

PARATHOM® PAR16 20 35°

Product description



- 1 to 1 replacement to HAL PAR16
- Same light output as a 20W HAL, but -80% energy
- Long lifetime
- Not dimmable

Product Offering

Type reference	Wattage	CCT	Beam Angle	CRI
PAR16 20 35° - 828	5W	2800K	35°	80
PAR16 20 35° - 830	5W	3000K	35°	80
PAR16 20 35° - 740	5W	4000K	35°	75

1. Key Features and Benefits

- LED PAR16 lamp as replacement for Halogen PAR16 20W
- Voltage: 220 – 240V
- GU10 base
- beam angle approx. 35°
- available in three different colour temperatures:
 - 2700K – warm white
 - 3000K – warm white
 - 4000K – cool white
- reduces energy consumption ~ 80%
- shock-proof and vibration-proof
- 25,000 hours lifetime
- UV and NIR radiation free
- Mercury free
- 4 years Osram Guarantee¹
- not dimmable

¹ See www.osram.com/guarantee

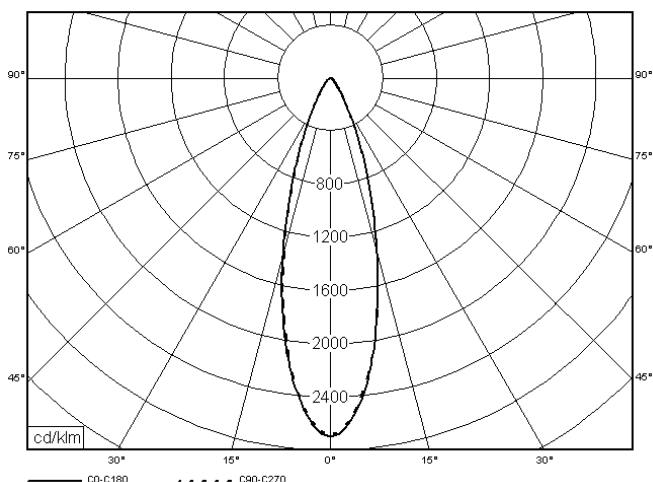
2. Common Characteristics³

Average lifetime ⁴		Switching cycles (30s on, 30s off)	Casing material		Starting time	Warm up time for 60% light	Power factor
25,000h		100.000	Metal/plastic		0.0s	none	0.5
Mercury max.	Base Type	Length	Diameter	Weight	Tc temperature max. ⁵	Nominal current	
0.0mg	GU10	57 mm	50 mm	45g	88°	46mA	

3. Characteristic Range³

Type reference	Wattage	Luminous flux	Luminous intensity	Correlated colour temperature	Standard Deviation of Color Matching	Color Rendering Index	Beam angle
PAR16 20 35° - 828	5W	170lm	450 cd	2800K	<7	80	35°
PAR16 20 35° - 830	5W	170 lm	450 cd	3000K	<7	80	35°
PAR16 20 35° - 740	5W	230 lm	600 cd	4000K	<7	75	35°

4. Light Distribution Curve



PARATHOM PAR16 20 35° 830

5. Mounting information

Good heat exchange supports ideal performance



³ 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.

⁴ 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. To achieve a full lifetime a good heat exchange for the electronic components is required.

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)

6. Disposal information

WEEE-lamps can be returned at specific collection points.

LED lamps have to be disposed as special waste.



7. Application Information

Applications

- hotels
- restaurant
- commercial areas
- residentials
- art galleries and museum
- office space

Application Notes

- suitable for indoor application.
- for outdoor applications and operation in damp locations special approved fixture are required.
- Input voltage: AC: 220-240V
- Operating temperature range between -20°C and 40°C

8. Cost savings: example

Reference product description	Similar halogen product	Watts saved	Cost saved after 1 year	Cost saved after 2 years	Cost saved after 5 years
PAR16 20 35°	PAR16 halogen 20W	15W	14 €	39 €	116€
*Based on the assumption of 12hours/day on and an energy cost of 0.19€/kWh					
**Including 2 € per lamp replacement					
***Recommended retail price 15,99 €					

9. Ordering Guide

Type reference	Product Number – 1pcs	Product Number – 1 shipping unit	Number of pcs / ship. unit
PAR16 20 35° - 827	4008321973108	4008321973115	10
PAR16 20 35° - 830	4008321980502	4008321976963	10
PAR16 20 35° - 740	4008321973634	4008321973641	10

10. Lamp conformity

2004/108/EC Electromagnetic compatibility (EMC)

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

IEC/TR 62471-2 Photobiological safety of lamps and lamp systems - Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety

EN 55015 Limits and methods of measurement of radio disturbance

EN 61000-3-2 Electromagnetic compatibility – Limits for harmonic current emission

EN 61000-3-3 Electromagnetic compatibility – Limitation of voltage changes, voltage fluctuations, flicker in public low voltage supply systems

EN61547 Electromagnetic compatibility immunity requirements