



 COOLON

# TUNNEL RAY

62W LED Conveyor/Area Light

Robust and energy efficient replacement for conventional tunnel lights

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

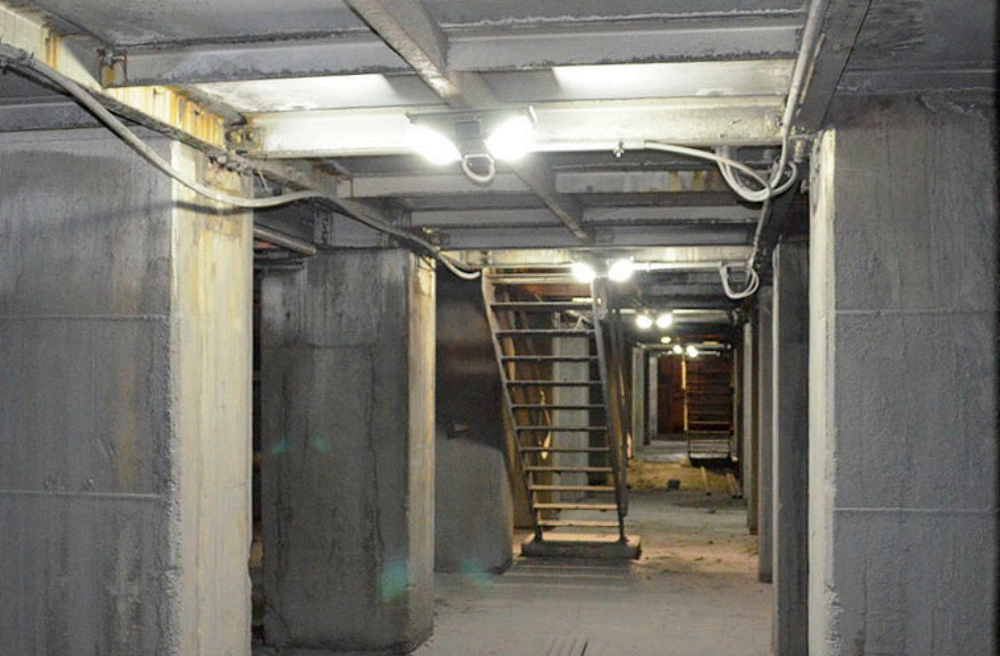
Built on the backbone of the multi-award-winning DLK, the Tunnel Ray is both lightweight and versatile with the flexibility to fit many different applications.

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

 DESIGNED &  
MANUFACTURED  
IN AUSTRALIA



## 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

## 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.



### 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.



### 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

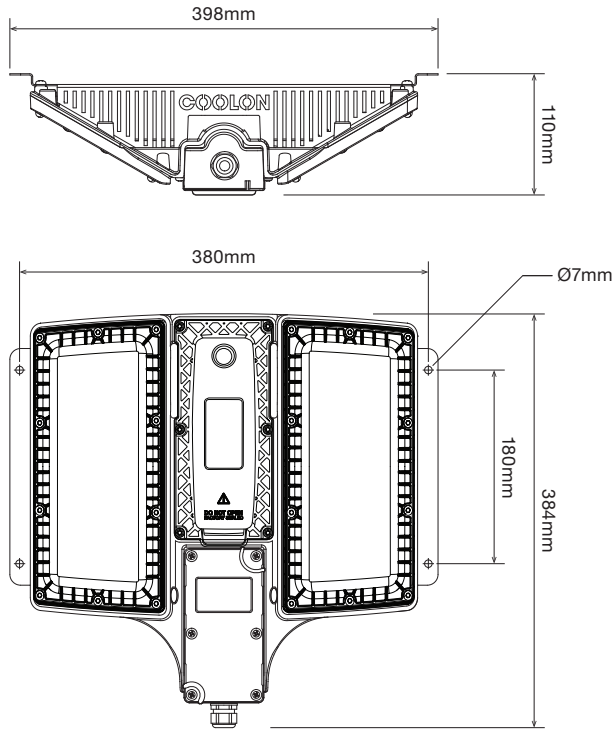
At Coolon we believe the lifetime of a luminaire is so much more than just the LED's. Coolon product lifetime takes the entire luminaire into consideration and each product is backed by a comprehensive warranty – that's the Coolon confidence.



