

## Datasheet

LED engine specification

Product type:  
**LF-24-4200-24.2X16-POL**

Description:  
**LuxaLight Industrial LED Fixture Polarised cover Neutral White 4200K  
24.2x16mm**



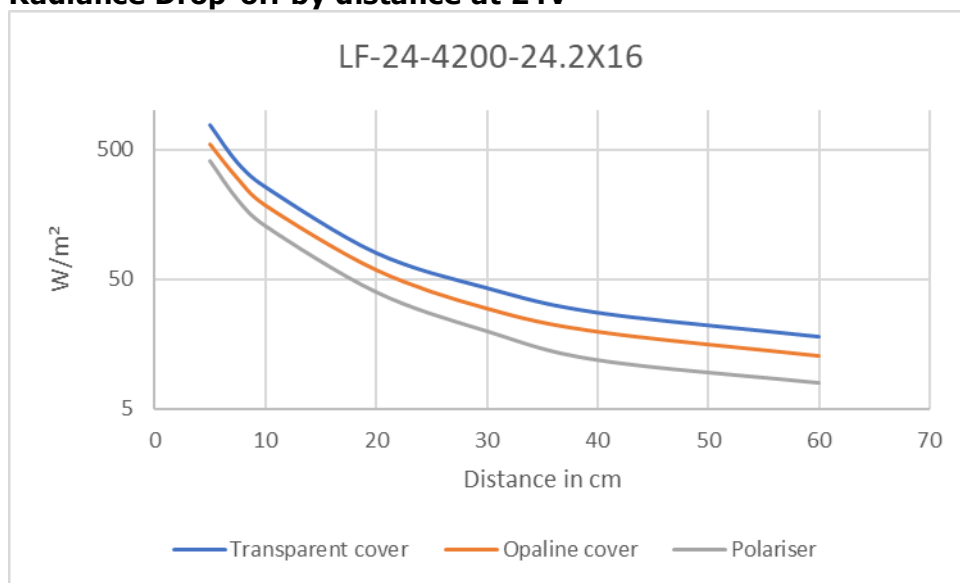
Date:  
05-12-2023

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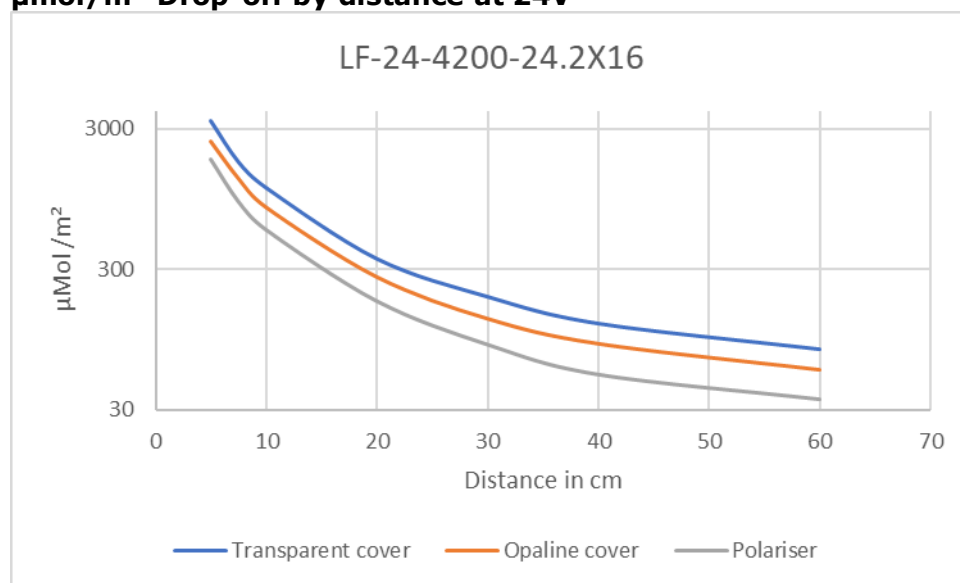
Technical Specifications					
LF-24-4200-24.2x16-POL		Polarised cover POL			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (B x L x H)			
	Weight	Variable, depending on moulding and lenght			
	Infosheet	<a href="#">LuxaLight Industrial LED Fixtures infopage</a>			
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	<a href="#">LuxaLight LED Engine Neutral White 4200K 2835 IP64</a>			
	Driving Method	Constant Voltage			
	Cable type	<a href="#">PUR Cable 4x 0.5mm² Gray   LuxaLight</a>			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Engine Colour temperature(K)	4200K 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)	4007k			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	408 W/m²	581 W/m²	746 W/m²
