

## Laser Pinhole

Design iGuzzini

iGuzzini

Last information update: October 2023

### Product configuration: P454

P454: recessed adjustable



### Product code

P454: recessed adjustable **Attention! Code no longer in production**

### 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, upper barrel made of black-coated thermoplastic for guaranteeing maximum visual comfort and preventing stray light dispersion, black-coated extruded aluminium heat sink. Spot 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.

### Colour

White (01)

### Weight (Kg)

1.3

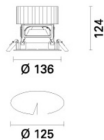
### Mounting

ceiling surface

### Wiring

Product inclusive of DALI components.

Complies with EN60598-1 and pertinent regulations



### Technical data

lm system:	1160	Ballast losses [W]:	4
W system:	35	Lamp code:	LED
lm source:	2900	Number of lamps for optical assembly:	1
W source:	31	ZVEI Code:	LED
Luminous efficiency (lm/W, real value):	33.1	Number of optical assemblies:	1
lm in emergency mode:	-	Power factor:	See installation instructions
Total light flux at or above an angle of 90° [Lm]:	0	Inrush current:	24 A / 192 µs
Light Output Ratio (L.O.R.) [%]:	40	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 8 luminaires B16A: 14 luminaires C10A: 14 luminaires C16A: 23 luminaires
Beam angle [°]:	18°	Minimum dimming %:	1
CRI (minimum):	90	Overvoltage protection:	2kV Common mode & 1kV Differential mode
Colour temperature [K]:	2700	Dimming mode:	CCR
MacAdam Step:	3	Control:	DALI
Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)		

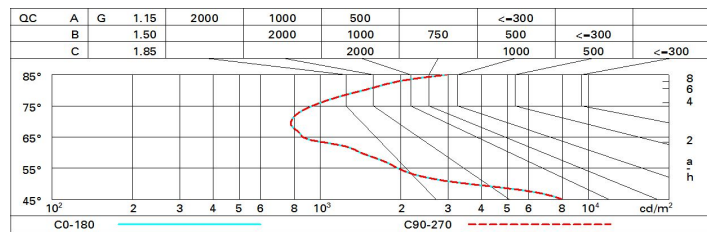
### Polar

	<b>CIE</b> nL 0.40 98-100-100-100-40 UGR <10-<10 <b>DIN</b> A.61 <b>UTE</b> 0.40A+0.00T F*1=985 F*1+F*2=997 F*1+F*2+F*3=999 <b>CIBSE</b> LG3 L<3000 cd/m² at 65° UGR<10   L<3000 cd/mq @65°			
	h	d	Em	Emax
	2	0.6	1275	1707
	4	1.3	319	427
	6	1.9	142	190
	8	2.5	80	107

# Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	36	34	33	32	34	32	32	31	77
1.0	37	36	35	34	35	34	34	33	82
1.5	39	38	37	36	38	37	36	35	88
2.0	41	40	39	38	39	38	38	37	92
2.5	41	41	40	40	40	40	39	38	95
3.0	42	41	41	41	41	40	40	39	97
4.0	42	42	42	42	41	41	41	40	99
5.0	43	42	42	42	42	42	41	40	100

# Luminance curve limit



# UGR diagram

Corrected UGR values (at 2900 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
		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
2H	2H	0.1	0.2	0.5	0.5	0.8	0.1	0.2	0.5	0.5	0.8
	3H	0.0	0.7	0.4	0.0	0.3	0.0	0.7	0.4	0.0	0.3
	4H	0.1	0.4	0.4	0.7	0.1	0.0	0.3	0.3	0.7	0.0
	6H	0.2	0.2	0.6	0.5	0.9	0.9	0.0	0.3	0.3	0.7
	8H	0.3	0.3	0.7	0.6	0.0	0.9	0.9	0.3	0.3	0.7
	12H	0.4	0.5	0.8	0.8	0.2	0.8	0.9	0.2	0.2	0.7
4H	2H	0.0	0.3	0.3	0.6	0.0	0.1	0.4	0.4	0.7	0.1
	3H	0.0	0.0	0.4	0.3	0.7	0.0	0.1	0.4	0.4	0.8
	4H	0.0	0.0	0.4	0.4	0.8	0.0	0.0	0.4	0.4	0.8
	6H	0.9	0.6	0.4	0.0	0.5	0.7	0.4	0.2	0.8	0.3
	8H	0.0	0.9	0.5	0.4	0.9	0.6	0.5	0.1	0.9	0.4
	12H	0.3	0.2	0.8	0.7	0.2	0.5	0.5	0.0	0.9	0.5
8H	4H	0.6	0.5	0.1	0.9	0.4	0.0	0.9	0.5	0.4	0.9
	6H	0.9	0.7	0.4	0.2	0.7	0.1	0.9	0.6	0.4	0.9
	8H	0.2	0.8	0.7	0.3	0.8	0.2	0.8	0.7	0.3	0.8
	12H	0.0	0.0	0.5	0.5	0.0	0.5	0.5	0.0	0.0	0.6
12H	4H	0.5	0.5	0.0	0.9	0.5	0.3	0.2	0.8	0.7	0.2
	6H	0.9	0.5	0.5	0.0	0.6	0.6	0.2	0.1	0.7	0.2
	8H	0.5	0.5	0.0	0.0	0.6	0.0	0.0	0.5	0.5	0.0
Variations with the observer position at spacing:											
S =	1.0H	1.4 / -2.1					1.4 / -2.1				
	1.5H	3.1 / -2.6					3.1 / -2.6				
	2.0H	4.7 / -3.0					4.7 / -3.0				