



Project / Type

Notes

Count / Date



General

Ceiling , Track

tilt max 310°

rotation 360°

black , RAL9005 <sup>1</sup>

IP20

312 lm

LED

3000 K

CRI ≥ 95

L90 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 99 , R<sub>f</sub>: 94 , R<sub>(1-15)</sub>: 96

MR 0.66

MDER 0.6

Optical

framing

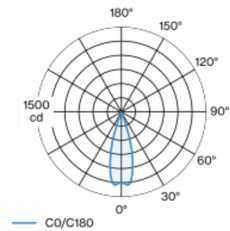
beam angle 32°

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

Track light made of die-cast aluminium; surface black 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 3000 K; binning initial MacAdam ≤ 2 SDCM; CRI ≥ 95; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; contoured spotlight for precise circular shape; easy adjustment by iris-shaped shielding device made of stainless steel; including high quality bi-convex glass lens; sharp object focusing through adjustable lens; focusing by means of rubberised adjusting ring on the spotlight head; degree of protection IP20; PC1 220-240V; 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;

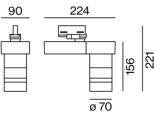
Light distribution



framing 32°

h (m)	E0° (lx)	ø (m)
1	1250	0.57
2	310	1.13
3	140	1.70
4	80	2.26
5	50	2.83

Product drawing



Electrical

DALI-2

system 23.0 W

PC1 220-240V

system 14 lm/W<sup>3</sup>

inset 16 lm/W<sup>4</sup>

1 DALI Addr.

Physical

diameter 70 mm

height 156 mm

1 kg

tool-free fixation

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. optical losses and the efficiency of the operating device (converter)  
<sup>4</sup> incl. optical losses

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

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.

Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	45
B16	80