Laser Blade
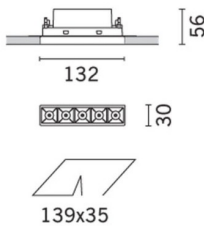
Last information update: April 2024

Product configuration: MQ90

MQ90: 5 - cell Frameless Recessed luminaire - LED - Warm white - Incorporated DALI dimmable power supply - Wide Flood optic

Product code

MQ90: 5 - cell Frameless Recessed luminaire - LED - Warm white - Incorporated DALI dimmable power supply - Wide Flood optic
Attention! Code no longer in production

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

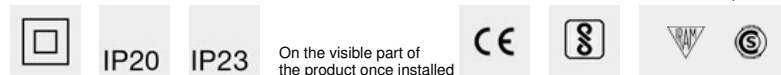| **Colour**	**Weight (Kg)**
White (01) | Black (04) | Burnished chrome (E6)	0.36

Mounting

wall recessed|ceiling recessed

Wiring

on control gear box; screw connections with terminal block included

Complies with EN60598-1 and pertinent regulations

IP20   IP23   On the visible part of the product once installed   CE

Technical data

lm system:	705	CRI:	95
W system:	15	Colour temperature [K]:	3000
lm source:	850	MacAdam Step:	3
W source:	10	Life Time LED 1:	50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	47	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=1248 cd	CIE	Lux			
	nL 0.83	h	d	Em	Emax
	100-100-100-100-83				
	UGR <10-<10	1	0.9	1045	1246
	DIN A.61				
	UTE 0.83A+0.00T	2	1.8	261	311
	F"1=999 F"1+F"2=1000				
	F"1+F"2+F"3=1000	3	2.7	116	138
	CIBSE LG3 L<1500 cd/m² at 65°				
α=48°	UGR<10 | L<1500 cd/mq @65°	4	3.6	65	78

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)

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 x	y		viewed crosswise					viewed 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