Datasheet

LED engine specification

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

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

Date:
24-10-2023

LuxaLight B.V.
Hastelweg 260B
5652 CN Eindhoven
Nederland

KvK-nummer: 57580561
BTW-nummer: NL852642209B01
ING bankrekening: 7815975
IBAN: NL87 INGB 0007 8159 75

Email: info@luxalight.eu
Website: www.luxalight.eu
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Technical Specifications

LF-24-RGBW-24.2x16-(...)		Opaline Cover OC
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℃ ~ +60℃
	Storing Temperature	-5℃ ~ +60℃
	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 5 x 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)		462nm	518nm	628nm	2572K	-
	Peak Measured Radiance per distance (cm) (1 LED Engine)*	5	1,4 W/m²	0,8 W/m²	1,3 W/m²	-	-
		7,5	0,7 W/m²	0,4 W/m²	0,6 W/m²	-	-
		10	0,4 W/m²	0,2 W/m²	0,4 W/m²	-	-
		20	0,13 W/m²	0,07 W/m²	0,1 W/m²	-	-
		30	0,06 W/m²	0,04 W/m²	0,06 W/m²	-	-
		40	0,04 W/m²	0,02 W/m²	0,04 W/m²	-	-
		60	0,03 W/m²	0,02 W/m²	0,02 W/m²	-	-
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)*	5	40,9 W/m²	28,3 W/m²	28 W/m²	48,9 W/m²	140 W/m²
		7,5	19 W/m²	13,1 W/m²	12,5 W/m²	23,2 W/m²	65,8 W/m²
		10	12 W/m²	8,4 W/m²	7,8 W/m²	14,7 W/m²	41,5 W/m²
		20	3,7 W/m²	2,6 W/m²	2,4 W/m²	4,6 W/m²	12,9 W/m²
		30	1,9 W/m²	1,3 W/m²	1,2 W/m²	2,3 W/m²	6,5 W/m²
		40	1,2 W/m²	0,8 W/m²	0,7 W/m²	1,5 W/m²	4,1 W/m²
		60	0,8 W/m²	0,6 W/m²	0,5 W/m²	1 W/m²	2,8 W/m²
	Total Lux per distance (CIE1931 2°) (1 LED Engine)*	5	3367 lx	12 klx	5762 lx	16 klx	36 klx
		7,5	1593 lx	5837 lx	2615 lx	7359 lx	17 klx
		10	1010 lx	3721 lx	1648 lx	4674 lx	11 klx
		20	314 lx	1159 lx	504 lx	1455 lx	3331 lx
		30	158 lx	581 lx	250 lx	729 lx	1678 lx
		40	100 lx	369 lx	157 lx	465 lx	1058 lx
		60	68 lx	247 lx	111 lx	306 lx	724 lx
	Total PPFD µmol/m² (400nm - 700nm) (1 LED Engine)*	5	156 µmol/m²	121 µmol/m²	137 µmol/m²	231 µmol/m²	625 µmol/m²
		7,5	74 µmol/m²	57 µmol/m²	63 µmol/m²	109 µmol/m²	296 µmol/m²
		10	47 µmol/m²	36 µmol/m²	40 µmol/m²	69 µmol/m²	187 µmol/m²
		20	15 µmol/m²	11 µmol/m²	12 µmol/m²	22 µmol/m²	58 µmol/m²
		30	7 µmol/m²	6 µmol/m²	6 µmol/m²	11 µmol/m²	29 µmol/m²
		40	5 µmol/m²	4 µmol/m²	4 µmol/m²	7 µmol/m²	18 µmol/m²
		60	3 µmol/m²	2 µmol/m²	3 µmol/m²	5 µmol/m²	13 µmol/m²
	Output Reduction Approx.		30% - 40%				
	Viewing Angle (θ)		120 ±5°				
	To reach much higher performances, use MaNima Pollux Industry						

