



 **COOLON**

# DLK2

62W LED Conveyor/Area Light

Easy to install, highly reliable conveyor light

DLK2 offers the most robust and energy-efficient way of illuminating industrial conveyors, platforms and walkways. Capable of delivering the required minimum of 40 lux, even when lights are spaced up to 12m apart, and operating for years with next to no ongoing maintenance throughout all of the fixed plant infrastructure.

Also available in application-specific versions of Wildlife & Turtle Friendly Amber and Dark Sky Compliant.

#### Designed for use in:

- Conveyors
- Walkways
- Stairwells
- Stacker / Reclaimers
- Pedestrian Access Ways
- Campsite Area Lighting
- General Area Lighting
- Mining Processing Plant
- Tunnels
- Bulkheads
- Material Washing and Crushing





## Lowest cost of installation

The DLK2 is so easy to install it can be done in minutes, without the need of any specialized tools. Simply open the hatch, connect the cable, tighten the gland, close the hatch.

The DLK2 is made to cut costs; even before it is ever turned on.

## Dark Sky Compliance

Lighting pollution is viewed as a negative product of most modern around-the-clock mining operations. It disturbs nocturnal animals, affects human circadian rhythms and severely impacts astronomy observatories.

The DLK2 is available in Dark Sky compliant configuration that features a specially designed hood as well as finetuned light spectrum designed to control the effects of light pollution.



### 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.



### 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.



### 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.



### 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.

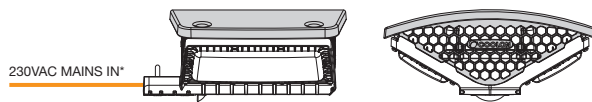


### PROUDLY MADE IN AUSTRALIA

Our products are designed and manufactured 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.

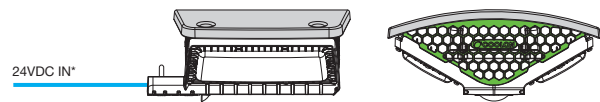
## WIRING CONFIGURATION

### DLK2 / EMDLK2 Luminaire - MP Grey Grill



\* Cable not included

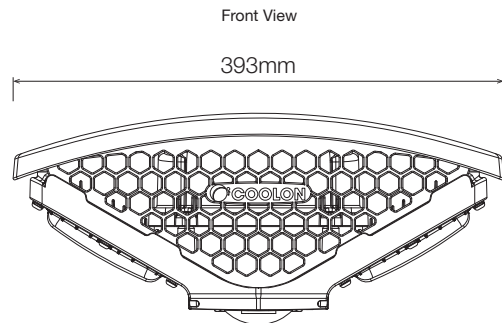
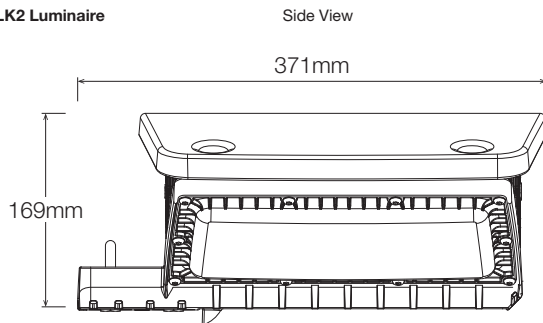
### DLK2 Luminaire - ELV Green Grill



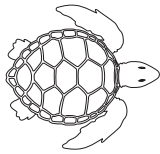
\* Cable not included

## DIMENSIONS

### DLK2 Luminaire



## TURTLE FRIENDLY OPTION



The DLK2 is available in turtle friendly Amber. In many coastal areas white light may not be permitted for use, as it is believed to be disrupting breeding cycles of certain species of sea turtles.

Coolon has specifically designed a variation of the DLK2 in 595nm (nanometers) Amber that is in the region of their lowest visual sensitivity.

## TECHNICAL SPECIFICATIONS

Product	DLK2 LED Conveyor / Area Light	
Model	DLK2 Mains Powered (MP)	DLK2 Low Voltage (ELV)
<b>Optical Characteristics</b>		
Luminous Flux (Photometered) *	3,020 – 5,000 lm	3,632 – 6,612 lm
CCT	CWT / WWT / AMB / GRN	CWT / WWT / AMB / GRN
CRI	>70 excluding amber and green	
<b>Electrical Characteristics (Luminaire)</b>		
Power Consumption	62W Typical	62W Typical
Nominal Voltage	230VAC	24VDC
Voltage Range	90 – 305VAC, 127 – 431VDC	23 – 27VDC
Frequency Range	47 – 63Hz	N/A
Power Factor	>0.95 / 230VAC	N/A
Leakage Current	<0.75mA / 277VAC	N/A
<b>Environmental</b>		
IP Rating	IP66	
Impact Rating	IK09	
Salt Spray Tested	Yes	
Operating Temp. Range	-10 to +50°C	-10 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)	Polycarbonate	
Material Composition (Cover)	Polycarbonate	
Mounting/Bracket Type	U-Bolt Spigot Mount OD 32 – 44 mm	
Cable Gland	M20 x 1.5 SS316	
Cable Ø Entry Range	7 – 13mm	

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

\*\* UL / cUL listing only applies to MP version

<sup>2</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.

