

# Datasheet

LED-strip specification

LED-strip type:  
**LS24RGBWW84TM1824ILX**

Description:  
**LuxaLight Pixel LED-strip TM1824 Digital RGB + Warm White  
High Power Indoor  
(24 Volt, 84 LEDs, 5050, IP20)**

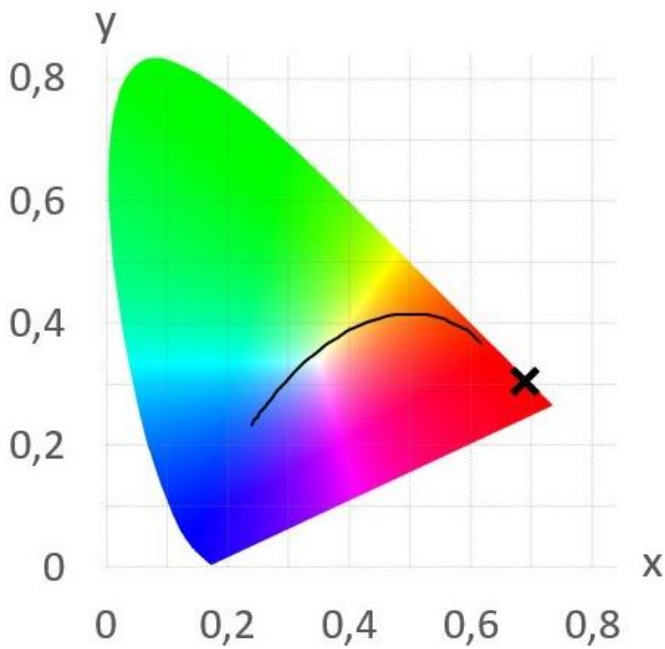


Date:  
30-01-2024

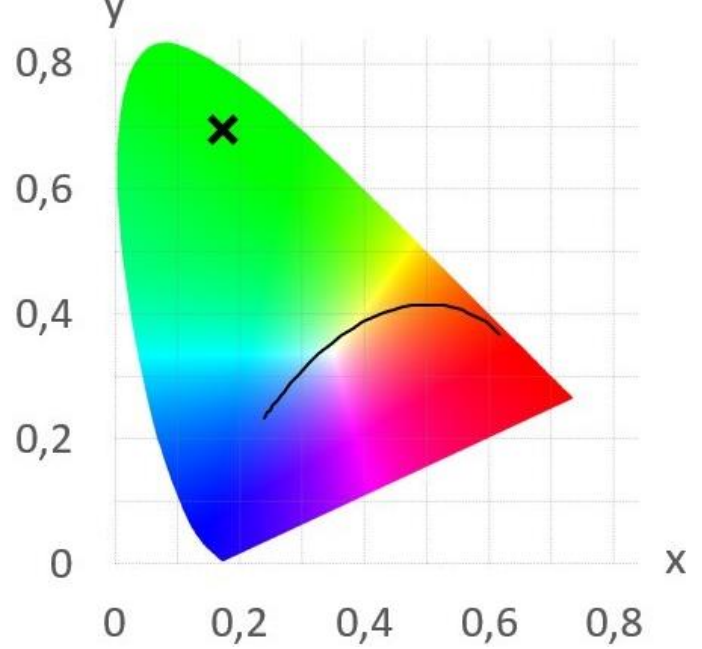
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| Technical Specifications |                             |                              |                        |             |            |
|--------------------------|-----------------------------|------------------------------|------------------------|-------------|------------|
| LS24RGBWW72TM1814PLX     |                             |                              |                        |             |            |
| Mechanical               | LED Type                    | 5050 SMD                     |                        |             |            |
|                          | LED Quantity                | 84 LEDs / m                  |                        |             |            |
|                          | Length per segment          | 71 mm                        |                        |             |            |
|                          | LEDs / segment              | 6                            |                        |             |            |
|                          | Length on single reel       | 10 m                         |                        |             |            |
|                          | Dimensions                  | 10000 x 12 x 4 ( L x B X H ) |                        |             |            |
|                          | Weight                      | 35g ~40g / m                 |                        |             |            |
|                          | Mounting                    | 3M Tape VHB4905              |                        |             |            |
|                          | Protection grade            | IP20                         |                        |             |            |
|                          | PCB Material                | Copper                       |                        |             |            |
| Electronic               | Working Voltage             | DC24V                        |                        |             |            |
|                          | Working Current             | 0,8 A / m                    |                        |             |            |
|                          | Working Wattage             | 19,2 Watt / m                |                        |             |            |
|                          | Driving Method              | Constant Voltage             |                        |             |            |
|                          | Wires                       | UL1007 20# 150mm             |                        |             |            |
| Environment              | Working Temperature         | -20°C ~ +60°C                |                        |             |            |
|                          | Storing Temperature         | -25°C ~ +70°C                |                        |             |            |
|                          | Lifespan                    | 50.000 Hours                 |                        |             |            |
|                          | Warranty                    | 5 Years                      |                        |             |            |
| Lighting                 | Colour channels             | Red                          | Green                  | Blue        | Warm White |
|                          | Lumen / meter               | 240 lm                       | 348 lm                 | 222 lm      | 585 lm     |
|                          | Wavelength                  | 620 - 630 nm                 | 510 - 525 nm           | 455 - 470nm | 2700K      |
|                          | BIN                         | 3 SDCM                       |                        |             |            |
|                          | Viewing Angle               | 120 ±5°                      |                        |             |            |
| IC Protocol              | IC Protocol                 | TM1824                       |                        |             |            |
|                          | Clock Type                  | No Clock                     |                        |             |            |
|                          | Redundant Data (Data 2)     | No                           |                        |             |            |
|                          | Colour Resolution           | 8 Bits                       |                        |             |            |
|                          | Data transmission frequency | 500 - 800 kbps               |                        |             |            |
|                          | PWM Frequency               | 1 KHz                        |                        |             |            |
| Pin-out                  | Wire colour                 | Symbol                       | Function description   |             |            |
|                          | Black                       | GND                          | Ground                 |             |            |
|                          | Green                       | DI                           | Data In                |             |            |
|                          | Green                       | DO                           | Data Out               |             |            |
|                          | Red                         | +24V                         | 24V Logic Power Supply |             |            |