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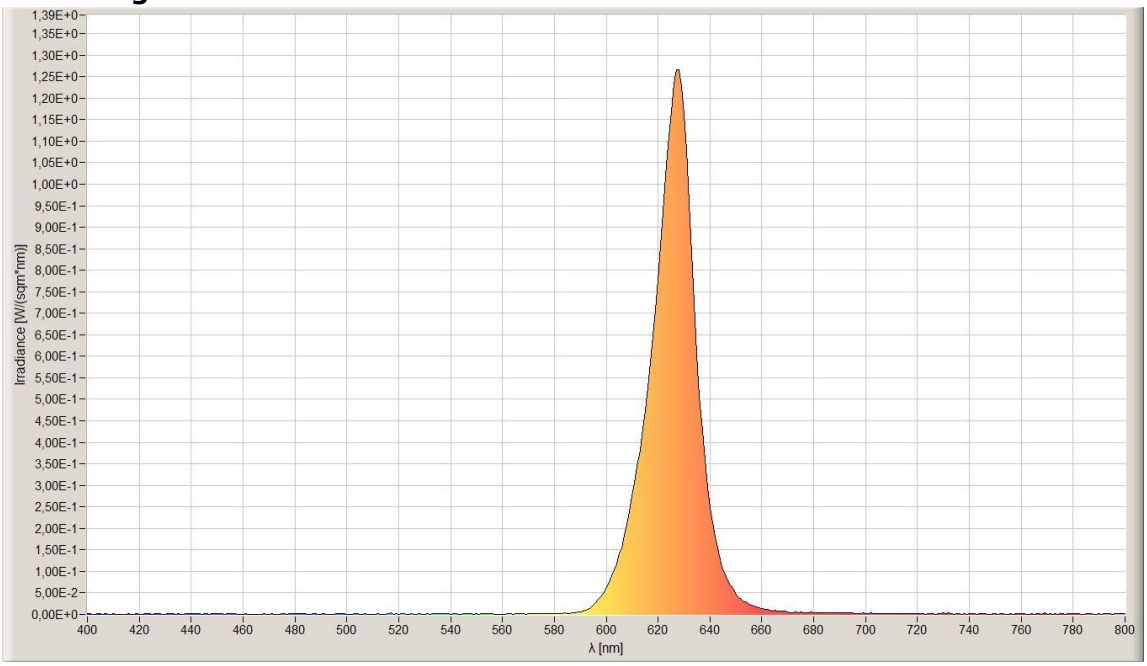
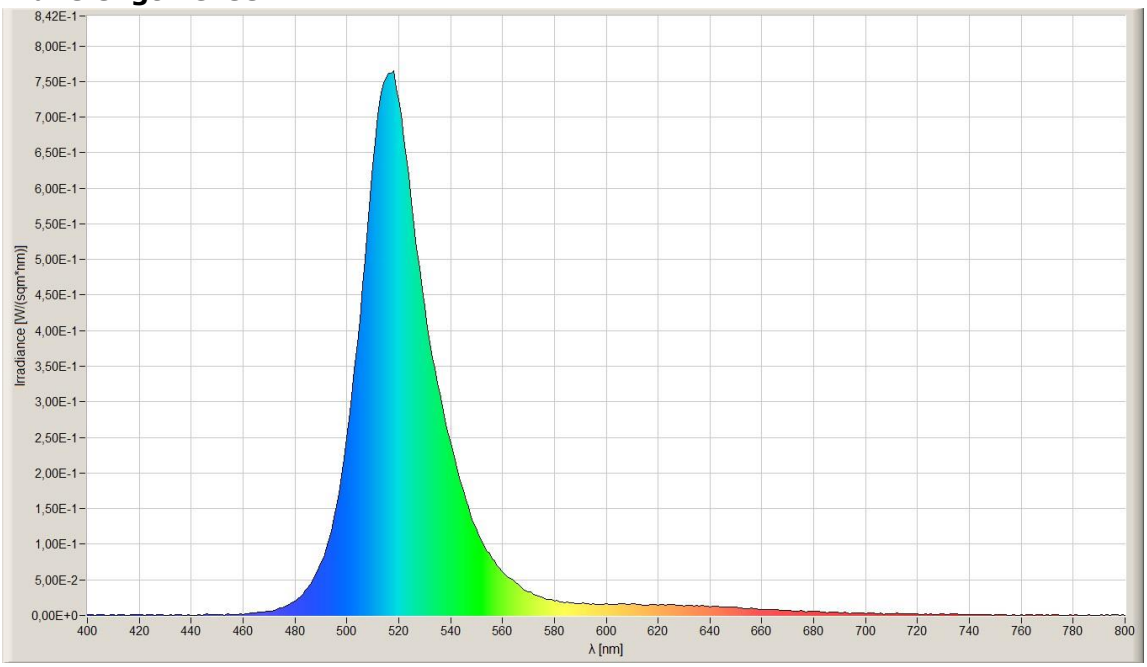
Additional Benefits of LuxaLight Industrial LED Fixture	
Benefits of LED Fixture	Multiple wavelengths in one housing
	No optics required due to high output
	Applicable in Humid environments (PU Version)
	Custom cable output and/or connector
	Wide range of mounting options
	In-house expertise to personally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



