

## Datasheet

LED engine specification

Product type:  
**LF-24-5700-24.2X16-PU**

Description:  
**LuxaLight Industrial LED Fixture White Transparent IP68 5700K 24.2x16mm  
(24 Volt, 2835, IP64)**



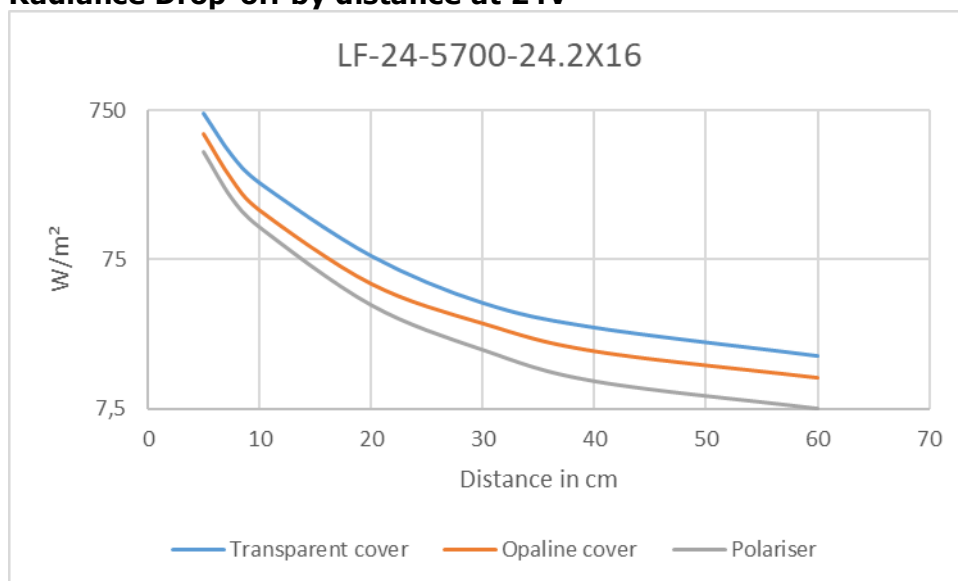
Date:  
06-12-2023

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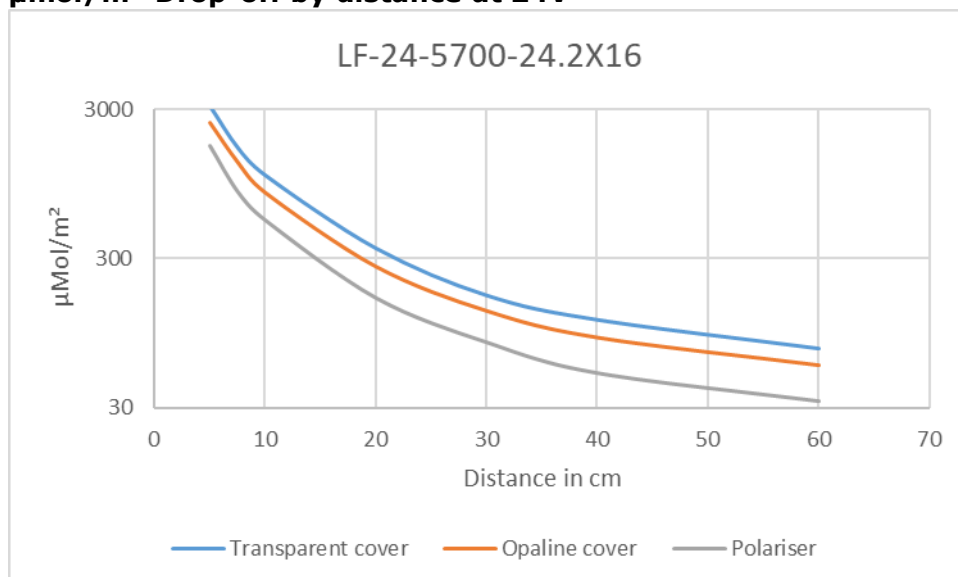
Technical Specifications					
LF-24-5700-24.2x16-PU		Polyurethane moulded PU			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (B x L x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	<a href="#">LuxaLight Industrial LED 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 LED Engine White 5700K 2835 IP64</a>			
	Driving Method	Constant Voltage			
	Cable type	<a href="#">PUR Cable 4x 0.5mm<sup>2</sup> Gray   LuxaLight</a>			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Engine Colour temperature(K)	5700K 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. (10cm)	5517K			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	713 W/m <sup>2</sup>	1045 W/m <sup>2</sup>	1307 W/m <sup>2</sup>
		7,5	378 W/m <sup>2</sup>	554 W/m <sup>2</sup>	693 W/m <sup>2</sup>
