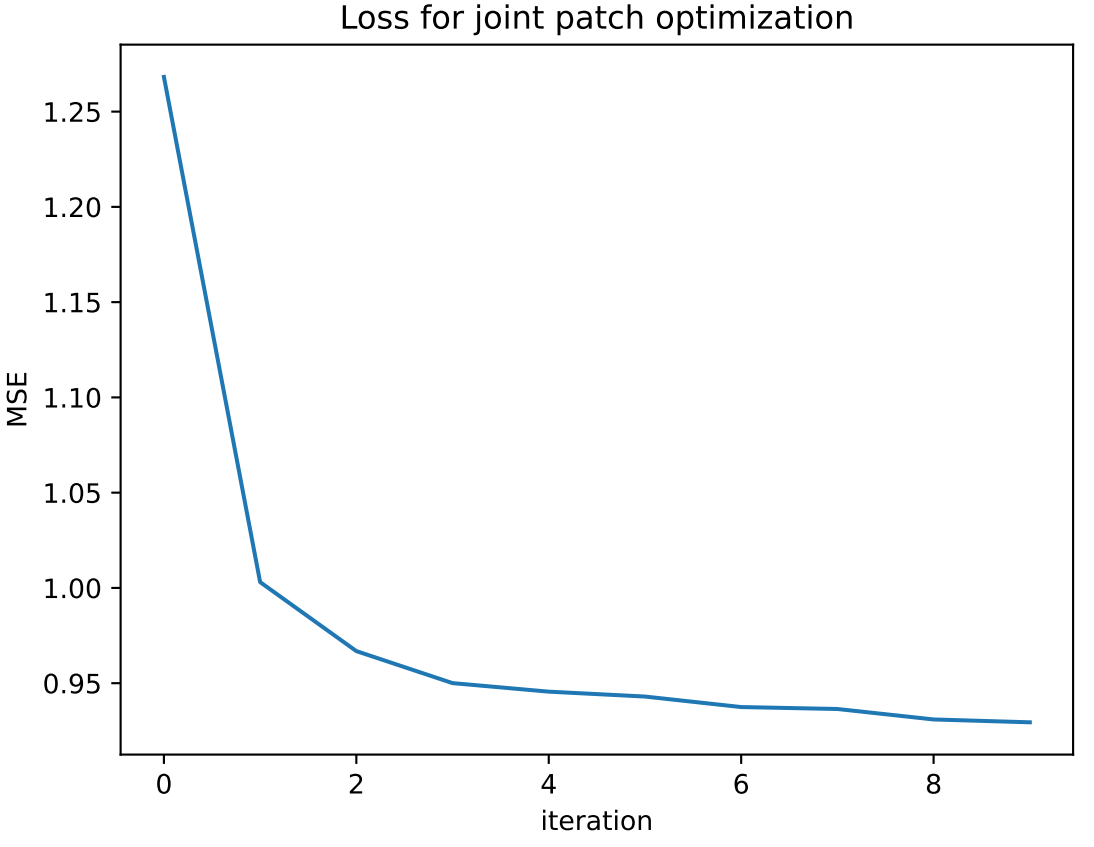
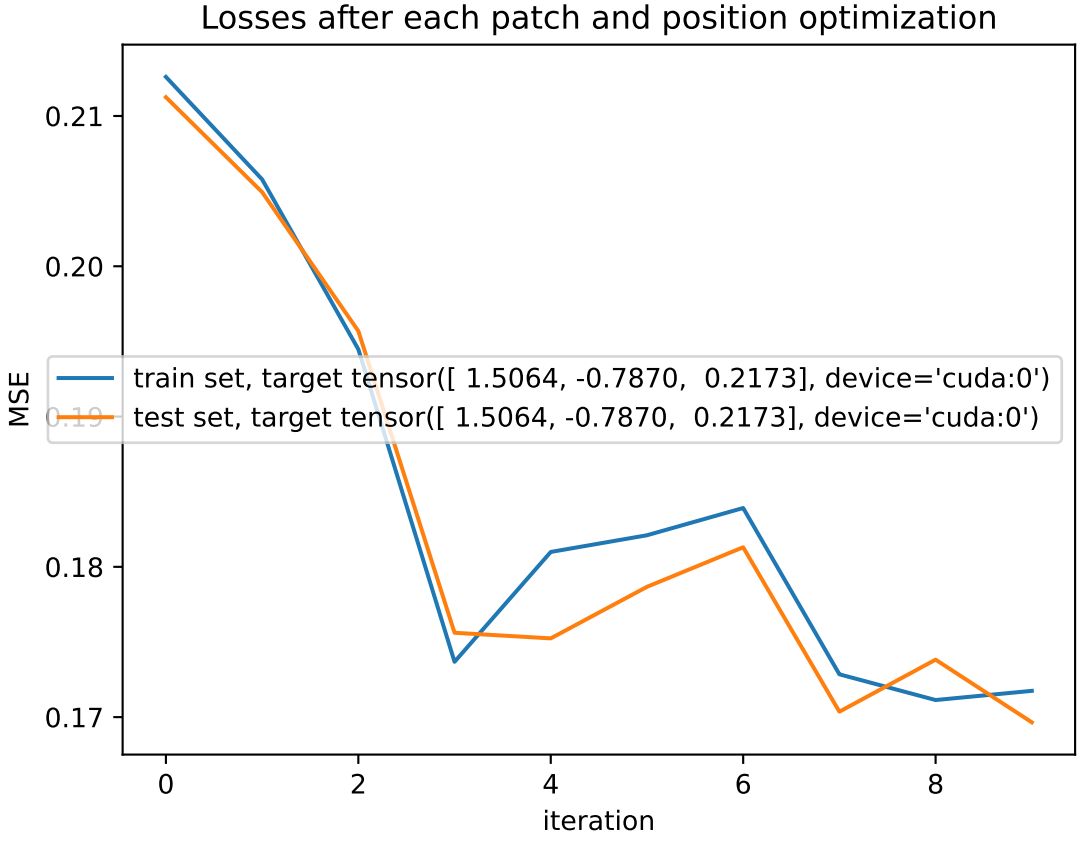
