

SPECTRAL EVOLUTION

LF and SR Series Single Si Array UV-VIS-NIR Spectroradiometers & Spectrometers

Superior performance in a small, easy to integrate package!

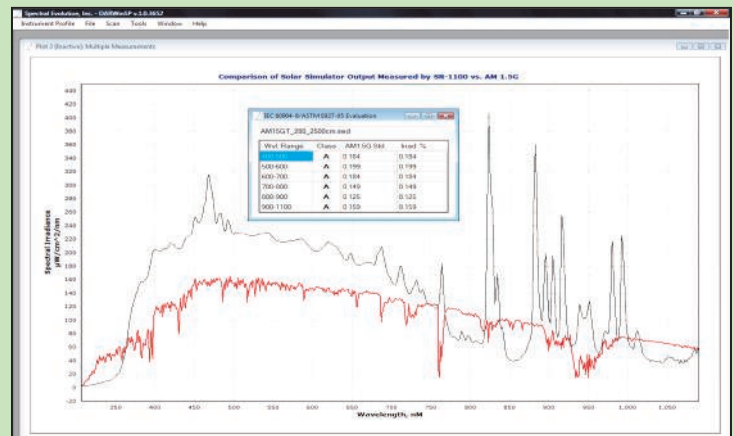


Typical Applications:

- ▶ Solar Simulation
- ▶ LED Measurement
- ▶ Process Control
- ▶ Raw Material Identification
- ▶ Color Measurement

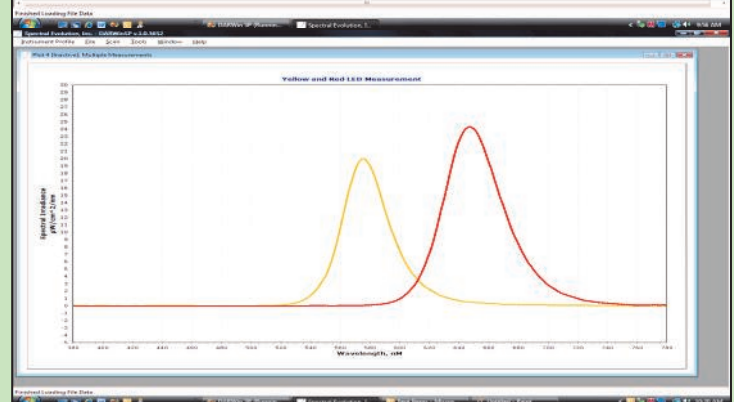
Solar Simulation

Validate the class of any commercially available solar simulator using the SR-1100 Spectroradiometer as per IEC60904-9/ASTM E927-05. The graph was generated using the easy-to-use DARWin SP Data Acquisition and Analysis software included with each LR- and SR-Series Spectroradiometer. The red trace demonstrates the simulated solar graph of AM1.5 Global Tilt as per ASTM specification (E892). The black trace shows the actual measurement of irradiance as detected using the SR-1100 over its full spectroradiographic range (320-1100nm). Built-in software routines automatically provide class status as a function of wavelength (inset).



LED Measurement

Rapid one-touch measurements of light emitting diodes can be obtained using the LF-500 Spectrometer (with optional calibration) and the companion DARWin SP Data & Acquisition Module included with each unit. Here, the LF-500 was used to measure irradiance levels of commercially available red LEDs (red trace) and yellow LEDs (yellow trace) in two separate experiments. Easy pull-down menus in the software allow users to superimpose graphs for convenience.



90 Sutton Street ♦ Unit 4
North Andover, MA 01845 USA
Tel: 978 687-1833 ♦ Fax: 978 945-0372
Email: sales@spectralevolution.com
www.spectralevolution.com

SPECTRAL EVOLUTION

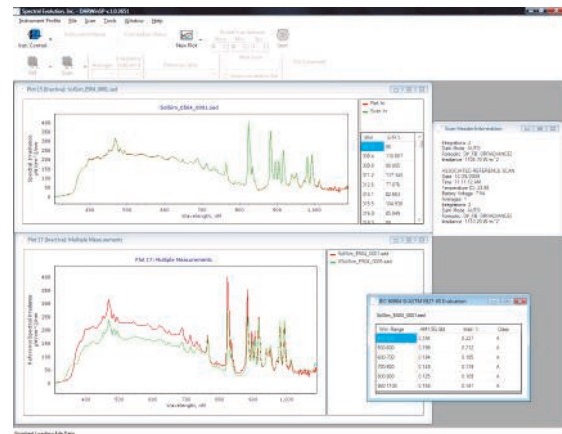
LF and SR Series Single Si Array

UV-VIS-NIR Spectroradiometers & Spectrometers

	SR-1100	LF-500	LF-780
Spectral Range	320-1100nm	320-1100nm	380-780nm
Spectral Resolution	3.2nm	3.2nm	2.0nm
Spectrometer Type	Fiber Optic Input, Diffraction Grating	Fiber Optic Input	Fiber Optic Input
Slit	50µm	50µm	50µm
Detector Type	512 element Si Array	512 element Si Array	512 element Si Array
A/D Converter	16 bit	16 bit	16 bit
λ Reproducibility	0.1nm	0.1nm	0.1nm
λ Accuracy	0.5nm	0.5nm	0.5nm
Integration Time	7.5-2000ms	7.5-2000ms	7.5-2000ms
Calibration	Factory calibrated for irradiance using NIST traceable source	Optional	Optional
Integral shutter	Yes	Yes	Yes
Automatic exposure	Yes	Yes	Yes
Optical trigger signal for pulsed operation	Yes	No	No
Software included	DARWin SP Data Acquisition	DARWin SP Data Acquisition	DARWin SP Data Acquisition
Power	6-12V; 0.5W	6-12V; 0.5W	6-12V; 0.5W
Dimensions	5.5" x 2.5" x 6.5"	4" x 2" x 5"	4" x 2" x 5"
Weight	less than 3 pounds	less than 2 pounds	less than 2 pounds
Interface	USB, Bluetooth	USB	USB

DARWin SP Data Acquisition & Analysis Software

All SPECTRAL EVOLUTION Spectrometers are very simple to use. Each system includes all necessary Windows-based software, quick start guide and instruction manuals. The integral dark shutter, automatic exposure setting, user friendly software console buttons and pull-down menus will have you taking measurements & processing data within seconds! DARWin SP enables the user to collect, save, recall and display acquired spectral scan data. PDA-compatible software for the SR-1100, LF-500 and LF-780 is also available as an option.



90 Sutton Street ♦ Unit 4
 North Andover, MA 01845 USA
 Tel: 978 687-1833 ♦ Fax: 978 945-0372
 Email: sales@spectralevolution.com
www.spectralevolution.com