

MINO 60 high lumen

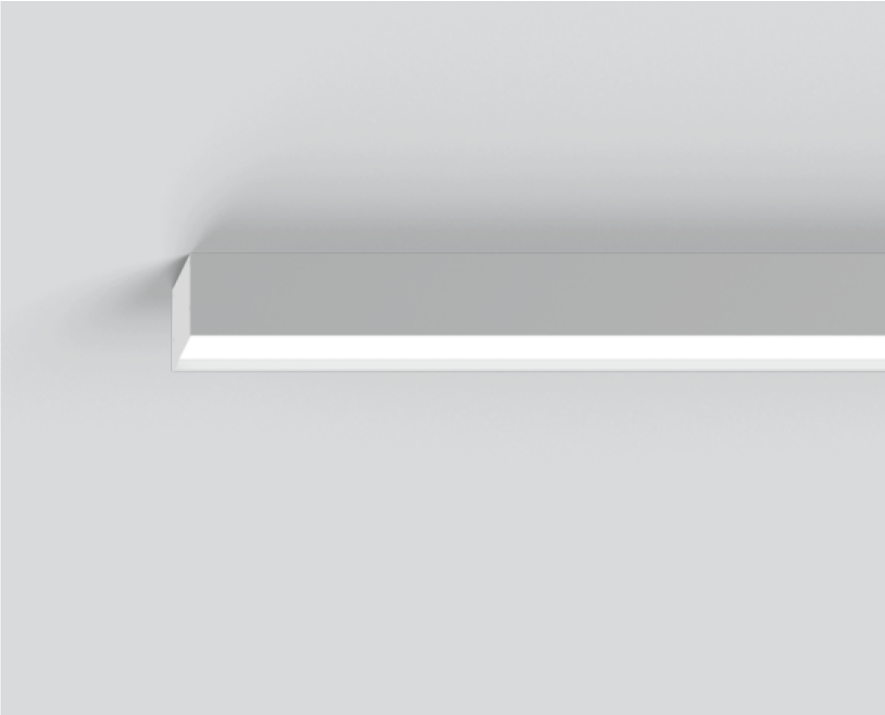
ceiling offset
046-47M451GH



Project / Type

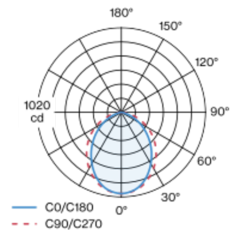
Notes

Count / Date

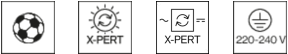
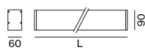


Luminaire housing made of extruded aluminium profile; light-tight end caps in aluminium; angular design; surface white aluminium powder coated; luminaire, ball proof version to DIN 18032-3 and DIN 57710 part 13 / VDE 0710 part 13; not suitable for indoor tennis centers (or halls with comparable ball sizes); LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 3000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 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. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

Light distribution



Product drawing



General

Ceiling | Surface

white aluminium | RAL 9006

IP20

Ball impact resistant DIN 18032-3

2280 lm

1950 lm/m

LED

3000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.56 | MDER 0.51

Optical

High Performance Opal | opal (lambertsch)

PstLM ≤ 1.0 ¹ | SVM ≤ 0.4 ¹

Electrical

non DIM

PC1 | 220-240 V

system 23.3 W

system 98 lm/W ²

20 W/m

Physical

length 1175 mm | width 60 mm | height 90 mm

3.1 kg

¹ Value of containing product at full load (undimmed)
² 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^a

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF^a

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

Lamp Survival Factor

^a 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	22
B13	29
B16	36
B20	45
C10	37
C13	48
C16	61
C20	76