		7,5	205 W/m²	292 W/m²	375 W/m²
		10	129 W/m²	184 W/m²	236 W/m²
		20	40 W/m²	57 W/m²	73 W/m²
		30	20 W/m²	29 W/m²	37 W/m²
		40	12 W/m²	17 W/m²	22 W/m²
		60	8 W/m²	11 W/m²	14 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	118 klx	163 klx	210 klx
		7,5	60 klx	83 klx	107 klx
		10	38 klx	52,6 klx	67,5 klx
		20	12 klx	16,6 klx	21,3 klx
		30	6 klx	8,3 klx	10,7 klx
		40	3,5 klx	4,8 klx	6,2 klx
		60	2,3 klx	3,2 klx	4,1 klx
	Total PPFD (400nm - 700nm) (1 LED Engine)	5	1811 µmol/m²	2549 µmol/m²	3277 µmol/m²
		7,5	908 µmol/m²	1278 µmol/m²	1643 µmol/m²
10		574 µmol/m²	808 µmol/m²	1039 µmol/m²	
20		179 µmol/m²	252 µmol/m²	324 µmol/m²	
30		88 µmol/m²	124 µmol/m²	159 µmol/m²	
40		54 µmol/m²	76 µmol/m²	97 µmol/m²	
60		36 µmol/m²	51 µmol/m²	65 µmol/m²	
Output Reduction Approx. Due to cover	25% - 30%				
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

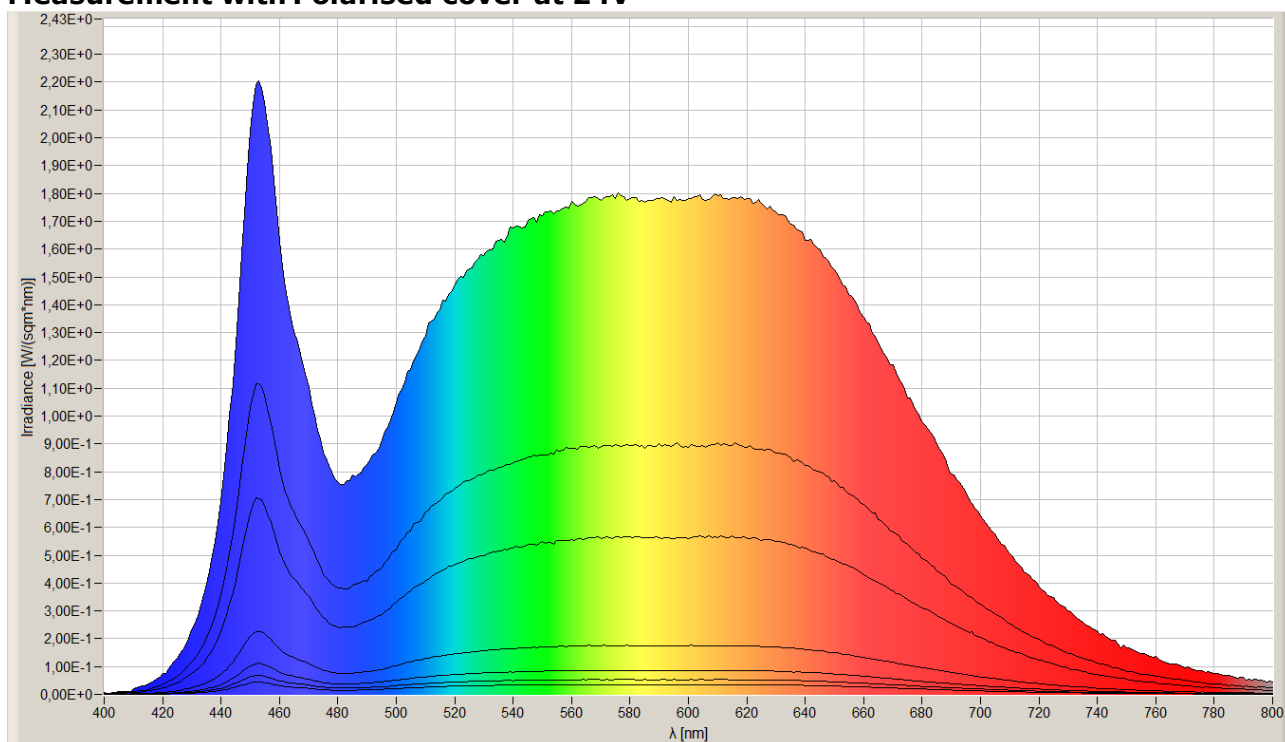
### Radiance Drop-off by distance at 24V



