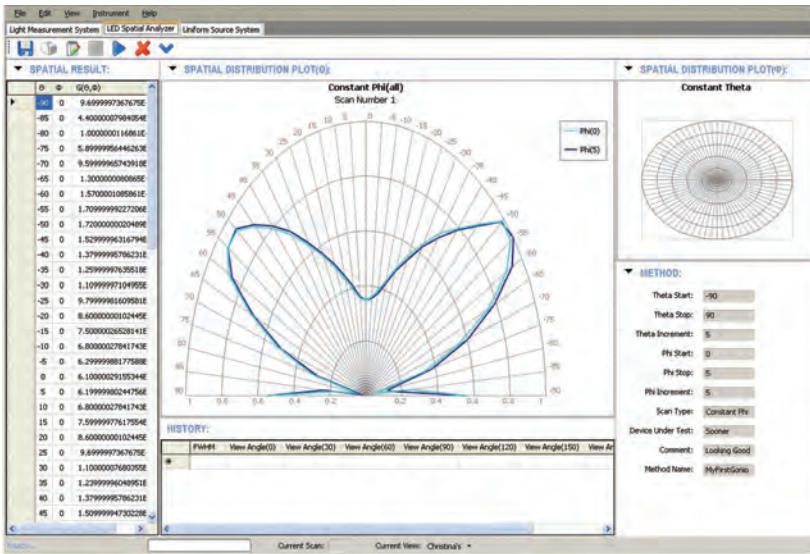


LSA 3000 LED SPATIAL ANALYZER

Performs angle dependent spatial radiation characterization of LEDs



MTRX-LSA SOFTWARE

FLEXIBLE

Choose from a wide variety of Labsphere's LS series LED sockets, or work with Labsphere's team to design a socket that fits your LED specifications. The LSA 3000 has a staging area for the device under testing for Phi and Theta positioning. The Phi stage allows for adaptation of Labsphere's LS series uncooled LED sockets, and LS-TE cooled LED sockets. The sensor active area is sized and located appropriately for the high resolution angular scale. The LSA 3000 accommodates Labsphere's light sensors, including Condition A, and I 2000, and Condition B, I 1000, average spectral intensity heads. The primary use for the graphical user interface is to control the LSA 3000 and capture the spatial distribution of the DUTs. The software is designed so that the application of the LSA 3000 can be expanded for use with sensors other than its integrated receiver. The stages and detector are housed in an easy-access, light-tight enclosure.

RELIABLE

Labsphere's LSA 3000 is an automated goniospectroradiometer that is designed to operate with Labsphere's LightMtrX software and LED test and measurement hardware products. The LightMtrX application software provides complete control of the LSA 3000 device under test (DUT) rotational stages, for spatial radiation measurement routines. The LSA 3000 performs accurate measurements from narrow-angled to broad, distributing LEDs at high angular resolution of 0.1° or greater intervals. The spatial software allows the user to measure relative intensity plot versus angle.

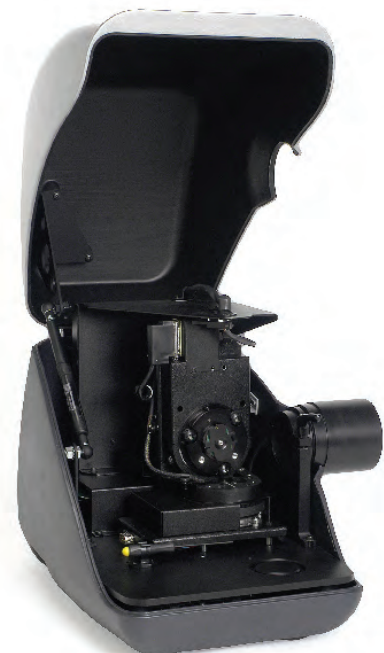
Combined with Labsphere's spectrometers, light measurement software and the I 1000 or I 2000, the LSA 3000 can be used to slew the LED to any desired polar coordinate and measure its spectral radiant intensity, luminous intensity, chromaticity, color, and color rendering properties; while also being able to measure the far field hemispherical spatial distribution.

FEATURES:

- Measurements are accurate and reproducible
- Complete solution for spectral intensity, spectral flux, spatial distribution and color
- Easy to test many different types of LEDs
- Easy interior access
- User selectable angular step intervals
- Measurements conform to internationally accepted standards

KEY APPLICATIONS:

- Far field spatial characterization of LEDs (Standard, and High Brightness)



OPEN LSA 3000 LED SPATIAL ANALYZER

Specifications

Part Name
LSA 3000 LED Spatial Analyzer

Order Number
AS-02707-000

Component Properties and Performance

	LSA 3000
Horizontal Range (theta)	-90° to +90°
Horizontal Resolution	0.1°
Horizontal Rotation Intervals	1, 2, 5, 10 and 15 degree
Horizontal Rotation Limits	Programmable start and stop
Axial Range (phi)	0° to 360°
Axial Resolution	0.1°
Axial Rotation Intervals	1, 5, 10, 15 and 30 degree
Axial Rotation Limits	Programmable start and stop
Scan time Fast (single sweep)	5 seconds
Scan Time Medium (5° intervals full scan)	9 minutes
Scan time Slow (1° intervals full scan)	2 hours
Distance from DUT to detector aperture	3.82 in (9.7 cm)
Detector Aperture Area	0.01mm ²
Dimensions (W x D x H)	13.9 x 18.0 x 10.9 in (35.3 x 45.7 x 35.3 cm)

LightMtrX Software Program

LightMtrX software is a comprehensive light test application package. It includes several modules allowing for data collection and system control of a variety of system configurations and applications. As expansion hardware is added to the core system, applicable modules become activated via a key code provided by Labsphere. Documented key codes also enable Labsphere to easily track customer software releases in the field and allow for easy access to software revisions and upgrades. Purchase of the LightMtrX Service Package will allow LightMtrX users to automatically receive LightMtrX revisions and also be notified when upgrades are available.