

Pupil Locations - Gaussian

XP: $z = -70 \text{ mm}$
 $f_L = 400 \text{ mm}$

$$\frac{1}{z'} = \frac{1}{z} + \frac{1}{f_2}$$

$$z' = -84.8 \text{ mm}$$

$$m = \frac{z'}{z} = 1.21$$

$$D_{XP} = 24.24 \text{ mm}$$

XP is 84.8 mm to the left of Lens 2

EP: Light from R \rightarrow L $n = n' = -1$

$$z = 50 \text{ mm}$$

$$f_1 = 250 \text{ mm}$$

$$\frac{-1}{z'} = \frac{-1}{z} + \frac{1}{f_1}$$

$$z' = 62.5 \text{ mm}$$

$$m = \frac{z'}{z} = 1.25$$

$$D_{EP} = 25.0 \text{ mm}$$

EP is 62.5 mm to the right of Lens 1