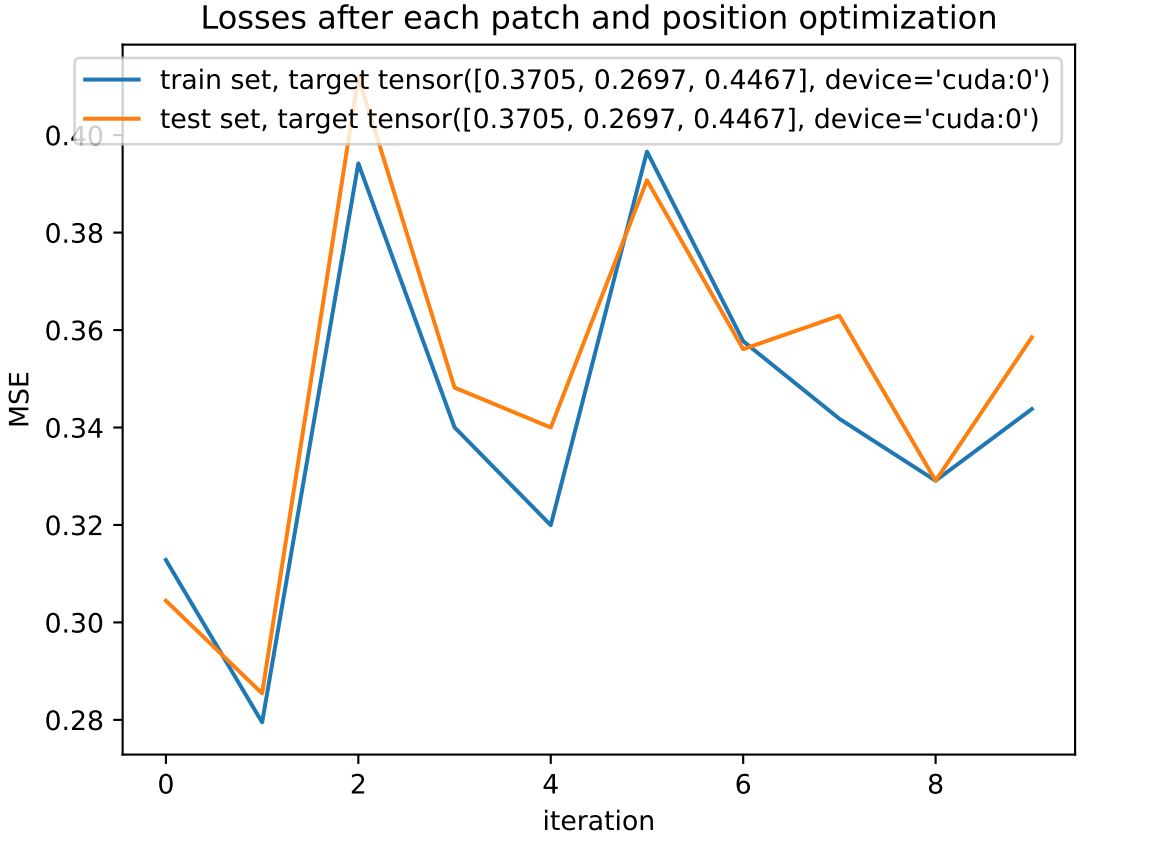
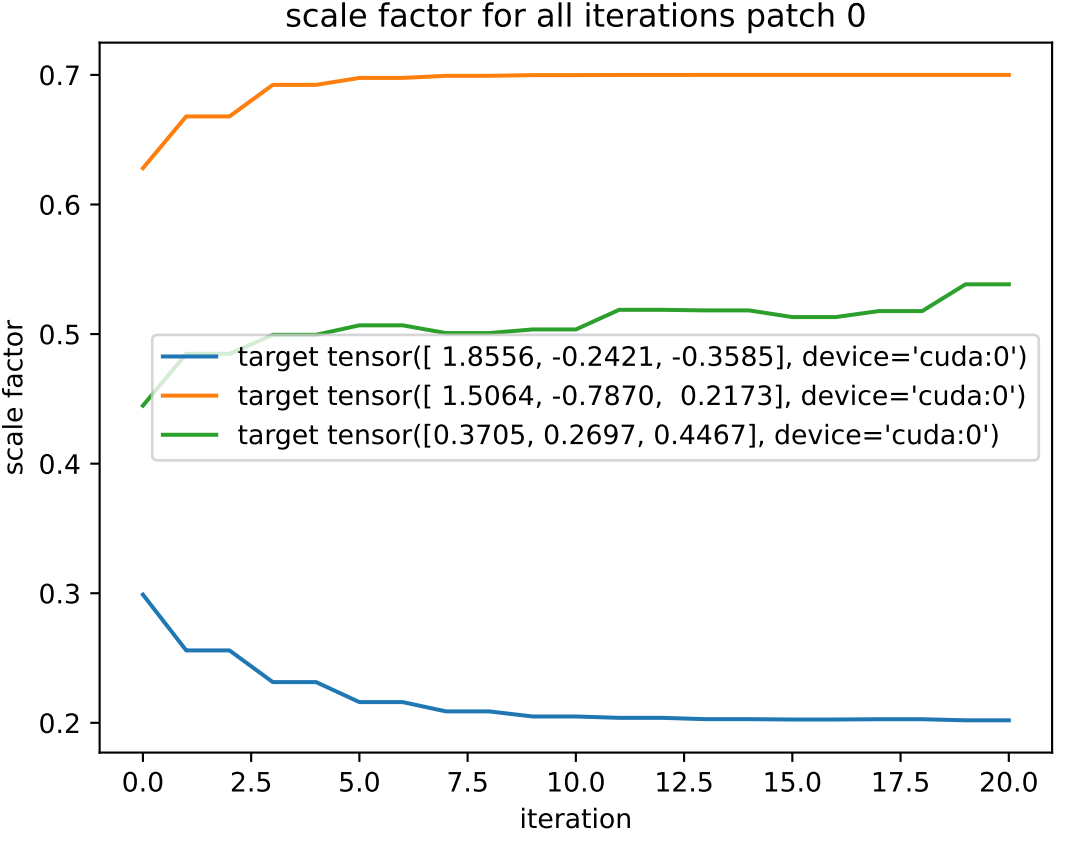
Last patch