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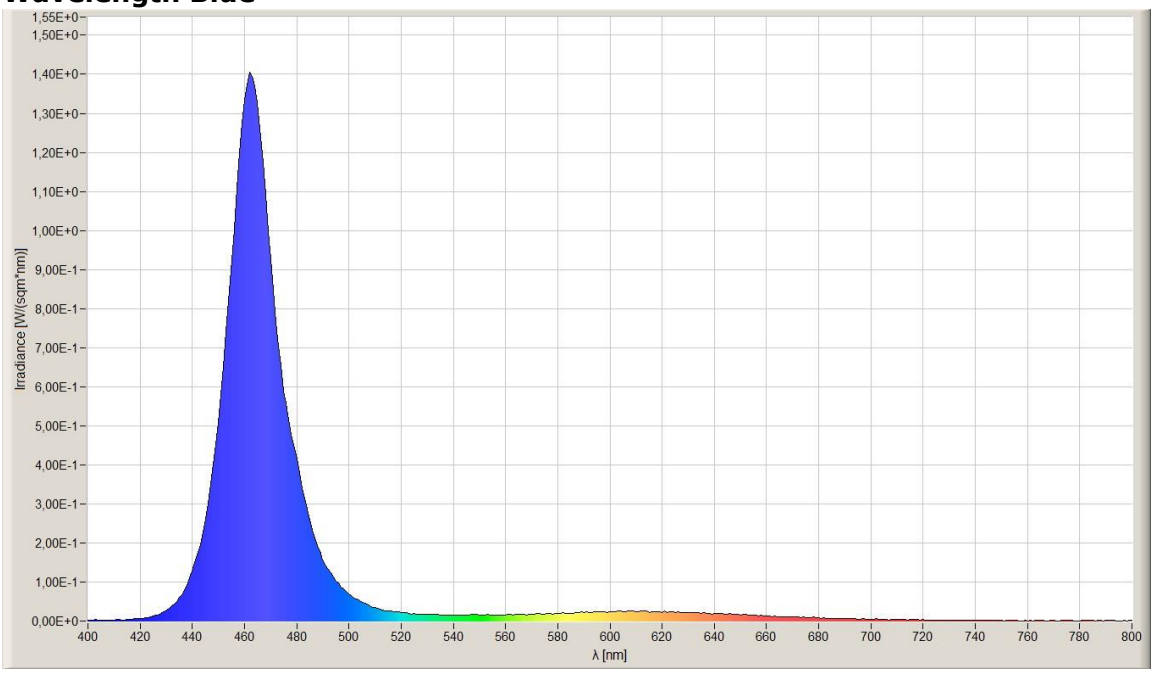
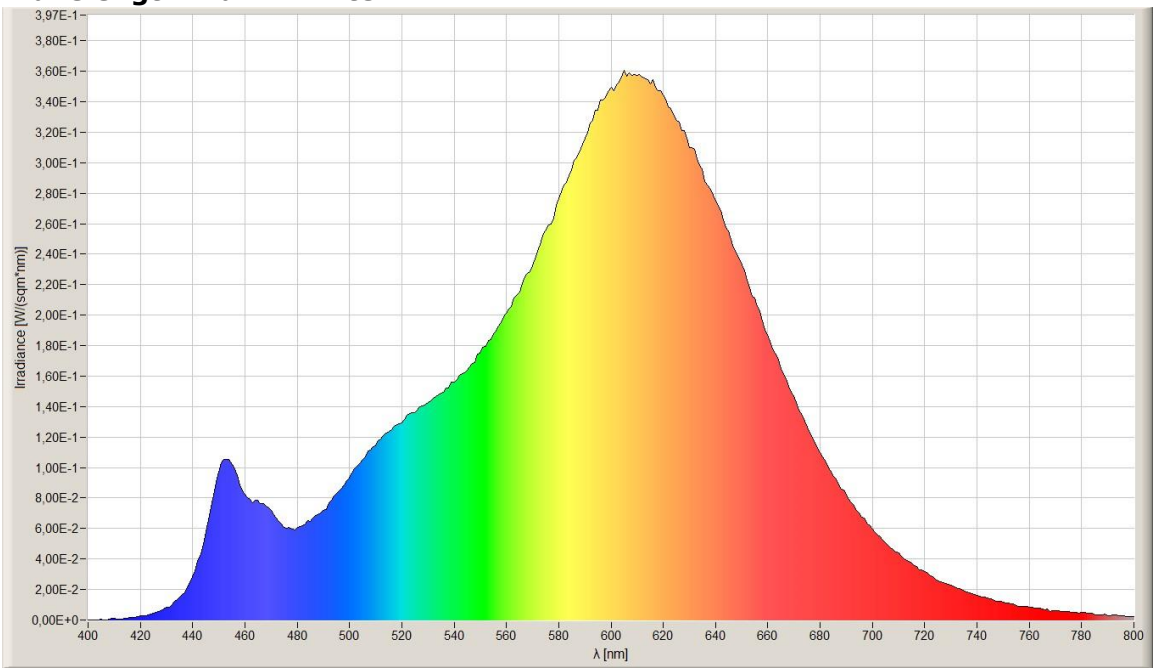
Wavelength Blue



