

Datasheet

LED engine specification

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

Description:
LuxaLight Industrial LED Fixture Transparent IP68 24V 4800K 24.2x16mm



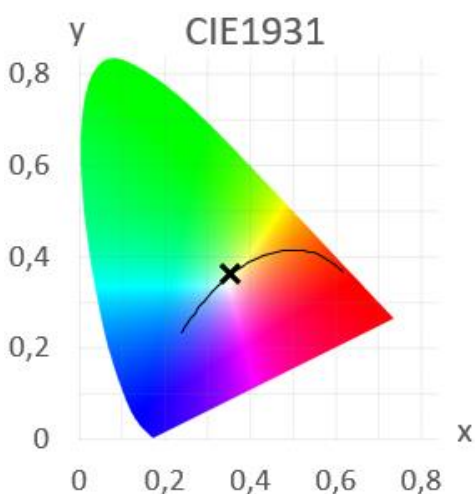
Date:
06-12-2023

Technical Specifications					
LF-24-4800-24.2x16-PU		Polyurethane moulding PU			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	LuxaLight Industrial LED Fixtures infopage			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP68			
	Mechanical Protection	PU Shore 85			
	Moulding Resin	Robnor 420LVS			
	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 Full Spectrum 4800K IP64 24V 2835			
	Driving Method	Constant Voltage			
	Cable type	PUR Cable 4x 0.5mm² Gray LuxaLight			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Engine Colour temperature (nm)	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 temperature (5cm)	4117k			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	784 W/m²	1265 W/m²	1629 W/m²
		7,5	401 W/m²	647 W/m²	833 W/m²
		10	259 W/m²	418 W/m²	538 W/m²
		20	80 W/m²	129 W/m²	166 W/m²
		30	43 W/m²	69 W/m²	89 W/m²
		40	27 W/m²	43 W/m²	55 W/m²
		60	17 W/m²	27 W/m²	35 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	225 klx	362 klx	468 klx
		7,5	115 klx	185 klx	239 klx
		10	74 klx	119 klx	154 klx
		20	23 klx	37 klx	48 klx
		30	12 klx	19 klx	25 klx
		40	7,6 klx	12 klx	16 klx
		60	5 klx	7,9 klx	11 klx
	Total PPFD (400nm - 700nm) (1 LED Engine)	5	3473 µmol/m²	5617 µmol/m²	7259 µmol/m²
7,5		1777 µmol/m²	2874 µmol/m²	3714 µmol/m²	
10		1144 µmol/m²	1850 µmol/m²	2391 µmol/m²	
20		353 µmol/m²	571 µmol/m²	738 µmol/m²	
30		189 µmol/m²	306 µmol/m²	395 µmol/m²	
40		118 µmol/m²	191 µmol/m²	247 µmol/m²	
60		76,3 µmol/m²	124 µmol/m²	160 µmol/m²	
Output Reduction Approx.	0% - 5%				
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>					

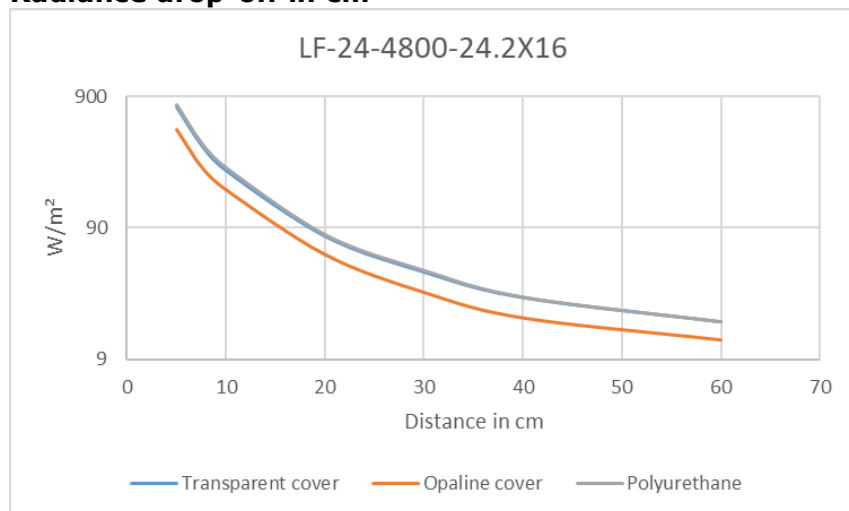
Additional Benefits of LuxaLight Industrial LED Fixture	
Benefits of LED Fixture	Multiple wavelengths in one housing
	No optics required due to high output
	Applicable in Humid environments (PU Version)
	Custom cable output and/or connector
	Wide range of mounting options
	In-house expertise to personally 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*

