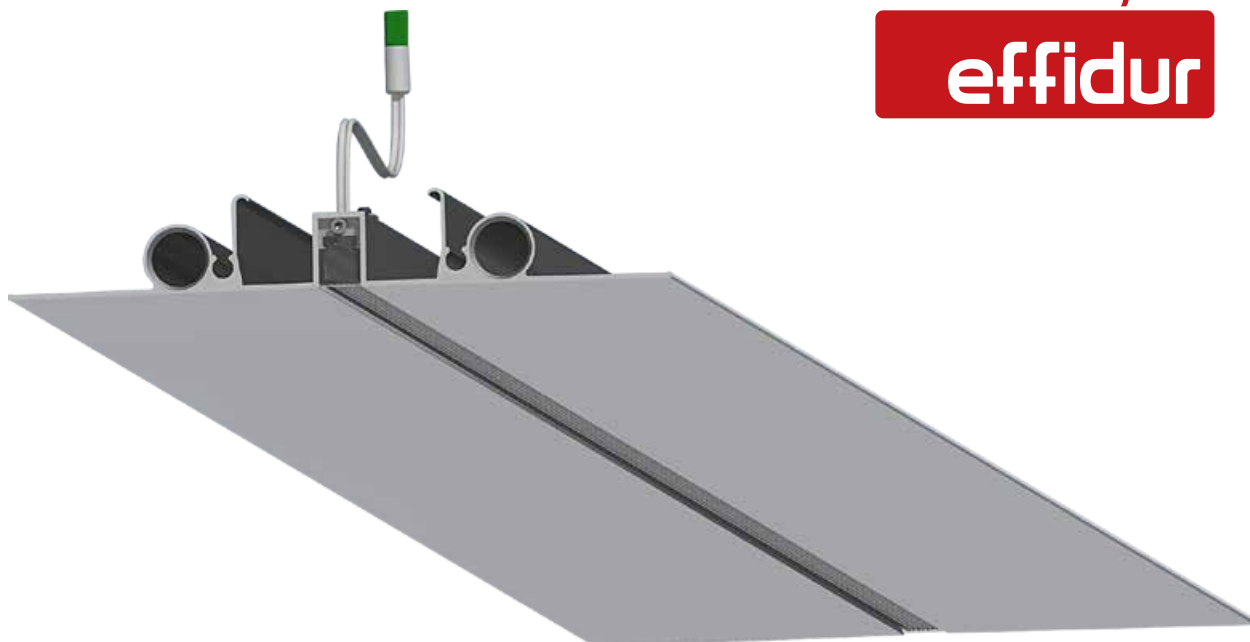
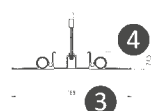
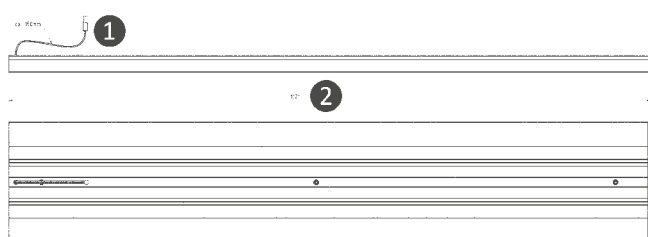


**effidur**

## HEATING / COOLING CEILING SYSTEM » LED CEILING PROFILE LIGHT RAIL 1121 mm RAL 9003

### TENDER SPECIFICATION

Effidur HCCS Grid light rail 1121 mm RAL 9003. ceiling profile with narrow, homogeneous light rail flush mounted in the profile. Light color 4000 K. Color rendering CRI > 90. Rated luminous flux 1850 lumens. Equipped with 1 LED module. LED Flex-Strip changeable, tightest color tolerance according to 3-Step McAdam. Thermal management. Lifetime L80/B10 > 50.000 h. Lifetime LED driver > 50.000 h. THD < 10 %. Electrical connection 230 V. Switchable. Translated with [www.DeepL.com/Translator](http://www.DeepL.com/Translator) (free version). Connected load 25.8 W. System efficiency 84 lm/W. External LED driver. Protection class I according to DIN EN 61140-1. Approved ambient temperature -25 °C to +50 °C. Construction: high quality extruded aluminum profile, anodized, plastic end caps. Lens made of clear prismatic profile PMMA to direct the light. Protection class IP42 according to DIN EN 60529. Luminaire wired halogen-free. Dimensions (LxWxH) 1121x188x28 mm. Weight approx. 2.5 kg. Mounting type: ceiling profile for direct installation in room-K heating and cooling ceilings. Scope of delivery: Ceiling profile ready for connection incl. driver. Mounting accessories can be purchased separately.



