

# MINO 60 high lumen

ceiling offset

046-47M461GH



Project / Type

Notes

Count / Date



### General

Ceiling , Surface

grey , RAL9006 <sup>1</sup>

2220 lm/m

IP20

Ball impact resistant DIN 18032-3

2600 lm

### LED

4000 K

CRI ≥ 80

L90 / 50000 h

photobio. safety RG 0 - no Risk

initial MacAdam ≤ 3 SDCM

MR 0.72

MDER 0.65

### Optical

High Performance Opal

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

### Electrical

non DIM

23.3 W

PC1 220-240V

112 lm/W

20 W/m

### Physical

length 1175 mm

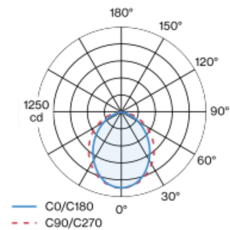
width 60 mm

height 90 mm

3.1 kg

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 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 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; 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> Value of containing product at full load (undimmed)

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

