

Datasheet

LuxaLight LED-strip Full-color RGB + Warm White (2700-2900K), RGBWW High Power Waterproof (24 Volt, 96 LEDs, 5050, IP68)

LS24RGBWW96X5050WLX

Version: 2025-06-05.1

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 2700-2900K.

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 has an **IP68 certification**, meaning it is fully dustproof and resistant to immersion in water. Additionally, it is protected by a **vulcanized silicone sleeve**, offering enhanced durability and protection against moisture, dirt, and other external factors, making it suitable for use in demanding 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 2700-2900K, perfect for creating a cozy atmosphere, while the RGB settings provide versatile color effects.
- **IP68 Certification:** The strip has an IP68 rating, making it fully dustproof and resistant to immersion in water, suitable for use in moist and wet environments.
- **24V Power Supply:** The professional RGBW LED strip operates on a 24V power supply, ensuring stable and reliable performance.
- **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.
- **Vulcanized Silicone Sleeve:** The strip is protected by a vulcanized silicone sleeve, offering extra durability and protection against external factors such as moisture and dirt, contributing to the long lifespan of the strip.
- **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.
- **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.
- **Additional Protection:** The vulcanized silicone sleeve offers added protection against moisture and other external factors, making the strip suitable for use in demanding environments.

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	15.00 mm
LED strip thickness	5.00 mm
PCB color	White
Mantle material	Silicon
Warranty	2 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

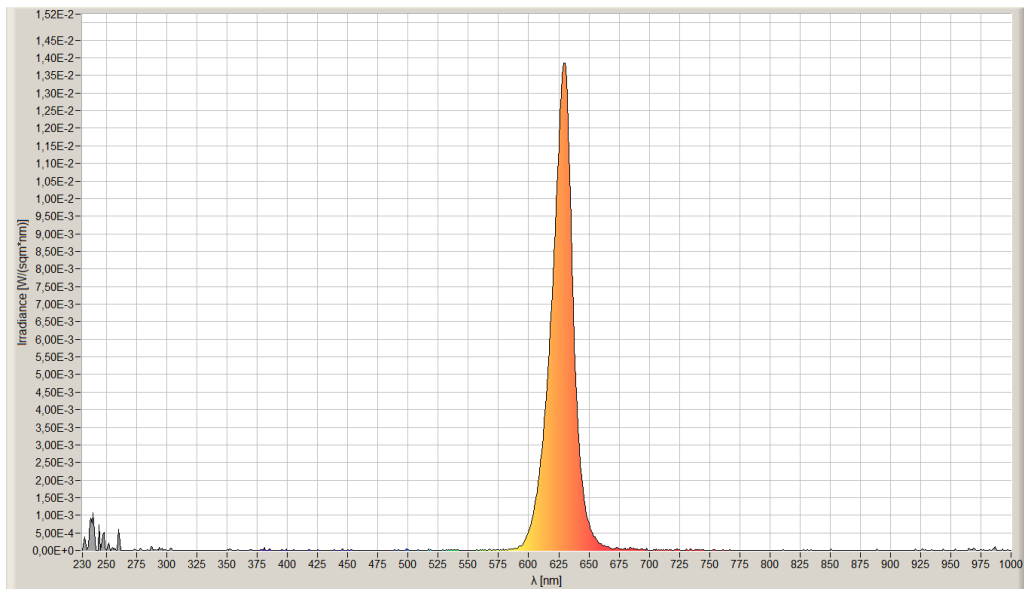
Operating temperature	-20 ~ +60 °C
Storage temperature	-40 ~ +80 °C
IP class	IP 68

Directives - standards - certificates

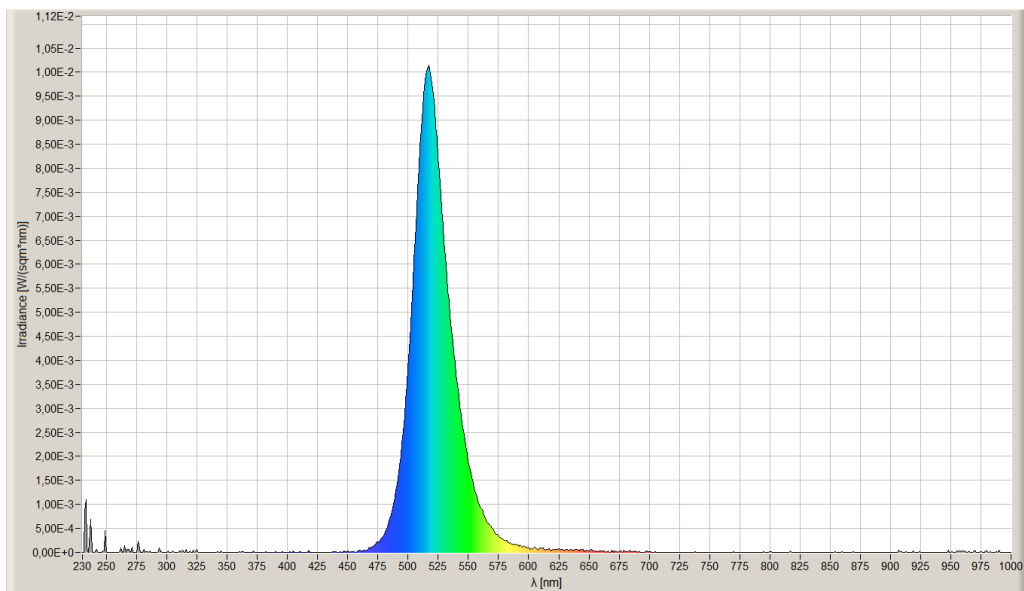
Directives	RoHS CE
Safety standards	EN60598-1 EN62031 IEC62471

