

Result:

Photon energy = 1.976×10^{-19} J

Solution:

$$E_{\text{photon}} = \frac{hc}{\lambda} = \frac{(6.626 \times 10^{-34} \text{ J s})(2.9979 \times 10^8 \text{ m/s})}{1.005 \times 10^{-6} \text{ m}} = \frac{1.986 \times 10^{-25} \text{ J m}}{1.005 \times 10^{-6} \text{ m}} = 1.976 \times 10^{-19} \text{ J}$$