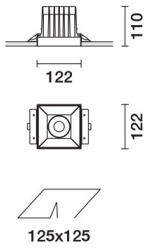
# Laser Blade XL

**Design iGuzzini** **iGuzzini**

Last information update: May 2018




**Fixed recessed luminaire - Minimal - Neutral LED - DALI dimmable control gear - Wide Flood**

**Product code**
P783

**Technical description**
Recessed luminaire with fixed optic for Neutral White LED lamp. Flush with ceiling version (frameless). Passive heat dissipation system. Lamp body with radiant surface made of die-cast aluminum. False ceiling adapter with bracket system that adapts to the thickness of the panels. Metallised, thermoplastic, high definition Opti Beam optic, integrated in a set-back position in the anti-glare screen. Glass cover for LED lamp. The structure of the optic system produces light emission with controlled luminance (UGR < 19) to guarantee high visual comfort. Supplied with a dimmable DALI ballast connected to the luminaire.

**Installation**
Recessed with steel springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter fixed to false ceiling (between 12.5 mm and 25 mm thick) with self-tapping screws; subsequent filling and smoothing operations; insertion of luminaire body and aesthetic finishing. Preparation hole 125 x 125 Installation possible in a horizontal position.

**Dimension (mm)**
119x119x107

**Colour**
White (01) | Black (04)

**Weight (Kg)**
0.85

**Mounting**
ceiling recessed

**Wiring**
Quick-coupling connections on the ballast unit terminal block - Digital electronic cabling that allows dimming to be performed with DALI protocol or pushbutton systems (TOUCH DIM)

**Notes**
The product has a white finish (01) that maintains its UGR < 19 performance unaltered even when luminance values vary slightly.

Complies with EN60598-1 and pertinent regulations

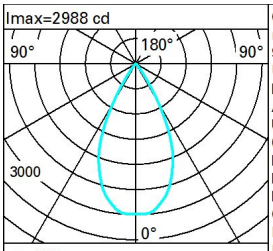
IP20 IP44 On the visible part of the product once installed

**Product configuration: P783.01**

**Product characteristics**
Total lighting output [Lm]: 1948
Total power [W]: 23.5
Luminous efficacy [Lm/W]: 82.9
Life Time: > 50,000h - L80 - B10 (Ta 25°C)
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

**Optical assembly Characteristics Type 1**
Light Output Ratio (L.O.R.) [%]: 65
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 21
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 52°
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.5
Colour temperature [K]: 4000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

**Polar**




**CIE**
nL 0.65
99-100-100-100-65
UGR 12.0-12.0
**DIN**
A.61
**UTE**
0.65A+0.00T
F"1=990
F"1+F"2=1000
F"1+F"2+F"3=1000
**CIBSE**
LG3 L<1500 cd/m² at 65°
UGR<16 I L<1500 cd/mq @65°

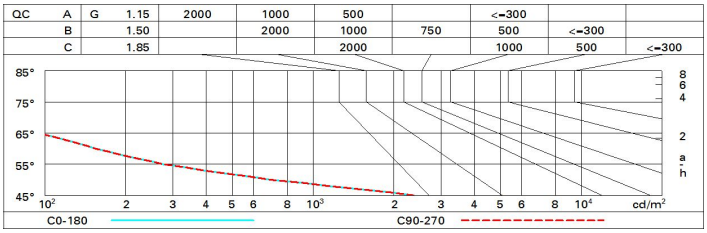
Lux

| h | d | Em | Emax |
|---|---|---|---|
| 2 | 2 | 574 | 747 |
| 4 | 3.9 | 144 | 187 |
| 6 | 5.9 | 64 | 83 |
| 8 | 7.8 | 36 | 47 |