### Weight/Packaging

Luminaire Weight	5.9kg	5.9kg
Packaging Dimensions (DLK2)	460 x 440 x 180mm	
Packaged Weight	6.9kg	6.9kg

### Compliance (Safety Standards)

AS/NZS 60598.1	Luminaires - General Requirements and Tests
AS/NZS 60598.2.1	Luminaires - Particular requirements - Fixed general purpose luminaires
UL 1598 and CSA C22.2 No. 250.0-08 **	Luminaires
UL 8750 **	Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products
CSA C22.2 No. 250.13-14 **	Power Supplies with Extra-Low-Voltage Class 2 Outputs
AS/NZS 2293	Emergency escape lighting and exit signs for buildings

### Compliance (EMC)

AS/NZS CISPR15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
FCC Part 15 Subpart B	
Industry Canada ICES-005 **	Interference - Causing Equipment Standard, Issue 4 Lighting Equipment, Dec 2015
ANSI C63.4-2014 **	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40 GHz

### Warranty

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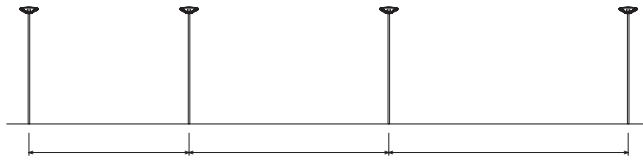
## SPACINGS

### Simulation Based on DLK2-60-CWT-BW1-MP

Mounting Height: 2.7m  
Maintenance Factor: 0.7

Spigot Length: 0.2m  
Walkway Width: 1m

\* Drawing not to scale

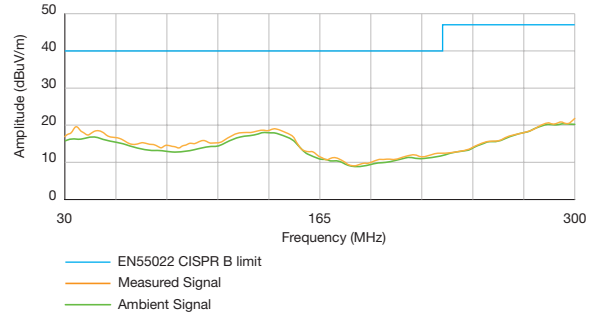


Spacing: 8 meters  
Ave = 171 lux  
Min = 97 lux  
Min/Ave = 0.5

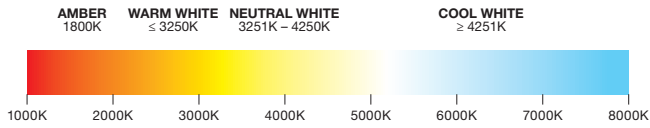
Spacing: 10 meters  
Ave = 120 lux  
Min = 75 lux  
Min/Ave = 0.6

Spacing: 12 meters  
Ave = 102 lux  
Min = 43 lux  
Min/Ave = 0.4

## MINIMAL RADIATED EMI

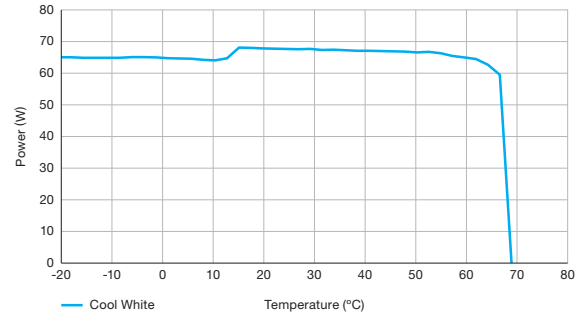


## COLOUR TEMPERATURES

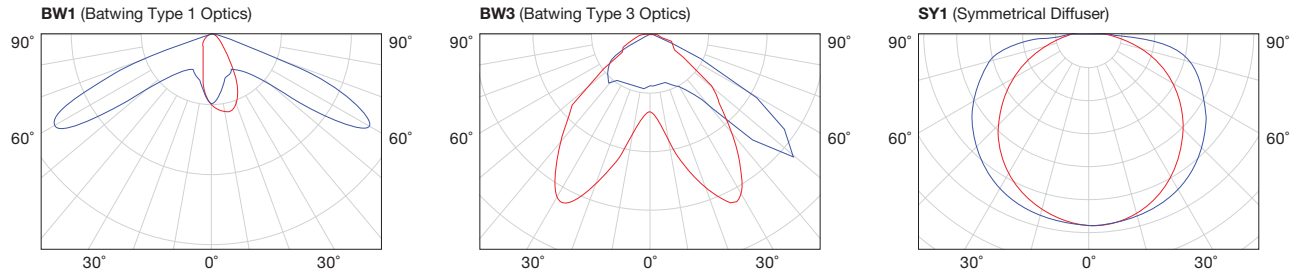


All colour temperatures are indicative. Some variation can occur.

## AMBIENT TEMPERATURE VS POWER



## POLAR DISTRIBUTION



## DLK2 ORDERING EXAMPLE

**DLK2 - 60 - CWT - BW3 - MP<sup>1</sup>**

PRODUCT      TYPE      COLOUR TEMP      OPTICS      SUPPLY OPTION

PRODUCT	TYPE	COLOUR TEMP	OPTICS	SUPPLY OPTION	HOOD OPTION
DLK2	60    60W	CWT    Cool White	BW1    Batwing Type 1	MP    Mains Powered	DS    Dark Sky Hood <sup>2</sup>
		WWT    Warm White	BW3    Batwing Type 3	ELV    Extra Low Voltage Luminaire	
		AMB    Amber	SY1    Symmetrical / Diffuser		
		GRN    Green			

<sup>1</sup> If SUPPLY OPTION is not specified, Standard Configuration Mains Powered will be supplied

<sup>2</sup> Dark Sky Hood (DS) only available for Warm White LEDs (WWT)