

# UNICO L4 basic

ceiling

090-1L453BGB01



Project / Type

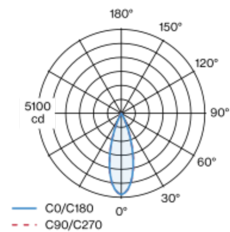
Notes

Count / Date



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 white aluminium 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 ≤ 10; passive cooling of the LEDs through improved heat sink geometry; light colour 3000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 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



## General

Ceiling | Surface

white aluminium | RAL 9006

Reflector black

IP20

1600 lm

## LED

3000 K

CRI ≥ 90

L90 / 50000 h

initial MacAdam ≤ 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 ≤ 10

P<sub>stLM</sub> ≤ 1.0 <sup>1</sup> | SVM ≤ 0.4 <sup>1</sup>

## Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 19.3 W

system 83 lm/W <sup>2</sup>

## Physical

length 164 mm | width 51 mm | height 90 mm

0.55 kg

<sup>1</sup> Value of containing product at full load (undimmed)  
<sup>2</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

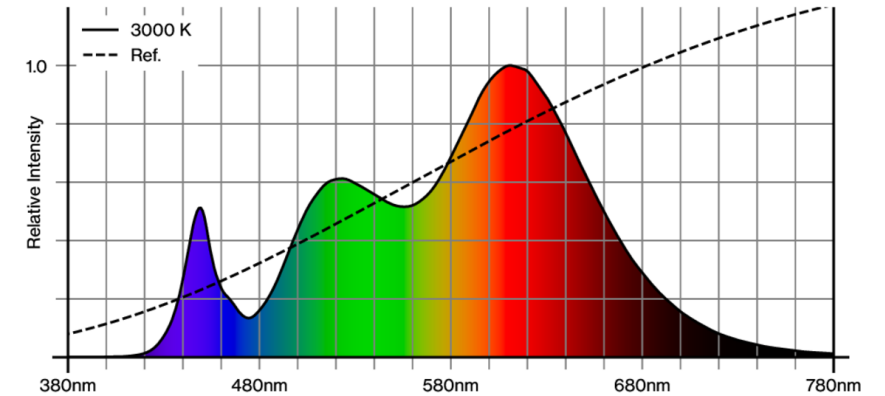
MF	LMF × RSMF × LLMF × LSF	RSMF <sup>a</sup>	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF <sup>a</sup>	Luminaire Maintenance Factor	LSF	Lamp Survival Factor

<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.

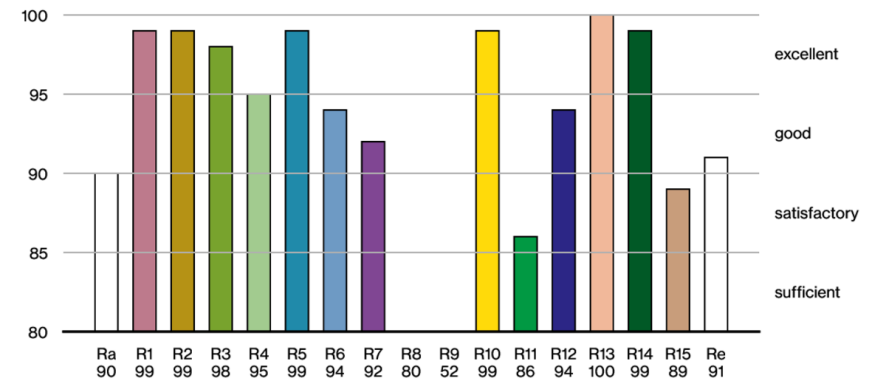
## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	45
B13	59
B16	72
B20	90
C10	77
C13	100
C16	122
C20	153

## Colour rendering



## CRI/R<sub>a</sub> ≥ 94 R<sub>e</sub> ≥ 91 (3000 K)



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## TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.