Measurement results

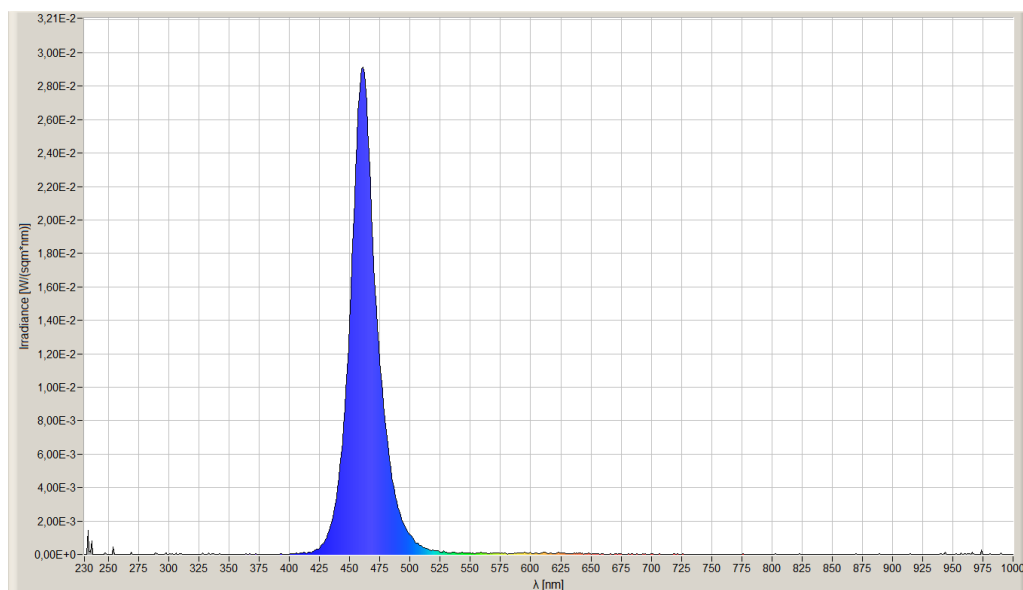
Wavelength Red



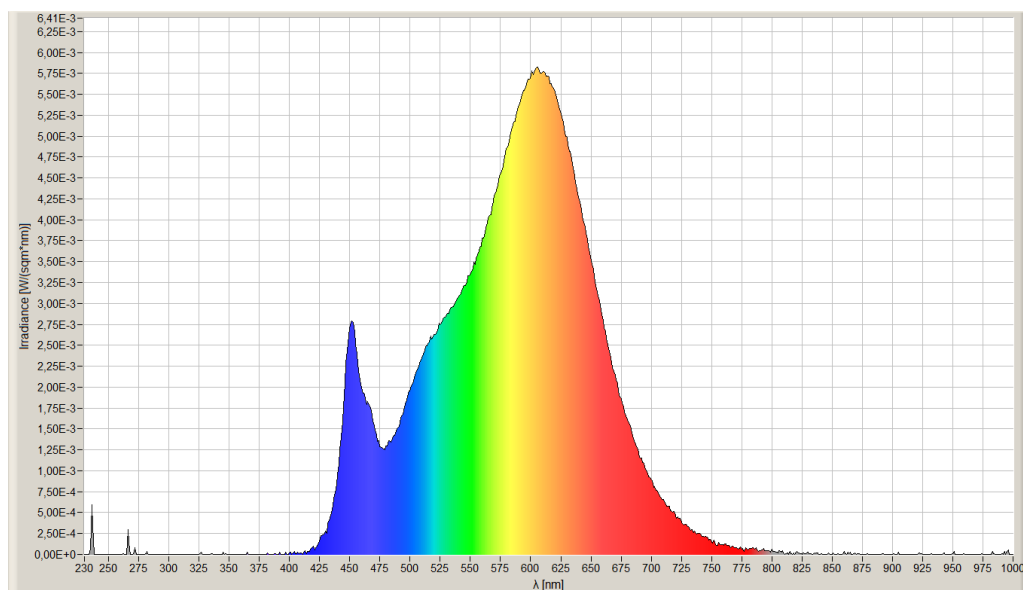
Wavelength Green



Wavelength Blue



Warm White



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