

# VELA 450 direct / indirect power

suspended  
073-14445180



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

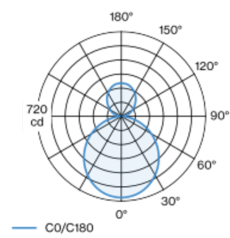
Notes \_\_\_\_\_

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

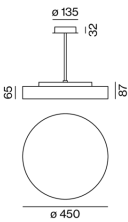


Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface black powder coated; highly reflective coating for improved efficiency; suspended luminaire with adjustable pendant rod mounting (chrome) 1000mm, feed in rod; completely homogeneously illuminated, satinised PMMA cover; direct / indirect radiation characteristic for additional accentuation of the ceiling; light colour 3000 K; binning initial MacAdam  $\leq 3$  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  
black , RAL9005 <sup>1</sup>  
IP40  
indirect 767 lm  
direct 1960 lm  
total 2730 lm

### LED

3000 K  
CRI  $\geq 80$   
L90 / 50000 h  
photobio. safety RG 0 - no Risk  
initial MacAdam  $\leq 3$  SDCM  
MR 0.54  
MDER 0.49

### Optical

Opal  
opal (lambertsch)  
PstLM  $\leq 1.0$  <sup>2</sup>  
SVM  $\leq 0.4$  <sup>2</sup>

### Electrical

non DIM  
system 21.1 W  
PC1 220-240V  
system 129 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>

$LMF \times RSMF \times LLMF \times LSF$

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

