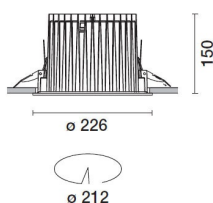


Last information update: May 2025

Product configuration: N228

N228: Fixed circular recessed luminaire - Ø212 mm - warm white - flood optic - UGR<19

**Product code**

N228: Fixed circular recessed luminaire - Ø212 mm - warm white - flood optic - UGR<19

Technical description

Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version with rim for surface-mounting. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in warm white colour tone CRI 90 (3000K). General light emission, with controlled luminance UGR<19 1500 cd/m² α>65° flood optic.

Installation

Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

Colour

White / Aluminium (39)

Weight (Kg)

1.95

Mounting

ceiling recessed

Wiring

product complete with DALI components

Notes

TPb rated

Complies with EN60598-1 and pertinent regulations

**Technical data**

lm system:	4590	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
W system:	43.4	Lamp code:	LED
lm source:	5400	Number of lamps for optical assembly:	1
W source:	39	ZVEI Code:	LED
Luminous efficiency (lm/W, real value):	105.8	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.) [%]:	85	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 [°]:	26°	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

Imax=17744 cd		CIE		Lux			
90°		nL 0.85		h	d	Em	Emax
180°		100-100-100-100-85		2	0.9	3710	4434
90°		DIN		4	1.8	927	1108
0°		A.61		6	2.8	412	493
α = 26°		UTE		8	3.7	232	277
		0.85A+0.00T					
		F*1=999					
		F*1+F*2=1000					
		F*1+F*2+F*3=1000					
		CIBSE					
		LG3 L<1500 cd/m ² at 65°					

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	77	73	70	68	72	70	69	67	78
1.0	80	77	74	72	76	74	73	71	83
1.5	84	81	79	78	80	79	78	75	89
2.0	87	85	83	82	84	82	81	79	93
2.5	88	87	86	85	86	85	84	81	96
3.0	89	88	87	87	87	86	85	83	98
4.0	90	90	89	89	88	88	87	84	99
5.0	91	90	90	90	89	89	87	85	100
