

Datasheet

LED Science Panel specification

LED Science Panel type:
LP-24-SP-2835PLX

Description:
LuxaLight Aluminium LED Science Panel White, Green, Blue, Far Red, Deep Red, UV-A 365nm Protected (24 Volt, 2835, IP64)

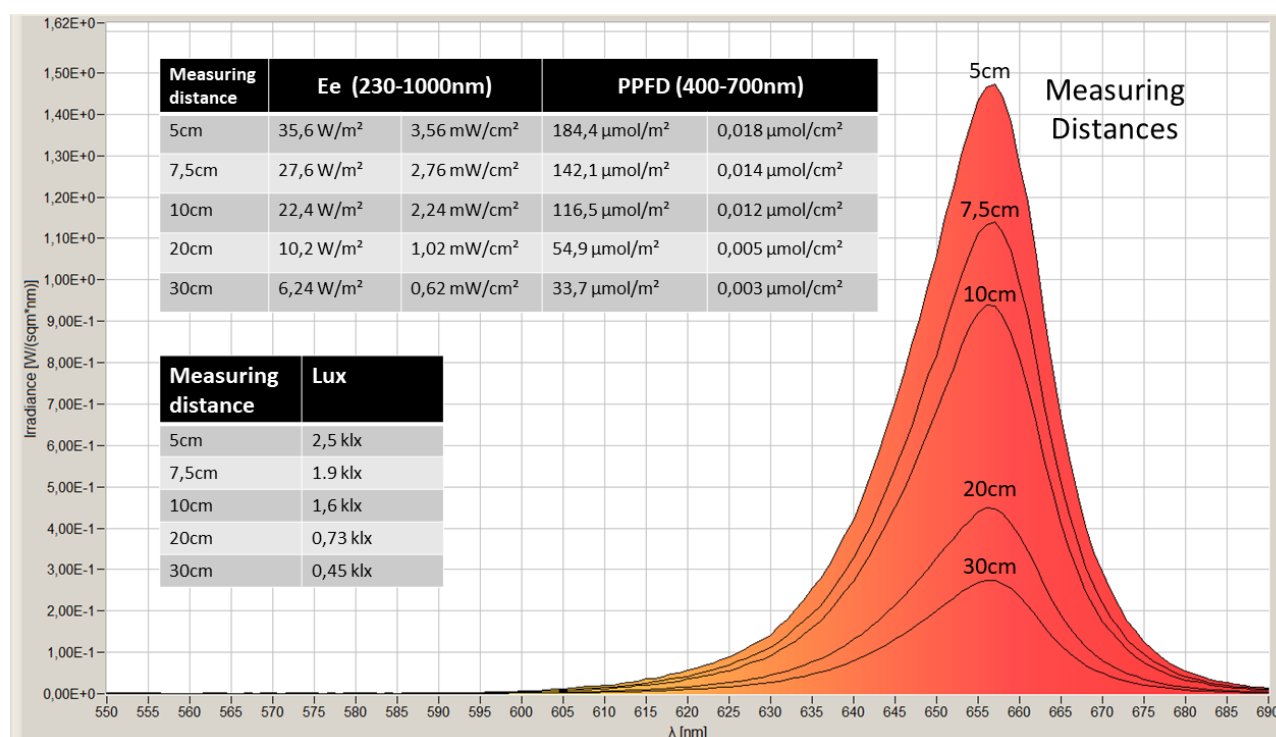
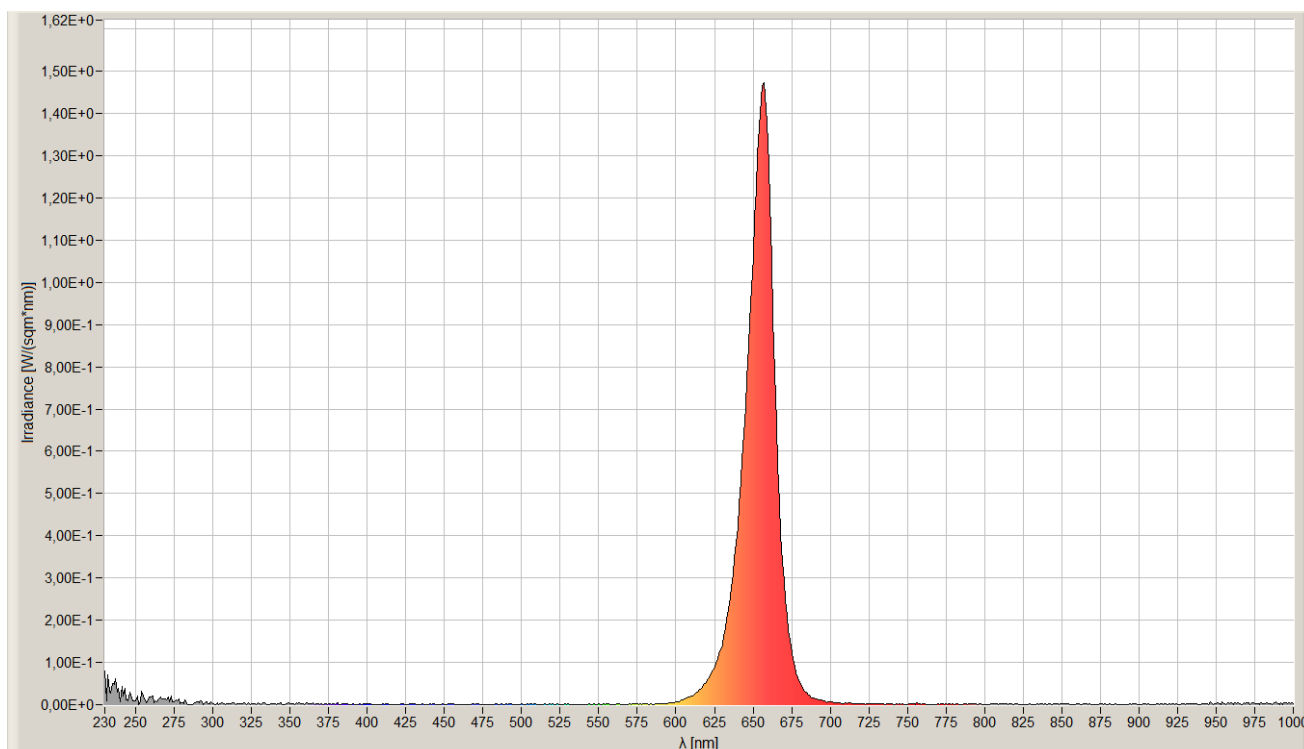


