Laser Pinhole

Design iGuzzini **iGuzzini**

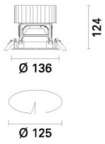
Last information update: May 2018

recessed adjustable

Product code
P461

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-coted 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. Medium 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

IP20

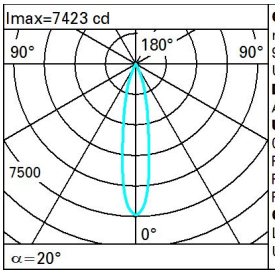
pending

Product configuration: P461

Product characteristics
Total lighting output [Lm]: 1320
Total power [W]: 29
Luminous efficacy [Lm/W]: 45.5
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.) [%]: 44
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 26
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 20°
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3
Colour temperature [K]: 3000
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

Polar



CIE
nL 0.44
99-100-100-100-44
UGR <10-<10
DIN
A.61
UTE
0.44A+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°

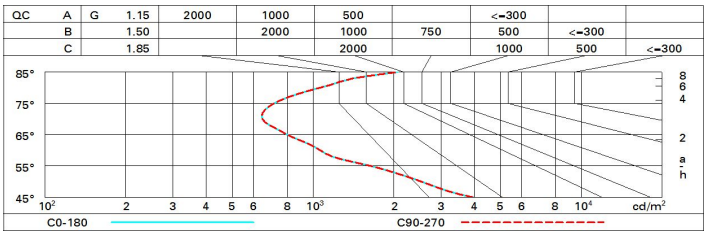
Lux

h	d	Em	Emax
2	0.7	1463	1856
4	1.4	366	464
6	2.1	163	206
8	2.8	91	116

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	40	38	36	35	37	36	36	34	78
1.0	41	40	38	37	39	38	38	36	82
1.5	43	42	41	40	42	41	40	39	88
2.0	45	44	43	42	43	42	42	41	93
2.5	46	45	44	44	44	44	43	42	95
3.0	46	46	45	45	45	45	44	43	98
4.0	47	46	46	46	46	45	45	44	99
5.0	47	47	46	46	46	46	45	44	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 3000 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				viewed crosswise					viewed endwise		
x	y										
2H	2H	3.5	5.6	3.9	5.9	6.3	3.5	5.6	3.9	5.9	6.3
	3H	3.5	5.1	3.9	5.4	5.8	3.4	5.0	3.8	5.4	5.7
	4H	3.5	4.8	3.9	5.2	5.5	3.4	4.7	3.8	5.1	5.4
	6H	3.6	4.6	4.0	5.0	5.3	3.4	4.4	3.8	4.7	5.1
	8H	3.7	4.7	4.1	5.1	5.4	3.3	4.3	3.7	4.7	5.0
	12H	3.9	4.9	4.3	5.2	5.6	3.3	4.3	3.7	4.6	5.0
4H	2H	3.4	4.7	3.8	5.1	5.4	3.5	4.8	3.9	5.2	5.5
	3H	3.5	4.5	3.9	4.8	5.2	3.5	4.5	3.9	4.9	5.3
	4H	3.5	4.5	3.9	4.9	5.3	3.5	4.5	3.9	4.9	5.3
	6H	3.4	5.1	3.9	5.5	6.0	3.2	4.9	3.6	5.3	5.8
	8H	3.5	5.4	4.0	5.8	6.3	3.1	5.0	3.6	5.4	5.9
	12H	3.7	5.7	4.2	6.2	6.7	3.0	5.0	3.5	5.4	6.0
8H	4H	3.1	5.0	3.6	5.4	5.9	3.5	5.4	4.0	5.8	6.3
	6H	3.4	5.2	3.9	5.6	6.2	3.6	5.4	4.1	5.9	6.4
	8H	3.7	5.3	4.2	5.8	6.3	3.7	5.3	4.2	5.8	6.3
	12H	4.4	5.4	4.9	5.9	6.4	4.0	5.0	4.5	5.5	6.0
12H	4H	3.0	5.0	3.5	5.4	6.0	3.7	5.7	4.2	6.2	6.7
	6H	3.4	5.0	3.9	5.5	6.0	4.0	5.6	4.5	6.1	6.6
	8H	4.0	5.0	4.5	5.5	6.0	4.4	5.4	4.9	5.9	6.4

Variations with the observer position at spacing:

S =			
	1.0H	2.3 / -2.0	2.3 / -2.0
	1.5H	4.4 / -2.6	4.4 / -2.6
	2.0H	6.2 / -2.9	6.2 / -2.9