

# VELA 450 direct / indirect power

suspended  
073-12445370



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



**General**

Ceiling , Suspended \_\_\_\_\_

white , RAL 9010 <sup>1</sup> \_\_\_\_\_

IP40 \_\_\_\_\_

indirect 767 lm \_\_\_\_\_

direct 1960 lm \_\_\_\_\_

total 2730 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**

DALI-2 \_\_\_\_\_

220-240 V \_\_\_\_\_

system 21.1 W \_\_\_\_\_

system 129 lm/W<sup>3</sup> \_\_\_\_\_

PC1 \_\_\_\_\_

1 DALI Addr. \_\_\_\_\_

**Physical**

cable 1500 mm \_\_\_\_\_

diameter 450 mm \_\_\_\_\_

height 87 mm \_\_\_\_\_

3.8 kg \_\_\_\_\_

Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface white powder coated; highly reflective coating for improved efficiency; suspended luminaire with 1500mm cable suspension; with integrated toolless suspension height adjustment on the luminaire; incl. feed (white); 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; canopy 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. DALI-2 converter; 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



## Lighting calculator



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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

LMF × RSMF × LLMF × LSF

MF

Maintenance Factor

LMF<sup>a</sup>

Luminaire Maintenance Factor

RSMF<sup>a</sup>

Room Surface Maintenance Factor

LLMF

Lamp Lumens 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	13
B13	20
B16	24
B20	30
C10	26
C13	40
C16	48
C20	60