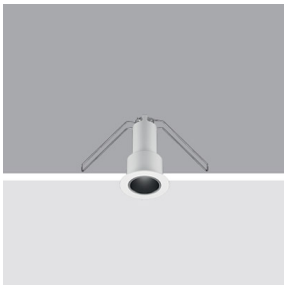
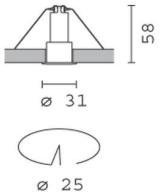
Laser

Design iGuzzini **iGuzzini**

Last information update: June 2018





Fixed round mini-recessed luminaire - LED - medium

Product code
P310

Technical description
Fixed round mini-recessed luminaire with contact frame. The LED is set back to minimize direct glare. The recessed body is made of machined aluminium and the inside of the ring of thermoplastic available in a range of painted and metallised finishes. PMMA - medium (25°) high resolution optic lens. High color rendering index 2700K LED. Tool free assembly. Power unit available with a separate code no.

Installation
Recessed in a false ceiling by means of a steel wire spring - minimum thickness of false ceiling: 1 mm - preparation hole Ø 25 mm.

Dimension (mm)
Ø31x58

Colour
White (01) | Black/Black (43) | Black/White (47)

Weight (Kg)
0.03

Mounting
wall recessed|ceiling recessed

Wiring
Direct current ballasts are available with a separate code no.: ON-OFF / 1-10V dimmable / DALI dimmable / Trailing Edge dimmable

Notes
The 25° optic is not available for the finishes: E4 (white - chrome) - 41 (white - gold) - E9 (white - satin finish gold) - E7 (white - burnished chrome)

Complies with EN60598-1 and pertinent regulations

IP20 IP43 On the visible part of the product once installed

Product configuration: P310.01

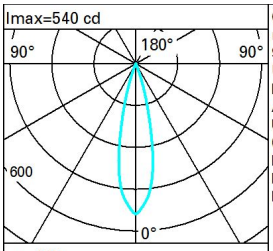
Product characteristics

Total lighting output [Lm]: 101	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 2	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 50.3	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.) [%]: 67	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 0
Nominal power [W]: 2	Colour temperature [K]: 2700
Nominal luminous [Lm]: 150	CRI: 90
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 24°	MacAdam Step: 3

Polar



CIE
nL 0.67
96-98-100-100-67
UGR 14.8-14.4
DIN
A.61
UTE
0.67A+0.00T
F"1=956
F"1+F"2=985
F"1+F"2+F"3=997

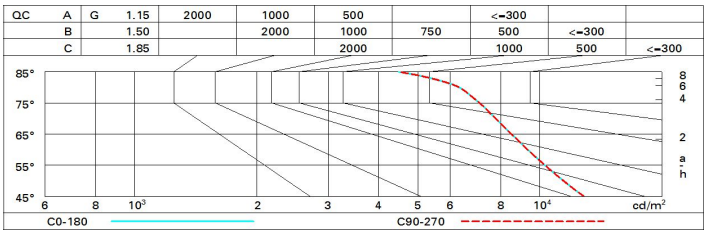
Lux

h	d	Em	Emax
1	0.4	428	540
2	0.9	107	135
3	1.3	48	60
4	1.7	27	34

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	59	56	53	52	55	53	53	50	75
1.0	62	59	57	55	58	56	56	54	80
1.5	65	63	61	60	62	61	60	58	86
2.0	68	66	64	63	65	64	63	61	91
2.5	69	68	67	66	67	66	65	63	94
3.0	70	69	68	67	68	67	66	64	96
4.0	71	70	70	69	69	68	67	66	98
5.0	71	71	70	70	70	69	68	66	99

Luminance curve limit



UGR diagram

Corrected UGR values (at 150 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					viewed		
x	y			crosswise					endwise		
2H	2H	12.1	14.2	12.5	14.5	14.8	12.1	14.2	12.5	14.5	14.8
	3H	13.3	14.8	13.7	15.1	15.4	12.5	14.0	12.9	14.4	14.7
	4H	13.8	15.0	14.1	15.3	15.6	12.7	13.9	13.1	14.2	14.5
	6H	14.2	15.0	14.5	15.4	15.7	12.8	13.6	13.2	14.0	14.3
	8H	14.3	15.1	14.6	15.5	15.8	12.8	13.6	13.1	14.0	14.3
	12H	14.3	15.2	14.7	15.5	15.9	12.7	13.6	13.1	13.9	14.3
4H	2H	12.7	13.9	13.1	14.2	14.5	13.8	15.0	14.1	15.3	15.6
	3H	14.0	14.9	14.4	15.3	15.6	14.4	15.2	14.8	15.6	16.0
	4H	14.6	15.5	15.0	15.8	16.2	14.6	15.5	15.0	15.8	16.2
	6H	14.7	16.4	15.2	16.8	17.3	14.4	16.1	14.9	16.5	17.0
	8H	14.8	16.6	15.3	17.1	17.6	14.4	16.2	14.9	16.7	17.2
	12H	14.8	16.7	15.3	17.2	17.7	14.3	16.2	14.8	16.7	17.2
8H	4H	14.4	16.2	14.9	16.7	17.2	14.8	16.6	15.3	17.1	17.6
	6H	14.9	16.7	15.5	17.1	17.7	15.0	16.8	15.5	17.2	17.8
	8H	15.2	16.7	15.7	17.2	17.7	15.2	16.7	15.7	17.2	17.7
	12H	15.4	16.5	16.0	17.0	17.6	15.4	16.5	15.9	17.0	17.5
12H	4H	14.3	16.2	14.8	16.7	17.2	14.8	16.7	15.3	17.2	17.7
	6H	15.0	16.5	15.5	17.0	17.5	15.2	16.7	15.7	17.2	17.7
	8H	15.4	16.5	15.9	17.0	17.5	15.4	16.5	16.0	17.0	17.6

Variations with the observer position at spacing:

S =	1.0H	0.2 / -0.2	0.2 / -0.2
	1.5H	0.3 / -0.6	0.3 / -0.6
	2.0H	0.6 / -0.9	0.6 / -0.9