

Datasheet

LED engine specification

Product type:
LE-24-450-108X2835PLX

Description:
LuxaLight LED Engine Blue 450nm Protected (24 Volt, 108 LEDs, 2835, IP64)

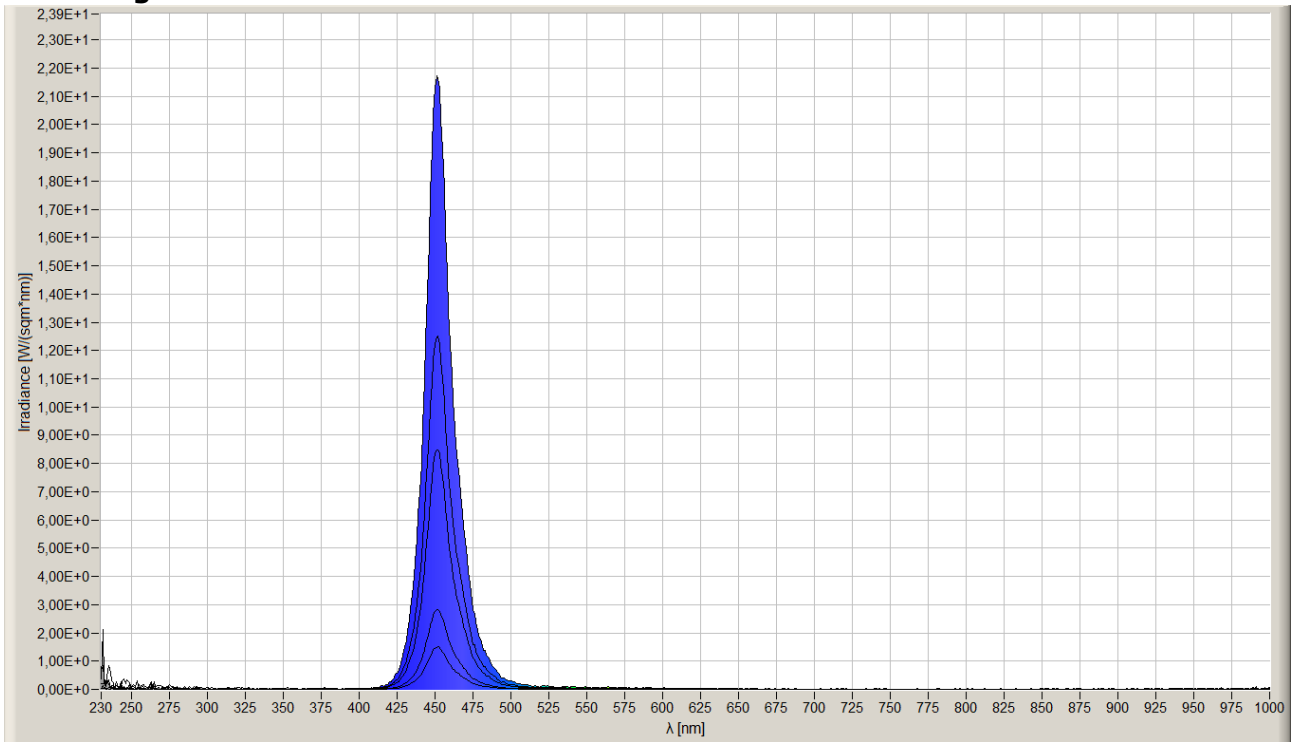


Date:
15-12-2023

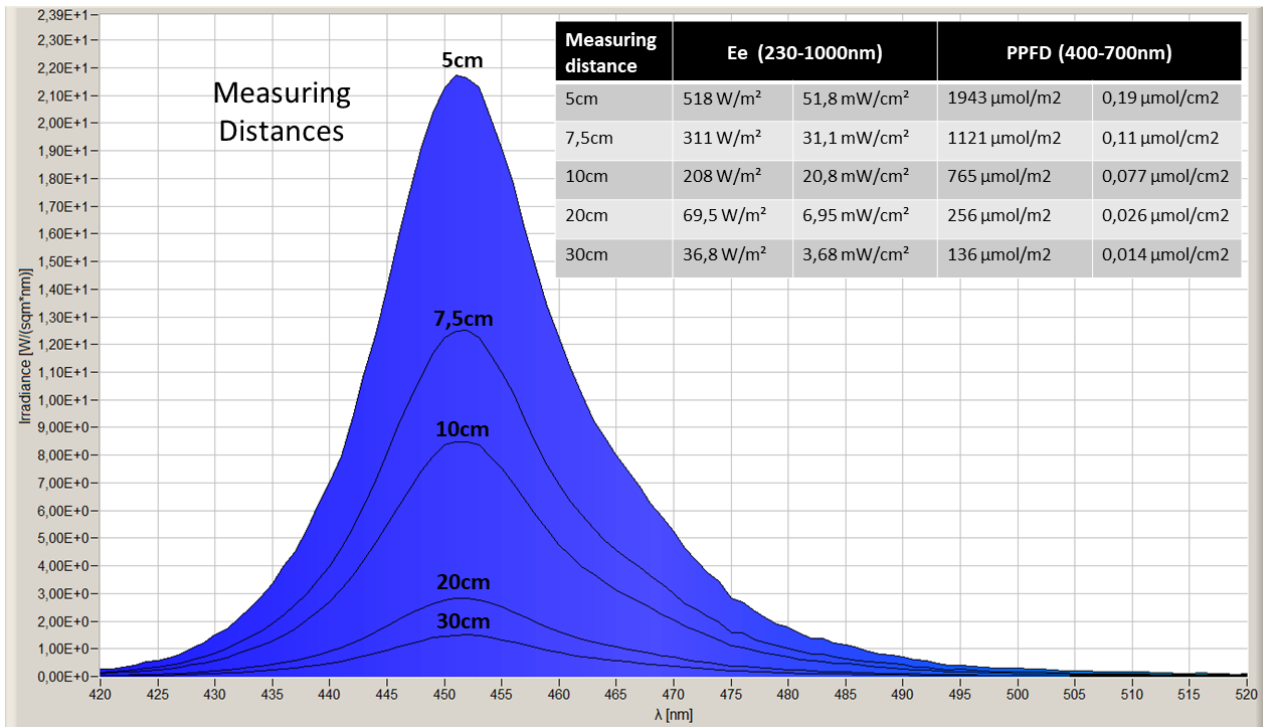
Page 1 of 5

Technical Specifications					
LE-24-450-108X2835PLX					
General	LED Type	2835 SMD			
	LED Quantity	108 LEDs / Engine			
	Dimensions	200 * 20 * 2 (L x B x H)			
	Weight	22g / Engine			
	Mounting	3M tape VHB4905			
Environment	Working Temperature	-20°C ~ +70°C			
	Storing Temperature	-20°C ~ +70°C			
	IP Grade	IP64			
	Mechanical Protection	Silicone Nano Coating			
Electronic	Working Voltage	DC24V			
	Working Current	1,25 A / Engine			
	Working Wattage	30 W / Engine			
	Driving Method	Constant Voltage			
	NTC Resistance	5Kohm			
	NTC Beta	3950			
Lighting	Engine Wavelength (nm)	450nm Blue			
	Voltage at measurement	24V	29V	34V	
	Current at measurement	1,25 A	1,9 A	2,65A	
	Wattage at measurement	30 W	55,1 W	90,1 W	
	Peak Measured Wavelength (5cm)	450nm			
