iN90

Design iGuzzini **iGuzzini**

Last information update: May 2024

Product configuration: Q438
Q438: Frame Angular Module - Down Office / Working UGR < 19 - Warm LED

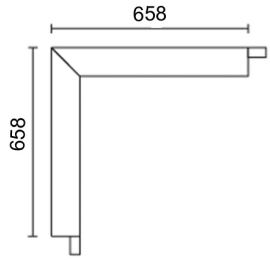
Product code
Q438: Frame Angular Module - Down Office / Working UGR < 19 - Warm LED **Attention! Code no longer in production**

Technical description
Angular element for Frame version profiles with contact frame; including a Warm LED module. Microprismatic screen for controlled luminance emission UGR < 19 - 3000 cd/m2 (working lighting); screen set up for connecting several lengths by overlapping. Integrated control gear. Pass-through wiring for continuous lines:

Installation
Recessed using the brackets on the profile.

Colour
White (01) | Aluminium (12)

Weight (Kg)
5.1



Mounting
ceiling recessed

Wiring
The angular profile is supplied with pass-through wiring for continuous lines. Quick coupling terminal blocks to simplify connections between the luminaires. LED module complete with integrated electronic control gear.

Notes
Take care when configuring the system; to complete a continuous line with an angular profile correctly, two initial modules are required, one for each side of the corner.

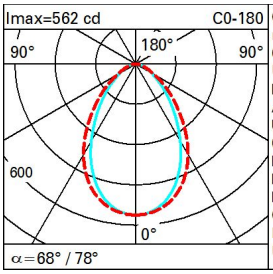
Complies with EN60598-1 and pertinent regulations

IP20

Technical data

lm system:	1800	Colour temperature [K]:	3000
W system:	16	MacAdam Step:	3
lm source:	1250	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
W source:	6.8	Voltage [Vin]:	230
Luminous efficiency (lm/W, real value):	112.5	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	72	Number of optical assemblies:	2
CRI (minimum):	80		

Polar



CIE
nL 0.72
66-90-98-100-72
UGR 17.4-17.7
DIN
A.51
UTE
0.72C+0.00T
F"1=662
F"1+F"2=902
F"1+F"2+F"3=980
CIBSE
LG3 L<3000 cd/m² at 65°
UGR<19 | L<3000 cd/mq @65°

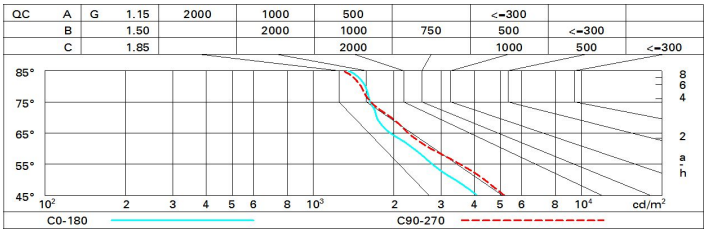
Lux

h	d1	d2	Em	Emax
1	1.3	1.6	391	562
2	2.7	3.2	98	141
3	4	4.9	43	62
4	5.4	6.5	24	35

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	54	47	43	40	47	43	42	38	53
1.0	58	52	48	45	51	48	47	43	60
1.5	64	60	56	53	59	56	55	51	71
2.0	68	64	61	59	63	61	60	56	78
2.5	70	67	65	63	66	64	63	60	83
3.0	71	69	67	65	68	66	65	62	86
4.0	73	71	70	68	70	68	67	64	89
5.0	74	72	71	70	71	70	69	66	91

Luminance curve limit



UGR diagram

Corrected UGR values (at 1250 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	15.1	16.1	15.4	16.3	16.6	16.2	17.2	16.5	17.4	17.7
	3H	15.8	16.7	16.2	17.0	17.3	16.4	17.3	16.8	17.6	17.9
	4H	16.2	17.0	16.5	17.3	17.6	16.5	17.3	16.8	17.6	17.9
	6H	16.5	17.2	16.8	17.6	17.9	16.4	17.2	16.8	17.5	17.9
	8H	16.6	17.3	17.0	17.6	18.0	16.4	17.1	16.8	17.5	17.8
	12H	16.6	17.3	17.0	17.7	18.0	16.4	17.1	16.8	17.4	17.8
4H	2H	15.5	16.4	15.9	16.7	17.0	17.1	17.9	17.4	18.2	18.5
	3H	16.4	17.1	16.8	17.5	17.8	17.5	18.1	17.8	18.5	18.9
	4H	16.8	17.5	17.3	17.8	18.2	17.6	18.2	18.0	18.6	19.0
	6H	17.3	17.8	17.7	18.2	18.6	17.7	18.2	18.1	18.6	19.0
	8H	17.4	17.9	17.8	18.3	18.8	17.7	18.2	18.1	18.6	19.0
	12H	17.5	17.9	18.0	18.4	18.8	17.7	18.1	18.1	18.6	19.0
8H	4H	17.0	17.5	17.4	17.9	18.4	18.0	18.5	18.4	18.9	19.3
	6H	17.5	18.0	18.0	18.4	18.9	18.2	18.6	18.7	19.0	19.5
	8H	17.8	18.1	18.3	18.6	19.1	18.3	18.6	18.8	19.1	19.6
	12H	17.9	18.2	18.4	18.7	19.3	18.3	18.6	18.8	19.1	19.7
12H	4H	17.0	17.5	17.5	17.9	18.3	18.0	18.5	18.5	18.9	19.4
	6H	17.6	17.9	18.1	18.4	18.9	18.3	18.6	18.8	19.1	19.6
	8H	17.8	18.2	18.4	18.6	19.2	18.4	18.7	18.9	19.2	19.7

Variations with the observer position at spacing:

S =			
	1.0H	0.4 / -0.5	0.3 / -0.4
	1.5H	0.5 / -1.0	0.7 / -1.2
	2.0H	1.1 / -1.4	1.6 / -1.6