

## Datasheet

LED engine specification

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

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



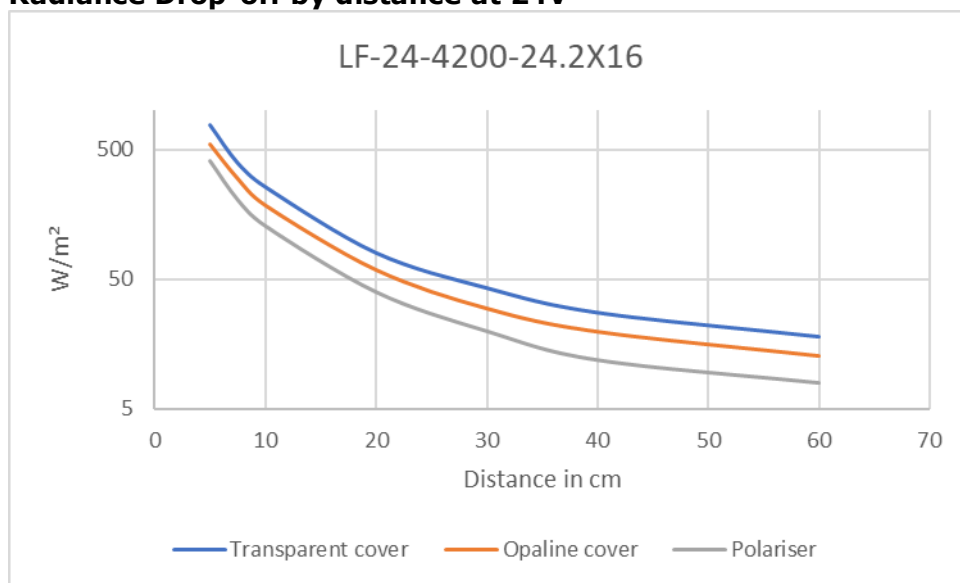
Date:  
05-12-2023

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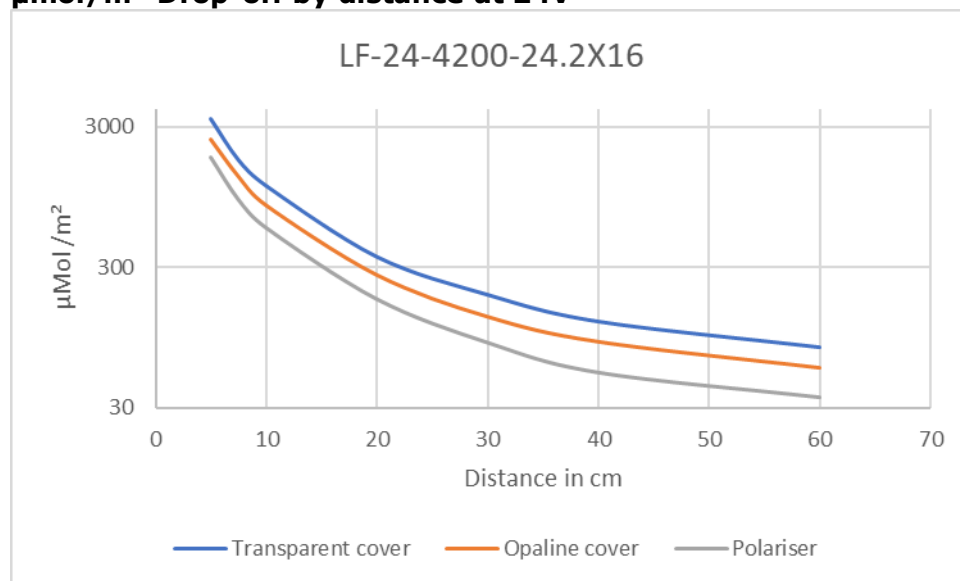
Technical Specifications					
LF-24-4200-24.2x16-TC		Transparent cover TC			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	<a href="#">LuxaLight Industrial LED Fixtures infopage</a>			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP64			
	Mechanical Protection	Transparent 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	
	Peak Colour temp. (5cm)	4149k			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	778 W/m²	1216 W/m²	1575 W/m²
		7,5	396 W/m²	619 W/m²	802 W/m²
		10	259 W/m²	405 W/m²	525 W/m²
		20	80 W/m²	125 W/m²	162 W/m²
		30	43 W/m²	67 W/m²	87 W/m²
		40	28 W/m²	44 W/m²	57 W/m²
		60	18 W/m²	28 W/m²	36 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	226klx	352klx	460klx
		7,5	115klx	179klx	234klx
		10	75klx	117klx	153klx
		20	23klx	36klx	47klx
		30	13klx	20klx	26klx
		40	8,1klx	12klx	16klx
		60	5,3klx	7,9klx	11klx
Total PPFD (400nm - 700nm) (1 LED Engine)	5	3459 µmol/m²	5377 µmol/m²	6975 µmol/m²	
	7,5	1758 µmol/m²	2733 µmol/m²	3545 µmol/m²	
	10	1150 µmol/m²	1788 µmol/m²	2319 µmol/m²	
	20	357 µmol/m²	555 µmol/m²	720 µmol/m²	
	30	191 µmol/m²	297 µmol/m²	385 µmol/m²	
	40	123 µmol/m²	191 µmol/m²	248 µmol/m²	
	60	80,4 µmol/m²	125 µmol/m²	162 µmol/m²	
Output Reduction Approx. Due to cover	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

