

940 LED-1200 Model Goniometers



Our 940 LED-1200 Goniometers are optimized to provide precise measurement of angle dependent spatial radiation properties of large LED luminaires, lamps and modules, with models optimized for measuring different samples sizes. The 940 LED-1200 measures samples up to 1250 mm in diameter and 30 kg in weight, and comply with CIE, DIN and IES standards.

All Goniometer products from Gamma Scientific are accompanied by ISO17025 accredited calibration (NVLAP lab code 200823-0) for accuracy and certainty.

Complete Goniometric Measurement Systems In Sizes and Configurations to Fit Your Needs

- Rapid, precise characterization of of spatial light distribution
- Accurate measurement of LED luminaires, lamps and modules
- Models optimized for specific sample sizes
- Work seamlessly with our spectroradiometers or photometers to measure luminous flux, color coordinates or CRI
- Conform with CIE, DIN and IES standards

Our wide range of Goniometric light measurement solutions are complemented by ISO/IEC 17025 accreditation by NVLAP (NVLAP lab code 200823-0), resulting in unmatched performance and custom configuration as required.

Parameter	Value
Goniometer Type	Moving luminaire goniometer
Driver	Stepper motor
Angular Range C (horizontal) Axis	$\pm 160^\circ$ with end switches
Angular Range Gamma (vertical) Axis	$\pm 160^\circ$ with end switches
Resolution of Angle encoder	0.01°
Reproducibility of C-Axis	$\leq 0.1^\circ$ at maximum sample load
Reproducibility of Gamma-Axis	$\leq 0.05^\circ$ at maximum sample load
Angular Speed of C-Axis	16 speeds (minimum) selectable to maximum 25° / second
Angular Speed of Gamma-Axis	16 speeds (minimum) selectable to maximum 14° / second
Travel Range Z-Axis	311 mm
Alignment Laser	Mounted in the center of rotation of the Gamma axis, 1 mW, Class 2 laser
Equipment Setup	Stable base with integrated controller
Height	1118 mm
Width	940 mm
Depth	940 mm
Weight	50 kg
Optical Axis Height	965 mm
Interface	USB for connection to PC
Power Supply	115 / 230 VAC 50/60 Hz
Power Rating	120 W max
Environmental	0 to 35° C Relative Humidity 0 to 90% non-condensing

Sample Table	
Mounting Plate	350 mm diameter
Maximum Sample Size	1250 mm diameter
Maximum Sample Mass	30 kg

Specifications are subject to change without notice.

Detector Package Options

Photodetector with Amplifier

- Ultra-fast measurements for total distributions in as little as 10 minutes
- Excellent photometric compensation with a filter value error of < 3%
- Low-cost option for companies on a budget
- Allows user to monitor the burning-in period of luminaires through data logging option

Spectroradiometer with Collector

- Measure CIE x,y, CRI and CCT
- Excellent for qualifying R&D prototypes for color shift by angle
- Produces IES files directly from raw scan data
- Effective exclusion of stray light using baffle tube or field-of-view stops
- Can evaluate sources with UV and IR components