

Datasheet

LED engine specification

Product type:
LF-24-525-24.2X16-TC

Description:
**LuxaLight Industrial LED Fixture Transparent cover Green 525nm
24.2x16mm
(24 Volt, 2835, IP64)**



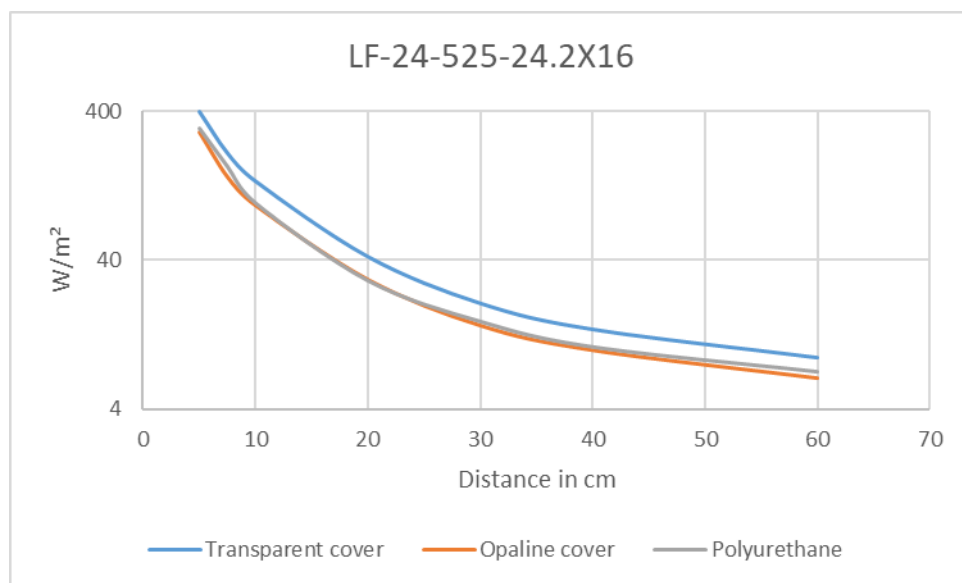
Date:
12-12-2023

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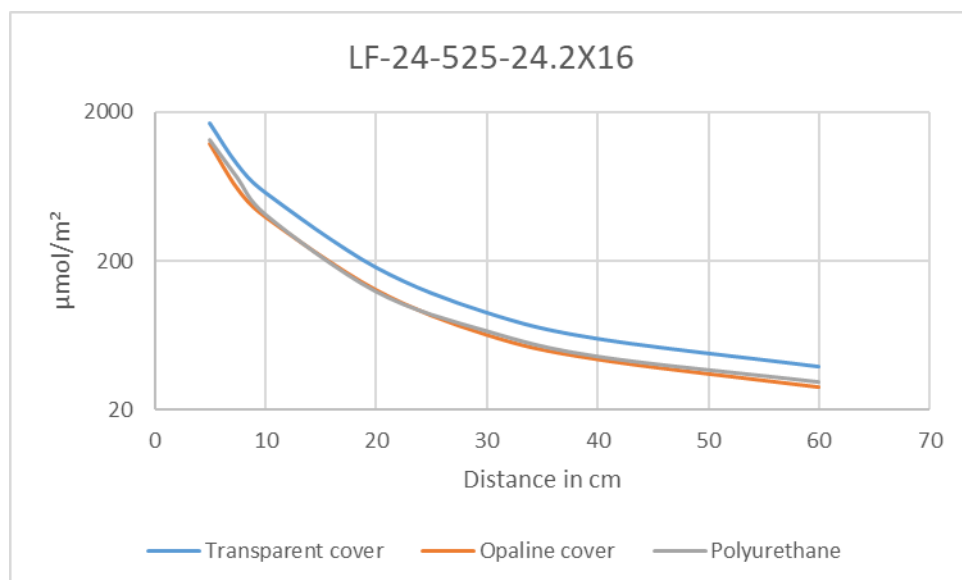
Technical Specifications					
LF-24-525-24.2x16-TC		Transparent cover TC			
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	220mm - 3000mm * 24,2mm * 16mm (L x B x H)			
	Weight	Variable, depending on moulding and length			
	Infosheet	LuxaLight Industrial LED Fixtures infopage			
Environment	Working Temperature	-5°C ~ +60°C			
	Storing Temperature	-5°C ~ +60°C			
	IP Grade	IP64			
	Mechanical Protection	PMMA Transparent 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 Green 525nm 24V 2835 IP64			
	Driving Method	Constant Voltage			
	Cable type	PUR Cable 4x 0.5mm² Gray LuxaLight			
	NTC Resistance	5KOhm			
	NTC Beta	3950			
Lighting	Voltage at measurement	24VDC	29VDC	34VDC	
	Current at measurement	1,25A	1,9A	2,65A	
	Wattage at measurement	30W	55,1W	90,1W	
	Engine Wavelength (nm)	525nm Green			
	Peak Measured Wavelength (5cm)	521nm			
	Peak Measured Radiance per distance (cm) (1 LED Engine)	5	10,4 W/m²	14,3 W/m²	17,2 W/m²
		7,5	5,4 W/m²	7,4 W/m²	8,9 W/m²
		10	3,5 W/m²	4,8 W/m²	5,8 W/m²
		20	1,1 W/m²	1,5 W/m²	1,8 W/m²
		30	0,6 W/m²	0,8 W/m²	1 W/m²
		40	0,4 W/m²	0,5 W/m²	0,6 W/m²
		60	0,2 W/m²	0,3 W/m²	0,4 W/m²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	396 W/m²	538 W/m²	669 W/m²
		7,5	209 W/m²	284 W/m²	353 W/m²
		10	135 W/m²	185 W/m²	229,9 W/m²
		20	42,1 W/m²	57,7 W/m²	71,7 W/m²
		30	20,5 W/m²	28,1 W/m²	34,9 W/m²
		40	13,7 W/m²	18,8 W/m²	23,3 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)	5	195 klx	260 klx	315 klx
		7,5	103 klx	137 klx	166 klx
		10	67 klx	89 klx	108 klx
		20	21 klx	28 klx	34 klx
		30	10 klx	13 klx	16 klx
40		7 klx	9,1 klx	11 klx	
Total PPFd (400nm - 700nm) (1 LED Engine)	5	1679 µmol/m²	2291 µmol/m²	2850 µmol/m²	
	7,5	886 µmol/m²	1209 µmol/m²	1504 µmol/m²	
	10	576 µmol/m²	786 µmol/m²	978 µmol/m²	
	20	181 µmol/m²	247 µmol/m²	306 µmol/m²	
	30	90 µmol/m²	123 µmol/m²	152 µmol/m²	
	40	60 µmol/m²	82 µmol/m²	101 µmol/m²	
60	39 µmol/m²	53 µmol/m²	65 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

