Reflex

Design iGuzzini **iGuzzini**

Last information update: April 2025

Product configuration: N224
N224: Fixed circular recessed luminaire - Ø212 mm - neutral white - flood optic - UGR<19

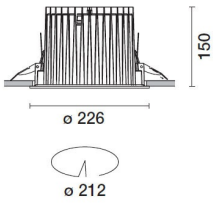
Product code
N224: Fixed circular recessed luminaire - Ø212 mm - neutral white - flood optic - UGR<19 **Attention! Code no longer in production**

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 neutral white colour tone (4,000K). 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 an electronic ballast

Notes

TPb rated

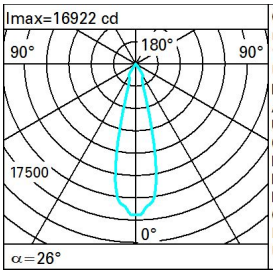
Complies with EN60598-1 and pertinent regulations

IP20 IP54 On the visible part of the product once installed

Technical data

lm system:	4378	CRI (minimum):	80
W system:	35.4	Colour temperature [K]:	4000
lm source:	5150	MacAdam Step:	2
W source:	31	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	123.7	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.) [%]:	85	Number of optical assemblies:	1
Beam angle [°]:	26°		

Polar



CIE
nL 0.85
100-100-100-100-85
UGR 11.7-11.7
DIN
A.61
UTE
0.85A+0.00T
F"1=999
F"1+F"2=1000
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	d	Em	Emax
2	0.9	3538	4229
4	1.8	885	1057
6	2.8	393	470
8	3.7	221	264

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

UGR diagram

Corrected UGR values (at 5150 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 crosswise					viewed endwise		
x	y										
2H	2H	12.6	14.6	13.0	14.9	15.2	12.6	14.6	13.0	14.9	15.2
	3H	12.5	13.9	12.9	14.2	14.6	12.5	13.9	12.9	14.2	14.6
	4H	12.4	13.7	12.8	14.0	14.3	12.4	13.7	12.8	14.0	14.3
	6H	12.4	13.4	12.7	13.8	14.1	12.4	13.4	12.7	13.8	14.1
	8H	12.3	13.4	12.7	13.7	14.1	12.3	13.4	12.7	13.7	14.1
	12H	12.3	13.3	12.7	13.7	14.0	12.3	13.3	12.7	13.7	14.0
4H	2H	12.4	13.7	12.8	14.0	14.3	12.4	13.7	12.8	14.0	14.3
	3H	12.3	13.3	12.7	13.7	14.0	12.3	13.3	12.7	13.7	14.0
	4H	12.1	13.1	12.6	13.5	13.9	12.1	13.1	12.6	13.5	13.9
	6H	11.9	13.3	12.3	13.7	14.2	11.9	13.3	12.3	13.7	14.2
	8H	11.7	13.4	12.2	13.8	14.3	11.7	13.4	12.2	13.8	14.3
	12H	11.6	13.4	12.1	13.9	14.4	11.6	13.4	12.1	13.9	14.4
8H	4H	11.7	13.4	12.2	13.8	14.3	11.7	13.4	12.2	13.8	14.3
	6H	11.6	13.2	12.1	13.7	14.2	11.6	13.2	12.1	13.7	14.2
	8H	11.6	13.0	12.1	13.5	14.0	11.6	13.0	12.1	13.5	14.0
	12H	11.7	12.7	12.2	13.2	13.7	11.7	12.7	12.2	13.2	13.7
12H	4H	11.6	13.4	12.1	13.9	14.4	11.6	13.4	12.1	13.9	14.4
	6H	11.6	13.0	12.1	13.5	14.0	11.6	13.0	12.1	13.5	14.0
	8H	11.7	12.7	12.2	13.2	13.7	11.7	12.7	12.2	13.2	13.7

Variations with the observer position at spacing:

S =			
	1.0H	6.7 / -31.5	6.7 / -31.5
	1.5H	9.5 / -31.8	9.5 / -31.8
	2.0H	11.5 / -32.1	11.5 / -32.1