# LED SUPERSTAR PAR16 50 36° Advanced
## Product description

**Product Offering**

| Type reference | Wattage | CCT | Beam Angle | CRI |
|---|---|---|---|---|
| PAR16 50 36° ADV 827 | 7W | 2700K | 36° | 80 |
| PAR16 50 36° ADV 840 | 7W | 4000K | 36° | 80 |

- 1 to 1 replacement to HAL PAR16
- Same light output as a 50W HAL, but -85% energy
- Long lifetime
- Dimmable

## 1. Key Features and Benefits

• LED PAR16 lamp as replacement for Halogen PAR16 50W
• voltage: 220 – 240V
• GU10 base
• beam angle 36°
• available in light color warm white 2700℁, as we ll as cool white 4000℁
• reduces energy consumption ~ 85%
• dimmable, working on most common dimmers down to 10%
• light-to-the-back effect
• shock-proof and vibration-proof
• 25,000 hours lifetime
• UV and NIR radiation free
• mercury free
• 4 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 |
|---|---|---|---|---|---|
| 25,000h | 100.000 | Metal/plastic | ≤0.5s | none | 0.75 |

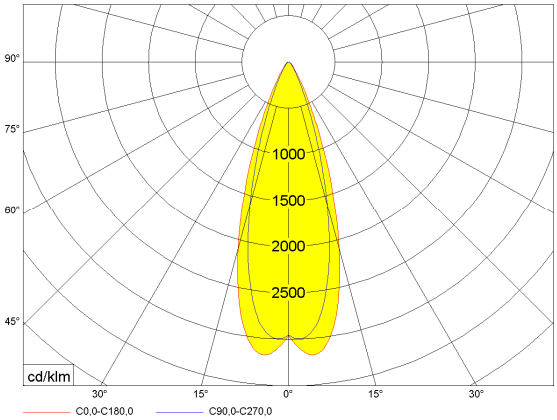
| Mercury max. | Base Type | Length | Diameter | Weight | Tc temperature max.[5] | Nominal current |
|---|---|---|---|---|---|---|
| 0.0mg | GU10 | 58 mm | 50 mm | 75g | 92,5° | 40mA |

## 3. Characteristic Range[3]

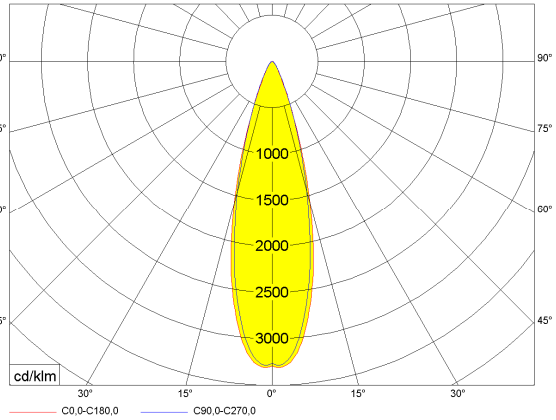
| Type reference | Wattage | Luminous flux | Luminous intensity | Correlated colour temperature | Standard Deviation of Color Matching | Color Rendering Index | Beam angle |
|---|---|---|---|---|---|---|---|
| PAR16 50 36°ADV 827 | 7W | 385lm | 950cd | 2700K | <6 | 80 | 36° |
| PAR16 50 36°ADV 840 | 7W | 400lm | 1000cd | 4000K | <6 | 80 | 36° |

## 4. Light Distribution Curve

PAR16 50 36°ADV 827

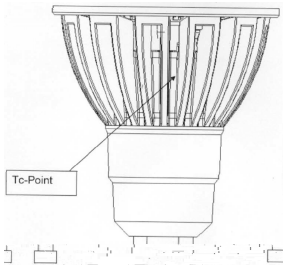



PAR16 50 36°ADV 840




## 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℃), 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 and storage temperature range between -20℃ and 40℃

## 8. Cost savings: example

| Reference product description | Similar halogen product | Watts saved | Cost saved after 3 year | Cost saved after 5 years | Cost saved after 25 years |
|---|---|---|---|---|---|
| PAR16 50 36°ADV 827 | PAR16 halogen 50W | 43W | 22 € | 48€ | 286€ |

*Based on the assumption of 2,7hours/day on and an energy cost of 0.27€/kWh

**Recommended price 17 €

## 9. Ordering Guide

| Type reference | Product Number – 1pcs | Product Number – 1 shipping unit | Number of pcs / ship. unit |
|---|---|---|---|
| PAR16 50 36°ADV 827 | 4008321882714 | 4008321882721 | 6 |
| PAR16 50 36°ADV 8 40 | 4008321882745 | 4008321882752 | 6 |

## 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 |