

## Laser Pinhole

Design iGuzzini

iGuzzini

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recessed adjustable

**Product code**  
P469

### Technical description

Round adjustable luminaire designed for housing 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, upper barrel made of black-coated thermoplastic for guaranteeing maximum visual comfort and preventing stray light dispersion, black-coated extruded aluminium heat sink. Flood optic. Adjustable internally around the horizontal axis by 35° and around the vertical axis by 358°. Passive cooling system. Product inclusive of DALI components.

### Installation

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

**Dimension (mm)**  
Ø136x124

**Colour**  
White (01)

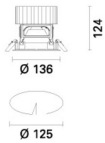
**Weight (Kg)**  
1.3

**Mounting**  
ceiling surface

### Wiring

Product inclusive of DALI components.

Complies with EN60598-1 and pertinent regulations



### Product configuration: P469

#### Product characteristics

Total lighting output [Lm]: 1640  
Total power [W]: 36.6  
Luminous efficacy [Lm/W]: 44.8  
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.) [%]: 41  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 32  
Nominal luminous [Lm]: 4000  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 34°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 4.6  
Colour temperature [K]: 3000  
CRI: 90  
Wavelength [Nm]: /  
MacAdam Step: 2

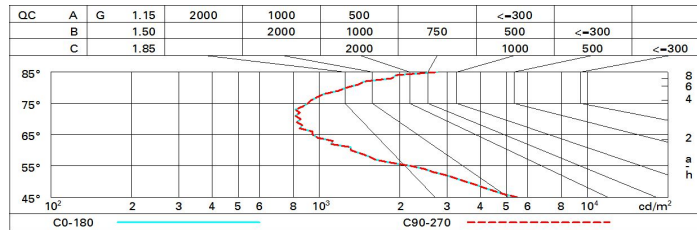
#### Polar

Imax=5023 cd		CIE nL 0.41 99-100-100-100-41 UGR <10-<10 DIN A.61 UTE 0.41A+0.00T F*1=991 F*1+F*2=998 F*1+F*2+F*3=999 CIBSE LG3 L<3000 cd/m² at 65° UGR<10   L<3000 cd/mq @65°	Lux			
90°	180°		h	d	Em	E <sub>max</sub>
		2	1.2	1017	1255	
		4	2.4	254	314	
		6	3.7	113	139	
		8	4.9	64	78	

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	37	35	34	33	35	33	33	32	78
1.0	39	37	36	35	36	35	35	34	82
1.5	40	39	38	37	39	38	37	36	88
2.0	42	41	40	39	40	40	39	38	93
2.5	42	42	41	41	41	41	40	39	95
3.0	43	43	42	42	42	42	41	40	97
4.0	44	43	43	43	42	42	42	41	99
5.0	44	44	43	43	43	43	42	41	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 4000 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceiling	cav	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim		viewed crosswise					viewed endwise				
X	Y										
2H	2H	5.5	6.0	5.7	6.2	6.4	5.5	6.0	5.7	6.2	6.4
	3H	5.4	5.9	5.7	6.2	6.4	5.4	5.9	5.7	6.1	6.4
	4H	5.4	5.9	5.8	6.2	6.5	5.4	5.8	5.7	6.1	6.4
	6H	5.5	5.9	5.8	6.2	6.5	5.3	5.7	5.6	6.0	6.3
	8H	5.5	5.9	5.9	6.3	6.6	5.3	5.6	5.6	6.0	6.3
	12H	5.7	6.0	6.0	6.4	6.7	5.2	5.6	5.6	5.9	6.3
4H	2H	5.4	5.8	5.7	6.1	6.4	5.4	5.9	5.8	6.2	6.5
	3H	5.4	5.7	5.7	6.1	6.4	5.4	5.8	5.8	6.1	6.5
	4H	5.4	5.7	5.8	6.1	6.5	5.4	5.7	5.8	6.1	6.5
	6H	5.5	5.8	5.9	6.2	6.6	5.3	5.6	5.8	6.0	6.4
	8H	5.6	5.9	6.1	6.3	6.7	5.3	5.6	5.8	6.0	6.4
	12H	5.9	6.1	6.3	6.5	7.0	5.3	5.5	5.7	6.0	6.4
8H	4H	5.3	5.6	5.8	6.0	6.4	5.6	5.9	6.1	6.3	6.7
	6H	5.5	5.7	6.0	6.2	6.7	5.7	5.9	6.2	6.4	6.8
	8H	5.7	5.9	6.2	6.4	6.9	5.7	5.9	6.2	6.4	6.9
	12H	6.2	6.3	6.7	6.8	7.3	5.8	6.0	6.3	6.5	7.0
12H	4H	5.3	5.5	5.7	6.0	6.4	5.9	6.1	6.3	6.5	7.0
	6H	5.5	5.7	6.0	6.2	6.7	6.0	6.2	6.5	6.7	7.2
	8H	5.8	6.0	6.3	6.5	7.0	6.2	6.3	6.7	6.8	7.3
Variations with the observer position at spacing:											
S =	1.0H	2.8 / -2.4					2.8 / -2.4				
	1.5H	5.0 / -3.2					5.0 / -3.2				
	2.0H	6.9 / -3.5					6.9 / -3.5				