

## Datasheet

LED engine specification

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

Description:  
**LuxaLight Industrial LED Fixture Transparent IP68 Neutral White 4200K  
24.2x16mm**



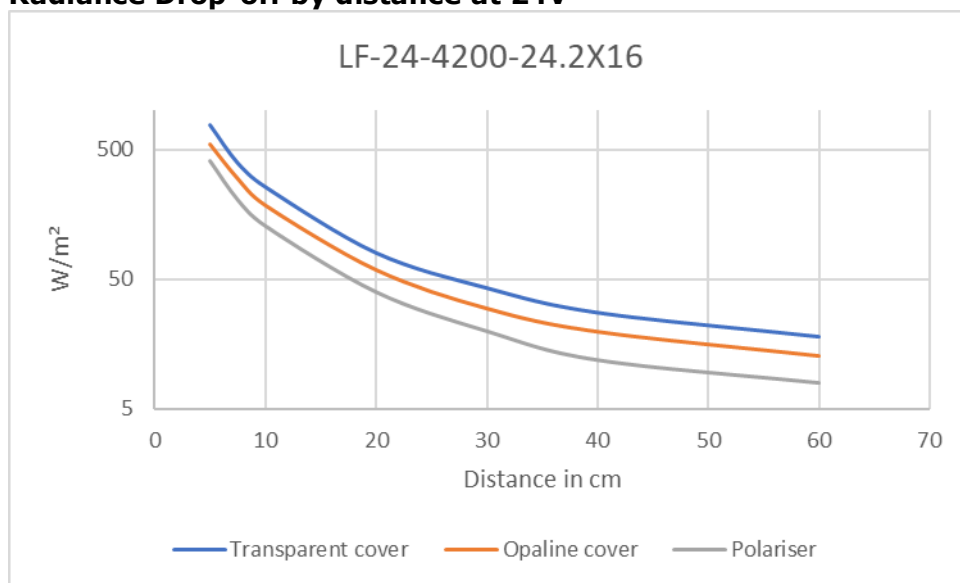
Date:  
04-05-2023

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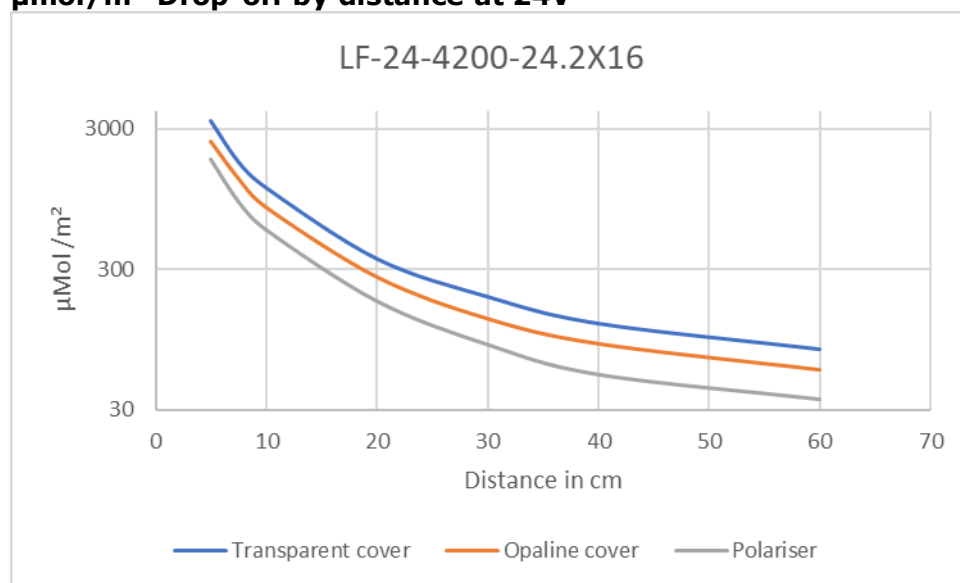
Technical Specifications					
LF-24-4200K-24.2x16-(...)		Polyurethane Moulding PU			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and lenght			
	Infosheet	<a href="#">LuxaLight Industrial LED Fixtures infopage</a>			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP64			
	Mechanical Protection	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	<a href="#">LuxaLight industrial LED Engine Full Spectrum 4200K 24V 2835 IP6.</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)	4117k			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	747 W/m²	1186 W/m²	1546 W/m²
		7,5	425 W/m²	675 W/m²	880 W/m²
		10	274 W/m²	435 W/m²	567 W/m²
		20	85 W/m²	135 W/m²	176 W/m²
		30	44 W/m²	70 W/m²	91 W/m²
		40	28 W/m²	45 W/m²	59 W/m²
		60	20 W/m²	32 W/m²	42 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	218 klx	343 klx	448 klx
		7,5	124 klx	195 klx	254,7 klx
		10	80 klx	126 klx	164,6 klx
		20	25 klx	39,5 klx	51,6 klx
		30	13 klx	20,5 klx	26,8 klx
		40	8,3 klx	13,1 klx	17,1 klx
		60	5,7 klx	9 klx	11,7 klx
	Total PPFd (400nm - 700nm) (1 LED Engine)	5	3329 µmol/m²	5293 µmol/m²	6921 µmol/m²
		7,5	1893 µmol/m²	3010 µmol/m²	3936 µmol/m²
10		1220 µmol/m²	1940 µmol/m²	2537 µmol/m²	
20		378 µmol/m²	601 µmol/m²	786 µmol/m²	
30		198 µmol/m²	315 µmol/m²	412 µmol/m²	
40		127 µmol/m²	202 µmol/m²	264 µmol/m²	
60		87,4 µmol/m²	139 µmol/m²	182 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

