

Last information update: May 2018



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

**Product code**  
MQ90

**Technical description**

rectangular miniaturised recessed luminaire with 5 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 139

**Dimension (mm)**  
132x30x56

**Colour**  
White (01) | Black (04) | (E6)

**Weight (Kg)**  
0.36

**Mounting**  
wall recessed|ceiling recessed

**Wiring**  
on control gear box; screw connections with terminal block included

Complies with EN60598-1 and pertinent regulations



**Product configuration: MQ90**

**Product characteristics**

Total lighting output [Lm]: 704.9  
Total power [W]: 15  
Luminous efficacy [Lm/W]: 47  
Life Time: 50,000h - L90 - B10 (Ta 25 °C)

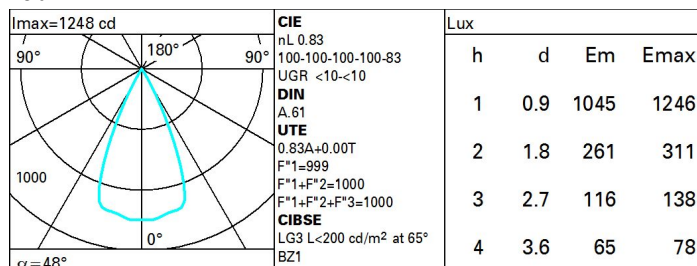
Total luminous flux at or above an angle of 90° [Lm]: 0  
Emergency luminous flux [Lm]: /  
Voltage [V]: -  
Number of optical assemblies: 1

**Optical assembly Characteristics Type 1**

Light Output Ratio (L.O.R.) [%]: 83  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 10  
Nominal luminous [Lm]: 850  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 48°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 5  
Colour temperature [K]: 3000  
CRI: 95  
Wavelength [Nm]: /  
MacAdam Step: 3

**Polar**



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 850 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
ceill/cav		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
walls		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
work pl.		viewed crosswise					viewed endwise				
Room dim											
x	y										
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				