



# 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





## 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.



### 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.

IP66

### 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.



### 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.

L70

### 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.

3  
YEARS

### 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.

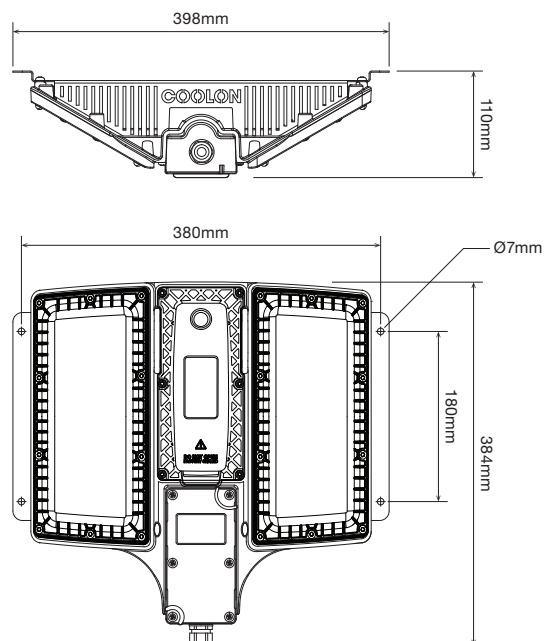


### PROUDLY MADE IN AUSTRALIA

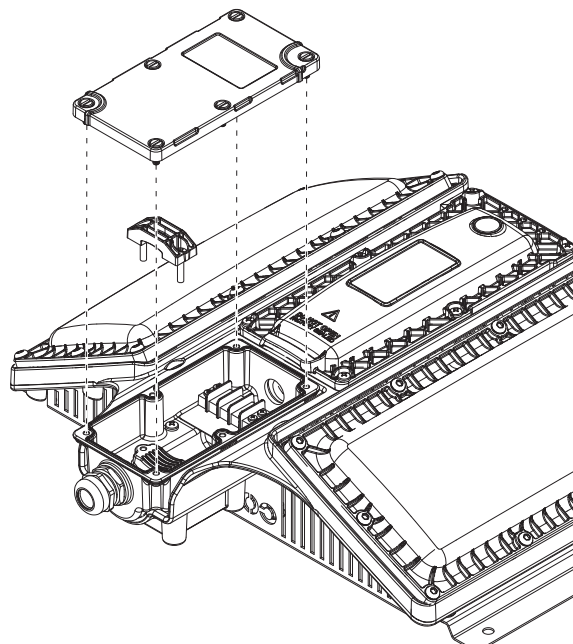
Our products are designed and manufactured in Australia. Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.



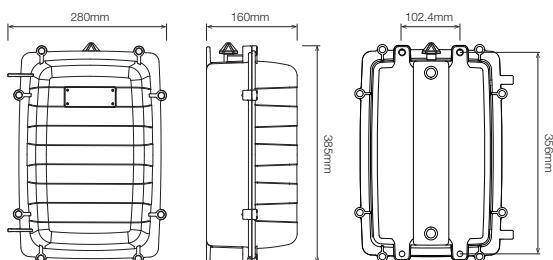
## DIMENSIONS



## EASY JUNCTION BOX ACCESS AND INSTALLATION



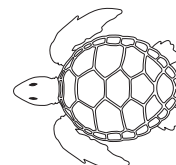
## EMERGENCY POWER PACK (WHERE APPLICABLE)



Tunnel Ray is versatile and can be backed with optional Coolon Emergency Pack. Emergency Tunnel Ray can be wired to be both maintained and non-maintained, eliminating the need for costly additional fittings. The Emergency Tunnel Ray will work for a minimum of 2 hours in case of power failure, far exceeding the requirements of Australian Standards.

For more detailed information on Coolon's Emergency Pack, and the range of Coolon's Emergency Backed LED luminaires, visit: [www.coolon.com.au](http://www.coolon.com.au)

## 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)	3,632 – 6,612 lm	
CCT	CWT / WWT / AMB / GRN / RED	
Electrical Characteristics (Luminaire)		
Power Consumption	62W Typical	62W Typical
Nominal Voltage	230VAC	24VDC
Voltage Range	90 – 305VAC, 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

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.

