#### Palco InOut



Last information update: April 2024

#### Product configuration: EF45+X304.04+X302.01

EF45: Spotlight with base - Warm White Led - integrated electronic control gear - Very Wide Flood optic

X304.04: Cylindrical screen - Installation with accessory frame - Black

X302.01: Accessory support frame - White



243

Ø120

282

0137

#### Product code

EF45: Spotlight with base - Warm White Led - integrated electronic control gear - Very Wide Flood optic

#### **Technical description**

Spotlight designed to use LED lamps and a Very Wide Flood optic. The optical assembly and base is made of EN1706AC 46100LF aluminium alloy and subjected to a multi-step, pre-treatment process, in which the main phases are degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The following painting stage consists of a primer and a liquid acrylic paint, cured at 150°C, with a high level of weather and UV ray resistance. 5 mm thick tempered sodium-calcium closing glass. Double adjustability allows a 360° rotation about the vertical axis and 90° tilting relative to the horizontal plane. Mechanical ining locks for rotation on both the vertical axis and horizontal plane. Complete with a monochrome LED circuit and an Opti Beam Reflector optic system. The product includes a PG13.5 cable gland. Electronic DALI ballast integrated in product. Option of using optic accessories assembled via an accessory holder frame. All external screws used are made of A2 stainless steel.



Floor, wall, ceiling or via pole.

 Colour
 Weight (Kg)

 White (01) | Black (04) | Grey (15) | Rust Brown (F5)
 5.5

#### Mounting

wall arm|ground surface|wall surface|ceiling surface

## Wiring

Double PG.

Complies with EN60598-1 and pertinent regulations

IK07 IP66

C € 

IK07 IP66



X304.04: Cylindrical screen - Installation with accessory frame - Black

### Technical description

Cylindrical screen for a Ø 137 mm spotlight. The cylindrical screen is made of steel with a zinc-nickel treatment and corrosion-proof passivation. It is painted black. The screen has openings so that water can flow out in applications in upward pointing applications. It has fixing screws that are hidden when the accessory is installed. The screen has internal cover plates that prevent the light from shining out sideways through the water outlet openings. To prevent illuminated cracks, there is a gasket for fastening it to the accessory holder (for X251-X252-X253-X247-X248-X249 only). The screen is supplied with protective glass for the accessory holder, which gives it a protection level of IP66 so that water does not collect inside. It is painted with a liquid coating.

#### Installation

The screen is installed on the accessory holder with hidden screws.

 Colour
 Weight (Kg)

 Black (04)
 0.48

Complies with EN60598-1 and pertinent regulations

#### Accessory code

X302.01: Accessory support frame - White

Technical description

Accessory support frame

 Colour
 Weight (Kg)

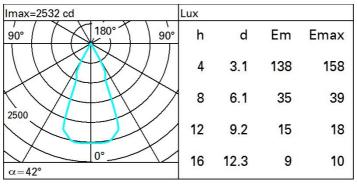
 White (01)
 0.15

Complies with EN60598-1 and pertinent regulations

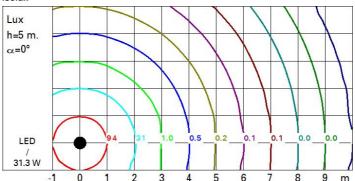


| Technical data                                     | ·                              |  | ·  |  |  |
|--|--------------------------------|--|--|--|--|
| Im system:   | 1319                           | Life Time LED 2:                                       | 100,000h - L90 - B10 (Ta 40°C)   |  |  |
| W system:  | 31.3                           | Lamp code:   | LED  |  |  |
| Im source:   | 3880                           | Number of lamps for optical                            | 1  |  |  |
| W source:  | 27                             | assembly:  |  |  |  |
| Luminous efficiency (lm/W,                         | 42.1                           | ZVEI Code:   | LED  |  |  |
| real value):                                       |                                | Number of optical                                      | 1  |  |  |
| Im in emergency mode:                              | -                              | assemblies:  |  |  |  |
| Total light flux at or above an angle of 90° [Lm]: | 0                              | Intervallo temperatura<br>ambiente:                    | from -30°C to 50°C.  |  |  |
| Light Output Ratio (L.O.R.) [%]:                   | 34                             | Lifetime of product at ambient operating               | ≥ 50.000h Ta=40°C  |  |  |
| Beam angle [°]:                                    | 42°                            | temperature:   |  |  |  |
| CRI (minimum):                                     | 80                             | Power factor:  | See installation instructions  |  |  |
| Colour temperature [K]:                            | 3000                           | Inrush current:  | 21 A / 300 μs  |  |  |
| MacAdam Step:                                      | 2                              | Maximum number of                                      |  |  |  |
| Life Time LED 1:                                   | 100,000h - L90 - B10 (Ta 25°C) | luminaires of this type per miniature circuit breaker: | B10A: 13 luminaires<br>B16A: 21 luminaires<br>C10A: 21 luminaires<br>C16A: 35 luminaires |  |  |
|  |                                | Overvoltage protection:                                | 10kV Common mode & 6kV<br>Differential mode  |  |  |
|  |                                | Control:   | DALI-2   |  |  |
|  |                                |  |  |  |  |

