

# PRODUCT DATASHEET

## P MR16 20 36° DIM 4.5 W/4000K GU5.3

PARATHOM PRO MR16 | Dimmable low-voltage LED reflector lamps MR16 with retrofit pin base



---

### AREAS OF APPLICATION

- Shops and exhibition rooms
- Domestic applications
- Commercial applications
- Accent lighting
- Outdoor use in outdoor luminaires only (minimum IP65)

---

### PRODUCT BENEFITS

- Quick, simple and safe replacement without rewiring
- Design, dimensions, luminous flux comparable to an incandescent or halogen lamp
- Low maintenance costs thanks to long lifetime
- No UV and near-IR radiation in the light beam
- Stepless dimming
- Very high dimmer compatibility, see also [www.ledvance.com/dim](http://www.ledvance.com/dim)
- Compatible with many common conventional and electronic control gears (see also compatibility list)
- Instant 100 % light, no warm-up time

---

### PRODUCT FEATURES

- LED alternative to low voltage halogen lamps
- High color consistency:  $\leq 3$  SDCM
- Dimmable
- Base: GU5.3



- Lamp made of glass
- Excellent color rendering ( $R_a : 97$ )
- Lifetime: up to 40,000 h

## TECHNICAL DATA

### Electrical data

|                                        |            |
|----------------------------------------|------------|
| Rated wattage                          | 4.50 W     |
| Nominal wattage                        | 4.50 W     |
| Nominal voltage                        | 12 V       |
| Claimed equiv. conventional lamp power | 20 W       |
| Operating frequency                    | 50...60 Hz |
| Power factor $\lambda$                 | > 0.50     |

### Photometrical data

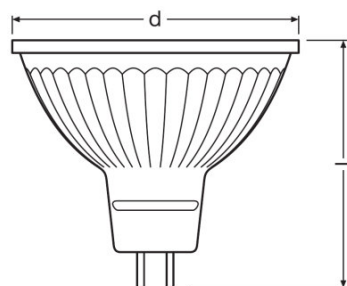
|                                         |              |
|-----------------------------------------|--------------|
| Nominal luminous flux                   | 230 lm       |
| Rated luminous flux                     | 230 lm       |
| Lumen main.fact.at end of nom.life time | 0.70         |
| Light color (designation)               | Cool White   |
| Color temperature                       | 4000 K       |
| Luminous flux                           | 230 lm       |
| Color rendering index $R_a$             | 97           |
| Standard deviation of color matching    | $\leq 3$ sdc |
| Rated color temperature                 | 4000 K       |
| Nominal useful luminous flux 90°        | 230 lm       |
| Rated useful luminous flux 90°          | 230 lm       |
| Rated peak intensity                    | 600 cd       |

### Light technical data

|                                    |                    |
|------------------------------------|--------------------|
| Beam angle                         | 36 ° <sup>1)</sup> |
| Warm-up time (60 %)                | < 0.50 s           |
| Starting time                      | < 0.5 s            |
| Nominal beam angle                 | 36 °               |
| Rated beam angle (half peak value) | 36.00 °            |

<sup>1)</sup> ZMP\_110132

### Dimensions & weight



|                         |         |
|-------------------------|---------|
| <b>Overall length</b>   | 46.0 mm |
| <b>Diameter</b>         | 51.0 mm |
| <b>Outer bulb</b>       | MR51    |
| <b>Length</b>           | 46.0 mm |
| <b>Maximum diameter</b> | 51.0 mm |

### Temperatures & operating conditions

|                                             |              |
|---------------------------------------------|--------------|
| <b>Ambient temperature range</b>            | -20...+40 °C |
| <b>Maximum temperature at tc test point</b> | 80 °C        |

### Lifespan

|                                   |         |
|-----------------------------------|---------|
| <b>Nominal lamp life time</b>     | 40000 h |
| <b>Rated lamp life time</b>       | 40000 h |
| <b>Number of switching cycles</b> | 1000000 |

### Additional product data

|                                    |                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Base (standard designation)</b> | GU5.3                                                                                                                                                                                                                                                                                                                                      |
| <b>Mercury content</b>             | 0.0 mg                                                                                                                                                                                                                                                                                                                                     |
| <b>Mercury-free</b>                | Yes                                                                                                                                                                                                                                                                                                                                        |
| <b>Show WEEE picto</b>             | Yes                                                                                                                                                                                                                                                                                                                                        |
| <b>Product remark</b>              | All technical parameters apply to the entire lamp/Due to the complex production process for light-emitting diodes, the typical values shown for the technical LED parameters are purely statistical values that do not necessarily match the actual technical parameters of each individual product, which can vary from the typical value |