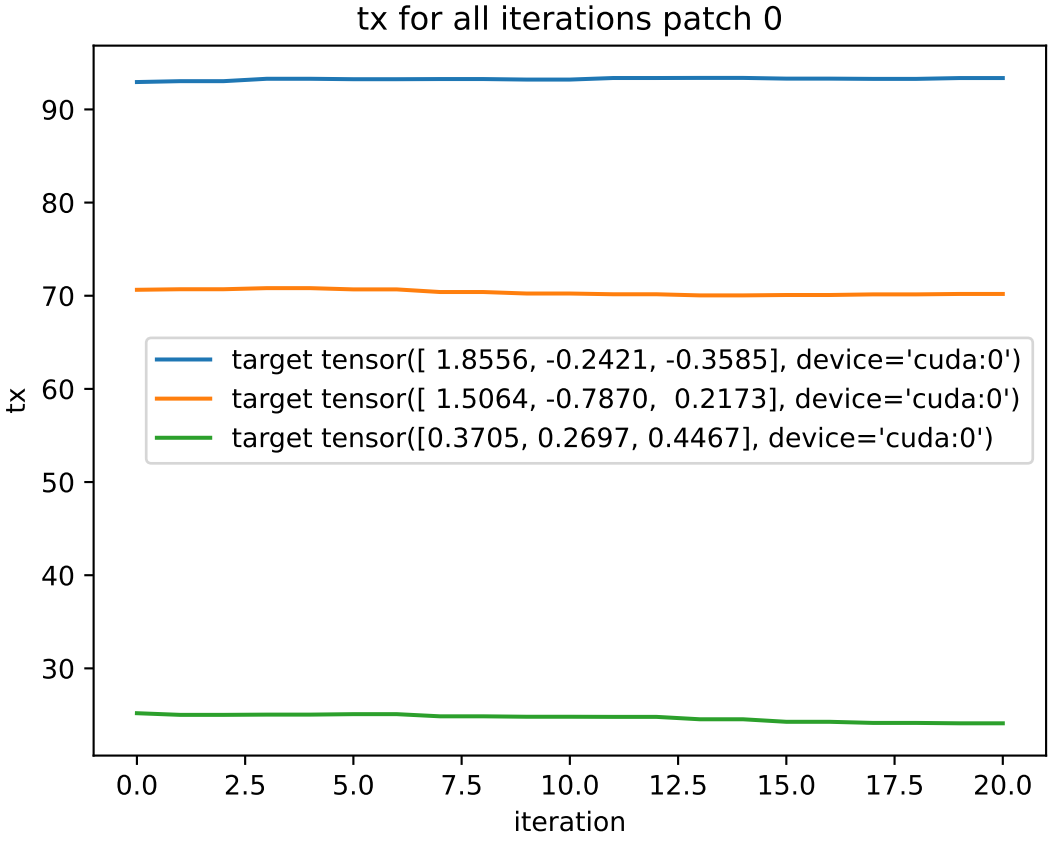

Loss for joint patch optimization
MSE
1.25
1.20
1.15
1.10
1.05
1.00
0.95
0
2
4
6
8
iteration

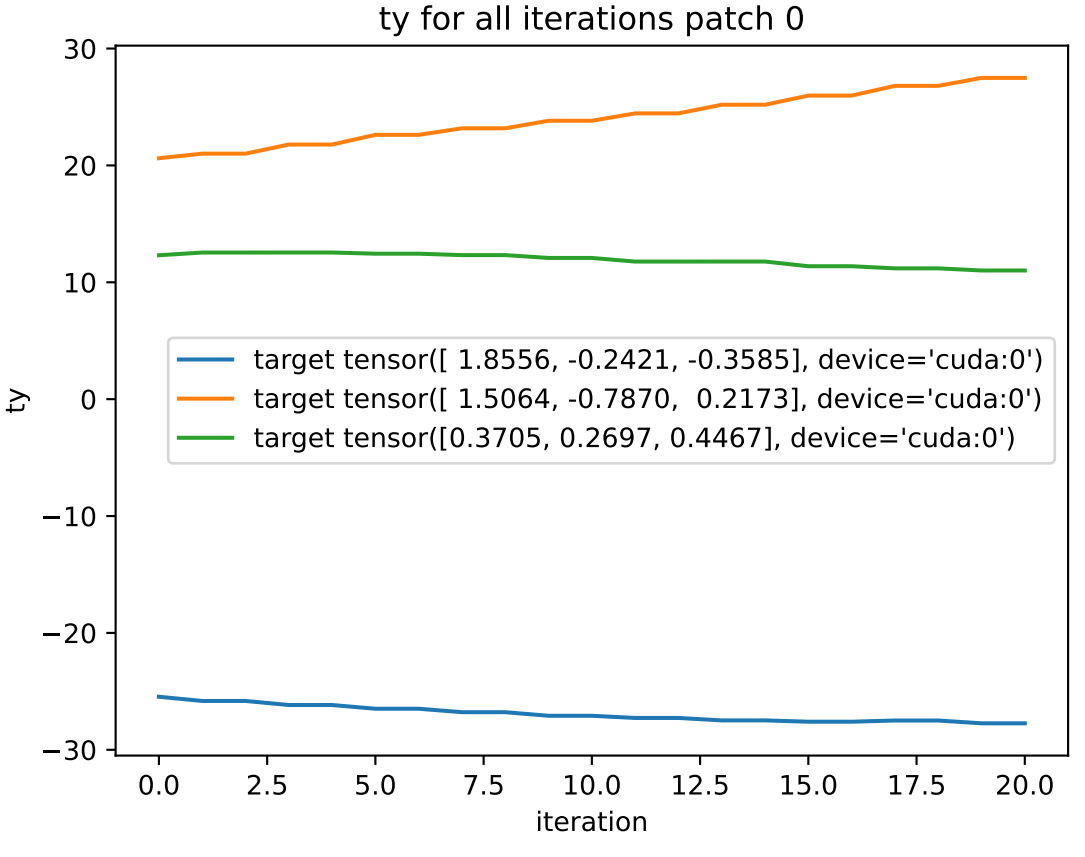
Losses after each patch and position optimization
train set, target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
test set, target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
0.605
0.600
0.595
0.590
0.585
0.580
0.575
0.570
MSE
0
2
4
6
8
iteration

