

With a stellar efficiency of up to 150 lumens per watt, the liniLED® PCB R High Power 800, ensures brilliant illumination while conserving energy, offering a perfect balance for sustainable lighting projects.




Boasting an impressive Colour Rendering Index (CRI) of 90, this LED strip delivers true-to-life colours, creating an immersive and visually appealing environment. The L90/B10 rating guarantees longevity, with over 47,000 hours of consistent performance even at a challenging temperature of 55°C, maintaining 89.95% of its luminosity.

For the latest version of this datasheet, visit our website: <https://www.triolight.com/en/led-products/led-strips>

USPs

- High Efficiency (up to 150 lum/W)
- CRI 90
- L90/B10>47000hrs @ 55°C:
- lumen maintenance 89.95%
- 5 year warranty

Available colours

Colour	Description
 Extra Warm White 2700K	liniLED® PCB R High Power 800 2700K CRI90
 Warm White 3000K	liniLED® PCB R High Power 800 3000K CRI90
 Natural White 4000K	liniLED® PCB R High Power 800 4000K CRI90
 Cold White 6500K	liniLED® PCB R High Power 800 6500K CRI90

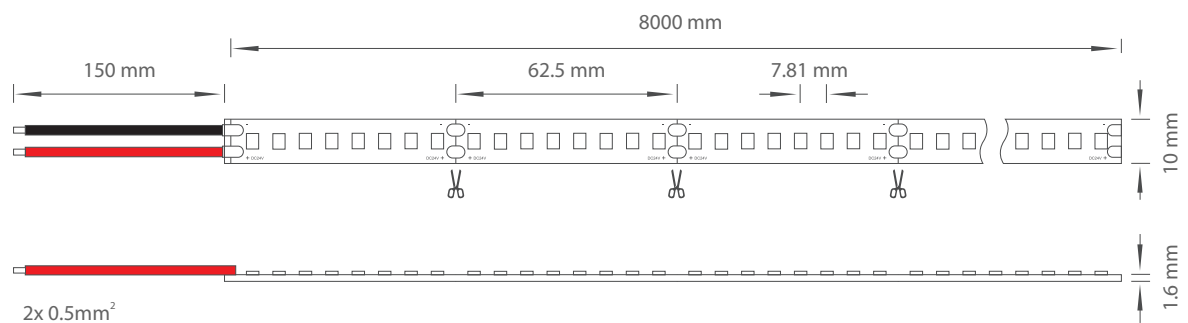


Technical specifications

	2700K	3000K	4000K	6500K
Product code	RP08-927	RP08-930	RP08-940	RP08-965
Power (24V DC)	5.76 W/m	5.76 W/m	5.76 W/m	5.76 W/m
CCT	2700K	3000K	4000K	6500K
CRI	90	90	90	90
Luminous flux	806 lm/m	818 lm/m	864 lm/m	858 lm/m
Luminous efficiency	140 lm/W	142 lm/W	150 lm/W	149 lm/W
Spool length	8 m			
Section length	62.5 mm			
LED type	2835			
Number of LEDs	128 pcs			
Max. connection length	8 m			
Min. operating voltage	23V DC			
Max. operating voltage	25V DC			
Width	10 mm			
Height	1.6 mm			
Dimmable	PWM, 0-10V, DALI and DMX dimming			
MacAdam Steps	3 Steps			
Type of protection	IP00			
Storage temperature	-20°C ... +60°C			
Operating temperature	-20°C ... +70°C			

Typical measured values are given, which due to tolerances in components and production process can vary up to 10%.

Product drawings



Power consumption

To power the liniLED® LED strips and lighting fixtures, a power supply from the liniLED® Power assortment can be selected. Selection of the correct power supply must be done by taking the total requested power and the environment into account.

The total power consumption can be calculated by summing the requested power of all connected products. To calculate the power consumption of a single length of LED strip, use the equation below. The typical equation is valid if the product is supplied by a 24 V DC constant voltage power supply. If the output voltage of a power supply is increased, the power consumption will increase with the same ratio and needs to be corrected by using the optional part of the equation found between brackets.

