

RAIL-LIGHT Data Sheet



Index

TECHNICAL SPECIFICATIONS	2
PHOTOMETRIC INFORMATION	3

RAIL-LIGHT

The Rail-Light luminaire is specifically developed for safety and lighting up paths alongside railroad tracks. The luminaire fits perfect in the hollow space of the railroad track.

Thanks to the plug and play coupling system, Rail-Light can be installed fast and easily. Shut down time of the tracks will be minimal.

Due to the robust fixture (IK08) and the high quality light source, this product is durable (L80/B10, 60.000 hours) and cost-saving.

In addition to permanent placement, the Rail-Light can also be used as a temporary solution.

Features

- Safety on worksite: properly illuminated paths and prevents being blinded in the train cabin.
- Long life-time: 60,000 hours and L80/B10.
- One power supply can illuminate up to 656 feet of railroad track.
- Minimal light pollution.
- Fast installation and a short out of service time.
- Vibration resistant.
- 24V DC

Available colors

Color	Description
Warm White 3000K	Rail Light 3000K



Specifications may be modified or improved without notification.

Technical specifications

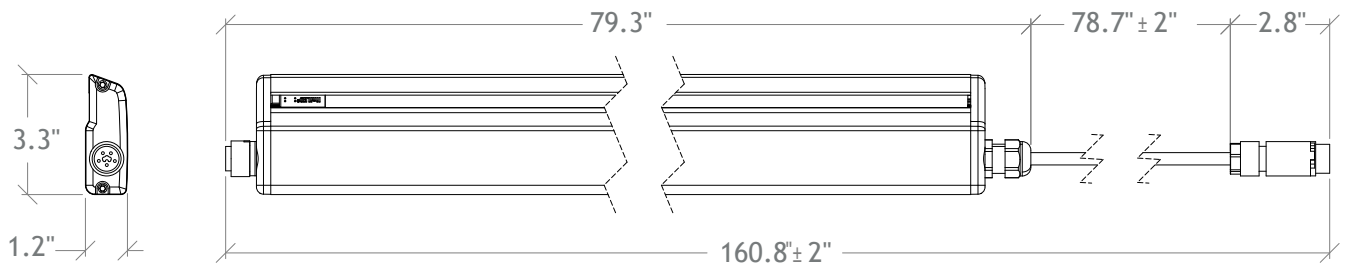
	Rail-Light 3000K
Product code	70000
Power	24V DC
Wattage	1.3 W/ft
CCT ¹	3000K
CRI	90
Luminous flux ¹	265 lm/ft
Luminous efficiency ¹	200 lm/W
Section length	3.9in
LED type	3535
Number of LEDs	7 per section /21 per foot
Beam angle	50°
Dimensions (L x W x H)	80in x 1.2in x 3.3in
Dimmable	PWM dimming
Weight	8.8 lbs
IK rating	IK08
Expected lifetime	L80/B10 > 60000 hrs @ Tc = 40°C (104°F)
Ingress protection ²	IP67
Storage temperature	-40 ... 80°C (-40 ... 176°F)
Operating temperature ³	-30 ... 55°C (-22 ... 131°F)

¹ Typical values are given, which due to tolerances in components and production process can vary up to 10%.

² The LED strip and cables are IP67, 30 minutes up to 4.9 ft deep. Water can enter and exit the aluminium luminaire.

³ Max. connection length between -30°C (-22°F) and -20°C (-4°F) is 70% of normal total length.

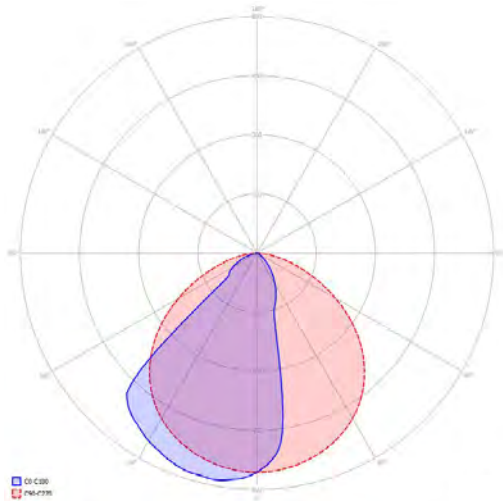
Product Drawing



Specifications may be modified or improved without notification.

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. Therefore, photometric are available which can be used for simulations with photometric software.



How to measure

Light striking a surface can be divided into horizontal and vertical illuminance. For horizontal illuminance the amount that lands on a horizontal surface is measured. Objects can be seen when shape or color differ from its background and light levels are high enough. Vertical illuminance measures the amount of light that lands on a vertical plane or object. Lighting objects from the side will create large cast shadows and provide higher contrast.

For the application of Rail-Light, observing objects is more important than recognizing objects. Color, shape and detail are less relevant for this type of lighting. The Rail-Light illuminates from the side which creates the greatest possible shadow effect. The objects will be illuminated, creating an object shadow and casting a shadow on the footpath. The contrast makes it easier to distinguish objects due to the developed "light-dark" shadow effect. This results in a safe working environment.

To guarantee the relationship of both lighting methods and the most ideal situation (horizontal-vertical illuminance), a measurement plane perpendicular to the floor surface at a 30° angle is suggested. See image below for a visual explanation.

