

# SPIO 20 downlight

trim

048-1610517F 002-90784



Project / Type

Notes

Count / Date



### General

Ceiling , Recessed

rotation 360°

white , RAL9016 <sup>1</sup>

IP20

296 lm

### LED

3000 K

CRI ≥ 90

L85 / 50000 h

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 104 , R<sub>f</sub>: 91 , R<sub>{1-15}</sub>: 92

MR 0.59

MDER 0.54

### Optical

flood

beam angle 34°

UGR < 10

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

### Electrical

DALI-2

system 8.7 W

inset 6.5 W

12 Vf

600 mA

PC2 220-240V

system 34 lm/W<sup>3</sup>

inset 45 lm/W<sup>4</sup>

1 DALI Addr.

### Physical

trim

diameter 35 mm

height 66 mm

### Cutout

diameter 26 mm

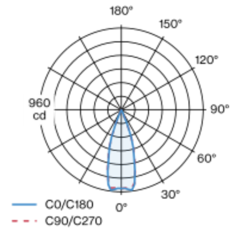
min. ceiling thickness 2 mm

max. ceiling thickness 25 mm

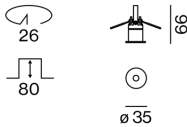
recessed depth 80 mm

Round recessed spotlight in aluminium; surface white powder coated; with trim; suitable for ceiling thickness of 2-25 mm; installation without tools using snap spring closure; passive cooling of the LEDs through improved heat sink geometry; light colour 3000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 90; min. 85% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; incl. high quality lens system; precise radiation characteristic with 34° beam; no multiple shadows; uncluttered ceiling look through recessed lighting level; reduced light-emitting surface (only ø 10 mm); degree of protection IP20; PC2 220-240V; incl. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

### Light distribution



### Product drawing



<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



# SPIO 20 downlight

trim

048-1610517F 002-90784



Project / Type

Notes

Count / Date

## Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 1                            | 1      | 0.99              | 0.97                            | 0.96   |
| 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                            | 18                 |
| B16                            | 30                 |
| C10                            | 23                 |
| C16                            | 36                 |

## Components

### POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 143-43-30  | 002-90784         |

## Optional electrical accessories

### DIN RAIL POWER SUPPLY

|       |            |                   |
|-------|------------|-------------------|
| TYPE  | L-W-H (MM) | ARTICLE NUMBER(S) |
| 160 W | 72-90-63   | 005-6520210       |



### DIN RAIL LED DRIVER

|                                |            |                   |
|--------------------------------|------------|-------------------|
| TYPE                           | L-W-H (MM) | ARTICLE NUMBER(S) |
| DALI-2   200-1050 mA   2 x 42W | 36-88-59   | 005-6121030       |

