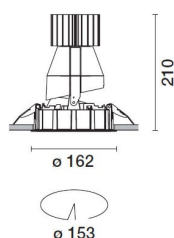


Last information update: May 2024

**Product configuration: N093**

N093: adjustable luminaire - Ø 153 mm - warm white - medium optic - frame

**Product code**N093: adjustable luminaire - Ø 153 mm - warm white - medium optic - frame **Attention! Code no longer in production****Technical description**

Round adjustable luminaire designed to use an LED lamp with C.O.B. technology in a warm white colour tone 3000K. Version with rim for surface-mounting. Painted, die-cast aluminium body. Lower reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Anodised aluminium upper reflector. Black, zinc-plated sheet steel bracket. The luminaire can be rotated 30° relative to the horizontal plane and 358° about the vertical axis. The luminaire is fitted with mechanical locks for light beam aiming. Painted extruded aluminium dissipater.

**Installation**

Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

**Colour**

White / Aluminium (39)

**Weight (Kg)**

1.43

**Mounting**

ceiling recessed

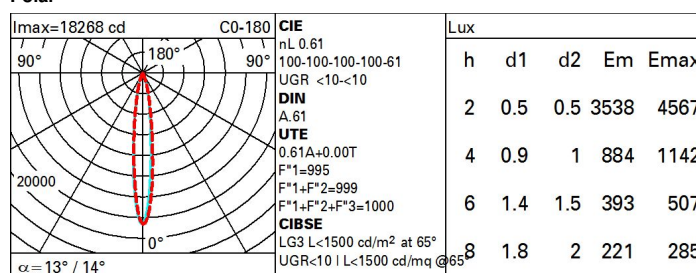
**Wiring**

Product complete with electronic components

Complies with EN60598-1 and pertinent regulations

**Technical data**

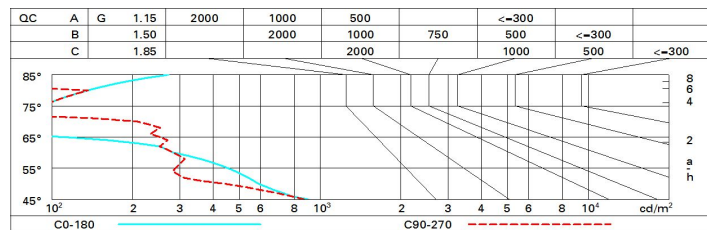
|  |           |                                       |                                 |
|--|-----------|---------------------------------------|---------------------------------|
| lm system:   | 1827      | CRI (minimum):                        | 80                              |
| W system:  | 23.7      | Colour temperature [K]:               | 3000                            |
| lm source:   | 3000      | MacAdam Step:                         | 2                               |
| W source:  | 21        | Life Time LED 1:                      | > 50,000h - L80 - B10 (Ta 25°C) |
| Luminous efficiency (lm/W, real value):            | 77.1      | Lamp code:                            | LED                             |
| lm in emergency mode:                              | -         | Number of lamps for optical assembly: | 1                               |
| Total light flux at or above an angle of 90° [Lm]: | 0         | ZVEI Code:                            | LED                             |
| Light Output Ratio (L.O.R.) [%]:                   | 61        | Number of optical assemblies:         | 1                               |
| Beam angle [°]:                                    | 13° / 14° |                                       |                                 |

**Polar**

# Utilisation factors

| R    | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 55 | 52 | 50 | 49 | 52 | 50 | 49 | 48 | 78  |
| 1.0  | 57 | 55 | 53 | 52 | 54 | 53 | 52 | 50 | 83  |
| 1.5  | 60 | 58 | 57 | 56 | 58 | 56 | 56 | 54 | 88  |
| 2.0  | 62 | 61 | 60 | 59 | 60 | 59 | 58 | 57 | 93  |
| 2.5  | 63 | 62 | 61 | 61 | 61 | 61 | 60 | 58 | 96  |
| 3.0  | 64 | 63 | 63 | 62 | 62 | 62 | 61 | 59 | 98  |
| 4.0  | 65 | 64 | 64 | 63 | 63 | 63 | 62 | 60 | 99  |
| 5.0  | 65 | 65 | 64 | 64 | 64 | 63 | 62 | 61 | 100 |

