

## Datasheet

LED engine specification

Product type:  
**LE-24-RGBW-36X5050PLX**

Description:  
**LuxaLight LED Engine 24V RGBW Beschermd (24 Volt, 36 LEDs, 5050, IP64)**

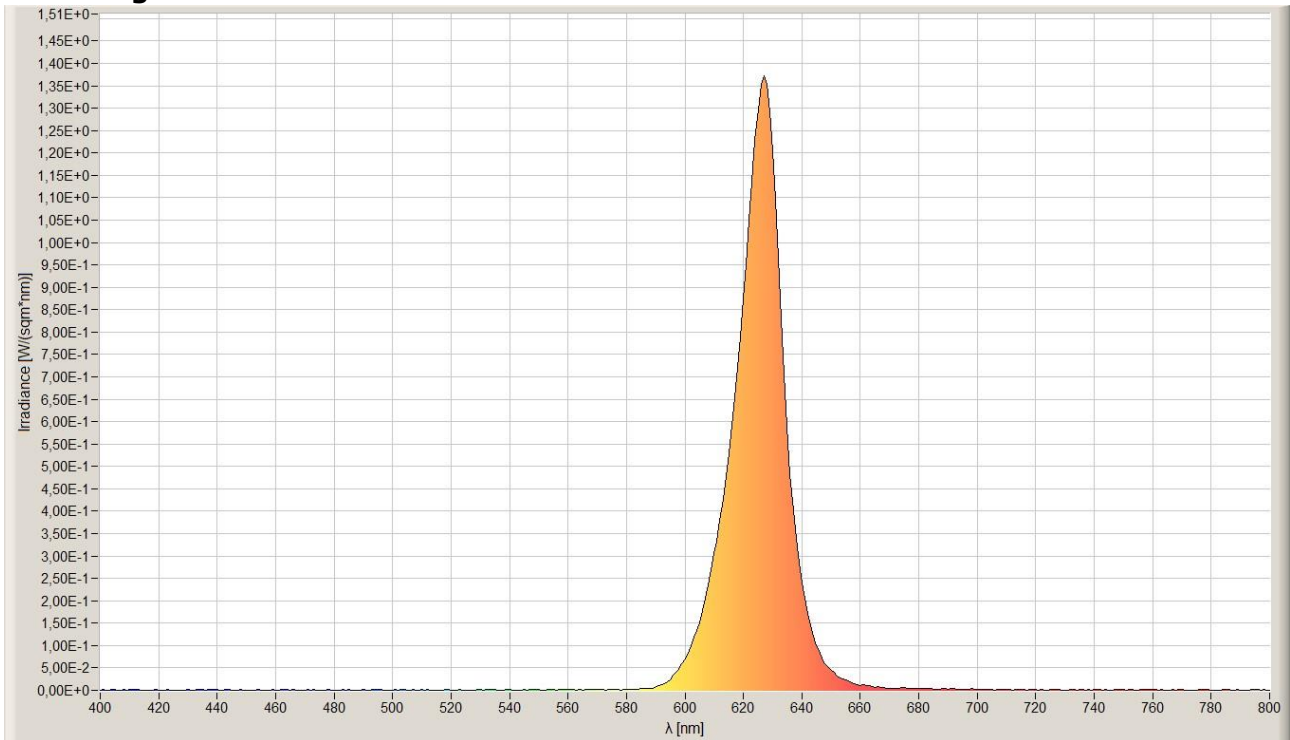


Date:  
24-10-2023

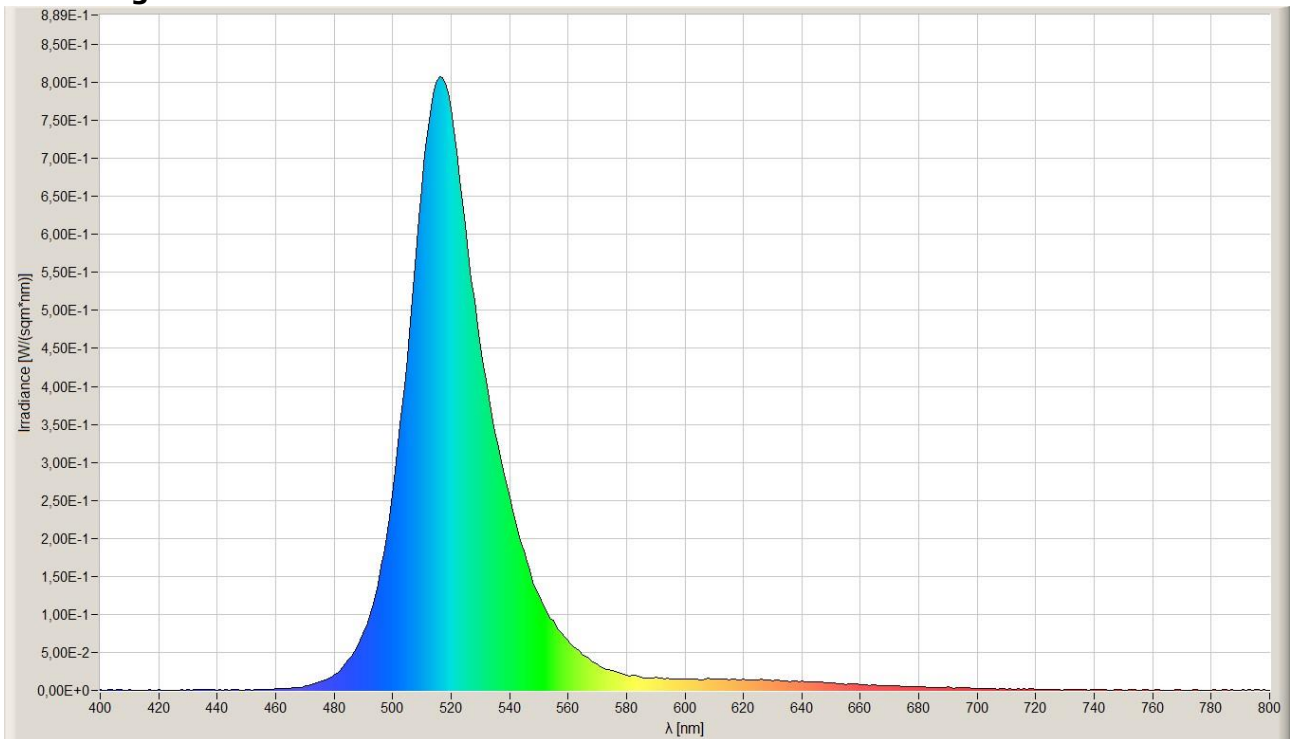
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Technical Specifications							
LE-24-RGBW-36X5050PLX							
General	LED Type	5050 SMD					
	LED Quantity	36 LEDs / Engine					
	Dimensions	200 * 20 * 2 ( L x B x H )					
	Weight	22g / Engine					
	Mounting	3M tape VHB4905					
Environment	Working Temperature	-20°C ~ +70°C					
	Storing Temperature	-20°C ~ +70°C					
	IP Grade	IP64					
	Mechanical Protection	Silicone Nano Coating					
Electronic	Working Voltage	DC24V					
	Working Current	0,425 A / Engine					
	Working Wattage	10,2 W / Engine					
	Driving Method	Constant Voltage					
	NTC Resistance	5Kohm					
	NTC Beta	3950					
Lighting		Blue	Green	Red	Warm White	Total	
	Engine Wavelength (nm)	460nm	515nm	625nm	2625K	-	
	Peak Measured Wavelength (5cm)	462nm	516nm	627nm	2650K	-	
	Peak Measured Radiance per distance (cm) (1 LED Engine)*	5	1,5 W/m <sup>2</sup>	0,8 W/m <sup>2</sup>	1,3 W/m <sup>2</sup>	-	-
		7,5	0,76 W/m <sup>2</sup>	0,4 W/m <sup>2</sup>	0,7 W/m <sup>2</sup>	-	-
		10	0,5 W/m <sup>2</sup>	0,3 W/m <sup>2</sup>	0,5 W/m <sup>2</sup>	-	-
		20	0,16 W/m <sup>2</sup>	0,09 W/m <sup>2</sup>	0,2 W/m <sup>2</sup>	-	-
		30	0,09 W/m <sup>2</sup>	0,05 W/m <sup>2</sup>	0,08 W/m <sup>2</sup>	-	-
		40	0,06 W/m <sup>2</sup>	0,03 W/m <sup>2</sup>	0,05 W/m <sup>2</sup>	-	-
		60	0,04 W/m <sup>2</sup>	0,02 W/m <sup>2</sup>	0,04 W/m <sup>2</sup>	-	-
	Total Radiance per distance 230nm - 1000nm (cm) (1 LED Engine)*	5	42,1 W/m <sup>2</sup>	29,16 W/m <sup>2</sup>	29,27 W/m <sup>2</sup>	53,6 W/m <sup>2</sup>	146,4 W/m <sup>2</sup>
		7,5	21,5W/m <sup>2</sup>	14,7 W/m <sup>2</sup>	14,5 W/m <sup>2</sup>	27,7 W/m <sup>2</sup>	77,4 W/m <sup>2</sup>
