iN 60

Last information update: June 2018

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

Product code
QC08

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). 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)
1.6

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

CE CIDET EHC A++ pending

Product configuration: QC08

Product characteristics

Total lighting output [Lm]: 1675	Total luminous flux at or above an angle of 90° [Lm]: 480
Total power [W]: 15.7	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 106.9	Voltage [V]: -
Life Time: > 50,000h - L90 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 67	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 2.7
Nominal power [W]: 13	Colour temperature [K]: 3000
Nominal luminous [Lm]: 2500	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: /	MacAdam Step: 3

Polar

Imax=744 cd C0-180

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 | L<3000 cd/mq @65°

α=68° / 78°

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
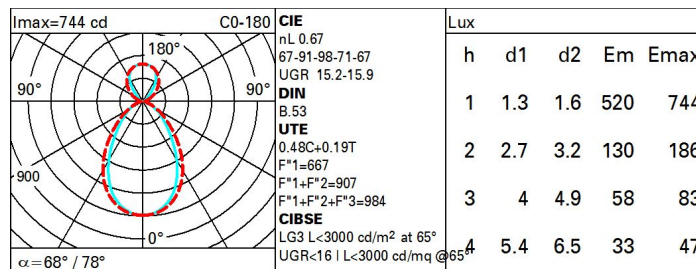
Utilisation factors

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

QC		A	G	1.15	2000		1000		500			<=300		
		B		1.50		2000		1000		750		500	<=300	
		C		1.85			2000				1000		500	<=300

C0-180   C90-270
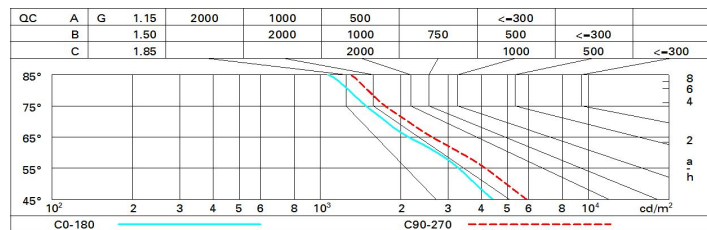
UGR diagram

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 x	y			viewed crosswise					viewed endwise		
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