

# BO 45 surface

049-6230418F 002-90728



Project / Type

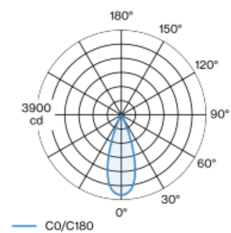
Notes

Count / Date



Cylindrical spotlight in aluminium; surface black powder coated; 350° rotatable and 90° tiltable; with surface mounted housing; 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; PC2; 220-240 V; incl. DALI-2 converter; flicker-free visual comfort through analogue current control (minimum value 1%); external converter for ceiling insertion, through-wiring suitable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

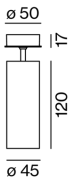
## Light distribution



flood 36°

| h (m) | EO° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 3690     | 0.65  |
| 2     | 920      | 1.29  |
| 3     | 410      | 1.94  |
| 4     | 230      | 2.59  |
| 5     | 150      | 3.23  |

## Product drawing



## General

Ceiling , Surface

tilt max 90°

rotation 350°

black , RAL 9005 <sup>1</sup>

IP20

1240 lm

fixture 92 lm/W<sup>2</sup>

## LED

2700 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 99 , R<sub>r</sub>: 91 , R<sub>(1-15)</sub>: 89

MR 0.53

MDER 0.48

## Optical

flood

beam angle 36°

PstLM ≤ 1.0 <sup>3</sup>

SVM ≤ 0.4 <sup>3</sup>

## Electrical

DALI-2

220-240 V

system 15.9 W

fixture 13.5 W

36 Vf

400 mA

PC2

1 DALI Addr.

## Physical

diameter 45 mm

height 155 mm

0.34 kg

<sup>1</sup> RAL code  
<sup>2</sup> FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.  
<sup>3</sup> Value of containing product at full load (undimmed)

## Installation instructions



## Lighting calculator





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Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 0.96                         | 0.92   | 0.88              | 0.85                            | 0.81   |
| 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 Faktor            |        |

<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                            | 36                 |
| B13                            | 47                 |
| B16                            | 58                 |
| C10                            | 36                 |
| C13                            | 78                 |
| C16                            | 58                 |

Components

POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 197-29-21  | 002-90728         |



Optional electrical accessories

DIN RAIL POWER SUPPLY

|       |            |                   |
|-------|------------|-------------------|
| TYPE  | L-W-H (MM) | ARTICLE NUMBER(S) |
| 160 W | 72-90-63   | 005-6520210       |



DIN RAIL LED DRIVER

|                                |            |                   |
|--------------------------------|------------|-------------------|
| TYPE                           | L-W-H (MM) | ARTICLE NUMBER(S) |
| DALI-2   200-1050 mA   2 x 42W | 36-88-59   | 005-6121030       |



Optical accessories

HONEYCOMB LOUVER

|           |        |                   |
|-----------|--------|-------------------|
| COLOUR    | Ø (MM) | ARTICLE NUMBER(S) |
| jet black | 42     | 007-1965188       |



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### OVAL LENS

| Ø (MM) | ARTICLE NUMBER(S) |
|--------|-------------------|
| 42     | 007-1965880       |



### SOFT LENS

| Ø (MM) | ARTICLE NUMBER(S) |
|--------|-------------------|
| 42     | 007-1965980       |



### WALLWASHER LENS

| Ø (MM) | ARTICLE NUMBER(S) |
|--------|-------------------|
| 42     | 007-1965780       |

