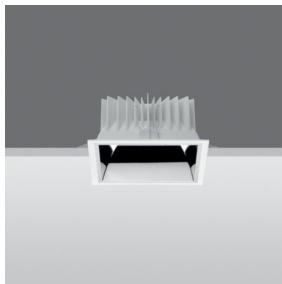# Reflex

Last information update: May 2024

Product configuration: MC13
MC13: Square recessed luminaire - 226x226 mm H=103 mm - neutral white - INVERTER - general light optic

Product code
MC13: Square recessed luminaire - 226x226 mm H=103 mm - neutral white - INVERTER - general light optic **Attention! Code no longer in production**

Technical description
Recessed fixed square luminaire designed to use a LED lamp. Version with rim for surface-mounting. Multi-faceted 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 with INVERTER in a neutral white tone 4000K and driver separate from the luminaire. General light distribution.

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

Colour
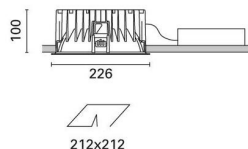White / Aluminium (39)

Mounting
ceiling recessed

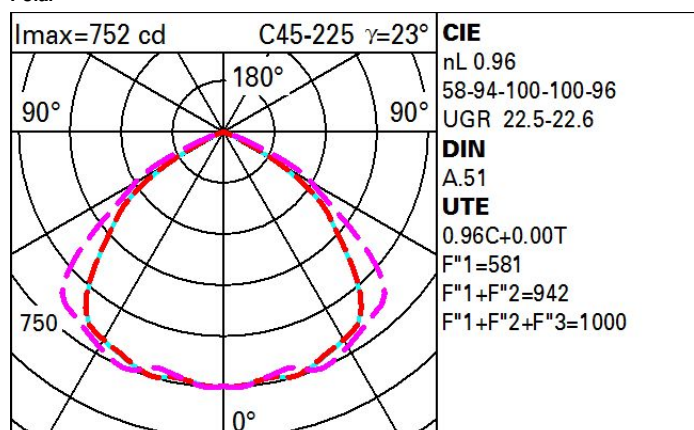**Wiring**
product complete with electronic components with INVERTER

Complies with EN60598-1 and pertinent regulations

Technical data

lm system:	1920	CRI:	80
W system:	18.8	Colour temperature [K]:	4000
lm source:	2000	MacAdam Step:	3
W source:	16	Life Time LED 1:	50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	102.1	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.) [%]:	96	Number of optical assemblies:	1

Polar

Imax=752 cd   C45-225 γ=23°

CIE
nL 0.96
58-94-100-100-96
UGR 22.5-22.6
DIN
A.51
UTE
0.96C+0.00T
F"1=581
F"1+F"2=942
F"1+F"2+F"3=1000

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	68	59	52	48	57	52	51	45	47
1.0	75	66	60	56	65	60	59	53	56
1.5	85	78	73	69	77	72	71	66	69
2.0	90	85	81	78	83	80	79	74	77
2.5	93	89	86	83	87	84	83	79	82
3.0	95	92	89	86	90	87	86	82	85
4.0	97	94	92	90	92	90	89	85	89
5.0	98	96	94	92	94	92	91	87	91

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 ------------
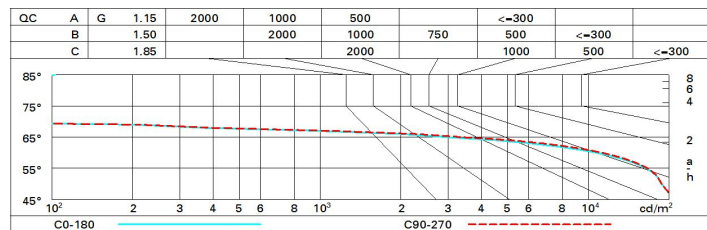
UGR diagram

Corrected UGR values (at 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	22.4	23.4	22.7	23.7	23.9	22.5	23.4	22.8	23.7	23.9
	3H	22.3	23.2	22.7	23.5	23.8	22.9	23.7	23.2	24.0	24.3
	4H	22.3	23.0	22.6	23.3	23.7	22.9	23.7	23.2	24.0	24.3
	6H	22.2	22.9	22.5	23.2	23.5	22.8	23.5	23.2	23.8	24.2
	8H	22.1	22.8	22.5	23.2	23.5	22.8	23.5	23.1	23.8	24.1
	12H	22.1	22.8	22.5	23.1	23.5	22.7	23.4	23.1	23.7	24.1
4H	2H	22.8	23.6	23.2	23.9	24.2	22.3	23.1	22.6	23.4	23.7
	3H	22.8	23.4	23.1	23.8	24.1	22.7	23.3	23.1	23.7	24.0
	4H	22.7	23.2	23.1	23.6	24.0	22.7	23.3	23.1	23.6	24.0
	6H	22.6	23.1	23.0	23.5	23.9	22.6	23.1	23.0	23.5	23.9
	8H	22.5	23.0	23.0	23.4	23.9	22.6	23.0	23.0	23.4	23.9
	12H	22.5	22.9	23.0	23.3	23.8	22.5	22.9	23.0	23.4	23.8
8H	4H	22.5	23.0	23.0	23.4	23.9	22.6	23.0	23.0	23.4	23.9
	6H	22.5	22.8	22.9	23.3	23.8	22.5	22.9	23.0	23.3	23.8
	8H	22.4	22.7	22.9	23.2	23.7	22.4	22.8	22.9	23.2	23.7
	12H	22.4	22.6	22.9	23.1	23.6	22.4	22.7	22.9	23.2	23.7
12H	4H	22.5	22.9	23.0	23.3	23.8	22.5	22.9	23.0	23.4	23.8
	6H	22.4	22.7	22.9	23.2	23.7	22.4	22.8	22.9	23.2	23.7
	8H	22.4	22.6	22.9	23.1	23.6	22.4	22.7	22.9	23.2	23.7

Variations with the observer position at spacing:

S =	1.0H	0.5 / -0.5	0.5 / -0.5
	1.5H	1.5 / -4.1	1.5 / -3.8
	2.0H	2.3 / -17.2	2.3 / -16.6