

CALIBRATION OF SPECTROMETER BY MERCURY VAPOUR LAMP

OMEGA TYPE ES-344



OMEGA TYPE ES-344 Experimental Set Up has been designed specifically to calibrate the spectrometer by Mercury Vapour Lamp and hence to find the wavelength of a given monochromatic source of sodium light. The set-up consists of Spectrometer, Prism, Mercury vapour lamp, Sodium light source, Reading lens, Spirit Level etc.

The set up is complete in all respect and requires no other apparatus.

Practical experience on this set up carries great educative value for Science and Engineering Students.

OBJECT

01 To calibrate the spectrometer by Mercury Vapour Lamp and hence to find the wavelength of a given monochromatic source of Light (Sodium Light).

FEATURES

The complete Experimental Set-up consists of the following:-

01 SPECTROMETER STANDARD :-

6" dia circle reading 30 seconds. The objectives used in telescope and collimator are achromatic and provided with rack and pinion focusing arrangement. Telescope arm and prism table are provided with fine and coarse adjustment. The prism table is provided with three leveling screws and is engraved with concentric rings & lines. The scales and verniers are of stainless steel and are machine divided. Clamping devices are also provided to lock telescope and collimator after adjustment, with prism clamping device and diffraction grating stand.

- 02 MERCURY LIGHT SOURCE: Complete with Mercury Vapour lamp 80W along with choke & wooden box with holes with slide covers one each on three sides.
- 03 SODIUM LIGHT SOURCE: Sodium light source complete with sodium lamp 35 watts with vacuum jacket, Transformer & Wooden Box having four holes with slide covers, one each on every side at different heights.
- 04 PRISM: Borosilicate Crown Glass Optically worked with two faces Polished, equilateral size 38mm x 38mm.
- 05 READING LENS: 40/50mm diameter with handle.
- 06 SPIRITLEVEL: 60/80mm length.
- 07 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS