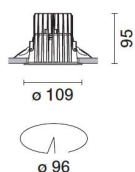# Reflex

Design iGuzzini   **iGuzzini**

Last information update: October 2024

Product configuration: Q046
Q046: Fixed circular recessed luminaire - Ø 96 mm - warm white - wide flood optic - UGR<19

Product code
Q046: Fixed circular recessed luminaire - Ø 96 mm - warm white - wide flood optic - UGR<19

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 CRI 90 (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 20 mm.

Colour
White / Aluminium (39)

Mounting
ceiling recessed

Wiring
product complete with 1-10V components

95
ø 109
ø 96

Complies with EN60598-1 and pertinent regulations

IP20   IP54   On the visible part of the product once installed

Technical data

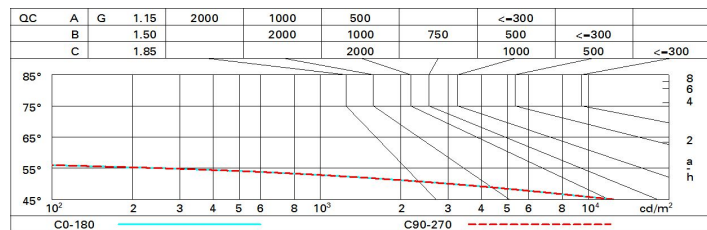|			
lm system:	1221	CRI (minimum):	90
W system:	14	Colour temperature [K]:	3000
lm source:	1650	MacAdam Step:	2
W source:	12	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	87.2	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	74	Number of optical assemblies:	1
Beam angle [°]:	44°	Control:	1-10V

Polar

Imax=1936 cd

CIE
nL 0.74
97-100-100-100-74
UGR 17.2-17.2
DIN
A.61
UTE
0.74A+0.00T
F"1=972
F"1+F"2=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<19 | L<1500 cd/mq @65°

α=44°

Lux			
h	d	Em	Emax
2	1.6	392	484
4	3.2	98	121
6	4.8	44	54
8	6.5	24	30

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	66	62	60	58	62	59	59	57	76
1.0	69	66	63	62	65	63	63	60	81
1.5	73	70	68	67	69	68	67	65	87
2.0	75	73	72	71	72	71	70	68	92
2.5	77	75	74	73	74	73	72	70	95
3.0	77	77	76	75	75	75	74	72	97
4.0	78	78	77	77	76	76	75	73	99
5.0	79	78	78	78	77	77	76	74	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 1650 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	17.8	18.4	18.0	18.7	18.9	17.8	18.4	18.0	18.7	18.9
	3H	17.6	18.2	17.9	18.5	18.8	17.6	18.2	17.9	18.5	18.8
	4H	17.6	18.1	17.9	18.4	18.7	17.6	18.1	17.9	18.4	18.7
	6H	17.5	18.0	17.8	18.3	18.6	17.5	18.0	17.8	18.3	18.6
	8H	17.4	17.9	17.8	18.3	18.6	17.4	17.9	17.8	18.3	18.6
	12H	17.4	17.9	17.8	18.2	18.6	17.4	17.9	17.8	18.2	18.6
4H	2H	17.6	18.1	17.9	18.4	18.7	17.6	18.1	17.9	18.4	18.7
	3H	17.4	17.9	17.8	18.2	18.6	17.4	17.9	17.8	18.2	18.6
	4H	17.3	17.7	17.7	18.1	18.5	17.3	17.7	17.7	18.1	18.5
	6H	17.2	17.6	17.6	18.0	18.4	17.2	17.6	17.6	18.0	18.4
	8H	17.2	17.5	17.6	17.9	18.4	17.2	17.5	17.6	17.9	18.4
	12H	17.1	17.4	17.6	17.9	18.3	17.1	17.4	17.6	17.9	18.3
8H	4H	17.2	17.5	17.6	17.9	18.4	17.2	17.5	17.6	17.9	18.4
	6H	17.1	17.4	17.6	17.8	18.3	17.1	17.4	17.6	17.8	18.3
	8H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	12H	17.0	17.2	17.5	17.7	18.2	17.0	17.2	17.5	17.7	18.2
12H	4H	17.1	17.4	17.6	17.9	18.3	17.1	17.4	17.6	17.9	18.3
	6H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	8H	17.0	17.2	17.5	17.7	18.2	17.0	17.2	17.5	17.7	18.2

Variations with the observer position at spacing:

S =	1.0H	4.4 / -31.1	4.4 / -31.1
	1.5H	7.2 / -38.8	7.2 / -38.8
	2.0H	9.2 / -39.6	9.2 / -39.6