Laser Pinhole

Design iGuzzini   **iGuzzini**

Last information update: May 2018

recessed adjustable

Product code
P447

Technical description
Round adjustable luminaire designed for housing 3000K 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 electronic components.

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

Dimension (mm)
Ø136x104

Colour
White (01)

Weight (Kg)
1.3

Mounting
ceiling surface

Wiring
Product inclusive of electronic components.

Complies with EN60598-1 and pertinent regulations

IP20

Product configuration: P447

Product characteristics

Total lighting output [Lm]: 1077	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 21	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 51.3	Voltage [V]: -
Life Time: > 50,000h - L80 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

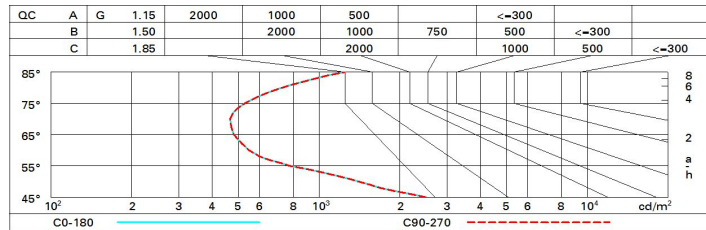|	
Light Output Ratio (L.O.R.) [%]: 54	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 3
Nominal power [W]: 18	Colour temperature [K]: 3000
Nominal luminous [Lm]: 2000	CRI: 90
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 30°	MacAdam Step: 2

Polar

Imax=3781 cd

CIE
nL 0.54
99-100-100-100-54
UGR <10-<10
DIN
A.61
UTE
0.54A+0.00T
F"1=993
F"1+F"2=999
F"1+F"2+F"3=999
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<10 | L<1500 cd/mq @65°

α=30°

Lux			
h	d	Em	Emax
2	1.1	736	945
4	2.1	184	236
6	3.2	82	105
8	4.3	46	59

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	49	46	44	43	46	44	44	42	78
1.0	51	48	47	46	48	46	46	44	83
1.5	53	51	50	49	51	50	49	48	88
2.0	55	54	53	52	53	52	51	50	93
2.5	56	55	54	54	54	53	53	51	96
3.0	57	56	55	55	55	55	54	53	98
4.0	57	57	56	56	56	56	55	53	99
5.0	58	57	57	57	56	56	55	54	100

Luminance curve limit

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

C0-180 ——————   C90-270 - - - - - - - - - -

UGR diagram

| Corrected UGR values (at 2000 lm bare lamp luminous flux) |||||||||||

Riflect.: ceil/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 x	y		viewed crosswise					viewed endwise				
2H	2H	7.5	8.0	7.8	8.3	8.5	7.5	8.0	7.8	8.3	8.5
	3H	7.4	7.9	7.7	8.1	8.4	7.4	7.9	7.7	8.1	8.4
	4H	7.3	7.8	7.7	8.1	8.4	7.3	7.8	7.8	8.0	8.3
	6H	7.3	7.7	7.7	8.0	8.3	7.2	7.6	7.6	8.0	8.3
	8H	7.3	7.7	7.7	8.0	8.4	7.2	7.6	7.6	7.9	8.3
	12H	7.3	7.7	7.7	8.0	8.4	7.2	7.5	7.5	7.9	8.2
4H	2H	7.3	7.8	7.6	8.0	8.3	7.3	7.8	7.7	8.1	8.4
	3H	7.2	7.6	7.6	7.9	8.3	7.2	7.6	7.6	7.9	8.3
	4H	7.1	7.5	7.5	7.8	8.2	7.1	7.5	7.5	7.8	8.2
	6H	7.1	7.4	7.5	7.8	8.2	7.1	7.4	7.5	7.8	8.2
	8H	7.1	7.4	7.6	7.8	8.2	7.0	7.3	7.5	7.7	8.2
	12H	7.2	7.4	7.6	7.8	8.3	7.0	7.2	7.4	7.7	8.1
8H	4H	7.0	7.3	7.5	7.7	8.2	7.1	7.4	7.6	7.8	8.2
	6H	7.0	7.3	7.5	7.7	8.2	7.1	7.3	7.6	7.8	8.2
	8H	7.1	7.3	7.6	7.7	8.2	7.1	7.3	7.6	7.7	8.2
	12H	7.1	7.3	7.6	7.8	8.3	7.1	7.2	7.6	7.7	8.2
12H	4H	7.0	7.2	7.4	7.7	8.1	7.2	7.4	7.6	7.8	8.3
	6H	7.0	7.2	7.5	7.7	8.2	7.1	7.3	7.6	7.8	8.3
	8H	7.1	7.2	7.6	7.7	8.2	7.1	7.3	7.6	7.8	8.3

Variations with the observer position at spacing:

S =	1.0H	4.7 / -6.5	4.7 / -6.5
	1.5H	7.4 / -6.9	7.4 / -6.9
	2.0H	9.4 / -7.1	9.4 / -7.1