

# MINO 60 high lumen

ceiling offset

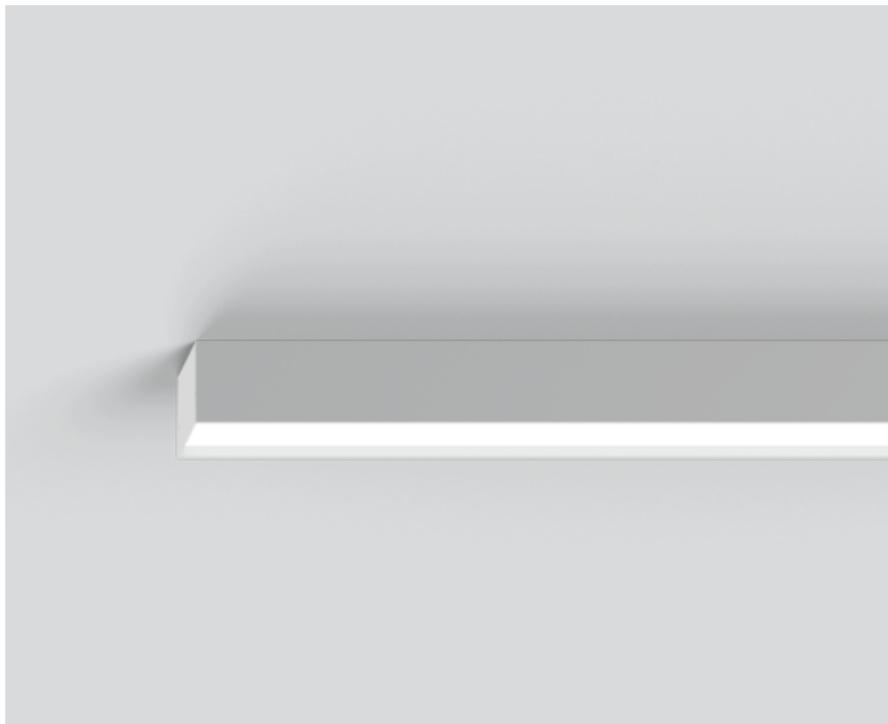
046-47M853GH



Project / Type

Notes

Count / Date



## General

Ceiling , Surface

grey , RAL9006 <sup>1</sup>

1950 lm/m

IP20

Ball impact resistant DIN 18032-3

4570 lm

## LED

3000 K

CRI  $\geq$  80

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam  $\leq$  3 SDCM

MR 0.56

MDER 0.51

## Optical

High Performance Opal

opal (lambertsch)

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

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

## Electrical

DALI-2

system 45 W

PC1 220-240V

system 102 lm/W<sup>3</sup>

1 DALI Addr.

19 W/m

## Physical

length 2347 mm

width 60 mm

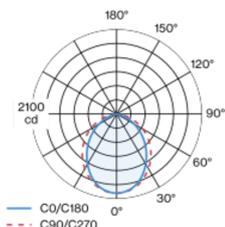
height 90 mm

5.8 kg

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. optical losses and the efficiency of the operating device (converter)

Luminaire housing made of extruded aluminium profile; light-tight end caps in aluminium; angular design; surface grey 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 3000 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 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; 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 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	7
B13	10
B16	12
B20	14
C10	10
C13	20
C16	24
C20	28