

CS-562 Project3 Assignment Report

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For this assignment, I mainly implemented PBS, IBL, and Irradiance Map.

This is the instruction for each feature's implemented code files or line numbers.

1. PBS & IBL:

- In shaders file - lightStage.frag with 87~119, 221~261 line (D, F, G1, G, getUV functions)

2. Irradiance Map:

- SkySphere.cpp with 61~158 line (InitIrradianceMap, CreateIrradianceMap, SHCoefficient functions)

+) It takes a little bit taking time to start the project. Because I used a high polygon obj file of the Bunny model.

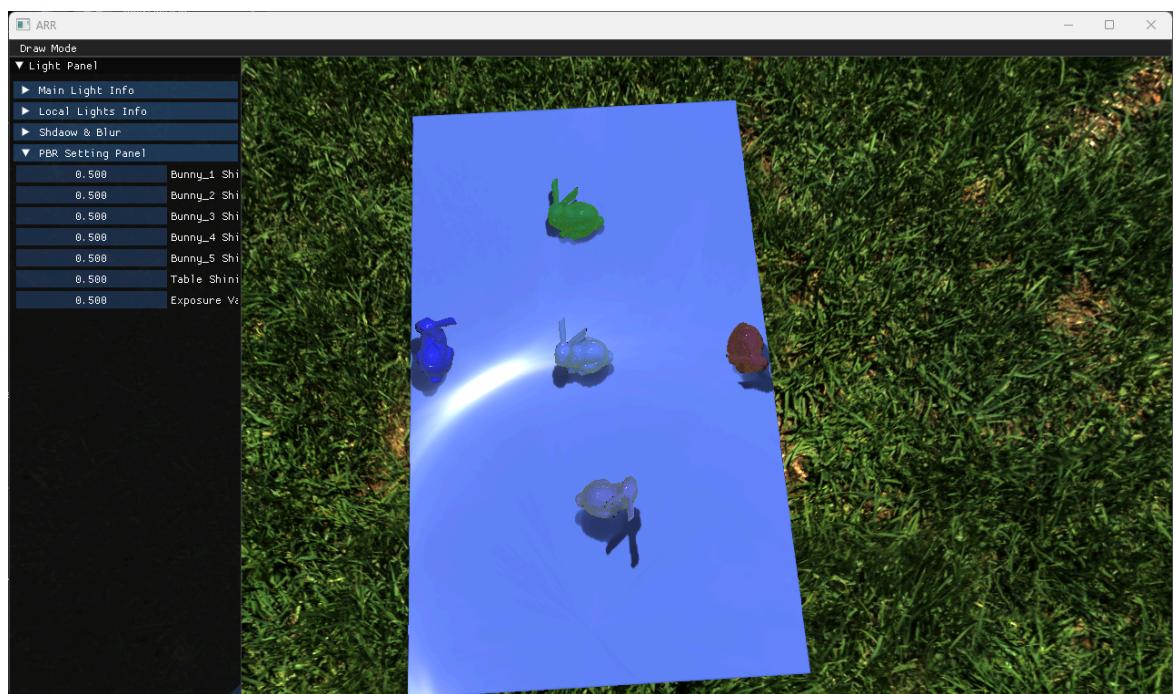
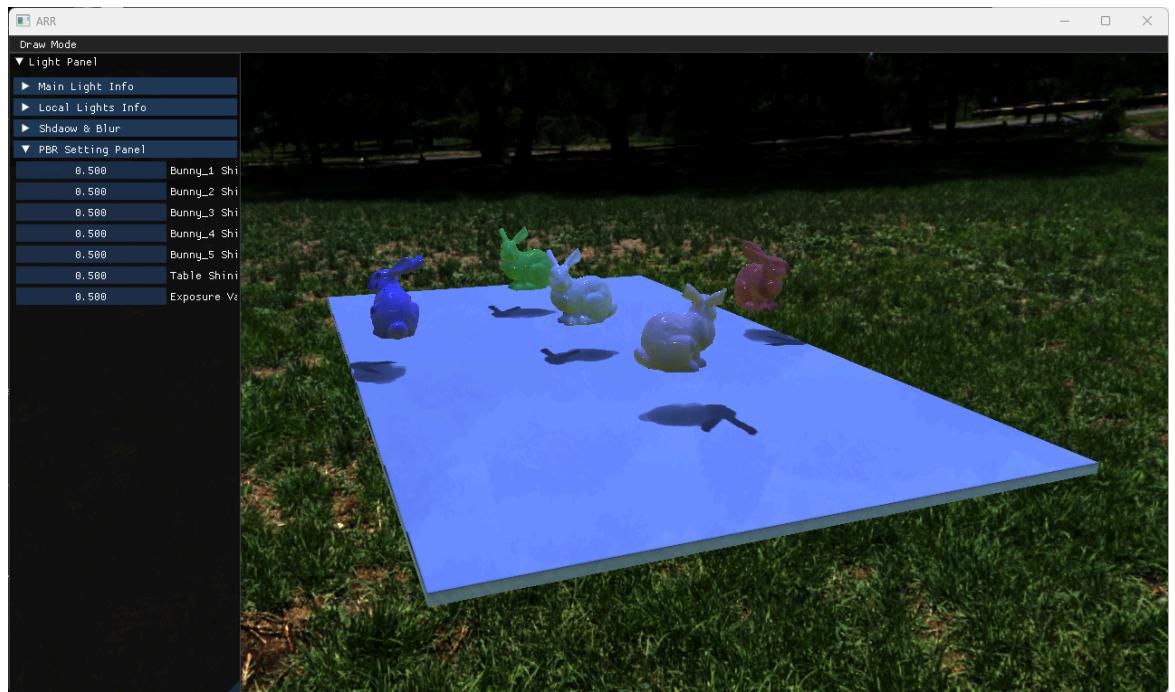
+) I set only the x64 version.

