

Datasheet

LED engine specification

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

Description:
**LuxaLight Industrial LED Fixture Transparent Cover RGBW 24.2x16mm
(24 Volt, 5050, IP64)**



Date:
24-10-2023

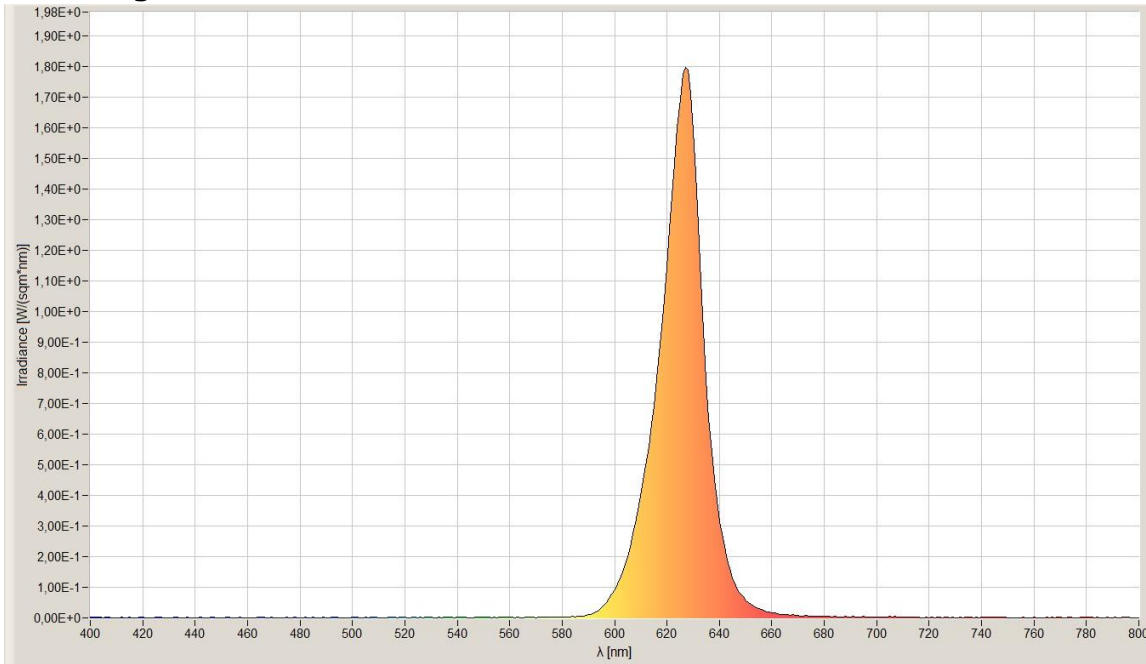
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Technical Specifications							
LF-24-RGBW-24.2x16-(...)		Transparent Cover TC					
General	LED Type	5050 SMD					
	LED Quantity	36 LEDs / Engine					
	Dimensions	Variable (see table) * 24,2mm * 16mm (B x L x H)					
	Weight	Variable, depending on moulding and length					
	Mounting	Surface mounted					
Environment	Working Temperature	-5°C ~ +60°C					
	Storing Temperature	-5°C ~ +60°C					
	IP Grade	IP64					
	Mechanical Protection	PMMA cover					
	Moulding Resin	N.A.					
	Housing material	Anodized aluminium					
Electronic	Working Voltage	DC24V					
	Working Current	0,4A / Engine					
	Working Wattage	9,6 W / Engine					
	LED Engine type	LuxaLight LED Engine RGBW Bescherm (24 Volt, 36 LEDs, 5050, IP64) LuxaLight					
	Driving Method	Constant Voltage					
	Cable type	PUR Cable 5x 0.34mm² Black LuxaLight					
	NTC Resistance	5KOhm					
	NTC Beta	3950					
Lighting		Blue	Green	Red	Warm White	Total	
	Engine Wavelength (nm) / Colour temp (k)	460nm	515nm	625nm	2650K	-	
	Peak Measured Wavelength (5cm)	463nm	517nm	627nm	2633K	-	
	Peak Measured Radiance per distance (cm) (1 LED Engine)*	5	2 W/m²	1,1 W/m²	1,8 W/m²	-	-
		7,5	1 W/m²	0,5 W/m²	0,9 W/m²	-	-
