

# ©COOLON

470W/320W High Tower LED Flood Light

High performance flood light designed specifically for high mast lighting towers

The high lumen output and narrow beam optics of the the HT66 allows a single tower to iluminate extremely large areas. The power supply unit can be positioned up to 50m from the luminaire for easy maintenance.

Designed and manufactured in Australia using only the highest quality components, the HT66 LED luminaire is designed specifically for industrial applications where reliability and performance are paramount.

#### Designed for use in:

- Lighting Towers
- Flood Lighting
- Crushers
- Area Lighting
- Large Open Spaces
- Processing Plants
- **ROM Bins**
- Switching Yard
- Warehouses
- Workshops





## Extreme Remote Operation

Revolutionary power management allowing for up to 50 metres of separation between power supply and luminaire with minimal system loses.



#### **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.



#### **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.



#### **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.



#### **EXTREME REMOTE OPERATION**

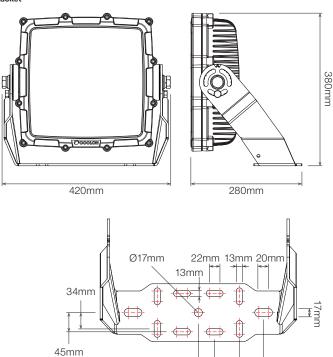
Revolutionary power management allowing for up to 50 metres of separation between power supply and luminaire with minimal system loses.



#### **PROUDLY MADE IN AUSTRALIA**

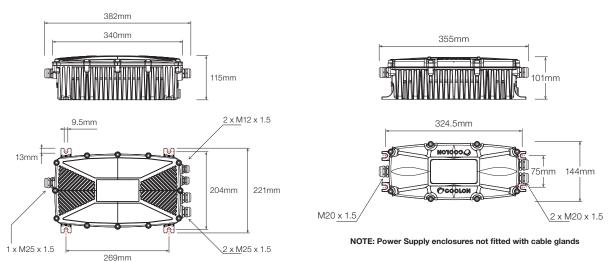
Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

#### HT66 Luminaire with Fixed Plant Bracket



Remote Power Supply - PWR-CLN-600-CC2800-381AL-MPXXX

Remote Power Supply - PWR-CLN-320-CC1750-281AL-MP



34mm 85.5mm 136mm

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#### TECHNICAL SPECIFICATIONS

Product

Model	H100-470	H100-320
Optical Characteristics		
Luminous Flux (Photometered)	43,072 – 51,664 lm <sup>1</sup>	32,562 – 39,056 lm <sup>1</sup>
CCT	AMB / WWT / NWT / CW	
CRI	>70 excluding amber	

High Tower LED Flood Light

#### Electrical Characteristics (Luminaire & Power Supply)

•		
Typical Power Consumption	470W	320W
Max Power Consumption (Cold Start) <sup>2</sup>	560W	340W
Cable Type		WG x 2C + 14AWG x 2C, Braid lle, PVC Insulation, UV Resistant
Cable Diameter	8.5mm	
Luminaire Cable Length	2m	
Cable Extension	Distance between the power supply and luminaire can be extended up to 50 metres using the recommended extension cable.  See ACCESSORIES section for details.	

#### Inrush and Leakage Currents 345

Peak Inrush Current (A) @230V	10.8	11.4
Duration - twitdth (ms)	4	2.2
I²t (A²S)	0.52	0.32
Leakage Current (mA)	<0.75mA @ 230V / 60Hz	<0.75mA @ 230V / 60Hz

#### Maximum number of luminaires per MCB @ 230V

B16	3	5
C16	4	7
D16	5	8

#### Electrical Characteristics (230VAC Power Supply for HT66 470W unit)

Model Part Number	PWR-CLN-600-CC2800-381AL-MP230
Voltage Range	90 – 305VAC / 127 – 250VDC
Frequency Range	47 – 63Hz
Power Factor	0.95
Leakage Current	<0.75 mA IEC 60598-1; 240VAC/ 60Hz; Grounding effectively
Surge Protection	6kV line-line, 10kV line-earth

