

# Datasheet

## LuxaLight LED-strip White 5600K Indoor (24 Volt, 140 LEDs, 2835, IP20)

**LS24W140X2835ILX**

**Version: 2025-07-09.2**

## Product description

The **LuxaLight Professional LED Strip** is designed for lighting applications where high color rendering and a cool, bright light are required. With a color temperature of **5600K** and a Color Rendering Index (CRI) of over 95, this professional LED strip provides excellent light quality, essential for applications where accurate color representation and true-to-life color accuracy are important.

### Key Features:

- **5600K Color Temperature:** The **5600K color temperature** provides cool, bright white light, ideal for workspaces, commercial environments, and other applications where bright light is needed for maximum visibility and productivity.
- **High CRI (Color Rendering Index) over 95:** The professional LED strip features a CRI of over 95, meaning that the light from this strip renders colors as naturally and accurately as natural sunlight. This is crucial for environments where color interpretation is important, such as in retail, museums, and galleries.
- **140 pcs 2835 LEDs per Meter:** The strip contains **140 pcs 2835 LEDs** per meter, ensuring high light density and uniform light distribution across the surface, providing consistent lighting at all times.
- **24V Connection:** The professional LED strip operates on a standard **24V power supply**, for stable and reliable performance.
- **Flexible Design:** The flexible design allows the LED strip to be easily installed in various configurations, such as in profiles, fixtures, or as direct lighting for custom systems.
- **PCB Thickness:** The PCB has a thickness of **3 oz/ft²**, providing robust support and efficient heat dissipation, extending the lifespan of the LED strip and maintaining consistent performance.
- **Passive Cooling Required:** Since the LED strip requires passive cooling, it should be integrated into a suitable system that efficiently dissipates heat to ensure optimal performance and longer lifespan.
- **3M 4905 VHB Tape:** The LED strip is equipped with **3M 4905 VHB tape**, which ensures strong and durable adhesion to a variety of surfaces. This makes the strip easy to install in various applications, including wall and ceiling mounting, profiles, and other lighting systems.

### Applications:

- **Residential and Workspaces:** The **5600K color temperature** and high CRI value make this professional LED strip ideal for creating bright, true-to-life lighting in workspaces, offices, and commercial environments.
- **Retail and Display Windows:** The excellent color rendering (CRI >95) ensures that products in stores and display windows are showcased at their best, contributing to an enjoyable shopping experience for customers.
- **Museums and Galleries:** The cool lighting and high color rendering are perfect for illuminating artworks and objects in museums, galleries, and exhibitions, where color integrity is of the utmost importance.
- **Healthcare and Medical Settings:** The cool, true-to-life lighting is also ideal for healthcare settings, where lighting plays a crucial role in the well-being of patients and staff.
- **Home Decoration:** Perfect for illuminating decorative and ambiance-setting elements in homes, such as in living room lighting, kitchens, and bedrooms, where bright and natural lighting is desired.

### Benefits:

- **Excellent Color Rendering:** With a CRI of over 95, this professional LED strip provides accurate and natural color rendering, making it ideal for applications where color perception is crucial.
- **Cool Lighting:** The **5600K color temperature** delivers bright, cool white light, ideal for creating an energized and well-lit atmosphere in various environments.
- **Flexible and Customizable:** Thanks to the flexible design, the strip can be easily integrated into various lighting setups and fixtures, making it a versatile solution for diverse applications.
- **Uniform Light Distribution:** With **140 pcs 2835 LEDs** per meter, the strip offers consistent and uniform light distribution, ensuring pleasant and comfortable lighting without harsh shadows.
- **Reliable Performance:** The LED strip operates on a standard **24V power supply** and provides efficient, stable performance, making it an ideal choice 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	140	
LED type	2835	
Length per reel	10 m	
Length per segment	50 mm	
LED strip width	10.00 mm	
LED strip thickness	3.00 mm	
PCB color	White	
Warranty	5 years	
Lifetime	70000 hours	
Lighting		
Color temperature	5500 ~ 5700 K	
CRI	≥ 95	
Luminous Flux	≈ 3000 lm	
BIN	3 SDCM	
Beam angle	120 °	
LB waarde	L90B50	
Measurement results		
CRI (Object size: 1 piece)	93	
CCT (Object size: 1 piece)	5604 K	
Illuminance (Lux) (Object size: 1 piece)		24V
	5cm	41600 lx
	10cm	15550 lx
	15cm	8114 lx
	20cm	5021 lx
	25cm	3376 lx
	30cm	2530 lx
Total PPFD umol/m2 (PAR 400-700nm) (Object size: 1 piece)		24V
	5cm	663.414 umol/m2
	10cm	248.726 umol/m2
	15cm	129.953 umol/m2
	20cm	80.5074 umol/m2
	25cm	54.1207 umol/m2
	30cm	40.5514 umol/m2
Peak wavelength (Object size: 1 piece)	451 nm	

