



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

Notes \_\_\_\_\_

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



<b>General</b>
Ceiling , Semi-Recessed
tilt max 90°
rotation 360°
black , RAL9005 <sup>1</sup>
IP20
1060 lm

<b>LED</b>
4000 K
CRI ≥ 90
L80 / 50000 h
initial MacAdam ≤ 2 SDCM
R <sub>g</sub> : 97 , R <sub>f</sub> : 90 , R <sub>(1-15)</sub> : 89
MR 0.81
MDER 0.74

<b>Optical</b>
spot
beam angle 14°
PstLM ≤ 1.0 <sup>2</sup>
SVM ≤ 0.4 <sup>2</sup>

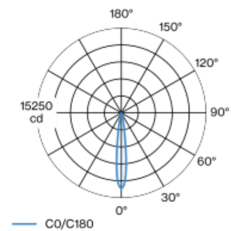
Spotlight made of aluminium; 1 lamp; cylindrical spotlight head; surface black powder coated; spotlight head 360° rotatable and 90° tiltable; spotlight can be installed without tools in MINO 40 system or FRAME 40 system; converter integrated in the power track adapter; passive cooling of the LEDs through 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 ≤ 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 14° beam; good glare control through recessed light point level; optical attachment available as accessory; accessories are listed separately; degree of protection IP20; PC1 220-240V; incl. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

<b>Electrical</b>
DALI-2
15.0 W
PC1 220-240V
71 lm/W
1 DALI Addr.

<b>Physical</b>
length 300 mm
width 45 mm
height 142 mm
0.45 kg
300 (adapter) mm

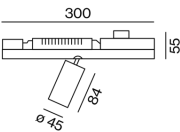
<b>Cutout</b>
diameter 65 mm
min. ceiling thickness 9 mm
max. ceiling thickness 25 mm
recessed depth 230 mm

Light distribution



spot 14°		
h (m)	E0° (lx)	ø (m)
1	13500	0.24
2	3400	0.48
3	1500	0.72
4	800	0.96
5	500	1.20

Product drawing



<sup>1</sup> RAL code <sup>2</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	0.96	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	36
B13	47
B16	58
C10	36
C13	78
C16	58

Optical accessories

HONEYCOMB LOUVER

COLOUR	Ø (MM)	ARTICLE NUMBER(S)
jet black	42	007-1965188

