Reflex

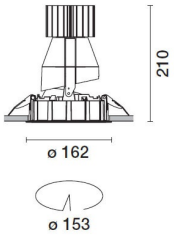
Design iGuzzini **iGuzzini**

Last information update: May 2018

adjustable luminaire - Ø 153 mm - warm white - medium optic - frame

Product code
N099

Technical description
Round adjustable luminaire designed to use an LED lamp with C.O.B.technology in a warm white colour tone 3000K (CRI 90). Version with rim for surface-mounting. Painted, die-cast aluminium body. Lower reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Anodised aluminium upper reflector. Black, zinc-plated sheet steel bracket. The luminaire can be rotated 30° relative to the horizontal plane and 358° about the vertical axis. The luminaire is fitted with mechanical locks for light beam aiming. Painted extruded aluminium dissipater.



Installation
Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

Dimension (mm)
Ø162x210

Colour
White/Aluminium (39)

Weight (Kg)
1.95

Mounting
ceiling recessed

Wiring
Product complete with DALI components

Complies with EN60598-1 and pertinent regulations

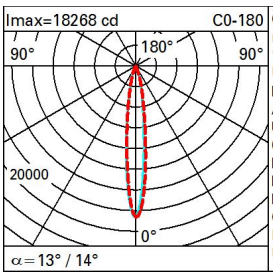
IP20 IP23

Product configuration: N099

Product characteristics
Total lighting output [Lm]: 1827
Total power [W]: 30.9
Luminous efficacy [Lm/W]: 59.1
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.) [%]: 61
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 28
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 13° / 14°
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.9
Colour temperature [K]: 3000
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

Polar



CIE
nL 0.61
100-100-100-100-61
UGR <10-<10
DIN
A.61
UTE
0.61A+0.00T
F"1=995
F"1+F"2=999
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<10 | L<1500 cd/mq @65°

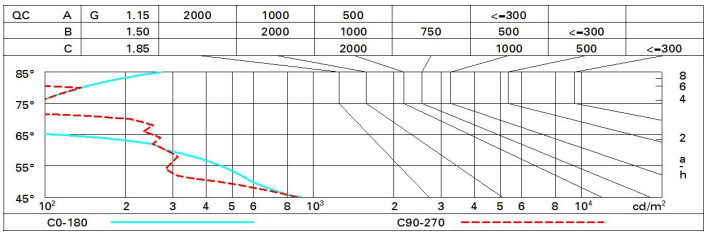
Lux

h	d1	d2	Em	Emax
2	0.5	0.5	3538	4567
4	0.9	1	884	1142
6	1.4	1.5	393	507
8	1.8	2	221	285

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	55	52	50	49	52	50	49	48	78
1.0	57	55	53	52	54	53	52	50	83
1.5	60	58	57	56	58	56	56	54	88
2.0	62	61	60	59	60	59	58	57	93
2.5	63	62	61	61	61	61	60	58	96
3.0	64	63	63	62	62	62	61	59	98
4.0	65	64	64	63	63	63	62	60	99
5.0	65	65	64	64	64	63	62	61	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 x	y			viewed crosswise					viewed endwise		
2H	2H	-3.1	-1.0	-2.7	-0.7	-0.3	-0.7	1.4	-0.3	1.7	2.0
	3H	-3.2	-1.7	-2.8	-1.4	-1.1	-0.8	0.7	-0.5	1.0	1.3
	4H	-3.2	-2.1	-2.8	-1.7	-1.4	-0.9	0.3	-0.5	0.6	0.9
	6H	-3.2	-2.4	-2.8	-2.0	-1.7	-0.9	-0.1	-0.5	0.2	0.6
	8H	-3.2	-2.3	-2.8	-2.0	-1.6	-0.9	-0.1	-0.6	0.2	0.6
	12H	-3.1	-2.2	-2.7	-1.9	-1.5	-1.0	-0.1	-0.6	0.2	0.6
4H	2H	-3.2	-2.1	-2.8	-1.7	-1.4	-0.9	0.3	-0.5	0.6	0.9
	3H	-3.3	-2.4	-2.9	-2.1	-1.7	-1.0	-0.1	-0.6	0.3	0.6
	4H	-3.4	-2.4	-3.0	-2.0	-1.6	-1.1	-0.1	-0.7	0.3	0.7
	6H	-3.7	-2.0	-3.2	-1.5	-1.1	-1.5	0.2	-1.0	0.7	1.2
	8H	-3.7	-1.8	-3.2	-1.3	-0.8	-1.6	0.3	-1.1	0.8	1.3
	12H	-3.6	-1.6	-3.1	-1.1	-0.6	-1.7	0.2	-1.2	0.7	1.2
8H	4H	-3.9	-2.0	-3.4	-1.5	-1.0	-1.6	0.3	-1.1	0.8	1.3
	6H	-3.9	-2.1	-3.3	-1.6	-1.1	-1.6	0.1	-1.1	0.6	1.1
	8H	-3.6	-2.1	-3.0	-1.6	-1.1	-1.6	-0.2	-1.1	0.3	0.9
	12H	-3.1	-2.1	-2.5	-1.6	-1.1	-1.5	-0.5	-0.9	-0.0	0.5
12H	4H	-4.0	-2.0	-3.5	-1.6	-1.0	-1.7	0.3	-1.2	0.8	1.3
	6H	-3.8	-2.4	-3.3	-1.9	-1.3	-1.6	-0.2	-1.1	0.3	0.9
	8H	-3.4	-2.4	-2.8	-1.9	-1.4	-1.5	-0.5	-0.9	-0.0	0.5

Variations with the observer position at spacing:

S =			
	1.0H	3.6 / -3.8	6.4 / -9.1
	1.5H	6.1 / -4.7	9.1 / -9.8
	2.0H	8.0 / -5.0	11.1 / -10.1