

# SONIC direct / indirect

suspended

059-722163XP



Project / Type

Notes

Count / Date



### General

Ceiling , Suspended

special colours

IP20

indirect 5230 lm

direct 5290 lm

total 10520 lm

### LED

4000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.72

MDER 0.66

### Optical

Microprismatic

microprismatic

UGR < 19

PstLM ≤ 1.0 <sup>1</sup>

SVM ≤ 0.4 <sup>1</sup>

Conical light housing in die-cast aluminium; surface special colours powder coated; suspended luminaire with 1500mm cable suspension; with integrated toolless suspension height adjustment on the luminaire; incl. feed (white); direct/indirect illumination characteristic; indirect light component with special PCBs for increased luminous flux and maximum ceiling illumination; indirect component covered with opal cover; direct lighting portion: micro prismatic PMMA cover; perfectly unifrom illumination through use of a diffuse polycarbonate-based film; better light dispersion to transparency ratio; UGR ≤ 19; light colour 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 80; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; degree of protection IP20; PC1; internal wiring in light halogen free; canopy with 2 cable openings and plug-in terminal for through wiring; incl. DALI-2 converter; sound absorbing accessories available: acoustic elements made of high quality, self-supporting, recycled PET felt (high acoustic performance by doubling the material) or as an acoustically effective lampshade (large selection of colours) with sound absorbing properties; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

### Electrical

DALI-2

220-240 V

system 69 W

PC1

system 152 lm/W<sup>2</sup>

1 DALI Addr.

### Physical

cable 1500 mm (min. 500 mm)

diameter 500 mm

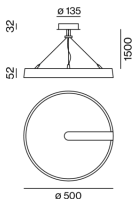
height 52 mm

5.5 kg

### Light distribution



### Product drawing



<sup>1</sup> Value of containing product at full load (undimmed)  
<sup>2</sup> incl. optical losses and the efficiency of the operating device (converter)

### Installation instructions



### Lighting calculator





Project / Type

Notes

Count / Date

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 <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                            | 31                 |
| B13                            | 40                 |
| B16                            | 50                 |
| B20                            | 62                 |
| B25                            | 78                 |
| C10                            | 52                 |
| C13                            | 67                 |
| C16                            | 85                 |
| C20                            | 104                |
| C25                            | 130                |

Acoustic accessories

ABSORBER RING

| COLOUR      | Ø (MM) | ARTICLE NUMBER(S) |
|-------------|--------|-------------------|
| white       | 1280   | 059-771111W       |
| marble grey | 1280   | 059-771111D       |
| black       | 1280   | 059-771111L       |



SOUNDCAP

| COLOUR                   | Ø (MM) | ARTICLE NUMBER(S) |
|--------------------------|--------|-------------------|
| marble grey              | 527    | 059-773111D       |
| felt grey                | 527    | 059-773111G       |
| black                    | 527    | 059-773111L       |
| white                    | 527    | 059-773111W       |
| acoustic special colours | 527    | 059-773111X       |