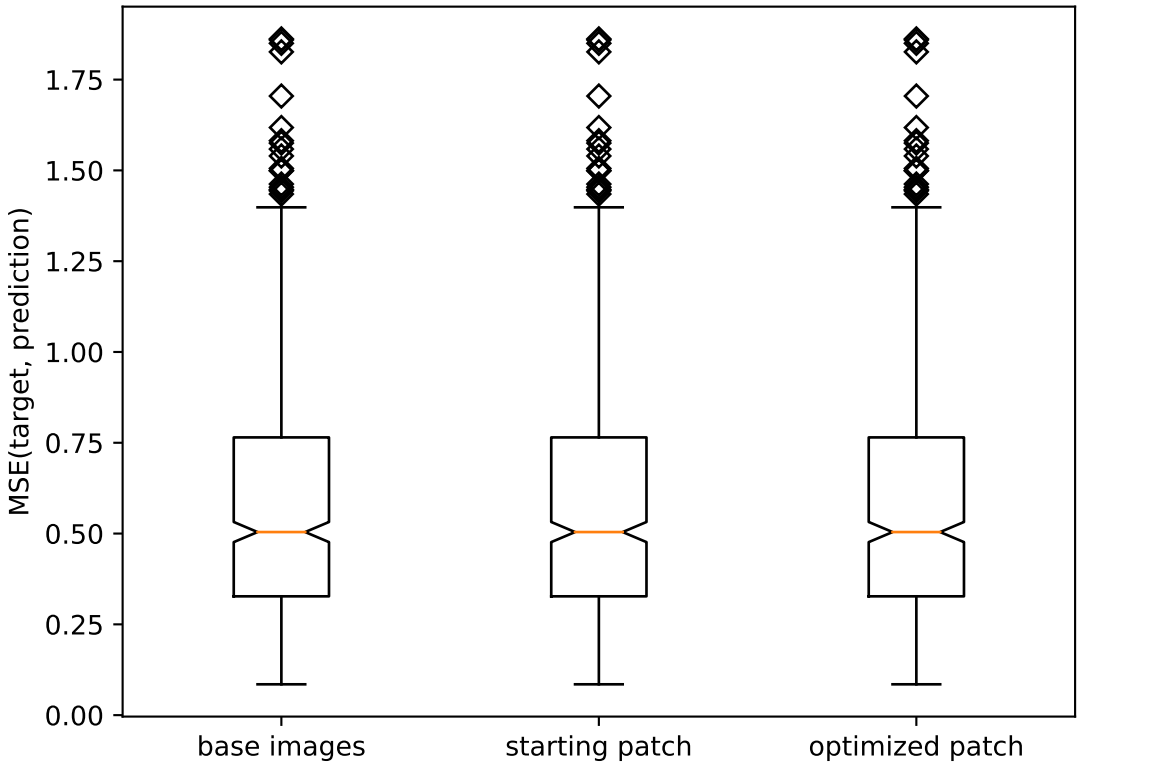

Losses after each patch and position optimization
0.21
0.20
0.19
0.18
0.17
MSE
train set, target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
test set, target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
0
2
4
6
8
iteration

