

TUBO 60

surface

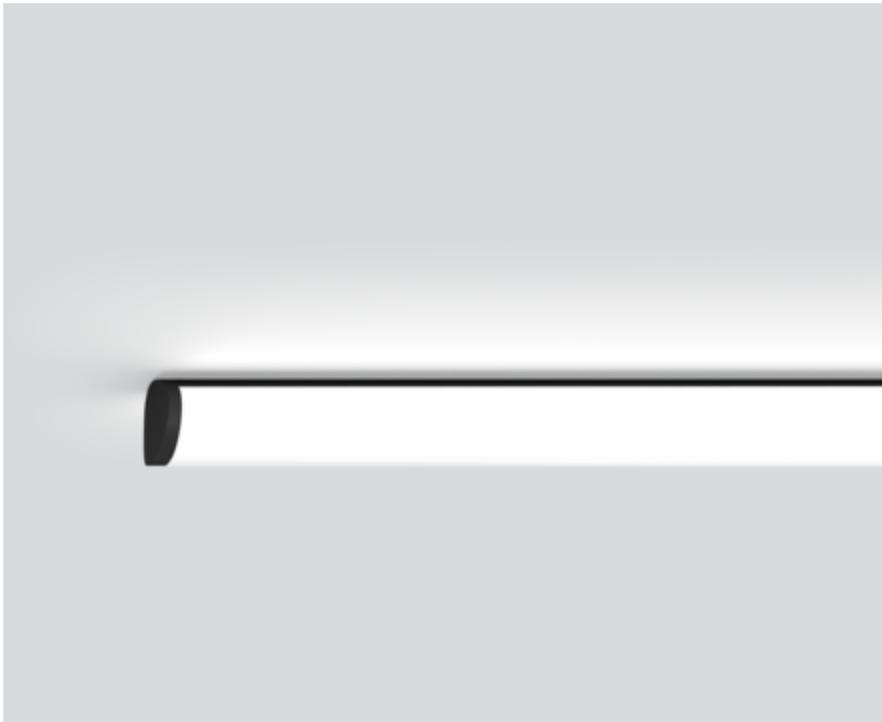
058-31151380



Project / Type

Notes

Count / Date



General

Ceiling / Wall , Surface

black , RAL 9005 ¹

IP20

3670 lm

2490 lm/m

LED

4000 K

CRI \geq 90

L90 / 50000 h

initial MacAdam \leq 3 SDCM

R_g: 99 , R_r: 92 , R₍₁₋₁₅₎: 90

MR 0.81

MDER 0.74

Optical

High Performance Opal

opal (lambertsch)

PstLM \leq 1.0 ²

SVM \leq 0.4 ²

Electrical

DALI-2

220-240 V

system 34 W

system 108 lm/W³

PC1

1 DALI Addr.

23 W/m

Physical

length 1500 mm

width 60 mm

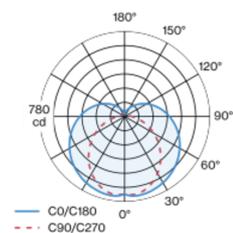
height 60 mm

3.4 kg

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.

Light distribution



Product drawing



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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 ^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	15
B13	19
B16	24
B20	30
B25	37
C10	24
C13	32
C16	40
C20	49
C25	62