Implementations:

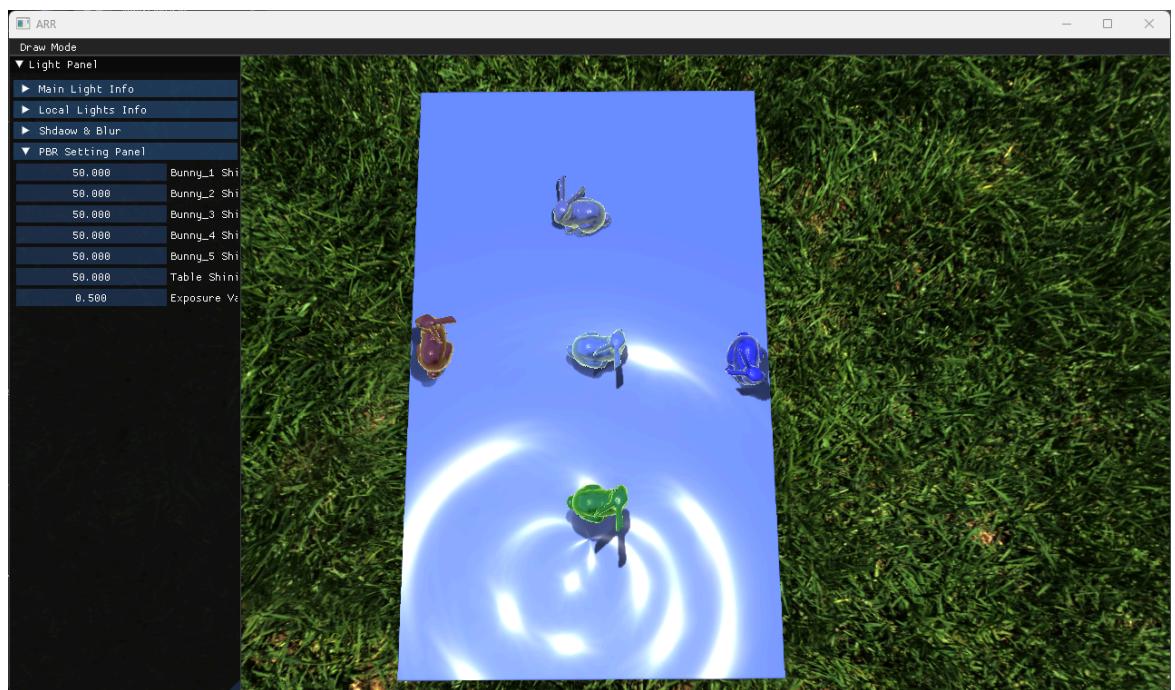
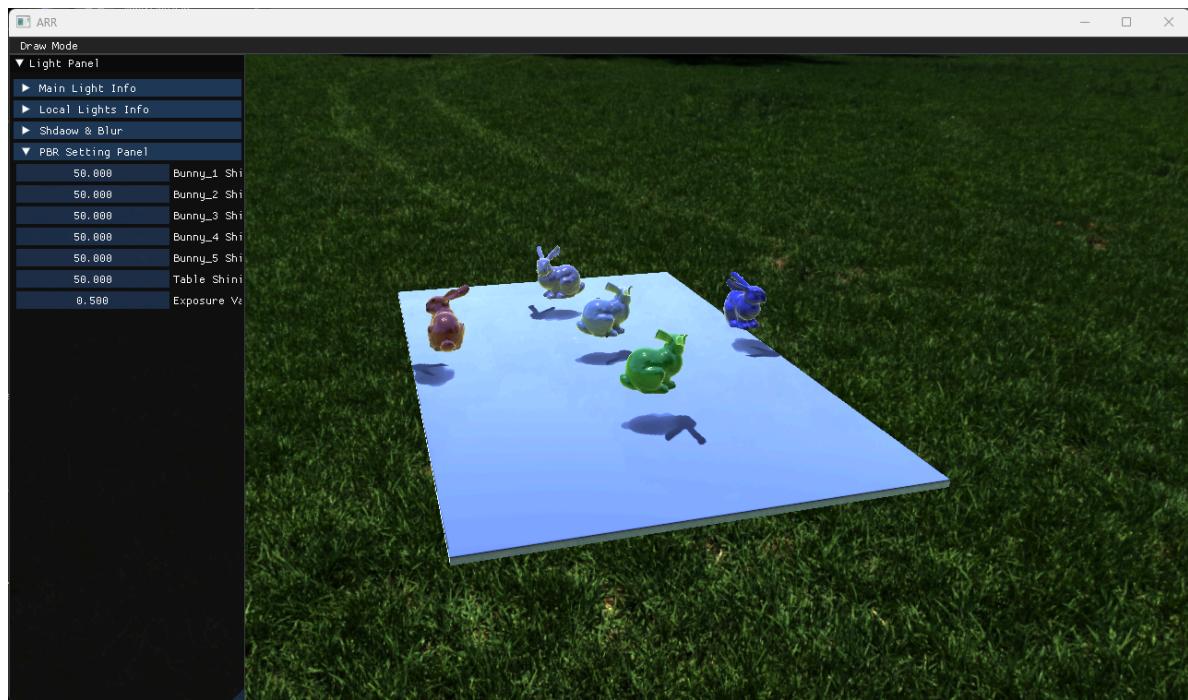
- PBS & IBL
- Irradiance Map