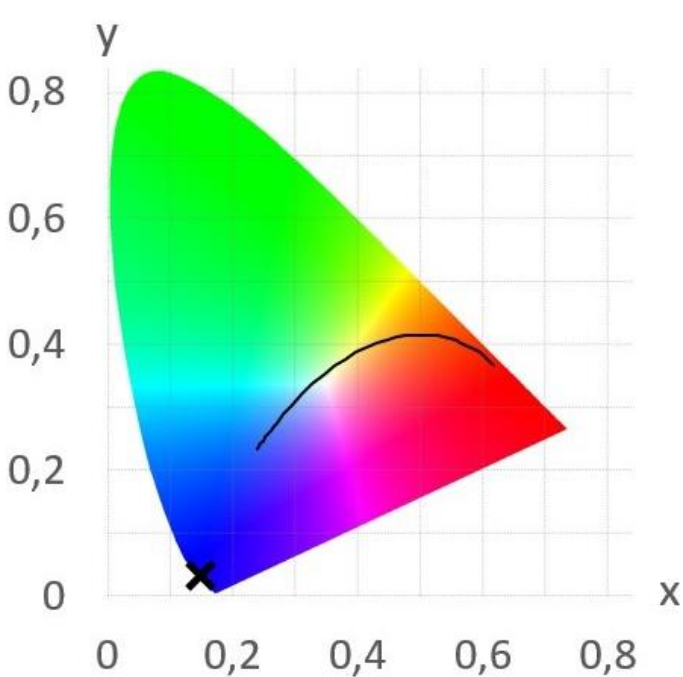
**CIE1931 Red:**



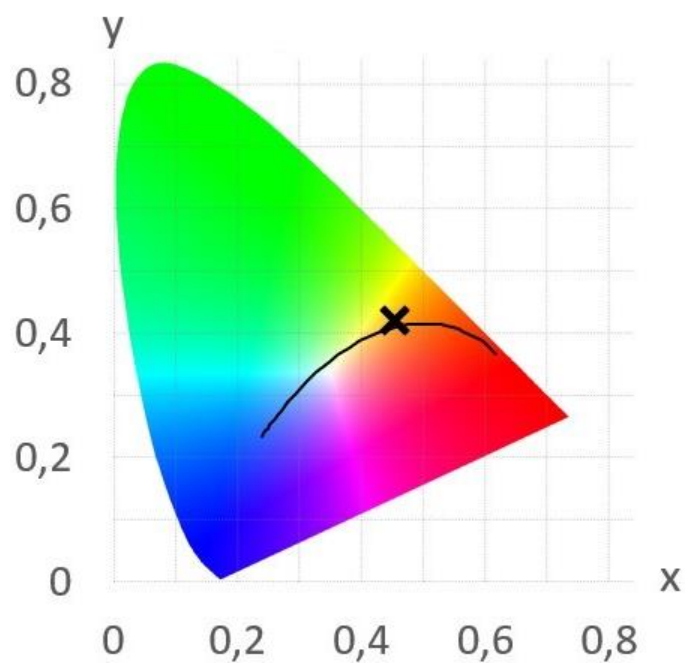
**CIE1931 Green:**



**CIE1931 Blue:**

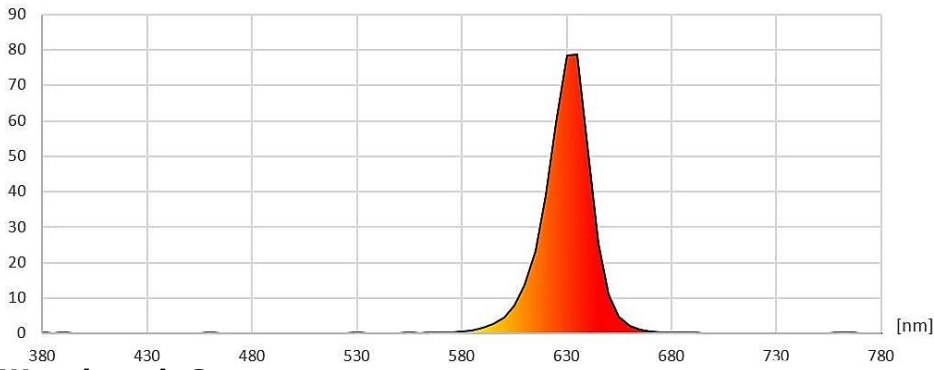


**CIE1931 Warm White:**



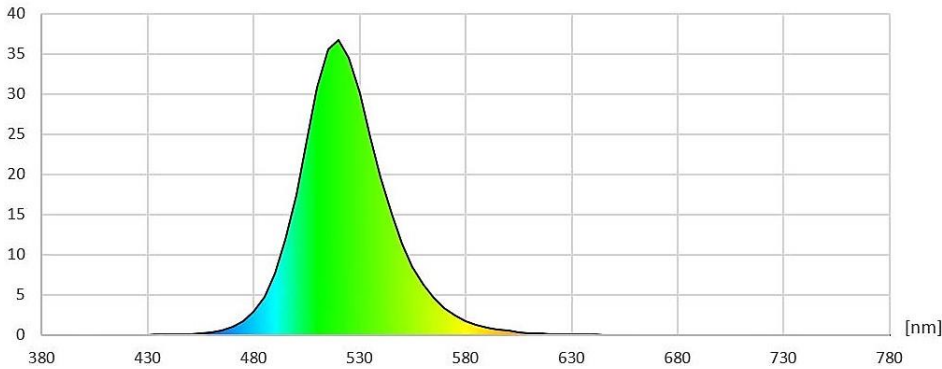
### Wavelength Red:

mW/m<sup>2</sup>/nm



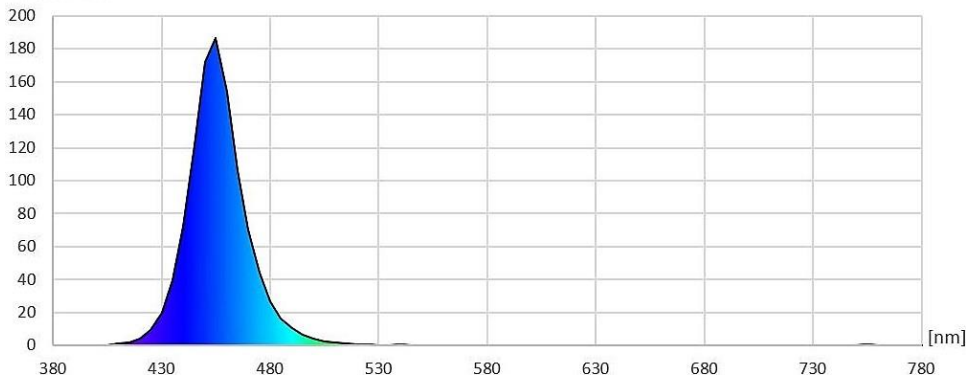
### Wavelength Green:

mW/m<sup>2</sup>/nm



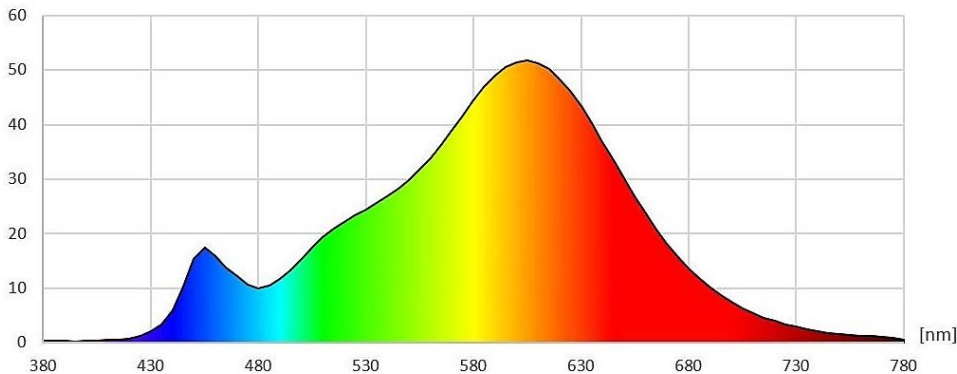
### Wavelength Blue:

mW/m<sup>2</sup>/nm



### Wavelength Warm White:

mW/m<sup>2</sup>/nm



**The Materials of PCB:**

Conducting Tracks: Cu, 35um thickness, double sided.

**Solderings:**

Solder Alloy: 99.3 Sn, 0.7 Cu,

Melting Temperature: 227°C

No SVHC (Jan 2021)

**Certificate of Conformity:**

EC Council Directive 2004/108/EC

Electromagnetic Compatibility

**Complies to the standards:**

- IEC 55015:2019/A11:2020
- IEC 61000-3-2:2019/A1:2021
- IEC 61000-3-3:2013+A1:2017+A2:2021
- IEC 61547:2009

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