

- 29** A beacon of power 10 W emits green light of frequency 6.20×10^{14} Hz uniformly in all directions. An observer has a telescope with an aperture of area 2.00×10^{-3} m². His eye-brain system perceives a flash of light when 50 or more photons are incident on a small area of his retina in less than 0.10 s.

What is the approximate maximum range at which the beacon might be detected by the observer using the telescope?

- A** 2.78×10^6 m **B** 4.82×10^6 m
C 5.56×10^6 m **D** 2.85×10^4 m

