

## Datasheet

LED engine specification

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

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



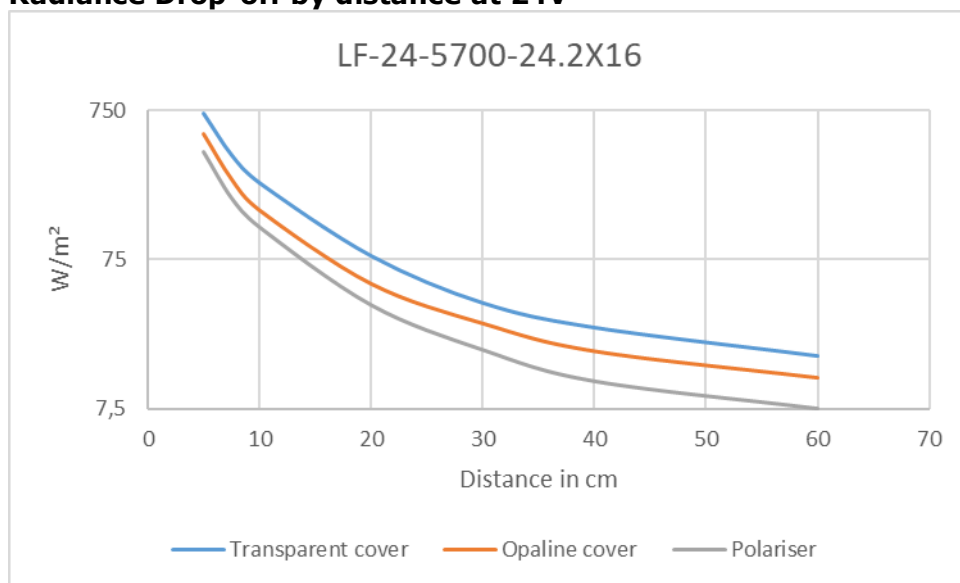
Date:  
29-11-2023

Page 1 of 6

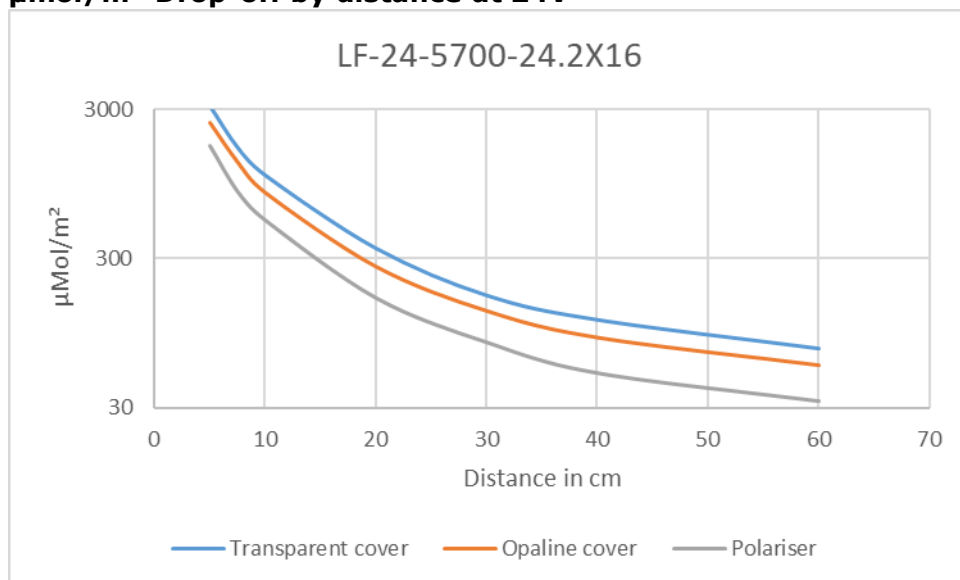
Technical Specifications					
LF-24-5700-24.2x16-POL		Polarised cover POL			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm* 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	<a href="#">LuxaLight Industrial LED Fixtures infopage</a>			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP64			
	Mechanical Protection	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 White 5700K 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)	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. (5cm)	5505k			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	391 W/m²	581 W/m²	739 W/m²
		7,5	193 W/m²	287 W/m²	365 W/m²
		10	123 W/m²	183 W/m²	233 W/m²
		20	37 W/m²	55 W/m²	70 W/m²
		30	19 W/m²	28 W/m²	36 W/m²
		40	11 W/m²	16 W/m²	21 W/m²
		60	8 W/m²	12 W/m²	16 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	111klx	161klx	201klx
		7,5	55klx	80klx	100klx
		10	35klx	51klx	64klx
		20	11klx	16klx	20klx
		30	5,3klx	7,7klx	9,6klx
		40	3,3klx	4,8klx	6klx
		60	2,2klx	3,2klx	4klx
Total PPFD (400nm - 700nm) (1 LED Engine)	5	1718 µmol/m²	2541 µmol/m²	3246 µmol/m²	
	7,5	845 µmol/m²	1250 µmol/m²	1597 µmol/m²	
	10	543 µmol/m²	803 µmol/m²	1026 µmol/m²	
	20	163 µmol/m²	241 µmol/m²	308 µmol/m²	
	30	82 µmol/m²	121 µmol/m²	155 µmol/m²	
	40	51 µmol/m²	75 µmol/m²	96 µmol/m²	
	60	33 µmol/m²	49 µmol/m²	63 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

