

LED Directional

Dimmable GU10 4.5 Watt

DATA SHEET



Product information

This range provides a substantial energy saving and gives an effective replacement performance for 35W halogen while consuming only 4.5W of power.

Features & Benefits

- IEC-size
- Dimming range 10% ~ 100%
- Available in 2700K, 3000K and 4000K
- Lumen output of 170-180-200lm
- 25 degree and 35 degree beam angles
- Long life for reduced maintenance costs
- IR/UV-radiation free, Mercury free, Low heat emission

Application areas

LED GU10 dimmable lamps have massive energy savings versus traditional lamps. Coupled with long life, they are superb replacements where standard incandescent or halogen lamps are in use such as: accent, display and general lighting applications in a commercial, industrial or residential environments.

Standards

- IEC60357: Tungsten halogen lamps (non-vehicle) – Performance specifications.
- IEC62560: Self-ballasted LED lamp for general lighting services voltage 50~250V-safety specification.
- IEC62471: Photobiological safety of lamps and lamp systems.

- EN55015: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.
- EN61547: Equipment for general lighting purposed EMC immunity requirements.
- EN61000-3-2: Limits for harmonic current emissions.
- EN61000-3-3: Limitation of voltage fluctuations and flicker in low voltage supply systems for equipment with rated current $\leq 16A$.



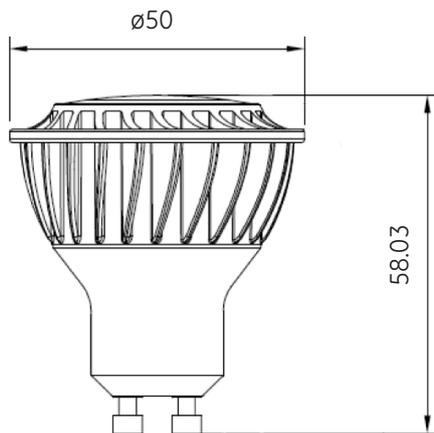
4.5W GU10 LED lamps have the following common features

- 220-240V with power factor of 0.5
- Complete range with CRI >80 and 6-step MacAdam colour consistency
- Efficiency up to 44lm/W
- Operating temperature: -20°C to +40°C

Specification summary

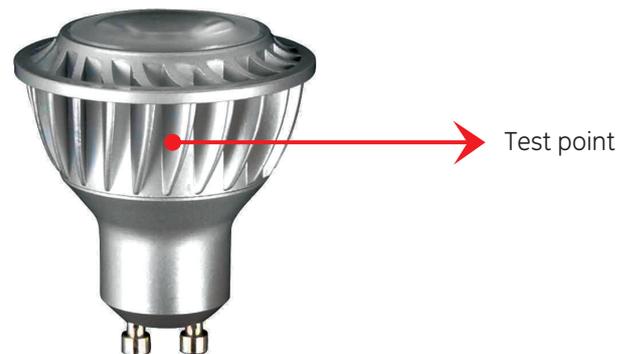
Wattage (W)	Base	Product Description	Candela (cd)	Lumen (lm)	Beam Angle (degree)	CCT (K)	Life hours L70/B10	Life hours B50	Efficiency (lm/W)	Power factor	CRI	Switch Cycles	Pack Qty	Product Code
4.5	GU10	LED4.5D/GU10/827/220-240V/FL/BX 1/8	500	170	25	2700	25,000	45,000	38	0.5	80	12,500	1/8	65775
4.5	GU10	LED4.5D/GU10/827/220-240V/WFL/BX 1/8	400	170	35	2700	25,000	45,000	38	0.5	80	12,500	1/8	97248
4.5	GU10	LED4.5D/GU10/830/220-240V/FL/BX 1/8	560	180	25	3000	25,000	45,000	40	0.5	80	12,500	1/8	65777
4.5	GU10	LED4.5D/GU10/830/220-240V/WFL/BX 1/8	450	180	35	3000	25,000	45,000	40	0.5	80	12,500	1/8	97266
4.5	GU10	LED4.5D/GU10/840/220-240V/FL/BX 1/8	610	200	25	4000	25,000	45,000	44	0.5	80	12,500	1/8	65780
4.5	GU10	LED4.5D/GU10/840/220-240V/WFL/BX 1/8	500	200	35	4000	25,000	45,000	44	0.5	80	12,500	1/8	97273

Dimensions



Maximum T_{hs} recommended

GU10 4.5W Dimmable (IEC-size) 95° C



Lumen maintenance at rated life

>70% lumen maintenance by 90% of lamps at 25,000 hours

Operation and maintenance

- Not for use in totally enclosed fixtures.
- Suitable for voltage fluctuations of +/- 10%.
- Switch off mains supply before installing/removing lamp.
- LED GU10 lamps are dimmable on most common leading edge dimmers, please contact local Sales agent for compatibility.
- Safe to use on Photo- & Timer-circuits, please contact local Sales agent for compatibility.
- Ambient temperature range -20° C to 40° C.