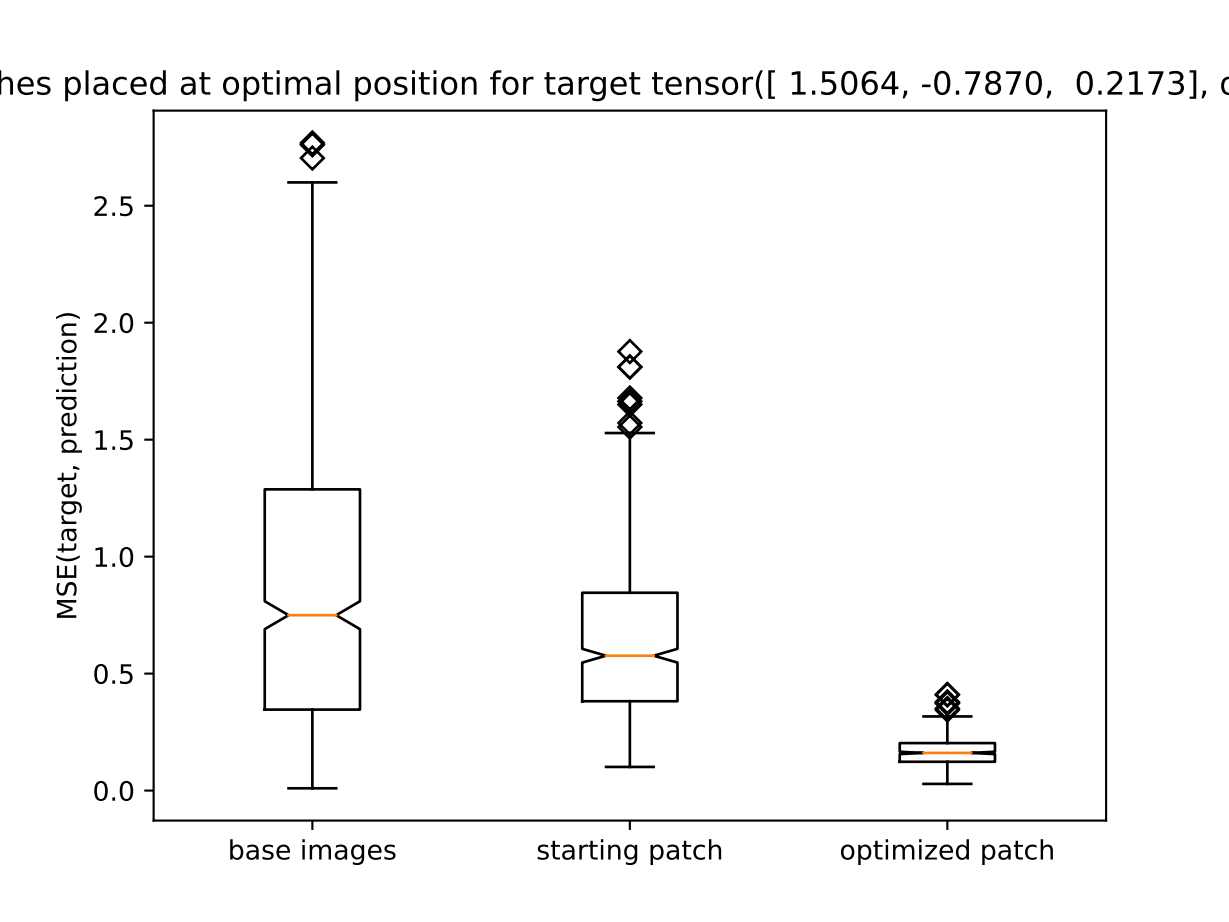

Losses after each patch and position optimization
train set, target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')
test set, target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')
MSE
0.40
0.38
0.36
0.34
0.32
0.30
0.28
0
2
4
6
8
iteration

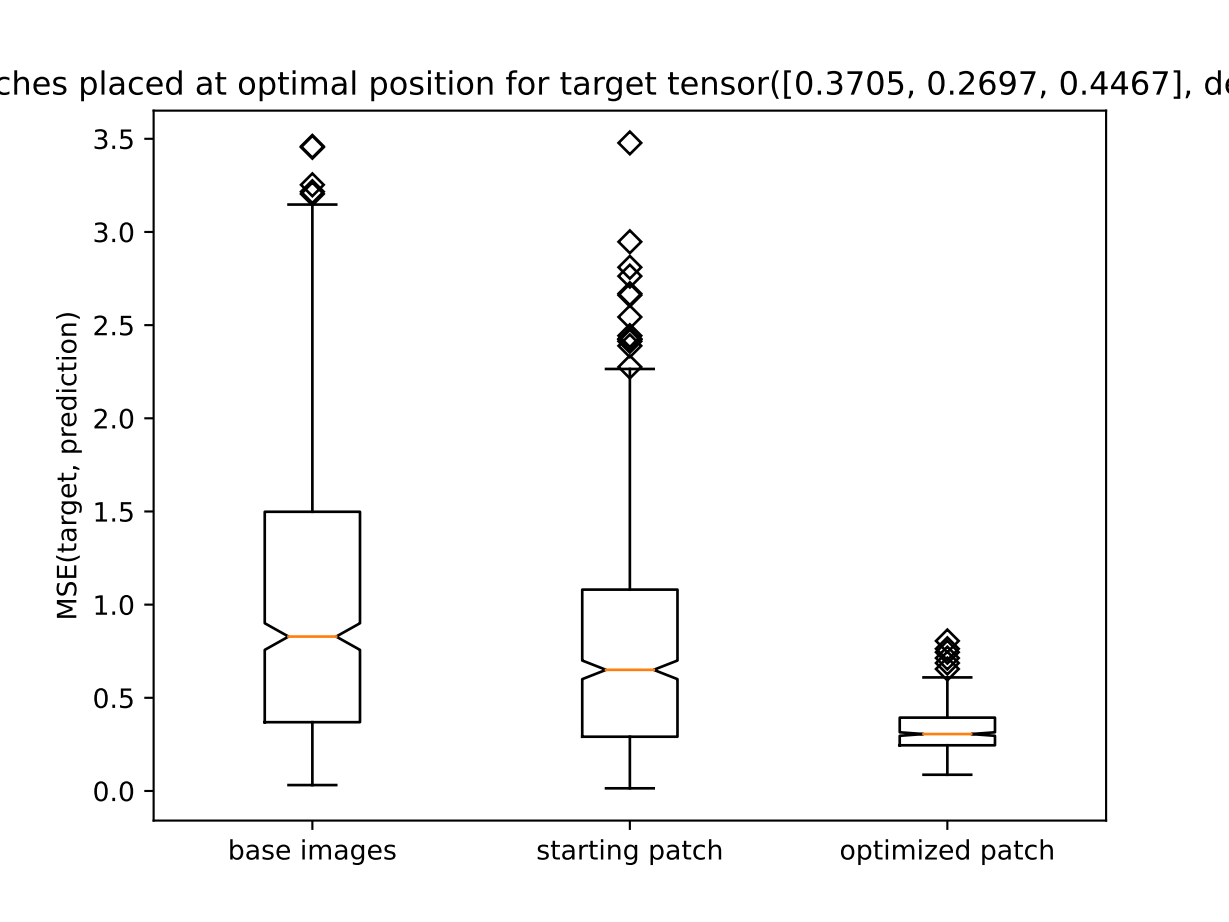

scale factor for all iterations patch 0
0.7
0.6
0.5
0.4
0.3
0.2
scale factor
target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
iteration

