



 COOLON

XBLADE™

480W/960W LED Flood Light

High performing flood light for large areas

Our most powerful and robust flood light that provides wider surface coverage without losing intensity or quality of light. Resistant to corrosion, impacts and vibration.

The XBLADE™ 480 is also available in Dark Sky compliant version.



Designed for use in:

- High Mast
- Stacker / Reclaimers
- Crushers
- Draglines
- Stock Piles
- Truck Parking
- Switching Yards
- Hard Stand Areas
- Loading Docks
- Ports/Wharf
- Security Perimeter
- Workshops
- ROM Pads
- Sports Grounds

 DESIGNED &
MANUFACTURED
IN AUSTRALIA

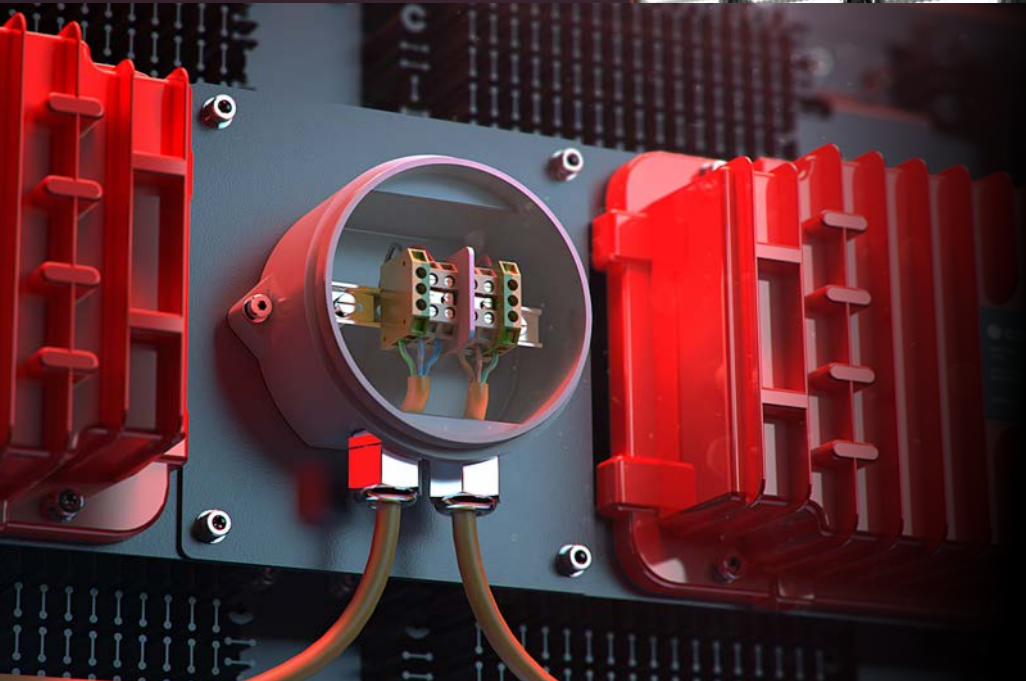
Built for application

The XBLADE™ Heavy-Duty LED Light has been designed specifically for safe and efficient installation and operation. A sturdy mainframe, in-built lifting handles and unique mounting bracket make this flood light easy to handle and quick to install.



Easy to install

The XBLADE™ Heavy-Duty LED Light is purpose-fitted with a quick-access mining-grade junction box that allows for easy in-line wire-in / wire-out connection.



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.



QUALITY WHITE LIGHT W/ HIGH CRI

This luminaire emits light with a spectrum closely resembling that of natural daylight with a relatively high colour rendering index (CRI) greater than 80, enabling excellent colour differentiation.

5
YEARS

5 YEARS FACTORY WARRANTY

Coolon luminaires are covered by a solid comprehensive 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.

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.



INDUSTRIAL GRADE FINISHINGS

A long-life luminaire deserves a long-life finish. We source the finest alloys and surface treatments to ensure the luminaire provides superior performance all year round in all weather conditions.