Date:
30-05-2023

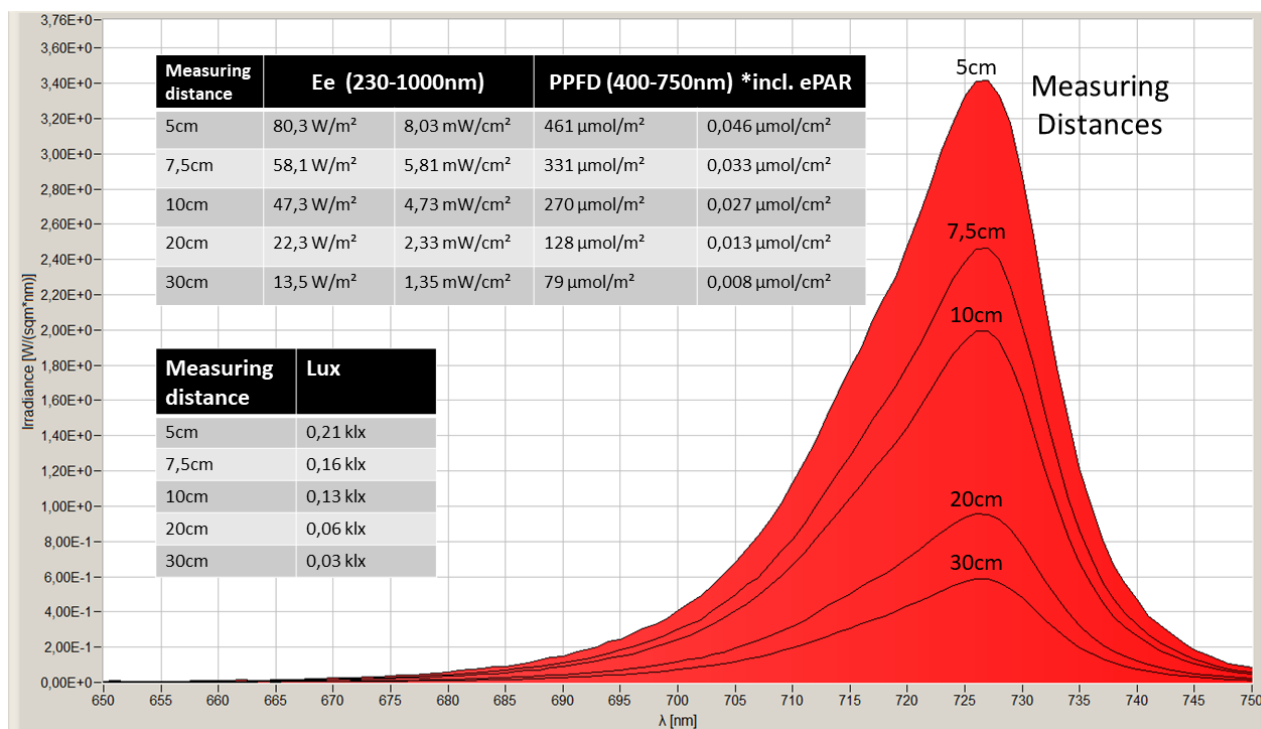
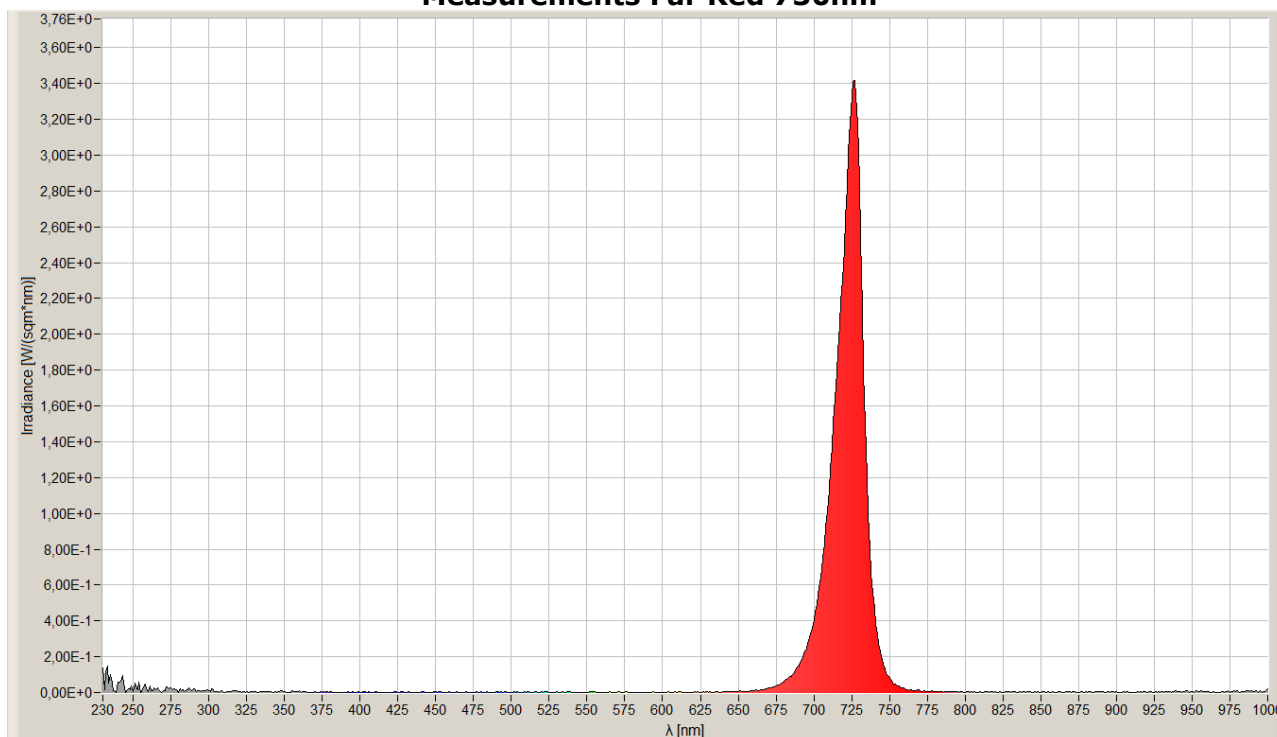
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Technical Specifications							
LB-24-SP-2835PLX							
Mechanical	LED Type	2835 SMD					
	LED Quantity	630 LEDs					
	Dimensions	980 x 20 x 8 (L x B x H)					
	Weight	1135g / per piece					
	Mounting	4 x Ø6mm hole for mounting					
	Protection grade	IP64 Nano silicone coating					
	LB Value	L80B50					
	PCB Material	Copper					
Electronic	Working Voltage	DC24V					
	Working Current Total	3,95A					
	Working Wattage	94,8 Watt / Piece					
	Driving Method	Constant Voltage					
	Colour channels	Far Red 730nm	Deep Red 650nm	Green 515nm	Blue 450nm	UV-A 365nm	White 4200k
	Current / piece	0,5A	0,5A	0,5A	0,6A	0,85A	1A
	Wattage / piece	12W	12W	12W	14,4W	20,4W	24W
Environment	Working Temperature	-20°C ~ +70°C					
	Storing Temperature	-20°C ~ +70°C					
	Lifespan	70.000 Hours					
	Warranty	5 Years					
Lighting	CRI	≥ 90 Ra					
	BIN	3 SDCM					
	Viewing Angle	120 ±5°					
	Colour channels	Far Red 730nm	Deep Red 660nm	Green 515nm	Blue 450nm	UV-A 365nm	White 4200k
	Irradiance at	5	80,3 W/m²	35,6 W/m²	29,3 W/m²	90,6 W/m²	34,6 W/m²
		7,5	58,1 W/m²	27,6 W/m²	22,2 W/m²	76,5 W/m²	30,8 W/m²
		10	47,3 W/m²	22,4 W/m²	18,4 W/m²	65,8 W/m²	27,2 W/m²
		20	22,3 W/m²	10 W/m²	9,2 W/m²	36,4 W/m²	15,6 W/m²
		30	13,5 W/m²	6,2 W/m²	5,8 W/m²	22,8 W/m²	9,6 W/m²
	Peak Irradiance	5	3,4 W/m²	1,5 W/m²	0,89 W/m²	4 W/m²	2,5 W/m²
		7,5	2,5 W/m²	1,1 W/m²	0,67 W/m²	3,3 W/m²	2,24 W/m²
		10	2 W/m²	0,9 W/m²	0,56 W/m²	2,9 W/m²	1,99 W/m²
		20	1 W/m²	0,4 W/m²	0,29 W/m²	1,6 W/m²	1,15 W/m²
		30	0,6 W/m²	0,3 W/m²	0,18 W/m²	1 W/m²	0,7 W/m²
	PPFD at (Far red includes ePAR)	5	461 µmol/m²	184 µmol/m²	125 µmol/m²	332 µmol/m²	N.A.
		7,5	331 µmol/m²	142 µmol/m²	95 µmol/m²	274 µmol/m²	N.A.
		10	270 µmol/m²	117 µmol/m²	79 µmol/m²	238 µmol/m²	N.A.
		20	128 µmol/m²	55 µmol/m²	40 µmol/m²	131 µmol/m²	N.A.
		30	79 µmol/m²	34 µmol/m²	25 µmol/m²	83 µmol/m²	N.A.
	Illuminance (Lux) at	5	0,2 klx	2,5 klx	12,5 klx	3 klx	0,2 klx
		7,5	0,16 klx	1,9 klx	9,5 klx	2,5 klx	0,17 klx
		10	0,13 klx	1,6 klx	7,9 klx	2,2 klx	0,15 klx
		20	0,06 klx	0,7 klx	4 klx	1,2 klx	0,08 klx
		30	0,03 klx	0,5 klx	2,5 klx	0,7 klx	0,06 klx
Connections and wiring	Cable Type	7 x 0,75mm² HQ5RR-F					
	Length of cable	1000mm					
	Wire colour	Wire specifications					
	Red	24V+					
	Brown	Far Red 730nm					
	Black	Deep Red 660nm					
	Green	Green 515nm					
	Blue	Blue 450nm					
	Yellow	UV-A 365nm					
	White	White 4000k					

