Power, Reliability, Performance

LED Light Curing Systems
Henkel offers innovative LOCTITE® LED light curing solutions that provide high power, portability, continuous duty, and long life. A wide range of systems are available – hand held point, spot wand, flood, and line array systems – offering maximum flexibility for any application. These light sources are optimized for curing our extensive line of UV/Vis light curing adhesive products to provide the customer with the optimal solution for their process needs.
ADVANTAGES OF LED TECHNOLOGY

» Long Life – up to 20,000 hours of operation (10x longer than typical UV bulbs) with minimal decay over time.

» Instant On/Off – no warm-up like traditional UV systems.

» Zero infrared emissions, reducing part heating (warping) to an absolute minimum.

» 100% of LED light output is within the usable curing spectrum.

» Environmental Benefit (no mercury).

» Low Maintenance Cost (no replacement bulbs).

» Low Energy Consumption.

» Low Cost of Ownership.
The LOCTITE® CL32 LED Spot is a cost effective, high powered, portable LED light source that offers a high level of flexibility for all your UV or visible light curing needs. The light weight compact design helps minimize operator fatigue, while its small size and long focus length make it perfect for applications in crowded areas and hard to reach bond areas. Usable as hand held or stationary mount, this system is perfect for prototyping, scale up, or full production environments.

**PRODUCT FEATURES**

» High intensity – up to 3 W/cm² (@ 8-12mm)
» Light weight compact design
» Robust, ergonomic housing
» 365nm and 405nm LED heads
» Battery or line powered (3 hr battery life)
» Hand held or stationary mount
» Up to 100% duty cycle (with line power)
» Integrated timer

**TYPICAL INTENSITY PROFILE**

EQ CL32 405nm Intensity Range (at 8mm to 20mm Distance)

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Values denote typical expected intensities and are not a fixed specification. Exact output measurement is dependent on the brand and calibration method of the meter used and normal variation of the Light Emitting Diodes. Measurements were made with a LOCTITE® Radiometer Dosimeter, either item number 1265282 or 1390323, depending on wavelength. As with all applications, testing with your specific part and adhesive is recommended.
The LOCTITE® EQ CL28 LED Spot system is one of our highest intensity LED spot curing devices available. With intensities up to 27 W/cm², this system delivers extremely high power for all of your fast curing needs. The innovative design combines both high intensity with a significantly wider cure area than most spot system for maximum performance.

**PRODUCT FEATURES**

- High Intensity – up to 27 W/cm²
- Wide spot cure area – up to 20mm
- Multiple wavelengths – 380nm, and 405nm
- Single or quad controller options
- Stackable LED heads with 25mm center to center spacing
- Intensity adjustment (with quad controller)
- Up to 2.5 times improvement in cure through depth

**QUAD CONTROLLER FEATURES**

- Controls Up to 4 channels independently, simultaneously, or in sequence
- Intensity adjustment from 1 to 100%
- Output current and temperature of each channel are continuously monitored to maintain consistent intensity
- Up to 10 programs can be stored in memory
- Self-diagnosis with warning messages and front panel indicator lights.

**TYPICAL INTENSITY PROFILES**

**EQ CL28 CureJet LED Spot 380 nm**

- Cure Distance (mm)
- Output Intensity (W/cm²)

**EQ CL28 CureJet LED Spot 405 nm**

- Cure Distance (mm)
- Output Intensity (W/cm²)

Values denote typical expected intensities and are not a fixed specification. Exact output measurement is dependent on the brand and calibration method of the meter used and normal variation of the Light Emitting Diodes. Measurements were made with a LOCTITE® Radiometer Dosimeter, either item number 1265282 or 1390323, depending on wavelength. As with all applications, testing with your specific part and adhesive is recommended.
LOCTITE® EQ CL10 LED Spot System

The LOCTITE® EQ CL10 system is one of Henkel’s most cost-effective and versatile LED systems available. Offered in both a single and quad controller to provide maximum flexibility. It can be used in manual work stations as well as automated production lines.

**PRODUCT FEATURES**
- Small profile LED heads for tight locations
- 100% Duty Cycle
- 365 nm and 405 nm wavelengths
- Intensity Up to 2 W/cm²
- 6 mm and 10 mm spot size
- Single Controller with time and intensity adjustment
- 4 Channel Quad controller with 5 operating modes and 10-step programming capability

**TYPICAL INTENSITY PROFILE**

EQ CL10 UV (405 nm w/6 mm lens)

Radial Distance from Center Point (mm)

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LOCTITE® EQ CL25 LED Spot System

The LOCTITE® EQ CL25 is one of the highest intensity LED systems available. With output as high as 20 W/cm² and a compact multi-channel design, this system provides a high level of both flexibility and performance.

**PRODUCT FEATURES**
- Intensity up to 20 W/cm²
- Small profile LED heads for tight, hard to reach locations
- 100% duty cycle
- 3 mm, 6 mm, and 10 mm spot sizes
- 365 nm and 405 nm wavelengths
- 4 Channel Controller with:
  - Multi-step programming capability and storage
  - Intensity adjustment
  - LED temperature monitoring

**TYPICAL INTENSITY PROFILE**

EQ CL25 UV Intensity Profile (365 nm w/3 mm Lens)

UV Intensity (mW/cm²)

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Values denote typical expected intensities and are not a fixed specification. Exact output measurement is dependent on the brand and calibration method of the meter used and normal variation of the Light Emitting Diodes. Measurements were made with a LOCTITE® Radiometer Dosimeter, either item number 1265282 or 1390323, depending on wavelength. As with all applications, testing with your specific part and adhesive is recommended.
The LOCTITE® CL30 LED Flood system is a high intensity flood system specifically designed to cure LOCTITE® UV and visible light cure adhesive. The large area flood allows for easy curing of large part assemblies and the LED heads can be stacked in both the X and Y directions further expanding the curing area if needed. The system can be easily integrated into either manual/stationary applications or fully automated processes.

**PRODUCT FEATURES**
- 100% Duty Cycle
- 100 mm x 100 mm cure area
- Up to 1.5 W/cm² intensity (at 50 mm)
- Optimal Curing Distance – 50 mm
- 365, 380 and 405 nm wavelengths.
- LED Floods are stackable in both X and Y directions.
- Controller with digital timer and indicator lights for status, over temperature, and error conditions.
- Compact footprint with integrated air cooling.

**TYPICAL INTENSITY PROFILE**
CL30 Intensity Profile @50mm working distance

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LOCTITE® CL34 LED line arrays offer adhesive curing solutions for high speed production lines while requiring minimal space intrusion due to the small and narrow profile of the LED head. The system features a 4-channel controller with independent timing operation for each channel.

**PRODUCT FEATURES**
- 100% Duty Cycle
- Small profile LED heads
- Stackable side by side
- Up to 2.5 W/cm² intensity
- 5 mm x 80 mm Cure Area
- 365 nm and 405 nm wavelengths

**TYPICAL INTENSITY PROFILE**
CL34 405nm Intensity Profile

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Values denote typical expected intensities and are not a fixed specification. Exact output measurement is dependent on the brand and calibration method of the meter used and normal variation of the Light Emitting Diodes. Measurements were made with a LOCTITE® Radiometer Dosimeter, either item number 1265282 or 1390323, depending on wavelength. As with all applications, testing with your specific part and adhesive is recommended.