PBS + IBL + Irradiance Map with different value of shininess

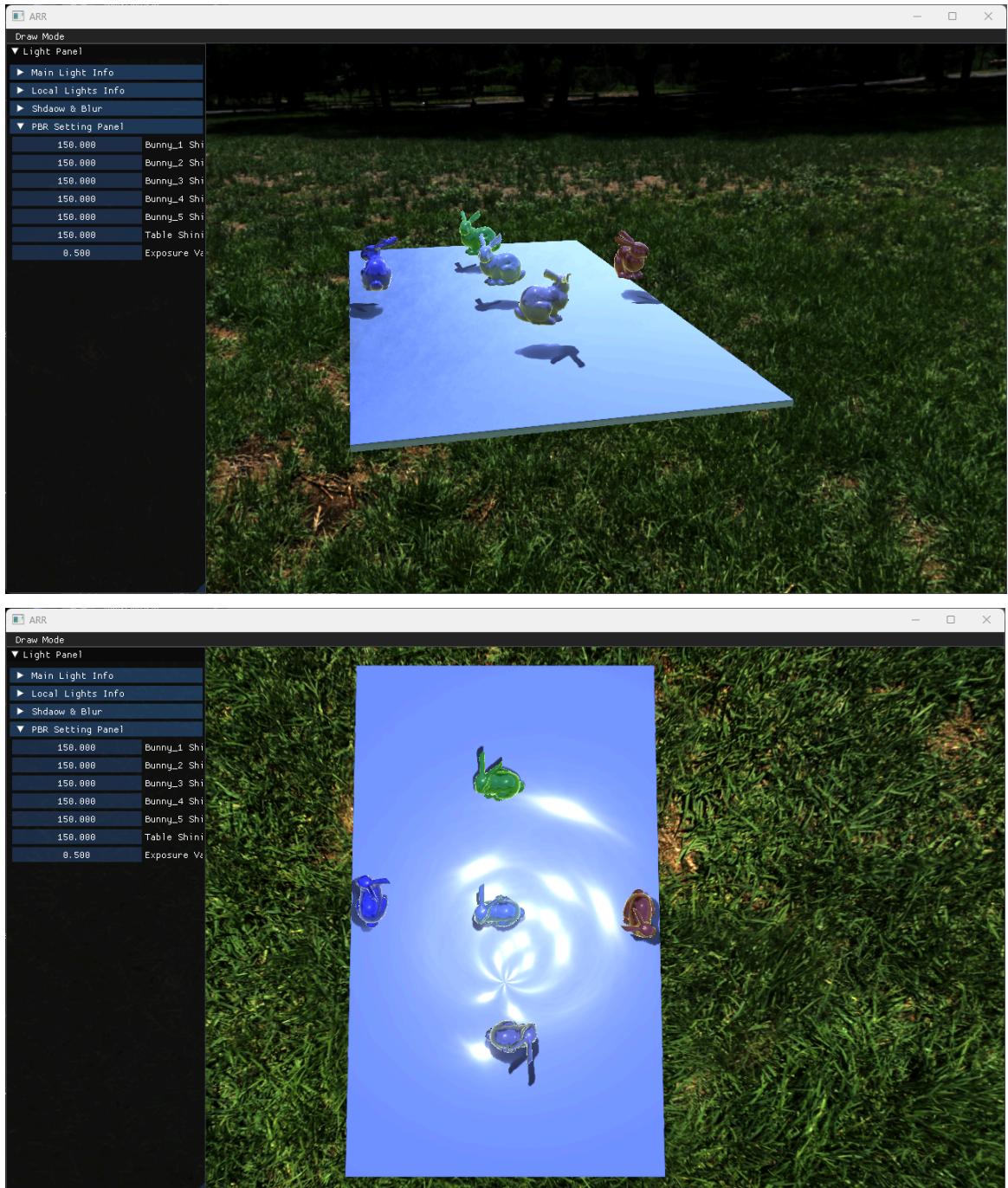
1. Shininess with 0.5



