Datasheet

LED Commercial Dimmable LED DD

12W GR10q (4-pin) Dimmable LED DD Lamp with Emergency Option

Overview

Kosnic's Dimmable LED DD lamps take a fresh approach to functional lighting bringing dimmable energy saving LED technology in a DD lamp format. With the addition of the plug and play emergency pack the Kosnic LED DD lamps offer a highly functional alternative to fluorescent DD lamps.

This dimmable version of Kosnic's LED DD lamp cannot be used in luminaires with control gear. While there are versions for 4-pin lamp holders, the mains supply must come directly from the switch without passing through magnetic or electronic control gear.

Features

- Save energy up to 65% compared with a fluorescent DD lamp with magnetic ballast.
- Dimmable.
- 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

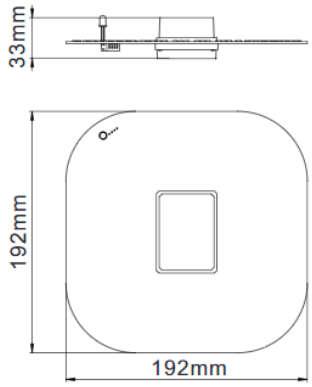
- Unsuitable for retrofitting to magnetic or electronic control gear.
- Switch off supply and allow cooling before handling lamp.
- Do not dispose of in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

Specifications

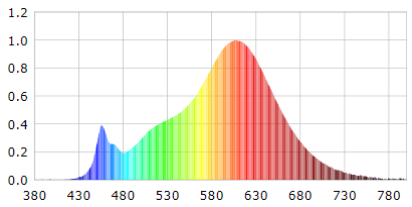
Product Code	**DD12DIM/4P-SCT**
Voltage	220-240Vac 50/60Hz
Current (mA)	54
Rated Power (W)	12
Power Factor	0.97
Luminous Flux (lm)	1430 (2700k) 1480 (4000k) 1430 (6500k)
Nominal Lifetime (h)	30000
Lifetime (L70B50) (h)	54000
Lifetime (L80) (h)	54000
Lifetime (L90) (h)	42000
Blue Light Hazard	RG1
Glow Wire Temperature (°C)	650
Dimensions (LxWxD) (mm)	33 x 192ø
Weight (Kg)	0.2
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	Yes
CCT	2700k Warm White 4000k Cool White 6500k Day Light
Energy Consumption in on-mode (kWh/1000h)	12
Energy Efficiency Class	E
Useful Luminous Flux (lm)	1430 (2700k) 1480 (4000k) 1430 (6500k)
Beam Angle Correspondence (°)	360
On-mode power (Pon) (W)	12
Standby power (Psb) (W)	0
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) 0.378(x), 0.367(y) (4000k) 0.308(x), 0.33(y) (6500k)
Peak luminous intensity (DLS) (cd)	N/A
Beam angle (DLS) (°)	N/A
R9 CRI value (LED/OLED)	10 (2700k) 33 (4000k) 12 (6500k)
Survival Factor	0.9
Lumen maintenance factor	0.96
Displacement factor (Mains LED/OLED)	0.94
Colour consistency in mcadam 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)	0.2

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

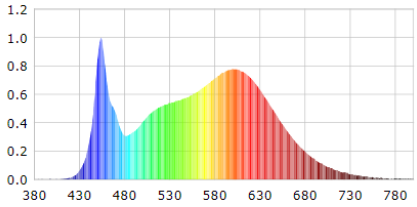
Dimensions



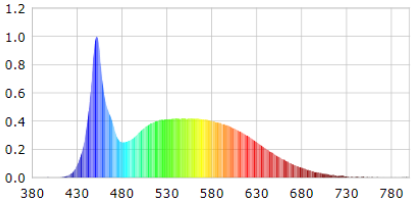
Photometric Information



2700k



4000k



6500k

Dimmer Switch Compatibility

The following mains dimmer switches are the most recommended for performance. The information is based on testing under laboratory conditions and should be used as guidance only. Other dimmer switches may give acceptable performance. Please ensure that the set-up is tested before committing to a large project.

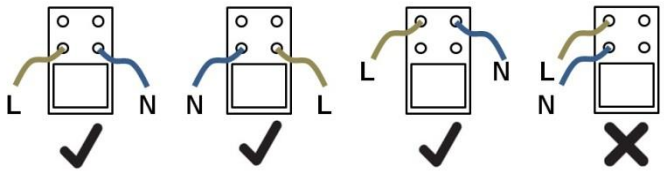
Make	Model	Marked Rating	Notes
CYANIRIS	CYDIMRFT1 (Remote)	2 x 288W	1 - 8 Lamps. Approx 95% dimming.
Danlers	DQDGD MK	400W	1 - 8 Lamps. Approx 90% dimming.
Hamilton	H-GDMTM250 (Touch)	250W	1 - 8 Lamps. Approx 95% dimming.
Hamilton	H-LEDStat	100W	1 - 8 Lamps. Approx 95% dimming.
Robus	LOADPRO RLA200DT-01	133W	1 - 8 Lamps. Approx 95% dimming.
Varilight	Eclique (JDQI401S)	400W	1 - 8 Lamps. Approx 90% dimming.
Varilight	V-Pro	100W LED	1 - 8 Lamps. Approx 95% dimming.

Installation

- **The Kosnic Dimmable LED DD lamps are not suitable for use with magnetic or electronic ballasts.**
- The Kosnic Dimmable LED DD lamps are designed to run directly from the mains supply.
- The luminaire must be switched off and isolated at the mains before commencing electrical work.
- If the luminaire wiring is altered it is the responsibility of the converter to ensure the luminaire continues to meet safety requirements.
- If in doubt consult a qualified electrician.

Magnetic or Electronic Ballast Conversion

- The 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.
- With 4-pin lampholders the wiring can be to either pair of terminals as they are connected within the lamp itself.
- If desired a 1A fuse may be added between the Live supply and the lampholder to prevent the whole 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 luminaire 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.