	Peak Measured Radiance per distance (cm) (1 LED Engine)	5	21,7 W/m ²	35,8 W/m ²	45,2 W/m ²
		7,5	12,5 W/m ²	20,6 W/m ²	26 W/m ²
		10	8,5 W/m ²	14 W/m ²	17,7 W/m ²
		20	2,8 W/m ²	4,6 W/m ²	5,8 W/m ²
		30	1,5 W/m ²	2,5 W/m ²	3,2 W/m ²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	518 W/m ²	864 W/m ²	1149 W/m ²
		7,5	311 W/m ²	519 W/m ²	690 W/m ²
		10	208 W/m ²	347 W/m ²	461 W/m ²
		20	69,5 W/m ²	116 W/m ²	154 W/m ²
	Total PPFd μmol/m ² (PAR 400-700nm) (1 LED Engine)	5	1943 μmol/m ²	3226 μmol/m ²	4296 μmol/m ²
		7,5	1121 μmol/m ²	1861 μmol/m ²	2478 μmol/m ²
		10	765 μmol/m ²	1270 μmol/m ²	1691 μmol/m ²
		20	256 μmol/m ²	425 μmol/m ²	566 μmol/m ²
	Illuminance (Lux) at (1 LED Engine)	5	22,6 klx	35,1 klx	46,1 klx
		7,5	13,4 klx	20,8 klx	27,3 klx
10		9,1 klx	14,1 klx	18,5 klx	
20		3,1 klx	4,8 klx	6,3 klx	
Illuminance (Lux) at (1 LED Engine)	30	1,6 klx	2,5 klx	3,3 klx	
	Viewing Angle (θ)	120 ±5°			
	Keep the LED Engine within operating temperatures, for more information about heat management, read the 'LuxaLight modular LED Fixtures infosheet'				

