

VELA 450

direct / indirect

soft

surface

073-11475170



Project / Type

Notes

Count / Date



|                               |
|-------------------------------|
| General                       |
| Ceiling / Wall , Surface      |
| white , RAL 9010 <sup>1</sup> |
| IP40                          |
| indirect 79 lm                |
| direct 2020 lm                |
| total 2100 lm                 |

|                          |
|--------------------------|
| LED                      |
| 3000 K                   |
| CRI ≥ 80                 |
| L90 / 50000 h            |
| initial MacAdam ≤ 3 SDCM |
| MR 0.54                  |
| MDER 0.49                |

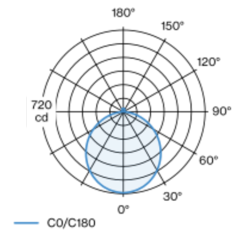
|                          |
|--------------------------|
| Optical                  |
| Opal                     |
| opal (lambertsch)        |
| PstLM ≤ 1.0 <sup>2</sup> |
| SVM ≤ 0.4 <sup>2</sup>   |

|                              |
|------------------------------|
| Electrical                   |
| non DIM                      |
| 220-240 V                    |
| system 16.7 W                |
| system 126 lm/W <sup>3</sup> |
| PC1                          |

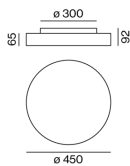
|                 |
|-----------------|
| Physical        |
| diameter 450 mm |
| height 92 mm    |
| 3.8 kg          |

Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface white powder coated; highly reflective coating for improved efficiency; suitable for wall or ceiling mounting; convenient quick mounting system without tools; completely homogeneously illuminated, satinised PMMA cover; direct / indirect radiation characteristic for additional accentuation of the ceiling; 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; luminaire with 2 cable openings and plug-in terminal for through wiring; degree of protection IP40; PC1; 220-240 V; internal wiring in light halogen free; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

Light distribution



Product drawing



<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: 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   | 0.96   | 0.94   | 0.91   | 0.9    |
| LSF                | 1      | 1      | 1      | 1      | 1      |

MF

MF

LMF<sup>a</sup>

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF<sup>a</sup>

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

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                |

