iN60

Design iGuzzini **iGuzzini**

Last information update: November 2024

Product configuration: QY06.12+QX49.01
QY06.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - high output - warm white - integrated DALI dimmable control gear - Aluminium
QX49.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - 3000K - CRI 80 - White

Product code
QY06.12: LED module - L 1192 - 78° - up (40%) and down (60%) emission - high output - warm 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 High Output. Supplied with DALI dimmable electronic control gear. Warm white LED (3000K), CRI80.

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
QX49.01: IN60 MMO - Up and Down Module - Minimal - L= 1192 - 3000K - CRI 80 - White

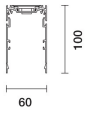
Technical description
The L profile=1192 mm is made of extruded aluminium. This is the Minimal version for up (3000K and CRI80) and down emission. The product can be used for pendant applications; in both a stand alone version and when the product is used in continuous lines.

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

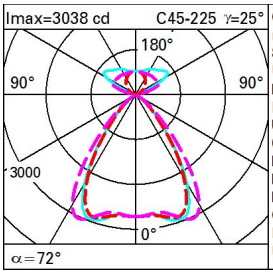


Technical data

lm system:	6474
W system:	41
lm source:	8300
W source:	41
Luminous efficiency (lm/W, real value):	157.9
lm in emergency mode:	-
Total light flux at or above an angle of 90° [Lm]:	2294
Light Output Ratio (L.O.R.) [%]:	78
CRI (minimum):	80
Colour temperature [K]:	3000
MacAdam Step:	3

Lamp code:	LED
Number of lamps for optical assembly:	1
ZVEI Code:	LED
Number of optical assemblies:	1
Power factor:	See installation instructions
Inrush current:	53 A / 200 µs
Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 8 luminaires B16A: 13 luminaires C10A: 13 luminaires C16A: 22 luminaires
Minimum dimming %:	1
Overvoltage protection:	2kV Common mode & 1kV Differential mode
Control:	DALI-2

Polar



CIE
nL 0.78
86-100-100-65-78
UGR 11.6-12.6
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°

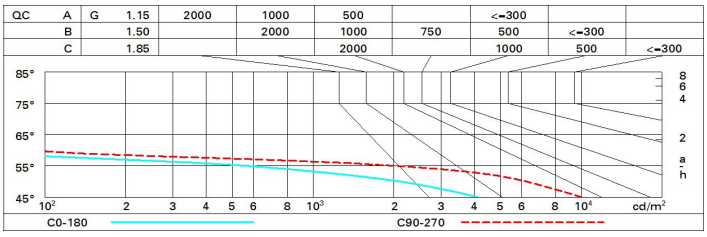
Lux

h	d1	d2	Em	Emax
2	2.9	2.9	541	680
4	5.8	5.8	135	170
6	8.7	8.7	60	76
8	11.6	11.6	34	42

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 8300 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	12.4	13.0	13.2	13.7	14.6	13.5	14.1	14.3	14.8	15.6
	3H	12.2	12.7	13.0	13.4	14.4	13.3	13.8	14.1	14.5	15.5
	4H	12.1	12.5	12.9	13.3	14.3	13.2	13.6	14.0	14.4	15.4
	6H	12.0	12.4	12.8	13.2	14.1	13.1	13.5	13.9	14.3	15.2
	8H	11.9	12.3	12.8	13.1	14.1	13.0	13.4	13.9	14.2	15.2
	12H	11.9	12.2	12.7	13.0	14.0	13.0	13.3	13.8	14.1	15.1
4H	2H	12.1	12.6	12.9	13.3	14.3	13.2	13.6	14.0	14.4	15.3
	3H	11.9	12.3	12.7	13.1	14.1	13.0	13.3	13.8	14.1	15.1
	4H	11.8	12.1	12.6	12.9	13.9	12.8	13.2	13.7	14.0	15.0
	6H	11.6	11.9	12.5	12.8	13.8	12.7	13.0	13.6	13.8	14.9
	8H	11.6	11.8	12.5	12.7	13.8	12.6	12.9	13.5	13.8	14.8
	12H	11.5	11.7	12.4	12.6	13.7	12.6	12.8	13.5	13.7	14.8
8H	4H	11.6	11.8	12.5	12.7	13.8	12.6	12.9	13.5	13.8	14.8
	6H	11.4	11.6	12.4	12.5	13.6	12.5	12.7	13.4	13.6	14.7
	8H	11.4	11.5	12.3	12.4	13.6	12.4	12.6	13.4	13.5	14.6
	12H	11.3	11.4	12.2	12.4	13.5	12.4	12.5	13.3	13.4	14.6
12H	4H	11.5	11.7	12.4	12.6	13.7	12.6	12.8	13.5	13.7	14.8
	6H	11.4	11.5	12.3	12.4	13.6	12.4	12.6	13.4	13.5	14.6
	8H	11.3	11.4	12.2	12.4	13.5	12.4	12.5	13.3	13.4	14.6

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