LED Directional

Dimmable GU10 5 Watt and 6.5 Watt

Product information

This range provides substantial energy savings compared to 35W or 50W halogen products by consuming only 5W to 6.5W of power.

Features

5W – Standard IEC size product with 220-270 Lumen output

6.5W – Large size product with 380-450 Lumen output

- Dimmable on most leading and trailing edge dimmers
- 45,000 hours life (L70/B50)
- Mercury free
- 2700K, 3000K and 4000K
- 25 degree and 35 degree beam angles

Application areas

LED GU10 dimmable lamps offer massive energy savings versus Halogen GU10 lamps. Coupled with long life, they are superb replacements where halogen lamps are in use such as: accent, display and general lighting applications in a commercial, industrial or residential environments.



IEC standards

IEC60357: Tungsten halogen lamps (non-vehicle) –Performance specifications.

IEC62560: Self-ballasted LED lamp for general lighting services voltage 50~250V-safety specification.

EN60968: Self-Ballast lamps for general lighting services-Safety Requirements.

IEC62471: Photobiological safety of lamps and lamp systems.

EN55015: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.

EN61547: Equipment for general lighting purposed EMC immunity requirements.

EN61000-3-2: Limits for harmonic current emissions.

EN61000-3-3: Limitation of voltage fluctuations and flicker in low voltage supply systems for equipment with rated current $\leq 16A$.



Basic data

- "A" Class Energy Rating
- Power factor: 0.8
- Colour Rendering Index >80
- Colour consistency within 5 steps on MacAdam ellipse
- Efficiency from 45lm/W up to 65lm/W
- Operating temperature: -20°C to +40°C

Wattage	Base	Product description	Candela	Lumen	Beam angle	CCT	Life hours L70/B50	Efficacy	Switch Cycles	Pack Qty	SKU
5	GU10	LED5D/GU10/827/220-240V/FL	950	220	25	2,700	45,000	45	45,000	1/8	65249
5	GU10	LED5D/GU10/827/220-240V/WFL	600	220	35	2,700	45,000	45	45,000	1/8	65250
5	GU10	LED5D/GU10/830/220-240V/FL	1,050	240	25	3,000	45,000	50	45,000	1/8	65253
5	GU10	LED5D/GU10/830/220-240V/WFL	700	240	35	3,000	45,000	50	45,000	1/8	65254
5	GU10	LED5D/GU10/840/220-240V/FL	1,200	270	25	4,000	45,000	55	45,000	1/8	65799
5	GU10	LED5D/GU10/840/220-240V/WFL	750	270	35	4,000	45,000	55	45,000	1/8	65801
6.5	GU10	LED6.5D/GU10/827/220-240V/FL	1,600	400	25	2,700	45,000	60	45,000	1/8	65252
6.5	GU10	LED6.5D/GU10/827/220-240V/WFL	750	380	35	2,700	45,000	60	45,000	1/8	65255
6.5	GU10	LED6.5D/GU10/830/220-240V/FL	1,600	400	25	3,000	45,000	60	45,000	1/8	65256
6.5	GU10	LED6.5D/GU10/830/220-240V/WFL	750	380	35	3,000	45,000	60	45,000	1/8	65257
6.5	GU10	LED6.5D/GU10/840/220-240V/FL	1,800	450	25	4,000	45,000	65	45,000	1/8	65258
6.5	GU10	LED6.5D/GU10/840/220-240V/WFL	850	430	35	4,000	45,000	65	45,000	1/8	65259

Dimensions



IEC-size GU10

Wattage [W]	MOL [mm]	DIA [mm]
5	57.0	50.2

Large-size GU10

Wattage [W]	MOL [mm]	DIA [mm]
6.5	77.6	50.2

MOL: maximum overall length
Diameter: maximum lamp diameter
Luminaire must be able to support 250g

Lumen maintenance at rated life

Minimum 70% Lumen maintenance at 45,000 hours average Life time

Operation and maintenance

- Store and use the lamps the same way as traditional halogen lamps.
- Check your fixtures are properly wired and don't deliver voltage spike to lamps causing overheating/failure.
- Lamps should be kept free from contamination.
- Good condition of the lamp holder contacts is important to ensure proper operation of lamp.
- Ensure lamp is cool before removing.
- Switch off mains supply before installing/removing lamp.
- LED GU10 5W and 6.5W lamps are dimmable on many leading edge and trailing edge dimmers. Please visit gelighting.com/dimming-led for a list of compatible dimmers.
- Not for use in totally enclosed recessed fixtures.