		10	0,6 W/m²	0,3 W/m²	0,5 W/m²	-	-
		20	0,18 W/m²	0,1 W/m²	0,16 W/m²	-	-
		30	0,09 W/m²	0,05 W/m²	0,08 W/m²	-	-
		40	0,06 W/m²	0,03 W/m²	0,05 W/m²	-	-
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)*	5	57,5 W/m²	39,1 W/m²	38,8 W/m²	71 W/m²	201 W/m²
		7,5	27,1 W/m²	18,6 W/m²	18,5 W/m²	34,2 W/m²	97,2 W/m²
		10	17,1 W/m²	11,6 W/m²	11,3 W/m²	21,5 W/m²	59,9 W/m²
		20	5 W/m²	3,5 W/m²	3,4 W/m²	6,6 W/m²	18,1 W/m²
		30	2,5 W/m²	1,7 W/m²	1,6 W/m²	3,2 W/m²	8,6 W/m²
		40	1,6 W/m²	1,1 W/m²	1 W/m²	2 W/m²	5,5 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)*	5	4578 lx	17 klx	8211 lx	23 klx	52 klx
		7,5	2177 lx	8210 lx	3917 lx	11 klx	25 klx
		10	1366 lx	5154 lx	2447 lx	6929 lx	16 klx
		20	408 lx	1554 lx	729 lx	2123 lx	4725 lx
		30	200 lx	760 lx	351 lx	1028 lx	2262 lx
		40	127 lx	480 lx	223 lx	646 lx	1439 lx
	Total PPFD µmol/m² (400nm - 700nm) (1 LED Engine)*	5	219 µmol/m²	167 µmol/m²	191 µmol/m²	334 µmol/m²	895 µmol/m²
		7,5	105 µmol/m²	80 µmol/m²	92 µmol/m²	161 µmol/m²	434 µmol/m²
10		66 µmol/m²	50 µmol/m²	57 µmol/m²	101 µmol/m²	269 µmol/m²	
20		20 µmol/m²	15 µmol/m²	17 µmol/m²	31 µmol/m²	82 µmol/m²	
30		9,6 µmol/m²	7,4 µmol/m²	8,3 µmol/m²	15 µmol/m²	39 µmol/m²	
40		6,1 µmol/m²	4,7 µmol/m²	5,3 µmol/m²	9,4 µmol/m²	25 µmol/m²	
	60	4,3 µmol/m²	3,3 µmol/m²	3,4 µmol/m²	6,2 µmol/m²	16 µmol/m²	
	Output Reduction Approx.	0% - 5%					
	Viewing Angle (θ)	120 ±5°					
<i>*To reach much higher performances, use MaNima Pollux Industry</i>							