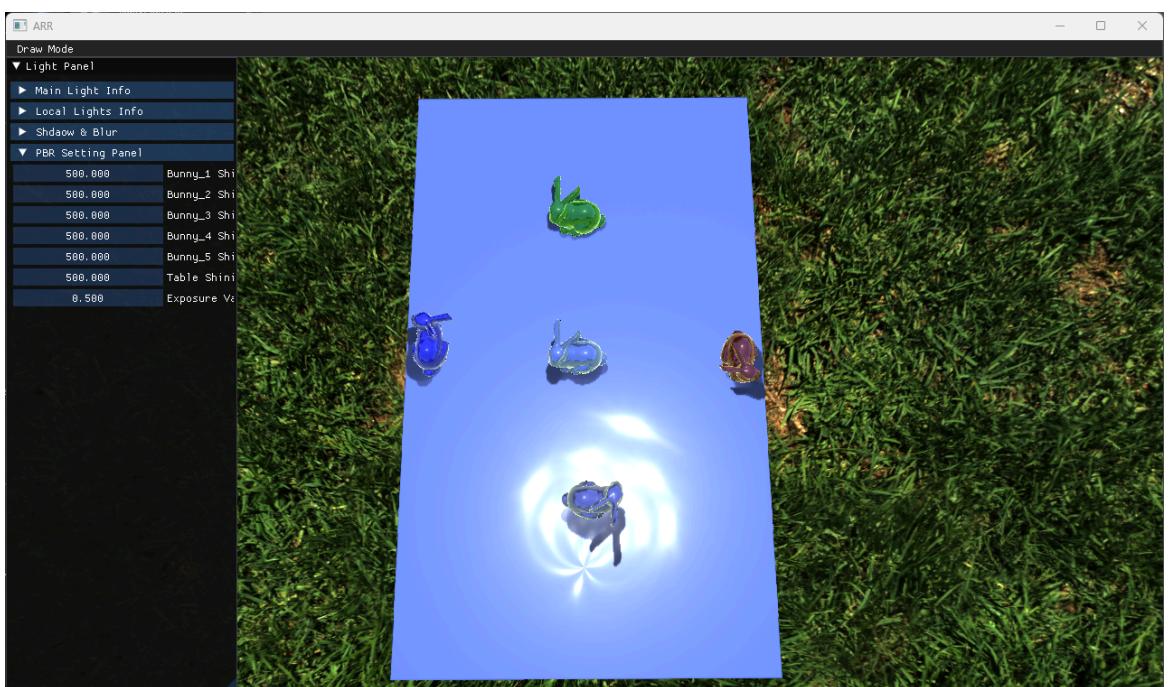
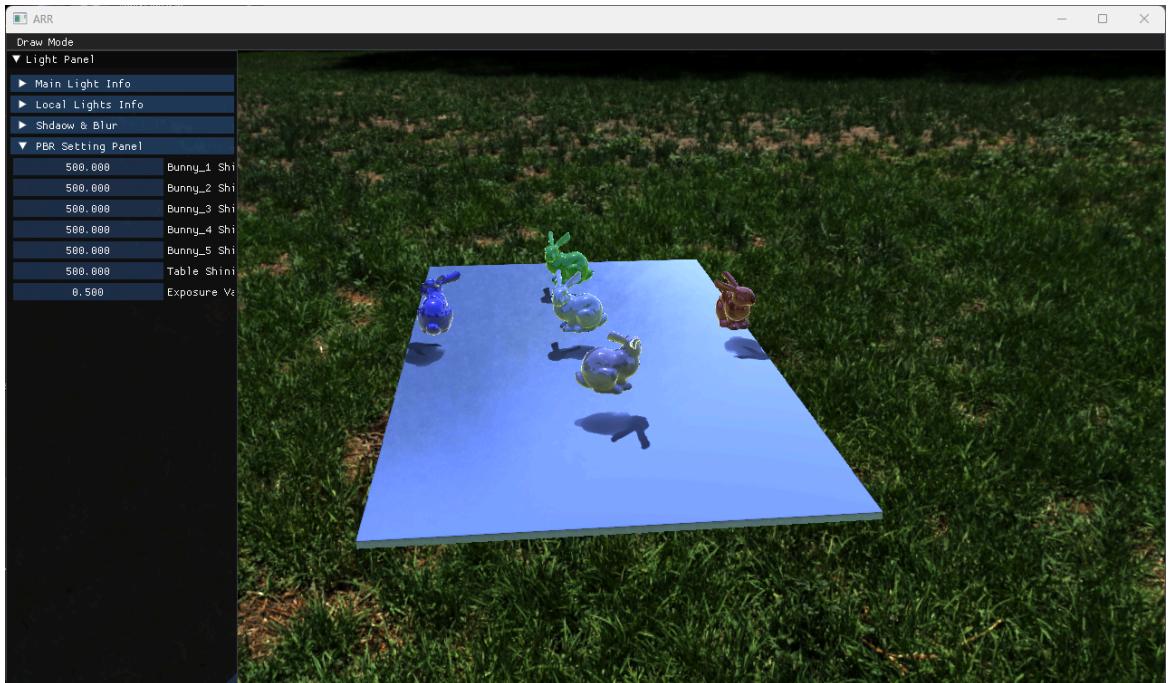
2. Shininess with 50



