

# PRODUCT DATASHEET

## P MR16 20 36° DIM 4.5 W/2700K GU5.3

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



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### AREAS OF APPLICATION

- Shops
- Hospitality
- Museums, art galleries
- Residential interiors
- As a downlight for marking walkways, doors, stairs, etc.
- Spotlighting for accents
- Display cabinets and shop windows
- Spotlighting heat-sensitive objects such as food, plants, etc.
- Outdoor applications only in suitable luminaires

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### PRODUCT BENEFITS

- Short payback period thanks to low energy consumption and maintenance costs
- Premium light quality thanks to high color rendering index and narrow binning
- Easy replacement of halogen lamps due to compact full glass design and single optic

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### PRODUCT FEATURES

- Very high color rendering ( $R_a : 90$ )
- Very high color consistency:  $\leq 4$  SDCM
- Dimmable (with many common dimmers, see also [www.ledvance.com/dim](http://www.ledvance.com/dim))
- Made in Germany (versions up to 20 W)
- Mercury-free lamps



## 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)               | Warm White                |
| Color temperature                       | 2700 K                    |
| Luminous flux                           | 230 lm                    |
| Color rendering index Ra                | 97                        |
| Standard deviation of color matching    | $\leq 3$ sdc <sub>m</sub> |
| Rated color temperature                 | 2700 K                    |
| Color rendering index Ra                | 97                        |
| 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 °     |
| Warm-up time (60 %)                | < 0.50 s |
| Starting time                      | < 0.5 s  |
| Nominal beam angle                 | 36 °     |
| Rated beam angle (half peak value) | 36.00 °  |

### 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 |
|-----------------|-----|

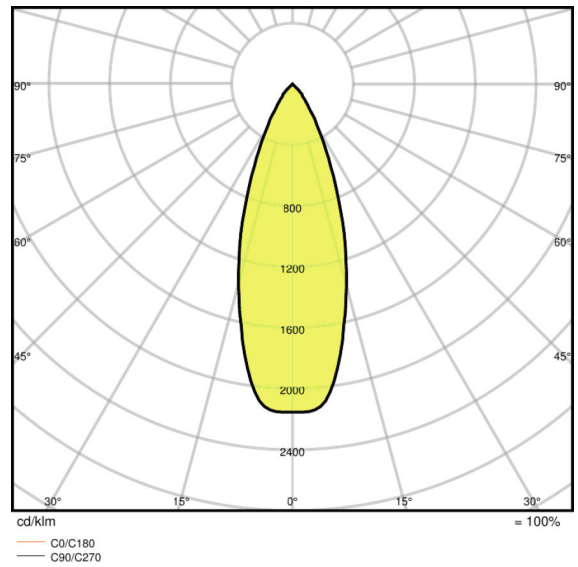
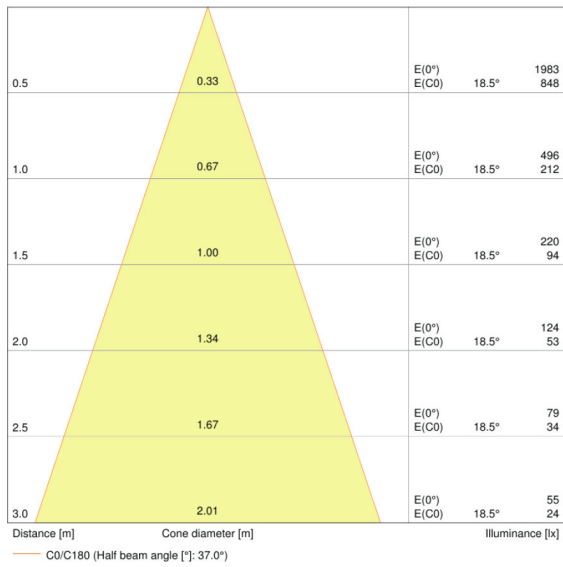
### Certificates & standards

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

Country-specific categorizations

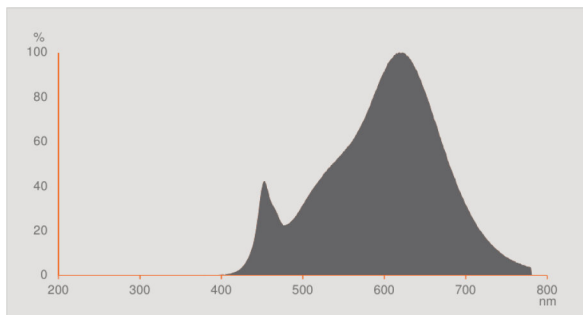
|                        |                 |
|------------------------|-----------------|
| <b>Order reference</b> | LPMR16D2036 4,5 |
|------------------------|-----------------|

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               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4058075095663 | Folding carton box<br>1      | 49 mm x 49 mm x 62 mm                | 45.00 g      | 0.15 dm <sup>3</sup> |
| 4058075095670 | Shipping carton box<br>10    | 257 mm x 110 mm x 70 mm              | 467.00 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.