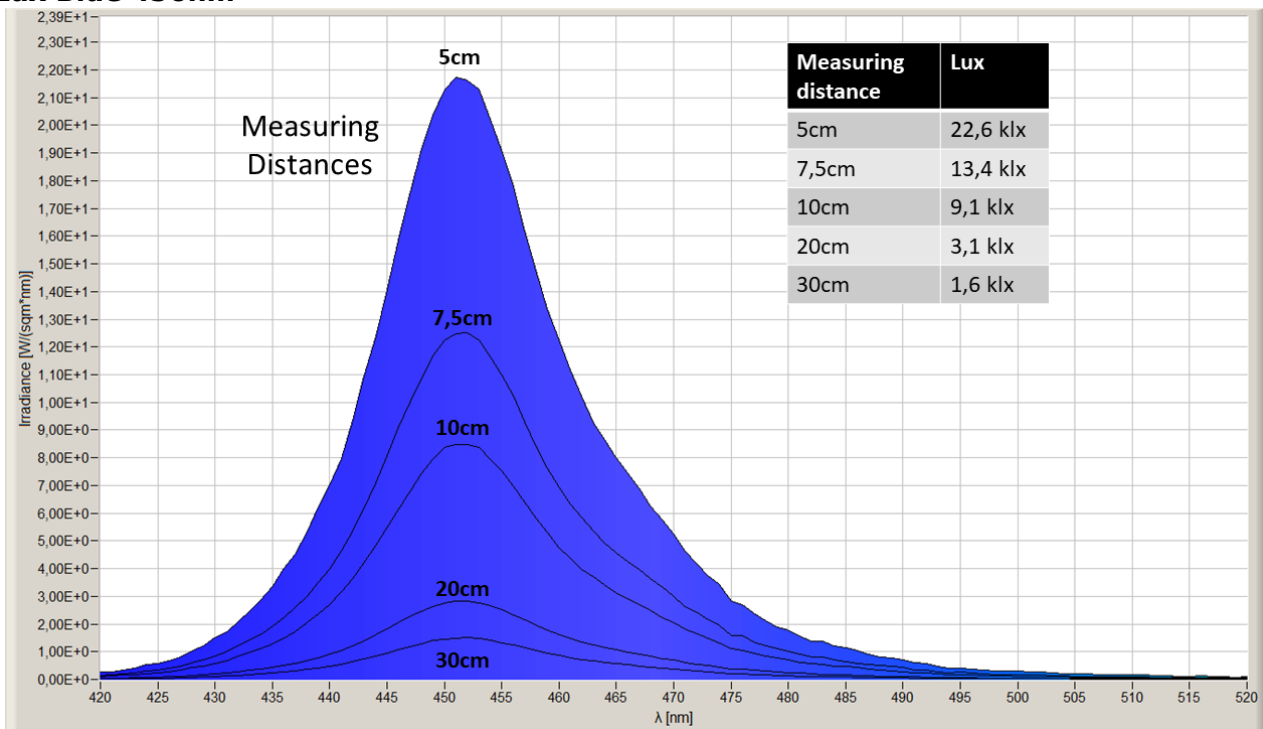
Wavelength Blue 450nm:



Radiance and PPFD Blue 450nm



Lux Blue 450nm



The Materials of PCB:

2mm Thick Aluminium.

Solderings:

Solder Alloy: 99.3 Sn, 0.7 Cu,

Melting Temperature: 227°C

No SVHC (Jan 2021)

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.