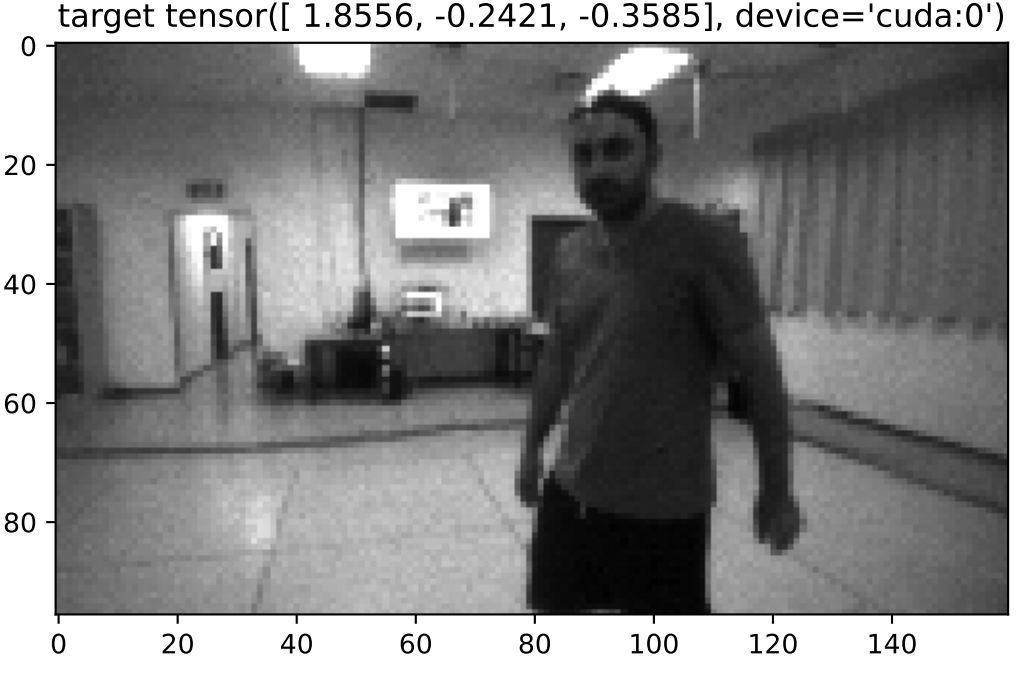

tx for all iterations patch 0
target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')
tx
iteration
90
80
70
60
50
40
30
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0

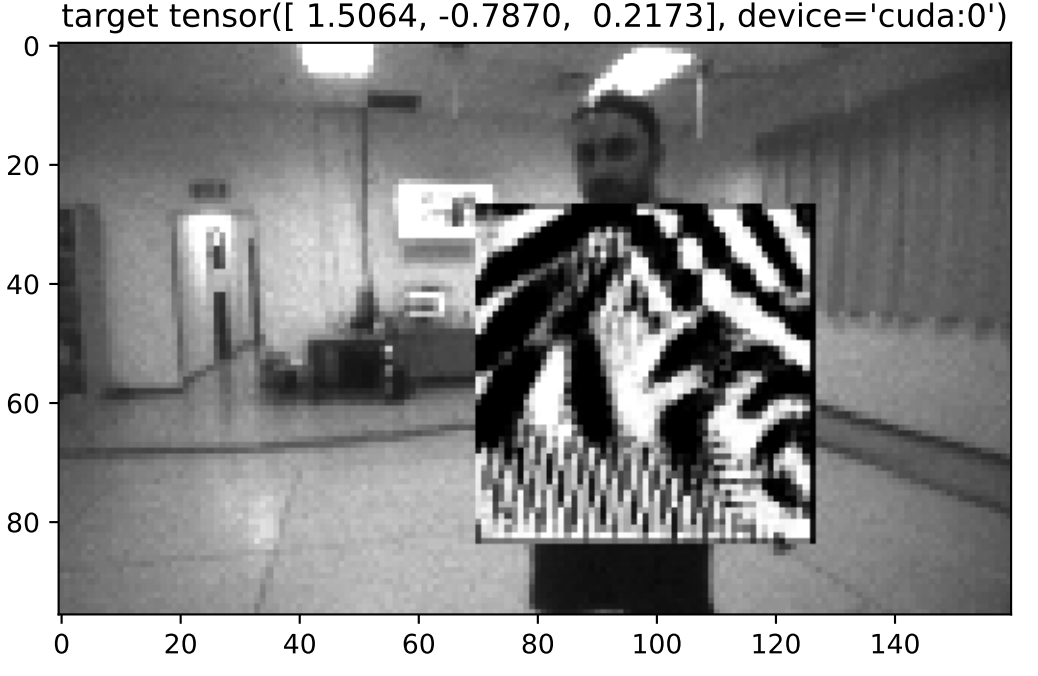

ty for all iterations patch 0
30
20
10
0
−10
−20
−30
ty
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
iteration
target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')

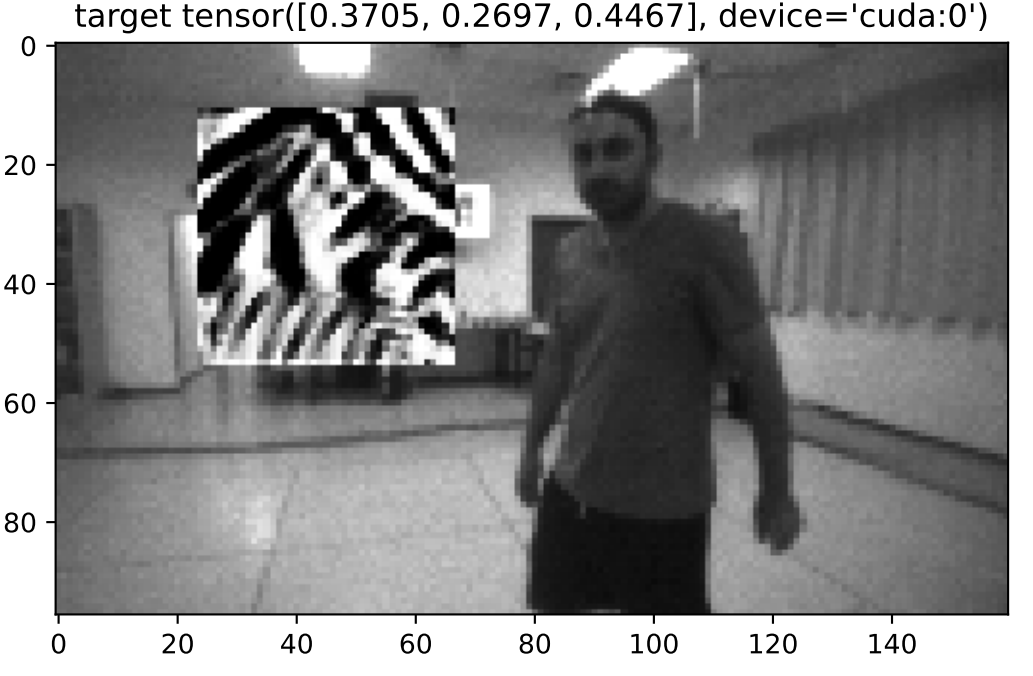

hes placed at optimal position for target tensor([1.8556, -0.2421, -0.3585], c
MSE(target, prediction)
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
base images
starting patch
optimized patch

