

# TULA micro suspended

canopy trimless

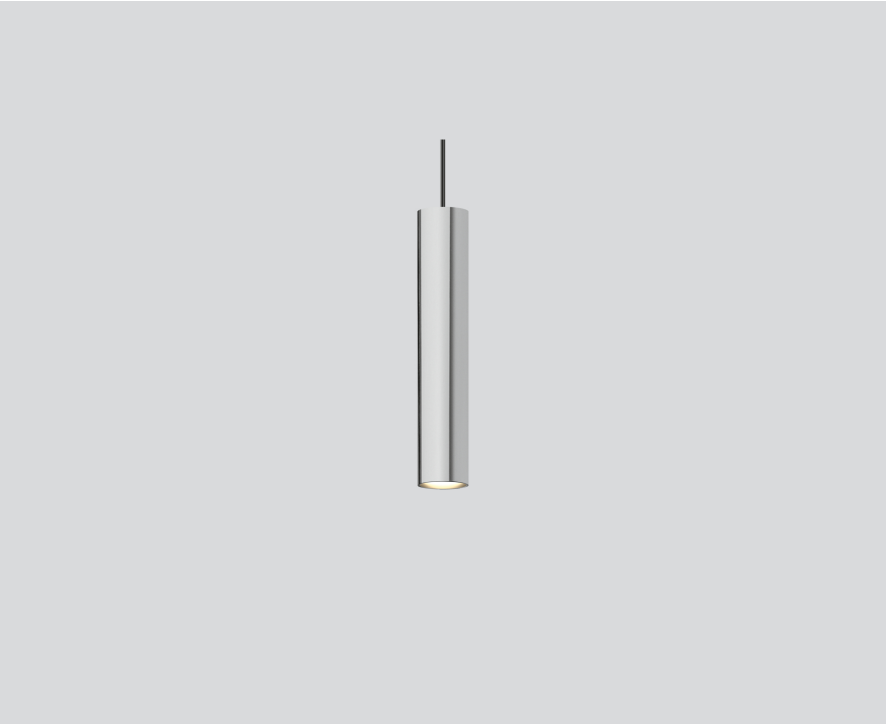
049-5715414F 005-3511017 002-90733



Project / Type

Notes

Count / Date



Decorative suspended luminaire in aluminium; surface polished chrome; pendant fitting with 1500mm suspension; incl. feed (black), can be individually shortened; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; light colour 2700 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; good glare control through recessed light point level; incl. high quality lens system; precise radiation characteristic with 44° beam; degree of protection IP20; PC2; 220-240 V; canopy for trimless installation in plasterboard ceilings; suitable for ceiling thickness of 9-25 mm; special mounting tool for easy installation of the trimless housing available as an accessory; accessories are listed separately; incl. DALI-2 converter; external converter for ceiling insertion; light source not replaceable; control gear replaceable by an authorized professional;

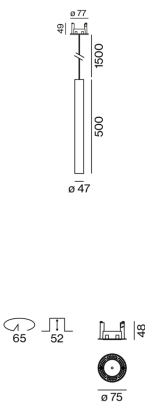
## Light distribution



flood 44°

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 1290     | 0.82  |
| 2     | 320      | 1.64  |
| 3     | 140      | 2.45  |
| 4     | 80       | 3.27  |
| 5     | 50       | 4.09  |

## Product drawing



## General

Ceiling | Suspended

chrome

Canopy traffic white

IP20

694 lm

## LED

2700 K

CRI  $\geq 90$

L90 / 50000 h

initial MacAdam  $\leq 3$  SDCM

R<sub>g</sub>: 99 | R<sub>f</sub>: 91 | R<sub>f(-15)</sub>: 89

MR 0.54 | MDER 0.49

## Optical

flood | beam angle 44°

PstLM  $\leq 1.0$ <sup>1 2 3 4</sup> | SVM  $\leq 0.4$ <sup>1 2 3 4</sup>

## Electrical

DALI-2

PC2 | 220-240 V

system 11.3 W | fixture 8.4 W

fixture 82 lm/W<sup>5</sup>

18 Vf | 500 mA

## Physical

diameter 47 mm | height 500 mm

1.06 kg

## Cutout

diameter 65 mm

min. ceiling thickness 9 mm | max. ceiling thickness 25 mm

recessed depth 130 mm

- <sup>1</sup> soft lens BO 45 007-1965980
- <sup>2</sup> wallwasher lens BO 45 007-1965780
- <sup>3</sup> oval lens BO 45 007-1965880
- <sup>4</sup> Value of containing product at full load (undimmed)
- <sup>5</sup> incl. consideration of optical losses & internal control unit losses

## Installation instructions



## Lighting calculator



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## Maintenance Factors

| Operating Time [h] | 10 000 | 20 000 | 30 000 | 40 000 | 50 000 |
|--------------------|--------|--------|--------|--------|--------|
| LLMF               | 0.97   | 0.96   | 0.94   | 0.93   | 0.92   |
| 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                            | 80                 |
| B13                            | 104                |
| B16                            | 130                |
| B20                            | 162                |
| C10                            | 135                |
| C13                            | 175                |
| C16                            | 220                |
| C20                            | 270                |

## Components

### MOUNTING SET trimless

|               |        |                   |
|---------------|--------|-------------------|
| COLOUR        | Ø (MM) | ARTICLE NUMBER(S) |
| traffic white | 75     | 005-3511017       |

### POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 147-33-23  | 002-90733         |

## Mounting accessories

### SPECIAL MOUNTING TOOL

|  |        |                   |
|--|--------|-------------------|
| TYPE   | Ø (MM) | ARTICLE NUMBER(S) |
| necessary to install mounting housing trimless | 100    | 063-8912110       |

### RING CEILING MOUNTED

|               |        |                   |
|---------------|--------|-------------------|
| COLOUR        | Ø (MM) | ARTICLE NUMBER(S) |
| traffic white | 50     | 050-0510217       |
| jet black     | 50     | 050-0510218       |

### HOOK

|               |        |                   |
|---------------|--------|-------------------|
| COLOUR        | Ø (MM) | ARTICLE NUMBER(S) |
| traffic white | 18     | 050-0510317       |
| jet black     | 18     | 050-0510318       |

## Optional electrical accessories

### DIN RAIL POWER SUPPLY

|            |                   |
|------------|-------------------|
| L-W-H (MM) | ARTICLE NUMBER(S) |
| 72-90-63   | 005-6520210       |

### DIN RAIL LED DRIVER

|                                |            |                   |
|--------------------------------|------------|-------------------|
| TYPE                           | L-W-H (MM) | ARTICLE NUMBER(S) |
| 2 × 42W   48V DC   UOUT 10–40V | 36-88-59   | 005-6121030       |



[049-5715414F 005-3511017 002-90733] The technical data represent rated values for an ambient temperature of 25 °C. The values for the electrical connected load 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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## Optical accessories

### OVAL LENS

|        |                   |
|--------|-------------------|
| Ø (MM) | ARTICLE NUMBER(S) |
| 42     | 007-1965880       |



### SOFT LENS

|        |                   |
|--------|-------------------|
| Ø (MM) | ARTICLE NUMBER(S) |
| 42     | 007-1965980       |



### WALLWASHER LENS

|        |                   |
|--------|-------------------|
| Ø (MM) | ARTICLE NUMBER(S) |
| 42     | 007-1965780       |

