Reflex

Design iGuzzini   **iGuzzini**

Last information update: May 2018

Fixed circular recessed luminaire - Ø153 mm - warm white - wide flood optic - UGR<19

Product code
N013

Technical description
Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version with rim for surface-mounting. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in warm white colour tone (3000K). General light emission, with controlled luminance UGR<19 1500 cd/m2 α>65° wide flood optic.

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

Dimension (mm)
Ø162x122

Colour
White/Aluminium (39)

Weight (Kg)
1.22

Mounting
ceiling recessed

Wiring
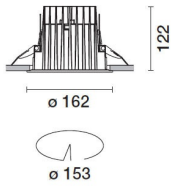product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20   IP54   On the visible part of the product once installed

Product configuration: N013

Product characteristics

Total lighting output [Lm]: 2487.9	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 24.7	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 100.7	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.) [%]: 83	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 2.7
Nominal power [W]: 22	Colour temperature [K]: 3000
Nominal luminous [Lm]: 3000	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 52°	MacAdam Step: 2

Polar

Imax=3494 cd

CIE
nL 0.83
98-100-100-100-83
UGR 16.2-16.2
DIN
A.61
UTE
0.83A+0.00T
F"1=982
F"1+F"2=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°
BZ1

α=52°

h	d	Em	Emax
2	2	663	874
4	3.9	166	218
6	5.9	74	97
8	7.8	41	55

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	74	70	68	65	70	67	67	64	77
1.0	78	74	72	70	73	71	71	68	82
1.5	82	79	77	75	78	76	75	73	88
2.0	84	82	81	79	81	80	79	77	92
2.5	86	84	83	82	83	82	81	79	95
3.0	87	86	85	84	85	84	83	81	97
4.0	88	87	87	86	86	85	84	82	99
5.0	89	88	87	87	87	86	85	83	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 ─ ─ ─ ─ ─ ─ ─
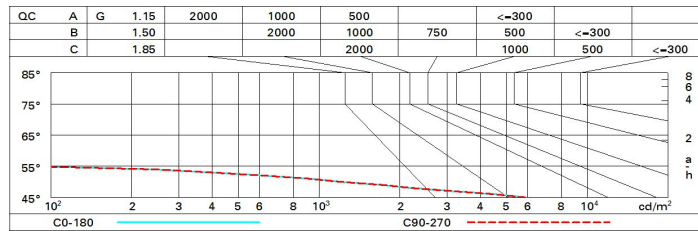
UGR diagram

Corrected UGR values (at 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					viewed			
x y		crosswise					endwise			
2H 2H	16.8	17.4	17.1	17.6	17.9	16.8	17.4	17.1	17.6	17.9
3H	16.7	17.2	17.0	17.5	17.8	16.7	17.2	17.0	17.5	17.8
4H	16.6	17.1	16.9	17.4	17.7	16.6	17.1	16.9	17.4	17.7
6H	16.5	17.0	16.9	17.3	17.6	16.5	17.0	16.9	17.3	17.6
8H	16.5	16.9	16.8	17.2	17.6	16.5	16.9	16.8	17.2	17.6
12H	16.4	16.9	16.8	17.2	17.6	16.4	16.9	16.8	17.2	17.6
4H 2H	16.6	17.1	16.9	17.4	17.7	16.6	17.1	16.9	17.4	17.7
3H	16.4	16.9	16.8	17.2	17.6	16.4	16.9	16.8	17.2	17.6
4H	16.3	16.7	16.7	17.1	17.5	16.3	16.7	16.7	17.1	17.5
6H	16.2	16.6	16.7	17.0	17.4	16.2	16.6	16.7	17.0	17.4
8H	16.2	16.5	16.6	16.9	17.4	16.2	16.5	16.6	16.9	17.4
12H	16.2	16.4	16.6	16.9	17.3	16.2	16.4	16.6	16.9	17.3
8H 4H	16.2	16.5	16.6	16.9	17.4	16.2	16.5	16.6	16.9	17.4
6H	16.1	16.4	16.6	16.8	17.3	16.1	16.4	16.6	16.8	17.3
8H	16.1	16.3	16.5	16.7	17.2	16.1	16.3	16.5	16.7	17.2
12H	16.0	16.2	16.5	16.7	17.2	16.0	16.2	16.5	16.7	17.2
12H 4H	16.2	16.4	16.6	16.9	17.3	16.2	16.4	16.6	16.9	17.3
6H	16.1	16.3	16.5	16.7	17.2	16.1	16.3	16.5	16.7	17.2
8H	16.0	16.2	16.5	16.7	17.2	16.0	16.2	16.5	16.7	17.2

Variations with the observer position at spacing:

S =	1.0H	5.1 / -29.8		5.1 / -29.8
	1.5H	7.9 / -30.2		7.9 / -30.2
	2.0H	9.9 / -30.4		9.9 / -30.4