Laser Blade

Design iGuzzini   **iGuzzini**

Last information update: May 2024

Product configuration: MQ47
MQ47: adjustable 10-cell module - LED - integrated DALI dimmable control gear - warm white - beam 48°

Product code
MQ47: adjustable 10-cell module - LED - integrated DALI dimmable control gear - warm white - beam 48° **Attention! Code no longer in production**

Technical description
Adjustable linear module with LEDs, specifically designed to be housed in the Laser Blade System channel. The steel coupling plate includes the lighting group and the operating components. Module with 10 lighting cells, in die-cast aluminium, adjustable with a practical extraction and rotation system with max inclination +/- 45°. 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 luminance (UGR < 19). Supplied with DALI dimmable control gear connected to the luminaire. Warm white high chromatic yield LED; CRI (Ra) > 90 - lifetime with residual flow at 80% (L80): 50,000 hours - Ta 25°.

Installation
Double rotating pin blocking system with return spring to facilitate the insertion in the profile seating. Can be manoeuvred with a screwdriver.

Colour	Weight (Kg)
Black (04)	1.3

Mounting
ceiling recessed

Wiring
The module is fitted with connectors on both sides for connecting with subsequent modules. For connections at greater distances, there are accessory connectors (code MXN6 - cables not included).

Notes
dimming function with pushbutton (TOUCH DIM/PUSH): for this option consult the instructions included in the package
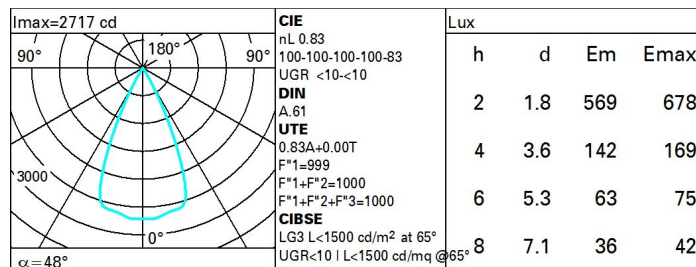
Complies with EN60598-1 and pertinent regulations

Technical data

lm system:	1534	CRI:	95
W system:	24.5	Colour temperature [K]:	3000
lm source:	1850	MacAdam Step:	3
W source:	21	Life Time LED 1:	50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	62.6	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.) [%]:	83	Number of optical assemblies:	1
Beam angle [°]:	48°	Control:	DALI

Polar

Imax=2717 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=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<10 | L<1500 cd/mq @65°

α=48°

h	d	Em	Emax
2	1.8	569	678
4	3.6	142	169
6	5.3	63	75
8	7.1	36	42

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 1850 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	1.6	2.0	1.8	2.3	2.5	1.6	2.0	1.8	2.3	2.5
	3H	1.4	1.9	1.7	2.1	2.4	1.4	1.9	1.7	2.1	2.4
	4H	1.4	1.8	1.7	2.1	2.4	1.4	1.8	1.7	2.1	2.4
	6H	1.3	1.7	1.6	2.0	2.3	1.3	1.7	1.6	2.0	2.3
	8H	1.3	1.6	1.6	1.9	2.3	1.3	1.6	1.6	1.9	2.3
	12H	1.2	1.6	1.6	1.9	2.3	1.2	1.6	1.6	1.9	2.2
4H	2H	1.4	1.8	1.7	2.1	2.4	1.4	1.8	1.7	2.1	2.4
	3H	1.2	1.6	1.6	1.9	2.3	1.2	1.6	1.6	1.9	2.3
	4H	1.1	1.4	1.5	1.8	2.2	1.1	1.4	1.5	1.8	2.2
	6H	1.0	1.3	1.5	1.7	2.1	1.0	1.3	1.5	1.7	2.1
	8H	1.0	1.2	1.4	1.7	2.1	1.0	1.2	1.4	1.7	2.1
	12H	0.9	1.2	1.4	1.6	2.1	0.9	1.2	1.4	1.6	2.1
8H	4H	1.0	1.2	1.4	1.7	2.1	1.0	1.2	1.4	1.7	2.1
	6H	0.9	1.1	1.4	1.6	2.0	0.9	1.1	1.4	1.6	2.0
	8H	0.8	1.0	1.3	1.5	2.0	0.8	1.0	1.3	1.5	2.0
	12H	0.8	0.9	1.3	1.4	2.0	0.8	0.9	1.3	1.4	1.9
12H	4H	0.9	1.2	1.4	1.6	2.1	0.9	1.2	1.4	1.6	2.1
	6H	0.8	1.0	1.3	1.5	2.0	0.8	1.0	1.3	1.5	2.0
	8H	0.8	0.9	1.3	1.4	1.9	0.8	0.9	1.3	1.4	2.0

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