Last information update: May 2018


## Deep Frame - 2 elements - CoB warm LED - medium beam

## Product cod

P900

## Technical description

Two element recessed luminaire for LED lamps. Version with a perimeter frame. Shaped sheet steel structural frame. Die-cast aluminium, twin swivel universal joints located in a position set back from the installation surface to guarantee a high level of visual comfort. Tilts $\pm 30^{\circ}$ around both the horizontal and vertical axes. Die-cast aluminium lighting bodies designed to optimise heat dispersal. High efficiency aluminium reflectors - medium angle. High color rendering index, warm white LED lamps. Each lamp unit has its own glass cover. The installation system is toolfree. Control gear unit included.

Installation
Recessed in 1 to 30 mm thick false ceilings. Steel wire fixing springs. Preparation hole $102 \times 187$.

##  <br> $\stackrel{195 \times 110}{ }$ <br> 1 <br> 187x102

## Dimension (mm)

195x110x89

Colour
White (01) | Grey/Black (74)

## Weight (Kg)

1.12

## Mounting

ceiling recessed

## Wiring

Complete with electronic control gear unit connected to the luminaire. Wiring for connecting to mains network on driver terminal board.

## Notes

Accessories available: refractor for elliptical flow distribution - interchangeable reflectors.

Complies with EN60598-1 and pertinent regulations

IP20
IP23 On the visible part of the product once installed


## Product configuration: P900

## Product characteristics

Total lighting output [Lm]: 1330
Total luminous flux at or above an angle of $90^{\circ}[\mathrm{Lm}]: 0$
Total power [W]: 20.3
Emergency luminous flux [Lm]:
Luminous efficacy [Lm/W]: 65.5
Voltage [V]:
Life Time: $>50,000 \mathrm{~h}-\mathrm{L} 80-\mathrm{B} 10\left(\mathrm{Ta} 25^{\circ} \mathrm{C}\right)$
Number of optical assemblies: 2

## Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [\%]: $70 \quad$ Number of lamps for optical assembly: 1
Lamp code: LED
Socket: /
ZVEI Code: LED
Ballast losses [W]: 1.8
Nominal power [W]: 8.4
Colour temperature $[\mathrm{K}]$ : 3000
Nominal luminous [Lm]: 950
Lamp maximum intensity [cd]: /
CRI: 90
Beam angle [ ${ }^{\circ}$ ]: $26^{\circ}$
Wavelength [ Nm ]: /
MacAdam Step: 3


Utilisation factors

| $R$ | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K0.8 | 63 | 60 | 58 | 56 | 59 | 57 | 57 | 55 | 78 |
| 1.0 | 66 | 63 | 61 | 59 | 62 | 60 | 60 | 58 | 83 |
| 1.5 | 69 | 67 | 65 | 64 | 66 | 65 | 64 | 62 | 88 |
| 2.0 | 71 | 70 | 68 | 67 | 69 | 68 | 67 | 65 | 93 |
| 2.5 | 73 | 71 | 70 | 70 | 70 | 70 | 69 | 67 | 96 |
| 3.0 | 73 | 73 | 72 | 71 | 72 | 71 | 70 | 68 | 98 |
| 4.0 | 74 | 74 | 73 | 73 | 73 | 72 | 71 | 69 | 99 |
| 5.0 | 75 | 74 | 74 | 74 | 73 | 73 | 72 | 70 | 100 |



