00:00, 81.95it/s, loss=0.00417,
v_num=4.31e+7]
Epoch 19: 100%|     | 126/126 [00:01<00:00, 81.84it/s, loss=0.00417,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 79%|      | 100/126 [00:01<00:00, 66.86it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 20: 80%|          | 101/126 [00:01<00:00, 59.71it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 81%|          | 102/126 [00:01<00:00, 60.00it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 82%|          | 103/126 [00:01<00:00, 60.38it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 83%|          | 104/126 [00:01<00:00, 60.77it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 83%|          | 105/126 [00:01<00:00, 61.15it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 84%|          | 106/126 [00:01<00:00, 61.53it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 85%|          | 107/126 [00:01<00:00, 61.92it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 86%|          | 108/126 [00:01<00:00, 62.32it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 87%|          | 109/126 [00:01<00:00, 62.71it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 87%|          | 110/126 [00:01<00:00, 63.11it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 88%|          | 111/126 [00:01<00:00, 63.51it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 89%|          | 112/126 [00:01<00:00, 63.91it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 90%|          | 113/126 [00:01<00:00, 64.31it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 90%|          | 114/126 [00:01<00:00, 64.71it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 91%|          | 115/126 [00:01<00:00, 65.12it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 92%|          | 116/126 [00:01<00:00, 65.52it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 93%|          | 117/126 [00:01<00:00, 65.92it/s, loss=0.00383,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 179.00it/s]
Epoch 20: 94%|          | 118/126 [00:01<00:00, 66.32it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 94%|          | 119/126 [00:01<00:00, 66.73it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 95%|          | 120/126 [00:01<00:00, 67.13it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 96%|          | 121/126 [00:01<00:00, 67.54it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 97%|          | 122/126 [00:01<00:00, 67.96it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 98%|          | 123/126 [00:01<00:00, 68.39it/s, loss=0.00383,
v_num=4.31e+7]

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Epoch 20: 98%|      | 124/126 [00:01<00:00, 68.82it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 99%|      | 125/126 [00:01<00:00, 69.24it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 20: 100%|     | 126/126 [00:01<00:00, 69.68it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 20: 100%|     | 126/126 [00:01<00:00, 68.50it/s, loss=0.00383,
v_num=4.31e+7]

Epoch 20: 100%|     | 126/126 [00:01<00:00, 68.41it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 79%|      | 100/126 [00:01<00:00, 75.94it/s, loss=0.00371,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 21: 80%|      | 101/126 [00:01<00:00, 66.26it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 81%|      | 102/126 [00:01<00:00, 66.51it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 82%|      | 103/126 [00:01<00:00, 66.99it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 83%|      | 104/126 [00:01<00:00, 67.46it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 83%|      | 105/126 [00:01<00:00, 67.94it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 84%|      | 106/126 [00:01<00:00, 68.41it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 85%|      | 107/126 [00:01<00:00, 68.89it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 86%|      | 108/126 [00:01<00:00, 69.37it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 87%|      | 109/126 [00:01<00:00, 69.84it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 87%|      | 110/126 [00:01<00:00, 70.31it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 88%|      | 111/126 [00:01<00:00, 70.78it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 89%|      | 112/126 [00:01<00:00, 71.24it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 90%|      | 113/126 [00:01<00:00, 71.71it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 90%|      | 114/126 [00:01<00:00, 72.17it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 91%|      | 115/126 [00:01<00:00, 72.63it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 92%|      | 116/126 [00:01<00:00, 73.09it/s, loss=0.00371,
v_num=4.31e+7]

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Epoch 21: 93%|      | 117/126 [00:01<00:00, 73.55it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 94%|      | 118/126 [00:01<00:00, 74.01it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 94%|      | 119/126 [00:01<00:00, 74.46it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 95%|      | 120/126 [00:01<00:00, 74.92it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 96%|      | 121/126 [00:01<00:00, 75.37it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 97%|      | 122/126 [00:01<00:00, 75.82it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 98%|      | 123/126 [00:01<00:00, 76.30it/s, loss=0.00371,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.75it/s]
Epoch 21: 98%|      | 124/126 [00:01<00:00, 76.76it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 99%|      | 125/126 [00:01<00:00, 77.23it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 77.71it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 21: 100%|     | 126/126 [00:01<00:00, 76.23it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 21: 100%|     | 126/126 [00:01<00:00, 76.10it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 79%|      | 100/126 [00:01<00:00, 74.50it/s, loss=0.00383,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 22: 80%|      | 101/126 [00:01<00:00, 66.35it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 81%|      | 102/126 [00:01<00:00, 66.41it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 82%|      | 103/126 [00:01<00:00, 66.89it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 83%|      | 104/126 [00:01<00:00, 67.38it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 83%|      | 105/126 [00:01<00:00, 67.85it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 84%|      | 106/126 [00:01<00:00, 68.33it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 85%|      | 107/126 [00:01<00:00, 68.81it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 86%|      | 108/126 [00:01<00:00, 69.28it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 87%|      | 109/126 [00:01<00:00, 69.76it/s, loss=0.00383,
v_num=4.31e+7]

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Epoch 22: 87%|      | 110/126 [00:01<00:00, 70.24it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 88%|      | 111/126 [00:01<00:00, 70.71it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 89%|      | 112/126 [00:01<00:00, 71.17it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 90%|      | 113/126 [00:01<00:00, 71.64it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 90%|      | 114/126 [00:01<00:00, 72.10it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 91%|      | 115/126 [00:01<00:00, 72.56it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 92%|      | 116/126 [00:01<00:00, 73.02it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 93%|      | 117/126 [00:01<00:00, 73.48it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 94%|      | 118/126 [00:01<00:00, 73.94it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 94%|      | 119/126 [00:01<00:00, 74.38it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 95%|      | 120/126 [00:01<00:00, 74.84it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 96%|      | 121/126 [00:01<00:00, 75.29it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 97%|      | 122/126 [00:01<00:00, 75.74it/s, loss=0.00383,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 229.59it/s]
Epoch 22: 98%|      | 123/126 [00:01<00:00, 76.21it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 98%|      | 124/126 [00:01<00:00, 76.69it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 99%|      | 125/126 [00:01<00:00, 77.16it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 77.64it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 22: 100%|     | 126/126 [00:01<00:00, 75.92it/s, loss=0.00383,
v_num=4.31e+7]
Epoch 22: 100%|     | 126/126 [00:01<00:00, 75.81it/s, loss=0.00383,
v_num=4.31e+7]Mapping latent space...
Epoch 23: 79%|      | 100/126 [00:01<00:00, 75.94it/s, loss=0.00394,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 23: 80%|      | 101/126 [00:01<00:00, 67.21it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 23: 81%|      | 102/126 [00:01<00:00, 67.29it/s, loss=0.00394,
v_num=4.31e+7]

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Epoch 23: 82%| | 103/126 [00:01<00:00, 67.80it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 83%| | 104/126 [00:01<00:00, 68.28it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 83%| | 105/126 [00:01<00:00, 68.79it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 84%| | 106/126 [00:01<00:00, 69.28it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 85%| | 107/126 [00:01<00:00, 69.79it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 86%| | 108/126 [00:01<00:00, 70.28it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 87%| | 109/126 [00:01<00:00, 70.78it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 87%| | 110/126 [00:01<00:00, 71.27it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 88%| | 111/126 [00:01<00:00, 71.78it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 89%| | 112/126 [00:01<00:00, 72.26it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 90%| | 113/126 [00:01<00:00, 72.76it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 90%| | 114/126 [00:01<00:00, 73.24it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 91%| | 115/126 [00:01<00:00, 73.75it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 92%| | 116/126 [00:01<00:00, 74.22it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 93%| | 117/126 [00:01<00:00, 74.73it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 94%| | 118/126 [00:01<00:00, 75.21it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 94%| | 119/126 [00:01<00:00, 75.71it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 95%| | 120/126 [00:01<00:00, 76.18it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 96%| | 121/126 [00:01<00:00, 76.67it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 97%| | 122/126 [00:01<00:00, 77.15it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 98%| | 123/126 [00:01<00:00, 77.66it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 98%| | 124/126 [00:01<00:00, 78.17it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 99%| | 125/126 [00:01<00:00, 78.68it/s, loss=0.00394, v_num=4.31e+7]
Epoch 23: 100%| | 126/126 [00:01<00:00, 79.19it/s, loss=0.00394, v_num=4.31e+7]Mapping latent space...

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Epoch 23: 100%|      | 126/126 [00:01<00:00, 77.79it/s, loss=0.00394,
v_num=4.31e+7]
Epoch 23: 100%|      | 126/126 [00:01<00:00, 77.68it/s, loss=0.00394,
v_num=4.31e+7]Mapping latent space...

Epoch 24: 79%|      | 100/126 [00:01<00:00, 79.28it/s, loss=0.0033,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 24: 80%|      | 101/126 [00:01<00:00, 70.36it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 81%|      | 102/126 [00:01<00:00, 70.53it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 82%|      | 103/126 [00:01<00:00, 71.07it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 83%|      | 104/126 [00:01<00:00, 71.58it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 83%|      | 105/126 [00:01<00:00, 72.12it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 84%|      | 106/126 [00:01<00:00, 72.63it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 85%|      | 107/126 [00:01<00:00, 73.17it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 86%|      | 108/126 [00:01<00:00, 73.67it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 87%|      | 109/126 [00:01<00:00, 74.18it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 87%|      | 110/126 [00:01<00:00, 74.70it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 88%|      | 111/126 [00:01<00:00, 75.22it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 89%|      | 112/126 [00:01<00:00, 75.72it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 90%|      | 113/126 [00:01<00:00, 76.23it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 90%|      | 114/126 [00:01<00:00, 76.74it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 91%|      | 115/126 [00:01<00:00, 77.26it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 92%|      | 116/126 [00:01<00:00, 77.76it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 93%|      | 117/126 [00:01<00:00, 78.26it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 94%|      | 118/126 [00:01<00:00, 78.76it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 94%|      | 119/126 [00:01<00:00, 79.26it/s, loss=0.0033,
v_num=4.31e+7]

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Epoch 24: 95%|      | 120/126 [00:01<00:00, 79.76it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 96%|      | 121/126 [00:01<00:00, 80.26it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 97%|      | 122/126 [00:01<00:00, 80.75it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 98%|      | 123/126 [00:01<00:00, 81.28it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 98%|      | 124/126 [00:01<00:00, 81.80it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 99%|      | 125/126 [00:01<00:00, 82.31it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 82.84it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...
Epoch 24: 100%|     | 126/126 [00:01<00:00, 81.31it/s, loss=0.0033,
v_num=4.31e+7]
Epoch 24: 100%|     | 126/126 [00:01<00:00, 81.20it/s, loss=0.0033,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 79%|      | 100/126 [00:01<00:00, 91.44it/s, loss=0.00334,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 25: 80%|      | 101/126 [00:01<00:00, 78.32it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 81%|      | 102/126 [00:01<00:00, 78.42it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 82%|      | 103/126 [00:01<00:00, 78.79it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 83%|      | 104/126 [00:01<00:00, 79.17it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 83%|      | 105/126 [00:01<00:00, 79.55it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 84%|      | 106/126 [00:01<00:00, 79.94it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 85%|      | 107/126 [00:01<00:00, 80.34it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 86%|      | 108/126 [00:01<00:00, 80.75it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 87%|      | 109/126 [00:01<00:00, 81.16it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 87%|      | 110/126 [00:01<00:00, 81.57it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 88%|      | 111/126 [00:01<00:00, 81.98it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 89%|      | 112/126 [00:01<00:00, 82.36it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 90%|      | 113/126 [00:01<00:00, 82.74it/s, loss=0.00334,

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v_num=4.31e+7]
Epoch 25: 90%|      | 114/126 [00:01<00:00, 83.13it/s, loss=0.00334,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 147.82it/s]
Epoch 25: 91%|      | 115/126 [00:01<00:00, 83.53it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 92%|      | 116/126 [00:01<00:00, 83.93it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 93%|      | 117/126 [00:01<00:00, 84.35it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 94%|      | 118/126 [00:01<00:00, 84.77it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 94%|      | 119/126 [00:01<00:00, 85.20it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 95%|      | 120/126 [00:01<00:00, 85.63it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 96%|      | 121/126 [00:01<00:00, 86.07it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 97%|      | 122/126 [00:01<00:00, 86.51it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 98%|      | 123/126 [00:01<00:00, 86.98it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 98%|      | 124/126 [00:01<00:00, 87.45it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 99%|      | 125/126 [00:01<00:00, 87.91it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 88.39it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 25: 100%|     | 126/126 [00:01<00:00, 86.27it/s, loss=0.00334,
v_num=4.31e+7]
Epoch 25: 100%|     | 126/126 [00:01<00:00, 86.09it/s, loss=0.00334,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 79%|      | 100/126 [00:01<00:00, 74.38it/s, loss=0.00341,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 26: 80%|      | 101/126 [00:01<00:00, 66.17it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 81%|      | 102/126 [00:01<00:00, 66.13it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 82%|      | 103/126 [00:01<00:00, 66.65it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 83%|      | 104/126 [00:01<00:00, 67.14it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 83%|      | 105/126 [00:01<00:00, 67.64it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 84%|      | 106/126 [00:01<00:00, 68.11it/s, loss=0.00341,

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v_num=4.31e+7]
Epoch 26: 85%|      | 107/126 [00:01<00:00, 68.61it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 86%|      | 108/126 [00:01<00:00, 69.07it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 87%|      | 109/126 [00:01<00:00, 69.54it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 87%|      | 110/126 [00:01<00:00, 70.02it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 88%|      | 111/126 [00:01<00:00, 70.52it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 89%|      | 112/126 [00:01<00:00, 70.98it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 90%|      | 113/126 [00:01<00:00, 71.48it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 90%|      | 114/126 [00:01<00:00, 71.94it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 91%|      | 115/126 [00:01<00:00, 72.44it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 92%|      | 116/126 [00:01<00:00, 72.90it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 93%|      | 117/126 [00:01<00:00, 73.40it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 94%|      | 118/126 [00:01<00:00, 73.86it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 94%|      | 119/126 [00:01<00:00, 74.35it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 95%|      | 120/126 [00:01<00:00, 74.81it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 96%|      | 121/126 [00:01<00:00, 75.32it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 97%|      | 122/126 [00:01<00:00, 75.78it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 98%|      | 123/126 [00:01<00:00, 76.28it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 98%|      | 124/126 [00:01<00:00, 76.79it/s, loss=0.00341,
v_num=4.31e+7]
Epoch 26: 99%|      | 125/126 [00:01<00:00, 77.29it/s, loss=0.00341,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.09it/s]
Epoch 26: 100%|      | 126/126 [00:01<00:00, 77.80it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...
Epoch 26: 100%|      | 126/126 [00:01<00:00, 76.44it/s, loss=0.00341,
v_num=4.31e+7]

Epoch 26: 100%|      | 126/126 [00:01<00:00, 76.34it/s, loss=0.00341,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 79%|      | 100/126 [00:01<00:00, 79.24it/s, loss=0.00371,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 27: 80%|          | 101/126 [00:01<00:00, 69.33it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 81%|          | 102/126 [00:01<00:00, 69.46it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 82%|          | 103/126 [00:01<00:00, 69.95it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 83%|          | 104/126 [00:01<00:00, 70.44it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 83%|          | 105/126 [00:01<00:00, 70.92it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 84%|          | 106/126 [00:01<00:00, 71.41it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 85%|          | 107/126 [00:01<00:00, 71.91it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 86%|          | 108/126 [00:01<00:00, 72.41it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 87%|          | 109/126 [00:01<00:00, 72.92it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 87%|          | 110/126 [00:01<00:00, 73.41it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 88%|          | 111/126 [00:01<00:00, 73.91it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 89%|          | 112/126 [00:01<00:00, 74.41it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 90%|          | 113/126 [00:01<00:00, 74.90it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 90%|          | 114/126 [00:01<00:00, 75.40it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 91%|          | 115/126 [00:01<00:00, 75.89it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 92%|          | 116/126 [00:01<00:00, 76.38it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 93%|          | 117/126 [00:01<00:00, 76.87it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 94%|          | 118/126 [00:01<00:00, 77.36it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 94%|          | 119/126 [00:01<00:00, 77.85it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 95%|          | 120/126 [00:01<00:00, 78.34it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 96%|          | 121/126 [00:01<00:00, 78.83it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 97%|          | 122/126 [00:01<00:00, 79.32it/s, loss=0.00371,
v_num=4.31e+7]

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Epoch 27: 98%|      | 123/126 [00:01<00:00, 79.83it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 98%|      | 124/126 [00:01<00:00, 80.35it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 99%|      | 125/126 [00:01<00:00, 80.86it/s, loss=0.00371,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 256.40it/s]
Epoch 27: 100%|      | 126/126 [00:01<00:00, 81.37it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 27: 100%|      | 126/126 [00:01<00:00, 79.86it/s, loss=0.00371,
v_num=4.31e+7]
Epoch 27: 100%|      | 126/126 [00:01<00:00, 79.75it/s, loss=0.00371,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 79%|      | 100/126 [00:01<00:00, 68.56it/s, loss=0.00379,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 28: 80%|      | 101/126 [00:01<00:00, 60.84it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 81%|      | 102/126 [00:01<00:00, 61.06it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 82%|      | 103/126 [00:01<00:00, 61.48it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 83%|      | 104/126 [00:01<00:00, 61.90it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 83%|      | 105/126 [00:01<00:00, 62.33it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 84%|      | 106/126 [00:01<00:00, 62.76it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 85%|      | 107/126 [00:01<00:00, 63.19it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 86%|      | 108/126 [00:01<00:00, 63.61it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 87%|      | 109/126 [00:01<00:00, 64.04it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 87%|      | 110/126 [00:01<00:00, 64.46it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 88%|      | 111/126 [00:01<00:00, 64.88it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 89%|      | 112/126 [00:01<00:00, 65.30it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 90%|      | 113/126 [00:01<00:00, 65.71it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 90%|      | 114/126 [00:01<00:00, 66.13it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 91%|      | 115/126 [00:01<00:00, 66.55it/s, loss=0.00379,
v_num=4.31e+7]

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Epoch 28: 92%|      | 116/126 [00:01<00:00, 66.96it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 93%|      | 117/126 [00:01<00:00, 67.38it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 94%|      | 118/126 [00:01<00:00, 67.79it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 94%|      | 119/126 [00:01<00:00, 68.19it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 95%|      | 120/126 [00:01<00:00, 68.60it/s, loss=0.00379,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 201.84it/s]
Epoch 28: 96%|      | 121/126 [00:01<00:00, 69.00it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 97%|      | 122/126 [00:01<00:00, 69.40it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 98%|      | 123/126 [00:01<00:00, 69.82it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 98%|      | 124/126 [00:01<00:00, 70.23it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 99%|      | 125/126 [00:01<00:00, 70.64it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 71.06it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.81it/s, loss=0.00379,
v_num=4.31e+7]
Epoch 28: 100%|     | 126/126 [00:01<00:00, 69.71it/s, loss=0.00379,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 79%|      | 100/126 [00:01<00:00, 69.10it/s, loss=0.00322,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 29: 80%|      | 101/126 [00:01<00:00, 61.39it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 81%|      | 102/126 [00:01<00:00, 61.63it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 82%|      | 103/126 [00:01<00:00, 62.11it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 83%|      | 104/126 [00:01<00:00, 62.58it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 83%|      | 105/126 [00:01<00:00, 63.05it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 84%|      | 106/126 [00:01<00:00, 63.51it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 85%|      | 107/126 [00:01<00:00, 63.99it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 86%|      | 108/126 [00:01<00:00, 64.44it/s, loss=0.00322,
v_num=4.31e+7]

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Epoch 29: 87%|      | 109/126 [00:01<00:00, 64.91it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 87%|      | 110/126 [00:01<00:00, 65.38it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 88%|      | 111/126 [00:01<00:00, 65.85it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 89%|      | 112/126 [00:01<00:00, 66.30it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 90%|      | 113/126 [00:01<00:00, 66.76it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 90%|      | 114/126 [00:01<00:00, 67.22it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 91%|      | 115/126 [00:01<00:00, 67.68it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 92%|      | 116/126 [00:01<00:00, 68.14it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 93%|      | 117/126 [00:01<00:00, 68.60it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 94%|      | 118/126 [00:01<00:00, 69.06it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 94%|      | 119/126 [00:01<00:00, 69.51it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 95%|      | 120/126 [00:01<00:00, 69.96it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 96%|      | 121/126 [00:01<00:00, 70.42it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 97%|      | 122/126 [00:01<00:00, 70.88it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 98%|      | 123/126 [00:01<00:00, 71.35it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 98%|      | 124/126 [00:01<00:00, 71.83it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 99%|      | 125/126 [00:01<00:00, 72.30it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 72.78it/s, loss=0.00322,
v_num=4.31e+7]Mapping latent space...
Epoch 29: 100%|     | 126/126 [00:01<00:00, 71.59it/s, loss=0.00322,
v_num=4.31e+7]
Epoch 29: 100%|     | 126/126 [00:01<00:00, 71.50it/s, loss=0.00322,
v_num=4.31e+7]Mapping latent space...

Epoch 30: 79%|      | 100/126 [00:01<00:00, 88.44it/s, loss=0.00319,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 30: 80%|      | 101/126 [00:01<00:00, 76.77it/s, loss=0.00319,
v_num=4.31e+7]

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Epoch 30: 81%| | 102/126 [00:01<00:00, 76.78it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 82%| | 103/126 [00:01<00:00, 77.08it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 83%| | 104/126 [00:01<00:00, 77.50it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 83%| | 105/126 [00:01<00:00, 77.93it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 84%| | 106/126 [00:01<00:00, 78.36it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 85%| | 107/126 [00:01<00:00, 78.79it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 86%| | 108/126 [00:01<00:00, 79.22it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 87%| | 109/126 [00:01<00:00, 79.66it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 87%| | 110/126 [00:01<00:00, 80.09it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 88%| | 111/126 [00:01<00:00, 80.53it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 89%| | 112/126 [00:01<00:00, 80.97it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 90%| | 113/126 [00:01<00:00, 81.40it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 90%| | 114/126 [00:01<00:00, 81.85it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 91%| | 115/126 [00:01<00:00, 82.29it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 92%| | 116/126 [00:01<00:00, 82.72it/s, loss=0.00319, v_num=4.31e+7]
 Validation DataLoader 0: 65%| | 17/26 [00:00<00:00, 164.42it/s]
 Epoch 30: 93%| | 117/126 [00:01<00:00, 83.16it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 94%| | 118/126 [00:01<00:00, 83.60it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 94%| | 119/126 [00:01<00:00, 84.05it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 95%| | 120/126 [00:01<00:00, 84.50it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 96%| | 121/126 [00:01<00:00, 84.94it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 97%| | 122/126 [00:01<00:00, 85.41it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 98%| | 123/126 [00:01<00:00, 85.91it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 98%| | 124/126 [00:01<00:00, 86.40it/s, loss=0.00319, v_num=4.31e+7]
 Epoch 30: 99%| | 125/126 [00:01<00:00, 86.89it/s, loss=0.00319, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 30: 100%|      | 126/126 [00:01<00:00, 87.40it/s, loss=0.00319,
v_num=4.31e+7]Mapping latent space...
Epoch 30: 100%|      | 126/126 [00:01<00:00, 85.49it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 30: 100%|      | 126/126 [00:01<00:00, 85.33it/s, loss=0.00319,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 79%|       | 100/126 [00:01<00:00, 73.34it/s, loss=0.00316,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|       | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|       | 0/26 [00:00<?, ?it/s]
Epoch 31: 80%|       | 101/126 [00:01<00:00, 64.55it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 81%|       | 102/126 [00:01<00:00, 64.74it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 82%|       | 103/126 [00:01<00:00, 65.20it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 83%|       | 104/126 [00:01<00:00, 65.67it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 83%|       | 105/126 [00:01<00:00, 66.13it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 84%|       | 106/126 [00:01<00:00, 66.59it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 85%|       | 107/126 [00:01<00:00, 67.04it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 86%|       | 108/126 [00:01<00:00, 67.51it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 87%|       | 109/126 [00:01<00:00, 67.91it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 87%|       | 110/126 [00:01<00:00, 68.25it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 88%|       | 111/126 [00:01<00:00, 68.58it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 89%|       | 112/126 [00:01<00:00, 68.92it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 90%|       | 113/126 [00:01<00:00, 69.26it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 90%|       | 114/126 [00:01<00:00, 69.60it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 91%|       | 115/126 [00:01<00:00, 69.94it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 92%|       | 116/126 [00:01<00:00, 70.29it/s, loss=0.00316,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 168.43it/s]
Epoch 31: 93%|       | 117/126 [00:01<00:00, 70.63it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 94%|       | 118/126 [00:01<00:00, 70.99it/s, loss=0.00316,

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v_num=4.31e+7]
Epoch 31: 94%|      | 119/126 [00:01<00:00, 71.34it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 95%|      | 120/126 [00:01<00:00, 71.70it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 96%|      | 121/126 [00:01<00:00, 72.06it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 97%|      | 122/126 [00:01<00:00, 72.42it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 98%|      | 123/126 [00:01<00:00, 72.81it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 98%|      | 124/126 [00:01<00:00, 73.20it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 99%|      | 125/126 [00:01<00:00, 73.59it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 73.99it/s, loss=0.00316,
v_num=4.31e+7]Mapping latent space...
Epoch 31: 100%|     | 126/126 [00:01<00:00, 72.56it/s, loss=0.00316,
v_num=4.31e+7]
Epoch 31: 100%|     | 126/126 [00:01<00:00, 72.44it/s, loss=0.00316,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 79%|      | 100/126 [00:01<00:00, 73.92it/s, loss=0.00333,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 32: 80%|      | 101/126 [00:01<00:00, 65.19it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 81%|      | 102/126 [00:01<00:00, 65.42it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 82%|      | 103/126 [00:01<00:00, 65.90it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 83%|      | 104/126 [00:01<00:00, 66.38it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 83%|      | 105/126 [00:01<00:00, 66.85it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 84%|      | 106/126 [00:01<00:00, 67.32it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 85%|      | 107/126 [00:01<00:00, 67.78it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 86%|      | 108/126 [00:01<00:00, 68.25it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 87%|      | 109/126 [00:01<00:00, 68.72it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 87%|      | 110/126 [00:01<00:00, 69.18it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 88%|      | 111/126 [00:01<00:00, 69.65it/s, loss=0.00333,
v_num=4.31e+7]

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Epoch 32: 89%|      | 112/126 [00:01<00:00, 70.10it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 90%|      | 113/126 [00:01<00:00, 70.56it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 90%|      | 114/126 [00:01<00:00, 71.02it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 91%|      | 115/126 [00:01<00:00, 71.47it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 92%|      | 116/126 [00:01<00:00, 71.93it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 93%|      | 117/126 [00:01<00:00, 72.37it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 94%|      | 118/126 [00:01<00:00, 72.82it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 94%|      | 119/126 [00:01<00:00, 73.27it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 95%|      | 120/126 [00:01<00:00, 73.72it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 96%|      | 121/126 [00:01<00:00, 74.16it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 97%|      | 122/126 [00:01<00:00, 74.60it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 98%|      | 123/126 [00:01<00:00, 75.07it/s, loss=0.00333,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.73it/s]
Epoch 32: 98%|      | 124/126 [00:01<00:00, 75.52it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 99%|      | 125/126 [00:01<00:00, 75.98it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 76.45it/s, loss=0.00333,
v_num=4.31e+7]Mapping latent space...
Epoch 32: 100%|     | 126/126 [00:01<00:00, 74.97it/s, loss=0.00333,
v_num=4.31e+7]
Epoch 32: 100%|     | 126/126 [00:01<00:00, 74.86it/s, loss=0.00333,
v_num=4.31e+7]Mapping latent space...

Epoch 33: 79%|      | 100/126 [00:01<00:00, 76.89it/s, loss=0.00301,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 33: 80%|      | 101/126 [00:01<00:00, 66.94it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 81%|      | 102/126 [00:01<00:00, 67.26it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 82%|      | 103/126 [00:01<00:00, 67.67it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 83%|      | 104/126 [00:01<00:00, 68.08it/s, loss=0.00301,

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v_num=4.31e+7]
Epoch 33: 83%|      | 105/126 [00:01<00:00, 68.50it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 84%|      | 106/126 [00:01<00:00, 68.92it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 85%|      | 107/126 [00:01<00:00, 69.33it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 86%|      | 108/126 [00:01<00:00, 69.77it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 87%|      | 109/126 [00:01<00:00, 70.19it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 87%|      | 110/126 [00:01<00:00, 70.62it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 88%|      | 111/126 [00:01<00:00, 71.05it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 89%|      | 112/126 [00:01<00:00, 71.47it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 90%|      | 113/126 [00:01<00:00, 71.90it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 90%|      | 114/126 [00:01<00:00, 72.34it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 91%|      | 115/126 [00:01<00:00, 72.76it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 92%|      | 116/126 [00:01<00:00, 73.17it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 93%|      | 117/126 [00:01<00:00, 73.55it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 94%|      | 118/126 [00:01<00:00, 73.99it/s, loss=0.00301,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.55it/s]
Epoch 33: 94%|      | 119/126 [00:01<00:00, 74.41it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 95%|      | 120/126 [00:01<00:00, 74.85it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 96%|      | 121/126 [00:01<00:00, 75.28it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 97%|      | 122/126 [00:01<00:00, 75.72it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 98%|      | 123/126 [00:01<00:00, 76.19it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 98%|      | 124/126 [00:01<00:00, 76.66it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 99%|      | 125/126 [00:01<00:00, 77.12it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 33: 100%|     | 126/126 [00:01<00:00, 77.59it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 33: 100%|     | 126/126 [00:01<00:00, 75.68it/s, loss=0.00301,
v_num=4.31e+7]

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Epoch 33: 100%|      | 126/126 [00:01<00:00, 75.52it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 79%|      | 100/126 [00:01<00:00, 72.71it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 34: 80%|      | 101/126 [00:01<00:00, 64.35it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 81%|      | 102/126 [00:01<00:00, 64.66it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 82%|      | 103/126 [00:01<00:00, 65.07it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 83%|      | 104/126 [00:01<00:00, 65.48it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 83%|      | 105/126 [00:01<00:00, 65.88it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 84%|      | 106/126 [00:01<00:00, 66.30it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 85%|      | 107/126 [00:01<00:00, 66.71it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 86%|      | 108/126 [00:01<00:00, 67.12it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 87%|      | 109/126 [00:01<00:00, 67.53it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 87%|      | 110/126 [00:01<00:00, 67.95it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 88%|      | 111/126 [00:01<00:00, 68.36it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 89%|      | 112/126 [00:01<00:00, 68.77it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 90%|      | 113/126 [00:01<00:00, 69.18it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 90%|      | 114/126 [00:01<00:00, 69.60it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 91%|      | 115/126 [00:01<00:00, 70.02it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 92%|      | 116/126 [00:01<00:00, 70.44it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 93%|      | 117/126 [00:01<00:00, 70.86it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 94%|      | 118/126 [00:01<00:00, 71.29it/s, loss=0.00331,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 185.64it/s]
Epoch 34: 94%|      | 119/126 [00:01<00:00, 71.70it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 95%|      | 120/126 [00:01<00:00, 72.13it/s, loss=0.00331,
v_num=4.31e+7]

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Epoch 34: 96%|      | 121/126 [00:01<00:00, 72.55it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 97%|      | 122/126 [00:01<00:00, 72.98it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 98%|      | 123/126 [00:01<00:00, 73.43it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 98%|      | 124/126 [00:01<00:00, 73.88it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 99%|      | 125/126 [00:01<00:00, 74.33it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 74.78it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 34: 100%|     | 126/126 [00:01<00:00, 73.31it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 34: 100%|     | 126/126 [00:01<00:00, 73.20it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 79%|      | 100/126 [00:01<00:00, 78.99it/s, loss=0.00295,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 35: 80%|      | 101/126 [00:01<00:00, 70.34it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 81%|      | 102/126 [00:01<00:00, 70.50it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 82%|      | 103/126 [00:01<00:00, 71.01it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 83%|      | 104/126 [00:01<00:00, 71.52it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 83%|      | 105/126 [00:01<00:00, 72.03it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 84%|      | 106/126 [00:01<00:00, 72.55it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 85%|      | 107/126 [00:01<00:00, 73.06it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 86%|      | 108/126 [00:01<00:00, 73.57it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 87%|      | 109/126 [00:01<00:00, 74.08it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 87%|      | 110/126 [00:01<00:00, 74.59it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 88%|      | 111/126 [00:01<00:00, 75.09it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 89%|      | 112/126 [00:01<00:00, 75.60it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 90%|      | 113/126 [00:01<00:00, 76.10it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 90%|      | 114/126 [00:01<00:00, 76.60it/s, loss=0.00295,

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v_num=4.31e+7]
Epoch 35: 91%|      | 115/126 [00:01<00:00, 77.10it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 92%|      | 116/126 [00:01<00:00, 77.60it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 93%|      | 117/126 [00:01<00:00, 78.10it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 94%|      | 118/126 [00:01<00:00, 78.60it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 94%|      | 119/126 [00:01<00:00, 79.09it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 95%|      | 120/126 [00:01<00:00, 79.59it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 96%|      | 121/126 [00:01<00:00, 80.08it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 97%|      | 122/126 [00:01<00:00, 80.59it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 98%|      | 123/126 [00:01<00:00, 81.11it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 98%|      | 124/126 [00:01<00:00, 81.63it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 99%|      | 125/126 [00:01<00:00, 82.15it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 82.68it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 35: 100%|     | 126/126 [00:01<00:00, 81.14it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 35: 100%|     | 126/126 [00:01<00:00, 81.04it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...

