

Datasheet

LuxaLight LED-strip Full-color RGB + Warm White (2700-2900K), RGBWW High Power Protected (24 Volt, 96 LEDs, 5050, IP64)

LS24RGBWW96X5050PLX

Version: 2025-03-10.3

Product description

The **LuxaLight Professional RGBW LED Strip** is designed for lighting applications where high color rendering and dynamic color effects are required. This strip features **96 RGBW 5050 LEDs per meter**, ensuring high light density and even coverage for optimal performance. It provides excellent light quality, ideal for applications where accurate color rendering and true-to-life color accuracy are essential, with the added flexibility of adjustable RGBW color settings and warm white light with a color temperature of **2400-2600K**.

This RGBW LED strip operates on a **24V power supply** and is equipped with **3M 4905 VHB tape**, providing a strong and reliable attachment to various surfaces, ideal for permanent installations. The strip also has an **IP64 rating**, making it suitable for use in environments exposed to dust and **moist environments**.

Key Features:

- **96 RGBW 5050 LEDs per Meter:** The strip contains 96 RGBW 5050 LEDs per meter, ensuring excellent brightness and dynamic color rendering for various lighting applications.
- **RGBW LED Light Output:** The RGBW LEDs offer both dynamic color settings and a warm white color temperature of **2400-2600K**, perfect for creating a cozy atmosphere, while the RGB settings provide versatile color effects.
- **IP64 Certification:** The strip has an IP64 rating, making it dust-resistant and suitable for use in **moist environments**.
- **24V Power Supply:** The professional RGBW LED strip operates on a **24V power supply**, ensuring stable and reliable operation.
- **Flexible Design:** The flexible design makes the LED strip perfect for interior applications, custom lighting systems, and other flexible light installations.
- **3M 4905 VHB Tape:** The strip is equipped with 3M 4905 VHB tape, providing strong and durable adhesion to various surfaces.
- **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.

Applications:

- **Interior Lighting:** Perfect for illuminating the interiors of homes, offices, workspaces, and other environments where functional and dynamic lighting is desired.
- **Custom Lighting Systems:** Ideal for custom lighting installations in various settings, such as retail environments or architectural lighting.
- **Ambient and Accent Lighting:** The flexible color settings make this strip perfect for creating ambient and accent lighting in different environments.
- **Workspace Lighting:** Can be used to illuminate workspaces and storage areas, allowing users to easily see what they need.
- **Dashboard and Control Panel Lighting:** Can be applied to illuminate dashboards and control panels, making it easier to operate systems under different lighting conditions.
- **General Lighting:** Suitable for illuminating various objects and surfaces in both commercial and residential spaces.

Advantages:

- **Dynamic RGBW Color Options:** The **96 RGBW 5050 LEDs per meter** offer full color customization options, ideal for creating customizable lighting settings and ambiance.
- **Flexible and Customizable:** Thanks to its flexible design, the strip can easily be integrated into various lighting setups and is perfect for custom systems.
- **Even Light Distribution:** The strip ensures consistent and uniform light distribution, providing pleasant lighting without harsh shadows.
- **Reliable Performance:** The RGBW LED strip operates on a **24V power supply**, delivering efficient, stable performance, making it an ideal choice for long-term use in various applications.
- **Durable and Energy-Efficient:** RGBW 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** provides reliable adhesion for easy and durable installation on various surfaces.

Technical specifications

General

Brand	LuxaLight
LEDs / meter	96
LED type	5050
Length per reel	10 m
Length per segment	62.5 mm
LED strip width	12.00 mm
LED strip thickness	4.00 mm
PCB color	White
Mantle material	Silicon
Warranty	5 years
Lifetime	70000 hours

Lighting

Color temperature warm white	2700 ~ 2900 K
CRI	≥ 85
Luminous Flux	1861 lm
Luminous flux red	320 lm
Luminous flux green	464 lm
Luminous flux blue	296 lm
Luminous flux warm white	781 lm
Wave length Red	620~630 nm
Wave length Green	510 ~ 525 nm
Wave length Blue	455 ~ 470 nm
BIN	3 SDCM
Beam angle	120 °
LB waarde	L80B50

Electronics

Working voltage	24V
Current / meter	1.28 A / meter
Power consumption per meter	30.72 W / meter
PCB material	Copper

