

Datasheet

LuxaLight LED-strip Warm White 2600K Indoor (24 Volt, 140 LEDs, 2835, IP20)

LS24WW140X2835ILX

Version: 2025-07-09.2

Product description

The **LuxaLight Professional LED strip** is designed for lighting applications where high color rendering and a warm, pleasant light temperature are required. With a color temperature of 2600K and a **Color Rendering Index (CRI) of over 95**, this professional LED strip provides excellent light quality, which is essential for applications where accurate color representation and true-to-life color accuracy are important.

Key Features:

- **2600K Color Temperature:** The 2600K color temperature provides warm, pleasant lighting, ideal for residential and office environments that require a cozy and relaxed atmosphere.
- **High CRI (Color Rendering Index) of 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:** As the LED strip requires passive cooling, it should be integrated into a suitable system that efficiently dissipates heat to ensure optimal performance and a 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 Office Spaces:** The warm 2600K color temperature and high CRI value make this professional LED strip ideal for creating pleasant, true-to-life lighting in homes, offices, and other commercial spaces.
- **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 warm 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 warm, 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 a warm and cozy atmosphere is desired.

Benefits:

- **Excellent Color Rendering:** With a CRI of over 95, the professional LED strip provides accurate and natural color rendering, making it ideal for applications where color perception is crucial.
- **Warm Lighting:** The 2600K color temperature delivers a soft, warm glow, ideal for creating a comfortable and inviting 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	2500 ~ 2700 K
CRI	≥ 95
Luminous Flux	≈ 3000 lm
BIN	3 SDCM
Beam angle	120 °
LB waarde	L90B50

Measurement results

CRI (Object size: 1 piece)	97
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CCT (Object size: 1 piece)	2448 K
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Illuminance (Lux)
(Object size: 1 piece)

	24V
5cm	28070 lx
10cm	10970 lx
15cm	5719 lx
20cm	3563 lx
25cm	2402 lx
30cm	1801 lx

Total PPFD umol/m2 (PAR 400-700nm)
(Object size: 1 piece)

	24V
5cm	534.925 umol/m2
10cm	207.585 umol/m2
15cm	108.301 umol/m2
20cm	67.4124 umol/m2
25cm	45.3703 umol/m2
30cm	34.0243 umol/m2

Peak wavelength (Object size: 1 piece)	644 nm
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Peak irradiance (Object size: 1 piece)	24V	
	5cm	0.773519 W/sqm
	10cm	0.300144 W/sqm
	15cm	0.154959 W/sqm
	20cm	0.0962496 W/sqm
	25cm	0.064781 W/sqm
	30cm	0.0485759 W/sqm

Total irradiance (Object size: 1 piece)	24V	
	5cm	119.4 W/sqm
	10cm	46.16 W/sqm
	15cm	24.1 W/sqm
	20cm	15.03 W/sqm
	25cm	10.1 W/sqm
	30cm	7.568 W/sqm

Electronics

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

Environmental

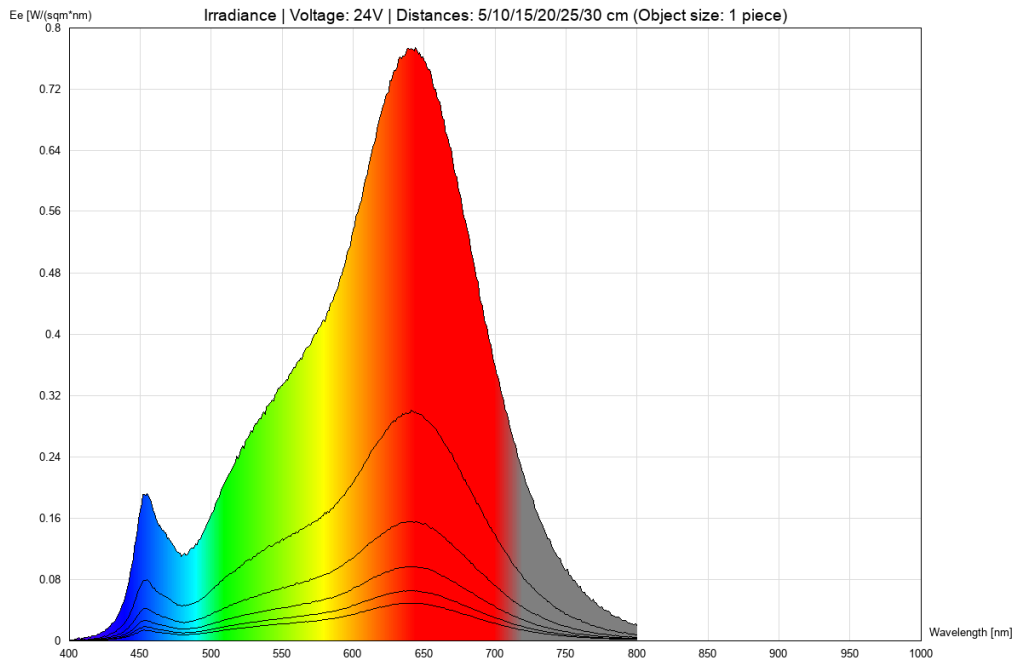
Operating temperature	-20 ~ +70 °C
Storage temperature	-20 ~ +70 °C
IP class	IP 20

Directives - standards - certificates

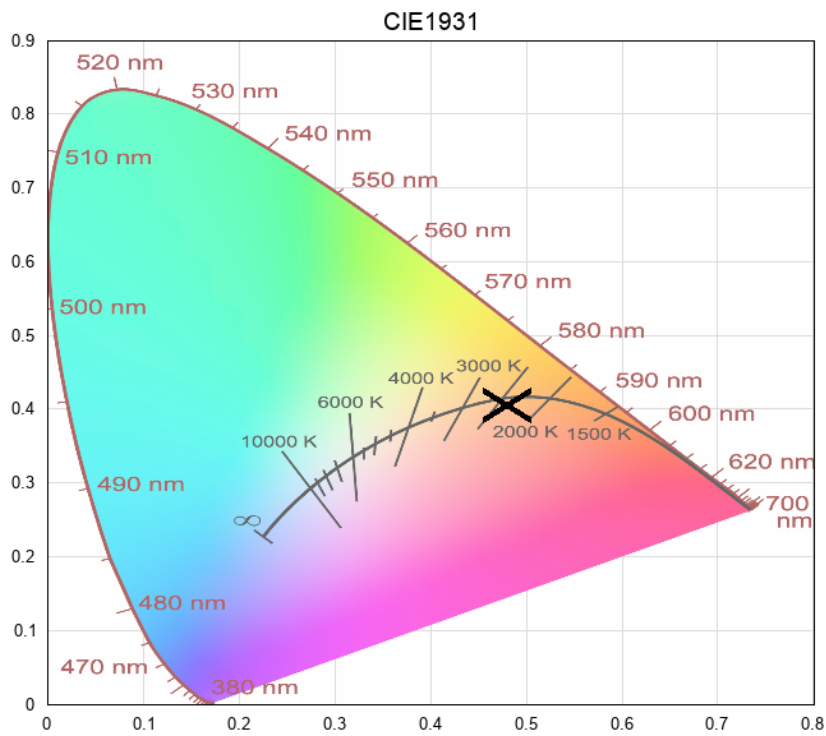
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

irradiance - full-spectrum (24V)



cie1931



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