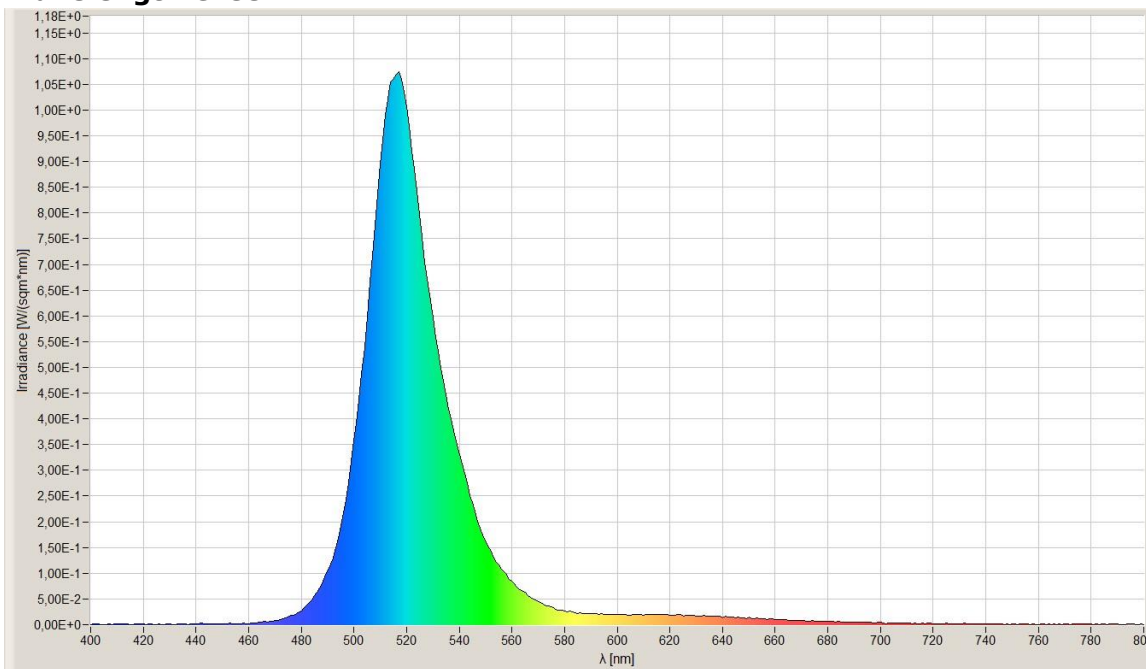
Additional Benefits of LuxaLight Industrial LED Fixture	
Benefits of LED Fixture	Multiple wavelengths in one housing
	No optics required due to high output
	Applicable in Humid environments (PU Version)
	Custom cable output and/or connector
	Wide range of mounting options
	In-house expertise to personally 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

