

Datasheet

LuxaLight LED-strip Neutral White 4300K Protected (48 Volt, 160 LEDs, 2835, IP64)

LS48NW140X2835PLX

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Product description

The LuxaLight Professional LED Strip is a high-quality lighting solution ideal for various applications, ranging from commercial environments to public spaces. The strip is designed with a robust **silicone** coating and is IP64 rated, meaning it is dustproof and splash-resistant, making it suitable for a wide range of applications. It features 140 2835 LEDs per meter and provides a color temperature of **4300K**, combined with excellent color rendering (CRI > 80). These features make the LED strip perfect for environments where true-to-life lighting is required, such as workspaces, commercial areas, and other large installations.

Technical Features:

- **4300K Color Temperature:** The 4300K lighting provides a neutral white glow, ideal for use in workspaces, offices, and commercial settings, where bright, clear lighting is desired for maximum visibility and productivity.
- **High CRI (Color Rendering Index) > 80:** The excellent color rendering ensures accurate and vibrant color representation, essential for applications in retail, museums, and healthcare settings.
- **Silicone Coating and IP64 Rating:** The strip is equipped with a durable **silicone** coating and is IP64 rated, offering protection against dust and splashes of water. This makes the strip suitable for environments where limited exposure to moisture is possible, such as in wet areas (e.g., bathrooms).
- **140 pcs 2835 LEDs per Meter:** This LED strip features 140 2835 LEDs per meter, ensuring even and efficient light distribution across the surface.
- **PCB Thickness of 3 oz/ft²:** The PCB has a thickness of 3 oz/ft², providing robust support and efficient heat dissipation, making the strip reliable and durable.
- **Use of 3M 4905 VHB Tape:** The strip comes equipped with 3M 4905 VHB tape, ensuring strong and reliable adhesion to various surfaces.
- **48V Working Voltage:** The LED strip operates on a **48V working voltage**, which results in a lower current load and reduced voltage drop over long distances. This makes the strip ideal for larger installations where longer cables or multiple connections are required. The **48V working voltage** ensures stable and reliable operation while minimizing energy loss, making it perfect for large-scale lighting projects.

Applications:

- **Residential and Workspaces:** The 4300K color temperature and high CRI value make this professional LED strip ideal for creating pleasant, true-to-life lighting in living rooms, offices, and meeting rooms.
- **Retail and Display Windows:** The excellent color rendering (CRI > 80) ensures that products in stores and display windows are presented at their best, contributing to an enjoyable shopping experience for customers.
- **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, true-to-life lighting is ideal for healthcare settings, where proper lighting is important for the well-being of patients and staff.
- **Public Spaces:** The versatility of the LED strip makes it suitable for use in public spaces, where reliable and efficient lighting is required.

Benefits:

- **Excellent Color Rendering:** With a CRI of over 80, this professional LED strip provides accurate and true-to-life color rendering, making it ideal for applications where color perception is critical.
- **Neutral Lighting:** The 4300K color temperature offers a soft, neutral white glow, perfect for creating a comfortable and inviting atmosphere in various environments.
- **Flexible and Customizable:** Thanks to its flexible design, the strip can be easily integrated into various lighting setups and fixtures, making it a versatile solution for a wide range of applications.
- **Uniform Light Distribution:** With 140 pcs 2835 LEDs per meter, the strip provides 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 delivers 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 ensures reliable adhesion for easy and durable installation on various surfaces.

Technical specifications

General		
Brand	LuxaLight	
LEDs / meter	160	
LED type	2835	
Length per reel	10 m	
Length per segment	100 mm	
LED strip width	10.00 mm	
LED strip thickness	4.00 mm	
PCB color	White	
Mounting	3M tape VHB4905	
Warranty	5 years	
Lifetime	70000 hours	
Lighting		
Color temperature	4000 ~ 4300 K	
CRI	≥ 80	
Luminous Flux	≈ 3990 lm	
BIN	3 SDCM	
Beam angle	120 °	
LB waarde	L90B50	
Measurement results		
CRI (Object length: 20 cm)	87	
CCT (Object length: 20 cm)	4379 K	
Illuminance (Lux) (Object length: 20 cm)		48V
	2.5cm	50530 lx
	5cm	43250 lx
	7.5cm	25910 lx
	10cm	13720 lx
	20cm	5644 lx
	30cm	2491 lx
Total PPFD umol/m2 (PAR 400-700nm) (Object length: 20 cm)		48V
	2.5cm	723.614 umol/m2
	5cm	626.936 umol/m2
	7.5cm	374.316 umol/m2
	10cm	198.021 umol/m2
	20cm	81.7511 umol/m2
	30cm	35.7791 umol/m2
Electronics		

