Laser Blade

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

Product code
MQ83

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

Dimension (mm)
281x44x54

Colour
White (01) | Black/Black (43) | Black/White (47) | Grey/Black (74)

Weight (Kg)
0.6

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

Product configuration: MQ83
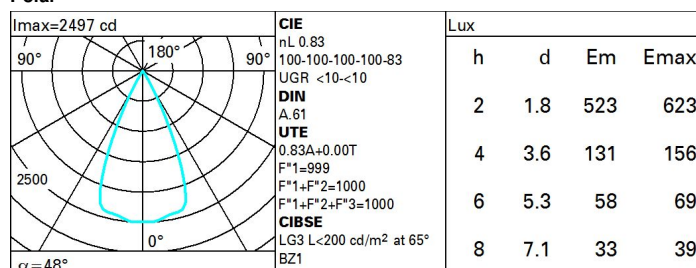
Product characteristics

Total lighting output [Lm]: 1409.8	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 24.5	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 57.5	Voltage [V]: -
Life Time: 50,000h - L90 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 83	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 3.5
Nominal power [W]: 21	Colour temperature [K]: 3000
Nominal luminous [Lm]: 1700	CRI: 95
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 48°	MacAdam Step: 3

Polar

Imax=2497 cd

CIE		Lux			
nL 0.83		h	d	Em	Emax
100-100-100-100-83					
UGR <10-<10		2	1.8	523	623
DIN A.61					
UTE 0.83A+0.00T		4	3.6	131	156
F"1=999					
F"1+F"2=1000		6	5.3	58	69
F"1+F"2+F"3=1000					
CIBSE LG3 L<200 cd/m² at 65°		8	7.1	33	39
BZ1					

α=48°

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 1700 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	1.2	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