Environmental

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

Directives - standards - certificates

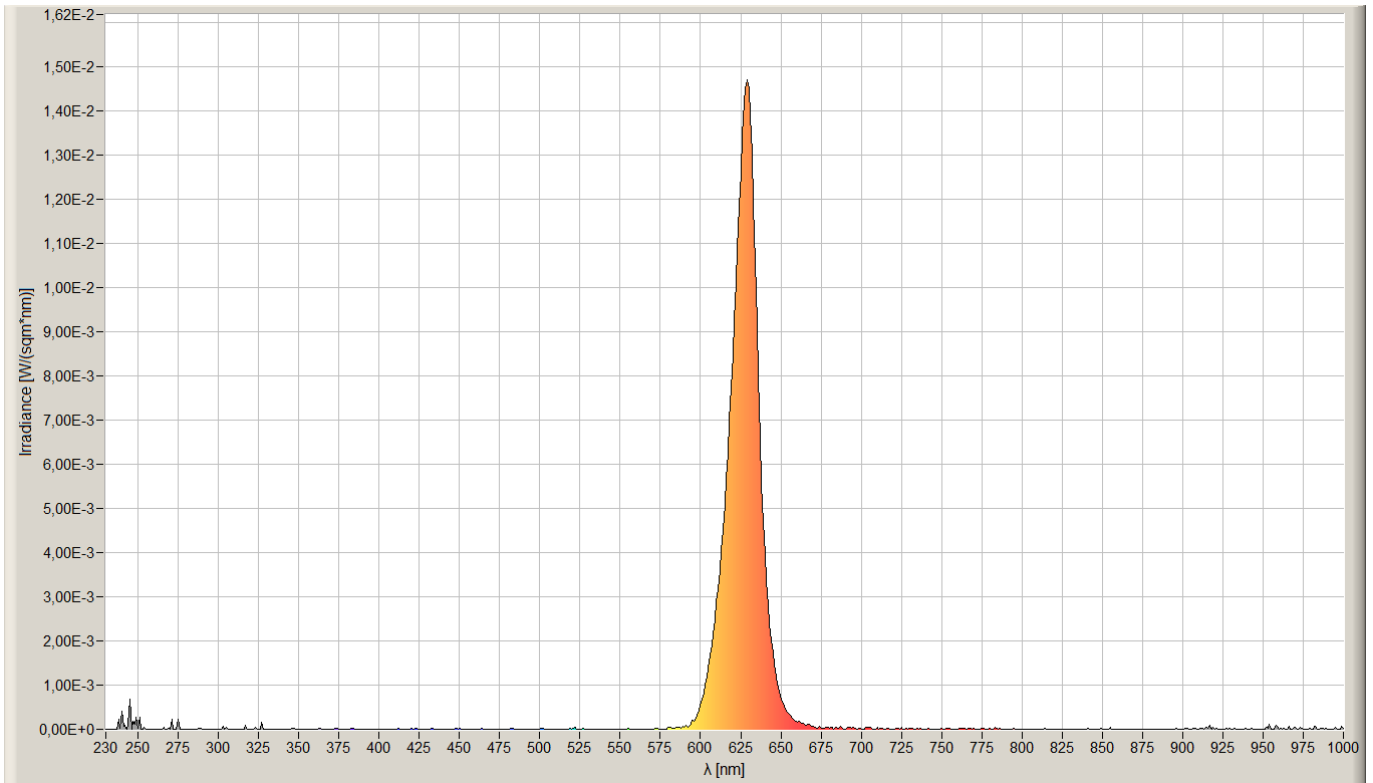
Directives	RoHS
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Safety standards

