

# Datasheet

## **LuxaLight COB LED-strip Warm White 2600K Waterproof (24 Volt, 512 LEDs, COB, IP68)**

**LS24WWCOBWLX2600K**

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## Product description

The LuxaLight Professional COB LED Strip is a high-quality lighting solution, ideal for use in various indoor and outdoor environments. This strip is designed with a vulcanized silicone sleeve and has an IP68 certification, meaning it is fully dust- and waterproof, making it suitable for a wide range of applications, even in the most demanding environments. The strip utilizes advanced COB LED technology and offers a warm color temperature of 2600K with excellent color rendering (CRI > 95). These features make the LED strip perfect for applications where natural lighting is required, such as in living spaces, work areas, retail environments, and more.

### Key Features:

- **Color Temperature of 2600K:** The warm 2600K lighting creates a cozy and inviting atmosphere, ideal for use in living rooms, offices, and commercial spaces.
- **CRI (≥95):** The excellent color rendering ensures natural lighting, with colors appearing vivid and true-to-life, which is essential for applications in retail, museums, and healthcare facilities.
- **Vulcanized Silicone Sleeve and IP68 Certification:** The strip is encased in a robust vulcanized silicone sleeve and is IP68 certified, providing full protection against dust and water. This makes it suitable for use in environments where the strip may be exposed to water, such as outdoor spaces, gardens, pools, and other wet environments.
- **COB LED Technology:** Instead of traditional individual LEDs, this strip uses COB (Chip-on-Board) LED technology, ensuring uniform light distribution without visible hotspots. This results in a more consistent and efficient lighting solution.
- **Use of 3M 4905 VHB Tape:** The strip is equipped with 3M 4905 VHB tape, ensuring a strong and reliable attachment to various surfaces.

### Applications:

- **Residential and Work Spaces (indoor):** The warm 2600K color temperature and high CRI value make this professional LED strip ideal for creating pleasant, natural lighting in living rooms, offices, and meeting rooms.
- **Retail and Window Displays:** The excellent color rendering ensures that products in stores and window displays are presented in the best possible light. The IP68 certification makes the strip suitable for use in commercial environments, both indoors and outdoors.
- **Museums and Galleries:** The warm lighting and high color rendering are perfect for illuminating artworks and objects in museums, galleries, and exhibitions, where color integrity is crucial.
- **Healthcare and Medical Facilities:** The warm, natural lighting is ideal for healthcare facilities, where proper lighting is important for the well-being of patients and staff.
- **Outdoor Spaces and Pools:** The IP68 certification makes this LED strip fully waterproof and suitable for use in outdoor environments such as gardens, patios, and pools, where the strip may be exposed to water and weather conditions.

### Advantages:

- **Excellent Color Rendering:** With a CRI of over 95, this professional LED strip provides accurate and natural color rendering, ideal for applications where color perception is essential.
- **Warm Lighting:** The 2600K color temperature provides a soft, warm glow that is perfect for creating a comfortable and inviting atmosphere in various environments.
- **Flexible and Customizable:** Thanks to its flexible design, the strip can easily be integrated into various lighting setups and fixtures, making it a versatile solution for a wide range of applications.
- **Uniform Light Distribution:** COB LED technology ensures consistent and even light distribution, providing pleasant and comfortable lighting without harsh shadows or hotspots.
- **Reliable Performance:** The LED strip operates on a standard 24V power supply and offers efficient, stable performance, making it ideal for long-term use in both residential and commercial environments.
- **Durable and Energy-Efficient:** LED technology is energy-efficient, meaning the strip is not only cost-effective but also contributes to a more sustainable lighting solution.
- **Strong Adhesion:** The 3M 4905 VHB tape provides reliable adhesion for easy and durable installation on various surfaces.

## Technical specifications

General		
Brand	LuxaLight	
LEDs / meter	512	
LED type	COB	
Length per reel	10 m	
Length per segment	31.25 mm	
LED strip width	12.00 mm	
LED strip thickness	5.00 mm	
PCB color	White	
Mantle material	Silicon	
Warranty	5 years	
Lifetime	70000 hours	
Lighting		
Color temperature	2500 - 2700 K	
CRI	≥ 95	
Luminous Flux	1527 lm	
BIN	3 SDCM	
Beam angle	120 °	
LB waarde	L90B20	
Measurement results		
CRI (Object size: 1 piece)	94	
CCT (Object size: 1 piece)	2577 K	
Illuminance (Lux) (Object size: 1 piece)		24V
	5cm	13070 lx
	10cm	4829 lx
	15cm	2605 lx
	20cm	1663 lx
	25cm	1158 lx
	30cm	891.2 lx
Total PPFD umol/m2 (PAR 400-700nm) (Object size: 1 piece)		24V
	5cm	219.213 umol/m2
	10cm	80.461 umol/m2
	15cm	43.3911 umol/m2
	20cm	27.6609 umol/m2
	25cm	19.2418 umol/m2
	30cm	14.8103 umol/m2
Peak wavelength (Object size: 1 piece)	627 nm	

