

Datasheet

LED engine specification

Product type:
LF-24-UVC-26.6X23.5-QG

Description:
**LuxaLight Industrial LED Fixture Quartz Glass UV-B/C 3535 60° 26,6 x
23,5mm
(24 Volt, 3535, IP64)**



Date:
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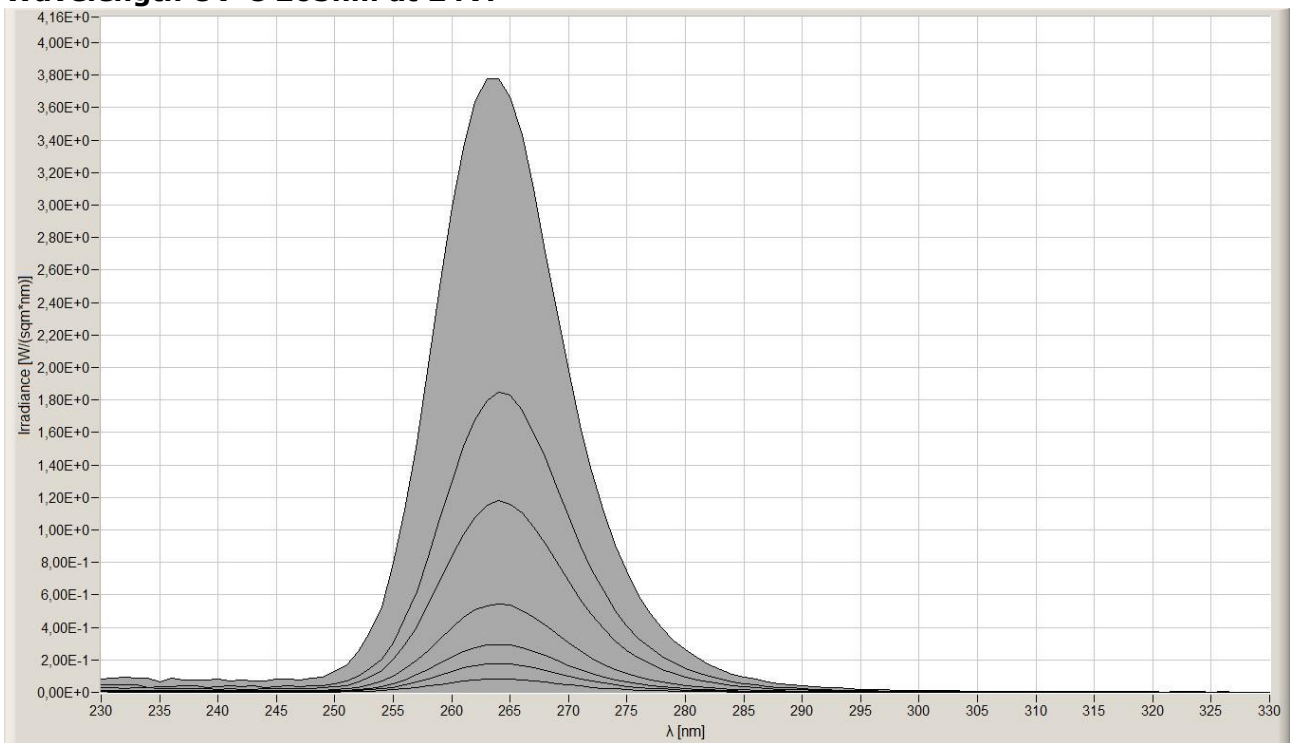
Technical Specifications							
LF-24-UVC-26.6x23.5-QG				Quartz Glass QG			
General	LED Type		3535 SMD				
	LED Quantity		57 LEDs / Engine				
	Dimensions		220mm - 3000mm * 26.6mm * 23.5mm (L * B * H)				
	Weight		Variable, depending on moulding and length				
	Infosheet		LuxaLight Industrial LED Fixtures infopage				
Environment	Working Temperature		-5°C ~ +60°C				
	Storing Temperature		-5°C ~ +60°C				
	IP Grade		IP64				
	Mechanical Protection		1,5mm thick Quartz Glass				
	Housing material		Anodized aluminium				
	Moulding Resin		N.A.				
Electronic	Working Voltage		DC24V				
	Working Current		1,55 A / Engine				
	Working Wattage		37,2 W / Engine				
	LED Engine type		LuxaLight LED Engine UVC 3535 60°				
	Driving Method		Constant Voltage				
	Cable type		PUR Cable 4x 0.5mm² Gray LuxaLight				
	NTC Resistance		5KOhm				
	NTC Beta		3950				
Lighting	Engine Wavelength (nm)		265nm + 275nm + 300nm				
	Voltage at measurement		18.1V	24V			
	Current at measurement		0,47 A	1,55 A			
	Wattage at measurement		10,2 W	37,2 W			
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)		5	620 mJ/cm²	62 W/m²	1610 mJ/cm²	161 W/m²
			7,5	340 mJ/cm²	34 W/m²	887 mJ/cm²	88,7 W/m²
			10	260 mJ/cm²	26 W/m²	680 mJ/cm²	68 W/m²
			20	110 mJ/cm²	11 W/m²	290 mJ/cm²	29 W/m²
			30	55 mJ/cm²	5,5 W/m²	146 mJ/cm²	14,6 W/m²
			40	34 mJ/cm²	3,4 W/m²	89 mJ/cm²	8,9 W/m²
60			16 mJ/cm²	1,6 W/m²	42 mJ/cm²	4,2 W/m²	

