

# VELA 450 direct / indirect power

suspended  
073-12445380



Project / Type

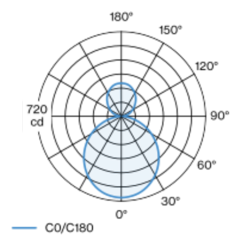
Notes

Count / Date

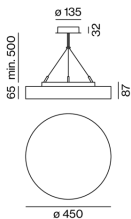


Round luminaire housing in aluminium, rolled profile, seamlessly welded; surface black powder coated; highly reflective coating for improved efficiency; suspended luminaire with 1500mm cable suspension; with integrated toolless suspension height adjustment on the luminaire; incl. feed (black); completely 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; 220-240 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



## General

Ceiling | Suspended

black | RAL 9005 <sup>1</sup>

IP40

indirect 767 lm | direct 1960 lm

total 2730 lm

## LED

3000 K

CRI  $\geq 80$

L90 / 50000 h

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

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 21.1 W

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

## Physical

cable 1500 mm

diameter 450 mm | height 87 mm

3.8 kg

<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





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

Notes \_\_\_\_\_

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

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		RSMF <sup>a</sup>	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF <sup>a</sup>	Luminaire 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	13
B13	20
B16	24
B20	30
C10	26
C13	40
C16	48
C20	60