

Datasheet

LED engine specification

Product type:
LF-24-960-24.2X16-PU

Description:
**LuxaLight Industrial LED Fixture Transparent IP68 Near Infrared 960nm
24.2x16mm
(24 Volt, 2835, IP64)**



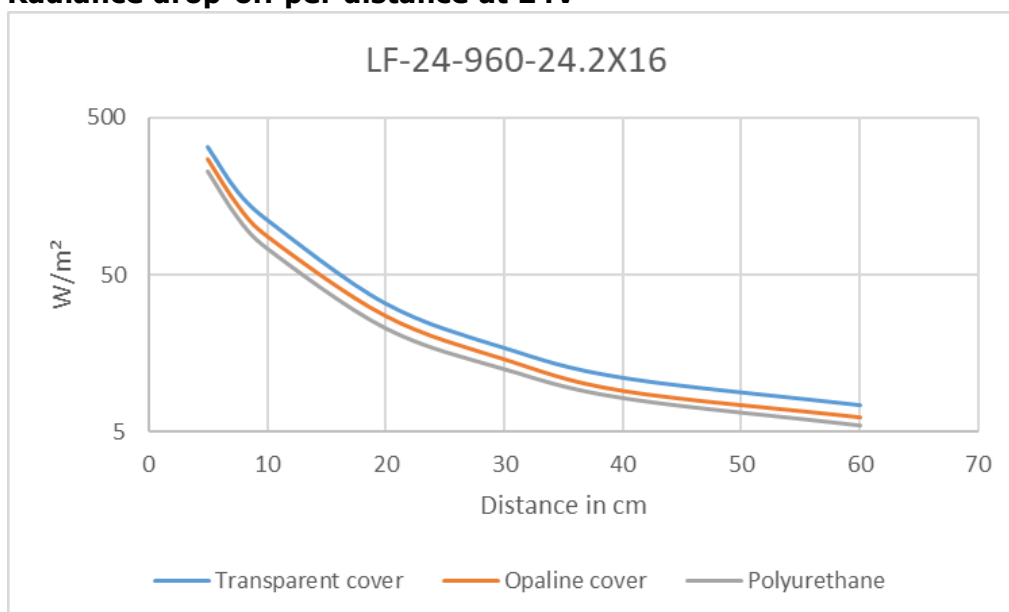
Date:
21-12-2023

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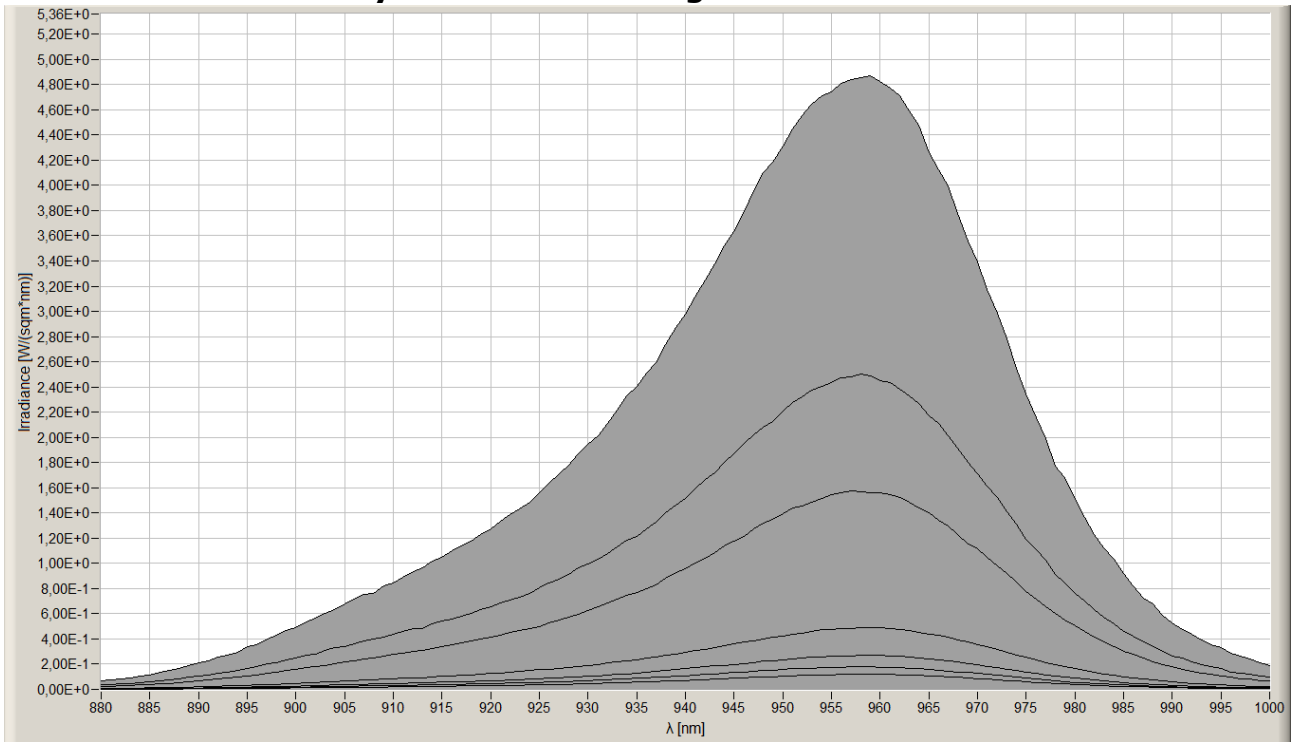
Technical Specifications					
LF-24-960-24.2x16-PU		Polyurethane moulded PU			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (B x L x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	LuxaLight Industrial LED Fixtures infopage			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP64			
	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 Near Infrared 960nm 24V 2835 IP64			
	Driving Method	Constant Voltage			
	Cable type	PUR Cable 4x 0.5mm² Gray LuxaLight			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Engine Wavelength (nm)	960nm Near Infrared			
	Voltage at measurement	24V	29V	34V	
	Current at measurement	1,25A	1,7A	2,1A	
	Wattage at measurement	30W	49,3W	71,7W	
	Peak Measured Wavelength (5cm)	962nm			
	Peak Measured Radiance per distance (cm) (1 LED Engine)	5	4,9 W/m²	6,5 W/m²	7,5 W/m²
		7,5	2,5 W/m²	3,3 W/m²	3,8 W/m²
		10	1,6 W/m²	2,1 W/m²	2,4 W/m²
		20	0,6 W/m²	0,8 W/m²	0,9 W/m²
		30	0,3 W/m²	0,4 W/m²	0,5 W/m²
		40	0,2 W/m²	0,3 W/m²	0,4 W/m²
		60	0,1 W/m²	0,2 W/m²	0,3 W/m²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	228 W/m²	397 W/m²	485 W/m²
		7,5	116 W/m²	202 W/m²	247 W/m²
		10	74 W/m²	129 W/m²	158 W/m²
		20	23 W/m²	40 W/m²	49 W/m²
		30	13 W/m²	23 W/m²	28 W/m²
40		8,2 W/m²	15 W/m²	18 W/m²	
60		5,5 W/m²	10 W/m²	12 W/m²	
Output Reduction Approx.	30% - 35%				
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

