

## LED Commercial Dusk to Dawn DD

### 12W GR10q (4-pin) LED DD Lamp with Light Sensor



#### Overview

Kosnic's LED DD Dusk to Dawn lamps take a fresh approach to functional lighting bringing energy saving LED technology in a DD lamp format that is now available with a light sensor that will switch the lamp on at dusk and off again at dawn. The lamps will switch on when the natural light level detected at the lamp falls below 10lux and will stay on until this level is exceeded by natural light (artificial light may prevent the lamp from switching on but will not cause it to switch off).

The lamp is designed to react to slow changes in the natural light level. To avoid nuisance switching, the lamp only switches on once it has been dark enough for 5 seconds. It must then remain this dark for a further 5 seconds before the sensor is primed to switch the lamp off when the natural light increases. Rapid changes in light level may cause unexpected results.

With the addition of the plug and play emergency pack the Kosnic LED DD lamps offer a highly functional alternative to fluorescent DD lamps.

#### Features

- Built-in Dusk to Dawn light sensor.
- Save energy up to 65% compared with a fluorescent DD lamp with magnetic ballast.
- Single side high lumen output for light only where it's needed.
- Long life of 30,000h.
- Compatible with Kosnic's emergency modules.
- Instant start.
- Negligible UV output.
- Mercury free.

#### Emergency Module Compatible

The LED DD lamp is compatible with the Kosnic emergency module, which provides power in the event of a cut in the supply and must be wired to an un-switched supply. The battery will supply the lamp for over 3 hours at a reduced output.

#### Safety and Maintenance

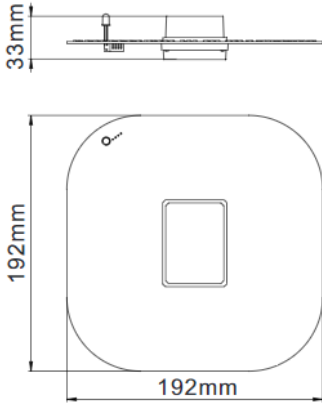
- Switch off supply and allow cooling before handling lamp.
- Do not dispose of in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

### Specifications

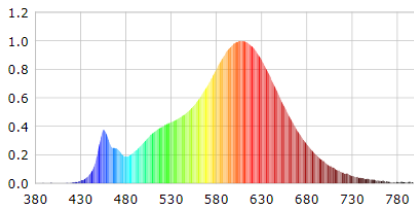
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|--|--|
| Product Code   | DD12DTD/4P-SCT   |
| Voltage  | 220-240Vac 50/60Hz   |
| Current (mA)   | 56   |
| Rated Power (W)  | 12   |
| Power Factor   | 0.94   |
| Luminous Flux (lm)   | 1330 (2700k)<br>1380 (4000k)<br>1330 (6500k)   |
| Nominal Lifetime (h)   | 30000  |
| Lifetime (L70B50) (h)  | 54000  |
| Lifetime (L80) (h)   | 54000  |
| Lifetime (L90) (h)   | 42000  |
| Blue Light Hazard  | RG1  |
| Glow Wire Temperature (°C)   | 650  |
| Dimensions (LxWxD) (mm)  | 33 x 192ø  |
| Weight (Kg)  | 0.15   |
| Lighting Technology used   | LED  |
| Directional / Non-Directional  | NDLS   |
| Cap Type / interface   | GR10q  |
| Mains / Non-Mains  | MLS  |
| Connected Light Source   | No   |
| Colour Tuneable Lightsource  | No   |
| High luminance light source  | No   |
| Anti-glare shield  | No   |
| Dimmable   | No   |
| CCT  | 2700k Warm White<br>4000k Cool White<br>6500k Day Light                              |
| Energy Consumption in on-mode (kWh/1000h)  | 12   |
| Energy Efficiency Class  | E  |
| Useful Luminous Flux (lm)  | 1330 (2700k)<br>1380 (4000k)<br>1330 (6500k)   |
| Beam Angle Correspondence (°)  | 360  |
| On-mode power (Pon) (W)  | 12   |
| Standby power (Psb) (W)  | 0.5  |
| Networked standby pwr (CLS) (Pnet)   | N/A  |
| CRI  | 82   |
| Claim of equivalent power  | No   |
| Equivalent power   | N/A  |
| Chromaticity Coordinates   | 0.463(x), 0.416(y) (2700k)<br>0.38(x), 0.369(y) (4000k)<br>0.308(x), 0.33(y) (6500k) |
| Peak luminous intensity (DLS) (cd)   | N/A  |
| Beam angle (DLS) (°)   | N/A  |
| R9 CRI value (LED/OLED)  | 9 (2700k)<br>33 (4000k)<br>10 (6500k)  |
| Survival Factor  | 0.9  |
| Lumen maintenance factor   | 0.96   |
| Displacement factor (Mains LED/OLED)   | 0.94   |
| Colour consistency in mcdam ellipses (Mains LED/OLED)  | 6  |
| LED light source rep. a fluorescent light source without integrated ballast of a particular wattage (Mains LED/OLED) | No   |
| Rep. W claim (Mains LED/OLED)  | N/A  |
| Flicker (pst LM) (Mains LED/OLED)  | 0.1  |

