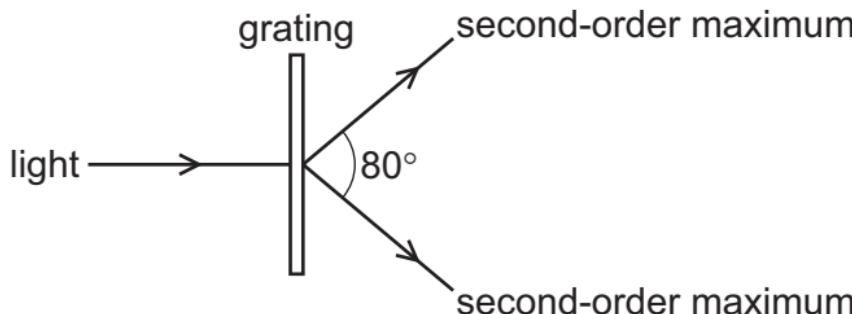


30 Light of wavelength 5.5×10^{-7} m is incident normally on a diffraction grating.



The angle between the second-order diffraction maxima is 80° , as shown.

What is the number of lines per metre of the diffraction grating?

- A 5.8×10^5 lines per metre
- B 9.0×10^5 lines per metre
- C 1.2×10^6 lines per metre
- D 2.3×10^6 lines per metre