

# BO 45 semi-recessed

049-6130417M 002-90728



Project / Type

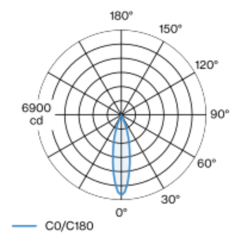
Notes

Count / Date



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

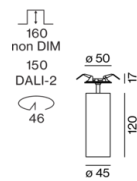
## Light distribution



medium 24°

h (m)	EO° (lx)	ø (m)
1	6500	0.43
2	1630	0.86
3	720	1.30
4	410	1.73
5	260	2.16

## Product drawing



## General

Ceiling | Semi-Recessed

tilt max 90°

rotation 350°

traffic white | RAL 9016

IP20

1350 lm

## LED

2700 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 97 | R<sub>f</sub>: 91 | R<sub>(1-15)</sub>: 87

MR 0.52 | MDER 0.47

## Optical

medium | beam angle 24°

PstLM ≤ 1.0<sup>1 2 3 4</sup> | SVM ≤ 0.4<sup>1 2 3 4</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC2 | 220-240 V

system 15.8 W | fixture 13.4 W

fixture 101 lm/W<sup>5</sup>

36 Vf | 400 mA

## Physical

diameter 45 mm | height 149 mm

0.41 kg

## Cutout

diameter 46 mm

min. ceiling thickness 2 mm | max. ceiling thickness 25 mm

recessed depth 150 mm

<sup>1</sup> oval lens BO 45 007-1965880

<sup>2</sup> wallwasher lens BO 45 007-1965780

<sup>3</sup> soft lens BO 45 007-1965980

<sup>4</sup> Value of containing product at full load (undimmed)

<sup>5</sup> incl. consideration of optical losses & internal control unit 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 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

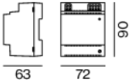
L-W-H (MM)	ARTICLE NUMBER(S)
197-29-21	002-90728



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

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



### DIN RAIL LED DRIVER

L-W-H (MM)	ARTICLE NUMBER(S)
36-88-59	005-6121030



## Optical accessories

### HONEYCOMB LOUVER

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
for BO 45   JUST 45   MOVE IN 45   TARO 45   TULA micro	jet black	42	007-1965188



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## Optical accessories

### OVAL LENS

TYPE	Ø (MM)	ARTICLE NUMBER(S)
for BO 45   MOVE IN 45   TULA micro	42	007-1965880



### SOFT LENS

TYPE	Ø (MM)	ARTICLE NUMBER(S)
for ARY   BO 45   MOVE IN 45   TULA micro	42	007-1965980

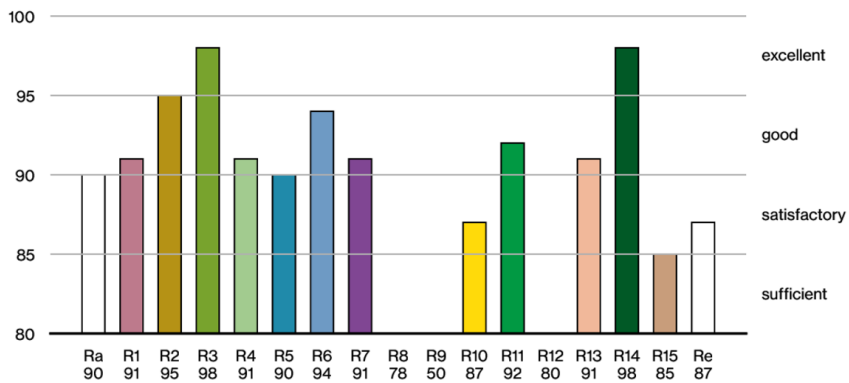
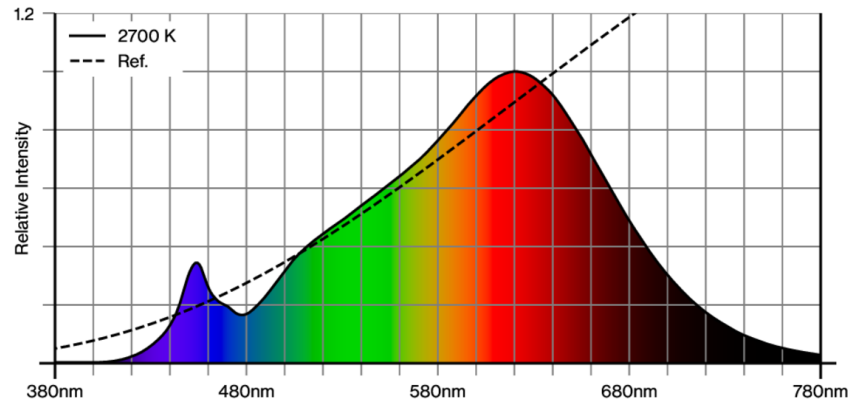


### WALLWASHER LENS

TYPE	Ø (MM)	ARTICLE NUMBER(S)
for ARY   BO 45   MOVE IN 45   TULA micro	42	007-1965780



## Colour rendering



[049-6130417M 002-90728] The technical data represent rated values for an ambient temperature of 25°C. The data values for the luminous flux are initially subject to a tolerance of +/- 10%, those for the electrical connected load are initially subject to a tolerance of +/- 10%, and those for the colour temperature are initially subject to a tolerance of +/- 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.  
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## TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.