Epoch 36: 79%|      | 100/126 [00:01<00:00, 89.13it/s, loss=0.00292,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 36: 80%|      | 101/126 [00:01<00:00, 78.45it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 81%|      | 102/126 [00:01<00:00, 78.55it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 82%|      | 103/126 [00:01<00:00, 79.12it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 83%|      | 104/126 [00:01<00:00, 79.67it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 83%|      | 105/126 [00:01<00:00, 80.23it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 84%|      | 106/126 [00:01<00:00, 80.79it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 85%|      | 107/126 [00:01<00:00, 81.36it/s, loss=0.00292,

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v_num=4.31e+7]
Epoch 36: 86%|      | 108/126 [00:01<00:00, 81.90it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 87%|      | 109/126 [00:01<00:00, 82.47it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 87%|      | 110/126 [00:01<00:00, 83.01it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 88%|      | 111/126 [00:01<00:00, 83.57it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 89%|      | 112/126 [00:01<00:00, 84.10it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 90%|      | 113/126 [00:01<00:00, 84.66it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 90%|      | 114/126 [00:01<00:00, 85.20it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 91%|      | 115/126 [00:01<00:00, 85.75it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 92%|      | 116/126 [00:01<00:00, 86.28it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 93%|      | 117/126 [00:01<00:00, 86.82it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 94%|      | 118/126 [00:01<00:00, 87.35it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 94%|      | 119/126 [00:01<00:00, 87.89it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 95%|      | 120/126 [00:01<00:00, 88.43it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 96%|      | 121/126 [00:01<00:00, 88.96it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 97%|      | 122/126 [00:01<00:00, 89.50it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 98%|      | 123/126 [00:01<00:00, 90.07it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 98%|      | 124/126 [00:01<00:00, 90.63it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 99%|      | 125/126 [00:01<00:00, 91.18it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 91.76it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 36: 100%|     | 126/126 [00:01<00:00, 89.73it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 36: 100%|     | 126/126 [00:01<00:00, 89.60it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 79%|      | 100/126 [00:01<00:00, 64.03it/s, loss=0.00312,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 37: 80%| | 101/126 [00:01<00:00, 57.32it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 81%| | 102/126 [00:01<00:00, 57.58it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 82%| | 103/126 [00:01<00:00, 58.01it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 83%| | 104/126 [00:01<00:00, 58.44it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 83%| | 105/126 [00:01<00:00, 58.87it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 84%| | 106/126 [00:01<00:00, 59.30it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 85%| | 107/126 [00:01<00:00, 59.73it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 86%| | 108/126 [00:01<00:00, 60.16it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 87%| | 109/126 [00:01<00:00, 60.59it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 87%| | 110/126 [00:01<00:00, 61.02it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 88%| | 111/126 [00:01<00:00, 61.45it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 89%| | 112/126 [00:01<00:00, 61.87it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 90%| | 113/126 [00:01<00:00, 62.29it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 90%| | 114/126 [00:01<00:00, 62.72it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 91%| | 115/126 [00:01<00:00, 63.13it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 92%| | 116/126 [00:01<00:00, 63.53it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 93%| | 117/126 [00:01<00:00, 63.92it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 94%| | 118/126 [00:01<00:00, 64.32it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 94%| | 119/126 [00:01<00:00, 64.71it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 95%| | 120/126 [00:01<00:00, 65.13it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 96%| | 121/126 [00:01<00:00, 65.54it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 97%| | 122/126 [00:01<00:00, 65.95it/s, loss=0.00312, v_num=4.31e+7]
 Validation DataLoader 0: 88%| | 23/26 [00:00<00:00, 228.94it/s]
 Epoch 37: 98%| | 123/126 [00:01<00:00, 66.38it/s, loss=0.00312, v_num=4.31e+7]
 Epoch 37: 98%| | 124/126 [00:01<00:00, 66.80it/s, loss=0.00312,

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v_num=4.31e+7]
Epoch 37: 99%|      | 125/126 [00:01<00:00, 67.23it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 67.65it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 37: 100%|     | 126/126 [00:01<00:00, 66.55it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 37: 100%|     | 126/126 [00:01<00:00, 66.46it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 79%|      | 100/126 [00:01<00:00, 76.99it/s, loss=0.00356,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 38: 80%|      | 101/126 [00:01<00:00, 69.18it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 81%|      | 102/126 [00:01<00:00, 68.61it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 82%|      | 103/126 [00:01<00:00, 69.06it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 83%|      | 104/126 [00:01<00:00, 69.51it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 83%|      | 105/126 [00:01<00:00, 69.97it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 84%|      | 106/126 [00:01<00:00, 70.43it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 85%|      | 107/126 [00:01<00:00, 70.89it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 86%|      | 108/126 [00:01<00:00, 71.35it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 87%|      | 109/126 [00:01<00:00, 71.81it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 87%|      | 110/126 [00:01<00:00, 72.28it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 88%|      | 111/126 [00:01<00:00, 72.74it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 89%|      | 112/126 [00:01<00:00, 73.20it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 90%|      | 113/126 [00:01<00:00, 73.66it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 90%|      | 114/126 [00:01<00:00, 74.12it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 91%|      | 115/126 [00:01<00:00, 74.59it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 92%|      | 116/126 [00:01<00:00, 75.05it/s, loss=0.00356,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.90it/s]
Epoch 38: 93%|      | 117/126 [00:01<00:00, 75.51it/s, loss=0.00356,

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v_num=4.31e+7]
Epoch 38: 94%|      | 118/126 [00:01<00:00, 75.97it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 94%|      | 119/126 [00:01<00:00, 76.43it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 95%|      | 120/126 [00:01<00:00, 76.89it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 96%|      | 121/126 [00:01<00:00, 77.35it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 97%|      | 122/126 [00:01<00:00, 77.83it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 98%|      | 123/126 [00:01<00:00, 78.31it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 98%|      | 124/126 [00:01<00:00, 78.80it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 99%|      | 125/126 [00:01<00:00, 79.28it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 38: 100%|     | 126/126 [00:01<00:00, 79.77it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 38: 100%|     | 126/126 [00:01<00:00, 78.19it/s, loss=0.00356,
v_num=4.31e+7]

Epoch 38: 100%|     | 126/126 [00:01<00:00, 78.08it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 79%|      | 100/126 [00:01<00:00, 79.84it/s, loss=0.0028,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 39: 80%|      | 101/126 [00:01<00:00, 71.11it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 81%|      | 102/126 [00:01<00:00, 71.02it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 82%|      | 103/126 [00:01<00:00, 71.56it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 83%|      | 104/126 [00:01<00:00, 72.07it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 83%|      | 105/126 [00:01<00:00, 72.60it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 84%|      | 106/126 [00:01<00:00, 73.11it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 85%|      | 107/126 [00:01<00:00, 73.64it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 86%|      | 108/126 [00:01<00:00, 74.15it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 87%|      | 109/126 [00:01<00:00, 74.67it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 87%|      | 110/126 [00:01<00:00, 75.18it/s, loss=0.0028,

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v_num=4.31e+7]
Epoch 39: 88%|      | 111/126 [00:01<00:00, 75.70it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 89%|      | 112/126 [00:01<00:00, 76.20it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 90%|      | 113/126 [00:01<00:00, 76.71it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 90%|      | 114/126 [00:01<00:00, 77.22it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 91%|      | 115/126 [00:01<00:00, 77.73it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 92%|      | 116/126 [00:01<00:00, 78.23it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 93%|      | 117/126 [00:01<00:00, 78.74it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 94%|      | 118/126 [00:01<00:00, 79.23it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 94%|      | 119/126 [00:01<00:00, 79.74it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 95%|      | 120/126 [00:01<00:00, 80.24it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 96%|      | 121/126 [00:01<00:00, 80.73it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 97%|      | 122/126 [00:01<00:00, 81.24it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 98%|      | 123/126 [00:01<00:00, 81.77it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 98%|      | 124/126 [00:01<00:00, 82.29it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 99%|      | 125/126 [00:01<00:00, 82.80it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 83.33it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 39: 100%|     | 126/126 [00:01<00:00, 81.62it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 39: 100%|     | 126/126 [00:01<00:00, 81.51it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 79%|      | 100/126 [00:01<00:00, 74.81it/s, loss=0.00284,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 40: 80%|      | 101/126 [00:01<00:00, 65.62it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 81%|      | 102/126 [00:01<00:00, 65.92it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 82%|      | 103/126 [00:01<00:00, 66.40it/s, loss=0.00284,
v_num=4.31e+7]

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Epoch 40: 83%|      | 104/126 [00:01<00:00, 66.87it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 83%|      | 105/126 [00:01<00:00, 67.35it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 84%|      | 106/126 [00:01<00:00, 67.82it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 85%|      | 107/126 [00:01<00:00, 68.29it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 86%|      | 108/126 [00:01<00:00, 68.76it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 87%|      | 109/126 [00:01<00:00, 69.24it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 87%|      | 110/126 [00:01<00:00, 69.71it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 88%|      | 111/126 [00:01<00:00, 70.17it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 89%|      | 112/126 [00:01<00:00, 70.63it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 90%|      | 113/126 [00:01<00:00, 71.09it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 90%|      | 114/126 [00:01<00:00, 71.55it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 91%|      | 115/126 [00:01<00:00, 72.01it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 92%|      | 116/126 [00:01<00:00, 72.47it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 93%|      | 117/126 [00:01<00:00, 72.92it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 94%|      | 118/126 [00:01<00:00, 73.38it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 94%|      | 119/126 [00:01<00:00, 73.83it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 95%|      | 120/126 [00:01<00:00, 74.28it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 96%|      | 121/126 [00:01<00:00, 74.73it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 97%|      | 122/126 [00:01<00:00, 75.18it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 98%|      | 123/126 [00:01<00:00, 75.65it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 98%|      | 124/126 [00:01<00:00, 76.12it/s, loss=0.00284,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 244.29it/s]
Epoch 40: 99%|      | 125/126 [00:01<00:00, 76.57it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 40: 100%|     | 126/126 [00:01<00:00, 77.04it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 40: 100%|     | 126/126 [00:01<00:00, 75.57it/s, loss=0.00284,

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v_num=4.31e+7]
Epoch 40: 100%|      | 126/126 [00:01<00:00, 75.46it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 79%|      | 100/126 [00:01<00:00, 79.52it/s, loss=0.00283,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 41: 80%|      | 101/126 [00:01<00:00, 69.59it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 81%|      | 102/126 [00:01<00:00, 69.64it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 82%|      | 103/126 [00:01<00:00, 70.13it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 83%|      | 104/126 [00:01<00:00, 70.62it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 83%|      | 105/126 [00:01<00:00, 71.10it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 84%|      | 106/126 [00:01<00:00, 71.59it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 85%|      | 107/126 [00:01<00:00, 72.08it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 86%|      | 108/126 [00:01<00:00, 72.56it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 87%|      | 109/126 [00:01<00:00, 73.05it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 87%|      | 110/126 [00:01<00:00, 73.53it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 88%|      | 111/126 [00:01<00:00, 74.01it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 89%|      | 112/126 [00:01<00:00, 74.49it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 90%|      | 113/126 [00:01<00:00, 74.96it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 90%|      | 114/126 [00:01<00:00, 75.43it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 91%|      | 115/126 [00:01<00:00, 75.91it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 92%|      | 116/126 [00:01<00:00, 76.37it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 93%|      | 117/126 [00:01<00:00, 76.84it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 94%|      | 118/126 [00:01<00:00, 77.31it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 94%|      | 119/126 [00:01<00:00, 77.77it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 95%|      | 120/126 [00:01<00:00, 78.23it/s, loss=0.00283,
v_num=4.31e+7]

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Epoch 41: 96%|      | 121/126 [00:01<00:00, 78.69it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 97%|      | 122/126 [00:01<00:00, 79.15it/s, loss=0.00283,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.36it/s]
Epoch 41: 98%|      | 123/126 [00:01<00:00, 79.63it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 98%|      | 124/126 [00:01<00:00, 80.11it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 99%|      | 125/126 [00:01<00:00, 80.59it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 81.08it/s, loss=0.00283,
v_num=4.31e+7]Mapping latent space...
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.48it/s, loss=0.00283,
v_num=4.31e+7]
Epoch 41: 100%|     | 126/126 [00:01<00:00, 79.35it/s, loss=0.00283,
v_num=4.31e+7]Mapping latent space...

Epoch 42: 79%|      | 100/126 [00:01<00:00, 76.43it/s, loss=0.0031,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 42: 80%|      | 101/126 [00:01<00:00, 66.75it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 81%|      | 102/126 [00:01<00:00, 66.92it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 82%|      | 103/126 [00:01<00:00, 67.40it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 83%|      | 104/126 [00:01<00:00, 67.87it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 83%|      | 105/126 [00:01<00:00, 68.34it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 84%|      | 106/126 [00:01<00:00, 68.81it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 85%|      | 107/126 [00:01<00:00, 69.28it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 86%|      | 108/126 [00:01<00:00, 69.75it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 87%|      | 109/126 [00:01<00:00, 70.22it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 87%|      | 110/126 [00:01<00:00, 70.68it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 88%|      | 111/126 [00:01<00:00, 71.14it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 89%|      | 112/126 [00:01<00:00, 71.60it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 90%|      | 113/126 [00:01<00:00, 72.06it/s, loss=0.0031,

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v_num=4.31e+7]
Epoch 42: 90%|      | 114/126 [00:01<00:00, 72.52it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 91%|      | 115/126 [00:01<00:00, 72.97it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 92%|      | 116/126 [00:01<00:00, 73.43it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 93%|      | 117/126 [00:01<00:00, 73.87it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 94%|      | 118/126 [00:01<00:00, 74.32it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 94%|      | 119/126 [00:01<00:00, 74.77it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 95%|      | 120/126 [00:01<00:00, 75.22it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 96%|      | 121/126 [00:01<00:00, 75.66it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 97%|      | 122/126 [00:01<00:00, 76.11it/s, loss=0.0031,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.60it/s]
Epoch 42: 98%|      | 123/126 [00:01<00:00, 76.57it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 98%|      | 124/126 [00:01<00:00, 77.04it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 99%|      | 125/126 [00:01<00:00, 77.51it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 77.98it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 42: 100%|     | 126/126 [00:01<00:00, 75.95it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 42: 100%|     | 126/126 [00:01<00:00, 75.76it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 79%|      | 100/126 [00:01<00:00, 79.23it/s, loss=0.00306,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 43: 80%|      | 101/126 [00:01<00:00, 70.42it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 81%|      | 102/126 [00:01<00:00, 70.56it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 82%|      | 103/126 [00:01<00:00, 71.10it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 83%|      | 104/126 [00:01<00:00, 71.62it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 83%|      | 105/126 [00:01<00:00, 72.16it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 84%|      | 106/126 [00:01<00:00, 72.68it/s, loss=0.00306,

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v_num=4.31e+7]
Epoch 43: 85%|      | 107/126 [00:01<00:00, 73.22it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 86%|      | 108/126 [00:01<00:00, 73.72it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 87%|      | 109/126 [00:01<00:00, 74.26it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 87%|      | 110/126 [00:01<00:00, 74.77it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 88%|      | 111/126 [00:01<00:00, 75.30it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 89%|      | 112/126 [00:01<00:00, 75.82it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 90%|      | 113/126 [00:01<00:00, 76.35it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 90%|      | 114/126 [00:01<00:00, 76.85it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 91%|      | 115/126 [00:01<00:00, 77.37it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 92%|      | 116/126 [00:01<00:00, 77.87it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 93%|      | 117/126 [00:01<00:00, 78.38it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 94%|      | 118/126 [00:01<00:00, 78.88it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 94%|      | 119/126 [00:01<00:00, 79.39it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 95%|      | 120/126 [00:01<00:00, 79.90it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 96%|      | 121/126 [00:01<00:00, 80.40it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 97%|      | 122/126 [00:01<00:00, 80.91it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 98%|      | 123/126 [00:01<00:00, 81.44it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 98%|      | 124/126 [00:01<00:00, 81.97it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 99%|      | 125/126 [00:01<00:00, 82.50it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 83.03it/s, loss=0.00306,
v_num=4.31e+7]Mapping latent space...
Epoch 43: 100%|     | 126/126 [00:01<00:00, 81.52it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 43: 100%|     | 126/126 [00:01<00:00, 81.42it/s, loss=0.00306,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 79%|      | 100/126 [00:01<00:00, 84.17it/s, loss=0.00335,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 44: 80%|          | 101/126 [00:01<00:00, 73.55it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 81%|          | 102/126 [00:01<00:00, 73.41it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 82%|          | 103/126 [00:01<00:00, 73.91it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 83%|          | 104/126 [00:01<00:00, 74.41it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 83%|          | 105/126 [00:01<00:00, 74.92it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 84%|          | 106/126 [00:01<00:00, 75.42it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 85%|          | 107/126 [00:01<00:00, 75.92it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 86%|          | 108/126 [00:01<00:00, 76.43it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 87%|          | 109/126 [00:01<00:00, 76.93it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 87%|          | 110/126 [00:01<00:00, 77.43it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 88%|          | 111/126 [00:01<00:00, 77.92it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 89%|          | 112/126 [00:01<00:00, 78.42it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 90%|          | 113/126 [00:01<00:00, 78.91it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 90%|          | 114/126 [00:01<00:00, 79.40it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 91%|          | 115/126 [00:01<00:00, 79.89it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 92%|          | 116/126 [00:01<00:00, 80.38it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 93%|          | 117/126 [00:01<00:00, 80.87it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 94%|          | 118/126 [00:01<00:00, 81.35it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 94%|          | 119/126 [00:01<00:00, 81.82it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 95%|          | 120/126 [00:01<00:00, 82.30it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 96%|          | 121/126 [00:01<00:00, 82.78it/s, loss=0.00335,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 216.13it/s]
Epoch 44: 97%|          | 122/126 [00:01<00:00, 83.25it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 98%|          | 123/126 [00:01<00:00, 83.75it/s, loss=0.00335,

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v_num=4.31e+7]
Epoch 44: 98%|      | 124/126 [00:01<00:00, 84.26it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 99%|      | 125/126 [00:01<00:00, 84.75it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 85.26it/s, loss=0.00335,
v_num=4.31e+7]Mapping latent space...
Epoch 44: 100%|     | 126/126 [00:01<00:00, 83.50it/s, loss=0.00335,
v_num=4.31e+7]
Epoch 44: 100%|     | 126/126 [00:01<00:00, 83.38it/s, loss=0.00335,
v_num=4.31e+7]Mapping latent space...

Epoch 45: 79%|      | 100/126 [00:01<00:00, 72.93it/s, loss=0.00336,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 45: 80%|      | 101/126 [00:01<00:00, 64.74it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 81%|      | 102/126 [00:01<00:00, 64.96it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 82%|      | 103/126 [00:01<00:00, 65.42it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 83%|      | 104/126 [00:01<00:00, 65.88it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 83%|      | 105/126 [00:01<00:00, 66.34it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 84%|      | 106/126 [00:01<00:00, 66.81it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 85%|      | 107/126 [00:01<00:00, 67.27it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 86%|      | 108/126 [00:01<00:00, 67.75it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 87%|      | 109/126 [00:01<00:00, 68.22it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 87%|      | 110/126 [00:01<00:00, 68.69it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 88%|      | 111/126 [00:01<00:00, 69.17it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 89%|      | 112/126 [00:01<00:00, 69.63it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 90%|      | 113/126 [00:01<00:00, 70.10it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 90%|      | 114/126 [00:01<00:00, 70.57it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 91%|      | 115/126 [00:01<00:00, 71.03it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 92%|      | 116/126 [00:01<00:00, 71.50it/s, loss=0.00336,

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v_num=4.31e+7]
Epoch 45: 93%|      | 117/126 [00:01<00:00, 71.96it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 94%|      | 118/126 [00:01<00:00, 72.43it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 94%|      | 119/126 [00:01<00:00, 72.89it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 95%|      | 120/126 [00:01<00:00, 73.35it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 96%|      | 121/126 [00:01<00:00, 73.81it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 97%|      | 122/126 [00:01<00:00, 74.28it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 98%|      | 123/126 [00:01<00:00, 74.77it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 98%|      | 124/126 [00:01<00:00, 75.25it/s, loss=0.00336,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.25it/s]
Epoch 45: 99%|      | 125/126 [00:01<00:00, 75.73it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 76.22it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 45: 100%|     | 126/126 [00:01<00:00, 74.79it/s, loss=0.00336,
v_num=4.31e+7]
Epoch 45: 100%|     | 126/126 [00:01<00:00, 74.71it/s, loss=0.00336,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 79%|      | 100/126 [00:01<00:00, 90.37it/s, loss=0.00303,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 46: 80%|      | 101/126 [00:01<00:00, 79.85it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 81%|      | 102/126 [00:01<00:00, 78.88it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 82%|      | 103/126 [00:01<00:00, 79.45it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 83%|      | 104/126 [00:01<00:00, 80.00it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 83%|      | 105/126 [00:01<00:00, 80.56it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 84%|      | 106/126 [00:01<00:00, 81.12it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 85%|      | 107/126 [00:01<00:00, 81.68it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 86%|      | 108/126 [00:01<00:00, 82.24it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 87%|      | 109/126 [00:01<00:00, 82.79it/s, loss=0.00303,

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v_num=4.31e+7]
Epoch 46: 87%|      | 110/126 [00:01<00:00, 83.34it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 88%|      | 111/126 [00:01<00:00, 83.89it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 89%|      | 112/126 [00:01<00:00, 84.43it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 90%|      | 113/126 [00:01<00:00, 84.98it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 90%|      | 114/126 [00:01<00:00, 85.52it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 91%|      | 115/126 [00:01<00:00, 86.06it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 92%|      | 116/126 [00:01<00:00, 86.60it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 93%|      | 117/126 [00:01<00:00, 87.14it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 94%|      | 118/126 [00:01<00:00, 87.67it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 94%|      | 119/126 [00:01<00:00, 88.20it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 95%|      | 120/126 [00:01<00:00, 88.73it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 96%|      | 121/126 [00:01<00:00, 89.26it/s, loss=0.00303,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 215.58it/s]
Epoch 46: 97%|      | 122/126 [00:01<00:00, 89.78it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 98%|      | 123/126 [00:01<00:00, 90.35it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 98%|      | 124/126 [00:01<00:00, 90.91it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 99%|      | 125/126 [00:01<00:00, 91.47it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 92.03it/s, loss=0.00303,
v_num=4.31e+7]Mapping latent space...
Epoch 46: 100%|     | 126/126 [00:01<00:00, 90.14it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 46: 100%|     | 126/126 [00:01<00:00, 90.02it/s, loss=0.00303,
v_num=4.31e+7]Mapping latent space...
Epoch 47: 79%|      | 100/126 [00:01<00:00, 87.29it/s, loss=0.00298,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 47: 80%|      | 101/126 [00:01<00:00, 77.44it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 81%|      | 102/126 [00:01<00:00, 77.41it/s, loss=0.00298,

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v_num=4.31e+7]
Epoch 47: 82%| | 103/126 [00:01<00:00, 77.97it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 83%| | 104/126 [00:01<00:00, 78.50it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 83%| | 105/126 [00:01<00:00, 79.05it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 84%| | 106/126 [00:01<00:00, 79.58it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 85%| | 107/126 [00:01<00:00, 80.12it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 86%| | 108/126 [00:01<00:00, 80.65it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 87%| | 109/126 [00:01<00:00, 81.21it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 87%| | 110/126 [00:01<00:00, 81.73it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 88%| | 111/126 [00:01<00:00, 82.29it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 89%| | 112/126 [00:01<00:00, 82.80it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 90%| | 113/126 [00:01<00:00, 83.35it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 90%| | 114/126 [00:01<00:00, 83.87it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 91%| | 115/126 [00:01<00:00, 84.42it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 92%| | 116/126 [00:01<00:00, 84.93it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 93%| | 117/126 [00:01<00:00, 85.47it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 94%| | 118/126 [00:01<00:00, 85.98it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 94%| | 119/126 [00:01<00:00, 86.52it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 95%| | 120/126 [00:01<00:00, 87.02it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 96%| | 121/126 [00:01<00:00, 87.55it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 97%| | 122/126 [00:01<00:00, 88.06it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 98%| | 123/126 [00:01<00:00, 88.62it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 98%| | 124/126 [00:01<00:00, 89.19it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 99%| | 125/126 [00:01<00:00, 89.75it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 100%| | 126/126 [00:01<00:00, 90.31it/s, loss=0.00298,

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v_num=4.31e+7]Mapping latent space...
Epoch 47: 100%|      | 126/126 [00:01<00:00, 88.53it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 47: 100%|      | 126/126 [00:01<00:00, 88.40it/s, loss=0.00298,
v_num=4.31e+7]Mapping latent space...

Epoch 48: 79%|      | 100/126 [00:01<00:00, 70.68it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 48: 80%|      | 101/126 [00:01<00:00, 63.04it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 81%|      | 102/126 [00:01<00:00, 63.33it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 82%|      | 103/126 [00:01<00:00, 63.79it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 83%|      | 104/126 [00:01<00:00, 64.25it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 83%|      | 105/126 [00:01<00:00, 64.71it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 84%|      | 106/126 [00:01<00:00, 65.16it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 85%|      | 107/126 [00:01<00:00, 65.62it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 86%|      | 108/126 [00:01<00:00, 66.07it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 87%|      | 109/126 [00:01<00:00, 66.53it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 87%|      | 110/126 [00:01<00:00, 66.98it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 88%|      | 111/126 [00:01<00:00, 67.44it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 89%|      | 112/126 [00:01<00:00, 67.89it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 90%|      | 113/126 [00:01<00:00, 68.34it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 90%|      | 114/126 [00:01<00:00, 68.78it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 91%|      | 115/126 [00:01<00:00, 69.23it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 92%|      | 116/126 [00:01<00:00, 69.68it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 93%|      | 117/126 [00:01<00:00, 70.12it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 94%|      | 118/126 [00:01<00:00, 70.56it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 94%|      | 119/126 [00:01<00:00, 71.00it/s, loss=0.00331,

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v_num=4.31e+7]
Epoch 48: 95%|      | 120/126 [00:01<00:00, 71.44it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 96%|      | 121/126 [00:01<00:00, 71.87it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 97%|      | 122/126 [00:01<00:00, 72.31it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 98%|      | 123/126 [00:01<00:00, 72.77it/s, loss=0.00331,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 237.00it/s]
Epoch 48: 98%|      | 124/126 [00:01<00:00, 73.22it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 99%|      | 125/126 [00:01<00:00, 73.67it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 74.12it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 48: 100%|     | 126/126 [00:01<00:00, 72.78it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 48: 100%|     | 126/126 [00:01<00:00, 72.68it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 79%|      | 100/126 [00:01<00:00, 77.83it/s, loss=0.00295,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 49: 80%|      | 101/126 [00:01<00:00, 69.78it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 81%|      | 102/126 [00:01<00:00, 69.98it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 82%|      | 103/126 [00:01<00:00, 70.52it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 83%|      | 104/126 [00:01<00:00, 71.02it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 83%|      | 105/126 [00:01<00:00, 71.55it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 84%|      | 106/126 [00:01<00:00, 72.05it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 85%|      | 107/126 [00:01<00:00, 72.57it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 86%|      | 108/126 [00:01<00:00, 73.08it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 87%|      | 109/126 [00:01<00:00, 73.59it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 87%|      | 110/126 [00:01<00:00, 74.10it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 88%|      | 111/126 [00:01<00:00, 74.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 89%|      | 112/126 [00:01<00:00, 75.11it/s, loss=0.00295,

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v_num=4.31e+7]
Epoch 49: 90%|      | 113/126 [00:01<00:00, 75.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 90%|      | 114/126 [00:01<00:00, 76.12it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 91%|      | 115/126 [00:01<00:00, 76.63it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 92%|      | 116/126 [00:01<00:00, 77.12it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 93%|      | 117/126 [00:01<00:00, 77.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 94%|      | 118/126 [00:01<00:00, 78.12it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 94%|      | 119/126 [00:01<00:00, 78.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 95%|      | 120/126 [00:01<00:00, 79.11it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 96%|      | 121/126 [00:01<00:00, 79.61it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 97%|      | 122/126 [00:01<00:00, 80.11it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 98%|      | 123/126 [00:01<00:00, 80.63it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 98%|      | 124/126 [00:01<00:00, 81.15it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 99%|      | 125/126 [00:01<00:00, 81.66it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 82.18it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 49: 100%|     | 126/126 [00:01<00:00, 80.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 49: 100%|     | 126/126 [00:01<00:00, 80.51it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 79%|      | 100/126 [00:01<00:00, 87.85it/s, loss=0.0035,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 50: 80%|      | 101/126 [00:01<00:00, 77.81it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 81%|      | 102/126 [00:01<00:00, 77.66it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 82%|      | 103/126 [00:01<00:00, 78.24it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 83%|      | 104/126 [00:01<00:00, 78.76it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 83%|      | 105/126 [00:01<00:00, 79.32it/s, loss=0.0035,
v_num=4.31e+7]

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Epoch 50: 84%|      | 106/126 [00:01<00:00, 79.85it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 85%|      | 107/126 [00:01<00:00, 80.32it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 86%|      | 108/126 [00:01<00:00, 80.87it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 87%|      | 109/126 [00:01<00:00, 81.40it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 87%|      | 110/126 [00:01<00:00, 81.94it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 88%|      | 111/126 [00:01<00:00, 82.49it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 89%|      | 112/126 [00:01<00:00, 83.01it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 90%|      | 113/126 [00:01<00:00, 83.55it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 90%|      | 114/126 [00:01<00:00, 84.09it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 91%|      | 115/126 [00:01<00:00, 84.62it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 92%|      | 116/126 [00:01<00:00, 85.15it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 93%|      | 117/126 [00:01<00:00, 85.68it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 94%|      | 118/126 [00:01<00:00, 86.20it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 94%|      | 119/126 [00:01<00:00, 86.75it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 95%|      | 120/126 [00:01<00:00, 87.25it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 96%|      | 121/126 [00:01<00:00, 87.79it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 97%|      | 122/126 [00:01<00:00, 88.30it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 98%|      | 123/126 [00:01<00:00, 88.86it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 98%|      | 124/126 [00:01<00:00, 89.42it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 99%|      | 125/126 [00:01<00:00, 89.98it/s, loss=0.0035,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 253.97it/s]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 90.54it/s, loss=0.0035,
v_num=4.31e+7]Mapping latent space...
Epoch 50: 100%|      | 126/126 [00:01<00:00, 88.65it/s, loss=0.0035,
v_num=4.31e+7]
Epoch 50: 100%|      | 126/126 [00:01<00:00, 88.51it/s, loss=0.0035,
v_num=4.31e+7]Mapping latent space...

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Epoch 51: 79%|          | 100/126 [00:01<00:00, 90.23it/s, loss=0.00338,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 51: 80%|          | 101/126 [00:01<00:00, 78.16it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 81%|          | 102/126 [00:01<00:00, 78.27it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 82%|          | 103/126 [00:01<00:00, 78.83it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 83%|          | 104/126 [00:01<00:00, 79.38it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 83%|          | 105/126 [00:01<00:00, 79.93it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 84%|          | 106/126 [00:01<00:00, 80.48it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 85%|          | 107/126 [00:01<00:00, 81.03it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 86%|          | 108/126 [00:01<00:00, 81.57it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 87%|          | 109/126 [00:01<00:00, 82.12it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 87%|          | 110/126 [00:01<00:00, 82.67it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 88%|          | 111/126 [00:01<00:00, 83.21it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 89%|          | 112/126 [00:01<00:00, 83.75it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 90%|          | 113/126 [00:01<00:00, 84.28it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 90%|          | 114/126 [00:01<00:00, 84.82it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 91%|          | 115/126 [00:01<00:00, 85.35it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 92%|          | 116/126 [00:01<00:00, 85.88it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 93%|          | 117/126 [00:01<00:00, 86.41it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 94%|          | 118/126 [00:01<00:00, 86.94it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 94%|          | 119/126 [00:01<00:00, 87.47it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 95%|          | 120/126 [00:01<00:00, 88.01it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 96%|          | 121/126 [00:01<00:00, 88.53it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 97%|          | 122/126 [00:01<00:00, 89.06it/s, loss=0.00338,

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v_num=4.31e+7]
Epoch 51: 98%|      | 123/126 [00:01<00:00, 89.62it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 98%|      | 124/126 [00:01<00:00, 90.18it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 99%|      | 125/126 [00:01<00:00, 90.73it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 91.30it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 51: 100%|     | 126/126 [00:01<00:00, 89.48it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 51: 100%|     | 126/126 [00:01<00:00, 89.35it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 79%|      | 100/126 [00:01<00:00, 85.83it/s, loss=0.0036,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 52: 80%|      | 101/126 [00:01<00:00, 74.62it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 81%|      | 102/126 [00:01<00:00, 74.75it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 82%|      | 103/126 [00:01<00:00, 75.18it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 83%|      | 104/126 [00:01<00:00, 75.62it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 83%|      | 105/126 [00:01<00:00, 76.06it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 84%|      | 106/126 [00:01<00:00, 76.50it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 85%|      | 107/126 [00:01<00:00, 76.95it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 86%|      | 108/126 [00:01<00:00, 77.40it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 87%|      | 109/126 [00:01<00:00, 77.84it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 87%|      | 110/126 [00:01<00:00, 78.31it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 88%|      | 111/126 [00:01<00:00, 78.75it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 89%|      | 112/126 [00:01<00:00, 79.22it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 90%|      | 113/126 [00:01<00:00, 79.67it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 90%|      | 114/126 [00:01<00:00, 80.14it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 91%|      | 115/126 [00:01<00:00, 80.59it/s, loss=0.0036,
v_num=4.31e+7]

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Epoch 52: 92%|      | 116/126 [00:01<00:00, 81.06it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 93%|      | 117/126 [00:01<00:00, 81.52it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 94%|      | 118/126 [00:01<00:00, 81.99it/s, loss=0.0036,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.22it/s]
Epoch 52: 94%|      | 119/126 [00:01<00:00, 82.43it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 95%|      | 120/126 [00:01<00:00, 82.90it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 96%|      | 121/126 [00:01<00:00, 83.30it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 97%|      | 122/126 [00:01<00:00, 83.60it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 98%|      | 123/126 [00:01<00:00, 83.96it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 98%|      | 124/126 [00:01<00:00, 84.32it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 99%|      | 125/126 [00:01<00:00, 84.68it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 85.06it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 52: 100%|     | 126/126 [00:01<00:00, 83.00it/s, loss=0.0036,
v_num=4.31e+7]
Epoch 52: 100%|     | 126/126 [00:01<00:00, 82.83it/s, loss=0.0036,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 79%|      | 100/126 [00:01<00:00, 76.23it/s, loss=0.00295,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 53: 80%|      | 101/126 [00:01<00:00, 67.21it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 81%|      | 102/126 [00:01<00:00, 67.62it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 82%|      | 103/126 [00:01<00:00, 68.05it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 83%|      | 104/126 [00:01<00:00, 68.48it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 83%|      | 105/126 [00:01<00:00, 68.91it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 84%|      | 106/126 [00:01<00:00, 69.35it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 85%|      | 107/126 [00:01<00:00, 69.78it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 86%|      | 108/126 [00:01<00:00, 70.22it/s, loss=0.00295,
v_num=4.31e+7]

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Epoch 53: 87%|      | 109/126 [00:01<00:00, 70.66it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 87%|      | 110/126 [00:01<00:00, 71.09it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 88%|      | 111/126 [00:01<00:00, 71.52it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 89%|      | 112/126 [00:01<00:00, 71.96it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 90%|      | 113/126 [00:01<00:00, 72.39it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 90%|      | 114/126 [00:01<00:00, 72.83it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 91%|      | 115/126 [00:01<00:00, 73.26it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 92%|      | 116/126 [00:01<00:00, 73.70it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 93%|      | 117/126 [00:01<00:00, 74.13it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 94%|      | 118/126 [00:01<00:00, 74.58it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 94%|      | 119/126 [00:01<00:00, 75.02it/s, loss=0.00295,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 198.88it/s]
Epoch 53: 95%|      | 120/126 [00:01<00:00, 75.45it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 96%|      | 121/126 [00:01<00:00, 75.89it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 97%|      | 122/126 [00:01<00:00, 76.34it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 98%|      | 123/126 [00:01<00:00, 76.80it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 98%|      | 124/126 [00:01<00:00, 77.27it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 99%|      | 125/126 [00:01<00:00, 77.74it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 78.21it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 53: 100%|     | 126/126 [00:01<00:00, 76.63it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 53: 100%|     | 126/126 [00:01<00:00, 76.50it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...

Epoch 54: 79%|      | 100/126 [00:01<00:00, 79.69it/s, loss=0.0031,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 54: 80%|      | 101/126 [00:01<00:00, 70.27it/s, loss=0.0031,

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v_num=4.31e+7]
Epoch 54: 81%|      | 102/126 [00:01<00:00, 70.52it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 82%|      | 103/126 [00:01<00:00, 71.03it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 83%|      | 104/126 [00:01<00:00, 71.55it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 83%|      | 105/126 [00:01<00:00, 72.09it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 84%|      | 106/126 [00:01<00:00, 72.59it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 85%|      | 107/126 [00:01<00:00, 73.13it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 86%|      | 108/126 [00:01<00:00, 73.63it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 87%|      | 109/126 [00:01<00:00, 74.14it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 87%|      | 110/126 [00:01<00:00, 74.64it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 88%|      | 111/126 [00:01<00:00, 75.16it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 89%|      | 112/126 [00:01<00:00, 75.66it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 90%|      | 113/126 [00:01<00:00, 76.17it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 90%|      | 114/126 [00:01<00:00, 76.67it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 91%|      | 115/126 [00:01<00:00, 77.18it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 92%|      | 116/126 [00:01<00:00, 77.67it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 93%|      | 117/126 [00:01<00:00, 78.17it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 94%|      | 118/126 [00:01<00:00, 78.67it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 94%|      | 119/126 [00:01<00:00, 79.17it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 95%|      | 120/126 [00:01<00:00, 79.66it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 96%|      | 121/126 [00:01<00:00, 80.16it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 97%|      | 122/126 [00:01<00:00, 80.66it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 98%|      | 123/126 [00:01<00:00, 81.19it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 98%|      | 124/126 [00:01<00:00, 81.71it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 99%|      | 125/126 [00:01<00:00, 82.23it/s, loss=0.0031,

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v_num=4.31e+7]
Epoch 54: 100%|      | 126/126 [00:01<00:00, 82.75it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 54: 100%|      | 126/126 [00:01<00:00, 80.87it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 54: 100%|      | 126/126 [00:01<00:00, 80.77it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 79%|      | 100/126 [00:01<00:00, 80.23it/s, loss=0.00315,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 55: 80%|      | 101/126 [00:01<00:00, 71.02it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 81%|      | 102/126 [00:01<00:00, 71.27it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 82%|      | 103/126 [00:01<00:00, 71.81it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 83%|      | 104/126 [00:01<00:00, 72.32it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 83%|      | 105/126 [00:01<00:00, 72.87it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 84%|      | 106/126 [00:01<00:00, 73.37it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 85%|      | 107/126 [00:01<00:00, 73.90it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 86%|      | 108/126 [00:01<00:00, 74.42it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 87%|      | 109/126 [00:01<00:00, 74.94it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 87%|      | 110/126 [00:01<00:00, 75.45it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 88%|      | 111/126 [00:01<00:00, 75.98it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 89%|      | 112/126 [00:01<00:00, 76.48it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 90%|      | 113/126 [00:01<00:00, 76.99it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 90%|      | 114/126 [00:01<00:00, 77.50it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 91%|      | 115/126 [00:01<00:00, 78.03it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 92%|      | 116/126 [00:01<00:00, 78.53it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 93%|      | 117/126 [00:01<00:00, 79.06it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 94%|      | 118/126 [00:01<00:00, 79.55it/s, loss=0.00315,
v_num=4.31e+7]

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Epoch 55: 94%|      | 119/126 [00:01<00:00, 80.06it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 95%|      | 120/126 [00:01<00:00, 80.56it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 96%|      | 121/126 [00:01<00:00, 81.06it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 97%|      | 122/126 [00:01<00:00, 81.56it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 98%|      | 123/126 [00:01<00:00, 82.10it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 98%|      | 124/126 [00:01<00:00, 82.62it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 99%|      | 125/126 [00:01<00:00, 83.15it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 83.68it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...
Epoch 55: 100%|     | 126/126 [00:01<00:00, 82.12it/s, loss=0.00315,
v_num=4.31e+7]
Epoch 55: 100%|     | 126/126 [00:01<00:00, 82.02it/s, loss=0.00315,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 79%|      | 100/126 [00:01<00:00, 77.97it/s, loss=0.00353,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 56: 80%|      | 101/126 [00:01<00:00, 69.37it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 81%|      | 102/126 [00:01<00:00, 69.40it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 82%|      | 103/126 [00:01<00:00, 69.93it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 83%|      | 104/126 [00:01<00:00, 70.43it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 83%|      | 105/126 [00:01<00:00, 70.95it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 84%|      | 106/126 [00:01<00:00, 71.45it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 85%|      | 107/126 [00:01<00:00, 71.98it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 86%|      | 108/126 [00:01<00:00, 72.48it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 87%|      | 109/126 [00:01<00:00, 72.99it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 87%|      | 110/126 [00:01<00:00, 73.49it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 88%|      | 111/126 [00:01<00:00, 74.01it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 89%|      | 112/126 [00:01<00:00, 74.51it/s, loss=0.00353,

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v_num=4.31e+7]
Epoch 56: 90%|      | 113/126 [00:01<00:00, 75.01it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 90%|      | 114/126 [00:01<00:00, 75.51it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 91%|      | 115/126 [00:01<00:00, 76.03it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 92%|      | 116/126 [00:01<00:00, 76.51it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 93%|      | 117/126 [00:01<00:00, 77.03it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 94%|      | 118/126 [00:01<00:00, 77.51it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 94%|      | 119/126 [00:01<00:00, 78.02it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 95%|      | 120/126 [00:01<00:00, 78.50it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 96%|      | 121/126 [00:01<00:00, 79.00it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 97%|      | 122/126 [00:01<00:00, 79.49it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 98%|      | 123/126 [00:01<00:00, 80.01it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 98%|      | 124/126 [00:01<00:00, 80.53it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 99%|      | 125/126 [00:01<00:00, 81.05it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 81.58it/s, loss=0.00353,
v_num=4.31e+7]Mapping latent space...
Epoch 56: 100%|     | 126/126 [00:01<00:00, 80.13it/s, loss=0.00353,
v_num=4.31e+7]
Epoch 56: 100%|     | 126/126 [00:01<00:00, 80.02it/s, loss=0.00353,
v_num=4.31e+7]Mapping latent space...

