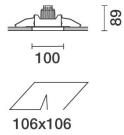
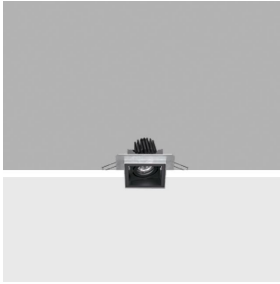


Deep Minimal

Design iGuzzini

iGuzzini

Last information update: May 2018



Deep Minimal - 1 element - CoB warm LED - medium beam - dimmable DALI

Product code
P909

Technical description

Individual recessed luminaire for LED lamp. Minimal (frameless) version with no contact frame. Shaped stainless steel sheet structural frame specifically designed for flush with ceiling application using the adapter supplied. Die-cast aluminium, twin swivel universal joint 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 body designed to optimise heat dispersal. High efficiency aluminium reflector - medium angle. High color rendering index, warm white LED lamp. Glass cover Control gear unit included.

Installation

Recessed in 12.5 mm thick false ceilings. The aluminium adapter is designed for filling, smoothing and finishing the false ceiling before inserting the recessed unit. Steel wire fixing springs. Preparation hole 106 x 106

Dimension (mm)
100x100x89

Colour
White (01) | Black (04)

Weight (Kg)
0.7

Mounting
ceiling recessed

Wiring

Complete with DALI dimmable 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 - adapter for installation in 15 mm thick false ceilings

Complies with EN60598-1 and pertinent regulations

IP20 **IP23** On the visible part of the product once installed



Product configuration: P909

Product characteristics

Total lighting output [Lm]: 665
Total power [W]: 10.7
Luminous efficacy [Lm/W]: 62.1
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 70
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 8.4
Nominal luminous [Lm]: 950
Lamp maximum intensity [cd]: /
Beam angle [°]: 26°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.3
Colour temperature [K]: 3000
CRI: 90
Wavelength [nm]: /
MacAdam Step: 3

	imax=2705 cd 90° 180° 90° 3000 0° α = 26°		CIE nL 0.70 99-100-100-100-70 UGR <10<10 DIN A.61 UTE 0.70A+0.00T F*1=993 F*1+F*2=999 F*1+F*2+F*3=1000 CIBSE LG3 L<500 cd/m² at 65° UGR<10 L<500 cd/mq at 65°		Lux			
	h	d	Em	Emax				
	2	0.9	556	676				
	4	1.8	139	169				
	6	2.8	62	75				
8	3.7	35	42					

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

Figure 1 is a graph showing the relationship between the angle of incidence (α) and the optical density (OD) for different materials (A, B, C) at various wavelengths (1.15, 1.50, 1.85 μm). The graph includes a table of OD values for different materials and wavelengths, and a plot of α (°) vs. OD (cm²/m²).

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

The graph plots α (°) on the y-axis (ranging from 45° to 85°) against OD (cm²/m²) on the x-axis (logarithmic scale, ranging from 10¹ to 10³). The graph shows three curves (A, B, C) for different materials, and a dashed line for the C90-270 material. The curves show that α increases with OD, and the rate of increase is higher for materials A and B compared to C. The dashed line for C90-270 shows a much lower rate of increase in α with OD.

UGR diagram

Corrected UGR values (at 950 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
		0.50	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
		viewed crosswise					viewed endwise				
2H	2H	-1.3	0.8	-0.9	1.1	1.5	-1.3	0.8	-0.9	1.1	1.5
	3H	-1.4	0.3	-1.0	0.6	1.0	-1.3	0.4	-0.9	0.7	1.0
	4H	-1.4	-0.0	-1.0	0.3	0.7	-1.4	0.0	-1.0	0.4	0.7
	6H	-1.4	-0.4	-1.1	-0.0	0.3	-1.4	-0.3	-1.0	0.0	0.4
	8H	-1.5	-0.4	-1.1	-0.1	0.3	-1.4	-0.4	-1.0	-0.0	0.3
	12H	-1.5	-0.5	-1.1	-0.1	0.3	-1.5	-0.4	-1.1	-0.1	0.3
4H	2H	-1.4	0.0	-1.0	0.4	0.7	-1.4	-0.0	-1.0	0.3	0.7
	3H	-1.4	-0.3	-1.0	0.0	0.4	-1.4	-0.3	-1.0	0.0	0.4
	4H	-1.5	-0.5	-1.0	-0.1	0.3	-1.5	-0.5	-1.0	-0.1	0.3
	6H	-1.8	-0.1	-1.3	0.4	0.8	-1.8	-0.1	-1.3	0.3	0.8
	8H	-1.9	0.0	-1.4	0.5	1.0	-2.0	-0.0	-1.5	0.4	0.9
	12H	-2.0	0.0	-1.5	0.5	1.0	-2.1	-0.1	-1.5	0.4	0.9
8H	4H	-2.0	-0.0	-1.5	0.4	0.9	-1.9	0.0	-1.4	0.5	1.0
	6H	-2.0	-0.2	-1.5	0.3	0.8	-2.0	-0.2	-1.5	0.3	0.9
	8H	-2.0	-0.4	-1.5	0.1	0.7	-2.0	-0.4	-1.5	0.1	0.7
	12H	-1.8	-0.7	-1.2	-0.2	0.3	-1.8	-0.8	-1.3	-0.3	0.3
12H	4H	-2.1	-0.1	-1.5	0.4	0.9	-2.0	0.0	-1.5	0.5	1.0
	6H	-2.0	-0.4	-1.5	0.1	0.6	-2.0	-0.3	-1.4	0.2	0.7
	8H	-1.8	-0.8	-1.3	-0.3	0.3	-1.8	-0.7	-1.2	-0.2	0.3
Variations with the observer position at spacing:											
S =		1.0H	3.9 / -2.7				3.9 / -2.7				
		1.5H	6.3 / -4.6				6.3 / -4.6				
		2.0H	8.2 / -7.3				8.2 / -7.3				