Datasheet

LuxaLight UV LED-strip 395nm Protected (24 Volt, 140 LEDs, 2835, IP64)

LS24UV395X140X2835PLX

Version: 2025-07-09.4

LuxaLight B.V.
Hastelweg 260B
5652 CN Eindhoven
Nederland

KvK-nummer: 57580561
BTW-nummer: NL852642209B01
IBAN: NL87 INGB 0007 8159 75
BIC/SWIFT code: INGBNL2A

Email: info@luxalight.eu
Website: www.luxalight.eu
Tel.: +31 (0)40 - 202 49 04

Product description

The **LuxaLight Industrial 395nm LED Strip** is designed for demanding industrial environments, providing an exceptionally effective UV-A lighting solution with a 395nm wavelength. This LED strip is perfect for applications such as curing, sterilization, reactor processes, and inspection. Featuring **140 high-performance LEDs**, the strip delivers uniform and consistent UV-A radiation with an impressive output of **309 W/m²** at a **distance of 2.5 cm**, ensuring powerful and reliable illumination for a wide range of industrial processes.

Designed with **IP64-rated protection**, the LED strip is resistant to dust, moisture, and other environmental contaminants, making it highly reliable in harsh conditions. Its robust and durable design is ideal for industrial applications such as UV curing, surface sterilization, reactor processes, and fluorescence detection.

Key Features:

- **395nm Wavelength:** Delivers effective UV-A radiation, perfect for curing, sterilization, reactor processes, and applications requiring precise UV light.
- **140 High-Performance LEDs:** Ensures uniform UV-A output with consistent radiation intensity, making it efficient and reliable for industrial applications.
- **Radiation Output of 309 W/m² at 2.5 cm Distance:** Provides a high radiation output of **309 W/m²** at **2.5 cm**, making it ideal for processes requiring focused and consistent UV-A energy.
- **IP64 Protection:** The LED strip is IP64-rated, offering protection against dust and water, making it suitable for use in industrial environments and other challenging settings.
- **Energy-Efficient:** Designed for high performance with low power consumption, the LED strip offers an energy-efficient lighting solution for UV-related applications.
- **Durable and Long-Lasting:** Built to last, the LED strip is reliable for continuous operation in demanding environments.
- **PCB thickness:** The PCB has a thickness of **3 oz/ft²**, providing robust support and efficient heat dissipation.

Applications:

- **UV Curing:** Ideal for curing adhesives, coatings, inks, and other materials in various industrial manufacturing processes.
- **Sterilization:** Perfect for surface sterilization in environments where disinfection is crucial, such as medical and laboratory settings.
- **Reactor Processes:** The 395nm UV-A output is perfect for driving photochemical reactions in UV reactors, such as those used in wastewater treatment, chemical synthesis, or polymerization processes. The precise and reliable UV-A energy ensures consistent results in these applications.
- **Fluorescence Detection:** Suitable for applications in research and quality control, where UV light is required for fluorescence-based imaging and detection.
- **Inspection Systems:** The LED strip is also ideal for machine vision systems, providing UV illumination to inspect materials, surfaces, or products in detail.
- **Printing and Coating Industry:** Enhances the efficiency of UV-based curing processes, particularly in industries such as printing and coating, where rapid curing is critical.

Benefits:

- **High and Consistent Output:** The **309 W/m² radiation output at 2.5 cm** ensures reliable and high-efficiency UV-A energy, optimizing the effectiveness of industrial processes.
- **Protection in Harsh Environments:** The **IP64 protection** guarantees durability against dust and water, ensuring reliable performance in industrial and other challenging environments.
- **Compact and Flexible:** The flexible design of the LED strip allows for easy installation in tight spaces and can be adapted to meet specific application requirements.
- **Long Service Life:** The robust construction of the LED strip ensures long-lasting performance, reducing the need for frequent replacements and offering greater cost efficiency.
- **Energy Efficiency:** High radiation output combined with low power consumption ensures an energy-efficient solution for UV applications in various industrial sectors.

