

# 940 LED Series Goniophotometers

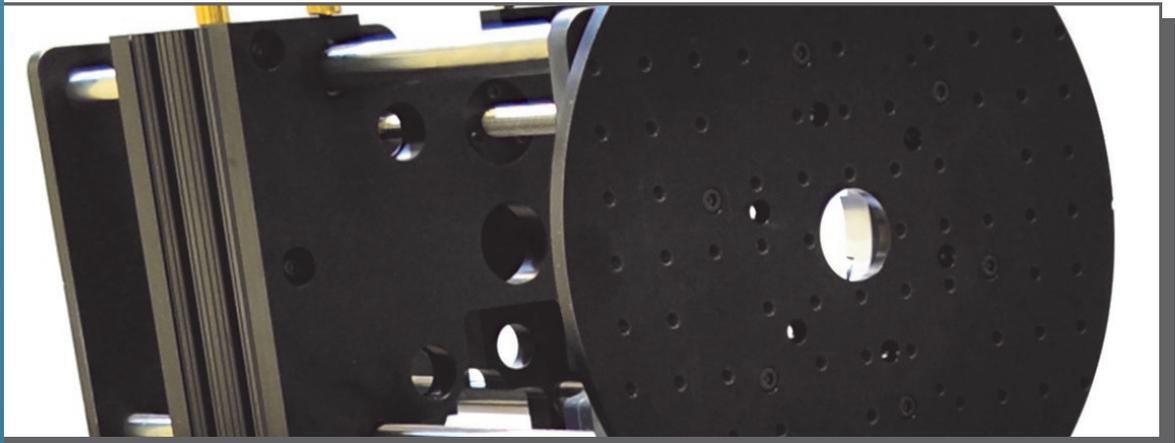


***GAMMA SCIENTIFIC***  
*Light Measurement Solutions*



# **GAMMA SCIENTIFIC** *Light Measurement Solutions*

## **940 LED Series Goniophotometers**



**About Gamma Scientific**  
Since 1961 Gamma Scientific has produced LED, display and light measurement test solutions for production and R&D environments. Gamma Scientific instruments are trusted by leading global organizations that require high-speed, precision measurements and custom configurations for the most challenging environments. Gamma Scientific also operates a NVLAP accredited laboratory that performs ENERGY STAR® lighting certification and is ISO 17025 compliant. NVLAP Lab Code 200823-0

To view the complete line of test and measurement solutions from Gamma Scientific, visit [www.Gamma-Sci.com](http://www.Gamma-Sci.com).

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### **LED Measurements You Can Trust**

Gamma Scientific's 940 LED-1200 and 940 LED-1850 Goniophotometers are designed to analyze angle dependent spatial radiation properties of LED luminaires, lamps and modules.

With an angular resolution of 0.01° the goniophotometers capture highly accurate and repeatable LED measurements.

The 940 LED-1200 and LED-1850 are in conformity with CIE, DIN and IES standards.

Instrument calibration is performed at Gamma Scientific's accredited laboratory using NIST traceable standards.

### **RadOMA Spectroradiometers**

The Goniophotometers utilize Gamma Scientific's high-speed RadOMA spectroradiometers to capture complete spectral measurements as a function of angle. [RadOMA spectroradiometers](#) feature millisecond measurement speed, exceptional low-light measurement capability and superior blue-light region sensitivity.

### **Features**

- **Type C Goniophotometer with horizontal optical axis**
- **940 LED-1200: measures samples up to 1250 mm in diameter and 50 kg**
- **940 LED-1850: measures samples up to 1850 mm in diameter and 50 kg**
- **Angular analysis of spectral and colorimetric quantities**
- **Measures luminous intensity distribution and luminous flux**
- **Exceptional accuracy via high-resolution bandwidth coverage**
- **Superior wavelength and color accuracy**
- **Near-real-time measurement**
- **NIST-traceable calibration**





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## **Goniophotometer System Specifications**

	Model 940 LED-1200	Model 940 LED-1850
Equipment Setup	Stable base with integrated controller	
Height	1118 mm	1448 mm
Width	940 mm	940 mm
Depth	940 mm	940 mm
Weight	approx. 50 kg	approx. 52 kg
Height of Optical Axis	965 mm	1295 mm
Interface	USB for connecting to a PC	
Power Supply	115 VAC or 230 VAC (50-60 Hz)	115 VAC or 230 VAC (50-60 Hz)
Power Rating	120 W max	120 W max
<b>Goniometer</b>		
CIE Goniometer Type	Type C with horizontal optical axis	
Driver	Stepper motors	
Angular Range C (horizontal) axis	± 160° with end switches	
Angular Range Gamma (vertical) axis	± 160° with end switches	
Resolution of Angle Encoder	0.01°	
Reproducibility C Axis	≤0.1° (at max sample load)	
Reproducibility Gamma Axis	≤0.05° (at max sample load)	
Angular Speed C Axis	16 speeds (minimum) selectable to maximum 25°/s	
Angular Speed Gamma Axis	16 speeds (minimum) selectable to maximum 14°/s	
Travel Range Z Axis	311 mm	
Alignment Laser	Integrated in the center of rotation of the y axis, 1 mW, laser class 2	
<b>Sample Table</b>		
Mounting Plate	350 mm diameter	350 mm diameter
Maximum Sample Size	1250 mm diameter	1850 mm diameter
Maximum Sample Mass	up to 50 kg	up to 50 kg

