

# VELA 450 direct / indirect power

suspended  
073-1444617K



Project / Type

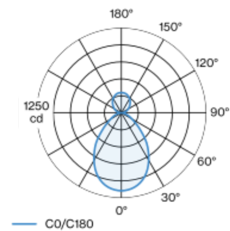
Notes

Count / Date

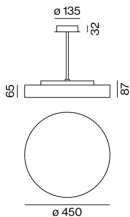


Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface white powder coated; highly reflective coating for improved efficiency; suspended luminaire with adjustable pendant rod mounting (chrome) 1000mm, feed in rod; microprismatic PMMA cover; completely homogeneous illumination;  $UGR \leq 19$ ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above  $65^\circ \leq 3000 \text{ cd/m}^2$ ; direct / indirect radiation characteristic for additional accentuation of the ceiling; light colour 4000 K; binning initial MacAdam  $\leq 3 \text{ SDCM}$ ; CRI  $\geq 80$ ; 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 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; 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



## General

Ceiling , Suspended

white , RAL9010 <sup>1</sup>

IP40

indirect 812 lm

direct 2080 lm

total 2890 lm

## LED

4000 K

CRI  $\geq 80$

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam  $\leq 3 \text{ SDCM}$

MR 0.72

MDER 0.66

## Optical

Microprismatic

microprismatic

$UGR < 19$  ,  $\geq 65^\circ < 3000 \text{ cd/m}^2$

$P_{stLM} \leq 1.0$  <sup>2</sup>

$SVM \leq 0.4$  <sup>2</sup>

## Electrical

non DIM

system 21.1 W

PC1 220-240V

system 137 lm/W<sup>3</sup>

## Physical

rod 1000 mm

diameter 450 mm

height 87 mm

4.1 kg

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. optical losses and the efficiency of the operating device (converter)

## 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

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                |

