

# Datasheet

## **LuxaLight COB LED-strip Neutral White 4500K Waterproof (12 Volt, 512 LEDs, COB, IP68)**

**LS12NWCOWLX4500K**

**Version: 2025-03-10.2**

## 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 color temperature of 4500K 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 4500K:** The 4500K lighting provides bright, neutral white light that is ideal for work environments and commercial spaces, with a pleasant balance between cool and warm light.
- **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 neutral 4500K color temperature and high CRI value make this professional LED strip ideal for creating bright and functional lighting in living rooms, kitchens, 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 neutral 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 neutral, 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:

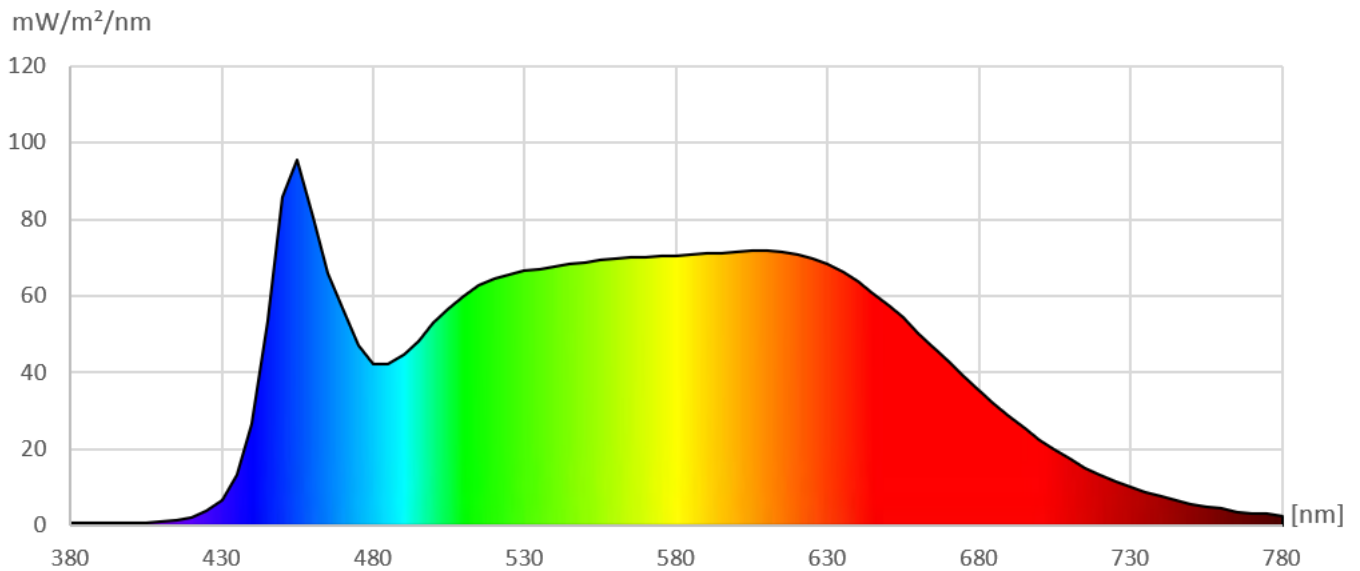
- **Excellent Color Rendering:** With a CRI of over 95, this professional LED strip provides accurate and natural color rendering, ideal for applications where color perception is essential.
- **Neutral Lighting:** The 4500K color temperature provides bright, neutral white light, perfect for work environments and commercial spaces that require clear lighting without feeling too cool or too warm.
- **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 12V 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

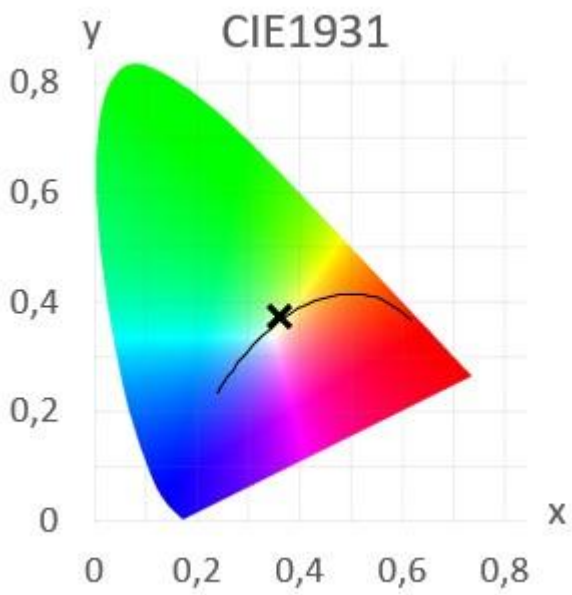
General	
Brand	LuxaLight
LEDs / meter	512
LED type	COB
Length per reel	10 m
Length per segment	50 mm
LED strip width	12.00 mm
LED strip thickness	5.00 mm
PCB color	White
Mantle material	Silicon
Warranty	5 years
Lifetime	70000 hours
Lighting	
Color temperature	4500 K
CRI	≥ 95
Luminous Flux	1420 lm
BIN	3 SDCM
Beam angle	120 °
LB waarde	L90B20
Electronics	
Working voltage	12V
Current / meter	1.25 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

### WAVELENGTH



## CIE1931



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