

## W6IMTWOROS

### Imaging: Two round apertures and a round lens, (R' is X)

$$Y := -.1, -.099 \dots .6$$

$$\text{Tol} := .1$$

$$f/10 = f/2a$$

$$b1 \equiv -.002$$

$$b2 \equiv .002$$

$$\lambda := .0005$$

$$f := 500.5$$

$$b3 \equiv .012$$

$$b4 \equiv .016$$

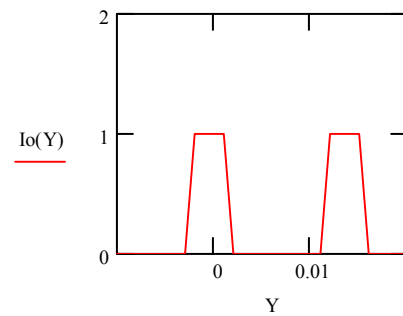
$$k := \frac{2 \cdot \pi}{\lambda}$$

Object

$$Io1(Y) := (\Phi(b2 - Y) - \Phi(b1 - Y)) \quad Io2(Y) := (\Phi(b4 - Y) - \Phi(b3 - Y))$$

$$Io(Y) := Io1(Y) + Io2(Y)$$

Image



$$Iim(Y) := \int_{b1}^{b2} 4 \cdot a^2 \cdot \left[ \frac{J1\left[\frac{k \cdot a \cdot (Y - YY)}{f}\right]}{k \cdot a \cdot \frac{(Y - YY)}{f}} \right]^2 dYY + \int_{b3}^{b4} 4 \cdot a^2 \cdot \left[ \frac{J1\left[\frac{k \cdot a \cdot (Y - YY)}{f}\right]}{k \cdot a \cdot \frac{(Y - YY)}{f}} \right]^2 dYY$$

Unnormalized