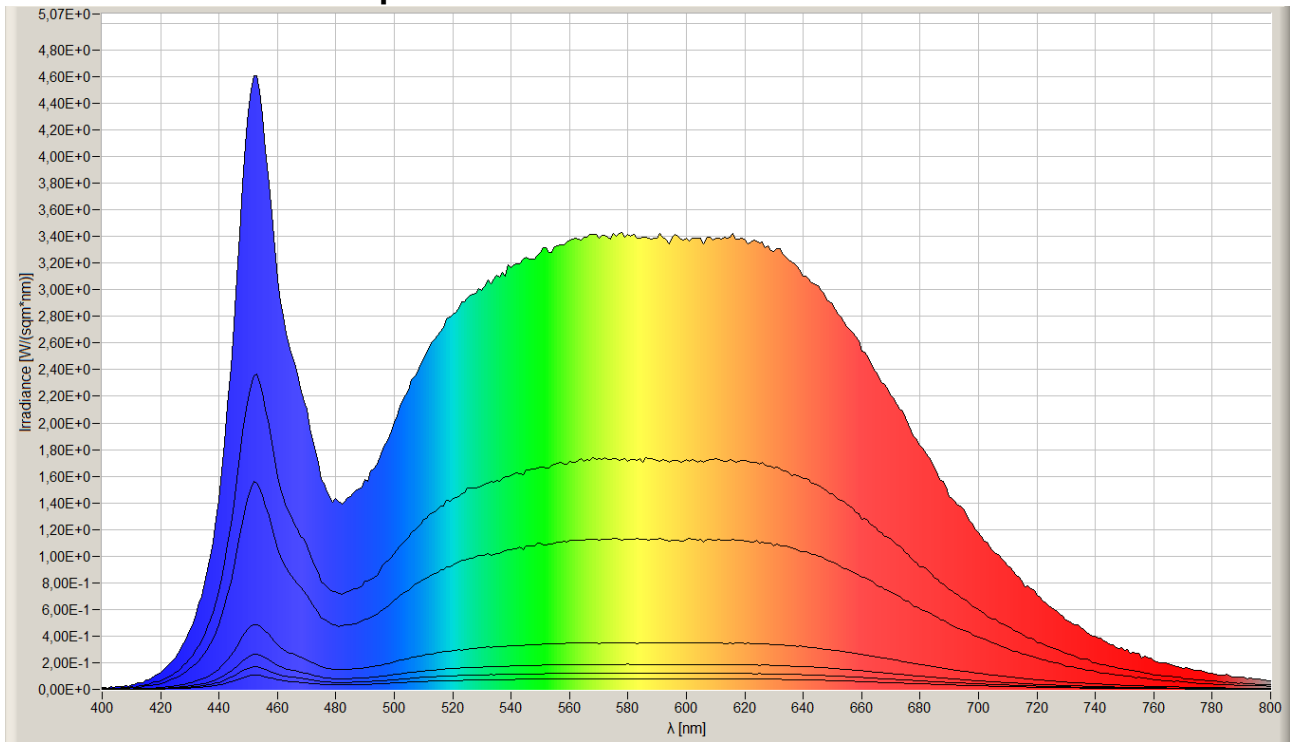
### Radiance Drop-off by distance at 24V



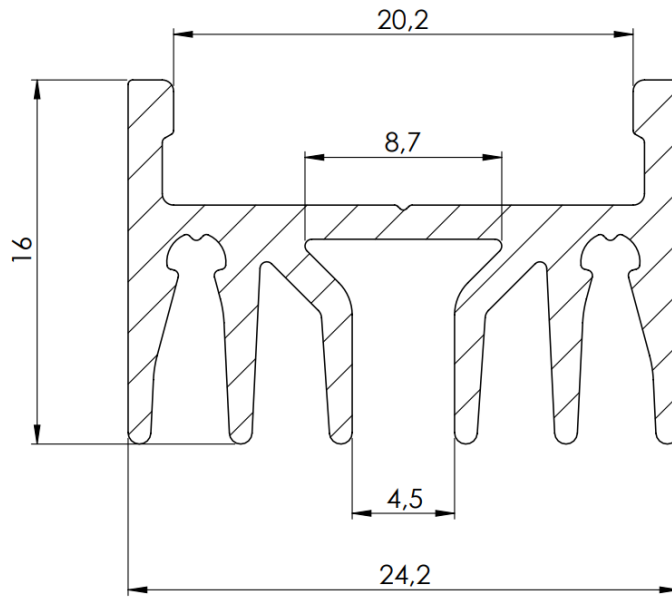
### µmol/m² Drop-off by distance at 24V



## Measurement with Transparent cover at 24V



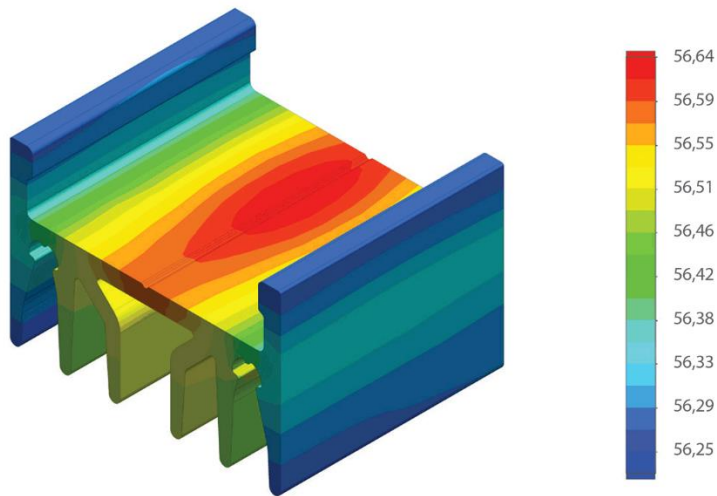
## Dimensions



## 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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