

## 046-42M413GH



Project / Type

## Notes

Count / Date



## General

Ceiling | Suspended

grey | RAL 9006 <sup>1</sup>

IP20

2570 lm

2200 lm/m

**LED**

4000 K

CRI  $\geq 90$

L90 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 99 | R<sub>f</sub>: 92 | R<sub>{1-15}</sub>: 90

MR 0.81 | MDER 0.74

## Optical

High Performance Opal | opal (lambertsch)

$$\text{PstLM} \leq 1.0^2 \mid \text{SVM} \leq 0.4^2$$

## Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 23.3 W

system 110 lm/W<sup>3</sup>

20 W/m

## Physical

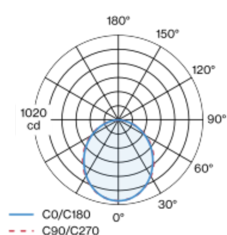
cable 1500 mm

length 1180 mm | width 60 mm | height 80 mm

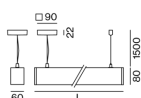
3.4 kg

Luminaire housing made of extruded aluminium profile; light tight final end caps made of aluminium; no visible screws; angular design; surface grey powder coated; suspended luminaire with 1500mm cable suspension; with integrated toolless suspension height adjustment on the luminaire; spring clip attachment to the luminaire; freely positionable; incl. feed (white); lighting profile (end cover pre-assembled) available in advance for installation; remaining lamp components mounted without tools; LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 4000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; 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; internal wiring in light halogen free; 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



<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

# MINO 60 high lumen

suspended

046-42M413GH



Project / Type

Notes

Count / Date

## 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

