

# FRAME 60 high lumen

trim

052-47M411GZ



Project / Type

Notes

Count / Date



### General

Ceiling , Recessed

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

IP20

2240 lm

1910 lm/m

### LED

4000 K

CRI ≥ 90

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

R<sub>g</sub>: 99 , R<sub>r</sub>: 92 , R<sub>t(1-15)</sub>: 90

MR 0.81

MDER 0.74

### Optical

Microprismatic

microprismatic

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

### Electrical

non DIM

220-240 V

system 23.3 W

system 96 lm/W<sup>3</sup>

PC1

20 W/m

### Physical

trim

length 1193 mm

width 77 mm

height 78 mm

3.2 kg

### Cutout

length 1183 mm

width 66 mm

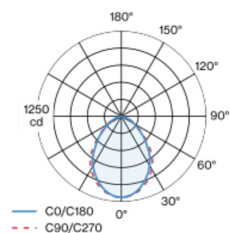
min. ceiling thickness 8 mm

max. ceiling thickness 25 mm

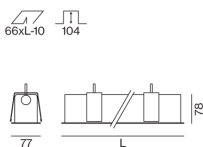
recessed depth 104 mm

<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

### Light distribution



### Product drawing



### Installation instructions



### Lighting calculator



[‘052-47M411GZ’] The technical data represent rated values for an ambient temperature of 25°C. The data values for the luminous flux are initially subject to a tolerance of +/- 10%, those for the electrical connected load are initially subject to a tolerance of +/- 10%, and those for the colour temperature are initially subject to a tolerance of +/- 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.  
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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 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	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