		10	14,2 W/m <sup>2</sup>	9,8 W/m <sup>2</sup>	9,4 W/m <sup>2</sup>	18,2 W/m <sup>2</sup>	51,74 W/m <sup>2</sup>
		20	4,6 W/m <sup>2</sup>	3,2 W/m <sup>2</sup>	3,2 W/m <sup>2</sup>	6,2 W/m <sup>2</sup>	16,9 W/m <sup>2</sup>
		30	2,4 W/m <sup>2</sup>	1,7 W/m <sup>2</sup>	1,6 W/m <sup>2</sup>	3,2 W/m <sup>2</sup>	8,8 W/m <sup>2</sup>
		40	1,5 W/m <sup>2</sup>	1,1 W/m <sup>2</sup>	1 W/m <sup>2</sup>	2 W/m <sup>2</sup>	5,8 W/m <sup>2</sup>
	Total PPFd μmol/m <sup>2</sup> (PAR 400-700nm) (1 LED Engine)*	5	162 μmol/m <sup>2</sup>	126 μmol/m <sup>2</sup>	145 μmol/m <sup>2</sup>	253 μmol/m <sup>2</sup>	656 μmol/m <sup>2</sup>
		7,5	82 μmol/m <sup>2</sup>	64 μmol/m <sup>2</sup>	73 μmol/m <sup>2</sup>	130 μmol/m <sup>2</sup>	347 μmol/m <sup>2</sup>
		10	55 μmol/m <sup>2</sup>	43 μmol/m <sup>2</sup>	48 μmol/m <sup>2</sup>	85 μmol/m <sup>2</sup>	233 μmol/m <sup>2</sup>
		20	18 μmol/m <sup>2</sup>	14 μmol/m <sup>2</sup>	16 μmol/m <sup>2</sup>	29 μmol/m <sup>2</sup>	77 μmol/m <sup>2</sup>
		30	9 μmol/m <sup>2</sup>	7 μmol/m <sup>2</sup>	8 μmol/m <sup>2</sup>	15 μmol/m <sup>2</sup>	40 μmol/m <sup>2</sup>
40		6 μmol/m <sup>2</sup>	5 μmol/m <sup>2</sup>	5 μmol/m <sup>2</sup>	9 μmol/m <sup>2</sup>	26 μmol/m <sup>2</sup>	
60		5 μmol/m <sup>2</sup>	3 μmol/m <sup>2</sup>	4 μmol/m <sup>2</sup>	7 μmol/m <sup>2</sup>	18 μmol/m <sup>2</sup>	
Illuminance (Lux) at (1 LED Engine)*	5	3385 lx	12,9 klx	6223 lx	17,2 klx	38 klx	
	7,5	1724 lx	6525 lx	3155 lx	8904 lx	20 klx	
	10	1149 lx	4399 lx	2047 lx	5810 lx	13,5 klx	
	20	373,5 lx	1436 lx	689,7 lx	1985 lx	4437 lx	
	30	195,2 lx	742,7 lx	359,9 lx	1028 lx	2295 lx	
	40	125,3 lx	485,6 lx	232,6 lx	648,2 lx	1513 lx	
	60	92,6 lx	357,1 lx	163,9 lx	447,5 lx	1063 lx	
Viewing Angle (θ)		120 ±5°					
*By using the pulse mode in combination with the MaNima Pollux Industry, higher performances can be reached							

