

D8FARONEXS

Graph of part of the diffraction pattern of a round aperture of radius a and wavelength λ .

The graph is not normalized.

X is distance: Slit-Screen,

R is coordinate on Screen,

All length in mm, parameters are globally defined above the graph.

$R := 3, 3.1.. 10$ $X := 1000$

$\lambda \equiv .010$

$a \equiv 1.5$

$$I(R) := \frac{\left[J_1 \left(2 \cdot \pi \cdot a \cdot \frac{R}{\lambda \cdot X} \right) \right]^2}{\left(2 \cdot \pi \cdot a \cdot \frac{R}{\lambda \cdot X} \right)^2}$$