		10	273 W/m <sup>2</sup>	400 W/m <sup>2</sup>	500 W/m <sup>2</sup>
		20	82 W/m <sup>2</sup>	120 W/m <sup>2</sup>	150 W/m <sup>2</sup>
		30	42 W/m <sup>2</sup>	61 W/m <sup>2</sup>	76 W/m <sup>2</sup>
		40	23 W/m <sup>2</sup>	33 W/m <sup>2</sup>	41 W/m <sup>2</sup>
		60	16 W/m <sup>2</sup>	23 W/m <sup>2</sup>	29 W/m <sup>2</sup>
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	202klx	298klx	375klx
		7,5	107klx	158klx	199klx
		10	78klx	115klx	145klx
		20	23klx	34klx	43klx
		30	12klx	18klx	23klx
		40	6,5klx	9,8klx	13klx
		60	4,6klx	6,9klx	9,2klx
Total PPFD (400nm - 700nm) (1 LED Engine)	5	3142 μmol/m <sup>2</sup>	4580 μmol/m <sup>2</sup>	5707 μmol/m <sup>2</sup>	
	7,5	1662 μmol/m <sup>2</sup>	2423 μmol/m <sup>2</sup>	3019 μmol/m <sup>2</sup>	
	10	1200 μmol/m <sup>2</sup>	1750 μmol/m <sup>2</sup>	2181 μmol/m <sup>2</sup>	
	20	362 μmol/m <sup>2</sup>	528 μmol/m <sup>2</sup>	658 μmol/m <sup>2</sup>	
	30	186 μmol/m <sup>2</sup>	271 μmol/m <sup>2</sup>	338 μmol/m <sup>2</sup>	
	40	103 μmol/m <sup>2</sup>	150 μmol/m <sup>2</sup>	187 μmol/m <sup>2</sup>	
	60	81,9 μmol/m <sup>2</sup>	119 μmol/m <sup>2</sup>	148 μmol/m <sup>2</sup>	
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