3. Shininess with 150

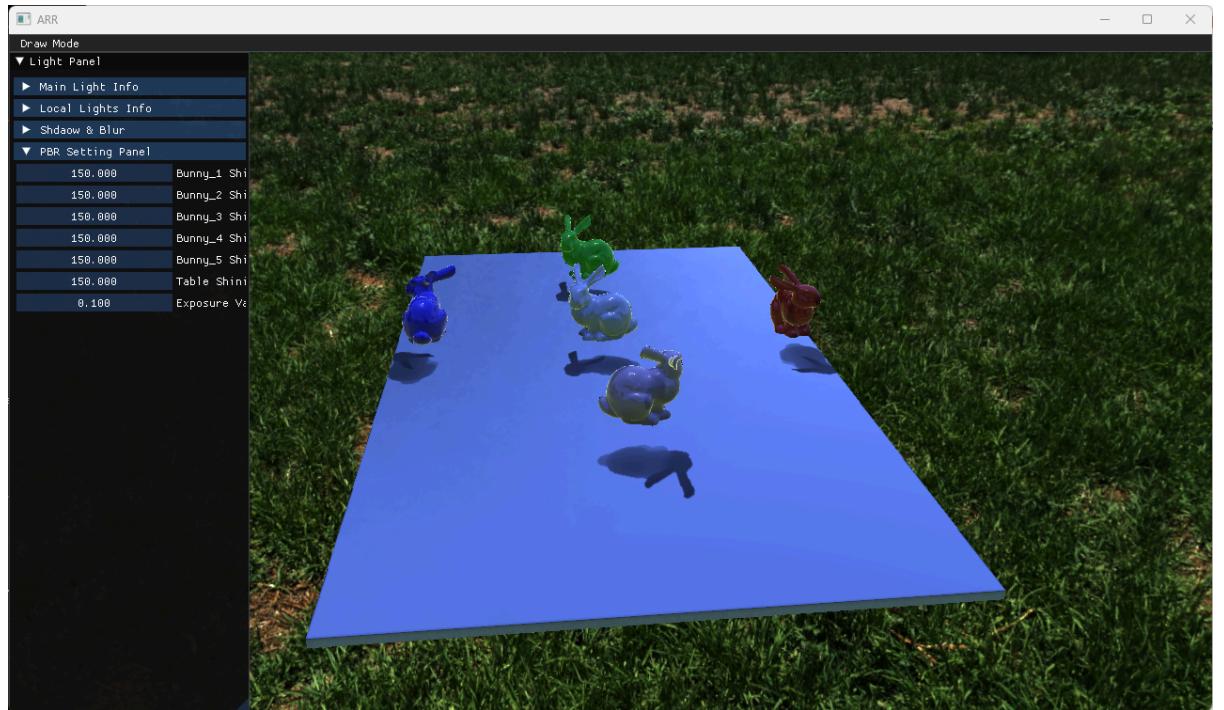


4. Shininess with 500

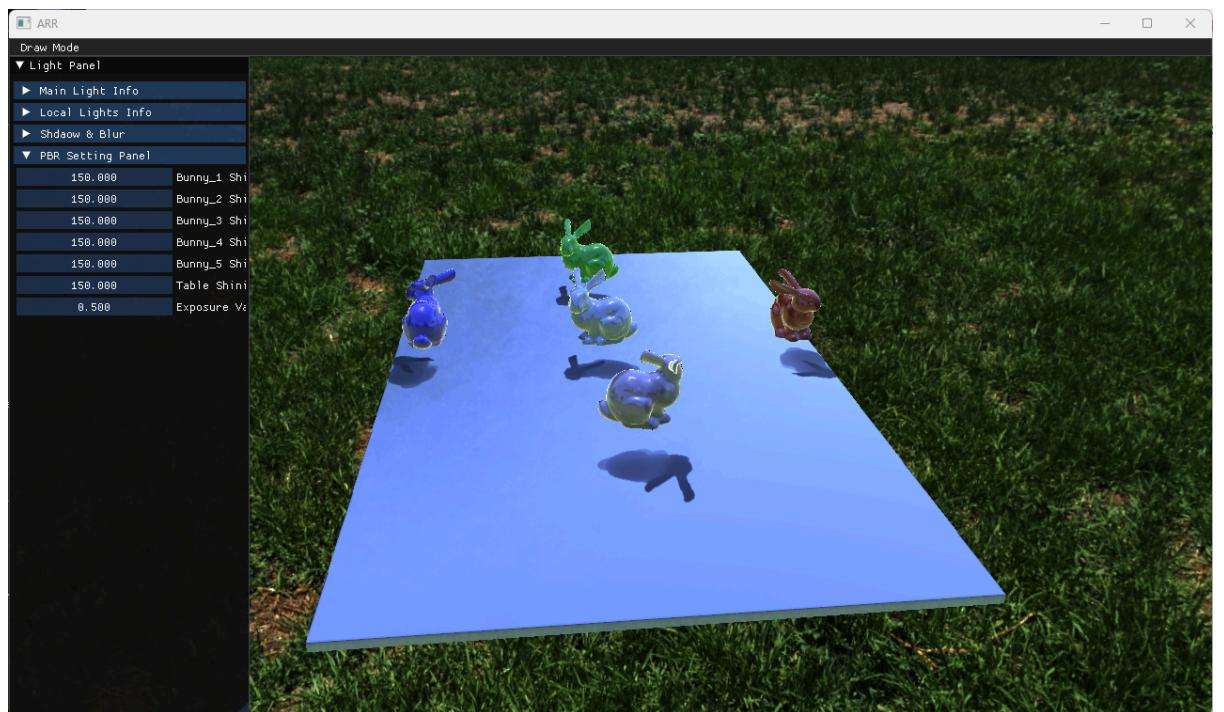


Ton Mapping with control Exposure Control value:

