

Datasheet

LED engine specification

Product type:
LF-24-4800K-24.2X16-POL

Description:
LuxaLight Industrial LED Fixture Polarised cover 24V 4800K 24.2x16mm



Date:
05-12-2023

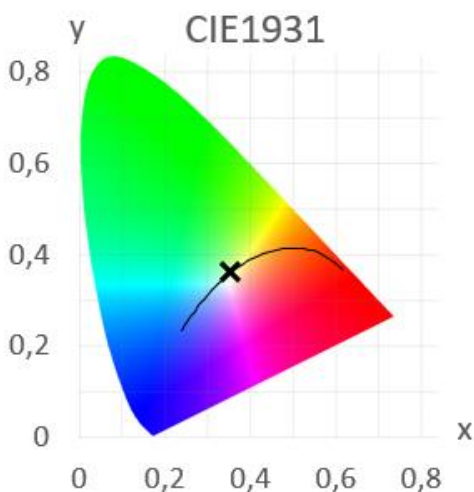
Page 1 of 6

| Technical Specifications | | | | | |
|---|--|--|--------------|--------------|--------------|
| LF-24-4800-24.2x16-POL | | Polarised cover POL | | | |
| General | LED Type | 2835 SMD | | | |
| | LED Quantity | 108 LEDs / Engine | | | |
| | Dimensions | 220mm - 3000mm * 24,2mm * 16mm (B x L x H) | | | |
| | Weight | Variable, depending on moulding and lenght | | | |
| | Infosheet | LuxaLight Industrial LED Fixtures infopage | | | |
| Environment | Working Temperature | -5°C ~ +60°C | | | |
| | Storing Temperature | -5°C ~ +60°C | | | |
| | IP Grade | IP64 | | | |
| | Mechanical Protection | Polarised PMMA cover | | | |
| | Moulding Resin | N.A. | | | |
| | Housing material | Anodized aluminium | | | |
| Electronic | Working Voltage | DC24V | | | |
| | Working Current | 1,25 A / Engine | | | |
| | Working Wattage | 30 W / Engine | | | |
| | LED Engine type | LuxaLight LED Engine Neutral White 4800K 2835 IP64 | | | |
| | Driving Method | Constant Voltage | | | |
| | Cable type | PUR Cable 4x 0.5mm² Gray LuxaLight | | | |
| | NTC Resistance | 5KOhm | | | |
| | NTC Beta | 3950 | | | |
| Lighting | Engine Colour temperature(K) | 4800K Neutral White | | | |
| | CRI | ≥ 95 Ra | | | |
| | BIN | 3 SDCM | | | |
| | Voltage at measurement | 24V | 29V | 34V | |
| | Current at measurement | 1,25A | 1,9A | 2,65A | |
| | Wattage at measurement | 30W | 55,1W | 90,1W | |
| | Measured Colour temp. (5cm) | 4671k | | | |
| | Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine) | 5 | 408 W/m² | 541 W/m² | 692 W/m² |
| | | 7,5 | 205 W/m² | 272 W/m² | 348 W/m² |
| | | 10 | 129 W/m² | 171 W/m² | 219 W/m² |
| | | 20 | 40 W/m² | 53 W/m² | 68 W/m² |
| | | 30 | 20 W/m² | 27 W/m² | 35 W/m² |
| | | 40 | 12 W/m² | 16 W/m² | 21 W/m² |
| | | 60 | 8 W/m² | 11 W/m² | 14 W/m² |
| | Total Lux per distance (CIE1931 2°) (1 LED Engine) | 5 | 115klx | 155 klx | 205 klx |
| | | 7,5 | 60klx | 81 klx | 107 klx |
| | | 10 | 34klx | 46 klx | 61 klx |
| | | 20 | 11klx | 15 klx | 20 klx |
| | | 30 | 5,4klx | 7,4 klx | 9,9 klx |
| | | 40 | 3,3klx | 4,5 klx | 6 klx |
| | | 60 | 2,1klx | 2,9 klx | 3,9 klx |
| | Total PPFD (400nm - 700nm) (1 LED Engine) | 5 | 1777 µmol/m² | 2511 µmol/m² | 3226 µmol/m² |
| | | 7,5 | 935 µmol/m² | 1321 µmol/m² | 1697 µmol/m² |
| 10 | | 535 µmol/m² | 756 µmol/m² | 971 µmol/m² | |
| 20 | | 167 µmol/m² | 236 µmol/m² | 303 µmol/m² | |
| 30 | | 84 µmol/m² | 119 µmol/m² | 153 µmol/m² | |
| 40 | | 52 µmol/m² | 74 µmol/m² | 95 µmol/m² | |
| 60 | | 32 µmol/m² | 46 µmol/m² | 59 µmol/m² | |
| Output Reduction Approx. | 50% - 60% | | | | |
| Polariser | 90° | | | | |
| Viewing Angle (θ) | 120 ±5° | | | | |
| <i>Keep the LED Fixture within operating temperatures, for more information about heat management, read the 'LuxaLight modular LED Fixtures infosheet'.</i> | | | | | |

