

Datasheet

LuxaLight LED-strip Full Color RGB + Warm White 2800K + White 8000K, RGBWWW High Power Waterproof (24 Volt, 84 LEDs, 5050, IP68)

LS24RGBWWW84X5050WLX

Version: 2025-03-10.1

Product description

The **LuxaLight Professional RGB - Tunable White LED Strip** is designed for lighting purposes where both colorful lighting and the ability to adjust the white color temperature (tunable white) are required. This LED strip offers the versatility of **RGB colors** for dynamic lighting effects and the ability to adjust the white color temperature from **warm white (2700 ~ 2900 K)** to **cool white (7900 ~ 8100 K)**, allowing you to tailor the lighting to the desired ambiance or functionality.

The LED strip uses **84 5050 LEDs per meter**, ensuring high light density and even light distribution for optimal performance. The strip is equipped with a **vulcanized silicone sleeve**, providing **IP68 protection**, making the strip fully dustproof and resistant to immersion in water. This makes it suitable for both indoor and outdoor applications.

Key Features:

- **RGB Colors and Tunable White (2700 ~ 2900 K and 7900 ~ 8100 K):** The strip offers full RGB color rendering and the ability to adjust the white light temperature (tunable white), from warm white to cool white, ideal for creating the desired ambiance.
- **Vulcanized Silicone Sleeve with IP68 Protection:** The LED strip is equipped with a vulcanized silicone sleeve, providing **IP68 protection**, making the strip fully dustproof and resistant to immersion in water, ideal for both indoor and outdoor applications.
- **84 5050 LEDs per Meter:** The strip contains 84 5050 LEDs per meter, ensuring high light density and even light distribution across the surface.
- **Flexible Design:** The flexible design makes the LED strip suitable for installation in various configurations, such as profiles, fixtures, or as a direct lighting source 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.
- **3M 4905 VHB Tape:** The LED strip is equipped with 3M 4905 VHB tape, ensuring reliable adhesion for easy and durable installation on various surfaces.

Applications:

- **Color Lighting for Events and Presentations:** The RGB color rendering makes the LED strip perfect for visual effects, events, exhibitions, and presentations requiring dynamic lighting.
- **Retail and Showrooms:** The RGB colors and tunable white functionality make the LED strip ideal for **retail environments**, where products need to be lit in various ways.
- **Commercial Lighting:** The tunable white feature makes the strip suitable for various commercial spaces, from meeting rooms to workstations, where lighting needs to be flexible depending on the task.

Benefits:

- **Flexible Color Settings:** RGB colors and tunable white offer versatility in lighting settings for a wide range of applications, from ambient lighting to task lighting.
- **Robust Protection (IP68):** The vulcanized silicone sleeve provides full protection against water and dust, making the strip suitable for both indoor and outdoor use.
- **Flexible and Customizable:** Thanks to the flexible design, the strip can be easily integrated into various lighting systems, making it a versatile solution for different applications.
- **Even Light Distribution:** With 84 5050 LEDs per meter, the strip provides consistent and even light distribution without harsh shadows.
- **Reliable Performance:** The LED strip operates on a standard 24V power supply and delivers reliable performance for long-term use in industrial and commercial environments.
- **Energy-efficient:** The LED technology is energy-efficient, making the strip cost-effective and contributing to a more sustainable lighting solution.
- **Easy Installation:** The 3M 4905 VHB tape ensures strong and reliable adhesion for easy installation on various surfaces.

Technical specifications

General

Brand	LuxaLight
LEDs / meter	84
LED type	5050
Length per reel	10 m
Length per segment	83.33 mm
LED strip width	15.00 mm
LED strip thickness	5.00 mm
PCB color	White
Mantle material	Silicon
Warranty	5 years
Lifetime	70000 hours

Lighting

Color temperature white	7900 ~ 8100 K
Color temperature warm white	2700 ~ 2900 K
CRI	≥ 80
Luminous Flux	2163 lm
Luminous flux red	280 lm
Luminous flux green	406 lm
Luminous flux blue	259 lm
Luminous flux white	684 lm
Luminous flux warm white	534 lm
Wave length Red	620~630 nm
Wave length Green	510~525 nm
Wave length Blue	455~470 nm
Wave length	455~470 nm
BIN	3 SDCM
Beam angle	120 °
LB waarde	L80B50

