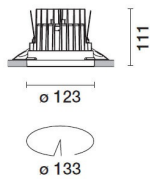
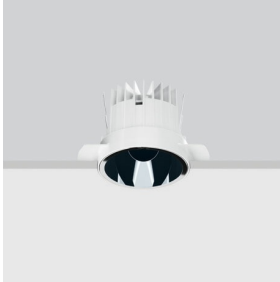


Last information update: May 2025

Product configuration: QQ21

QQ21: Fixed circular recessed luminaire - Ø133 mm - warm white - medium optic - UGR<19

**Product code**

QQ21: Fixed circular recessed luminaire - Ø133 mm - warm white - medium optic - UGR<19

Technical description

Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version without rim for mounting flush with ceiling. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in warm white colour tone (3,000K). General light emission, with controlled luminance UGR<19 1500 cd/m² α>65° medium optic.

Installation

Installation flush with the ceiling is for false ceilings 12.5 mm thick

Colour

Aluminium (12)

Weight (Kg)

1.08

Mounting

ceiling recessed

Wiring

product complete with TRIAC components

Complies with EN60598-1 and pertinent regulations



IP20

IP43

On the visible part of the product once installed



pending

Technical data

lm system:	2723	CRI (minimum):	90
W system:	27.5	Colour temperature [K]:	3000
lm source:	3100	MacAdam Step:	2
W source:	25	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	99	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.) [%]:	88	Number of optical assemblies:	1
Beam angle [°]:	24°	Control:	TRIAC

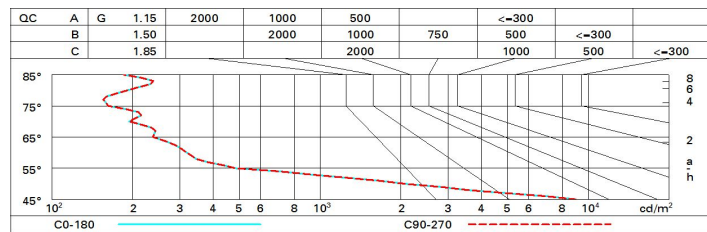
Polar

Imax=7372 cd		CIE		Lux			
h	d	Em	E _{max}				
2	0.9	1393	1843				
4	1.7	348	461				
6	2.6	155	205				
8	3.4	87	115				

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	79	74	71	69	74	71	70	68	77
1.0	82	78	76	73	77	75	75	72	82
1.5	86	84	81	79	83	81	80	77	88
2.0	89	87	85	84	86	84	83	81	92
2.5	91	89	88	87	88	87	86	84	95
3.0	92	91	90	89	89	89	88	85	97
4.0	93	92	92	91	91	90	89	87	99
5.0	94	93	93	92	92	91	90	88	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 3100 lm bare lamp luminous flux)											
Reflect.: ceiling walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise				
2H	2H	19.0	19.7	19.3	19.9	20.1	19.0	19.7	19.3	19.9	20.1
	3H	18.9	19.4	19.2	19.7	20.0	18.9	19.4	19.2	19.7	20.0
	4H	18.8	19.3	19.1	19.6	19.9	18.8	19.3	19.1	19.6	19.9
	6H	18.7	19.2	19.1	19.5	19.8	18.7	19.2	19.1	19.5	19.8
	8H	18.7	19.2	19.0	19.5	19.8	18.7	19.2	19.0	19.5	19.8
	12H	18.6	19.1	19.0	19.4	19.8	18.6	19.1	19.0	19.4	19.8
4H	2H	18.8	19.3	19.1	19.6	19.9	18.8	19.3	19.1	19.6	19.9
	3H	18.6	19.1	19.0	19.4	19.8	18.6	19.1	19.0	19.4	19.8
	4H	18.5	18.9	18.9	19.3	19.7	18.5	18.9	18.9	19.3	19.7
	6H	18.5	18.8	18.9	19.2	19.6	18.5	18.8	18.9	19.2	19.6
	8H	18.4	18.7	18.8	19.1	19.6	18.4	18.7	18.8	19.1	19.6
	12H	18.4	18.7	18.8	19.1	19.5	18.4	18.7	18.8	19.1	19.5
8H	4H	18.4	18.7	18.8	19.1	19.6	18.4	18.7	18.8	19.1	19.6
	6H	18.3	18.6	18.8	19.0	19.5	18.3	18.6	18.8	19.0	19.5
	8H	18.3	18.5	18.7	19.0	19.5	18.3	18.5	18.7	19.0	19.5
	12H	18.2	18.4	18.7	18.9	19.4	18.2	18.4	18.7	18.9	19.4
12H	4H	18.4	18.7	18.8	19.1	19.5	18.4	18.7	18.8	19.1	19.5
	6H	18.3	18.5	18.7	19.0	19.5	18.3	18.5	18.7	19.0	19.5
	8H	18.2	18.4	18.7	18.9	19.4	18.2	18.4	18.7	18.9	19.4
Variations with the observer position at spacing:											
S =	1.0H	4.4 / -24.6					4.4 / -24.6				
	1.5H	7.2 / -25.8					7.2 / -25.8				
	2.0H	9.2 / -26.2					9.2 / -26.2				