

Answer to Question #85824, Physics/Other

For constructive interference

$$d \sin \theta = m\lambda$$

d is the distance between the slit or size of slit=1micrometer

m is the order of spectrum= First order=1

theta is the angle between the path=36 degree

$$\frac{d \sin \theta}{m} = \lambda$$

$$\frac{1 \times \sin 36}{1} = \lambda$$

$$\lambda = 0.58 \text{micrometer}$$

Answer provided by <https://www.AssignmentExpert.com>