



PROJECT

TYPE

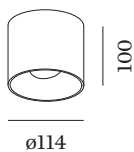
NOTES

QUANTITY

DATE



Cylindrical ceiling surface mounted downlight made from die-cast aluminium; surface Black Matt; powder coated; matt texture; RAL 9011; with COB (Chip on Board) technology for maximum efficiency; phase-cut dim; light colour 2000 - 3000 K colour warm dimming; ≤ 3 SDCM (initial MacAdam); CRI ≥ 90 ; 220 - 240 V; degree of protection IP20; Class 1; UGR ≤ 13 ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above $65^\circ \leq 1500 \text{ cd/m}^2$; optional single inner cover available; light source replaceable by Wever & Ducré or by a professional with explicit authorization; control gear replaceable by end-user;



LUMINAIRE

Ceiling
Surface
Black Matt
RAL 9011^a
IP20
Interior
405 lm

LED Module

colour warm dimming
2000 - 3000 K
CRI ≥ 90
L70 / 50000h
 ≤ 3 SDCM (initial MacAdam)
545 lm
90 lm/W^b

Optical

Medium (standard)
beam angle 21°
UGR ≤ 13
CIE flux code: 92 99 100 100
 $\geq 65^\circ < 1500 \text{ cd/m}^2$

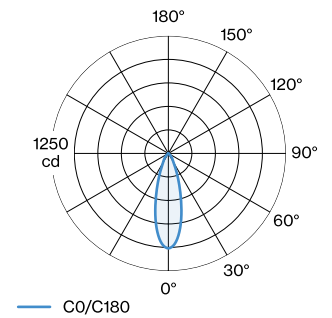
Electrical

phase-cut dim
220 - 240 V
system 8.1 W
Class I
Standard

Physical

diameter 114 mm
height 100 mm
0.7 kg

LIGHT DISTRIBUTION



^a Colour may deviate slightly due to production conditions

^b Without electrical and optical losses



Maintenance Factor

Operating Time [h]	10.000	20.000	30.000	40.000	50.000
LLMF	0.95	0.91	0.86	0.82	0.77
LSF	1	1	1	1	1

MF	$LMF \times RSMF \times LLMF \times LSF$	RSMF ^a	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF ^a	Luminaire Maintenance Factor	LSF	Lamp Survival Factor

^aAccording to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

OPTICAL ACCESSORIES

Single Inner Cover

Type	Colour	Voltage	Ø·H (MM)	Item number
RAY max. 10W	Black		67·54	911041B1
RAY max. 10W	Gold		67·54	911041G1
RAY max. 10W	Champagne		67·54	911041M1
RAY max. 10W	White		67·54	911041W1