#### Dimensions

- |           |        |
|-----------|--------|
| ① ca. 150 | ③ 188  |
| ② 1121    | ④ 27,5 |

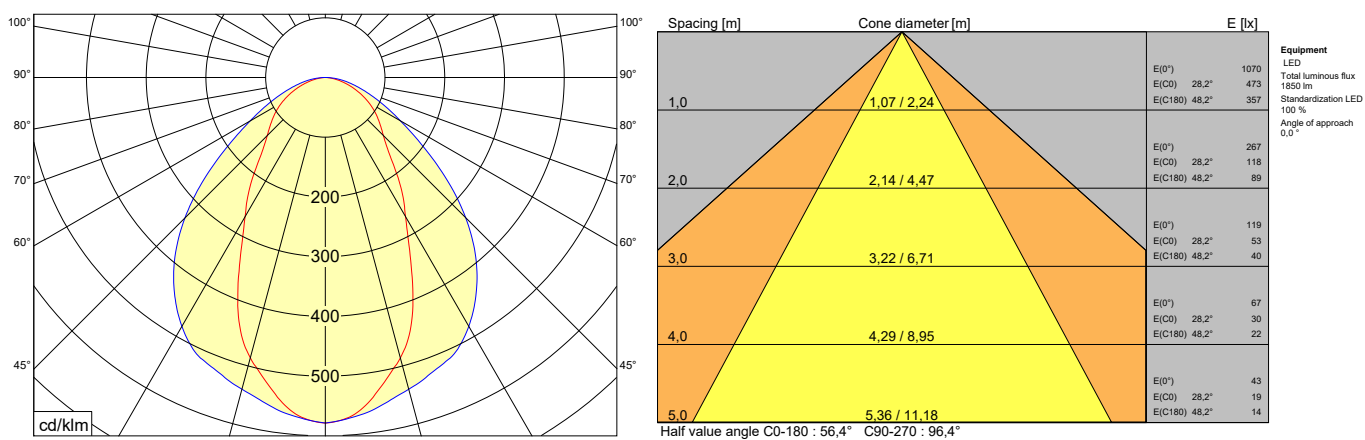
## PRODUCT FEATURES AND CHARACTERISTICS

|                                         |                                        |                                   |                                    |
|-----------------------------------------|----------------------------------------|-----------------------------------|------------------------------------|
| <b>Luminaire type</b>                   | Light rail<br>Heating- cooling ceiling | <b>Nominal luminous flux</b>      | 3105 lm                            |
| <b>Illuminant</b>                       | LED                                    | <b>Rated luminous flux</b>        | 1850 lm                            |
| <b>Mounting type</b>                    | Installation                           | <b>Color temperature</b>          | 4000 K                             |
| <b>Input voltage AC</b>                 | 198 - 264V~                            | <b>Color rendering index</b>      | > 90                               |
| <b>Frequency</b>                        | 50/60 Hz                               | <b>Housing design</b>             | high quality<br>Aluminum extrusion |
| <b>Connected load</b>                   | 25,8 W                                 | <b>Connection type</b>            | Terminal on ext.<br>LED driver     |
| <b>Rated power<br/>Illuminant</b>       | 27,0 W                                 | <b>Emergency light</b>            | With appropriate driver            |
| <b>Module/<br/>luminaire efficiency</b> | 133/84 lm/W                            | <b>Protection class</b>           | I                                  |
| <b>Power Faktor</b>                     | > 0,95                                 | <b>Protection category</b>        | IP 42                              |
| <b>THD</b>                              | < 10 %                                 | <b>Ambient temperature</b>        | -25 °C / +50 °C                    |
| <b>Lifetime</b>                         | L80/B10 > 50.000 h                     | <b>Dimensions (L×W×H)</b>         | 1121×188×28 mm                     |
| <b>Dimming</b>                          | DALI                                   | <b>Weight</b>                     | 2,5 kg                             |
| <b>ESD-classification</b>               | Test severity level 1                  | <b>Luminaire glass</b>            | Clear PMMA prismatic profile       |
| <b>Lifetime<br/>LED board</b>           | bis zu 72.000 h                        | <b>Risk group<br/>(IEC 62471)</b> | RG 1                               |