Lighting	Engine Wavelength (nm)		265nm UV-C			
	Peak Measured Wavelength (5cm)		264nm			
	Voltage at measurement		18.1V		24V	
	Current at measurement		0,13 A		0,6 A	
	Wattage at measurement		2,4 W		14,4 W	
	Peak Measured Radiance per distance (cm) (1 LED Engine)	5	11 mJ/cm ²	1,14 W/m ²	38 mJ/cm ²	3,8 W/m ²
		7,5	5,4 mJ/cm ²	0,54 W/m ²	18 mJ/cm ²	1,8 W/m ²
		10	3,6 mJ/cm ²	0,36 W/m ²	12 mJ/cm ²	1,2 W/m ²
		20	1,5 mJ/cm ²	0,15 W/m ²	5 mJ/cm ²	0,5 W/m ²
		30	0,9 mJ/cm ²	0,09 W/m ²	3 mJ/cm ²	0,3 W/m ²
		40	0,6 mJ/cm ²	0,06 W/m ²	2 mJ/cm ²	0,2 W/m ²
		60	0,3 mJ/cm ²	0,03 W/m ²	1 mJ/cm ²	0,1 W/m ²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	145 mJ/cm ²	14,5 W/m ²	550 mJ/cm ²	55 W/m ²
		7,5	71 mJ/cm ²	7,1 W/m ²	270 mJ/cm ²	27 W/m ²
		10	45 mJ/cm ²	4,5 W/m ²	170 mJ/cm ²	17 W/m ²
		20	21 mJ/cm ²	2,1 W/m ²	80 mJ/cm ²	8 W/m ²
		30	11 mJ/cm ²	1,1 W/m ²	40 mJ/cm ²	4 W/m ²
		40	8 mJ/cm ²	0,8 W/m ²	30 mJ/cm ²	3 W/m ²
		60	3 mJ/cm ²	0,3 W/m ²	10 mJ/cm ²	1 W/m ²
	Engine Wavelength (nm)		275nm UV-C			
	Peak Measured Wavelength (5cm)		276nm			
	Voltage at measurement		18.1V		24V	
	Current at measurement		0,09 A		0,25 A	
	Wattage at measurement		1,6 W		50,2 W	
Peak Measured Radiance per distance (cm) (1 LED Engine)	5	4,3 mJ/cm ²	0,43 W/m ²	13 mJ/cm ²	1,3 W/m ²	
	7,5	2 mJ/cm ²	0,2 W/m ²	6 mJ/cm ²	0,6 W/m ²	
	10	1,3 mJ/cm ²	0,13 W/m ²	4 mJ/cm ²	0,4 W/m ²	
	20	1 mJ/cm ²	0,1 W/m ²	3 mJ/cm ²	0,3 W/m ²	
	30	0,7 mJ/cm ²	0,07 W/m ²	2 mJ/cm ²	0,2 W/m ²	
	40	0,4 mJ/cm ²	0,04 W/m ²	1 mJ/cm ²	0,1 W/m ²	
	60	0,2 mJ/cm ²	0,02 W/m ²	0,4 mJ/cm ²	0,04 W/m ²	
Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)	5	70 mJ/cm ²	7 W/m ²	190 mJ/cm ²	19 W/m ²	
	7,5	33 mJ/cm ²	3,3 W/m ²	90 mJ/cm ²	9 W/m ²	
	10	26 mJ/cm ²	2,6 W/m ²	70 mJ/cm ²	7 W/m ²	
	20	15 mJ/cm ²	1,5 W/m ²	40 mJ/cm ²	4 W/m ²	
	30	9 mJ/cm ²	0,9 W/m ²	23 mJ/cm ²	2,3 W/m ²	
	40	5 mJ/cm ²	0,5 W/m ²	13 mJ/cm ²	1,3 W/m ²	
	60	2 mJ/cm ²	0,2 W/m ²	6 mJ/cm ²	0,6 W/m ²	

