

OmniCure LED Light Measurement System

Achieve Maximum
Reliability and Control
for Your UV Curing
Process



- Small form factor fits into limited working areas
- Peak hold function detects and records peak measurements
- Broad linear dynamic range for measuring from any LED light source
- Multi-point wavelength calibration for accurate measurements
- Consistent measurements via accurate positioning of a light beam



OmniCure LED Light Meter

The OmniCure® LED Light Meter offers the ability to accurately measure power and irradiance from an OmniCure UV LED curing system, or any other UV LED source, directly at the cure site.

The OmniCure LED Light Meter is specially designed to allow manufacturers the ability to select specific wavelengths for measurement. When used with the sensor calibrated with a near monochromatic source, the LED Light Meter eliminates the potential for inaccuracies in measurement that would normally occur due to the narrow spectral distribution of a UV LED source.

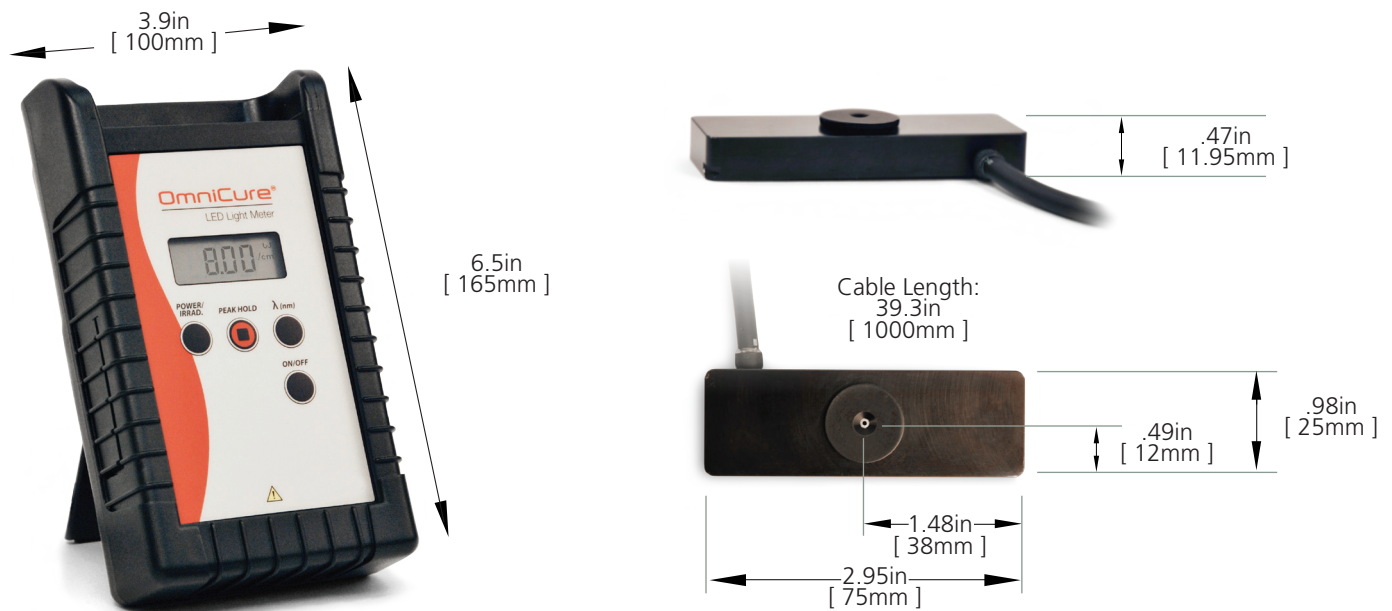
Featuring a peak hold function, the OmniCure LED Light Meter allows users the ability to easily measure narrow beam

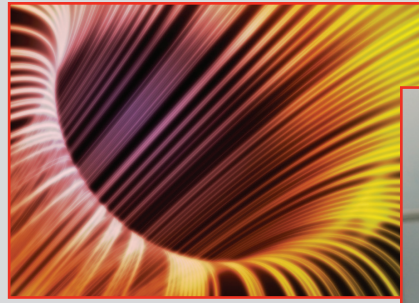
patterns for capturing peak irradiance. With a fine aperture that is calibrated with precision, accurate and consistent measurements can be obtained over a broad dynamic range. Manufacturers are able to achieve greater accuracy with ease of use while maintaining a reliable and controlled UV assembly process. The OmniCure LED Light Meter is calibrated according to protocol standards traceable to NIST* and NRC**.