# Polar



# Isolux



## UGR diagram

| Rifled                                    | ct.:     |              |         |              |           |              |              |              |         |      |      |        |
|---|----------|--------------|---------|--------------|-----------|--------------|--------------|--------------|---------|------|------|--------|
| ceil/cav<br>walls<br>work pl.<br>Room dim |          | 0.70         | 0.70    | 0.50         | 0.50      | 0.30         | 0.70         | 0.70         | 0.50    | 0.50 | 0.30 |        |
|   |          | 0.50<br>0.20 | 0.30    | 0.50<br>0.20 | 0.30      | 0.30<br>0.20 | 0.50<br>0.20 | 0.30<br>0.20 | 0.50    | 0.30 | 0.30 |        |
|   |          |              |         |              |           |              |              |              |         |      |      | viewed |
|   |          | x            | У       |              | crosswise |              |              |              | endwise |      |      |        |
| 2H  | 2H       | 3.3          | 3.8     | 3.6          | 4.0       | 4.3          | 3.3          | 3.8          | 3.6     | 4.0  | 4.3  |        |
|   | ЗН       | 3.9          | 4.3     | 4.2          | 4.6       | 4.9          | 3.6          | 4.0          | 3.9     | 4.3  | 4.5  |        |
|   | 4H       | 4.1          | 4.5     | 4.4          | 4.7       | 5.0          | 3.6          | 4.0          | 4.0     | 4.3  | 4.6  |        |
|   | бН       | 4.1          | 4.5     | 4.5          | 4.8       | 5.1          | 3.6          | 4.0          | 4.0     | 4.3  | 4.6  |        |
|   | нв       | 4.1          | 4.5     | 4.5          | 4.8       | 5.1          | 3.6          | 3.9          | 3.9     | 4.3  | 4.6  |        |
|   | 12H      | 4.1          | 4.4     | 4.4          | 4.8       | 5.1          | 3.6          | 3.9          | 3.9     | 4.2  | 4.6  |        |
| 4H  | 2H       | 3.6          | 4.0     | 4.0          | 4.3       | 4.6          | 4.1          | 4.5          | 4.4     | 4.7  | 5.0  |        |
|   | ЗН       | 4.3          | 4.7     | 4.7          | 5.0       | 5.3          | 4.4          | 4.8          | 4.8     | 5.1  | 5.4  |        |
|   | 4H       | 4.5          | 4.8     | 4.9          | 5.2       | 5.6          | 4.5          | 4.8          | 4.9     | 5.2  | 5.6  |        |
|   | бН       | 4.6          | 4.9     | 5.0          | 5.3       | 5.7          | 4.6          | 4.8          | 5.0     | 5.2  | 5.6  |        |
|   | HS       | 4.6          | 4.8     | 5.0          | 5.3       | 5.7          | 4.5          | 4.8          | 5.0     | 5.2  | 5.6  |        |
|   | 12H      | 4.6          | 4.8     | 5.0          | 5.2       | 5.7          | 4.5          | 4.7          | 5.0     | 5.2  | 5.6  |        |
| вн  | 4H       | 4.5          | 4.8     | 5.0          | 5.2       | 5.6          | 4.6          | 4.8          | 5.0     | 5.3  | 5.7  |        |
|   | 6H       | 4.7          | 4.9     | 5.1          | 5.3       | 5.8          | 4.7          | 4.9          | 5.1     | 5.3  | 5.8  |        |
|   | HS       | 4.7          | 4.8     | 5.1          | 5.3       | 5.8          | 4.7          | 4.8          | 5.1     | 5.3  | 5.8  |        |
|   | 12H      | 4.7          | 4.8     | 5.2          | 5.3       | 5.8          | 4.6          | 4.8          | 5.1     | 5.3  | 5.8  |        |
| 12H                                       | 4H       | 4.5          | 4.7     | 5.0          | 5.2       | 5.6          | 4.6          | 4.8          | 5.0     | 5.2  | 5.7  |        |
|   | 6H       | 4.6          | 4.8     | 5.1          | 5.3       | 5.8          | 4.6          | 4.8          | 5.1     | 5.3  | 5.8  |        |
|   | H8       | 4.6          | 4.8     | 5.1          | 5.3       | 5.8          | 4.7          | 4.8          | 5.2     | 5.3  | 5.8  |        |
| Varia                                     | tions wi | th the ol    | bserver | osition a    | at spacir | ng:          |              |              |         |      |      |        |
| S =                                       | 1.0H     |              |         | .7 / -0.     |           |              |              |              | .7 / -0 |      |      |        |
|   | 1.5H     | 1.2 / -1.6   |         |              |           |              | 1.2 / -1.6   |              |         |      |      |        |