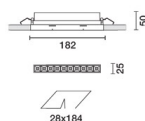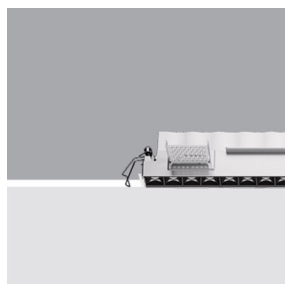# Laser Blade XS

Last information update: May 2018

Minimal 10 cells - Medium beam - Tunable White - LED

Product code
Q794

Technical description
Minimal linear 10 optic element recessed miniaturised luminaire. Using LED lamps with a high colour rendering index and a different colour temperature allows dynamic light modulation to be obtained. The variation is achieved by mixing an emission of 5 x 2700K LEDs and 5 x 5700K LEDs. The colour temperature remains constant and uniform even when products of different sizes with different numbers of warm and cold LEDs are used. Main body with die-cast aluminium radiant surface; frameless version for mounting flush with ceiling. Metallised, thermoplastic, high definition Opti Beam reflectors, integrated in a set-back position in the anti-glare screen. The product is designed to be used together with codes 6170 + M630 to obtain a solution suitable for small to medium systems that can be programmed with a DALI protocol via a simple and intuitive user touch-panel. Other management systems are also available with a separate code for larger systems that require the intervention of a specialised technician to programme them: the MH97 + MH93 + MI02 group offers a DALI / KNX programmable solution, and the MH97 + MH93 + M618 group allows the system management to be extended to remote devices like tablet and smartphones too.

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 184.

Dimension (mm)
182x25x50

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

Weight (Kg)
0.68

Mounting
wall recessed|ceiling recessed

Wiring
DALI control gear units included. Different management systems are available with a separate code. For technical details, properties and connection procedures see the instruction sheet.

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

IP20

CE | CIDET | EAC | A++ (pending) | CCC (pending)

Product configuration: Q794

Product characteristics

Total lighting output [Lm]: 1146	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 21.3	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 53.8	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.) [%]: 79	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 4.3
Nominal power [W]: 17	Colour temperature [K]: /
Nominal luminous [Lm]: 1450	CRI: /
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 24°	MacAdam Step: /

Polar

Imax=5292 cd	**CIE**	Lux			
90° 180° 90°	nL 0.79 100-100-100-100-79 UGR <10-<10	h	d	Em	Emax
	DIN A.61	2	0.9	1099	1323
	UTE 0.79A+0.00T F"1=999	4	1.7	275	331
6000	F"1+F"2=1000 F"1+F"2+F"3=1000	6	2.6	122	147
0°	**CIBSE** LG3 L<500 cd/m² at 65°	8	3.4	69	83
α=24°					
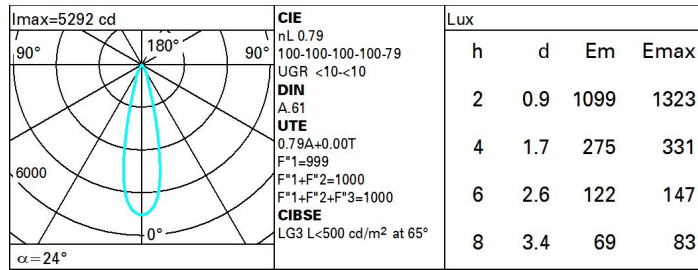
Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	71	68	65	63	67	65	64	62	78
1.0	75	71	69	67	70	68	68	66	83
1.5	78	76	74	72	75	73	72	70	89
2.0	81	79	77	76	78	76	76	73	93
2.5	82	81	80	79	80	79	78	76	96
3.0	83	82	81	81	81	80	79	77	98
4.0	84	83	83	82	82	82	80	79	99
5.0	84	84	84	83	83	82	81	79	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

85°								8 6 4
75°								
65°								2
55°								a h
45°	10²	2	3	4 5 6 8	10³	2 3 4 5 6 8	10⁴	cd/m²

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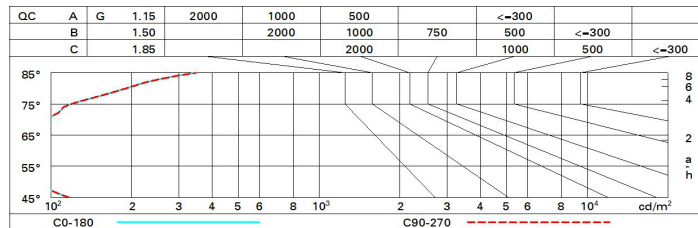
UGR diagram

Corrected UGR values (at 1450 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	2.2	4.3	2.5	4.6	4.9	2.2	4.3	2.5	4.6	4.9
	3H	2.0	3.6	2.4	4.0	4.3	2.0	3.6	2.4	4.0	4.3
	4H	2.0	3.3	2.3	3.6	4.0	2.0	3.3	2.3	3.6	4.0
	6H	1.9	3.0	2.3	3.3	3.6	1.9	2.9	2.3	3.3	3.6
	8H	1.9	2.9	2.3	3.3	3.6	1.9	2.9	2.3	3.2	3.6
	12H	1.9	2.9	2.3	3.2	3.6	1.8	2.8	2.2	3.2	3.6
4H	2H	2.0	3.3	2.3	3.6	4.0	2.0	3.3	2.3	3.6	4.0
	3H	1.8	2.8	2.2	3.2	3.6	1.8	2.8	2.2	3.2	3.6
	4H	1.7	2.7	2.1	3.1	3.5	1.7	2.7	2.1	3.1	3.5
	6H	1.4	3.0	1.8	3.5	4.0	1.3	3.0	1.8	3.5	3.9
	8H	1.2	3.1	1.7	3.6	4.1	1.2	3.1	1.7	3.6	4.1
	12H	1.2	3.1	1.7	3.6	4.1	1.1	3.1	1.6	3.6	4.1
8H	4H	1.2	3.1	1.7	3.6	4.1	1.2	3.1	1.7	3.6	4.1
	6H	1.1	2.9	1.6	3.4	3.9	1.1	2.9	1.6	3.4	3.9
	8H	1.1	2.7	1.6	3.2	3.7	1.1	2.7	1.6	3.2	3.7
	12H	1.3	2.3	1.8	2.8	3.4	1.3	2.3	1.8	2.8	3.3
12H	4H	1.1	3.1	1.6	3.6	4.1	1.2	3.1	1.7	3.6	4.1
	6H	1.1	2.7	1.6	3.2	3.7	1.2	2.7	1.7	3.2	3.8
	8H	1.3	2.3	1.8	2.8	3.3	1.3	2.3	1.8	2.8	3.4

Variations with the observer position at spacing:

S =			
1.0H	6.9 / -11.5	6.9 / -11.5
1.5H	9.7 / -11.7	9.7 / -11.7
2.0H	11.7 / -11.8	11.7 / -11.8