*NIST - National Institute of Standards and Technology

**NRC - National Research Council

Dimensions





OmniCure Beam Positioning Kit

Key Benefits:

- Consistent measurements by accurately positioning the beam on the detector aperture
- Reduction in calibration time and cost with its easy to use alignment and setup
- Elimination of the need for expensive and bulky alignment tools

FEATURE	BENEFIT
Precision screw drive XY axis positioner	Enables accurate positioning of the beam on the detector aperture for consistent measurements
Graduated block with stop screw	Presets focal distance for the lens type in use to measure peak irradiance
Small form factor	Easily slides in the curing station for quick measurement

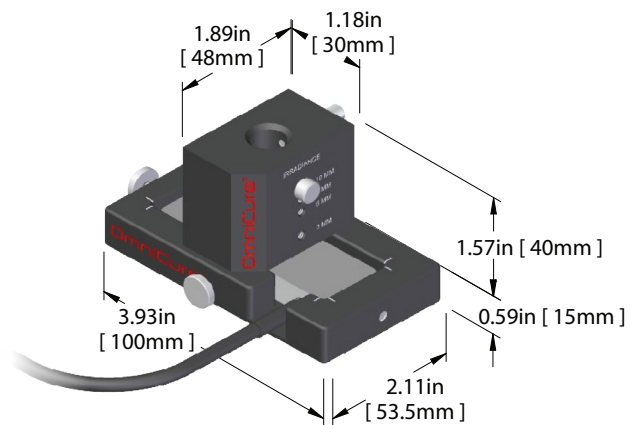
Designed to ensure accurate measurements while reducing set-up time and costs.

The ability to accurately measure light intensity in UV LED spot curing is challenging for the UV assembly manufacturer and is a critical piece to controlling a UV curing process.

Focused UV LED light sources with LED at the tip of the head are accompanied by individual lenses in order to accommodate the various spot sizes and high irradiance requirements at the cure site. The need for a measuring system is essential for measuring peak irradiance by capturing the narrow beam at the center of the detector aperture with the exact focal height. By combining an accurate radiometer with a precise alignment fixture allows users to efficiently measure the peak irradiance accurately and consistently on every measurement in an assembly manufacturing environment.

The beam positioning kit consists of an XY stage and a metal block. The detector is positioned in the XY stage which is precisely aligned using the stage screws to center the beam on the detector aperture; the metal block sets the exact offset height in order to capture the focal point of the beam. This allows quick and accurate measurement of the peak irradiance without altering the curing setup; saving time and increasing productivity.

This accessory kit can be combined with the OmniCure LED Light Meter and the LX500 to provide a complete UV LED curing solution for assembly manufacturing.



SPECIFICATIONS

Spectral Sensitivity	Selectable wavelengths programmable from 320-750nm
Measurement Range	Irradiance: 50mW/cm ² to 25 W/cm ² Power: 1mW to 500mW
Accuracy	+/- 10%
Resolution	Irradiance: 1mW/cm ² Power: 1mW
Calibration Cycle	One Year
Battery Life	Two Years, Typical (intermittent use)
Operating Temperature Range	Ambient to 40° Centigrade
Certification	Complies with IEC, Canadian and US Standards, RoHS compliant
Functions	Peak Hold, Power On/Off, λ nm (Wavelength selection), Power/Irradiance
Traceability	NIST and NRC Compliant
Sensor Dimension (LxWxH)	75mm x 25mm x 11.95mm
Meter Dimension (LxWxH)	165mm x 100mm x 44mm

PART NUMBER	DESCRIPTION
010-00281R	OmniCure LED Light Meter (Complete with Meter & Sensor)
ACCESSORY	
019-00131R *	OmniCure Beam Positioning Kit

* Can be ordered as an accessory to the LED Light Meter



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