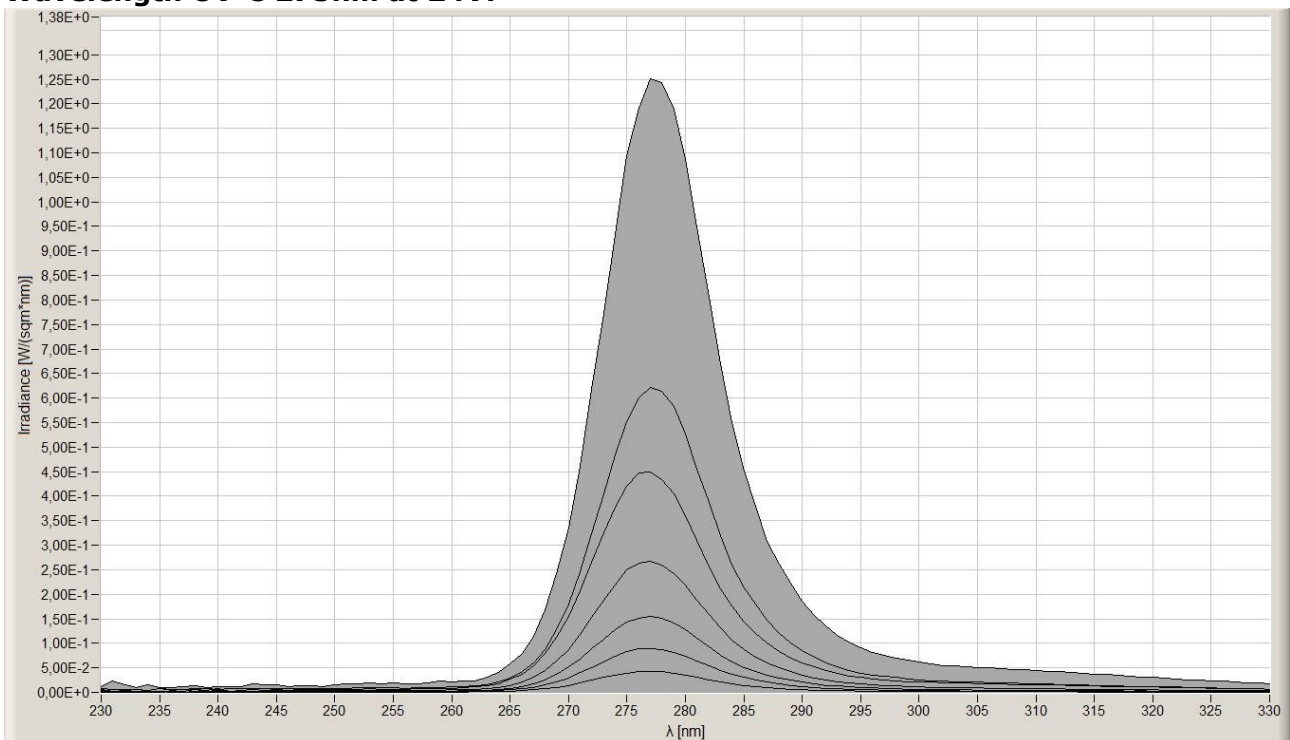
Lighting	Engine Wavelength (nm)		300nm UV-B				
	Peak Measured Wavelength (5cm)		301nm				
	Voltage at measurement		18.1V		24V		
	Current at measurement		0,25 A		0,7 A		
	Wattage at measurement		4,5 W		16,8 W		
	Peak Measured Radiance per distance (cm) (1 LED Engine)		5	26 mJ/cm ²	2,6 W/m ²	67 mJ/cm ²	6,7 W/m ²
			7,5	12 mJ/cm ²	1,2 W/m ²	31 mJ/cm ²	3,1 W/m ²
			10	9 mJ/cm ²	0,9 W/m ²	23 mJ/cm ²	2,3 W/m ²
			20	4 mJ/cm ²	0,4 W/m ²	10 mJ/cm ²	1 W/m ²
			30	2 mJ/cm ²	0,2 W/m ²	5 mJ/cm ²	0,5 W/m ²
			40	1,2 mJ/cm ²	0,12 W/m ²	3 mJ/cm ²	0,3 W/m ²
			60	0,4 mJ/cm ²	0,04 W/m ²	1 mJ/cm ²	0,1 W/m ²
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)		5	510 mJ/cm ²	51 W/m ²	1180 mJ/cm ²	118 W/m ²
			7,5	230 mJ/cm ²	23 W/m ²	530 mJ/cm ²	53 W/m ²
			10	170 mJ/cm ²	17 W/m ²	400 mJ/cm ²	40 W/m ²
20			73 mJ/cm ²	7,3 W/m ²	170 mJ/cm ²	17 W/m ²	
30			39 mJ/cm ²	3,9 W/m ²	91 mJ/cm ²	9,1 W/m ²	
40			22 mJ/cm ²	2,2 W/m ²	51 mJ/cm ²	5,1 W/m ²	
60			10 mJ/cm ²	1 W/m ²	24 mJ/cm ²	2,4 W/m ²	
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 Fixtures	
Benefits of LED Fixture	Multiple wavelengths in one housing
	No optics required due to high output
	Custom cable output and/or connector
	Wide range of mounting options
	In-house expertise to personally advice 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

