

# TULA micro suspended

canopy trimless

049-5715518M 005-3511017 002-90733



Project / Type \_\_\_\_\_

Notes \_\_\_\_\_

Count / Date \_\_\_\_\_



## General

Ceiling , Suspended \_\_\_\_\_

black , RAL9005 <sup>1</sup> \_\_\_\_\_

Canopy traffic white \_\_\_\_\_

IP20 \_\_\_\_\_

746 lm \_\_\_\_\_

## LED

3000 K \_\_\_\_\_

CRI ≥ 90 \_\_\_\_\_

L90 / 50000 h \_\_\_\_\_

initial MacAdam ≤ 3 SDCM \_\_\_\_\_

R<sub>g</sub>: 100 , R<sub>f</sub>: 90 , R<sub>f(1-15)</sub>: 87 \_\_\_\_\_

MR 0.59 \_\_\_\_\_

MDER 0.54 \_\_\_\_\_

## Optical

medium \_\_\_\_\_

beam angle 25° \_\_\_\_\_

PstLM ≤ 1.0 <sup>2</sup> \_\_\_\_\_

SVM ≤ 0.4 <sup>2</sup> \_\_\_\_\_

## Electrical

DALI-2 \_\_\_\_\_

system 11.3 W \_\_\_\_\_

inset 8.4 W \_\_\_\_\_

500 mA \_\_\_\_\_

PC2 220-240V \_\_\_\_\_

system 66 lm/W<sup>3</sup> \_\_\_\_\_

inset 88 lm/W<sup>4</sup> \_\_\_\_\_

## Physical

diameter 47 mm \_\_\_\_\_

height 500 mm \_\_\_\_\_

0.74 kg \_\_\_\_\_

## Cutout

diameter 65 mm \_\_\_\_\_

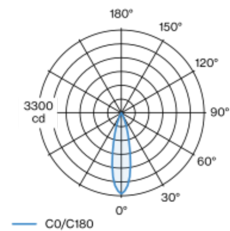
min. ceiling thickness 9 mm \_\_\_\_\_

max. ceiling thickness 25 mm \_\_\_\_\_

recessed depth 130 mm \_\_\_\_\_

Decorative suspended luminaire in aluminium; surface black powder coated; 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 3000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 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 25° beam; degree of protection IP20; PC2 220-240V; 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;

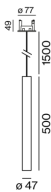
## Light distribution



medium 25°

| h (m) | EO° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 3230     | 0.44  |
| 2     | 810      | 0.89  |
| 3     | 360      | 1.33  |
| 4     | 200      | 1.78  |
| 5     | 130      | 2.22  |

## Product drawing



<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. optical losses and the efficiency of the operating device (converter)  
<sup>4</sup> incl. optical 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   | 0.95  | 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 Faktor                          |        |        |

<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

|      |            |                   |
|------|------------|-------------------|
| TYPE | L-W-H (MM) | ARTICLE NUMBER(S) |
| 10 W | 166-30-22  | 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

|       |            |                   |
|-------|------------|-------------------|
| TYPE  | L-W-H (MM) | ARTICLE NUMBER(S) |
| 160 W | 72-90-63   | 005-6520210       |



### DIN RAIL LED DRIVER

|                                |            |                   |
|--------------------------------|------------|-------------------|
| TYPE                           | L-W-H (MM) | ARTICLE NUMBER(S) |
| DALI-2   200-1050 mA   2 x 42W | 36-88-59   | 005-6121030       |



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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       |

