

KTC LED.PowerSpot 5W Dimmable SMD LED

5W GU10 PAR16 Lamp



Product Overview

Suitable for the most demanding of professional users, Kosnic's KTC-PRO range offers lamps that deliver huge energy savings over halogen lamps without compromising on brightness. The lamps can quickly replace halogen products in accent and general lighting applications, and once in place rapid payback is achieved.

Features

- Save energy up to 85% compared with halogen lamp.
- Direct replacement of GU10 halogen lamp.
- 45° or 80° beam angle.
- Dimmable
- High lumen output.
- Long life of 30,000h.
- Instant start.
- Negligible UV output.
- Mercury free.

Safety and Maintenance

- Switch off supply before installing or removing lamp. Allow to cool before handling.
- Do not use in totally enclosed fittings as this will reduce lamp life.
- Do not dispose of in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

Specifications – 45° Beam Angle

Product Code	KDIM05SMD/GU10-S30	KDIM05SMD/GU10-S40	KDIM05SMD/GU10-S65
Lamp Cap	GU10	GU10	GU10
Lamp Shape	PAR16	PAR16	PAR16
Nominal Power (W)	5	5	5
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Current (mA)	36	36	36
Nominal Useful Luminous Flux (lm)	230	240	260
Total Luminous Flux (lm)	310	320	350
CCT (K)	3000K Warm White	4000K Cool White	6500K Day Light
Nominal Lifetime (h)	30000	30000	30000
Beam Angle (°)	45	45	45
Dimmable	Yes - See website datasheet	Yes - See website datasheet	Yes - See website datasheet
Switching Cycles	50000	50000	50000
Warm-up time to 60% (S)	Instant full light	Instant full light	Instant full light
Suitable for accent lighting	Yes	Yes	Yes
Length (mm)	53.0	53.0	53.0
Diameter (mm)	50.0	50.0	50.0
Mercury (mg)	0	0	0
Clean-up instructions	N/A	N/A	N/A
Retrofit	Yes	Yes	Yes
Equivalent Wattage (W)	36	37	40
Rated Power (W)	5.0	5.0	5.0
Rated Useful Luminous Flux (lm)	230	240	260
Rated Lifetime (h)	30000	30000	30000
Power Factor	0.60	0.60	0.60
Rated Peak Candelas (cd)	250	260	280
Lumen Maintenance Factor at Nominal Lifetime	0.75	0.75	0.75
SDCM of CCT	<6	<6	<6
CRI	72	71	75
Start Time (s)	0.42	0.42	0.42
Ambient Temperature Range (°C)	-20 to 40	-20 to 40	-20 to 40

Notes: The Useful Luminous Flux quoted is for the output within a 90° cone as per the EU implementing directive on ecodesign requirements for directional lamps.

Specifications – 80° Beam Angle

Product Code	KDIM05SMD/GU10-W30	KTC05SMD/GU10-W40	KTC05SMD/GU10-W65
Lamp Cap	GU10	GU10	GU10
Lamp Shape	PAR16	PAR16	PAR16
Nominal Power (W)	5	5	5
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Current (mA)	36	41	41
Nominal Useful Luminous Flux (lm)	210	220	230
Total Luminous Flux (lm)	310	320	350
CCT (K)	3000K Warm White	4000K Cool White	6500K Day Light
Nominal Lifetime (h)	30000	30000	30000
Beam Angle (°)	80	80	80
Dimmable	Yes - See website datasheet	No	No

Switching Cycles	50000	50000	50000
Warm-up time to 60% (S)	Instant full light	Instant full light	Instant full light
Suitable for accent lighting	Yes	Yes	Yes
Length (mm)	53.0	53	53
Diameter (mm)	50.0	50	50
Mercury (mg)	0	0	0
Clean-up instructions	N/A	N/A	N/A
Retrofit	Yes	Yes	Yes
Equivalent Wattage (W)	33	32	33
Rated Power (W)	5.0	5.0	5.0
Rated Useful Luminous Flux (lm)	210	200	210
Rated Lifetime (h)	30000	30000	30000
Power Factor	0.60	0.53	0.53
Rated Peak Candelas (cd)	155	160	175
Lumen Maintenance Factor at Nominal Lifetime	0.75	0.75	0.75
SDCM of CCT	<6	<6	<6
CRI	71	71	75
Start Time (s)	0.42	0.47	0.47
Ambient Temperature Range (°C)	-20 to 40	-20 to 40	-20 to 40

Notes: The Useful Luminous Flux quoted is for the output within a 90° cone as per the EU implementing directive on ecodesign requirements for directional lamps.

Energy Label – 45° Beam Angle

Manufacturer	Kosnic	Kosnic	Kosnic
Product Code	KDIM05SMD/GU10-S30	KDIM05SMD/GU10-S40	KDIM05SMD/GU10-S65
Energy Class	A	A	A
Energy Consumption (kWh/1000h)	5.00 (5)*	5.00 (5)*	5.00 (5)*

Notes: The kWh/1000h value published on the energy label is required to be rounded up to an integer according to the EU implementing directive on Energy Labelling. The value to 2 decimal places is given for reference.