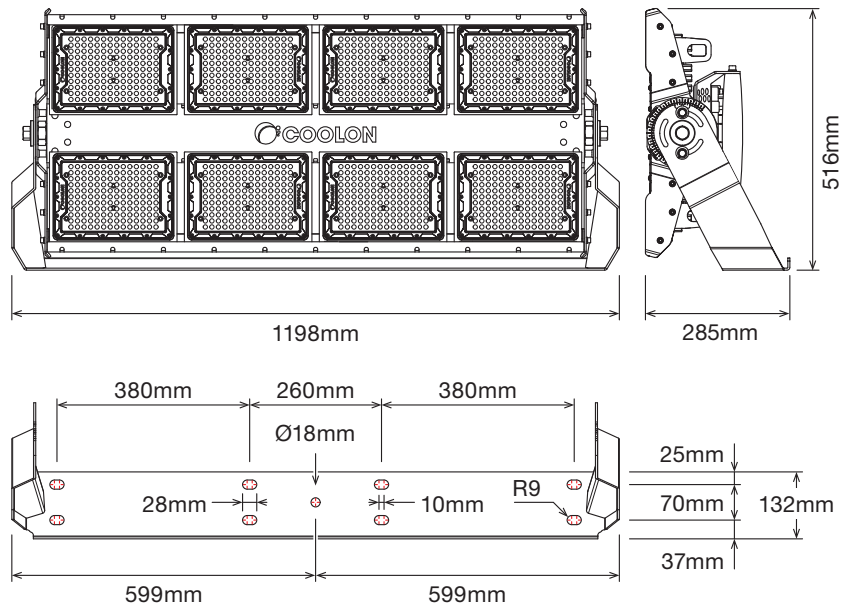


PROUDLY MADE IN AUSTRALIA

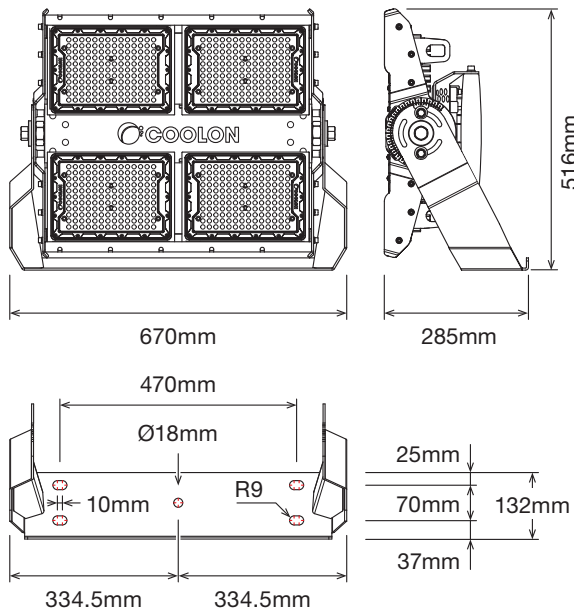
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

DIMENSIONS

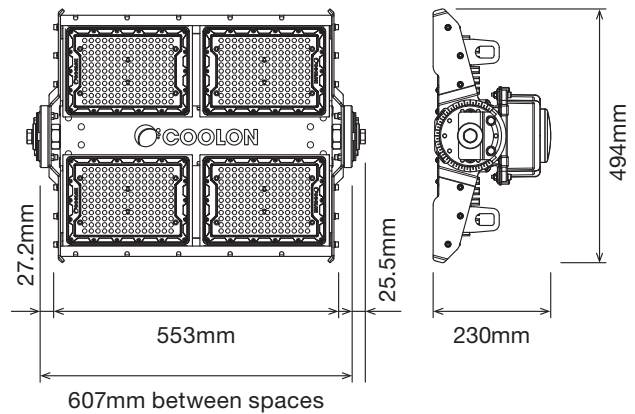
XBLADE™ 960



XBLADE™ 480



XBLADE™ 480 with Dragline Mounting Bracket



DARK SKY COMPLIANCE

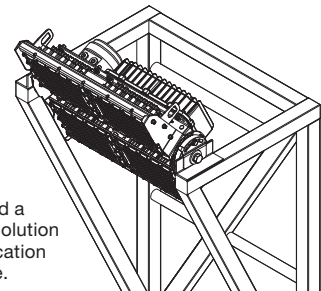
Lighting pollution is a negative of today's technology, disturbing nocturnal animals, affecting human circadian rhythms and severely impacting astronomy observatories. The XBLADE™ 480 is available in Dark Sky compliant configuration that features a specifically designed shield in a bid to reduce light pollution.



DRAGLINE MOUNT BRACKET



For draglines utilising the M.I.D. MK1763-A bracket, we've designed a customised mounting solution that requires no modification to the existing structure.



TECHNICAL SPECIFICATIONS

Product	XBLADE LED Flood Light	
Model	XBLADE™ 960	XBLADE™ 480

Optical Characteristics

Luminous Flux (Photometered)	117,067 – 128,228 lm	58,534 – 64,114 lm
CCT	CWT / NWT / WWT / AMB	
CRI	>70 excluding amber	

Electrical Characteristics (MP-WVR Luminaire)

Power Consumption	960W	480W
Nominal Voltage	230VAC	
Voltage Range	180 – 440VAC / 254 – 550VDC	
Frequency Range (AC)	47 – 63Hz	
Power Factor	≥0.98 / 230VAC	
Surge Protection	2kV line-line, 4kV line-earth	

Electrical Characteristics (RPS Luminaire)

Power Consumption	960W	480W
Voltage Input	2x 170 ± 10 VDC	170 ± 10 VDC
Cable Extension	Distance between the power supply and luminaire can be extended up to 100m using 1.5mm² cable.	

