

## Laser Pinhole

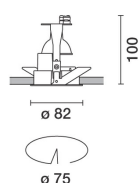
Design iGuzzini

iGuzzini

Last information update: October 2024

### Product configuration: P418

P418: recessed adjustable



### Product code

P418: recessed adjustable

### Technical description

Round adjustable luminaire designed for housing 3000K Warm White COB LED light sources with high colour rendering and OPTIBEAM reflector made of thermoplastic material. Rim made of white-coated die-cast aluminium incorporating a black-coated thermoplastic component for guaranteeing maximum visual comfort and preventing stray light dispersion. Flood optic. Adjustable internally around the horizontal axis by 35° and around the vertical axis by 358°. Passive cooling system, by means of a black-coated heat sink made of extruded aluminium. The power supply unit is available with a separate code.

### Installation

Recessed installation in false ceilings with 1 mm to 20 mm thickness with steel springs.

### Colour

White (01)

### Weight (Kg)

0.38

### Mounting

ceiling surface

### Wiring

Constant-current ballasts available with separate code: ON-OFF / 1-10 V dimmable / phase-cut dimmer / the recessed luminaire is supplied with the cable and connector to be connected to the connector provided on the driver.

Complies with EN60598-1 and pertinent regulations



### Technical data

|                                                    |      |                                       |                                 |
|----------------------------------------------------|------|---------------------------------------|---------------------------------|
| lm system:                                         | 466  | CRI (minimum):                        | 90                              |
| W system:                                          | 10   | Colour temperature [K]:               | 3000                            |
| lm source:                                         | 1200 | MacAdam Step:                         | 2                               |
| W source:                                          | 10   | Life Time LED 1:                      | > 50,000h - L80 - B10 (Ta 25°C) |
| Luminous efficiency (lm/W, real value):            | 46.6 | 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.) [%]:                   | 39   | Number of optical assemblies:         | 1                               |
| Beam angle [°]:                                    | 26°  | LED current [mA]:                     | 300                             |

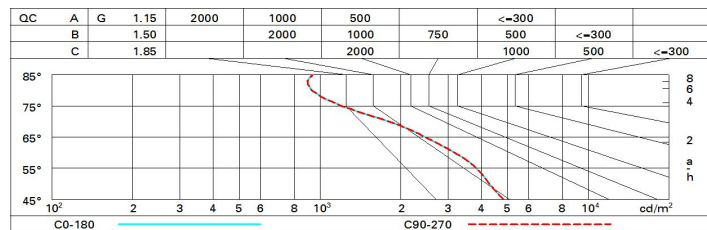
### Polar

|                                                         |                                                                                                                                                                                                                                     |     |     |      |            |  |  |  |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|------|------------|--|--|--|
| <br>Imax=2329 cd<br>90° 180° 90°<br>2500<br>0°<br>α=26° | <b>CIE</b><br>nL 0.39<br>99-100-100-100-39<br>UGR <10-<10<br><b>DIN</b><br>A.61<br><b>UTE</b><br>0.39A+0.00T<br>F*1=986<br>F*1+F*2=996<br>F*1+F*2+F*3=1000<br><b>CIBSE</b><br>LG3 L<3000 cd/m² at 65°<br>UGR<10   L<3000 cd/mq @65° |     |     |      | <b>Lux</b> |  |  |  |
|                                                         | h                                                                                                                                                                                                                                   | d   | Em  | Emax |            |  |  |  |
|                                                         | 2                                                                                                                                                                                                                                   | 0.9 | 460 | 582  |            |  |  |  |
|                                                         | 4                                                                                                                                                                                                                                   | 1.8 | 115 | 146  |            |  |  |  |
|                                                         | 6                                                                                                                                                                                                                                   | 2.8 | 51  | 65   |            |  |  |  |
|                                                         | 8                                                                                                                                                                                                                                   | 3.7 | 29  | 36   |            |  |  |  |

# Utilisation factors

| R    | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 35 | 33 | 32 | 31 | 33 | 32 | 31 | 30 | 77  |
| 1.0  | 36 | 35 | 34 | 33 | 34 | 33 | 33 | 32 | 82  |
| 1.5  | 38 | 37 | 36 | 35 | 37 | 36 | 35 | 34 | 88  |
| 2.0  | 40 | 39 | 38 | 37 | 38 | 37 | 37 | 36 | 92  |
| 2.5  | 40 | 40 | 39 | 39 | 39 | 39 | 38 | 37 | 95  |
| 3.0  | 41 | 40 | 40 | 39 | 40 | 39 | 39 | 38 | 97  |
| 4.0  | 41 | 41 | 41 | 40 | 40 | 40 | 39 | 38 | 99  |
| 5.0  | 42 | 41 | 41 | 41 | 41 | 40 | 40 | 39 | 100 |

