

- 18** A space station orbits at a height of 335 km above the surface of the Earth. It carries two panels separated by a distance of 25 m. The panels reflect light of wavelength 500 nm towards an observer on the Earth's surface.

The observer views the panels with a telescope that has an aperture diameter of 200 mm. Assume that the panels act as point sources of light for the observer.

Which of the following is correct?

	Will the two images seen by the observer be resolved?	Angular separation of two panels as measured from aperture / rad
A	Yes	2.5×10^{-6}
B	Yes	7.5×10^{-5}
C	No	2.5×10^{-6}
D	No	7.5×10^{-5}