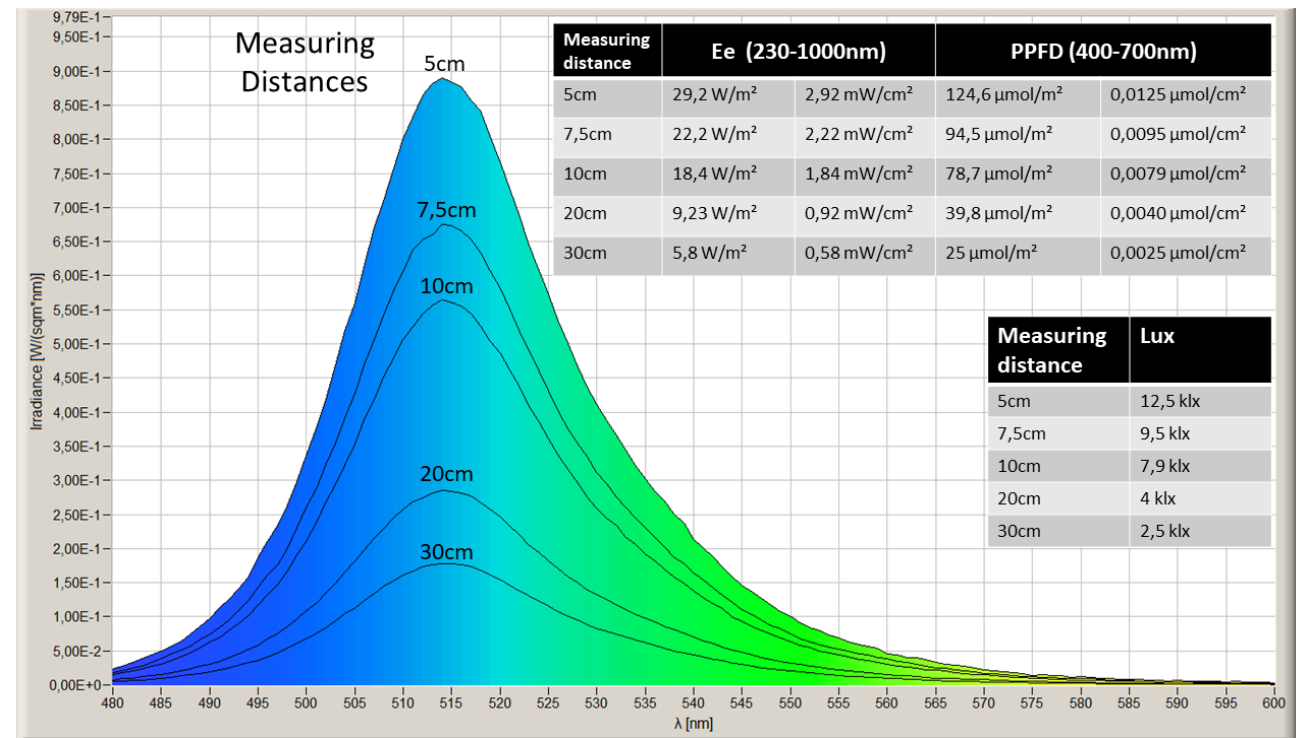
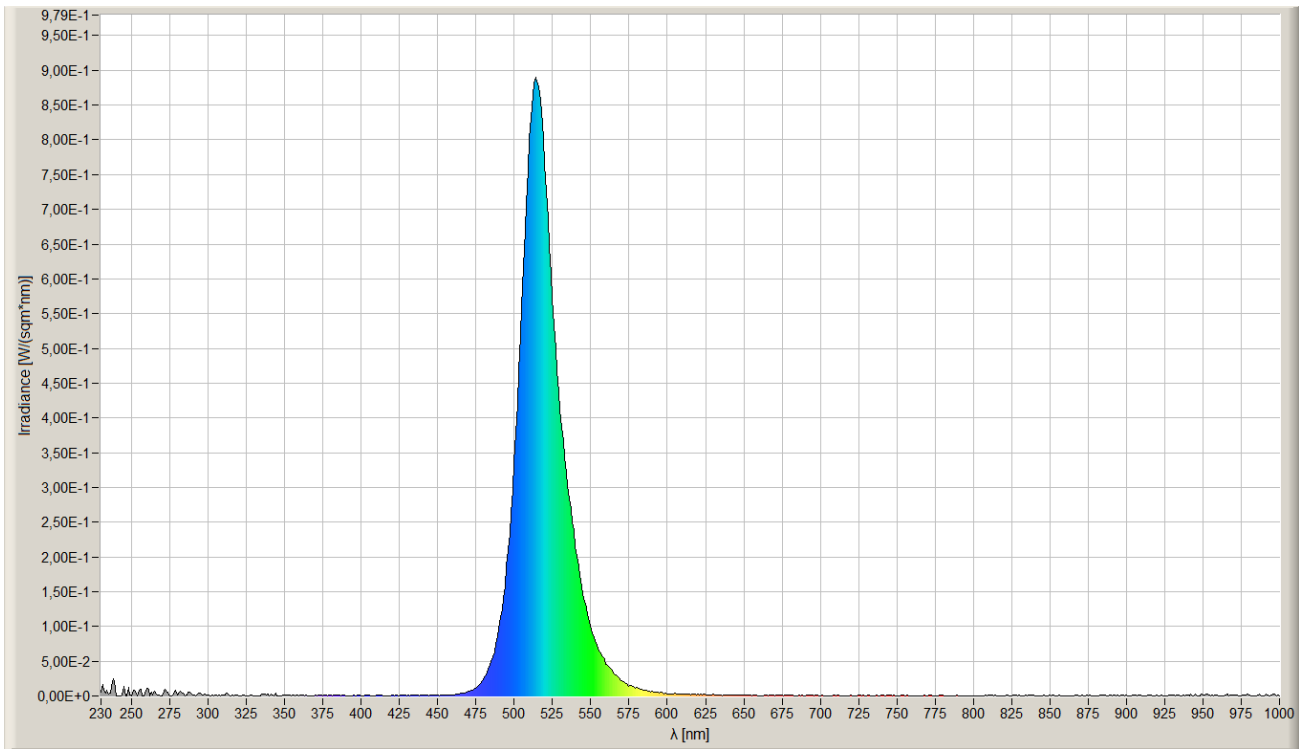
Measurements Deep Red 660nm



