



 COOLON

# AC2

20W LED Mining Lead Light

Purpose built for operation in harsh underground environments

The AC2 LED combines IP66 and IK09 impact ratings with support for a wide range of AC and DC voltages to make it a perfect replacement for commonly used low voltage fluorescent lead lights.

The use of the latest low glare, remote phosphor LED lighting technology makes it the ideal candidate for most underground mining applications.

#### Designed for use in:

- Switchboard / Switchroom
- Harsh Underground Lighting
- Local Area Lighting
- Workshop Lighting



**ELV SAFE**

#### EXTRA LOW VOLTAGE OPERATION

Our products operate on extra low voltage power. It is substantially safer to work with than conventional mains powered light sources.

**Voltage Range:** 23 – 35 VAC, 22 – 48 VDC







## Reliability, where it counts

AC2 LED is a robust alternative to conventionally found fluorescent lead lights. High IP rating ensures that the fitting can survive in the harshest environments. Powered by Low Voltage AC and DC range, AC2 LED is easily adoptable for many underground applications.

## Robust and virtually indestructible

The outer materials are corrosion resistant with a low surface temperature offering easy handling and maximum rigidity for all demanding applications.



### 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 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.

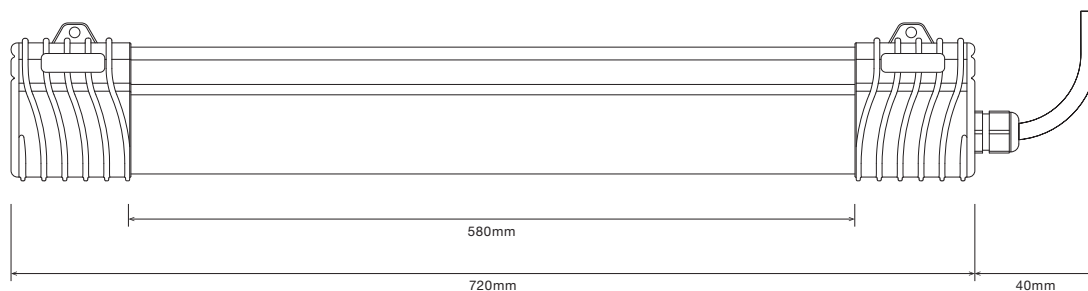


### PROUDLY MADE IN AUSTRALIA

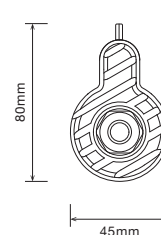
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

## DIMENSIONS & CONFIGURATIONS

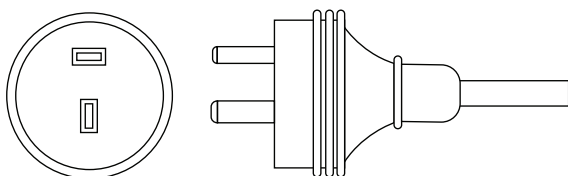
Front View



Side View



PLG32 - 492/32 VAC Plug



WR20S - 2 Core Cable Exposed

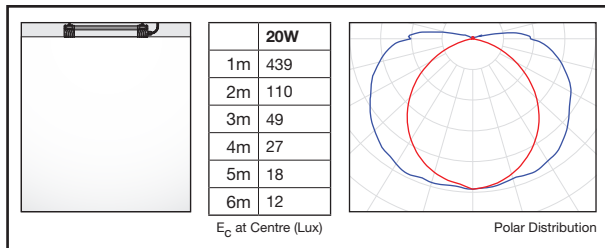


## TECHNICAL SPECIFICATIONS

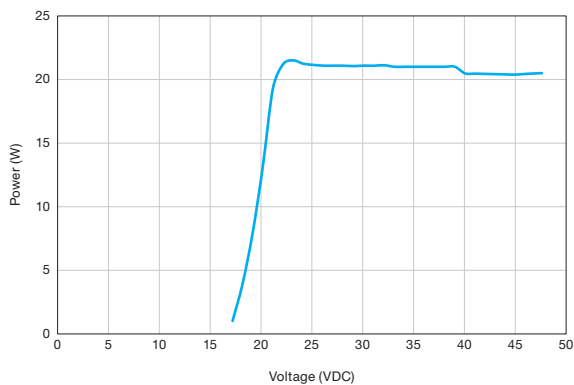
<b>Make/Model</b>	AC2 LED Mining Lead Light
Model	AC2
<b>Optical Characteristics</b>	
Luminous Flux (Photometered)	1,779 lm
CCT	NWT
CRI	>80
<b>Electrical Characteristics (Luminaire)</b>	
Power Consumption	20W
Nominal Voltage	24 VDC 30 VAC
Voltage Range	22 – 48 VDC 23 – 35 VAC 50Hz
Power Factor (AC supply)	0.5
Cable Diameter	7.5mm
Cable Length	3 Meters
<b>Environmental</b>	
IP Rating	IP66
Impact Rating	IK09
Operating Temp. Range	-20 to +45°C
Expected Lifespan	50,000 Hours to 70% Brightness
Material Composition (Body)	Polycarbonate
Material Composition (Diffuser)	Polycarbonate
<b>Weight/Packaging</b>	
Luminaire Weight	1.1kg
Packaging Dimension	1000 x 100 x 50mm
Packaging Weight	1.2kg
<b>Warranty</b>	
Warranty	3 years warranty as standard 5 years extended warranty optional

<sup>1</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.

## ILLUMINANCE AT DISTANCE

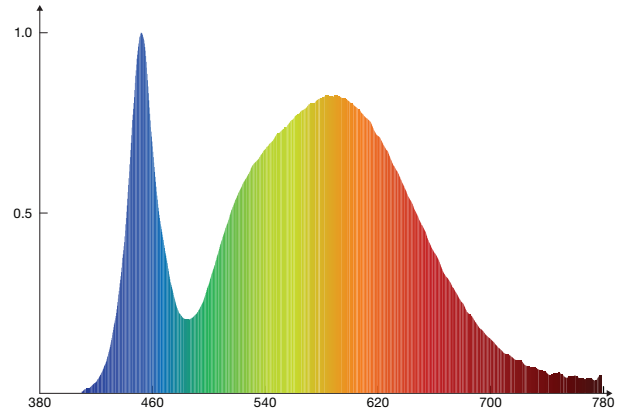


## SUPPLY VOLTAGE VS POWER <sup>1</sup>



<sup>1</sup> Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behavior may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior to commissioning.

## SPECTRAL DISTRIBUTION



CCT	4,047K
Colour Rendering Index	81.2
Efficacy	90.3lm / W
Power	20W
Luminous Flux (Spectrophotometry Result)	1,779lm

## ORDERING EXAMPLE

**AC2 - NWT - WR2OS**

PRODUCT COLOUR TEMP TERMINAL

PRODUCT	COLOUR TEMP	TERMINAL
AC2	NWT Neutral White	WR2OS 2 Core Cable Exposed
		PLG32 Fitted with 492/32 type Plug