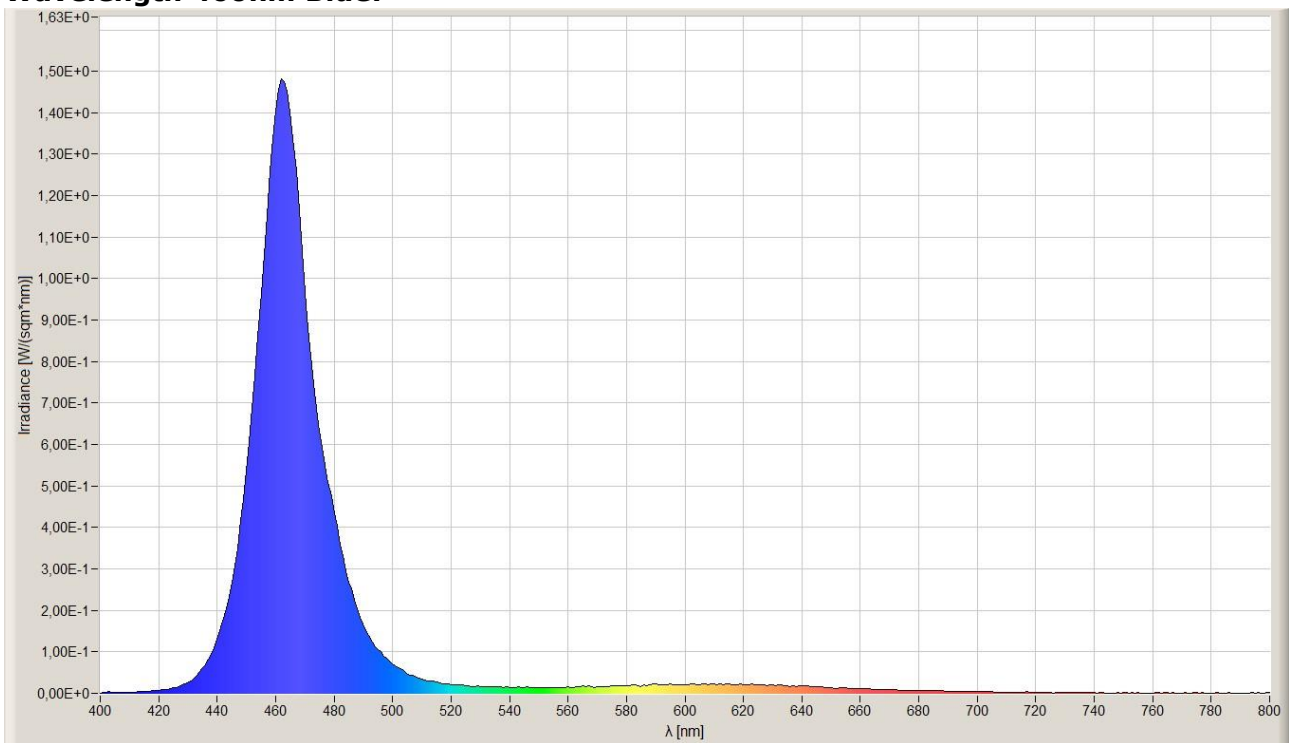
## Wavelength 625nm Red:



