Datasheet

LuxaLight Industrial LED Fixture Opaline cover UV-A 395nm 24.2x16mm (24 Volt, 2835, IP64)

LF-24-395-24.2X16-OC

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Product description

The LuxaLight Industrial LED Fixture **Opaline Cover UV-A 395 nm** (24.2 × 16 mm) is designed for industrial environments that require durability, precision, and **uniform UV illumination**. The opaline diffuser ensures homogeneous distribution, reducing hotspots and improving dose consistency. Its modular design (scalable from 220 mm up to 3000 mm) and compatibility with the **MaNima Pollux Industrial System** make it a robust solution for curing, inspection, and photochemical processes.

Key Specifications

Property	Value / Description
Wavelength	395 nm UV-A (measured peak ~397 nm)
Irradiance (5 cm)	~263 W/m² (Total irradiance)
Cover	Opaline PMMA cover for diffused, uniform emission
Beam angle	120°
Dimensions	220 × 24.2 × 16 mm (fixture profile)
Supply & Protection	24 V DC / ~30 W, integrated NTC sensor, IP64
Electronics (ref.)	24 V, 1.25 A, ~30 W; NTC 5 kΩ, β=3950
PCB Protection	Industrial-grade silicone coating (dust, moisture, chemical resistance)
Thermal Monitoring	Integrated NTC sensor, controllable via MaNima Pollux Industrial System
Pulsing/Strobing	Supported when integrated with MaNima Pollux Industrial System
Environment	Designed for industrial conditions (dust, vibration, moisture)

Applications

- UV curing of coatings, adhesives, and sealants where **uniform exposure** is required
- Fluorescence inspection of tracers, labels, and sealants with diffuse UV excitation
- Photochemical activation in laboratory setups and test environments
- Machine vision fluorescence (395 nm-sensitive materials) with reduced glare and stray light due to diffused emission
- Surface treatment and material testing requiring controlled homogeneous illumination

Also applicable in R&D and specialized lighting setups.

Benefits for Engineers

- Process stability: homogeneous illumination reduces hotspots and improves repeatability
- Consistent performance: thermal feedback ensures reliability and extended LED lifetime
- Robust industrial construction: protection against dust, moisture, and mechanical stress
- Modular scalability: customizable length and configuration per application
- Seamless integration: plug-and-play readiness for production and R&D environments

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Integration with MaNima Pollux Industrial System

- Real-time NTC sensor control and feedback
- Pulsing/strobing capabilities for higher peak irradiance
- Prevents thermal overload while maximizing UV output
- Delivers process data for PLC/SCADA industrial automation
- Open API (UDP-based) support for system integration and custom applications

Technical specifications

General	
Brand	LuxaLight
Application	Curing & Aging Machine Vision UV Inspection
LED type	2835
Material	Aluminum
Dimensions	220 × 24,2 × 16 mm
Mounting	Surface mounted
Cover type	PMMA opal
LEDs per piece	108.00

Lighting	
Wave length	395nm
Beam angle	120 °

Measurement results	
Peak wavelength (Object size: 1 piece)	397 nm
Peak irradiance (Object size: 1 piece)	

	24V
5cm	15.9 W/sqm
10cm	6.04 W/sqm
15cm	3.08 W/sqm
20cm	1.87 W/sqm
25cm	1.26 W/sqm
30cm	0.92 W/sqm

Total irradiance
(Object size: 1 piece)

	24V
5cm	262.66 W/sqm
10cm	104.76 W/sqm
15cm	54.16 W/sqm
20cm	33.05 W/sqm
25cm	22.12 W/sqm
30cm	16.36 W/sqm

• By combining Pulse Mode with Real-Time Monitoring, the efficiency of LED systems can be increased, resulting in higher output.
• We have the expertise and equipment to perform measurements tailored to the specific requirements of the application.

Electronics	
Working voltage	24V
Current per piece	1.25 A / piece
Power consumption per piece	30.00 W / piece
PCB material	Aluminium

Pinout	

Symbol	Function
V+	V+
GND	Ground
NTC	NTC sensor
NTC_GND	NTC ground

NTC parameters	Resistance: 5000 Ohm Beta value: 3950

Environmental

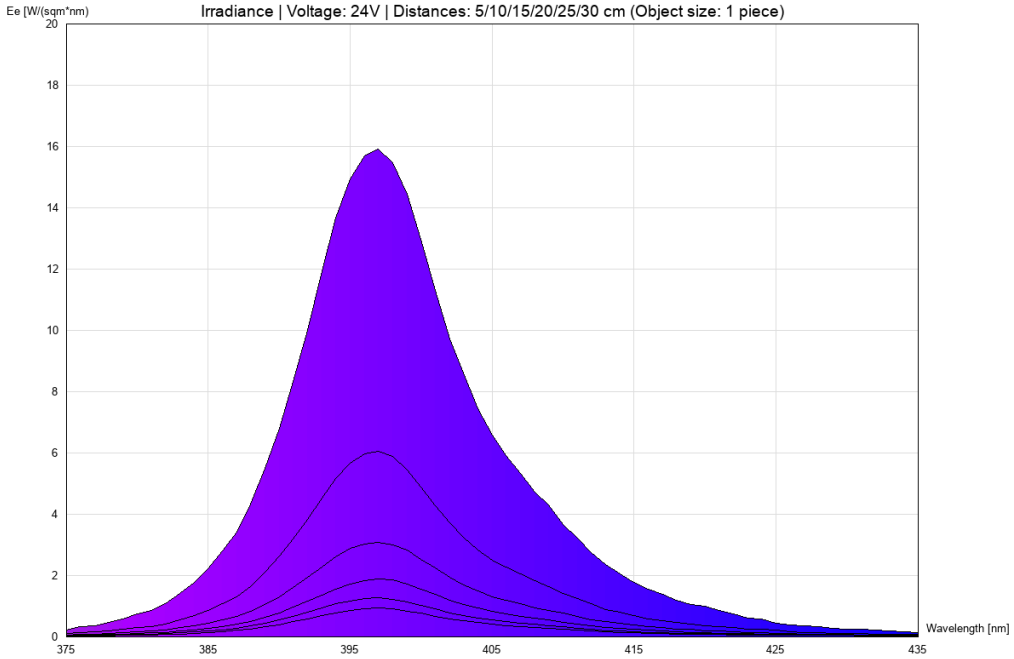
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 68

Directives - standards - certificates

Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

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



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