

MINO 60 mid lumen

surface

046-41L411GG



Project / Type

Notes

Count / Date



RG0
IEC 62471

220-240V

X-PERT

X-PERT

General

Ceiling , Surface

grey , RAL9006 ¹

1140 lm/m

IP20

1330 lm

LED

4000 K

CRI ≥ 90

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam ≤ 3 SDCM

R_g: 99 , R_f: 92 , R₍₁₋₁₅₎: 90

MR 0.81

MDER 0.74

Optical

Microprismatic

microprismatic

UGR < 19 , ≥65° <3000 cd/m²

PstLM ≤ 1.0 ²

SVM ≤ 0.4 ²

Electrical

non DIM

system 13.3 W

PC1 220-240V

system 100 lm/W³

11 W/m

Physical

length 1180 mm

width 60 mm

height 80 mm

3.3 kg

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 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; 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



¹ RAL code ² Value of containing product at full load (undimmed)
³ incl. optical losses and the efficiency of the operating device (converter)

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	0.92	0.9
LSF	1	1	1	1	1

MF

LMF × RSMF × LLMF × LSF

MF

Maintenance Factor

LMF^a

Luminaire Maintenance Factor

RSMF^a

Room Surface Maintenance Factor

LLMF

Lamp Lumens Maintenance Factor

LSF

Lamp Survival Faktor

^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

