

14. We use Eq. 37-12 with $\theta = 2.5^\circ/2 = 1.25^\circ$. Thus,

$$d = \frac{1.22\lambda}{\sin \theta} = \frac{1.22(550 \text{ nm})}{\sin 1.25^\circ} = 31 \mu\text{m} .$$