Laser Blade

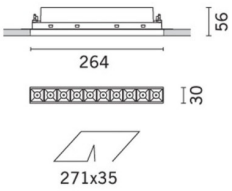
Design iGuzzini **iGuzzini**

Last information update: May 2018

10 - cell Frameless Recessed luminaire - LED - Warm white - Incorporated DALI dimmable power supply - Wide Flood optic

Product code
MM88

Technical description
rectangular miniaturised recessed luminaire with 10 optical elements with LED lamps - fixed optics - wide flood beam angle. Main body with die-cast aluminium radiant surface, minimal (frameless) version for mounting flush with the ceiling. Metallised thermoplastic high definition optics, integrated in a rear position in the black anti-glare screen; the structure of the optical system prevents a pinpoint effect, allowing precise, circular light distribution and emission with controlled glare . Supplied with DALI dimmable electronic control gear connected to the luminaire. Warm white high colour rendering LED



Installation
recessed with steel wire springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter fixed to false ceiling (12.5 mm thick) with self-tapping screws; subsequent filling and smoothing operations; insertion of luminaire body and aesthetic finishing. Preparation hole 35 x 271

Dimension (mm)
264x30x56

Colour
White (01) | Black (04) | Grey/Black (74)

Weight (Kg)
0.73

Mounting
wall recessed|ceiling recessed

Wiring
on control gear box with quick-coupling connections

Complies with EN60598-1 and pertinent regulations

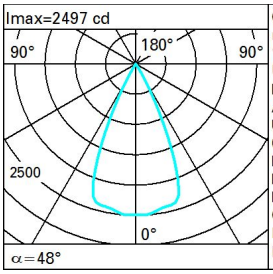
IP20 IP23 On the visible part of the product once installed

Product configuration: MM88

Product characteristics
Total lighting output [Lm]: 1409.8
Total power [W]: 24.5
Luminous efficacy [Lm/W]: 57.5
Life Time: 50,000h - L90 - 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.) [%]: 83
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 21
Nominal luminous [Lm]: 1700
Lamp maximum intensity [cd]: /
Beam angle [°]: 48°
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.5
Colour temperature [K]: 2700
CRI: 95
Wavelength [Nm]: /
MacAdam Step: 3

Polar



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=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°
BZ1

Lux

h	d	Em	Emax
2	1.8	523	623
4	3.6	131	156
6	5.3	58	69
8	7.1	33	39

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	79	77	76	74	89
2.0	85	83	81	80	82	80	79	77	93
2.5	86	85	84	83	84	83	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	88	87	86	85	83	100

UGR diagram

Corrected UGR values (at 1700 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	1.2	1.6	1.4	1.9	2.1	1.2	1.6	1.4	1.9	2.1
	3H	1.0	1.5	1.3	1.7	2.0	1.0	1.5	1.3	1.7	2.0
	4H	1.0	1.4	1.3	1.7	2.0	1.0	1.4	1.3	1.7	2.0
	6H	0.9	1.3	1.2	1.6	1.9	0.9	1.3	1.2	1.6	1.9
	8H	0.9	1.2	1.2	1.5	1.9	0.9	1.2	1.2	1.5	1.9
	12H	0.8	1.2	1.2	1.5	1.9	0.8	1.2	1.2	1.5	1.8
4H	2H	1.0	1.4	1.3	1.7	2.0	1.0	1.4	1.3	1.7	2.0
	3H	0.8	1.2	1.2	1.5	1.8	0.8	1.2	1.2	1.5	1.9
	4H	0.7	1.0	1.1	1.4	1.8	0.7	1.0	1.1	1.4	1.8
	6H	0.6	0.9	1.1	1.3	1.7	0.6	0.9	1.1	1.3	1.7
	8H	0.6	0.8	1.0	1.3	1.7	0.6	0.8	1.0	1.3	1.7
	12H	0.5	0.8	1.0	1.2	1.7	0.5	0.8	1.0	1.2	1.7
8H	4H	0.6	0.8	1.0	1.3	1.7	0.6	0.8	1.0	1.3	1.7
	6H	0.5	0.7	1.0	1.2	1.6	0.5	0.7	1.0	1.2	1.6
	8H	0.4	0.6	0.9	1.1	1.6	0.4	0.6	0.9	1.1	1.6
	12H	0.4	0.5	0.9	1.0	1.6	0.4	0.5	0.9	1.0	1.5
12H	4H	0.5	0.8	1.0	1.2	1.7	0.5	0.8	1.0	1.2	1.7
	6H	0.4	0.6	0.9	1.1	1.6	0.4	0.6	0.9	1.1	1.6
	8H	0.4	0.5	0.9	1.0	1.5	0.4	0.5	0.9	1.0	1.6

Variations with the observer position at spacing:

S =			
	1.0H	6.9 / -18.0	6.9 / -18.0
	1.5H	9.7 / -18.3	9.7 / -18.3
	2.0H	11.7 / -18.4	11.7 / -18.4