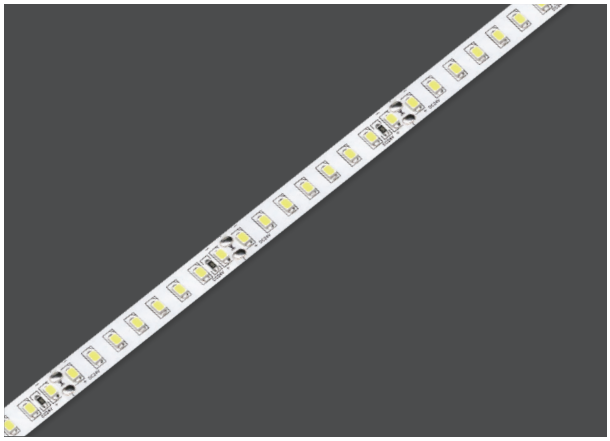
liniLED® PCB R Power 500 CRI90



Choose the liniLED® PCB R Power for its reliability and superior performance, backed by a robust 5-year warranty. Experience unparalleled efficiency with an impressive output of up to 150 lumens per watt, ensuring a perfect balance between brightness and energy conservation.

With a high Colour Rendering Index (CRI) of 90, this product guarantees accurate colour representation, enhancing the visual appeal of any illuminated space. The exceptional L90/B10 rating attests to its longevity, surpassing 47,000 hours even in demanding conditions at 55°C, while maintaining an impressive 89.95% lumen maintenance.

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

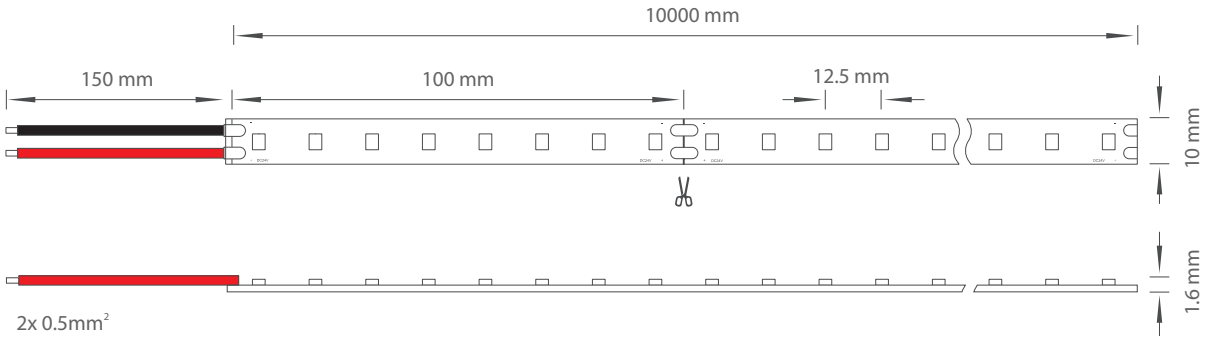
Colour	Description
Extra Warm White 2700K	liniLED® PCB R Power 500 2700K CRI90
Warm White 3000K	liniLED® PCB R Power 500 3000K CRI90
Natural White 4000K	liniLED® PCB R Power 500 4000K CRI90
Cold White 6500K	liniLED® PCB R Power 500 6500K CRI90

Technical specifications

	2700K	3000K	4000K	6500K
Product code	RP05-927	RP05-930	RP05-940	RP05-965
Power (24V DC)	3.84 W/m	3.84 W/m	3.84 W/m	3.84 W/m
CCT	2700K	3000K	4000K	6500K
CRI	90	90	90	90
Luminous flux	522 lm/m	534 lm/m	576 lm/m	561 lm/m
Luminous efficiency	136 lm/W	139 lm/W	150 lm/W	146 lm/W
Spool length	10 m			
Section length	100 mm			
LED type	2835			
Number of LEDs	80 pcs			
Max. connection length	10 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 consuption

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 supplymust be done by taking the total requested power and the environment into account.

