

Datasheet

LED engine specification

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

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



Date:
24-10-2023

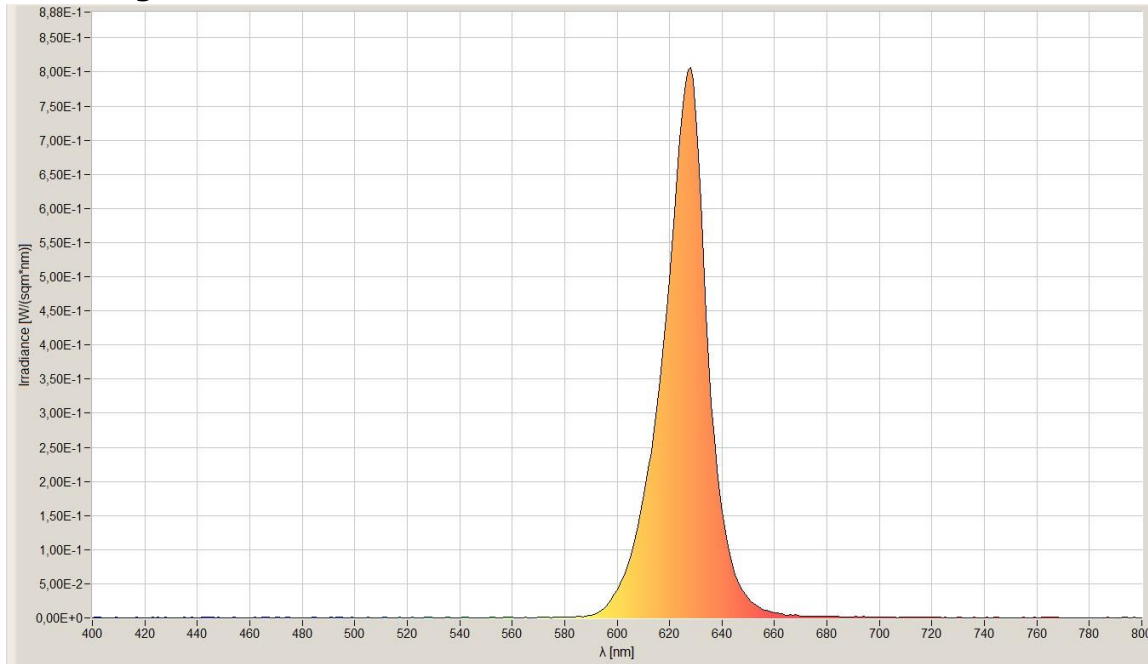
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Technical Specifications							
LF-24-RGBW-24.2x16-(...)		Transpant Polarised Cover POL					
General	LED Type	5050 SMD					
	LED Quantity	36 LEDs / Engine					
	Dimensions	Variable (see table) * 24,2mm * 16mm (B x L x H)					
	Weight	Variable, depending on moulding and lenght					
	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 Beschermd (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	0,9 W/m²	0,5 W/m²	0,8 W/m²	-	-
		7,5	0,4 W/m²	0,2 W/m²	0,4 W/m²	-	-
		10	0,2 W/m²	0,1 W/m²	0,2 W/m²	-	-
		20	0,08 W/m²	0,04 W/m²	0,07 W/m²	-	-
		30	0,04 W/m²	0,02 W/m²	0,03 W/m²	-	-
		40	0,02 W/m²	0,01 W/m²	0,02 W/m²	-	-
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)*	5	25,3 W/m²	17,9 W/m²	17,2 W/m²	32,9 W/m²	90,2 W/m²
		7,5	11,3 W/m²	7,9 W/m²	7,4 W/m²	14,8 W/m²	40 W/m²
		10	7,1 W/m²	4,9 W/m²	4,6 W/m²	9,3 W/m²	25,1 W/m²
		20	2,1 W/m²	1,5 W/m²	1,4 W/m²	2,9 W/m²	7,7 W/m²
		30	1,1 W/m²	0,8 W/m²	0,7 W/m²	1,4 W/m²	3,8 W/m²
		40	0,7 W/m²	0,5 W/m²	0,4 W/m²	0,9 W/m²	2,3 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)*	5	2051 lx	7937 lx	3654 lx	11 klx	23 klx
		7,5	928 lx	3546 lx	1560 lx	4744 lx	10 klx
		10	587 lx	2211 lx	980 lx	3009 lx	6591 lx
		20	178 lx	669 lx	289 lx	922 lx	2010 lx
		30	88 lx	336 lx	143 lx	457 lx	998 lx
		40	54 lx	203 lx	89 lx	274 lx	608 lx
	Total PPFd µmol/m² (400nm - 700nm) (1 LED Engine)*	5	97 µmol/m²	77 µmol/m²	86 µmol/m²	155 µmol/m²	403 µmol/m²
		7,5	44 µmol/m²	34 µmol/m²	38 µmol/m²	69 µmol/m²	181 µmol/m²
10		28 µmol/m²	22 µmol/m²	24 µmol/m²	44 µmol/m²	114 µmol/m²	
20		8,4 µmol/m²	6,5 µmol/m²	7,1 µmol/m²	13 µmol/m²	35 µmol/m²	
30		4,2 µmol/m²	3,3 µmol/m²	3,5 µmol/m²	6,7 µmol/m²	17 µmol/m²	
40		2,6 µmol/m²	2 µmol/m²	2,2 µmol/m²	4 µmol/m²	10,5 µmol/m²	
	60	1,7 µmol/m²	1,4 µmol/m²	1,4 µmol/m²	2,6 µmol/m²	7 µmol/m²	
	Output Reduction Approx.	50% - 60%					
	Polarised	Yes, 90 Degrees					
	Viewing Angle (θ)	120 ±5°					
<i>*To reach much higher performances, use MaNima Pollux Industry</i>							