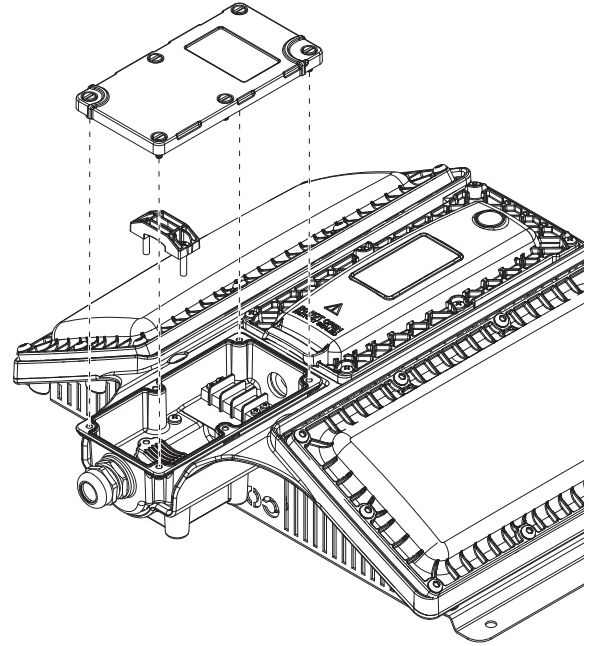
### PROUDLY MADE IN AUSTRALIA

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.

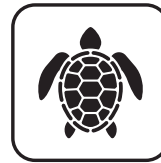
## DIMENSIONS



## EASY JUNCTION BOX ACCESS AND INSTALLATION



## TURTLE FRIENDLY OPTION



Tunnel Ray is available in turtle friendly Amber. In many coastal areas white light may not be permitted for use, as it is believed to be disrupting breeding cycles of certain species of sea turtles. Coolon has specifically designed a variation of Tunnel Ray in 595nm (nanometers) Amber that is in the region of their lowest visual sensitivity.

## TECHNICAL SPECIFICATIONS

| Product                                |                              | Tunnel Ray LED Conveyor / Area Light |  |
|--|------------------------------|--------------------------------------|--|
| Model                                  | TNR (MP)                     | TNR (ELV)                            |  |
| Optical Characteristics                |                              |                                      |  |
| Luminous Flux (Photometered)           | 5,257 – 7,066 lm             | 4,966 – 6,675 lm                     |  |
| CCT                                    | CWT / WWT / AMB / GRN / RED  |                                      |  |
| Electrical Characteristics (Luminaire) |                              |                                      |  |
| Power Consumption                      | 69W Typical                  | 62W Typical                          |  |
| Nominal Voltage                        | 230VAC                       | 24VDC                                |  |
| Voltage Range                          | 90 – 305VAC,<br>127 – 431VDC | 23 – 27VDC                           |  |
| Frequency Range                        | 47 – 63Hz                    | N/A                                  |  |
| Power Factor                           | >0.95 / 230VAC               | N/A                                  |  |
| Leakage Current                        | <0.75mA / 277VAC             | 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                     |

| Weight/Packaging     |                   |
|----------------------|-------------------|
| Luminaire Weight     | 5.1kg with Hood   |
| Bracket Weight       | 1.1kg SS Bracket  |
| Packaging Dimensions | 460 x 440 x 180mm |
| Packaging Weight     | 6.4kg (Standard)  |

| Warranty |  |
|----------|--|
| Warranty | 3 years warranty as standard.<br>5 years extended warranty optional. |

