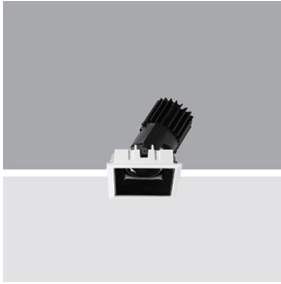# Laser Blade L

Last information update: May 2018

Frame Adjustable Recessed Luminaire - Neutral White LED - Wide Flood beam - ON-OFF

Product code
P722

Technical description
Recessed luminaire with adjustable optic for neutral white LED. Passive cooling system. Adjustable body can be rotated within the recess to ensure precise but comfortable lighting and considerably reduced direct glare. 355° internal rotation and max 30° oscillation with continuous friction. Fixed recess structure in die-cast aluminium with perimeter stop frame. The recessed luminaire includes a radiant aluminium element, a steel junction for the optical assembly and a thermoplastic rotation ring. Metallised thermoplastic reflector with high definition optic and wide flood beam aperture. External thermoplastic anti-glare screen. Transparent protection glass for LED light source. Supplied with electronic power supply unit connected to the luminaire.

Installation
Recessed with torsional steel springs - 1 mm minimum thickness of false ceiling - recess opening 76 x 76 mm.

Dimension (mm)
86x86x111
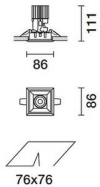
Colour
White (01) | Black/Black (43) | Black/White (47) | Grey/Black (74)

Weight (Kg)
0.53

Mounting
wall recessed|ceiling recessed

Wiring
Quick-fit power supply connection to terminal block.

Notes
Vast range of technical and decorative accessories available; option to install 2 accessories at the same time.

Complies with EN60598-1 and pertinent regulations

IP20　IP23　On the visible part of the product once installed

Product configuration: P722.01

Product characteristics

Total lighting output [Lm]: 689.3	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 9.1	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 75.7	Voltage [V]: 230
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.) [%]: 69	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 2.4
Nominal power [W]: 6.7	Colour temperature [K]: 4000
Nominal luminous [Lm]: 1000	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 50°	MacAdam Step: 3

Polar

Imax=1048 cd	CIE	Lux			
90° 180° 90°	nL 0.69 100-100-100-100-69 UGR <10-<10	h	d	Em	Emax
	DIN A.61	1	0.9	880	1048
	UTE 0.69A+0.00T F"1=996	2	1.9	220	262
1000	F"1+F"2=999 F"1+F"2+F"3=1000 **CIBSE**	3	2.8	98	116
0°	LG3 L<200 cd/m² at 65° BZ1	4	3.7	55	66
α=50°					
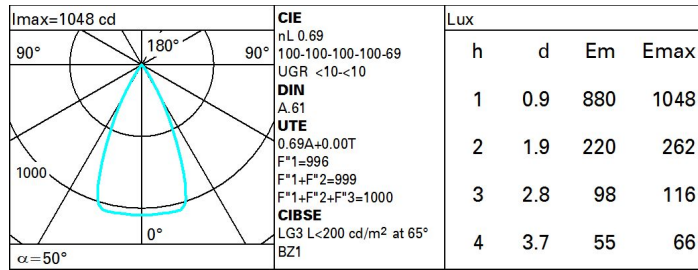
Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	62	59	57	55	58	56	56	54	78
1.0	65	62	60	58	61	60	59	57	83
1.5	68	66	64	63	65	64	63	61	89
2.0	70	69	67	66	68	67	66	64	93
2.5	72	70	69	69	69	69	68	66	96
3.0	72	72	71	70	70	70	69	67	98
4.0	73	73	72	72	71	71	70	68	99
5.0	74	73	73	73	72	72	71	69	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
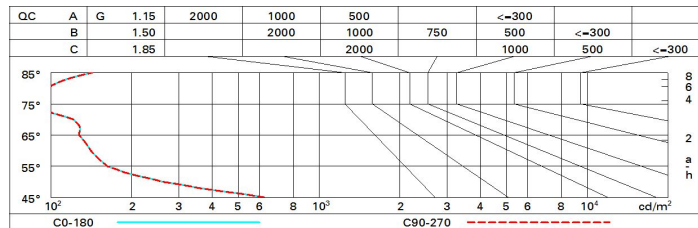
UGR diagram

Corrected UGR values (at 1000 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	10.0	10.6	10.3	10.8	11.0	10.0	10.6	10.3	10.8	11.0
	3H	9.9	10.4	10.2	10.7	10.9	9.9	10.4	10.2	10.7	10.9
	4H	9.8	10.3	10.2	10.6	10.9	9.8	10.3	10.2	10.6	10.9
	6H	9.8	10.2	10.1	10.5	10.8	9.8	10.2	10.1	10.5	10.8
	8H	9.7	10.1	10.1	10.5	10.8	9.7	10.1	10.1	10.5	10.8
	12H	9.7	10.1	10.1	10.4	10.8	9.7	10.1	10.1	10.4	10.8
4H	2H	9.8	10.3	10.2	10.6	10.9	9.8	10.3	10.2	10.6	10.9
	3H	9.7	10.1	10.1	10.4	10.8	9.7	10.1	10.1	10.4	10.8
	4H	9.6	9.9	10.0	10.3	10.7	9.6	9.9	10.0	10.3	10.7
	6H	9.5	9.8	9.9	10.2	10.6	9.5	9.8	9.9	10.2	10.6
	8H	9.5	9.7	9.9	10.2	10.6	9.5	9.7	9.9	10.2	10.6
	12H	9.4	9.7	9.9	10.1	10.6	9.4	9.7	9.9	10.1	10.5
8H	4H	9.5	9.7	9.9	10.2	10.6	9.5	9.7	9.9	10.2	10.6
	6H	9.4	9.6	9.8	10.0	10.5	9.4	9.6	9.8	10.0	10.5
	8H	9.3	9.5	9.8	10.0	10.5	9.3	9.5	9.8	10.0	10.5
	12H	9.3	9.4	9.8	9.9	10.4	9.3	9.4	9.8	9.9	10.4
12H	4H	9.4	9.7	9.9	10.1	10.5	9.4	9.7	9.9	10.1	10.6
	6H	9.3	9.5	9.8	10.0	10.5	9.3	9.5	9.8	10.0	10.5
	8H	9.3	9.4	9.8	9.9	10.4	9.3	9.4	9.8	9.9	10.4

Variations with the observer position at spacing:

S =				
	1.0H	6.5 / -18.7		6.5 / -18.7
	1.5H	9.3 / -19.2		9.3 / -19.2
	2.0H	11.3 / -19.4		11.3 / -19.4