



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

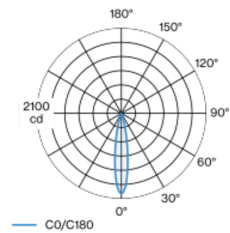
Notes \_\_\_\_\_

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



Miniature rectangular lamp made of aluminium; angular design; surface lacquered in black; plug and play electrical connector system for toolless mounting; different mechanical and electrical poles available - for flexible system design (available as an accessory); equipped with miniature spotlight heads; light colour 4000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 95$ ; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 18° beam; light inset rotatable; degree of protection IP20; PC3; 24 V; accessories are listed separately; light source replaceable by an authorized professional;

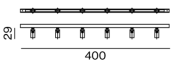
Light distribution



spot 18°

h (m)	EO° (lx)	ø (m)
1	329	0.32
2	82	0.64
3	37	0.96
4	21	1.28
5	13	1.59

Product drawing



General

Showcase , Standing \_\_\_\_\_

rotation 360° \_\_\_\_\_

black , RAL 9021 <sup>1</sup> \_\_\_\_\_

IP20 \_\_\_\_\_

Interior \_\_\_\_\_

270 lm \_\_\_\_\_

optical inset 13 lm/W<sup>2</sup> \_\_\_\_\_

LED

4000 K \_\_\_\_\_

CRI  $\geq 95$  \_\_\_\_\_

L80 / 50000 h \_\_\_\_\_

initial MacAdam  $\leq 3$  SDCM \_\_\_\_\_

R<sub>g</sub>: 100 , R<sub>f</sub>: 94 , R<sub>f(1-5)</sub>: 96 \_\_\_\_\_

MR 0.87 \_\_\_\_\_

MDER 0.78 \_\_\_\_\_

Optical

spot \_\_\_\_\_

beam angle 18° \_\_\_\_\_

Electrical

excl. driver \_\_\_\_\_

24 V \_\_\_\_\_

fixture 4.7 W \_\_\_\_\_

optical inset 3.5 W \_\_\_\_\_

PC3 \_\_\_\_\_

Physical

length 400 mm \_\_\_\_\_

width 11 mm \_\_\_\_\_

height 29 mm \_\_\_\_\_

<sup>1</sup> RAL code <sup>2</sup> incl. consideration of optical losses

Installation instructions





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Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.954	0.915	0.879	0.844	0.81
LSF	1	1	1	1	1

MF

MF

LMF<sup>a</sup>

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF<sup>a</sup>

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

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.