

Datasheet

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

LF-24-395-24.2x16-TC

Version: 2025-08-26.3

Product description

The **LuxaLight Industrial LED Fixture Transparent PMMA Cover UV-A 395 nm (24.2 x 16 mm)** is designed for demanding industrial environments where durability, precision, and high radiant intensity are essential. Its **modular design** (scalable from 220 mm up to 3000 mm), the transparent PMMA cover – optimized for 395 nm UV transmission – and compatibility with the **MaNima Pollux Industrial System** make it a robust and flexible solution for curing, photochemistry, disinfection, machine vision, and additive manufacturing.

Specifications

Property	Value / Description
Wavelength	395 nm UV-A (peak ~397 nm)
Optical Output	High radiant intensity, engineered for industrial use
Cover	Transparent PMMA cover – optimized for 395 nm, maintains high UV transmission
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
Design	Modular and scalable, adaptable from 220 mm up to 3000 mm
Dimensions	24.2 x 16 mm (fixture profile)
Environment	Built for harsh industrial conditions (dust, vibration, moisture)

Applications

- **Cost-effective UV curing of coatings and inks** – printing, packaging, electronics
- **Adhesive & resin curing** – suitable for photoinitiators responsive at 385–405 nm
- **Machine vision & inspection** – fluorescence excitation for quality control, material detection, and security marking
- **Blacklight and visual inspection** – detection of optical brighteners, inks, adhesives, and contaminants
- **3D printing** – compatible with resins designed for 385–405 nm range
- **Surface disinfection (limited)** – effective mainly in controlled environments with extended exposure

Also applicable in optical bonding and R&D environments.

Benefits for Engineers

- **Process efficiency:** pulsing and monitoring supported when integrated with MaNima Pollux Industrial
- **Consistent performance:** real-time thermal feedback prevents degradation and ensures lifetime stability
- **Industrial robustness:** resistant to dust, moisture, vibration, and chemical stress
- **Modular scalability:** fixture length and configuration tailored to the application
- **Easy integration:** designed for seamless use in production lines and test setups

Integration with MaNima Pollux Industrial System

- Real-time readout and control of NTC thermal sensors
- Full support for pulsing/strobing operation of the fixture
- Increased peak intensity without thermal overload
- Process data available for industrial automation (PLC/SCADA integration)
- **Open API (UDP-based)** for system integration and custom industrial applications

Technical specifications

General

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

Lighting

Wave length	395nm
Beam angle	120 °

Measurement results

Peak wavelength (Object size: 1 piece)	397 nm
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Peak irradiance (Object size: 1 piece)		24V
	5cm	29.4479 W/sqm
	10cm	11.1859 W/sqm
	15cm	5.70155 W/sqm
	20cm	3.45532 W/sqm
	25cm	2.33018 W/sqm
	30cm	1.70424 W/sqm

Total irradiance (Object size: 1 piece)		24V
	5cm	486.4 W/sqm
	10cm	194 W/sqm
	15cm	100.3 W/sqm
	20cm	61.2 W/sqm
	25cm	40.96 W/sqm
	30cm	30.29 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
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Environmental

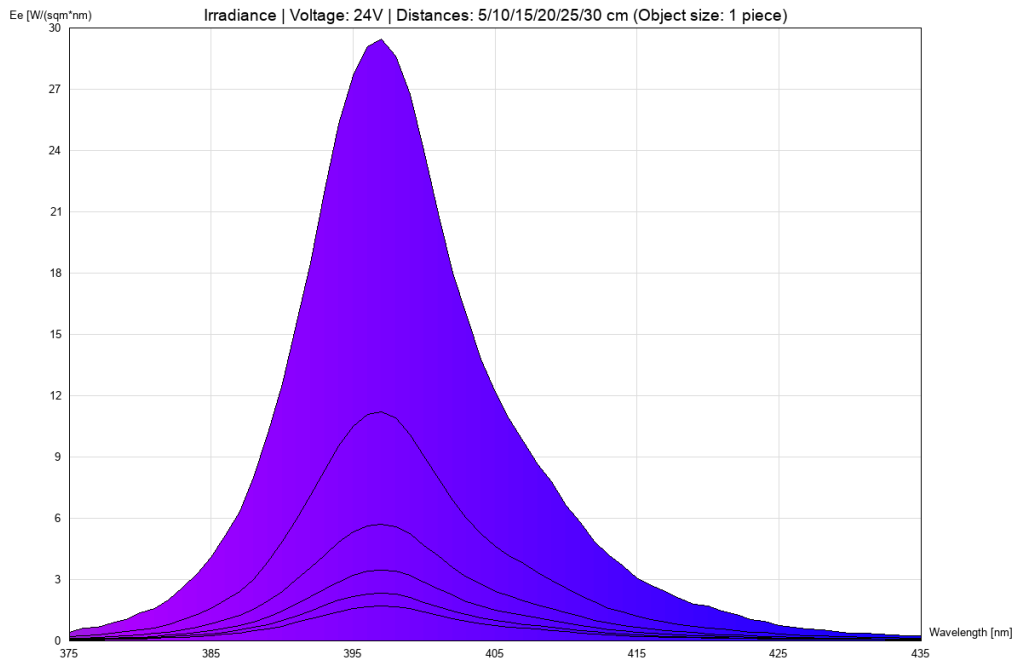
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 64

Directives - standards - certificates

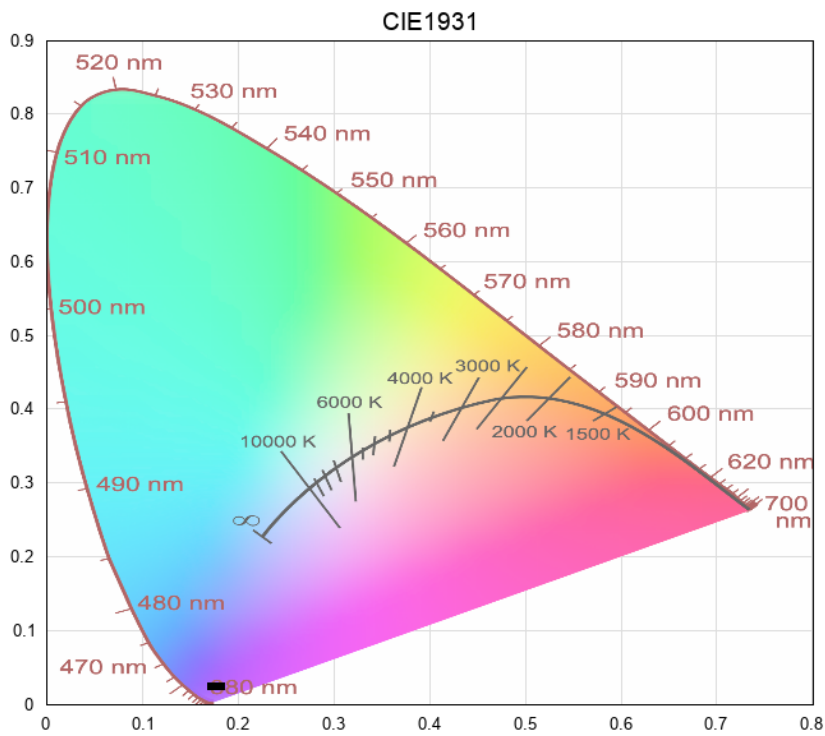
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

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



cie1931



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