

# UNICO L4basic

ceiling

090-1L451KG001



Project / Type

Notes

Count / Date



### General

Ceiling , Surface

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

Reflector chrome

IP20

1180 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(1-5)</sub>: 91

MR 0.64

MDER 0.58

### Optical

spot round

beam angle 15°

UGR ≤ 10 , ≥65° <1500 cd/m<sup>2</sup>

PstLM ≤ 1.0 <sup>2</sup>

SVM ≤ 0.4 <sup>2</sup>

### Electrical

non DIM

220-240 V

system 19.3 W

system 61 lm/W<sup>3</sup>

PC1

### Physical

length 164 mm

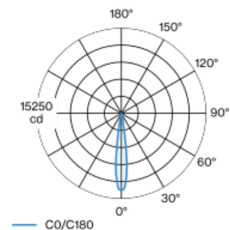
width 51 mm

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 grey powder coated; equipped with four spot round light elements; symmetrical light distribution with precise radiation characteristic; beam angle 15°; high quality reflector with micro-faceted, aluminum-vaporised surface; Reflector chrome; UGR ≤ 10; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above 65° ≤ 1500 cd/m<sup>2</sup>; 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. converter, non dimmable; 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                            | 42                 |
| B16                            | 68                 |
| B20                            | 85                 |
| C10                            | 57                 |
| C16                            | 91                 |
| C20                            | 114                |

