

Datasheet

LED engine specification

Product type:
LF-24-405-24.2x16-POL

Description:
**LuxaLight Industrial LED Fixture Polarised cover UV-A 405nm 24.2x16mm
(24 Volt, 2835, IP64)**



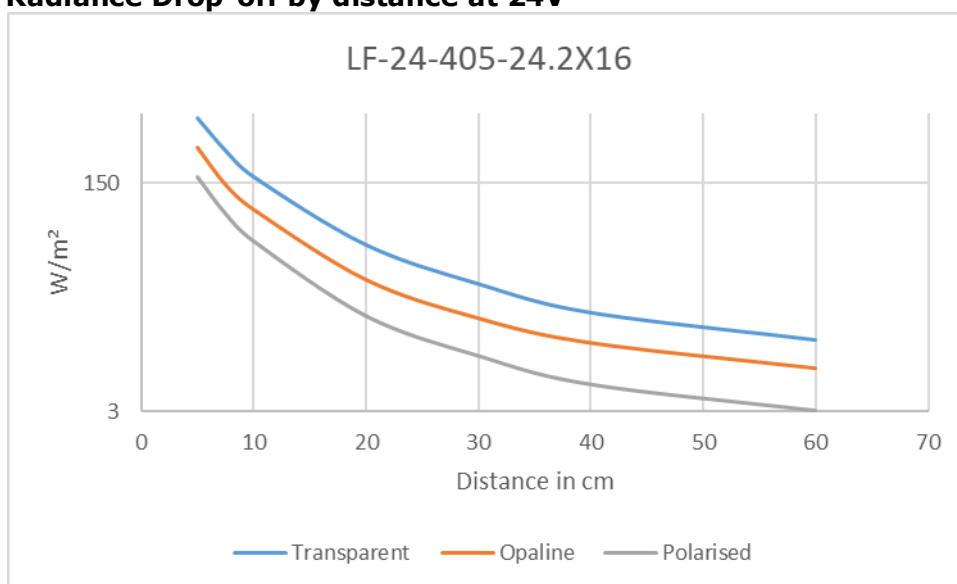
Date:
21-11-2023

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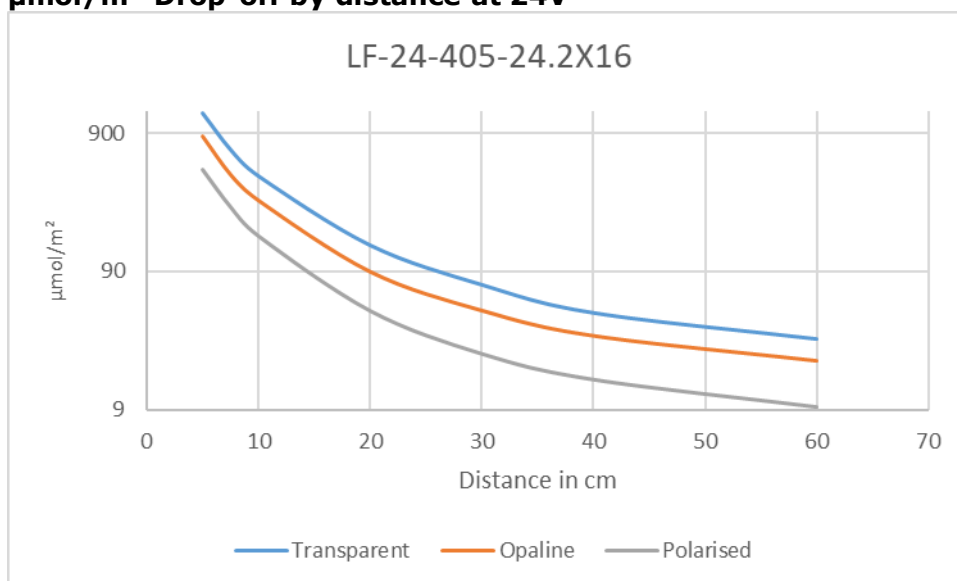
Technical Specifications					
LF-24-405-24.2x16-POL		Polarised cover POL			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L * B * H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	LuxaLight Industrial LED Fixtures infosheet			
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 UV-A 405nm 2835 IP64			
	Driving Method	Constant Voltage			
	Cable type	PUR Cable 4x 0.5mm² Gray LuxaLight			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Voltage at measurement	21,8VDC	24VDC	27,7VDC	
	Current at measurement	0,47 A	1,25 A	2,25 A	
	Wattage at measurement	10,2 W	30 W	62,3 W	
	Engine Wavelength (nm)	405nm UV-A			
	Peak Measured Wavelength (5cm)	406nm	405nm	406nm	
