iN60

Design iGuzzini **iGuzzini**

Last information update: November 2024

Product configuration: QY11.12+QX52.01
QY11.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - low output - neutral white - integrated DALI dimmable control gear - Aluminium
QX52.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - 4000K - CRI 90 - White

Product code
QY11.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - low output - neutral white - integrated DALI dimmable control gear - Aluminium

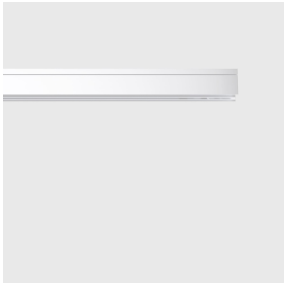
Technical description
LED module set up for housing in IN60 MMO up (40%) and down (60%) emission system profiles. The raster is made of metallised thermoplastic. The luminaire generates a down emission with controlled luminance L ≤ 3000 cd/m2 – α > 65°, for use in environments with video monitors in compliance with EN 12464-1. The version is Low Output. Supplied with DALI dimmable electronic control gear. Neutral white LED (4000K), CRI90.

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

Colour	**Weight (Kg)**
Aluminium (12)	0.93

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



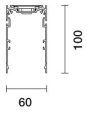
Product code
QX52.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - 4000K - CRI 90 - White

Technical description
The L profile=1192 mm is made of extruded aluminium. This is the Minimal version for up (4000K 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

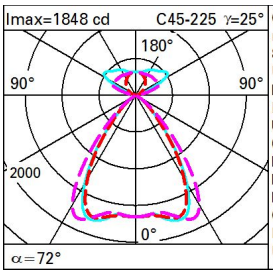


Complies with EN60598-1 and pertinent regulations

Technical data

lm system:	3939	CRI (minimum):	90
W system:	27	Colour temperature [K]:	4000
lm source:	5050	MacAdam Step:	3
W source:	27	Lamp code:	LED
Luminous efficiency (lm/W, real value):	145.9	Number of lamps for optical assembly:	1
lm in emergency mode:	-	ZVEI Code:	LED
Total light flux at or above an angle of 90° [Lm]:	1396	Number of optical assemblies:	1
Light Output Ratio (L.O.R.) [%]:	78	Control:	DALI-2

Polar



CIE
nL 0.78
86-100-100-65-78
UGR <10-10.9
DIN
B.62
UTE
0.50A+0.28T
F"1=862
F"1+F"2=998
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<16 I L<1500 cd/mq @65°

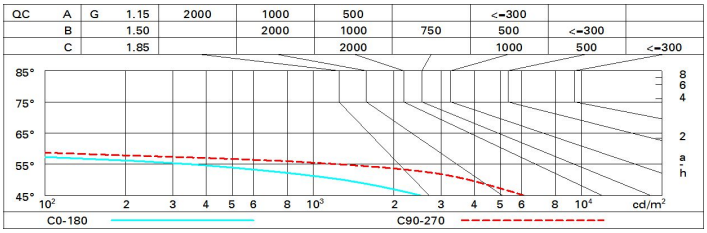
Lux

h	d1	d2	Em	Emax
2	2.9	2.9	329	414
4	5.8	5.8	82	103
6	8.7	8.7	37	46
8	11.6	11.6	21	26

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	54	49	45	42	45	42	40	34	68
1.0	58	53	50	47	49	47	43	37	74
1.5	64	60	57	54	55	53	49	42	83
2.0	67	64	61	59	58	56	52	44	88
2.5	69	66	64	62	60	59	54	46	92
3.0	70	68	66	65	62	61	55	47	94
4.0	71	70	68	67	63	62	57	48	96
5.0	72	71	70	69	64	63	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	10.7	11.2	11.5	12.0	12.8	11.8	12.3	12.6	13.1	13.9
	3H	10.5	11.0	11.3	11.7	12.6	11.6	12.1	12.4	12.8	13.7
	4H	10.4	10.8	11.2	11.6	12.5	11.5	11.9	12.3	12.7	13.6
	6H	10.3	10.7	11.1	11.4	12.4	11.4	11.8	12.2	12.5	13.5
	8H	10.2	10.6	11.0	11.4	12.4	11.3	11.7	12.1	12.5	13.5
	12H	10.2	10.5	11.0	11.3	12.3	11.3	11.6	12.1	12.4	13.4
4H	2H	10.4	10.8	11.2	11.6	12.6	11.5	11.9	12.3	12.7	13.6
	3H	10.2	10.5	11.0	11.4	12.3	11.3	11.6	12.1	12.4	13.4
	4H	10.0	10.4	10.9	11.2	12.2	11.1	11.4	12.0	12.3	13.3
	6H	9.9	10.2	10.8	11.0	12.1	11.0	11.3	11.9	12.1	13.2
	8H	9.8	10.1	10.7	11.0	12.0	10.9	11.2	11.8	12.0	13.1
	12H	9.8	10.0	10.7	10.9	12.0	10.8	11.1	11.7	12.0	13.0
8H	4H	9.8	10.1	10.7	11.0	12.0	10.9	11.2	11.8	12.0	13.1
	6H	9.7	9.9	10.6	10.8	11.9	10.8	11.0	11.7	11.9	13.0
	8H	9.6	9.8	10.6	10.7	11.8	10.7	10.9	11.6	11.8	12.9
	12H	9.6	9.7	10.5	10.6	11.8	10.6	10.8	11.6	11.7	12.9
12H	4H	9.8	10.0	10.7	10.9	12.0	10.8	11.1	11.7	12.0	13.0
	6H	9.6	9.8	10.6	10.7	11.8	10.7	10.9	11.6	11.8	12.9
	8H	9.6	9.7	10.5	10.6	11.8	10.6	10.8	11.6	11.7	12.9

Variations with the observer position at spacing:

S =	1.0H	3.9 / -11.5	3.1 / -9.1
	1.5H	5.5 / -26.8	5.4 / -27.3
	2.0H	7.4 / -26.7	7.4 / -27.7