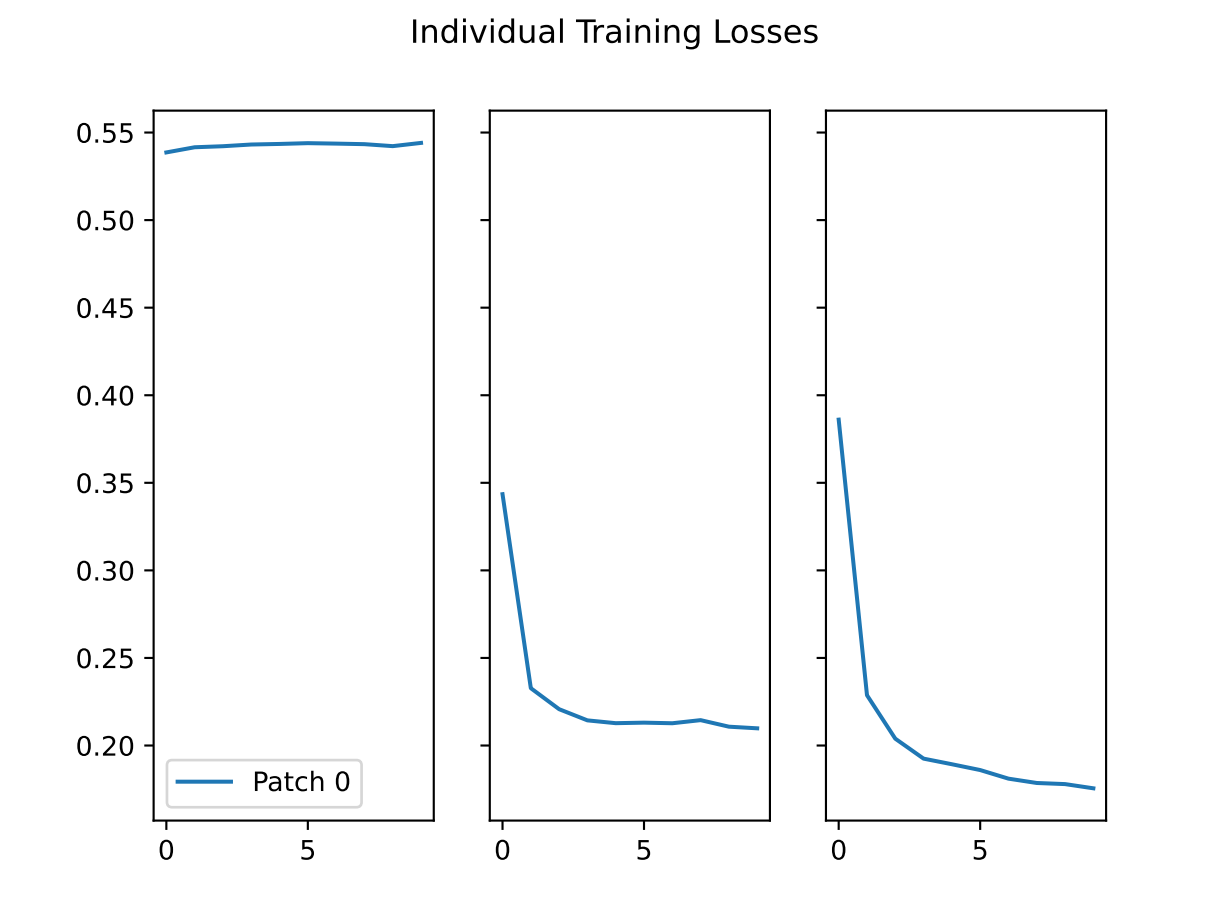

hes placed at optimal position for target tensor([1.5064, -0.7870, 0.2173], d
MSE(target, prediction)
0.0
0.5
1.0
1.5
2.0
2.5
base images
starting patch
optimized patch

