Reflex

Design iGuzzini   **iGuzzini**

Last information update: May 2018

Fixed circular recessed luminaire - Ø125 mm - neutral white - wide flood optic - UGR<19

Product code
N230

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 neutral white colour tone (4,000K). 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 20 mm.

Dimension (mm)
Ø144x107

Colour
White/Aluminium (39)

Weight (Kg)
1.02

Mounting
ceiling recessed

Wiring
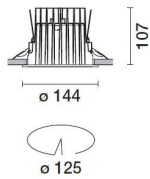product complete with an electronic ballast

Complies with EN60598-1 and pertinent regulations

IP20   IP54   On the visible part of the product once installed

Product configuration: N230

Product characteristics

Total lighting output [Lm]: 2429	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 23.7	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 102.5	Voltage [V]: -
Life Time: 50,000h - L80 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

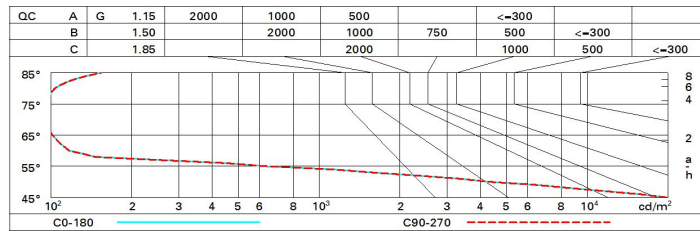|	
Light Output Ratio (L.O.R.) [%]: 81	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 2.7
Nominal power [W]: 21	Colour temperature [K]: 4000
Nominal luminous [Lm]: 3000	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 64°	MacAdam Step: 2

Polar

Imax=2408 cd

CIE
nL 0.81
96-100-100-100-81
UGR 19.4-19.4
DIN
A.61
UTE
0.81A+0.00T
F"1=961
F"1+F"2=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°

α=64°

Lux			
h	d	Em	Emax
2	2.5	460	602
4	5	115	151
6	7.5	51	67
8	10	29	38

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	72	68	65	63	67	64	64	61	76
1.0	75	72	69	67	71	68	68	65	81
1.5	79	77	74	73	76	74	73	70	87
2.0	82	80	78	77	79	77	77	74	92
2.5	84	82	81	80	81	80	79	77	95
3.0	85	84	83	82	82	81	80	78	97
4.0	86	85	84	84	83	83	82	80	98
5.0	86	86	85	85	84	84	82	80	99

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	20.0	20.6	20.3	20.8	21.1	20.0	20.6	20.3	20.8	21.1
	3H	19.9	20.4	20.2	20.7	20.9	19.9	20.4	20.2	20.7	20.9
	4H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	6H	19.7	20.2	20.1	20.5	20.8	19.7	20.2	20.1	20.5	20.8
	8H	19.7	20.1	20.0	20.4	20.8	19.7	20.1	20.0	20.4	20.8
	12H	19.6	20.1	20.0	20.4	20.8	19.6	20.1	20.0	20.4	20.8
4H	2H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	3H	19.6	20.1	20.0	20.4	20.8	19.6	20.1	20.0	20.4	20.8
	4H	19.6	19.9	20.0	20.3	20.7	19.6	19.9	20.0	20.3	20.7
	6H	19.5	19.8	19.9	20.2	20.6	19.5	19.8	19.9	20.2	20.6
	8H	19.4	19.7	19.9	20.1	20.6	19.4	19.7	19.9	20.1	20.6
	12H	19.4	19.6	19.8	20.1	20.5	19.4	19.6	19.8	20.1	20.5
8H	4H	19.4	19.7	19.9	20.1	20.6	19.4	19.7	19.9	20.1	20.6
	6H	19.3	19.6	19.8	20.0	20.5	19.3	19.6	19.8	20.0	20.5
	8H	19.3	19.5	19.8	19.9	20.4	19.3	19.5	19.8	19.9	20.4
	12H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4
12H	4H	19.4	19.6	19.8	20.1	20.5	19.4	19.6	19.8	20.1	20.5
	6H	19.3	19.5	19.8	19.9	20.4	19.3	19.5	19.8	19.9	20.4
	8H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4

Variations with the observer position at spacing:

S =	1.0H	4.7 / -26.2	4.7 / -26.2
	1.5H	7.5 / -31.2	7.5 / -31.2
	2.0H	9.5 / -31.4	9.5 / -31.4