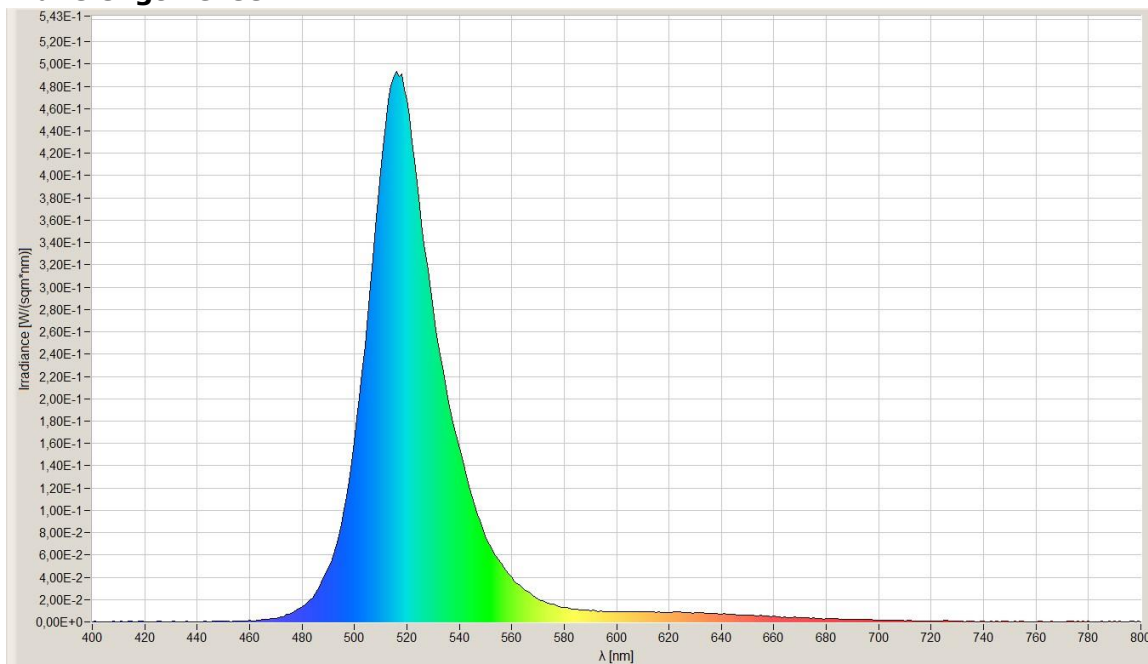
Additional Benefits of LuxaLight Industrial LED Fixture	
Benefits of LED Fixture	Multiple wavelengths in one housing
	No optics required due to high output
	Applicable in Humid environments (PU Version)
	Custom cable output and/or connector
	Wide range of mounting options
	In-house expertise to personally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

