LED-R™ Series Radiometer

LEDCure™

EFSEN
UV & EB TECHNOLOGY

The LED-R™ Series of Radiometers from EIT comprises a new family of radiometers designed specifically to measure the energy generated by UV LED systems. The optics and instrument response have been engineered specifically for UV LEDs. The first product released in the LED-R Series is the EIT LEDCure™ featuring a L395 response with a near rectangular response from 370-420 nm.

Easy to Use

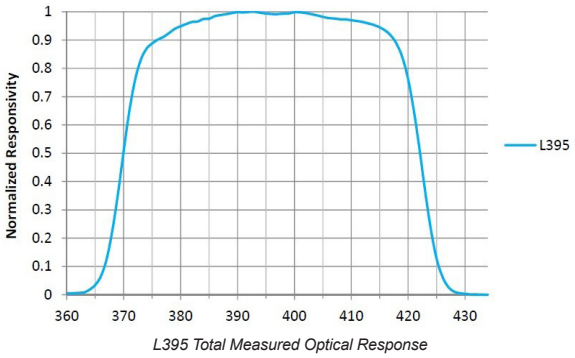
Single Button for On/Off and Run makes it easy to collect and view data.

Non-profiling or Profiling instruments

The Irradiance (W/cm2), Energy Density (J/cm2) and Irradiance Profile (Watts/cm2 as a function of time) are available on the Display. The LEDCure come also as a Profiling Radiometer where the Irradiance Profile can be transferred to a computer for further analysis and evaluation with EIT's PowerView® II software.

Total Measured Optical Response

The L395 has a rectangular Total Measured Optical Response of 370-420 nm. The response accounts for variations (± 5 nm) in the Center Wavelength (CWL) in LED sources and for the distribution of energy output based on how the diodes are selected (binned). All optical components in the instrument optical path are included in the response; not just the filter. Users receive repeatable accurate readings run to run, unit to unit and source to source with this new patent pending approach.



L395 Total Measured Optical Response

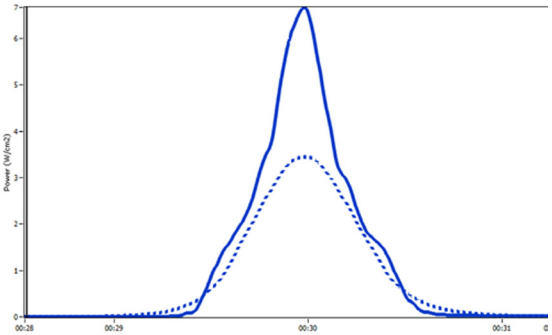
Setup Mode

Provides user selectable instrument default modes for data analysis and comparison, screen, and operational settings.

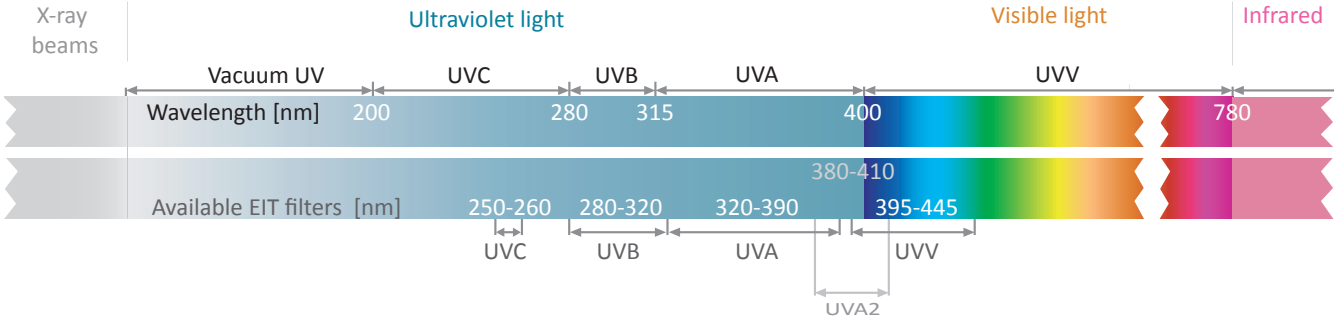
Display Mode

A graph illustrating the collected UV irradiance and energy is displayed on the instrument.

