

# T-Line

The most sustainable and secure emergency solution for tunnels



## KEY ADVANTAGES

- Complies with emergency regulations for tunnels.
- Modular and flexible design for installation in all tunnel or underpass varieties.
- Easy maintenance: Centralized access to electronic equipment and batteries.
- Fully adjustable and orientable stainless steel fixing brackets.
- Permanent Emergency version up to 1 hour.
- Configurable aligner for easy installation.
- Durability and robustness: IP66/ IP69K + IK08/ IK09.
- High luminous performance with reduced consumption. Up to 70% less consumption than a conventional solution.
- Corrosion-resistant anodized 6063 aluminum.
- Energy Efficient: 0,9 W/m.
- 10 lux in normal and in emergency operation
- 5 years warranty.

IP66  
IP69KBox: IK08  
LED module: IK09

CI



CII

RAL 9006  
(unpainted)

EM 1H



## DESCRIPTION

T-LINE is an innovative linear system for beaconing, lighting, and emergency purposes designed to enhance safety in tunnels. This system incorporates cutting-edge LED technology, ensuring exceptional efficiency and minimal power consumption. Its design is specifically conceived to provide low-height illumination without causing glare, which is crucial in such environments. Being a continuous system completely eliminates the annoying flickering effect often experienced with individual emergency systems. Furthermore, its modular linear design ensures absolutely perfect uniformity, covering up to 50 linear meters per luminaire.

## STANDARDS / CERTIFICATES

- CE
- RoHS
- UNE EN 60598-1
- UNE EN 60598-2-1
- UNE EN 62031
- UNE EN 62384
- UNE 61347-2-13
- UNE EN 62471
- UNE EN 55015
- UNE EN 61000-3-2
- UNE EN 61000-3-3
- UNE EN 61547
- IEC 60695-2-10
- UNE EN 60598-2-22

## EMERGENCY REGULATION

- OC 36/2015: Pedestrian Emergency
- RD 635/2006: Safety in tunnels
- CIE88-2004 y UNE CR 14.380

4.000K  
CRI>80

3.200 lm



-40°C to + 50°C

71 lm/W  
0,9W/m  
Luminaire

0,00%



40 Kg (50 metres)

1,46 m<sup>2</sup>  
(50 metres)

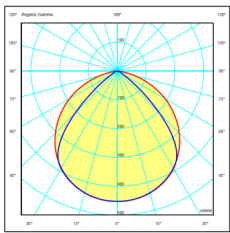
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NOTE: Correct data on the date of printing. The company reserves the right to change the value at any time.  
09/08/2024

## PHOTOMETRIC DISTRIBUTIONS

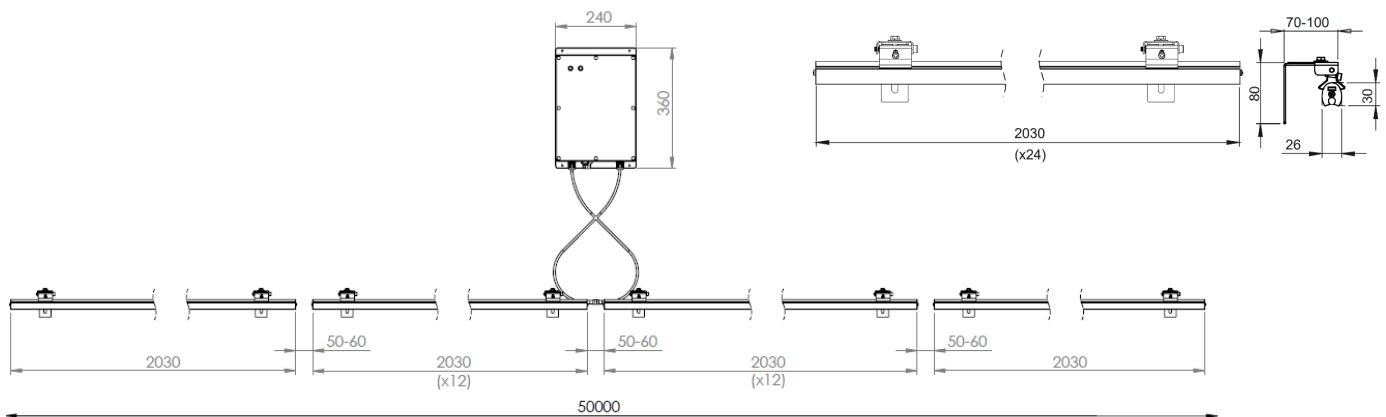
1 photometric configurations are available for use in the various environments where this type of luminaire might be installed, meaning it can be adapted to suit all situations:



SCE7

## DIMENSIONS

50 linear meters.