	Peak Measured Radiance per distance (cm) (1 LED Engine)*	5	4,4 W/m²	9,4 W/m²	19,7 W/m²
		7,5	2 W/m²	5 W/m²	10,5 W/m²
		10	1,2 W/m²	3,1 W/m²	6,4 W/m²
		20	0,33 W/m²	0,86 W/m²	1,7 W/m²
		30	0,15 W/m²	0,44 W/m²	0,8 W/m²
		40	0,09 W/m²	0,26 W/m²	0,5 W/m²
		60	0,05 W/m²	0,16 W/m²	0,3 W/m²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)*	5	88 W/m²	167 W/m²	335 W/m²
		7,5	40 W/m²	89,1 W/m²	179 W/m²
		10	25 W/m²	55,6 W/m²	112 W/m²
		20	6,7 W/m²	15,5 W/m²	29,4 W/m²
		30	3,1 W/m²	7,8 W/m²	13,8 W/m²
		40	1,9 W/m²	4,8 W/m²	8,2 W/m²
		60	1,2 W/m²	3,1 W/m²	5 W/m²
	Total PPF PAR (400nm - 700nm) (1 LED Engine)*	5	259 µmol/m²	491 µmol/m²	986 µmol/m²
		7,5	119 µmol/m²	264 µmol/m²	530 µmol/m²
		10	73 µmol/m²	163 µmol/m²	327 µmol/m²
		20	20,3 µmol/m²	47 µmol/m²	89 µmol/m²
30		9,1 µmol/m²	23 µmol/m²	41 µmol/m²	
40		5,9 µmol/m²	15 µmol/m²	26 µmol/m²	
60		3,7 µmol/m²	9,5 µmol/m²	15,5 µmol/m²	
Output Reduction Approx.		60% - 70%			
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 wavelenghts in one fixture that can be controlled/pulsed separately

