

# SPADO 100 round downlight

trim

049-31116170



Project / Type

Notes

Count / Date



Round recessed spotlight in die-cast 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 4000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 80$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; reflector made of polycarbonate, polished chrome; symmetric radiation characteristic with 49° beam; recessed luminaire plane; UGR  $\leq 19$ ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above 65°  $\leq 1500$  cd/m<sup>2</sup>; degree of protection from below IP44 (from above IP20); PC2; 220-240 V; incl. converter, non dimmable; external converter for ceiling insertion, through-wiring suitable; operating device suitable for use with a central battery system; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution



## Product drawing



## General

Ceiling , Recessed

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

front IP44 , back IP20

989 lm

## LED

4000 K

CRI  $\geq 80$

L90 / 50000 h

initial MacAdam  $\leq 3$  SDCM

MR 0.72

MDER 0.66

## Optical

wide flood

beam angle 49°

UGR  $\leq 19$  ,  $\geq 65^\circ < 1500$  cd/m<sup>2</sup>

PstLM  $\leq 1.0$  <sup>2</sup>

SVM  $\leq 0.4$  <sup>2</sup>

## Electrical

non DIM

220-240 V

system 9.3 W

system 106 lm/W<sup>3</sup>

PC2

## Physical

trim

diameter 130 mm

height 79 mm

0.5 kg

## Cutout

diameter 100 mm

min. ceiling thickness 2 mm

max. ceiling thickness 25 mm

recessed depth 90 mm

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)

<sup>3</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## Installation instructions



## Lighting calculator



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### Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.91	0.9
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	34
B13	43
B16	54
B20	67
C10	56
C13	72
C16	91
C20	112

