

Last information update: April 2025

Product configuration: PY90.S1

PY90.S1: Luminaire L=880 - DALI-2 Sensor - Very Wide Flood (Down) optic - UGR<19 - 28.1W 4959lm - 4000K - White/White/White Transparent

**Product code**

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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 DALI-2 power supply and 4000K 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 DALI-2 sensor and light and motion detector, for compatible DALI-2 control systems.

Installation

Mounted on mains voltage tracks.

Positioning height min 2.4 m / max 5 m for motion and min 2.4 m / max 3 m as a light and motion sensor.

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

Example of typical motion sensor coverage diameter: 5 m (@ 4 m h for installation).

Dynamic lighting range: 1-1000 lx.

Movement detection angle 84°.

Detection angle for light measurement 30° - 60° (asymmetric).

Colour

White/White/White Transparent (S1)

Weight (Kg)

2.73

Wiring

Power supply via DALI bus (consumption 9 mA).

Notes

DALI EN 62386-101 ed.2 (DALI-2) The sensor used is DALI-2 certified. DALI parts 101,103,301,303,304

For systems compatible with the DALI-2 sensor, contact iGuzzini.

Complies with EN60598-1 and pertinent regulations

**Technical data**

Im system:	4959	Lamp code:	LED
W system:	26	Number of lamps for optical assembly:	1
Im source:	5700	ZVEI Code:	LED
W source:	26	Number of optical assemblies:	1
Luminous efficiency (Im/W, real value):	190.7	Power factor:	See installation instructions
Im in emergency mode:	-	Inrush current:	10 A / 220 µs
Total light flux at or above an angle of 90° [Lm]:	0	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 18 luminaires B16A: 30 luminaires C10A: 31 luminaires C16A: 51 luminaires
Light Output Ratio (L.O.R.) [%]:	87	Minimum dimming %:	1
CRI (minimum):	80	Overvoltage protection:	2kV Common mode & 1kV Differential mode
Colour temperature [K]:	4000	Control:	DALI-2 sensor
MacAdam Step:	3		

	<p>Imax=3620 cd C35-215 $\gamma=15^\circ$</p> <p>CIE nL 0.87 85-97-99-100-87 UGR 15.0-13.9</p> <p>DIN A.61</p> <p>UTE 0.87 A+0.00 T F"1=846 F"1+F"2=966 F"1+F"2+F"3=992</p> <p>CIBSE LG3 L<3000 cd/m² at 65° UGR<16 L<3000 cd/mq @</p>
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	R	77	75	73	71	55	53	33	00	DRR
K0.8	72	67	63	60	66	62	62	58	67	
1.0	77	72	68	65	71	67	67	63	73	
1.5	82	79	75	73	77	75	74	70	81	
2.0	86	83	80	78	82	79	78	75	87	
2.5	88	85	84	82	84	82	81	78	90	
3.0	89	87	86	84	86	85	83	81	93	
4.0	91	89	88	87	88	87	85	83	95	
5.0	91	90	89	88	89	88	86	84	96	

QC

A	G	1.15	2000	1000	500	<~300		
B		1.50		2000	1000	750	500	<~300
C		1.85			2000		1000	500

85°
75°
65°
55°
45°

8
6
4
2
a
h

10⁻² 2 3 4 5 6 8 10³ 2 3 4 5 6 8 10⁴ cm²/m²

C0-180 C90-270 C0-180

UGR diagram

Corrected UGR values (at 5700 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	14.9	15.6	15.2	15.9	16.1	14.0	14.7	14.3	15.0	15.2	
	3H	15.0	15.7	15.3	16.0	16.2	13.9	14.6	14.2	14.9	15.2	
	4H	15.0	15.7	15.4	16.0	16.3	13.9	14.5	14.2	14.8	15.1	
	6H	15.1	15.6	15.4	16.0	16.3	13.8	14.4	14.1	14.7	15.0	
	8H	15.1	15.6	15.4	16.0	16.3	13.8	14.3	14.1	14.7	15.0	
	12H	15.0	15.6	15.4	15.9	16.3	13.7	14.3	14.1	14.6	15.0	
4H	2H	14.7	15.4	15.1	15.7	16.0	14.0	14.7	14.4	15.0	15.3	
	3H	14.9	15.4	15.3	15.8	16.1	14.0	14.6	14.4	14.9	15.3	
	4H	15.0	15.5	15.4	15.8	16.2	14.0	14.5	14.4	14.8	15.2	
	6H	15.0	15.4	15.5	15.8	16.3	13.9	14.4	14.4	14.8	15.2	
	8H	15.0	15.4	15.5	15.8	16.3	13.9	14.3	14.4	14.7	15.2	
	12H	15.0	15.4	15.5	15.8	16.3	13.9	14.2	14.3	14.7	15.1	
8H	4H	14.9	15.3	15.3	15.7	16.1	14.0	14.4	14.4	14.8	15.2	
	6H	15.0	15.3	15.4	15.7	16.2	14.0	14.3	14.5	14.8	15.2	
	8H	15.0	15.3	15.5	15.7	16.2	14.0	14.3	14.5	14.7	15.2	
	12H	15.0	15.2	15.5	15.7	16.2	14.0	14.2	14.5	14.7	15.2	
12H	4H	14.9	15.2	15.3	15.6	16.1	14.0	14.3	14.4	14.8	15.2	
	6H	14.9	15.2	15.4	15.7	16.2	14.0	14.2	14.5	14.7	15.2	
	8H	15.0	15.2	15.5	15.7	16.2	14.0	14.2	14.5	14.7	15.2	
Variations with the observer position at spacing:												
S =		1.0H	2.7 / -3.8		3.0 / -4.4							
		1.5H	5.2 / -4.3		5.2 / -4.9							
		2.0H	7.1 / -4.9		7.1 / -5.2							