

FOTOMETRIA

Príkl. :

$$a) E = I \cdot \cos \alpha / l^2 = 800 \cdot \cos 30^\circ / 4 = 173,2 \text{ lx}$$

$$b) E = \Delta \Phi / \Delta S \Rightarrow \Delta \Phi = E \cdot \Delta S = 1558,8 \text{ lm}$$

$$\Phi_d = E \cdot S$$

~~$$\Phi = 1 \cdot \pi \cdot \cos \alpha = 800 \cdot \pi \cdot \cos 30^\circ = 294 \text{ lm}$$~~

$$c) \Phi_r = \Phi_d \cdot k_r = 1558,8 \cdot 0,85 = 1325 \text{ lm}$$

$$k_r = 0,85 \quad 173,2$$

~~$$d) B = \frac{E}{\pi} = \frac{173,2}{3,14} = 55,13 \text{ nt}$$~~

Správne má byť: $B = \frac{E}{\pi} \cdot k_r = 55,13 \cdot 0,85 = 46,86 \text{ nt}$

$$e) H = E \cdot k_r = \dots = 147,22 \text{ lm/m}^2$$

$$f) I = B \cdot S = 46,86 \cdot 9 = 422,7 \text{ cd}$$