

# MINO 60 mid lumen

surface

046-41L4018Z



Project / Type	
Notes	
Count / Date	



## General

Ceiling , Surface
black , RAL 9005 <sup>1</sup>
IP20
1230 lm
1050 lm/m

## LED

3000 K
CRI ≥ 90
L90 / 50000 h
initial MacAdam ≤ 3 SDCM
R <sub>g</sub> : 99 , R <sub>r</sub> : 91 , R <sub>t(1-15)</sub> : 89
MR 0.61
MDER 0.55

## Optical

Microprismatic
microprismatic
PstLM ≤ 1.0 <sup>2</sup>
SVM ≤ 0.4 <sup>2</sup>

## Electrical

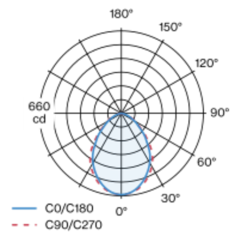
non DIM
220-240 V
system 13.3 W
system 92 lm/W <sup>3</sup>
PC1
11 W/m

## 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 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; 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



<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> 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

MF

LMF<sup>a</sup>

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF<sup>a</sup>

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

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