Epoch 57: 79%|      | 100/126 [00:01<00:00, 91.08it/s, loss=0.00355,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 57: 80%|      | 101/126 [00:01<00:00, 79.10it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 81%|      | 102/126 [00:01<00:00, 79.10it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 82%|      | 103/126 [00:01<00:00, 79.62it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 83%|      | 104/126 [00:01<00:00, 80.14it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 83%|      | 105/126 [00:01<00:00, 80.66it/s, loss=0.00355,

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v_num=4.31e+7]
Epoch 57: 84%|      | 106/126 [00:01<00:00, 81.18it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 85%|      | 107/126 [00:01<00:00, 81.69it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 86%|      | 108/126 [00:01<00:00, 82.21it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 87%|      | 109/126 [00:01<00:00, 82.73it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 87%|      | 110/126 [00:01<00:00, 83.24it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 88%|      | 111/126 [00:01<00:00, 83.76it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 89%|      | 112/126 [00:01<00:00, 84.27it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 90%|      | 113/126 [00:01<00:00, 84.78it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 90%|      | 114/126 [00:01<00:00, 85.29it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 91%|      | 115/126 [00:01<00:00, 85.79it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 92%|      | 116/126 [00:01<00:00, 86.31it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 93%|      | 117/126 [00:01<00:00, 86.81it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 94%|      | 118/126 [00:01<00:00, 87.31it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 94%|      | 119/126 [00:01<00:00, 87.81it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 95%|      | 120/126 [00:01<00:00, 88.30it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 96%|      | 121/126 [00:01<00:00, 88.79it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 97%|      | 122/126 [00:01<00:00, 89.29it/s, loss=0.00355,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 224.88it/s]
Epoch 57: 98%|      | 123/126 [00:01<00:00, 89.81it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 98%|      | 124/126 [00:01<00:00, 90.34it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 99%|      | 125/126 [00:01<00:00, 90.86it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 91.39it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 57: 100%|     | 126/126 [00:01<00:00, 89.38it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 57: 100%|     | 126/126 [00:01<00:00, 89.23it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...

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Epoch 58: 79%|          | 100/126 [00:01<00:00, 78.73it/s, loss=0.00278,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 58: 80%|          | 101/126 [00:01<00:00, 69.47it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 81%|          | 102/126 [00:01<00:00, 69.62it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 82%|          | 103/126 [00:01<00:00, 70.05it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 83%|          | 104/126 [00:01<00:00, 70.48it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 83%|          | 105/126 [00:01<00:00, 70.91it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 84%|          | 106/126 [00:01<00:00, 71.35it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 85%|          | 107/126 [00:01<00:00, 71.79it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 86%|          | 108/126 [00:01<00:00, 72.22it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 87%|          | 109/126 [00:01<00:00, 72.66it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 87%|          | 110/126 [00:01<00:00, 73.09it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 88%|          | 111/126 [00:01<00:00, 73.53it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 89%|          | 112/126 [00:01<00:00, 73.96it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 90%|          | 113/126 [00:01<00:00, 74.40it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 90%|          | 114/126 [00:01<00:00, 74.83it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 91%|          | 115/126 [00:01<00:00, 75.27it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 92%|          | 116/126 [00:01<00:00, 75.71it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 93%|          | 117/126 [00:01<00:00, 76.14it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 94%|          | 118/126 [00:01<00:00, 76.58it/s, loss=0.00278,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 184.27it/s]
Epoch 58: 94%|          | 119/126 [00:01<00:00, 77.01it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 95%|          | 120/126 [00:01<00:00, 77.46it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 96%|          | 121/126 [00:01<00:00, 77.90it/s, loss=0.00278,
v_num=4.31e+7]

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Epoch 58: 97%|      | 122/126 [00:01<00:00, 78.35it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 98%|      | 123/126 [00:01<00:00, 78.83it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 98%|      | 124/126 [00:01<00:00, 79.30it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 99%|      | 125/126 [00:01<00:00, 79.76it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 80.24it/s, loss=0.00278,
v_num=4.31e+7]Mapping latent space...
Epoch 58: 100%|     | 126/126 [00:01<00:00, 78.70it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 58: 100%|     | 126/126 [00:01<00:00, 78.59it/s, loss=0.00278,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 79%|      | 100/126 [00:01<00:00, 78.98it/s, loss=0.00259,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 59: 80%|      | 101/126 [00:01<00:00, 69.39it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 81%|      | 102/126 [00:01<00:00, 68.68it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 82%|      | 103/126 [00:01<00:00, 69.18it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 83%|      | 104/126 [00:01<00:00, 69.68it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 83%|      | 105/126 [00:01<00:00, 70.21it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 84%|      | 106/126 [00:01<00:00, 70.70it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 85%|      | 107/126 [00:01<00:00, 71.23it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 86%|      | 108/126 [00:01<00:00, 71.72it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 87%|      | 109/126 [00:01<00:00, 72.23it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 87%|      | 110/126 [00:01<00:00, 72.73it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 88%|      | 111/126 [00:01<00:00, 73.25it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 89%|      | 112/126 [00:01<00:00, 73.74it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 90%|      | 113/126 [00:01<00:00, 74.25it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 90%|      | 114/126 [00:01<00:00, 74.74it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 91%|      | 115/126 [00:01<00:00, 75.25it/s, loss=0.00259,

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v_num=4.31e+7]
Epoch 59: 92%|      | 116/126 [00:01<00:00, 75.74it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 93%|      | 117/126 [00:01<00:00, 76.25it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 94%|      | 118/126 [00:01<00:00, 76.73it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 94%|      | 119/126 [00:01<00:00, 77.24it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 95%|      | 120/126 [00:01<00:00, 77.72it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 96%|      | 121/126 [00:01<00:00, 78.23it/s, loss=0.00259,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 213.42it/s]
Epoch 59: 97%|      | 122/126 [00:01<00:00, 78.69it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 98%|      | 123/126 [00:01<00:00, 79.22it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 98%|      | 124/126 [00:01<00:00, 79.74it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 99%|      | 125/126 [00:01<00:00, 80.26it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 80.78it/s, loss=0.00259,
v_num=4.31e+7]Mapping latent space...
Epoch 59: 100%|     | 126/126 [00:01<00:00, 79.36it/s, loss=0.00259,
v_num=4.31e+7]
Epoch 59: 100%|     | 126/126 [00:01<00:00, 79.26it/s, loss=0.00259,
v_num=4.31e+7]Mapping latent space...

Epoch 60: 79%|      | 100/126 [00:01<00:00, 74.40it/s, loss=0.00317,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 60: 80%|      | 101/126 [00:01<00:00, 65.21it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 81%|      | 102/126 [00:01<00:00, 65.45it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 82%|      | 103/126 [00:01<00:00, 65.92it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 83%|      | 104/126 [00:01<00:00, 66.40it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 83%|      | 105/126 [00:01<00:00, 66.87it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 84%|      | 106/126 [00:01<00:00, 67.34it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 85%|      | 107/126 [00:01<00:00, 67.81it/s, loss=0.00317,
v_num=4.31e+7]

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Epoch 60: 86%|      | 108/126 [00:01<00:00, 68.28it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 87%|      | 109/126 [00:01<00:00, 68.74it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 87%|      | 110/126 [00:01<00:00, 69.20it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 88%|      | 111/126 [00:01<00:00, 69.67it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 89%|      | 112/126 [00:01<00:00, 70.13it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 90%|      | 113/126 [00:01<00:00, 70.58it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 90%|      | 114/126 [00:01<00:00, 71.04it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 91%|      | 115/126 [00:01<00:00, 71.50it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 92%|      | 116/126 [00:01<00:00, 71.95it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 93%|      | 117/126 [00:01<00:00, 72.40it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 94%|      | 118/126 [00:01<00:00, 72.84it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 94%|      | 119/126 [00:01<00:00, 73.29it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 95%|      | 120/126 [00:01<00:00, 73.73it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 96%|      | 121/126 [00:01<00:00, 74.18it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 97%|      | 122/126 [00:01<00:00, 74.62it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 98%|      | 123/126 [00:01<00:00, 75.09it/s, loss=0.00317,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 236.07it/s]
Epoch 60: 98%|      | 124/126 [00:01<00:00, 75.55it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 99%|      | 125/126 [00:01<00:00, 76.01it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 76.47it/s, loss=0.00317,
v_num=4.31e+7]Mapping latent space...
Epoch 60: 100%|     | 126/126 [00:01<00:00, 75.06it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 60: 100%|     | 126/126 [00:01<00:00, 74.96it/s, loss=0.00317,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 79%|      | 100/126 [00:01<00:00, 78.44it/s, loss=0.00281,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 61: 80%| | 101/126 [00:01<00:00, 68.78it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 81%| | 102/126 [00:01<00:00, 68.82it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 82%| | 103/126 [00:01<00:00, 69.33it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 83%| | 104/126 [00:01<00:00, 69.83it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 83%| | 105/126 [00:01<00:00, 70.34it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 84%| | 106/126 [00:01<00:00, 70.84it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 85%| | 107/126 [00:01<00:00, 71.35it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 86%| | 108/126 [00:01<00:00, 71.84it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 87%| | 109/126 [00:01<00:00, 72.35it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 87%| | 110/126 [00:01<00:00, 72.84it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 88%| | 111/126 [00:01<00:00, 73.36it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 89%| | 112/126 [00:01<00:00, 73.84it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 90%| | 113/126 [00:01<00:00, 74.34it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 90%| | 114/126 [00:01<00:00, 74.83it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 91%| | 115/126 [00:01<00:00, 75.32it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 92%| | 116/126 [00:01<00:00, 75.82it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 93%| | 117/126 [00:01<00:00, 76.31it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 94%| | 118/126 [00:01<00:00, 76.80it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 94%| | 119/126 [00:01<00:00, 77.29it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 95%| | 120/126 [00:01<00:00, 77.77it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 96%| | 121/126 [00:01<00:00, 78.26it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 97%| | 122/126 [00:01<00:00, 78.74it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 98%| | 123/126 [00:01<00:00, 79.26it/s, loss=0.00281, v_num=4.31e+7]
Epoch 61: 98%| | 124/126 [00:01<00:00, 79.77it/s, loss=0.00281, v_num=4.31e+7]

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Epoch 61: 99%|      | 125/126 [00:01<00:00, 80.28it/s, loss=0.00281,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 258.13it/s]
Epoch 61: 100%|      | 126/126 [00:01<00:00, 80.80it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...
Epoch 61: 100%|      | 126/126 [00:01<00:00, 79.25it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 61: 100%|      | 126/126 [00:01<00:00, 79.15it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 79%|      | 100/126 [00:01<00:00, 89.07it/s, loss=0.00356,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 62: 80%|      | 101/126 [00:01<00:00, 77.80it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 81%|      | 102/126 [00:01<00:00, 77.55it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 82%|      | 103/126 [00:01<00:00, 77.97it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 83%|      | 104/126 [00:01<00:00, 78.43it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 83%|      | 105/126 [00:01<00:00, 78.88it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 84%|      | 106/126 [00:01<00:00, 79.34it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 85%|      | 107/126 [00:01<00:00, 79.80it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 86%|      | 108/126 [00:01<00:00, 80.27it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 87%|      | 109/126 [00:01<00:00, 80.73it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 87%|      | 110/126 [00:01<00:00, 81.20it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 88%|      | 111/126 [00:01<00:00, 81.66it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 89%|      | 112/126 [00:01<00:00, 82.12it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 90%|      | 113/126 [00:01<00:00, 82.58it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 90%|      | 114/126 [00:01<00:00, 83.04it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 91%|      | 115/126 [00:01<00:00, 83.50it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 92%|      | 116/126 [00:01<00:00, 83.96it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 93%|      | 117/126 [00:01<00:00, 84.42it/s, loss=0.00356,
v_num=4.31e+7]

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Epoch 62: 94%|      | 118/126 [00:01<00:00, 84.89it/s, loss=0.00356,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 182.74it/s]
Epoch 62: 94%|      | 119/126 [00:01<00:00, 85.34it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 95%|      | 120/126 [00:01<00:00, 85.81it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 96%|      | 121/126 [00:01<00:00, 86.27it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 97%|      | 122/126 [00:01<00:00, 86.76it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 98%|      | 123/126 [00:01<00:00, 87.26it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 98%|      | 124/126 [00:01<00:00, 87.76it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 99%|      | 125/126 [00:01<00:00, 88.26it/s, loss=0.00356,
v_num=4.31e+7]
Epoch 62: 100%|     | 126/126 [00:01<00:00, 88.77it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 62: 100%|     | 126/126 [00:01<00:00, 86.84it/s, loss=0.00356,
v_num=4.31e+7]

Epoch 62: 100%|     | 126/126 [00:01<00:00, 86.70it/s, loss=0.00356,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 79%|      | 100/126 [00:01<00:00, 78.25it/s, loss=0.00326,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 63: 80%|      | 101/126 [00:01<00:00, 69.41it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 81%|      | 102/126 [00:01<00:00, 69.61it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 82%|      | 103/126 [00:01<00:00, 70.14it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 83%|      | 104/126 [00:01<00:00, 70.64it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 83%|      | 105/126 [00:01<00:00, 71.17it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 84%|      | 106/126 [00:01<00:00, 71.67it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 85%|      | 107/126 [00:01<00:00, 72.21it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 86%|      | 108/126 [00:01<00:00, 72.70it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 87%|      | 109/126 [00:01<00:00, 73.22it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 87%|      | 110/126 [00:01<00:00, 73.71it/s, loss=0.00326,

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v_num=4.31e+7]
Epoch 63: 88%|      | 111/126 [00:01<00:00, 74.24it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 89%|      | 112/126 [00:01<00:00, 74.73it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 90%|      | 113/126 [00:01<00:00, 75.23it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 90%|      | 114/126 [00:01<00:00, 75.73it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 91%|      | 115/126 [00:01<00:00, 76.23it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 92%|      | 116/126 [00:01<00:00, 76.73it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 93%|      | 117/126 [00:01<00:00, 77.22it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 94%|      | 118/126 [00:01<00:00, 77.71it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 94%|      | 119/126 [00:01<00:00, 78.21it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 95%|      | 120/126 [00:01<00:00, 78.70it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 96%|      | 121/126 [00:01<00:00, 79.18it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 97%|      | 122/126 [00:01<00:00, 79.68it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 98%|      | 123/126 [00:01<00:00, 80.20it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 98%|      | 124/126 [00:01<00:00, 80.72it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 99%|      | 125/126 [00:01<00:00, 81.23it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 81.75it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 63: 100%|     | 126/126 [00:01<00:00, 80.27it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 63: 100%|     | 126/126 [00:01<00:00, 80.17it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 64: 79%|      | 100/126 [00:01<00:00, 89.74it/s, loss=0.00288,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 64: 80%|      | 101/126 [00:01<00:00, 79.55it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 64: 81%|      | 102/126 [00:01<00:00, 79.52it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 64: 82%|      | 103/126 [00:01<00:00, 80.08it/s, loss=0.00288,
v_num=4.31e+7]

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Epoch 64: 83%| | 104/126 [00:01<00:00, 80.60it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 83%| | 105/126 [00:01<00:00, 81.18it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 84%| | 106/126 [00:01<00:00, 81.73it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 85%| | 107/126 [00:01<00:00, 82.30it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 86%| | 108/126 [00:01<00:00, 82.85it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 87%| | 109/126 [00:01<00:00, 83.41it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 87%| | 110/126 [00:01<00:00, 83.97it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 88%| | 111/126 [00:01<00:00, 84.55it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 89%| | 112/126 [00:01<00:00, 85.10it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 90%| | 113/126 [00:01<00:00, 85.64it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 90%| | 114/126 [00:01<00:00, 86.09it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 91%| | 115/126 [00:01<00:00, 86.65it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 92%| | 116/126 [00:01<00:00, 87.18it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 93%| | 117/126 [00:01<00:00, 87.71it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 94%| | 118/126 [00:01<00:00, 88.25it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 94%| | 119/126 [00:01<00:00, 88.79it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 95%| | 120/126 [00:01<00:00, 89.33it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 96%| | 121/126 [00:01<00:00, 89.86it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 97%| | 122/126 [00:01<00:00, 90.39it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 98%| | 123/126 [00:01<00:00, 90.96it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 98%| | 124/126 [00:01<00:00, 91.53it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 99%| | 125/126 [00:01<00:00, 92.09it/s, loss=0.00288, v_num=4.31e+7]
Epoch 64: 100%| | 126/126 [00:01<00:00, 92.67it/s, loss=0.00288, v_num=4.31e+7] Mapping latent space...
Epoch 64: 100%| | 126/126 [00:01<00:00, 90.64it/s, loss=0.00288, v_num=4.31e+7]

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Epoch 64: 100%|      | 126/126 [00:01<00:00, 90.52it/s, loss=0.00288,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 79%|      | 100/126 [00:01<00:00, 77.31it/s, loss=0.00266,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 65: 80%|      | 101/126 [00:01<00:00, 69.33it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 81%|      | 102/126 [00:01<00:00, 69.62it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 82%|      | 103/126 [00:01<00:00, 70.07it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 83%|      | 104/126 [00:01<00:00, 70.52it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 83%|      | 105/126 [00:01<00:00, 70.97it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 84%|      | 106/126 [00:01<00:00, 71.40it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 85%|      | 107/126 [00:01<00:00, 71.85it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 86%|      | 108/126 [00:01<00:00, 72.30it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 87%|      | 109/126 [00:01<00:00, 72.76it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 87%|      | 110/126 [00:01<00:00, 73.20it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 88%|      | 111/126 [00:01<00:00, 73.65it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 89%|      | 112/126 [00:01<00:00, 74.10it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 90%|      | 113/126 [00:01<00:00, 74.55it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 90%|      | 114/126 [00:01<00:00, 74.99it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 91%|      | 115/126 [00:01<00:00, 75.43it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 92%|      | 116/126 [00:01<00:00, 75.86it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 93%|      | 117/126 [00:01<00:00, 76.31it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 94%|      | 118/126 [00:01<00:00, 76.74it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 94%|      | 119/126 [00:01<00:00, 77.18it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 95%|      | 120/126 [00:01<00:00, 77.61it/s, loss=0.00266,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 201.49it/s]

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Epoch 65: 96%|      | 121/126 [00:01<00:00, 78.04it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 97%|      | 122/126 [00:01<00:00, 78.47it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 98%|      | 123/126 [00:01<00:00, 78.91it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 98%|      | 124/126 [00:01<00:00, 79.36it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 99%|      | 125/126 [00:01<00:00, 79.80it/s, loss=0.00266,
v_num=4.31e+7]
Epoch 65: 100%|     | 126/126 [00:01<00:00, 80.25it/s, loss=0.00266,
v_num=4.31e+7]Mapping latent space...
Epoch 65: 100%|     | 126/126 [00:01<00:00, 78.65it/s, loss=0.00266,
v_num=4.31e+7]

Epoch 65: 100%|     | 126/126 [00:01<00:00, 78.53it/s, loss=0.00266,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 79%|      | 100/126 [00:01<00:00, 74.57it/s, loss=0.00294,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 66: 80%|      | 101/126 [00:01<00:00, 65.89it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 81%|      | 102/126 [00:01<00:00, 66.09it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 82%|      | 103/126 [00:01<00:00, 66.56it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 83%|      | 104/126 [00:01<00:00, 67.03it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 83%|      | 105/126 [00:01<00:00, 67.50it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 84%|      | 106/126 [00:01<00:00, 67.97it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 85%|      | 107/126 [00:01<00:00, 68.44it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 86%|      | 108/126 [00:01<00:00, 68.88it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 87%|      | 109/126 [00:01<00:00, 69.35it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 87%|      | 110/126 [00:01<00:00, 69.82it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 88%|      | 111/126 [00:01<00:00, 70.28it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 89%|      | 112/126 [00:01<00:00, 70.74it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 90%|      | 113/126 [00:01<00:00, 71.20it/s, loss=0.00294,
v_num=4.31e+7]

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Epoch 66: 90%|      | 114/126 [00:01<00:00, 71.66it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 91%|      | 115/126 [00:01<00:00, 72.12it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 92%|      | 116/126 [00:01<00:00, 72.57it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 93%|      | 117/126 [00:01<00:00, 73.03it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 94%|      | 118/126 [00:01<00:00, 73.48it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 94%|      | 119/126 [00:01<00:00, 73.95it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 95%|      | 120/126 [00:01<00:00, 74.38it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 96%|      | 121/126 [00:01<00:00, 74.82it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 97%|      | 122/126 [00:01<00:00, 75.27it/s, loss=0.00294,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 227.97it/s]
Epoch 66: 98%|      | 123/126 [00:01<00:00, 75.74it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 98%|      | 124/126 [00:01<00:00, 76.21it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 99%|      | 125/126 [00:01<00:00, 76.67it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 77.14it/s, loss=0.00294,
v_num=4.31e+7]Mapping latent space...
Epoch 66: 100%|     | 126/126 [00:01<00:00, 75.71it/s, loss=0.00294,
v_num=4.31e+7]
Epoch 66: 100%|     | 126/126 [00:01<00:00, 75.61it/s, loss=0.00294,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 79%|      | 100/126 [00:01<00:00, 81.47it/s, loss=0.00291,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 67: 80%|      | 101/126 [00:01<00:00, 70.91it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 81%|      | 102/126 [00:01<00:00, 71.02it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 82%|      | 103/126 [00:01<00:00, 71.42it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 83%|      | 104/126 [00:01<00:00, 71.84it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 83%|      | 105/126 [00:01<00:00, 72.26it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 84%|      | 106/126 [00:01<00:00, 72.68it/s, loss=0.00291,
v_num=4.31e+7]

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Epoch 67: 85%|      | 107/126 [00:01<00:00, 73.11it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 86%|      | 108/126 [00:01<00:00, 73.54it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 87%|      | 109/126 [00:01<00:00, 73.99it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 87%|      | 110/126 [00:01<00:00, 74.39it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 88%|      | 111/126 [00:01<00:00, 74.83it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 89%|      | 112/126 [00:01<00:00, 75.16it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 90%|      | 113/126 [00:01<00:00, 75.48it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 90%|      | 114/126 [00:01<00:00, 75.83it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 91%|      | 115/126 [00:01<00:00, 76.19it/s, loss=0.00291,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 153.68it/s]
Epoch 67: 92%|      | 116/126 [00:01<00:00, 76.54it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 93%|      | 117/126 [00:01<00:00, 76.91it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 94%|      | 118/126 [00:01<00:00, 77.28it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 94%|      | 119/126 [00:01<00:00, 77.62it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 95%|      | 120/126 [00:01<00:00, 77.93it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 96%|      | 121/126 [00:01<00:00, 78.26it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 97%|      | 122/126 [00:01<00:00, 78.59it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 98%|      | 123/126 [00:01<00:00, 78.96it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 98%|      | 124/126 [00:01<00:00, 79.33it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 99%|      | 125/126 [00:01<00:00, 79.70it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 80.09it/s, loss=0.00291,
v_num=4.31e+7]Mapping latent space...
Epoch 67: 100%|     | 126/126 [00:01<00:00, 77.83it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 67: 100%|     | 126/126 [00:01<00:00, 77.66it/s, loss=0.00291,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 79%|      | 100/126 [00:01<00:00, 80.91it/s, loss=0.00313,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 68: 80%|          | 101/126 [00:01<00:00, 71.07it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 81%|          | 102/126 [00:01<00:00, 71.12it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 82%|          | 103/126 [00:01<00:00, 71.67it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 83%|          | 104/126 [00:01<00:00, 72.18it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 83%|          | 105/126 [00:01<00:00, 72.71it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 84%|          | 106/126 [00:01<00:00, 73.23it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 85%|          | 107/126 [00:01<00:00, 73.77it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 86%|          | 108/126 [00:01<00:00, 74.28it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 87%|          | 109/126 [00:01<00:00, 74.81it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 87%|          | 110/126 [00:01<00:00, 75.32it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 88%|          | 111/126 [00:01<00:00, 75.85it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 89%|          | 112/126 [00:01<00:00, 76.33it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 90%|          | 113/126 [00:01<00:00, 76.85it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 90%|          | 114/126 [00:01<00:00, 77.36it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 91%|          | 115/126 [00:01<00:00, 77.89it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 92%|          | 116/126 [00:01<00:00, 78.39it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 93%|          | 117/126 [00:01<00:00, 78.89it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 94%|          | 118/126 [00:01<00:00, 79.39it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 94%|          | 119/126 [00:01<00:00, 79.91it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 95%|          | 120/126 [00:01<00:00, 80.40it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 96%|          | 121/126 [00:01<00:00, 80.91it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 97%|          | 122/126 [00:01<00:00, 81.42it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 98%|          | 123/126 [00:01<00:00, 81.94it/s, loss=0.00313,
v_num=4.31e+7]

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Epoch 68: 98%|      | 124/126 [00:01<00:00, 82.47it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 99%|      | 125/126 [00:01<00:00, 82.99it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 83.53it/s, loss=0.00313,
v_num=4.31e+7]Mapping latent space...
Epoch 68: 100%|     | 126/126 [00:01<00:00, 81.98it/s, loss=0.00313,
v_num=4.31e+7]
Epoch 68: 100%|     | 126/126 [00:01<00:00, 81.88it/s, loss=0.00313,
v_num=4.31e+7]Mapping latent space...

Epoch 69: 79%|      | 100/126 [00:01<00:00, 76.71it/s, loss=0.00304,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 69: 80%|      | 101/126 [00:01<00:00, 66.95it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 81%|      | 102/126 [00:01<00:00, 67.28it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 82%|      | 103/126 [00:01<00:00, 67.76it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 83%|      | 104/126 [00:01<00:00, 68.23it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 83%|      | 105/126 [00:01<00:00, 68.69it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 84%|      | 106/126 [00:01<00:00, 69.16it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 85%|      | 107/126 [00:01<00:00, 69.63it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 86%|      | 108/126 [00:01<00:00, 70.09it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 87%|      | 109/126 [00:01<00:00, 70.55it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 87%|      | 110/126 [00:01<00:00, 71.01it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 88%|      | 111/126 [00:01<00:00, 71.47it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 89%|      | 112/126 [00:01<00:00, 71.91it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 90%|      | 113/126 [00:01<00:00, 72.36it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 90%|      | 114/126 [00:01<00:00, 72.78it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 91%|      | 115/126 [00:01<00:00, 73.23it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 92%|      | 116/126 [00:01<00:00, 73.68it/s, loss=0.00304,
v_num=4.31e+7]

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Epoch 69: 93%|      | 117/126 [00:01<00:00, 74.12it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 94%|      | 118/126 [00:01<00:00, 74.56it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 94%|      | 119/126 [00:01<00:00, 75.00it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 95%|      | 120/126 [00:01<00:00, 75.43it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 96%|      | 121/126 [00:01<00:00, 75.87it/s, loss=0.00304,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 219.52it/s]
Epoch 69: 97%|      | 122/126 [00:01<00:00, 76.30it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 98%|      | 123/126 [00:01<00:00, 76.77it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 98%|      | 124/126 [00:01<00:00, 77.24it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 99%|      | 125/126 [00:01<00:00, 77.70it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 78.17it/s, loss=0.00304,
v_num=4.31e+7]Mapping latent space...
Epoch 69: 100%|     | 126/126 [00:01<00:00, 76.70it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 69: 100%|     | 126/126 [00:01<00:00, 76.59it/s, loss=0.00304,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 79%|      | 100/126 [00:01<00:00, 67.30it/s, loss=0.00312,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 70: 80%|      | 101/126 [00:01<00:00, 59.76it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 81%|      | 102/126 [00:01<00:00, 60.14it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 82%|      | 103/126 [00:01<00:00, 60.51it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 83%|      | 104/126 [00:01<00:00, 60.90it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 83%|      | 105/126 [00:01<00:00, 61.29it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 84%|      | 106/126 [00:01<00:00, 61.69it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 85%|      | 107/126 [00:01<00:00, 62.08it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 86%|      | 108/126 [00:01<00:00, 62.48it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 87%|      | 109/126 [00:01<00:00, 62.87it/s, loss=0.00312,
v_num=4.31e+7]

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Epoch 70: 87%|      | 110/126 [00:01<00:00, 63.27it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 88%|      | 111/126 [00:01<00:00, 63.68it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 89%|      | 112/126 [00:01<00:00, 64.08it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 90%|      | 113/126 [00:01<00:00, 64.48it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 90%|      | 114/126 [00:01<00:00, 64.89it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 91%|      | 115/126 [00:01<00:00, 65.15it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 92%|      | 116/126 [00:01<00:00, 65.48it/s, loss=0.00312,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.69it/s]
Epoch 70: 93%|      | 117/126 [00:01<00:00, 65.88it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 94%|      | 118/126 [00:01<00:00, 66.29it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 94%|      | 119/126 [00:01<00:00, 66.69it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 95%|      | 120/126 [00:01<00:00, 67.10it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 96%|      | 121/126 [00:01<00:00, 67.50it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 97%|      | 122/126 [00:01<00:00, 67.91it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 98%|      | 123/126 [00:01<00:00, 68.35it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 98%|      | 124/126 [00:01<00:00, 68.78it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 99%|      | 125/126 [00:01<00:00, 69.20it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 69.64it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 70: 100%|     | 126/126 [00:01<00:00, 68.32it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 70: 100%|     | 126/126 [00:01<00:00, 68.22it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 71: 79%|      | 100/126 [00:01<00:00, 76.44it/s, loss=0.00319,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 71: 80%|      | 101/126 [00:01<00:00, 68.46it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 71: 81%|      | 102/126 [00:01<00:00, 68.73it/s, loss=0.00319,
v_num=4.31e+7]

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Epoch 71: 82%| | 103/126 [00:01<00:00, 69.25it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 83%| | 104/126 [00:01<00:00, 69.77it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 83%| | 105/126 [00:01<00:00, 70.26it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 84%| | 106/126 [00:01<00:00, 70.77it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 85%| | 107/126 [00:01<00:00, 71.29it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 86%| | 108/126 [00:01<00:00, 71.78it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 87%| | 109/126 [00:01<00:00, 72.30it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 87%| | 110/126 [00:01<00:00, 72.79it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 88%| | 111/126 [00:01<00:00, 73.31it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 89%| | 112/126 [00:01<00:00, 73.79it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 90%| | 113/126 [00:01<00:00, 74.29it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 90%| | 114/126 [00:01<00:00, 74.79it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 91%| | 115/126 [00:01<00:00, 75.29it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 92%| | 116/126 [00:01<00:00, 75.78it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 93%| | 117/126 [00:01<00:00, 76.28it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 94%| | 118/126 [00:01<00:00, 76.74it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 94%| | 119/126 [00:01<00:00, 77.23it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 95%| | 120/126 [00:01<00:00, 77.72it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 96%| | 121/126 [00:01<00:00, 78.20it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 97%| | 122/126 [00:01<00:00, 78.70it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 98%| | 123/126 [00:01<00:00, 79.21it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 98%| | 124/126 [00:01<00:00, 79.72it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 99%| | 125/126 [00:01<00:00, 80.23it/s, loss=0.00319, v_num=4.31e+7]
Epoch 71: 100%| | 126/126 [00:01<00:00, 80.74it/s, loss=0.00319, v_num=4.31e+7]Mapping latent space...

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Epoch 71: 100%|      | 126/126 [00:01<00:00, 79.28it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 71: 100%|      | 126/126 [00:01<00:00, 79.17it/s, loss=0.00319,
v_num=4.31e+7]Mapping latent space...

Epoch 72: 79%|      | 100/126 [00:01<00:00, 91.03it/s, loss=0.00355,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 72: 80%|      | 101/126 [00:01<00:00, 78.00it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 81%|      | 102/126 [00:01<00:00, 77.85it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 82%|      | 103/126 [00:01<00:00, 78.29it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 83%|      | 104/126 [00:01<00:00, 78.73it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 83%|      | 105/126 [00:01<00:00, 79.18it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 84%|      | 106/126 [00:01<00:00, 79.62it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 85%|      | 107/126 [00:01<00:00, 80.07it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 86%|      | 108/126 [00:01<00:00, 80.52it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 87%|      | 109/126 [00:01<00:00, 80.98it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 87%|      | 110/126 [00:01<00:00, 81.44it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 88%|      | 111/126 [00:01<00:00, 81.90it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 89%|      | 112/126 [00:01<00:00, 82.35it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 90%|      | 113/126 [00:01<00:00, 82.81it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 90%|      | 114/126 [00:01<00:00, 83.29it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 91%|      | 115/126 [00:01<00:00, 83.75it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 92%|      | 116/126 [00:01<00:00, 84.22it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 93%|      | 117/126 [00:01<00:00, 84.69it/s, loss=0.00355,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 173.98it/s]
Epoch 72: 94%|      | 118/126 [00:01<00:00, 85.14it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 94%|      | 119/126 [00:01<00:00, 85.61it/s, loss=0.00355,

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v_num=4.31e+7]
Epoch 72: 95%|      | 120/126 [00:01<00:00, 86.04it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 96%|      | 121/126 [00:01<00:00, 86.51it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 97%|      | 122/126 [00:01<00:00, 86.98it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 98%|      | 123/126 [00:01<00:00, 87.49it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 98%|      | 124/126 [00:01<00:00, 88.00it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 99%|      | 125/126 [00:01<00:00, 88.50it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 89.01it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 72: 100%|     | 126/126 [00:01<00:00, 87.05it/s, loss=0.00355,
v_num=4.31e+7]
Epoch 72: 100%|     | 126/126 [00:01<00:00, 86.90it/s, loss=0.00355,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 79%|      | 100/126 [00:01<00:00, 69.13it/s, loss=0.00287,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 73: 80%|      | 101/126 [00:01<00:00, 60.80it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 81%|      | 102/126 [00:01<00:00, 61.07it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 82%|      | 103/126 [00:01<00:00, 61.48it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 83%|      | 104/126 [00:01<00:00, 61.88it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 83%|      | 105/126 [00:01<00:00, 62.28it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 84%|      | 106/126 [00:01<00:00, 62.69it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 85%|      | 107/126 [00:01<00:00, 63.10it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 86%|      | 108/126 [00:01<00:00, 63.52it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 87%|      | 109/126 [00:01<00:00, 63.93it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 87%|      | 110/126 [00:01<00:00, 64.35it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 88%|      | 111/126 [00:01<00:00, 64.76it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 89%|      | 112/126 [00:01<00:00, 65.18it/s, loss=0.00287,
v_num=4.31e+7]

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Epoch 73: 90%|      | 113/126 [00:01<00:00, 65.59it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 90%|      | 114/126 [00:01<00:00, 66.01it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 91%|      | 115/126 [00:01<00:00, 66.42it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 92%|      | 116/126 [00:01<00:00, 66.84it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 93%|      | 117/126 [00:01<00:00, 67.25it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 94%|      | 118/126 [00:01<00:00, 67.66it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 94%|      | 119/126 [00:01<00:00, 68.08it/s, loss=0.00287,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 193.66it/s]
Epoch 73: 95%|      | 120/126 [00:01<00:00, 68.49it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 96%|      | 121/126 [00:01<00:00, 68.89it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 97%|      | 122/126 [00:01<00:00, 69.29it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 98%|      | 123/126 [00:01<00:00, 69.73it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 98%|      | 124/126 [00:01<00:00, 70.16it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 99%|      | 125/126 [00:01<00:00, 70.59it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 71.03it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 73: 100%|     | 126/126 [00:01<00:00, 69.69it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 73: 100%|     | 126/126 [00:01<00:00, 69.59it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 79%|      | 100/126 [00:01<00:00, 75.42it/s, loss=0.00312,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 74: 80%|      | 101/126 [00:01<00:00, 65.96it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 81%|      | 102/126 [00:01<00:00, 65.86it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 82%|      | 103/126 [00:01<00:00, 66.25it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 83%|      | 104/126 [00:01<00:00, 66.65it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 83%|      | 105/126 [00:01<00:00, 67.06it/s, loss=0.00312,
v_num=4.31e+7]

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Epoch 74: 84%|      | 106/126 [00:01<00:00, 67.48it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 85%|      | 107/126 [00:01<00:00, 67.89it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 86%|      | 108/126 [00:01<00:00, 68.31it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 87%|      | 109/126 [00:01<00:00, 68.72it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 87%|      | 110/126 [00:01<00:00, 69.14it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 88%|      | 111/126 [00:01<00:00, 69.55it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 89%|      | 112/126 [00:01<00:00, 69.98it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 90%|      | 113/126 [00:01<00:00, 70.39it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 90%|      | 114/126 [00:01<00:00, 70.81it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 91%|      | 115/126 [00:01<00:00, 71.23it/s, loss=0.00312,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 159.41it/s]
Epoch 74: 92%|      | 116/126 [00:01<00:00, 71.64it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 93%|      | 117/126 [00:01<00:00, 72.06it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 94%|      | 118/126 [00:01<00:00, 72.48it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 94%|      | 119/126 [00:01<00:00, 72.90it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 95%|      | 120/126 [00:01<00:00, 73.32it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 96%|      | 121/126 [00:01<00:00, 73.74it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 97%|      | 122/126 [00:01<00:00, 74.17it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 98%|      | 123/126 [00:01<00:00, 74.62it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 98%|      | 124/126 [00:01<00:00, 75.08it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 99%|      | 125/126 [00:01<00:00, 75.53it/s, loss=0.00312,
v_num=4.31e+7]
Epoch 74: 100%|     | 126/126 [00:01<00:00, 75.99it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...
Epoch 74: 100%|     | 126/126 [00:01<00:00, 74.56it/s, loss=0.00312,
v_num=4.31e+7]

Epoch 74: 100%|     | 126/126 [00:01<00:00, 74.45it/s, loss=0.00312,
v_num=4.31e+7]Mapping latent space...