## MAXIMUM LOAD OF AUTOMATIC CIRCUIT BREAKERS

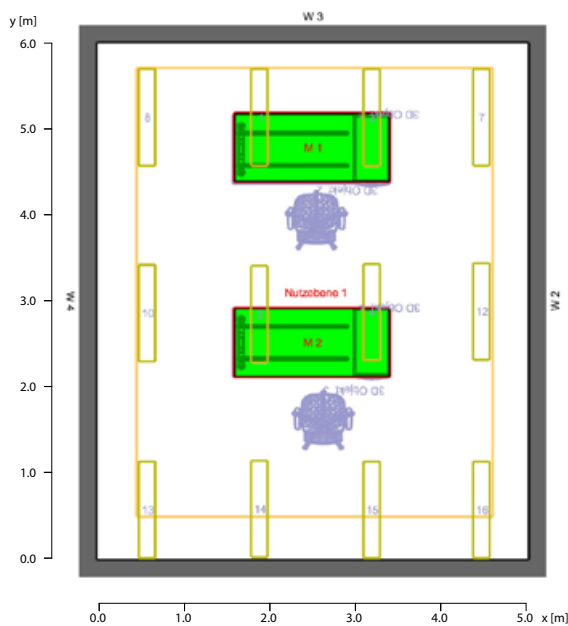
| Automatic circuit breaker | C10 | C13 | C16 | C20 | B10 | B13 | B16 | B20 | Starting current |                |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------------------|----------------|
| Installation Ø in mm²     | 1,5 | 1,5 | 2,5 | 2,5 | 1,5 | 1,5 | 2,5 | 2,5 | I <sub>max</sub> | Pulse duration |
| Number of luminaires      | 40  | 56  | 68  | 80  | 24  | 34  | 41  | 48  | 30A              | 180 µs         |

## LUMINOUS INTENSITY DISTRIBUTION / CONE DIAGRAM

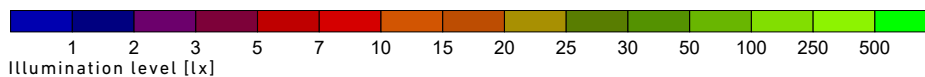


Equipped with LED, total luminous flux 1850 lm,  
normalization LED 100%, angle of incidence 0,0°

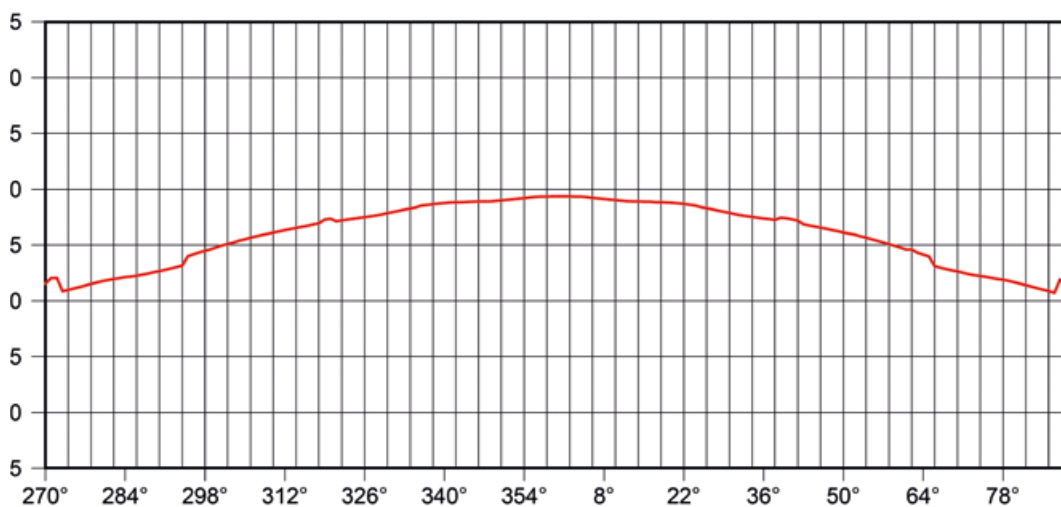
## CALCULATION RESULTS, MEASURING SURFACE DESK



**RELUX®**  
light simulation tools



## CALCULATION RESULTS, GLARE EVALUATION ACCORDING TO UGR



Observer position:  
x = 2.50 m,  
y = 2.00 m,  
z = 1.30 m  
Observer position:  
Useful plane 1, M2  
(see upper graphic, left)

**Total power per area for office lighting according to DIN EN 12464-1 for 2.70 m high rooms: 10.4 W/m<sup>2</sup>**

|                               |           |                 |
|-------------------------------|-----------|-----------------|
| Height of the reference plane |           | 0.75 m          |
| Average illuminance           | Em        | 503 lx          |
| Minimum illuminance           | Emin      | 489 lx          |
| Maximum illuminance           | Emax      | 512 lx          |
| Uniformity Uo                 | Emin/Em   | 1 : 1.03 (0.97) |
| Non-uniformity Ud             | Emin/Emax | 1 : 1.05 (0.95) |
| Maximum glare                 | UGR       | 19,4            |