

Lab 23: Camera and Eye Model

Name: _____ Partners: _____

Image Quality of a Projector: Unlike a pinhole projector, the quality of the image projected on a screen using a converging lens is highly dependent on the position of the screen with respect to the lens.

1. Place the screen 1.5 meters from the lamp. Bring the magnifying glass close to the lamp till you see a focused image on the screen. Determine how much you need to move the screen either closer to or away from the lamp in order for the image to get fuzzy.
2. Cover the magnifying glass with an aluminum foil with a $\frac{1}{4}$ " hole and repeat the same experiment. What is different? Why?

Group Discussion:

3. Discuss what would happen to the projected image, if you cover the upper half of the lens by an opaque material.

