

Last information update: May 2018

**Fixed circular recessed luminaire - Ø125 mm - warm white - wide flood optic - UGR<19****Product code**

N221

Technical description

Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version without rim for mounting flush with ceiling. 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 (3000K). General light emission, with controlled luminance UGR<19 1500 cd/m² $\alpha > 65^\circ$ wide flood optic.

Installation

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

Dimension (mm)

Ø123x111

Colour

Aluminium (12)

Weight (Kg)

1.08

Mounting

ceiling recessed

Wiring

product complete with DALI components

Complies with EN60598-1 and pertinent regulations



IP20



IP43

On the visible part of the product once installed

**Product configuration: N221****Product characteristics**

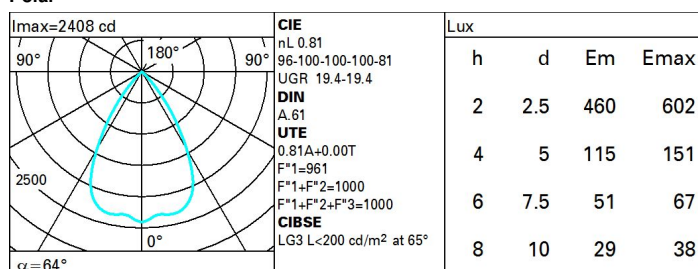
Total lighting output [Lm]: 2429
Total power [W]: 24.7
Luminous efficacy [Lm/W]: 98.3
Life Time: 50,000h - L80 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 81
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 22
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: 64°

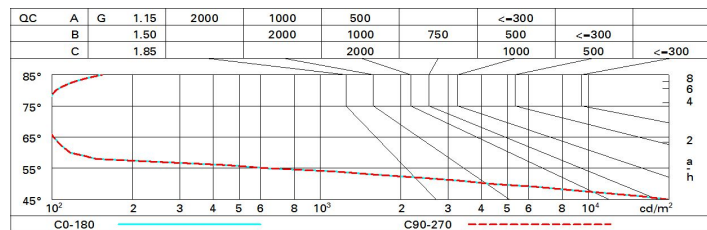
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.7
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

Polar

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	72	68	65	63	67	64	64	61	76
1.0	75	72	69	67	71	68	68	65	81
1.5	79	77	74	73	76	74	73	70	87
2.0	82	80	78	77	79	77	77	74	92
2.5	84	82	81	80	81	80	79	77	95
3.0	85	84	83	82	82	81	80	78	97
4.0	86	85	84	84	83	83	82	80	98
5.0	86	86	85	85	84	84	82	80	99

Luminance curve limit



UGR diagram

Corrected UGR values (at 3000 lm bare lamp luminous flux)											
Reflect.: ceiling walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise				
2H	2H	20.0	20.6	20.3	20.8	21.1	20.0	20.6	20.3	20.8	21.1
	3H	19.9	20.4	20.2	20.7	20.9	19.9	20.4	20.2	20.7	20.9
	4H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	6H	19.7	20.2	20.1	20.5	20.8	19.7	20.2	20.1	20.5	20.8
	8H	19.7	20.1	20.0	20.4	20.8	19.7	20.1	20.0	20.4	20.8
	12H	19.6	20.1	20.0	20.4	20.8	19.6	20.1	20.0	20.4	20.8
4H	2H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	3H	19.6	20.1	20.0	20.4	20.8	19.6	20.1	20.0	20.4	20.8
	4H	19.6	19.9	20.0	20.3	20.7	19.6	19.9	20.0	20.3	20.7
	6H	19.5	19.8	19.9	20.2	20.6	19.5	19.8	19.9	20.2	20.6
	8H	19.4	19.7	19.9	20.1	20.6	19.4	19.7	19.9	20.1	20.6
	12H	19.4	19.6	19.8	20.1	20.5	19.4	19.6	19.8	20.1	20.5
8H	4H	19.4	19.7	19.9	20.1	20.6	19.4	19.7	19.9	20.1	20.6
	6H	19.3	19.6	19.8	20.0	20.5	19.3	19.6	19.8	20.0	20.5
	8H	19.3	19.5	19.8	19.9	20.4	19.3	19.5	19.8	19.9	20.4
	12H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4
12H	4H	19.4	19.6	19.8	20.1	20.5	19.4	19.6	19.8	20.1	20.5
	6H	19.3	19.5	19.8	19.9	20.4	19.3	19.5	19.8	19.9	20.4
	8H	19.2	19.4	19.7	19.9	20.4	19.2	19.4	19.7	19.9	20.4
Variations with the observer position at spacing:											
S =		1.0H	4.7 / -26.2				4.7 / -26.2				
		1.5H	7.5 / -31.2				7.5 / -31.2				
		2.0H	9.5 / -31.4				9.5 / -31.4				