

MINO 60 mid lumen

surface

046-41L311GG



Project / Type

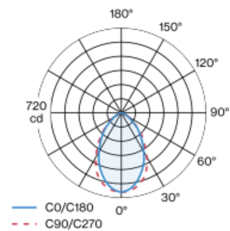
Notes

Count / Date



Luminaire housing made of extruded aluminium profile; light tight final end caps made of aluminium; no visible screws; angular design; surface grey powder coated; suitable for wall or ceiling mounting; lighting profile (end cover pre-assembled) available in advance for installation; remaining lamp components mounted without tools; LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 90 ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; micro prismatic PMMA diffuser incl. diffuser film for homogeneous illumination and reduced luminance; UGR ≤ 19 ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above 65° ≤ 3000 cd/m²; degree of protection IP20; 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;

Light distribution



Product drawing



General

Ceiling | Surface

grey | RAL 9006 ¹

IP20

999 lm

1150 lm/m

LED

4000 K

CRI ≥ 90

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

R_g: 99 | R_f: 92 | R_{i(1-15)}: 90

MR 0.81 | MDER 0.74

Optical

Microprismatic | microprismatic

UGR ≤ 19 | $\geq 65^\circ$ < 3000 cd/m²

PstLM ≤ 1.0 ² | SVM ≤ 0.4 ²

Electrical

non DIM

PC1 | 220-240 V

system 10.3 W

system 97 lm/W ³

12 W/m

Physical

length 880 mm | width 60 mm | height 80 mm

2.59 kg

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



MINO 60 mid lumen

surface

046-41L311GG



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	0.92	0.9
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	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	9
B13	13
B16	15
B20	18
C10	18
C13	26
C16	30
C20	36

