

SONO 450 direct / indirect

surface

071-91485170



Project / Type

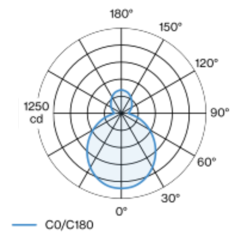
Notes

Count / Date

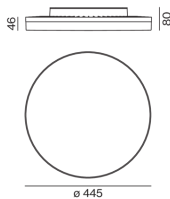


Round luminaire housing in die-cast aluminium; surface white powder coated; suitable for wall or ceiling mounting; time saving installation through snap-in mounting system; LED board highly reflective lacquered for higher efficiency; same luminance for all size versions; light colour 3000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 80 ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; completely homogeneously illuminated, satin PMMA cover; direct / indirect radiation characteristic for additional accentuation of the ceiling; luminaire with 2 cable openings and plug-in terminal for through wiring; degree of protection IP40; PC1 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; shock resistance IK07; internal wiring in light halogen free; incl. converter, non dimmable; light source not replaceable; control gear replaceable by an authorized professional;

Light distribution



Product drawing



IP 40

IK 07

220-240V

General

Ceiling / Wall , Surface

white , RAL9010 ¹

IP40

IK07

indirect 1130 lm

direct 3280 lm

total 4410 lm

LED

3000 K

CRI ≥ 80

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam ≤ 3 SDCM

MR 0.54

MDER 0.49

Optical

Opal

PstLM ≤ 1.0 ²

Electrical

non DIM

34 W

PC1 220-240V

130 lm/W

Physical

diameter 445 mm

height 80 mm

3.8 kg

¹ RAL code ² Value of containing product at full load (undimmed)

Installation instructions



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Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.95	0.93	0.91	0.9
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	Lamp Survival Faktor	

^a 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	25
B13	32
B16	39
B20	49
C10	41
C13	53
C16	65
C20	81

