Product Information

LED STAR PAR16 120°270 lm & LED STAR PAR16 120°450lm

Product Overview

Product	Wattage	CCT	lm	Base
LED STAR PAR16 120°270lm	**4**	**2700**	**270**	**GU10**
LED STAR PAR16 120°450lm	**6,5**	**2700**	**450**	**GU10**

Benefits

- For all household luminaires
- Low energy consumption and maintenance costs
- Longer lifetime[1]
- Compact main voltage LED reflector lamp in PAR16 shape
- Equipped with high-efficiency patented LEDs, quality assured
- Shockproof and vibration-proof

Key Features

- Low energy consuming LED lamps for continious light distribution through a wide beam angle of 120°
- GU10 base for easy replacement
- Available in 2700K warm white color temperature
- Energy efficiency class A+
- 15,000 hours lifetime[2]
- Similar dimensions as incandescent candle lamp with GU10 base
- UV and NIR radiation free
- Mercury free
- 3 years Osram Guarantee (www.osram.com/guarantee)

Product	Wattage	CCT	lm	Base	Diameter	Lenght	Weight	Beam Angle	EAN10	EAN40 (ship.unit)	Ship. unit
LED STAR PAR16 120° 270lm 827	4W	2700 K	270	GU10	50 mm	58 mm	50 g	120°	4052899921924	4052899921948	6
LED STAR PAR16 120° 450lm 827	6,5W	2700 K	450	GU10	50 mm	58 mm	60 g	120°	4052899921931	4052899921955	6

[1] Typical values. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.
[2] The average lifetime of LED lamps is defined as the number of hours when the light output of 50% of a large group of identical lamps goes below 70% of its initial luminous flux (L70B50, IEC60969).The lifetime is estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage.

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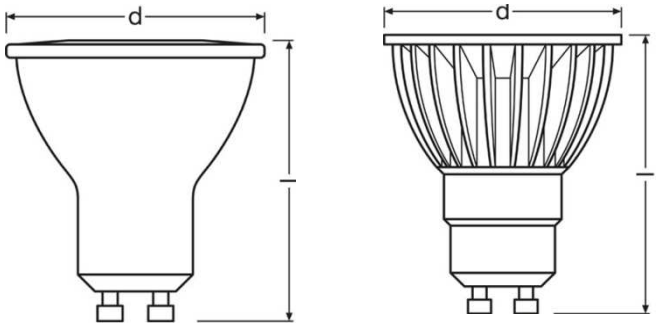
Common Characteristics[3]

Average lifetime[4]	Switching cycles (30s on, 30s off)	Casing material	Starting time	Warm up time for 60% light	Power factor
15,000 hrs	100,000	Plastic	< 0,5 s	< 1 s	270lm = 0.4 450lm > 0.5
Nominal current	**inrush current**	**Tc temperature max.5**	**CRI**	**Mercury max.**	**Luminous intensity**
270lm = 35 mA 450lm = 50 mA	15 A	270lm = 80 ℃ 450lm = 85 ℃	80	0.0 mg	270lm = 100 cd 450lm = 150 cd



Good heat exchange supports ideal performance

Disposal information

- Lamps with WEEE sign can be returned at specific collection points.
- LED lamps have to be disposed as special waste.

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[5] The Tc is defined as the highest permissible temperature which may occur on the outer surface of the LED lamp (in the indicated position) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range (DIN EN 62031: 2009-01)

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Application information

- Suitable for indoor application.
- For outdoor applications and operation in damp locations special approved fixture are required.
- Input voltage: 220 - 240 V
- Storage temperature & humidity conditions (-20℃ u p to +40°C, at max. 95% relative humidity)
- Operating temperature & humidity conditions (-20°C up to +40℃, at max. 95% relative humidity)

Lamp conformity

- 2004/108/EC Electromagnetic compatibility (EMC)
- 244/2009 Ecodesign requirements for non-directional household lamps
- IEC/ PAS 62612 Self ballasted LED-lamps for general lighting services – Performance requirements
- 2009/125/EC Ecodesign requirements for energy related products
- 2011/65/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
- 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation)
- 2002/96/EC Waste Electrical and Electronic Equipment Directive (WEEE)
- EN 62471 Photobiological safety of lamps and lamp systems
- EN 55015 Limits and methods of measurement of radio disturance
- EN 61000-3-2 Electromagnetic compatibility – Limits for harmonic current emission
- EN 61000-3-3 Electromagnetic compatibility – Limitation of voltage changes, voltage fluactuations, flicker in public low voltage supply systems
- EN61547 Electromagnetic compatibility immunity requirements
- 1194/2012 Eco design requirement for directional lamps, light emitting diode lamps and related equipment (DIM II)
- IEC 62560 self-ballasted LED-lamps for general lighting services by voltage >50V – Safety specifications
- 874/2012/EU Energy labeling of electrical lamps and luminaires