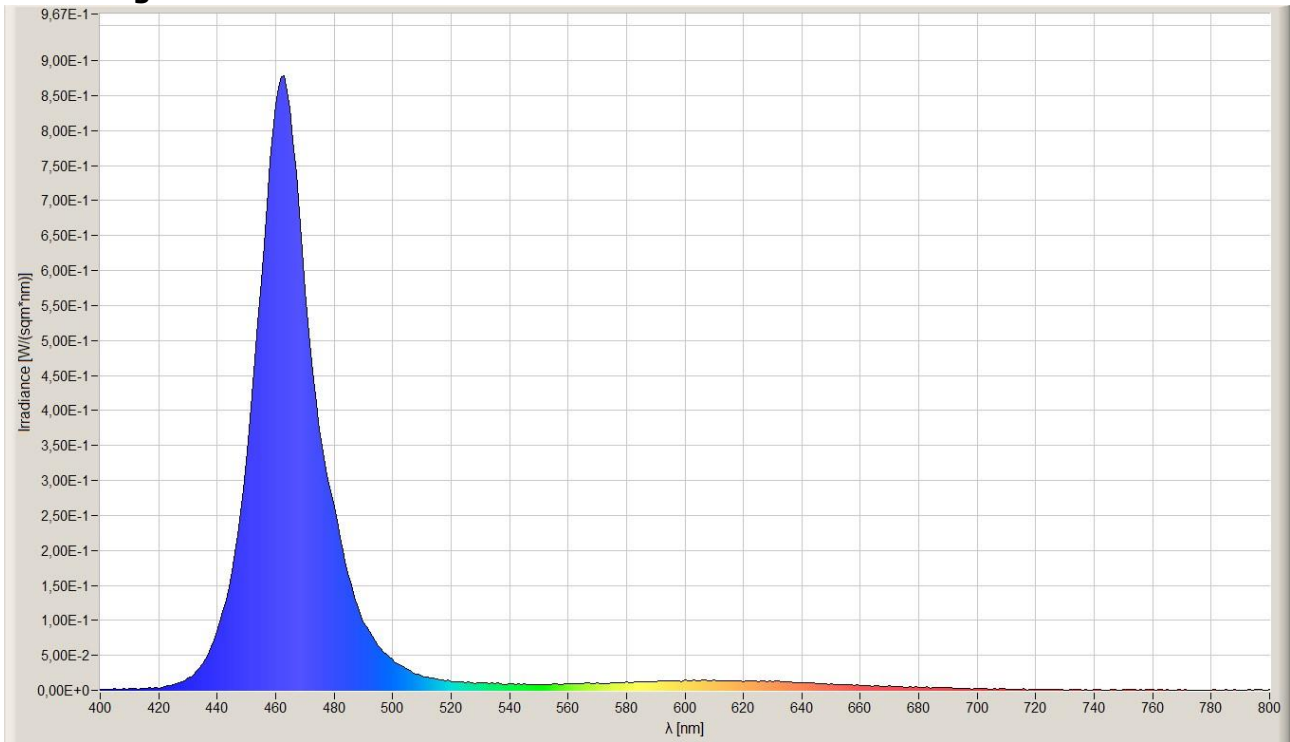
Wavelength Red



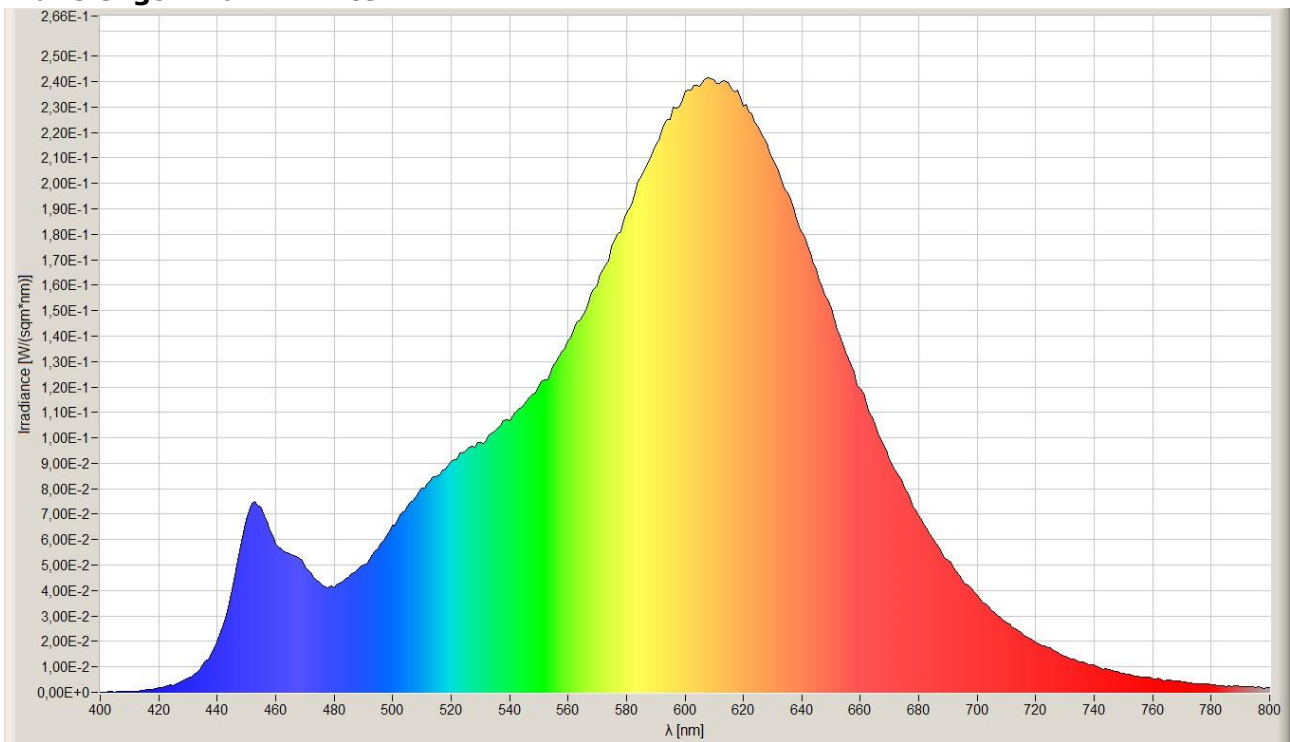
Wavelength Green



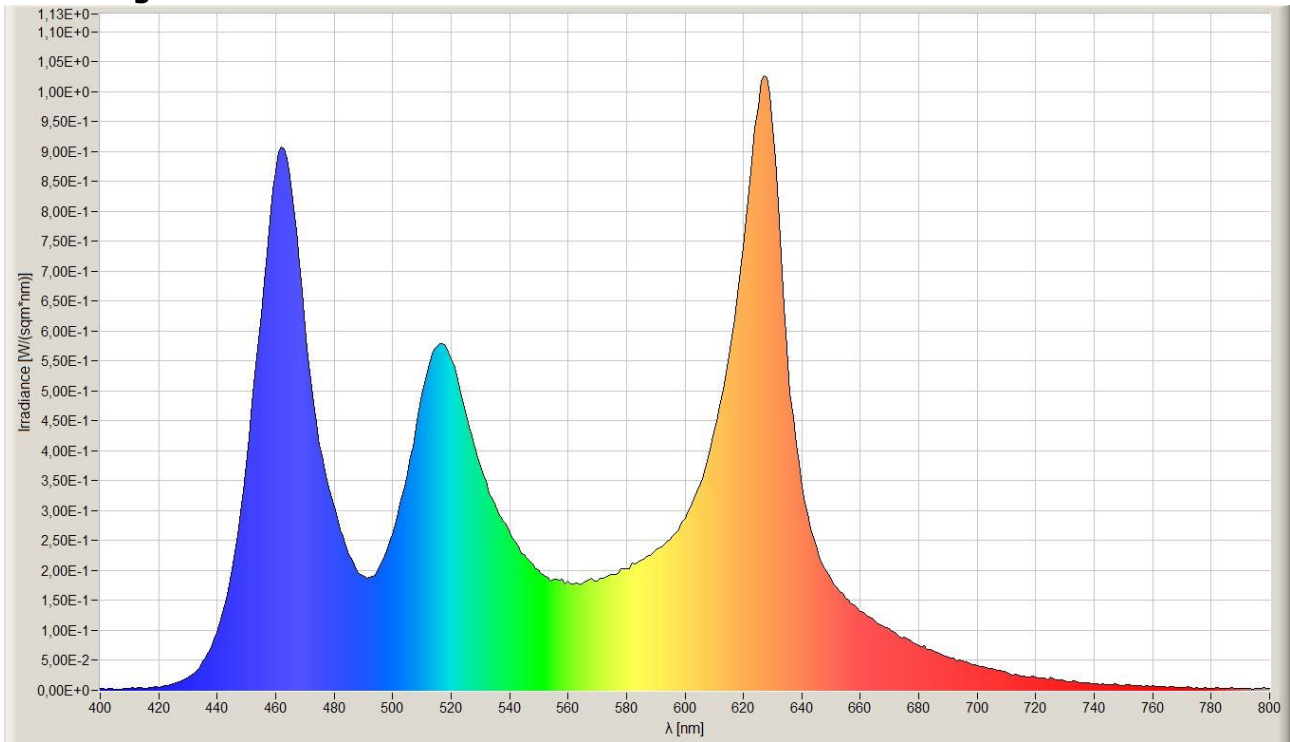