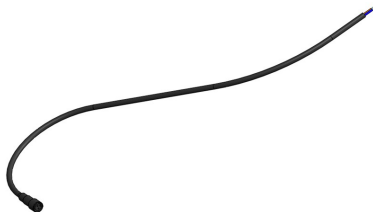


## ACCESSORIES

**Cable with 1m long connector:**

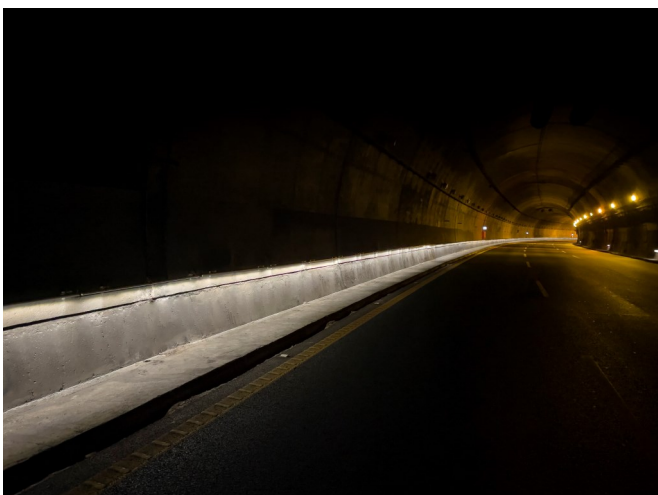
Ref. 180787 Cable with male connector.

Ref. 180786 Cable with female connector.



## APPLICATIONS

Tunnels & infrastructures, and underpasses.



## T-LINE CHARACTERISTICS

### GENERAL INFORMATION

Sustainability	In testing process
CE mark	Yes
RoHS-compliant	Yes
Testing standards	LM 79-80 (todas las mediciones en laboratorio acreditado según ISO17025)

### GENERAL CHARACTERISTICS

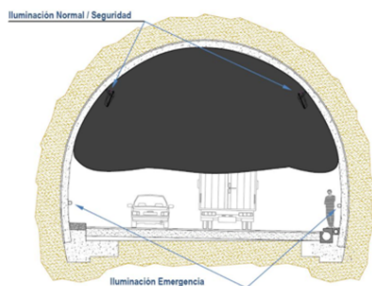
Profile	Extruded anodized aluminum 6063.
Diffuser	Weather-resistant extruded transparent silicone.
Supports	AISI 304 stainless steel.
Equipment box	Halogen-free injected ABS.
Watertightness	According to EN 60598-1 and EN 60529: Luminaire sealing degree IP66/ IP69K.
Impact protection grade	LED module: IK09 (EN 62262). Box: IK08 (EN 62262).
Operating temperature	Ta -40°C to 50°C.
Lifetime	L70B10 179.000h (Ta) 25°C

### ELECTRICAL CHARACTERISTICS

Electrical class	Class I at Class II
Input voltage	220V/240V - 50Hz/60Hz
Connection cross-section	≤ 2,5mm <sup>2</sup> * On request ≤ 4mm <sup>2</sup>
Power factor (at full load)	>0,9
Total Harmonic Distortion (THD)	<10%
Surge protection	Surge protection device (1.2 / 50) 10 kV. Maximum current (8/20) 10 kA. Maximum service voltage (L/N-GND) 400 V.

### New Regulations and Recommendations for Emergency Lighting

Its function is guidance and marking, indicating to users the evacuation route. It is located at a low height in anticipation that during a fire, normal lighting fixtures may be obscured due to stratified smoke in the upper area of the tunnel.



### LIGHTING CHARACTERISTICS

Package real light	3.200lm (45W). (133lm per module)
Light package Emergency	2.700lm
LED color temperature	4.000K (Neutral White, nw).
LEDs	Integrates 2,496 high-efficiency LEDs every 50 linear meters.
Index of reproduction chromatic (CRI)	CRI>80.
F.H.S.	0,00%
Photometric distributions	SCE7: Linear symmetric.

### MAINTENANCE AND INSTALLATION

Maintenance and assembly	Access to the equipment in a watertight box. Quick replacement of LED profiles with connectors.
Fixation	Adjustable wall bracket.
Orientation	LED profiles adjustable in tilt, distance, and height
Weight	24 LED profiles + equipment box: 40 kg (50 meters)
Aligner	Configurable aligner for easy installation

### MANAGEMENT AND CONTROL

Equipment	<b>TLN-EM 1h:</b> 1 Level (L1N) <b>RD:</b> DALI protocol adjustable (LRD)
Emergency	On/Off, 1-hour Emergency. *The batteries are Li-ion (lithium iron phosphate).

### FINISHES

#### Predefined luminaire colour

RAL 9006 (unpainted)
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