

Result: Frequency = 7.0×10^{18} Hz

Solution

One angstrom equals 10^{-10} m, so $0.43 \text{ \AA} = 0.43 \times 10^{-10}$ m.

$$c = \lambda \times \nu, \text{ so } \nu = \frac{c}{\lambda} = \frac{2.9979 \times 10^8 \text{ m/s}}{0.43 \times 10^{-10} \text{ m}} = 7.0 \times 10^{18} \text{ s}^{-1} = 7.0 \times 10^{18} \text{ Hz}$$