



 COOLON

# AC2

18W LED Mining Lead Light

Portable work light LED luminaire, purpose built for operation in harsh environments.

Suitable for use as a reliable replacement of commonly used low voltage fluorescent lead lights.

A wide range of both AC and DC voltages combined with the robust and compact design make AC2 LED lights ideal for a variety of applications including underground mining and lighting of limited and confined spaces.

High IP and impact ratings of the AC2 LED, combined with the latest in low glare, remote phosphor LED lighting technology makes it the ideal candidate for most underground mining applications.

#### Designed for use in:

- Harsh Underground General Lighting
- General 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 of the environments. Powered by Low Voltage AC and DC range, AC2 LED is easily adoptable for many underground applications.



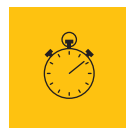
## Robust and virtually indestructible

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.



### 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.



### 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 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.

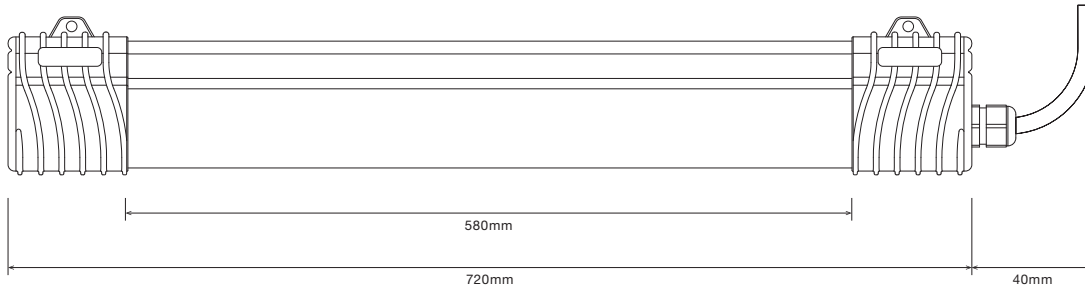


### PROUDLY MADE IN AUSTRALIA

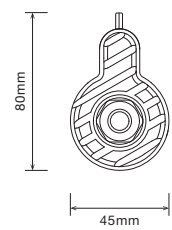
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

## DIMENSIONS & CONFIGURATIONS

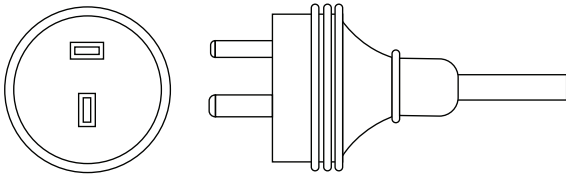
Front View



Side View



PLG32 - 492/32 VAC Plug



WR20S - 2 Core Cable Exposed



## TECHNICAL SPECIFICATIONS

### Make/Model

Model AC2

### Optical Characteristics

Luminous Flux (Photometered) 1785lm  
 CCT Cool White 5100 – 5500K  
 CRI >80

### Electrical Characteristics (Luminaire)

Power Consumption 18 – 20W Typical  
 Nominal Voltage 24 VDC  
 30 VAC  
 Voltage Range 23 – 50 VDC  
 23 – 35 VAC 50Hz  
 Power Factor (AC supply) 0.5  
 Cable Diameter 7.5mm  
 Cable Length 3 Meters

### Environmental

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

### Weight/Packaging

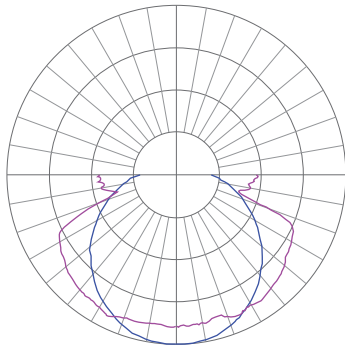
Luminaire Weight 1.1kg

### Warranty

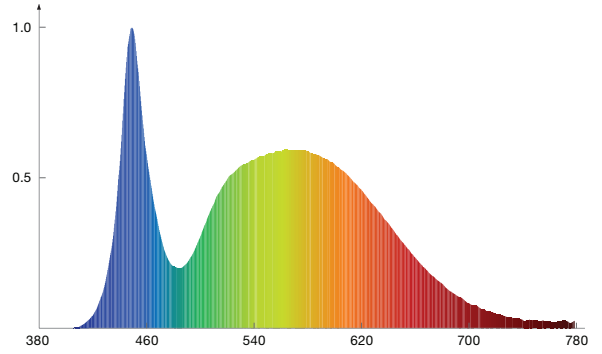
Warranty 3 years warranty as standard  
 5 years extended warranty optional

## POLAR DISTRIBUTION

ILLUMINANCE AT DISTANCE	
	LUX
1m	222
1.5m	122
2m	74
2.5m	49
3m	35
3.5m	26
4m	20

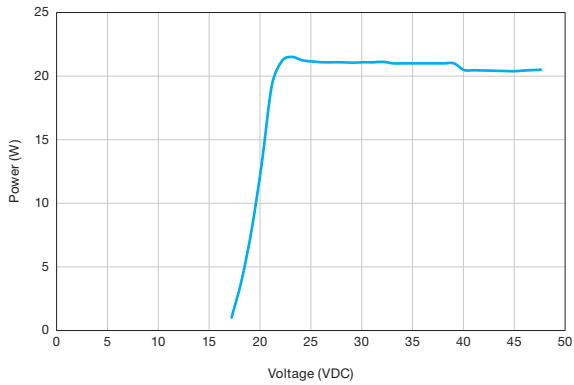


## SPECTRAL DISTRIBUTION



CCT	5200K
Rendering Ind	80.9
Flux	1785lm
Effi	87.5lm/w
Radiant	4656.6mW

## 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.

## ORDERING EXAMPLE

**AC2 - CWT - WR2OS**

PRODUCT                      COLOUR TEMP                      TERMINAL

PRODUCT	COLOUR TEMP	TERMINAL
AC2	CWT    Cool White	WR2OS    2 Core Cable Exposed
	WWT    Warm White	PLG32    Fitted with 492/32 type Plug