Peak irradiance (Object size: 1 piece)		24V
	5cm	0.305861 W/sqm
	10cm	0.111413 W/sqm
	15cm	0.0597726 W/sqm
	20cm	0.0379422 W/sqm
	25cm	0.0265145 W/sqm
	30cm	0.0204414 W/sqm

Total irradiance (Object size: 1 piece)		24V
	5cm	48.01 W/sqm
	10cm	17.58 W/sqm
	15cm	9.475 W/sqm
	20cm	6.054 W/sqm
	25cm	4.205 W/sqm
	30cm	3.237 W/sqm

## Electronics

Working voltage	24V
Current / meter	0.63 A / meter
Power consumption per meter	15.00 W / meter
PCB material	Copper

## Environmental

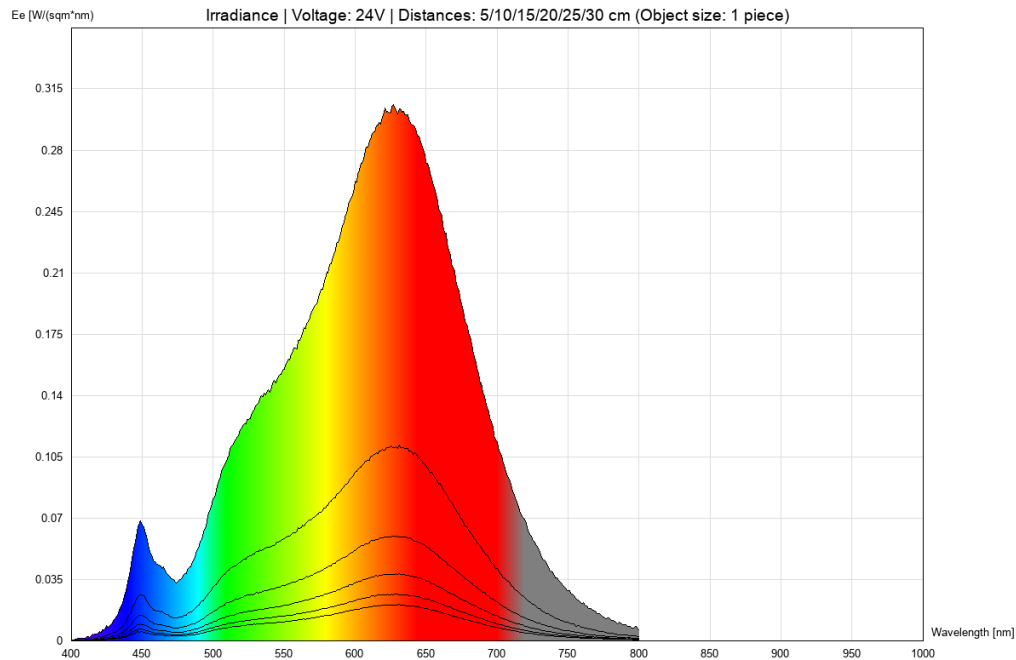
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 68

## Directives - standards - certificates

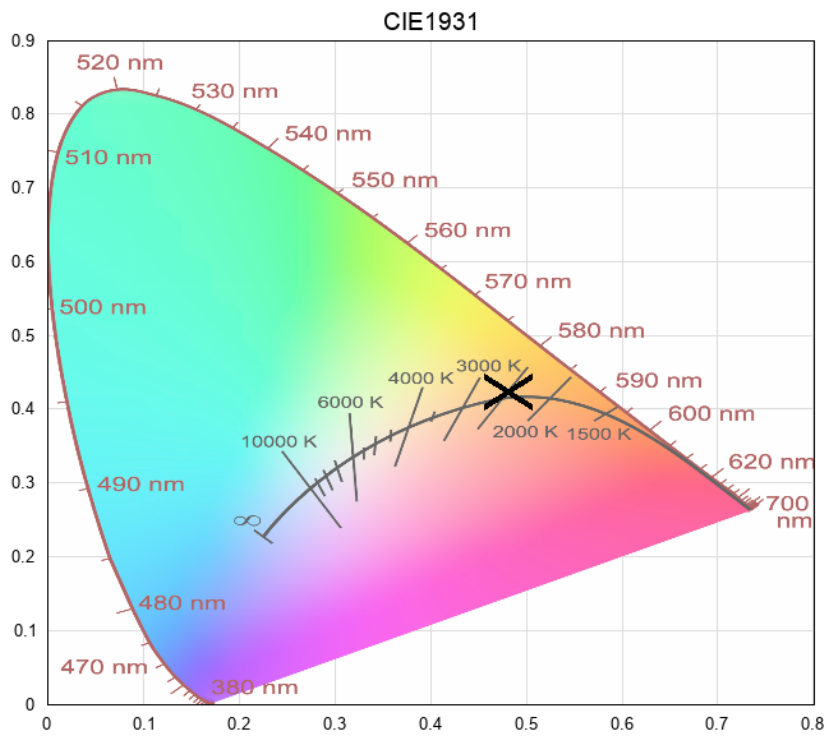
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

## Measurement results

### irradiance - full-spectrum (24V)



## cie1931



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