|                                  |   |
|----------------------------------|---|
| Stroboscopic effect metric (SVM) | 0.1   |
| Ambient Temperature (°C)         | -20 to 40                                   |
| Emergency Module                 | EMDD02 (standard)<br>CEC02LBL/S (self-test) |
| Emergency Luminous Flux (lm)     | 180   |

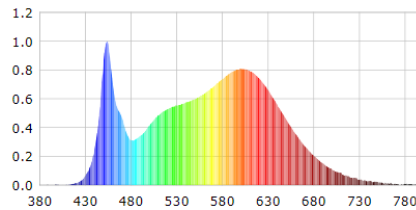
### Dimensions



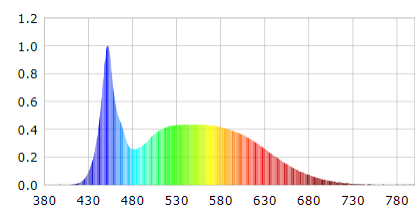
### Photometric Information



2700k



4000k



6500k

## Fitting Conversion

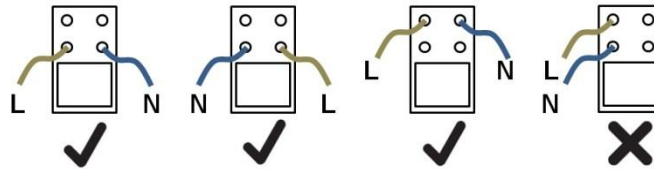
The existing fitting must be switched off and isolated at the mains before commencing electrical work. It is the responsibility of the converter to ensure the fitting continues to meet safety requirements. If in doubt consult a qualified electrician. For maximum energy savings, bypass all control gear and wire from the mains to the lampholder as for an electronic high frequency ballast conversion.

### Magnetic Ballast (Choke):

- Remove the starter and any power factor capacitor. The capacitor may be left in place but the energy savings will be less.
- Plug the LED DD lamp directly into the lampholder.

### Electronic Ballast (High Frequency) Conversion:

- The electronic ballast is not required so it must be removed or bypassed.
- Wire the Live and Neutral directly from the supply to the lampholder terminals as per below.
- The Live and Neutral must be wired to opposite terminals on the lampholder and not be wired to terminals on the same side.
- A 1A fuse may be added between the Live supply and the lampholder to prevent the circuit from cutting-out in the event of a fault in a single luminaire.



Add an indelible warning label, visible when changing the lamp, showing the substance of:

**Warning - not for use with fluorescent lamp, use only Kosnic LED DD lamp.**

## Optional Emergency Module

An optional emergency module for the LED DD lamp can be installed within the fitting to provide a back-up supply in the event of a power cut. The emergency module requires a permanent live un-switched supply to maintain the battery charge. In the event of a power cut the battery within the emergency module will supply the LED DD lamp at a reduced voltage through the supplementary socket provided for this purpose. The supplementary socket also connects the emergency module to the green charging indicator on the LED DD lamp.