Electrical Characteristics (RPS230 Power Supply)

Model Part Number	PWR-CLN-600-CC2800-381AL-MP230-XBLADE
Voltage Range	100 – 277VAC / 127 – 250VDC
Frequency Range	47 – 63Hz
Power Factor	0.95
Leakage Current	<0.7mA IEC 60598-1; 230V / 60Hz; Grounding effectively
Surge Protection	6kV line-line, 10kV line-earth

Electrical Characteristics (RPS415 Power Supply)

Model Part Number	PWR-CLN-600-CC2800-381AL-MP415-XBLADE
Voltage Range	249 – 440VAC / 352 – 500VDC
Frequency Range	47 – 63Hz
Power Factor	0.95
Leakage Current	<0.7mA IEC 60598-1; 230V / 60Hz; Grounding effectively
Surge Protection	6kV line-line, 10kV line-earth

Inrush and Leakage Currents ^{2 3 4}

Product	480-MP-WVR	480-RPS230	960-MP-WVR	960-RPS230
Peak Inrush Current (A) @230	12.4	10.2	24.8	20.4
twidth (ms)	2.2	3.8	2.2	3.8
I²t (A²s)	0.38	0.44	1.52	1.76
Leakage Current	< 1.5 @ 230V	< 0.7 @ 230V	< 3 @ 230V	< 1.4 @ 230V

Maximum number of luminaires per MCB @ 230V ⁵

	B16	C16	D16
	4	5	5
	4	5	5
	2	2	2

Sail Area	XBLADE™ 960	XBLADE™ 480
Vertical Orientation	MP/ELV 0.550m² (approx.)	0.290m² (approx.)
Horizontal Orientation	MP 0.245m² (approx.)	0.140m² (approx.)
	ELV 0.195m² (approx.)	0.113m² (approx.)

Environmental

IP Rating	IP66
IK Rating	IK09
Operating Temp. Range	-20°C to +50°C
Thermal Management Type	Active / Continuous
Expected Lifespan	50,000 Hours to 70% Brightness
Material Composition (Body)	High Purity Cold Forged Aluminium
Material Composition (Optics)	PC
Material Composition (Bracket)	Stainless Steel 316

Weight/Packaging

Luminaire Weight (MP-WVR) (excluding bracket weight)	34kg	19.1kg
Luminaire Weight (RPS) (excluding bracket weight)	25kg	14.6kg
Bracket Weight	9kg	6.7kg
Luminaire Dimensions	W 1093mm H 495mm D 235mm	W 670mm H 495mm D 235mm
Packaging Dimensions	W 1260mm H 560mm D 340mm	W 710mm H 560mm D 310mm
Packaged Weight (MP-WVR)	50kg	30kg
Packaged Weight (RPS)	47kg	29.5kg

Weight / Packaging

	PWR-CLN-600-CC2800-381AL-MP230-XBLADE
Power Supply Weight	7.1kg
Packaging Dimensions	W 350mm H 130mm D 230mm
Packaged Weight	7.4kg

Weight / Packaging

	PWR-CLN-600-CC2800-381AL-MP415-XBLADE
Power Supply Weight	7.1kg
Packaging Dimensions	W 350mm H 130mm D 230mm
Packaged Weight	7.4kg

Warranty

Warranty	5 years warranty as standard
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¹ Optical and electrical characteristics are measured using Cool White LEDs (CWT)

² Note: At 230VAC input, 25°C cold start, 10%lpk-10%lpk.

³ 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.

⁴ Number of Luminaires is subject to relative MCB properties, assuming a 30mA leakage current limit and MCB steady state current load not exceeding 60%, 70% and 80% for the B, C, D type MCB respectfully.

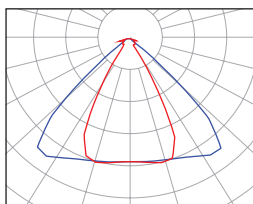
⁵ Maximum Number of Luminaires per MCB @230 VAC Based on the Operating Current of the Variant.

