

Elevate your lighting projects with the liniLED® PCB R High Power 2000, a beacon of efficiency, durability, and superior performance. With an impressive lumen output of 2000 lm/m, this product sets a new standard for radiant and powerful illumination, meeting the diverse needs of various applications.

Harness the power of efficiency with an outstanding efficacy of up to 150 lumens per watt, ensuring not just brightness but sustainable and cost-effective performance. The Colour Rendering Index (CRI) of 90 ensures accurate colour representation, adding a vibrant touch to any space. The product's exceptional L90/B10 rating guarantees longevity, surpassing 47,000 hours at a demanding 55°C.

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 2000 2700K CRI90
 Warm White 3000K	liniLED® PCB R High Power 2000 3000K CRI90
 Natural White 4000K	liniLED® PCB R High Power 2000 4000K CRI90
 Cold White 6500K	liniLED® PCB R High Power 2000 6500K CRI90

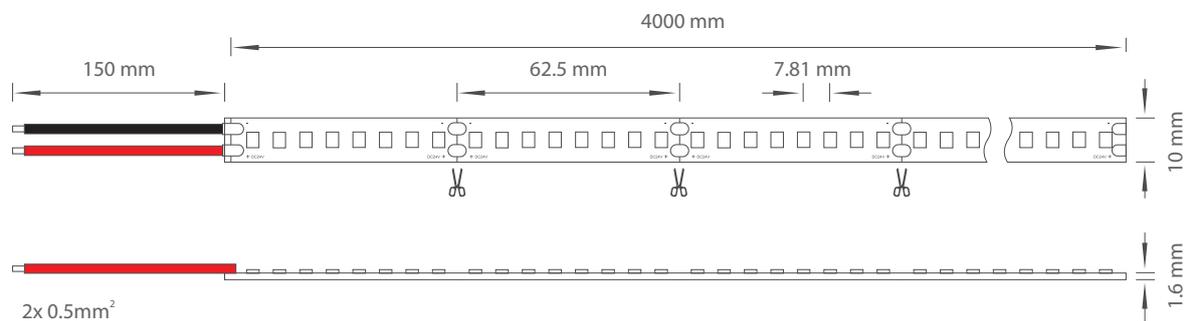


## Technical specifications

	2700K	3000K	4000K	6500K
Product code	RP20-927	RP20-930	RP20-940	RP20-965
Power (24V DC)	14.4 W/m	14.4 W/m	14.4 W/m	14.4 W/m
CCT	2700K	3000K	4000K	6500K
CRI	90	90	90	90
Luminous flux	2016 lm/m	2045 lm/m	2160 lm/m	2146 lm/m
Luminous efficiency	140 lm/W	142 lm/W	150 lm/W	149 lm/W
Spool length	4 m			
Section length	62.5 mm			
LED type	2835			
Number of LEDs	128 pcs			
Max. connection length	4 m			
Min. operating voltage	23V DC			
Max. operating voltage	25V DC			
Width	8 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.

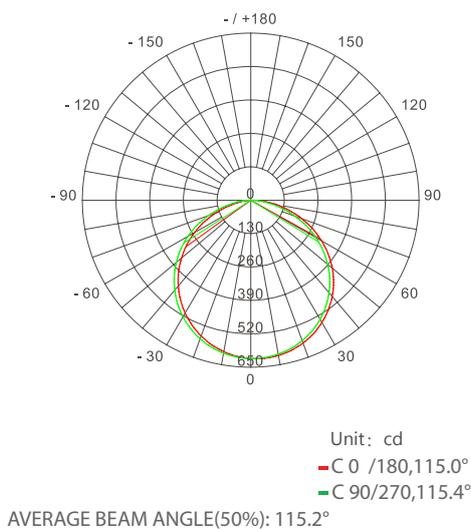
$$P_{STRIP} = P_{PRODUCT} \times X_{LENGTH} \times 110\% \left[ \times \frac{U_{SUPPLY}}{24} \right]$$

- $P_{STRIP}$**  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:

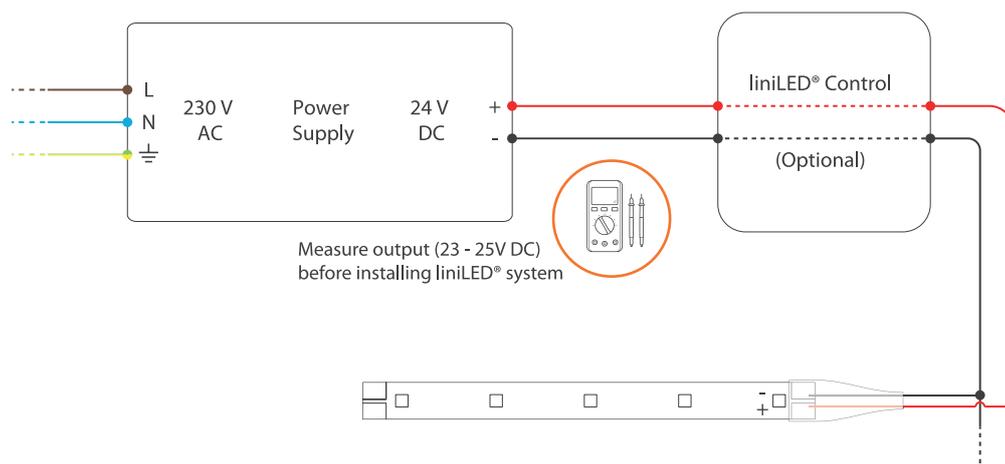
- Eulumdat (.ldt)
- IES LM-63-1995 (.ies)



	Flux Out: 1282lm	4000K
0.3m	2224,7089lx	83.82cm
0.6m	556,0,1772lx	167,64cm
0.9m	247,1,787,6lx	251,47cm
1.2m	139,0,443,0lx	335,29cm
1.5m	88,96,283,6lx	419,11cm
1.8m	61,77,196,9lx	502,93cm
2.1m	45,39,144,7lx	586,76cm
2.4m	34,75,110,8lx	670,58cm
2.7m	27,46,87,52lx	754,40cm
3.0m	22,24,70,89lx	838,22cm
Height	Eavg, Emax	Beam Angle: 108.81° Diameter

Note: the above data is based on RP20-940 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.