



Project / Type _____

Notes _____

Count / Date _____



General

Ceiling , Track
 tilt max 310°
 rotation 360°
 black , RAL 9005 ¹
 IP20
 298 lm

LED

3000 K
 CRI ≥ 95
 L90 / 50000 h
 initial MacAdam ≤ 2 SDCM
 R_g: 99 , R_f: 94 , R₍₁₋₁₅₎: 96
 MR 0.66
 MDER 0.6

Optical

framing _____
 beam angle 31°
 PstLM ≤ 1.0 ²
 SVM ≤ 0.4 ²

Electrical

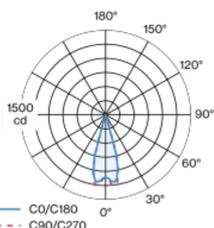
DALI-2
 220-240 V
 system 23.0 W
 system 13 lm/W³
 PC1
 1 DALI Addr.

Physical

diameter 70 mm
 height 156 mm
 1 kg
 tool-free fixation

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; contour spotlight for precise rectangular shape; easy adjustment by 4 stainless steel shading elements; incl. 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; 220-240 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;

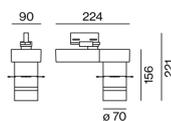
Light distribution



framing 31°

h (m)	EO° (lx)	ø (m)
1	1100	0.56
2	280	1.12
3	120	1.68
4	70	2.24
5	40	2.79

Product drawing



¹ RAL code ² Value of containing product at full load (undimmed)
³ FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: 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 ^a	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF ^a	Luminaire Maintenance Factor	LSF	Lamp Survival Faktor

^a 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