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

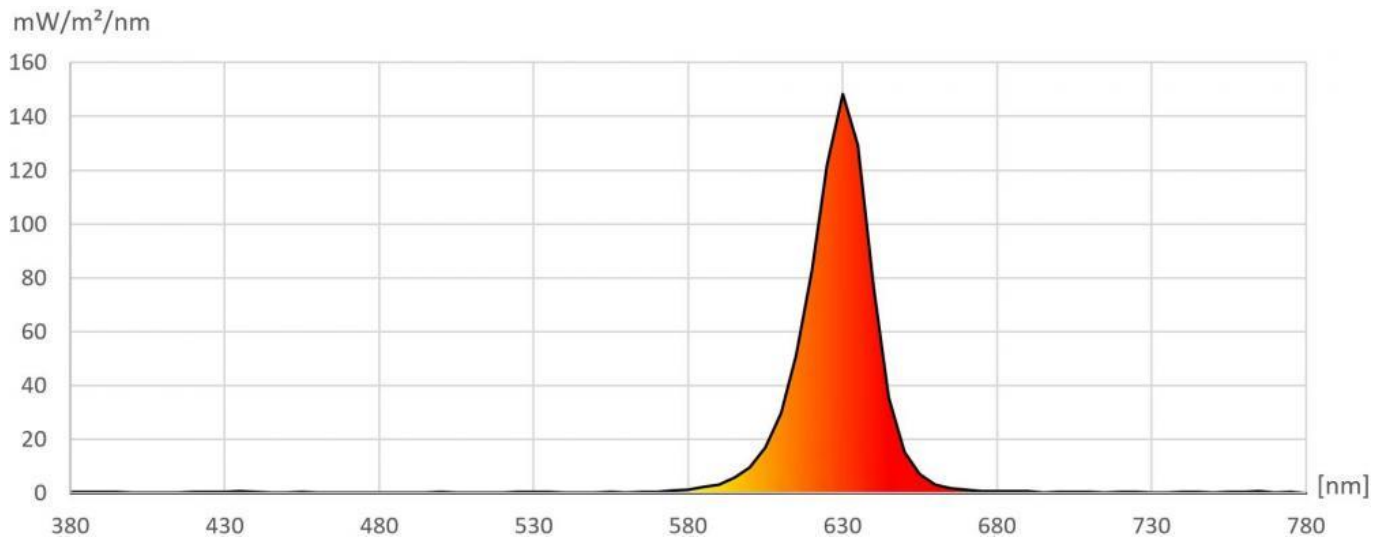
IP class IP 68

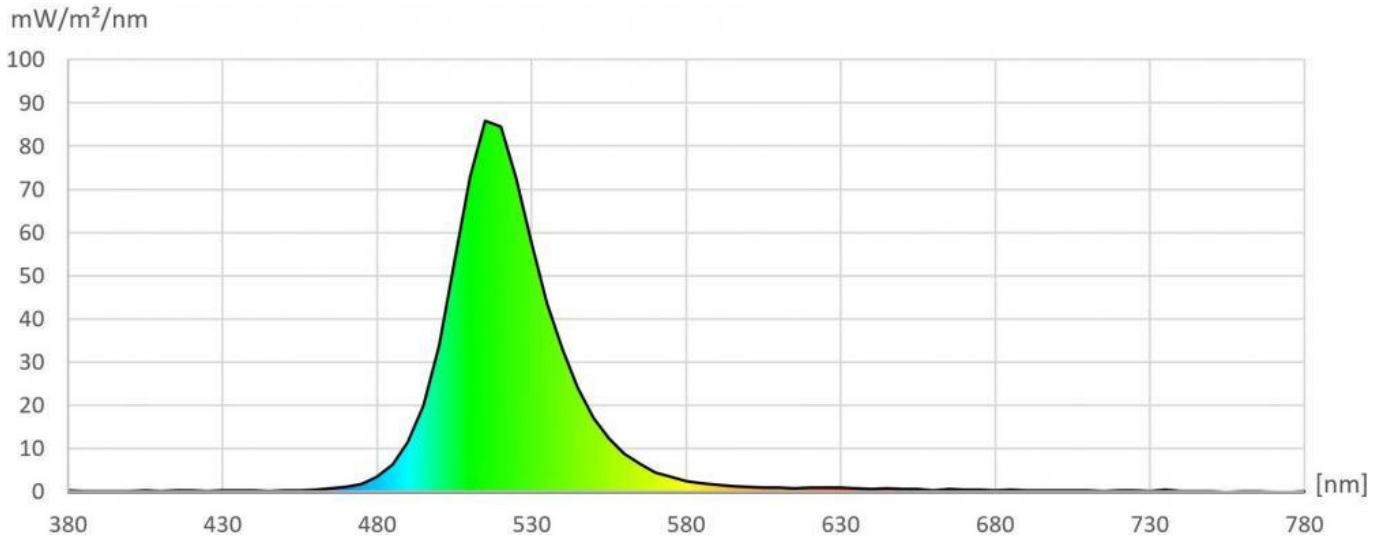
