

# SQUADRO single-sided wallwasher

trim

049-2012117S



Project / Type

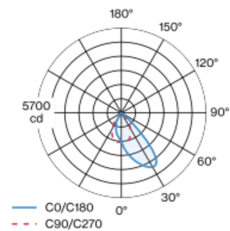
Notes

Count / Date



Recessed ceiling spotlight in die cast aluminium with 2-lamp design; surface traffic white powder coated; with wrap around edge; suitable for ceiling thickness of 2-25 mm; installation without tools using snap spring closure; heat sink integrated into luminaire geometry for optimum thermal management and passive cooling of LEDs; with COB (Chip on Board) technology for maximum efficiency; light colour 4000 K; binning initial MacAdam  $\leq 2$  SDCM; CRI  $\geq 90$ ; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; aisle spotlight shelf floor washer with special, multi-free-form, facet effect surface reflectors for high precision light control; precise shelf and aisle zone lighting, optimum longitudinal glare control for high viewing comfort in the aisle zone; adjustable light modules (tiltable  $+20^\circ$  to  $-10^\circ$ ); degree of protection IP20; IP 40 protection glass available as an accessory; accessories are listed separately; 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

tilt min  $-10^\circ$

tilt max  $20^\circ$

traffic white | RAL 9016 <sup>1</sup>

IP20

4890 lm

## LED

4000 K

CRI  $\geq 90$

L80 / 50000 h

initial MacAdam  $\leq 2$  SDCM

R<sub>g</sub>: 100 | R<sub>f</sub>: 92 | R<sub>(f-15)</sub>: 92

MR 0.78 | MDER 0.71

## Optical

shelf floor washer

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

## Electrical

non DIM

PC2 | 220-240 V

system 36 W

system 136 lm/W <sup>3</sup>

## Physical

length 180 mm | width 130 mm | height 76 mm

0.9 kg

## Cutout

length 145 mm | width 100 mm

min. ceiling thickness 2 mm | max. ceiling thickness 25 mm

recessed depth 85 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	0.977	0.94	0.905	0.871	0.838
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
B13	14
B16	18
B20	22
C13	24
C16	31
C20	37

## Optical accessories

### IP40 PROTECTION GLASS

TYPE	ARTICLE NUMBER(S)
1 x 2 lamps / single-sided	049-2910010