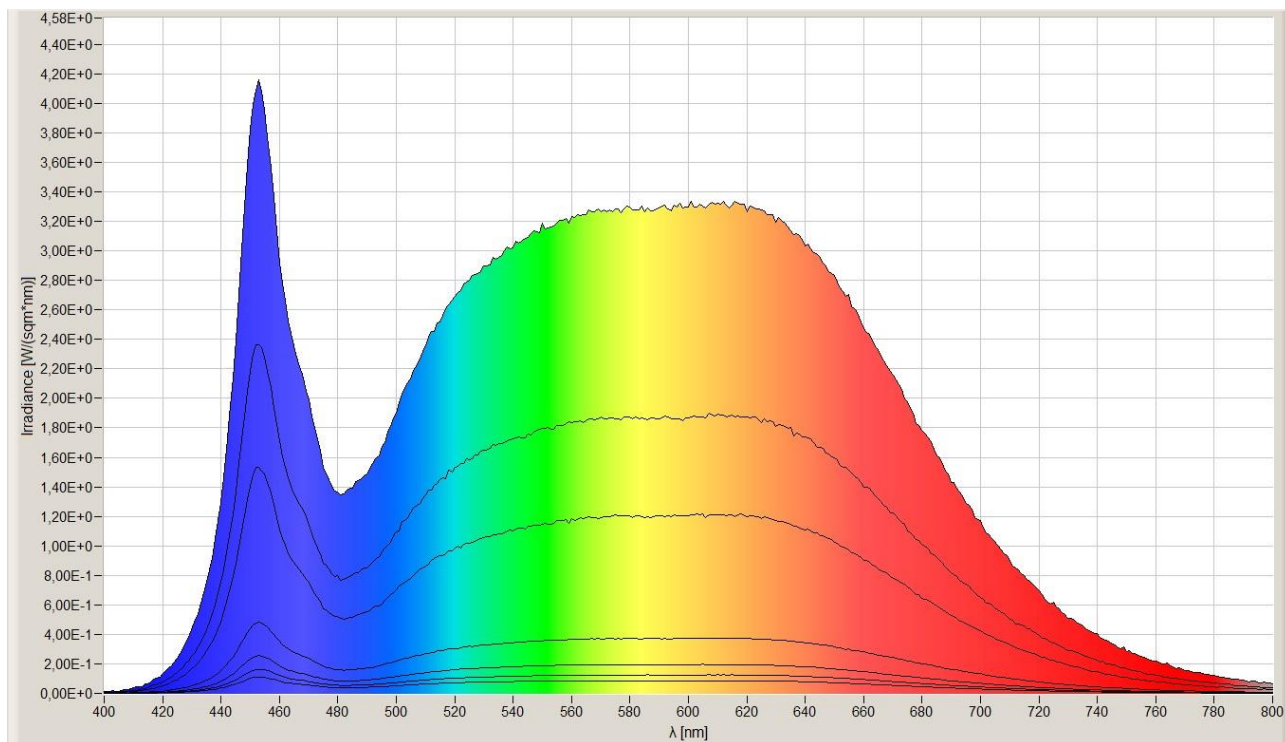
### Radiance Drop-off by distance at 24V



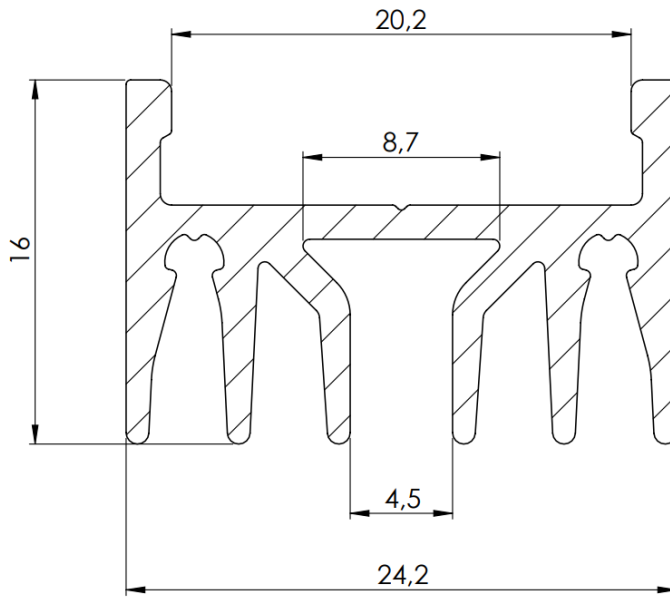
### µmol/m² Drop-off by distance at 24V



## Measurement with Transparent cover at 24V



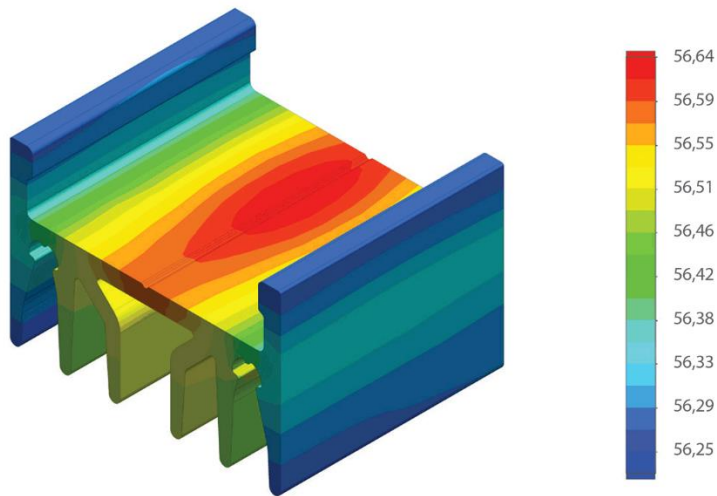
## Dimensions



## 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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