Robust and energy efficient replacement for conventional tunnel lights

Low profile light that provides unmatched performance for illuminating mining tunnels.

Built on the backbone of the multi-award-winning DLK, the Tunnel Ray is both lightweight and versatile with the flexibility to fit many different applications.

The Tunnel Ray is designed to provide the most energy-efficient way of delivering a level of luminance that far exceeds that of its comparable gas discharge lamp predecessors.

Designed for use in:
- Tunnels and corridors
- Enclosed Conveyor Belts
- Enclosed Conveyor Walkways
- Stairwells and platforms
- Confined Spaces
- Wall and Bulkhead lights
- Switching Rooms
Robust, solid body design

Built on the backbone of the multi-award winning DLK, the Tunnel Ray uses the same, proven solid body technology that allows it to be compact, lightweight, robust and completely resistant to vibrations.

- Impact/Shock Proof
- Chemical Resistant
- High Pressure Washable
- Unaffected by Severe Temperature Variations

COOL SURFACE TEMPERATURE

Coolon’s Industrial LED fittings have a much lower surface temperature than traditional HID equivalents which prevents dirt from baking onto the luminaire. This allows for easier cleaning and will prolong the lifespan of the luminaire.

NO FLICKERING

LED luminaires run on constant low voltage DC power and do not produce any visible stroboscopic effects, thus reducing the strain on eyes and significantly improving safety in areas where moving machinery is present.

LOW SUSCEPTIBILITY TO VIBRATION

This luminaire is designed to handle continuous exposure to vibration. A typically critical issue affecting the life and operation of most common gas discharge lamp based light sources is mechanical shock and vibration.

3 YEARS FACTORY WARRANTY

Coolon Luminaires are covered by a solid comprehensible manufacturer’s warranty that covers a range of possible defects and performance parameters throughout the duration of the warranty period.

High quality light output

The Tunnel Ray is the perfect choice of luminaire for applications that require:

- Energy Efficiency
- Glare Free High Quality White Light
- High Colour Rendering Index
- No Stroboscopic Effect

COOL SURFACE TEMPERATURE

Coolon's Industrial LED fittings have a much lower surface temperature than traditional HID equivalents which prevents dirt from baking onto the luminaire. This allows for easier cleaning and will prolong the lifespan of the luminaire.

INSTANT ON/OFF

LEDs do not require warm up. Instant on to 100% output translates to no downtime, improved safety and the ability to utilize sensor switching to significantly save energy.

NO FLICKERING

LED luminaires run on constant low voltage DC power and do not produce any visible stroboscopic effects, thus reducing the strain on eyes and significantly improving safety in areas where moving machinery is present.

HIGH IP RATING - IP66

Coolon’s Industrial LEDs are designed specifically to withstand the harsh conditions in mining environments. The robust design allows our LED products to be used in many different applications and are high pressure washable.

LONG USEFUL OPERATING LIFE

Currently available specification from world’s most reputable LED manufacturers states 50,000 hours of continuous operation at the rated current within the operating temperature range to 70% residual light output.

PROUDLY MADE IN AUSTRALIA

Our products are designed and manufactured in Australia. Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.
DIMENSIONS

EASY JUNCTION BOX ACCESS AND INSTALLATION

EMERGENCY POWER PACK (WHERE APPLICABLE)

TURTLE FRIENDLY OPTION

COOLON’S TUNNEL RAY LED LUMINARY

TECHNICAL SPECIFICATIONS

Product: Tunnel Ray LED Conveyor / Area Light

Model: TNR (MP) TNR (MP-WVR) TNR (ELV)

Optical Characteristics

Luminous Flux (Photometered) 3,632 – 6,612 lm

CCT CWT / WWT / AMB / GRN / RED

Electrical Characteristics (Luminaire)

Power Consumption 62W Typical 62W Typical 62W Typical

Nominal Voltage 230VAC 230VAC 24VDC


Frequency Range 47 – 63Hz 47 – 63Hz N/A

Power Factor >0.97 / 230VAC >0.97 / 277VAC >0.93 / 480VAC

Leakage Current <0.75mA / 277VAC <0.75mA / 480VAC N/A

Environmental

IP Rating IP66

Impact Rating IK09

Salt Spray Tested Yes

Operating Temp. Range -20 to +50°C

Thermal Management Type Active/Continuous

Expected Lifespan 50,000 Hours to 70% Brightness

Material Composition (Body) Aluminium Alloy (Anodised and E-Coated)

Material Composition (Optics) PC LEV1700

Material Composition (Bracket) Stainless Steel 316

Emergency Pack (Where fitted)

Charge Time 8 hours

Battery Type LEAD CRYSTAL®

Discharge Time Over 2 hours

Weight / Packaging

Luminaire Weight 5.1kg with Hood

Bracket Weight 1.1kg SS Bracket

Packaging Dimensions (TNR) 460 x 440 x 180mm

Packaging Weight (TNR) 6.4kg (Standard)

Packaging Dimensions (EMP) 400 x 280 x 180mm

Packaging Weight (EMP) 10.75kg

Warranty

Warranty 3 years warranty as standard. 5 years extended warranty optional.

1 Optical and electrical characteristics are measured using Cool White LEDs (CWT)

2 Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behaviour may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior to commissioning.
**WIRING CONFIGURATION**

Tunnel Ray Luminaire - MP

230VAC MAINS IN
Cable not supplied

Tunnel Ray Luminaire - ELV

24VDC IN
Cable not supplied

**MINIMAL RADIATED EMI**

**AMBIENT TEMP VS POWER**

**COLOUR TEMPERATURES**

<table>
<thead>
<tr>
<th>AMBER</th>
<th>1800K – 2700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARM WHITE</td>
<td>2700K – 3250K</td>
</tr>
<tr>
<td>NEUTRAL WHITE</td>
<td>3251K – 4250K</td>
</tr>
<tr>
<td>COOL WHITE</td>
<td>≥ 4251K</td>
</tr>
</tbody>
</table>

All colour temperatures are indicative. Some variation can occur.

**POLAR DISTRIBUTION**

**ORDERING EXAMPLE**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TYPE</th>
<th>COLOUR TEMP</th>
<th>OPTICS</th>
<th>SUPPLY OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNR</td>
<td>NLS</td>
<td>CWT</td>
<td>BW1</td>
<td>MP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mains Powered</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BW2</td>
<td>MP-WVR</td>
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<td></td>
<td></td>
<td></td>
<td>SY1</td>
<td>ELV</td>
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<td></td>
<td></td>
<td></td>
<td>Extra Low Voltage</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>AMB</td>
<td>EML</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Luminaire for Emergency Pack</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GRN</td>
<td>EML</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Luminaire for Emergency Pack</td>
</tr>
</tbody>
</table>

1 If SUPPLY OPTION is not specified, Standard Configuration Mains Powered will be supplied
If SUPPLY OPTION “EM” is specified without kit specification, KIT1 will be supplied

**TNR-EM KIT OPTIONS**

<table>
<thead>
<tr>
<th>KIT</th>
<th>UNIT SUPPLIED</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT1</td>
<td>EMP-724-036AL</td>
<td>Tunnel Ray Luminaire for Emergency Pack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emergency Pack Aluminium Enclosure</td>
</tr>
</tbody>
</table>

| KIT2| EMP-724-0305S | Tunnel Ray Luminaire for Emergency Pack |
|     |               | Emergency Pack Stainless Steel Enclosure |