Wavelength Warm White



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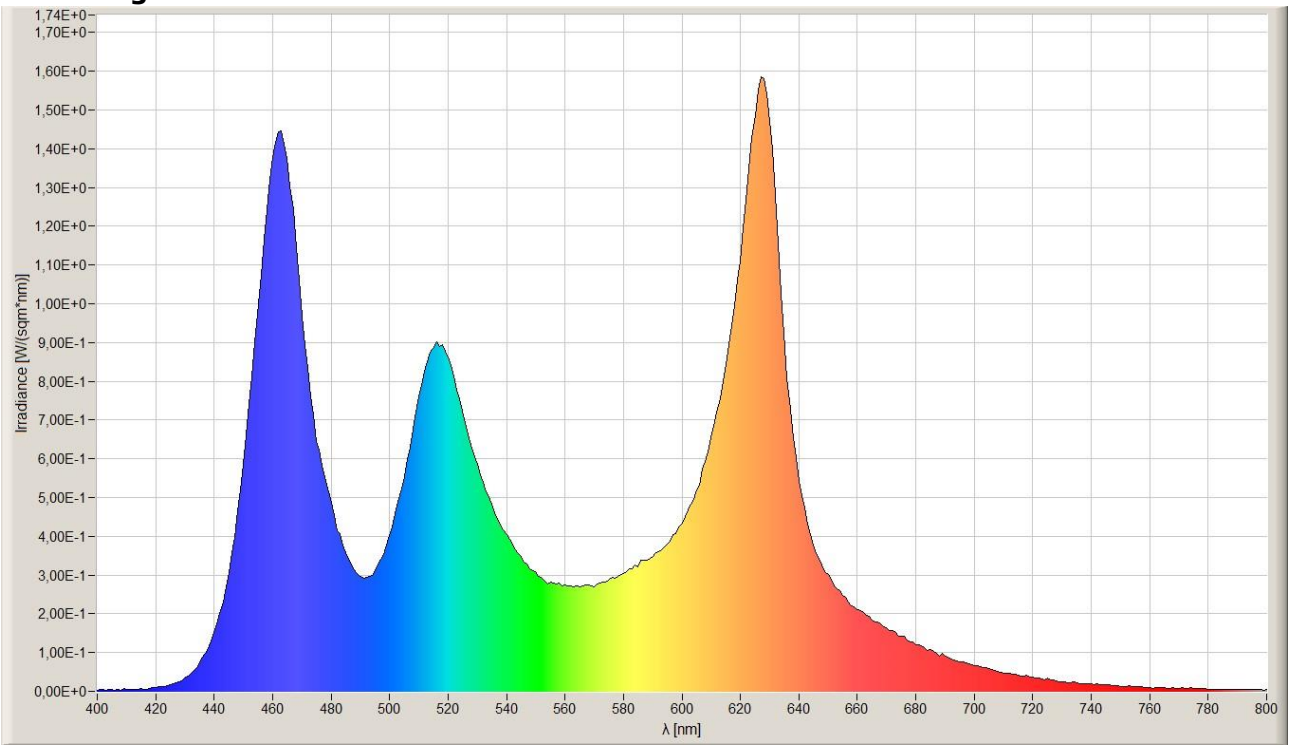
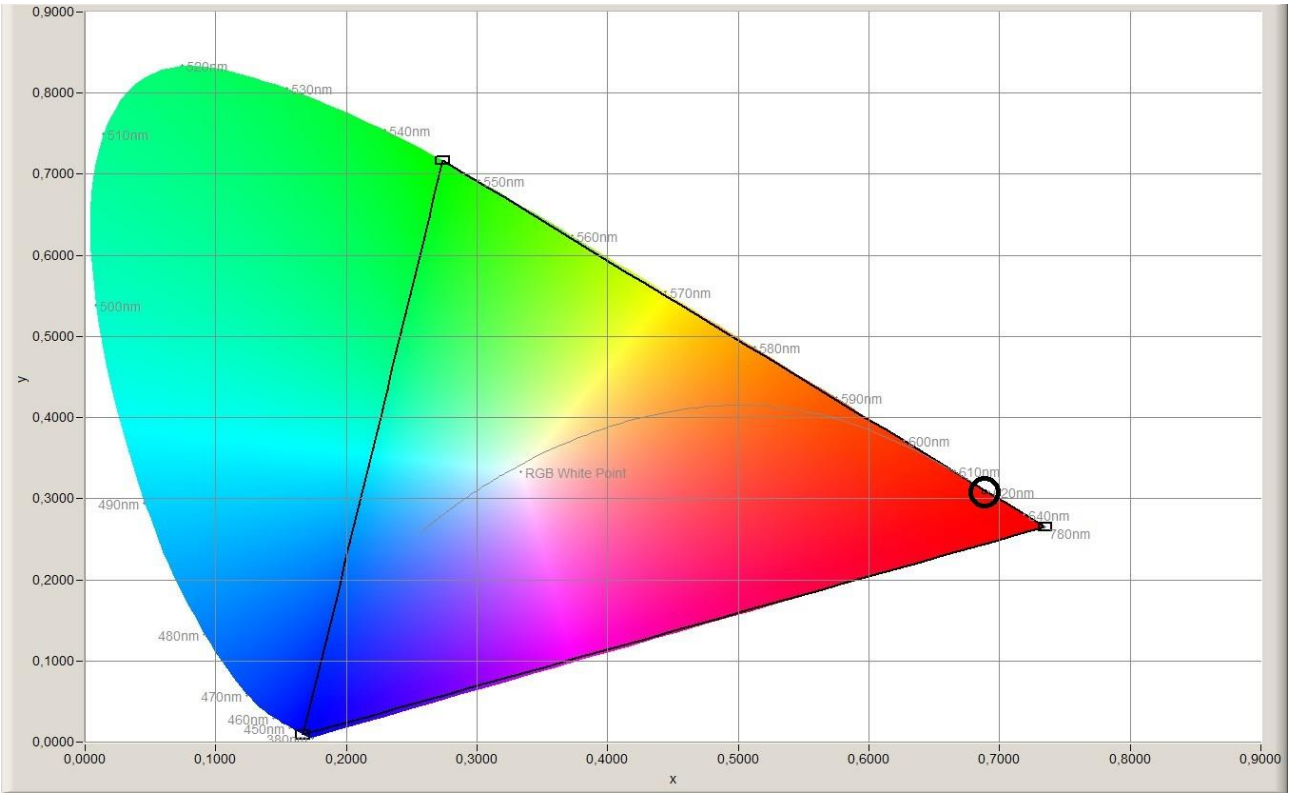
Wavelength Total



