

MINO 60 mid lumen

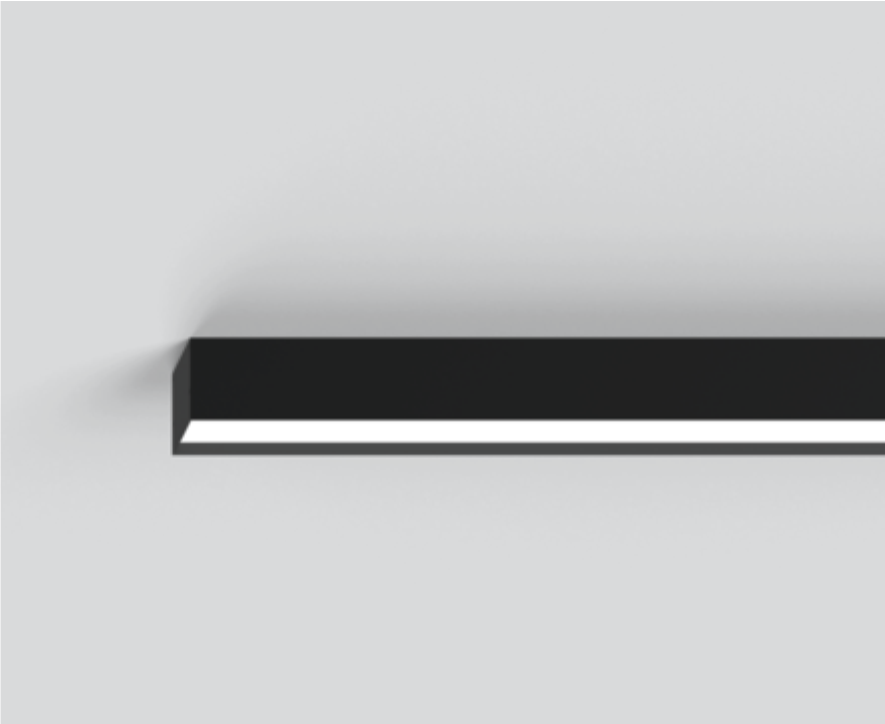
ceiling offset
046-47L2618H



Project / Type

Notes

Count / Date



Luminaire housing made of extruded aluminium profile; light-tight end caps in aluminium; angular design; surface black 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 ≤ 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;



General

Ceiling | Surface

black | RAL 9005 ¹

IP20

Ball impact resistant DIN 18032-3

684 lm

1200 lm/m

LED

4000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.72 | MDER 0.65

Optical

High Performance Opal | opal (lambertsch)

PstLM ≤ 1.0 ² | SVM ≤ 0.4 ²

Electrical

non DIM

PC1 | 220-240 V

system 6.9 W

system 99 lm/W ³

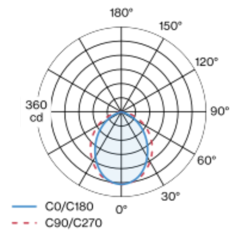
12 W/m

Physical

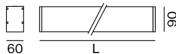
length 575 mm | width 60 mm | height 90 mm

1.61 kg

Light distribution



Product drawing



¹ RAL code ² Value of containing product at full load (undimmed)
³ 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 ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	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	23
B13	30
B16	36
B20	46
C10	35
C13	50
C16	60
C20	76

