Reflex

Design iGuzzini   **iGuzzini**

Last information update: September 2024

Product configuration: MV93

MV93: Fixed circular recessed luminaire - Ø 96 mm - warm white - wide flood optic - UGR<19

Product code

MV93: 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 (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.
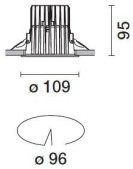
Colour	Weight (Kg)
White / Aluminium (39)	0.65

Mounting
ceiling recessed

Wiring
product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20   IP54   On the visible part of the product once installed   CE

Technical data

lm system:	1147	MacAdam Step:	2
W system:	11.9	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
lm source:	1550	Lamp code:	LED
W source:	9.3	Number of lamps for optical assembly:	1
Luminous efficiency (lm/W, real value):	96.4	ZVEI Code:	LED
lm in emergency mode:	-	Number of optical assemblies:	1
Total light flux at or above an angle of 90° [Lm]:	0	Power factor:	See installation instructions
Light Output Ratio (L.O.R.) [%]:	74	Inrush current:	16 A / 220 µs
Beam angle [°]:	44°	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 15 luminaires B16A: 24 luminaires C10A: 24 luminaires C16A: 40 luminaires
CRI (minimum):	80	Overvoltage protection:	2kV Common mode & 1kV Differential mode
Colour temperature [K]:	3000	Control:	DALI-2

Polar

Imax=1819 cd

CIE	
nL 0.74	
97-100-100-100-74	
UGR 17.0-17.0	
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	368	454
4	3.2	92	114
6	4.8	41	50
8	6.5	23	28
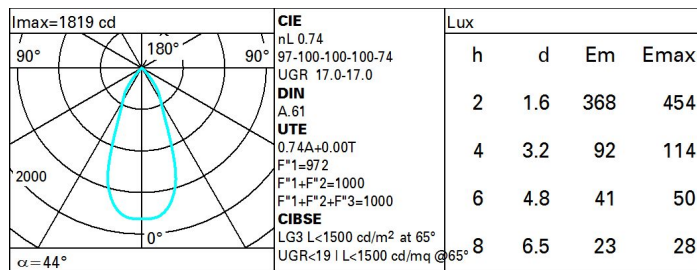
Utilisation factors

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
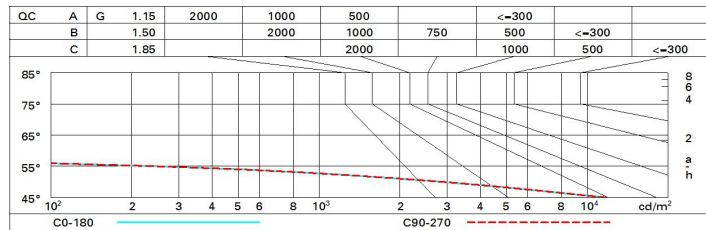
UGR diagram

Corrected UGR values (at 1550 lm bare lamp luminous flux)

Riflect.: ceil/cav	walls	work pl.	Room dim x	y	0.70 / 0.50 / 0.20	0.70 / 0.30 / 0.20	0.50 / 0.50 / 0.20	0.50 / 0.30 / 0.20	0.30 / 0.30 / 0.20	0.70 / 0.50 / 0.20	0.70 / 0.30 / 0.20	0.50 / 0.50 / 0.20	0.50 / 0.30 / 0.20	0.30 / 0.30 / 0.20
					viewed crosswise					viewed endwise				
			2H	2H	17.5	18.2	17.8	18.5	18.7	17.5	18.2	17.8	18.5	18.7
				3H	17.4	18.0	17.7	18.3	18.6	17.4	18.0	17.7	18.3	18.6
				4H	17.3	17.9	17.7	18.2	18.5	17.3	17.9	17.7	18.2	18.5
				6H	17.3	17.8	17.6	18.1	18.4	17.3	17.8	17.6	18.1	18.4
				8H	17.2	17.7	17.6	18.0	18.4	17.2	17.7	17.6	18.0	18.4
				12H	17.2	17.6	17.6	18.0	18.3	17.2	17.6	17.6	18.0	18.3
			4H	2H	17.3	17.9	17.7	18.2	18.5	17.3	17.9	17.7	18.2	18.5
				3H	17.2	17.6	17.6	18.0	18.3	17.2	17.6	17.6	18.0	18.3
				4H	17.1	17.5	17.5	17.9	18.3	17.1	17.5	17.5	17.9	18.3
				6H	17.0	17.4	17.4	17.8	18.2	17.0	17.4	17.4	17.8	18.2
				8H	17.0	17.3	17.4	17.7	18.1	17.0	17.3	17.4	17.7	18.1
				12H	16.9	17.2	17.4	17.6	18.1	16.9	17.2	17.4	17.6	18.1
			8H	4H	17.0	17.3	17.4	17.7	18.1	17.0	17.3	17.4	17.7	18.1
				6H	16.9	17.1	17.3	17.6	18.1	16.9	17.1	17.3	17.6	18.1
				8H	16.8	17.0	17.3	17.5	18.0	16.8	17.0	17.3	17.5	18.0
				12H	16.8	17.0	17.3	17.4	18.0	16.8	17.0	17.3	17.4	18.0
			12H	4H	16.9	17.2	17.4	17.6	18.1	16.9	17.2	17.4	17.6	18.1
				6H	16.8	17.0	17.3	17.5	18.0	16.8	17.0	17.3	17.5	18.0
				8H	16.8	17.0	17.3	17.4	18.0	16.8	17.0	17.3	17.4	18.0

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