# Luminance curve limit



# UGR diagram

| Corrected UGR values (at 1200 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 |      |      |      |      |
|                                                                       |      | 0.70                | 0.70 | 0.50 | 0.50 | 0.30 | 0.70              | 0.70 | 0.50 | 0.50 | 0.30 |
|                                                                       |      | 0.50                | 0.30 | 0.50 | 0.30 | 0.30 | 0.50              | 0.30 | 0.50 | 0.30 | 0.30 |
|                                                                       |      | 0.20                | 0.20 | 0.20 | 0.20 | 0.20 | 0.20              | 0.20 | 0.20 | 0.20 | 0.20 |
|                                                                       |      |                     |      |      |      |      |                   |      |      |      |      |
| 2H                                                                    | 2H   | 5.0                 | 7.1  | 5.3  | 7.4  | 7.7  | 5.0               | 7.1  | 5.3  | 7.4  | 7.7  |
|                                                                       | 3H   | 5.5                 | 7.1  | 5.9  | 7.5  | 7.8  | 5.2               | 6.8  | 5.6  | 7.2  | 7.5  |
|                                                                       | 4H   | 5.6                 | 6.9  | 6.0  | 7.3  | 7.6  | 5.3               | 6.6  | 5.7  | 6.9  | 7.3  |
|                                                                       | 6H   | 5.7                 | 6.6  | 6.1  | 7.0  | 7.3  | 5.3               | 6.3  | 5.7  | 6.6  | 6.9  |
|                                                                       | 8H   | 5.7                 | 6.6  | 6.1  | 7.0  | 7.3  | 5.3               | 6.2  | 5.7  | 6.6  | 6.9  |
|                                                                       | 12H  | 5.7                 | 6.6  | 6.1  | 7.0  | 7.3  | 5.2               | 6.2  | 5.6  | 6.5  | 6.9  |
|                                                                       |      |                     |      |      |      |      |                   |      |      |      |      |
| 4H                                                                    | 2H   | 5.3                 | 6.6  | 5.7  | 6.9  | 7.3  | 5.6               | 6.9  | 6.0  | 7.3  | 7.6  |
|                                                                       | 3H   | 6.0                 | 6.9  | 6.4  | 7.3  | 7.6  | 6.0               | 6.9  | 6.4  | 7.3  | 7.7  |
|                                                                       | 4H   | 6.1                 | 7.0  | 6.5  | 7.4  | 7.8  | 6.1               | 7.0  | 6.5  | 7.4  | 7.8  |
|                                                                       | 6H   | 5.8                 | 7.5  | 6.3  | 8.0  | 8.4  | 5.8               | 7.5  | 6.3  | 7.9  | 8.4  |
|                                                                       | 8H   | 5.7                 | 7.7  | 6.2  | 8.1  | 8.6  | 5.7               | 7.6  | 6.2  | 8.1  | 8.6  |
|                                                                       | 12H  | 5.7                 | 7.7  | 6.2  | 8.2  | 8.7  | 5.6               | 7.6  | 6.1  | 8.0  | 8.6  |
|                                                                       |      |                     |      |      |      |      |                   |      |      |      |      |
| 8H                                                                    | 4H   | 5.7                 | 7.6  | 6.2  | 8.1  | 8.6  | 5.7               | 7.7  | 6.2  | 8.1  | 8.6  |
|                                                                       | 6H   | 5.7                 | 7.6  | 6.3  | 8.0  | 8.6  | 5.8               | 7.6  | 6.3  | 8.1  | 8.6  |
|                                                                       | 8H   | 5.8                 | 7.4  | 6.3  | 7.9  | 8.4  | 5.8               | 7.4  | 6.3  | 7.9  | 8.4  |
|                                                                       | 12H  | 6.0                 | 7.1  | 6.5  | 7.6  | 8.2  | 6.0               | 7.1  | 6.5  | 7.6  | 8.1  |
|                                                                       |      |                     |      |      |      |      |                   |      |      |      |      |
| 12H                                                                   | 4H   | 5.6                 | 7.6  | 6.1  | 8.0  | 8.6  | 5.7               | 7.7  | 6.2  | 8.2  | 8.7  |
|                                                                       | 6H   | 5.8                 | 7.3  | 6.3  | 7.8  | 8.4  | 5.8               | 7.4  | 6.4  | 7.9  | 8.5  |
|                                                                       | 8H   | 6.0                 | 7.1  | 6.5  | 7.6  | 8.1  | 6.0               | 7.1  | 6.5  | 7.6  | 8.2  |
|                                                                       |      |                     |      |      |      |      |                   |      |      |      |      |
| Variations with the observer position at spacing:                     |      |                     |      |      |      |      |                   |      |      |      |      |
| S =                                                                   | 1.0H | 0.3 / -0.5          |      |      |      |      | 0.3 / -0.5        |      |      |      |      |
|                                                                       | 1.5H | 0.8 / -1.4          |      |      |      |      | 0.8 / -1.4        |      |      |      |      |
|                                                                       | 2.0H | 1.6 / -2.3          |      |      |      |      | 1.6 / -2.3        |      |      |      |      |