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Epoch 75: 79%|          | 100/126 [00:01<00:00, 68.60it/s, loss=0.00318,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 75: 80%|          | 101/126 [00:01<00:00, 60.82it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 81%|          | 102/126 [00:01<00:00, 60.89it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 82%|          | 103/126 [00:01<00:00, 61.29it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 83%|          | 104/126 [00:01<00:00, 61.69it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 83%|          | 105/126 [00:01<00:00, 62.10it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 84%|          | 106/126 [00:01<00:00, 62.50it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 85%|          | 107/126 [00:01<00:00, 62.91it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 86%|          | 108/126 [00:01<00:00, 63.31it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 87%|          | 109/126 [00:01<00:00, 63.72it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 87%|          | 110/126 [00:01<00:00, 64.13it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 88%|          | 111/126 [00:01<00:00, 64.54it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 89%|          | 112/126 [00:01<00:00, 64.95it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 90%|          | 113/126 [00:01<00:00, 65.37it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 90%|          | 114/126 [00:01<00:00, 65.78it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 91%|          | 115/126 [00:01<00:00, 66.19it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 92%|          | 116/126 [00:01<00:00, 66.60it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 93%|          | 117/126 [00:01<00:00, 67.01it/s, loss=0.00318,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 173.89it/s]
Epoch 75: 94%|          | 118/126 [00:01<00:00, 67.38it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 94%|          | 119/126 [00:01<00:00, 67.68it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 95%|          | 120/126 [00:01<00:00, 68.00it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 96%|          | 121/126 [00:01<00:00, 68.34it/s, loss=0.00318,
v_num=4.31e+7]

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Epoch 75: 97%|      | 122/126 [00:01<00:00, 68.67it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 98%|      | 123/126 [00:01<00:00, 69.04it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 98%|      | 124/126 [00:01<00:00, 69.41it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 99%|      | 125/126 [00:01<00:00, 69.78it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 70.16it/s, loss=0.00318,
v_num=4.31e+7]Mapping latent space...
Epoch 75: 100%|     | 126/126 [00:01<00:00, 68.78it/s, loss=0.00318,
v_num=4.31e+7]
Epoch 75: 100%|     | 126/126 [00:01<00:00, 68.65it/s, loss=0.00318,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 79%|      | 100/126 [00:01<00:00, 71.60it/s, loss=0.00267,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 76: 80%|      | 101/126 [00:01<00:00, 63.53it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 81%|      | 102/126 [00:01<00:00, 63.79it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 82%|      | 103/126 [00:01<00:00, 64.18it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 83%|      | 104/126 [00:01<00:00, 64.58it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 83%|      | 105/126 [00:01<00:00, 64.97it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 84%|      | 106/126 [00:01<00:00, 65.38it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 85%|      | 107/126 [00:01<00:00, 65.79it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 86%|      | 108/126 [00:01<00:00, 66.20it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 87%|      | 109/126 [00:01<00:00, 66.61it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 87%|      | 110/126 [00:01<00:00, 67.03it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 88%|      | 111/126 [00:01<00:00, 67.44it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 89%|      | 112/126 [00:01<00:00, 67.86it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 90%|      | 113/126 [00:01<00:00, 68.28it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 90%|      | 114/126 [00:01<00:00, 68.69it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 91%|      | 115/126 [00:01<00:00, 69.11it/s, loss=0.00267,

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v_num=4.31e+7]
Epoch 76: 92%|      | 116/126 [00:01<00:00, 69.53it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 93%|      | 117/126 [00:01<00:00, 69.95it/s, loss=0.00267,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 179.31it/s]
Epoch 76: 94%|      | 118/126 [00:01<00:00, 70.36it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 94%|      | 119/126 [00:01<00:00, 70.78it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 95%|      | 120/126 [00:01<00:00, 71.21it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 96%|      | 121/126 [00:01<00:00, 71.63it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 97%|      | 122/126 [00:01<00:00, 72.05it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 98%|      | 123/126 [00:01<00:00, 72.50it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 98%|      | 124/126 [00:01<00:00, 72.95it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 99%|      | 125/126 [00:01<00:00, 73.40it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 73.85it/s, loss=0.00267,
v_num=4.31e+7]Mapping latent space...
Epoch 76: 100%|     | 126/126 [00:01<00:00, 72.29it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 76: 100%|     | 126/126 [00:01<00:00, 72.19it/s, loss=0.00267,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 79%|      | 100/126 [00:01<00:00, 77.42it/s, loss=0.00305,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 77: 80%|      | 101/126 [00:01<00:00, 68.85it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 81%|      | 102/126 [00:01<00:00, 69.12it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 82%|      | 103/126 [00:01<00:00, 69.61it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 83%|      | 104/126 [00:01<00:00, 70.11it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 83%|      | 105/126 [00:01<00:00, 70.62it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 84%|      | 106/126 [00:01<00:00, 71.12it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 85%|      | 107/126 [00:01<00:00, 71.62it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 86%|      | 108/126 [00:01<00:00, 72.12it/s, loss=0.00305,

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v_num=4.31e+7]
Epoch 77: 87%|      | 109/126 [00:01<00:00, 72.62it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 87%|      | 110/126 [00:01<00:00, 73.12it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 88%|      | 111/126 [00:01<00:00, 73.62it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 89%|      | 112/126 [00:01<00:00, 74.11it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 90%|      | 113/126 [00:01<00:00, 74.61it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 90%|      | 114/126 [00:01<00:00, 75.09it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 91%|      | 115/126 [00:01<00:00, 75.59it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 92%|      | 116/126 [00:01<00:00, 76.08it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 93%|      | 117/126 [00:01<00:00, 76.57it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 94%|      | 118/126 [00:01<00:00, 77.05it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 94%|      | 119/126 [00:01<00:00, 77.51it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 95%|      | 120/126 [00:01<00:00, 77.98it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 96%|      | 121/126 [00:01<00:00, 78.48it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 97%|      | 122/126 [00:01<00:00, 78.94it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 98%|      | 123/126 [00:01<00:00, 79.46it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 98%|      | 124/126 [00:01<00:00, 79.97it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 99%|      | 125/126 [00:01<00:00, 80.48it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 81.00it/s, loss=0.00305,
v_num=4.31e+7]Mapping latent space...
Epoch 77: 100%|     | 126/126 [00:01<00:00, 78.75it/s, loss=0.00305,
v_num=4.31e+7]
Epoch 77: 100%|     | 126/126 [00:01<00:00, 78.65it/s, loss=0.00305,
v_num=4.31e+7]Mapping latent space...

Epoch 78: 79%|      | 100/126 [00:01<00:00, 88.25it/s, loss=0.00297,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 78: 80%|      | 101/126 [00:01<00:00, 76.69it/s, loss=0.00297,

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v_num=4.31e+7]
Epoch 78: 81%|      | 102/126 [00:01<00:00, 77.01it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 82%|      | 103/126 [00:01<00:00, 77.44it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 83%|      | 104/126 [00:01<00:00, 77.88it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 83%|      | 105/126 [00:01<00:00, 78.31it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 84%|      | 106/126 [00:01<00:00, 78.76it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 85%|      | 107/126 [00:01<00:00, 79.20it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 86%|      | 108/126 [00:01<00:00, 79.65it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 87%|      | 109/126 [00:01<00:00, 80.10it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 87%|      | 110/126 [00:01<00:00, 80.54it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 88%|      | 111/126 [00:01<00:00, 80.98it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 89%|      | 112/126 [00:01<00:00, 81.43it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 90%|      | 113/126 [00:01<00:00, 81.88it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 90%|      | 114/126 [00:01<00:00, 82.33it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 91%|      | 115/126 [00:01<00:00, 82.78it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 92%|      | 116/126 [00:01<00:00, 83.24it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 93%|      | 117/126 [00:01<00:00, 83.69it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 94%|      | 118/126 [00:01<00:00, 84.16it/s, loss=0.00297,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 187.21it/s]
Epoch 78: 94%|      | 119/126 [00:01<00:00, 84.61it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 95%|      | 120/126 [00:01<00:00, 85.07it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 96%|      | 121/126 [00:01<00:00, 85.53it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 97%|      | 122/126 [00:01<00:00, 86.00it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 98%|      | 123/126 [00:01<00:00, 86.50it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 98%|      | 124/126 [00:01<00:00, 87.00it/s, loss=0.00297,
v_num=4.31e+7]

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Epoch 78: 99%|      | 125/126 [00:01<00:00, 87.49it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 87.99it/s, loss=0.00297,
v_num=4.31e+7]Mapping latent space...
Epoch 78: 100%|     | 126/126 [00:01<00:00, 86.09it/s, loss=0.00297,
v_num=4.31e+7]
Epoch 78: 100%|     | 126/126 [00:01<00:00, 85.95it/s, loss=0.00297,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 79%|      | 100/126 [00:01<00:00, 78.61it/s, loss=0.00281,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 79: 80%|      | 101/126 [00:01<00:00, 69.82it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 81%|      | 102/126 [00:01<00:00, 69.90it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 82%|      | 103/126 [00:01<00:00, 70.42it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 83%|      | 104/126 [00:01<00:00, 70.94it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 83%|      | 105/126 [00:01<00:00, 71.46it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 84%|      | 106/126 [00:01<00:00, 71.98it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 85%|      | 107/126 [00:01<00:00, 72.50it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 86%|      | 108/126 [00:01<00:00, 73.01it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 87%|      | 109/126 [00:01<00:00, 73.53it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 87%|      | 110/126 [00:01<00:00, 74.04it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 88%|      | 111/126 [00:01<00:00, 74.55it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 89%|      | 112/126 [00:01<00:00, 75.07it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 90%|      | 113/126 [00:01<00:00, 75.57it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 90%|      | 114/126 [00:01<00:00, 76.08it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 91%|      | 115/126 [00:01<00:00, 76.58it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 92%|      | 116/126 [00:01<00:00, 77.09it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 93%|      | 117/126 [00:01<00:00, 77.59it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 94%|      | 118/126 [00:01<00:00, 78.09it/s, loss=0.00281,

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v_num=4.31e+7]
Epoch 79: 94%|      | 119/126 [00:01<00:00, 78.59it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 95%|      | 120/126 [00:01<00:00, 79.08it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 96%|      | 121/126 [00:01<00:00, 79.58it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 97%|      | 122/126 [00:01<00:00, 80.08it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 98%|      | 123/126 [00:01<00:00, 80.60it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 98%|      | 124/126 [00:01<00:00, 81.13it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 99%|      | 125/126 [00:01<00:00, 81.65it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 82.18it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...
Epoch 79: 100%|     | 126/126 [00:01<00:00, 80.53it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 79: 100%|     | 126/126 [00:01<00:00, 80.43it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 79%|      | 100/126 [00:01<00:00, 66.58it/s, loss=0.00331,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 80: 80%|      | 101/126 [00:01<00:00, 59.23it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 81%|      | 102/126 [00:01<00:00, 59.34it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 82%|      | 103/126 [00:01<00:00, 59.78it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 83%|      | 104/126 [00:01<00:00, 60.22it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 83%|      | 105/126 [00:01<00:00, 60.66it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 84%|      | 106/126 [00:01<00:00, 61.10it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 85%|      | 107/126 [00:01<00:00, 61.54it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 86%|      | 108/126 [00:01<00:00, 61.98it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 87%|      | 109/126 [00:01<00:00, 62.42it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 87%|      | 110/126 [00:01<00:00, 62.85it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 88%|      | 111/126 [00:01<00:00, 63.29it/s, loss=0.00331,
v_num=4.31e+7]

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Epoch 80: 89%|      | 112/126 [00:01<00:00, 63.72it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 90%|      | 113/126 [00:01<00:00, 64.15it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 90%|      | 114/126 [00:01<00:00, 64.57it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 91%|      | 115/126 [00:01<00:00, 65.00it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 92%|      | 116/126 [00:01<00:00, 65.43it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 93%|      | 117/126 [00:01<00:00, 65.85it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 94%|      | 118/126 [00:01<00:00, 66.27it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 94%|      | 119/126 [00:01<00:00, 66.69it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 95%|      | 120/126 [00:01<00:00, 67.11it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 96%|      | 121/126 [00:01<00:00, 67.53it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 97%|      | 122/126 [00:01<00:00, 67.95it/s, loss=0.00331,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.51it/s]
Epoch 80: 98%|      | 123/126 [00:01<00:00, 68.38it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 98%|      | 124/126 [00:01<00:00, 68.81it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 99%|      | 125/126 [00:01<00:00, 69.24it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 69.67it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...
Epoch 80: 100%|     | 126/126 [00:01<00:00, 68.49it/s, loss=0.00331,
v_num=4.31e+7]
Epoch 80: 100%|     | 126/126 [00:01<00:00, 68.40it/s, loss=0.00331,
v_num=4.31e+7]Mapping latent space...

Epoch 81: 79%|      | 100/126 [00:01<00:00, 75.67it/s, loss=0.00309,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 81: 80%|      | 101/126 [00:01<00:00, 66.23it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 81%|      | 102/126 [00:01<00:00, 66.49it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 82%|      | 103/126 [00:01<00:00, 66.97it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 83%|      | 104/126 [00:01<00:00, 67.43it/s, loss=0.00309,

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v_num=4.31e+7]
Epoch 81: 83%|      | 105/126 [00:01<00:00, 67.91it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 84%|      | 106/126 [00:01<00:00, 68.38it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 85%|      | 107/126 [00:01<00:00, 68.85it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 86%|      | 108/126 [00:01<00:00, 69.32it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 87%|      | 109/126 [00:01<00:00, 69.79it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 87%|      | 110/126 [00:01<00:00, 70.25it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 88%|      | 111/126 [00:01<00:00, 70.72it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 89%|      | 112/126 [00:01<00:00, 71.18it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 90%|      | 113/126 [00:01<00:00, 71.64it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 90%|      | 114/126 [00:01<00:00, 72.10it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 91%|      | 115/126 [00:01<00:00, 72.56it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 92%|      | 116/126 [00:01<00:00, 73.02it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 93%|      | 117/126 [00:01<00:00, 73.47it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 94%|      | 118/126 [00:01<00:00, 73.93it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 94%|      | 119/126 [00:01<00:00, 74.38it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 95%|      | 120/126 [00:01<00:00, 74.83it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 96%|      | 121/126 [00:01<00:00, 75.27it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 97%|      | 122/126 [00:01<00:00, 75.73it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 98%|      | 123/126 [00:01<00:00, 76.20it/s, loss=0.00309,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 234.22it/s]
Epoch 81: 98%|      | 124/126 [00:01<00:00, 76.66it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 99%|      | 125/126 [00:01<00:00, 77.13it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 81: 100%|     | 126/126 [00:01<00:00, 77.60it/s, loss=0.00309,
v_num=4.31e+7]Mapping latent space...
Epoch 81: 100%|     | 126/126 [00:01<00:00, 76.16it/s, loss=0.00309,
v_num=4.31e+7]

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Epoch 81: 100%|      | 126/126 [00:01<00:00, 76.05it/s, loss=0.00309,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 79%|      | 100/126 [00:01<00:00, 79.99it/s, loss=0.00309,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 82: 80%|      | 101/126 [00:01<00:00, 71.12it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 81%|      | 102/126 [00:01<00:00, 71.19it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 82%|      | 103/126 [00:01<00:00, 71.73it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 83%|      | 104/126 [00:01<00:00, 72.23it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 83%|      | 105/126 [00:01<00:00, 72.75it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 84%|      | 106/126 [00:01<00:00, 73.27it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 85%|      | 107/126 [00:01<00:00, 73.78it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 86%|      | 108/126 [00:01<00:00, 74.30it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 87%|      | 109/126 [00:01<00:00, 74.82it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 87%|      | 110/126 [00:01<00:00, 75.33it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 88%|      | 111/126 [00:01<00:00, 75.85it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 89%|      | 112/126 [00:01<00:00, 76.35it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 90%|      | 113/126 [00:01<00:00, 76.86it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 90%|      | 114/126 [00:01<00:00, 77.36it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 91%|      | 115/126 [00:01<00:00, 77.87it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 92%|      | 116/126 [00:01<00:00, 78.38it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 93%|      | 117/126 [00:01<00:00, 78.88it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 94%|      | 118/126 [00:01<00:00, 79.38it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 94%|      | 119/126 [00:01<00:00, 79.89it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 95%|      | 120/126 [00:01<00:00, 80.39it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 96%|      | 121/126 [00:01<00:00, 80.88it/s, loss=0.00309,

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v_num=4.31e+7]
Epoch 82: 97%|      | 122/126 [00:01<00:00, 81.39it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 98%|      | 123/126 [00:01<00:00, 81.92it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 98%|      | 124/126 [00:01<00:00, 82.45it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 99%|      | 125/126 [00:01<00:00, 82.97it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 83.51it/s, loss=0.00309,
v_num=4.31e+7]Mapping latent space...
Epoch 82: 100%|     | 126/126 [00:01<00:00, 81.99it/s, loss=0.00309,
v_num=4.31e+7]
Epoch 82: 100%|     | 126/126 [00:01<00:00, 81.88it/s, loss=0.00309,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 79%|      | 100/126 [00:01<00:00, 90.34it/s, loss=0.00281,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 83: 80%|      | 101/126 [00:01<00:00, 79.57it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 81%|      | 102/126 [00:01<00:00, 79.74it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 82%|      | 103/126 [00:01<00:00, 80.33it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 83%|      | 104/126 [00:01<00:00, 80.88it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 83%|      | 105/126 [00:01<00:00, 81.47it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 84%|      | 106/126 [00:01<00:00, 82.01it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 85%|      | 107/126 [00:01<00:00, 82.59it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 86%|      | 108/126 [00:01<00:00, 83.13it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 87%|      | 109/126 [00:01<00:00, 83.70it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 87%|      | 110/126 [00:01<00:00, 84.25it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 88%|      | 111/126 [00:01<00:00, 84.83it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 89%|      | 112/126 [00:01<00:00, 85.36it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 90%|      | 113/126 [00:01<00:00, 85.92it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 90%|      | 114/126 [00:01<00:00, 86.46it/s, loss=0.00281,
v_num=4.31e+7]

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Epoch 83: 91%|      | 115/126 [00:01<00:00, 87.01it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 92%|      | 116/126 [00:01<00:00, 87.55it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 93%|      | 117/126 [00:01<00:00, 88.11it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 94%|      | 118/126 [00:01<00:00, 88.63it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 94%|      | 119/126 [00:01<00:00, 89.17it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 95%|      | 120/126 [00:01<00:00, 89.71it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 96%|      | 121/126 [00:01<00:00, 90.25it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 97%|      | 122/126 [00:01<00:00, 90.78it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 98%|      | 123/126 [00:01<00:00, 91.35it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 98%|      | 124/126 [00:01<00:00, 91.92it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 99%|      | 125/126 [00:01<00:00, 92.49it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 93.06it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...
Epoch 83: 100%|     | 126/126 [00:01<00:00, 89.77it/s, loss=0.00281,
v_num=4.31e+7]
Epoch 83: 100%|     | 126/126 [00:01<00:00, 89.65it/s, loss=0.00281,
v_num=4.31e+7]Mapping latent space...

Epoch 84: 79%|      | 100/126 [00:01<00:00, 89.66it/s, loss=0.00332,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 84: 80%|      | 101/126 [00:01<00:00, 76.84it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 81%|      | 102/126 [00:01<00:00, 76.55it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 82%|      | 103/126 [00:01<00:00, 76.92it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 83%|      | 104/126 [00:01<00:00, 77.30it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 83%|      | 105/126 [00:01<00:00, 77.69it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 84%|      | 106/126 [00:01<00:00, 78.08it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 85%|      | 107/126 [00:01<00:00, 78.48it/s, loss=0.00332,
v_num=4.31e+7]

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Epoch 84: 86%|      | 108/126 [00:01<00:00, 78.89it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 87%|      | 109/126 [00:01<00:00, 79.30it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 87%|      | 110/126 [00:01<00:00, 79.70it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 88%|      | 111/126 [00:01<00:00, 80.12it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 89%|      | 112/126 [00:01<00:00, 80.55it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 90%|      | 113/126 [00:01<00:00, 80.97it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 90%|      | 114/126 [00:01<00:00, 81.40it/s, loss=0.00332,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 145.45it/s]
Epoch 84: 91%|      | 115/126 [00:01<00:00, 81.82it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 92%|      | 116/126 [00:01<00:00, 82.26it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 93%|      | 117/126 [00:01<00:00, 82.69it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 94%|      | 118/126 [00:01<00:00, 83.13it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 94%|      | 119/126 [00:01<00:00, 83.56it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 95%|      | 120/126 [00:01<00:00, 84.00it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 96%|      | 121/126 [00:01<00:00, 84.44it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 97%|      | 122/126 [00:01<00:00, 84.88it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 98%|      | 123/126 [00:01<00:00, 85.37it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 98%|      | 124/126 [00:01<00:00, 85.86it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 99%|      | 125/126 [00:01<00:00, 86.33it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 86.83it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 84: 100%|     | 126/126 [00:01<00:00, 84.96it/s, loss=0.00332,
v_num=4.31e+7]
Epoch 84: 100%|     | 126/126 [00:01<00:00, 84.81it/s, loss=0.00332,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 79%|      | 100/126 [00:01<00:00, 76.20it/s, loss=0.00301,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 85: 80%| | 101/126 [00:01<00:00, 67.36it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 81%| | 102/126 [00:01<00:00, 67.37it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 82%| | 103/126 [00:01<00:00, 67.81it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 83%| | 104/126 [00:01<00:00, 68.26it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 83%| | 105/126 [00:01<00:00, 68.70it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 84%| | 106/126 [00:01<00:00, 69.15it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 85%| | 107/126 [00:01<00:00, 69.59it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 86%| | 108/126 [00:01<00:00, 70.05it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 87%| | 109/126 [00:01<00:00, 70.51it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 87%| | 110/126 [00:01<00:00, 70.97it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 88%| | 111/126 [00:01<00:00, 71.43it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 89%| | 112/126 [00:01<00:00, 71.89it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 90%| | 113/126 [00:01<00:00, 72.34it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 90%| | 114/126 [00:01<00:00, 72.80it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 91%| | 115/126 [00:01<00:00, 73.26it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 92%| | 116/126 [00:01<00:00, 73.71it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 93%| | 117/126 [00:01<00:00, 74.17it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 94%| | 118/126 [00:01<00:00, 74.62it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 94%| | 119/126 [00:01<00:00, 75.07it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 95%| | 120/126 [00:01<00:00, 75.53it/s, loss=0.00301, v_num=4.31e+7]
 Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 203.09it/s]
 Epoch 85: 96%| | 121/126 [00:01<00:00, 75.97it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 97%| | 122/126 [00:01<00:00, 76.43it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 98%| | 123/126 [00:01<00:00, 76.91it/s, loss=0.00301, v_num=4.31e+7]
 Epoch 85: 98%| | 124/126 [00:01<00:00, 77.38it/s, loss=0.00301, v_num=4.31e+7]

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v_num=4.31e+7]
Epoch 85: 99%|      | 125/126 [00:01<00:00, 77.85it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 78.34it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 85: 100%|     | 126/126 [00:01<00:00, 76.83it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 85: 100%|     | 126/126 [00:01<00:00, 76.73it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 79%|      | 100/126 [00:01<00:00, 86.96it/s, loss=0.003,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 86: 80%|      | 101/126 [00:01<00:00, 75.06it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 81%|      | 102/126 [00:01<00:00, 75.14it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 82%|      | 103/126 [00:01<00:00, 75.58it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 83%|      | 104/126 [00:01<00:00, 76.03it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 83%|      | 105/126 [00:01<00:00, 76.48it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 84%|      | 106/126 [00:01<00:00, 76.94it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 85%|      | 107/126 [00:01<00:00, 77.39it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 86%|      | 108/126 [00:01<00:00, 77.86it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 87%|      | 109/126 [00:01<00:00, 78.31it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 87%|      | 110/126 [00:01<00:00, 78.77it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 88%|      | 111/126 [00:01<00:00, 79.23it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 89%|      | 112/126 [00:01<00:00, 79.69it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 90%|      | 113/126 [00:01<00:00, 80.14it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 90%|      | 114/126 [00:01<00:00, 80.61it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 91%|      | 115/126 [00:01<00:00, 81.06it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 92%|      | 116/126 [00:01<00:00, 81.52it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 93%|      | 117/126 [00:01<00:00, 81.98it/s, loss=0.003,
v_num=4.31e+7]

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Epoch 86: 94%|      | 118/126 [00:01<00:00, 82.44it/s, loss=0.003,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 186.19it/s]
Epoch 86: 94%|      | 119/126 [00:01<00:00, 82.89it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 95%|      | 120/126 [00:01<00:00, 83.36it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 96%|      | 121/126 [00:01<00:00, 83.82it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 97%|      | 122/126 [00:01<00:00, 84.29it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 98%|      | 123/126 [00:01<00:00, 84.79it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 98%|      | 124/126 [00:01<00:00, 85.28it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 99%|      | 125/126 [00:01<00:00, 85.77it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 86.27it/s, loss=0.003,
v_num=4.31e+7]Mapping latent space...
Epoch 86: 100%|     | 126/126 [00:01<00:00, 84.46it/s, loss=0.003,
v_num=4.31e+7]
Epoch 86: 100%|     | 126/126 [00:01<00:00, 84.24it/s, loss=0.003,
v_num=4.31e+7]Mapping latent space...

Epoch 87: 79%|      | 100/126 [00:01<00:00, 82.79it/s, loss=0.00288,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 87: 80%|      | 101/126 [00:01<00:00, 73.81it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 81%|      | 102/126 [00:01<00:00, 72.93it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 82%|      | 103/126 [00:01<00:00, 73.34it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 83%|      | 104/126 [00:01<00:00, 73.76it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 83%|      | 105/126 [00:01<00:00, 74.17it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 84%|      | 106/126 [00:01<00:00, 74.60it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 85%|      | 107/126 [00:01<00:00, 75.03it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 86%|      | 108/126 [00:01<00:00, 75.46it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 87%|      | 109/126 [00:01<00:00, 75.89it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 87%|      | 110/126 [00:01<00:00, 76.33it/s, loss=0.00288,

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v_num=4.31e+7]
Epoch 87: 88%|      | 111/126 [00:01<00:00, 76.76it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 89%|      | 112/126 [00:01<00:00, 77.20it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 90%|      | 113/126 [00:01<00:00, 77.63it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 90%|      | 114/126 [00:01<00:00, 78.07it/s, loss=0.00288,
v_num=4.31e+7]
Validation DataLoader 0: 58%|      | 15/26 [00:00<00:00, 144.29it/s]
Epoch 87: 91%|      | 115/126 [00:01<00:00, 78.50it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 92%|      | 116/126 [00:01<00:00, 78.94it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 93%|      | 117/126 [00:01<00:00, 79.37it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 94%|      | 118/126 [00:01<00:00, 79.80it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 94%|      | 119/126 [00:01<00:00, 80.23it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 95%|      | 120/126 [00:01<00:00, 80.67it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 96%|      | 121/126 [00:01<00:00, 81.10it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 97%|      | 122/126 [00:01<00:00, 81.54it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 98%|      | 123/126 [00:01<00:00, 82.02it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 98%|      | 124/126 [00:01<00:00, 82.50it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 99%|      | 125/126 [00:01<00:00, 82.96it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 83.45it/s, loss=0.00288,
v_num=4.31e+7]Mapping latent space...
Epoch 87: 100%|     | 126/126 [00:01<00:00, 81.75it/s, loss=0.00288,
v_num=4.31e+7]
Epoch 87: 100%|     | 126/126 [00:01<00:00, 81.65it/s, loss=0.00288,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 79%|      | 100/126 [00:01<00:00, 92.77it/s, loss=0.00311,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 88: 80%|      | 101/126 [00:01<00:00, 81.16it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 81%|      | 102/126 [00:01<00:00, 81.10it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 82%|      | 103/126 [00:01<00:00, 81.69it/s, loss=0.00311,

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v_num=4.31e+7]
Epoch 88: 83%| | 104/126 [00:01<00:00, 82.25it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 83%| | 105/126 [00:01<00:00, 82.84it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 84%| | 106/126 [00:01<00:00, 83.39it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 85%| | 107/126 [00:01<00:00, 83.98it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 86%| | 108/126 [00:01<00:00, 84.53it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 87%| | 109/126 [00:01<00:00, 85.12it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 87%| | 110/126 [00:01<00:00, 85.66it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 88%| | 111/126 [00:01<00:00, 86.25it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 89%| | 112/126 [00:01<00:00, 86.79it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 90%| | 113/126 [00:01<00:00, 87.37it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 90%| | 114/126 [00:01<00:00, 87.91it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 91%| | 115/126 [00:01<00:00, 88.49it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 92%| | 116/126 [00:01<00:00, 89.03it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 93%| | 117/126 [00:01<00:00, 89.59it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 94%| | 118/126 [00:01<00:00, 90.13it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 94%| | 119/126 [00:01<00:00, 90.69it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 95%| | 120/126 [00:01<00:00, 91.22it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 96%| | 121/126 [00:01<00:00, 91.77it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 97%| | 122/126 [00:01<00:00, 92.32it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 98%| | 123/126 [00:01<00:00, 92.90it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 98%| | 124/126 [00:01<00:00, 93.47it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 99%| | 125/126 [00:01<00:00, 94.04it/s, loss=0.00311,
v_num=4.31e+7]
Epoch 88: 100%| | 126/126 [00:01<00:00, 94.62it/s, loss=0.00311,
v_num=4.31e+7]Mapping latent space...
Epoch 88: 100%| | 126/126 [00:01<00:00, 92.62it/s, loss=0.00311,

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v_num=4.31e+7]
Epoch 88: 100%|      | 126/126 [00:01<00:00, 92.50it/s, loss=0.00311,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 79%|      | 100/126 [00:01<00:00, 90.56it/s, loss=0.00268,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 89: 80%|      | 101/126 [00:01<00:00, 79.61it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 81%|      | 102/126 [00:01<00:00, 79.64it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 82%|      | 103/126 [00:01<00:00, 80.22it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 83%|      | 104/126 [00:01<00:00, 80.76it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 83%|      | 105/126 [00:01<00:00, 81.33it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 84%|      | 106/126 [00:01<00:00, 81.88it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 85%|      | 107/126 [00:01<00:00, 82.43it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 86%|      | 108/126 [00:01<00:00, 82.98it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 87%|      | 109/126 [00:01<00:00, 83.53it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 87%|      | 110/126 [00:01<00:00, 84.09it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 88%|      | 111/126 [00:01<00:00, 84.64it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 89%|      | 112/126 [00:01<00:00, 85.18it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 90%|      | 113/126 [00:01<00:00, 85.74it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 90%|      | 114/126 [00:01<00:00, 86.28it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 91%|      | 115/126 [00:01<00:00, 86.83it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 92%|      | 116/126 [00:01<00:00, 87.38it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 93%|      | 117/126 [00:01<00:00, 87.91it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 94%|      | 118/126 [00:01<00:00, 88.46it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 94%|      | 119/126 [00:01<00:00, 89.00it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 95%|      | 120/126 [00:01<00:00, 89.54it/s, loss=0.00268,
v_num=4.31e+7]

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Epoch 89: 96%|      | 121/126 [00:01<00:00, 90.08it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 97%|      | 122/126 [00:01<00:00, 90.62it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 98%|      | 123/126 [00:01<00:00, 91.19it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 98%|      | 124/126 [00:01<00:00, 91.76it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 99%|      | 125/126 [00:01<00:00, 92.33it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 92.91it/s, loss=0.00268,
v_num=4.31e+7]Mapping latent space...
Epoch 89: 100%|     | 126/126 [00:01<00:00, 91.01it/s, loss=0.00268,
v_num=4.31e+7]
Epoch 89: 100%|     | 126/126 [00:01<00:00, 90.89it/s, loss=0.00268,
v_num=4.31e+7]Mapping latent space...

Epoch 90: 79%|      | 100/126 [00:01<00:00, 91.23it/s, loss=0.0031,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 90: 80%|      | 101/126 [00:01<00:00, 80.25it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 81%|      | 102/126 [00:01<00:00, 80.41it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 82%|      | 103/126 [00:01<00:00, 81.00it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 83%|      | 104/126 [00:01<00:00, 81.55it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 83%|      | 105/126 [00:01<00:00, 82.15it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 84%|      | 106/126 [00:01<00:00, 82.71it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 85%|      | 107/126 [00:01<00:00, 83.30it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 86%|      | 108/126 [00:01<00:00, 83.85it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 87%|      | 109/126 [00:01<00:00, 84.44it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 87%|      | 110/126 [00:01<00:00, 84.99it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 88%|      | 111/126 [00:01<00:00, 85.58it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 89%|      | 112/126 [00:01<00:00, 86.13it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 90%|      | 113/126 [00:01<00:00, 86.71it/s, loss=0.0031,
v_num=4.31e+7]

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Epoch 90: 90%|      | 114/126 [00:01<00:00, 87.25it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 91%|      | 115/126 [00:01<00:00, 87.82it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 92%|      | 116/126 [00:01<00:00, 88.37it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 93%|      | 117/126 [00:01<00:00, 88.94it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 94%|      | 118/126 [00:01<00:00, 89.48it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 94%|      | 119/126 [00:01<00:00, 90.03it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 95%|      | 120/126 [00:01<00:00, 90.57it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 96%|      | 121/126 [00:01<00:00, 91.13it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 97%|      | 122/126 [00:01<00:00, 91.67it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 98%|      | 123/126 [00:01<00:00, 92.26it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 98%|      | 124/126 [00:01<00:00, 92.84it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 99%|      | 125/126 [00:01<00:00, 93.42it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 94.00it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 90: 100%|     | 126/126 [00:01<00:00, 92.06it/s, loss=0.0031,
v_num=4.31e+7]
Epoch 90: 100%|     | 126/126 [00:01<00:00, 91.93it/s, loss=0.0031,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 79%|      | 100/126 [00:01<00:00, 83.01it/s, loss=0.00307,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 91: 80%|      | 101/126 [00:01<00:00, 72.09it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 81%|      | 102/126 [00:01<00:00, 72.26it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 82%|      | 103/126 [00:01<00:00, 72.68it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 83%|      | 104/126 [00:01<00:00, 73.10it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 83%|      | 105/126 [00:01<00:00, 73.54it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 84%|      | 106/126 [00:01<00:00, 73.92it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 85%|      | 107/126 [00:01<00:00, 74.30it/s, loss=0.00307,

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v_num=4.31e+7]
Epoch 91: 86%|      | 108/126 [00:01<00:00, 74.66it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 87%|      | 109/126 [00:01<00:00, 75.03it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 87%|      | 110/126 [00:01<00:00, 75.42it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 88%|      | 111/126 [00:01<00:00, 75.81it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 89%|      | 112/126 [00:01<00:00, 76.21it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 90%|      | 113/126 [00:01<00:00, 76.60it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 90%|      | 114/126 [00:01<00:00, 77.00it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 91%|      | 115/126 [00:01<00:00, 77.40it/s, loss=0.00307,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 155.85it/s]
Epoch 91: 92%|      | 116/126 [00:01<00:00, 77.81it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 93%|      | 117/126 [00:01<00:00, 78.22it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 94%|      | 118/126 [00:01<00:00, 78.64it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 94%|      | 119/126 [00:01<00:00, 79.07it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 95%|      | 120/126 [00:01<00:00, 79.49it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 96%|      | 121/126 [00:01<00:00, 79.92it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 97%|      | 122/126 [00:01<00:00, 80.35it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 98%|      | 123/126 [00:01<00:00, 80.81it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 98%|      | 124/126 [00:01<00:00, 81.27it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 99%|      | 125/126 [00:01<00:00, 81.72it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 82.19it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 91: 100%|     | 126/126 [00:01<00:00, 80.45it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 91: 100%|     | 126/126 [00:01<00:00, 80.31it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 79%|      | 100/126 [00:01<00:00, 83.97it/s, loss=0.00324,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]

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Validation DataLoader 0:  0%|          | 0/26 [00:00<?, ?it/s]
Epoch 92: 80%|          | 101/126 [00:01<00:00, 73.96it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 81%|          | 102/126 [00:01<00:00, 74.37it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 82%|          | 103/126 [00:01<00:00, 74.81it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 83%|          | 104/126 [00:01<00:00, 75.24it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 83%|          | 105/126 [00:01<00:00, 75.68it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 84%|          | 106/126 [00:01<00:00, 76.12it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 85%|          | 107/126 [00:01<00:00, 76.57it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 86%|          | 108/126 [00:01<00:00, 77.01it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 87%|          | 109/126 [00:01<00:00, 77.46it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 87%|          | 110/126 [00:01<00:00, 77.90it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 88%|          | 111/126 [00:01<00:00, 78.34it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 89%|          | 112/126 [00:01<00:00, 78.78it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 90%|          | 113/126 [00:01<00:00, 79.23it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 90%|          | 114/126 [00:01<00:00, 79.68it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 91%|          | 115/126 [00:01<00:00, 80.13it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 92%|          | 116/126 [00:01<00:00, 80.57it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 93%|          | 117/126 [00:01<00:00, 81.02it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 94%|          | 118/126 [00:01<00:00, 81.46it/s, loss=0.00324,
v_num=4.31e+7]
Validation DataLoader 0: 73%|          | 19/26 [00:00<00:00, 189.79it/s]
Epoch 92: 94%|          | 119/126 [00:01<00:00, 81.90it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 95%|          | 120/126 [00:01<00:00, 82.35it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 96%|          | 121/126 [00:01<00:00, 82.80it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 97%|          | 122/126 [00:01<00:00, 83.26it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 98%|          | 123/126 [00:01<00:00, 83.74it/s, loss=0.00324,
v_num=4.31e+7]

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Epoch 92: 98%|      | 124/126 [00:01<00:00, 84.23it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 99%|      | 125/126 [00:01<00:00, 84.71it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 85.20it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...
Epoch 92: 100%|     | 126/126 [00:01<00:00, 83.38it/s, loss=0.00324,
v_num=4.31e+7]
Epoch 92: 100%|     | 126/126 [00:01<00:00, 83.25it/s, loss=0.00324,
v_num=4.31e+7]Mapping latent space...