**In combination with the MaNima Pollux Industry*

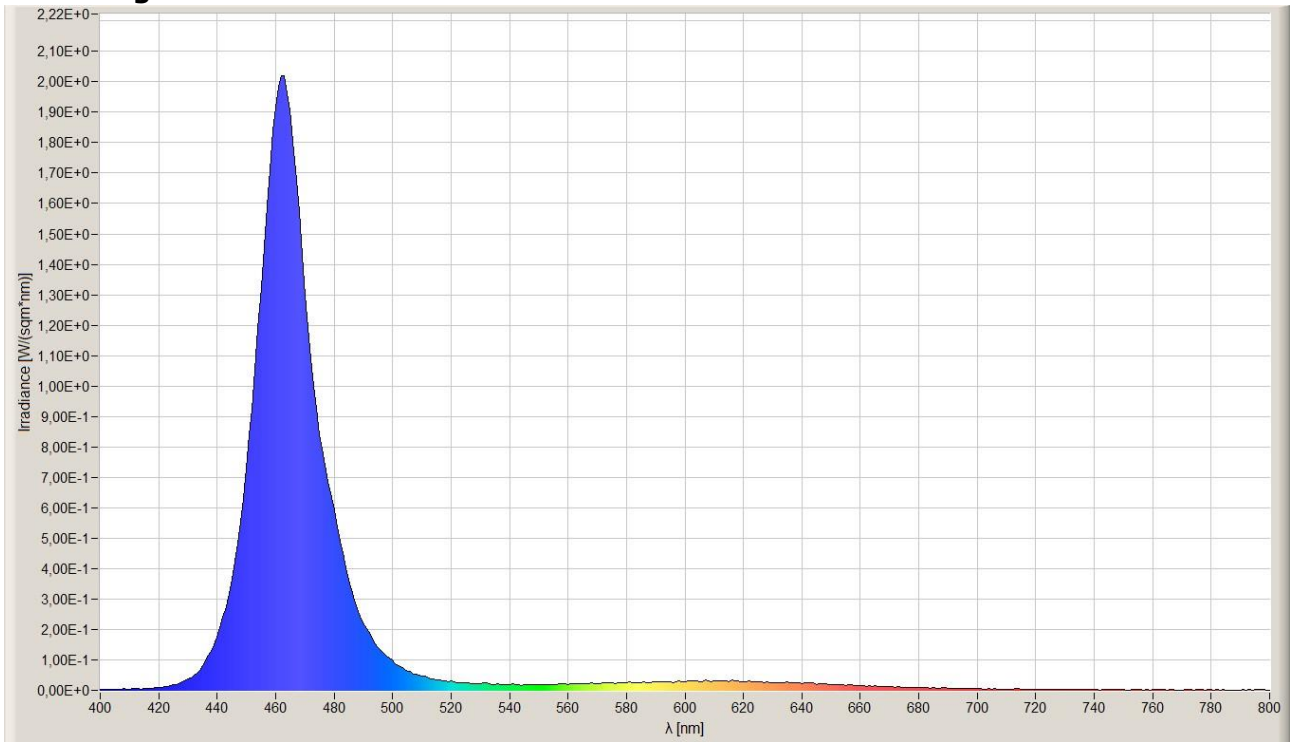
Wavelength Red



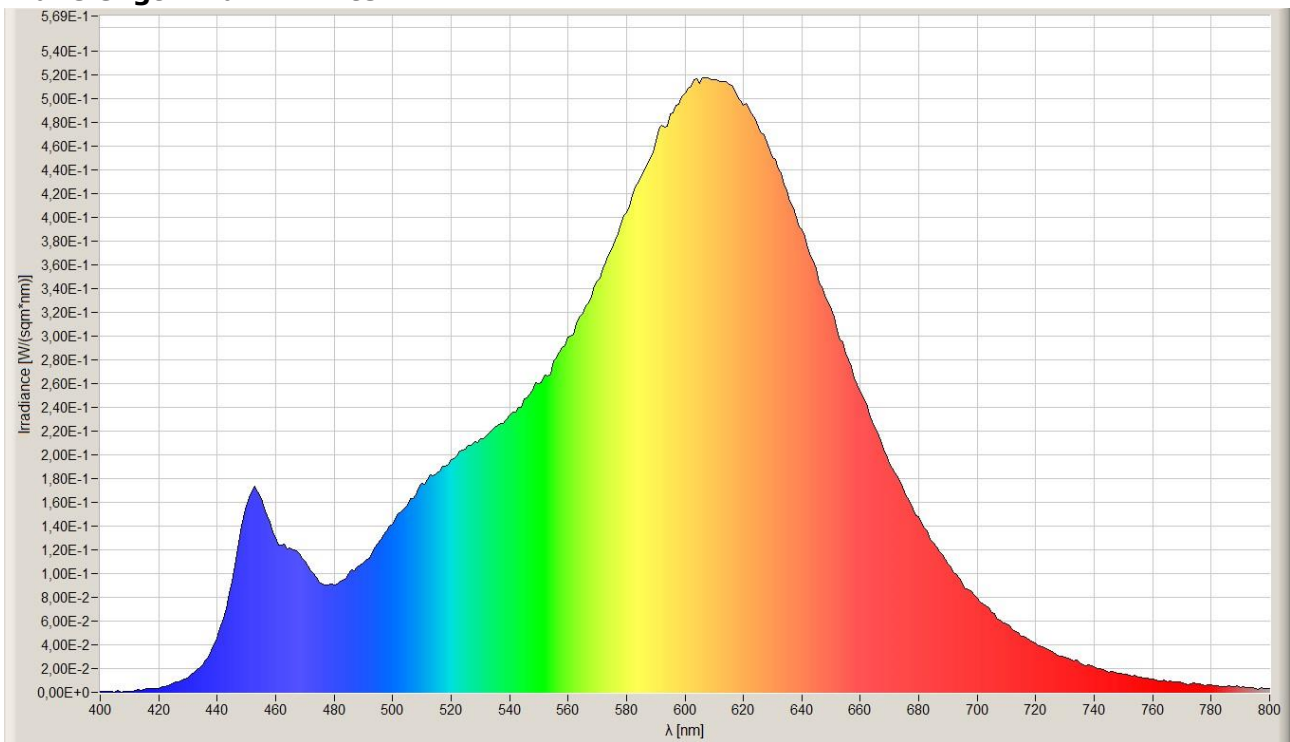
Wavelength Green



