



DATASHEET LEDCURE

Measuring device for the determination of the UV irradiance and energy

Portable UV radiometer, remotely triggerable

Adapted to measurement on production lines, conveyors and inside chamber units

Electronics	Supply	2 user-replaceable AAA cells (around 20 hours with display ON)
	Display	Easy to read, yellow text on black background
Optics	Calibration wavelength available	L365 on the range 340-392nm, +/- 2nm, FWHM 52nm L385 on the range 360-412nm, +/- 2nm, FWHM 52nm L395 on the range 370-422nm, +/- 2nm, FWHM 52nm L405 on the range 380-432nm, +/- 2nm, FWHM 52nm
	Standard measurement range	200mW/cm ² to 40W/cm ² , 0 to 250J/cm ² , with a +/- 5% accuracy
	Resolution	3mW/cm ²
	Repeatability	<1% max
	Calibration	Delivered with a unique calibration certificate
Mechanics	Diameter x Height	117 x 12,7mm
	Weight	289g
	Materials	Aluminum, stainless steel
Environment	Operation	Temperature : 0 °C to +75 °C



Product reference

The **LEDCURE** is delivered inside its case and is calibrated depending on customer's requirements and single wavelength needed (365, 385, 395 or 405nm):

LEDCURE - WWW

**CALIBRATED
WAVELENGTH (nm)**

- 365** on the range 340-392nm
- 385** on the range 360-412nm
- 395** on the range 370-422nm
- 405** on the range 380-432nm

The reference with the 4 measurement bands (365, 385, 395 and 405nm) is also available:

LEDCURE - 365 - 385 - 395 - 405

**4 CALIBRATED
WAVELENGTHS (nm)**

- 365** on the range 340-392nm
- 385** on the range 360-412nm
- 395** on the range 370-422nm
- 405** on the range 380-432nm

→ Please note that UVC and UVB wavelengths are not available on standard systems. Contact UWAVE for more information and offer a suitable system.



Presentation



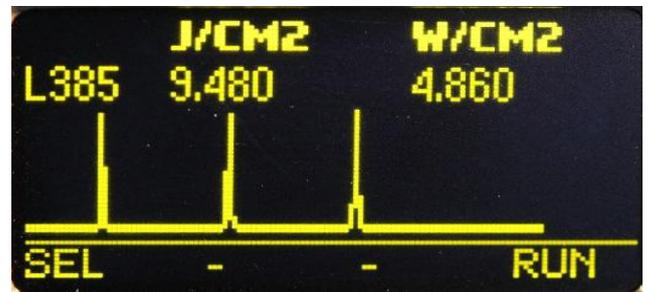
General specifications

The **LEDCURE** is a portable UV radiometer designed for measuring irradiance (W/cm^2) and UV dose (J/cm^2) in industrial and research applications. It consists of a UV sensor integrated into a puck, all supplied in a carrying case. The radiometer is calibrated in collaboration with the customer according to their specific needs, including the sensor type and the LED wavelength to be measured. The system includes a display screen and all the necessary buttons for operation, measurement, and data reading. The sensor can be calibrated for different UV radiation sources, and a model is available that accommodates four sensors at 365, 385, 395, and 405 nm.

Display functions of the radiometer

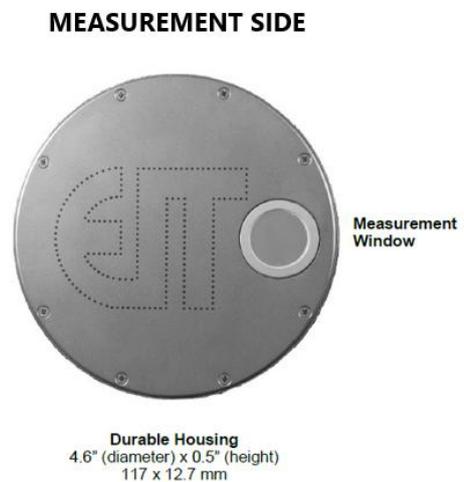
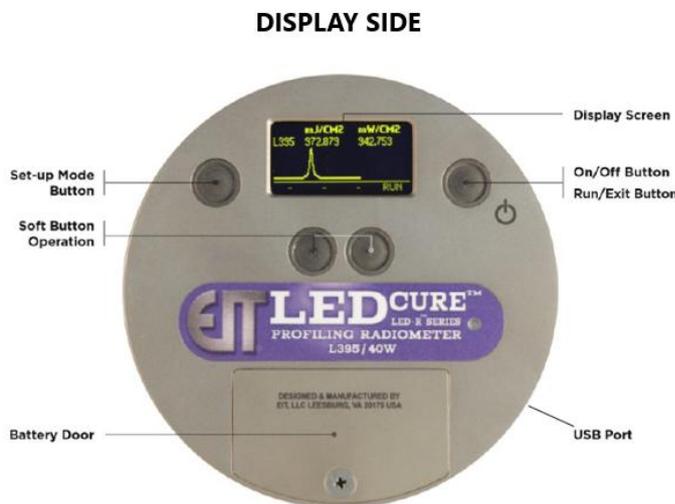
- **Easy-to-use:** single push button operation to turn the unit on, collect & view the data (irradiance & energy density) and irradiance profile.
- **Measurement band:** specified at the time of order between 365, 385, 395 and 405nm.
- **Operating range:** for irradiance (given in W/cm^2) from $200mW/cm^2$ to $40W/cm^2$ and for energy (given in J/cm^2) from 0 to $250J/cm^2$
- **Selectable sample modes :** adjustable between 25, 128 et 2048 equivalent samples/seconde.

