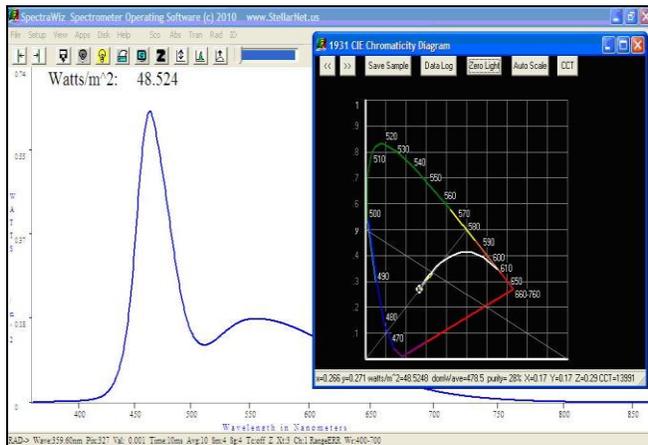
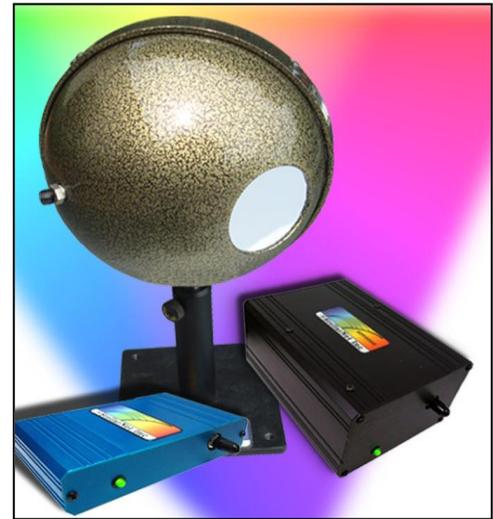


# LED Measurement Systems

## ➤ NIST Calibrated LED Metrology

- Reliably measure LED output in **Lumens** (*Luminous Flux*), **Watts** (*Radiant Flux*), **watts/m<sup>2</sup>**, **microwatts/cm<sup>2</sup>**, **lumens/m<sup>2</sup>**, **moles per second**, **PAR**, **Footcandles**, **mcd**, **CRI** and the new **CQS**
- Real-time 1931 CIE Chromaticity diagram for **xy chromaticity**, **Dominant Wavelength**, **Purity**, and **Correlated Color Temperature (CCT)**
- **NIST Traceable** Irradiance Calibration service. Also, calibration lamps available for customer's calibration using free SpectraWiz software
- Spectrometer configurations available to cover the extended 200-1700nm range



## ➤ Miniature Spectrometer Systems

- Systems include a miniature spectrometer, a fiber optic cable (or direct attachment), a light collecting accessory, and an irradiance calibration.
- Low cost - Ruggedized high performance
- Shock-proof - Permanently aligned
- Simple USB2 interface to Netbook & PC's
- Most system can be calibrated and shipped within 1 week after receipt of order
- 2"-12" Integrating Sphere Options
- Perfect for lab, process, or field applications

| Item   | Description   | Price    |
|--|---|----------|
| <b>SpectroRadiometers with SpectraWiz software for LED and light measurements</b>            |   |          |
| BLUE-Wave-VIS  | Smallest SpectroRadiometer 16bit, USB2 interface, 50um slit, VIS model for 350-1100nm   | \$2900   |
| BLACK-Comet  | SpectroRadiometer 16bit, USB2 interface, choose model "C"200-850nm or "CXR"280-900nm  | \$3150   |
| BLACK-Comet-SR   | "Super Range" SpectroRadiometer 16bit, USB2, choose "C"200-1080nm or "CXR"220-1100nm  | \$3595   |
| DS-InGaAs-512  | SpectroRadiometer for NIR 900-1700nm, connects with VIS range units for extended coverage   | \$14,125 |
| <b>Fiber Optic Accessories</b>   |   |          |
| CR2  | 1/4" Miniature cosine receptor attaches to fiber tip or can be direct attached via SMA-coupler  | \$35     |
| CR2-AP   | Aperture mounts on CR2 for 10x brighter LEDs –equivalent to 10%T corrected by SpectraWiz  | \$180    |
| IC2  | 2" Miniature Integrating Sphere provides accurate LED xy-chromaticity color measurements  | \$550    |
| IS6  | 6" Integrating Sphere with SMA905 fiber optic interface and 2.0" light receptor input port  | \$1865   |
| IS12   | 12" Integrating Sphere with SMA905 fiber optic interface, open to insert LED bulb or arrays, includes internal calibration lamp for lumen flux and post fixture for sample mount. | \$3750   |
| Tripod   | Miniature Tripod for Integrating Light Sphere or CR2 cosine receptor  | \$75     |
| F600-VISNIR  | Fiber optic cable sends signal from light receptor to Spectrometer (add \$30 for UV-SR fiber)   | \$185    |
| <b>NIST-Traceable Irradiance Calibrations (add \$125 for traceable calibration document)</b> |   |          |
| IRRAD-CAL-UV   | UV Irradiance calibration for 200-600nm range in Watts/m <sup>2</sup> /nm   | \$350    |
| IRRAD-CAL  | VIS or NIR Irradiance calibration for 300-1100nm or 900-1700nm range in Watts/m <sup>2</sup> /nm  | \$350    |
| RAD-CAL  | Radiant power calibration (flux) in Watts/nm and Lumen/nm (for LEDs) 300-1100nm   | \$350    |
| RAD-SRCAL  | Radiance calibration in Watts/sr/m <sup>2</sup> /nm can measure Cd/m <sup>2</sup> /nm - requires CR-LENS for CR2  | \$350    |