

# BO 45 surface

049-6230717M 002-90728



Project / Type

Notes

Count / Date



### General

Ceiling , Surface

tilt max 90°

rotation 350°

white , RAL9016 <sup>1</sup>

IP20

1280 lm

### LED

3500 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 97 , R<sub>f</sub>: 90 , R<sub>f(1-5)</sub>: 89

MR 0.7

MDER 0.63

### Optical

medium

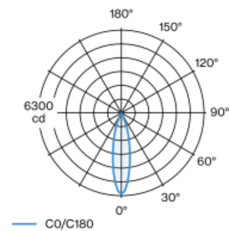
beam angle 24°

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

Cylindrical spotlight in aluminium; surface white 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 3500 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 24° beam; good glare control through recessed light point level; optical attachment available as accessory; accessories are listed separately; degree of protection IP20; PC2 220-240V; 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;

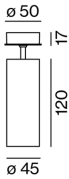
### Light distribution



medium 24°

| h (m) | EO° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 6160     | 0.43  |
| 2     | 1540     | 0.86  |
| 3     | 680      | 1.30  |
| 4     | 390      | 1.73  |
| 5     | 250      | 2.16  |

### Product drawing



### Electrical

DALI-2

system 15.9 W

inset 13.5 W

36 Vf

400 mA

PC2 220-240V

system 81 lm/W<sup>3</sup>

inset 95 lm/W<sup>4</sup>

1 DALI Addr.

### Physical

diameter 45 mm

height 155 mm

0.34 kg

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. optical losses and the efficiency of the operating device (converter)  
<sup>4</sup> incl. optical losses

### 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 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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## 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       |