Epoch 93: 79%|      | 100/126 [00:01<00:00, 79.89it/s, loss=0.00307,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 93: 80%|      | 101/126 [00:01<00:00, 72.10it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 81%|      | 102/126 [00:01<00:00, 72.25it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 82%|      | 103/126 [00:01<00:00, 72.81it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 83%|      | 104/126 [00:01<00:00, 73.33it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 83%|      | 105/126 [00:01<00:00, 73.88it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 84%|      | 106/126 [00:01<00:00, 74.41it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 85%|      | 107/126 [00:01<00:00, 74.97it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 86%|      | 108/126 [00:01<00:00, 75.49it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 87%|      | 109/126 [00:01<00:00, 76.03it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 87%|      | 110/126 [00:01<00:00, 76.55it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 88%|      | 111/126 [00:01<00:00, 77.08it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 89%|      | 112/126 [00:01<00:00, 77.60it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 90%|      | 113/126 [00:01<00:00, 78.14it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 90%|      | 114/126 [00:01<00:00, 78.65it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 91%|      | 115/126 [00:01<00:00, 79.18it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 92%|      | 116/126 [00:01<00:00, 79.69it/s, loss=0.00307,
v_num=4.31e+7]

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Epoch 93: 93%|      | 117/126 [00:01<00:00, 80.21it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 94%|      | 118/126 [00:01<00:00, 80.72it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 94%|      | 119/126 [00:01<00:00, 81.23it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 95%|      | 120/126 [00:01<00:00, 81.73it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 96%|      | 121/126 [00:01<00:00, 82.24it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 97%|      | 122/126 [00:01<00:00, 82.74it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 98%|      | 123/126 [00:01<00:00, 83.28it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 98%|      | 124/126 [00:01<00:00, 83.82it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 99%|      | 125/126 [00:01<00:00, 84.34it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 84.88it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 93: 100%|     | 126/126 [00:01<00:00, 83.25it/s, loss=0.00307,
v_num=4.31e+7]
Epoch 93: 100%|     | 126/126 [00:01<00:00, 83.14it/s, loss=0.00307,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 79%|      | 100/126 [00:01<00:00, 68.79it/s, loss=0.00286,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 94: 80%|      | 101/126 [00:01<00:00, 61.24it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 81%|      | 102/126 [00:01<00:00, 61.43it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 82%|      | 103/126 [00:01<00:00, 61.84it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 83%|      | 104/126 [00:01<00:00, 62.25it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 83%|      | 105/126 [00:01<00:00, 62.66it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 84%|      | 106/126 [00:01<00:00, 63.07it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 85%|      | 107/126 [00:01<00:00, 63.48it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 86%|      | 108/126 [00:01<00:00, 63.90it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 87%|      | 109/126 [00:01<00:00, 64.31it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 87%|      | 110/126 [00:01<00:00, 64.73it/s, loss=0.00286,

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v_num=4.31e+7]
Epoch 94: 88%|      | 111/126 [00:01<00:00, 65.14it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 89%|      | 112/126 [00:01<00:00, 65.56it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 90%|      | 113/126 [00:01<00:00, 65.98it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 90%|      | 114/126 [00:01<00:00, 66.40it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 91%|      | 115/126 [00:01<00:00, 66.82it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 92%|      | 116/126 [00:01<00:00, 67.24it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 93%|      | 117/126 [00:01<00:00, 67.66it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 94%|      | 118/126 [00:01<00:00, 68.08it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 94%|      | 119/126 [00:01<00:00, 68.50it/s, loss=0.00286,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 194.16it/s]
Epoch 94: 95%|      | 120/126 [00:01<00:00, 68.92it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 96%|      | 121/126 [00:01<00:00, 69.34it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 97%|      | 122/126 [00:01<00:00, 69.77it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 98%|      | 123/126 [00:01<00:00, 70.21it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 98%|      | 124/126 [00:01<00:00, 70.65it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 99%|      | 125/126 [00:01<00:00, 71.09it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 71.53it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 94: 100%|     | 126/126 [00:01<00:00, 70.17it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 94: 100%|     | 126/126 [00:01<00:00, 70.07it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 79%|      | 100/126 [00:01<00:00, 78.04it/s, loss=0.00278,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 95: 80%|      | 101/126 [00:01<00:00, 69.62it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 81%|      | 102/126 [00:01<00:00, 69.85it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 82%|      | 103/126 [00:01<00:00, 70.36it/s, loss=0.00278,

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v_num=4.31e+7]
Epoch 95: 83%|      | 104/126 [00:01<00:00, 70.87it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 83%|      | 105/126 [00:01<00:00, 71.40it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 84%|      | 106/126 [00:01<00:00, 71.90it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 85%|      | 107/126 [00:01<00:00, 72.42it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 86%|      | 108/126 [00:01<00:00, 72.92it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 87%|      | 109/126 [00:01<00:00, 73.44it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 87%|      | 110/126 [00:01<00:00, 73.93it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 88%|      | 111/126 [00:01<00:00, 74.45it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 89%|      | 112/126 [00:01<00:00, 74.94it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 90%|      | 113/126 [00:01<00:00, 75.44it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 90%|      | 114/126 [00:01<00:00, 75.94it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 91%|      | 115/126 [00:01<00:00, 76.44it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 92%|      | 116/126 [00:01<00:00, 76.94it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 93%|      | 117/126 [00:01<00:00, 77.43it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 94%|      | 118/126 [00:01<00:00, 77.93it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 94%|      | 119/126 [00:01<00:00, 78.42it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 95%|      | 120/126 [00:01<00:00, 78.92it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 96%|      | 121/126 [00:01<00:00, 79.41it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 97%|      | 122/126 [00:01<00:00, 79.91it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 98%|      | 123/126 [00:01<00:00, 80.43it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 98%|      | 124/126 [00:01<00:00, 80.96it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 99%|      | 125/126 [00:01<00:00, 81.47it/s, loss=0.00278,
v_num=4.31e+7]
Epoch 95: 100%|     | 126/126 [00:01<00:00, 82.00it/s, loss=0.00278,
v_num=4.31e+7]Mapping latent space...
Epoch 95: 100%|     | 126/126 [00:01<00:00, 80.54it/s, loss=0.00278,

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v_num=4.31e+7]
Epoch 95: 100%|      | 126/126 [00:01<00:00, 80.44it/s, loss=0.00278,
v_num=4.31e+7]Mapping latent space...

Epoch 96: 79%|      | 100/126 [00:01<00:00, 76.64it/s, loss=0.00269,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 96: 80%|      | 101/126 [00:01<00:00, 68.35it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 81%|      | 102/126 [00:01<00:00, 68.34it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 82%|      | 103/126 [00:01<00:00, 68.83it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 83%|      | 104/126 [00:01<00:00, 69.33it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 83%|      | 105/126 [00:01<00:00, 69.83it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 84%|      | 106/126 [00:01<00:00, 70.33it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 85%|      | 107/126 [00:01<00:00, 70.83it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 86%|      | 108/126 [00:01<00:00, 71.32it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 87%|      | 109/126 [00:01<00:00, 71.82it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 87%|      | 110/126 [00:01<00:00, 72.32it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 88%|      | 111/126 [00:01<00:00, 72.81it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 89%|      | 112/126 [00:01<00:00, 73.30it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 90%|      | 113/126 [00:01<00:00, 73.79it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 90%|      | 114/126 [00:01<00:00, 74.28it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 91%|      | 115/126 [00:01<00:00, 74.77it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 92%|      | 116/126 [00:01<00:00, 75.26it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 93%|      | 117/126 [00:01<00:00, 75.75it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 94%|      | 118/126 [00:01<00:00, 76.24it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 94%|      | 119/126 [00:01<00:00, 76.72it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 95%|      | 120/126 [00:01<00:00, 77.21it/s, loss=0.00269,

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v_num=4.31e+7]
Epoch 96: 96%|      | 121/126 [00:01<00:00, 77.69it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 97%|      | 122/126 [00:01<00:00, 78.17it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 98%|      | 123/126 [00:01<00:00, 78.68it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 98%|      | 124/126 [00:01<00:00, 79.18it/s, loss=0.00269,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 249.06it/s]
Epoch 96: 99%|      | 125/126 [00:01<00:00, 79.68it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 80.19it/s, loss=0.00269,
v_num=4.31e+7]Mapping latent space...
Epoch 96: 100%|     | 126/126 [00:01<00:00, 78.73it/s, loss=0.00269,
v_num=4.31e+7]
Epoch 96: 100%|     | 126/126 [00:01<00:00, 78.64it/s, loss=0.00269,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 79%|      | 100/126 [00:01<00:00, 80.40it/s, loss=0.00267,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 97: 80%|      | 101/126 [00:01<00:00, 69.88it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 81%|      | 102/126 [00:01<00:00, 69.90it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 82%|      | 103/126 [00:01<00:00, 70.31it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 83%|      | 104/126 [00:01<00:00, 70.72it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 83%|      | 105/126 [00:01<00:00, 71.14it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 84%|      | 106/126 [00:01<00:00, 71.57it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 85%|      | 107/126 [00:01<00:00, 71.98it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 86%|      | 108/126 [00:01<00:00, 72.41it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 87%|      | 109/126 [00:01<00:00, 72.83it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 87%|      | 110/126 [00:01<00:00, 73.27it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 88%|      | 111/126 [00:01<00:00, 73.69it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 89%|      | 112/126 [00:01<00:00, 74.13it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 90%|      | 113/126 [00:01<00:00, 74.56it/s, loss=0.00267,

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v_num=4.31e+7]
Epoch 97: 90%|      | 114/126 [00:01<00:00, 75.00it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 91%|      | 115/126 [00:01<00:00, 75.43it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 92%|      | 116/126 [00:01<00:00, 75.78it/s, loss=0.00267,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 162.59it/s]
Epoch 97: 93%|      | 117/126 [00:01<00:00, 76.13it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 94%|      | 118/126 [00:01<00:00, 76.49it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 94%|      | 119/126 [00:01<00:00, 76.87it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 95%|      | 120/126 [00:01<00:00, 77.24it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 96%|      | 121/126 [00:01<00:00, 77.62it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 97%|      | 122/126 [00:01<00:00, 78.01it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 98%|      | 123/126 [00:01<00:00, 78.43it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 98%|      | 124/126 [00:01<00:00, 78.84it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 99%|      | 125/126 [00:01<00:00, 79.26it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 79.69it/s, loss=0.00267,
v_num=4.31e+7]Mapping latent space...
Epoch 97: 100%|     | 126/126 [00:01<00:00, 78.05it/s, loss=0.00267,
v_num=4.31e+7]
Epoch 97: 100%|     | 126/126 [00:01<00:00, 77.90it/s, loss=0.00267,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 79%|      | 100/126 [00:01<00:00, 66.62it/s, loss=0.00286,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 98: 80%|      | 101/126 [00:01<00:00, 59.29it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 81%|      | 102/126 [00:01<00:00, 59.53it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 82%|      | 103/126 [00:01<00:00, 59.95it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 83%|      | 104/126 [00:01<00:00, 60.37it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 83%|      | 105/126 [00:01<00:00, 60.79it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 84%|      | 106/126 [00:01<00:00, 61.22it/s, loss=0.00286,

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v_num=4.31e+7]
Epoch 98: 85%|      | 107/126 [00:01<00:00, 61.64it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 86%|      | 108/126 [00:01<00:00, 62.05it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 87%|      | 109/126 [00:01<00:00, 62.47it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 87%|      | 110/126 [00:01<00:00, 62.89it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 88%|      | 111/126 [00:01<00:00, 63.30it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 89%|      | 112/126 [00:01<00:00, 63.71it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 90%|      | 113/126 [00:01<00:00, 64.12it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 90%|      | 114/126 [00:01<00:00, 64.53it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 91%|      | 115/126 [00:01<00:00, 64.94it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 92%|      | 116/126 [00:01<00:00, 65.34it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 93%|      | 117/126 [00:01<00:00, 65.75it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 94%|      | 118/126 [00:01<00:00, 66.15it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 94%|      | 119/126 [00:01<00:00, 66.55it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 95%|      | 120/126 [00:01<00:00, 66.95it/s, loss=0.00286,
v_num=4.31e+7]
Validation DataLoader 0: 81%|      | 21/26 [00:00<00:00, 202.43it/s]
Epoch 98: 96%|      | 121/126 [00:01<00:00, 67.34it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 97%|      | 122/126 [00:01<00:00, 67.73it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 98%|      | 123/126 [00:01<00:00, 68.14it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 98%|      | 124/126 [00:01<00:00, 68.54it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 99%|      | 125/126 [00:01<00:00, 68.95it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 98: 100%|     | 126/126 [00:01<00:00, 69.35it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 98: 100%|     | 126/126 [00:01<00:00, 67.85it/s, loss=0.00286,
v_num=4.31e+7]

Epoch 98: 100%|     | 126/126 [00:01<00:00, 67.75it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 79%|      | 100/126 [00:01<00:00, 73.63it/s, loss=0.00304,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 99: 80%|          | 101/126 [00:01<00:00, 64.54it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 81%|          | 102/126 [00:01<00:00, 64.76it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 82%|          | 103/126 [00:01<00:00, 65.06it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 83%|          | 104/126 [00:01<00:00, 65.48it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 83%|          | 105/126 [00:01<00:00, 65.89it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 84%|          | 106/126 [00:01<00:00, 66.31it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 85%|          | 107/126 [00:01<00:00, 66.73it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 86%|          | 108/126 [00:01<00:00, 67.15it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 87%|          | 109/126 [00:01<00:00, 67.57it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 87%|          | 110/126 [00:01<00:00, 67.99it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 88%|          | 111/126 [00:01<00:00, 68.41it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 89%|          | 112/126 [00:01<00:00, 68.83it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 90%|          | 113/126 [00:01<00:00, 69.25it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 90%|          | 114/126 [00:01<00:00, 69.68it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 91%|          | 115/126 [00:01<00:00, 70.10it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 92%|          | 116/126 [00:01<00:00, 70.52it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 93%|          | 117/126 [00:01<00:00, 70.94it/s, loss=0.00304,
v_num=4.31e+7]
Validation DataLoader 0: 69%|          | 18/26 [00:00<00:00, 178.55it/s]
Epoch 99: 94%|          | 118/126 [00:01<00:00, 71.36it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 94%|          | 119/126 [00:01<00:00, 71.78it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 95%|          | 120/126 [00:01<00:00, 72.20it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 96%|          | 121/126 [00:01<00:00, 72.62it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 97%|          | 122/126 [00:01<00:00, 73.05it/s, loss=0.00304,

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v_num=4.31e+7]
Epoch 99: 98%|      | 123/126 [00:01<00:00, 73.50it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 98%|      | 124/126 [00:01<00:00, 73.96it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 99%|      | 125/126 [00:01<00:00, 74.40it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 74.86it/s, loss=0.00304,
v_num=4.31e+7]Mapping latent space...
Epoch 99: 100%|     | 126/126 [00:01<00:00, 73.18it/s, loss=0.00304,
v_num=4.31e+7]
Epoch 99: 100%|     | 126/126 [00:01<00:00, 73.03it/s, loss=0.00304,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 79%|     | 100/126 [00:01<00:00, 71.36it/s, loss=0.00328,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 100: 80%|     | 101/126 [00:01<00:00, 62.88it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 81%|     | 102/126 [00:01<00:00, 63.01it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 82%|     | 103/126 [00:01<00:00, 63.47it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 83%|     | 104/126 [00:01<00:00, 63.93it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 83%|     | 105/126 [00:01<00:00, 64.39it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 84%|     | 106/126 [00:01<00:00, 64.85it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 85%|     | 107/126 [00:01<00:00, 65.31it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 86%|     | 108/126 [00:01<00:00, 65.77it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 87%|     | 109/126 [00:01<00:00, 66.23it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 87%|     | 110/126 [00:01<00:00, 66.68it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 88%|     | 111/126 [00:01<00:00, 67.13it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 89%|     | 112/126 [00:01<00:00, 67.58it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 90%|     | 113/126 [00:01<00:00, 68.03it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 90%|     | 114/126 [00:01<00:00, 68.48it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 91%|     | 115/126 [00:01<00:00, 68.93it/s, loss=0.00328,
v_num=4.31e+7]

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Epoch 100: 92%|      | 116/126 [00:01<00:00, 69.37it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 93%|      | 117/126 [00:01<00:00, 69.81it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 94%|      | 118/126 [00:01<00:00, 70.26it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 94%|      | 119/126 [00:01<00:00, 70.70it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 95%|      | 120/126 [00:01<00:00, 71.14it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 96%|      | 121/126 [00:01<00:00, 71.58it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 97%|      | 122/126 [00:01<00:00, 72.02it/s, loss=0.00328,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 228.73it/s]
Epoch 100: 98%|      | 123/126 [00:01<00:00, 72.47it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 98%|      | 124/126 [00:01<00:00, 72.93it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 99%|      | 125/126 [00:01<00:00, 73.38it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 73.84it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 100: 100%|     | 126/126 [00:01<00:00, 69.60it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 100: 100%|     | 126/126 [00:01<00:00, 69.46it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 79%|      | 100/126 [00:01<00:00, 79.64it/s, loss=0.00261,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 101: 80%|      | 101/126 [00:01<00:00, 69.32it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 81%|      | 102/126 [00:01<00:00, 69.37it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 82%|      | 103/126 [00:01<00:00, 69.86it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 83%|      | 104/126 [00:01<00:00, 70.36it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 83%|      | 105/126 [00:01<00:00, 70.88it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 84%|      | 106/126 [00:01<00:00, 71.39it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 85%|      | 107/126 [00:01<00:00, 71.90it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 86%|      | 108/126 [00:01<00:00, 72.39it/s, loss=0.00261,
v_num=4.31e+7]

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Epoch 101: 87%|      | 109/126 [00:01<00:00, 72.90it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 87%|      | 110/126 [00:01<00:00, 73.39it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 88%|      | 111/126 [00:01<00:00, 73.90it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 89%|      | 112/126 [00:01<00:00, 74.39it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 90%|      | 113/126 [00:01<00:00, 74.89it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 90%|      | 114/126 [00:01<00:00, 75.38it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 91%|      | 115/126 [00:01<00:00, 75.88it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 92%|      | 116/126 [00:01<00:00, 76.38it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 93%|      | 117/126 [00:01<00:00, 76.88it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 94%|      | 118/126 [00:01<00:00, 77.37it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 94%|      | 119/126 [00:01<00:00, 77.87it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 95%|      | 120/126 [00:01<00:00, 78.36it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 96%|      | 121/126 [00:01<00:00, 78.85it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 97%|      | 122/126 [00:01<00:00, 79.35it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 98%|      | 123/126 [00:01<00:00, 79.87it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 98%|      | 124/126 [00:01<00:00, 80.39it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 99%|      | 125/126 [00:01<00:00, 80.91it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 81.43it/s, loss=0.00261,
v_num=4.31e+7]Mapping latent space...
Epoch 101: 100%|     | 126/126 [00:01<00:00, 79.97it/s, loss=0.00261,
v_num=4.31e+7]
Epoch 101: 100%|     | 126/126 [00:01<00:00, 79.87it/s, loss=0.00261,
v_num=4.31e+7]Mapping latent space...

Epoch 102: 79%|      | 100/126 [00:01<00:00, 76.36it/s, loss=0.00299,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 102: 80%|      | 101/126 [00:01<00:00, 67.20it/s, loss=0.00299,
v_num=4.31e+7]

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Epoch 102: 81%	102/126 [00:01<00:00, 67.49it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 82%	103/126 [00:01<00:00, 67.99it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 83%	104/126 [00:01<00:00, 68.48it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 83%	105/126 [00:01<00:00, 68.99it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 84%	106/126 [00:01<00:00, 69.48it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 85%	107/126 [00:01<00:00, 70.00it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 86%	108/126 [00:01<00:00, 70.48it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 87%	109/126 [00:01<00:00, 70.99it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 87%	110/126 [00:01<00:00, 71.47it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 88%	111/126 [00:01<00:00, 71.98it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 89%	112/126 [00:01<00:00, 72.46it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 90%	113/126 [00:01<00:00, 72.97it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 90%	114/126 [00:01<00:00, 73.44it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 91%	115/126 [00:01<00:00, 73.94it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 92%	116/126 [00:01<00:00, 74.42it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 93%	117/126 [00:01<00:00, 74.91it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 94%	118/126 [00:01<00:00, 75.39it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 94%	119/126 [00:01<00:00, 75.89it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 95%	120/126 [00:01<00:00, 76.36it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 96%	121/126 [00:01<00:00, 76.85it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 97%	122/126 [00:01<00:00, 77.33it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 98%	123/126 [00:01<00:00, 77.84it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 98%	124/126 [00:01<00:00, 78.35it/s, loss=0.00299,
v_num=4.31e+7]	
Epoch 102: 99%	125/126 [00:01<00:00, 78.85it/s, loss=0.00299,
v_num=4.31e+7]	

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Epoch 102: 100%|      | 126/126 [00:01<00:00, 79.36it/s, loss=0.00299,
v_num=4.31e+7]Mapping latent space...
Epoch 102: 100%|      | 126/126 [00:01<00:00, 76.91it/s, loss=0.00299,
v_num=4.31e+7]
Epoch 102: 100%|      | 126/126 [00:01<00:00, 76.82it/s, loss=0.00299,
v_num=4.31e+7]Mapping latent space...
Epoch 103:  79%|      | 100/126 [00:01<00:00, 78.42it/s, loss=0.0028,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:   0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:   0%|      | 0/26 [00:00<?, ?it/s]
Epoch 103:  80%|      | 101/126 [00:01<00:00, 68.40it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  81%|      | 102/126 [00:01<00:00, 68.31it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  82%|      | 103/126 [00:01<00:00, 68.80it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  83%|      | 104/126 [00:01<00:00, 69.28it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  83%|      | 105/126 [00:01<00:00, 69.77it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  84%|      | 106/126 [00:01<00:00, 70.25it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  85%|      | 107/126 [00:01<00:00, 70.73it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  86%|      | 108/126 [00:01<00:00, 71.20it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  87%|      | 109/126 [00:01<00:00, 71.68it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  87%|      | 110/126 [00:01<00:00, 72.15it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  88%|      | 111/126 [00:01<00:00, 72.63it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  89%|      | 112/126 [00:01<00:00, 73.10it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  90%|      | 113/126 [00:01<00:00, 73.57it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  90%|      | 114/126 [00:01<00:00, 74.04it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  91%|      | 115/126 [00:01<00:00, 74.51it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  92%|      | 116/126 [00:01<00:00, 74.97it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  93%|      | 117/126 [00:01<00:00, 75.44it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  94%|      | 118/126 [00:01<00:00, 75.89it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103:  94%|      | 119/126 [00:01<00:00, 76.35it/s, loss=0.0028,

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v_num=4.31e+7]
Epoch 103: 95%|      | 120/126 [00:01<00:00, 76.81it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 96%|      | 121/126 [00:01<00:00, 77.25it/s, loss=0.0028,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 214.46it/s]
Epoch 103: 97%|      | 122/126 [00:01<00:00, 77.71it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 98%|      | 123/126 [00:01<00:00, 78.19it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 98%|      | 124/126 [00:01<00:00, 78.67it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 99%|      | 125/126 [00:01<00:00, 79.14it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 79.62it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 103: 100%|     | 126/126 [00:01<00:00, 78.10it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 103: 100%|     | 126/126 [00:01<00:00, 77.99it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 79%|      | 100/126 [00:01<00:00, 74.39it/s, loss=0.00284,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 104: 80%|      | 101/126 [00:01<00:00, 64.95it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 81%|      | 102/126 [00:01<00:00, 64.68it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 82%|      | 103/126 [00:01<00:00, 65.10it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 83%|      | 104/126 [00:01<00:00, 65.51it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 83%|      | 105/126 [00:01<00:00, 65.93it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 84%|      | 106/126 [00:01<00:00, 66.35it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 85%|      | 107/126 [00:01<00:00, 66.77it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 86%|      | 108/126 [00:01<00:00, 67.20it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 87%|      | 109/126 [00:01<00:00, 67.62it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 87%|      | 110/126 [00:01<00:00, 68.05it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 88%|      | 111/126 [00:01<00:00, 68.48it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 89%|      | 112/126 [00:01<00:00, 68.91it/s, loss=0.00284,

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v_num=4.31e+7]
Epoch 104: 90%|      | 113/126 [00:01<00:00, 69.35it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 90%|      | 114/126 [00:01<00:00, 69.78it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 91%|      | 115/126 [00:01<00:00, 70.21it/s, loss=0.00284,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 156.76it/s]
Epoch 104: 92%|      | 116/126 [00:01<00:00, 70.64it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 93%|      | 117/126 [00:01<00:00, 71.07it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 94%|      | 118/126 [00:01<00:00, 71.51it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 94%|      | 119/126 [00:01<00:00, 71.94it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 95%|      | 120/126 [00:01<00:00, 72.37it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 96%|      | 121/126 [00:01<00:00, 72.81it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 97%|      | 122/126 [00:01<00:00, 73.25it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 98%|      | 123/126 [00:01<00:00, 73.71it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 98%|      | 124/126 [00:01<00:00, 74.16it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 99%|      | 125/126 [00:01<00:00, 74.61it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 104: 100%|     | 126/126 [00:01<00:00, 75.07it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 104: 100%|     | 126/126 [00:01<00:00, 73.67it/s, loss=0.00284,
v_num=4.31e+7]

Epoch 104: 100%|     | 126/126 [00:01<00:00, 73.57it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 79%|      | 100/126 [00:01<00:00, 76.64it/s, loss=0.00286,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 105: 80%|      | 101/126 [00:01<00:00, 68.03it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 81%|      | 102/126 [00:01<00:00, 68.21it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 82%|      | 103/126 [00:01<00:00, 68.63it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 83%|      | 104/126 [00:01<00:00, 69.06it/s, loss=0.00286,
v_num=4.31e+7]

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Epoch 105: 83%|      | 105/126 [00:01<00:00, 69.49it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 84%|      | 106/126 [00:01<00:00, 69.91it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 85%|      | 107/126 [00:01<00:00, 70.34it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 86%|      | 108/126 [00:01<00:00, 70.78it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 87%|      | 109/126 [00:01<00:00, 71.21it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 87%|      | 110/126 [00:01<00:00, 71.64it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 88%|      | 111/126 [00:01<00:00, 72.06it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 89%|      | 112/126 [00:01<00:00, 72.49it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 90%|      | 113/126 [00:01<00:00, 72.92it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 90%|      | 114/126 [00:01<00:00, 73.36it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 91%|      | 115/126 [00:01<00:00, 73.79it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 92%|      | 116/126 [00:01<00:00, 74.23it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 93%|      | 117/126 [00:01<00:00, 74.67it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 94%|      | 118/126 [00:01<00:00, 75.11it/s, loss=0.00286,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.69it/s]
Epoch 105: 94%|      | 119/126 [00:01<00:00, 75.54it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 95%|      | 120/126 [00:01<00:00, 75.98it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 96%|      | 121/126 [00:01<00:00, 76.42it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 97%|      | 122/126 [00:01<00:00, 76.87it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 98%|      | 123/126 [00:01<00:00, 77.34it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 98%|      | 124/126 [00:01<00:00, 77.81it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 99%|      | 125/126 [00:01<00:00, 78.27it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 78.74it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 105: 100%|     | 126/126 [00:01<00:00, 77.22it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 105: 100%|     | 126/126 [00:01<00:00, 77.12it/s, loss=0.00286,

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v_num=4.31e+7]Mapping latent space...
Epoch 106: 79%|          | 100/126 [00:01<00:00, 68.75it/s, loss=0.00292,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 106: 80%|          | 101/126 [00:01<00:00, 61.35it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 81%|          | 102/126 [00:01<00:00, 61.48it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 82%|          | 103/126 [00:01<00:00, 61.92it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 83%|          | 104/126 [00:01<00:00, 62.37it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 83%|          | 105/126 [00:01<00:00, 62.81it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 84%|          | 106/126 [00:01<00:00, 63.26it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 85%|          | 107/126 [00:01<00:00, 63.71it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 86%|          | 108/126 [00:01<00:00, 64.15it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 87%|          | 109/126 [00:01<00:00, 64.59it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 87%|          | 110/126 [00:01<00:00, 65.02it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 88%|          | 111/126 [00:01<00:00, 65.46it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 89%|          | 112/126 [00:01<00:00, 65.89it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 90%|          | 113/126 [00:01<00:00, 66.32it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 90%|          | 114/126 [00:01<00:00, 66.75it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 91%|          | 115/126 [00:01<00:00, 67.18it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 92%|          | 116/126 [00:01<00:00, 67.61it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 93%|          | 117/126 [00:01<00:00, 68.03it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 94%|          | 118/126 [00:01<00:00, 68.46it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 94%|          | 119/126 [00:01<00:00, 68.88it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 95%|          | 120/126 [00:01<00:00, 69.30it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 96%|          | 121/126 [00:01<00:00, 69.72it/s, loss=0.00292,
v_num=4.31e+7]

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Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 213.45it/s]
Epoch 106: 97%|          | 122/126 [00:01<00:00, 70.14it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 98%|          | 123/126 [00:01<00:00, 70.58it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 98%|          | 124/126 [00:01<00:00, 71.03it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 99%|          | 125/126 [00:01<00:00, 71.47it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 100%|         | 126/126 [00:01<00:00, 71.92it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 106: 100%|         | 126/126 [00:01<00:00, 70.62it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 106: 100%|         | 126/126 [00:01<00:00, 70.53it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 79%|          | 100/126 [00:01<00:00, 72.00it/s, loss=0.00328,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 107: 80%|          | 101/126 [00:01<00:00, 63.60it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 81%|          | 102/126 [00:01<00:00, 63.76it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 82%|          | 103/126 [00:01<00:00, 64.14it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 83%|          | 104/126 [00:01<00:00, 64.53it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 83%|          | 105/126 [00:01<00:00, 64.92it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 84%|          | 106/126 [00:01<00:00, 65.31it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 85%|          | 107/126 [00:01<00:00, 65.70it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 86%|          | 108/126 [00:01<00:00, 66.10it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 87%|          | 109/126 [00:01<00:00, 66.50it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 87%|          | 110/126 [00:01<00:00, 66.90it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 88%|          | 111/126 [00:01<00:00, 67.30it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 89%|          | 112/126 [00:01<00:00, 67.71it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 90%|          | 113/126 [00:01<00:00, 68.11it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 90%|          | 114/126 [00:01<00:00, 68.52it/s, loss=0.00328,
v_num=4.31e+7]

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Epoch 107: 91%|      | 115/126 [00:01<00:00, 68.93it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 92%|      | 116/126 [00:01<00:00, 69.34it/s, loss=0.00328,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.36it/s]
Epoch 107: 93%|      | 117/126 [00:01<00:00, 69.74it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 94%|      | 118/126 [00:01<00:00, 70.16it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 94%|      | 119/126 [00:01<00:00, 70.57it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 95%|      | 120/126 [00:01<00:00, 70.98it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 96%|      | 121/126 [00:01<00:00, 71.40it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 97%|      | 122/126 [00:01<00:00, 71.82it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 98%|      | 123/126 [00:01<00:00, 72.26it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 98%|      | 124/126 [00:01<00:00, 72.70it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 99%|      | 125/126 [00:01<00:00, 73.14it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 107: 100%|     | 126/126 [00:01<00:00, 73.59it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 107: 100%|     | 126/126 [00:01<00:00, 72.24it/s, loss=0.00328,
v_num=4.31e+7]

Epoch 107: 100%|     | 126/126 [00:01<00:00, 72.13it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 79%|      | 100/126 [00:01<00:00, 77.59it/s, loss=0.0028,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 108: 80%|      | 101/126 [00:01<00:00, 68.68it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 81%|      | 102/126 [00:01<00:00, 68.89it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 82%|      | 103/126 [00:01<00:00, 69.39it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 83%|      | 104/126 [00:01<00:00, 69.89it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 83%|      | 105/126 [00:01<00:00, 70.39it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 84%|      | 106/126 [00:01<00:00, 70.88it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 85%|      | 107/126 [00:01<00:00, 71.39it/s, loss=0.0028,

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v_num=4.31e+7]
Epoch 108: 86%|      | 108/126 [00:01<00:00, 71.88it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 87%|      | 109/126 [00:01<00:00, 72.37it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 87%|      | 110/126 [00:01<00:00, 72.86it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 88%|      | 111/126 [00:01<00:00, 73.36it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 89%|      | 112/126 [00:01<00:00, 73.85it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 90%|      | 113/126 [00:01<00:00, 74.33it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 90%|      | 114/126 [00:01<00:00, 74.85it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 91%|      | 115/126 [00:01<00:00, 75.31it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 92%|      | 116/126 [00:01<00:00, 75.79it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 93%|      | 117/126 [00:01<00:00, 76.27it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 94%|      | 118/126 [00:01<00:00, 76.75it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 94%|      | 119/126 [00:01<00:00, 77.24it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 95%|      | 120/126 [00:01<00:00, 77.71it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 96%|      | 121/126 [00:01<00:00, 78.20it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 97%|      | 122/126 [00:01<00:00, 78.67it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 98%|      | 123/126 [00:01<00:00, 79.19it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 98%|      | 124/126 [00:01<00:00, 79.71it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 99%|      | 125/126 [00:01<00:00, 80.22it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 80.74it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 108: 100%|     | 126/126 [00:01<00:00, 79.29it/s, loss=0.0028,
v_num=4.31e+7]
Epoch 108: 100%|     | 126/126 [00:01<00:00, 79.20it/s, loss=0.0028,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 79%|      | 100/126 [00:01<00:00, 66.35it/s, loss=0.00286,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]

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Epoch 109: 80%| | 101/126 [00:01<00:00, 58.93it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 81%| | 102/126 [00:01<00:00, 59.13it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 82%| | 103/126 [00:01<00:00, 59.57it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 83%| | 104/126 [00:01<00:00, 60.01it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 83%| | 105/126 [00:01<00:00, 60.46it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 84%| | 106/126 [00:01<00:00, 60.90it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 85%| | 107/126 [00:01<00:00, 61.24it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 86%| | 108/126 [00:01<00:00, 61.66it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 87%| | 109/126 [00:01<00:00, 62.10it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 87%| | 110/126 [00:01<00:00, 62.53it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 88%| | 111/126 [00:01<00:00, 62.96it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 89%| | 112/126 [00:01<00:00, 63.40it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 90%| | 113/126 [00:01<00:00, 63.82it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 90%| | 114/126 [00:01<00:00, 64.25it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 91%| | 115/126 [00:01<00:00, 64.68it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 92%| | 116/126 [00:01<00:00, 65.10it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 93%| | 117/126 [00:01<00:00, 65.52it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 94%| | 118/126 [00:01<00:00, 65.94it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 94%| | 119/126 [00:01<00:00, 66.36it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 95%| | 120/126 [00:01<00:00, 66.78it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 96%| | 121/126 [00:01<00:00, 67.20it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 97%| | 122/126 [00:01<00:00, 67.62it/s, loss=0.00286,
 v_num=4.31e+7]
 Validation DataLoader 0: 88%| | 23/26 [00:00<00:00, 223.21it/s]
 Epoch 109: 98%| | 123/126 [00:01<00:00, 68.05it/s, loss=0.00286,
 v_num=4.31e+7]
 Epoch 109: 98%| | 124/126 [00:01<00:00, 68.48it/s, loss=0.00286,


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v_num=4.31e+7]
Epoch 109: 99%|      | 125/126 [00:01<00:00, 68.91it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 69.35it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 109: 100%|     | 126/126 [00:01<00:00, 68.13it/s, loss=0.00286,
v_num=4.31e+7]
Epoch 109: 100%|     | 126/126 [00:01<00:00, 68.02it/s, loss=0.00286,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 79%|      | 100/126 [00:01<00:00, 68.51it/s, loss=0.00314,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 110: 80%|      | 101/126 [00:01<00:00, 60.78it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 81%|      | 102/126 [00:01<00:00, 60.87it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 82%|      | 103/126 [00:01<00:00, 61.25it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 83%|      | 104/126 [00:01<00:00, 61.64it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 83%|      | 105/126 [00:01<00:00, 62.03it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 84%|      | 106/126 [00:01<00:00, 62.42it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 85%|      | 107/126 [00:01<00:00, 62.82it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 86%|      | 108/126 [00:01<00:00, 63.22it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 87%|      | 109/126 [00:01<00:00, 63.61it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 87%|      | 110/126 [00:01<00:00, 64.02it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 88%|      | 111/126 [00:01<00:00, 64.41it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 89%|      | 112/126 [00:01<00:00, 64.82it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 90%|      | 113/126 [00:01<00:00, 65.22it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 90%|      | 114/126 [00:01<00:00, 65.62it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 91%|      | 115/126 [00:01<00:00, 66.02it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 92%|      | 116/126 [00:01<00:00, 66.43it/s, loss=0.00314,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 166.56it/s]
Epoch 110: 93%|      | 117/126 [00:01<00:00, 66.83it/s, loss=0.00314,

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v_num=4.31e+7]
Epoch 110: 94%|      | 118/126 [00:01<00:00, 67.23it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 94%|      | 119/126 [00:01<00:00, 67.63it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 95%|      | 120/126 [00:01<00:00, 68.04it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 96%|      | 121/126 [00:01<00:00, 68.44it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 97%|      | 122/126 [00:01<00:00, 68.85it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 98%|      | 123/126 [00:01<00:00, 69.26it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 98%|      | 124/126 [00:01<00:00, 69.62it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 99%|      | 125/126 [00:01<00:00, 70.01it/s, loss=0.00314,
v_num=4.31e+7]
Epoch 110: 100%|     | 126/126 [00:01<00:00, 70.45it/s, loss=0.00314,
v_num=4.31e+7]Mapping latent space...
Epoch 110: 100%|     | 126/126 [00:01<00:00, 68.91it/s, loss=0.00314,
v_num=4.31e+7]

Epoch 110: 100%|     | 126/126 [00:01<00:00, 68.83it/s, loss=0.00314,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 79%|      | 100/126 [00:01<00:00, 74.03it/s, loss=0.00292,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 111: 80%|      | 101/126 [00:01<00:00, 65.93it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 81%|      | 102/126 [00:01<00:00, 65.52it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 82%|      | 103/126 [00:01<00:00, 66.01it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 83%|      | 104/126 [00:01<00:00, 66.50it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 83%|      | 105/126 [00:01<00:00, 67.00it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 84%|      | 106/126 [00:01<00:00, 67.46it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 85%|      | 107/126 [00:01<00:00, 67.88it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 86%|      | 108/126 [00:01<00:00, 68.29it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 87%|      | 109/126 [00:01<00:00, 68.70it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 87%|      | 110/126 [00:01<00:00, 69.12it/s, loss=0.00292,

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v_num=4.31e+7]
Epoch 111: 88%|      | 111/126 [00:01<00:00, 69.54it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 89%|      | 112/126 [00:01<00:00, 69.97it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 90%|      | 113/126 [00:01<00:00, 70.39it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 90%|      | 114/126 [00:01<00:00, 70.82it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 91%|      | 115/126 [00:01<00:00, 71.25it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 92%|      | 116/126 [00:01<00:00, 71.67it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 93%|      | 117/126 [00:01<00:00, 72.10it/s, loss=0.00292,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.36it/s]
Epoch 111: 94%|      | 118/126 [00:01<00:00, 72.52it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 94%|      | 119/126 [00:01<00:00, 72.95it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 95%|      | 120/126 [00:01<00:00, 73.38it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 96%|      | 121/126 [00:01<00:00, 73.80it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 97%|      | 122/126 [00:01<00:00, 74.23it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 98%|      | 123/126 [00:01<00:00, 74.68it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 98%|      | 124/126 [00:01<00:00, 75.12it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 99%|      | 125/126 [00:01<00:00, 75.56it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 76.01it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 111: 100%|     | 126/126 [00:01<00:00, 74.55it/s, loss=0.00292,
v_num=4.31e+7]
Epoch 111: 100%|     | 126/126 [00:01<00:00, 74.44it/s, loss=0.00292,
v_num=4.31e+7]Mapping latent space...
Epoch 112: 79%|      | 100/126 [00:01<00:00, 77.48it/s, loss=0.00303,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 112: 80%|      | 101/126 [00:01<00:00, 69.86it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 81%|      | 102/126 [00:01<00:00, 70.15it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 82%|      | 103/126 [00:01<00:00, 70.58it/s, loss=0.00303,

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v_num=4.31e+7]
Epoch 112: 83%|      | 104/126 [00:01<00:00, 71.00it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 83%|      | 105/126 [00:01<00:00, 71.43it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 84%|      | 106/126 [00:01<00:00, 71.86it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 85%|      | 107/126 [00:01<00:00, 72.29it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 86%|      | 108/126 [00:01<00:00, 72.72it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 87%|      | 109/126 [00:01<00:00, 73.16it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 87%|      | 110/126 [00:01<00:00, 73.60it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 88%|      | 111/126 [00:01<00:00, 74.04it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 89%|      | 112/126 [00:01<00:00, 74.48it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 90%|      | 113/126 [00:01<00:00, 74.92it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 90%|      | 114/126 [00:01<00:00, 75.37it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 91%|      | 115/126 [00:01<00:00, 75.81it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 92%|      | 116/126 [00:01<00:00, 76.26it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 93%|      | 117/126 [00:01<00:00, 76.70it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 94%|      | 118/126 [00:01<00:00, 77.15it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 94%|      | 119/126 [00:01<00:00, 77.60it/s, loss=0.00303,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 192.46it/s]
Epoch 112: 95%|      | 120/126 [00:01<00:00, 78.04it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 96%|      | 121/126 [00:01<00:00, 78.48it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 97%|      | 122/126 [00:01<00:00, 78.94it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 98%|      | 123/126 [00:01<00:00, 79.42it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 98%|      | 124/126 [00:01<00:00, 79.89it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 99%|      | 125/126 [00:01<00:00, 80.37it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 100%|     | 126/126 [00:01<00:00, 80.85it/s, loss=0.00303,
v_num=4.31e+7]Mapping latent space...