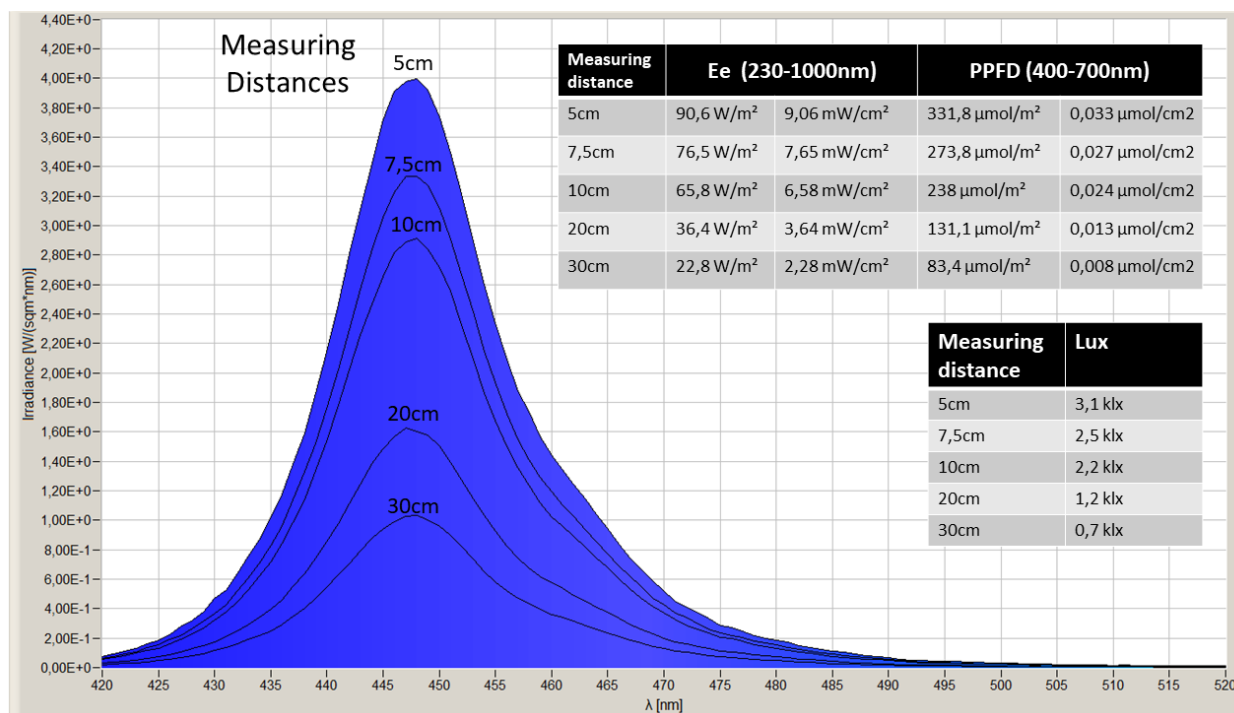
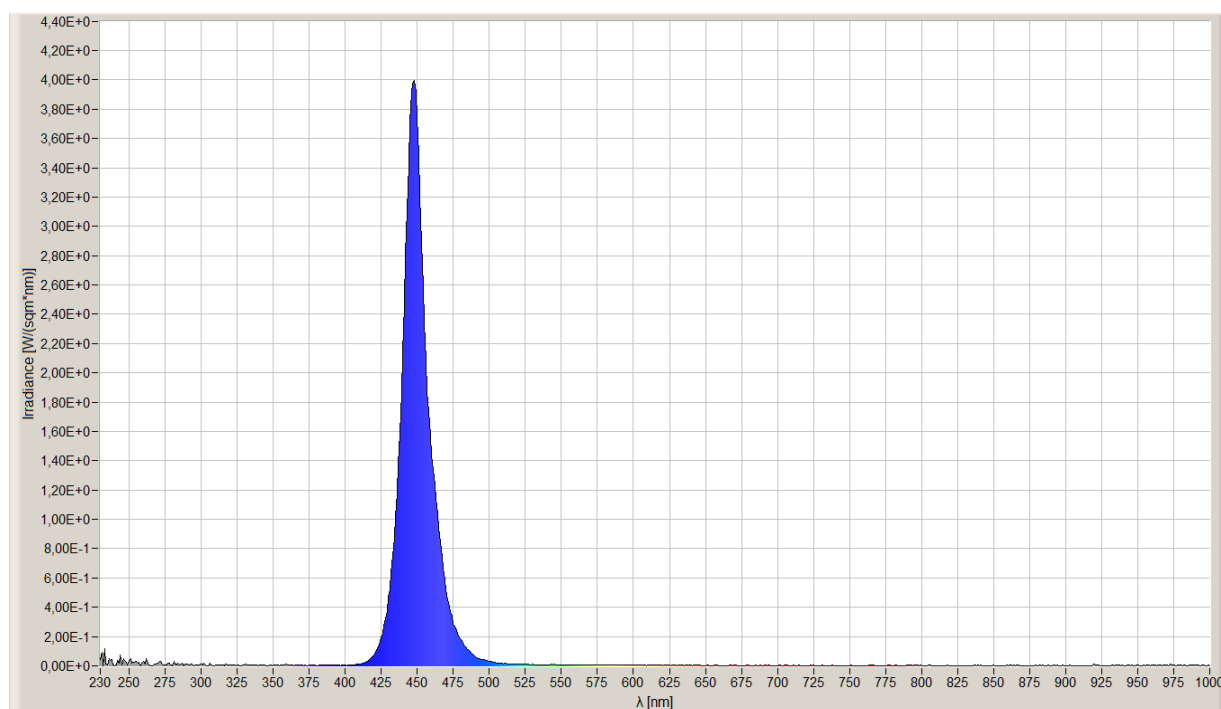
Measurements Far Red 730nm



