

# VELA 450 direct / indirect power

suspended  
073-144461GO



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

Notes \_\_\_\_\_

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



**General**

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

grey , RAL 9006 <sup>1</sup> \_\_\_\_\_

IP40 \_\_\_\_\_

indirect 812 lm \_\_\_\_\_

direct 2070 lm \_\_\_\_\_

total 2880 lm \_\_\_\_\_

**LED**

4000 K \_\_\_\_\_

CRI ≥ 80 \_\_\_\_\_

L90 / 50000 h \_\_\_\_\_

initial MacAdam ≤ 3 SDCM \_\_\_\_\_

MR 0.72 \_\_\_\_\_

MDER 0.66 \_\_\_\_\_

**Optical**

Opal \_\_\_\_\_

opal (lambertsch) \_\_\_\_\_

PstLM ≤ 1.0 <sup>2</sup> \_\_\_\_\_

SVM ≤ 0.4 <sup>2</sup> \_\_\_\_\_

**Electrical**

non DIM \_\_\_\_\_

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

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

system 136 lm/W<sup>3</sup> \_\_\_\_\_

PC1 \_\_\_\_\_

**Physical**

rod 1000 mm \_\_\_\_\_

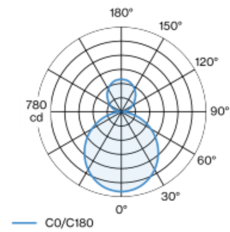
diameter 450 mm \_\_\_\_\_

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

4.1 kg \_\_\_\_\_

Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface grey powder coated; highly reflective coating for improved efficiency; suspended luminaire with adjustable pendant rod mounting (chrome) 1000mm, feed in rod; completely homogeneously illuminated, satinised PMMA cover; direct / indirect radiation characteristic for additional accentuation of the ceiling; 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; 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. 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> 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 Factor

<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