

FRAME 60 high lumen

trim

052-47M451GH



Project / Type

Notes

Count / Date



General

Ceiling , Recessed

grey , RAL 9006 ¹

IP20

2760 lm

2360 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 ²

SVM ≤ 0.4 ²

Electrical

non DIM

220-240 V

system 23.3 W

system 118 lm/W³

PC1

20 W/m

Physical

trim

length 1193 mm

width 77 mm

height 78 mm

2.97 kg

Cutout

length 1183 mm

width 66 mm

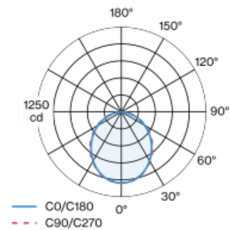
min. ceiling thickness 8 mm

max. ceiling thickness 25 mm

recessed depth 104 mm

Luminaire housing made of extruded aluminium profile; recessed light with wrap around edge; suitable for ceiling thickness of 8-25 mm; surface grey powder coated; lighting profile (end cover and mounting bracket 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 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; internal wiring in light halogen free; incl. converter, non dimmable; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

Light distribution



Product drawing



¹ RAL code ² Value of containing product at full load (undimmed)
³ FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.

Installation instructions



Lighting calculator



FRAME 60 high lumen

trim
052-47M451GH



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 ^a	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF ^a	Luminaire Maintenance Factor		LSF	Lamp Survival Faktor	

^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	9
B13	13
B16	15
B20	18
C10	18
C13	26
C16	30
C20	36

Mounting accessories

CONCRETE INSTALLATION HOUSING

L·W·H (MM)	ARTICLE NUMBER(S)
1235·75·88	035-04126