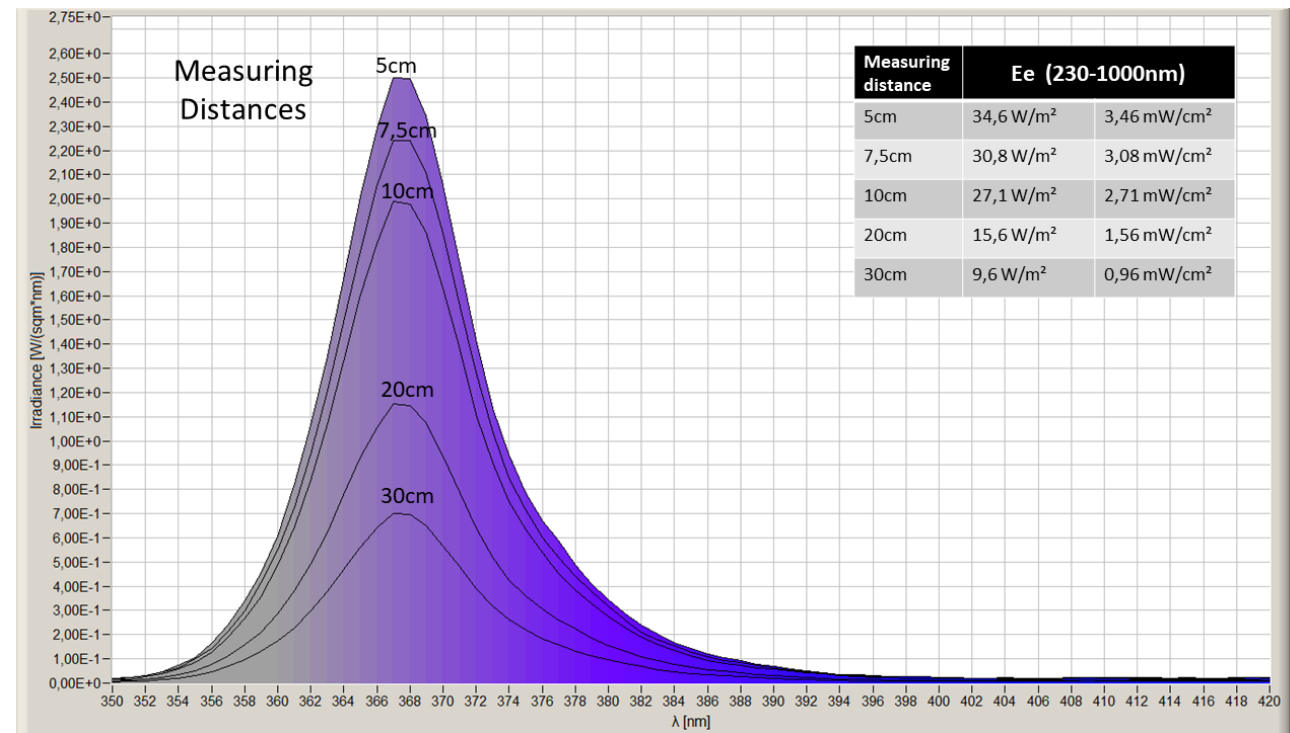
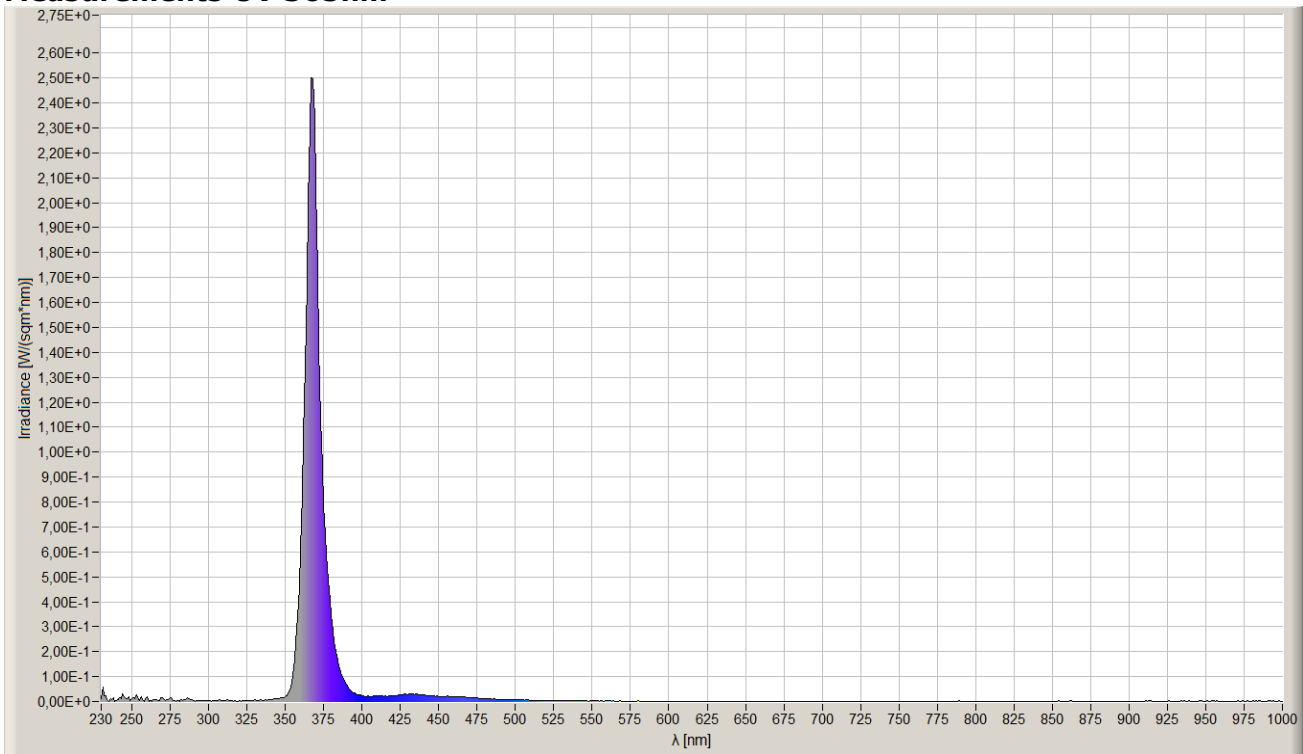
Green 515nm