### Capabilities

|                 |     |
|-----------------|-----|
| <b>Dimmable</b> | Yes |
|-----------------|-----|

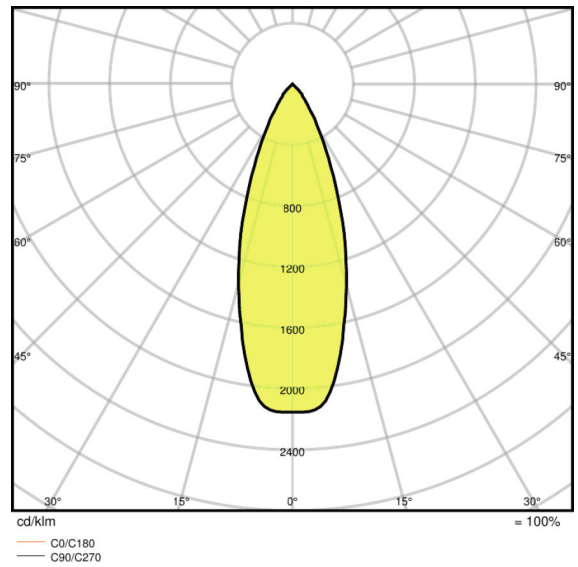
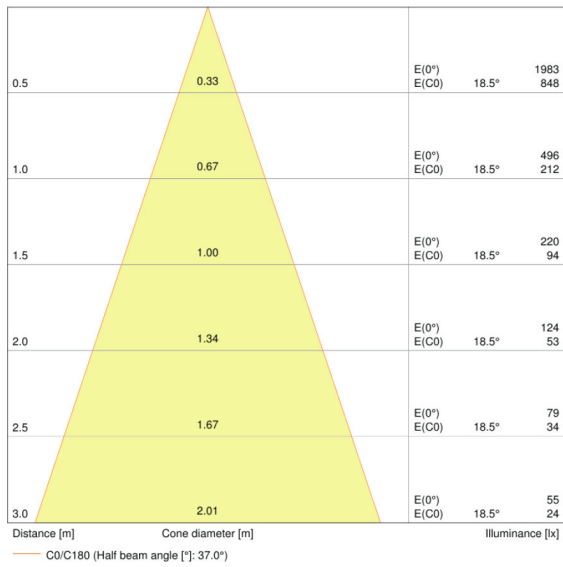
### Certificates & standards

|                                |             |
|--------------------------------|-------------|
| <b>Energy efficiency class</b> | A           |
| <b>Energy consumption</b>      | 5 kWh/1000h |

Country-specific categorizations

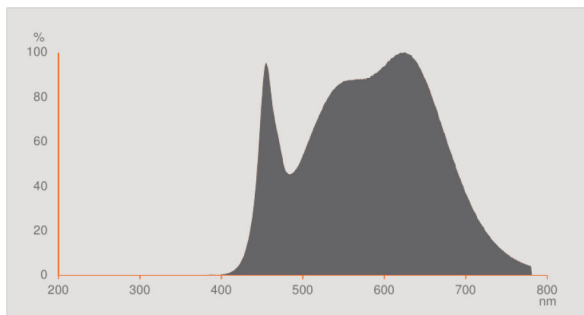
|                        |                 |
|------------------------|-----------------|
| <b>Order reference</b> | LPMR16D2036 4,5 |
|------------------------|-----------------|

Light Distribution



LDC typ cone

LDC typ polar



Spectral power distribution

**LOGISTICAL DATA**

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4058075095625 | Folding carton box<br>1      | 49 mm x 49 mm x 62 mm                | 45.00 g      | 0.15 dm <sup>3</sup> |
| 4058075095632 | Shipping carton box<br>10    | 257 mm x 110 mm x 70 mm              | 498.00 g     | 1.98 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

**REFERENCES / LINKS**

For dimming conformity see

- ▶ [www.ledvance.com/dim](http://www.ledvance.com/dim)

For further products and actual information concerning LED lamps see

- ▶ [www.ledvance.com/ledlamps](http://www.ledvance.com/ledlamps)

For Guarantee see

- ▶ [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

Further information see

- ▶ [www.ledvance.com/low-voltage-ledlamps](http://www.ledvance.com/low-voltage-ledlamps)

**DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.