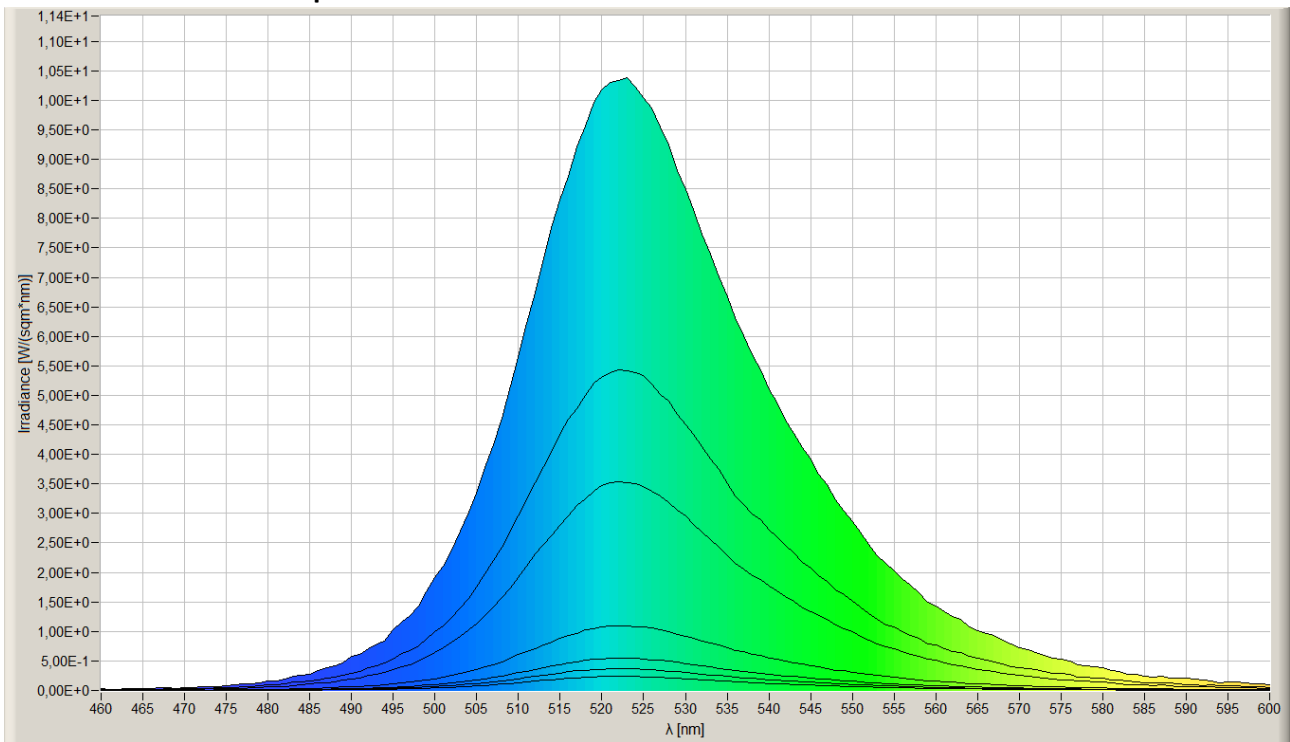
Radiance Drop-off by distance at 24V



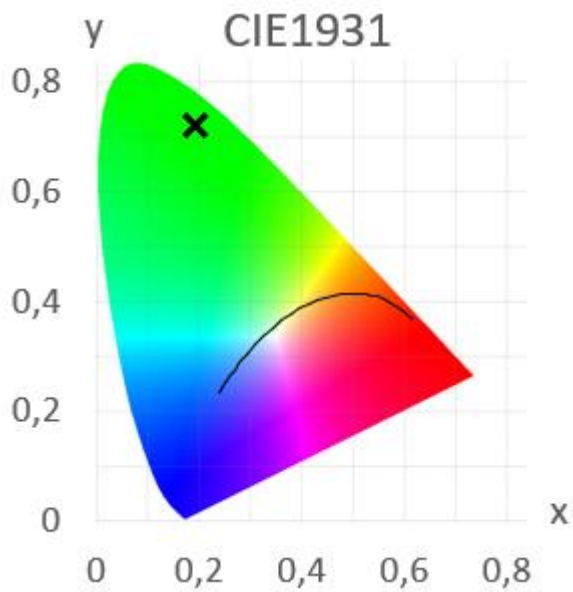
µmol/m² Drop-off by distance at 24V



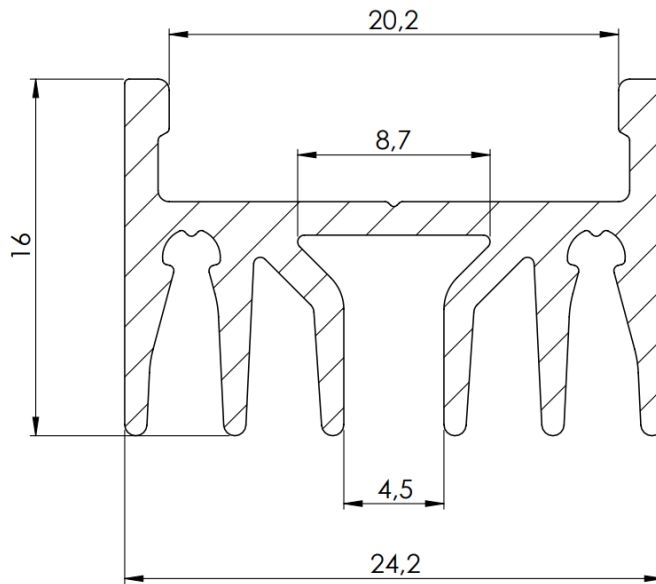
Measurement with Transparent cover at 24V



CIE1931 Green 525nm:

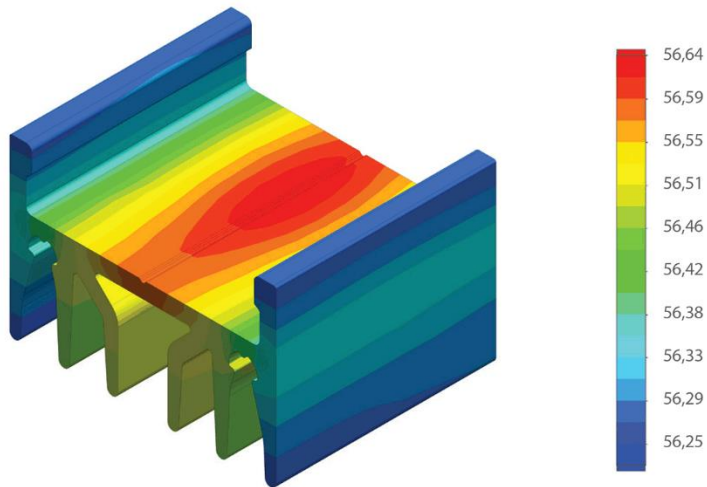


Dimensions:



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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