

# SPIO 60 downlight

trim

048-1510517F 048-1597207 002-90787



Project / Type

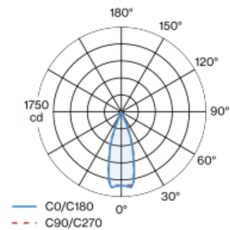
Notes

Count / Date



Round recessed spotlight in die-cast aluminium; surface white powder coated; installation without tools in mounting set due to patented ball catch system; recessed light with wrap around edge; suitable for ceiling thickness of 2-25 mm; passive cooling of the LEDs through improved heat sink geometry; light colour 3000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 95% 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  $\varnothing$  10 mm); degree of protection IP20; PC2; 220-240 V; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling , Recessed

rotation 360°

white , RAL 9016 <sup>1</sup>

Mounting set traffic white

IP20

489 lm

fixture 41 lm/W<sup>2</sup>

## LED

3000 K

CRI  $\geq 90$

L95 / 50000 h

initial MacAdam  $\leq 3$  SDCM

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

MR 0.59

MDER 0.54

## Optical

flood

beam angle 34°

UGR < 10

PstLM  $\leq 1.0$  <sup>3</sup>

SVM  $\leq 0.4$  <sup>3</sup>

## Electrical

non DIM

220-240 V

system 14.0 W

fixture 11.9 W

12 Vf

1050 mA

PC2

## Physical

trim

diameter 81 mm

height 67 mm

0.34 kg

## Cutout

diameter 73 mm

min. ceiling thickness 2 mm

max. ceiling thickness 25 mm

recessed depth 85 mm

<sup>1</sup> RAL code  
<sup>2</sup> FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.  
<sup>3</sup> Value of containing product at full load (undimmed)



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Installation  
instructions



Lighting  
calculator



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## Maintenance Factors

| Operating Time [h] | 10 000                       | 20 000 | 30 000            | 40 000                          | 50 000 |
|--------------------|------------------------------|--------|-------------------|---------------------------------|--------|
| LLMF               | 1                            | 0.99   | 0.98              | 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                            | 17                 |
| B13                            | 21                 |
| B16                            | 27                 |
| B20                            | 33                 |
| B25                            | 42                 |
| C10                            | 28                 |
| C13                            | 36                 |
| C16                            | 45                 |
| C20                            | 56                 |
| C25                            | 70                 |

## Components

### MOUNTING SET with trim

| TYPE                      | COLOUR        | Ø (MM) | ARTICLE NUMBER(S) |
|---------------------------|---------------|--------|-------------------|
| for intermediate ceilings | traffic white | 81     | 048-1597207       |



### POWER SUPPLY

| TYPE | L-W-H (MM) | ARTICLE NUMBER(S) |
|------|------------|-------------------|
| 22 W | 111-38-28  | 002-90787         |



## 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       |