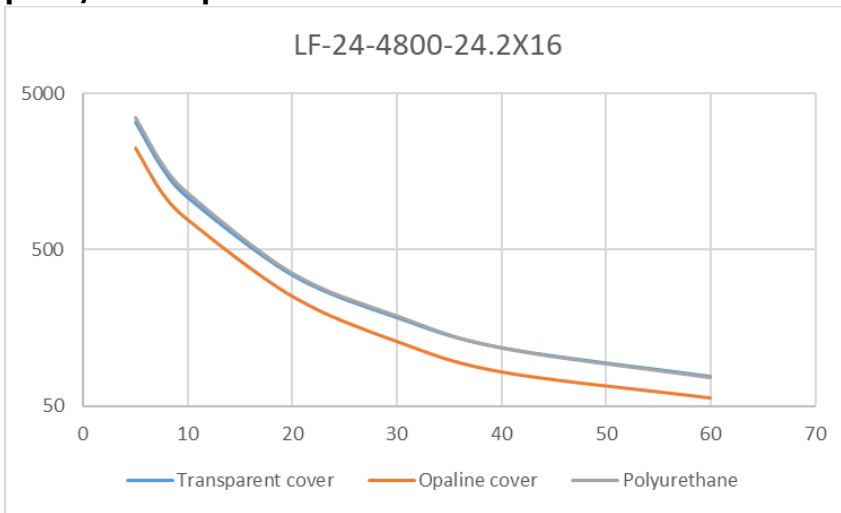
CIE1931 White:



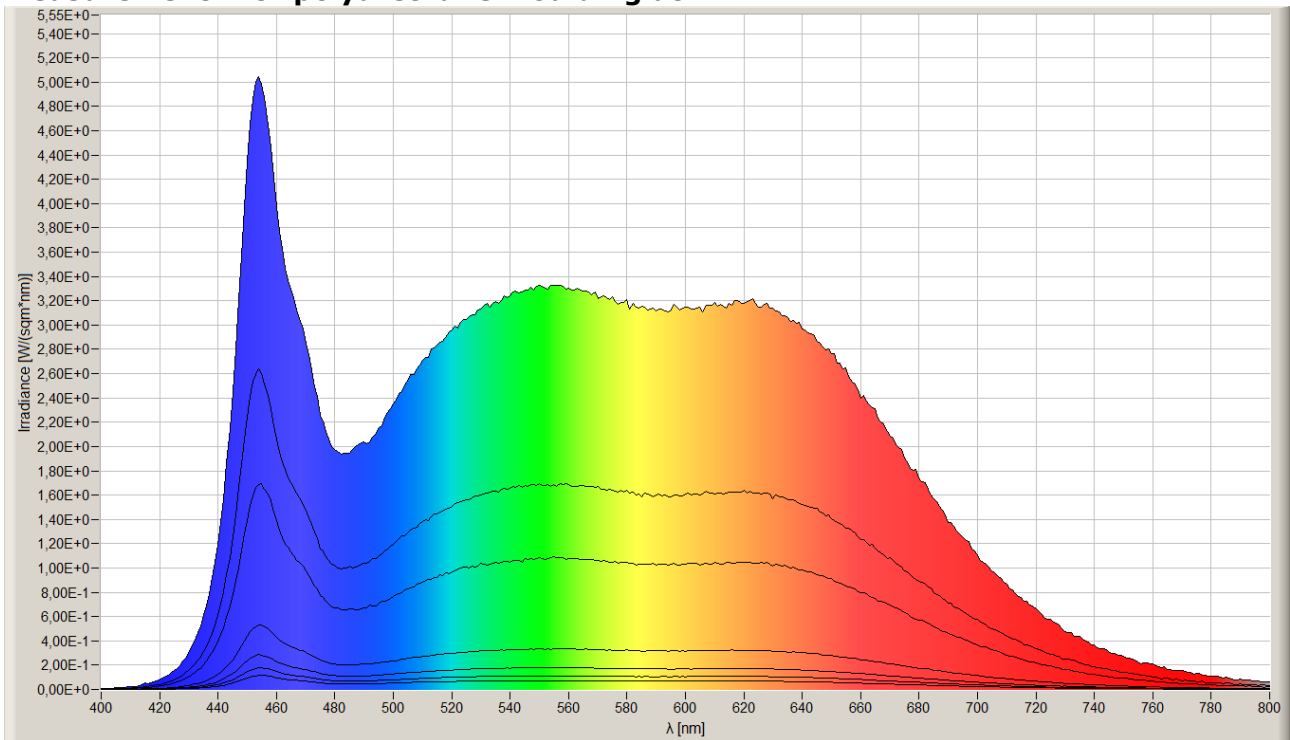
Radiance drop-off in cm



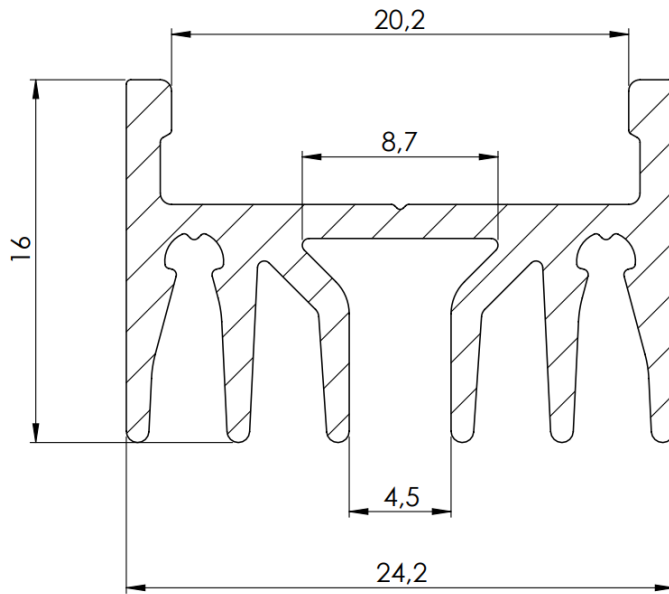
μmol/m² drop-off in cm at 24V



Measurement with polyurethane moulding at 24V

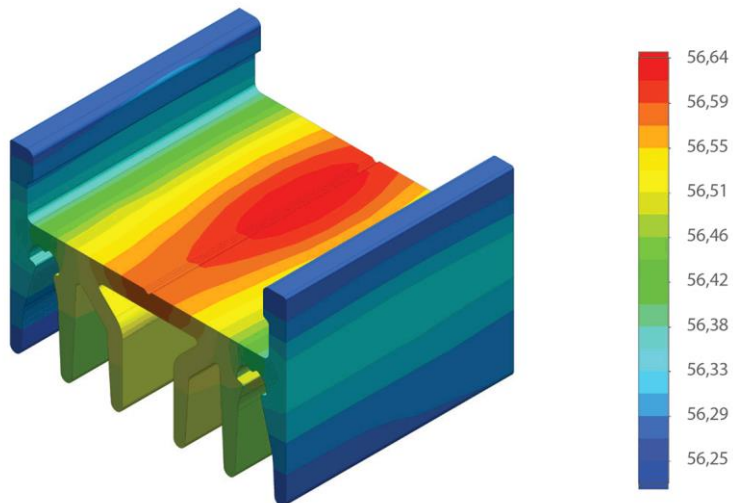


Dimensions



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

While LuxaLight has made every reasonable effort to ensure the accuracy of the information in this brochure, LuxaLight does not guarantee that it is error-free, nor does LuxaLight make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. LuxaLight reserves the right to make any adjustments to the information contained herein at any time without notice. LuxaLight expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalogue are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult LuxaLight for the latest dimensions and design specifications.