

Last information update: April 2025

Product configuration: PY81.S4

PY81.S4: Luminaire L=880 - Organic Response - Very Wide Flood (Down) optic - UGR<19 - 31W 5002.5lm - 3500K - Black/Black/Black Transparent

**Product code**

PY81.S4: Luminaire L=880 - Organic Response - Very Wide Flood (Down) optic - UGR<19 - 31W 5002.5lm - 3500K - Black/Black/Black Transparent

Technical description

Luminaire made of painted extruded aluminium, frame and caps made of injection-moulded thermoplastic. Very Wide Flood optic (80°) in a Space Opti-Diamond (PMMA) version with a rear cover available in a White (Transparent White) or Black (Transparent Black) version. Integrated power supply and 3500K CRI80 direct emission monochrome LED lamp (Mid-Power). Version with UGR < 19 controlled luminance - in compliance with the standard for use in environments with video monitors ($L \leq 3000 \text{ cd/m}^2$). Luminaire complete with Organic Response wireless multi-sensor and light and motion detector. Wirepas, Bluetooth, infrared communication and PIR technology. In base systems with a Plug&Play configuration, the luminaire operates in stand-alone mode (motion control) and communicates automatically with other nearby luminaires fitted with the same Organic Response sensor. For advanced functions, like daylight control and editing operating parameters, the Organic Response Express app available from App Store and Play Store can be used. Accessories like BLE buttons, dongles and gateways are available for system architectures connected to the Organic Response Portal that can be used to activate other sensor functions, like Analytics and Space Management. Wireless frequency 2.4 GHz / IR 38 kHz. Integrated beacon that can be activated via the Organic Response Portal (iBeacon protocol).

Installation

Mounted on mains voltage tracks.

Positioning height min 2.7 m / max 3.7 m. Distance between luminaires min 1.0 m / max 3.0 m.

For other height positioning values and distances between luminaires, contact iGuzzini or refer to the instruction sheets.

Typical motion sensor coverage diameter: 3 m (@ 2.7 m installation h), 58°

Colour

Black/Black/Black Transparent (S4)

Weight (Kg)

2.73

Notes

Specifications:

Default Plug&Play values (that can be changed from the app Organic Response Express):

-Maximum light level with presence (max light): 100%

-Wait before shifting to low light level (dwell time): 10 min

-Low light level (low light): 10%

-Low light level time (low light time): 10 min

-Minimum light value after low level time (min light): 0% (OFF)

-Daylight control: disabled but can be activated using app

-Double time for sensor that has detected the last presence state (double dwell time): disabled

-Mesh RF sensor-sensor-gateway distance: Wirepas, maximum distance 8m (in a straight line with no obstacles).

-Sensor-smartphone-button connection: Bluetooth.

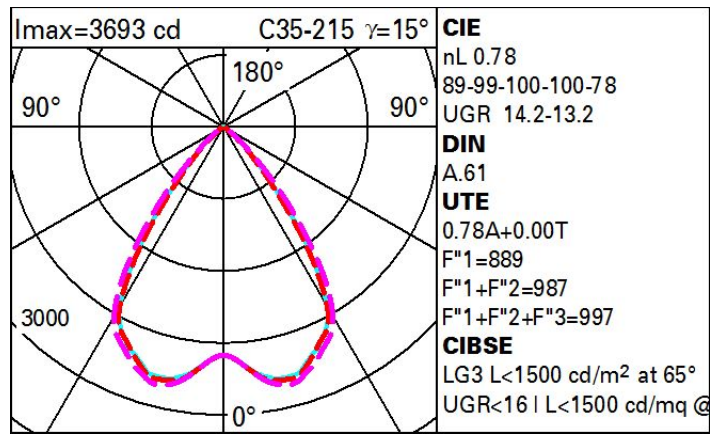
For advanced programming with the Organic Response portal, an IR dongle and gateway are required.

Complies with EN60598-1 and pertinent regulations

**Technical data**

| | | | |
|--|-------|--|--|
| Im system: | 4836 | MacAdam Step: | 3 |
| W system: | 30 | Lamp code: | LED |
| Im source: | 6200 | Number of lamps for optical assembly: | 1 |
| W source: | 30 | ZVEI Code: | LED |
| Luminous efficiency (Im/W, real value): | 161.2 | Number of optical assemblies: | 1 |
| Im in emergency mode: | - | Power factor: | See installation instructions |
| Total light flux at or above an angle of 90° [Lm]: | 0 | Inrush current: | 10 A / 220 µs |
| Light Output Ratio (L.O.R.) [%]: | 78 | Maximum number of luminaires of this type per miniature circuit breaker: | B10A: 18 luminaires B16A: 30 luminaires C10A: 31 luminaires C16A: 51 luminaires |
| CRI (minimum): | 80 | Minimum dimming %: | 1 |
| Colour temperature [K]: | 3500 | Overvoltage protection: | 2kV Common mode & 1kV Differential mode |