Easy to use with single push button operation



Graph view showing data collected on 3 LEDs

Components and buttons

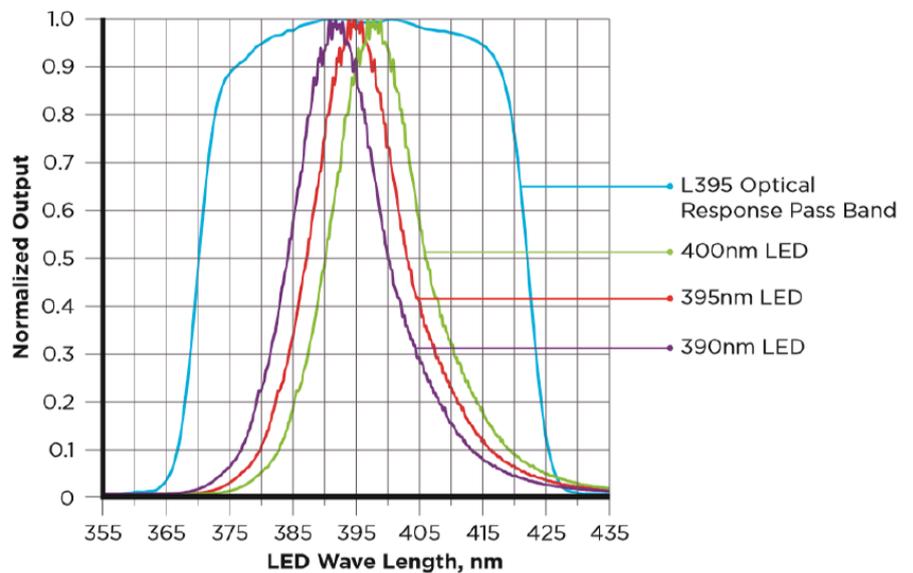


Total measured optical response (example for 395nm)

The radiometer's optics are specifically designed for UV LED measurements. Its band response is virtually flat across its entire optical range. This technology provides highly accurate and repeatable measurements, highly reproducible results, a perfect correspondence between dose and irradiance units, and an absolute energy measurement that facilitates comparisons between units and between sources.

The total optical response measured for each band is nearly rectangular (blue curve). Each band response (365, 385, 395, 405 nm) covers a wavelength range that accurately captures all the energy emitted by that type of LED source.

The total optical response measured for the 395 nm band shown above accurately captures all the energy wavelengths emitted by a nominal 395 nm ± 5 nm LED (violet, red, green). The same is true for the response of all other bands in the radiometer.



Warranty and calibration

UWAVE products come with a warranty of 1 year (except specific agreements and contracts), starting from UWAVE shipping date. Any improper use voids the warranty.

The **LEDCURE** calibration is valid for 6 months. Each radiometer is unique through its customization and generates the best conditions for permanently precise and reliable UV measurement. However, expert operation and care are required. Accordingly, the radiometer must be protected from shocks and dirt and should be recalibrated every 6 months.

The **LEDCURE** comes with its own calibration certificate, dated and signed by our partner lab. It contains all technical information on the system.



Regulations compliancy

Regulation & marking	CE - FCC
Environmental standards	RoHS III Directives - REACH Regulation - WEEE Regulation
HS Codes	90275010 for radiometers
Country of origin	Unites States of America (US) – Manufactured by EIT2.0 LLC