LABSPHERE LABSPHERE LABSPHERE

LIGHT MEASUREMENT

Build *YOUR* system
Meet *YOUR* needs

System flexibility to meet your most demanding requirements and grow with your business

Product testing with the highest absolute accuracy, repeatability, and NIST-traceability

Stay ahead of global testing needs while maximizing throughput and productivity

Global support from the trusted and reliable industry leader

Mobile software platform that can be accessed from anywhere, in any language

labsphere®
illumia® plus
Modular Test & Measurement Systems

DELIVERING SOLUTIONS

You Spoke. We Listened.

System flexibility meets your most demanding requirements and grows with your business

A wide range of spectrometer options combined with integrating sphere choices ranging from 25 cm to 3 m

Add-on electronic modules increase functionality and simplify compliance with IESNA LM-79, IESNA LM-82 and equivalent measurement guidelines

Automated calibration routines ensure ease-of-use and improved efficiency

Automated IESNA LM-79 stabilization routine

Improved integrating sphere design allowing lamp "hot swap" to achieve greater efficiency and shorter measurement time

Generate reports using Excel templates: data where you want it, how you want it, formatted for language and style

Integral® LM software drives it all

HTML5-enabled web browser based Integral® Software allows operation from any device, any platform, any location and in any language

Instantly switch between English, Mandarin Chinese, Japanese, Korean, German, Italian and French

Large assortment of test hardware configurations are supported (spectrometer, AC and DC power supplies, temperature controls and monitors)

Powerful, easy-to-use Application Programming Interface (API) supports LabVIEW, .NET, C, and VBA

One user can control many test stations and multiple users can access the same test station from anywhere

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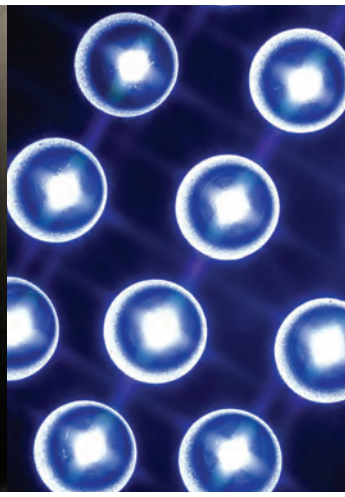
Add-on electronic modules provide additional functionality to simplify compliance with global testing standards





Ambient Temperature Control Module

features feedback control of device temperature to simplify testing per IESNA LM-82

Complete thermal, electrical and optical characterization of a variety of LED lamps and light engines

Ambient temperature achievable between 15° C - 53° C

Multiple temperature sensors and monitors in accordance to IESNA LM-82 guidelines

Easily adaptable to most of Labsphere 1.5 m, 2 m, and 3 m integrating spheres

Software controlled feedback system for temperature controls

Test reports based on IESNA LM-82 guidelines

AC Module

measure the luminous efficacy of your lighting products per IESNA LM-79 guidelines

Measure the luminous efficacy (Lumens/Watt) and evaluate key electrical parameters such as current, voltage, frequency, total harmonic distortion (THD), power factor (PF), K-factor etc.

Generate a comprehensive report with optical and electrical lamp parameters

Control AC power to the lamp via Integral® Light Measurement Software and characterize performance at variable electrical inputs

Combines Chroma AC Power Supply and Xitron Power Meter for integrated electrical testing per IESNA LM-79

Find the illumia®plus system that best fits your application

	illumia®plus 600/610	illumia®plus 2600	illumia®plus 3020/3030
MEASURE	Packaged LEDs	Packaged LEDs	Packaged LEDs
	Clustered LEDs	Clustered LEDs	Clustered LEDs
	Miniature Lamps	Miniature Lamps	Miniature Lamps
	Entertainment Lighting	Entertainment Lighting	Entertainment Lighting
	Automotive Lighting	Automotive Lighting	Automotive Lighting
	LED Troffers	LED Troffers	LED Troffers
	LED Luminaires	LED Luminaires	LED Luminaires
		CFLs	CFLs
		Fluorescent Lamps	Fluorescent Lamps
		OLEDs	OLEDs
		Low Power LEDs	Low Power LEDs
		UV LEDs	HID Lamps
			LED Devices in High Speed Production Environment
FEATURES	Wide spectral range	Fast, low noise; TE cooled back–thinned CCD array detector	Low stray light
	Fast CCD array detector	Shutter for dark measurements in real time	High speed
	Compact size	Hardware triggering capability	Exceptional measurement sensitivity
	Ideal for Quality Control & manufacturing applications	Exceptional stability at long exposure time	Inbuilt filter wheel with ND filters provides excellent dynamic range
	High sensitivity	High dynamic range	Easily synchronized with other devices

Need to Know More? Here it is.

System	illumia®plus 600/610	illumia®plus 2600	illumia®plus 3020/3030
Spectral Flux Measurements:	350 nm - 850 nm (600 systems) 350 nm - 1000 nm (610 systems)	350 nm - 850 nm 350 nm - 1050 nm	350 nm - 830 nm (3020 systems) 350 nm - 1050 nm (3030 systems)
Minimum Measurable Lumens: (typical)	0.04 lumens (Cool white LED source with 50 cm sphere)	0.012 lumens (Cool white LED source with 50 cm sphere)	0.007 lumens (Cool white LED source with 50 cm sphere)
Maximum Measurable Lumens: (typical)	~46K lumens (Cool white LED source with 195 cm sphere)	~159K lumens (Cool white LED source with 195 cm sphere)	~317K lumens (Cool white LED source with 195 cm sphere)
Exposure Time Range: (Actual exposure time depends on sphere size and source type)	1 ms - 5^3 s	8 ms – 4 min	5 ms - 20 sec
Software			
Integral® LM:	Included	Included	Included
Standards			
LM-79:	Included	Included	Included
LM-82:	Module Available	Module Available	Module Available

Spectrometer	CDS 600	CDS 610	CDS 2600	CDS 3020	CDS 3030
Detector:	2048 element Linear CCD	2048 element Linear CCD	1044 x 64 CCD (back thinned)	1044 x 128 CCD (back thinned)	1044 x 128 CCD (back thinned)
Spectral Range: (spectrograph)	200 - 850 nm	350 - 1100 nm	300 - 1080 nm	350 - 830 nm	350 - 1100 nm
Shutter:	No	No	Yes	Yes	Yes

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