# Luminance curve limit



# UGR diagram

| Corrected UGR values (at 3000 lm bare lamp luminous flux)        |     |                     |      |      |      |      |                   |      |      |      |     |
|--|-----|---------------------|------|------|------|------|-------------------|------|------|------|-----|
| Reflect.:<br>ceiling/cav<br>walls<br>work pl.<br>Room dim<br>x y |     | viewed<br>crosswise |      |      |      |      | viewed<br>endwise |      |      |      |     |
| 2H   | 2H  | -3.1                | -1.0 | -2.7 | -0.7 | -0.3 | -0.7              | 1.4  | -0.3 | 1.7  | 2.0 |
|  | 3H  | -3.2                | -1.7 | -2.8 | -1.4 | -1.1 | -0.8              | 0.7  | -0.5 | 1.0  | 1.3 |
|  | 4H  | -3.2                | -2.1 | -2.8 | -1.7 | -1.4 | -0.9              | 0.3  | -0.5 | 0.6  | 0.9 |
|  | 6H  | -3.2                | -2.4 | -2.8 | -2.0 | -1.7 | -0.9              | -0.1 | -0.5 | 0.2  | 0.6 |
|  | 8H  | -3.2                | -2.3 | -2.8 | -2.0 | -1.6 | -0.9              | -0.1 | -0.6 | 0.2  | 0.6 |
|  | 12H | -3.1                | -2.2 | -2.7 | -1.9 | -1.5 | -1.0              | -0.1 | -0.6 | 0.2  | 0.6 |
| 4H   | 2H  | -3.2                | -2.1 | -2.8 | -1.7 | -1.4 | -0.9              | 0.3  | -0.5 | 0.6  | 0.9 |
|  | 3H  | -3.3                | -2.4 | -2.9 | -2.1 | -1.7 | -1.0              | -0.1 | -0.6 | 0.3  | 0.6 |
|  | 4H  | -3.4                | -2.4 | -3.0 | -2.0 | -1.6 | -1.1              | -0.1 | -0.7 | 0.3  | 0.7 |
|  | 6H  | -3.7                | -2.0 | -3.2 | -1.5 | -1.1 | -1.5              | 0.2  | -1.0 | 0.7  | 1.2 |
|  | 8H  | -3.7                | -1.8 | -3.2 | -1.3 | -0.8 | -1.6              | 0.3  | -1.1 | 0.8  | 1.3 |
|  | 12H | -3.6                | -1.6 | -3.1 | -1.1 | -0.6 | -1.7              | 0.2  | -1.2 | 0.7  | 1.2 |
| 8H   | 4H  | -3.9                | -2.0 | -3.4 | -1.5 | -1.0 | -1.6              | 0.3  | -1.1 | 0.8  | 1.3 |
|  | 6H  | -3.9                | -2.1 | -3.3 | -1.6 | -1.1 | -1.6              | 0.1  | -1.1 | 0.6  | 1.1 |
|  | 8H  | -3.6                | -2.1 | -3.0 | -1.6 | -1.1 | -1.6              | -0.2 | -1.1 | 0.3  | 0.9 |
|  | 12H | -3.1                | -2.1 | -2.5 | -1.6 | -1.1 | -1.5              | -0.5 | -0.9 | -0.0 | 0.5 |
| 12H  | 4H  | -4.0                | -2.0 | -3.5 | -1.6 | -1.0 | -1.7              | 0.3  | -1.2 | 0.8  | 1.3 |
|  | 6H  | -3.8                | -2.4 | -3.3 | -1.9 | -1.3 | -1.6              | -0.2 | -1.1 | 0.3  | 0.9 |
|  | 8H  | -3.4                | -2.4 | -2.8 | -1.9 | -1.4 | -1.5              | -0.5 | -0.9 | -0.0 | 0.5 |
| Variations with the observer position at spacing:                |     |                     |      |      |      |      |                   |      |      |      |     |
| S =  |     | 1.0H                |      |      |      |      | 3.6 / -3.8        |      |      |      |     |
|  |     | 1.5H                |      |      |      |      | 6.1 / -4.7        |      |      |      |     |
|  |     | 2.0H                |      |      |      |      | 8.0 / -5.0        |      |      |      |     |
|  |     |                     |      |      |      |      | 6.4 / -9.1        |      |      |      |     |
|  |     |                     |      |      |      |      | 9.1 / -9.8        |      |      |      |     |
|  |     |                     |      |      |      |      | 11.1 / -10.1      |      |      |      |     |