

D3FASLITEXS

Study of side maxima and minima of the Slit

Diffraction on a slit of width d and wavelength λ .

X is distace: Slit-Screen,

Y is coordinate on Screen.

For small angles, Y/X is proportional to the diffraction angle.

All length in mm.

$$\lambda \equiv .0005 \quad X := 4000$$

$$Y := 18, 19..150$$

$$d \equiv .08 \quad I(Y) := \frac{\left[\sin \left[\pi \cdot \frac{d}{\lambda} \cdot \left(\frac{Y}{X} \right) \right] \right]^2}{\left[\pi \cdot \frac{d}{\lambda} \cdot \left(\frac{Y}{X} \right) \right]^2}$$