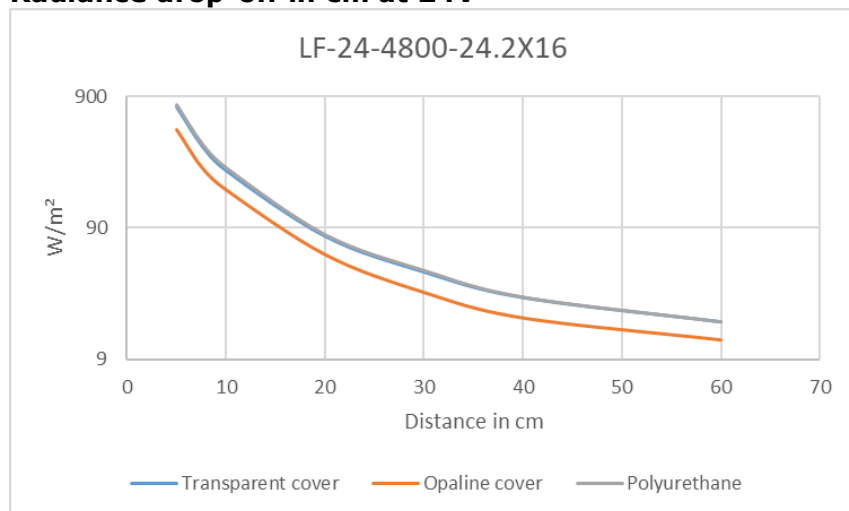
| Additional Benefits of LuxaLight Industrial LED Fixture | |
|---|---|
| Benefits of LED Fixture | Multiple wavelengths in one housing |
| | No optics required due to high output |
| | Applicable in Humid environments (PU Version) |
| | Custom cable output and/or connector |
| | Wide range of mounting options |
| | In-house expertise to personally advice on LED fixture customization |
| | *By using the pulse mode in combination with real-time monitoring extremely high output |
| | *Different wavelengths in one fixture that can be controlled/pulsed separately |

**In combination with the MaNima Pollux Industry*

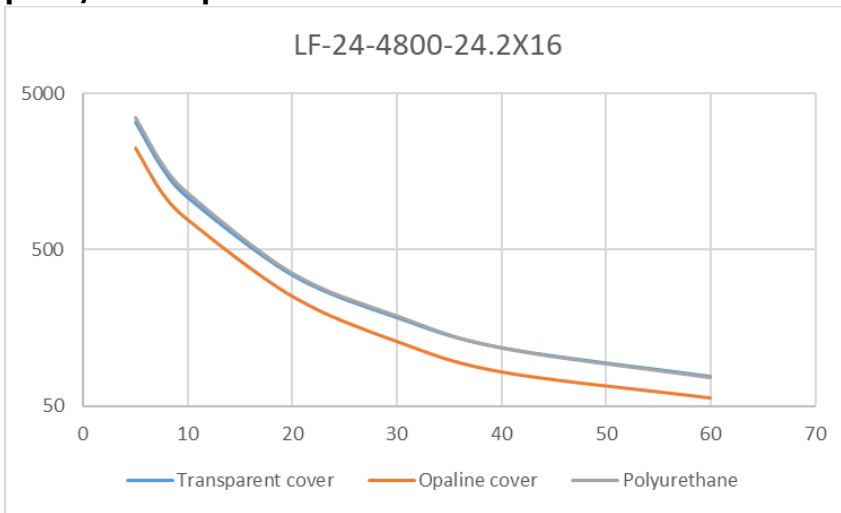
CIE1931 White:



