Reflex

Design iGuzzini **iGuzzini**

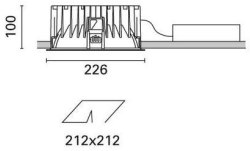
Last information update: April 2018

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

Product code
MC20

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 2000 lm LED unit in a warm white tone 3000K 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)
1.98

Mounting
ceiling recessed

Wiring
Product complete with electronic components

Complies with EN60598-1 and pertinent regulations

IP20 IP23

Product configuration: MC20

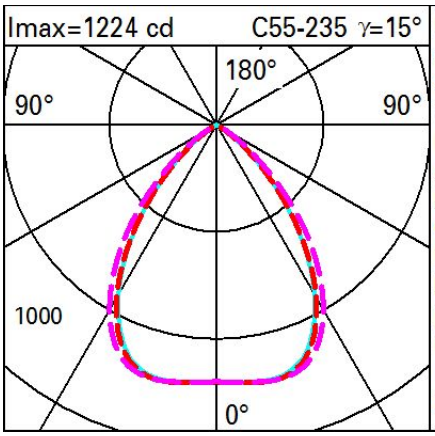
Product characteristics

Total lighting output [Lm]: 1859.4
Total power [W]: 21
Luminous efficacy [Lm/W]: 88.5
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]: 18
Nominal luminous [Lm]: 2000
Lamp maximum intensity [cd]: /
Beam angle [°]: /
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

Polar

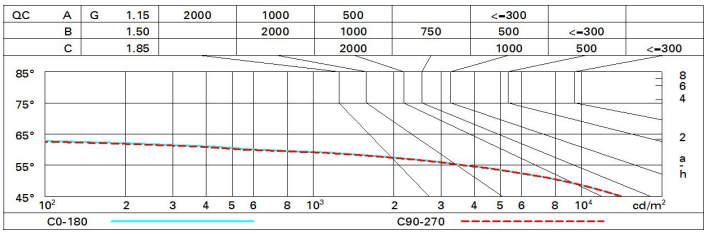


CIE
nL 0.93
81-100-100-100-93
UGR 17.8-17.8
DIN
A.61
UTE
0.93B+0.00T
F"1=809
F"1+F"2=997
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°
BZ1

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 2000 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	18.3	19.1	18.6	19.4	19.6	18.3	19.1	18.6	19.4	19.6
	3H	18.2	18.9	18.5	19.2	19.4	18.3	19.0	18.6	19.3	19.5
	4H	18.1	18.8	18.4	19.1	19.4	18.2	18.9	18.5	19.1	19.5
	6H	18.0	18.6	18.4	18.9	19.3	18.1	18.7	18.5	19.0	19.4
	8H	18.0	18.6	18.4	18.9	19.2	18.1	18.7	18.5	19.0	19.3
	12H	18.0	18.5	18.3	18.8	19.2	18.0	18.6	18.4	18.9	19.3
4H	2H	18.2	18.8	18.5	19.1	19.4	18.1	18.8	18.5	19.1	19.4
	3H	18.0	18.6	18.4	18.9	19.3	18.0	18.6	18.4	18.9	19.3
	4H	17.9	18.4	18.3	18.8	19.2	18.0	18.4	18.4	18.8	19.2
	6H	17.9	18.3	18.3	18.7	19.1	17.9	18.3	18.3	18.7	19.1
	8H	17.8	18.2	18.3	18.6	19.0	17.8	18.2	18.3	18.6	19.1
	12H	17.8	18.1	18.2	18.5	19.0	17.8	18.1	18.2	18.6	19.0
8H	4H	17.8	18.2	18.3	18.6	19.0	17.8	18.2	18.3	18.6	19.1
	6H	17.7	18.0	18.2	18.5	19.0	17.7	18.1	18.2	18.5	19.0
	8H	17.7	17.9	18.2	18.4	18.9	17.7	18.0	18.2	18.4	18.9
	12H	17.6	17.9	18.1	18.3	18.9	17.6	17.9	18.1	18.4	18.9
12H	4H	17.8	18.1	18.2	18.5	19.0	17.8	18.1	18.2	18.6	19.0
	6H	17.7	17.9	18.2	18.4	18.9	17.7	18.0	18.2	18.4	18.9
	8H	17.6	17.9	18.1	18.3	18.9	17.6	17.9	18.1	18.4	18.9

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