Laser Blade XS
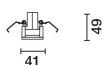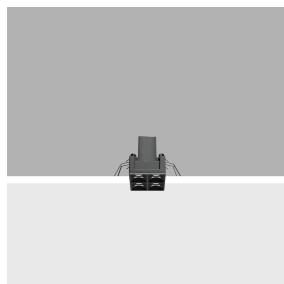
Design iGuzzini   **iGuzzini**

Last information update: November 2024

Product configuration: RA89
RA89: Minimal 4 cells - Flood beam - LED

RA89_EN 1 / 2

Product code
RA89: Minimal 4 cells - Flood beam - LED

Technical description
Square miniaturised recessed luminaire with 4 optical elements for LED lamps - fixed optic. Despite the ultracompact size of the product, the patented technology of the optic system guarantees an efficient luminous flux and a high level of controlled glare visual comfort. Main body with die-cast aluminium radiant surface, minimal (frameless) version for mounting flush with the ceiling. For recessed installation in a false ceiling a specific adapter is required that is available with a separate item code. 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
The luminaire is recessed in the specific adapter (QJ89) by means of a steel wire spring, previously installed on the ceiling that can be 12.5 / 15 / 20 mm thick. A special protective sheath allows finishing operations on the plasterboard to be simplified and speeded up.

Colour   **Weight (Kg)**
White (01) | Black (04) | Gold (14)* | Burnished chrome (E6)*   0.07

* Colours on request

Mounting
wall recessed|ceiling recessed

Wiring
Constant current ballasts to be ordered separately: ON-OFF - code no. MXF9 (min 1 / max 2); dimmable DALI - code no. BZM4 (min 1 / max 5) - 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

Technical data

lm system:	616	CRI (minimum):	90
W system:	7.9	Colour temperature [K]:	3500
lm source:	770	MacAdam Step:	2
W source:	7.9	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	78	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.) [%]:	80	Number of optical assemblies:	1
Beam angle [°]:	42°	LED current [mA]:	700

Polar

CIE	Lux			
Imax=1295 cd				
nL 0.80	h	d	Em	Emax
100-100-100-100-80				
UGR <10-<10	1	0.8	1031	1289
DIN A.61				
UTE 0.80A+0.00T	2	1.5	258	322
F"1=997				
F"1+F"2=999	3	2.3	115	143
F"1+F"2+F"3=1000				
CIBSE LG3 L<1500 cd/m² at 65°	4	3.1	64	81
UGR<10	L<1500 cd/mq @65°				

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	

(Diagram axes: 85°, 75°, 65°, 55°, 45° vs. cd/m² scale 10² to 10⁴; right axis 8 6 4 2 a h)

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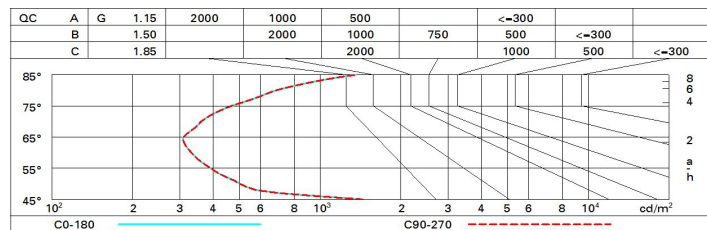
UGR diagram

Corrected UGR values (at 770 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	8.0	8.6	8.3	8.8	9.1	8.0	8.6	8.3	8.8	9.1
	3H	7.9	8.4	8.2	8.7	9.0	7.9	8.4	8.2	8.7	9.0
	4H	7.8	8.3	8.2	8.6	8.9	7.8	8.3	8.2	8.6	8.9
	6H	7.8	8.2	8.1	8.5	8.9	7.7	8.2	8.1	8.5	8.8
	8H	7.8	8.2	8.1	8.5	8.9	7.7	8.1	8.1	8.5	8.8
	12H	7.7	8.2	8.1	8.5	8.8	7.7	8.1	8.0	8.4	8.8
4H	2H	7.8	8.3	8.2	8.6	8.9	7.8	8.3	8.2	8.6	8.9
	3H	7.7	8.1	8.1	8.4	8.8	7.7	8.1	8.1	8.4	8.8
	4H	7.6	8.0	8.0	8.3	8.7	7.6	8.0	8.0	8.3	8.7
	6H	7.6	7.9	8.0	8.3	8.7	7.5	7.8	8.0	8.2	8.7
	8H	7.5	7.8	8.0	8.2	8.7	7.5	7.8	7.9	8.2	8.6
	12H	7.5	7.8	8.0	8.2	8.7	7.4	7.7	7.9	8.1	8.6
8H	4H	7.5	7.8	7.9	8.2	8.6	7.5	7.8	8.0	8.2	8.7
	6H	7.4	7.7	7.9	8.1	8.6	7.5	7.7	7.9	8.2	8.6
	8H	7.4	7.6	7.9	8.1	8.6	7.4	7.6	7.9	8.1	8.6
	12H	7.5	7.6	8.0	8.1	8.7	7.4	7.6	7.9	8.1	8.6
12H	4H	7.4	7.7	7.9	8.1	8.6	7.5	7.8	8.0	8.2	8.7
	6H	7.4	7.6	7.9	8.1	8.6	7.5	7.7	8.0	8.2	8.7
	8H	7.4	7.6	7.9	8.1	8.6	7.5	7.6	8.0	8.1	8.7

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