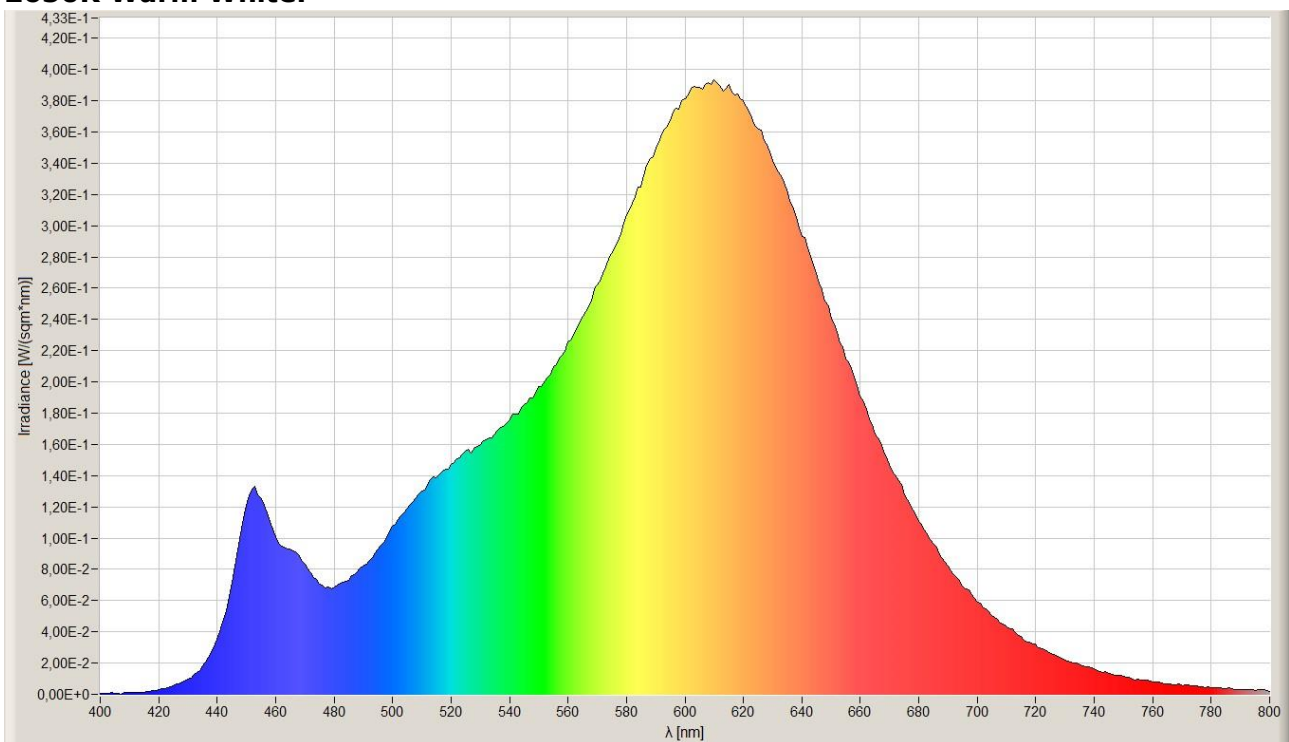
## Wavelength 515nm Green:



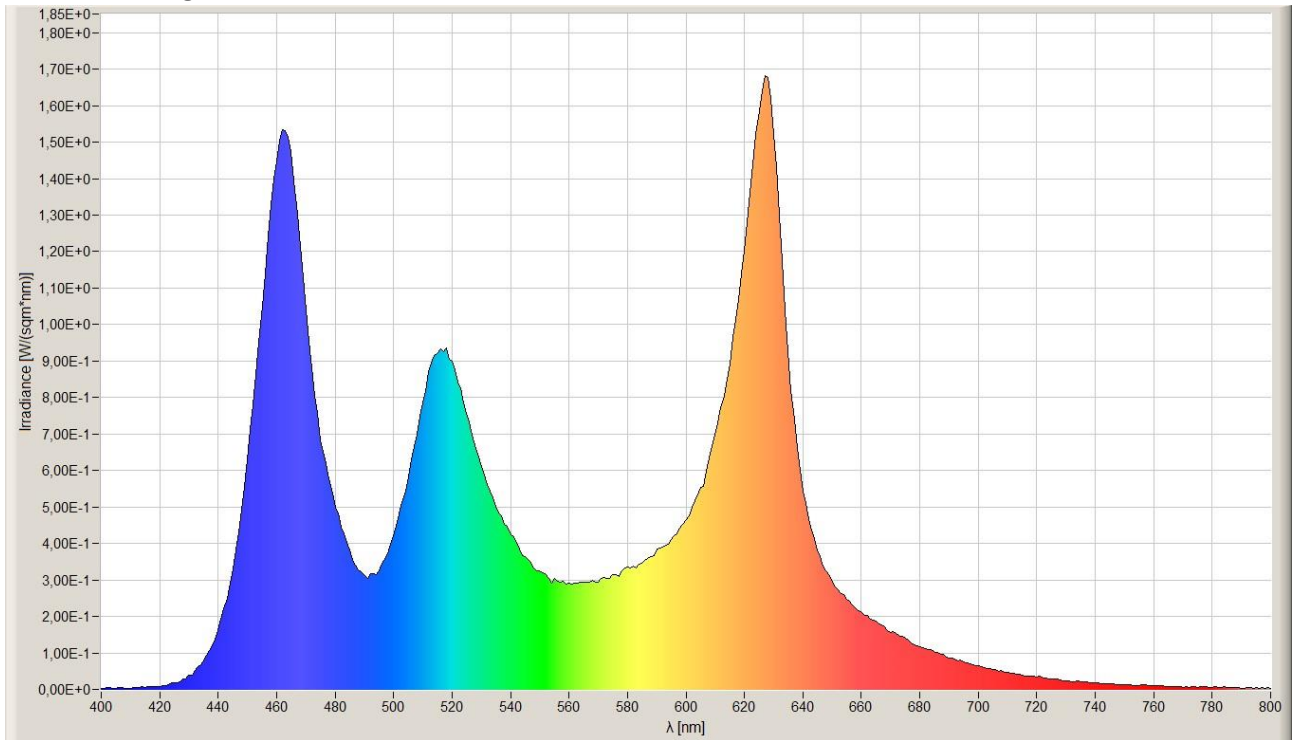
## Wavelength 460nm Blue:



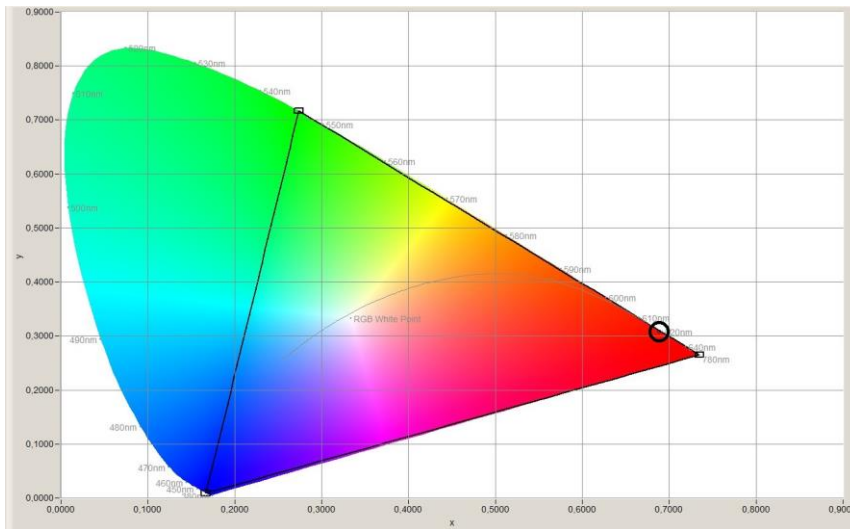
## 2650K Warm White:



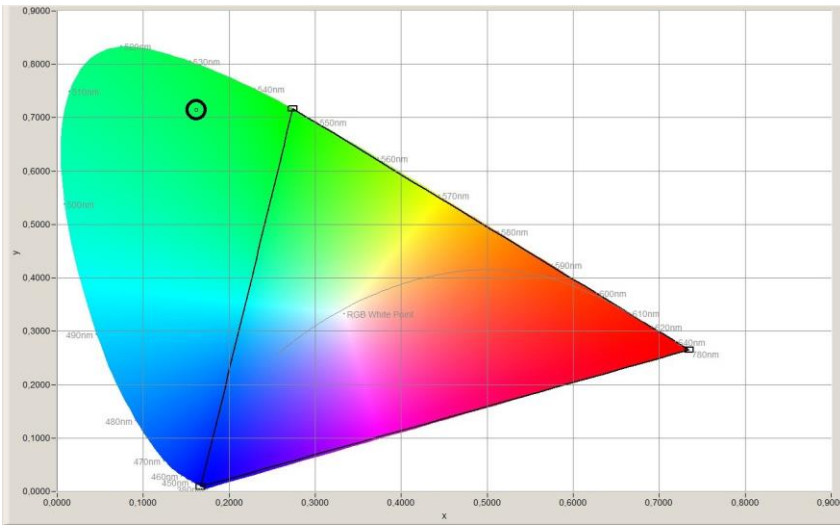
## Total Wavelength



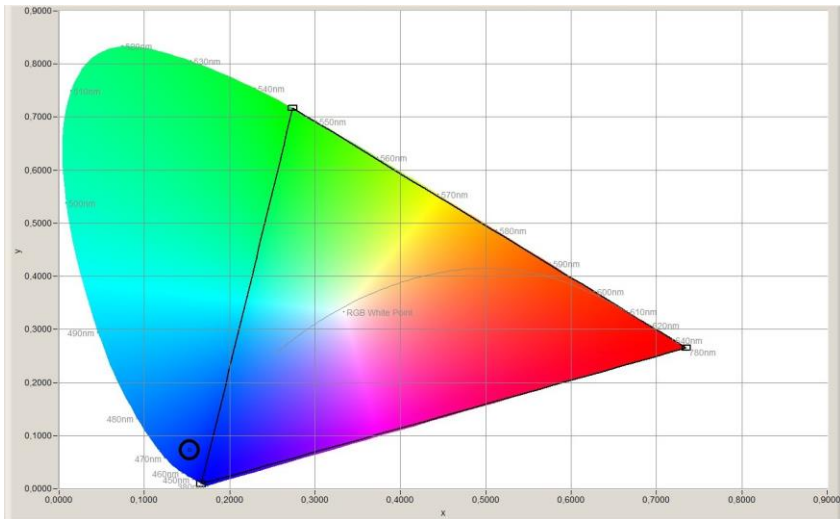
## CIE Red 625nm



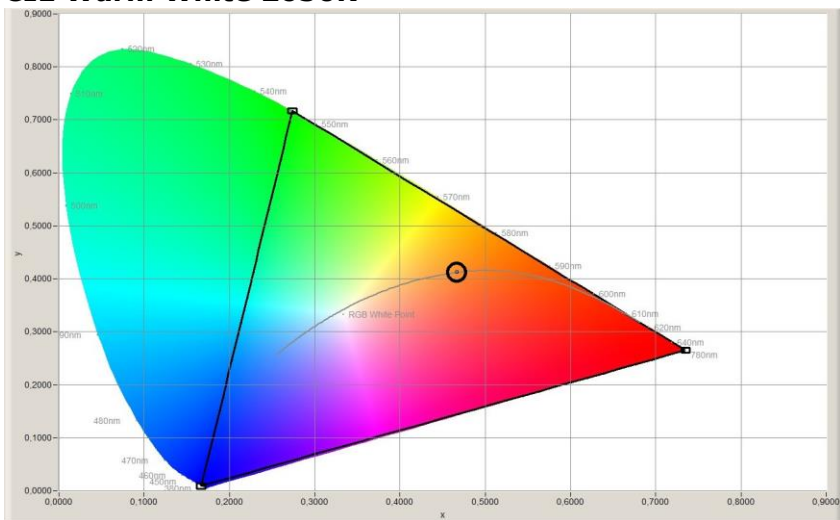
## CIE Green 515nm



## CIE Blue 460nm



## CIE Warm White 2650K



**The Materials of PCB:**

2mm 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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