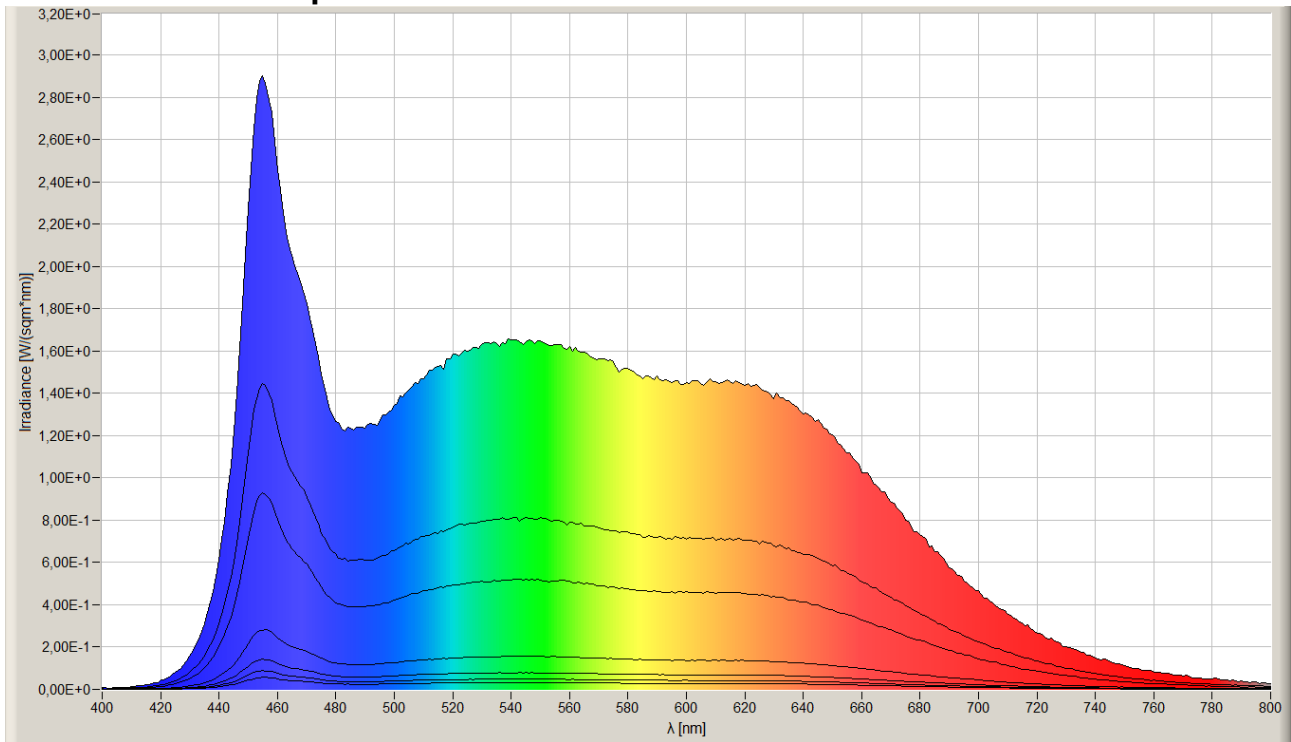
### Radiance Drop-off by distance at 24V



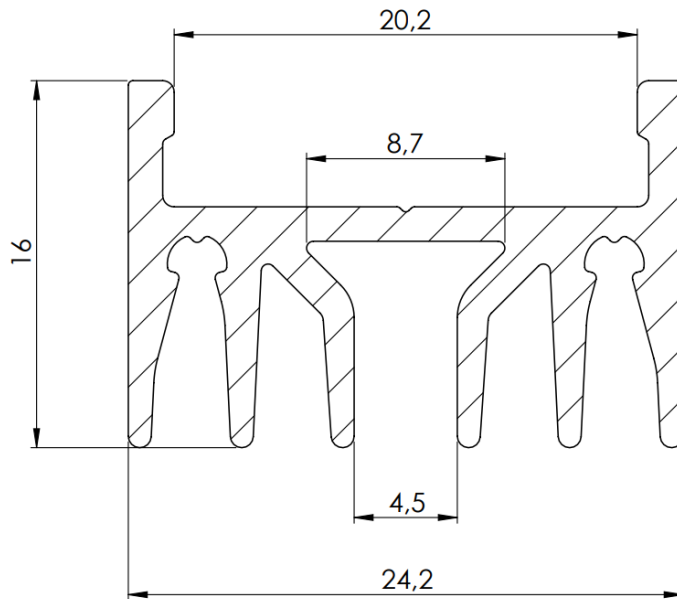
### µmol/m² Drop-off by distance at 24V



## Measurements with polarizer at 24V

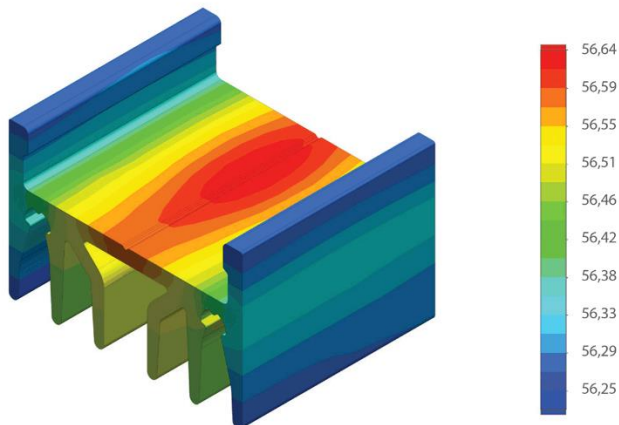


## Dimensions



## 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

While LuxaLight has made every reasonable effort to ensure the accuracy of the information in this brochure, LuxaLight does not guarantee that it is error-free, nor does LuxaLight make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. LuxaLight reserves the right to make any adjustments to the information contained herein at any time without notice. LuxaLight expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalogue are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult LuxaLight for the latest dimensions and design specifications.