Undulator

$$K = \frac{B_0 e}{m_0 c} \frac{\lambda_u}{2\pi} = 93.36 \, B_0 \lambda_u \quad \text{(} B_0 \text{ in T, } \lambda_u \text{ in m)}$$

$$\lambda = \frac{\lambda_u}{2n\gamma^2} \left(1 + \frac{K^2}{2} + \theta^2 \gamma^2 \right)$$

Example

$B_0 = 750$ G
$\lambda_u = 0.4$ m
$K = 2.8$

$E = 0.5$ GeV => $\gamma = 1000$ => $\lambda = 1 \, \mu m$