

VELA 450 direct / indirect power

suspended
073-144451GK



Project / Type

Notes

Count / Date



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; microprismatic PMMA cover; completely homogeneous illumination; $UGR \leq 16$; 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 3000 K; binning initial MacAdam $\leq 3 \text{ SDCM}$; 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;

220-240 V

IP 40

X-PERT

X-PERT

General

Ceiling | Suspended

grey | RAL 9006 ¹

IP40

indirect 767 lm | direct 1960 lm

total 2730 lm

LED

3000 K

CRI ≥ 80

L90 / 50000 h

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

MR 0.54 | MDER 0.49

Optical

Microprismatic | microprismatic

$UGR \leq 16 \mid \geq 65^\circ < 3000 \text{ cd/m}^2$

$PstLM \leq 1.0 \text{ }^2 \mid SVM \leq 0.4 \text{ }^2$

Electrical

non DIM

PC1 | 220-240 V

system 21.1 W

system 129 lm/W ³

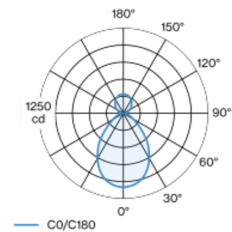
Physical

rod 1000 mm

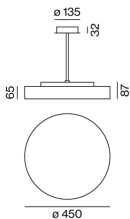
diameter 450 mm | height 87 mm

4.1 kg

Light distribution



Product drawing



¹ RAL code ² Value of containing product at full load (undimmed)
³ 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

MF

LMF^a

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF^a

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

Lamp Survival Factor

^a 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 |

