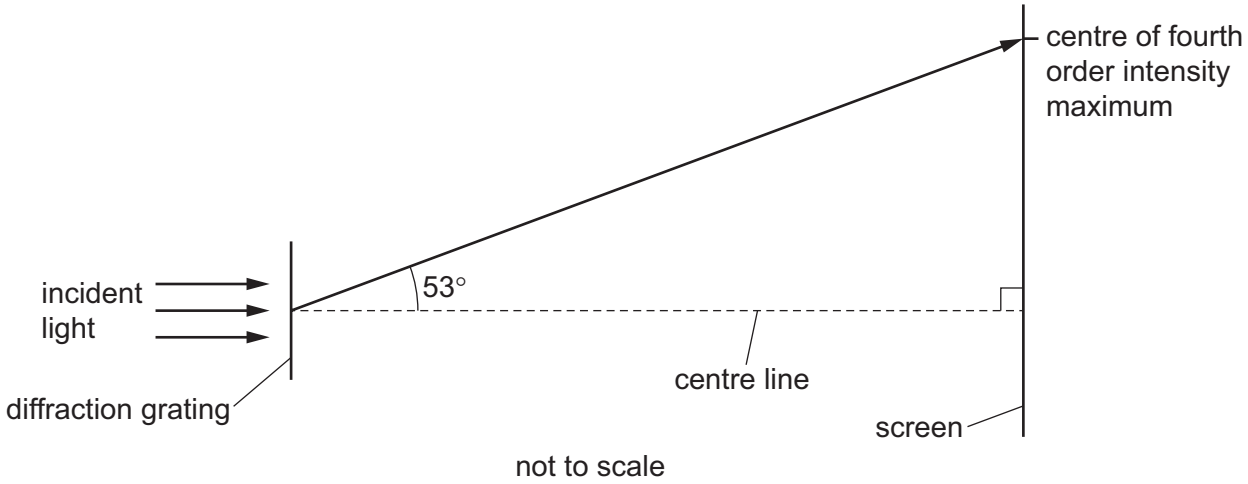
30 The diagram shows visible light incident normally on a diffraction grating.



A pattern of intensity maxima forms on the screen. A line connecting the centre of the fourth order intensity maximum with the centre of the diffraction grating forms an angle of 53° with the centre line. The grating has a line spacing of 2.7×10^{-6} m.

What is the wavelength of the incident light?

A 4.1×10^{-7} m **B** 5.4×10^{-7} m **C** 1.6×10^{-6} m **D** 2.2×10^{-6} m