GS-1220-FLUX-20 LED Measurement System

The LED / Luminaire Total Flux Measurement System combines our legacy RadOMA GS-1220 spectroradiometer platform and a 3-port, 0.5-meter diameter integrating sphere. The system includes our Light Touch LED software, Light Touch Controller and a 2m flexible fiber optic coupler. Optimized for quality control and high speed LED testing applications, optical integration times range from 2 µsec to 3 seconds. A wide variety of test sockets for specific LED types are also available.

Precision-matched Measurement Solutions

Total Flux Measurement Systems for Precise LED Characterization

- NIST-traceable System Calibration for Accurate, Reproducible Results
- High Speed LED Testing With Integration Time from 2 µsec to 3 seconds
- Exceptional Dynamic Measurement Capability for High and Low Light Intensities
- Temperature Controlled Sensors for Superior Repeatability
- Windows® based Control / Analysis Software Integration with Excel® Integration
- Control Software Suite for Data Acquisition & Report Generation
- Available On-site Installation and Training

In addition to our exceptional technical and functional capabilities, Gamma Scientific is ISO/IEC 17025 accredited by NVLAP (NAVLAP lab code 200823-0).

GS-1220-FLUX-20 LED Measurement System

GS-1220 RadOMA Spectroradiometer Specifications	
Wavelength Range	360 nm to 900 nm (UV or IR extended ranges available)
Data Point Interval	0.32nm
Spectral Bandwidth	User selectable from 1 nm to 10 nm – factory set at 2.5 nm
Wavelength Repeatability	0.02 nm
Wavelength Accuracy	± 0.1 nm
Luminous Intensity Accuracy	± 0.1%
Luminous Flux Accuracy	± 0.1%
Chromaticity (CIE1931 x,y)	x, y ± 0.0015
Dominant Wavelength	± 0.5 nm
Luminous Intensity (10:1 signal-to-noise)	0.02 mcd to 15 kcd
Luminous Flux (12" sphere, 10:1 signal-to-noise)	1 mlm to 240 klm
Illuminance Sensitivity (10:1 signal-to-noise)	0.02 mlux to 15klux
Measuring Time (range)	2 µsec to 2.67 sec
Measuring Time at 1 mcd	40 msec
Stray Light	< 1 x 10-4 (assuming 8 x the HPBW from a HeNe laser)
Spectral Sensor	High resolution 2048 pixel CCD
Temperature Stabilized Sensor	5° C below ambient
Electrical Resolution	16 bit
Dynamic Range (single scan)	6,670:1
Computer Interface	USB 2.0
Control Software	LightTouch™ LED software for Windows®

MODEL GS-IS20 Integrating Sphere Specifications	
Diameter	0.5 meter (20-in) (diameters are available from 1-inch to 120-inches)
Internal Coating	Barium Sulfate PTFE is available on some optional sphere sizes
Internal Baffles	2
Number of Ports	3 Others are available as custom options
Port Locations	0° (detector), 90° (2pi), 180° (auxiliary lamp)
Operating Temperature	0 to 85° C
Humidity	< 90% (non-condensing)
Mounting	Benchtop

Optional Accessories	
LED Test Sockets	G4, E26, E39, T8/T52P
Integrating Spheres	From 25mm (1-in) to 3 m (120-in) with multiple Port options
Goniometer Mounts	Enable capture spectral measurements as a function of angle Angular resolution of 0.01° with conformity to CIE, DIN and IES standards

Specifications are subject to change without notice

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