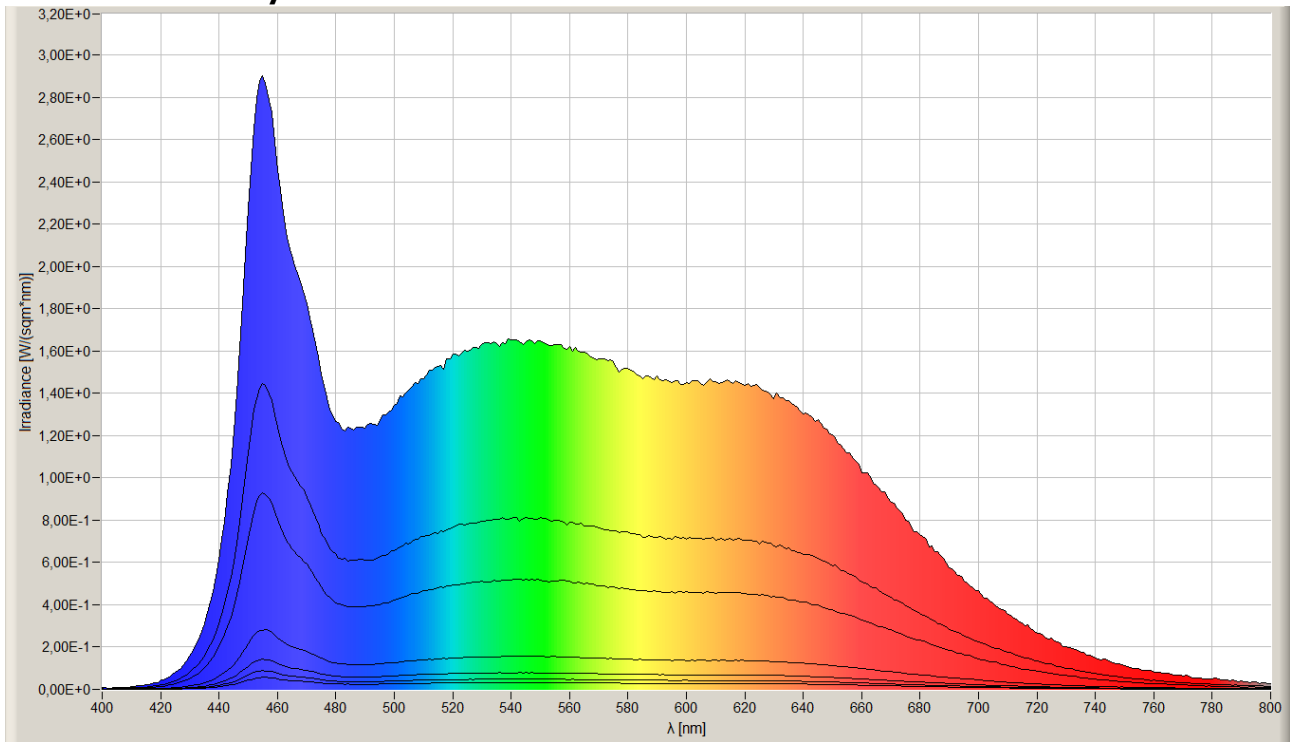
## Radiance Drop-off by distance at 24V



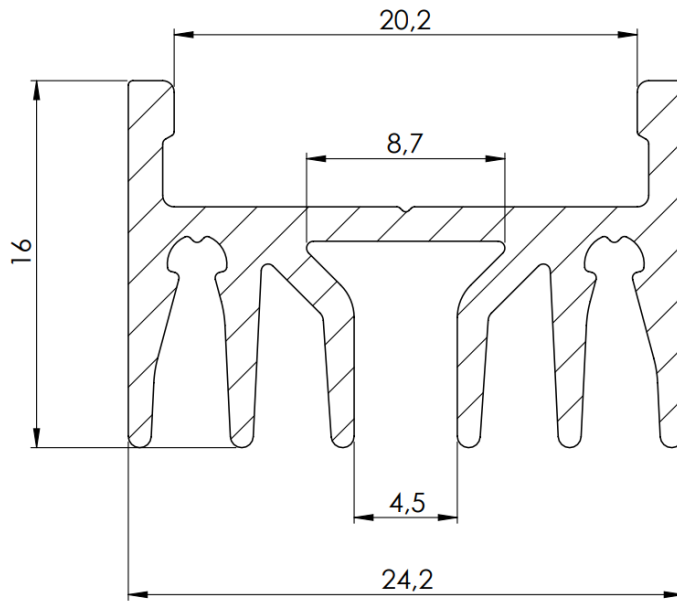
## µmol/m² Drop-off by distance at 24V



## Measurement Polyurethane moulded IP68 at 24V

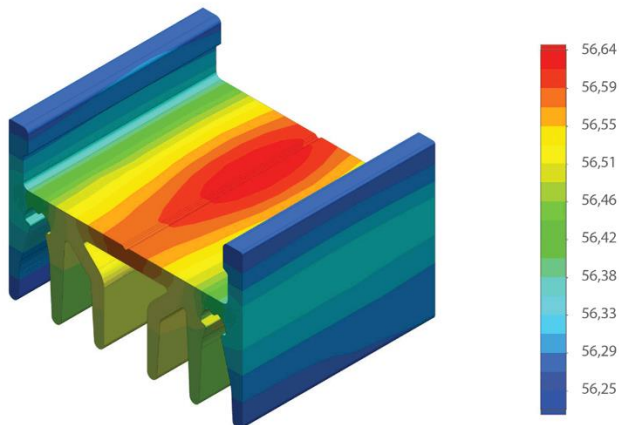


## Dimensions



## 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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