

SONO 450 direct / indirect

surface

071-91485170



Project / Type _____

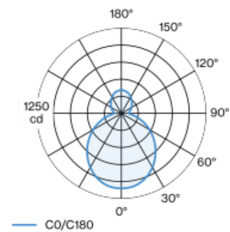
Notes _____

Count / Date _____

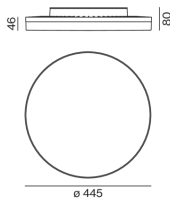


Round luminaire housing in die-cast aluminium; surface white powder coated; suitable for wall or ceiling mounting; time saving installation through snap-in mounting system; LED board highly reflective lacquered for higher efficiency; same luminance for all size versions; light colour 3000 K; binning 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



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