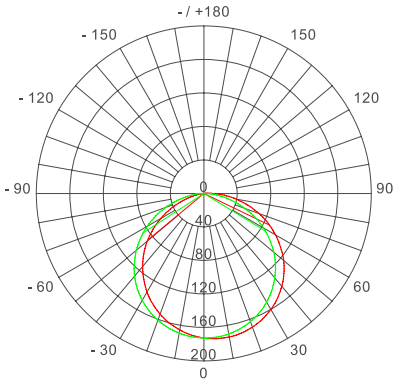
The total power consumption can be calculated by summing the requested power of all connected products. To calculate the power consumption of a single length of LED strip, use the equation below. The typical equation is valid if the product is supplied by a 24 V DC constant voltage power supply. If the 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.

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

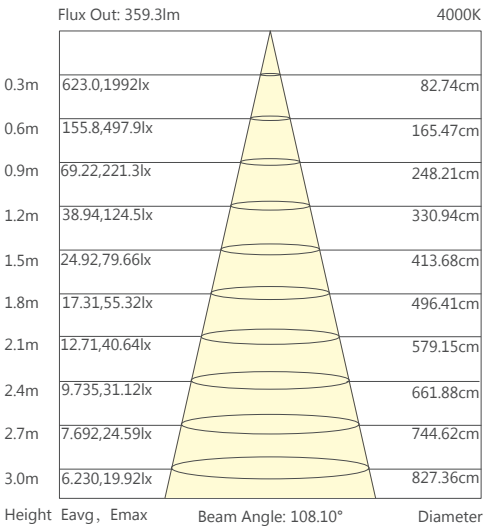
P_{STRIP}	Calculated power consumption of one LED strip in Watt
$P_{PRODUCT}$	Typical power consumption in Watt per metre of the selected LED strip This value can be found under 'Product characteristics' on page 2
X_{LENGTH}	Length of the connected LED strip in metres
110%	Safety margin to buffer differences 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)

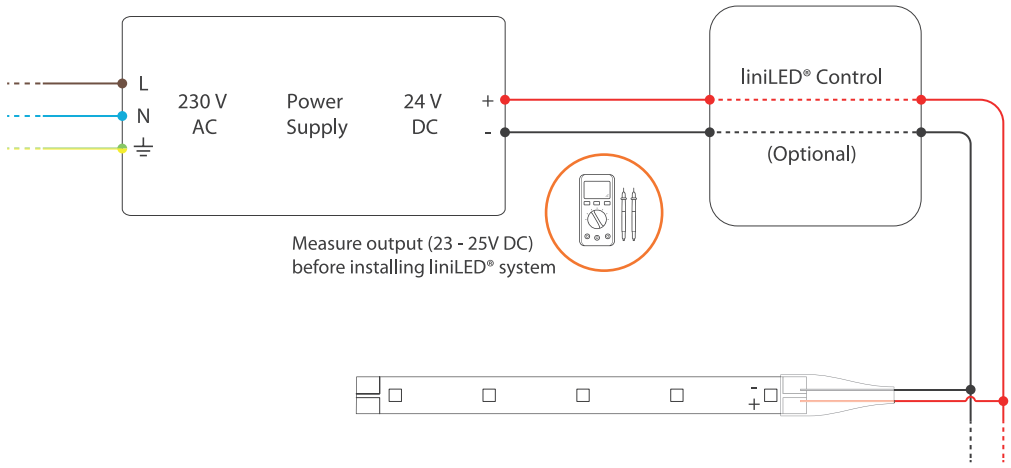


Unit：cd
C 0 /180,114.6°
C 90/270,115.6°
AVERAGE BEAM ANGLE(50%): 115.1°



Note: the above data is based on RP05-940 at 4000K. For other data, please consult sales rep.

Power and connection diagram



Disclaimer

The published information is checked to be as accurate as possible, however Triolight B.V. or any reseller of liniLED® cannot be held liable for any damages resulting from misprints, errors, modifi cations or outdated information. No legal rights can be derived from this document. Triolight B.V. reserves the right to modify the information without informing the customers. Please check for the latest version on www.triolight.com. This product should not be used in applications, devices or systems where incorrect operation of the product may result in personal injury (includes emergency lighting) without written permission from the board of Triolight B.V. If nevertheless used in such applications, devices or systems, Triolight B.V. cannot be held liable for any resulting injury. liniLED® is a registered trademark of Triolight B.V.

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 specications.

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.