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Epoch 112: 100%|      | 126/126 [00:01<00:00, 79.15it/s, loss=0.00303,
v_num=4.31e+7]
Epoch 112: 100%|      | 126/126 [00:01<00:00, 79.03it/s, loss=0.00303,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 79%|       | 100/126 [00:01<00:00, 77.62it/s, loss=0.00326,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|        | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 113: 80%|       | 101/126 [00:01<00:00, 68.49it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 81%|       | 102/126 [00:01<00:00, 68.56it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 82%|       | 103/126 [00:01<00:00, 69.04it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 83%|       | 104/126 [00:01<00:00, 69.52it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 83%|       | 105/126 [00:01<00:00, 69.99it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 84%|       | 106/126 [00:01<00:00, 70.46it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 85%|       | 107/126 [00:01<00:00, 70.94it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 86%|       | 108/126 [00:01<00:00, 71.41it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 87%|       | 109/126 [00:01<00:00, 71.88it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 87%|       | 110/126 [00:01<00:00, 72.35it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 88%|       | 111/126 [00:01<00:00, 72.81it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 89%|       | 112/126 [00:01<00:00, 73.28it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 90%|       | 113/126 [00:01<00:00, 73.74it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 90%|       | 114/126 [00:01<00:00, 74.20it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 91%|       | 115/126 [00:01<00:00, 74.66it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 92%|       | 116/126 [00:01<00:00, 75.11it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 93%|       | 117/126 [00:01<00:00, 75.56it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 94%|       | 118/126 [00:01<00:00, 76.02it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 94%|       | 119/126 [00:01<00:00, 76.47it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 95%|       | 120/126 [00:01<00:00, 76.92it/s, loss=0.00326,

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v_num=4.31e+7]
Epoch 113: 96%|      | 121/126 [00:01<00:00, 77.36it/s, loss=0.00326,
v_num=4.31e+7]
Validation DataLoader 0: 85%|      | 22/26 [00:00<00:00, 212.85it/s]
Epoch 113: 97%|      | 122/126 [00:01<00:00, 77.80it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 98%|      | 123/126 [00:01<00:00, 78.28it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 98%|      | 124/126 [00:01<00:00, 78.75it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 99%|      | 125/126 [00:01<00:00, 79.22it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 79.71it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...
Epoch 113: 100%|     | 126/126 [00:01<00:00, 78.18it/s, loss=0.00326,
v_num=4.31e+7]
Epoch 113: 100%|     | 126/126 [00:01<00:00, 78.06it/s, loss=0.00326,
v_num=4.31e+7]Mapping latent space...

Epoch 114: 79%|      | 100/126 [00:01<00:00, 81.60it/s, loss=0.00317,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 114: 80%|      | 101/126 [00:01<00:00, 71.68it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 81%|      | 102/126 [00:01<00:00, 71.81it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 82%|      | 103/126 [00:01<00:00, 72.24it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 83%|      | 104/126 [00:01<00:00, 72.67it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 83%|      | 105/126 [00:01<00:00, 73.11it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 84%|      | 106/126 [00:01<00:00, 73.55it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 85%|      | 107/126 [00:01<00:00, 73.99it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 86%|      | 108/126 [00:01<00:00, 74.44it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 87%|      | 109/126 [00:01<00:00, 74.87it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 87%|      | 110/126 [00:01<00:00, 75.32it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 88%|      | 111/126 [00:01<00:00, 75.76it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 89%|      | 112/126 [00:01<00:00, 76.20it/s, loss=0.00317,
v_num=4.31e+7]

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Epoch 114: 90%|      | 113/126 [00:01<00:00, 76.65it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 90%|      | 114/126 [00:01<00:00, 77.09it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 91%|      | 115/126 [00:01<00:00, 77.54it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 92%|      | 116/126 [00:01<00:00, 77.99it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 93%|      | 117/126 [00:01<00:00, 78.44it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 94%|      | 118/126 [00:01<00:00, 78.89it/s, loss=0.00317,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 184.75it/s]
Epoch 114: 94%|      | 119/126 [00:01<00:00, 79.33it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 95%|      | 120/126 [00:01<00:00, 79.78it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 96%|      | 121/126 [00:01<00:00, 80.23it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 97%|      | 122/126 [00:01<00:00, 80.69it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 98%|      | 123/126 [00:01<00:00, 81.18it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 98%|      | 124/126 [00:01<00:00, 81.66it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 99%|      | 125/126 [00:01<00:00, 82.14it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 82.63it/s, loss=0.00317,
v_num=4.31e+7]Mapping latent space...
Epoch 114: 100%|     | 126/126 [00:01<00:00, 80.94it/s, loss=0.00317,
v_num=4.31e+7]
Epoch 114: 100%|     | 126/126 [00:01<00:00, 80.81it/s, loss=0.00317,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 79%|      | 100/126 [00:01<00:00, 76.81it/s, loss=0.00295,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 115: 80%|      | 101/126 [00:01<00:00, 66.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 81%|      | 102/126 [00:01<00:00, 66.94it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 82%|      | 103/126 [00:01<00:00, 67.40it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 83%|      | 104/126 [00:01<00:00, 67.85it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 83%|      | 105/126 [00:01<00:00, 68.31it/s, loss=0.00295,
v_num=4.31e+7]

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Epoch 115: 84%|      | 106/126 [00:01<00:00, 68.76it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 85%|      | 107/126 [00:01<00:00, 69.22it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 86%|      | 108/126 [00:01<00:00, 69.68it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 87%|      | 109/126 [00:01<00:00, 70.13it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 87%|      | 110/126 [00:01<00:00, 70.59it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 88%|      | 111/126 [00:01<00:00, 71.05it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 89%|      | 112/126 [00:01<00:00, 71.50it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 90%|      | 113/126 [00:01<00:00, 71.96it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 90%|      | 114/126 [00:01<00:00, 72.41it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 91%|      | 115/126 [00:01<00:00, 72.85it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 92%|      | 116/126 [00:01<00:00, 73.30it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 93%|      | 117/126 [00:01<00:00, 73.75it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 94%|      | 118/126 [00:01<00:00, 74.20it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 94%|      | 119/126 [00:01<00:00, 74.64it/s, loss=0.00295,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 199.09it/s]
Epoch 115: 95%|      | 120/126 [00:01<00:00, 75.07it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 96%|      | 121/126 [00:01<00:00, 75.50it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 97%|      | 122/126 [00:01<00:00, 75.95it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 98%|      | 123/126 [00:01<00:00, 76.42it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 98%|      | 124/126 [00:01<00:00, 76.89it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 99%|      | 125/126 [00:01<00:00, 77.35it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 77.82it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 115: 100%|     | 126/126 [00:01<00:00, 76.23it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 115: 100%|     | 126/126 [00:01<00:00, 76.13it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 79%|      | 100/126 [00:01<00:00, 71.83it/s, loss=0.0029,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 116: 80%|          | 101/126 [00:01<00:00, 63.61it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 81%|          | 102/126 [00:01<00:00, 63.69it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 82%|          | 103/126 [00:01<00:00, 64.14it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 83%|          | 104/126 [00:01<00:00, 64.59it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 83%|          | 105/126 [00:01<00:00, 65.03it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 84%|          | 106/126 [00:01<00:00, 65.48it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 85%|          | 107/126 [00:01<00:00, 65.93it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 86%|          | 108/126 [00:01<00:00, 66.37it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 87%|          | 109/126 [00:01<00:00, 66.82it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 87%|          | 110/126 [00:01<00:00, 67.27it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 88%|          | 111/126 [00:01<00:00, 67.72it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 89%|          | 112/126 [00:01<00:00, 68.17it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 90%|          | 113/126 [00:01<00:00, 68.62it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 90%|          | 114/126 [00:01<00:00, 69.07it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 91%|          | 115/126 [00:01<00:00, 69.51it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 92%|          | 116/126 [00:01<00:00, 69.96it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 93%|          | 117/126 [00:01<00:00, 70.41it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 94%|          | 118/126 [00:01<00:00, 70.85it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 94%|          | 119/126 [00:01<00:00, 71.29it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 95%|          | 120/126 [00:01<00:00, 71.73it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 96%|          | 121/126 [00:01<00:00, 72.16it/s, loss=0.0029,
v_num=4.31e+7]
Validation DataLoader 0: 85%|          | 22/26 [00:00<00:00, 213.74it/s]
Epoch 116: 97%|          | 122/126 [00:01<00:00, 72.60it/s, loss=0.0029,

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v_num=4.31e+7]
Epoch 116: 98%|      | 123/126 [00:01<00:00, 73.06it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 98%|      | 124/126 [00:01<00:00, 73.51it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 99%|      | 125/126 [00:01<00:00, 73.96it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 74.43it/s, loss=0.0029,
v_num=4.31e+7]Mapping latent space...
Epoch 116: 100%|     | 126/126 [00:01<00:00, 73.07it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 116: 100%|     | 126/126 [00:01<00:00, 72.98it/s, loss=0.0029,
v_num=4.31e+7]Mapping latent space...

Epoch 117: 79%|      | 100/126 [00:01<00:00, 81.38it/s, loss=0.00306,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 117: 80%|      | 101/126 [00:01<00:00, 70.90it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 81%|      | 102/126 [00:01<00:00, 71.05it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 82%|      | 103/126 [00:01<00:00, 71.47it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 83%|      | 104/126 [00:01<00:00, 71.89it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 83%|      | 105/126 [00:01<00:00, 72.33it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 84%|      | 106/126 [00:01<00:00, 72.77it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 85%|      | 107/126 [00:01<00:00, 73.20it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 86%|      | 108/126 [00:01<00:00, 73.64it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 87%|      | 109/126 [00:01<00:00, 74.07it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 87%|      | 110/126 [00:01<00:00, 74.51it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 88%|      | 111/126 [00:01<00:00, 74.95it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 89%|      | 112/126 [00:01<00:00, 75.39it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 90%|      | 113/126 [00:01<00:00, 75.83it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 90%|      | 114/126 [00:01<00:00, 76.28it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 91%|      | 115/126 [00:01<00:00, 76.72it/s, loss=0.00306,

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v_num=4.31e+7]
Epoch 117: 92%|      | 116/126 [00:01<00:00, 77.17it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 93%|      | 117/126 [00:01<00:00, 77.61it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 94%|      | 118/126 [00:01<00:00, 78.07it/s, loss=0.00306,
v_num=4.31e+7]
Validation DataLoader 0: 73%|      | 19/26 [00:00<00:00, 183.55it/s]
Epoch 117: 94%|      | 119/126 [00:01<00:00, 78.51it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 95%|      | 120/126 [00:01<00:00, 78.96it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 96%|      | 121/126 [00:01<00:00, 79.41it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 97%|      | 122/126 [00:01<00:00, 79.87it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 98%|      | 123/126 [00:01<00:00, 80.35it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 98%|      | 124/126 [00:01<00:00, 80.83it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 99%|      | 125/126 [00:01<00:00, 81.31it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 81.80it/s, loss=0.00306,
v_num=4.31e+7]Mapping latent space...
Epoch 117: 100%|     | 126/126 [00:01<00:00, 80.17it/s, loss=0.00306,
v_num=4.31e+7]
Epoch 117: 100%|     | 126/126 [00:01<00:00, 80.04it/s, loss=0.00306,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 79%|      | 100/126 [00:01<00:00, 80.72it/s, loss=0.0029,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 118: 80%|      | 101/126 [00:01<00:00, 70.35it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 81%|      | 102/126 [00:01<00:00, 70.53it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 82%|      | 103/126 [00:01<00:00, 70.93it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 83%|      | 104/126 [00:01<00:00, 71.35it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 83%|      | 105/126 [00:01<00:00, 71.76it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 84%|      | 106/126 [00:01<00:00, 72.18it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 85%|      | 107/126 [00:01<00:00, 72.59it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 86%|      | 108/126 [00:01<00:00, 73.01it/s, loss=0.0029,

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v_num=4.31e+7]
Epoch 118: 87%|      | 109/126 [00:01<00:00, 73.42it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 87%|      | 110/126 [00:01<00:00, 73.85it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 88%|      | 111/126 [00:01<00:00, 74.27it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 89%|      | 112/126 [00:01<00:00, 74.70it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 90%|      | 113/126 [00:01<00:00, 75.13it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 90%|      | 114/126 [00:01<00:00, 75.56it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 91%|      | 115/126 [00:01<00:00, 75.99it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 92%|      | 116/126 [00:01<00:00, 76.43it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 93%|      | 117/126 [00:01<00:00, 76.87it/s, loss=0.0029,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 174.12it/s]
Epoch 118: 94%|      | 118/126 [00:01<00:00, 77.29it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 94%|      | 119/126 [00:01<00:00, 77.73it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 95%|      | 120/126 [00:01<00:00, 78.18it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 96%|      | 121/126 [00:01<00:00, 78.62it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 97%|      | 122/126 [00:01<00:00, 79.07it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 98%|      | 123/126 [00:01<00:00, 79.54it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 98%|      | 124/126 [00:01<00:00, 80.01it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 99%|      | 125/126 [00:01<00:00, 80.48it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 80.96it/s, loss=0.0029,
v_num=4.31e+7]Mapping latent space...
Epoch 118: 100%|     | 126/126 [00:01<00:00, 79.26it/s, loss=0.0029,
v_num=4.31e+7]
Epoch 118: 100%|     | 126/126 [00:01<00:00, 79.15it/s, loss=0.0029,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 79%|      | 100/126 [00:01<00:00, 73.61it/s, loss=0.00323,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 119: 80%|      | 101/126 [00:01<00:00, 64.43it/s, loss=0.00323,

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v_num=4.31e+7]
Epoch 119: 81%|      | 102/126 [00:01<00:00, 64.68it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 82%|      | 103/126 [00:01<00:00, 65.03it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 83%|      | 104/126 [00:01<00:00, 65.39it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 83%|      | 105/126 [00:01<00:00, 65.76it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 84%|      | 106/126 [00:01<00:00, 66.13it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 85%|      | 107/126 [00:01<00:00, 66.52it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 86%|      | 108/126 [00:01<00:00, 66.90it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 87%|      | 109/126 [00:01<00:00, 67.29it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 87%|      | 110/126 [00:01<00:00, 67.67it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 88%|      | 111/126 [00:01<00:00, 68.06it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 89%|      | 112/126 [00:01<00:00, 68.45it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 90%|      | 113/126 [00:01<00:00, 68.85it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 90%|      | 114/126 [00:01<00:00, 69.23it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 91%|      | 115/126 [00:01<00:00, 69.63it/s, loss=0.00323,
v_num=4.31e+7]
Validation DataLoader 0: 62%|      | 16/26 [00:00<00:00, 154.24it/s]
Epoch 119: 92%|      | 116/126 [00:01<00:00, 70.02it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 93%|      | 117/126 [00:01<00:00, 70.41it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 94%|      | 118/126 [00:01<00:00, 70.81it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 94%|      | 119/126 [00:01<00:00, 71.21it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 95%|      | 120/126 [00:01<00:00, 71.60it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 96%|      | 121/126 [00:01<00:00, 72.00it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 97%|      | 122/126 [00:01<00:00, 72.40it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 98%|      | 123/126 [00:01<00:00, 72.82it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 98%|      | 124/126 [00:01<00:00, 73.25it/s, loss=0.00323,
v_num=4.31e+7]

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Epoch 119: 99%|      | 125/126 [00:01<00:00, 73.66it/s, loss=0.00323,
v_num=4.31e+7]
Epoch 119: 100%|     | 126/126 [00:01<00:00, 74.08it/s, loss=0.00323,
v_num=4.31e+7]Mapping latent space...
Epoch 119: 100%|     | 126/126 [00:01<00:00, 72.54it/s, loss=0.00323,
v_num=4.31e+7]

Epoch 119: 100%|     | 126/126 [00:01<00:00, 72.41it/s, loss=0.00323,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 79%|      | 100/126 [00:01<00:00, 78.19it/s, loss=0.00298,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 120: 80%|      | 101/126 [00:01<00:00, 69.28it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 81%|      | 102/126 [00:01<00:00, 69.50it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 82%|      | 103/126 [00:01<00:00, 70.02it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 83%|      | 104/126 [00:01<00:00, 70.53it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 83%|      | 105/126 [00:01<00:00, 71.04it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 84%|      | 106/126 [00:01<00:00, 71.55it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 85%|      | 107/126 [00:01<00:00, 72.06it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 86%|      | 108/126 [00:01<00:00, 72.57it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 87%|      | 109/126 [00:01<00:00, 73.10it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 87%|      | 110/126 [00:01<00:00, 73.59it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 88%|      | 111/126 [00:01<00:00, 74.11it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 89%|      | 112/126 [00:01<00:00, 74.59it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 90%|      | 113/126 [00:01<00:00, 75.11it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 90%|      | 114/126 [00:01<00:00, 75.59it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 91%|      | 115/126 [00:01<00:00, 76.09it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 92%|      | 116/126 [00:01<00:00, 76.58it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 93%|      | 117/126 [00:01<00:00, 77.08it/s, loss=0.00298,
v_num=4.31e+7]

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Epoch 120: 94%|      | 118/126 [00:01<00:00, 77.57it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 94%|      | 119/126 [00:01<00:00, 78.06it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 95%|      | 120/126 [00:01<00:00, 78.56it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 96%|      | 121/126 [00:01<00:00, 79.05it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 97%|      | 122/126 [00:01<00:00, 79.54it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 98%|      | 123/126 [00:01<00:00, 80.06it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 98%|      | 124/126 [00:01<00:00, 80.57it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 99%|      | 125/126 [00:01<00:00, 81.09it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 81.61it/s, loss=0.00298,
v_num=4.31e+7]Mapping latent space...
Epoch 120: 100%|     | 126/126 [00:01<00:00, 79.80it/s, loss=0.00298,
v_num=4.31e+7]
Epoch 120: 100%|     | 126/126 [00:01<00:00, 79.70it/s, loss=0.00298,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 79%|      | 100/126 [00:01<00:00, 79.89it/s, loss=0.00291,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 121: 80%|      | 101/126 [00:01<00:00, 69.42it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 81%|      | 102/126 [00:01<00:00, 69.59it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 82%|      | 103/126 [00:01<00:00, 70.01it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 83%|      | 104/126 [00:01<00:00, 70.43it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 83%|      | 105/126 [00:01<00:00, 70.86it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 84%|      | 106/126 [00:01<00:00, 71.29it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 85%|      | 107/126 [00:01<00:00, 71.72it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 86%|      | 108/126 [00:01<00:00, 72.15it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 87%|      | 109/126 [00:01<00:00, 72.57it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 87%|      | 110/126 [00:01<00:00, 73.00it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 88%|      | 111/126 [00:01<00:00, 73.43it/s, loss=0.00291,

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v_num=4.31e+7]
Epoch 121: 89%|      | 112/126 [00:01<00:00, 73.86it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 90%|      | 113/126 [00:01<00:00, 74.29it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 90%|      | 114/126 [00:01<00:00, 74.73it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 91%|      | 115/126 [00:01<00:00, 75.13it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 92%|      | 116/126 [00:01<00:00, 75.57it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 93%|      | 117/126 [00:01<00:00, 76.01it/s, loss=0.00291,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 176.04it/s]
Epoch 121: 94%|      | 118/126 [00:01<00:00, 76.44it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 94%|      | 119/126 [00:01<00:00, 76.88it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 95%|      | 120/126 [00:01<00:00, 77.32it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 96%|      | 121/126 [00:01<00:00, 77.76it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 97%|      | 122/126 [00:01<00:00, 78.21it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 98%|      | 123/126 [00:01<00:00, 78.69it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 98%|      | 124/126 [00:01<00:00, 79.16it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 99%|      | 125/126 [00:01<00:00, 79.63it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 80.11it/s, loss=0.00291,
v_num=4.31e+7]Mapping latent space...
Epoch 121: 100%|     | 126/126 [00:01<00:00, 78.46it/s, loss=0.00291,
v_num=4.31e+7]
Epoch 121: 100%|     | 126/126 [00:01<00:00, 78.35it/s, loss=0.00291,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 79%|      | 100/126 [00:01<00:00, 75.40it/s, loss=0.00246,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 122: 80%|      | 101/126 [00:01<00:00, 66.51it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 81%|      | 102/126 [00:01<00:00, 66.72it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 82%|      | 103/126 [00:01<00:00, 67.19it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 83%|      | 104/126 [00:01<00:00, 67.66it/s, loss=0.00246,

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v_num=4.31e+7]
Epoch 122: 83%|      | 105/126 [00:01<00:00, 68.13it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 84%|      | 106/126 [00:01<00:00, 68.61it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 85%|      | 107/126 [00:01<00:00, 69.08it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 86%|      | 108/126 [00:01<00:00, 69.57it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 87%|      | 109/126 [00:01<00:00, 70.06it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 87%|      | 110/126 [00:01<00:00, 70.54it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 88%|      | 111/126 [00:01<00:00, 71.02it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 89%|      | 112/126 [00:01<00:00, 71.50it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 90%|      | 113/126 [00:01<00:00, 71.98it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 90%|      | 114/126 [00:01<00:00, 72.46it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 91%|      | 115/126 [00:01<00:00, 72.94it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 92%|      | 116/126 [00:01<00:00, 73.42it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 93%|      | 117/126 [00:01<00:00, 73.89it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 94%|      | 118/126 [00:01<00:00, 74.37it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 94%|      | 119/126 [00:01<00:00, 74.86it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 95%|      | 120/126 [00:01<00:00, 75.32it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 96%|      | 121/126 [00:01<00:00, 75.79it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 97%|      | 122/126 [00:01<00:00, 76.26it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 98%|      | 123/126 [00:01<00:00, 76.76it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 98%|      | 124/126 [00:01<00:00, 77.26it/s, loss=0.00246,
v_num=4.31e+7]
Epoch 122: 99%|      | 125/126 [00:01<00:00, 77.76it/s, loss=0.00246,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 257.31it/s]
Epoch 122: 100%|      | 126/126 [00:01<00:00, 78.26it/s, loss=0.00246,
v_num=4.31e+7]Mapping latent space...
Epoch 122: 100%|      | 126/126 [00:01<00:00, 76.85it/s, loss=0.00246,
v_num=4.31e+7]

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Epoch 122: 100%|      | 126/126 [00:01<00:00, 76.74it/s, loss=0.00246,
v_num=4.31e+7]Mapping latent space...

Epoch 123: 79%|      | 100/126 [00:01<00:00, 78.88it/s, loss=0.00319,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 123: 80%|      | 101/126 [00:01<00:00, 69.30it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 81%|      | 102/126 [00:01<00:00, 69.44it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 82%|      | 103/126 [00:01<00:00, 69.85it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 83%|      | 104/126 [00:01<00:00, 70.26it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 83%|      | 105/126 [00:01<00:00, 70.67it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 84%|      | 106/126 [00:01<00:00, 71.08it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 85%|      | 107/126 [00:01<00:00, 71.50it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 86%|      | 108/126 [00:01<00:00, 71.92it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 87%|      | 109/126 [00:01<00:00, 72.34it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 87%|      | 110/126 [00:01<00:00, 72.76it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 88%|      | 111/126 [00:01<00:00, 73.18it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 89%|      | 112/126 [00:01<00:00, 73.61it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 90%|      | 113/126 [00:01<00:00, 74.03it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 90%|      | 114/126 [00:01<00:00, 74.46it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 91%|      | 115/126 [00:01<00:00, 74.89it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 92%|      | 116/126 [00:01<00:00, 75.32it/s, loss=0.00319,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.56it/s]
Epoch 123: 93%|      | 117/126 [00:01<00:00, 75.74it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 94%|      | 118/126 [00:01<00:00, 76.17it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 94%|      | 119/126 [00:01<00:00, 76.60it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 95%|      | 120/126 [00:01<00:00, 77.03it/s, loss=0.00319,

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v_num=4.31e+7]
Epoch 123: 96%|      | 121/126 [00:01<00:00, 77.47it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 97%|      | 122/126 [00:01<00:00, 77.90it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 98%|      | 123/126 [00:01<00:00, 78.38it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 98%|      | 124/126 [00:01<00:00, 78.85it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 99%|      | 125/126 [00:01<00:00, 79.32it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 79.80it/s, loss=0.00319,
v_num=4.31e+7]Mapping latent space...
Epoch 123: 100%|     | 126/126 [00:01<00:00, 78.23it/s, loss=0.00319,
v_num=4.31e+7]
Epoch 123: 100%|     | 126/126 [00:01<00:00, 78.04it/s, loss=0.00319,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 79%|      | 100/126 [00:01<00:00, 76.94it/s, loss=0.00295,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      | 0/26 [00:00<?, ?it/s]
Epoch 124: 80%|      | 101/126 [00:01<00:00, 68.39it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 81%|      | 102/126 [00:01<00:00, 68.40it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 82%|      | 103/126 [00:01<00:00, 68.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 83%|      | 104/126 [00:01<00:00, 69.41it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 83%|      | 105/126 [00:01<00:00, 69.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 84%|      | 106/126 [00:01<00:00, 70.42it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 85%|      | 107/126 [00:01<00:00, 70.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 86%|      | 108/126 [00:01<00:00, 71.42it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 87%|      | 109/126 [00:01<00:00, 71.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 87%|      | 110/126 [00:01<00:00, 72.42it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 88%|      | 111/126 [00:01<00:00, 72.92it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 89%|      | 112/126 [00:01<00:00, 73.41it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 90%|      | 113/126 [00:01<00:00, 73.90it/s, loss=0.00295,
v_num=4.31e+7]

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Epoch 124: 90%|      | 114/126 [00:01<00:00, 74.40it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 91%|      | 115/126 [00:01<00:00, 74.89it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 92%|      | 116/126 [00:01<00:00, 75.37it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 93%|      | 117/126 [00:01<00:00, 75.86it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 94%|      | 118/126 [00:01<00:00, 76.35it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 94%|      | 119/126 [00:01<00:00, 76.84it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 95%|      | 120/126 [00:01<00:00, 77.32it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 96%|      | 121/126 [00:01<00:00, 77.80it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 97%|      | 122/126 [00:01<00:00, 78.30it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 98%|      | 123/126 [00:01<00:00, 78.81it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 98%|      | 124/126 [00:01<00:00, 79.32it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 99%|      | 125/126 [00:01<00:00, 79.82it/s, loss=0.00295,
v_num=4.31e+7]
Validation DataLoader 0: 100%|      | 26/26 [00:00<00:00, 259.04it/s]
Epoch 124: 100%|      | 126/126 [00:01<00:00, 80.34it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 124: 100%|      | 126/126 [00:01<00:00, 77.57it/s, loss=0.00295,
v_num=4.31e+7]
Epoch 124: 100%|      | 126/126 [00:01<00:00, 77.45it/s, loss=0.00295,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 79%|      | 100/126 [00:01<00:00, 81.64it/s, loss=0.00327,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 125: 80%|      | 101/126 [00:01<00:00, 71.89it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 81%|      | 102/126 [00:01<00:00, 71.94it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 82%|      | 103/126 [00:01<00:00, 72.49it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 83%|      | 104/126 [00:01<00:00, 73.01it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 83%|      | 105/126 [00:01<00:00, 73.55it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 84%|      | 106/126 [00:01<00:00, 74.07it/s, loss=0.00327,
v_num=4.31e+7]

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Epoch 125: 85%|      | 107/126 [00:01<00:00, 74.61it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 86%|      | 108/126 [00:01<00:00, 75.12it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 87%|      | 109/126 [00:01<00:00, 75.66it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 87%|      | 110/126 [00:01<00:00, 76.16it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 88%|      | 111/126 [00:01<00:00, 76.69it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 89%|      | 112/126 [00:01<00:00, 77.19it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 90%|      | 113/126 [00:01<00:00, 77.72it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 90%|      | 114/126 [00:01<00:00, 78.22it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 91%|      | 115/126 [00:01<00:00, 78.75it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 92%|      | 116/126 [00:01<00:00, 79.24it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 93%|      | 117/126 [00:01<00:00, 79.75it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 94%|      | 118/126 [00:01<00:00, 80.24it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 94%|      | 119/126 [00:01<00:00, 80.74it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 95%|      | 120/126 [00:01<00:00, 81.24it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 96%|      | 121/126 [00:01<00:00, 81.74it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 97%|      | 122/126 [00:01<00:00, 82.24it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 98%|      | 123/126 [00:01<00:00, 82.76it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 98%|      | 124/126 [00:01<00:00, 83.30it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 99%|      | 125/126 [00:01<00:00, 83.82it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 100%|     | 126/126 [00:01<00:00, 84.36it/s, loss=0.00327,
v_num=4.31e+7]Mapping latent space...
Epoch 125: 100%|     | 126/126 [00:01<00:00, 82.45it/s, loss=0.00327,
v_num=4.31e+7]
Epoch 125: 100%|     | 126/126 [00:01<00:00, 82.34it/s, loss=0.00327,
v_num=4.31e+7]Mapping latent space...

Epoch 126: 79%|      | 100/126 [00:01<00:00, 88.95it/s, loss=0.00284,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]

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Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 126: 80%|          | 101/126 [00:01<00:00, 77.86it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 81%|          | 102/126 [00:01<00:00, 78.07it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 82%|          | 103/126 [00:01<00:00, 78.65it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 83%|          | 104/126 [00:01<00:00, 79.14it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 83%|          | 105/126 [00:01<00:00, 79.68it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 84%|          | 106/126 [00:01<00:00, 80.22it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 85%|          | 107/126 [00:01<00:00, 80.76it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 86%|          | 108/126 [00:01<00:00, 81.29it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 87%|          | 109/126 [00:01<00:00, 81.84it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 87%|          | 110/126 [00:01<00:00, 82.36it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 88%|          | 111/126 [00:01<00:00, 82.90it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 89%|          | 112/126 [00:01<00:00, 83.42it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 90%|          | 113/126 [00:01<00:00, 83.95it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 90%|          | 114/126 [00:01<00:00, 84.47it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 91%|          | 115/126 [00:01<00:00, 85.00it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 92%|          | 116/126 [00:01<00:00, 85.51it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 93%|          | 117/126 [00:01<00:00, 86.04it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 94%|          | 118/126 [00:01<00:00, 86.55it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 94%|          | 119/126 [00:01<00:00, 87.07it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 95%|          | 120/126 [00:01<00:00, 87.58it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 96%|          | 121/126 [00:01<00:00, 88.10it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 97%|          | 122/126 [00:01<00:00, 88.62it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 98%|          | 123/126 [00:01<00:00, 89.18it/s, loss=0.00284,
v_num=4.31e+7]

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Epoch 126: 98%|      | 124/126 [00:01<00:00, 89.75it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 99%|      | 125/126 [00:01<00:00, 90.31it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 90.87it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 126: 100%|     | 126/126 [00:01<00:00, 88.51it/s, loss=0.00284,
v_num=4.31e+7]
Epoch 126: 100%|     | 126/126 [00:01<00:00, 88.37it/s, loss=0.00284,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 79%|      | 100/126 [00:01<00:00, 75.16it/s, loss=0.00338,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 127: 80%|      | 101/126 [00:01<00:00, 65.70it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 81%|      | 102/126 [00:01<00:00, 65.98it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 82%|      | 103/126 [00:01<00:00, 66.43it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 83%|      | 104/126 [00:01<00:00, 66.88it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 83%|      | 105/126 [00:01<00:00, 67.33it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 84%|      | 106/126 [00:01<00:00, 67.79it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 85%|      | 107/126 [00:01<00:00, 68.24it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 86%|      | 108/126 [00:01<00:00, 68.69it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 87%|      | 109/126 [00:01<00:00, 69.14it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 87%|      | 110/126 [00:01<00:00, 69.59it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 88%|      | 111/126 [00:01<00:00, 70.05it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 89%|      | 112/126 [00:01<00:00, 70.50it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 90%|      | 113/126 [00:01<00:00, 70.95it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 90%|      | 114/126 [00:01<00:00, 71.41it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 91%|      | 115/126 [00:01<00:00, 71.86it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 92%|      | 116/126 [00:01<00:00, 72.32it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 93%|      | 117/126 [00:01<00:00, 72.77it/s, loss=0.00338,

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v_num=4.31e+7]
Epoch 127: 94%|      | 118/126 [00:01<00:00, 73.22it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 94%|      | 119/126 [00:01<00:00, 73.67it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 95%|      | 120/126 [00:01<00:00, 74.11it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 96%|      | 121/126 [00:01<00:00, 74.56it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 97%|      | 122/126 [00:01<00:00, 75.02it/s, loss=0.00338,
v_num=4.31e+7]
Validation DataLoader 0: 88%|      | 23/26 [00:00<00:00, 223.67it/s]
Epoch 127: 98%|      | 123/126 [00:01<00:00, 75.48it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 98%|      | 124/126 [00:01<00:00, 75.95it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 99%|      | 125/126 [00:01<00:00, 76.41it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 76.89it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 127: 100%|     | 126/126 [00:01<00:00, 75.01it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 127: 100%|     | 126/126 [00:01<00:00, 74.90it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 79%|      | 100/126 [00:01<00:00, 80.83it/s, loss=0.00285,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 128: 80%|      | 101/126 [00:01<00:00, 71.43it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 81%|      | 102/126 [00:01<00:00, 71.78it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 82%|      | 103/126 [00:01<00:00, 72.22it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 83%|      | 104/126 [00:01<00:00, 72.63it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 83%|      | 105/126 [00:01<00:00, 73.07it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 84%|      | 106/126 [00:01<00:00, 73.51it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 85%|      | 107/126 [00:01<00:00, 73.96it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 86%|      | 108/126 [00:01<00:00, 74.40it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 87%|      | 109/126 [00:01<00:00, 74.85it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 87%|      | 110/126 [00:01<00:00, 75.30it/s, loss=0.00285,

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v_num=4.31e+7]
Epoch 128: 88%|      | 111/126 [00:01<00:00, 75.73it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 89%|      | 112/126 [00:01<00:00, 76.17it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 90%|      | 113/126 [00:01<00:00, 76.62it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 90%|      | 114/126 [00:01<00:00, 77.07it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 91%|      | 115/126 [00:01<00:00, 77.52it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 92%|      | 116/126 [00:01<00:00, 77.96it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 93%|      | 117/126 [00:01<00:00, 78.41it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 94%|      | 118/126 [00:01<00:00, 78.86it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 94%|      | 119/126 [00:01<00:00, 79.31it/s, loss=0.00285,
v_num=4.31e+7]
Validation DataLoader 0: 77%|      | 20/26 [00:00<00:00, 195.52it/s]
Epoch 128: 95%|      | 120/126 [00:01<00:00, 79.76it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 96%|      | 121/126 [00:01<00:00, 80.21it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 97%|      | 122/126 [00:01<00:00, 80.67it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 98%|      | 123/126 [00:01<00:00, 81.15it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 98%|      | 124/126 [00:01<00:00, 81.63it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 99%|      | 125/126 [00:01<00:00, 82.11it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 82.60it/s, loss=0.00285,
v_num=4.31e+7]Mapping latent space...
Epoch 128: 100%|     | 126/126 [00:01<00:00, 80.53it/s, loss=0.00285,
v_num=4.31e+7]
Epoch 128: 100%|     | 126/126 [00:01<00:00, 80.41it/s, loss=0.00285,
v_num=4.31e+7]Mapping latent space...

