Laser Blade

Last information update: April 2024

Product configuration: MQ83.D8

MQ83.D8: 10 - cell Recessed luminaire - LED - Warm white - Incorporated DALI dimmable power supply Wide - Flood optic - White / transparent
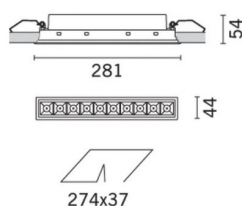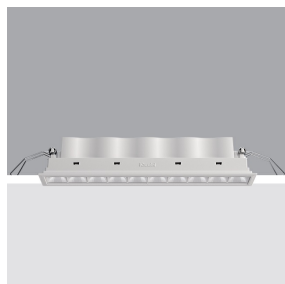
Product code

MQ83.D8: 10 - cell Recessed luminaire - LED - Warm white - Incorporated DALI dimmable power supply Wide - Flood optic - White / transparent

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, version with perimeter surface frame. 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 for false ceilings from 1 to 25 mm thick - preparation hole 37 x 274

Colour	Weight (Kg)
White Transparent (D8)	0.65

Mounting

wall recessed|ceiling recessed

Wiring

on control gear box with quick-coupling connections

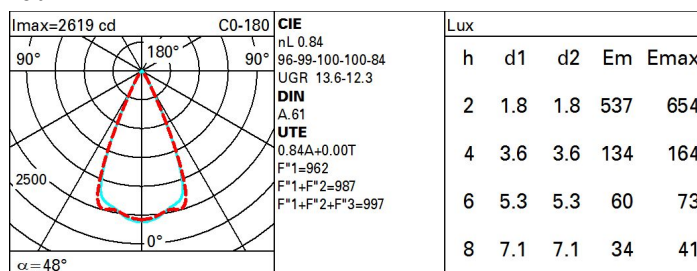Complies with EN60598-1 and pertinent regulations

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

Technical data

lm system:	1554	Life Time LED 1:	50,000h - L90 - B10 (Ta 25°C)
W system:	24.5	Ballast losses [W]:	3.5
lm source:	1850	Lamp code:	LED
W source:	21	Number of lamps for optical assembly:	1
Luminous efficiency (lm/W, real value):	63.4	ZVEI Code:	LED
lm in emergency mode:	-	Number of optical assemblies:	1
Total light flux at or above an angle of 90° [Lm]:	0	Power factor:	See installation instructions
Light Output Ratio (L.O.R.) [%]:	84	Inrush current:	21 A / 139 μs
Beam angle [°]:	48°	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 15 luminaires
CRI (minimum):	95		B16A: 24 luminaires
CRI (typical):	97		C10A: 24 luminaires
Colour temperature [K]:	3000		C16A: 40 luminaires
MacAdam Step:	3	Minimum dimming %:	1
		Overvoltage protection:	2kV Common mode & 1kV Differential mode
		Control:	DALI-2

Polar

Imax=2619 cd   C0-180

CIE
nL 0.84
96-99-100-100-84
UGR 13.6-12.3
DIN
A.61
UTE
0.84A+0.00T
F"1=962
F"1+F"2=987
F"1+F"2+F"3=997

α=48°

Lux				
h	d1	d2	Em	Emax
2	1.8	1.8	537	654
4	3.6	3.6	134	164
6	5.3	5.3	60	73
8	7.1	7.1	34	41

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	74	70	67	65	69	67	66	64	76
1.0	78	74	71	69	73	71	70	68	80
1.5	82	79	77	75	78	76	75	73	87
2.0	85	83	81	80	82	80	79	77	91
2.5	87	85	84	82	84	82	82	79	94
3.0	88	87	85	85	85	84	83	81	96
4.0	89	88	87	87	86	86	85	82	98
5.0	89	89	88	88	87	87	85	83	99

Luminance curve limit

QC	A	G	1.15	2000	1000	500		<=300		
	B		1.50		2000	1000	750	500	<=300	
	C		1.85			2000		1000	500	<=300

C0-180 ——————   C90-270 --------------
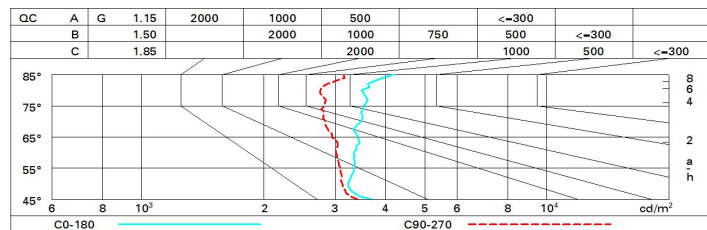
UGR diagram

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 crosswise					viewed endwise				
x	y										
2H	2H	11.4	12.0	11.7	12.2	12.5	10.9	11.4	11.2	11.7	11.9
	3H	12.1	12.5	12.4	12.8	13.1	11.0	11.5	11.3	11.8	12.1
	4H	12.4	12.9	12.7	13.2	13.5	11.1	11.5	11.4	11.8	12.1
	6H	12.7	13.1	13.1	13.5	13.8	11.1	11.5	11.4	11.8	12.1
	8H	12.9	13.3	13.2	13.6	13.9	11.1	11.5	11.4	11.8	12.2
	12H	13.0	13.4	13.3	13.7	14.0	11.1	11.4	11.4	11.8	12.1
4H	2H	11.6	12.0	11.9	12.3	12.6	11.6	12.1	11.9	12.3	12.6
	3H	12.4	12.8	12.8	13.1	13.5	11.9	12.3	12.3	12.7	13.0
	4H	13.0	13.3	13.4	13.7	14.1	12.1	12.4	12.5	12.8	13.2
	6H	13.5	13.8	13.9	14.2	14.6	12.2	12.5	12.6	12.9	13.3
	8H	13.6	13.9	14.1	14.3	14.8	12.3	12.5	12.7	13.0	13.4
	12H	13.8	14.1	14.3	14.5	14.9	12.3	12.5	12.7	13.0	13.4
8H	4H	13.1	13.4	13.5	13.8	14.2	12.6	12.9	13.0	13.3	13.7
	6H	13.7	13.9	14.2	14.4	14.9	12.9	13.1	13.3	13.5	14.0
	8H	14.0	14.2	14.5	14.6	15.1	13.0	13.2	13.5	13.6	14.1
	12H	14.2	14.4	14.7	14.9	15.4	13.1	13.2	13.6	13.7	14.2
12H	4H	13.1	13.3	13.5	13.8	14.2	12.7	13.0	13.2	13.4	13.9
	6H	13.7	13.9	14.2	14.4	14.9	13.1	13.3	13.5	13.7	14.2
	8H	14.0	14.2	14.5	14.7	15.2	13.2	13.4	13.7	13.9	14.4

Variations with the observer position at spacing:

S =	1.0H	1.5 / -1.0	2.0 / -1.2
	1.5H	3.0 / -1.2	3.7 / -1.5
	2.0H	4.5 / -1.5	5.3 / -1.7