



 COOLON

CPUG Series

35W/50W LED Flood Light

Zero EMI machine work light designed for underground applications

CPUG Series is purpose engineered for applications that are highly sensitive to Electro Magnetic Emissions, typically produced by most LED luminaires.

CPUG Series produces NO EMI, it is virtually undetectable and is guaranteed to not cause any interference with vital communications and data logging equipment.

Designed and manufactured in Australia using only the highest quality components, the CPUG LED Luminaire Series is designed specifically for use in underground mining applications where reliability and performance is required.

Designed for use in:

- Underground Drill Rigs (Jumbos)
- Underground General Lighting
- Underground Haul Trucks
- Other EMI Sensitive Applications
- Underground Wheel Loaders (Boggers)

 DESIGNED &
MANUFACTURED
IN AUSTRALIA

Born to live underground

The CPUG LED Luminaire Series is purpose built for lighting installations on underground mining machines. All performance characteristics of the CPUG Series have been optimised for operation in poorly lit, humid and hot conditions of underground mining.

Zero EMI - no interruptions

Confined underground environments are particularly sensitive to Electro Magnetic Emissions. EMI effects are detrimental on all kinds of electronic communication, navigation and data logging equipment.

CPUG LED Series was engineered from the ground up to produce NO Electro Magnetic Interferences.



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.



UNRESTRICTED BURNING POSITION

Coolon's LED luminaires can be positioned and oriented in any desired way without affecting the lifespan of the product. This gives greater flexibility when it comes to aiming angles and orientation.



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.



EXTRA LOW VOLTAGE OPERATION

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

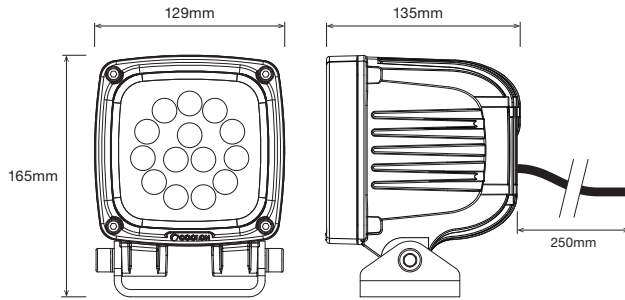


PROUDLY MADE IN AUSTRALIA

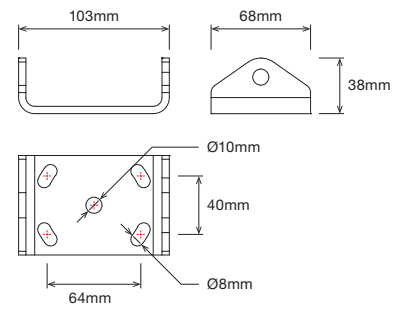
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

DIMENSIONS

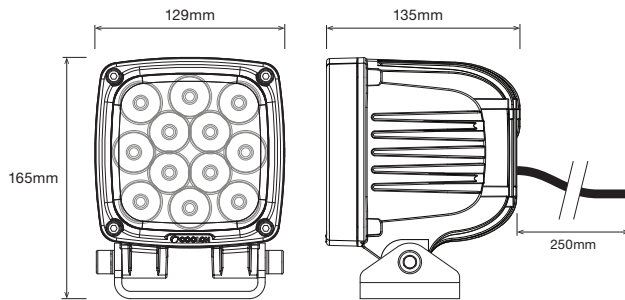
CP14UG Luminaire



Standard Bracket



CP12UG Luminaire



Optional Clip-on Cover

ACC-CP12-COVER
(available separately)

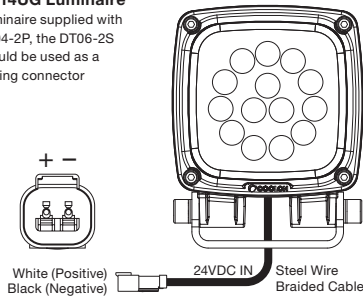
ACC-CP14-COVER
(available separately)



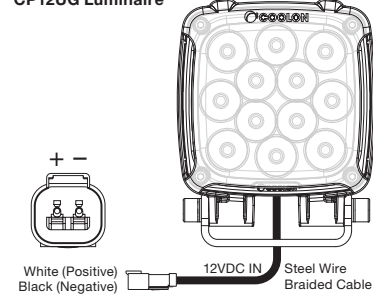
CONFIGURATION

CP14UG Luminaire

Luminaire supplied with DT04-2P, the DT06-2S should be used as a mating connector



