

## Laser Blade

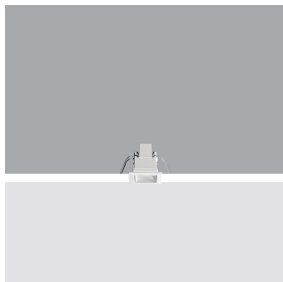
Design iGuzzini

iGuzzini

Last information update: June 2025

### Product configuration: MK45.01

MK45.01: Square Recessed luminaire - LED Neutral white flood - 2W 174lm - 4000K - CRI 95 - White



44



35x35

### Product code

MK45.01: Square Recessed luminaire - LED Neutral white flood - 2W 174lm - 4000K - CRI 95 - White

### Technical description

square miniaturised recessed luminaire for single LED - fixed optic - flood beam angle. Main body with die-cast aluminium radiant surface, version with perimeter surface frame. Metallised thermoplastic high definition optic, integrated in a rear position in the black anti-glare screen. Connecting cable supplied. Ballast not included, available with separate code. Neutral white high colour rendering LED.

### Installation

recessed with steel wire springs for false ceilings from 1 to 20 mm thick - preparation hole 35 x 35

### Colour

White (01)

### Weight (Kg)

0.05

### Mounting

wall recessed|ceiling recessed

### Wiring

direct current ballasts to be ordered separately: electronic (MXF9) for max. 7 LEDs; DALI dimmable (BZM4) for max. 20 LEDs (check instruction leaflet for compatible lengths of cables to be used)

Complies with EN60598-1 and pertinent regulations



IP20

IP23

On the visible part of the product once installed



### Technical data

Im system:	174	Rf (Colour Fidelity Index):	92
W system:	2	Rg (Gamut Index):	98
Im source:	210	Colour temperature [K]:	4000
W source:	2	MacAdam Step:	3
Luminous efficiency (lm/W, real value):	87	Life Time LED 1:	50,000h - L90 - B10 (Ta 25°C)
Im in emergency mode:	-	Lamp code:	LED
Total light flux at or above an angle of 90° [Lm]:	0	Number of lamps for optical assembly:	1
Light Output Ratio (L.O.R.) [%]:	83	ZVEI Code:	LED
Beam angle [°]:	32°	Number of optical assemblies:	1
CRI (minimum):	95	LED current [mA]:	700
CRI (typical):	97		

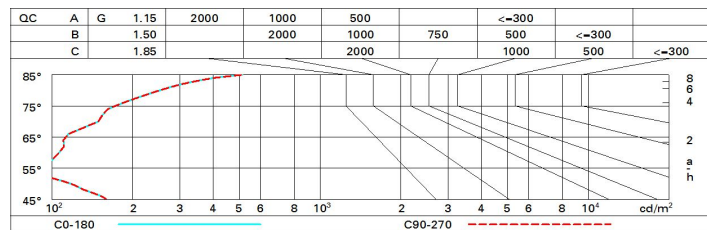
### Polar

Imax=584 cd		CIE nL 0.83 100-100-100-100-83 UGR <10-<10 DIN A.61 UTE 0.83A+0.00T F*1=999 F*1+F*2=999 F*1+F*2+F*3=1000 CIBSE LG3 L<1500 cd/m² at 65° UGR<10   L<1500 cd/mq @ 65°	Lux			
			h	d	Em	E <sub>max</sub>
			1	0.6	454	584
			2	1.1	114	146
			3	1.7	50	65
			4	2.3	28	37

# Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	68	65	78
1.0	78	75	72	70	74	72	71	69	83
1.5	82	79	77	76	78	77	76	73	89
2.0	84	83	81	80	81	80	79	77	93
2.5	86	85	84	83	83	82	82	79	96
3.0	87	86	85	85	85	84	83	81	98
4.0	88	87	87	86	86	86	84	82	99
5.0	89	88	88	87	87	86	85	83	100

# Luminance curve limit



# UGR diagram

Corrected UGR values (at 210 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	-2.5	-2.0	-2.2	-1.8	-1.5	-2.5	-2.0	-2.2	-1.8	-1.5
	3H	-2.6	-2.1	-2.3	-1.9	-1.6	-2.6	-2.2	-2.3	-1.9	-1.6
	4H	-2.6	-2.2	-2.3	-1.9	-1.6	-2.7	-2.3	-2.4	-2.0	-1.7
	6H	-2.6	-2.2	-2.2	-1.9	-1.5	-2.8	-2.4	-2.4	-2.1	-1.7
	8H	-2.5	-2.1	-2.2	-1.8	-1.5	-2.8	-2.4	-2.4	-2.1	-1.8
	12H	-2.4	-2.1	-2.1	-1.7	-1.4	-2.8	-2.5	-2.5	-2.1	-1.8
4H	2H	-2.7	-2.3	-2.4	-2.0	-1.7	-2.6	-2.2	-2.3	-1.9	-1.6
	3H	-2.8	-2.4	-2.4	-2.1	-1.7	-2.7	-2.3	-2.3	-2.0	-1.7
	4H	-2.8	-2.4	-2.4	-2.1	-1.7	-2.8	-2.4	-2.4	-2.1	-1.7
	6H	-2.7	-2.4	-2.2	-2.0	-1.6	-2.8	-2.5	-2.4	-2.1	-1.7
	8H	-2.6	-2.3	-2.1	-1.9	-1.4	-2.8	-2.6	-2.4	-2.2	-1.7
	12H	-2.3	-2.1	-1.9	-1.7	-1.2	-2.9	-2.6	-2.4	-2.2	-1.7
8H	4H	-2.8	-2.6	-2.4	-2.2	-1.7	-2.6	-2.3	-2.1	-1.9	-1.4
	6H	-2.6	-2.4	-2.2	-2.0	-1.5	-2.5	-2.3	-2.0	-1.8	-1.4
	8H	-2.5	-2.3	-2.0	-1.8	-1.3	-2.5	-2.3	-2.0	-1.8	-1.3
	12H	-2.1	-1.9	-1.6	-1.4	-0.9	-2.4	-2.2	-1.9	-1.8	-1.2
12H	4H	-2.9	-2.6	-2.4	-2.2	-1.7	-2.3	-2.1	-1.9	-1.7	-1.2
	6H	-2.6	-2.5	-2.2	-2.0	-1.5	-2.2	-2.0	-1.7	-1.6	-1.1
	8H	-2.4	-2.2	-1.9	-1.8	-1.2	-2.1	-1.9	-1.6	-1.4	-0.9
Variations with the observer position at spacing:											
S =	1.0H	5.6 / -3.8					5.6 / -3.8				
	1.5H	8.3 / -4.0					8.3 / -4.0				
	2.0H	10.3 / -4.1					10.3 / -4.1				