

SONO 450 direct / indirect

surface

071-91485370



Project / Type

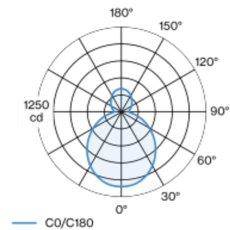
Notes

Count / Date

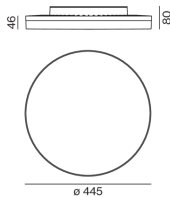


Round luminaire housing in die-cast aluminium; surface white powder coated; suitable for wall or ceiling mounting; time saving installation through snap-in mounting system; LED board highly reflective lacquered for higher efficiency; same luminance for all size versions; light colour 3000 K; binning 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; 220-240 V; shock resistance IK07; internal wiring in light halogen free; incl. DALI-2 converter; light source not replaceable; control gear replaceable by an authorized professional;

Light distribution



Product drawing



General

Ceiling / Wall | Surface

white | RAL 9010 ¹

IP40

IK07

indirect 1130 lm | direct 3280 lm

total 4410 lm

LED

3000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.54 | MDER 0.49

Optical

Opal | opal (lambertsch)

PstLM ≤ 1.0 ² | SVM ≤ 0.4 ²

Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 34 W

system 130 lm/W ³

Physical

diameter 445 mm | height 80 mm

3.8 kg

¹ RAL code ² Value of containing product at full load (undimmed)
³ incl. consideration of optical losses, internal control unit losses & operating device efficiency

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 Factor | |

^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 | 13 |
| B13 | 20 |
| B16 | 24 |
| B20 | 30 |
| C10 | 26 |
| C13 | 40 |
| C16 | 48 |
| C20 | 60 |

Mounting accessories

DISMOUNTING TOOL

| | |
|------------|-------------------|
| TYPE | ARTICLE NUMBER(S) |
| vacuum cup | 086-30000 |

