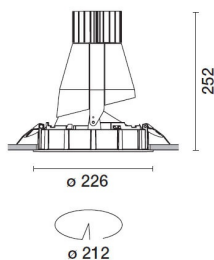


Last information update: April 2024

Product configuration: N109

N109: adjustable luminaire - Ø 212 mm - warm white - medium optic - frame

**Product code**

N109: adjustable luminaire - Ø 212 mm - warm white - medium optic - frame

Technical description

Round adjustable luminaire designed to use an LED lamp with C.O.B. technology in a warm white colour tone 3000K (CRI 90). Version with rim for surface-mounting. Lower reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Anodised aluminium upper reflector. Black, zinc-plated sheet steel bracket. The luminaire can be rotated 30° relative to the horizontal plane and 358° about the vertical axis. The luminaire is fitted with mechanical locks for light beam aiming. Painted extruded aluminium dissipater.

Installation

Installation flush with the ceiling is for false ceilings 12.5 mm thick

Colour

White / Aluminium (39)

Weight (Kg)

1.9

Mounting

ceiling recessed

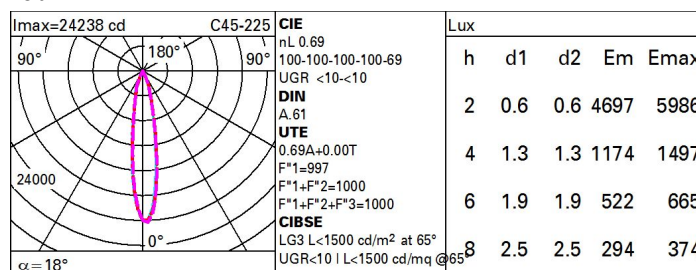
Wiring

Product complete with DALI components

Complies with EN60598-1 and pertinent regulations

**Technical data**

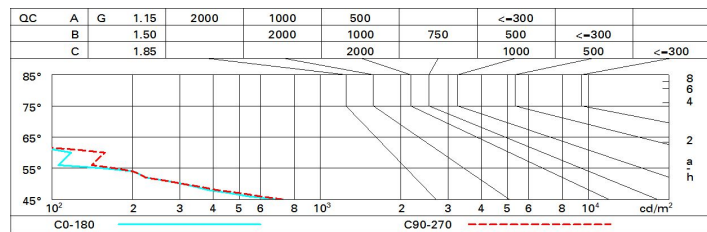
lm system:	3680	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
W system:	43	Lamp code:	LED
lm source:	5350	Number of lamps for optical assembly:	1
W source:	39	ZVEI Code:	LED
Luminous efficiency (lm/W, real value):	85.6	Number of optical assemblies:	1
lm in emergency mode:	-	Power factor:	See installation instructions
Total light flux at or above an angle of 90° [Lm]:	0	Inrush current:	30 A / 200 µs
Light Output Ratio (L.O.R.) [%]:	69	Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 12 luminaires B16A: 20 luminaires C10A: 20 luminaires C16A: 34 luminaires
Beam angle [°]:	18°	Minimum dimming %:	1
CRI (minimum):	90	Overvoltage protection:	2kV Common mode & 2kV Differential mode
Colour temperature [K]:	3000	Control:	DALI-2
MacAdam Step:	2		

Polar

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	62	59	57	55	58	56	56	54	78
1.0	65	62	60	58	61	59	59	57	83
1.5	68	66	64	63	65	64	63	61	89
2.0	70	69	67	66	68	66	66	64	93
2.5	71	70	69	69	69	68	68	66	96
3.0	72	71	71	70	70	70	69	67	98
4.0	73	72	72	72	71	71	70	68	99
5.0	74	73	73	73	72	72	71	69	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 5350 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
2H	2H	-4.2	-2.1	-3.8	-1.8	-1.4	-2.6	-0.5	-2.2	-0.1	0.2
	3H	-4.3	-2.7	-4.0	-2.4	-2.1	-2.7	-1.1	-2.4	-0.8	-0.5
	4H	-4.4	-3.1	-4.0	-2.8	-2.4	-2.8	-1.5	-2.4	-1.2	-0.8
	6H	-4.4	-3.5	-4.0	-3.1	-2.8	-2.8	-1.8	-2.4	-1.5	-1.2
	8H	-4.5	-3.5	-4.1	-3.2	-2.8	-2.9	-1.9	-2.5	-1.5	-1.2
	12H	-4.5	-3.5	-4.1	-3.2	-2.8	-2.9	-1.9	-2.5	-1.6	-1.2
4H	2H	-4.4	-3.1	-4.0	-2.8	-2.4	-2.8	-1.5	-2.4	-1.2	-0.8
	3H	-4.5	-3.5	-4.1	-3.2	-2.8	-2.9	-1.9	-2.5	-1.6	-1.2
	4H	-4.7	-3.6	-4.2	-3.2	-2.8	-3.1	-2.0	-2.6	-1.6	-1.2
	6H	-5.0	-3.3	-4.5	-2.8	-2.4	-3.4	-1.7	-2.9	-1.2	-0.8
	8H	-5.2	-3.2	-4.7	-2.8	-2.3	-3.5	-1.6	-3.1	-1.1	-0.6
	12H	-5.3	-3.3	-4.7	-2.8	-2.3	-3.6	-1.7	-3.1	-1.2	-0.7
8H	4H	-5.2	-3.2	-4.7	-2.8	-2.3	-3.6	-1.6	-3.1	-1.2	-0.6
	6H	-5.3	-3.5	-4.7	-3.0	-2.4	-3.7	-1.9	-3.1	-1.4	-0.8
	8H	-5.3	-3.7	-4.7	-3.2	-2.7	-3.7	-2.1	-3.1	-1.6	-1.1
	12H	-5.1	-4.1	-4.6	-3.6	-3.1	-3.5	-2.5	-3.0	-2.0	-1.5
12H	4H	-5.3	-3.3	-4.7	-2.8	-2.3	-3.6	-1.7	-3.1	-1.2	-0.7
	6H	-5.3	-3.7	-4.7	-3.2	-2.7	-3.7	-2.1	-3.1	-1.6	-1.1
	8H	-5.1	-4.1	-4.6	-3.6	-3.1	-3.5	-2.5	-3.0	-2.0	-1.5
Variations with the observer position at spacing:											
S =	1.0H	4.7 / -12.2					4.6 / -11.5				
	1.5H	7.5 / -15.8					7.4 / -15.9				
	2.0H	9.5 / -15.3					9.3 / -16.8				