iN 60

Design iGuzzini **iGuzzini**

Last information update: June 2018

Up / Down LED plate - DALI - Working UGR < 19 - Warm - L 1196

Product code
QC10

Technical description
LED module set up for housing in initial or intermediate system profiles. High efficiency up + down emission for Working profiles (with a controlled luminance micro-prismatic lower screen). DALI dimmable 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)
1.6

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

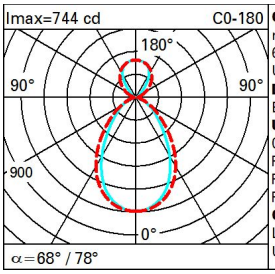
IP20

Product configuration: QC10

Product characteristics
Total lighting output [Lm]: 1675
Total power [W]: 15.2
Luminous efficacy [Lm/W]: 110.4
Life Time: > 50,000h - L90 - B10 (Ta 25°C)
Total luminous flux at or above an angle of 90° [Lm]: 480
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1
Light Output Ratio (L.O.R.) [%]: 67
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 13
Nominal luminous [Lm]: 2500
Lamp maximum intensity [cd]: /
Beam angle [°]: /
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.2
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 3

Polar



CIE
nL 0.67
67-91-98-71-67
UGR 15.2-15.9
DIN
B.53
UTE
0.48C+0.19T
F"1=667
F"1+F"2=907
F"1+F"2+F"3=984
CIBSE
LG3 L<3000 cd/m² at 65°
UGR<16 I L<3000 cd/mq @65°

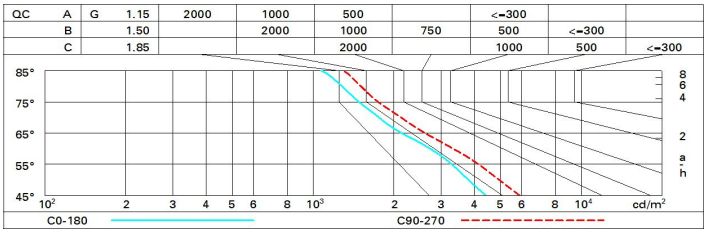
Lux

h	d1	d2	Em	Emax
1	1.3	1.6	520	744
2	2.7	3.2	130	186
3	4	4.9	58	83
4	5.4	6.5	33	47

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	44	38	35	32	36	33	31	26	54
1.0	48	43	39	36	40	37	34	29	61
1.5	54	49	46	44	46	43	40	34	72
2.0	57	53	51	48	49	47	44	38	79
2.5	59	56	54	52	52	50	46	40	83
3.0	60	58	56	54	53	52	48	41	86
4.0	62	60	58	57	55	54	50	43	90
5.0	62	61	60	58	56	55	51	44	92

Luminance curve limit



UGR diagram

Corrected UGR values (at 2500 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	13.7	14.4	14.4	15.1	15.9	14.9	15.6	15.6	16.3	17.1
	3H	14.3	14.9	15.0	15.6	16.4	15.0	15.7	15.7	16.4	17.2
	4H	14.4	15.0	15.2	15.7	16.6	15.0	15.6	15.7	16.3	17.2
	6H	14.5	15.1	15.3	15.8	16.7	14.9	15.5	15.7	16.2	17.1
	8H	14.6	15.1	15.3	15.8	16.7	14.9	15.4	15.7	16.2	17.1
	12H	14.6	15.1	15.3	15.8	16.7	14.9	15.4	15.6	16.1	17.0
4H	2H	14.0	14.6	14.7	15.3	16.2	15.6	16.2	16.3	16.9	17.7
	3H	14.7	15.2	15.5	15.9	16.8	15.8	16.3	16.6	17.1	18.0
	4H	14.9	15.4	15.7	16.1	17.1	15.9	16.3	16.7	17.1	18.1
	6H	15.1	15.5	15.9	16.3	17.3	15.9	16.3	16.7	17.1	18.1
	8H	15.2	15.5	16.0	16.3	17.3	15.9	16.3	16.7	17.1	18.0
	12H	15.2	15.5	16.0	16.3	17.3	15.9	16.2	16.7	17.0	18.0
8H	4H	15.0	15.3	15.8	16.1	17.1	16.1	16.5	17.0	17.3	18.3
	6H	15.3	15.6	16.1	16.4	17.4	16.2	16.5	17.1	17.4	18.4
	8H	15.4	15.6	16.2	16.5	17.5	16.3	16.5	17.1	17.3	18.4
	12H	15.5	15.7	16.3	16.5	17.6	16.3	16.5	17.1	17.3	18.4
12H	4H	15.0	15.3	15.8	16.1	17.1	16.2	16.5	17.0	17.3	18.3
	6H	15.3	15.5	16.1	16.4	17.4	16.3	16.5	17.1	17.4	18.4
	8H	15.4	15.6	16.3	16.5	17.5	16.3	16.5	17.2	17.4	18.4

Variations with the observer position at spacing:

S =			
	1.0H	0.5 / -0.5	0.3 / -0.5
	1.5H	0.6 / -1.2	0.8 / -1.2
	2.0H	1.2 / -1.9	1.8 / -1.8