FLUKA result – Deposited Energy

Photon energy distribution over distance.
Test with higher energies – 100 keV

\[ \ln\left(\frac{I}{I_0}\right) \ast \lambda = \rho L \Rightarrow \]

For \( I=0 \)

\[ L = \frac{\lambda}{\rho} = \frac{3}{7.87} = 0.4 \text{ cm} \]
FLUKA fluence – $\lambda$ for 100 keV: 0.4 cm

Beam full stops after ~4 mean free path lengths
Test with higher energies – 1 keV

\[ L = \frac{\lambda}{\rho} = 1.42857 \times 10^{-5} \text{ cm} = 0.14 \text{ um} \]
FLUKA fluence – $\lambda$ for 1 keV: $1.42857E-05$ cm

Beam full stops after ~350 mean free path lengths