

MINO 60 mid lumen

surface

046-41L5018G



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 black 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 3000 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 $65^\circ \leq 3000$ 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
black , RAL 9005 ¹
IP20
1540 lm
1050 lm/m

LED

3000 K
CRI ≥ 90
L90 / 50000 h
initial MacAdam ≤ 3 SDCM
R _g : 99 , R _r : 91 , R _{t(1-15)} : 89
MR 0.61
MDER 0.55

Optical

Microprismatic
microprismatic
UGR ≤ 19 , $\geq 65^\circ < 3000$ cd/m ²

Electrical

non DIM
220-240 V
system 16.6 W
system 93 lm/W ²
PC1
11 W/m

Physical

length 1480 mm
width 60 mm
height 80 mm
4 kg

¹ RAL code
² 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	0.92	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 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	15
B13	19
B16	24
B20	30
C10	25
C13	32
C16	40
C20	49