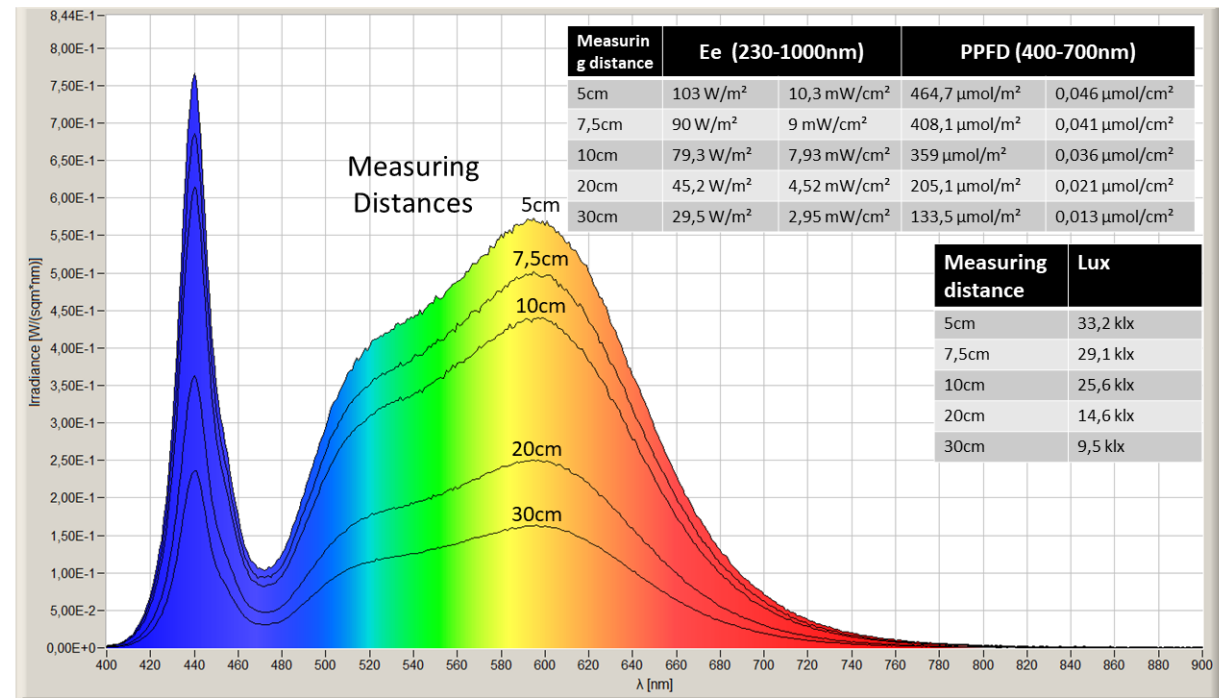
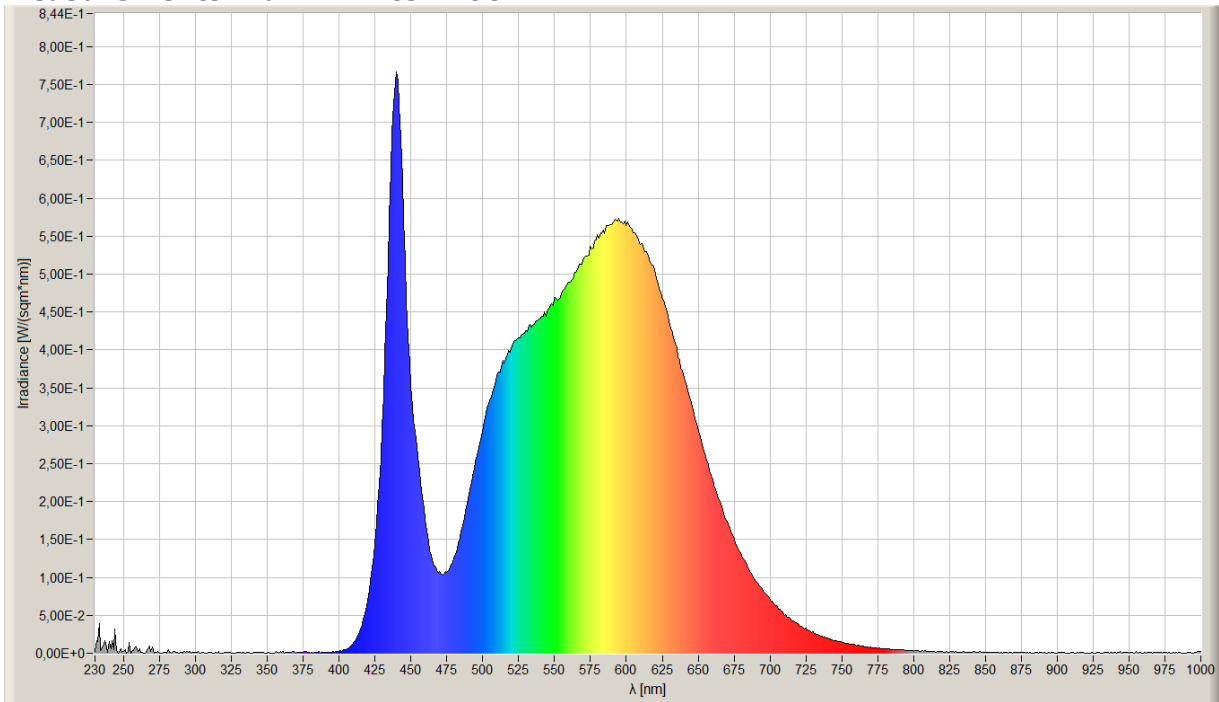
Measurements Blue 450nm