Profiler mode



The LEDCure is easy to use on the production line with the irradiance (W/cm2), energy density (J/cm2) and irradiance profile information available on the display. EIT's PowerView II software allows comparison of different sources, cure conditions or readings over time. The irradiance profiles above show the impact of changing the LED height.



Efsen Engineering A/S
Skelstedet 6
DK-2950 Vedbæk
Denmark
P: +45 4565 0260
F: +45 4565 0261
efsen@efsen.dk
www.efsen.dk

Unit of Measure
The unit of measure is user selectable to provide ease of reading for operators. Display the data as you want to see it. Selections are: mJ/cm^2, mW/cm^2, J/cm^2, W/cm^2, µJ/cm^2, µW/cm^2

Colorful, Easy to Read Display
Select low, medium, or high intensity for the graphical display brightness.

Communications Port
USB Port
Download collected data to a computer for statistical analysis and data logging. Software provided by EIT.

Specifications

L395 Spectral Response	370-420 nm (FWHM, 50 nm; Tolerance ± 2 nm); Out of Band, 4 OD Blocking
L395 Dynamic Range	40 W/cm2
Operating Range	400 mW/cm2 to 40 W/cm2 Note: Operating Range provides best performance. Units will "turn on" and display data at much lower irradiance values
Spatial Response	Approximately cosine
Accuracy	±10% of reading plus ±0.2% of full scale Typical ±5% or better
Repeatability	± 1-3% typical; dependent on source and equipment (conveyor) stability, unit alone better than 1%
Smooth Modes	Smooth ON: Effective Sample rate of 25 samples/second Smooth OFF: Effective Sample rate of 2048 samples/second Smooth PROFILER: Effective Sample rate of 128 samples/second
Sample Rate for Profiling	The LEDCure Profiler uses a fixed sample rate of 128 samples/second for profiling. For best matching between instrument display and PowerView Software® II values, use Smooth PROFILER mode
Memory Capacity For Profiling	The memory capacity of the LEDCure in Profiler Mode is sufficient to collect data for >100 minutes
PowerView Software II	National Instruments LabVIEW based programming designed for Windows XP, Windows NT, Windows Vista and Windows 7-10. Collected data stored in LabVIEW based *.tdms files
Display	Easy to Read, Yellow Text on Black Background, Display Brightness User Adjustable
Operating Temperature	0-75°C Internal temperature; withstands high external temperatures for short periods (audible alarm indicates when temperature has exceeded upper limit)
Time-Out Period	2 minutes DISPLAY mode (no key activity)
Battery/Battery Life	2 user-replaceable AAA Alkaline Cells, Approximately 20 hours with display on
Instrument Dimensions and Materials	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H), Aluminum & Stainless Steel
Instrument Weight	10.1 ounces (289 grams)
Carrying Case	Supplied with carrying case, cut polyurethane foam interior, scuff resistant nylon exterior cover, Size: 10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D), Weight: 9 ounces (260 grams)

INSTRUMENT MARKETS

This equipment is in conformity with the following standards and therefore bears CE marking: IEC 61326-1:2005, EN55011:1998, EN61000-4-2: 1995, A1: 1998, A2: 2001; EN 61000-4-3: 2002, A1: 2002, following the provisions of the applicable directives: 98/34/EEC and amendments, 89/336/EEC and amendments. Designed and manufactured in the USA.

Further Information

We have wide experience of measuring UV and the practical aspects of the use of EIT's instruments in different applications.

For more detailed information regarding price, delivery time and further specifications, please contact us.

Send to Efsen for calibration

Efsen Engineering is the European center for calibration of EIT instruments, and is certified to calibrate according to EIT standards.

More information is available at www.efsen.dk.

31.10.2016

Efsen Engineering A/S
Skelstedet 6
DK-2950 Vedbæk
Denmark
P: +45 4565 0260
F: +45 4565 0261
efsen@efsen.dk
www.efsen.dk