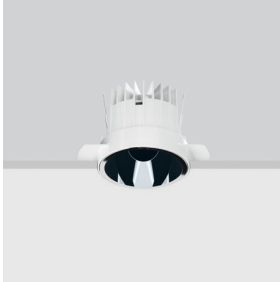


Last information update: May 2025

**Product configuration: QQ12**

QQ12: Fixed circular recessed luminaire - Ø133 mm - neutral white - wide flood optic - UGR&lt;19

**Product code**

QQ12: Fixed circular recessed luminaire - Ø133 mm - neutral white - wide flood optic - UGR&lt;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 neutral white colour tone (4,000K). General light emission, with controlled luminance UGR<19 1500 cd/m<sup>2</sup> α>65° wide flood 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 1-10V components

Complies with EN60598-1 and pertinent regulations



IP20

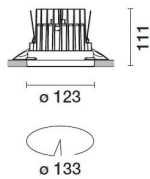


IP43

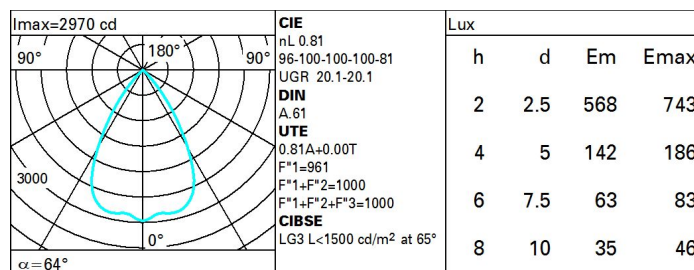
On the visible part of the product once installed



pending

**Technical data**

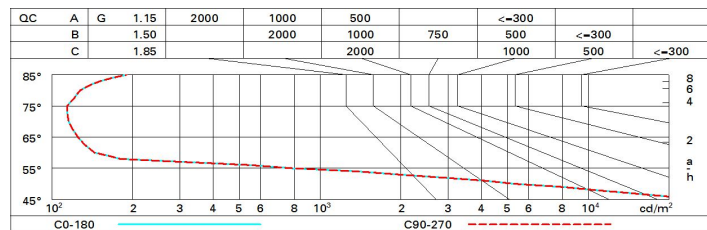
lm system:	2995	CRI (minimum):	80
W system:	29.7	Colour temperature [K]:	4000
lm source:	3700	MacAdam Step:	2
W source:	25	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	100.8	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	81	Number of optical assemblies:	1
Beam angle [°]:	64°	Control:	1-10V

**Polar**

# Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	72	68	65	63	67	64	64	61	76
1.0	75	72	69	67	71	68	68	65	81
1.5	79	77	74	73	76	74	73	70	87
2.0	82	80	78	77	79	77	77	74	92
2.5	84	82	81	80	81	80	79	77	95
3.0	85	84	83	82	82	81	80	78	97
4.0	86	85	84	84	83	83	82	80	98
5.0	86	86	85	85	84	84	82	80	99

# Luminance curve limit



# UGR diagram

Corrected UGR values (at 3700 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
2H	2H	20.7	21.3	21.0	21.0	21.8	20.7	21.3	21.0	21.0	21.8
	3H	20.6	21.1	20.9	21.4	21.7	20.6	21.1	20.9	21.4	21.7
	4H	20.5	21.0	20.9	21.3	21.6	20.5	21.0	20.9	21.3	21.6
	6H	20.4	20.9	20.8	21.2	21.5	20.4	20.9	20.8	21.2	21.5
	8H	20.4	20.8	20.8	21.2	21.5	20.4	20.8	20.8	21.2	21.5
	12H	20.4	20.8	20.7	21.1	21.5	20.4	20.8	20.7	21.1	21.5
4H	2H	20.5	21.0	20.9	21.3	21.6	20.5	21.0	20.9	21.3	21.6
	3H	20.4	20.8	20.7	21.1	21.5	20.4	20.8	20.7	21.1	21.5
	4H	20.3	20.7	20.7	21.0	21.4	20.3	20.7	20.7	21.0	21.4
	6H	20.2	20.5	20.6	20.9	21.3	20.2	20.5	20.6	20.9	21.3
	8H	20.1	20.4	20.6	20.9	21.3	20.1	20.4	20.6	20.9	21.3
	12H	20.1	20.4	20.6	20.8	21.3	20.1	20.4	20.6	20.8	21.3
8H	4H	20.1	20.4	20.6	20.9	21.3	20.1	20.4	20.6	20.9	21.3
	6H	20.1	20.3	20.5	20.7	21.2	20.1	20.3	20.5	20.7	21.2
	8H	20.0	20.2	20.5	20.7	21.2	20.0	20.2	20.5	20.7	21.2
	12H	19.9	20.1	20.4	20.6	21.1	19.9	20.1	20.4	20.6	21.1
12H	4H	20.1	20.4	20.6	20.8	21.3	20.1	20.4	20.6	20.8	21.3
	6H	20.0	20.2	20.5	20.7	21.2	20.0	20.2	20.5	20.7	21.2
	8H	19.9	20.1	20.4	20.6	21.1	19.9	20.1	20.4	20.6	21.1
Variations with the observer position at spacing:											
S =		1.0H					4.7 / -26.2				
		1.5H					7.5 / -31.2				
		2.0H					9.5 / -31.4				