

Datasheet

LED engine specification

Product type:
LF-24-5700-24.2X16-TC

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



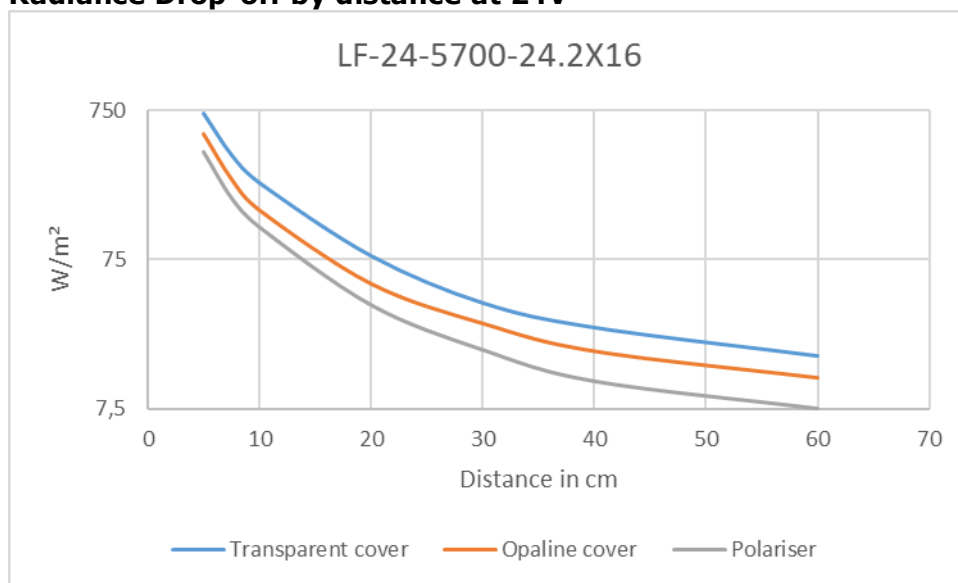
Date:
06-12-2023

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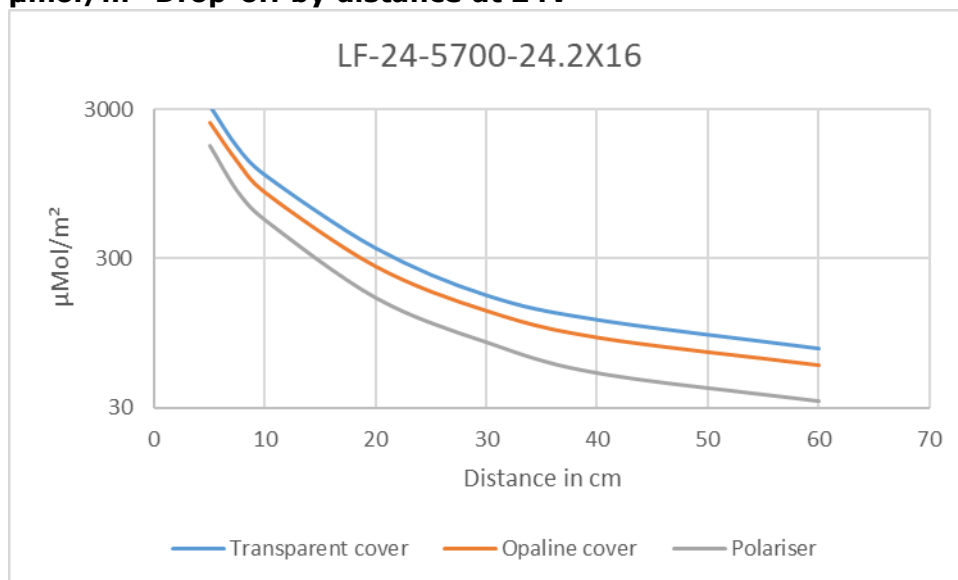
Technical Specifications					
LF-24-5700-24.2x16-TC		Transparent cover TC			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	LuxaLight Industrial LED Fixtures infopage			
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	LuxaLight LED Engine White 5700K 2835 IP64			
	Driving Method	Constant Voltage			
	Cable type	PUR Cable 4x 0.5mm² Gray LuxaLight			
	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)	5723K			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	718 W/m²	1142 W/m²	1448 W/m²
		7,5	378 W/m²	601 W/m²	762 W/m²
		10	246 W/m²	391 W/m²	496 W/m²
		20	80 W/m²	127 W/m²	161 W/m²
		30	38 W/m²	57,2 W/m²	72,5 W/m²
		40	26 W/m²	39,1 W/m²	49,6 W/m²
		60	17 W/m²	25,6 W/m²	32,5 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	203klx	332klx	419klx
		7,5	107klx	175klx	221klx
		10	69klx	113klx	142,7klx
		20	22klx	36,1klx	45,6klx
		30	11klx	18,1klx	22,9klx
		40	7,5klx	12,3klx	15,6klx
		60	4,8klx	7,9klx	10klx
Total PPFD (400nm - 700nm) (1 LED Engine)	5	3157 µmol/m²	5033 µmol/m²	6358 µmol/m²	
	7,5	1663 µmol/m²	2651 µmol/m²	3349 µmol/m²	
	10	1082 µmol/m²	1725 µmol/m²	2179 µmol/m²	
	20	350 µmol/m²	558 µmol/m²	705 µmol/m²	
	30	169 µmol/m²	269 µmol/m²	340 µmol/m²	
	40	116 µmol/m²	185 µmol/m²	234 µmol/m²	
	60	74,4 µmol/m²	119 µmol/m²	151 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

