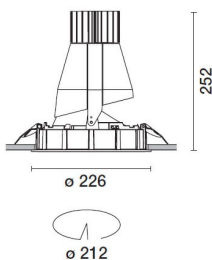


Last information update: June 2023

Product configuration: N104

N104: adjustable luminaire - Ø 212 mm - warm white - flood optic - frame

**Product code**N104: adjustable luminaire - Ø 212 mm - warm white - flood optic - frame **Attention! Code no longer in production****Technical description**

Round adjustable luminaire designed to use an LED lamp with C.O.B. technology in a warm white colour tone 3000K. Version without rim for mounting flush with ceiling. 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 electronic components

Complies with EN60598-1 and pertinent regulations

**Technical data**

lm system:	3310	CRI (minimum):	80
W system:	36	Colour temperature [K]:	3000
lm source:	5100	MacAdam Step:	2
W source:	32	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	92	Ballast losses [W]:	4
lm in emergency mode:	-	Lamp code:	LED
Total light flux at or above an angle of 90° [Lm]:	0	Number of lamps for optical assembly:	1
Light Output Ratio (L.O.R.) [%]:	65	ZVEI Code:	LED
Beam angle [°]:	32° / 31°	Number of optical assemblies:	1

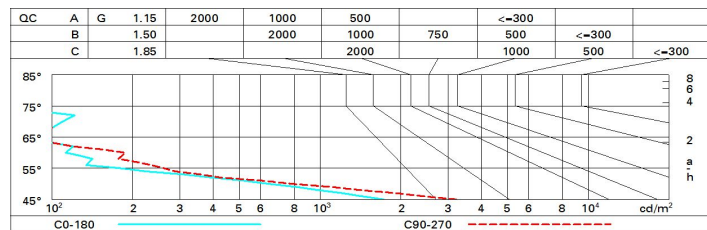
Polar

Imax=10419 cd		C145-325		CIE		Lux	
h	d1	d2	Em	Emax			
2	1.1	1.1	1993	2594	nL 0.65 99-100-100-100-65 UGR <10-10		
4	2.3	2.2	498	648	DIN A.61 UTE 0.65A+0.00T F*1=991 F*1+F*2=1000 F*1+F*2+F*3=1000		
6	3.4	3.3	221	288	CIBSE LG3 L<1500 cd/m² at 65° UGR<10 L<1500 cd/mq @65°		
8	4.6	4.4	125	162			

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	58	55	53	52	55	53	53	50	78
1.0	61	58	56	55	58	56	56	53	82
1.5	64	62	60	59	61	60	59	57	88
2.0	66	65	63	62	64	63	62	60	93
2.5	67	66	65	65	65	64	64	62	96
3.0	68	67	67	66	66	66	65	63	98
4.0	69	68	68	67	67	67	66	64	99
5.0	69	69	69	68	68	68	67	65	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 5100 lm bare lamp luminous flux)											
Riflect.: ceil/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
		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
2H	2H	7.2	7.8	7.5	8.0	8.2	5.7	6.3	6.0	6.5	6.7
	3H	7.1	7.6	7.4	7.9	8.1	5.6	6.1	5.9	6.4	6.6
	4H	7.0	7.5	7.3	7.8	8.1	5.5	6.0	5.9	6.3	6.6
	6H	6.9	7.4	7.3	7.7	8.0	5.5	5.9	5.8	6.2	6.5
	8H	6.9	7.3	7.3	7.6	8.0	5.4	5.8	5.8	6.2	6.5
	12H	6.9	7.3	7.2	7.6	7.9	5.4	5.8	5.8	6.1	6.5
4H	2H	7.0	7.5	7.3	7.8	8.1	5.5	6.0	5.9	6.3	6.6
	3H	6.9	7.3	7.2	7.6	8.0	5.4	5.8	5.8	6.1	6.5
	4H	6.8	7.1	7.2	7.5	7.9	5.3	5.6	5.7	6.0	6.4
	6H	6.7	7.0	7.1	7.4	7.8	5.2	5.5	5.6	5.9	6.3
	8H	6.7	6.9	7.1	7.3	7.8	5.2	5.4	5.6	5.9	6.3
	12H	6.6	6.9	7.1	7.3	7.7	5.1	5.4	5.6	5.8	6.3
8H	4H	6.7	6.9	7.1	7.3	7.8	5.2	5.4	5.6	5.9	6.3
	6H	6.6	6.8	7.0	7.2	7.7	5.1	5.3	5.5	5.7	6.2
	8H	6.5	6.7	7.0	7.2	7.7	5.0	5.2	5.5	5.7	6.2
	12H	6.4	6.6	7.0	7.1	7.6	5.0	5.1	5.5	5.6	6.1
12H	4H	6.6	6.9	7.1	7.3	7.7	5.1	5.4	5.6	5.8	6.2
	6H	6.5	6.7	7.0	7.2	7.7	5.0	5.2	5.5	5.7	6.2
	8H	6.4	6.6	7.0	7.1	7.6	5.0	5.1	5.5	5.6	6.1
Variations with the observer position at spacing:											
S =	1.0H	6.3 / -17.3					4.4 / -14.5				
	1.5H	9.1 / -18.8					7.2 / -18.5				
	2.0H	11.1 / -20.7					9.2 / -22.0				