Technical specifications

General	
Brand	LuxaLight
LEDs / meter	140
LED type	2835
Length per reel	10 m
Length per segment	25 mm
LED strip width	12.00 mm
LED strip thickness	4.00 mm
PCB color	White
Mantle material	Silicon

Lighting	
Wave length	395 nm
Beam angle	120 °

Measurement results

Peak wavelength
(Object length: 200 mm)

396 nm

Peak irradiance
(Object length: 200 mm)

	24V
5cm	5.98077 W/sqm
10cm	2.11407 W/sqm
15cm	1.09143 W/sqm
20cm	0.651881 W/sqm
25cm	0.428194 W/sqm
30cm	0.320989 W/sqm

Total irradiance
(Object length: 200 mm)

	24V
5cm	97.71 W/sqm
10cm	34.66 W/sqm
15cm	17.52 W/sqm
20cm	10.57 W/sqm
25cm	6.944 W/sqm
30cm	5.268 W/sqm

Electronics	
Working voltage	24V
Current / meter	1.00 A / meter
Power consumption per meter	24.00 W / meter
PCB material	Copper

Pinout

Symbol	Function
V+	V+
GND	Ground

Environmental	
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 64
Directives - standards - certificates	
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

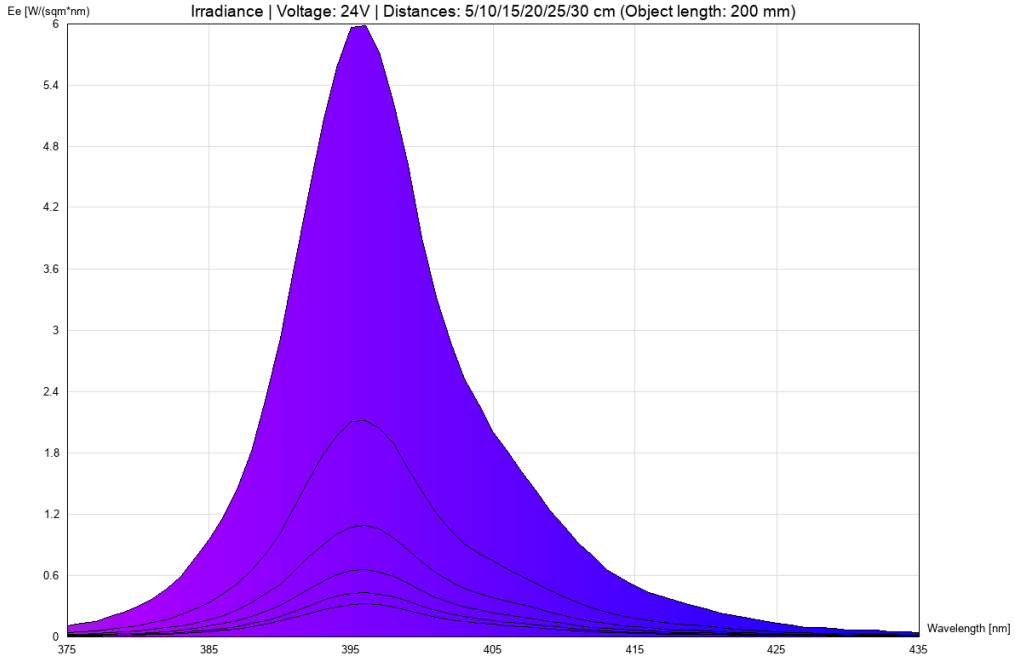
LuxaLight B.V.
Hastelweg 260B
5652 CN Eindhoven
Nederland

KvK-nummer: 57580561
BTW-nummer: NL852642209B01
IBAN: NL87 INGB 0007 8159 75
BIC/SWIFT code: INGBNL2A

Email: info@luxalight.eu
Website: www.luxalight.eu
Tel.: +31 (0)40 - 202 49 04

Measurement results

irradiance - 375-435-uv-ablue (24V)



cie1931