



Project / Type

Notes

Count / Date



General

Ceiling , Track

tilt max 310°

rotation 360°

white , RAL 9016 <sup>1</sup>

IP20

1610 lm

LED

4000 K

CRI ≥ 95

L90 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 98 , R<sub>f</sub>: 91 , R<sub>(1-15)</sub>: 95

MR 0.85

MDER 0.77

Optical

spot

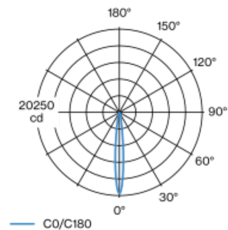
beam angle 12°

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

Track light made of die-cast aluminium; surface white powder coated; 360° rotatable and 310° tiltable; converter installed in aluminium spotlight housing; 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 ≥ 95; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; including high quality aluminium reflector with spherical reflector; high gloss anodised; neutral colour reflection through absolute freedom from interference colour; for brilliant object staging; precise radiation characteristic with 12° beam; installed and exchanged without tools; optical attachments available as accessories; degree of protection IP20; PC1; 220-240 V; adapter for toolless insertion or movement on a variety of 3-phase power tracks; adapter fixation without tools by means of knurled screw; incl. DALI-2 converter; point outlet, either in surface mounted housing or recessed housing, available as an accessory; accessories are listed separately; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

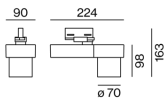
Light distribution



spot 12°

h (m)	E0° (lx)	ø (m)
1	19800	0.20
2	4900	0.40
3	2200	0.60
4	1200	0.81
5	800	1.01

Product drawing



Electrical

DALI-2

220-240 V

system 22.9 W

system 70 lm/W<sup>3</sup>

PC1

1 DALI Addr.

Physical

diameter 70 mm

height 98 mm

0.9 kg

tool-free fixation

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)

<sup>3</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	0.97	0.95	0.93	0.91	0.9
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	31
B13	40
B16	50
B20	62
B25	78
C10	52
C13	67
C16	85
C20	104
C25	130

Mounting accessories

RECESSED HOUSING

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
point outlet	traffic white	151	186-072277
point outlet	jet black	151	186-072278



SURFACE HOUSING

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
point outlet	traffic white	120	186-072287
point outlet	jet black	120	186-072288



Optical accessories

SNOOT

COLOUR	Ø (MM)	ARTICLE NUMBER(S)
jet black	62	080-5900008



HONEYCOMB LOUVER

COLOUR	Ø (MM)	ARTICLE NUMBER(S)
jet black	61	080-5900018

