



Project / Type

Notes

Count / Date



General

Ceiling , Track

tilt max 310°

rotation 360°

black , RAL 9005 ¹

IP20

201 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

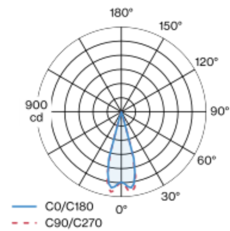
beam angle 31°

PstLM ≤ 1.0 ²

SVM ≤ 0.4 ²

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;

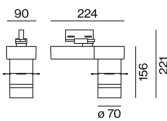
Light distribution



framing 31°

| h (m) | EO° (lx) | ø (m) |
|-------|----------|-------|
| 1 | 744 | 0.56 |
| 2 | 186 | 1.12 |
| 3 | 83 | 1.68 |
| 4 | 46 | 2.24 |
| 5 | 30 | 2.79 |

Product drawing



Electrical

DALI-2

220-240 V

system 14.0 W

system 14 lm/W³

PC1

1 DALI Addr.

Physical

diameter 70 mm

height 156 mm

1 kg

tool-free fixation

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





Project / Type

Notes

Count / Date

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 |
|--------------------------------|--------------------|
| B13 | 100 |
| B16 | 122 |
| B20 | 153 |
| C13 | 59 |
| C16 | 72 |
| C20 | 90 |