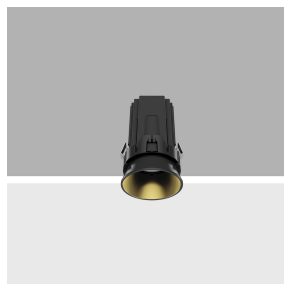# Laser

Last information update: May 2024

Product configuration: QA49
QA49: Fixed round recessed luminaire - Minimal - flood - Super Comfort

Product code
QA49: Fixed round recessed luminaire - Minimal - flood - Super Comfort

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 - flood 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 LED lamp with high color rendering index. Power unit available with a separate code no.

Installation
The luminaire is recessed in the adapter (QA80) 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.

Colour	Weight (Kg)
White (01) | Black (04) | Chrome (10)* | Gold (14)* | Burnished chrome (E6)* | Gold satin-finish (E8)*	0.1

* Colours on request

Mounting
ceiling recessed

Wiring
Direct current ballasts are available with a separate code no.: ON-OFF / 1-10V dimmable / DALI dimmable / Trailing Edge dimmable - 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   CE   03   S   EHL   NOM-3

Technical data

lm system:	616	CRI (minimum):	90
W system:	6.8	Colour temperature [K]:	3000
lm source:	800	MacAdam Step:	2
W source:	6.8	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	90.6	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.) [%]:	77	Number of optical assemblies:	1
Beam angle [°]:	42°	LED current [mA]:	200

Polar

	CIE
Imax=1429 cd	nL 0.77
	100-100-100-100-77
	UGR <10-<10
	DIN A.61
	UTE 0.77A+0.00T
	F"1=1000
	F"1+F"2=1000
	F"1+F"2+F"3=1000
	CIBSE LG3 L<1500 cd/m² at 65°
α=42°	UGR<10 | L<1500 cd/mq @65°

Lux

h	d	Em	Emax
1	0.8	1124	1429
2	1.6	281	357
3	2.3	125	159
4	3.1	70	89

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	70	66	64	62	65	63	63	60	78
1.0	73	69	67	65	69	67	66	64	83
1.5	76	74	72	70	73	71	71	68	89
2.0	79	77	75	74	76	75	74	72	93
2.5	80	79	78	77	78	77	76	74	96
3.0	81	80	79	79	79	78	77	75	98
4.0	82	81	81	80	80	80	78	77	99
5.0	82	82	81	81	81	80	79	77	100

UGR diagram

Corrected UGR values (at 800 lm bare lamp luminous flux)

Riflect.: ceil/cav	walls / work pl.	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 x	y		viewed crosswise					viewed endwise			
2H	2H	5.5	6.1	5.8	6.3	6.5	5.5	6.1	5.8	6.3	6.5
	3H	5.4	5.9	5.7	6.2	6.4	5.4	5.9	5.7	6.2	6.4
	4H	5.3	5.8	5.6	6.1	6.4	5.3	5.8	5.6	6.1	6.4
	6H	5.2	5.7	5.6	6.0	6.3	5.2	5.7	5.6	6.0	6.3
	8H	5.2	5.6	5.6	5.9	6.3	5.2	5.6	5.6	5.9	6.3
	12H	5.2	5.6	5.5	5.9	6.2	5.2	5.6	5.5	5.9	6.2
4H	2H	5.3	5.8	5.6	6.1	6.4	5.3	5.8	5.6	6.1	6.4
	3H	5.2	5.6	5.5	5.9	6.2	5.2	5.6	5.5	5.9	6.2
	4H	5.1	5.4	5.5	5.8	6.2	5.1	5.4	5.5	5.8	6.2
	6H	5.0	5.3	5.4	5.7	6.1	5.0	5.3	5.4	5.7	6.1
	8H	4.9	5.2	5.4	5.6	6.1	4.9	5.2	5.4	5.6	6.1
	12H	4.9	5.1	5.3	5.6	6.0	4.9	5.1	5.3	5.6	6.0
8H	4H	4.9	5.2	5.4	5.6	6.1	4.9	5.2	5.4	5.6	6.1
	6H	4.8	5.1	5.3	5.5	6.0	4.8	5.1	5.3	5.5	6.0
	8H	4.8	5.0	5.3	5.5	5.9	4.8	5.0	5.3	5.5	5.9
	12H	4.7	4.9	5.2	5.4	5.9	4.7	4.9	5.2	5.4	5.9
12H	4H	4.9	5.1	5.3	5.6	6.0	4.9	5.1	5.3	5.6	6.0
	6H	4.8	5.0	5.3	5.5	5.9	4.8	5.0	5.3	5.5	5.9
	8H	4.7	4.9	5.2	5.4	5.9	4.7	4.9	5.2	5.4	5.9

Variations with the observer position at spacing:

S =		crosswise	endwise
	1.0H	4.3 / -19.4	4.3 / -19.4
	1.5H	5.1 / -18.6	5.1 / -18.6
	2.0H	5.1 / -18.6	5.1 / -18.6