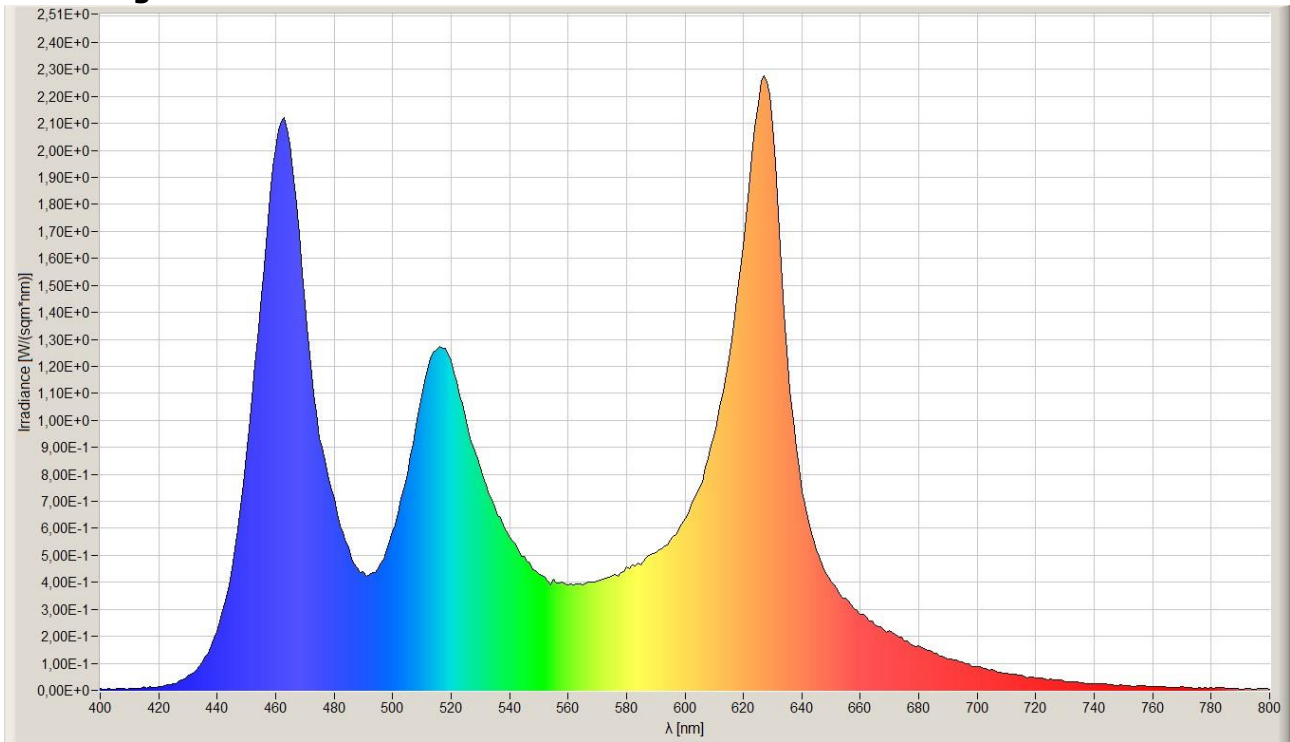
Wavelength Blue



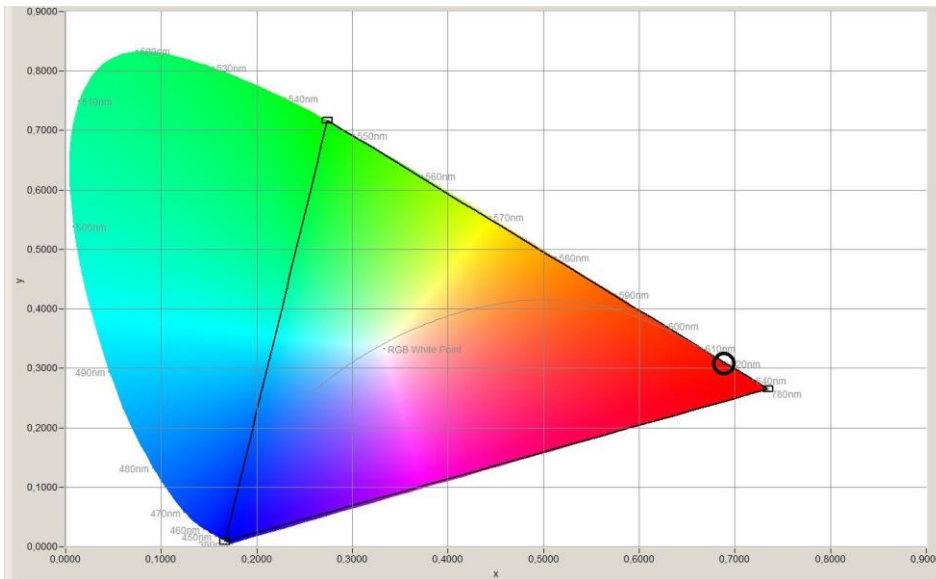
Wavelength Warm White



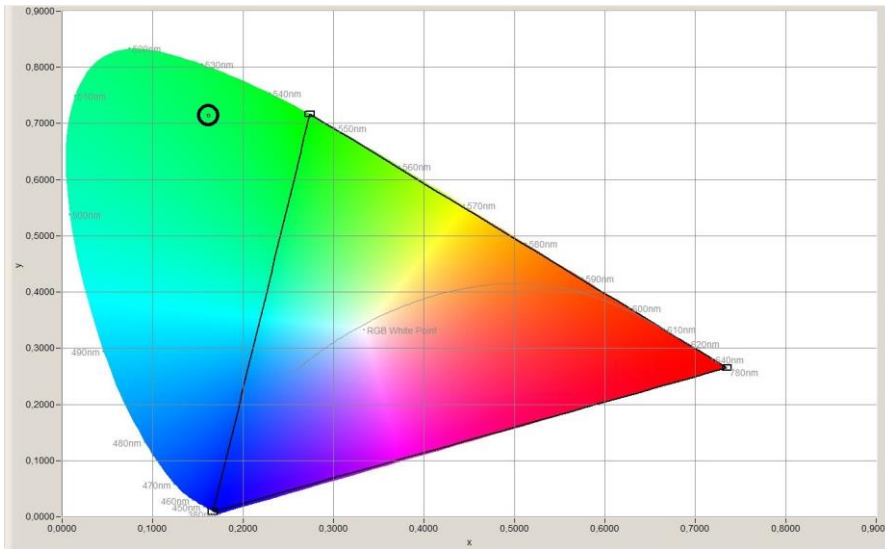
Wavelength Total