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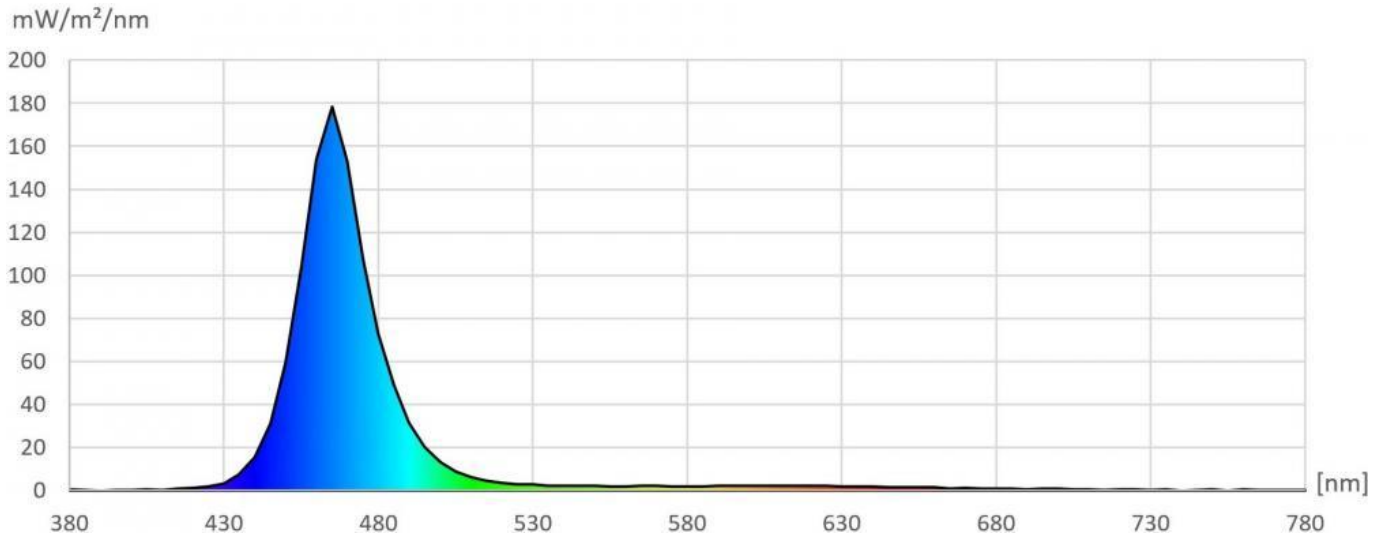
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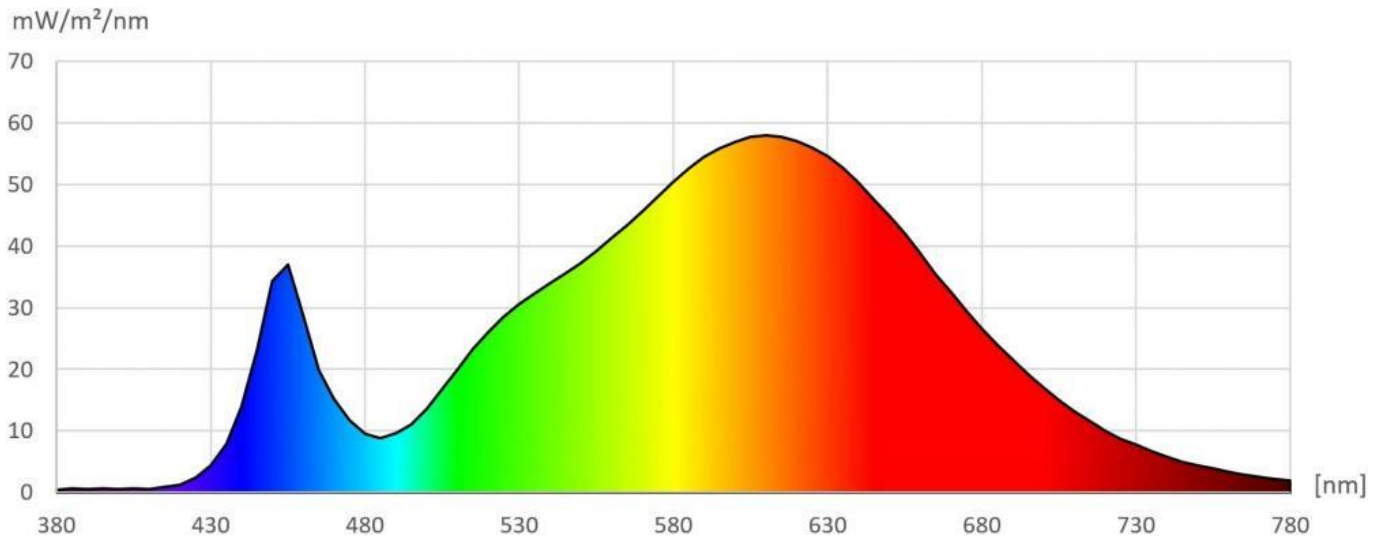