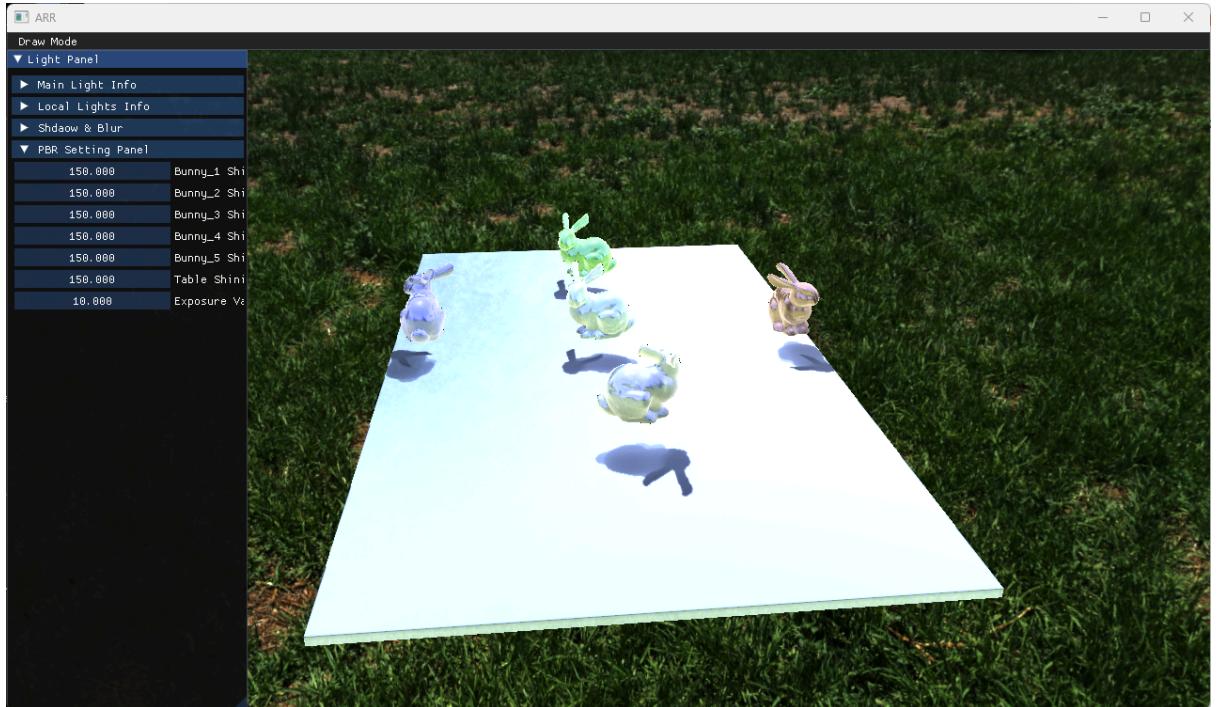
1. Exposure Control with 0.1



2. Exposure Control with 0.5



