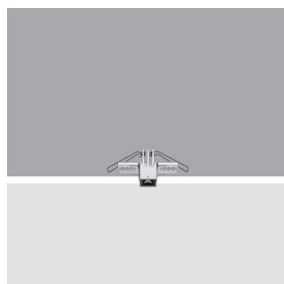# Laser Blade XS

Last information update: June 2018

### Minimal 1 cell - Flood beam - LED

Product code
Q522

Technical description
Square miniaturised recessed luminaire for a single LED lamp - fixed optic. Despite the ultracompact size of the product, the patented technology of the optic system guarantees an efficient flow and a high level of controlled glare visual comfort. Main body with die-cast zamak radiant surface, minimal (frameless) version for mounting flush with the ceiling. Metallised, thermoplastic, high definition Opti Beam reflector, integrated in a set-back position in the anti-glare screen. Ballast not included, available with separate code.

Installation
Recessed with steel wire springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter fixed to false ceiling (compatible thicknesses of 12.5 / 15 / 20 mm) with screws; subsequent filling and smoothing operations; insertion of luminaire body and aesthetic end finishing. A special protective sheath allows finishing operations on the plasterboard to be simplified and speeded up. Preparation hole 28 x 28
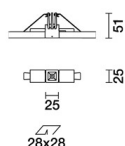
Dimension (mm)
25x25x51

Colour
White (01) | Black (04) | Brass (14) | (E6)

Weight (Kg)
0.07

Mounting
wall recessed|ceiling recessed

Wiring
Direct current ballasts to be ordered separately: ON-OFF - code no. MXF9 (min 1 / max 8); dimmable DALI - code no. BZM4 (min 2 / max 20) - check the instruction sheet for the lengths and compatible cross-sections of the cables to be used.

Notes
The special steel wire spring provided is required to facilitate the eventual extraction of the recessed body once it has been inserted.

Complies with EN60598-1 and pertinent regulations

III   IP20

CE   EAC   A++

Product configuration: Q522

Product characteristics

Total lighting output [Lm]: 152	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 2	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 76	Voltage [V]: -
Life Time: > 50,000h - L80 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 80	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 0
Nominal power [W]: 2	Colour temperature [K]: 4000
Nominal luminous [Lm]: 190	CRI: 90
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 42°	MacAdam Step: 3

Polar

Imax=319 cd	CIE	Lux			
90° 180° 90°	nL 0.80 100-100-100-100-80 UGR <10-<10	h	d	Em	Emax
	DIN A.61	1	0.8	254	318
	UTE 0.80A+0.00T F"1=997	2	1.5	64	80
300	F"1+F"2=999 F"1+F"2+F"3=1000	3	2.3	28	35
0°	**CIBSE** LG3 L<1500 cd/m² at 65°	4	3.1	16	20
α=42°					
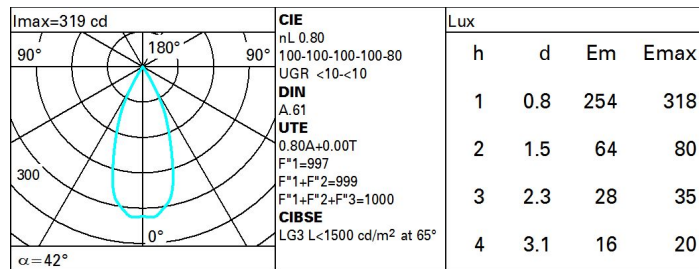
Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	72	69	66	64	68	66	65	63	78
1.0	75	72	70	68	71	69	69	66	83
1.5	79	77	75	73	76	74	73	71	89
2.0	82	80	78	77	79	77	76	74	93
2.5	83	82	81	80	81	80	79	77	96
3.0	84	83	82	82	82	81	80	78	98
4.0	85	84	84	83	83	83	81	79	99
5.0	86	85	85	84	84	83	82	80	100

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 - - - - - - -
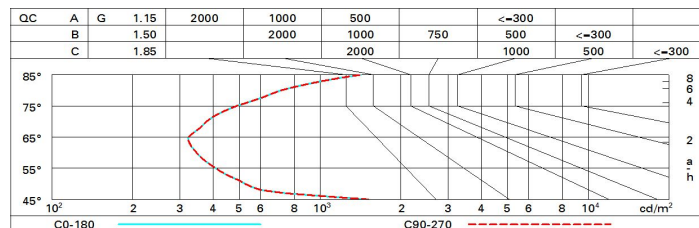
UGR diagram

Corrected UGR values (at 190 lm bare lamp luminous flux)

Riflect.: ceil/cav walls work pl.		0.70 0.50 0.20	0.70 0.30 0.20	0.50 0.50 0.20	0.50 0.30 0.20	0.30 0.30 0.20	0.70 0.50 0.20	0.70 0.30 0.20	0.50 0.50 0.20	0.50 0.30 0.20	0.30 0.30 0.20
Room dim x	y			viewed crosswise					viewed endwise		
2H	2H	8.2	8.8	8.5	9.0	9.2	8.2	8.8	8.5	9.0	9.2
	3H	8.1	8.6	8.4	8.8	9.1	8.1	8.6	8.4	8.8	9.1
	4H	8.0	8.5	8.3	8.8	9.1	8.0	8.5	8.3	8.8	9.1
	6H	7.9	8.4	8.3	8.7	9.0	7.9	8.4	8.3	8.7	9.0
	8H	7.9	8.3	8.3	8.7	9.0	7.9	8.3	8.2	8.6	9.0
	12H	7.9	8.3	8.3	8.7	9.0	7.8	8.2	8.2	8.6	8.9
4H	2H	8.0	8.5	8.3	8.8	9.1	8.0	8.5	8.3	8.8	9.1
	3H	7.8	8.3	8.2	8.6	8.9	7.9	8.3	8.2	8.6	9.0
	4H	7.8	8.1	8.2	8.5	8.9	7.8	8.1	8.2	8.5	8.9
	6H	7.7	8.0	8.1	8.4	8.8	7.7	8.0	8.1	8.4	8.8
	8H	7.7	8.0	8.1	8.4	8.8	7.6	7.9	8.1	8.3	8.8
	12H	7.7	8.0	8.1	8.4	8.8	7.6	7.9	8.1	8.3	8.7
8H	4H	7.6	7.9	8.1	8.3	8.8	7.7	8.0	8.1	8.4	8.8
	6H	7.6	7.8	8.1	8.3	8.8	7.6	7.9	8.1	8.3	8.8
	8H	7.6	7.8	8.1	8.3	8.8	7.6	7.8	8.1	8.3	8.8
	12H	7.6	7.8	8.1	8.3	8.8	7.6	7.7	8.1	8.2	8.7
12H	4H	7.6	7.9	8.1	8.3	8.7	7.7	8.0	8.1	8.4	8.8
	6H	7.6	7.8	8.0	8.2	8.7	7.6	7.8	8.1	8.3	8.8
	8H	7.6	7.7	8.1	8.2	8.7	7.6	7.8	8.1	8.3	8.8

Variations with the observer position at spacing:

S =			
	1.0H	6.7 / -8.9	6.7 / -8.9
	1.5H	9.5 / -9.1	9.5 / -9.1
	2.0H	11.5 / -9.3	11.5 / -9.3