

BO 45 semi-recessed

049-613041XM 002-90724



Project / Type

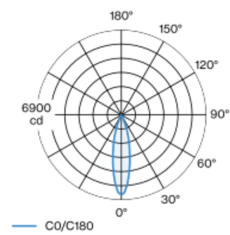
Notes

Count / Date



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 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. 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;

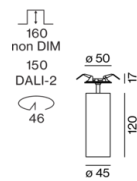
Light distribution



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°

special colours

IP20

1350 lm

LED

2700 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R_g: 97 | R_f: 91 | R₍₁₋₁₅₎: 87

MR 0.52 | MDER 0.47

Optical

medium | beam angle 24°

PstLM ≤ 1.0 ^{1 2 3 4} | SVM ≤ 0.4 ^{1 2 3 4}

Electrical

non DIM

PC2 | 220-240 V

system 15.8 W | fixture 13.4 W

fixture 101 lm/W⁵

36 Vf | 400 mA

Physical

diameter 45 mm | height 149 mm

0.39 kg

Cutout

diameter 46 mm

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

recessed depth 160 mm

¹ wallwasher lens BO 45 007-1965780
² oval lens BO 45 007-1965880 ³ soft lens BO 45 007-1965980
⁴ Value of containing product at full load (undimmed)
⁵ incl. consideration of optical losses & internal control unit losses

Installation instructions



Lighting calculator



BO 45 semi-recessed

049-613041XM 002-90724



Project / Type

Notes

Count / Date

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 ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	Lamp Survival Factor	

^a 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

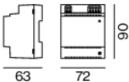
L-W-H (MM)	ARTICLE NUMBER(S)
180-30-21	002-90724



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



BO 45 semi-recessed

049-613041XM 002-90724



Project / Type

Notes

Count / Date

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

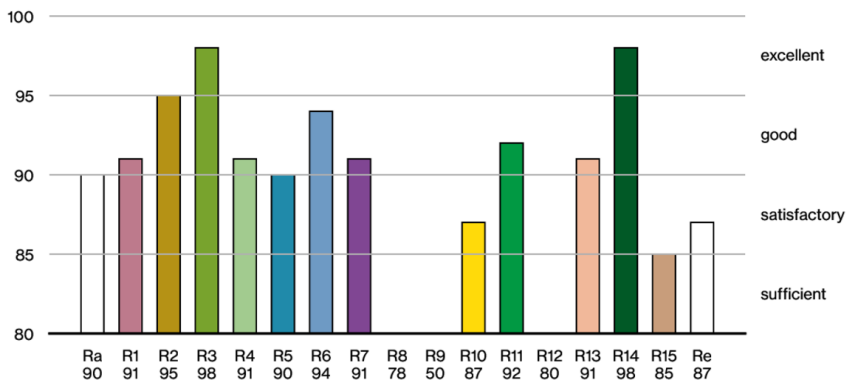
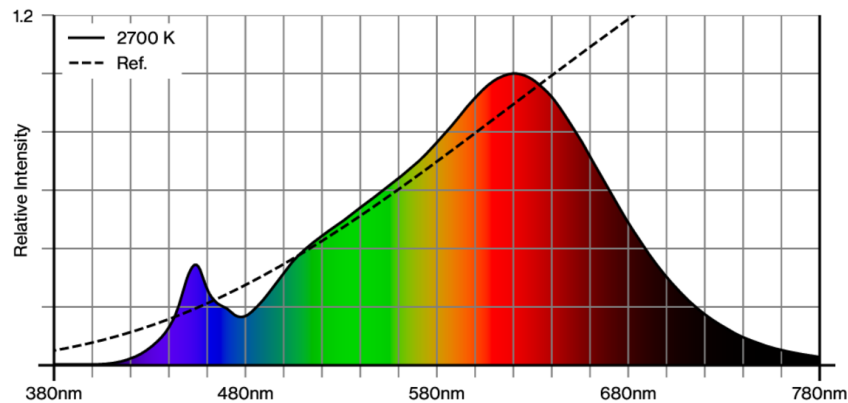


WALLWASHER LENS

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



Colour rendering



[049-613041XM 002-90724] 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.
© XAL GmbH · Auer-Welsbach-Gasse 36 · 8055 Graz · Austria · www.xal.com

BO 45 semi-recessed

049-613041XM 002-90724



Project / Type

Notes

Count / Date

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.

