Laser Blade InOut

Last information update: May 2018

Recessed rectangular ceiling-mounted IP65 luminaire, compact body, Warm White LEDs, Wide Flood optic.

Product code
BX82

Technical description
Miniaturised recessed rectangular luminaire with fifteen optical elements with 2700K Warm White LED light sources - fixed Wide Flood optic. Comprises a (round) optical compartment, frame, glass, outgoing cable and installation accessories to be ordered separately, where necessary. The optical compartment and frame are made of aluminium alloy and subjected to a multi-step pre-treatment process, the main phases of which include degreasing, fluorozirconic coating (a surface protective coat) and sealing (silane-based nanostructured coat). The successive painting phase is completed using primer and liquid acrylic paint, baked at 150°C, guaranteeing excellent resistance to atmospheric agents and UV rays. The glass-holder frame has plastic end caps. Tempered soda-lime closing glass, transparent with black screen-printing on the edge, 3mm thickness, attached to the frame with silicone. Silicone seals are placed between the glass-holder frame and the optical compartment. High-definition optic made of metallic thermoplastic, integrated into the black anti-glare screen towards the rear. Grade 304 stainless steel supporting springs. Equipped with IP65 control gear with outgoing cable for connection. The optical compartment and control gear are connected through IP68 quick-fit connectors. All external screws are made of A2 stainless steel.

Installation
Recessed installation with protruding frame on 1-20mm-thick suspended ceilings. Recess opening on suspended ceiling, size 406x37. Recessed installation with flush frame on 12.5mm- or 15mm-thick suspended ceilings, through adapter frame to be ordered separately. Installation on concrete ceilings using an outer casing to be ordered separately (flush and protruding frame).

Dimension (mm)
423x49x65

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

Weight (Kg)
1.37

Mounting
ceiling recessed

Wiring
Power supply unit inclusive of electronic control gear (220-240VAC 50/60Hz) with outgoing connection cable. IP68 connectors, to be ordered separately, are available for the electrical connections.

Notes
Versions with black painted frame, DALI or with Neutral White LEDs (Wide Flood optic) are available on request.

Complies with EN60598-1 and pertinent regulations

IK06   IP65

Product configuration: BX82

Product characteristics
Total lighting output [Lm]: 1898	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 35.4	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 53.6	Voltage [V]: -
Life Time: 50,000h - L90 - B10 (Ta 25°C)	Ambient temperature range: from -20°C to +35°C.
Number of optical assemblies: 1	

Optical assembly Characteristics Type 1
Light Output Ratio (L.O.R.) [%]: 76	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 4.4
Nominal power [W]: 31	Colour temperature [K]: 2700
Nominal luminous [Lm]: 2500	CRI: 95
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 48°	MacAdam Step: 3

Polar

Imax=3510 cd			**Lux**

Imax=3510 cd
90° 180° 90°
4000
0°
α=48°

h	d	Em	Emax
2	1.8	710	877
4	3.6	177	219
6	5.3	79	97
8	7.1	44	55

Isolux

Lux
h=5 m.
α=0°

LED
/
35.4 W

123 72 6 0.2 0.1 0.0 0.0 0.0 0.0

-1 0 1 2 3 4 5 6 7 8 9 m
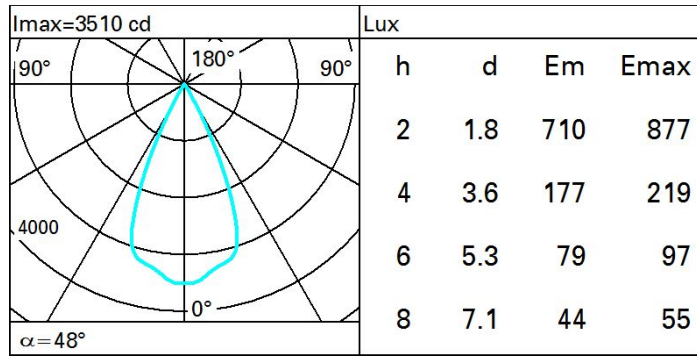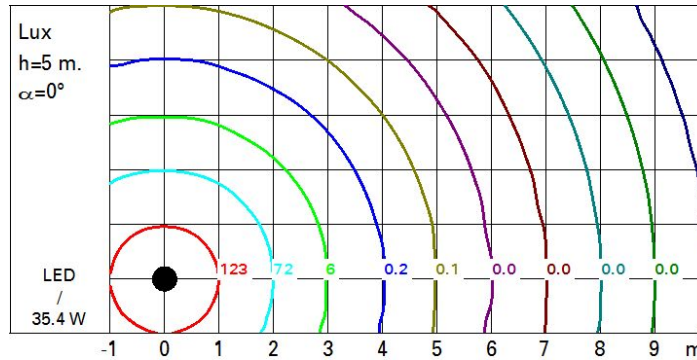
UGR diagram

Corrected UGR values (at 2500 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	0.8	1.3	1.1	1.5	1.8	0.8	1.3	1.1	1.5	1.8
	3H	0.7	1.2	1.0	1.4	1.7	0.7	1.1	1.0	1.4	1.7
	4H	0.7	1.1	1.0	1.4	1.7	0.6	1.1	1.0	1.3	1.6
	6H	0.7	1.0	1.0	1.3	1.7	0.6	0.9	0.9	1.3	1.6
	8H	0.6	1.0	1.0	1.3	1.7	0.5	0.9	0.9	1.2	1.6
	12H	0.6	1.0	1.0	1.3	1.7	0.5	0.8	0.9	1.2	1.5
4H	2H	0.6	1.1	1.0	1.3	1.6	0.7	1.1	1.0	1.4	1.7
	3H	0.6	0.9	0.9	1.2	1.6	0.6	0.9	1.0	1.3	1.6
	4H	0.5	0.8	0.9	1.2	1.6	0.5	0.8	0.9	1.2	1.6
	6H	0.5	0.8	0.9	1.2	1.6	0.5	0.7	0.9	1.1	1.5
	8H	0.5	0.7	0.9	1.1	1.6	0.4	0.7	0.9	1.1	1.5
	12H	0.5	0.7	0.9	1.1	1.6	0.4	0.6	0.8	1.0	1.5
8H	4H	0.4	0.7	0.9	1.1	1.5	0.5	0.7	0.9	1.1	1.6
	6H	0.4	0.6	0.9	1.1	1.5	0.4	0.6	0.9	1.1	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	0.6	0.9	1.1	1.6	0.4	0.5	0.9	1.0	1.5
12H	4H	0.4	0.6	0.8	1.0	1.5	0.5	0.7	0.9	1.1	1.6
	6H	0.4	0.5	0.8	1.0	1.5	0.5	0.6	0.9	1.1	1.6
	8H	0.4	0.5	0.9	1.0	1.5	0.4	0.6	0.9	1.1	1.6

Variations with the observer position at spacing:

S =	1.0H	6.2 / -6.5	6.2 / -6.5
	1.5H	9.0 / -6.9	9.0 / -6.9
	2.0H	11.0 / -7.2	11.0 / -7.2