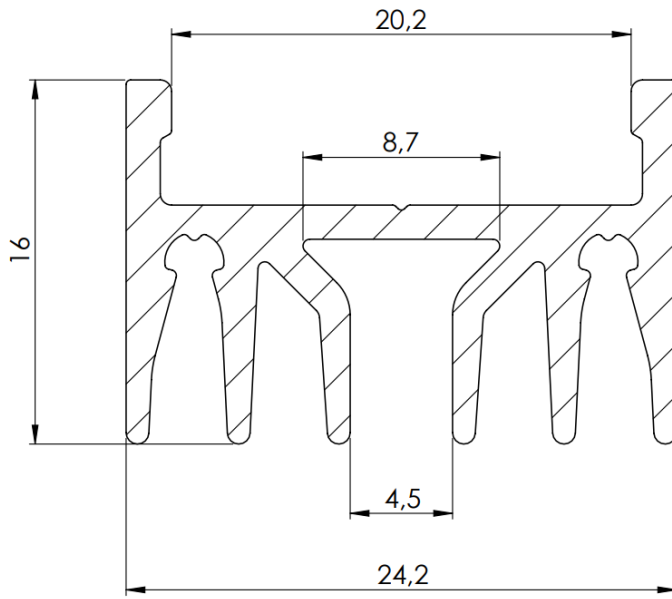
### µmol/m² Drop-off by distance at 24V



## Measurement with Polarised cover at 24V



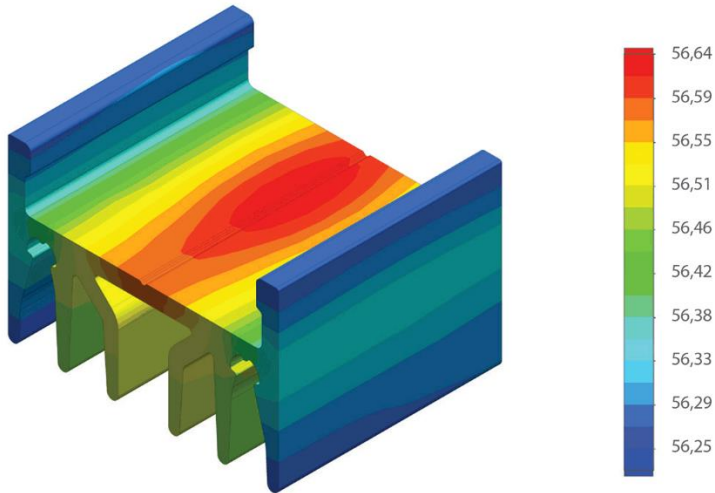
## Dimensions



## 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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