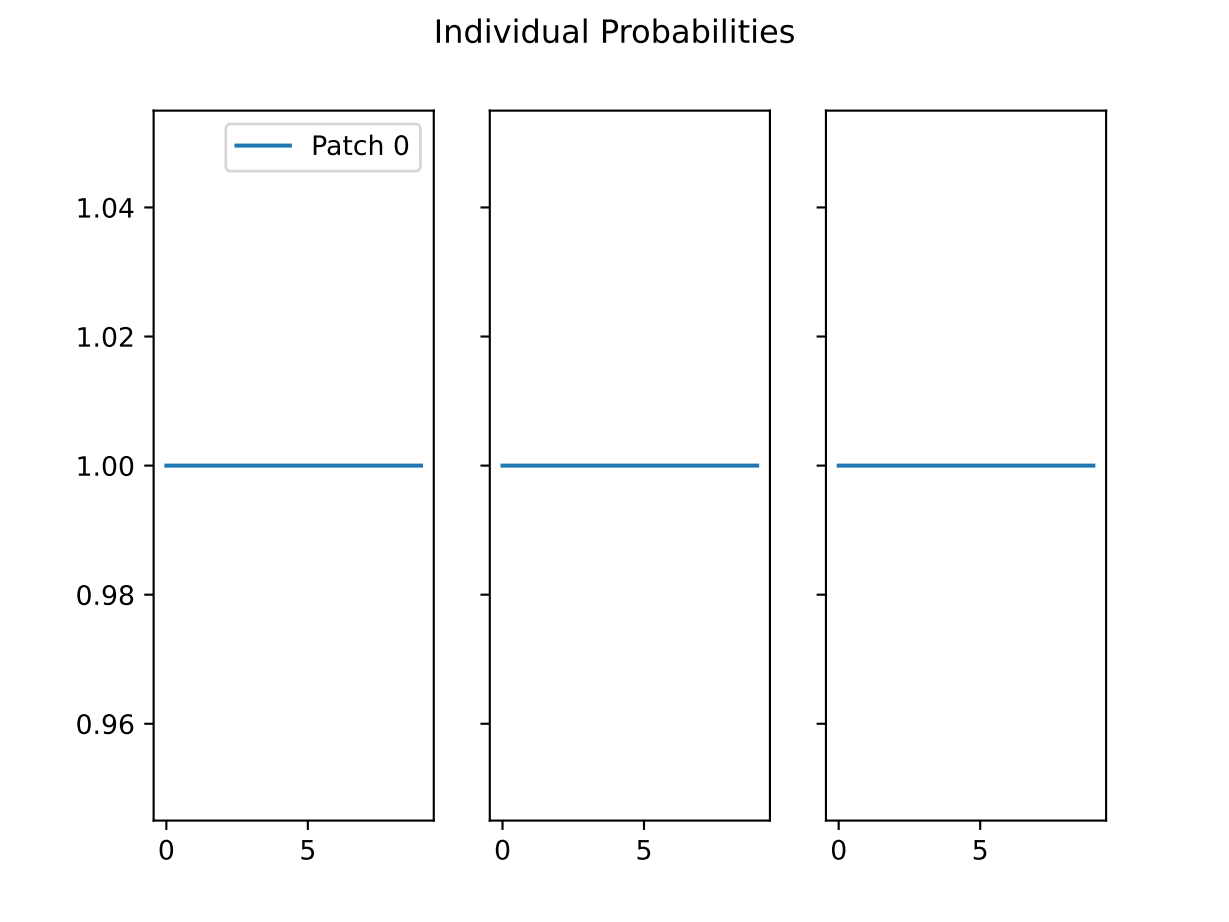

ches placed at optimal position for target tensor([0.3705, 0.2697, 0.4467], de
MSE(target, prediction)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
base images
starting patch
optimized patch

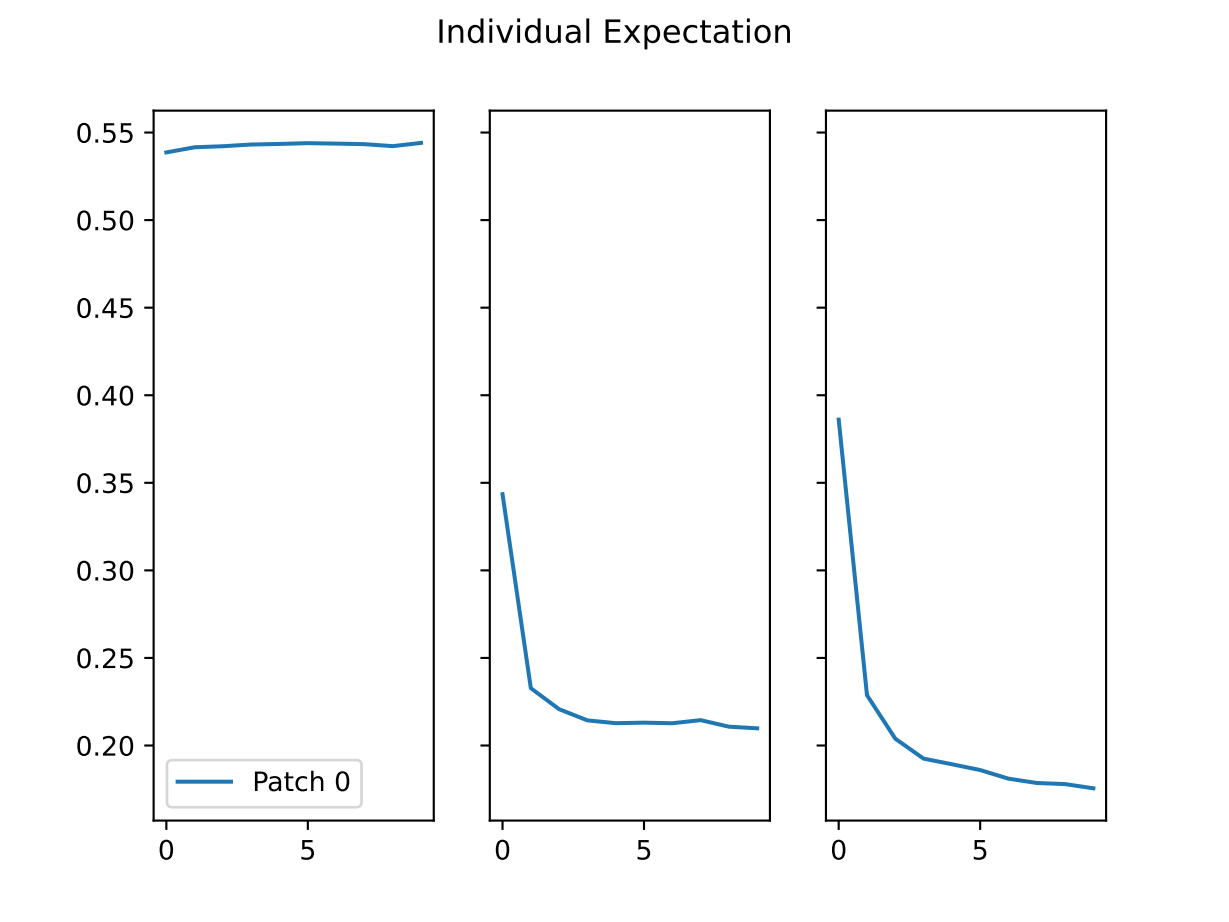

target tensor([1.8556, -0.2421, -0.3585], device='cuda:0')
0
20
40
60
80
0
20
40
60
80
100
120
140


target tensor([1.5064, -0.7870, 0.2173], device='cuda:0')
0
20
40
60
80
0
20
40
60
80
100
120
140


target tensor([0.3705, 0.2697, 0.4467], device='cuda:0')
0
20
40
60
80
0
20
40
60
80
100
120
140


Individual Training Losses
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
Patch 0
0
5
0
5
0
5


Individual Probabilities
Patch 0
1.04
1.02
1.00
0.98
0.96
0
5
0
5
0
5


Individual Expectation
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
Patch 0
0
5
0
5
0
5