Epoch 129: 79%|      | 100/126 [00:01<00:00, 80.49it/s, loss=0.00343,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 129: 80%|      | 101/126 [00:01<00:00, 71.03it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 81%|      | 102/126 [00:01<00:00, 70.64it/s, loss=0.00343,
v_num=4.31e+7]

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Epoch 129: 82%|      | 103/126 [00:01<00:00, 71.16it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 83%|      | 104/126 [00:01<00:00, 71.68it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 83%|      | 105/126 [00:01<00:00, 72.21it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 84%|      | 106/126 [00:01<00:00, 72.70it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 85%|      | 107/126 [00:01<00:00, 73.22it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 86%|      | 108/126 [00:01<00:00, 73.73it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 87%|      | 109/126 [00:01<00:00, 74.25it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 87%|      | 110/126 [00:01<00:00, 74.77it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 88%|      | 111/126 [00:01<00:00, 75.28it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 89%|      | 112/126 [00:01<00:00, 75.80it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 90%|      | 113/126 [00:01<00:00, 76.31it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 90%|      | 114/126 [00:01<00:00, 76.82it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 91%|      | 115/126 [00:01<00:00, 77.35it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 92%|      | 116/126 [00:01<00:00, 77.84it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 93%|      | 117/126 [00:01<00:00, 78.34it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 94%|      | 118/126 [00:01<00:00, 78.85it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 94%|      | 119/126 [00:01<00:00, 79.35it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 95%|      | 120/126 [00:01<00:00, 79.85it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 96%|      | 121/126 [00:01<00:00, 80.35it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 97%|      | 122/126 [00:01<00:00, 80.85it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 98%|      | 123/126 [00:01<00:00, 81.38it/s, loss=0.00343,
v_num=4.31e+7]
Validation DataLoader 0: 92%|      | 24/26 [00:00<00:00, 238.36it/s]
Epoch 129: 98%|      | 124/126 [00:01<00:00, 81.89it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 99%|      | 125/126 [00:01<00:00, 82.41it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 100%|     | 126/126 [00:01<00:00, 82.93it/s, loss=0.00343,

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v_num=4.31e+7]Mapping latent space...
Epoch 129: 100%|      | 126/126 [00:01<00:00, 80.93it/s, loss=0.00343,
v_num=4.31e+7]
Epoch 129: 100%|      | 126/126 [00:01<00:00, 80.83it/s, loss=0.00343,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 79%|      | 100/126 [00:01<00:00, 88.70it/s, loss=0.00287,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 130: 80%|      | 101/126 [00:01<00:00, 77.71it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 81%|      | 102/126 [00:01<00:00, 77.86it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 82%|      | 103/126 [00:01<00:00, 78.42it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 83%|      | 104/126 [00:01<00:00, 78.95it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 83%|      | 105/126 [00:01<00:00, 79.50it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 84%|      | 106/126 [00:01<00:00, 80.03it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 85%|      | 107/126 [00:01<00:00, 80.57it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 86%|      | 108/126 [00:01<00:00, 81.05it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 87%|      | 109/126 [00:01<00:00, 81.61it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 87%|      | 110/126 [00:01<00:00, 82.12it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 88%|      | 111/126 [00:01<00:00, 82.67it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 89%|      | 112/126 [00:01<00:00, 83.18it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 90%|      | 113/126 [00:01<00:00, 83.70it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 90%|      | 114/126 [00:01<00:00, 84.21it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 91%|      | 115/126 [00:01<00:00, 84.74it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 92%|      | 116/126 [00:01<00:00, 85.25it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 93%|      | 117/126 [00:01<00:00, 85.79it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 94%|      | 118/126 [00:01<00:00, 86.30it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 94%|      | 119/126 [00:01<00:00, 86.86it/s, loss=0.00287,
v_num=4.31e+7]

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Epoch 130: 95%|      | 120/126 [00:01<00:00, 87.34it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 96%|      | 121/126 [00:01<00:00, 87.86it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 97%|      | 122/126 [00:01<00:00, 88.38it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 98%|      | 123/126 [00:01<00:00, 88.95it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 98%|      | 124/126 [00:01<00:00, 89.52it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 99%|      | 125/126 [00:01<00:00, 90.07it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 90.64it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 130: 100%|     | 126/126 [00:01<00:00, 88.73it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 130: 100%|     | 126/126 [00:01<00:00, 88.61it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 79%|      | 100/126 [00:01<00:00, 89.39it/s, loss=0.00328,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 131: 80%|      | 101/126 [00:01<00:00, 76.35it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 81%|      | 102/126 [00:01<00:00, 76.45it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 82%|      | 103/126 [00:01<00:00, 76.85it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 83%|      | 104/126 [00:01<00:00, 77.25it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 83%|      | 105/126 [00:01<00:00, 77.67it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 84%|      | 106/126 [00:01<00:00, 78.10it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 85%|      | 107/126 [00:01<00:00, 78.53it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 86%|      | 108/126 [00:01<00:00, 78.96it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 87%|      | 109/126 [00:01<00:00, 79.40it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 87%|      | 110/126 [00:01<00:00, 79.81it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 88%|      | 111/126 [00:01<00:00, 80.25it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 89%|      | 112/126 [00:01<00:00, 80.69it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 90%|      | 113/126 [00:01<00:00, 81.15it/s, loss=0.00328,

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v_num=4.31e+7]
Epoch 131: 90%|      | 114/126 [00:01<00:00, 81.60it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 91%|      | 115/126 [00:01<00:00, 82.06it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 92%|      | 116/126 [00:01<00:00, 82.52it/s, loss=0.00328,
v_num=4.31e+7]
Validation DataLoader 0: 65%|      | 17/26 [00:00<00:00, 169.10it/s]
Epoch 131: 93%|      | 117/126 [00:01<00:00, 82.97it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 94%|      | 118/126 [00:01<00:00, 83.43it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 94%|      | 119/126 [00:01<00:00, 83.90it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 95%|      | 120/126 [00:01<00:00, 84.36it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 96%|      | 121/126 [00:01<00:00, 84.82it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 97%|      | 122/126 [00:01<00:00, 85.29it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 98%|      | 123/126 [00:01<00:00, 85.79it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 98%|      | 124/126 [00:01<00:00, 86.29it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 99%|      | 125/126 [00:01<00:00, 86.78it/s, loss=0.00328,
v_num=4.31e+7]
Epoch 131: 100%|     | 126/126 [00:01<00:00, 87.29it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 131: 100%|     | 126/126 [00:01<00:00, 85.29it/s, loss=0.00328,
v_num=4.31e+7]

Epoch 131: 100%|     | 126/126 [00:01<00:00, 85.17it/s, loss=0.00328,
v_num=4.31e+7]Mapping latent space...
Epoch 132: 79%|      | 100/126 [00:01<00:00, 66.39it/s, loss=0.00301,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 132: 80%|      | 101/126 [00:01<00:00, 59.05it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 81%|      | 102/126 [00:01<00:00, 59.28it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 82%|      | 103/126 [00:01<00:00, 59.67it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 83%|      | 104/126 [00:01<00:00, 60.07it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 83%|      | 105/126 [00:01<00:00, 60.47it/s, loss=0.00301,
v_num=4.31e+7]

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Epoch 132: 84%|      | 106/126 [00:01<00:00, 60.87it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 85%|      | 107/126 [00:01<00:00, 61.27it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 86%|      | 108/126 [00:01<00:00, 61.67it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 87%|      | 109/126 [00:01<00:00, 62.07it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 87%|      | 110/126 [00:01<00:00, 62.47it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 88%|      | 111/126 [00:01<00:00, 62.87it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 89%|      | 112/126 [00:01<00:00, 63.25it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 90%|      | 113/126 [00:01<00:00, 63.64it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 90%|      | 114/126 [00:01<00:00, 64.04it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 91%|      | 115/126 [00:01<00:00, 64.44it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 92%|      | 116/126 [00:01<00:00, 64.84it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 93%|      | 117/126 [00:01<00:00, 65.24it/s, loss=0.00301,
v_num=4.31e+7]
Validation DataLoader 0: 69%|      | 18/26 [00:00<00:00, 178.94it/s]
Epoch 132: 94%|      | 118/126 [00:01<00:00, 65.64it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 94%|      | 119/126 [00:01<00:00, 66.04it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 95%|      | 120/126 [00:01<00:00, 66.43it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 96%|      | 121/126 [00:01<00:00, 66.83it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 97%|      | 122/126 [00:01<00:00, 67.24it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 98%|      | 123/126 [00:01<00:00, 67.67it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 98%|      | 124/126 [00:01<00:00, 68.09it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 99%|      | 125/126 [00:01<00:00, 68.52it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 68.94it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 132: 100%|     | 126/126 [00:01<00:00, 67.34it/s, loss=0.00301,
v_num=4.31e+7]
Epoch 132: 100%|     | 126/126 [00:01<00:00, 67.23it/s, loss=0.00301,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 79%|      | 100/126 [00:01<00:00, 67.47it/s, loss=0.00338,

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v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|          | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|          | 0/26 [00:00<?, ?it/s]
Epoch 133: 80%|          | 101/126 [00:01<00:00, 60.28it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 81%|          | 102/126 [00:01<00:00, 60.16it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 82%|          | 103/126 [00:01<00:00, 60.61it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 83%|          | 104/126 [00:01<00:00, 61.06it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 83%|          | 105/126 [00:01<00:00, 61.50it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 84%|          | 106/126 [00:01<00:00, 61.94it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 85%|          | 107/126 [00:01<00:00, 62.38it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 86%|          | 108/126 [00:01<00:00, 62.83it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 87%|          | 109/126 [00:01<00:00, 63.27it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 87%|          | 110/126 [00:01<00:00, 63.70it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 88%|          | 111/126 [00:01<00:00, 64.14it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 89%|          | 112/126 [00:01<00:00, 64.57it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 90%|          | 113/126 [00:01<00:00, 65.00it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 90%|          | 114/126 [00:01<00:00, 65.41it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 91%|          | 115/126 [00:01<00:00, 65.84it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 92%|          | 116/126 [00:01<00:00, 66.27it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 93%|          | 117/126 [00:01<00:00, 66.70it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 94%|          | 118/126 [00:01<00:00, 67.12it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 94%|          | 119/126 [00:01<00:00, 67.54it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 95%|          | 120/126 [00:01<00:00, 67.96it/s, loss=0.00338,
v_num=4.31e+7]
Validation DataLoader 0: 81%|          | 21/26 [00:00<00:00, 203.39it/s]
Epoch 133: 96%|          | 121/126 [00:01<00:00, 68.38it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 97%|          | 122/126 [00:01<00:00, 68.80it/s, loss=0.00338,

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v_num=4.31e+7]
Epoch 133: 98%|      | 123/126 [00:01<00:00, 69.24it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 98%|      | 124/126 [00:01<00:00, 69.68it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 99%|      | 125/126 [00:01<00:00, 70.11it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 100%|     | 126/126 [00:01<00:00, 70.49it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 133: 100%|     | 126/126 [00:01<00:00, 68.79it/s, loss=0.00338,
v_num=4.31e+7]
Epoch 133: 100%|     | 126/126 [00:01<00:00, 68.69it/s, loss=0.00338,
v_num=4.31e+7]Mapping latent space...
Epoch 134: 79%|      | 100/126 [00:01<00:00, 68.73it/s, loss=0.00271,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 134: 80%|      | 101/126 [00:01<00:00, 60.22it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 81%|      | 102/126 [00:01<00:00, 60.58it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 82%|      | 103/126 [00:01<00:00, 61.03it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 83%|      | 104/126 [00:01<00:00, 61.49it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 83%|      | 105/126 [00:01<00:00, 61.94it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 84%|      | 106/126 [00:01<00:00, 62.39it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 85%|      | 107/126 [00:01<00:00, 62.83it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 86%|      | 108/126 [00:01<00:00, 63.28it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 87%|      | 109/126 [00:01<00:00, 63.73it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 87%|      | 110/126 [00:01<00:00, 64.17it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 88%|      | 111/126 [00:01<00:00, 64.61it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 89%|      | 112/126 [00:01<00:00, 65.05it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 90%|      | 113/126 [00:01<00:00, 65.49it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 90%|      | 114/126 [00:01<00:00, 65.92it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 91%|      | 115/126 [00:01<00:00, 66.35it/s, loss=0.00271,
v_num=4.31e+7]

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Epoch 134: 92%|      | 116/126 [00:01<00:00, 66.76it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 93%|      | 117/126 [00:01<00:00, 67.19it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 94%|      | 118/126 [00:01<00:00, 67.62it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 94%|      | 119/126 [00:01<00:00, 68.05it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 95%|      | 120/126 [00:01<00:00, 68.48it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 96%|      | 121/126 [00:01<00:00, 68.90it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 97%|      | 122/126 [00:01<00:00, 69.33it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 98%|      | 123/126 [00:01<00:00, 69.77it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 98%|      | 124/126 [00:01<00:00, 70.21it/s, loss=0.00271,
v_num=4.31e+7]
Validation DataLoader 0: 96%|      | 25/26 [00:00<00:00, 246.24it/s]
Epoch 134: 99%|      | 125/126 [00:01<00:00, 70.64it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 71.09it/s, loss=0.00271,
v_num=4.31e+7]Mapping latent space...
Epoch 134: 100%|     | 126/126 [00:01<00:00, 69.54it/s, loss=0.00271,
v_num=4.31e+7]
Epoch 134: 100%|     | 126/126 [00:01<00:00, 69.45it/s, loss=0.00271,
v_num=4.31e+7]Mapping latent space...

Epoch 135: 79%|      | 100/126 [00:01<00:00, 80.47it/s, loss=0.00287,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 135: 80%|      | 101/126 [00:01<00:00, 71.91it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 81%|      | 102/126 [00:01<00:00, 72.25it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 82%|      | 103/126 [00:01<00:00, 72.75it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 83%|      | 104/126 [00:01<00:00, 73.26it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 83%|      | 105/126 [00:01<00:00, 73.77it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 84%|      | 106/126 [00:01<00:00, 74.29it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 85%|      | 107/126 [00:01<00:00, 74.82it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 86%|      | 108/126 [00:01<00:00, 75.33it/s, loss=0.00287,

```

```

v_num=4.31e+7]
Epoch 135: 87%|      | 109/126 [00:01<00:00, 75.85it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 87%|      | 110/126 [00:01<00:00, 76.36it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 88%|      | 111/126 [00:01<00:00, 76.89it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 89%|      | 112/126 [00:01<00:00, 77.38it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 90%|      | 113/126 [00:01<00:00, 77.90it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 90%|      | 114/126 [00:01<00:00, 78.41it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 91%|      | 115/126 [00:01<00:00, 78.92it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 92%|      | 116/126 [00:01<00:00, 79.43it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 93%|      | 117/126 [00:01<00:00, 79.95it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 94%|      | 118/126 [00:01<00:00, 80.41it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 94%|      | 119/126 [00:01<00:00, 80.91it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 95%|      | 120/126 [00:01<00:00, 81.41it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 96%|      | 121/126 [00:01<00:00, 81.91it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 97%|      | 122/126 [00:01<00:00, 82.42it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 98%|      | 123/126 [00:01<00:00, 82.95it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 98%|      | 124/126 [00:01<00:00, 83.48it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 99%|      | 125/126 [00:01<00:00, 84.01it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 100%|     | 126/126 [00:01<00:00, 84.54it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 135: 100%|     | 126/126 [00:01<00:00, 82.77it/s, loss=0.00287,
v_num=4.31e+7]
Epoch 135: 100%|     | 126/126 [00:01<00:00, 82.67it/s, loss=0.00287,
v_num=4.31e+7]Mapping latent space...
Epoch 136: 79%|      | 100/126 [00:01<00:00, 70.91it/s, loss=0.00276,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation: 0%|      | 0/26 [00:00<?, ?it/s]
Validation DataLoader 0: 0%|      | 0/26 [00:00<?, ?it/s]
Epoch 136: 80%|      | 101/126 [00:01<00:00, 62.79it/s, loss=0.00276,
v_num=4.31e+7]

```

Epoch 136: 81%| | 102/126 [00:01<00:00, 62.73it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 82%| | 103/126 [00:01<00:00, 63.18it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 83%| | 104/126 [00:01<00:00, 63.64it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 83%| | 105/126 [00:01<00:00, 64.09it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 84%| | 106/126 [00:01<00:00, 64.55it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 85%| | 107/126 [00:01<00:00, 65.00it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 86%| | 108/126 [00:01<00:00, 65.46it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 87%| | 109/126 [00:01<00:00, 65.91it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 87%| | 110/126 [00:01<00:00, 66.36it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 88%| | 111/126 [00:01<00:00, 66.81it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 89%| | 112/126 [00:01<00:00, 67.26it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 90%| | 113/126 [00:01<00:00, 67.70it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 90%| | 114/126 [00:01<00:00, 68.15it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 91%| | 115/126 [00:01<00:00, 68.60it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 92%| | 116/126 [00:01<00:00, 69.04it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 93%| | 117/126 [00:01<00:00, 69.48it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 94%| | 118/126 [00:01<00:00, 69.92it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 94%| | 119/126 [00:01<00:00, 70.36it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 95%| | 120/126 [00:01<00:00, 70.78it/s, loss=0.00276, v_num=4.31e+7]
Validation DataLoader 0: 81%| | 21/26 [00:00<00:00, 209.60it/s]
Epoch 136: 96%| | 121/126 [00:01<00:00, 71.21it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 97%| | 122/126 [00:01<00:00, 71.65it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 98%| | 123/126 [00:01<00:00, 72.10it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 98%| | 124/126 [00:01<00:00, 72.56it/s, loss=0.00276, v_num=4.31e+7]
Epoch 136: 99%| | 125/126 [00:01<00:00, 73.00it/s, loss=0.00276, v_num=4.31e+7]

```

v_num=4.31e+7]
Epoch 136: 100%|      | 126/126 [00:01<00:00, 73.46it/s, loss=0.00276,
v_num=4.31e+7]Mapping latent space...
Epoch 136: 100%|      | 126/126 [00:01<00:00, 71.70it/s, loss=0.00276,
v_num=4.31e+7]
Epoch 136: 100%|      | 126/126 [00:01<00:00, 71.60it/s, loss=0.00276,
v_num=4.31e+7]Mapping latent space...
Epoch 137:  79%|      | 100/126 [00:01<00:00, 76.61it/s, loss=0.00293,
v_num=4.31e+7]
Validation: 0it [00:00, ?it/s]
Validation:  0%|      |  0/26 [00:00<?, ?it/s]
Validation DataLoader 0:  0%|      |  0/26 [00:00<?, ?it/s]
Epoch 137:  80%|      | 101/126 [00:01<00:00, 68.53it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  81%|      | 102/126 [00:01<00:00, 68.68it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  82%|      | 103/126 [00:01<00:00, 69.21it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  83%|      | 104/126 [00:01<00:00, 69.71it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  83%|      | 105/126 [00:01<00:00, 70.23it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  84%|      | 106/126 [00:01<00:00, 70.74it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  85%|      | 107/126 [00:01<00:00, 71.25it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  86%|      | 108/126 [00:01<00:00, 71.75it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  87%|      | 109/126 [00:01<00:00, 72.27it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  87%|      | 110/126 [00:01<00:00, 72.76it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  88%|      | 111/126 [00:01<00:00, 73.28it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  89%|      | 112/126 [00:01<00:00, 73.77it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  90%|      | 113/126 [00:01<00:00, 74.29it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  90%|      | 114/126 [00:01<00:00, 74.78it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  91%|      | 115/126 [00:01<00:00, 75.29it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  92%|      | 116/126 [00:01<00:00, 75.77it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  93%|      | 117/126 [00:01<00:00, 76.28it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137:  94%|      | 118/126 [00:01<00:00, 76.76it/s, loss=0.00293,
v_num=4.31e+7]

```

```

Epoch 137: 94%|      | 119/126 [00:01<00:00, 77.26it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 95%|      | 120/126 [00:01<00:00, 77.74it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 96%|      | 121/126 [00:01<00:00, 78.24it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 97%|      | 122/126 [00:01<00:00, 78.69it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 98%|      | 123/126 [00:01<00:00, 79.21it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 98%|      | 124/126 [00:01<00:00, 79.72it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 99%|      | 125/126 [00:01<00:00, 80.23it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 100%|     | 126/126 [00:01<00:00, 80.74it/s, loss=0.00293,
v_num=4.31e+7]Mapping latent space...
Epoch 137: 100%|     | 126/126 [00:01<00:00, 79.09it/s, loss=0.00293,
v_num=4.31e+7]
Epoch 137: 100%|     | 126/126 [00:01<00:00, 79.00it/s, loss=0.00293,
v_num=4.31e+7]Mapping latent space...

Epoch 137: 100%|     | 126/126 [00:01<00:00, 76.20it/s, loss=0.00293,
v_num=4.31e+7]
Training for latent_dim 8 done.

```

2.2 Model validation

As mentioned, we use the fraction of variance explained (FVE) plot to determine the appropriate dimensionality of the latent space. We identify a knee in the FVE plot that indicates the optimal number of bottleneck nodes.

```

[25]: def FVE(data,recon):
        SSerr = ((data - recon)**2).sum()
        SStot = ((data - data.mean(axis=0))**2).sum()
        fve = 1 - (SSerr/SStot)
        return fve

def piecewise_linear(x, x0, y0, k1, k2):
    return np.piecewise(x, [x < x0], [lambda x:k1*x + y0-k1*x0, lambda x:k2*x +
    ↪y0-k2*x0])

```

```

[32]: plt.figure(figsize=(10, 6), dpi=100)

input_data = np.load(f"{PIV_DIR}/PIVs.npy", allow_pickle=True)
d1 = np.load(f"{NN_DIR}/1d_ReconstructedPIVs.npy")
d2 = np.load(f"{NN_DIR}/2d_ReconstructedPIVs.npy")
d3 = np.load(f"{NN_DIR}/3d_ReconstructedPIVs.npy")
d4 = np.load(f"{NN_DIR}/4d_ReconstructedPIVs.npy")

```

```

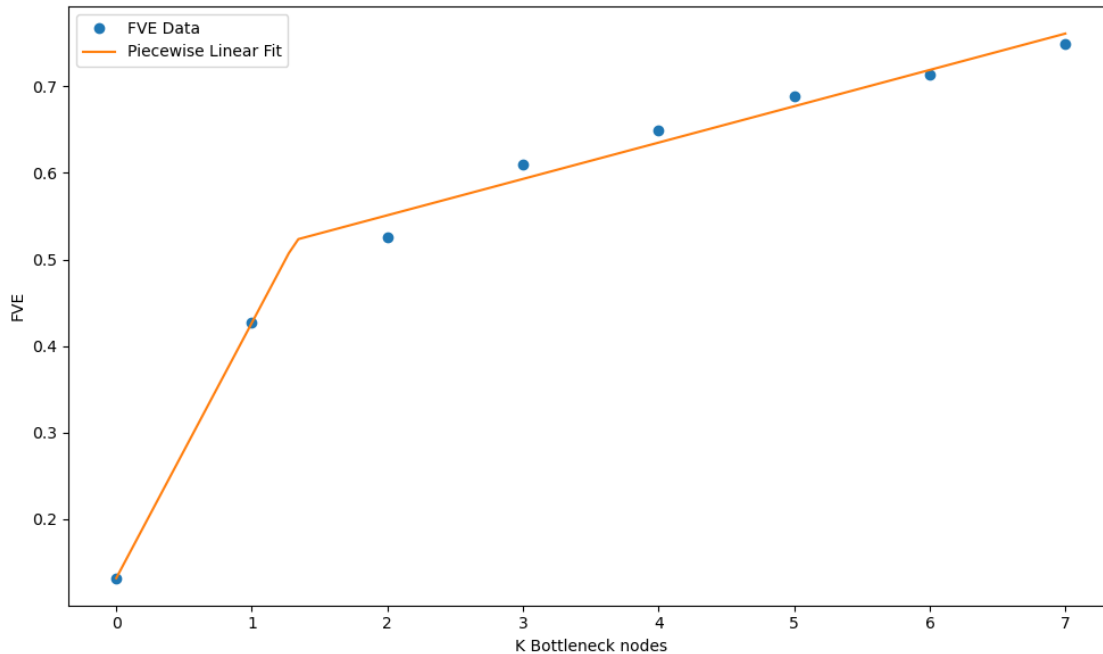
d5 = np.load(f"{NN_DIR}/5d_ReconstructedPIVs.npy")
d6 = np.load(f"{NN_DIR}/6d_ReconstructedPIVs.npy")
d7 = np.load(f"{NN_DIR}/7d_ReconstructedPIVs.npy")
d8 = np.load(f"{NN_DIR}/8d_ReconstructedPIVs.npy")

# Calculate FVE dimensions
fve_dims = [FVE(input_data, d) for d in [d1, d2, d3, d4, d5, d6, d7, d8]]
x = np.arange(8)
y = np.array(fve_dims)

# Fit and plot
p, _ = optimize.curve_fit(piecewise_linear, x, y)
xd = np.linspace(0, 7, 100)

plt.plot(x, y, "o", label='FVE Data')
plt.plot(xd, piecewise_linear(xd, *p), label='Piecewise Linear Fit')
plt.xlabel("K Bottleneck nodes")
plt.ylabel("FVE")
plt.legend()
plt.tight_layout()
plt.show()

```



2.3 Output model weights for PLUMED

Now that we have our trained model, we need to extract the learned weights and import them into PLUMED. We are going to load the latest checkpoint of our model chosen based on the knee of

the plot above, perform PCA, and write the weights of the model to a file so we can read it inside PLUMED's ANN module.

We need the location of the latest checkpoint file from training to extract the weights.

```
[61]: CKPT_DIR = NN_DIR/"3d_lightning_logs"/"version_43140222"/"checkpoints"/  
      ↪"epoch=139-step=14000.ckpt"
```

We will now load the weights from the trained model

```
[62]: model_weights = torch.load(CKPT_DIR, map_location=torch.  
      ↪device('cpu'))['state_dict']
```

/tmp/jobs/43140222/ipykernel_3268/4137612866.py:1: FutureWarning: You are using `torch.load` with `weights_only=False` (the current default value), which uses the default pickle module implicitly. It is possible to construct malicious pickle data which will execute arbitrary code during unpickling (See <https://github.com/pytorch/pytorch/blob/main/SECURITY.md#untrusted-models> for more details). In a future release, the default value for `weights_only` will be flipped to `True`. This limits the functions that could be executed during unpickling. Arbitrary objects will no longer be allowed to be loaded via this mode unless they are explicitly allowlisted by the user via `torch.serialization.add_safe_globals`. We recommend you start setting `weights_only=True` for any use case where you don't have full control of the loaded file. Please open an issue on GitHub for any issues related to this experimental feature.

```
model_weights = torch.load(CKPT_DIR,  
map_location=torch.device('cpu'))['state_dict']
```

We will need the weights and biases of each layer, as well as running mean and variances of the batchnorm layers. We are going to create a dictionary of for the weights which we will format into a text file to append to the input script for PLUMED. We'll write a helper function that takes the weights of a layer and outputs a string.

```
[63]: def weights_to_str(layer, label):  
      if layer.split(".")[1] == "running_var":  
          # variance in the ANNB module is the sqrt of the reported value in torch  
          # 0.0001 added for numerical stability  
          weights = np.sqrt(model_weights[layer].numpy() + 0.0001).flatten()  
      else:  
          weights = model_weights[layer].numpy().flatten()  
      weights = np.char.mod('%f', weights)  
      weights_str = ",".join(weights)  
      weights_str = label + weights_str  
  
      return weights_str
```

Based on our encoder's architecture (linear -> batchnorm -> linear -> batchnorm -> linear -> batchnorm -> linear -> batchnorm), we'll extract the relevant parameters for the PLUMED

inputs.

```
[64]: encoder_blocks = [i for i in model_weights.keys() if re.match("encoder\\.\\d+\\.\\.
    ↪*", i)]
    for w in encoder_blocks:
        print(w)
```

```
encoder.0.weight
encoder.0.bias
encoder.2.weight
encoder.2.bias
encoder.2.running_mean
encoder.2.running_var
encoder.2.num_batches_tracked
encoder.3.weight
encoder.3.bias
encoder.5.weight
encoder.5.bias
encoder.5.running_mean
encoder.5.running_var
encoder.5.num_batches_tracked
encoder.6.weight
encoder.6.bias
encoder.8.weight
encoder.8.bias
encoder.8.running_mean
encoder.8.running_var
encoder.8.num_batches_tracked
encoder.9.weight
encoder.9.bias
encoder.11.weight
encoder.11.bias
encoder.11.running_mean
encoder.11.running_var
encoder.11.num_batches_tracked
```

```
[65]: nn_arch={0: "linear0", 2: "batchnorm0", 3: "linear1", 5: "batchnorm1", 6:
    ↪"linear2", 8: "batchnorm2", 9: "linear3", 11: "batchnorm3"}
    linear_ws = ""
    linear_bs = ""
    batchnorm_gs = ""
    batchnorm_bs = ""
    batchnorm_es = ""
    batchnorm_vs = ""
    for i, layer in nn_arch.items():
        if layer[:-1] == "linear":
```



```

        linear_ws += weights_to_str(f"encoder.{i}.weight",␣
↪f"WEIGHTS{layer[-1]}=")
        linear_ws += "\n"
        linear_bs += weights_to_str(f"encoder.{i}.bias", f"BIASES{layer[-1]}=")
        linear_bs += "\n"
        elif layer[: -1] == "batchnorm":
            batchnorm_gs += weights_to_str(f"encoder.{i}.weight",␣
↪f"GAMMAS{layer[-1]}=")
            batchnorm_gs += "\n"
            batchnorm_bs += weights_to_str(f"encoder.{i}.bias",␣
↪f"BETAS{layer[-1]}=")
            batchnorm_bs += "\n"
            batchnorm_es += weights_to_str(f"encoder.{i}.running_mean",␣
↪f"EXPECTATIONS{layer[-1]}=")
            batchnorm_es += "\n"
            batchnorm_vs += weights_to_str(f"encoder.{i}.running_var",␣
↪f"VARIANCES{layer[-1]}=")
            batchnorm_vs += "\n"

```

Before we compile the weights, we need to apply PCA to the latent variables to find the directions in the latent space with the largest variations. We will incorporate this as an additional linear layer inside the PLUMED script.