#### Electrical Characteristics (415VAC Power Supply for HT66 470W unit)

Model Part Number	PWR-CLN-600-CC2800-381AL-MP415
Voltage Range	249 - 528VAC / 352 - 500VDC
Frequency Range	47 – 63Hz
Power Factor	0.95
Leakage Current	<0.75 mA IEC 60598-1; 240VAC/ 60Hz; Grounding effectively
Surge Protection	6kV line-line, 10kV line-earth

#### Electrical Characteristics (Power Supply for HT66 320W unit)

	, ,,,,	,
Model Part Number	PWR-CLN-320-CC1750	-281AL-MP
Voltage Range	180 – 440VAC / 254 – 55	
Frequency Range	47 – 63Hz	
Power Factor	>0.95 / 230VAC	
Leakage Current	<0.75mA / 440VAC	

Vertical Orientation	0.123m <sup>2</sup> (approx.)
Horizontal Orientation	0.077m <sup>2</sup> (approx.)
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 (Optics)	PMMA
Material Composition (Bracket)	Stainless Steel 316
Material Composition (Cover)	Tempered Glass
Angle Adjustment	360° Rotation
Weight/Packaging	HT66
Luminaire Weight	12kg
Bracket Weight	3kg
Packaging Dimensions	<b>W</b> 560mm <b>H</b> 440mm <b>D</b> 310mm
Packaged Weight	16kg
Weight/Packaging	PWR-CLN-600-CC2800-381AL-MPXXX
Power Supply Weight	7.1kg
Packaging Dimensions	<b>W</b> 350mm <b>H</b> 130mm <b>D</b> 230mm
Packaged Weight	7.4kg
	PWR-CLN-320-CC1750-281AL-MP
Weight/Packaging	1 W11-0LIN-020-001730-201AL-WII
Weight/Packaging Power Supply Weight	5kg

5.2kg

5 years warranty as standard

Optical and electrical characteristics are measured using Neutral White LEDs (NWT)

<sup>5</sup> 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.



Packaged Weight

Warranty Warranty

<sup>&</sup>lt;sup>1</sup> Luminous Flux (Photometered) excludes Amber.

 $<sup>^{\</sup>rm 2}$  Power consumption ramps down as the luminaire approaches steady state work conditions.

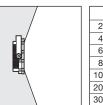
 $<sup>^{\</sup>rm 3}$  Note: At 230VAC input, 25°C cold start, 10%lpk-10%lpk.

<sup>4</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.

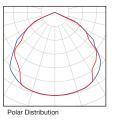
#### ILLUMINANCE AT DISTANCE

#### NOP Extra Wide Beam

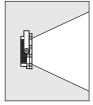
\*Generally used for illumination below 5m



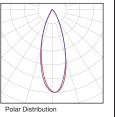
	320W	470W
2m	2,971	3,930
4m	743	982
6m	330	437
8m	186	246
10m	119	157
20m	30	39
30m	13	17
E <sub>C</sub> at Centre (Lux)		



#### **MEDIUM** Beam Optics

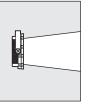


	320W	470W
2m	19,481	25,769
4m	4,870	6,442
6m	2,165	2,863
8m	1,218	1,611
10m	779	1,031
20m	195	258
30m	87	115
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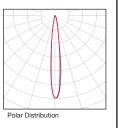


E<sub>C</sub> at Centre (Lux)

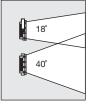
**NARROW** Beam Optics



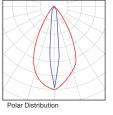
	320W	470W
2m	112,960	149,423
4m	28,240	37,356
6m	12,551	16,603
8m	7,060	9,339
10m	4,518	5,977
20m	1,130	1,494
30m	502	664
E <sub>C</sub> at Centre (Lux)		



