

# BO 45 surface

049-6230718V 002-90729



Project / Type

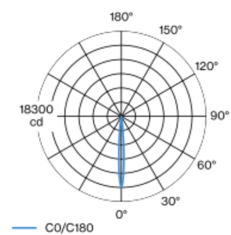
Notes

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 high power LED for maximum efficiency; no appearance of multiple shadows; light colour 3500 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 90; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 8° 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



super spot 8°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 15300    | 0.14  |
| 2     | 3800     | 0.28  |
| 3     | 1700     | 0.41  |
| 4     | 1000     | 0.55  |
| 5     | 600      | 0.69  |

## Product drawing



## General

Ceiling , Track

tilt max 90°

rotation 350°

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

IP20

437 lm

fixture 63 lm/W<sup>2</sup>

## LED

3500 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 97 , R<sub>r</sub>: 90 , R<sub>(1-5)</sub>: 87

MR 0.68

MDER 0.62

## Optical

super spot

beam angle 8°

PstLM ≤ 1.0 <sup>3</sup>

SVM ≤ 0.4 <sup>3</sup>

## Electrical

DALI-2

220-240 V

system 9.2 W

fixture 6.9 W

11 Vf

600 mA

PC2

1 DALI Addr.

## Physical

diameter 45 mm

height 155 mm

0.41 kg

<sup>1</sup> RAL code  
<sup>2</sup> incl. consideration of optical losses & internal control unit losses  
<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               | 0.98                         | 0.95   | 0.92              | 0.89                            | 0.86   |
| 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                            | 36                 |
| B13                            | 47                 |
| B16                            | 58                 |
| C10                            | 36                 |
| C13                            | 78                 |
| C16                            | 58                 |

Components

POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 197-29-21  | 002-90729         |



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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## Optical accessories

### 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       |

