iN60

Design iGuzzini **iGuzzini**

Last information update: November 2024

Product configuration: QY13.12+QX53.01
QY13.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - low output - tunable white - integrated DALI dimmable control gear - Aluminium
QX53.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - Tunable white - CRI 90 - White

Product code
QY13.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - low output - tunable white - integrated DALI dimmable control gear - Aluminium

Technical description
LED module set up for housing in IN60 MMO up (40%) and down (60%) emission system profiles. The raster is made of metallised thermoplastic. The luminaire generates a down emission with controlled luminance L ≤ 3000 cd/m2 – α > 65°, for use in environments with video monitors in compliance with EN 12464-1. The version is Low Output. Supplied with DALI dimmable electronic control gear. Tunable white LED, CRI90.

Installation
Module insertion on compartments with a mechanical easy-push system (steel snap-on springs).

Colour	Weight (Kg)
Aluminium (12)	1.15

Wiring
Quick coupling input terminal block connection. LED module complete with integrated DALI control gear. The electrical cables used are made of a “halogen free” material.

Complies with EN60598-1 and pertinent regulations

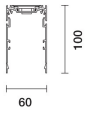
Product code
QX53.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - Tunable white - CRI 90 - White

Technical description
The L profile=1192 mm is made of extruded aluminium. This is the Minimal version for up (Tunable White and CRI90) and down emission. The product can be used for pendant applications; in both a stand alone version and when the product is used in continuous lines.

Installation
Installation can be pendant-mounted using suitable accessories to be ordered separately. The modules are completed with end caps and rasters with LEDs to be ordered separately.

Colour	Weight (Kg)
White (01)	2

Mounting
ceiling recessed|wall surface|ceiling pendant

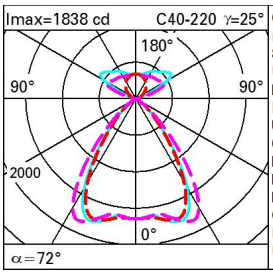


Complies with EN60598-1 and pertinent regulations

Technical data

lm system:	4040	Lamp code:	LED
W system:	29	Number of lamps for optical assembly:	1
lm source:	5050	ZVEI Code:	LED
W source:	29	Number of optical assemblies:	1
Luminous efficiency (lm/W, real value):	139.3	Power factor:	See installation instructions
lm in emergency mode:	-	Inrush current:	29 A / 180 µs
Total light flux at or above an angle of 90° [Lm]:	1488	Minimum dimming %:	3
Light Output Ratio (L.O.R.) [%]:	80	Overvoltage protection:	2kV Common mode & 1kV Differential mode
CRI (minimum):	90	Control:	DALI-2
Colour temperature [K]:	Tunable white 2700 - 6500		

Polar



CIE
nL 0.80
86-100-100-63-80
UGR <10-10.9
DIN
B.62
UTE
0.51A+0.29T
F"1=858
F"1+F"2=999
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<16 I L<1500 cd/mq @65°

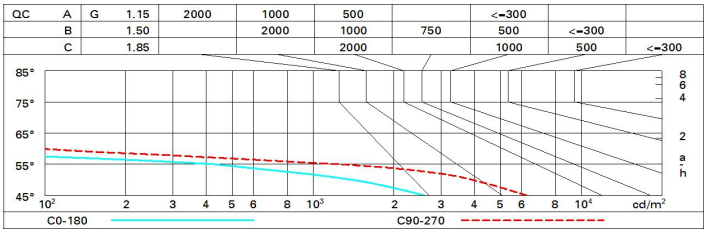
Lux

h	d1	d2	Em	Emax
2	2.9	2.9	328	411
4	5.9	5.8	82	103
6	8.8	8.7	36	46
8	11.7	11.6	20	26

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	55	50	46	43	46	43	40	34	68
1.0	59	54	50	48	50	47	44	37	74
1.5	65	61	58	55	56	53	49	42	83
2.0	68	65	62	60	59	57	52	45	88
2.5	70	67	65	63	61	60	55	46	91
3.0	71	69	67	66	63	61	56	47	94
4.0	73	71	70	68	64	63	57	48	96
5.0	73	72	71	70	65	64	58	49	97

Luminance curve limit



UGR diagram

Corrected UGR values (at 5050 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					viewed		
x	y			crosswise					endwise		
2H	2H	10.8	11.3	11.5	12.0	12.9	11.8	12.3	12.5	13.0	13.9
	3H	10.5	11.0	11.3	11.8	12.7	11.6	12.0	12.4	12.8	13.7
	4H	10.4	10.8	11.2	11.6	12.6	11.4	11.9	12.3	12.7	13.6
	6H	10.3	10.7	11.1	11.5	12.5	11.3	11.7	12.1	12.5	13.5
	8H	10.2	10.6	11.1	11.4	12.4	11.3	11.6	12.1	12.5	13.5
	12H	10.2	10.5	11.0	11.4	12.4	11.2	11.6	12.1	12.4	13.4
4H	2H	10.4	10.9	11.3	11.7	12.6	11.4	11.9	12.2	12.6	13.6
	3H	10.2	10.6	11.1	11.4	12.4	11.2	11.6	12.1	12.4	13.4
	4H	10.1	10.4	10.9	11.2	12.3	11.1	11.4	11.9	12.2	13.3
	6H	9.9	10.2	10.8	11.1	12.2	10.9	11.2	11.8	12.1	13.2
	8H	9.9	10.1	10.8	11.0	12.1	10.9	11.1	11.8	12.0	13.1
	12H	9.8	10.0	10.7	10.9	12.0	10.8	11.0	11.7	11.9	13.0
8H	4H	9.9	10.1	10.8	11.0	12.1	10.9	11.1	11.8	12.0	13.1
	6H	9.7	9.9	10.7	10.8	12.0	10.7	10.9	11.7	11.8	13.0
	8H	9.7	9.8	10.6	10.8	11.9	10.7	10.8	11.6	11.7	12.9
	12H	9.6	9.7	10.5	10.7	11.8	10.6	10.7	11.5	11.7	12.8
12H	4H	9.8	10.0	10.7	10.9	12.0	10.8	11.0	11.7	11.9	13.0
	6H	9.7	9.8	10.6	10.8	11.9	10.7	10.8	11.6	11.7	12.9
	8H	9.6	9.7	10.5	10.7	11.8	10.6	10.7	11.5	11.7	12.8

Variations with the observer position at spacing:

S =	1.0H	3.8 / -10.8	3.1 / -9.0
	1.5H	5.4 / -30.7	5.2 / -27.4
	2.0H	7.3 / -32.2	7.2 / -28.6