**OVAL** Beam Optics



	320W	470W
2m	30,204	39,953
4m	7,551	9,988
6m	3,356	4,439
8m	1,888	2,439
10m	1,208	1,598
20m	302	400
30m	134	178
E at Contro (Lux)		



### ORDERING EXAMPLE

#### 470 - NWT - NARROW - RPS230<sup>2</sup>

PRODUCT POWER COLOUR TEMPERATURE OPTICS SUPPLY OPTION PRODUCT **POWER COLOUR TEMPERATURE** OPTICS SUPPLY OPTION<sup>1</sup> NOP Extra Wide Beam RPS230 Remote Power Supply, 230VAC nominal input voltage HT66 470 470W Warm White NWT Neutral White NARROW Narrow Beam RPS415 Remote Power Supply, 415VAC nominal input voltage CWT Cool White MEDIUM Medium Beam Oval Beam

#### HT66 -320 **NWT** NARROW -RPS<sup>3</sup>

PRODUCT POWER COLOUR TEMPERATURE OPTICS SUPPLY OPTION

PRODUCT	PRODUCT POWER		COLOUR TEMPERATURE		OPTICS		SUPPLY	SUPPLY OPTION <sup>2</sup>	
HT66	320 32	20W	WWT	Warm White	NOP	Extra Wide Beam	RPS	Remote Power Supply, for 320W unit	
			NWT	Neutral White	NARROW	Narrow Beam			
			CWT	Cool White	MEDIUM	Medium Beam			
			AMD	Ambor	OVAL	Oval Boom			

#### ASSOCIATED PRODUCTS

KIT	PART #	DESCRIPTION		
RPS230 <sup>2</sup>	HT66-***-DC	HT66 Luminaire, 470W, Low Voltage		
	PWR-CLN-600-CC2800-381AL-MP230	Coolon Industrial Power Supply 600W IP66, 2.8A constant current, 230VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure		
RPS415 <sup>2</sup>	HT66-***-DC	HT66 Luminaire, 470W, Low Voltage		
	PWR-CLN-600-CC2800-381AL-MP415	Coolon Industrial Power Supply 600W IP66, 2.8A constant current, 415VAC nominal input voltage, 10kV protection in 381 Aluminium Enclosure		
RPS <sup>3</sup>	HT66-***-***-DC	HT66 Luminaire, 320W, Low Voltage		
	PWR-CLN-320-CC1750-281AL-MP	Coolon Industrial Power Supply 320W IP66, 1.75A constant current, wide input voltage range, in 281 Aluminium Enclosure		

#### $^{2}$ If SUPPLY OPTION is not specified when ordering HT66-470-...-RPS then the RPS230 kit shall be supplied.

#### ACCESSORIES

PART NUMBER	DESCRIPTION
CBL-2C142C20-BKC-20	Cable, 2C*14AWG, 2C*20AWG, Red, Black, White and Blue Conductors, Braid Shielded Cable, Black Circular Jacket, 105°C 300V PVC/PVC, 8.5mm OD, 20 meters
CBL-2C142C20-BKC-30	Cable, 2C*14AWG, 2C*20AWG, Red, Black, White and Blue Conductors, Braid Shielded Cable, Black Circular Jacket, 105°C 300V PVC/PVC, 8.5mm OD, 30 meters
CBL-2C142C20-BKC-40	Cable, 2C*14AWG, 2C*20AWG, Red, Black, White and Blue Conductors, Braid Shielded Cable, Black Circular Jacket, 105°C 300V PVC/PVC, 8.5mm OD, 40 meters
CBL-2C142C20-BKC-50	Cable, 2C*14AWG, 2C*20AWG, Red, Black, White and Blue Conductors, Braid Shielded Cable, Black Circular Jacket, 105°C 300V PVC/PVC, 8.5mm OD, 50 meters