<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

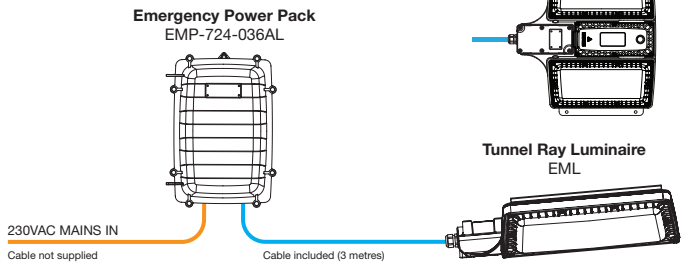
### Tunnel Ray Luminaire - MP



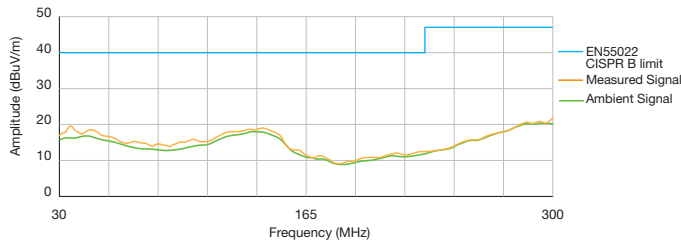
### Tunnel Ray Luminaire - ELV



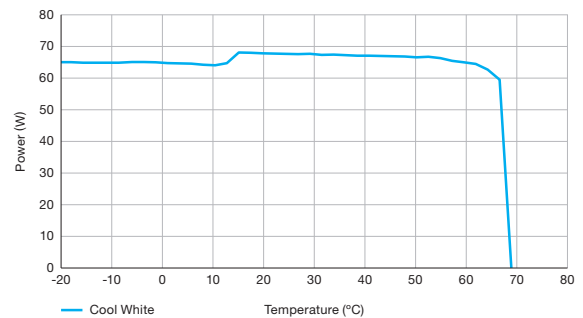
### TNR Luminaire - EM - KIT1



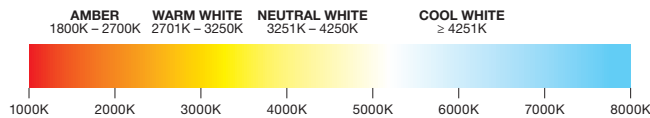
## MINIMAL RADIATED EMI



## AMBIENT TEMP VS POWER

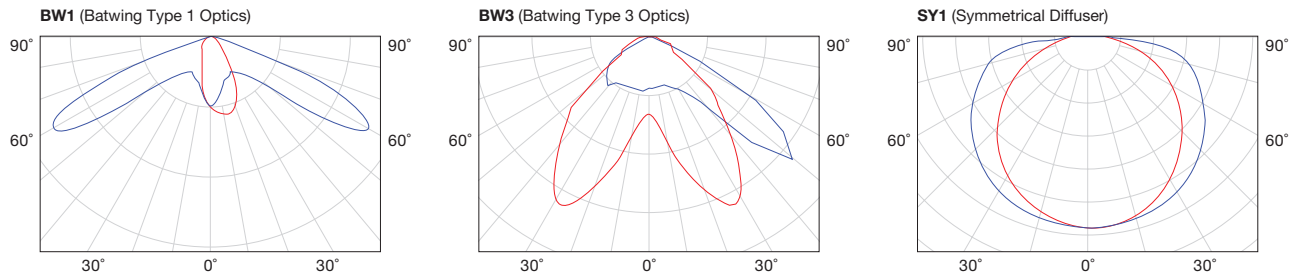


## COLOUR TEMPERATURES



All colour temperatures are indicative. Some variation can occur.

## POLAR DISTRIBUTION



## 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	CWT	BW1	MP
	No Day Light Sensor	Cool White	Batwing Type 1	Mains Powered
		WWT	BW3	ELV
		Warm White	Batwing Type 3	Extra Low Voltage Luminaire
		AMB	SY1	EML
		Amber	Symmetrical / Diffuser	Luminaire for Emergency Pack
		GRN		EM-KIT1
		Green		Kit with AL Emergency Pack
		RED		EM-KIT2
		Red		Kit with SS Emergency Pack

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

<sup>2</sup> If SUPPLY OPTION "EM" is specified without kit specification, KIT1 will be supplied

## TNR-EM KIT OPTIONS<sup>2</sup>

KIT	UNIT SUPPLIED	DESCRIPTION
KIT1	TNR - *** - *** - *** - EML	TNR Luminaire for Emergency Pack
	EMP-724-036AL	Emergency Pack Aluminium Enclosure
KIT2	TNR - *** - *** - *** - EML	TNR Luminaire for Emergency Pack
	EMP-724-093SS	Emergency Pack Stainless Steel Enclosure