

# VARO 80 S

track

180-6424038F



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

Notes \_\_\_\_\_

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



## General

Ceiling , Track \_\_\_\_\_

tilt max 90° \_\_\_\_\_

rotation 355° \_\_\_\_\_

black , RAL 9005 <sup>1</sup> \_\_\_\_\_

IP20 \_\_\_\_\_

1890 lm \_\_\_\_\_

## LED

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

CRI ≥ 90 \_\_\_\_\_

L80 / 50000 h \_\_\_\_\_

initial MacAdam ≤ 2 SDCM \_\_\_\_\_

R<sub>g</sub>: 98 , R<sub>f</sub>: 91 , R<sub>(1-15)</sub>: 93 \_\_\_\_\_

MR 0.54 \_\_\_\_\_

MDER 0.49 \_\_\_\_\_

## Optical

flood \_\_\_\_\_

beam angle 39° \_\_\_\_\_

PstLM ≤ 1.0 <sup>2</sup> \_\_\_\_\_

SVM ≤ 0.4 <sup>2</sup> \_\_\_\_\_

Track light made of die-cast aluminium; surface black powder coated; 355° rotatable and 90° tiltable; integrated converter in the plastic adapter; 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 ≤ 2 SDCM; CRI ≥ 90; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; including high quality aluminium reflector with spherical reflector; high gloss anodised; neutral colour reflection through absolute freedom from interference colour; for brilliant object staging; precise radiation characteristic with 39° beam; installed and exchanged without tools; optical attachments available as accessories; optical attachments can be combined; accessories are listed separately; degree of protection IP20; PC2; 220-240 V; incl. DALI-2 converter; adapter for toolless insertion or movement on a variety of 3-phase power tracks; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Electrical

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

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

system 13.0 W \_\_\_\_\_

system 145 lm/W<sup>3</sup> \_\_\_\_\_

PC2 \_\_\_\_\_

1 DALI Addr. \_\_\_\_\_

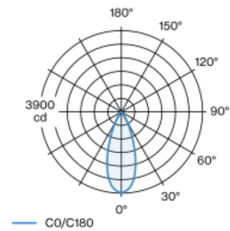
## Physical

diameter 87 mm \_\_\_\_\_

height 80 mm \_\_\_\_\_

0.49 kg \_\_\_\_\_

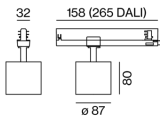
## Light distribution



flood 39°

| h (m) | EO° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 3880     | 0.70  |
| 2     | 970      | 1.40  |
| 3     | 430      | 2.10  |
| 4     | 240      | 2.80  |
| 5     | 160      | 3.50  |

## Product drawing



<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: 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               | 0.977                        | 0.94   | 0.905             | 0.871                           | 0.838  |
| 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 |
|--------------------------------|--------------------|
| B16                            | 27                 |
| C16                            | 44                 |

## Optical accessories

### HONEYCOMB LOUVER

Ø (MM)  
75

ARTICLE NUMBER(S)  
080-6401118



## Optical accessories

### LINEAR PRISMATIC LENS

Ø (MM)  
75

ARTICLE NUMBER(S)  
080-6402110P



## Optical accessories

### SNOOT

| TYPE   | Ø (MM) | ARTICLE NUMBER(S) |
|--------|--------|-------------------|
| short  | 66     | 080-6403118       |
| medium | 66     | 080-6403218       |
| angle  | 66     | 080-6403318       |