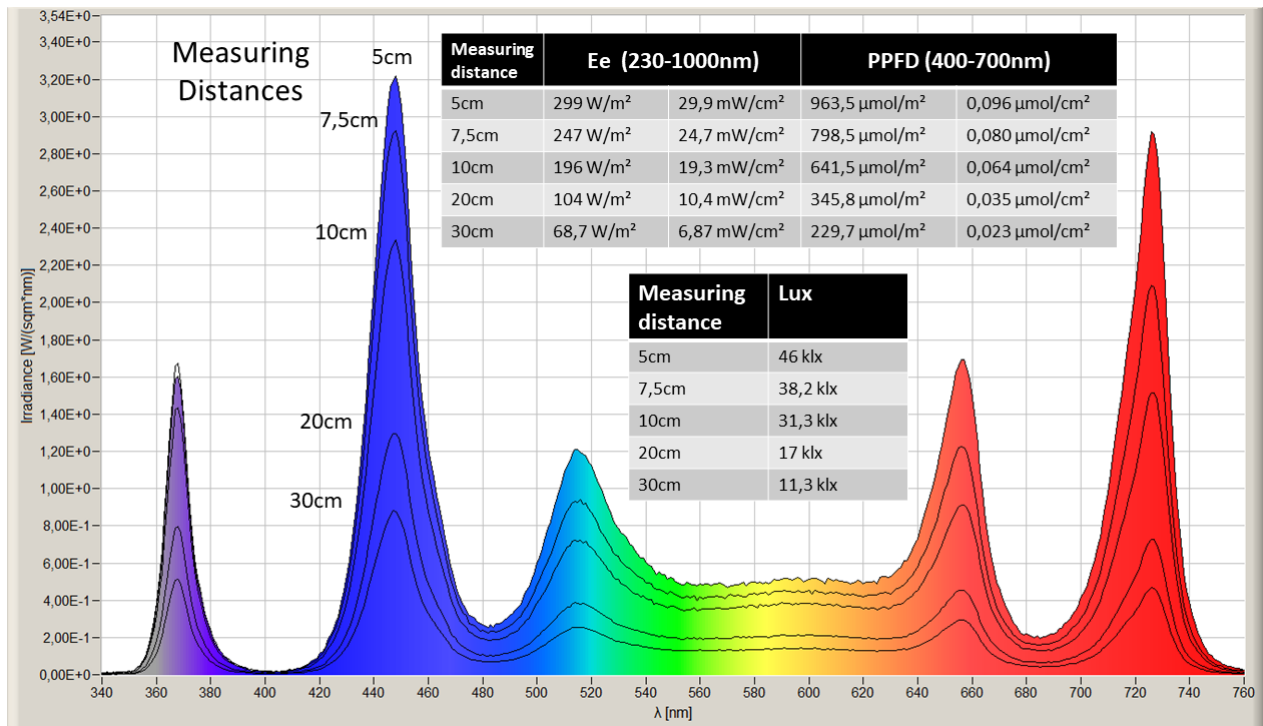
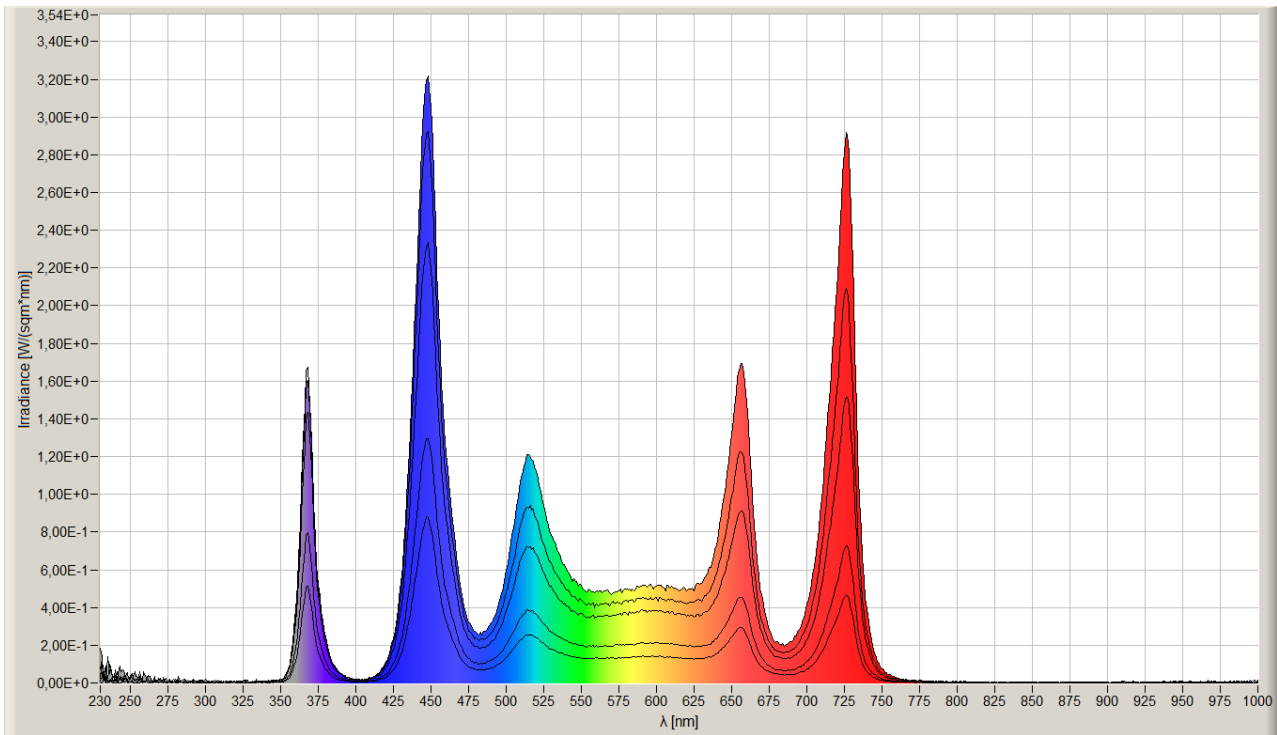
Measurements UV 365nm