UGR diagram

| Corrected UGR values (at 950 Im bare lamp lumino us flux) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rifl ceil wa wo Roo x | v <br> pl. <br> dim <br> y | $\begin{aligned} & 0.70 \\ & 0.50 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.70 \\ & 0.30 \\ & 0.20 \end{aligned}$ | 0.50 <br> 0.50 <br> 0.20 <br> viewed <br> osswise | $\begin{aligned} & 0.50 \\ & 0.30 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.30 \\ & 0.30 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.70 \\ & 0.50 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.70 \\ & 0.30 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.50 \\ & 0.50 \\ & 0.20 \end{aligned}$ <br> viewed endwise | $\begin{aligned} & 0.50 \\ & 0.30 \\ & 0.20 \end{aligned}$ | $\begin{aligned} & 0.30 \\ & 0.30 \\ & 0.20 \end{aligned}$ |
| 2 H | 2 H | -1.7 | 0.5 | -1.3 | 0.8 | 1.2 | -1.7 | 0.5 | -1.3 | 0.8 | 1.2 |
|  | 3 H | -1.7 | -0.0 | -1.3 | 0.3 | 0.6 | -1.7 | 0.0 | -1.3 | 0.4 | 0.7 |
|  | 4 H | -1.8 | -0.4 | -1.4 | -0.0 | 0.3 | -1.7 | -0.3 | -1.3 | 0.0 | 0.4 |
|  | 6 H | -1.8 | -0.7 | -1.4 | -0.4 | -0.0 | -1.7 | -0.6 | -1.3 | -0.3 | 0.0 |
|  | 8 H | -1.8 | -0.7 | -1.4 | -0.4 | -0.0 | -1.8 | -0.7 | -1.4 | -0.4 | 0.0 |
|  | 12H | -1.8 | -0.8 | -1.4 | -0.4 | -0.0 | -1.8 | -0.8 | -1.4 | -0.4 | -0.0 |
| 4 H | 2 H | -1.7 | -0.3 | -1.3 | 0.0 | 0.4 | -1.8 | -0.4 | -1.4 | -0.0 | 0.3 |
|  | 3 H | -1.7 | -0.7 | -1.3 | -0.3 | 0.1 | -1.7 | -0.7 | -1.3 | -0.3 | 0.1 |
|  | 4 H | -1.8 | -0.8 | -1.4 | -0.4 | -0.0 | -1.8 | -0.8 | -1.4 | -0.4 | -0.0 |
|  | 6 H | -2.1 | -0.4 | -1.6 | 0.0 | 0.5 | -2.1 | -0.4 | -1.7 | -0.0 | 0.5 |
|  | 8 H | -2.2 | -0.3 | -1.7 | 0.1 | 0.6 | -2.3 | -0.4 | -1.8 | 0.1 | 0.6 |
|  | 12H | -2.3 | -0.3 | -1.8 | 0.2 | 0.7 | -2.4 | -0.4 | -1.9 | 0.1 | 0.6 |
| 8 H | 4 H | -2.3 | -0.4 | -1.8 | 0.1 | 0.6 | -2.2 | -0.3 | -1.7 | 0.1 | 0.6 |
|  | 6 H | -2.3 | -0.5 | -1.8 | -0.0 | 0.5 | -2.3 | -0.5 | -1.8 | -0.0 | 0.5 |
|  | 8 H | -2.3 | -0.7 | -1.8 | -0.2 | 0.3 | -2.3 | -0.7 | -1.8 | -0.2 | 0.3 |
|  | 12H | -2.1 | -1.0 | -1.6 | -0.5 | -0.0 | -2.1 | -1.1 | -1.6 | -0.6 | -0.1 |
| 12H | 4 H | -2.4 | -0.4 | -1.9 | 0.1 | 0.6 | -2.3 | -0.3 | -1.8 | 0.2 | 0.7 |
|  | 6 H | -2.4 | -0.7 | -1.8 | -0.2 | 0.3 | -2.3 | -0.6 | -1.8 | -0.1 | 0.4 |
|  | 8 H | -2.1 | -1.1 | -1.6 | -0.6 | -0.1 | -2.1 | -1.0 | -1.6 | -0.5 | -0.0 |
| Variations with the o bserver position at spacing: |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{S}=$ | 1.0 H |  |  | / -2.7 |  |  |  |  | $3.9 /-2.7$ |  |  |
|  | 1.5 H |  |  | /-4.6 |  |  |  |  | 6.3/-4.6 |  |  |
|  | 2.0 H |  |  | / -7.3 |  |  |  |  | 8.2 / -7.3 |  |  |