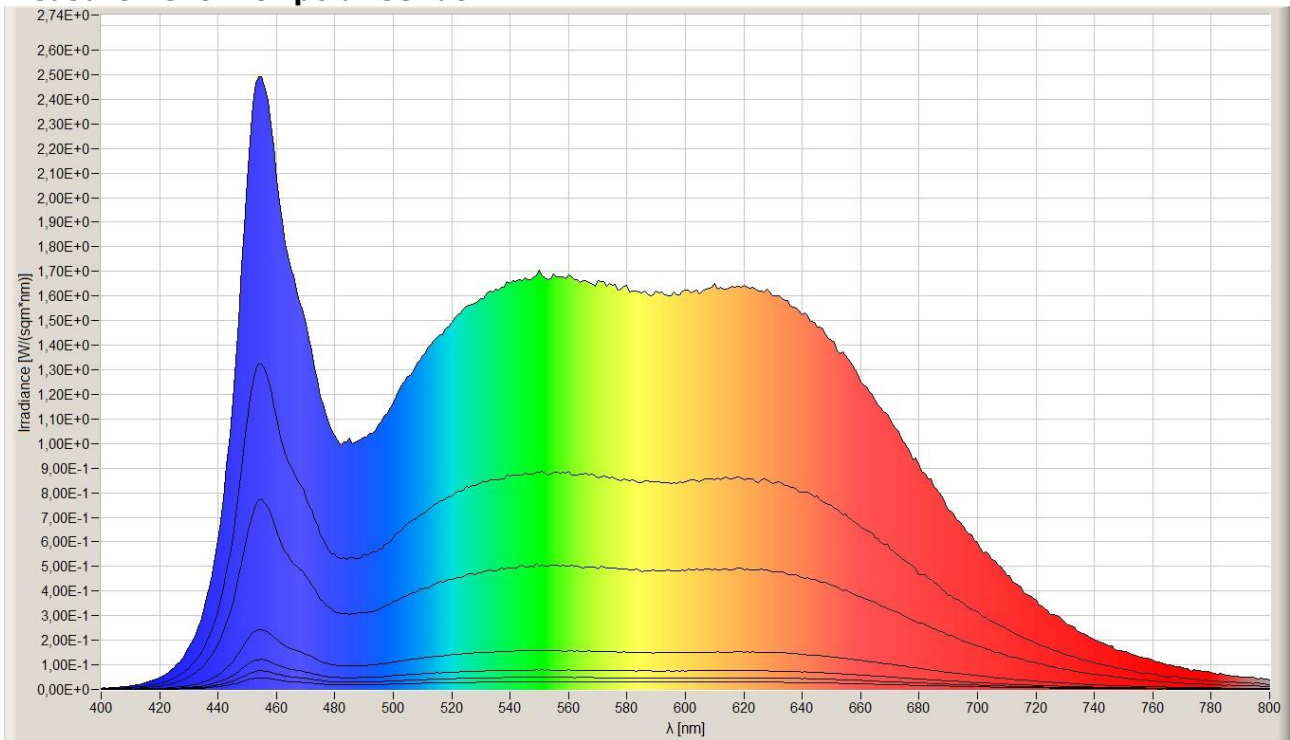
Radiance drop-off in cm at 24V



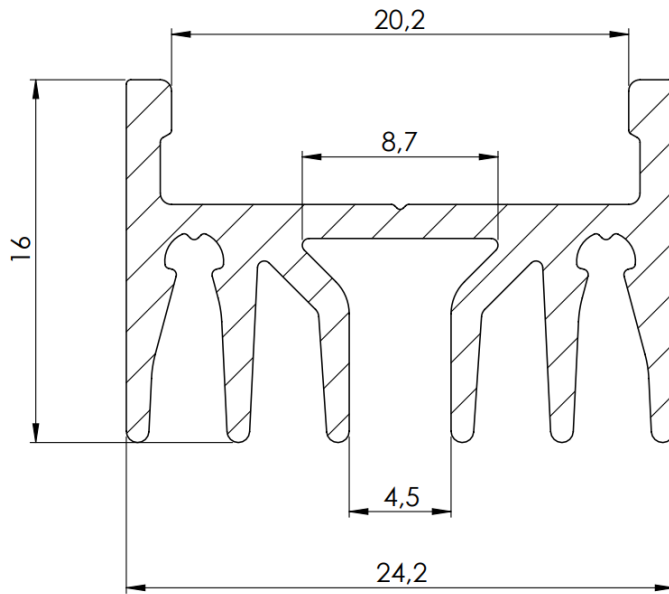
μmol/m² drop-off in cm at 24V



Measurement with polariser at 24V

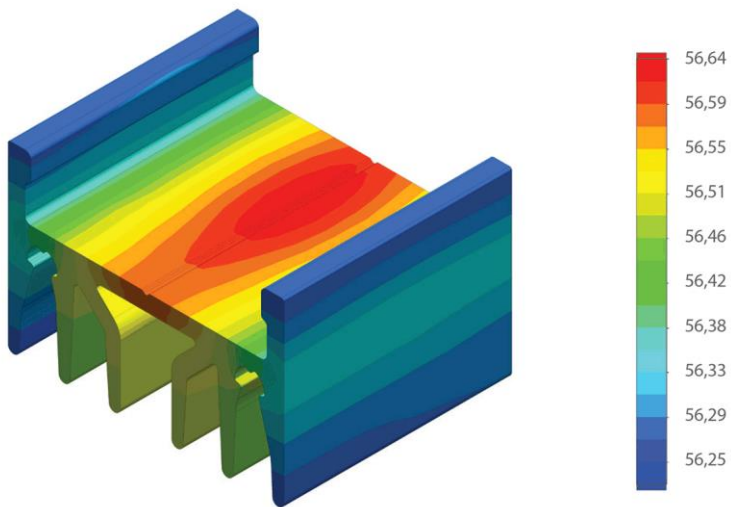


Dimensions



Temperature Distribution

Temperature (Solid) [°C]
 Temperature ambient: 25°C
 Total power: 36 W/m



Certificate of Conformity:

EC Council Directive 2004/108/EC
Electromagnetic Compatibility

Complies to the standards:

- NEN-EN-IEC 61000-3-2:2019/A1:2021
- NEN-EN-IEC 61000-3-3:2013+A1:2017+A2:2021
- NEN-EN-IEC 61547:2009

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