Reflex

Design iGuzzini **iGuzzini**

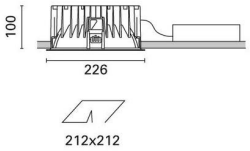
Last information update: April 2018

Square recessed luminaire - 226x226 mm H=103 mm - neutral white - electronic ballast - general light optic with controlled luminance UGR<19

Product code
MC21

Technical description
Recessed fixed square luminaire designed to use a LED lamp. 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 3000 lm LED unit in a neutral white tone 4000K and electronic driver separate from the luminaire. Light distribution UGR<19 with controlled luminance.

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



Dimension (mm)
226x226x100

Colour
White/Aluminium (39)

Weight (Kg)
2.11

Mounting
ceiling recessed

Wiring
Product complete with electronic components

Complies with EN60598-1 and pertinent regulations

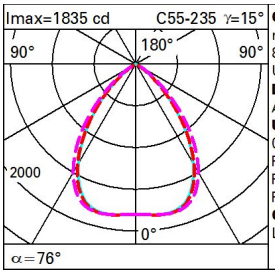
IP20 IP23

Product configuration: MC21

Product characteristics
Total lighting output [Lm]: 2789
Total power [W]: 26.5
Luminous efficacy [Lm/W]: 105.2
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.) [%]: 93
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 23
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: /
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.5
Colour temperature [K]: 4000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

Polar



CIE
nL 0.93
81-100-100-100-93
UGR 19.2-19.2
DIN
A.61
UTE
0.93B+0.00T
F"1=809
F"1+F"2=997
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°

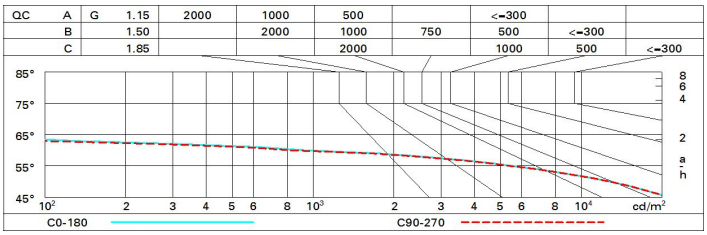
Lux

h	d1	d2	Em	Emax
2	3.1	3.1	335	450
4	6.3	6.3	84	113
6	9.4	9.4	37	50
8	12.5	12.5	21	28

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	76	69	65	61	68	64	64	60	64
1.0	81	75	71	68	74	70	70	66	71
1.5	88	83	80	77	82	79	78	75	80
2.0	92	88	86	84	87	85	84	80	86
2.5	94	91	89	87	90	88	87	84	90
3.0	95	93	91	90	92	90	89	86	92
4.0	97	95	94	92	93	92	91	88	95
5.0	97	96	95	94	94	93	92	89	96

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				viewed crosswise					viewed endwise		
x	y										
2H	2H	19.7	20.5	20.0	20.8	21.0	19.7	20.5	20.0	20.8	21.0
	3H	19.6	20.3	19.9	20.6	20.9	19.7	20.4	20.0	20.7	20.9
	4H	19.5	20.2	19.9	20.5	20.8	19.6	20.3	19.9	20.6	20.9
	6H	19.4	20.0	19.8	20.4	20.7	19.5	20.1	19.9	20.4	20.8
	8H	19.4	20.0	19.8	20.3	20.6	19.5	20.1	19.9	20.4	20.7
	12H	19.4	19.9	19.7	20.2	20.6	19.5	20.0	19.8	20.3	20.7
4H	2H	19.6	20.2	19.9	20.5	20.9	19.5	20.2	19.9	20.5	20.8
	3H	19.4	20.0	19.8	20.3	20.7	19.5	20.0	19.8	20.3	20.7
	4H	19.3	19.8	19.8	20.2	20.6	19.4	19.8	19.8	20.2	20.6
	6H	19.3	19.7	19.7	20.1	20.5	19.3	19.7	19.7	20.1	20.5
	8H	19.2	19.6	19.7	20.0	20.5	19.2	19.6	19.7	20.0	20.5
	12H	19.2	19.5	19.6	19.9	20.4	19.2	19.5	19.6	20.0	20.4
8H	4H	19.2	19.6	19.7	20.0	20.5	19.2	19.6	19.7	20.0	20.5
	6H	19.1	19.4	19.6	19.9	20.4	19.1	19.5	19.6	19.9	20.4
	8H	19.1	19.3	19.6	19.8	20.3	19.1	19.4	19.6	19.8	20.3
	12H	19.0	19.3	19.5	19.7	20.3	19.0	19.3	19.5	19.8	20.3
12H	4H	19.2	19.5	19.6	19.9	20.4	19.2	19.5	19.6	20.0	20.4
	6H	19.1	19.3	19.6	19.8	20.3	19.1	19.4	19.6	19.8	20.3
	8H	19.0	19.3	19.5	19.7	20.3	19.0	19.3	19.5	19.8	20.3

Variations with the observer position at spacing:

S =			
	1.0H	2.2 / -5.9	2.2 / -6.0
	1.5H	3.5 / -25.3	3.6 / -26.5
	2.0H	5.4 / -38.0	5.5 / -38.0