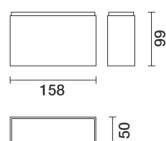# Laser Blade InOut

Last information update: May 2018

Ceiling-mounted Laser Blade InOut, Warm White LED, Wide Flood optic

Product code
E888

Technical description
Five optic element, outdoor rectangular, ceiling-mounted luminaire with Warm White LED lamps and a fixed Wide Flood optic. Consists of an optical assembly (rectangular), an upper base, a glass cover, and a ceiling plate. The optical assembly and upper base are made of aluminium alloy and are subjected to a multi-step, pre-treatment process, in which the main phases are degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The following painting stage consists of a primer and a liquid acrylic paint, cured at 150°C, with a high level of weather and UV ray resistance. AISI 304 stainless steel ceiling fixing plate. The tempered sodium-calcium sealing glass is transparent, with black serigraphy on the edge, 3mm thick and joined to the optical assembly with silicone. There are silicone seals between the upper base and the optical assembly too. Metallised, thermoplastic, high definition optic, integrated in a rear position in the black, anti-glare screen. Single cable entrance via black polyamide PG11 cable clamp, suitable for ø 6.5÷11mm cables. Connection with three fast-coupling terminals. Possibility to use unipolar cables with 2.4÷3.4mm diameter (1-2,5mm²) All external screws used are made of A2 stainless steel.

Installation
For ceiling-mounting using the special stainless steel plate. Secure using screw anchors for concrete, cement and solid brick.

Dimension (mm)
158x50x99

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

Weight (Kg)
1.1

Mounting
ceiling surface

Wiring
Complete with built-in electronic ballast (220÷240V ac 50/60Hz).

Complies with EN60598-1 and pertinent regulations

IK06   IP65

CE   EAC   A++

Product configuration: E888

Product characteristics
Total lighting output [Lm]: 652.9
Total power [W]: 12.4
Luminous efficacy [Lm/W]: 52.7
Life Time: 50,000h - L90 - B10 (Ta 25°C)
Number of optical assemblies: 1

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Ambient temperature range: from -20°C to +35°C. (*)
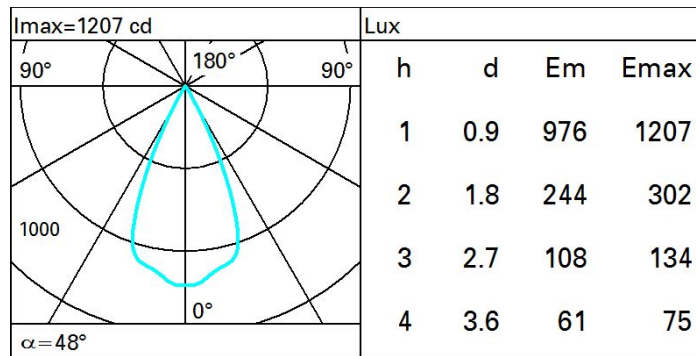
* Preliminary data
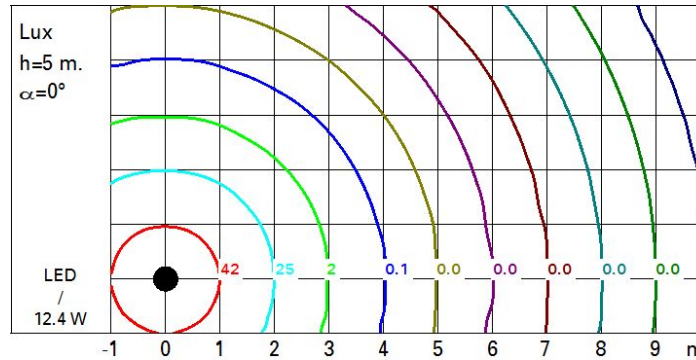
Optical assembly Characteristics Type 1
Light Output Ratio (L.O.R.) [%]: 76
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 10
Nominal luminous [Lm]: 860
Lamp maximum intensity [cd]: /
Beam angle [°]: 48°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.4
Colour temperature [K]: 2700
CRI: 95
Wavelength [Nm]: /
MacAdam Step: 3

Polar

Imax=1207 cd			Lux			
			h	d	Em	Emax
90° 180° 90°			1	0.9	976	1207
			2	1.8	244	302
1000			3	2.7	108	134
0°			4	3.6	61	75
α=48°						

Isolux

Lux
h=5 m.
α=0°

LED / 12.4 W

42 25 2 0.1 0.0 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 860 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	1.2	1.7	1.5	1.9	2.1	1.2	1.7	1.5	1.9	2.1
	3H	1.1	1.5	1.4	1.8	2.1	1.1	1.5	1.4	1.8	2.1
	4H	1.1	1.5	1.4	1.8	2.1	1.0	1.4	1.3	1.7	2.0
	6H	1.0	1.4	1.4	1.7	2.0	0.9	1.3	1.3	1.6	2.0
	8H	1.0	1.4	1.4	1.7	2.0	0.9	1.3	1.3	1.6	1.9
	12H	1.0	1.4	1.4	1.7	2.0	0.9	1.2	1.2	1.6	1.9
4H	2H	1.0	1.4	1.3	1.7	2.0	1.1	1.5	1.4	1.8	2.1
	3H	0.9	1.3	1.3	1.6	2.0	1.0	1.3	1.3	1.6	2.0
	4H	0.9	1.2	1.3	1.6	2.0	0.9	1.2	1.3	1.6	2.0
	6H	0.9	1.1	1.3	1.5	2.0	0.8	1.1	1.3	1.5	1.9
	8H	0.9	1.1	1.3	1.5	2.0	0.8	1.0	1.2	1.5	1.9
	12H	0.9	1.1	1.3	1.5	2.0	0.7	1.0	1.2	1.4	1.9
8H	4H	0.8	1.0	1.2	1.5	1.9	0.9	1.1	1.3	1.5	2.0
	6H	0.8	1.0	1.2	1.4	1.9	0.8	1.0	1.3	1.5	1.9
	8H	0.8	1.0	1.3	1.4	1.9	0.8	1.0	1.3	1.4	1.9
	12H	0.8	1.0	1.3	1.5	2.0	0.8	0.9	1.3	1.4	1.9
12H	4H	0.7	1.0	1.2	1.4	1.9	0.9	1.1	1.3	1.5	2.0
	6H	0.7	0.9	1.2	1.4	1.9	0.8	1.0	1.3	1.5	2.0
	8H	0.8	0.9	1.3	1.4	1.9	0.8	1.0	1.3	1.5	2.0

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