Peak irradiance (Object size: 1 piece)		24V
5cm		1.26556 W/sqm
10cm		0.496494 W/sqm
15cm		0.260346 W/sqm
20cm		0.161383 W/sqm
25cm		0.108245 W/sqm
30cm		0.0810229 W/sqm

Total irradiance (Object size: 1 piece)		24V
5cm		152.1 W/sqm
10cm		56.68 W/sqm
15cm		29.65 W/sqm
20cm		18.38 W/sqm
25cm		12.36 W/sqm
30cm		9.255 W/sqm

## Electronics

Working voltage	24V
Current / meter	1.00 A / meter
Power consumption per meter	24.00 W / meter
PCB material	Copper

## Environmental

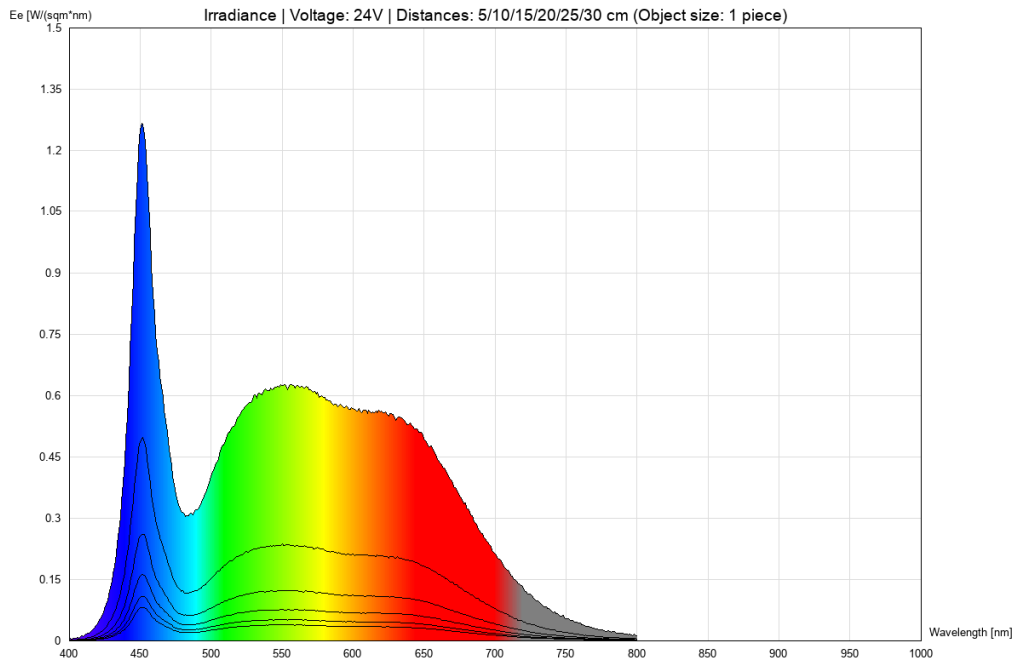
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 20

## Directives - standards - certificates

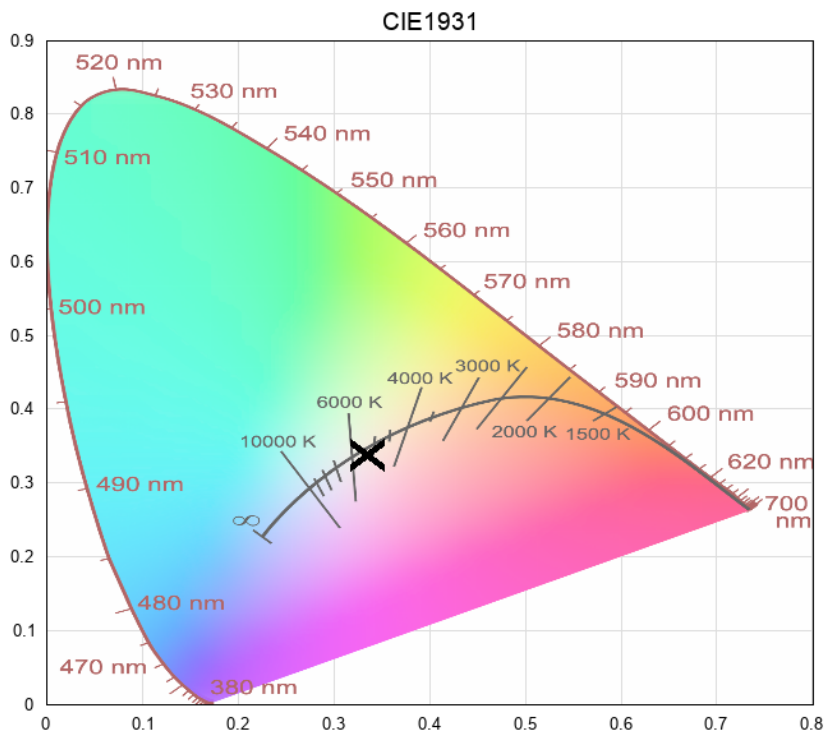
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

## Measurement results

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



## cie1931



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