

Last information update: November 2024

**Product configuration: QB93+QZ89.01**

QB93: Down plate - DALI - Working UGR < 19 - LED Neutral - L 896

QZ89.01: Module for continuous line - Minimal Down - UGR < 19 / Office / Working - L 898 - TP(a) - White

**Product code**

QB93: Down plate - DALI - Working UGR < 19 - LED Neutral - L 896

**Technical description**

LED module set up for housing in initial or intermediate system profiles. High efficiency down emission for Working profiles (with a controlled luminance micro-prismatic screen). DALI dimmable control gear integrated in the luminaire. Extruded aluminium heat sink; high emission yield flux enhancer. Neutral 4000K LED

**Installation**

Module insertion on profiles facilitated by a quick coupling system.

**Colour**

Indeterminate (00)

**Weight (Kg)**

0.99

**Wiring**

Quick coupling terminal block connection to simplify connections between the subsequent modules. Complete with integrated dimmable digital DALI control gear.

Complies with EN60598-1 and pertinent regulations

**Product code**

QZ89.01: Module for continuous line - Minimal Down - UGR < 19 / Office / Working - L 898 - TP(a) - White

**Technical description**

Extruded aluminium intermediate profile - Minimal (frameless) version for flush with ceiling mounting; this allows continuous lines to be created with other intermediate profiles and an initial profile (required). Polycarbonate screen for controlled luminance emission UGR < 19 - 3000 cd/m2 (working lighting) in compliance with the TP(a) standard; screen set up for overlapping connections of different lengths.

**Installation**

Installation can be recessed, surface, ceiling and pendant-mounted using suitable accessories to be ordered separately; the mechanical systems for connecting modules are included in the package.

**Colour**

White (01)

**Weight (Kg)**

1.66

**Mounting**

ceiling recessed|ceiling surface|ceiling pendant

**Wiring**

Set up to house the LED modules required by the system.

**Notes**

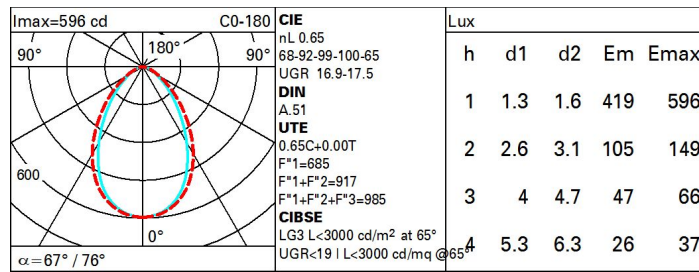
Take care with the system configuration. To make continuous lines of lighting, use the intermediate modules. To complete a continuous line correctly there must always be an initial module at the start or end of the composition.

Complies with EN60598-1 and pertinent regulations

**Technical data**

Im system:	910	Lamp code:	LED
W system:	6.8	Number of lamps for optical assembly:	1
Im source:	1400	ZVEI Code:	LED
W source:	6.8	Number of optical assemblies:	1
Luminous efficiency (Im/W, real value):	133.8	Power factor:	See installation instructions
Im in emergency mode:	-	Inrush current:	18 A / 250 µs
Total light flux at or above an angle of 90° [Lm]:	0	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 21 luminaires B16A: 34 luminaires C10A: 35 luminaires C16A: 57 luminaires
Light Output Ratio (L.O.R.) [%]:	65	Minimum dimming %:	1
CRI (minimum):	80	Overvoltage protection:	2kV Common mode & 1kV Differential mode
Colour temperature [K]:	4000	Control:	DALI-2
MacAdam Step:	3		

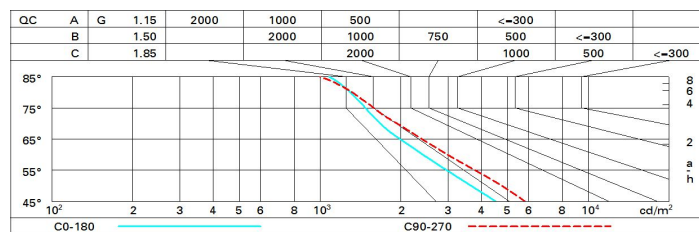
# Polar



# Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	49	44	40	37	43	40	39	36	55
1.0	53	48	45	42	47	44	44	40	62
1.5	59	55	52	49	54	51	50	47	73
2.0	62	59	56	54	58	55	55	52	80
2.5	64	61	59	57	60	58	57	55	84
3.0	65	63	61	60	62	60	59	57	87
4.0	66	65	63	62	63	62	61	59	90
5.0	67	66	64	64	64	63	62	60	92

# Luminance curve limit



# UGR diagram

Corrected UGR values (at 1400 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	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30	0.30
		0.20	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	15.3	16.2	15.6	16.5	16.7	16.4	17.3	16.7	17.6	17.8	17.8
	3H	15.8	16.7	16.2	17.0	17.3	16.5	17.4	16.9	17.7	18.0	18.0
	4H	16.0	16.8	16.4	17.1	17.5	16.6	17.4	16.9	17.7	18.0	18.0
	6H	16.2	16.9	16.6	17.2	17.6	16.5	17.3	16.9	17.6	17.9	17.9
	8H	16.2	16.9	16.6	17.3	17.6	16.5	17.2	16.9	17.5	17.9	17.9
	12H	16.3	16.9	16.7	17.3	17.6	16.5	17.1	16.9	17.5	17.8	17.8
4H	2H	15.6	16.4	16.0	16.7	17.0	17.1	17.9	17.4	18.2	18.5	18.5
	3H	16.3	17.0	16.7	17.3	17.7	17.4	18.0	17.8	18.4	18.7	18.7
	4H	16.6	17.2	17.0	17.6	18.0	17.5	18.1	17.9	18.4	18.8	18.8
	6H	16.8	17.4	17.3	17.8	18.2	17.5	18.0	17.9	18.4	18.8	18.8
	8H	16.9	17.4	17.4	17.8	18.3	17.5	18.0	17.9	18.4	18.8	18.8
	12H	17.0	17.4	17.4	17.8	18.3	17.5	17.9	17.9	18.3	18.8	18.8
8H	4H	16.7	17.2	17.1	17.6	18.0	17.7	18.2	18.2	18.6	19.0	19.0
	6H	17.0	17.4	17.5	17.9	18.3	17.8	18.2	18.3	18.7	19.2	19.2
	8H	17.2	17.5	17.6	18.0	18.5	17.9	18.2	18.4	18.7	19.2	19.2
	12H	17.3	17.5	17.8	18.0	18.6	17.9	18.2	18.4	18.7	19.2	19.2
12H	4H	16.7	17.1	17.1	17.5	18.0	17.7	18.2	18.2	18.6	19.1	19.1
	6H	17.0	17.4	17.5	17.8	18.3	17.9	18.2	18.4	18.7	19.2	19.2
	8H	17.2	17.5	17.7	18.0	18.5	17.9	18.2	18.5	18.7	19.2	19.2
Variations with the observer position at spacing:												
S =		1.0H	0.5 / -0.6		0.3 / -0.6							
		1.5H	0.7 / -1.4		1.0 / -1.4							
		2.0H	1.6 / -1.9		2.1 / -2.0							