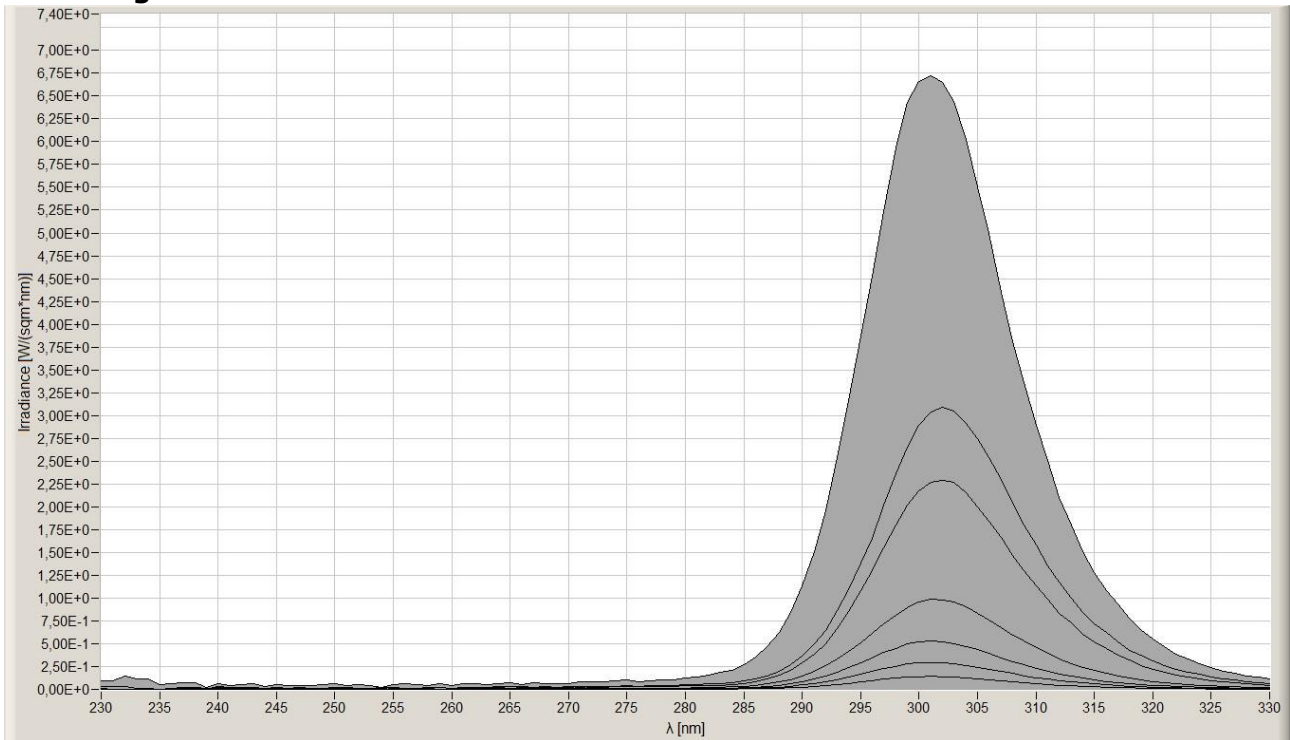
Wavelength UV-C 265nm at 24V:



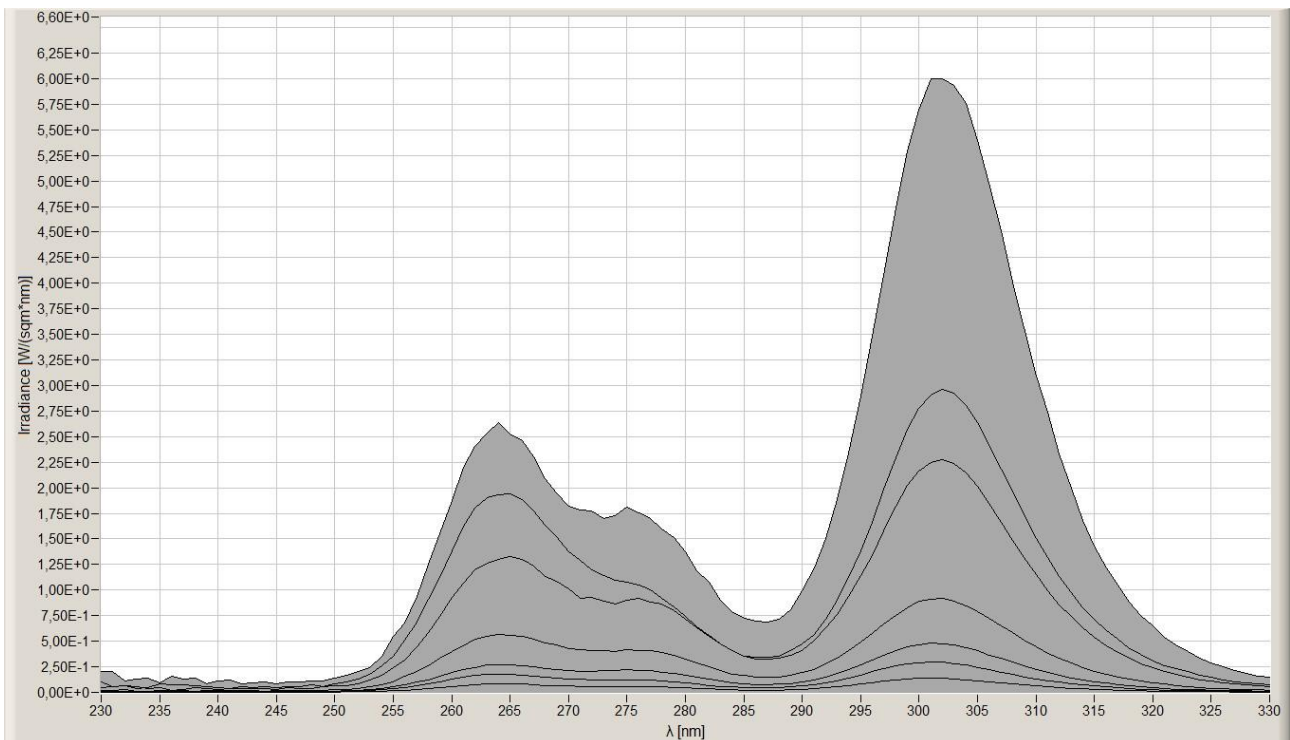
Wavelength UV-C 275nm at 24V:



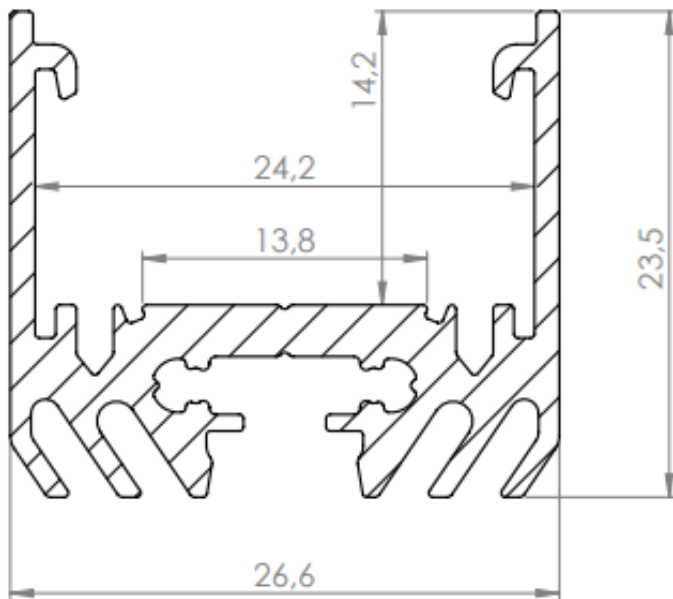
Wavelength UV-B 300nm at 24V:



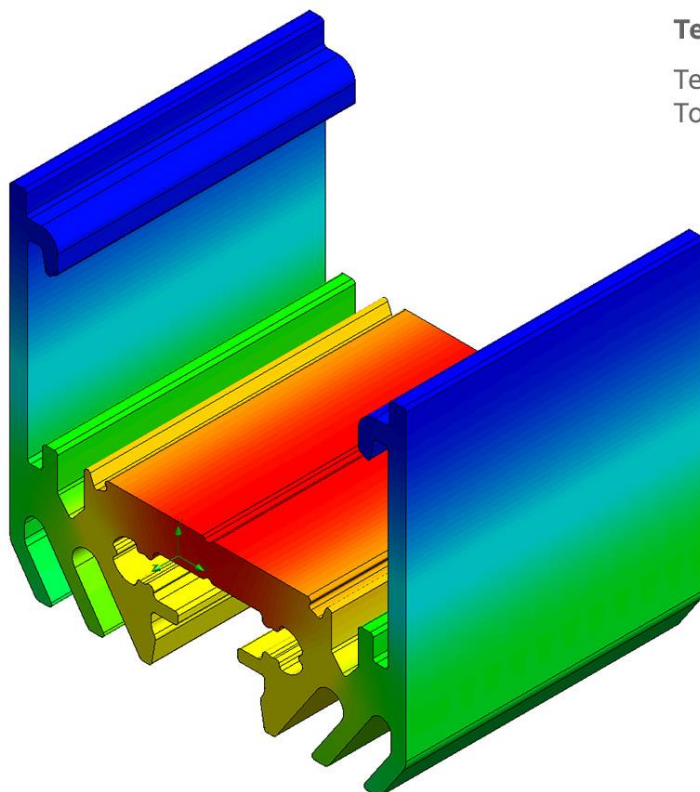
Wavelength Combined at 24V



Dimensions

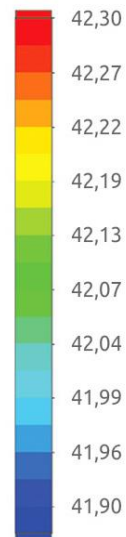


Temperature Distribution



Temperature (Solid) [°C]

Temperature ambient: 25°C
 Total power: 21,6 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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