**Utilisation factors**

| R | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|---|---|---|---|---|---|---|---|---|---|
| K0.8 | 58 | 55 | 53 | 52 | 55 | 53 | 53 | 50 | 78 |
| 1.0 | 61 | 58 | 56 | 55 | 58 | 56 | 56 | 53 | 82 |
| 1.5 | 64 | 62 | 60 | 59 | 61 | 60 | 59 | 57 | 88 |
| 2.0 | 66 | 65 | 63 | 62 | 64 | 63 | 62 | 60 | 93 |
| 2.5 | 67 | 66 | 65 | 65 | 65 | 64 | 64 | 62 | 95 |
| 3.0 | 68 | 67 | 67 | 66 | 66 | 66 | 65 | 63 | 98 |
| 4.0 | 69 | 68 | 68 | 68 | 67 | 67 | 66 | 64 | 99 |
| 5.0 | 69 | 69 | 69 | 68 | 68 | 68 | 67 | 65 | 100 |

**Luminance curve limit**



**UGR diagram**

Corrected UGR values (at 3000 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 | 12.6 | 13.2 | 12.9 | 13.4 | 13.6 | 12.6 | 13.2 | 12.9 | 13.4 | 13.6 |
| | 3H | 12.4 | 13.0 | 12.8 | 13.2 | 13.5 | 12.4 | 13.0 | 12.8 | 13.2 | 13.5 |
| | 4H | 12.4 | 12.9 | 12.7 | 13.1 | 13.4 | 12.4 | 12.9 | 12.7 | 13.1 | 13.4 |
| | 6H | 12.3 | 12.7 | 12.6 | 13.0 | 13.4 | 12.3 | 12.7 | 12.6 | 13.0 | 13.4 |
| | 8H | 12.3 | 12.7 | 12.6 | 13.0 | 13.3 | 12.3 | 12.7 | 12.6 | 13.0 | 13.3 |
| | 12H | 12.2 | 12.6 | 12.6 | 13.0 | 13.3 | 12.2 | 12.6 | 12.6 | 13.0 | 13.3 |
| 4H | 2H | 12.4 | 12.9 | 12.7 | 13.1 | 13.4 | 12.4 | 12.9 | 12.7 | 13.1 | 13.4 |
| | 3H | 12.2 | 12.6 | 12.6 | 13.0 | 13.3 | 12.2 | 12.6 | 12.6 | 13.0 | 13.3 |
| | 4H | 12.1 | 12.5 | 12.5 | 12.9 | 13.2 | 12.1 | 12.5 | 12.5 | 12.9 | 13.2 |
| | 6H | 12.0 | 12.4 | 12.5 | 12.8 | 13.2 | 12.0 | 12.4 | 12.5 | 12.8 | 13.2 |
| | 8H | 12.0 | 12.3 | 12.4 | 12.7 | 13.1 | 12.0 | 12.3 | 12.4 | 12.7 | 13.1 |
| | 12H | 11.9 | 12.2 | 12.4 | 12.6 | 13.1 | 11.9 | 12.2 | 12.4 | 12.6 | 13.1 |
| 8H | 4H | 12.0 | 12.3 | 12.4 | 12.7 | 13.1 | 12.0 | 12.3 | 12.4 | 12.7 | 13.1 |
| | 6H | 11.9 | 12.1 | 12.4 | 12.6 | 13.1 | 11.9 | 12.1 | 12.4 | 12.6 | 13.1 |
| | 8H | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 |
| | 12H | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 |
| 12H | 4H | 11.9 | 12.2 | 12.4 | 12.6 | 13.1 | 11.9 | 12.2 | 12.4 | 12.6 | 13.1 |
| | 6H | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 | 11.8 | 12.1 | 12.3 | 12.5 | 13.0 |
| | 8H | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 | 11.8 | 12.0 | 12.3 | 12.5 | 13.0 |

Variations with the observer position at spacing:

| | | | |
|---|---|---|---|
| S = | 1.0H | 6.1 / -21.4 | 6.1 / -21.4 |
| | 1.5H | 8.9 / -24.0 | 8.9 / -24.0 |
| | 2.0H | 10.9 / -25.3 | 10.9 / -25.3 |