

# SP-100

## Multifunctional Spectroradiometer System



### Fully NIST Traceable Spectroradiometer with Internal Target Spot Laser

- Luminance, Radiance
- Illuminance, Irradiance
- x,y and u',v' chromaticity coordinates
- Dominant Wavelength
- CCT and CRI



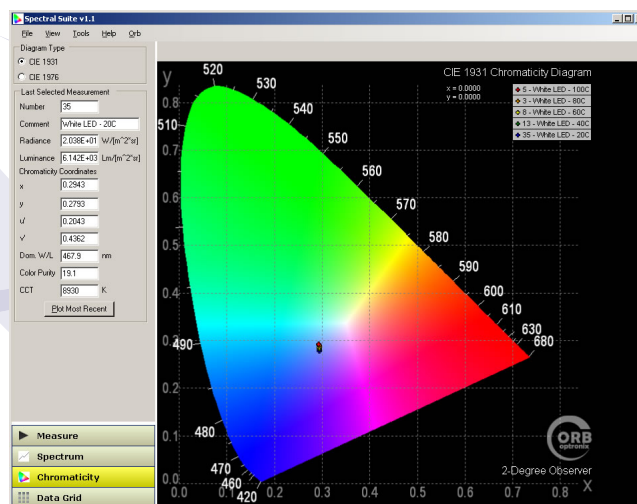
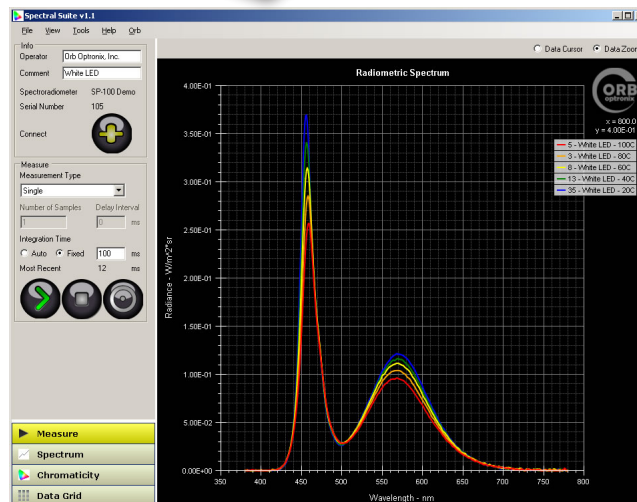
Laser Target Spot

### Applications

- Display Measurement (LCD, PDP, OLED ...)
- Display Calibration
- Backlight Unit Measurement (LED and CCFL)
- Front Projector Measurement
- LED Measurement
- Spectral Transmission & Reflection

The **SP-100 Multifunctional Spectroradiometer** features a versatile “swap-and-go” design that utilizes interchangeable head attachments to allow measurement of spectral radiance, irradiance and flux. The **SP-100** senses which measurement head is attached and automatically switches measurement units and calibration files, making this the most versatile, cost-effective spectroradiometer available.

Its usability is further enhanced by unique features including an internal target spot laser for radiance measurements which projects a circular image onto the device under test. This shows the user the region to be measured and removes the inconvenience of a viewfinder. The **SP-100** also has the capability of simultaneously running up to 16 instruments on a single computer, allowing capture of many test points for high throughput tasks such as quality control in production.



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# SP-100 Multifunctional Spectroradiometer System

## Measurements



Radiance / Luminance



Irradiance / Illuminance

## Specifications

Photodiode Array Resolution:	1024 pixel
Spectral Range:	380 to 780 nm
Optical Bandwidth:	4 nm
Wavelength Binning Resolution:	1 nm
Dynamic Range Resolution:	14 bit
Radiance Full View Angle:	1.8°
Measurement Distance Spot Diameter:	6mm diameter at 20cm 31mm diameter at 100 cm
Measurement Range Luminance:	<1 cd/m <sup>2</sup> to 7 x 10 <sup>4</sup> cd/m <sup>2</sup>
Measurement Range Illuminance:	<20 lx to 5 x 10 <sup>5</sup> lx
Luminance Accuracy:	± 2 %
Luminance Repeatability:	± 1 %
Chromaticity Accuracy (x,y):	± 0.002 x, y
Chromaticity Repeatability (x,y):	± 0.0005 x, y
Wavelength Accuracy:	± 0.5 nm
Dimensions:	5.51 in. x 2.28 in x 1.34 in.
Weight:	0.35 kg
Operating Environment:	10 to 40 °C and < 85 % relative humidity
Interface:	USB 2.0

## Software Capabilities:

Chromaticity Coordinates: x,y & u',v'  
CCT  
Dominant Wavelength  
Color Rendering Index  
Multiple Spectroradiometer Control

## Accessories (Included):

PC Software  
Cosine Correction Measurement Head  
Transportation Case  
USB Cable

