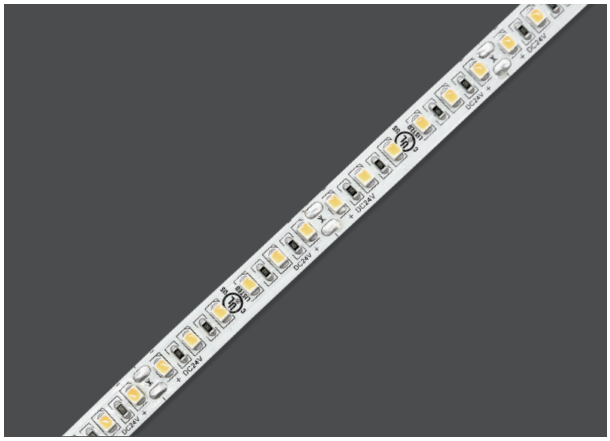
liniLED® PCB R High Power Colour



The liniLED® PCB R High Power Colour is not just a lighting solution; it's a testament to versatility and reliability. Elevate your projects with dynamic and vibrant illumination, offering the option of Red, Green, or Blue colours to suit various design applications.

With an impressive Colour Rendering Index (CRI) of 90, this product ensures accurate colour representation, bringing out the true brilliance of illuminated elements. The outstanding L90/B10 rating guarantees a remarkable lifespan, exceeding 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

Flexible and cuttable every 50 mm cutting section

5 year warranty

Available colours

Colour	Description
Red	PCB R High Power Red 240
Green	PCB R High Power Green 540
Blue	liniLED® PCB R High Power Blue 110

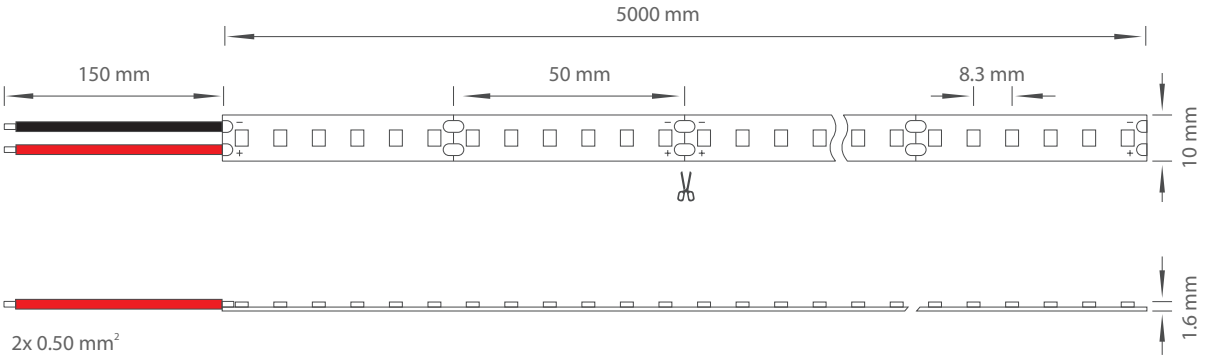
V020224

Technical specifications

	Red	Green	Blue
Product code	RP024-R	RP054-G	RP011-B
Power (24V DC)	6.72 W/m	5.00 W/m	5.00 W/m
CCT	/	/	/
CRI	/	/	/
Luminous flux	243 lm/m	549 lm/m	120 lm/m
Luminous efficiency	36.2 lm/W	109.8 lm/W	24 lm/W
Spool length	5 m		
Section length	50 mm		
LED type	2835		
Number of LEDs	120 pcs		
Max. connection length	5 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.

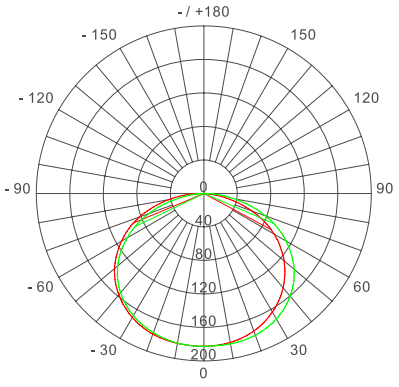
The total power consumption can be calculated by summing the requested power of all connected products. To calculate the power consumption of a single length of LED strip, use the equation below. The typical equation is valid if the product is supplied by a 24 V DC constant voltage power supply. If the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

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

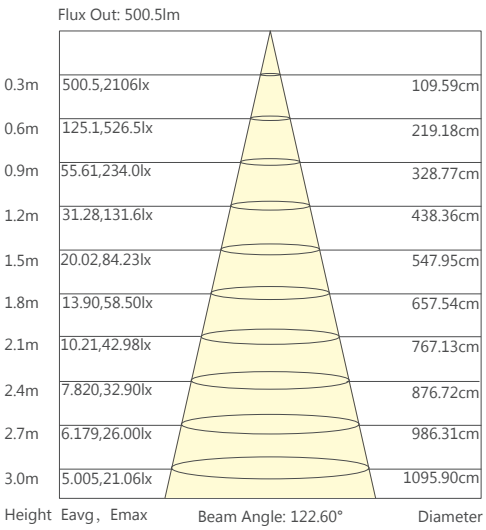
P_{STRIP}	Calculated power consumption of one LED strip in Watt
$P_{PRODUCT}$	Typical power consumption in Watt per metre of the selected LED strip This value can be found under 'Product characteristics' on page 2
X_{LENGTH}	Length of the connected LED strip in metres
110%	Safety margin to buffer differences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

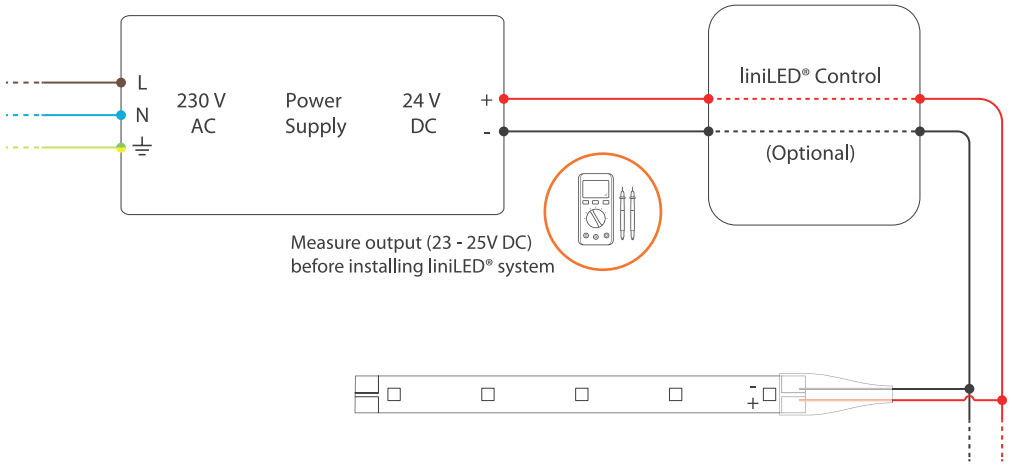


Unit：cd
C 0 /180,129.1°
C 90/270,131.0°
AVERAGE BEAM ANGLE(50%): 130.0°



Note: the above data is based on RP054-G. For other data, please consult sales rep.

Power and connection diagram



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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 specications.

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