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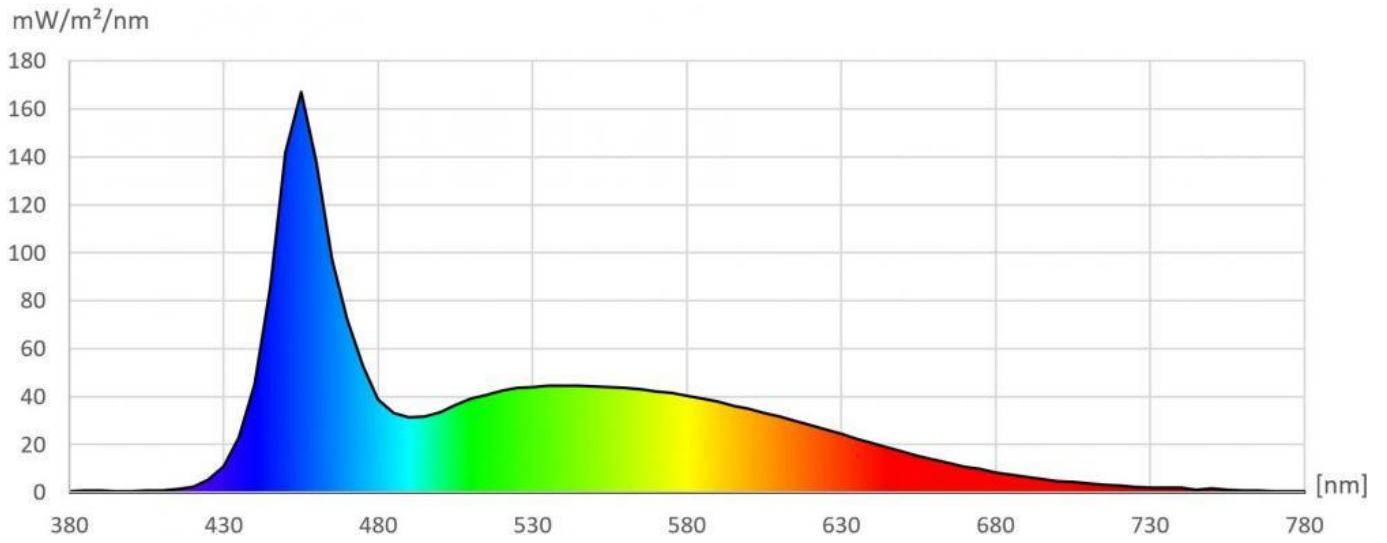
Measurement results











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