



PLM Series Photopic Lamp Measurement Systems

FEATURES

- Measure luminous flux with a standard deviation down to 0.001 lumens
- Measure flux over 6 decades at specified ranges from 0.010 lm to 10,000 lm
- Sphere sizes from 6 inches to 75 inches (30 cm to 190 cm)
- Optowhite diffuse reflectance coating
- Operating software included
- User calibration procedure built into software
- Calibrated lamp standard included
- Calibration traceable to national laboratories
- Large selection of lamp sockets and holders available for auto, bi-pin and LED lamps types
- Easily upgradeable to a spectral flux system

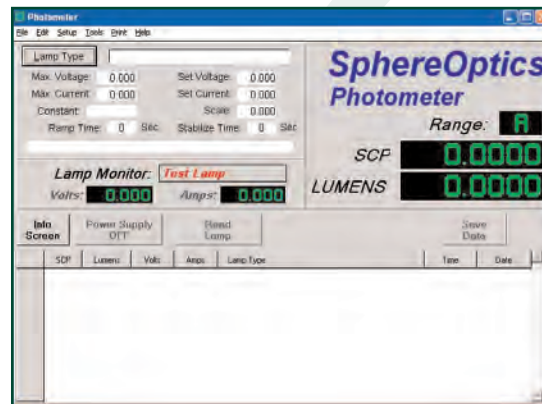
APPLICATIONS

- Measure, test, and evaluate:
 - automotive lamps
 - arc lamp systems
 - fluorescent lamps
 - incandescent lamps
 - HID lamps
 - Light Emitting Diodes
 - Backlights
 - LCD Panels
 - Displays
 - Projector Sources

Our PLM Photopic Lamp Measurement Systems are designed for measuring the total luminous flux of a variety of lamps, including incandescent, fluorescent, ARC, and light emitting diodes (LEDs). The systems are available in sphere sizes ranging from 6 to 75 inches in diameter (15 cm to 190 cm). Our 12 to 75 inch sphere interiors are coated with our high reflectance, diffuse white coating, Optowhite which provides exceptional performance for lamp flux measurement. Our 6 inch diameter sphere features a Zenith polymer liner that offers improved reflectance, UV and thermal performance when measuring low power and directional sources. Precision DC regulated lamp power supplies are operated by the system software, and power is routed through a system control module that allows for easy control of the test and auxiliary lamps in the sphere. A number of lamp sockets and holders are available to accommodate many lamp sizes and types.

System Software

The PLM Series Lamp Measurement Systems are computer controlled, allowing for measurement of luminous output of lamps under user defined operating conditions. System software, included with each Photopic Lamp Measurement System, operates in Windows XP environment. The software allows users to measure luminous flux at specified current or voltage settings. Units of measure are reported in either Mean Spherical Candle Power or Lumens. Measurement data can be saved and stored, then downloaded to your database programs for additional analysis and reporting.



Robust system software guides you through measurement routines with ease.

SOFTWARE FEATURES

- convenient, menu driven operation
- display measured data in real-time
- display current and voltage settings on screen
- control system power supply
- display lamp, lamp standard and auxiliary lamp parameters
- easily edit lamp parameters, measurement ranges and calibration information
- print function automatically generates lamp data and test reports
- select or edit lamp type from pre-defined lamp databases
- export data easily for further QC and statistical analysis

PRODUCT SELECTION CHART AND SPECIFICATIONS

Order Number	PLM-6	PLM-12	PLM-20	PLM-40	PLM-60	PLM-75
Spectral Range (nm):	380 - 780	380 - 780	380 - 780	380 - 780	380 - 780	380 - 780
Detector Range (lumens):	0.001 - 1,000	0.005 - 5,000	0.01 - 10,000	0.05 - 50,000	0.1 - 100,000	0.5 - 500,000
Sphere Coating:	Zenith	Optowhite	Optowhite	Optowhite	Optowhite	Optowhite
Sphere Damage Thresholds:						
Halogen - Lumens (Watts):	3,000 (150)	4,500 (225)	12,500 (625)	50,000 (2.5K)	115,000 (5.7k)	200,000 (10k)
HID no UV - Lumens (Watts):	10,000 (200)	9,000 (180)	25,000 (500)	100,000 (2.0k)	225,000 (4.5k)	360,000 (7.2k)
Max. UV Irradiance at 350°:	<4.0 W/cm2	<0.1 W/cm2	<0.1 W/cm2	<0.1 W/cm2	<0.1 W/cm2	<0.1 W/cm2
Max. Sphere Temperature:	100 C	80 C	80 C	80 C	80 C	80 C
Sphere Diameter:						
Inches (cm):	6 (15)	12 (30)	20 (50)	40 (101)	60 (153)	75 (190)
Detector Port - standard:	N/A	1.0"	1.0"	1.0"	1.0"	1.0"
Detector Port - SMA:	1.5 "	1.0 "	1.0 "	1.0"	1.0"	1.0"
External Lamp Port:	1.5"	4.0"	6.0"	6.0"	6.0"	6.0"
Auxiliary Lamp (installed):	5 W	20 W	20 W	100 W	100 W	100 W
Lamp Mount (style):	External socket	Bi-Pin	Bi-Pin	Bi-Pin	Bi-Pin	Bi-Pin
Maximum Lamp Length:						
Inches (cm):	3 (7.5)	10 (25)	18 (46)	38 (96)	58 (147)	70 (178)
Maximum Assembly Size:						
Inches:	1.4x2	3x3x3	6x6x6	10x10x10	15x15x15	20x20x20
Calibrated Lamp Standard:						
Power (Watts):	~5	20	20	100	100	100
Flux (Lumens):	~60	350	350	1500	1500	1500
Power Supply:	Included	Included	Included	Included	Included	Included
LM Controller Module:	Included	Included	Included	Included	Included	Included
USB-IEEE Converter:	Included	Included	Included	Included	Included	Included
Operating Software:	Included	Included	Included	Included	Included	Included

LAMP STANDARDS AND CALIBRATIONS

A calibrated spectral flux lamp standard is provided with each lamp measurement system. System software features a calibration routine to allow the user to re-calibrate the system as desired. System calibration and standards are traceable to national laboratories such as NIST, PTB and BAM.

CUSTOMIZED SYSTEM DESIGN CAPABILITIES

Our engineers and designers have carefully designed our lamp measurement systems to meet the requirements of most lamp measurement applications, however if our standard systems do not meet your exact needs we will work with you to design a system to your specifications. Please refer to our custom lamp measurement system worksheet, or contact us for assistance in developing a cost-effective customized system to meet your needs.



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