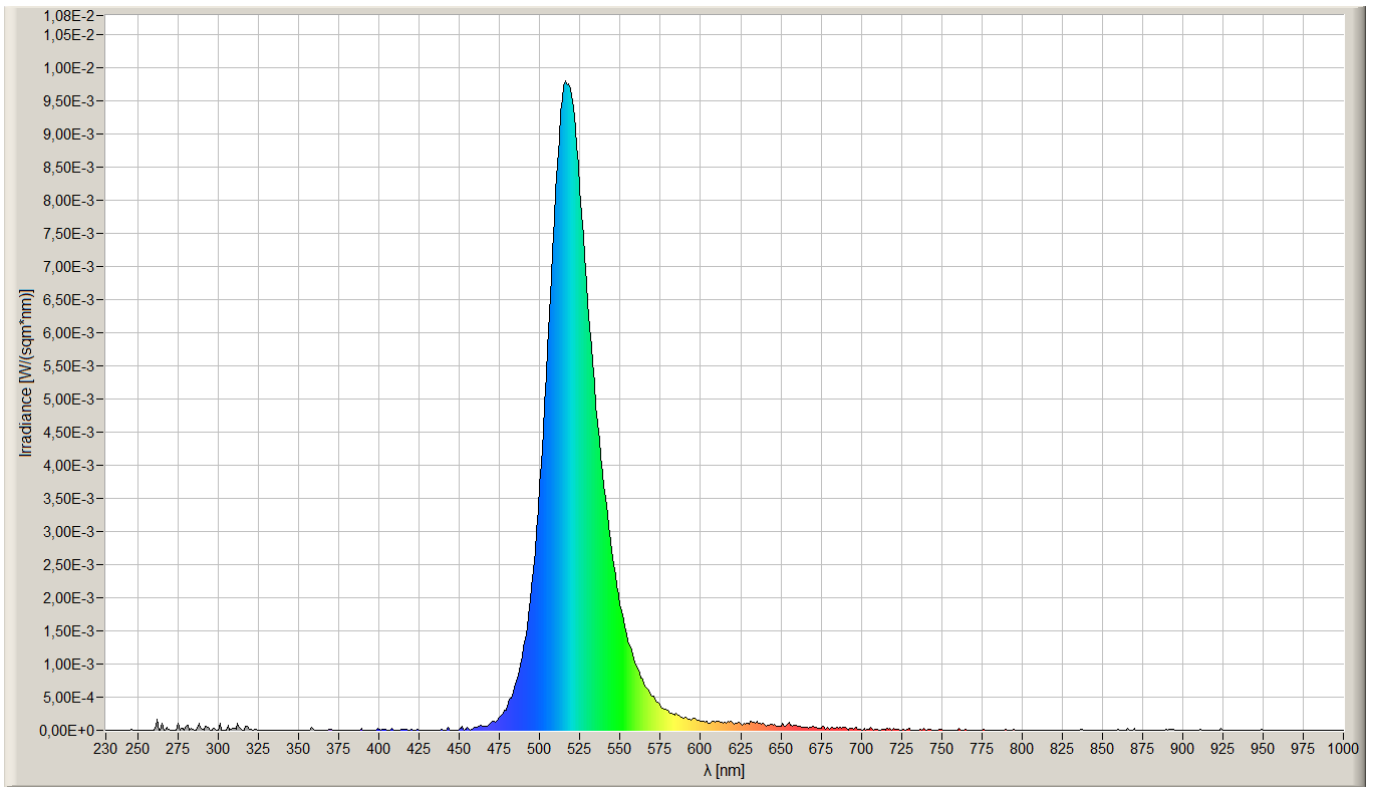
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EN62031
IEC62471

