

# VELA 450 direct

suspended

073-14415380



Project / Type

Notes

Count / Date



IP 40



## General

Ceiling , Suspended

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

IP40

2050 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

220-240 V

system 16.7 W

system 123 lm/W<sup>3</sup>

PC1

1 DALI Addr.

## Physical

rod 1000 mm

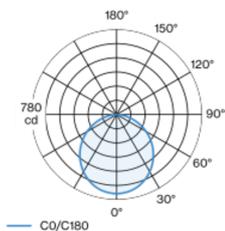
diameter 450 mm

height 87 mm

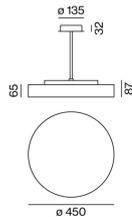
4.1 kg

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; 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



<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



# VELA 450 direct

suspended

073-14415380



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	21
B13	28
B16	35
B20	44
C10	35
C13	46
C16	58
C20	73