



For a video demonstration, please scan the QR Code or visit <http://goo.gl/EX2TzS>

 **COOLON**

# ExDLK

**60W LED Conveyor/Area Light**

The most energy efficient way of illuminating industrial conveyors and walkways.

ExDLK is designed to provide the most energy efficient way of illuminating industrial conveyors and walkways, capable of delivering the required minimum of 40 lux with an average of 80 lux, when spaced as far as 12m apart with a typical installation height of 2.4m and a 5 degree tilt. The typical power consumption of less than 62W converts into a mere 5W per linear meter of conveyor line (White LEDs version). Raising the bar of performance and efficiency for industrial conveyor and walkway lighting.

The robust unibody design is both lightweight and versatile with flexibility to fit many industry standard spigot mount installations.

Optional in-built daylight sensor will perform automatic switching between day and night modes to substantially decrease power consumption.

The ExDLK is also available in a Wildlife/Turtle Friendly Amber version.

#### Designed for use in:

- Bulkheads
- Campsite Area Lighting
- Car Parks
- Conveyors
- General Area Lighting
- Pedestrian Access Road Ways
- Stacker / Reclaimers
- Stairwells
- Tunnels
- Walkways





## Push the light further than ever before

The ExDLK is designed to achieve a uniform quality of light, without dropping below 40 lux over the 12 meter area.

## Solid body design

Unlike conventional conveyor lights ExDLK was designed to withstand constant abuse.

- Resistant to Vibration
- Impact/Shock Proof
- Chemical Resistant
- High Pressure Washable
- Unaffected by Severe Temperature Variations



### 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 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.

**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.



### 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.

**L70**

### 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

### 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.

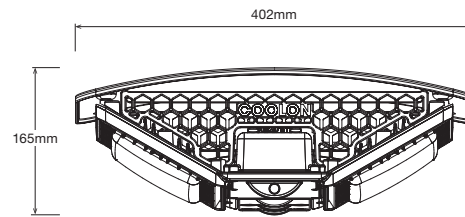
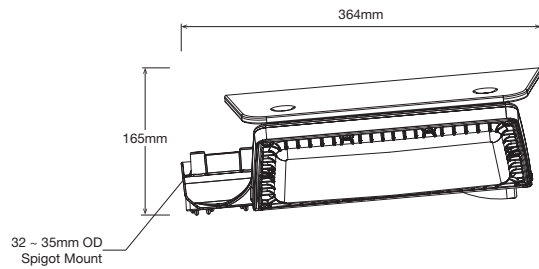


### PROUDLY MADE IN AUSTRALIA

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

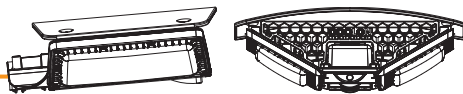
### ExDLK Luminaire



## WIRING CONFIGURATION

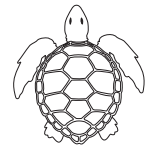
### ExDLK Luminaire - MP Grey Hood

230VAC MAINS IN



## TURTLE FRIENDLY OPTION

The ExDLK 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 ExDLK in 595nm (nanometers) Amber that is in the region of their lowest visual sensitivity.



## TECHNICAL SPECIFICATIONS

| Product                                |  |
|--|--|
| Model                                  | ExDLK  |
| Optical Characteristics                |  |
| Luminous Flux (Photometered)           | CWT 6300 – 6800 lm<br>WWT 2500 – 4000 lm                                     |
| CCT                                    | CWT 5000 – 7500K<br>AMB 1800 – 2700K<br>WWT 2700 – 3500K<br>NWT 3500 – 5000K |
| CRI                                    | >70 excluding amber  |
| Electrical Characteristics (Luminaire) |  |
| Power Consumption                      | 62W Typical  |
| Nominal Voltage                        | 230VAC   |
| Voltage Range                          | 90 – 305VAC, 127 – 431VDC  |
| Cable Type                             | Orange Circular 2.5 mm <sup>2</sup> 3 Core                                   |
| Cable Diameter                         | 10 – 12mm  |
| Cable Length                           | 3m   |
| Frequency Range                        | 47 – 63Hz  |
| Power Factor                           | >0.95 / 230VAC   |
| Leakage Current                        | <0.75mA / 277VAC   |
| 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)          | PC LEV1700   |
| Material Composition (Cover)           | Polycarbonate  |
| Mounting/Bracket Type                  | U-Bolt Spigot Mount OD 32 – 35mm   |

### Compliance (Safety Standards)

|                                 |  |
|---------------------------------|--|
| AS/NZS60598.1                   | Luminaires<br>General Requirements and Tests   |
| AS/NZS 60598.2.1                | Luminaires<br>Particular requirements<br>Fixed general purpose luminaires                |
| IEC 60079-0 : 2011 Edition: 6.0 | Explosive atmospheres<br>Part 0: General requirements                                    |
| IEC 60079-31 : 2013 Edition: 2  | Explosive atmospheres<br>Part 31: Equipment dust ignition protection<br>by enclosure "t" |

### Compliance (EMC)

|                |   |
|----------------|---|
| AS/NZS CISPR15 | Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment |
|----------------|---|

### Explosion Protection

|                    |                     |
|--------------------|---------------------|
| Dust               |                     |
| Certificate Number | IECEx TRA 15.0001X  |
| Protection         | Ex tb IIIC T65°C Db |

