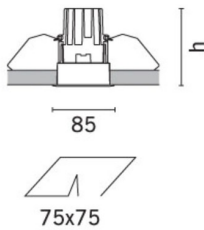


Last information update: September 2023

Product configuration: MA48

MA48: medium body, Frame installation 6 LED warm white

**Product code**MA48: medium body, Frame installation 6 LED warm white **Attention! Code no longer in production****Technical description**

Fixed square recessed luminaire designed to use a 6X1,5W LED lamp in warm white (3100°K) with medium optic. Recessed item with rim consisting of a single die-cast aluminium body. The upper part is a heat sink which helps to carry away the heat given off by the lamp. LED optics with a single lens made of thermoplastic material. Lamp set back 40 mm for greater visual comfort.

Installation

Recessed using springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 30 mm

Colour

White (01) | Grey (15)

Weight (Kg)

0.39

Mounting

wall recessed|ceiling recessed

Wiring

product complete with electronic components

Notes

the luminaire has an IP65 protection rating without the installation of any accessory.

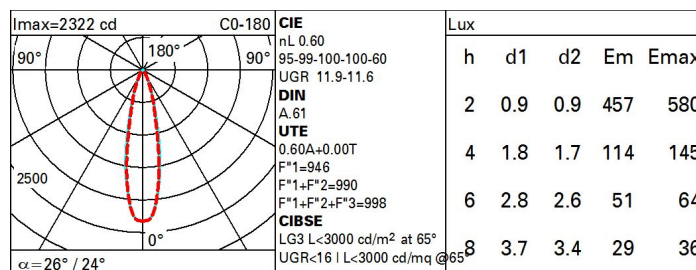
Complies with EN60598-1 and pertinent regulations



IP65

**Technical data**

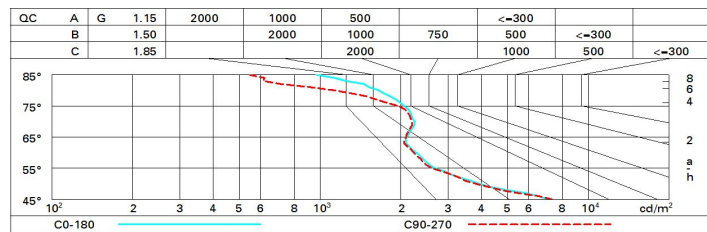
lm system:	600	CRI (minimum):	80
W system:	10	Colour temperature [K]:	3000
lm source:	1000	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
W source:	8.7	Ballast losses [W]:	1.3
Luminous efficiency (lm/W, real value):	60	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	60	Number of optical assemblies:	1
Beam angle [°]:	26° / 24°		

Polar

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	53	50	47	46	49	47	47	45	74
1.0	55	53	50	49	52	50	50	48	79
1.5	59	56	55	53	56	54	54	52	86
2.0	61	59	58	57	58	57	56	55	91
2.5	62	61	60	59	60	59	58	56	94
3.0	63	62	61	60	61	60	59	58	96
4.0	63	63	62	62	62	61	60	59	98
5.0	64	63	63	63	62	62	61	59	99

Luminance curve limit



UGR diagram

Corrected UGR values (at 1000 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
2H	2H	11.7	13.5	12.0	13.8	14.1	11.6	13.4	11.9	13.7	14.1
	3H	11.9	13.3	12.3	13.6	14.0	11.5	13.0	11.9	13.3	13.6
	4H	12.0	13.3	12.4	13.6	13.9	11.5	12.7	11.9	13.1	13.4
	6H	12.1	13.2	12.5	13.5	13.9	11.4	12.5	11.8	12.8	13.2
	8H	12.1	13.2	12.5	13.5	13.9	11.4	12.5	11.8	12.8	13.2
	12H	12.1	13.1	12.5	13.5	13.9	11.4	12.4	11.8	12.8	13.1
4H	2H	11.6	12.8	12.0	13.1	13.5	11.9	13.1	12.3	13.5	13.8
	3H	11.9	12.9	12.3	13.3	13.6	12.0	13.0	12.4	13.4	13.7
	4H	12.0	13.0	12.5	13.4	13.8	11.9	12.9	12.3	13.3	13.7
	6H	12.0	13.5	12.4	13.9	14.4	11.7	13.2	12.1	13.6	14.1
	8H	11.9	13.6	12.4	14.1	14.5	11.6	13.2	12.0	13.7	14.2
	12H	11.9	13.6	12.4	14.1	14.6	11.5	13.2	12.0	13.7	14.2
8H	4H	11.7	13.4	12.2	13.8	14.3	11.7	13.3	12.2	13.8	14.3
	6H	11.8	13.4	12.3	13.9	14.4	11.6	13.2	12.1	13.7	14.2
	8H	11.9	13.3	12.4	13.8	14.4	11.6	13.0	12.1	13.5	14.1
	12H	12.1	13.0	12.6	13.5	14.1	11.7	12.7	12.3	13.2	13.8
12H	4H	11.6	13.3	12.1	13.8	14.3	11.6	13.3	12.1	13.8	14.3
	6H	11.8	13.2	12.3	13.7	14.3	11.6	13.0	12.1	13.5	14.1
	8H	12.0	13.0	12.5	13.5	14.0	11.7	12.7	12.3	13.2	13.8
Variations with the observer position at spacing:											
S =	1.0H	2.0 / -2.6					2.2 / -2.9				
	1.5H	4.1 / -3.4					4.3 / -3.8				
	2.0H	5.9 / -3.5					6.1 / -4.0				