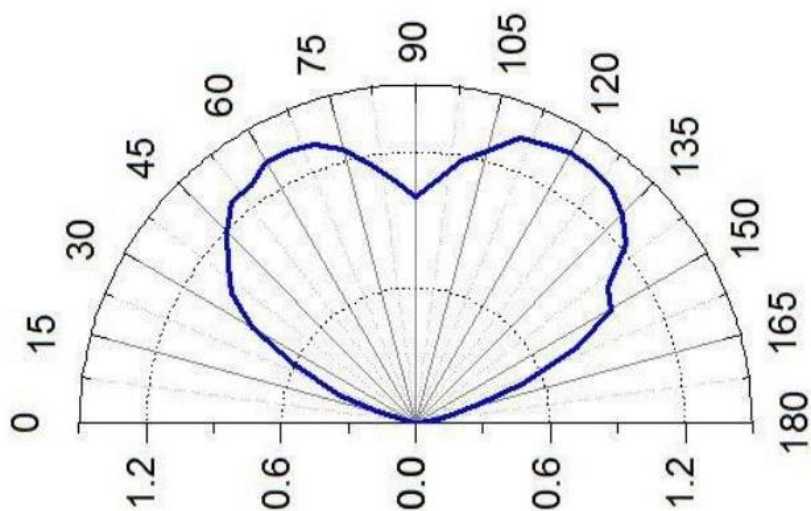
Measurements Warm White 4100k



Measurements of all Wavelengths combined



Lighting Angle:



The Materials of PCB:

5mm 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

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