

PC2232: Physics for Electrical Engineers

Tutorial 2 Answers

1. $\theta = 23.4^\circ$
2. (a) $\theta = 35^\circ$
(b) $I_0 = 10.1 \text{ Wm}^{-2}$
 $I_p = 19.9 \text{ Wm}^{-2}$
3. (a) $\theta = 0, \pm 53.1^\circ$
(b) $\theta = \pm 23.6^\circ$
(c) $t = 0.6d$
4. (b) $I_{\min} = \frac{1}{9} I_0$
 $\phi = (2n - 1)\pi \quad n = 1, 2, 3 \dots$

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In[1]:= Plot[ { 5/9 + 4/9 Cos[phi Degree], 1/9 }, {phi, 0, 360}, AxesLabel -> {phi, Intensity}]
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