3. Exposure Control with 10

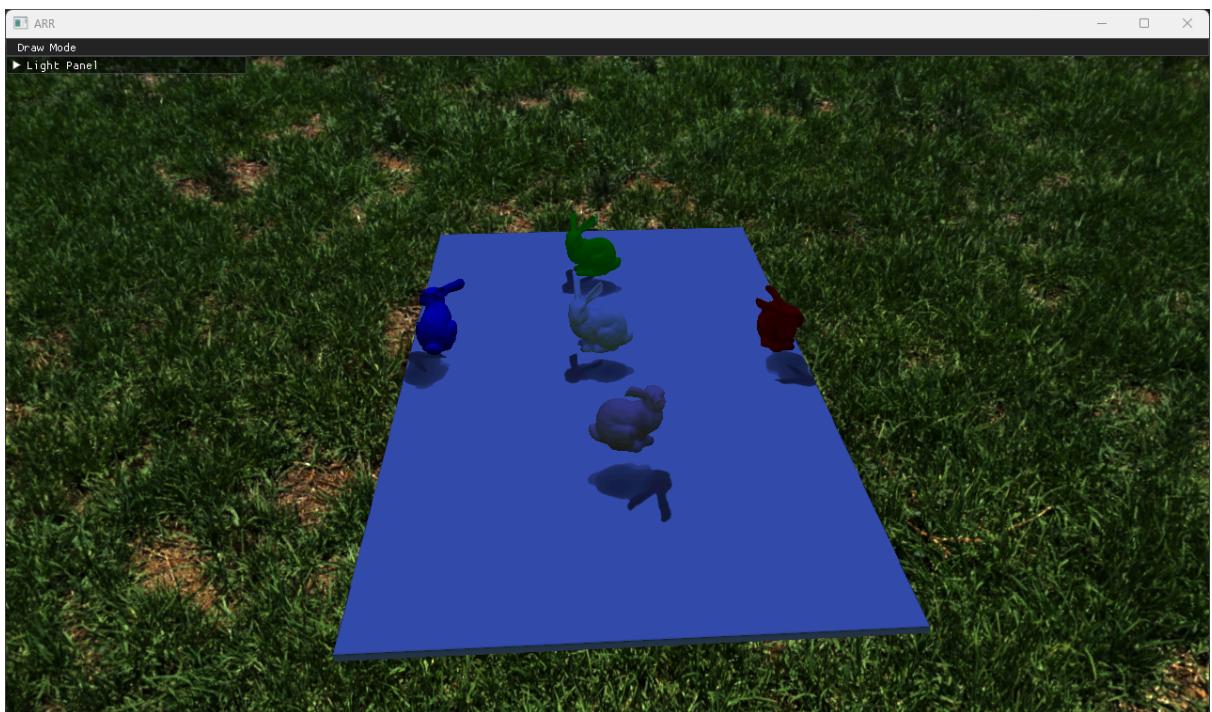
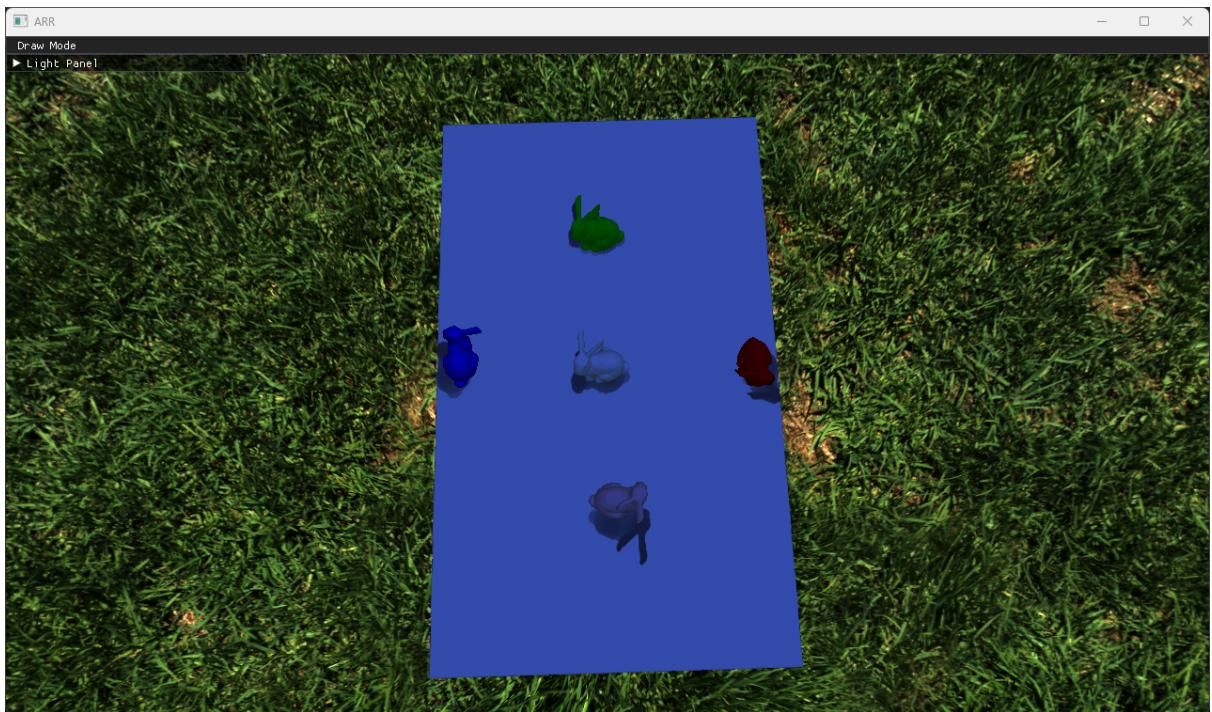


