

# UNICO L4 basic

ceiling

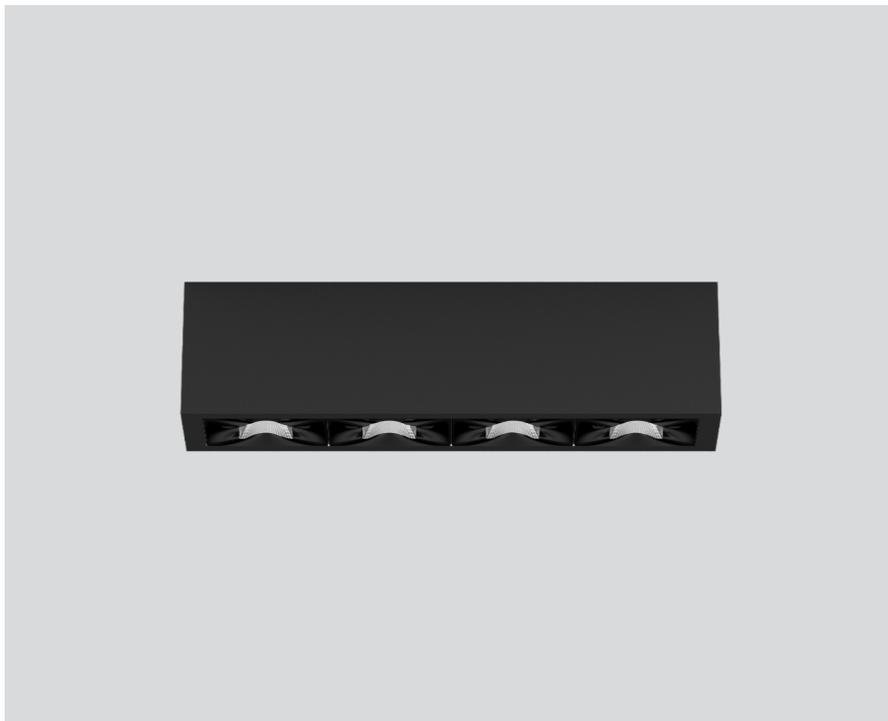
090-1L453BBB01



Project / Type

Notes

Count / Date



## General

Ceiling | Surface

black | RAL 9005 <sup>1</sup>

Reflector black

IP20

1600 lm

## LED

3000 K

CRI  $\geq$  90

L90 / 50000 h

initial MacAdam  $\leq$  3 SDCM

R<sub>g</sub>: 100 | R<sub>f</sub>: 92 | R<sub>f(1-15)</sub>: 91

MR 0.64 | MDER 0.58

## Optical

medium round | beam angle 33°

UGR  $\leq$  10

PstLM  $\leq$  1.0 <sup>2</sup> | SVM  $\leq$  0.4 <sup>2</sup>

## Electrical

DALI-2

PC1 | 220-240 V

system 19.3 W

system 83 lm/W <sup>3</sup>

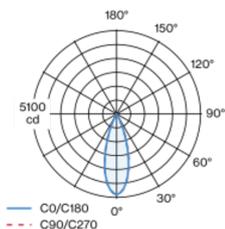
## Physical

length 164 mm | width 51 mm | height 90 mm

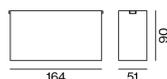
0.55 kg

Rectangular surface mounted multi-downlight made of aluminium; luminaire housing can be attached to mounting plate without tools by interlock; converter integrated into luminaire housing; surface black powder coated; equipped with four medium round light elements; symmetrical light distribution with precise radiation characteristic, beam angle 33°; high quality reflector with micro-faceted, aluminum-vaporised surface; Reflector black; UGR  $\leq$  10; passive cooling of the LEDs through improved heat sink geometry; light colour 3000 K; binning initial MacAdam  $\leq$  3 SDCM; CRI  $\geq$  90; min. 90% of luminous flux after 50000 operating hours; energy-efficient high power LEDs with very good colour rendering; degree of protection IP20; PC1; 220-240 V; incl. DALI-2 converter; light source not replaceable; control gear replaceable by an authorized professional; clank-free;

## Light distribution



## Product drawing



<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

## Installation instructions



## Lighting calculator



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.96	0.95	0.95	0.94	0.93
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	45
B13	59
B16	72
B20	90
C10	77
C13	100
C16	122
C20	153