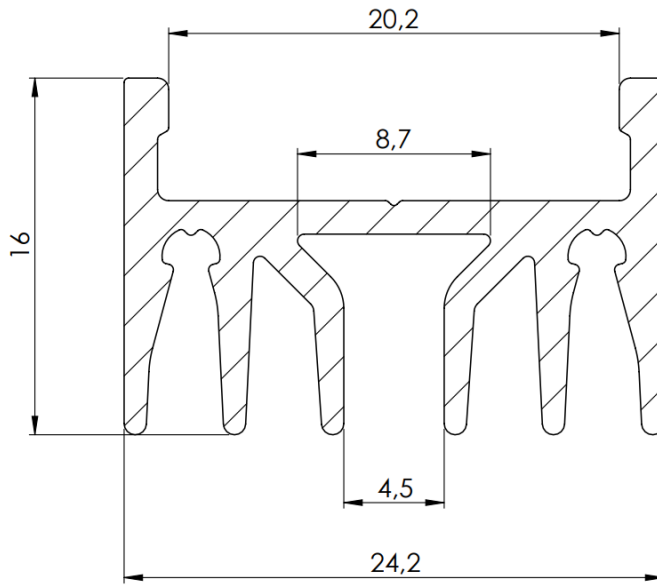
Radiance drop-off per distance at 24V



Measurement with Polyurethane moulding at 24V

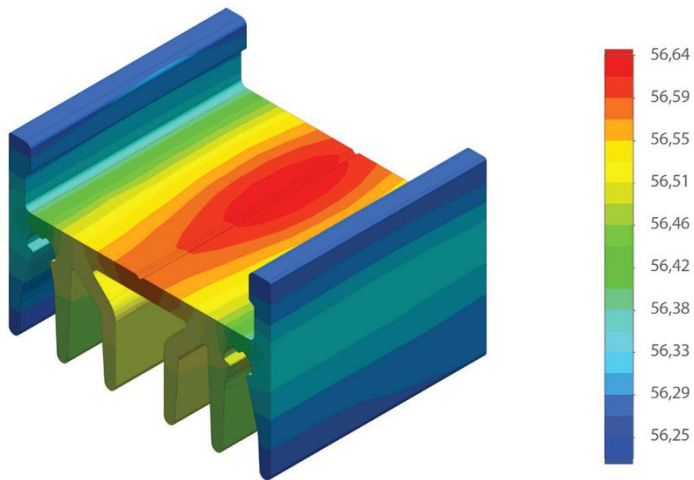


Dimensions



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

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