ILLUMINANCE AT DISTANCE

OVAL Beam Optics 60° x 100°

	480W	960W
4m	2417	4835
8m	604	1209
12m	267	537
16m	151	302
20m	97	193

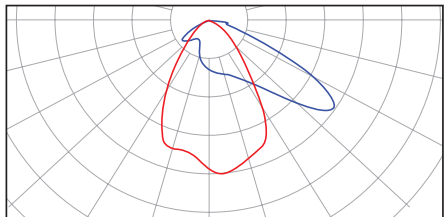
E_c at Centre (Lux)



Polar Distribution

— C0 - C180 — C90 - C270

AS4 Asymmetric Type 4 Optic



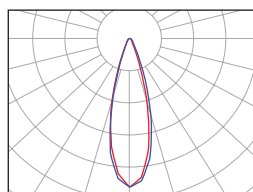
Polar Distribution

— V55 — H5

MEDIUM Beam Optics 30°

	480W	960W
4m	9517	19035
8m	2379	4759
12m	1057	2115
16m	595	1190
20m	381	761

E_c at Centre (Lux)

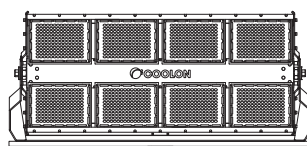


Polar Distribution

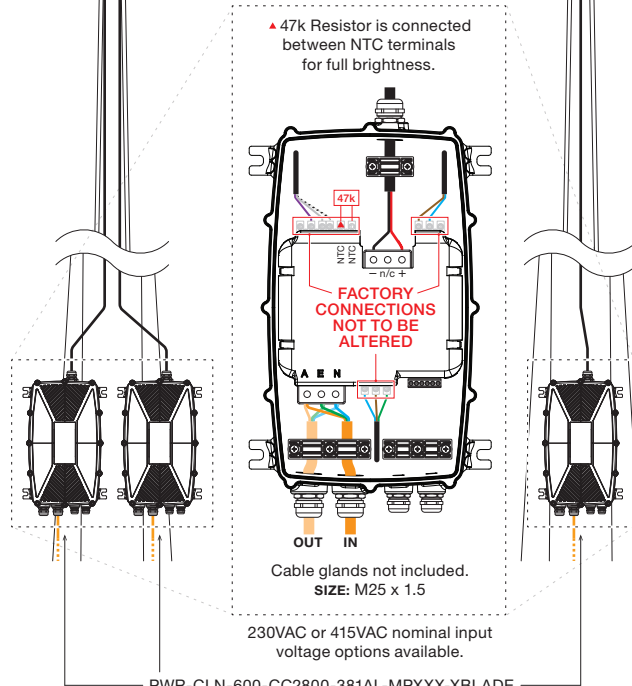
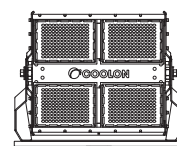
— C0 - C180 — C90 - C270

REMOTE POWER SUPPLY CONFIGURATION

XBLADE-960-XXX-XXX-RPSXXX
XBLADE-960-***-***-DC



XBLADE-480-XXX-XXX-RPSXXX
XBLADE-480-***-***-DC



Distance between the power supply and luminaire can be extended up to 100 metres using 1.5mm² cable.

ORDERING EXAMPLE

XBLADE - 960 - CWT - OVAL - MP-WVR

PRODUCT

TYPE

COLOUR TEMP

OPTICS

SUPPLY OPTION

PRODUCT	TYPE	COLOUR TEMP	OPTICS	SUPPLY OPTION	EXTRA OPTIONS
XBLADE™	960	CWT Cool White	OVAL Oval Optics	MP-WVR Wide Voltage Range	DS Dark Sky Hood ²
	480	NWT Neutral White	MEDIUM Medium Optics	RPS230 ¹ Remote Power Supply, 230VAC nominal input voltage	DLM Dragline Mount Bracket ³
		WWT Warm White	AS4 Asymmetric Type 4 Optic	RPS415 ¹ Remote Power Supply, 415VAC nominal input voltage	MPB Mobile Plant Bracket ³
	AMB Amber				

¹ Refer to KIT OPTIONS for details

² Dark Sky Hood (DS) only available for XBLADE™ 480 Warm White LEDs (WWT) and Asymmetric Type 4 Optics (AS4)

³ Dragline Mount Bracket / Mobile Plant Bracket only available for XBLADE™ 480

KIT OPTIONS

KIT	PART #	DESCRIPTION
RPS230	XBLADE-***-***-DC	XBLADE™ Luminaire, Low Voltage DC Supply**
	PWR-CLN-600-CC2800-381AL-MP230-XBLADE*	Coolon Industrial Power Supply 600W IP66, 2.8A constant current, 230VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure, for use with XBLADE-RPS luminaire.
RPS415	XBLADE-***-***-DC	XBLADE™ Luminaire, Low Voltage DC Supply**
	PWR-CLN-600-CC2800-381AL-MP415-XBLADE*	Coolon Industrial Power Supply 600W IP66, 2.8A constant current, 415VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure, for use with XBLADE-RPS luminaire.

* KITS using AMB will use PWR-CLN-480-CC3400-381AL-MP230-XBLADE / PWR-CLN-480-CC3400-381AL-MP415-XBLADE

** Distance between the power supply and luminaire can be extended up to 100 metres using 1.5mm² cable.