CP12UG Luminaire



TECHNICAL SPECIFICATIONS

Product	CPXXUG LED Flood Light	
Model	CP14UG	CP12UG
Optical Characteristics		
Luminous Flux (Photometered)	2,525 – 2,818 lm	3,695 – 4,776 lm
CCT	CWT / WWT	
CRI	>70	
Electrical Characteristics (Luminaire)		
Power Consumption	35W	50W
Nominal Voltage	26VDC	12VDC
Voltage Range	23 – 28VDC	10 – 15VDC
Cable Type	UL2095, 16 AWG x 2C Braid PVC, UV Resistant with Deutsch DT04-2P Connector	
Cable Diameter	7.5mm	
Cable Length	250mm	

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)	LM6 Aluminium Alloy (<0.1% copper content)
Material Composition (Diffuser)	High Impact/Shock Proof - Grilamid TR
Material Composition (Bracket)	Stainless Steel
Mounting/Bracket Type	Standard
Angle Adjustment	Free aiming range -30° to +30°

Weight/Packaging	
Luminaire Weight	2.1kg
Bracket Weight	0.4kg (STB)
Packaging Dimensions	140 x 175 x 160mm
Packaging Weight	2.7kg

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

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

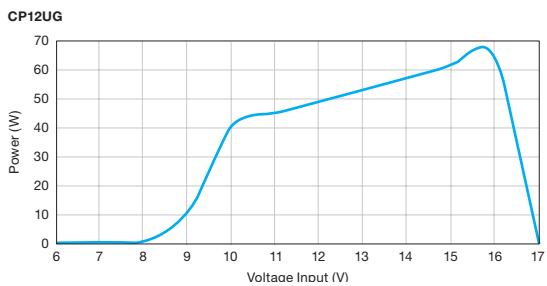
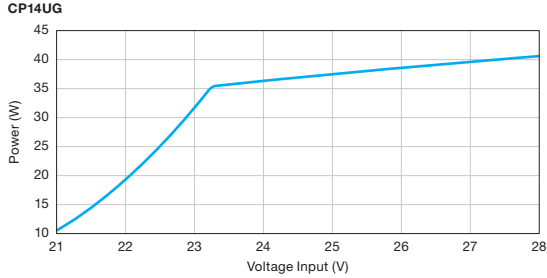
² Reading taken while test unit operating in steady state. Ambient temperature during testing is typically 25°C. Individual unit behaviour may differ due to electronic component tolerance and ambient conditions. Product parameters and application suitability shall be checked by the user prior to commissioning.

COLOUR TEMPERATURES

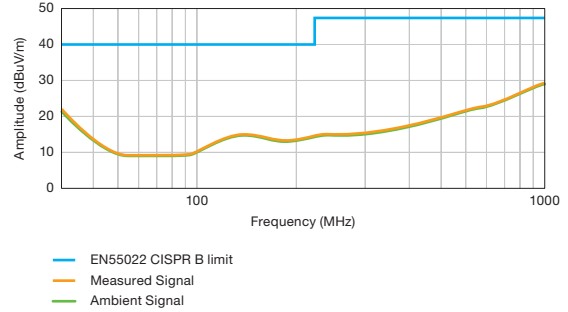


All colour temperatures are indicative. Some variation can occur.

SUPPLY VOLTAGE VS POWER ¹



MINIMAL RADIATED EMI ¹



¹Reading 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.

ILLUMINANCE AT DISTANCE

Optics Type	Distance (m)	CP14UG (Lux)	CP12UG (Lux)
NOP Extra Wide Optics <i>*Generally used for illumination below 5m</i>	2m	264	371
	4m	66	93
	6m	29	41
	8m	16	23
	10m	11	15
MEDIUM Beam Optics	2m	1,093	2,461
	4m	273	615
	6m	122	273
	8m	68	154
	10m	44	98
NARROW Beam Optics	2m	7,822	14,311
	4m	1,956	3,578
	6m	869	1,590
	8m	489	894
	10m	313	572
OVAL Beam Optics	2m	2,689	3,183
	4m	672	796
	6m	299	354
	8m	168	199
	10m	108	127

ORDERING EXAMPLE

CP14UG - CWT - NOP

PRODUCT COLOUR TEMP OPTICS

PRODUCT	COLOUR TEMP	OPTICS
CP14UG	CWT Cool White	NOP Extra Wide Optics
CP12UG	WWT Warm White	MEDIUM Medium Optics
		NARROW Narrow Optics
		OVAL Oval Optics

ASSOCIATED PRODUCTS

PART #	DESCRIPTION
ACC-CP12-COVER	Clip-on cover
ACC-CP14-COVER	Clip-on cover