

Datasheet

LuxaLight LED-strip Warm White 2600K Indoor 6mm (24 Volt, 140 LEDs, 2835, IP20)

LS24WW140X2835ILX2

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Product description

The LuxaLight Professional LED Strip (6 mm wide) is designed for lighting applications that require high color rendering and a warm, pleasant light temperature. With a color temperature of 2600K and a Color Rendering Index (CRI) of over 95, this professional LED strip delivers excellent light quality, essential for applications where accurate color reproduction and true-to-life color accuracy are crucial.

With a PCB width of just 6 mm, this LED strip is extra narrow, making it perfect for applications where space-saving is essential, such as when installing in tight spaces or using a narrow LED strip for interior lighting. This makes the strip ideal for use in various interior applications where a compact solution is needed without compromising light quality.

Key Features:

- **6 mm PCB Width:** The extra narrow 6 mm PCB makes this LED strip the perfect choice for applications where a compact light source is needed, such as in tight spaces, profiles, or specific interior lighting setups.
- **2600K Color Temperature:** The 2600K color temperature provides a warm, pleasant light, ideal for living and working environments that require a cozy and calm atmosphere.
- **High CRI (Color Rendering Index) of over 95:** The professional LED strip features a CRI of over 95, meaning the light emitted by this strip renders colors as naturally and accurately as sunlight. This is crucial for environments where color interpretation is important, such as in retail, museums, and galleries.
- **140 pieces of 2835 LEDs per Meter:** The strip contains 140 pieces of 2835 LEDs per meter, providing high light density and even light distribution across the surface, ensuring consistent lighting throughout.
- **Flexible Design:** The flexible design makes the LED strip suitable for installation in various configurations, such as profiles, fixtures, or as direct lighting in custom systems.
- **PCB Thickness:** The PCB has a thickness of 3 oz/ft², providing robust support and efficient heat dissipation, which extends the lifespan of the LED strip and maintains consistent performance.
- **Passive Cooling Required:** Since the LED strip requires passive cooling, it must 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, ensuring a strong and durable bond to various surfaces. This makes the strip easy to install in various applications, from wall and ceiling mounting to integration in profiles and other lighting systems.

Applications:

- **Living and Work Spaces:** The warm 2600K color temperature and high CRI value make this professional LED strip ideal for creating pleasant and 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 presented in the best light, enhancing the 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 Facilities:** The warm, true-to-life lighting is also ideal for healthcare facilities, where lighting is important for the well-being of patients and staff.
- **Home Decoration:** Perfect for illuminating ambient and decorative elements in homes, such as 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 that is perfect for creating a comfortable and inviting atmosphere in various settings.
- **Even Light Distribution:** With 140 pieces of 2835 LEDs per meter, the strip provides consistent and even light distribution, ensuring pleasant and comfortable lighting without harsh shadows.
- **Durable and Energy-Efficient:** The LED technology is energy-efficient, making the strip not only cost-effective but also contributing to a more sustainable lighting solution.
- **Strong Adhesion:** The 3M 4905 VHB tape offers 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	6.00 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)	96	
CCT (Object size: 1 piece)	2409 K	
Illuminance (Lux) (Object size: 1 piece)		24V
	5cm	18890 lx
	10cm	7115 lx
	15cm	3778 lx
	20cm	2334 lx
	25cm	1561 lx
	30cm	1167 lx
Total PPFD umol/m2 (PAR 400-700nm) (Object size: 1 piece)		24V
	5cm	365.313 umol/m2
	10cm	136.847 umol/m2
	15cm	72.6803 umol/m2
	20cm	44.8938 umol/m2
	25cm	29.978 umol/m2
	30cm	22.3928 umol/m2
Peak wavelength (Object size: 1 piece)	645 nm	

Peak irradiance (Object size: 1 piece)	24V	
	5cm	0.535638 W/sqm
	10cm	0.19856 W/sqm
	15cm	0.105745 W/sqm
	20cm	0.0649933 W/sqm
	25cm	0.0434964 W/sqm
	30cm	0.0324405 W/sqm

Total irradiance (Object size: 1 piece)	24V	
	5cm	81.75 W/sqm
	10cm	30.54 W/sqm
	15cm	16.23 W/sqm
	20cm	9.994 W/sqm
	25cm	6.702 W/sqm
	30cm	4.993 W/sqm

