

# MINO 60 high lumen

surface

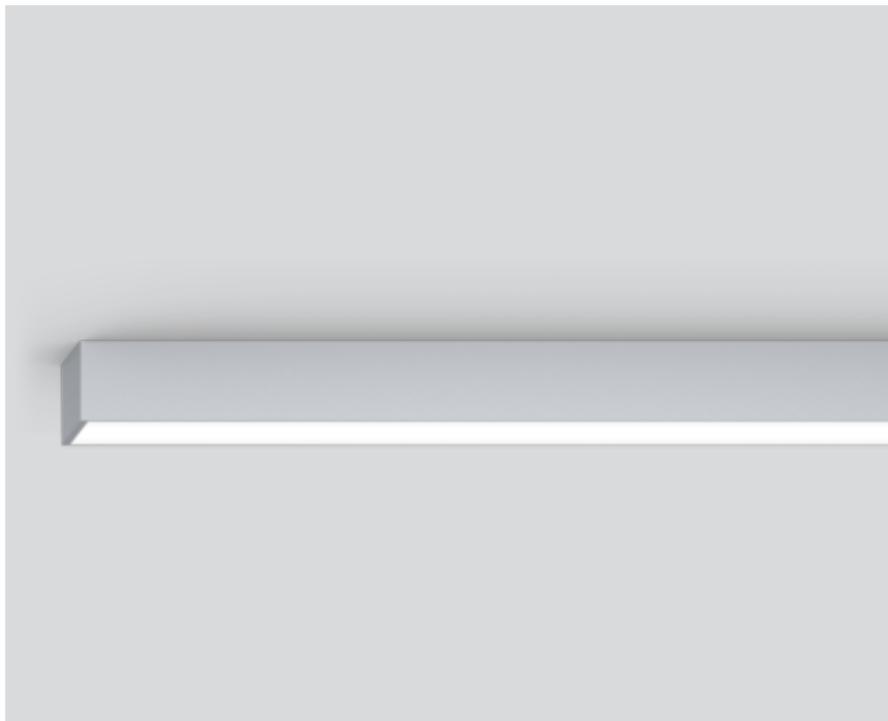
046-41M213GG



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



## General

Ceiling | Surface \_\_\_\_\_

grey | RAL 9006 <sup>1</sup> \_\_\_\_\_

IP20 \_\_\_\_\_

1120 lm \_\_\_\_\_

1960 lm/m \_\_\_\_\_

## LED

4000 K \_\_\_\_\_

CRI ≥ 90 \_\_\_\_\_

L90 / 50000 h \_\_\_\_\_

initial MacAdam ≤ 3 SDCM \_\_\_\_\_

R<sub>g</sub>: 99 | R<sub>r</sub>: 92 | R<sub>1-15</sub>: 90 \_\_\_\_\_

MR 0.81 | MDER 0.74 \_\_\_\_\_

## Optical

Microprismatic | microprismatic \_\_\_\_\_

PstLM ≤ 1.0 <sup>2</sup> | SVM ≤ 0.4 <sup>2</sup> \_\_\_\_\_

## Electrical

DALI-2 | 1 DALI Addr. \_\_\_\_\_

PC1 | 220-240 V \_\_\_\_\_

system 12.1 W \_\_\_\_\_

system 93 lm/W <sup>3</sup> \_\_\_\_\_

21 W/m \_\_\_\_\_

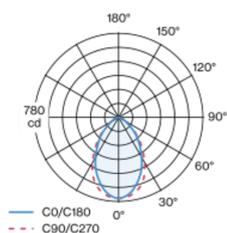
## Physical

length 580 mm | width 60 mm | height 80 mm \_\_\_\_\_

1.9 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; degree of protection IP20; PC1; 220-240 V; internal wiring in light halogen free; incl. DALI-2 converter; 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	LMF × RSMF × LLMF × LSF	RSMF <sup>a</sup>	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF <sup>a</sup>	Luminaire Maintenance Factor	LSF	Lamp Survival Factor

<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	18
B13	23
B16	28
B20	35
C10	30
C13	38
C16	46
C20	58