# **RAIL-LIGHT** Data Sheet





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### **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.

### **Available colors**

Color	Description		
Warm White 3000K	Rail Light 3000K		
4000K	Rail Light 4000K		

### **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.

# **Part Numbers & Specifications**

Part #	Description	
070101	Rail Light Starter Cable 6ft	
070102	Rail Light Jumper Cable 6ft	
070106	Rail Light End Cap	
070107	Rail Light Fixture Bracket	
070110	Rail Light 3000K, 1ft	
070112	Rail Light 3000K, 3ft	
070114	Rail Light 3000K, 6ft	
070120	Rail Light 4000K, 1ft	
070122	Rail Light 4000K, 3ft	
070124	Rail Light 4000K, 6ft	



























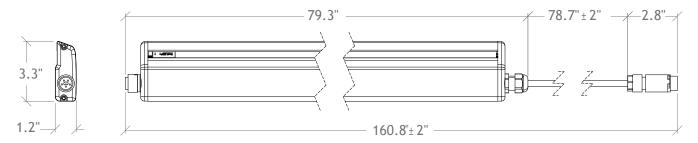


# **Technical specifications**

Based on Rail-Light 3000K, 6ft			
Product code	070114		
Power (24 V DC)	1.3 W/ft		
CCT <sup>1</sup>	3000K		
CRI	90		
Luminous flux <sup>1</sup>	265 lm/ft		
Luminous efficiency <sup>1</sup>	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)	79.3in x 1.2in x 3.3in		
Dimmable	PWM dimming		
Weight	8.8 lbs		
IK rating	IK08		
Expected lifetime	L80/B10 > 60000 hrs @Tc = $40^{\circ}$ C ( $104^{\circ}$ F)		
Ingress protection <sup>2</sup>	IP67		
Storage temperature	-40 80°C (-40 176°F)		
Operating temperature <sup>3</sup>	-30 55°C (-22 131°F)		

<sup>&</sup>lt;sup>1</sup> Typical values are given, which due to tolerances in components and production process can vary up to 10%.

# **Product Drawing**

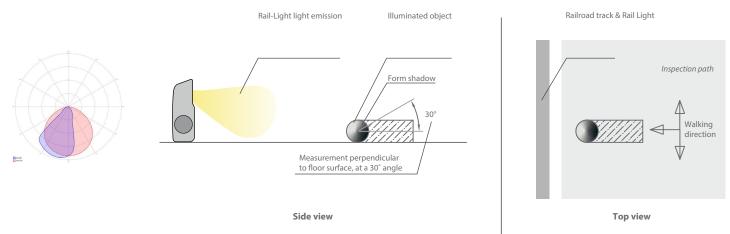


<sup>&</sup>lt;sup>2</sup> The LED strip and cables are IP67, 30 minutes up to 4.9 ft deep. Water can enter and exit the aluminium luminiaire.

 $<sup>^3</sup>$  Max. connection length between -30°C (-22°F) and -20°C (-4°F) is 70% of normal total length.

#### 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, photometrics 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.

## **Power Supplies & Enclosures**

## **Power Supplies - 24V**

Forward Phase, Reverse Phase, & 0-10V Dimming Drivers. Outdoor enclosures available.

	Part #	Ingress	Voltage	Wattage	Dimensions (inches / mm)	Description
ĺ	045001	IP67	100-305V	20W	7.6 x 1.18 x 0.79 /193 x 30 x 20	Dimmable LED Driver
	045002	IP67	100-305V	40W	5.83 x 1.58 x 0.87/148 x 40 x 22	Dimmable LED Driver
	045003	IP67	120-277V	60W	6.3 x 2.24 x 1.5/160 x 57 x 38	Dimmable LED Driver
	045004	IP67	120-277V	75W	6.3 x 2.24 x 1.5/160 x 57 x 38	Dimmable LED Driver
	045005	IP67	120-277V	96W	7.6 x 2.24 x 1.5/193 x 57 x 38	Dimmable LED Driver
	045006	IP67	120-277V	200W	10.1 x 3.03 x 1.8/257 x 77 x 46	Dimmable LED Driver
	045007	IP67	120-277V	300W	11.9 x 3.03 x 1.8/302 x 77 x 46	Dimmable LED Driver

## **Enclosures**

Part #	Ingress	Dimensions (inches / mm)	Description
045008	IP67	9.4 x 2.6 x 1.9 / 239 x 66 x 48	20W Enclosure
045009	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	40W Enclosure
045010	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	60W Enclosure
045011	IP67	11.02 x 4.05x 2.2 / 280 x 103 x 56	75W Enclosure
045012	IP67	11.02 x 4.05 x 2.2 / 280 x 103 x 56	96W Enclosure
045013	IP67	16.7 x 9.8 x 2.3 / 424 x 249 x 58	200W Enclosure
045014	IP67	16.7 x 9.8 x 2.3 / 424 x 249 x 58	300W Enclosure





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



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).



Dust-tight, no ingress of dust. Protected against the effects of temporary immersion in water (Immersion in water at a maximum depth of 1 metre up to a half hour).



Protected against impact energy of 5 joules.



Operating voltage of 24 V DC.



Electrical appliance class III: this product is designed to be supplied from an extra-low voltage ( $\leq 60.0 \, \text{V}$  DC or  $\leq 42.4 \, \text{V}$  AC).



Product is resistant against ultraviolet (UV) light or sunlight. Non-UV resistant products can degrade or discolour fast when exposed to UV light.



Product can be cleaned with normal cleaning agents.



This product can be stored and used below 32° Fahrenheit. Verify the minimum storage and operating temperature in the datasheet or manual for the lowest temperature allowed.



The CRI value of this product is 90 or higher.



This product needs to be disposed of separately from normal household waste so it can be recycled. Verify the IP rating for proper use.



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



Suitable for mounting on all surfaces and suitable to cover with insulating material.

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