

Laser Pinhole

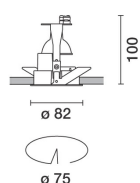
Design iGuzzini

iGuzzini

Last information update: October 2024

Product configuration: P416

P416: recessed adjustable



Product code

P416: recessed adjustable

Technical description

Round adjustable luminaire designed for housing 2700K 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 incorporating a black-coated thermoplastic component for guaranteeing maximum visual comfort and preventing stray light dispersion. Flood optic. Adjustable internally around the horizontal axis by 35° and around the vertical axis by 358°. Passive cooling system, by means of a black-coated heat sink made of extruded aluminium. The power supply unit is available with a separate code.

Installation

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

Colour

White (01)

Weight (Kg)

0.38

Mounting

ceiling surface

Wiring

Constant-current ballasts available with separate code: ON-OFF / 1-10 V dimmable / phase-cut dimmer / the recessed luminaire is supplied with the cable and connector to be connected to the connector provided on the driver.

Complies with EN60598-1 and pertinent regulations



Technical data

Im system:	447	CRI (minimum):	90
W system:	10	Colour temperature [K]:	2700
Im source:	1150	MacAdam Step:	2
W source:	10	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (Im/W, real value):	44.7	Lamp code:	LED
Im in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	39	Number of optical assemblies:	1
Beam angle [°]:	26°	LED current [mA]:	300

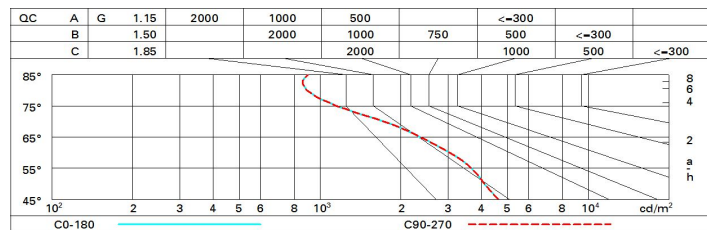
Polar

Imax=2232 cd		CIE		Lux			
90°	180°	nL 0.39		h	d	Em	Emax
		99-100-100-100-39		2	0.9	441	558
		UGR <10-<10		4	1.8	110	139
		DIN		6	2.8	49	62
		A.61		8	3.7	28	35
		UTE					
		0.39A+0.00T					
		F*1=986					
		F*1+F*2=996					
		F*1+F*2+F*3=1000					
		CIBSE					
		LG3 L<3000 cd/m² at 65°					
		UGR<10 L<3000 cd/mq @ 65°					
α=26°							

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	35	33	32	31	33	32	31	30	77
1.0	36	35	34	33	34	33	33	32	82
1.5	38	37	36	35	37	36	35	34	88
2.0	40	39	38	37	38	37	37	36	92
2.5	40	40	39	39	39	39	38	37	95
3.0	41	40	40	39	40	39	39	38	97
4.0	41	41	41	40	40	40	39	38	99
5.0	42	41	41	41	41	40	40	39	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1150 lm bare lamp luminous flux)											
Reflect.: ceiling 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	4.8	6.9	5.2	7.3	7.6	4.8	6.9	5.2	7.3	7.6
	3H	5.4	7.0	5.7	7.3	7.6	5.1	6.7	5.5	7.0	7.4
	4H	5.5	6.8	5.9	7.1	7.4	5.2	6.5	5.5	6.8	7.1
	6H	5.6	6.5	5.9	6.8	7.2	5.2	6.1	5.6	6.5	6.8
	8H	5.5	6.5	5.9	6.8	7.2	5.1	6.1	5.5	6.4	6.8
	12H	5.5	6.4	5.9	6.8	7.2	5.1	6.0	5.5	6.4	6.8
4H	2H	5.2	6.5	5.5	6.8	7.1	5.5	6.8	5.9	7.1	7.4
	3H	5.8	6.8	6.2	7.1	7.5	5.9	6.8	6.3	7.2	7.5
	4H	5.9	6.8	6.4	7.2	7.6	5.9	6.8	6.4	7.2	7.6
	6H	5.7	7.4	6.2	7.8	8.3	5.6	7.3	6.1	7.8	8.2
	8H	5.6	7.5	6.1	8.0	8.5	5.5	7.4	6.0	7.9	8.4
	12H	5.5	7.5	6.1	8.0	8.5	5.4	7.4	5.9	7.9	8.4
8H	4H	5.5	7.4	6.0	7.9	8.4	5.6	7.5	6.1	8.0	8.5
	6H	5.6	7.4	6.1	7.9	8.4	5.6	7.4	6.1	7.9	8.5
	8H	5.7	7.3	6.2	7.8	8.3	5.7	7.3	6.2	7.8	8.3
	12H	5.9	7.0	6.4	7.5	8.0	5.8	6.9	6.3	7.4	8.0
12H	4H	5.4	7.4	5.9	7.9	8.4	5.5	7.5	6.1	8.0	8.5
	6H	5.6	7.2	6.1	7.7	8.2	5.7	7.3	6.2	7.8	8.3
	8H	5.8	6.9	6.3	7.4	8.0	5.9	7.0	6.4	7.5	8.0
Variations with the observer position at spacing:											
S =	1.0H	0.3 / -0.5					0.3 / -0.5				
	1.5H	0.8 / -1.4					0.8 / -1.4				
	2.0H	1.6 / -2.3					1.6 / -2.3				