CIE Red



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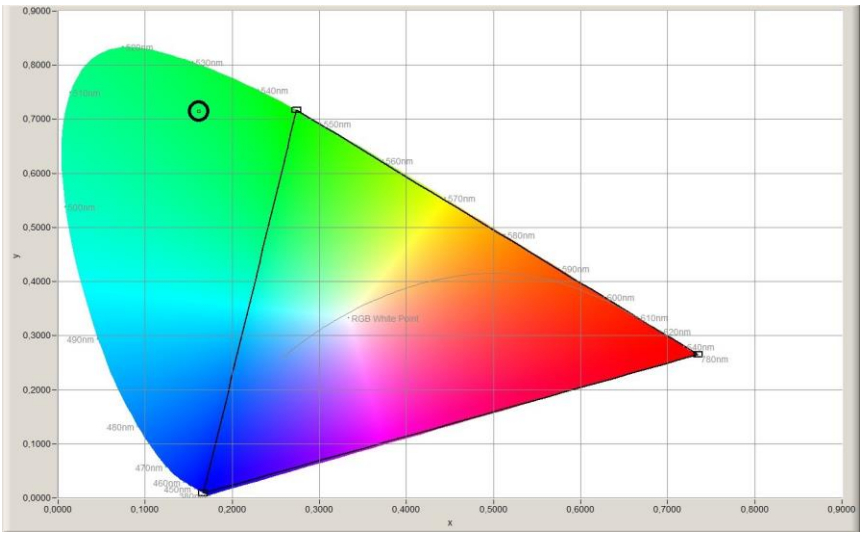
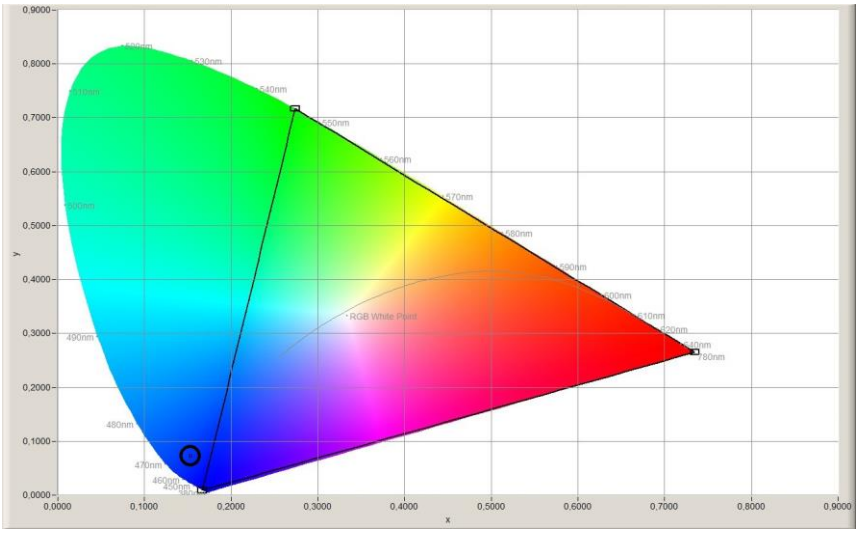
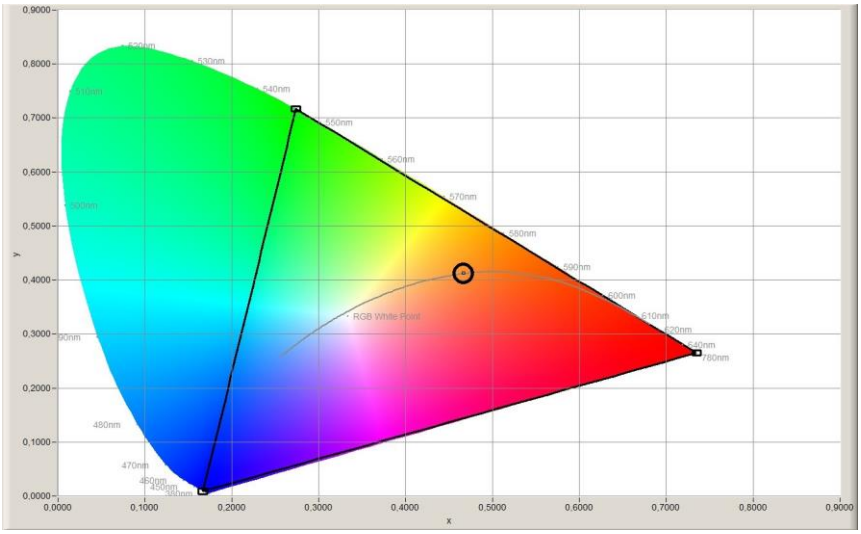
CIE Green



