

# MINO 60 mid lumen

surface

046-41L3118G



Project / Type

Notes

Count / Date



### General

Ceiling , Surface

black , RAL9005 <sup>1</sup>

1150 lm/m

IP20

999 lm

### LED

4000 K

CRI ≥ 90

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 99 , R<sub>f</sub>: 92 , R<sub>(1-15)</sub>: 90

MR 0.81

MDER 0.74

### Optical

Microprismatic

UGR < 19 , ≥65° <3000 cd/m<sup>2</sup>

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

### Electrical

non DIM

10.3 W

PC1 220-240V

97 lm/W

12 W/m

### Physical

length 880 mm

width 60 mm

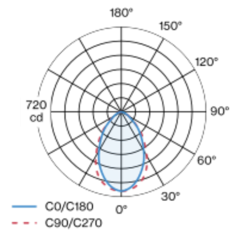
height 80 mm

2.59 kg

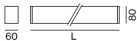
<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)

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 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/m<sup>2</sup>; 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



### 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<sup>a</sup>

Luminaire Maintenance Factor

RSMF<sup>a</sup>

Room Surface Maintenance Factor

LLMF

Lamp Lumens Maintenance Factor

LSF

Lamp Survival Faktor

<sup>a</sup> 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

