

# MINO 60 high lumen

ceiling offset

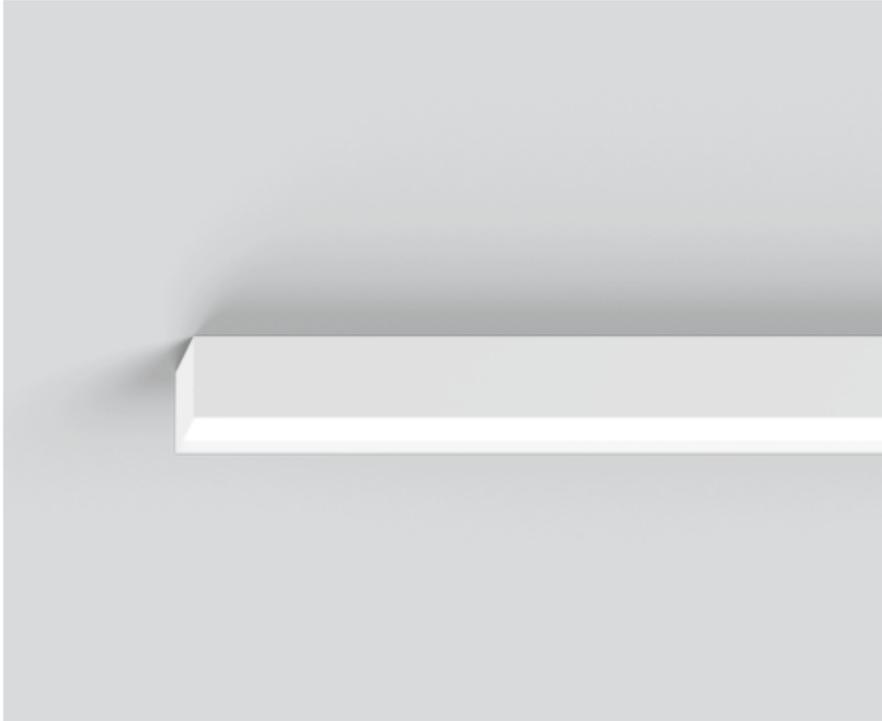
046-47M3637H



Project / Type

Notes

Count / Date



## General

Ceiling , Surface

white , RAL 9010 <sup>1</sup>

IP20

Ball impact resistant DIN 18032-3

2280 lm

2610 lm/m

## LED

4000 K

CRI  $\geq$  80

L90 / 50000 h

initial MacAdam  $\leq$  3 SDCM

MR 0.72

MDER 0.65

## Optical

High Performance Opal

opal (lambertsch)

PstLM  $\leq$  1.0 <sup>2</sup>

SVM  $\leq$  0.4 <sup>2</sup>

## Electrical

DALI-2

220-240 V

system 17.5 W

system 130 lm/W<sup>3</sup>

PC1

1 DALI Addr.

20 W/m

## Physical

length 875 mm

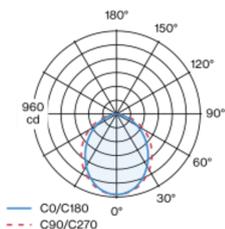
width 60 mm

height 90 mm

<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

Luminaire housing made of extruded aluminium profile; light-tight end caps in aluminium; angular design; surface white powder coated; luminaire, ball proof version to DIN 18032-3 and DIN 57710 part 13 / VDE 0710 part 13; not suitable for indoor tennis centers (or halls with comparable ball sizes); 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; HPO (High Performance Opal) cover for uniform illumination; degree of protection IP20; PC1; 220-240 V; incl. DALI-2 converter; 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	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