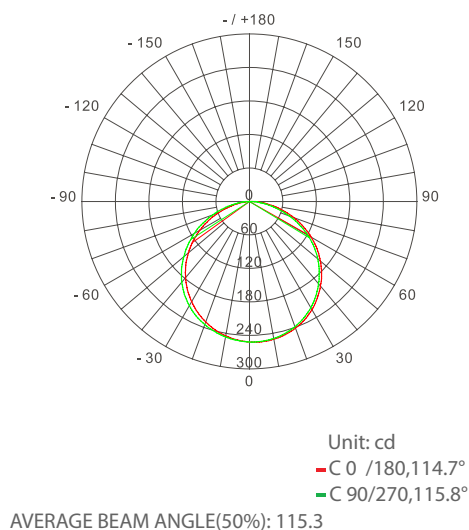
$$P_{STRIP} = P_{PRODUCT} \times X_{LENGTH} \times 110\% \left[\times \frac{U_{SUPPLY}}{24} \right]$$

- P_{STRIP}** Calculated power consumption of one LED strip in Watt
- $P_{PRODUCT}$** Typical power consumption in Watt per metre of the selected LED strip
This value can be found under 'Product characteristics' on page 2
- X_{LENGTH}** Length of the connected LED strip in metres
- 110% Safety margin to buffer differences over all production batches
- Optional:
- U_{SUPPLY}** Set supply voltage of the power supply in Volt
- 24** Nominal supply voltage of liniLED® in Volt

Photometric information

In the process of lighting design and calculations, the luminous flux and beam angle alone are not enough information to create a representative and realistic calculation or render. There is a set of photometric files for each LED strip type, available in two different file formats:

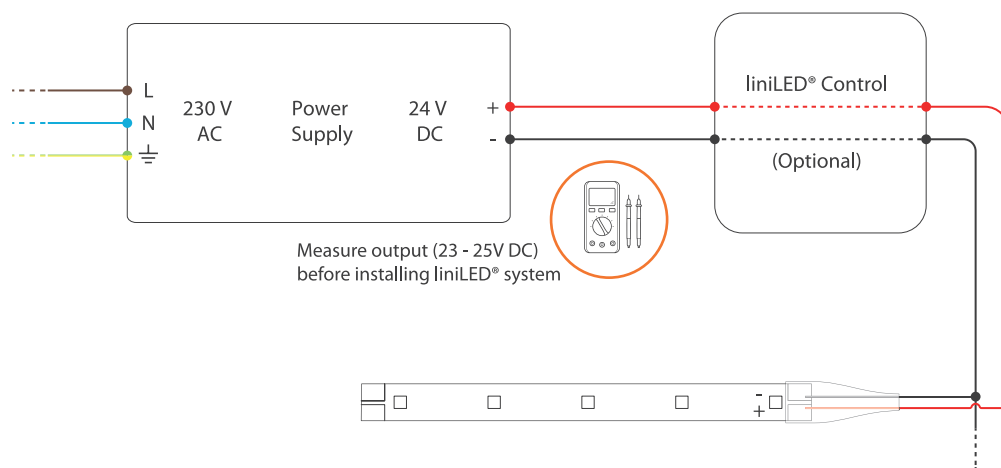
- Eulumdat (.ldt)
- IES LM-63-1995 (.ies)



	Flux Out: 524.2lm	4000K
0.3m	909.0,2899lx	83.81cm
0.6m	227.2,724.8lx	167.61cm
0.9m	101.0,322.2lx	251.42cm
1.2m	56.81,181.2lx	335.23cm
1.5m	36.36,116.0lx	419.04cm
1.8m	25.25,80.54lx	502.84cm
2.1m	18.55,59.17lx	586.65cm
2.4m	14.20,45.30lx	670.46cm
2.7m	11.22,35.79lx	754.26cm
3.0m	9,090,28.99lx	838.07cm
Height	Eavg, Emax	Beam Angle: 108.80° Diameter

Note: the above data is based on RP08-940 at 4000K. For other data, please consult sales rep.

Power and connection diagram



Disclaimer

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Symbols



Manufacturer's declaration that the product meets the applicable EC directives.



Operating voltage of 24 V DC.



Electro Static Discharge (ESD) sensitive device, apply standard ESD precautions when handling the product.



Restriction of Hazardous Substances (RoHS): product complies with the RoHS directive and each homogeneous material does not exceed the limits for the materials mentioned under the RoHS directive (Pb, Hg, Cd, Cr6+, PBB and PBDE).



Not protected against ingress of solid foreign objects. Not-protected against ingress of water.



White colour consistency up to 2 SDCM ellipse over an entire single strip length. LEDs used are single BIN 3 SDCM ellipse, but their careful combination in a LED strip during the production process, results in a mixed light through a diusive material which is within a 2 SDCM ellipse (probability >90%). Due to variability this is not legally binding. The guaranteed colour consistency can be found in the technical specifications.



The CRI value of this product is 90 or higher.



System guarantee of 5 years when the complete system consist of liniLED® products with the 5 years system warranty logo. Terms & conditions apply.