

COMBO 450

trim

064-1041637K



Project / Type

Notes

Count / Date



IP 40

General

Ceiling , Recessed

white , RAL 9010 ¹

IP40

2180 lm

LED

4000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.72

MDER 0.66

Optical

Microprismatic

microprismatic

UGR ≤ 19 , ≥65° <3000 cd/m²

PstLM ≤ 1.0 ²

SVM ≤ 0.4 ²

Electrical

DALI-2

220-240 V

system 16.7 W

system 131 lm/W³

PC1

1 DALI Addr.

Physical

trim

diameter 466 mm

height 72 mm

3.1 kg

Cutout

diameter 455 mm

min. ceiling thickness 10 mm

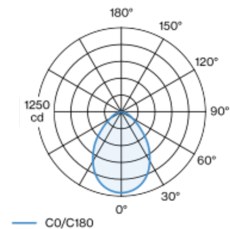
max. ceiling thickness 25 mm

recessed depth 100 mm

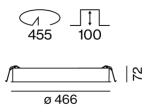
¹ RAL code ² Value of containing product at full load (undimmed)

³ incl. consideration of optical losses, internal control unit losses & operating device efficiency

Light distribution



Product drawing



[064-1041637K] 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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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	0.91	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	21
B13	28
B16	35
B20	44
C10	35
C13	46
C16	58
C20	73

Mounting accessories

MOUNTING RING

TYPE
for acoustic ceiling

ARTICLE NUMBER(S)
064-1906400

