

# BO 45 surface

049-6230518S 002-90722



Project / Type

Notes

Count / Date



General

Ceiling , Surface

tilt max 90°

rotation 350°

black , RAL9005 <sup>1</sup>

IP20

1110 lm

LED

3000 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 100 , R<sub>f</sub>: 91 , R<sub>f1-15</sub>: 88

MR 0.59

MDER 0.53

Optical

spot

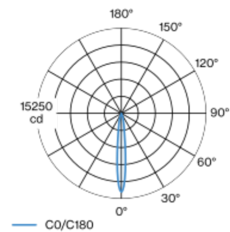
beam angle 12°

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

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 3000 K; binning initial MacAdam ≤ 3 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 12° 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. converter, non dimmable; external converter for ceiling insertion, through-wiring suitable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

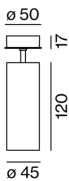
## Light distribution



spot 12°

h (m)	E0° (lx)	ø (m)
1	14000	0.21
2	3500	0.42
3	1600	0.63
4	900	0.84
5	600	1.06

## Product drawing



Electrical

non DIM

system 15.0 W

inset 12.8 W

37 Vf

350 mA

PC2 220-240V

system 74 lm/W<sup>3</sup>

inset 87 lm/W<sup>4</sup>

Physical

diameter 45 mm

height 155 mm

0.57 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	0.96	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	31
B13	40
B16	50
B20	62
B25	78
C10	52
C13	67
C16	85
C20	104
C25	130

## Components

### POWER SUPPLY

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
22 W	180-30-21	002-90722



## 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