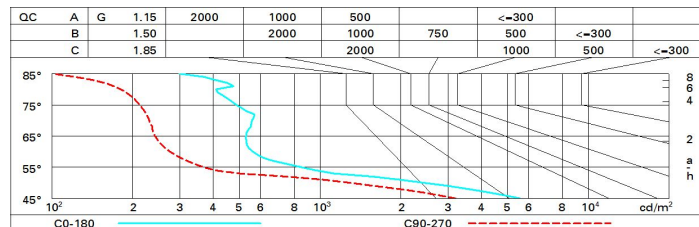
Polar



Utilisation factors

| R | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 66 | 62 | 59 | 56 | 61 | 58 | 58 | 55 | 70 |
| 1.0 | 70 | 66 | 63 | 61 | 65 | 62 | 62 | 59 | 76 |
| 1.5 | 75 | 72 | 69 | 67 | 71 | 69 | 68 | 65 | 84 |
| 2.0 | 78 | 75 | 74 | 72 | 74 | 73 | 72 | 69 | 89 |
| 2.5 | 79 | 78 | 76 | 75 | 76 | 75 | 74 | 72 | 92 |
| 3.0 | 81 | 79 | 78 | 77 | 78 | 77 | 76 | 74 | 94 |
| 4.0 | 82 | 81 | 80 | 79 | 79 | 79 | 77 | 75 | 96 |
| 5.0 | 82 | 82 | 81 | 80 | 80 | 79 | 78 | 76 | 97 |

Luminance curve limit



UGR diagram

| Corrected UGR values (at 6200 lm bare lamp luminous flux) | | | | | | | | | | | | |
|--|-----|---------------------|-------------|------|------|------|-------------------|------|------|------|------|------|
| Reflect.: ceiling/cav walls work pl. Room dim x y | | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.30 |
| | | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 | 0.30 |
| | | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | | viewed crosswise | | | | | viewed endwise | | | | | |
| 2H | 2H | 14.6 | 15.3 | 14.9 | 15.6 | 15.8 | 13.7 | 14.5 | 14.0 | 14.7 | 14.9 | 14.9 |
| | 3H | 14.5 | 15.1 | 14.8 | 15.4 | 15.7 | 13.6 | 14.3 | 13.9 | 14.5 | 14.8 | 14.8 |
| | 4H | 14.4 | 15.0 | 14.8 | 15.3 | 15.6 | 13.5 | 14.1 | 13.9 | 14.4 | 14.7 | 14.7 |
| | 6H | 14.4 | 14.9 | 14.7 | 15.3 | 15.6 | 13.5 | 14.0 | 13.8 | 14.3 | 14.7 | 14.7 |
| | 8H | 14.4 | 14.9 | 14.7 | 15.2 | 15.6 | 13.4 | 14.0 | 13.8 | 14.3 | 14.6 | 14.6 |
| | 12H | 14.3 | 14.8 | 14.7 | 15.2 | 15.5 | 13.4 | 13.9 | 13.8 | 14.2 | 14.6 | 14.6 |
| 4H | 2H | 14.4 | 15.0 | 14.7 | 15.3 | 15.6 | 13.6 | 14.2 | 13.9 | 14.5 | 14.8 | 14.8 |
| | 3H | 14.3 | 14.8 | 14.7 | 15.1 | 15.5 | 13.4 | 14.0 | 13.8 | 14.3 | 14.6 | 14.6 |
| | 4H | 14.2 | 14.7 | 14.6 | 15.0 | 15.4 | 13.4 | 13.8 | 13.8 | 14.2 | 14.6 | 14.6 |
| | 6H | 14.2 | 14.6 | 14.6 | 15.0 | 15.4 | 13.3 | 13.7 | 13.7 | 14.1 | 14.5 | 14.5 |
| | 8H | 14.2 | 14.5 | 14.6 | 14.9 | 15.4 | 13.2 | 13.6 | 13.7 | 14.0 | 14.5 | 14.5 |
| | 12H | 14.1 | 14.4 | 14.6 | 14.9 | 15.3 | 13.2 | 13.5 | 13.7 | 13.9 | 14.4 | 14.4 |
| 8H | 4H | 14.1 | 14.5 | 14.5 | 14.9 | 15.3 | 13.3 | 13.6 | 13.7 | 14.1 | 14.5 | 14.5 |
| | 6H | 14.1 | 14.3 | 14.5 | 14.8 | 15.3 | 13.2 | 13.5 | 13.7 | 13.9 | 14.4 | 14.4 |
| | 8H | 14.0 | 14.3 | 14.5 | 14.7 | 15.2 | 13.2 | 13.4 | 13.6 | 13.9 | 14.4 | 14.4 |
| | 12H | 14.0 | 14.2 | 14.5 | 14.7 | 15.2 | 13.1 | 13.3 | 13.6 | 13.8 | 14.3 | 14.3 |
| 12H | 4H | 14.1 | 14.4 | 14.5 | 14.8 | 15.3 | 13.2 | 13.6 | 13.7 | 14.0 | 14.5 | 14.5 |
| | 6H | 14.0 | 14.3 | 14.5 | 14.7 | 15.2 | 13.2 | 13.4 | 13.7 | 13.9 | 14.4 | 14.4 |
| | 8H | 14.0 | 14.2 | 14.5 | 14.7 | 15.2 | 13.1 | 13.3 | 13.6 | 13.8 | 14.3 | 14.3 |
| Variations with the observer position at spacing: | | | | | | | | | | | | |
| S = | | 1.0H | 3.6 / -8.7 | | | | 3.8 / -9.6 | | | | | |
| | | 1.5H | 6.3 / -9.7 | | | | 6.2 / -10.3 | | | | | |
| | | 2.0H | 8.3 / -10.3 | | | | 8.2 / -10.6 | | | | | |