



Project / Type

Notes

Count / Date



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 ≥ 90; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. exchangeable additional lenses; precise radiation characteristics with different beam angles; optical filter available as accessory; degree of protection IP20; PC1; 220-240 V; adapter for toolless insertion or movement on a variety of 3-phase power tracks; adapter fixation by means of set screw; incl. converter, dimmable with integrated potentiometer; 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;



General

Ceiling , Track

tilt max 310°

rotation 360°

black , RAL 9005 <sup>1</sup>

IP20

890<sup>2</sup>, 911<sup>3</sup>, 961<sup>4</sup>, 981<sup>5</sup>, 1010<sup>6</sup>, 1010<sup>7</sup> lm

LED

3000 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 2 SDCM

R<sub>g</sub>: 98 , R<sub>f</sub>: 91 , R<sub>(1-15)</sub>: 89

MR 0.6

MDER 0.55

Optical

spot<sup>2</sup>, wide flood<sup>3</sup>, medium<sup>4</sup>, flood<sup>5</sup>, super spot<sup>6</sup>

beam angle 64°<sup>2</sup>, 30°<sup>3</sup>, 38°<sup>4</sup>, 40°<sup>5</sup>, 19°<sup>6</sup>, 10°<sup>7</sup>

PstLM ≤ 1.0<sup>5 4 3 2 6 7 8</sup>

SVM ≤ 0.4<sup>5 4 3 2 6 7 8</sup>

Electrical

DIM POTI

220-240 V

system 14.7 W

system 61<sup>2</sup>, 62<sup>3</sup>, 65<sup>4</sup>, 67<sup>5</sup>, 69<sup>6</sup>, 69<sup>7</sup> lm/W<sup>9</sup>

PC1

Physical

diameter 70 mm

height 98 mm

0.92 kg

set screw (tool required)

<sup>1</sup> RAL code <sup>2</sup> 64 degrees <sup>3</sup> 30 degrees <sup>4</sup> 38 degrees  
<sup>5</sup> 40 degrees <sup>6</sup> 19 degrees <sup>7</sup> 10 degrees  
<sup>8</sup> Value of containing product at full load (undimmed)  
<sup>9</sup> 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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Light distribution



super spot 10°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 23700    | 0.18  |
| 2     | 5900     | 0.36  |
| 3     | 2600     | 0.53  |
| 4     | 1500     | 0.71  |
| 5     | 900      | 0.89  |

spot 19°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 6160     | 0.33  |
| 2     | 1540     | 0.65  |
| 3     | 680      | 0.98  |
| 4     | 390      | 1.31  |
| 5     | 250      | 1.63  |

medium 30°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 2070     | 0.54  |
| 2     | 520      | 1.08  |
| 3     | 230      | 1.63  |
| 4     | 130      | 2.17  |
| 5     | 80       | 2.71  |

flood 38°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 1710     | 0.69  |
| 2     | 430      | 1.37  |
| 3     | 190      | 2.06  |
| 4     | 110      | 2.75  |
| 5     | 70       | 3.43  |

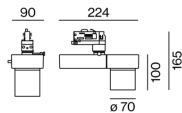
flood 40°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 1750     | 0.72  |
| 2     | 440      | 1.44  |
| 3     | 190      | 2.16  |
| 4     | 110      | 2.88  |
| 5     | 70       | 3.60  |

wide flood 64°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 735      | 1.24  |
| 2     | 184      | 2.48  |
| 3     | 82       | 3.72  |
| 4     | 46       | 4.96  |
| 5     | 29       | 6.19  |

Product drawing





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Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 0.98                         | 0.95   | 0.92              | 0.89                            | 0.86   |
| 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 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                            | 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

OVAL FILTER

| TYPE     | ARTICLE NUMBER(S) |
|----------|-------------------|
| 60 x 15° | 080-5900020       |