Energy Label – 80° Beam Angle

Manufacturer	Kosnic	Kosnic	Kosnic
Product Code	KDIM05SMD/GU10-W30	KDIM05SMD/GU10-W40	KDIM05SMD/GU10-W65
Energy Class	A	A	A
Energy Consumption (kWh/1000h)	5.00 (5)*	5.00 (5)*	5.00 (5)*

Notes: The kWh/1000h value published on the energy label is required to be rounded up to an integer according to the EU implementing directive on Energy Labelling. The value to 2 decimal places is given for reference.

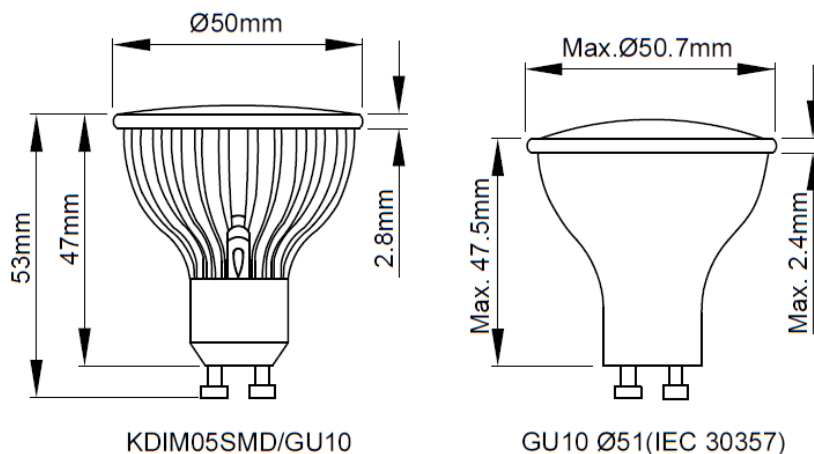
Product Markings – 45° Beam Angle

Manufacturer	Kosnic	Kosnic	Kosnic
Product Code	KDIM05SMD/GU10-S30	KDIM05SMD/GU10-S40	KDIM05SMD/GU10-S65
Volts (V)	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Nominal Watts (W)	5	5	5
Current (mA)	36	36	36
Nominal Useful Luminous Flux (lm)	230	240	260
CCT (K)	3000	4000	6500
Beam Angle (°)	45	45	45
CE Mark	Yes	Yes	Yes
WEEE Mark	Yes	Yes	Yes
Batch Code	Yes	Yes	Yes

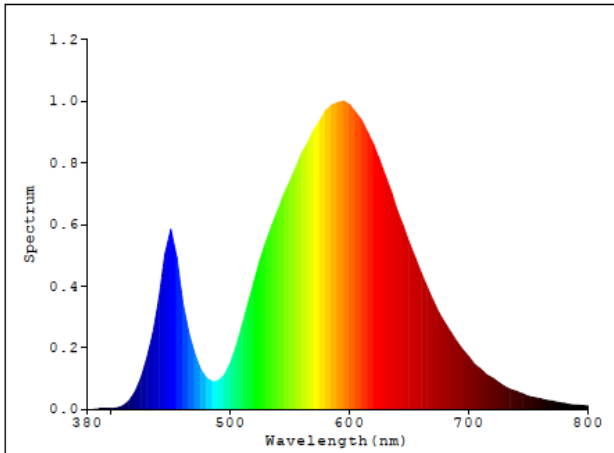
Product Markings – 80° Beam Angle

Manufacturer	Kosnic	Kosnic	Kosnic
Product Code	KDIM05SMD/GU10-W30	KDIM05SMD/GU10-W40	KDIM05SMD/GU10-W65
Volts (V)	220-240Vac 50-60Hz	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Nominal Watts (W)	5	5	5
Current (mA)	36	36	36
Nominal Useful Luminous Flux (lm)	210	220	230
CCT (K)	3000	4000	6500
Beam Angle (°)	80	80	80
CE Mark	Yes	Yes	Yes
WEEE Mark	Yes	Yes	Yes
Batch Code	Yes	Yes	Yes

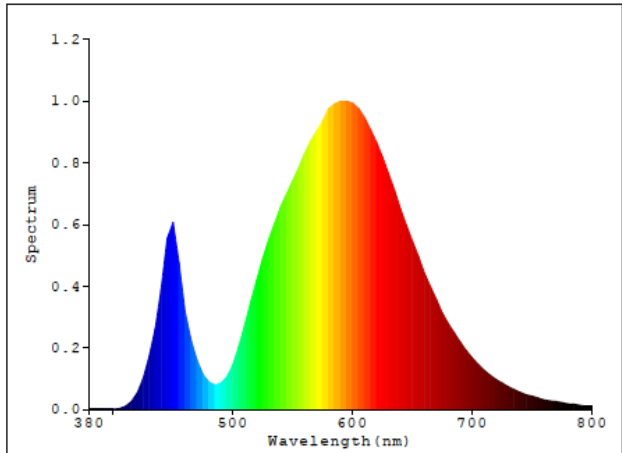
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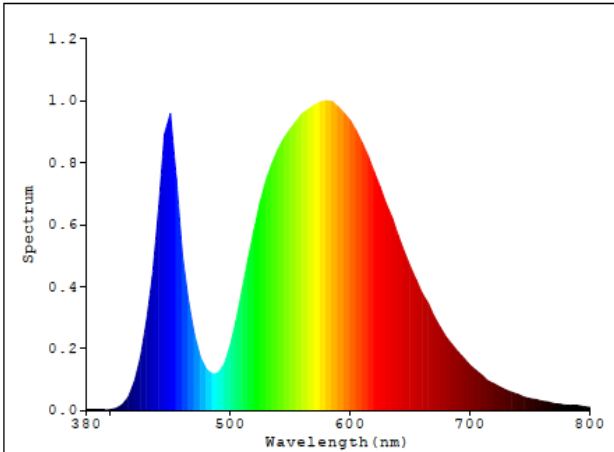
45° 3000K