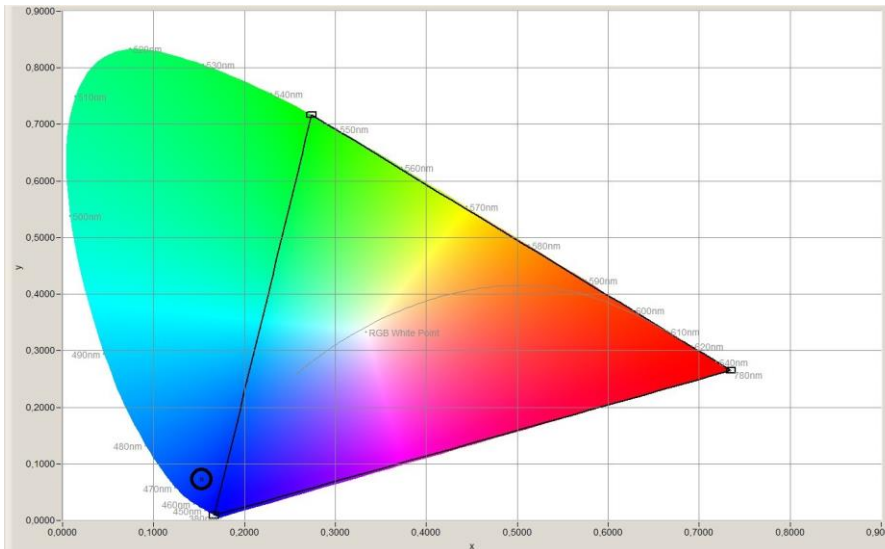
CIE Red



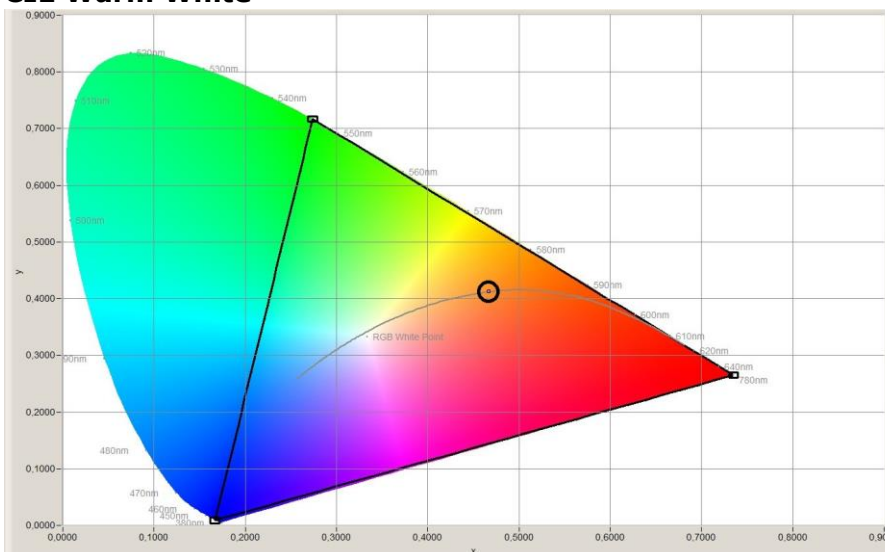
CIE Green



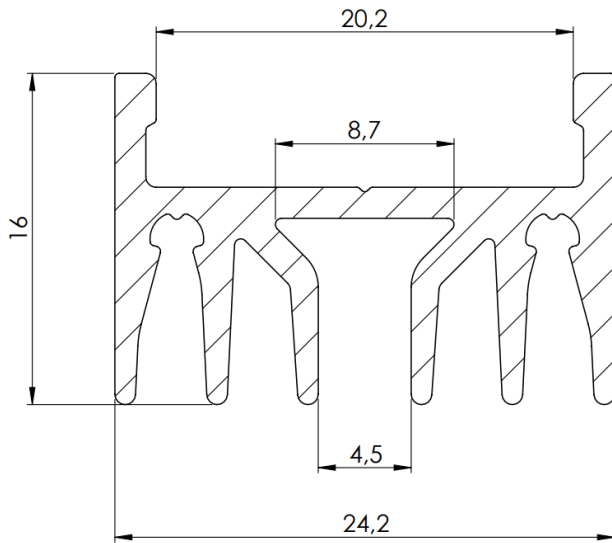
CIE Blue



CIE Warm White



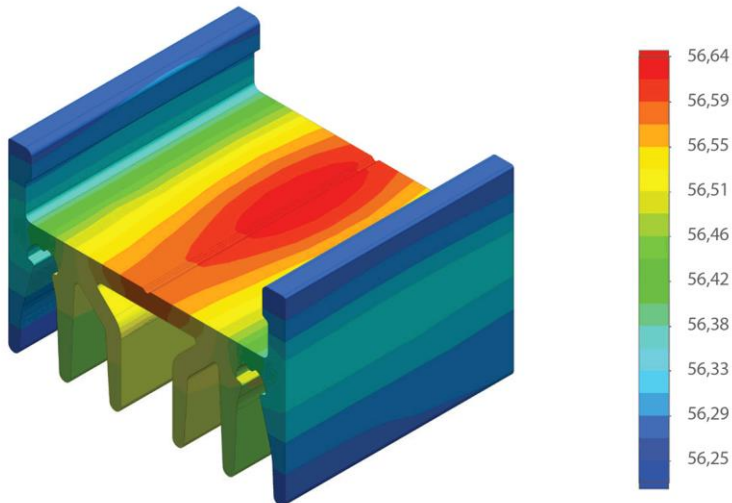
Dimensions:



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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