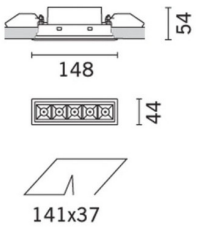
# Laser Blade

**Design iGuzzini** **iGuzzini**

Last information update: May 2018




**Frame recessed luminaire - 5 cells - General Lighting Pro - DALI**

**Product code**
Q935

**Technical description**
Rectangular recessed luminaire with 5 optical elements for LED lamps - fixed optics with metallised thermoplastic high definition Opti-Beam reflectors, integrated in a set-back position in the anti-glare screen. Main body with die-cast aluminium radiant surface, version with perimeter surface frame. The total white finish and the patented technology of the optic system guarantee an even and efficient luminous flux optimised by a special diffuser screen that reduces direct glare significantly. Supplied with DALI dimmable electronic control gear connected to the luminaire.

**Installation**
Recessed with steel wire springs for false ceilings from 1 to 25 mm thick - preparation hole 37 x 141.

**Dimension (mm)**
148x44x54

**Colour**
White (01)

**Weight (Kg)**
0.3

**Mounting**
wall recessed|ceiling recessed

**Wiring**
On control gear box with quick-coupling connections.

Complies with EN60598-1 and pertinent regulations

IP20 IP23

**Product configuration: Q935**

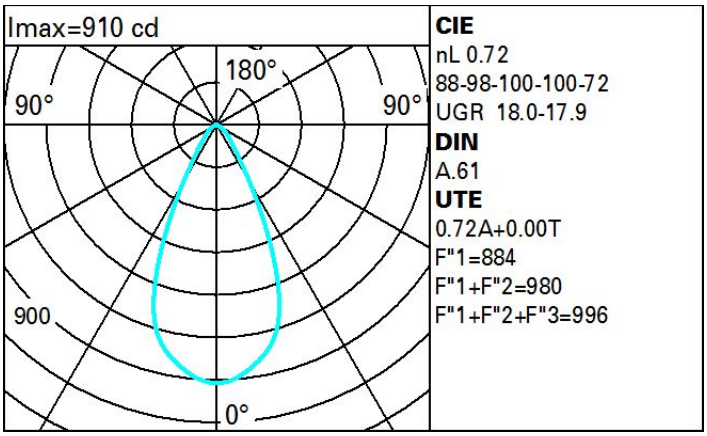
**Product characteristics**

| | |
|---|---|
| Total lighting output [Lm]: 662 | Total luminous flux at or above an angle of 90° [Lm]: 0 |
| Total power [W]: 13 | Emergency luminous flux [Lm]: / |
| Luminous efficacy [Lm/W]: 51 | Voltage [V]: - |
| Life Time: 50,000h - L90 - B10 (Ta 25°C) | Number of optical assemblies: 1 |

**Optical assembly Characteristics Type 1**

| | |
|---|---|
| Light Output Ratio (L.O.R.) [%]: 72 | Number of lamps for optical assembly: 1 |
| Lamp code: LED | Socket: / |
| ZVEI Code: LED | Ballast losses [W]: 3 |
| Nominal power [W]: 10 | Colour temperature [K]: 4000 |
| Nominal luminous [Lm]: 920 | CRI: 95 |
| Lamp maximum intensity [cd]: / | Wavelength [Nm]: / |
| Beam angle [°]: / | MacAdam Step: 3 |

