

Last information update: May 2018



adjustable 15-cell module - LED - integrated DALI dimmable control gear - neutral white - beam 48°

**Product code**  
 MQ48
**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 15 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. Neutral white LED - 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.

**Dimension (mm)**

904x93

**Colour**

Black (04)

**Weight (Kg)**

1.7

**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



IP20

**Product configuration: MQ48****Product characteristics**

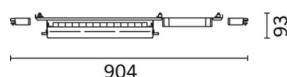
Total lighting output [Lm]: 2239.1  
 Total power [W]: 35  
 Luminous efficacy [Lm/W]: 64  
 Life Time: 50,000h - L90 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0  
 Emergency luminous flux [Lm]: /  
 Voltage [V]: -  
 Number of optical assemblies: 1

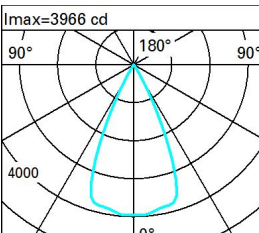
**Optical assembly Characteristics Type 1**

Light Output Ratio (L.O.R.) [%]: 83  
 Lamp code: LED  
 ZVEI Code: LED  
 Nominal power [W]: 31  
 Nominal luminous [Lm]: 2700  
 Lamp maximum intensity [cd]: /  
 Beam angle [°]: 48°

Number of lamps for optical assembly: 1  
 Socket: /  
 Ballast losses [W]: 4  
 Colour temperature [K]: 4000  
 CRI: 95  
 Wavelength [nm]: /  
 MacAdam Step: 3



# Polar

<b>I</b> max=3966 cd		<b>CIE</b> nL 0.83 100-100-100-100-83 UGR <10<10 <b>DIN</b> A.61 <b>UTE</b> 0.83A+0.00T F*1=999 F*1+F*2=1000 F*1+F*2+F*3=1000 <b>CIBSE</b> LG3 L<200 cd/m² at 65° BZ1		<b>Lux</b>			
				<b>h</b>	<b>d</b>	<b>Em</b>	<b>E<sub>max</sub></b>
<b>α = 48°</b>				2	1.8	830	989
				4	3.6	208	247
				6	5.3	92	110
				8	7.1	52	62

# 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 2700 lm bare lamp luminous flux)											
Reflect.: ceiling walls work pl. Room dim x y		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
		viewed crosswise					viewed endwise				
2H	2H	1.3	1.8	1.6	2.0	2.3	1.3	1.8	1.6	2.0	2.3
	3H	1.2	1.6	1.5	1.9	2.2	1.2	1.6	1.5	1.9	2.2
	4H	1.1	1.5	1.5	1.8	2.1	1.1	1.5	1.5	1.8	2.1
	6H	1.1	1.4	1.4	1.7	2.1	1.1	1.4	1.4	1.7	2.1
	8H	1.0	1.4	1.4	1.7	2.0	1.0	1.4	1.4	1.7	2.0
	12H	1.0	1.3	1.4	1.7	2.0	1.0	1.3	1.4	1.7	2.0
4H	2H	1.1	1.5	1.5	1.8	2.1	1.1	1.5	1.5	1.8	2.1
	3H	1.0	1.3	1.4	1.7	2.0	1.0	1.3	1.4	1.7	2.0
	4H	0.9	1.2	1.3	1.6	1.9	0.9	1.2	1.3	1.6	1.9
	6H	0.8	1.1	1.2	1.5	1.9	0.8	1.1	1.2	1.5	1.9
	8H	0.8	1.0	1.2	1.4	1.9	0.8	1.0	1.2	1.4	1.9
	12H	0.7	0.9	1.2	1.4	1.8	0.7	0.9	1.2	1.4	1.8
8H	4H	0.8	1.0	1.2	1.4	1.9	0.8	1.0	1.2	1.4	1.9
	6H	0.7	0.9	1.1	1.3	1.8	0.7	0.9	1.1	1.3	1.8
	8H	0.6	0.8	1.1	1.3	1.7	0.6	0.8	1.1	1.3	1.7
	12H	0.6	0.7	1.1	1.2	1.7	0.6	0.7	1.1	1.2	1.7
12H	4H	0.7	0.9	1.2	1.4	1.8	0.7	0.9	1.2	1.4	1.8
	6H	0.6	0.8	1.1	1.2	1.7	0.6	0.8	1.1	1.3	1.8
	8H	0.6	0.7	1.1	1.2	1.7	0.6	0.7	1.1	1.2	1.7
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			