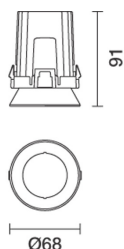
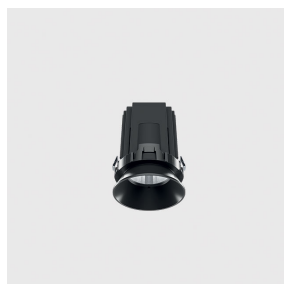


Last information update: June 2018

**Fixed round recessed luminaire - Minimal - Warm Dimming - medium - Super Comfort****Product code**

QA60

Technical description

Minimal round recessed luminaire (frameless). Super Comfort fixed version: the LEDs are set a long way back to minimize glare and guarantee a high level of visual comfort. The main body is made of die-cast aluminium with a radiant surface that guarantees optimum heat dissipation. Metallised, thermoplastic, high definition reflector - medium optic. Die-cast aluminium structure designed for flush with ceiling installation - a specific adapter with a separate code is available for false ceilings. This is indispensable for installing recessed luminaires. The internal ring is made of thermoplastic available in a range of painted and metallised finishes. Safety glass included Warm Dimming LED lamp: when the lamp is dimmed the colour temperature varies from 2700K to 1800K in order to maintain a comfortable light effect and a high color rendering index. Power unit available with a separate code no.

Installation

The luminaire is recessed in the adapter (QA82) by means of an anti-fall steel wire spring, previously installed on the ceiling that can be between 12.5 and 25 mm thick. A special steel spring required to extract the main body of the adapter after it has been installed is included in the package.

Dimension (mm)

Ø68x91

Colour

White (01) | Black (04) | Chrome (10) | Brass (14) | (E6) | (E8)

Weight (Kg)

0.13

Mounting

ceiling recessed

Wiring

DALI dimmable direct current ballast available with a separate code - the recessed fitting includes a cable and a quick-coupling connector to connect it to the connector on the ballast.

Notes

A wide range of decorative accessories and diffusers is available.

Complies with EN60598-1 and pertinent regulations



IP20

**Product configuration: QA60.01+QA82.04**

QA82.04: Frame / adapter for Minimal round fixed recessed luminaire Ø75 - Black

Product characteristics

Total lighting output [Lm]: 540
Total power [W]: 10
Luminous efficacy [Lm/W]: 54
Life Time: > 50,000h - L70 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 83
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 10
Nominal luminous [Lm]: 650
Lamp maximum intensity [cd]: /
Beam angle [°]: 28°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 0
Colour temperature [K]: /
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 3

	CIE nL 0.83 99-100-100-100-83 UGR <10<10		Lux			
	DIN A.61		h	d	Em	E _{max}
	UTE 0.83A+0.00T F*1=992 F*1+F*2=1000 F*1+F*2+F*3=1000		2	1	394	473
	CIBSE LG3 L<1500 cd/m ² at 65° UGR<10 L<1500 cd/mq @65°		4	2	98	118
			6	3	44	53
			8	4	25	30

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	67	65	78
1.0	78	75	72	70	74	71	71	68	82
1.5	82	79	77	76	78	77	76	73	88
2.0	85	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

The graph illustrates the relationship between the angle of incidence (α) and the solar constant (H) for different latitudes (QC, A, B, C) and different times of day (1.15, 1.50, 1.85). The table above the graph provides the values for H (cd/m²) for each combination of latitude and time of day. The plot shows α (°) on the y-axis (ranging from 45° to 85°) versus H (cd/m²) on the x-axis (logarithmic scale, ranging from 10^2 to 10^4). The curves show that α decreases as H increases, and the curves for different latitudes and times of day are very close to each other.

QC	A	G	1.15	2000	1000	500	<=300	<=300	<=300
	B		1.50		2000	1000	750	500	<=300
	C		1.85			2000		1000	500

UGR diagram

Corrected UGR values (at 650 lm bare lamp luminous flux)											
Reflect.: ceiling/cav 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	1.8	3.9	2.2	4.2	4.6	1.8	3.9	2.2	4.2	4.6
	3H	1.6	3.3	2.0	3.7	4.0	1.7	3.4	2.1	3.7	4.0
	4H	1.6	3.0	2.0	3.3	3.7	1.6	3.0	2.0	3.4	3.7
	6H	1.5	2.7	1.9	3.0	3.4	1.6	2.7	1.9	3.0	3.4
	8H	1.5	2.6	1.9	2.9	3.3	1.5	2.6	1.9	3.0	3.3
	12H	1.4	2.5	1.9	2.9	3.3	1.5	2.5	1.9	2.9	3.3
4H	2H	1.6	3.0	2.0	3.4	3.7	1.6	3.0	2.0	3.3	3.7
	3H	1.5	2.6	1.9	2.9	3.3	1.5	2.6	1.9	2.9	3.3
	4H	1.4	2.4	1.8	2.8	3.2	1.4	2.4	1.8	2.8	3.2
	6H	1.0	2.7	1.5	3.1	3.6	1.0	2.7	1.5	3.1	3.6
	8H	0.9	2.8	1.4	3.2	3.7	0.9	2.8	1.4	3.2	3.7
	12H	0.8	2.7	1.3	3.2	3.7	0.8	2.7	1.3	3.2	3.7
8H	4H	0.9	2.8	1.4	3.2	3.7	0.9	2.8	1.4	3.2	3.7
	6H	0.8	2.6	1.3	3.1	3.6	0.8	2.6	1.3	3.1	3.6
	8H	0.7	2.4	1.2	2.9	3.4	0.7	2.4	1.2	2.9	3.4
	12H	0.9	1.9	1.4	2.4	3.0	0.9	1.9	1.4	2.4	3.0
12H	4H	0.8	2.7	1.3	3.2	3.7	0.8	2.7	1.3	3.2	3.7
	6H	0.7	2.4	1.2	2.9	3.4	0.7	2.4	1.2	2.9	3.4
	8H	0.9	1.9	1.4	2.4	3.0	0.9	1.9	1.4	2.4	3.0
Variations with the observer position at spacing:											
S =		1.0H	4.5 / -7.1				4.5 / -7.1				
		1.5H	7.2 / -14.0				7.2 / -14.0				
		2.0H	9.2 / -19.4				9.2 / -19.4				