Working voltage	48V						
Current / meter	0.44 A / meter						
Power consumption per meter	21.00 W / meter						
PCB material	Copper						
Pinout	<table> <tr> <th>Symbol</th><th>Function</th></tr> <tr> <td>V+</td><td>V+</td></tr> <tr> <td>GND</td><td>Ground</td></tr> </table>	Symbol	Function	V+	V+	GND	Ground
Symbol	Function						
V+	V+						
GND	Ground						

Environmental

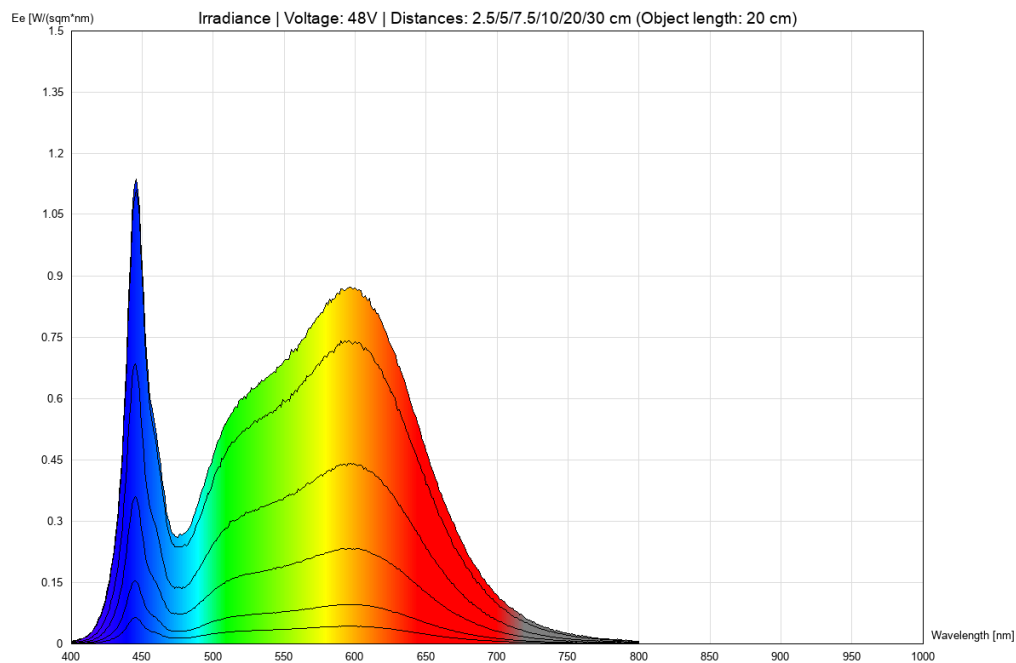
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 64

Directives - standards - certificates

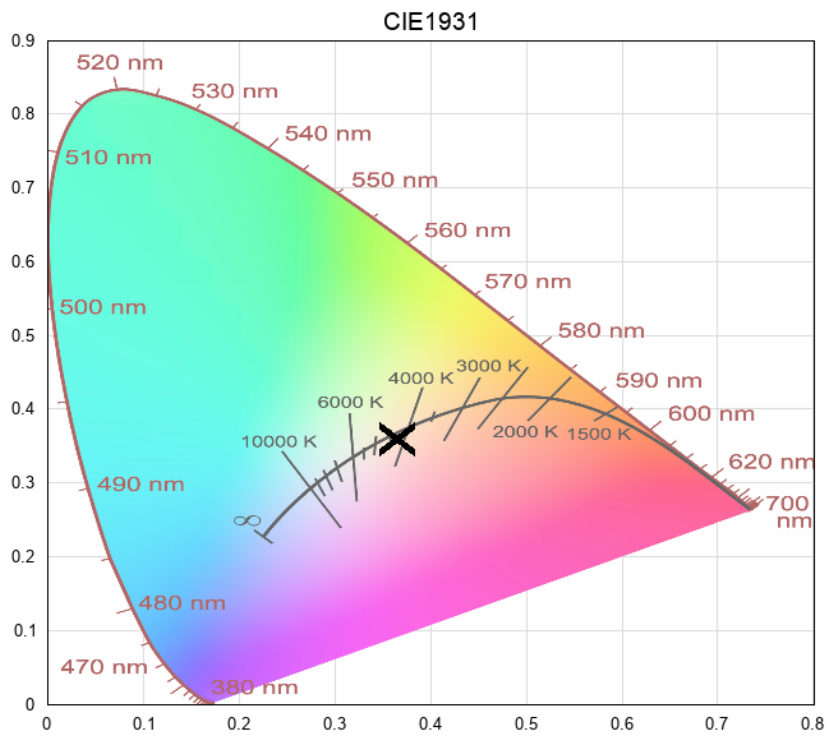
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

irradiance - full-spectrum (48V)



cie1931



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