Measurement results

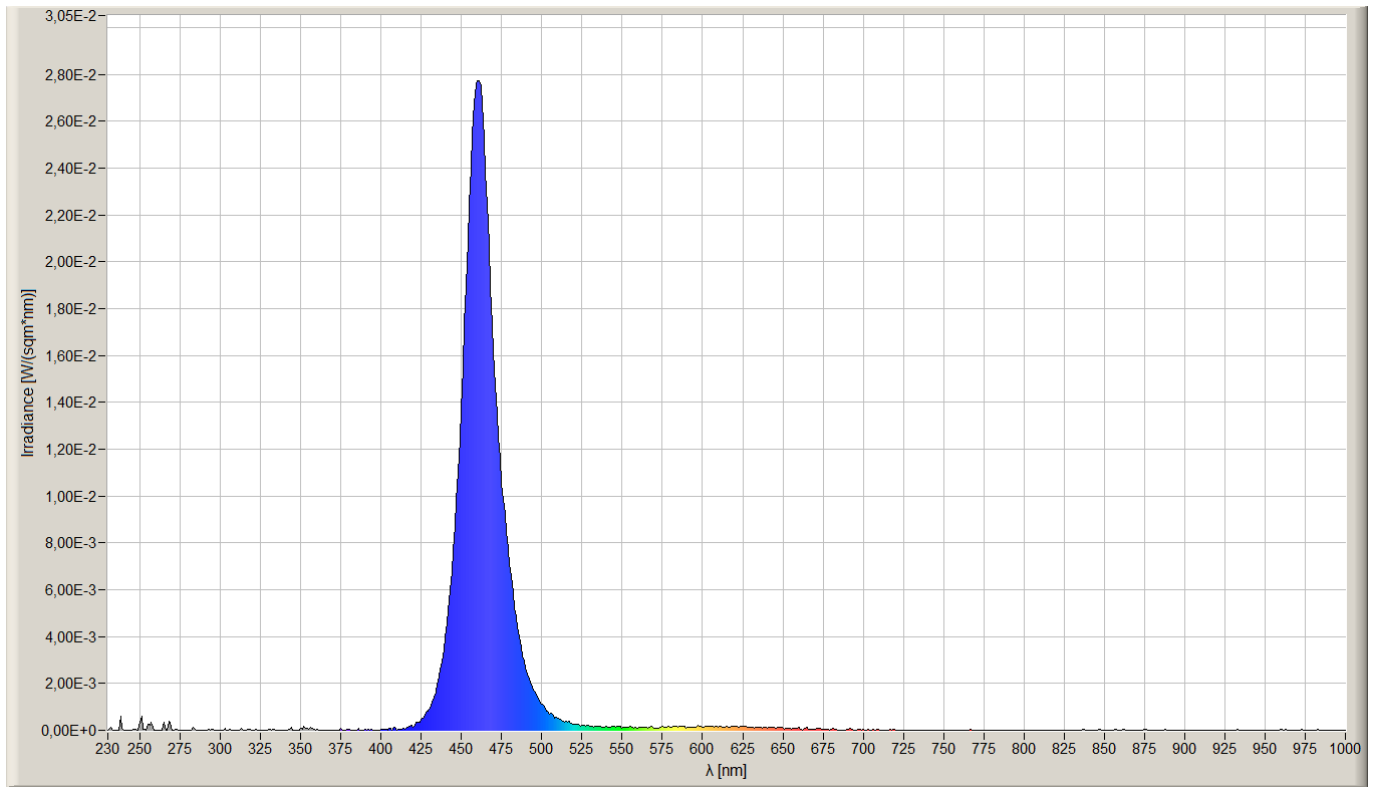
Wavelength Red



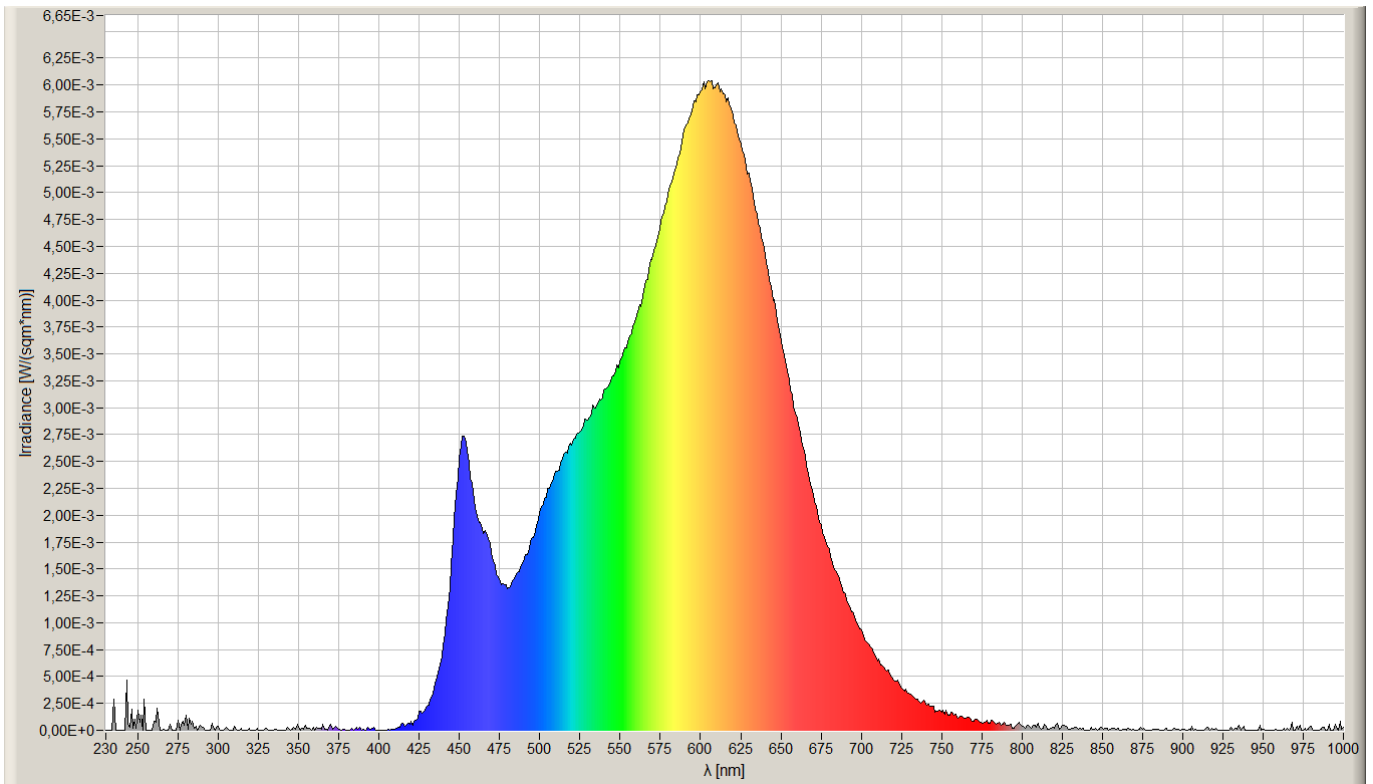
Wavelength Green



Wave Length Blue



Warm white



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