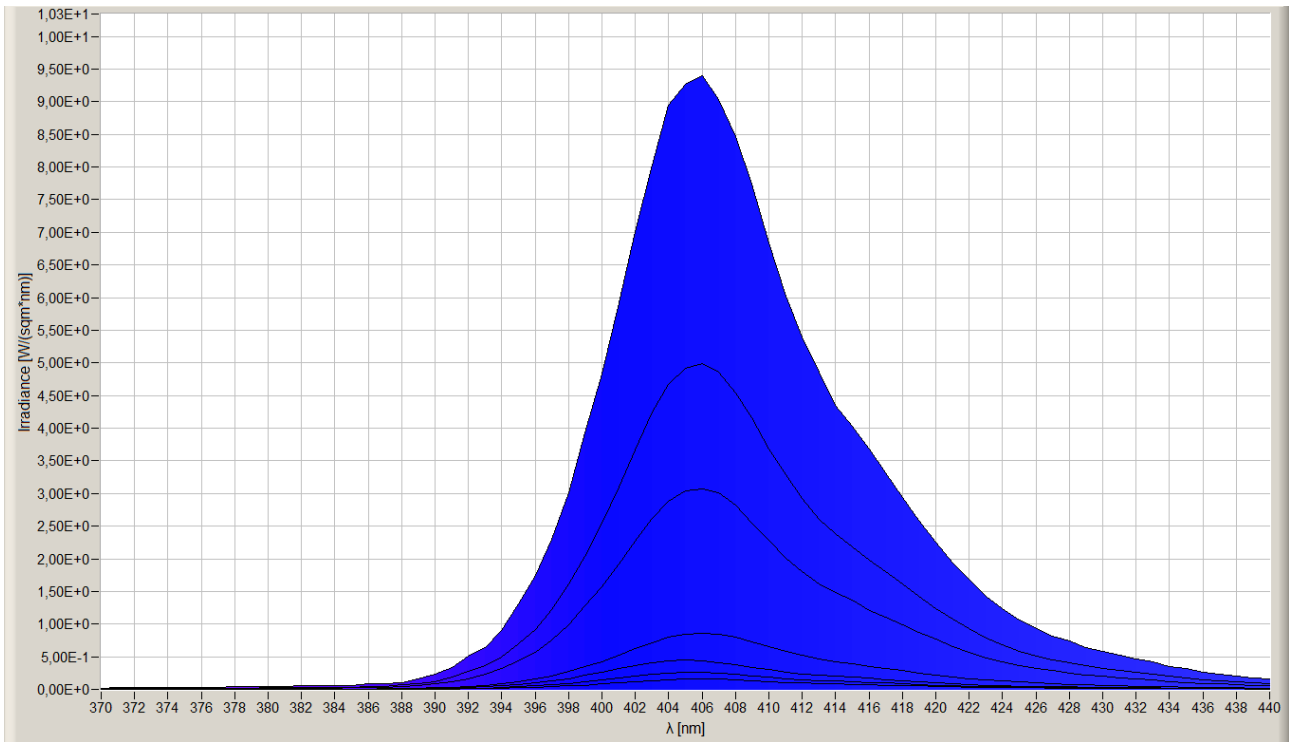
Radiance Drop-off by distance at 24V



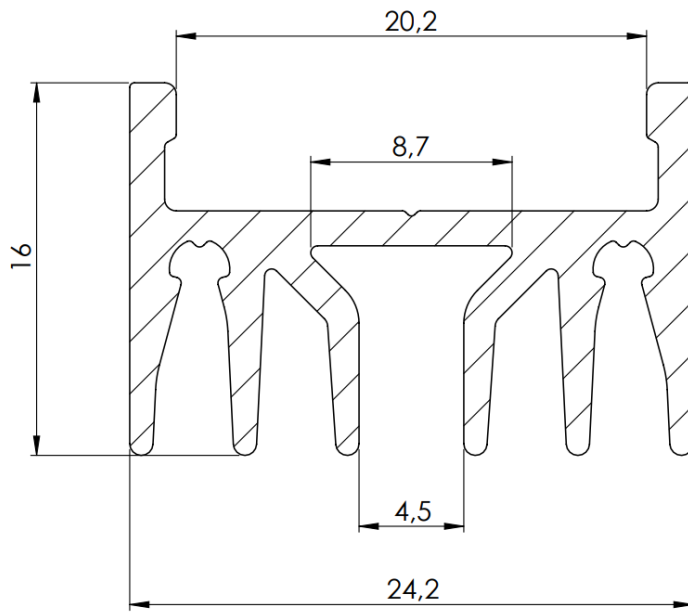
µmol/m² Drop-off by distance at 24V



Polarised cover at 24V

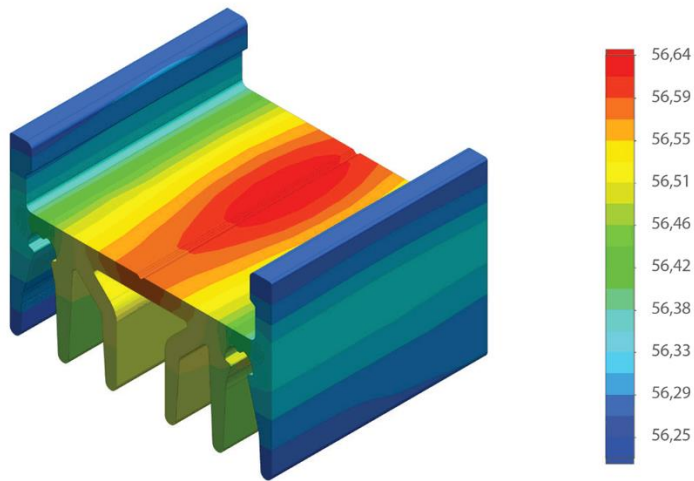


Dimensions



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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