Electronics

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

Environmental

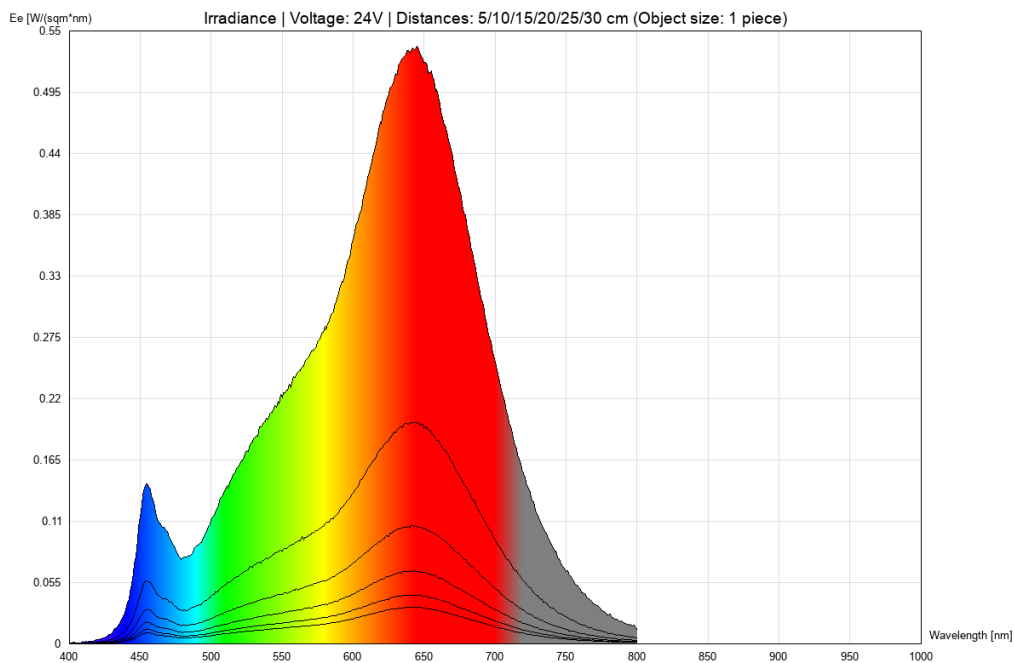
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 20

Directives - standards - certificates

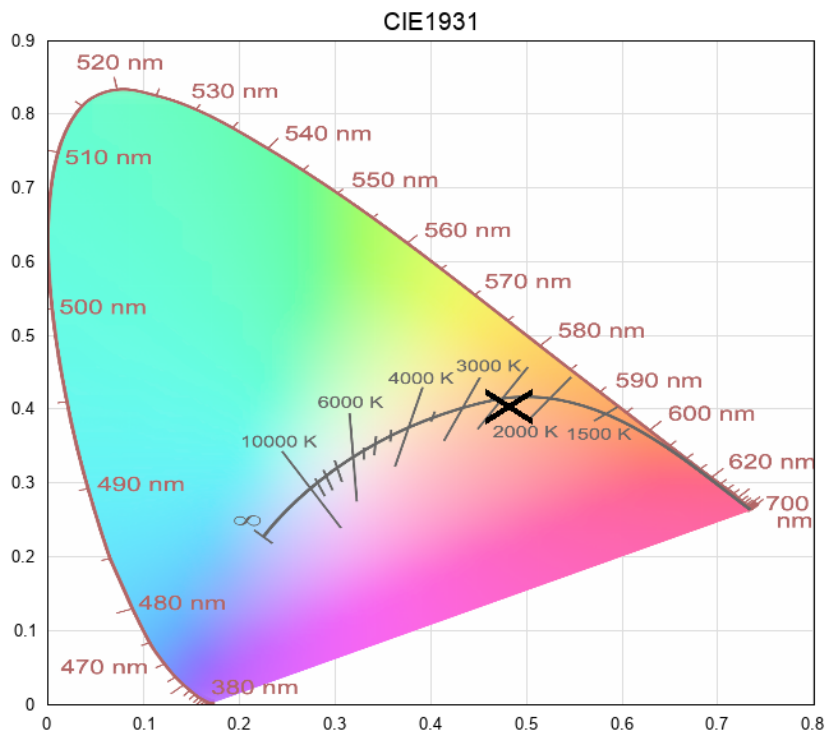
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

irradiance - full-spectrum (24V)



cie1931



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