PARATHOM® PRO PAR38 120 20°
Product description

- Replacement for PAR38 120W halogen lamp
- Long lifetime of 40.000h
- High colour consistency of 3SDCM
- High quality light with a CRI>80

Product Offering

Type reference	Wattage	CCT	Beam Angle	CRI
PAR38 120 20° WW	15W	3000K	20°	>80

1. Key Features and Benefits

- 15W LED lamp as high-quality replacement of 120W halogen lamp
- E27 base
- 220-240 input voltage
- non dimmable
- avaible in warm white colour temperature:
- high colour consistency: 3SDCM
- reduces energy consumption up to 87%
- shock-proof and vibration-proof
- 40,000 hours lifetime
- UV and NIR radiation free
- Mercury free
- 5 years Osram Guarantee[1]

[1] See www.osram.com/guarantee

2. Common Characteristics[3]

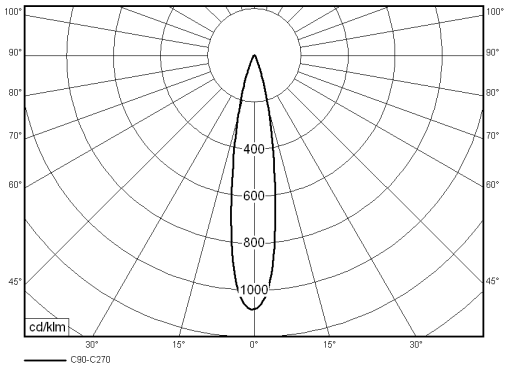
Average lifetime[4]	Switching cycles (30s on, 30s off)	Casing material	Starting time	Warm up time for 60% light	Power factor
40,000h	100,000	Plastic	<1s	none	>0.9

Mercury max.	Base Type	Length	Diameter	Weight	Tc temperature max.[5]	Nominal current
0.0mg	E27	130.6mm	121mm	500g	80°C	0.068A

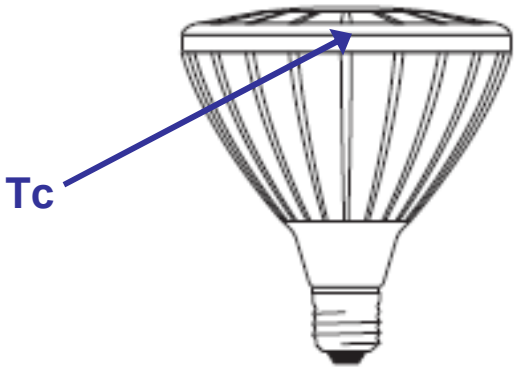
3. Characteristic Range[3]

Type reference	Power	Luminous flux	Luminous intensity	Correlated colour temperature	Standard deviation colour temperature	Colour renderix index	Beam angle
PAR38 120 20° 830	15W	900lm	5000cd	3000K	3	>80	20°

4. Technical information



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

- commercial areas
- shops
- hotels
- restaurant

Application Notes

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

8. Cost savings: example

Reference product description	Similar halogen product	Watts saved	Cost saved after 6 months	Cost saved after 1 years	Cost saved after 2 years
PAR38 120 20° 830	PAR38 halogen 120W	105W	18.7€	79.3€	200.5€

Based on the assumption of 12hours/day on and an energy cost of 0.19€/kWh

9. Ordering Guide

Type reference	Product Number – 1pcs	Product Number – 1 shipping unit	Number of pcs / ship. unit
PAR38 120 20° 830	400832**746252**	400832**746269**	12

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 manufactoring requirements relating to non-laser optical radiation safety
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