**Polar**

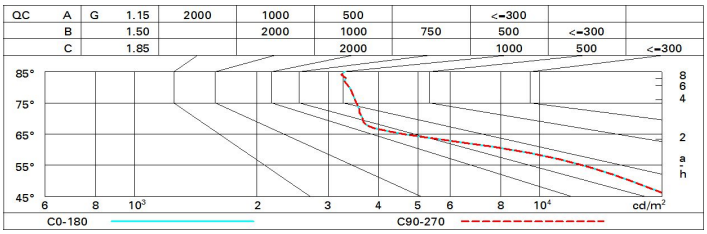



**CIE**
nL 0.72
88-98-100-100-72
UGR 18.0-17.9
**DIN**
A.61
**UTE**
0.72A+0.00T
F"1=884
F"1+F"2=980
F"1+F"2+F"3=996

**Utilisation factors**

| R | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|---|---|---|---|---|---|---|---|---|---|
| K0.8 | 61 | 57 | 54 | 52 | 56 | 53 | 53 | 50 | 70 |
| 1.0 | 65 | 61 | 58 | 56 | 60 | 57 | 57 | 54 | 75 |
| 1.5 | 69 | 66 | 64 | 62 | 65 | 63 | 62 | 60 | 83 |
| 2.0 | 72 | 69 | 68 | 66 | 68 | 67 | 66 | 64 | 88 |
| 2.5 | 73 | 72 | 70 | 69 | 70 | 69 | 68 | 66 | 92 |
| 3.0 | 74 | 73 | 72 | 71 | 72 | 71 | 70 | 68 | 94 |
| 4.0 | 75 | 74 | 74 | 73 | 73 | 72 | 71 | 69 | 96 |
| 5.0 | 76 | 75 | 74 | 74 | 74 | 73 | 72 | 70 | 97 |

**Luminance curve limit**



**UGR diagram**

Corrected UGR values (at 920 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 | 17.8 | 18.4 | 18.1 | 18.7 | 18.9 | 17.8 | 18.4 | 18.1 | 18.7 | 18.9 |
| | 3H | 17.8 | 18.4 | 18.1 | 18.7 | 19.0 | 17.8 | 18.4 | 18.1 | 18.7 | 19.0 |
| | 4H | 17.8 | 18.4 | 18.2 | 18.7 | 19.0 | 17.8 | 18.4 | 18.1 | 18.6 | 18.9 |
| | 6H | 17.8 | 18.4 | 18.2 | 18.7 | 19.0 | 17.7 | 18.2 | 18.1 | 18.6 | 18.9 |
| | 8H | 17.8 | 18.4 | 18.2 | 18.7 | 19.0 | 17.7 | 18.2 | 18.1 | 18.5 | 18.9 |
| | 12H | 17.8 | 18.3 | 18.2 | 18.7 | 19.0 | 17.7 | 18.1 | 18.0 | 18.5 | 18.8 |
| 4H | 2H | 17.8 | 18.4 | 18.1 | 18.6 | 18.9 | 17.8 | 18.4 | 18.2 | 18.7 | 19.0 |
| | 3H | 17.9 | 18.4 | 18.2 | 18.7 | 19.0 | 17.9 | 18.4 | 18.3 | 18.8 | 19.1 |
| | 4H | 17.9 | 18.3 | 18.3 | 18.7 | 19.1 | 17.9 | 18.3 | 18.3 | 18.7 | 19.1 |
| | 6H | 18.0 | 18.4 | 18.4 | 18.8 | 19.2 | 17.9 | 18.3 | 18.3 | 18.7 | 19.1 |
| | 8H | 18.0 | 18.4 | 18.4 | 18.8 | 19.2 | 17.9 | 18.2 | 18.3 | 18.6 | 19.1 |
| | 12H | 18.0 | 18.3 | 18.5 | 18.8 | 19.2 | 17.8 | 18.2 | 18.3 | 18.6 | 19.0 |
| 8H | 4H | 17.9 | 18.2 | 18.3 | 18.6 | 19.1 | 18.0 | 18.4 | 18.4 | 18.8 | 19.2 |
| | 6H | 18.0 | 18.3 | 18.5 | 18.7 | 19.2 | 18.0 | 18.3 | 18.5 | 18.8 | 19.2 |
| | 8H | 18.0 | 18.3 | 18.5 | 18.7 | 19.2 | 18.0 | 18.3 | 18.5 | 18.7 | 19.2 |
| | 12H | 18.1 | 18.3 | 18.6 | 18.8 | 19.3 | 18.0 | 18.2 | 18.5 | 18.7 | 19.2 |
| 12H | 4H | 17.8 | 18.2 | 18.3 | 18.6 | 19.0 | 18.0 | 18.3 | 18.5 | 18.8 | 19.2 |
| | 6H | 18.0 | 18.2 | 18.5 | 18.7 | 19.2 | 18.1 | 18.3 | 18.5 | 18.8 | 19.3 |
| | 8H | 18.0 | 18.2 | 18.5 | 18.7 | 19.2 | 18.1 | 18.3 | 18.6 | 18.8 | 19.3 |

Variations with the observer position at spacing:

| | | | |
|---|---|---|---|
| S = | 1.0H | 1.5 / -1.5 | 1.5 / -1.5 |
| | 1.5H | 3.1 / -3.4 | 3.1 / -3.4 |
| | 2.0H | 4.9 / -4.6 | 4.9 / -4.6 |