

Last information update: October 2024

**Product configuration: QQ78**

QQ78: 10 - cell Frameless Recessed luminaire - LED - Warm white - Wide Flood optic



**Product code**

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**Technical description**

rectangular miniaturised recessed luminaire with 10 optical elements with LED lamps - fixed optics - wide flood beam angle. Main body with die-cast aluminium radiant surface, minimal (frameless) version for mounting flush with the ceiling. Metallised thermoplastic high definition optics, integrated in a rear position in the black anti-glare screen; the structure of the optical system prevents a pinpoint effect, allowing precise, circular light distribution and emission with controlled glare. Warm white high colour rendering LED

**Installation**

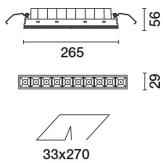
recessed with steel wire springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter fixed to false ceiling (12.5 mm thick) with self-tapping screws; subsequent filling and smoothing operations; insertion of luminaire body and aesthetic finishing. Preparation hole 35 x 271

**Colour**

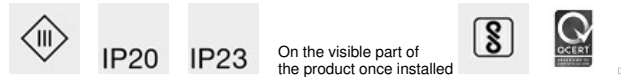
White (01) | Black (04)

**Mounting**

wall recessed|ceiling recessed



Complies with EN60598-1 and pertinent regulations

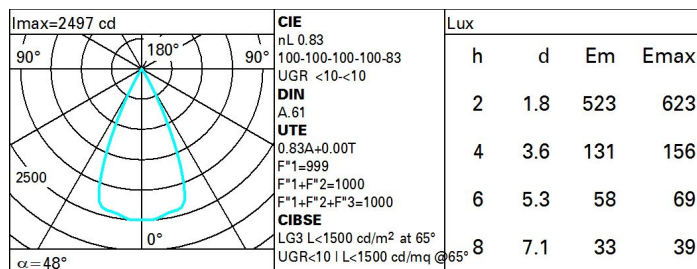


On the visible part of the product once installed

**Technical data**

lm system:	1410	CRI (typical):	97
W system:	21	Colour temperature [K]:	2700
lm source:	1700	MacAdam Step:	3
W source:	21	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 [°]:	48°	LED current [mA]:	700
CRI (minimum):	95		

**Polar**



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	79	77	76	74	89
2.0	85	83	81	80	82	80	79	77	93
2.5	86	85	84	83	84	83	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	88	87	86	85	83	100

UGR diagram

Corrected UGR values (at 1700 lm bare lamp luminous flux)											
Reflect.:											
ceiling/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	1.2	1.6	1.4	1.9	2.1	1.2	1.6	1.4	1.9	2.1
	3H	1.0	1.5	1.3	1.7	2.0	1.0	1.5	1.3	1.7	2.0
	4H	1.0	1.4	1.3	1.7	2.0	1.0	1.4	1.3	1.7	2.0
	6H	0.9	1.3	1.2	1.6	1.9	0.9	1.3	1.2	1.6	1.9
	8H	0.9	1.2	1.2	1.5	1.9	0.9	1.2	1.2	1.5	1.9
12H	0.8	1.2	1.2	1.5	1.9	0.8	1.2	1.2	1.5	1.8	
4H	2H	1.0	1.4	1.3	1.7	2.0	1.0	1.4	1.3	1.7	2.0
	3H	0.8	1.2	1.2	1.5	1.8	0.8	1.2	1.2	1.5	1.9
	4H	0.7	1.0	1.1	1.4	1.8	0.7	1.0	1.1	1.4	1.8
	6H	0.6	0.9	1.1	1.3	1.7	0.6	0.9	1.1	1.3	1.7
	8H	0.6	0.8	1.0	1.3	1.7	0.6	0.8	1.0	1.3	1.7
12H	0.5	0.8	1.0	1.2	1.7	0.5	0.8	1.0	1.2	1.7	
8H	4H	0.6	0.8	1.0	1.3	1.7	0.6	0.8	1.0	1.3	1.7
	6H	0.5	0.7	1.0	1.2	1.6	0.5	0.7	1.0	1.2	1.6
	8H	0.4	0.6	0.9	1.1	1.6	0.4	0.6	0.9	1.1	1.6
	12H	0.4	0.5	0.9	1.0	1.6	0.4	0.5	0.9	1.0	1.5
12H	4H	0.5	0.8	1.0	1.2	1.7	0.5	0.8	1.0	1.2	1.7
	6H	0.4	0.6	0.9	1.1	1.6	0.4	0.6	0.9	1.1	1.6
	8H	0.4	0.5	0.9	1.0	1.5	0.4	0.5	0.9	1.0	1.6
Variations with the observer position at spacing:											
S =	1.0H	0.9 / -18.0					0.9 / -18.0				
	1.5H	9.7 / -18.3					9.7 / -18.3				
	2.0H	11.7 / -18.4					11.7 / -18.4				