

# BO 45

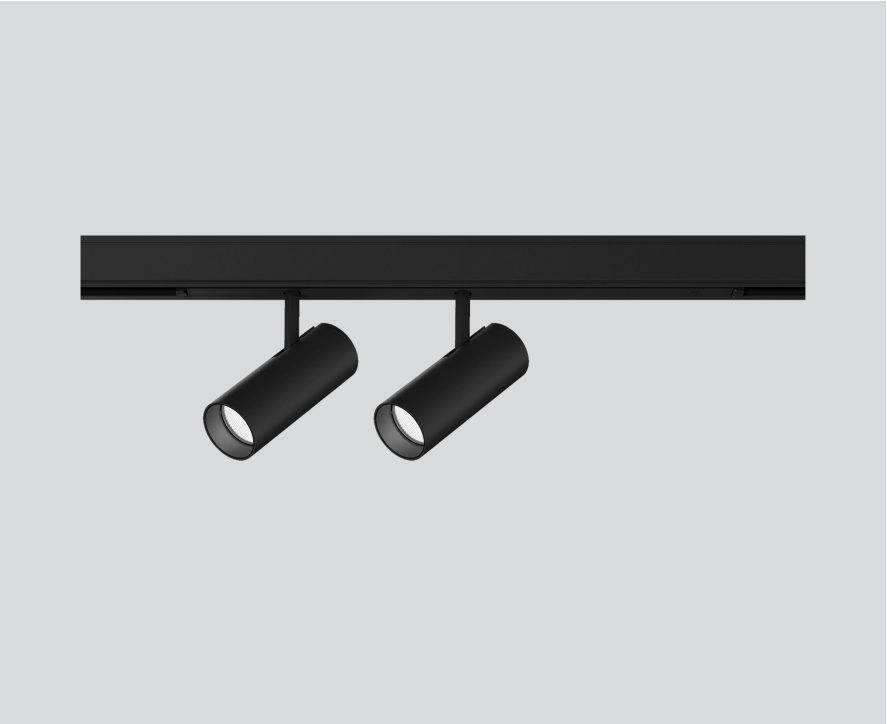
intrack 2 lamps  
180-7240638S



Project / Type

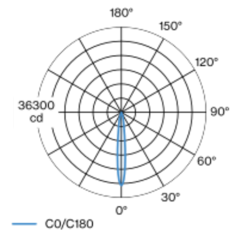
Notes

Count / Date



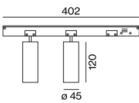
Tracked spotlight in die-cast aluminium with 3-phase adapter; classic style in elegant design for discerning requirements; 2 lamps; cylindrical spotlight heads; surface jet black powder coated; spotlight head 360° rotatable and 90° tiltable; converter integrated in the power track adapter; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; light colour 4000 K; binning initial MacAdam  $\leq 2$  SDCM; CRI  $\geq 90$ ; 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; 220-240 V; adapter for toolless insertion or movement on a variety of 3-phase power tracks; adapter flush with the power track; incl. DALI-2 converter; flicker-free visual comfort through analogue current control (minimum value 1%); light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



spot 12°			
h (m)	EO° (lx)	ø (m)	
1	15600	0.21	
2	3900	0.42	
3	1700	0.63	
4	1000	0.84	
5	600	1.06	

## Product drawing



## General

Ceiling | Track

tilt max 90°

rotation 360°

jet black | RAL 9005

IP20

2460 lm

## LED

4000 K

CRI  $\geq 90$

L80 / 50000 h

initial MacAdam  $\leq 2$  SDCM

R<sub>g</sub>: 98 | R<sub>f</sub>: 90 | R<sub>t(1-15)</sub>: 88

MR 0.8 | MDER 0.72

## Optical

spot | beam angle 12°

PstLM  $\leq 1.0$ <sup>1 2 3 4</sup> | SVM  $\leq 0.4$ <sup>1 2 3 4</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC2 | 220-240 V

system 29.9 W

system 82 lm/W<sup>5</sup>

## Physical

diameter 45 mm | height 120 mm

0.5 kg

<sup>1</sup> soft lens BO 45 007-1965980

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

<sup>3</sup> oval lens BO 45 007-1965880

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

<sup>5</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## 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	17
B13	22
B16	28
C10	22
C13	27
C16	35

## 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



## 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



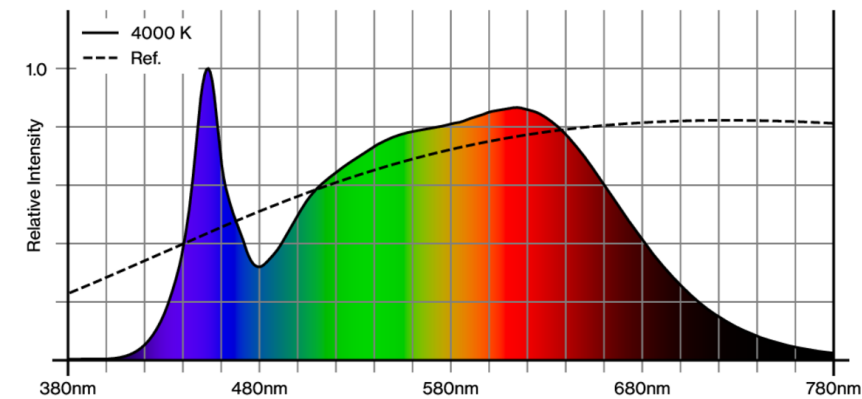
### WALLWASHER LENS

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

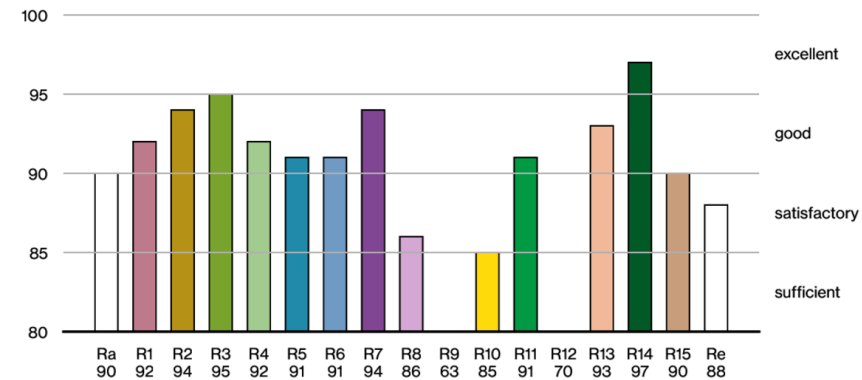




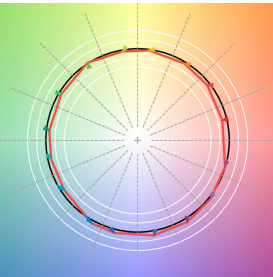
Colour rendering



CRI/R<sub>a</sub> ≥ 91 R<sub>e</sub> ≥ 88 (4000 K)



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.