```

[66]: LATENT_DATA = NN_DIR/"3d_LatentSpace.npy" # point to the latent data from the␣
↪model with the optimum latent dim

```

```

[67]: from sklearn.decomposition import PCA

latent_data = np.load(LATENT_DATA)

pca = PCA()
pca_res = pca.fit_transform(latent_data)
pcs = (np.array(pca.components_)).flatten()
pca_weights_str = np.char.mod('%f', pcs)
pca_weights_str = ",".join(pca_weights_str)
linear_ws += "WEIGHTS4=" + pca_weights_str
linear_ws += "\n"

pcs_bias = np.zeros_like(pcs)
pcs_bias = np.char.mod('%f', pcs_bias)
pcs_bias = ",".join(pcs_bias)
linear_bs += "BIASES4=" + pcs_bias
linear_bs += "\n"

```

Now that we have all the weights, we are going to compile our weights for incorporation into the PLUMED input file

```
[68]: ANN_WEIGHTS = linear_ws + linear_bs + batchnorm_gs + batchnorm_bs +  
      ↪ batchnorm_es + batchnorm_vs[:-1] # remove extra whitespace  
      print(ANN_WEIGHTS)
```

```
WEIGHTS0=0.059522,-0.031797,-0.034203,0.065462,0.009316,0.031548,-  
0.090607,0.013675,0.013982,-0.029689,-0.100079,-0.027566,-0.025034,-  
0.093748,0.034260,-0.071001,0.113793,-0.069650,-  
0.020678,0.063862,0.056353,0.019563,0.094358,-0.045418,0.012413,0.031488,-  
0.078949,0.077591,0.077960,-0.093587,-0.041219,-0.011504,0.010637,0.072051,-  
0.003872,-0.029227,0.017716,-0.104112,-0.089268,-0.043185,0.013084,-0.018323,-  
0.029933,-  
0.053609,0.004030,0.004309,0.092376,0.068974,0.090459,0.050518,0.019278,0.032052  
,0.108912,0.067203,0.107551,0.058835,0.034154,-0.092353,0.037466,0.092070,-  
0.022427,0.077494,0.065434,-0.005533,-0.097377,0.101196,-0.059845,0.023523,-  
0.067867,0.074906,-0.026904,-0.099826,0.061954,-0.043432,0.043392,0.056970,-  
0.061230,0.117199,-0.083468,0.019586,0.058602,-0.004032,0.031789,0.091293,-  
0.070758,-0.029708,-0.038639,-0.001225,0.017958,0.019118,-0.060649,-0.073153,-  
0.000175,-0.055708,-0.089946,-0.033878,0.048979,-0.090557,-0.101031,-0.049530,-  
0.004886,0.096354,-0.006697,0.031328,0.014770,-0.031580,0.013281,0.001086,-  
0.077935,-0.066924,0.048270,-0.059722,-0.058354,0.022236,-0.089603,0.000755,-  
0.081586,0.002691,0.028111,0.016660,0.035342,-  
0.048461,0.019434,0.049448,0.069249,-0.065354,-0.030205,0.040949,-  
0.029326,0.051988,-0.079899,0.070502,-0.033318,0.018753,0.058897,-0.110396,-  
0.064255,0.072472,-0.084312,-0.015778,-0.023654,-0.102617,-0.039212,-0.037979,-  
0.109249,-0.021481,0.023009,-0.057804,0.032940,-0.052047,0.032419,-0.017206,-  
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0.006929,-0.001757,0.101962,0.119510,0.082793,0.071368,0.072231,0.014811,-
0.029500,-0.082932,-0.089108,-0.115557,0.101531,0.008721,-0.098847,-0.019700,-
0.091695,-0.055754,-0.120936,-0.087314,-0.057610,-0.080066,-0.067051,-
0.068683,0.050893,-0.105285,-0.000544,0.015004,-
0.016226,0.061249,0.118882,0.066225,0.034549,-0.024510,-0.001626,0.076530,-
0.044227,0.043135,-0.098788,0.111880,-0.021886,0.037729,-0.091372,0.087129,-
0.016055,-0.019311,0.067143,-0.081340,0.022285,0.039402,-0.054151,-0.033834,-
0.039775,0.004153,0.036380,-0.092433,0.004862,0.024297,-0.069918,-
0.048768,0.010209,0.089072,0.004938,0.077169,0.016969,0.019328,0.036996,-
0.115179,-0.067523,0.035363,-0.112212,-0.093564,-0.099092,-0.051795,0.059432,-
0.100179,-0.017211,0.043607,-0.052758,0.092115,-
0.064039,0.037413,0.111515,0.018798,0.009140,0.014732,0.036049,-0.106309,-
0.027209,0.071378,0.034819,-0.005015,-0.028828,0.123812,-0.026317,0.048424,-
0.093156,0.114871,-0.097350,0.082964,-0.040366,-0.036191,-0.003162,-0.069083,-
0.061869,0.006495,0.040360,-
0.035221,0.028742,0.000133,0.021111,0.072856,0.052922,0.091769,-
0.044800,0.075874,0.001097,-0.084750,0.000783,0.016915,0.091960,0.047570,-
0.057468,0.057238,-0.103976,0.111504,-0.054821,-0.015523,0.024051,-
0.112495,0.014638,0.052719,-0.055361,0.114281,-0.007653,-0.083713,0.113634,-
0.118864,-0.070515,0.013825,-0.023103,-0.115000,-0.012642,-0.055134,-0.037682,-
0.020382,0.136328,-0.107656,-0.036794,0.085992,0.038836,-0.033821,0.014424,-
0.035876,0.025947,0.038880,0.073379,-
0.021294,0.010301,0.011970,0.141458,0.101099,0.018437,0.073535,-
0.029867,0.113847,0.030178,-0.075478,0.129045,-0.072249,-
0.011328,0.099026,0.073339,0.095448,-0.052227,0.003514,-
0.081861,0.002359,0.018770,-0.095387,-0.131869,0.098915,0.048257,0.111424,-
0.021689,0.095160,-0.056155,-0.114680,0.016901,-0.025755,-0.092158,0.011160,-
0.099433,-0.153124,-0.047308,-0.110857,0.050391,-0.111139,-0.056701,0.071171,-
0.118620,0.092577,-0.054544,-0.032072,0.015329,0.031396,0.044668,0.028393,-
0.027331,0.033601,0.006454,0.071530,-0.080478,0.034867,-0.096852,-
0.100746,0.015730,0.102692,-0.050532,-0.122634,0.008655,0.014288,0.018231,-
0.042868,-0.065409,0.053624,0.041801,-
0.117963,0.020815,0.047506,0.083434,0.024280,-0.097138,0.111771,-
0.058296,0.047396,-0.025433,-0.066152,0.032056,-
0.103067,0.011639,0.078504,0.130651,0.090663,0.044084,0.050032,0.011662,0.056884,
-0.089257,0.108518,-0.093546,-0.067969,0.116512,-0.009682,0.112043,-0.122552,-
0.007504,0.054099,-0.099287,0.064723,0.060632,0.103658,0.113423,0.078067,-
0.064951,0.105019,-0.046017,-0.113021,-0.123162,0.039724,-
0.082044,0.081113,0.058881,-
0.027654,0.061070,0.063566,0.093019,0.091656,0.110301,0.080742,0.009100,0.093577,
0.104655,0.119440,0.054295,0.106279,-0.065413,-0.092638,-0.020929,0.030588,-
0.087972,0.118706,0.040378,-0.031979,0.083383,-0.122611,-0.010100,0.091404,-
0.004010,0.024886,-0.091062,-0.076196,0.059008,-
0.049237,0.123877,0.020790,0.049245,-0.025694,0.092339,0.060236,-0.072955,-
0.077219,0.025629,0.087313,0.074569,-0.060067,0.069395,-0.006776,-0.057905,-
0.074505,-0.086256,0.133928,-0.034583,0.066119,-0.080594,0.019711,-

0.135382,0.072588,-0.053610,0.037165,-0.063542,-0.064924,0.106906,-0.000538,-
 0.074196,-0.021969,0.182131,-0.025844,-0.088139,-0.000034,-0.042299,-0.070225,-
 0.002767,0.060227,0.174331,0.016875,-0.052477,0.106598,-
 0.045578,0.033560,0.051659,0.035561,0.083176,-0.016653,-
 0.075841,0.054796,0.118072,-0.081334,-0.108736,-0.038615,0.058233,-0.053701,-
 0.109493,-0.077318,-0.106409,-0.078929,0.064686,-0.097108,-0.022478,0.012133,-
 0.074996,0.027343,0.065950,0.017047,-0.099322,0.008290,0.022165,-0.078417,-
 0.070688,-0.076736,-
 0.065209,0.122644,0.006588,0.108493,0.043831,0.056463,0.009620,0.037497,-
 0.082435,-0.075924,0.028567,-0.074286,-0.083821,-0.074598,-0.068146,-
 0.084649,0.023686,0.015870,-0.083104,0.092471,0.085706,-
 0.090855,0.087518,0.006039,-0.042623,0.038727,0.008561,-0.073447,-
 0.124664,0.045418,0.093484,-0.064316,-0.136456,-0.012394,0.029528,-0.095621,-
 0.099800,0.087277,0.082079,0.029536,0.070973,0.032448,0.111981,-0.163296,-
 0.008189,0.129952,0.107707,-0.070932,-0.029538,0.051855,-0.108959,-
 0.011952,0.087973,0.061995,-0.016097,0.002961,-0.082500,-
 0.004722,0.074908,0.004710,0.099500,-0.033680,0.095120,0.027933,-
 0.053307,0.053345,0.026545,0.070975,0.047378,0.080975,-0.082909,-
 0.049607,0.098484,0.005431,0.073231,-
 0.125965,0.080564,0.120303,0.042993,0.079044,0.097964,0.037688,0.024393,0.094133
 ,0.062466,0.069720,0.000204,-0.058634,0.100469,-0.019363,-
 0.081511,0.080883,0.108567,-0.054190,-0.002460,0.016289,-0.042664,-
 0.068186,0.066250,0.053977,-0.042091,-0.105601,-0.006753,-0.017145,0.047085,-
 0.080120,0.041411,0.003872,0.032455,-0.081489,0.044024,0.086521,0.084363,-
 0.042533,-0.067934,-0.042811,-0.047491,-
 0.066213,0.076390,0.023116,0.025073,0.111699,0.060869,-0.047220,-0.034984,-
 0.023873,0.083253,0.080626,-0.040758,0.093155,0.018565,-0.082868,0.071791,-
 0.037062,-0.093124,-0.027533,-0.058943,-0.099642,-0.115106,0.005138,-0.037760,-
 0.004948,0.069023,0.080760,0.034933,-0.047464,-0.053004,-
 0.041434,0.127114,0.011195,-0.064276,0.006291,-0.014142,-
 0.084820,0.084086,0.028188,0.047212,-0.016206,-
 0.103292,0.099754,0.016542,0.077613,-0.002651,-0.084761,0.055247,-
 0.065862,0.021819,-
 0.090665,0.024531,0.047969,0.095250,0.001565,0.083830,0.006555,-0.059495,-
 0.043053,0.013665,0.006947,-0.111668,-0.009500,0.004195,-
 0.092670,0.110025,0.085225,-0.033914,-0.105711,-0.105721,0.073885,-
 0.001825,0.026944,0.006260,0.094837,0.041065,-0.123044,-0.034520,-
 0.017154,0.095087,0.031835,0.067459,-0.074588,0.101152,-0.098973,-
 0.095972,0.054421,-0.027001,-0.096853,0.125804,0.127619,0.006856,-
 0.017398,0.007644,-0.093390,0.082333,-0.130398,-
 0.012228,0.065088,0.089240,0.042036,-0.077972,0.117498,0.109494,0.042110,-
 0.110567,0.018976,-0.012105,0.021018,0.001776,-0.138464,0.027169,-
 0.084546,0.117726,-0.068455,0.088512,-0.005092,-0.114937,0.055107,-0.107554,-
 0.035867,0.112073,0.006401,0.106170,0.036071,0.069036,-0.111253,-0.083032,-
 0.053992,-0.051094,-0.028394,-0.091282,0.044937,-0.089870,-0.085355,-0.059409,-
 0.021414,-0.101181,-0.086127,-0.022760,0.072424,-0.117734,0.037237,-
 0.032906,0.070460,-0.084330,0.057222,0.095373,-0.139979,0.131040,0.032306,-
 0.113110,0.103151,-0.091693,-0.022122,-0.053505,0.018017,-0.031289,-0.081126,-

0.035982,0.079469,-0.149801,0.056591,-0.000142,-0.071485,-
 0.052086,0.090630,0.049892,0.062799,0.107042,-0.044702,-0.099860,0.111633,-
 0.122549,0.006564,0.052636,0.052948,-0.067046,-0.065600,-
 0.087083,0.021746,0.053712,0.077093,0.096094,0.028910,-0.067589,0.039963,-
 0.031941,0.126144,0.074040,0.110459,0.071625,0.089980,0.061512,-
 0.088609,0.022375,0.028950,-0.052959,0.080880,0.083247,-0.120324,-0.084794,-
 0.120013,-0.016319,-0.117389,0.021261,0.099328,-0.029156,0.024200,-
 0.057818,0.058563,-0.076997,0.063231,-0.039559,-0.063592,-
 0.041204,0.106464,0.046576,0.052352,0.086772,-0.026529,-0.085493,-
 0.032697,0.050206,-0.068167,-0.043870,-0.112587,-0.129501,-0.033143,-0.059986,-
 0.077822,0.036532,-0.094657,-0.032919
 WEIGHTS2=0.184964,-0.075772,0.080704,0.020194,0.167680,-
 0.140587,0.130022,0.152337,-0.151689,0.127177,-0.143216,-0.023736,0.069403,-
 0.114009,-0.037587,-0.129432,0.084903,0.168348,-0.125695,0.081213,0.081334,-
 0.103149,-0.059246,0.031953,-0.157125,-0.136915,-0.148346,-0.181463,-0.087458,-
 0.147111,-0.155873,0.071644,0.164166,-0.058581,0.137575,0.099051,0.148860,-
 0.062986,0.108470,-0.017520,0.024175,0.124899,0.154583,0.081138,-0.143509,-
 0.140181,-0.114091,0.162757,-0.002213,-0.167601,-0.063676,-0.114296,0.131030,-
 0.106054,-0.160161,0.044195,0.118058,0.042537,-0.173588,0.086046,-
 0.118871,0.166998,0.011321,0.115582,0.160402,-0.054218,0.088700,-0.127223,-
 0.150987,-0.121446,0.099290,-0.057856,0.117551,0.131700,0.047175,-
 0.126609,0.150727,0.142751,0.145176,0.028067,-0.089385,-0.103806,-0.083414,-
 0.079200,0.101561,-0.080391,-0.033511,-0.045890,0.060448,0.082610,0.025986,-
 0.028275,-0.014932,0.135832,-0.094599,0.116255,-0.112000,0.138312,-0.166375,-
 0.148656,0.101655,-0.171504,-0.069640,0.092177,0.040818,-0.094378,-
 0.011342,0.177016,0.150420,-0.159942,0.131295,0.160567,0.038925,-
 0.024637,0.072717,-0.068586,0.010242,-0.081536,0.096156,0.064572,-
 0.094262,0.151704,-0.094055,0.002362,0.077194,-0.011806,0.135634,-0.046873,-
 0.115335,0.122052,0.118625,0.074508,-0.018338,0.043297,0.102277,0.019724,-
 0.085283,-0.110864,0.118920,0.069427,0.111074,0.010249,0.145130,-0.059054,-
 0.065891,-0.157007,0.147211,0.077985,0.050442,-0.171909,-0.160577,-
 0.171026,0.031037,-0.014513,-0.127552,-0.052638,0.013883,0.073788,-
 0.128841,0.115633,-0.108846,0.161982,-0.015088,-0.152871,-
 0.046578,0.159221,0.165493,0.084568,-0.077016,-0.136535,-0.152058,-0.067694,-
 0.078030,0.044410,-0.131490,0.137818,0.135459,-0.139115,-0.127565,-
 0.111833,0.010666,-0.113030,-0.036356,0.003740,-0.171073,-0.114157,-0.039881,-
 0.133263,0.114331,-0.084463,-0.091849,0.088259,-0.047022,0.019864,0.171968,-
 0.032133,0.071204,-0.109174,-
 0.111866,0.113327,0.037741,0.059546,0.000968,0.039492,-
 0.055724,0.124365,0.097197,0.160295,-0.047601,0.050345,-0.167485,0.136115,-
 0.097552,0.012140,0.049357,-
 0.021504,0.013250,0.056884,0.007499,0.084541,0.033700,0.117677,-
 0.143552,0.127441,0.040536,-0.011909,0.172784,0.137607,-0.096927,-
 0.003530,0.038554,0.050975,-0.057343,-0.086188,-0.108665,-0.106208,-0.159677,-
 0.103310,0.082253,0.172193,0.078389,0.101125,-0.007079,-0.110319,-
 0.119253,0.094629,0.088545,-0.076519,0.006903,0.025661,0.049111,0.048985,-
 0.039269,-0.078842,-0.078500,0.093839,0.091250,-0.096558,-0.061404,-
 0.079023,0.118784,-0.077979,0.074683,0.115535,-0.151483,-

0.160088,0.078336,0.013686,0.061823,-0.086846,-0.082519,-0.043555,-0.112804,-
 0.000022,0.107163,0.167890,0.051147,0.029010,-0.018465,0.075143,-0.086030,-
 0.040603,0.161571,0.056496,-0.001475,0.020282,0.030452,0.051484,-
 0.040076,0.038503,-0.083819,-0.080847,0.161967,0.114699,-0.156220,-
 0.057192,0.171070,0.038169,-0.122733,0.151344,-0.022034,-0.094141,-
 0.130717,0.055089,0.166891,-0.165524,0.008566,0.021704,-0.142435,-
 0.096433,0.072296,-0.048843,0.139271,0.157464,-0.097731,0.005737,0.069768,-
 0.111699,0.054715,-0.072509,0.140623,-0.162857,0.020914,-0.179225,0.111836,-
 0.050342,0.142418,0.150313,0.166018,0.051168,-0.051701,-
 0.140247,0.026920,0.143822,-0.172343,-0.107829,-0.123150,0.061552,-
 0.084753,0.046174,0.074217,-0.025684,0.116926,-0.132216,-0.068789,0.093317,-
 0.128624,-0.019388,0.093820,-0.064574,-0.010097,-0.042683,-
 0.020799,0.090333,0.157370,-0.012841,0.003959,-0.161209,-0.150009,-
 0.075828,0.022371,0.138079,0.167061,0.130398,-
 0.147083,0.007015,0.126359,0.077971,-0.066771,0.125468,0.147751,-
 0.068186,0.164213,0.125640,-0.167919,0.008227,-0.027999,0.021525,-0.053012,-
 0.009522,-0.083588,-0.085981,-0.042571,0.126783,-
 0.114360,0.015221,0.178899,0.091298,0.162816,0.043264,0.038633,0.002037,-
 0.086292,0.083871,0.012042,0.036082,-0.173173,-0.172356,-0.021522,0.085903,-
 0.136470,-0.036352,0.041805,0.078544,0.146222,0.024146,0.071440,0.007461,-
 0.057484,-0.015648,0.117679,-0.001905,-0.013123,0.015874,0.023211,-
 0.153004,0.145293,0.092213,-0.114149,-0.032569,-0.034513,0.108241,-0.155596,-
 0.015775,-0.051553,0.039079,-0.061185,0.128573,0.138013,0.095039,-0.082962,-
 0.095436,-0.043957,-0.038641,-0.093918,-0.033996,-0.069613,0.130696,-0.082219,-
 0.003076,-0.146360,0.100968,0.008690,0.020627,-0.037720,0.016869,-0.050981,-
 0.066879,0.163573,-0.037706,-0.051050,-0.125015,0.020844,-0.085493,-0.016655,-
 0.107377,0.096584,0.066792,0.007885,-0.010607,-0.044221,-0.133682,0.036833,-
 0.044926,0.140880,0.115771,0.039496,0.108551,-0.168112,0.089256,-
 0.111278,0.168718,-0.085645,0.155363,0.067923,-0.020371,-0.075431,-0.045084,-
 0.018349,-0.144589,0.113827,0.001475,-0.110877,0.105772,-0.070572,-0.067421,-
 0.046777,-0.078875,-0.008966,-0.138715,0.160705,-0.094240,-0.013028,-0.094747,-
 0.180306,0.157736,0.175183,-0.123139,0.158295,0.106733,0.026668,-0.155805,-
 0.055918,0.035752,-0.041566,0.041178,0.104274,0.068188,-
 0.113494,0.109703,0.094799,-0.181700
 WEIGHTS3=0.003625,0.145693,-0.000368,-0.175926,-0.020460,0.203081,-
 0.209221,0.186918,0.213836,0.207349,-0.079079,-0.127979,-
 0.116364,0.228900,0.041560,0.121317,0.031091,0.017550,0.188376,-0.021886,-
 0.013566,-0.052893,-0.229531,-0.058095,-0.125766,0.102632,0.008481,-
 0.233251,0.164691,0.086067,0.179604,-0.224737,0.124750,-
 0.107067,0.080659,0.093837,-0.237634,0.176061,0.195225,-
 0.178576,0.085231,0.178030,-0.213381,-0.110338,-0.084079,-0.078098,-0.232842,-
 0.048916
 WEIGHTS4=0.282789,0.562811,0.776707,0.697330,-
 0.676639,0.236412,0.658605,0.474767,-0.583811
 BIASES0=-0.025487,0.050816,-0.037806,-0.114197,0.092218,0.038456,0.022383,-
 0.112375,0.036763,0.029220,0.041215,0.009040,-0.060021,0.061903,0.088981,-
 0.049868,-0.051290,0.012783,0.034448,-0.064722,-0.091036,0.012908,-
 0.031161,0.053618,-0.030206,0.062307,0.050996,-

0.047806,0.139383,0.000237,0.065377,0.116044,-0.045965,0.108861,-
 0.100825,0.057312,0.037667,-0.049485,0.024529,-
 0.088324,0.069690,0.022489,0.052338,-0.065687,0.080479,0.055209,-
 0.040114,0.063432,-0.052802,-0.056456,0.046527,0.087361,-
 0.020865,0.057619,0.139398,-0.007770,-0.129271,-0.014798,0.048503,-
 0.027048,0.025643,-0.001379,0.102652,0.016066
 BIASES1=-0.121356,0.001079,-0.068214,0.049291,-0.003861,0.000039,0.034377,-
 0.058656,-0.103064,-0.053181,-0.078888,0.011683,-0.109955,0.133285,0.010788,-
 0.130515,0.080243,0.123157,-0.033130,0.019193,0.138919,-0.038804,-0.197304,-
 0.081634,0.032938,0.043524,0.047288,-0.002444,-0.004062,0.069847,-
 0.104810,0.029232
 BIASES2=0.134175,0.055603,0.172510,-0.116631,0.071498,0.133527,0.058206,-
 0.000549,0.029625,-0.076681,0.140370,0.129762,-0.152874,0.102441,0.130783,-
 0.159811
 BIASES3=0.043841,-0.079569,0.122066
 BIASES4=0.000000,0.000000,0.000000,0.000000,0.000000,0.000000,0.000000,0.000000,
 0.000000
 GAMMAS0=1.003214,1.001795,0.987291,0.992931,1.000324,1.000217,0.995291,0.981546,
 0.977845,1.002059,0.968823,0.998847,0.959497,1.006408,0.992267,1.005529,0.969464
 ,1.003839,1.003912,0.985274,1.004187,0.983526,0.996043,1.019537,0.954444,0.98274
 2,0.991427,0.987658,1.015425,0.974958,0.994141,0.987692,1.018226,0.966253,1.0022
 96,0.974526,0.992482,0.981065,1.015320,1.001398,0.974109,0.971930,0.981617,1.019
 712,0.978363,0.990625,0.990549,1.011035,0.991911,0.992616,0.991071,0.991026,0.98
 3854,1.022113,1.004859,1.002112,0.999478,1.002987,0.987252,0.978747,0.992059,1.0
 05566,0.998283,0.994887
 GAMMAS1=1.002674,0.973230,1.005234,1.000991,0.985006,0.996407,0.983633,0.985403,
 0.995628,0.985514,0.989221,0.985057,1.002085,0.998811,0.989339,1.011484,0.996159
 ,0.993557,0.988779,0.978159,0.994507,0.994864,0.979979,0.979019,0.992689,0.97994
 2,0.991089,0.989798,0.979162,0.990800,0.973267,1.003264
 GAMMAS2=1.010275,0.987370,0.991674,0.975140,0.989655,0.988581,0.997291,0.969233,
 0.992451,0.983423,0.989020,0.981501,0.986055,0.991398,0.989655,0.981086
 GAMMAS3=0.948339,0.952834,0.954476
 BETAS0=-0.051310,-0.036253,0.008093,0.030571,-0.020050,0.016434,-
 0.008522,0.007831,0.006573,-0.030169,-0.091260,0.026033,0.006389,-
 0.036946,0.036122,-0.024408,0.024280,-0.062155,0.026153,0.028048,-
 0.004686,0.030149,-0.014897,0.015086,0.000203,-0.045619,0.014259,-
 0.068335,0.006436,0.011896,-0.005205,0.066251,-0.080826,-0.041831,-
 0.081717,0.048222,-0.011378,-0.008326,0.027037,0.030998,-0.041645,0.079660,-
 0.059206,0.066816,0.062356,-0.039429,0.007649,-0.010516,-0.110014,-
 0.040863,0.014876,0.034283,0.015402,0.006089,-0.046241,-0.005449,-0.018113,-
 0.009212,-0.026280,-0.071733,0.019932,-0.014912,0.061686,0.011704
 BETAS1=0.012554,-0.026689,0.049549,0.003619,-0.014974,-0.026638,-
 0.006029,0.034230,-0.014872,0.027285,-0.003258,-0.056578,-
 0.004696,0.053291,0.033685,0.000626,-0.027369,0.040955,-0.036705,0.058471,-
 0.012895,0.018966,0.011198,-0.025656,-0.015276,-0.020350,0.029630,0.008641,-
 0.002916,0.033779,-0.097403,0.034559
 BETAS2=0.011027,0.006371,0.002526,-0.008323,-0.012637,0.020769,-
 0.001604,0.004273,0.018464,0.018150,-0.017042,-0.010133,-0.015155,0.010437,-

```

0.008757,0.006575
BETAS3=0.002433,0.000851,0.004302
EXPECTATIONS0=-0.166125,-0.308721,0.037151,-0.267159,-
0.333289,0.612295,0.320446,-0.246116,0.143302,-0.004870,0.444624,-0.476335,-
0.031427,0.584326,-0.170012,0.054094,0.235227,-0.004805,-0.254026,-0.034104,-
0.170884,-0.168430,-0.005385,-0.116342,-0.309483,0.080566,0.548837,-
0.218019,0.153193,0.216282,0.072577,0.179263,-0.429924,0.439453,0.130933,-
0.038109,0.376001,-0.141501,0.050968,-
0.128418,0.367968,0.505962,0.134048,0.282429,0.041928,0.374801,-
0.180508,0.267145,-0.243549,-0.014839,0.247039,-0.110697,-0.364593,-
0.097855,0.329012,0.005254,0.517994,0.358133,-0.439718,0.020002,-0.075550,-
0.188060,0.091810,0.218280
EXPECTATIONS1=-0.158050,-0.047366,-0.054244,0.026745,0.035491,-
0.044067,0.027885,-0.070337,-0.083727,-0.022896,-0.049555,0.044031,-
0.107448,0.137268,0.007711,-0.063183,0.060635,0.099831,-
0.101153,0.045527,0.120860,-0.007800,-0.219886,0.009613,0.053405,-
0.013142,0.066260,-0.016621,-0.050536,0.013733,0.025143,0.004151
EXPECTATIONS2=0.098392,0.021007,0.140765,-
0.141838,0.010730,0.092257,0.090904,0.024125,0.034028,-
0.103675,0.141677,0.109587,-0.101345,0.086292,0.112552,-0.150513
EXPECTATIONS3=0.048146,-0.059654,0.096706
VARIANCES0=0.038448,0.030901,0.035185,0.032913,0.027510,0.026067,0.033413,0.0304
02,0.033271,0.033448,0.025651,0.030938,0.040368,0.024992,0.039638,0.035426,0.028
174,0.026460,0.035518,0.035216,0.039101,0.035800,0.029870,0.031234,0.031380,0.03
6288,0.021420,0.033477,0.037009,0.034534,0.030936,0.025504,0.033995,0.028316,0.0
44973,0.028694,0.038637,0.034281,0.037699,0.034970,0.024852,0.024047,0.029978,0.
037291,0.031274,0.027231,0.027830,0.042767,0.034057,0.038010,0.032873,0.028437,0
.026197,0.040834,0.030373,0.035605,0.038748,0.028120,0.031710,0.031394,0.040458,
0.045195,0.031248,0.032279
VARIANCES1=0.504022,0.402628,0.498382,0.488570,0.536688,0.551898,0.564603,0.5478
39,0.556417,0.618942,0.509465,0.678843,0.457872,0.575701,0.464891,0.545755,0.510
091,0.544916,0.677776,0.512025,0.543852,0.461058,0.478664,0.622932,0.450506,0.70
0202,0.490206,0.600442,0.495490,0.621704,0.604209,0.511620
VARIANCES2=0.696531,0.499911,0.530344,0.530183,0.603407,0.468347,0.461008,0.4542
05,0.635680,0.598096,0.388182,0.465896,0.553905,0.421243,0.507408,0.483400
VARIANCES3=0.491218,0.446187,0.460428

```

3 Bias the simulation with PINES in PLUMED (2.biased)

```

[69]: BIASED_DIR = BASE_DIR/"data-SOLVED"/"2.biased"
      LATENT_DIM = latent_data.shape[1]

```

3.1 PINES PLUMED input file

In our PLUMED input file, we have PLUMED_PINES block, which calculates PIVs given cartesian coordinates. It is identical to the one we used for the unbiased data. The ANN block takes the PINES block's outputs as inputs, and incorporates the architecture and the weights of our autoencoder,

and finally a PBMETAD block which deposits biases along the discovered CVs. Note that the ANN block here has one extra layer compared to the autoencoder we trained because of the PCA layer that we manually appended.

The last piece of information we need, is the range of outputs from the PCA layer to determine the properties of the GRID used for PBMETAD

```
[82]: GRID_MAXES = np.ceil(pca_res.max(axis=0)*10)/10 # up to a decimal
GRID_MAXES *= 2
GRID_MAXES = np.char.mod('%f', GRID_MAXES)
GRID_MAXES = ",".join(GRID_MAXES)
GRID_MINS = np.floor(pca_res.min(axis=0)*10)/10
GRID_MINS *= 2
GRID_MINS = np.char.mod('%f', GRID_MINS)
GRID_MINS = ",".join(GRID_MINS)
GRID_BINS = ",".join(["5000" for i in range(LATENT_DIM)])
PBMETADARGS = [f"ann.node-{i}" for i in range(LATENT_DIM)]
PBMETADARGS = ",".join(PBMETADARGS)
PBSIGMAS = ",".join(["0.1" for i in range(LATENT_DIM)])
PBHILLS = ",".join([f"hills_pc{i}.out" for i in range(LATENT_DIM)])
```

```
[83]: PLUMED_PINES = f"""
# Distance between Na and Cl atoms
dist: DISTANCE ATOMS=1525,1526

# Solvation of Na atom
COORDINATION ...
    LABEL=coord
    GROUPA=1525
    GROUPB=1-1524:3
    SWITCH={{RATIONAL R_0=0.315 D_MAX=0.5 NN=12 MM=24}}
    NLIST
    NL_CUTOFF=0.55
    NL_STRIDE=10
... COORDINATION

PINES ...
LABEL=pines
PRECISION=10000
NLIST
ONLYCROSS
REF_FILE=nvt.pdb
PINESATOMS=5
ATOMTYPES=NA,CL,OW,HW1,HW2
SFACTOR=1.0,1.0,1.0,1.0,1.0
SORT=1.0,1.0,1.0,1.0,1.0
SWITCH1={{RATIONAL R_0=0.38 MM=12 NN=6}}
SWITCH2={{RATIONAL R_0=0.35 MM=12 NN=6}}
```

```

SWITCH3={{RATIONAL R_0=0.41 MM=12 NN=6}}
SWITCH4={{RATIONAL R_0=0.40 MM=12 NN=6}}
SWITCH5={{RATIONAL R_0=0.28 MM=12 NN=6}}
NL_CUTOFF=5.0,1.5,1.5,1.5,1.5
NL_STRIDE=1.0,1.0,1.0,1.0,1.0
NL_SKIN=0.1,0.1,0.1,0.1,0.1
NL_CONSTANT_SIZE=15
WRITEPINESTRAJ
WRITEPINESSTRIDE=100000000
... PINES

ANNB ...
LABEL=ann
ARG=pines.*
NUM_LAYERS=6
NUM_NODES=91,64,32,16,{LATENT_DIM},{LATENT_DIM}
ACTIVATIONS=BNTanh,BNTanh,BNTanh,BNTanh,Linear
{ANN_WEIGHTS}
APPLY_BATCH_NORM
... ANNB

PBMETAD ...
ARG={PBMETADARGS} SIGMA={PBSIGMAS} HEIGHT=1.2
TEMP=300 PACE=500 BIASFACTOR=2 LABEL=pb
FILE={PBHILLS}
GRID_MIN={GRID_MINS} GRID_MAX={GRID_MAXES} GRID_BIN={GRID_BINS}
... PBMETAD

# monitor the cv and the metadynamics bias potential
PRINT STRIDE=1 ARG=dist,coord,{PBMETADARGS} FILE=colvar.out
PRINT STRIDE=1 ARG=pb.bias FILE=pbbias.out

"""

```

Save the plumed file

```

[84]: with open(f"{BIASED_DIR}/plumed_parametrized.dat", "w") as f:
      f.write(PLUMED_PINES)

```

3.2 Run the biased simulation

```

[60]: # copy the pdb file from the nvt simulation for refrence
      subprocess.run(f"cp {EM_DIR}/nvt.pdb {BIASED_DIR}/nvt.pdb", shell=True)
      # for round 1
      with cd(f"{BIASED_DIR}"):

```

```

    subprocess.run(f"{GMX_EXEC} grompp -f {MD_DIR}/md.mdp -c {MD_DIR}/md.gro -r_{MD_DIR}/md.gro -t {MD_DIR}/md.cpt -p {MD_DIR}/topol.top -o biased.tpr",
    ↪shell=True)
    subprocess.run(f"{GMX_EXEC} mdrun -ntmpi 1 -deffnm biased -plumed_{plumed_parametrized.dat}", shell=True)
# for subsequent rounds
#with cd(f"{BIASED_DIR}"):
    #subprocess.run(f"{GMX_EXEC} mdrun -s {MD_DIR}/md.tpr" -deffnm biased_
    ↪-plumed plumed_parametrized.dat -cpi biased.cpt")

```

:-) GROMACS - gmx grompp, 2021.6-plumed-2.8.3 (-:

GROMACS is written by:

Andrey Alekseenko	Emile Apol	Rossen Apostolov
Paul Bauer	Herman J.C. Berendsen	Par Bjelkmar
Christian Blau	Viacheslav Bolnykh	Kevin Boyd
Aldert van Buuren	Rudi van Drunen	Anton Feenstra
Gilles Gouaillardet	Alan Gray	Gerrit Groenhof
Anca Hamuraru	Vincent Hindriksen	M. Eric Irrgang
Aleksei Lupinov	Christoph Junghans	Joe Jordan
Dimitrios Karkoulis	Peter Kasson	Jiri Kraus
Carsten Kutzner	Per Larsson	Justin A. Lemkul
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Peter Tieleman	Jon Vincent	Teemu Virolainen
Christian Wennberg	Maarten Wolf	Artem Zhmurov

and the project leaders:

Mark Abraham, Berk Hess, Erik Lindahl, and David van der Spoel

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GROMACS: gmx grompp, version 2021.6-plumed-2.8.3

Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2/bin/gmx

Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-files-gpu2

Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/2.biased
Command line:

```
gmx grompp -f /project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/md.mdp -c  
/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/3_md/md.gro  
-r /project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/md.gro -t  
/project2/andrewferguson/armin/pines_tutorial/data-SOLVED/0.unbiased/3_md/md.cpt  
-p /project2/andrewferguson/armin/pines_tutorial/data-  
SOLVED/0.unbiased/3_md/topol.top -o biased.tpr
```

Ignoring obsolete mdp entry 'title'

Ignoring obsolete mdp entry 'ns_type'

Generating 1-4 interactions: fudge = 0.5

Number of degrees of freedom in T-Coupling group Water_and_ions is 3051.00

Last frame -1 time 25000.000

GROMACS reminds you: "There's No Room For the Weak" (Joy Division)

:-) GROMACS - gmx mdrun, 2021.6-plumed-2.8.3 (-:

GROMACS is written by:

Andrey Alekseenko	Emile Apol	Rossen Apostolov
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of the License, or (at your option) any later version.

GROMACS: gmx mdrun, version 2021.6-plumed-2.8.3
Executable: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2/bin/gmx
Data prefix: /project/andrewferguson/armin/grom_new/gromacs-2021.6/installed-
files-gpu2
Working dir: /project2/andrewferguson/armin/pines_tutorial/data-SOLVED/2.biased
Command line:
 gmx mdrun -ntmpi 1 -deffnm biased -plumed plumed_parametrized.dat

Setting the LD random seed to -1091620801

Generated 2211 of the 2211 non-bonded parameter combinations

Generated 2211 of the 2211 1-4 parameter combinations

Excluding 2 bonded neighbours molecule type 'SOL'

turning H bonds into constraints...

Excluding 1 bonded neighbours molecule type 'NA'

turning H bonds into constraints...

Excluding 1 bonded neighbours molecule type 'CL'

turning H bonds into constraints...

Analysing residue names:

There are: 508 Water residues

There are: 2 Ion residues

Analysing residues not classified as Protein/DNA/RNA/Water and splitting into
groups...

Determining Verlet buffer for a tolerance of 0.005 kJ/mol/ps at 300 K

Calculated rlist for 1x1 atom pair-list as 1.035 nm, buffer size 0.035 nm

Set rlist, assuming 4x4 atom pair-list, to 1.000 nm, buffer size 0.000 nm

Note that mdrun will redetermine rlist based on the actual pair-list setup

Reading Coordinates, Velocities and Box size from old trajectory

Will read whole trajectory

Using frame at t = 25000 ps

Starting time for run is 0 ps

Calculating fourier grid dimensions for X Y Z

Using a fourier grid of 16x16x16, spacing 0.156 0.156 0.156

Estimate for the relative computational load of the PME mesh part: 0.22

This run will generate roughly 141 Mb of data

Reading file biased.tpr, VERSION 2021.6-plumed-2.8.3 (single precision)

Changing nstlist from 10 to 100, rlist from 1 to 1.16

1 GPU selected for this run.

Mapping of GPU IDs to the 2 GPU tasks in the 1 rank on this node:

PP:0,PME:0

PP tasks will do (non-perturbed) short-ranged interactions on the GPU

PP task will update and constrain coordinates on the CPU

PME tasks will do all aspects on the GPU

Using 1 MPI thread

Using 28 OpenMP threads

starting mdrun 'Ion pair in solution in water'

12500000 steps, 25000.0 ps.

Program: gmx mdrun, version 2021.6-plumed-2.8.3

Unknown exception:

(exception type: N4PLMD6Plumed14ExceptionErrorE)

+++ PLUMED error

+++ at PlumedMain.cpp:747, function void

PLMD::PlumedMain::readInputWords(const
std::vector<std::__cxx11::basic_string<char> >&)

+++ message follows +++

ERROR

I cannot understand line: PINES LABEL=pines PRECISION=10000 NLIST ONLYCROSS

REF_FILE=nvt.pdb PINESATOMS=5 ATOMTYPES=NA,CL,OW,HW1,HW2

SFACTOR=1.0,1.0,1.0,1.0,1.0 SORT=1.0,1.0,1.0,1.0,1.0 SWITCH1=RATIONAL R_0=0.38

MM=12 NN=6 SWITCH2=RATIONAL R_0=0.35 MM=12 NN=6 SWITCH3=RATIONAL R_0=0.41

MM=12 NN=6 SWITCH4=RATIONAL R_0=0.40 MM=12 NN=6 SWITCH5=RATIONAL R_0=0.28

MM=12 NN=6 NL_CUTOFF=5.0,1.5,1.5,1.5,1.5 NL_STRIDE=1.0,1.0,1.0,1.0,1.0

NL_SKIN=0.1,0.1,0.1,0.1,0.1 NL_CONSTANT_SIZE=15 WRITEPINESTRAJ

WRITEPINESSTRIDE=100000000

Maybe a missing space or a typo?

For more information and tips for troubleshooting, please check the GROMACS website at <http://www.gromacs.org/Documentation/Errors>

(Although this cell is showing an error, the simulation was run successfully outside of the notebook and the results were used to generate the plot below)

Another important criteria for determining whether the sampling at each round has been sufficient is to look at the explored CV space and compare it to the previous rounds.

```
[85]: def get_colvardata(filename_colvar):  
    with open(filename_colvar, 'r') as colvar_file:  
        colvar_labels = colvar_file.readline().split()[2:]  
        colvar_data = np.loadtxt(filename_colvar)  
        return (colvar_data, colvar_labels)  
  
    (colvar_data_un, labels_un) = get_colvardata(f"{PIV_DIR}/colvar")  
    (colvar_data_b, labels_b) = get_colvardata(f"{BIASED_DIR}/colvar.out")  
  
    plt.figure(figsize=(8, 6), dpi=100)  
  
    plt.plot(colvar_data_b[:, 1], colvar_data_b[:, 2], '.', c='red',  
            ↪label='biased') # plotting every 250 frames  
    plt.plot(colvar_data_un[:, 1], colvar_data_un[:, 2], '.', c='blue',  
            ↪label='unbiased')  
    plt.xlabel("Na-Cl distance [nm]")  
    plt.ylabel("Coord. No. of Na")  
    plt.legend()  
    plt.show()
```