Wavelength Blue



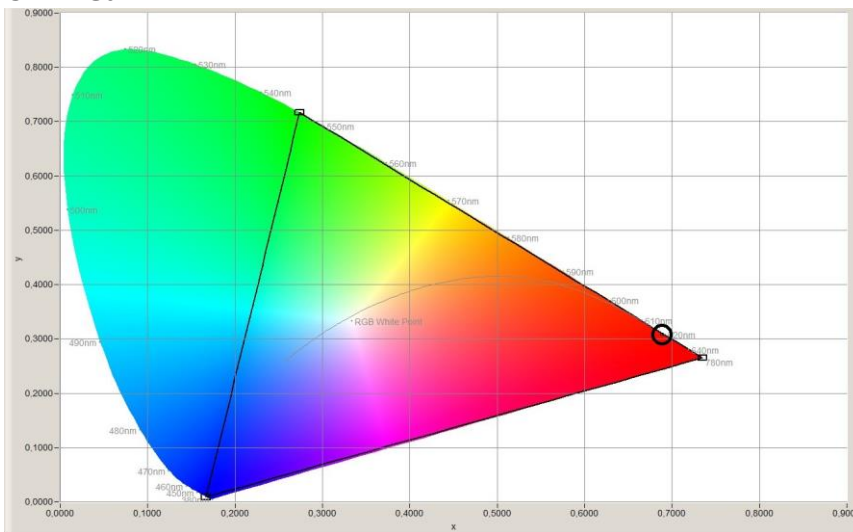
Wavelength Warm White



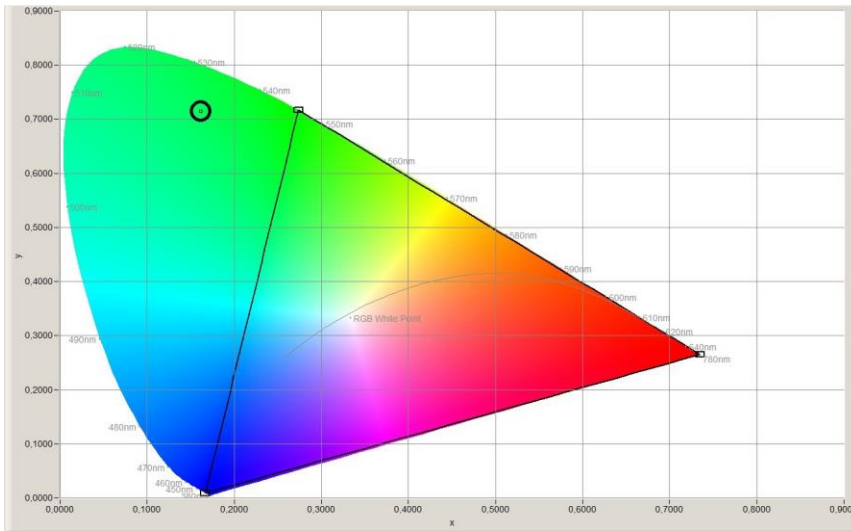
Wavelength Total