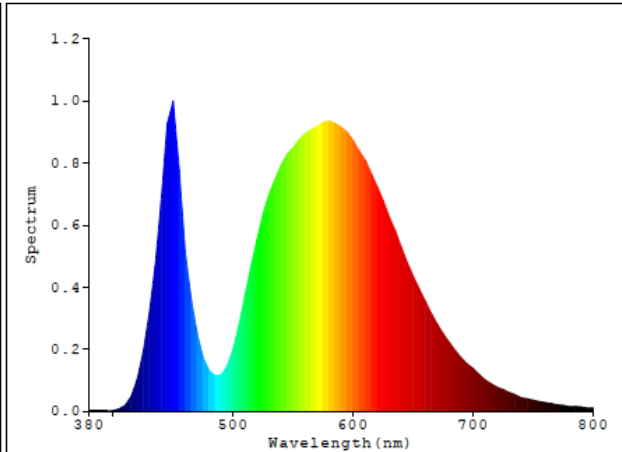
80° 3000K



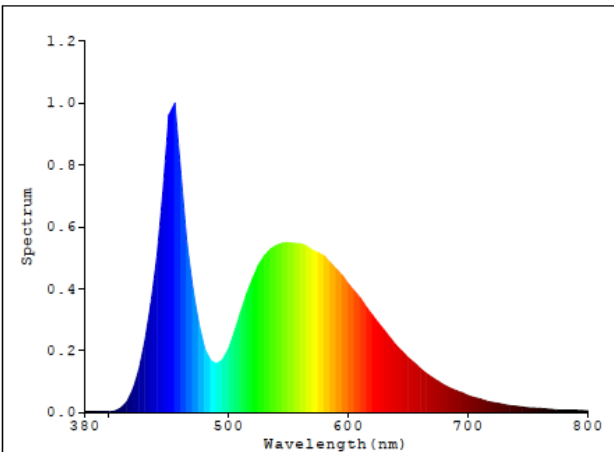
45° 4000K



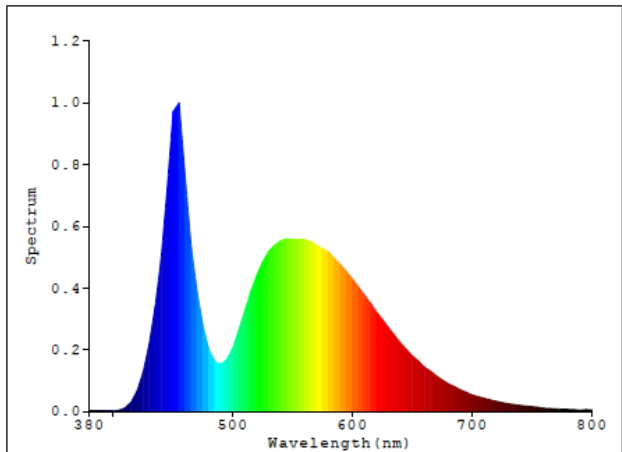
80° 4000K



45° 6500K



80° 6500K



Compatibility

It is important to appreciate that not all dimmer switches will provide effective, smooth and flicker free dimming. The operation of common mains voltage AC dimmers appears similar but the electrical characteristics vary significantly. While this makes no difference to filament lamps, the effect on the electronics within the LED lamp can be dramatic and are often incompatible. Please note that all information in this guide is based on testing under laboratory conditions and should be used as guidance only. Because of the complicated application environment, the huge variation in dimmer construction from one model to another it is not possible to guarantee that a lamp will work with a particular dimmer and undesirable effects could be observed even with recommended dimmer switches. In extreme cases incompatible dimmer switches may damage the lamps. **Please ensure that the set-up is tested for performance before committing to a large project.**

Recommended Dimmer Switches:

Manufacturer	Model	Rating	Notes
VARILIGHT	LEDLite Low Load	120W	Max 20 lamps. Approx. 75% dimming.
HAMILTON	L400/2	400W	Max 20 lamps. Approx. 65% dimming.
RICHMOND/ZANO	ZGRID500	500W	Max 20 lamps. Approx. 70% dimming.

Note: These are initial dimming results as full dimmer compatibility is still under review.