



## LUMETRON GP-400 Gonio Photometer



**LUMETRON GP-400 Gonio Photometer system** is a precision photometric equipment for R & D laboratories and manufacturers to evaluate the luminous flux and intensity distribution of light sources, head lamp assemblies of automobile vehicles, reflector lens and tail light assemblies as well as narrow beam flood light fittings. The gonio photometer uses the principle of turning the light source in two planes in selected angular steps and the luminous light intensity is measured at a known fixed distance using a photometer (lux meter). The test is carried out in a reflection free dark room usually painted with matt, non-reflective paint. The formula for conversion of values in units of illuminance 'LUX' into luminous intensity 'CANDELA' is by the Cosine law as :

$I = E d^2$  where 'I' is the luminous intensity in Candela, 'E' is the illuminance at the photocell in Lux and 'd' is the photometric distance in meters. The mechanical system consists of a stable welded steel base with castors, support legs and levelling jacks. The test sample can be mounted on the mounting bracket and precisely aligned for the light source center (hot spot).

### Features

- \* For evaluation of luminous flux and intensity distribution of light sources, luminaires, lamp assemblies.
- \* Useful for Photometric Research Laboratories and manufacturers of lamps, luminaires, fittings.
- \* The equipment 'Turns the light source in two planes in selected angular steps' and the luminous intensity at a known distance is measured.
- \* High precision mechanical system supported by a rugged stable base.
- \* Accepts luminaires up to 20 kgs. in weight.
- \* Heavy duty castors and support legs with leveling jacks.
- \* Articulation : 360° around Horizontal & Vertical Axis
- \* Resolution : 0.1° in both axes
- \* Adjustments : 6 levels of linear & angular adjustments facilitate easy positioning & mounting of samples.

### Options

- \* Digital Readout System for Two Axes
- \* Motorized Drive for Two Axes
- \* HeNe Laser Alignment System **LUMETRON HNL-2**
- \* Precision Digital Lux Meter **LUMETRON PM-3**, color and cosine corrected, with data hold.
- \* Electrical Test Panel **LUMETRON EP-4 Series** (Digital)