CIE Red



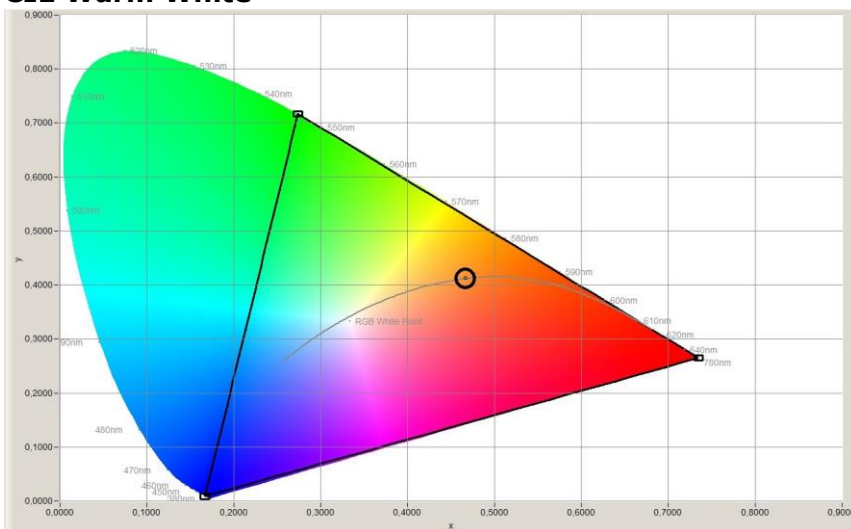
CIE Green



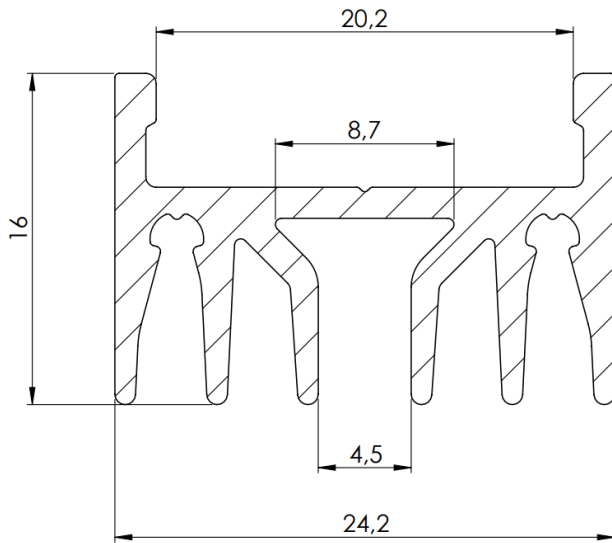
CIE Blue



CIE Warm White