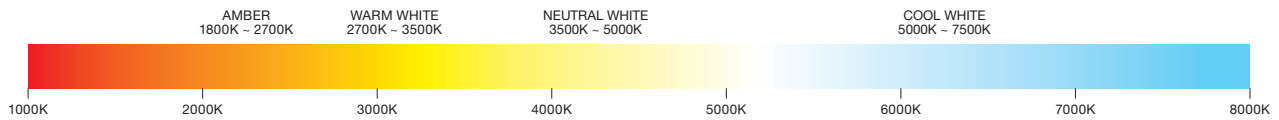
### Weight/Packaging

|                      |                   |
|----------------------|-------------------|
| Luminaire Weight     | 5.25kg            |
| Packaging Dimensions | 460 x 440 x 180mm |
| Packaged Weight      | 6.6kg             |

### Warranty

|          |  |
|----------|--|
| Warranty | 3 years warranty as standard<br>5 years extended warranty optional |
|----------|--|

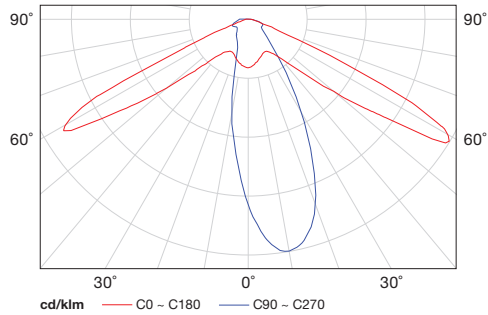
## COLOUR TEMPERATURES



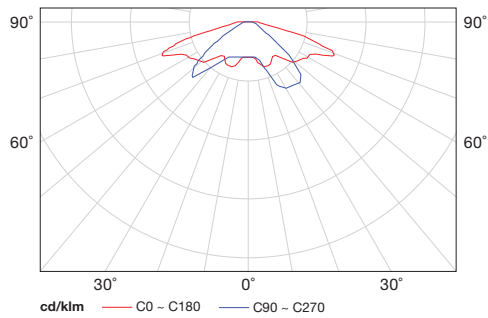
All colour temperatures are indicative. Some variation can occur.

## OPTICAL DISTRIBUTION

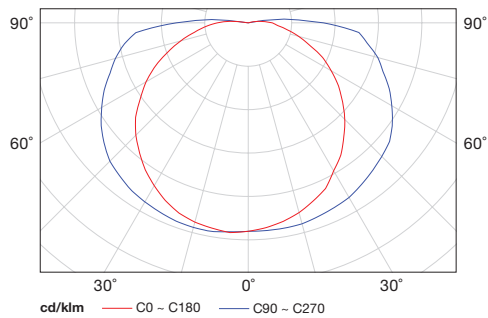
BW1 Batwing (Type 1 Optics)



BW3 Batwing (Type 3 Optics)



SY1 Symmetrical Diffuser



## SPACINGS

CWT-BW1 Optics Model  
\*Drawing not to scale

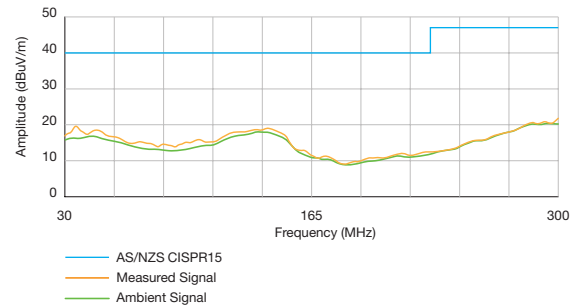


Spacing: 8 meters  
Ave = 124 lux  
Min = 90 lux  
Ave/Min = 0.72

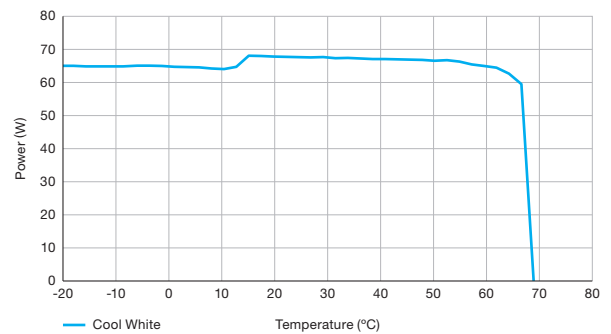
Spacing: 10 meters  
Ave = 100 lux  
Min = 75 lux  
Ave/Min = 0.75

Spacing: 12 meters  
Ave = 80 lux  
Min = 40 lux  
Ave/Min = 0.5

## MINIMAL RADIATED EMI



## AMBIENT TEMPERATURE VS POWER



## ORDERING EXAMPLE

ExDLK - CWT - BW1 - MP

PRODUCT COLOUR TEMP OPTICS SUPPLY OPTION

| PRODUCT | COLOUR TEMP         | OPTICS                     | SUPPLY OPTION    |
|---------|---------------------|----------------------------|------------------|
| ExDLK   | CWT Cool White LEDs | BW1 Batwing Type 1         | MP Mains Powered |
|         | WWT Warm White LEDs | BW3 Batwing Type 3         |                  |
|         | AMB Amber LEDs      | SY1 Symmetrical / Diffuser |                  |
|         | GRN Green LEDs      |                            |                  |