<sup>1</sup> Optical and electrical characteristics are measured using Cool White LEDs (CWT)

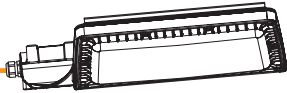
<sup>2</sup> Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behaviour may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior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



## WIRING CONFIGURATION

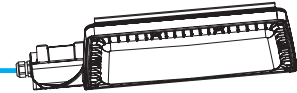
### Tunnel Ray Luminaire - MP

230VAC MAINS IN  
Cable not supplied

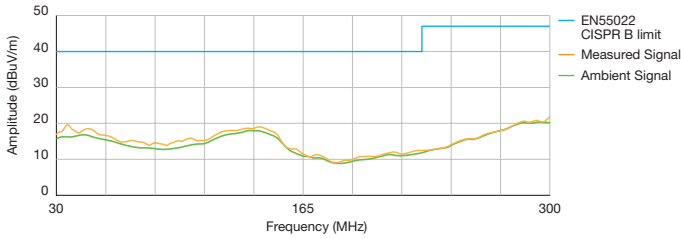


### Tunnel Ray Luminaire - ELV

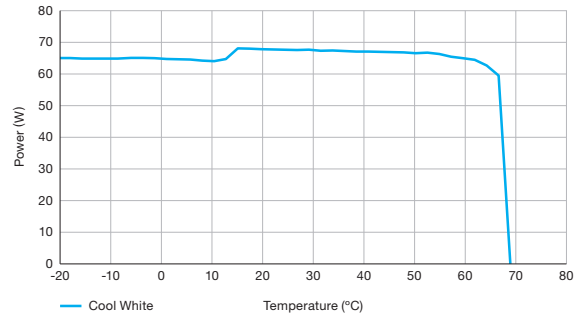
24VDC IN  
Cable not supplied



## MINIMAL RADIATED EMI



## AMBIENT TEMP VS POWER



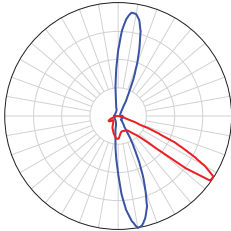
## COLOUR TEMPERATURES



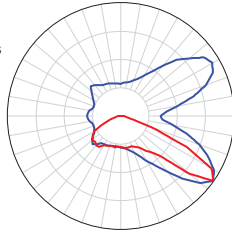
All colour temperatures are indicative. Some variation can occur.

## POLAR DISTRIBUTION

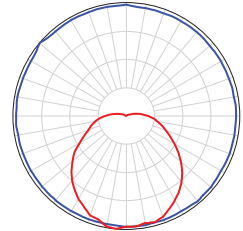
**BW1**  
Batwing  
Type 1 Optics



**BW3**  
Batwing  
Type 3 Optics



**SY1**  
Symmetrical  
Diffuser



## ORDERING EXAMPLE

**TNR - NLS - CWT - SY1 - MP<sup>1</sup>**

PRODUCT      TYPE      COLOUR TEMP      OPTICS      SUPPLY OPTION

| PRODUCT | TYPE                    | COLOUR TEMP    | OPTICS                     | SUPPLY OPTION                    |
|---------|-------------------------|----------------|----------------------------|----------------------------------|
| TNR     | NLS No Day Light Sensor | CWT Cool White | BW1 Batwing Type 1         | MP Mains Powered                 |
|         |                         | WWT Warm White | BW3 Batwing Type 3         | ELV Extra Low Voltage Luminaire  |
|         |                         | AMB Amber      | SY1 Symmetrical / Diffuser | EML Luminaire for Emergency Pack |
|         |                         | GRN Green      |                            |                                  |
|         |                         | RED Red        |                            |                                  |

<sup>1</sup> If SUPPLY OPTION is not specified, Standard Configuration Mains Powered will be supplied