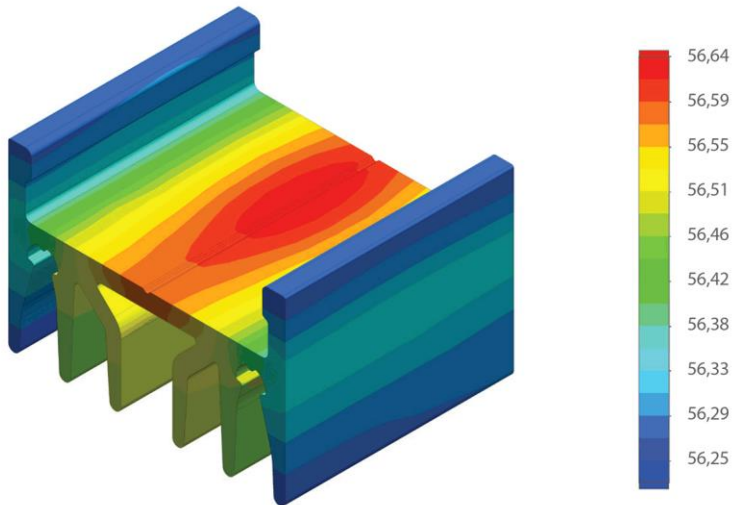
Dimensions:



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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