CIE Blue



CIE Warm White



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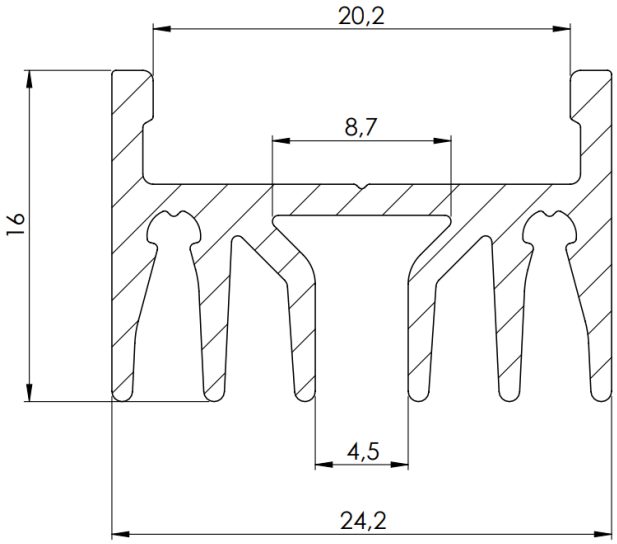
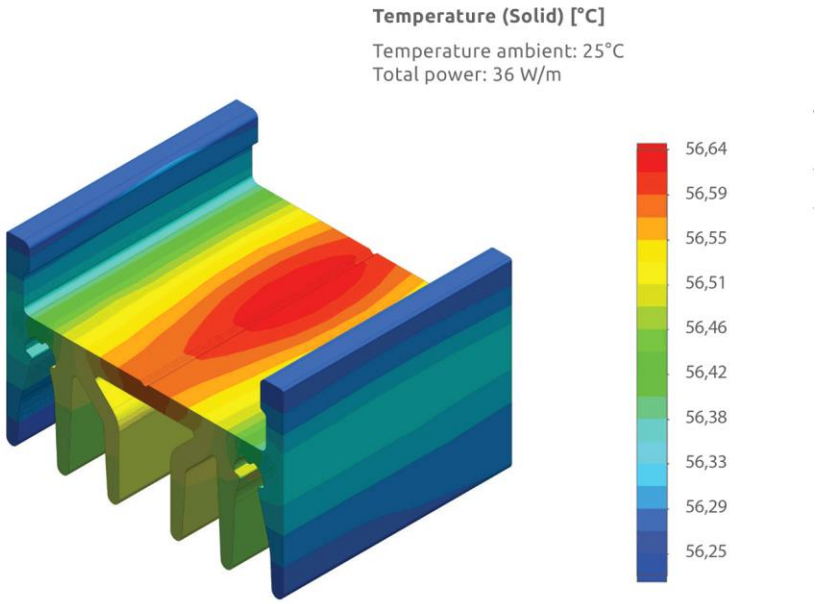
Dimensions:



Temperature distribution



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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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