

Physics Workshop

Wavelength of Light

1. Connect the plugtop supply to the RayZer Lightbox.
2. Play with the lenses, mirrors and prisms.
3. Use the diffraction grating (100 l/mm) and project a fringe pattern onto a paper screen placed at the end of the baseboard.
4. Calculate the wavelength using $\lambda = dD/L$ where d =slit separation, D =fringe separation, L = distance of screen to grating.
5. Repeat with different slit separation.

Apparatus Supplied

RayZer Lightbox + plugtop supply

Lens, Prism & Mirror set

Diffraction grating

Metre Stick (S)

Large white metal screen