iN 60

Design iGuzzini **iGuzzini**

Last information update: June 2018

Down LED plate - DALI - Working UGR < 19 - Neutral - L 1196

Product code
QB94

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)
1.28

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

IP20

Product configuration: QB94

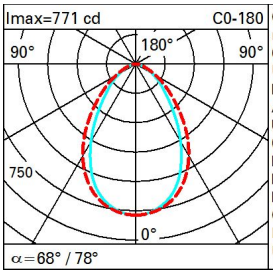
Product characteristics

Total lighting output [Lm]: 1243
Total power [W]: 10.5
Luminous efficacy [Lm/W]: 118.6
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]: 1750
Lamp maximum intensity [cd]: /
Beam angle [°]: /
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 1.6
Colour temperature [K]: 4000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

Polar



CIE
nL 0.71
67-91-98-100-71
UGR 17.4-18.2
DIN
A.51
UTE
0.71C+0.00T
F"1=667
F"1+F"2=908
F"1+F"2+F"3=984
CIBSE
LG3 L<3000 cd/m² at 65°
UGR<19 I L<3000 cd/mq @65°

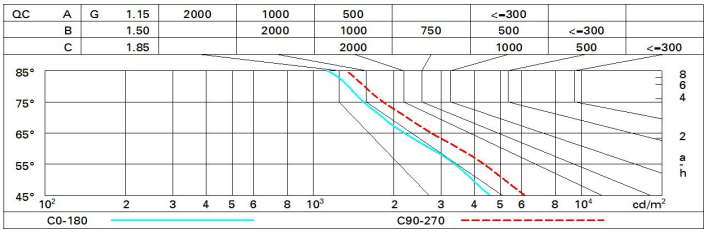
Lux

h	d1	d2	Em	Emax
1	1.3	1.6	540	771
2	2.7	3.2	135	193
3	4	4.9	60	86
4	5.4	6.5	34	48

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 1750 lm bare lamp luminous flux)

Riflect.:											
ceil/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 crosswise					viewed endwise		
x	y										
2H	2H	15.7	16.6	16.0	16.9	17.1	17.0	17.9	17.3	18.2	18.4
	3H	16.3	17.1	16.6	17.4	17.7	17.2	18.0	17.5	18.3	18.6
	4H	16.5	17.3	16.8	17.6	17.9	17.2	18.0	17.5	18.3	18.6
	6H	16.6	17.4	17.0	17.7	18.0	17.1	17.9	17.5	18.2	18.6
	8H	16.7	17.4	17.1	17.7	18.1	17.1	17.8	17.5	18.2	18.5
	12H	16.7	17.4	17.1	17.7	18.1	17.1	17.8	17.5	18.1	18.5
4H	2H	16.1	16.9	16.4	17.2	17.5	17.7	18.6	18.1	18.9	19.2
	3H	16.8	17.5	17.2	17.8	18.2	18.1	18.8	18.5	19.1	19.5
	4H	17.1	17.7	17.5	18.1	18.5	18.2	18.8	18.6	19.2	19.6
	6H	17.3	17.9	17.8	18.3	18.7	18.2	18.8	18.7	19.2	19.6
	8H	17.4	17.9	17.9	18.3	18.8	18.2	18.7	18.7	19.1	19.6
	12H	17.5	17.9	17.9	18.3	18.8	18.2	18.6	18.7	19.1	19.5
8H	4H	17.2	17.7	17.6	18.1	18.5	18.5	18.9	18.9	19.4	19.8
	6H	17.5	17.9	18.0	18.4	18.9	18.6	19.0	19.1	19.4	19.9
	8H	17.7	18.0	18.2	18.5	19.0	18.6	19.0	19.1	19.4	19.9
	12H	17.8	18.1	18.3	18.6	19.1	18.6	18.9	19.1	19.4	19.9
12H	4H	17.2	17.6	17.6	18.1	18.5	18.5	18.9	19.0	19.4	19.8
	6H	17.6	17.9	18.0	18.4	18.9	18.6	19.0	19.1	19.5	20.0
	8H	17.7	18.0	18.2	18.5	19.0	18.7	19.0	19.2	19.5	20.0

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