4. Exposure Control with 50

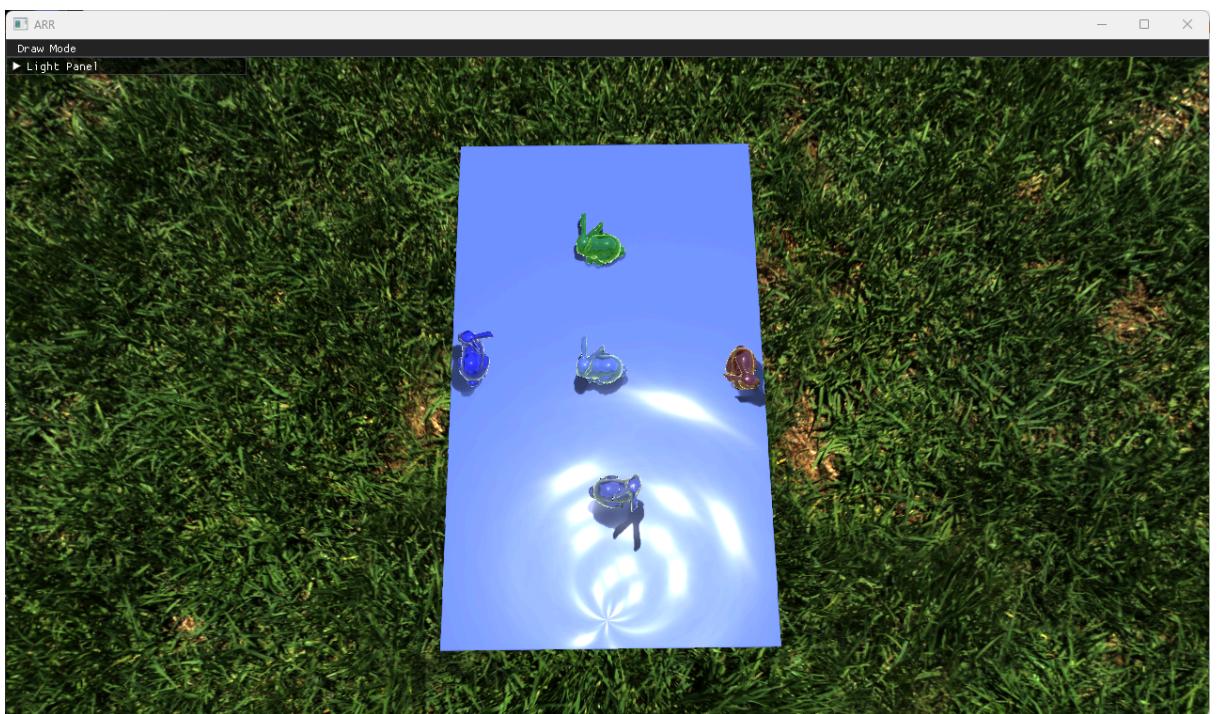
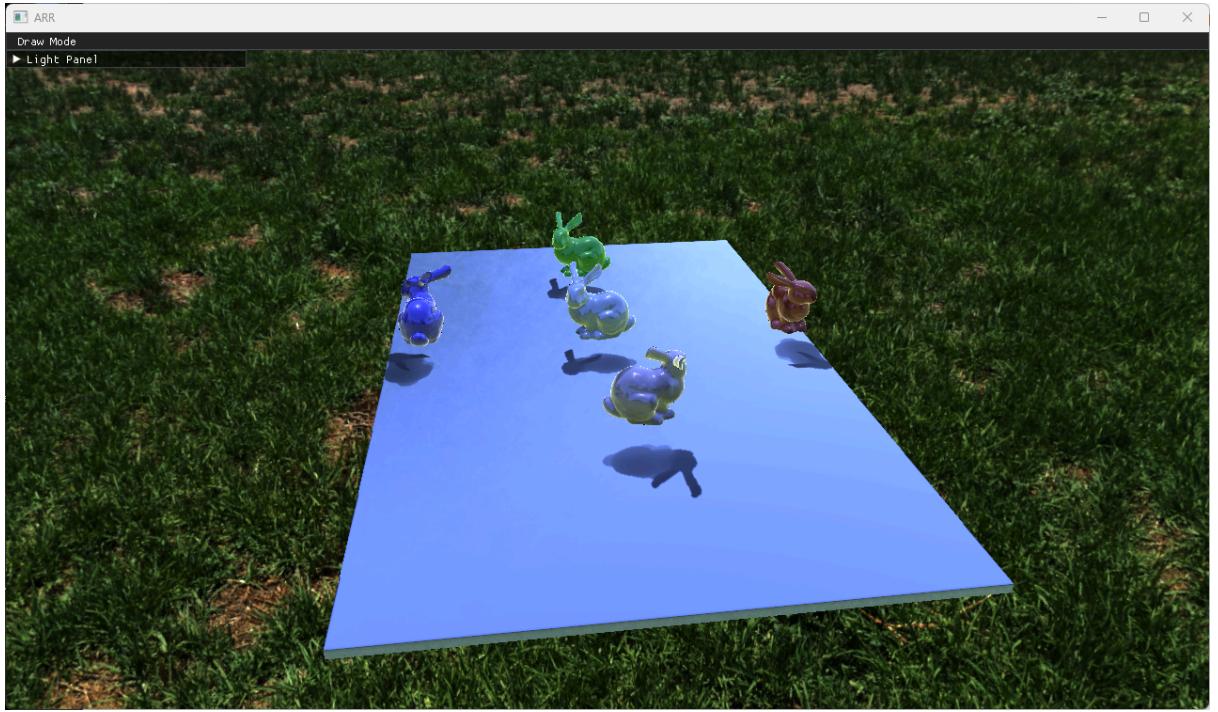


Only Irradiance Map VS Total Result

1. Only Irradiance



2. Total Result



Basic HDR Map vs Irradiance Map

1. *Basic HDR Map*



2. *Irradiance Map*

