

# MINO 60 high lumen

surface

046-41M8618Z



Project / Type

Notes

Count / Date



## General

Ceiling , Surface

black , RAL9005 <sup>1</sup>

IP20

5470 lm

2330 lm/m

## LED

4000 K

CRI  $\geq$  80

L90 / 50000 h

initial MacAdam  $\leq$  3 SDCM

MR 0.72

MDER 0.65

## Optical

Microprismatic

microprismatic

## Electrical

non DIM

220-240 V

system 45 W

PC1

system 122 lm/W<sup>2</sup>

19 W/m

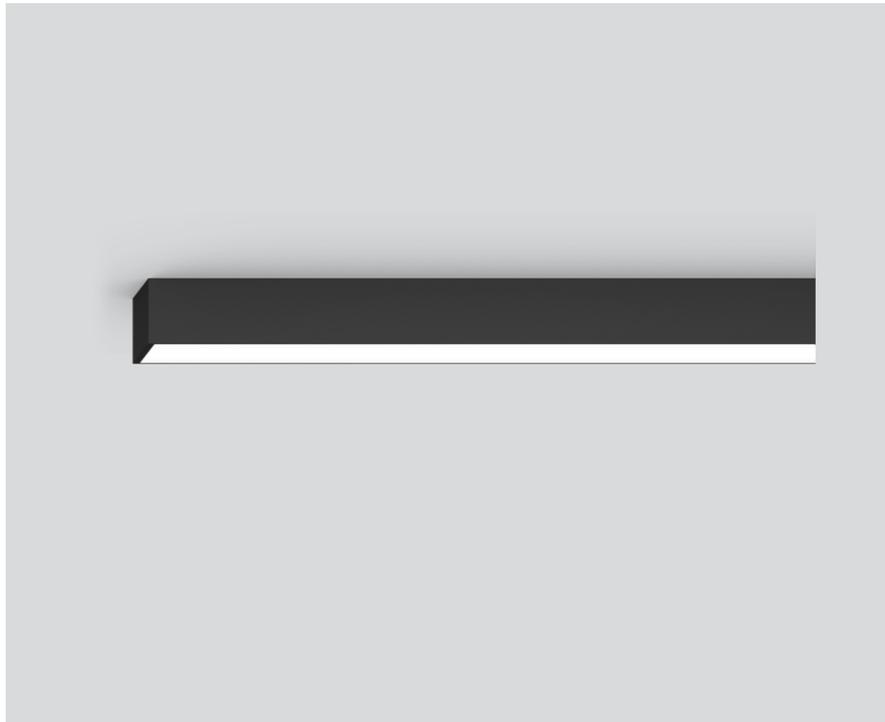
## Physical

length 2352 mm

width 60 mm

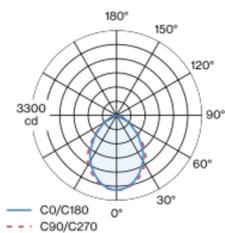
height 80 mm

6.2 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 4000 K; binning initial MacAdam  $\leq$  3 SDCM; CRI  $\geq$  80; 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> 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      | 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 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                            | 15                 |
| B13                            | 19                 |
| B16                            | 24                 |
| B20                            | 30                 |
| C10                            | 25                 |
| C13                            | 32                 |
| C16                            | 40                 |
| C20                            | 49                 |