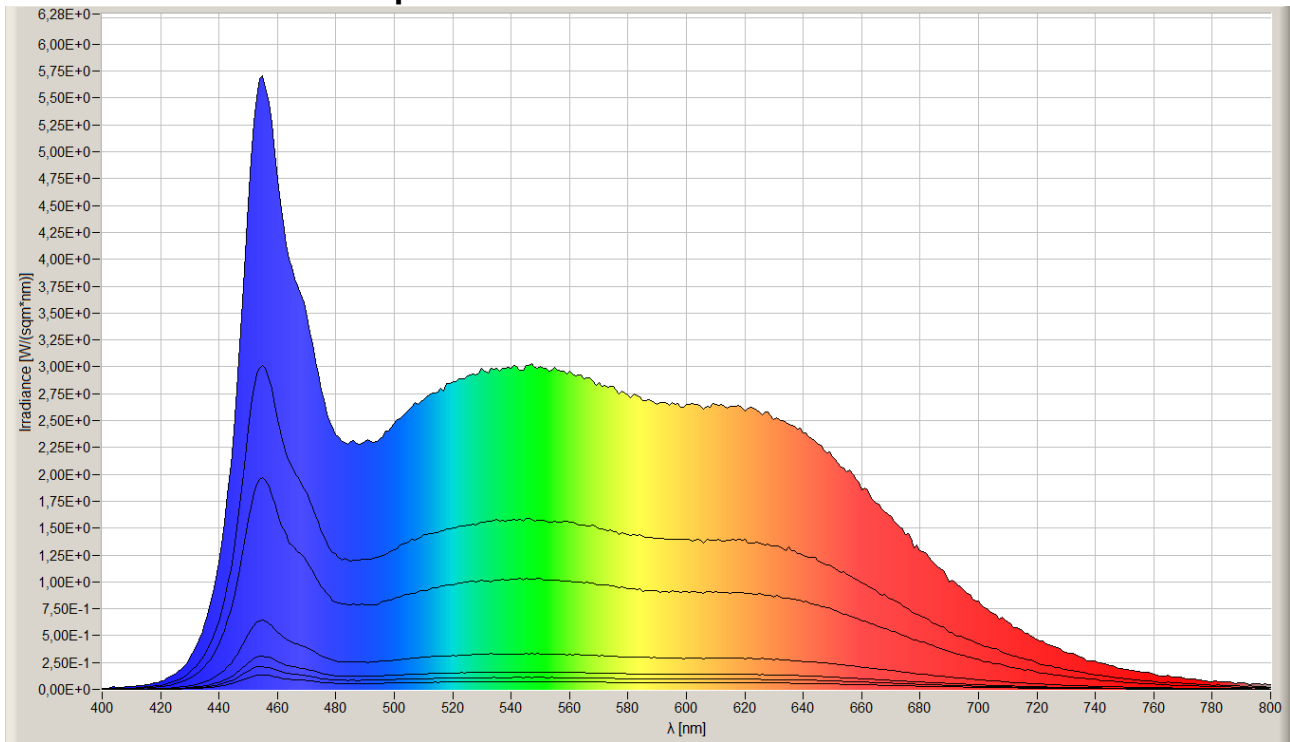
Radiance Drop-off by distance at 24V



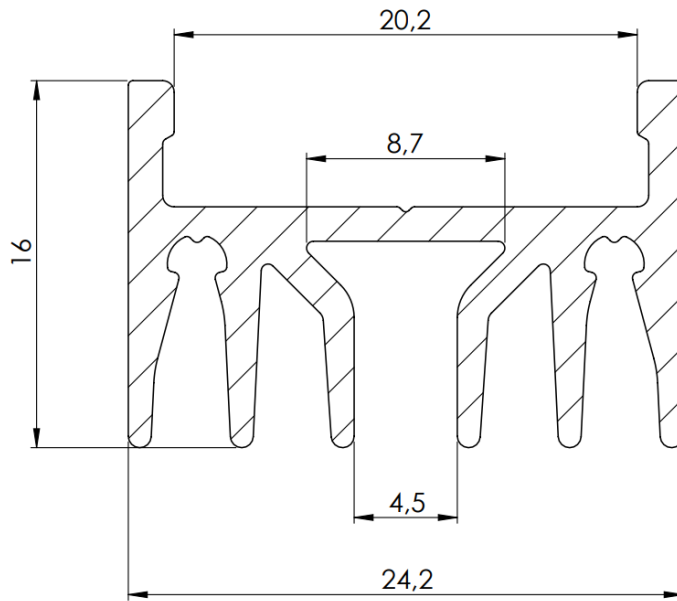
µmol/m² Drop-off by distance at 24V



Measurements with Transparent cover at 24V

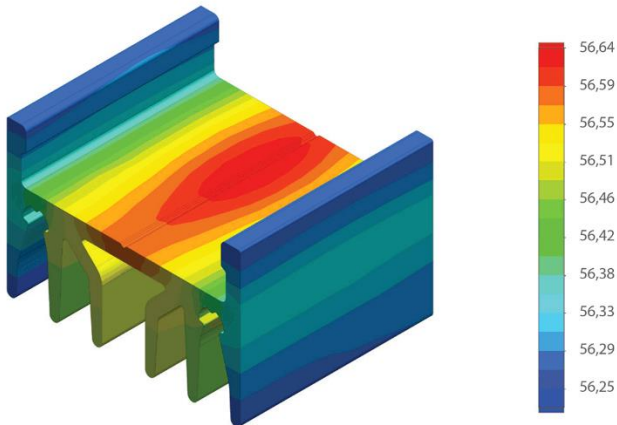


Dimensions



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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