

# SPIO 60 downlight

trimless

048-1510417F 048-2696117 002-90788



Project / Type

Notes

Count / Date

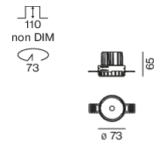


Round recessed spotlight in die-cast aluminium; surface traffic white powder coated; installation without tools in mounting set due to patented ball catch system; for trimless installation in plasterboard ceilings, specially designed trim with grooves for better adhesion of smoothing compound; suitable for ceiling thickness of 12.5/15/25 mm; paintable cover; shadow joint between cover and mounting set optionally fillable; passive cooling of the LEDs through improved heat sink geometry; light colour 2700 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. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling | Recessed

rotation 360°

traffic white | RAL 9016

Mounting set traffic white

IP20

477 lm

fixture 40 lm/W <sup>1</sup>

## LED

2700 K

CRI  $\geq 90$

L95 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 104 | R<sub>f</sub>: 88 | R<sub>f(1-15)</sub>: 89

MR 0.5 | MDER 0.46

## Optical

flood | beam angle 34°

UGR  $\leq 10$

PstLM  $\leq 1.0$  <sup>2</sup> | SVM  $\leq 0.4$  <sup>2</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC2 | 220-240 V

system 14.0 W | fixture 11.9 W

12 Vf | 1050 mA

## Physical

trimless

diameter 73 mm | height 67 mm

0.52 kg

## Cutout

diameter 73 mm

min. ceiling thickness 12.5 mm | max. ceiling thickness 25 mm

recessed depth 120 mm

<sup>1</sup> incl. consideration of optical losses & internal control unit losses  
<sup>2</sup> Value of containing product at full load (undimmed)

## 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 Factor		

<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.

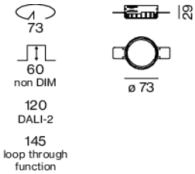
## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	37
B16	60
C10	37
C16	60

## Components

### MOUNTING SET trimless

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
for plasterboard ceilings 12.5/15/25 mm	traffic white	73	048-2696117



### POWER SUPPLY

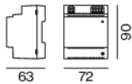
L-W-H (MM)	ARTICLE NUMBER(S)
143-43-30	002-90788



## Optional electrical accessories

### DIN RAIL POWER SUPPLY

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



### DIN RAIL LED DRIVER

L-W-H (MM)	ARTICLE NUMBER(S)
36-88-59	005-6121030



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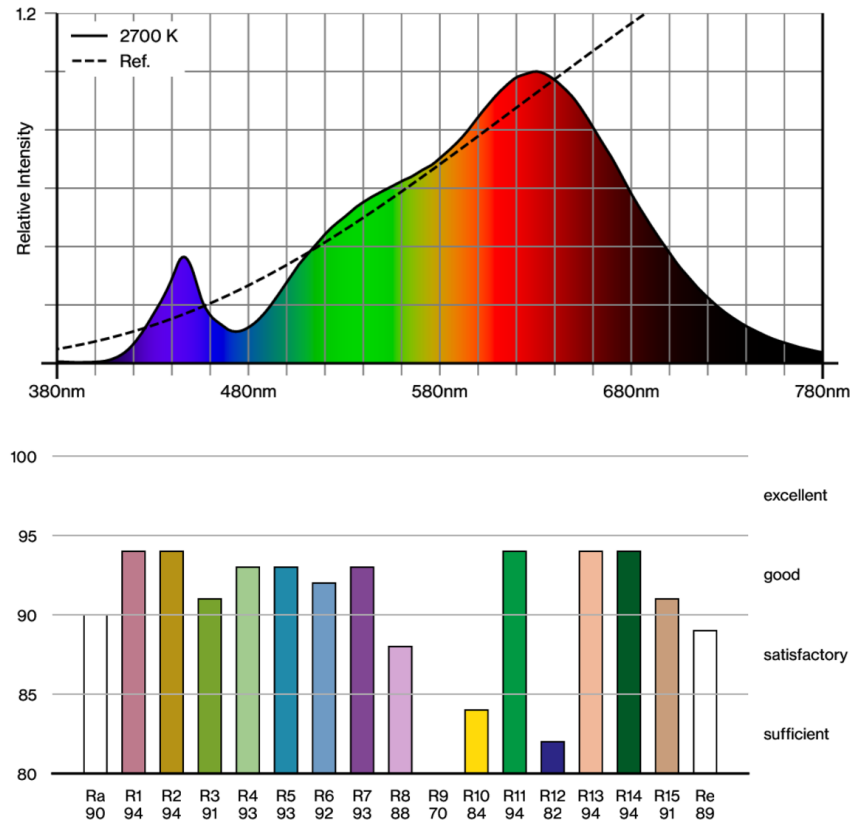


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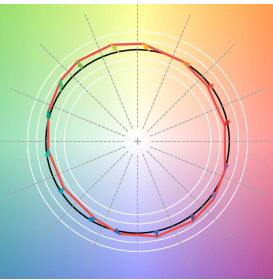
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## Colour rendering



## TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.