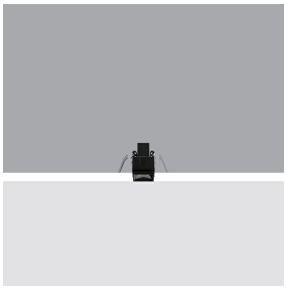
Laser Blade

Design iGuzzini **iGuzzini**

Last information update: February 2025

Product configuration: QK91
QK91: Minimal 1 cell - Flood - LED



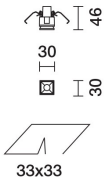
Product code
QK91: Minimal 1 cell - Flood - LED

Technical description
Square miniaturised recessed luminaire for a single LED lamp - fixed optic. Die-cast aluminium body, minimal version (frameless) installed flush with ceiling. For recessed installation in a false ceiling a specific adapter is required that is available with a separate item code. Metallised, thermoplastic, high definition OptiBeam reflector, integrated in a set-back position in the anti-glare screen. Connecting cable supplied. Ballast not included, available with separate code. High colour rendering LED.

Installation
The recess body is inserted in the specific adapter installed previously by means of a steel wire spring - check the thickness of the false ceiling and use a compatible frame available with a separate item code.

Colour
White (01) | Black (04)

Weight (Kg)
0.05



Mounting
wall recessed|ceiling recessed|ceiling surface

Wiring
Constant current ballasts to be ordered separately: ON-OFF - code no. MXF9; DALI dimmable - code no. BZM4 - check the instruction sheet for the operating current setting and the compatible length and cross sections of the cables to be used.

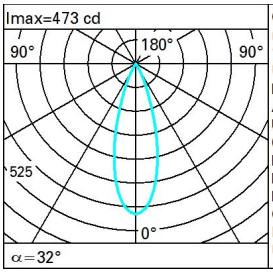
Complies with EN60598-1 and pertinent regulations

IP20 IP23 On the visible part of the product once installed

Technical data

lm system:	141	CRI (typical):	97
W system:	2.1	Colour temperature [K]:	2700
lm source:	170	MacAdam Step:	3
W source:	2.1	Life Time LED 1:	50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	67.1	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	83	Number of optical assemblies:	1
Beam angle [°]:	32°	LED current [mA]:	700
CRI (minimum):	95		

Polar



CIE
nL 0.83
100-100-100-100-83
UGR <10-<10
DIN
A.61
UTE
0.83A+0.00T
F"1=999
F"1+F"2=999
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<10 | L<1500 cd/mq @65°

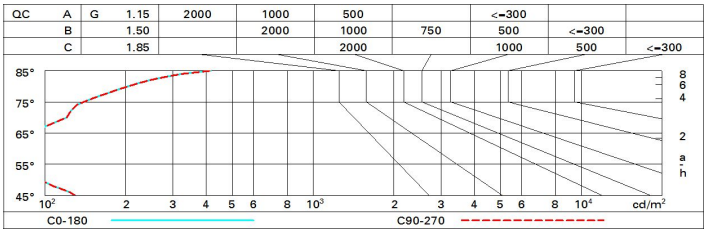
Lux

h	d	Em	Emax
1	0.6	368	473
2	1.1	92	118
3	1.7	41	53
4	2.3	23	30

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	68	65	78
1.0	78	75	72	70	74	72	71	69	83
1.5	82	79	77	76	78	77	76	73	89
2.0	84	83	81	80	81	80	79	77	93
2.5	86	85	84	83	83	82	82	79	96
3.0	87	86	85	85	85	84	83	81	98
4.0	88	87	87	86	86	86	84	82	99
5.0	89	88	88	87	87	86	85	83	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 170 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 crosswise					viewed endwise		
x	y										
2H	2H	-3.3	-2.7	-3.0	-2.5	-2.3	-3.3	-2.7	-3.0	-2.5	-2.3
	3H	-3.3	-2.9	-3.0	-2.6	-2.3	-3.4	-2.9	-3.1	-2.6	-2.4
	4H	-3.3	-2.9	-3.0	-2.6	-2.3	-3.4	-3.0	-3.1	-2.7	-2.4
	6H	-3.3	-2.9	-3.0	-2.6	-2.3	-3.5	-3.1	-3.2	-2.8	-2.5
	8H	-3.3	-2.9	-2.9	-2.6	-2.2	-3.5	-3.2	-3.2	-2.8	-2.5
	12H	-3.2	-2.8	-2.8	-2.5	-2.1	-3.6	-3.2	-3.2	-2.9	-2.5
4H	2H	-3.4	-3.0	-3.1	-2.7	-2.4	-3.3	-2.9	-3.0	-2.6	-2.3
	3H	-3.5	-3.1	-3.1	-2.8	-2.4	-3.4	-3.1	-3.1	-2.7	-2.4
	4H	-3.5	-3.2	-3.1	-2.8	-2.4	-3.5	-3.2	-3.1	-2.8	-2.4
	6H	-3.4	-3.1	-3.0	-2.7	-2.3	-3.5	-3.3	-3.1	-2.9	-2.4
	8H	-3.3	-3.0	-2.8	-2.6	-2.2	-3.6	-3.3	-3.1	-2.9	-2.5
	12H	-3.1	-2.8	-2.6	-2.4	-2.0	-3.6	-3.4	-3.1	-2.9	-2.5
8H	4H	-3.6	-3.3	-3.1	-2.9	-2.5	-3.3	-3.0	-2.8	-2.6	-2.2
	6H	-3.4	-3.2	-2.9	-2.7	-2.2	-3.2	-3.0	-2.8	-2.6	-2.1
	8H	-3.2	-3.0	-2.7	-2.5	-2.0	-3.2	-3.0	-2.7	-2.5	-2.0
	12H	-2.8	-2.7	-2.3	-2.2	-1.7	-3.1	-3.0	-2.6	-2.5	-2.0
12H	4H	-3.6	-3.4	-3.1	-2.9	-2.5	-3.1	-2.8	-2.6	-2.4	-2.0
	6H	-3.4	-3.2	-2.9	-2.7	-2.2	-2.9	-2.8	-2.5	-2.3	-1.8
	8H	-3.1	-3.0	-2.6	-2.5	-2.0	-2.8	-2.7	-2.3	-2.2	-1.7

Variations with the observer position at spacing:

S =			
	1.0H	5.6 / -3.8	5.6 / -3.8
	1.5H	8.3 / -4.0	8.3 / -4.0
	2.0H	10.3 / -4.1	10.3 / -4.1