

# BO 45 base surface 1 lamp

049-6330438F



Project / Type

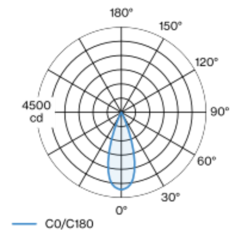
Notes

Count / Date



Surface mounted spotlight made of aluminium; 1 lamp; cylindrical spotlight head; surface jet black powder coated; 350° rotatable and 90° tiltable; surface mounted housing in aluminium incl. converter; mounting plate with pre-assembled converter unit can be pre-mounted; luminaire housing can be attached without tools by interlock; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; light colour 2700 K; binning initial MacAdam ≤ 2 SDCM; CRI ≥ 90; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; high quality, aluminium, vapour deposition coated reflector with faceted lens design; precise radiation characteristic with 36° beam; good glare control through recessed light point level; optical attachment available as accessory; accessories are listed separately; degree of protection IP20; PC1; 220-240 V; incl. DALI-2 converter; flicker-free visual comfort through analogue current control (minimum value 1%); luminaire for through wiring; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

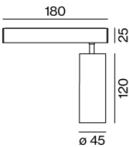
## Light distribution



flood 36°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 4080     | 0.65  |
| 2     | 1020     | 1.29  |
| 3     | 450      | 1.94  |
| 4     | 250      | 2.59  |
| 5     | 160      | 3.23  |

## Product drawing



## General

Ceiling | Surface

tilt max 90°

rotation 350°

jet black | RAL 9005

IP20

1370 lm

## LED

2700 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 97 | R<sub>f</sub>: 91 | R<sub>(1-15)</sub>: 87

MR 0.52 | MDER 0.47

## Optical

flood | beam angle 36°

PstLM ≤ 1.0<sup>1 2 3 4</sup> | SVM ≤ 0.4<sup>1 2 3 4</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 15.7 W

system 87 lm/W<sup>5</sup>

## Physical

length 180 mm | width 55 mm | height 163 mm

0.5 kg

<sup>1</sup> oval lens BO 45 007-1965880 <sup>2</sup> soft lens BO 45 007-1965980  
<sup>3</sup> wallwasher lens BO 45 007-1965780  
<sup>4</sup> Value of containing product at full load (undimmed)  
<sup>5</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## Installation instructions



## Lighting calculator



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## Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 0.964                        | 0.923  | 0.884             | 0.847                           | 0.811  |
| LSF                | 1                            | 1      | 1                 | 1                               | 1      |
| MF                 | LMF × RSMF × LLMF × LSF      |        | RSMF <sup>a</sup> | Room Surface Maintenance Factor |        |
| MF                 | Maintenance Factor           |        | LLMF              | Lamp Lumens Maintenance Factor  |        |
| LMF <sup>a</sup>   | Luminaire Maintenance Factor |        | LSF               | Lamp Survival Factor            |        |

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

| Automatic Circuit Breaker Type | Number of Fixtures |
|--------------------------------|--------------------|
| B10                            | 31                 |
| B13                            | 40                 |
| B16                            | 50                 |
| B20                            | 62                 |
| B25                            | 78                 |
| C10                            | 52                 |
| C13                            | 67                 |
| C16                            | 85                 |
| C20                            | 104                |
| C25                            | 130                |

## Optical accessories

### HONEYCOMB LOUVER

| TYPE  | COLOUR    | Ø (MM) | ARTICLE NUMBER(S) |
|---|-----------|--------|-------------------|
| for BO 45   JUST 45   MOVE IN 45   TARO 45   TULA micro | jet black | 42     | 007-1965188       |



## Optical accessories

### OVAL LENS

| TYPE                                | Ø (MM) | ARTICLE NUMBER(S) |
|-------------------------------------|--------|-------------------|
| for BO 45   MOVE IN 45   TULA micro | 42     | 007-1965880       |



### SOFT LENS

| TYPE                                      | Ø (MM) | ARTICLE NUMBER(S) |
|---|--------|-------------------|
| for ARY   BO 45   MOVE IN 45   TULA micro | 42     | 007-1965980       |



### WALLWASHER LENS

| TYPE                                      | Ø (MM) | ARTICLE NUMBER(S) |
|---|--------|-------------------|
| for ARY   BO 45   MOVE IN 45   TULA micro | 42     | 007-1965780       |



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## Colour rendering



## TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.