

# BO 45 semi-recessed

049-613041XV 002-90729



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



|                         |  |
|-------------------------|--|
| <b>General</b>          |  |
| Ceiling , Semi-Recessed |  |
| tilt max 90°            |  |
| rotation 350°           |  |
| special colours         |  |
| IP20                    |  |
| 346 lm                  |  |

|  |  |
|--|--|
| <b>LED</b>   |  |
| 2700 K   |  |
| CRI ≥ 90   |  |
| L85 / 50000 h  |  |
| initial MacAdam ≤ 3 SDCM   |  |
| R <sub>g</sub> : 99 , R <sub>f</sub> : 91 , R <sub>(1-15)</sub> : 89 |  |
| MR 0.54  |  |
| MDER 0.49  |  |

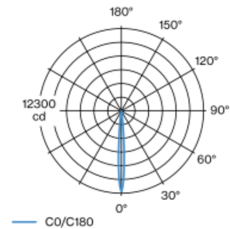
|                          |  |
|--------------------------|--|
| <b>Optical</b>           |  |
| super spot               |  |
| beam angle 8°            |  |
| PstLM ≤ 1.0 <sup>1</sup> |  |
| SVM ≤ 0.4 <sup>1</sup>   |  |

Cylindrical spotlight in aluminium; surface special colours powder coated; 350° rotatable and 90° tiltable; recessed version with trim; suitable for ceiling thickness of 2-25 mm; passive cooling of the LEDs through improved heat sink geometry; with high power LED for maximum efficiency; no appearance of multiple shadows; light colour 2700 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 220-240V; 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;

|                   |  |
|-------------------|--|
| <b>Electrical</b> |  |
| DALI-2            |  |
| 9.3 W             |  |
| PC2 220-240V      |  |
| 37 lm/W           |  |
| 1 DALI Addr.      |  |

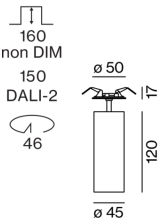
|                 |  |
|-----------------|--|
| <b>Physical</b> |  |
| diameter 45 mm  |  |
| height 149 mm   |  |
| 0.04 kg         |  |

## Light distribution



|               |          |       |  |
|---------------|----------|-------|--|
| super spot 8° |          |       |  |
| h (m)         | EO° (lx) | ø (m) |  |
| 1             | 12100    | 0.14  |  |
| 2             | 3000     | 0.28  |  |
| 3             | 1300     | 0.41  |  |
| 4             | 800      | 0.55  |  |
| 5             | 500      | 0.69  |  |

## Product drawing



|                              |  |
|------------------------------|--|
| <b>Cutout</b>                |  |
| min. ceiling thickness 2 mm  |  |
| max. ceiling thickness 25 mm |  |
| recessed depth 150 mm        |  |

<sup>1</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 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  | 002-90729         |



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 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       |

