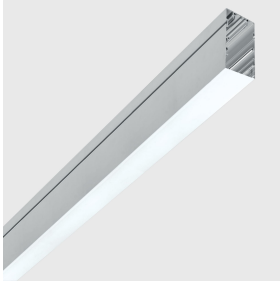# iN90

Last information update: April 2024

Product configuration: Q426+Q453.12
Q426: Minimal initial moduleDown Office / Working UGR < 19L 612
Q453.12: Plate - Down Office / Working UGR < 19 - Warm LED - DALI - L 598 - Aluminium

Product code
Q426: Minimal initial moduleDown Office / Working UGR < 19L 612

Technical description
Initial profile in extruded aluminium - Minimal (frameless) version for flush with ceiling mounting; micro-prismatic screen for controlled luminance emission UGR < 19 - 3000 cd/m2 (working lighting); screen set up for connecting several lengths by overlapping.

Installation
Installation can be recessed, surface, ceiling and pendant-mounted using suitable accessories to be ordered separately. The initial modules can be used individually for various applications if completed with accessory caps and the required LED module.

Colour	Weight (Kg)
White (01)* | Aluminium (12)*	1.9

* Colours on request

Mounting
ceiling recessed|wall surface|ceiling surface|ceiling pendant

Wiring
Set up to house the LED modules required by the system.

Notes
Take care with the system configuration. To make continuous lines of lighting, use the intermediate modules. To complete a continuous line correctly there must always be an initial module at the start or end of the composition.

Complies with EN60598-1 and pertinent regulations

Product code
Q453.12: Plate - Down Office / Working UGR < 19 - Warm LED - DALI - L 598 - Aluminium

Technical description
LED module set up for housing in initial or intermediate system profiles with screen for controlled luminance - down emission. DALI dimmable control gear integrated in the luminaire. Extruded aluminium heat sink; high emission yield flux enhancer. Warm LED.

Installation
Module insertion on profiles facilitated by a quick coupling system.

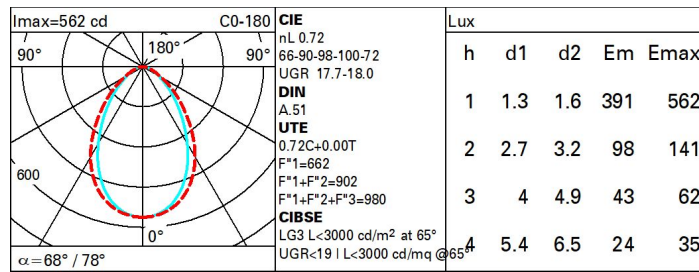| Colour	Weight (Kg)
Indeterminate (00)	0.81

Wiring
Quick coupling terminal block connection to simplify connections between the luminaires. LED module complete with integrated dimmable DALI control gear.

Complies with EN60598-1 and pertinent regulations

Technical data

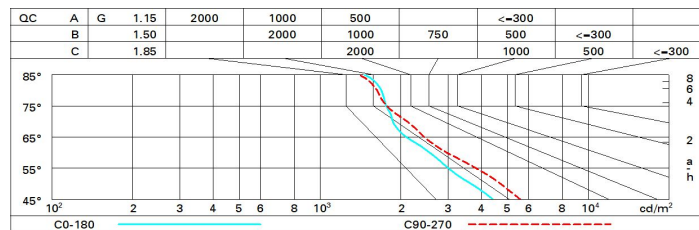|			
lm system:	900	Colour temperature [K]:	3000
W system:	8.4	MacAdam Step:	3
lm source:	1250	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
W source:	6.8	Voltage [Vin]:	230
Luminous efficiency (lm/W, real value):	107.1	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
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:	1
CRI (minimum):	80		

Polar

Imax=562 cd		C0-180	CIE				Lux				
90°	180°	90°	nL 0.72								
			66-90-98-100-72				h	d1	d2	Em	Emax
			UGR 17.7-18.0								
			DIN				1	1.3	1.6	391	562
600			A.51								
			UTE				2	2.7	3.2	98	141
			0.72C+0.00T								
			F"1=662								
		0°	F"1+F"2=902				3	4	4.9	43	62
			F"1+F"2+F"3=980								
			CIBSE								
α=68° / 78°			LG3 L<3000 cd/m² at 65°				4	5.4	6.5	24	35
			UGR<19 I L<3000 cd/mq @65°								

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

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 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 x	y			viewed crosswise					viewed endwise		
2H	2H	15.4	16.4	15.7	16.6	16.9	16.5	17.5	16.8	17.7	18.0
	3H	16.1	17.0	16.5	17.3	17.6	16.7	17.6	17.0	17.8	18.1
	4H	16.4	17.3	16.8	17.6	17.9	16.7	17.5	17.1	17.9	18.2
	6H	16.7	17.5	17.1	17.8	18.2	16.7	17.5	17.1	17.8	18.1
	8H	16.8	17.6	17.2	17.9	18.3	16.7	17.4	17.1	17.7	18.1
	12H	16.9	17.6	17.3	17.9	18.3	16.7	17.3	17.0	17.7	18.1
4H	2H	15.8	16.6	16.2	16.9	17.2	17.4	18.2	17.7	18.5	18.8
	3H	16.7	17.4	17.1	17.7	18.1	17.7	18.4	18.1	18.8	19.1
	4H	17.1	17.7	17.5	18.1	18.5	17.8	18.5	18.3	18.8	19.2
	6H	17.5	18.1	18.0	18.5	18.9	17.9	18.5	18.4	18.9	19.3
	8H	17.7	18.2	18.1	18.6	19.0	18.0	18.5	18.4	18.9	19.3
	12H	17.8	18.2	18.2	18.7	19.1	17.9	18.4	18.4	18.8	19.3
8H	4H	17.3	17.8	17.7	18.2	18.6	18.2	18.7	18.7	19.2	19.6
	6H	17.8	18.2	18.3	18.7	19.1	18.5	18.9	18.9	19.3	19.8
	8H	18.0	18.4	18.5	18.9	19.4	18.5	18.9	19.0	19.4	19.9
	12H	18.2	18.5	18.7	19.0	19.5	18.6	18.9	19.1	19.4	19.9
12H	4H	17.3	17.7	17.7	18.2	18.6	18.3	18.8	18.8	19.2	19.7
	6H	17.8	18.2	18.3	18.7	19.2	18.6	18.9	19.0	19.4	19.9
	8H	18.1	18.4	18.6	18.9	19.4	18.7	19.0	19.2	19.5	20.0

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