

Last information update: June 2018

**Down LED plate - ON-OFF - Working UGR < 19 - Warm - L 1196****Product code**

QB98

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). Electronic control gear integrated in the luminaire. Extruded aluminium heat sink; high emission yield flux enhancer. Warm 3000K LED

Installation

Module insertion on profiles facilitated by a quick coupling system.

Colour

Indeterminate (00)

Weight (Kg)

1.28

Wiring

Quick coupling terminal block connection to simplify connections between the subsequent modules. Complete with integrated ON-OFF - non-dimmable control gear.

Complies with EN60598-1 and pertinent regulations

IP20

**Product configuration: QB98****Product characteristics**

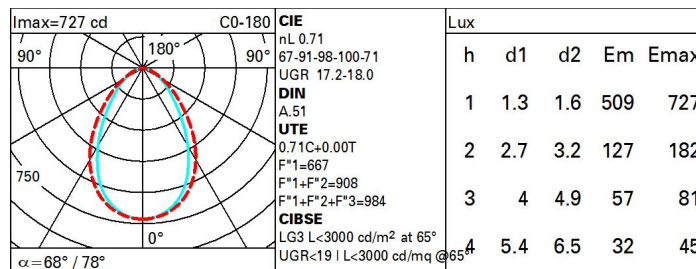
Total lighting output [Lm]: 1172
Total power [W]: 11.2
Luminous efficacy [Lm/W]: 104.9
Life Time: > 50,000h - L90 - B10 (Ta 25°C)

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.) [%]: 71
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 8.9
Nominal luminous [Lm]: 1650
Lamp maximum intensity [cd]: /
Beam angle [°]: /

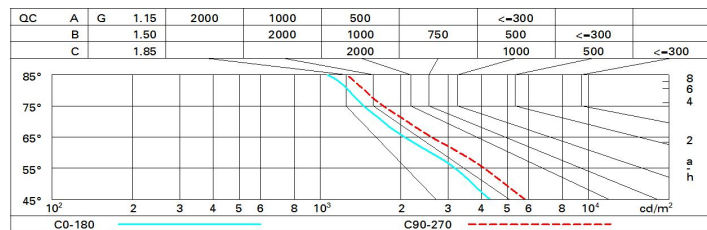
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.3
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

Polar

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	53	47	43	40	46	42	42	38	54
1.0	57	52	48	45	51	47	47	43	61
1.5	64	59	56	53	58	55	54	51	72
2.0	67	64	61	59	62	60	59	56	79
2.5	69	66	64	62	65	63	62	59	83
3.0	71	68	66	65	67	65	64	61	86
4.0	72	70	69	67	69	68	66	64	90
5.0	73	72	70	69	70	69	68	65	92

Luminance curve limit



UGR diagram

Corrected UGR values (at 1650 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
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											
x	y										
2H	2H	15.4	16.4	15.8	16.7	16.9	16.8	17.7	17.1	18.0	18.2
	3H	16.1	16.9	16.4	17.2	17.5	16.9	17.8	17.3	18.1	18.4
	4H	16.3	17.1	16.6	17.4	17.7	17.0	17.8	17.3	18.1	18.4
	6H	16.4	17.2	16.8	17.5	17.8	16.9	17.7	17.3	18.0	18.4
	8H	16.5	17.2	16.8	17.5	17.9	16.9	17.6	17.3	18.0	18.3
	12H	16.5	17.2	16.9	17.5	17.9	16.9	17.6	17.3	17.9	18.3
4H	2H	15.9	16.7	16.2	17.0	17.3	17.5	18.4	17.9	18.7	19.0
	3H	16.6	17.3	17.0	17.6	18.0	17.9	18.6	18.3	18.9	19.3
	4H	16.9	17.5	17.3	17.9	18.3	18.0	18.6	18.4	19.0	19.4
	6H	17.1	17.7	17.6	18.1	18.5	18.0	18.5	18.5	19.0	19.4
	8H	17.2	17.7	17.7	18.1	18.6	18.0	18.5	18.5	18.9	19.4
	12H	17.2	17.7	17.7	18.1	18.6	18.0	18.4	18.5	18.9	19.3
8H	4H	17.0	17.5	17.4	17.9	18.3	18.2	18.7	18.7	19.2	19.6
	6H	17.3	17.7	17.8	18.2	18.7	18.4	18.8	18.8	19.2	19.7
	8H	17.5	17.8	18.0	18.3	18.8	18.4	18.8	18.9	19.2	19.7
	12H	17.6	17.9	18.1	18.4	18.9	18.4	18.7	18.9	19.2	19.7
12H	4H	17.0	17.4	17.4	17.9	18.3	18.3	18.7	18.7	19.2	19.6
	6H	17.4	17.7	17.8	18.2	18.7	18.4	18.8	18.9	19.3	19.8
	8H	17.5	17.8	18.0	18.3	18.8	18.5	18.8	19.0	19.3	19.8
Variations with the observer position at spacing:											
S =		1.0H	0.5 / -0.5				0.3 / -0.5				
		1.5H	0.6 / -1.3				0.8 / -1.2				
		2.0H	1.2 / -1.9				1.8 / -1.8				