

Last information update: May 2018



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

Product code
N104

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

Dimension (mm)
Ø226x252

Colour
White/Aluminium (39)

Weight (Kg)
1.95

Mounting

ceiling recessed

Wiring

Product complete with electronic components

Complies with EN60598-1 and pertinent regulations



Product configuration: N104

Product characteristics

Total lighting output [Lm]: 3245.5
Total power [W]: 35.9
Luminous efficacy [Lm/W]: 90.4
Life Time: 50,000h - L80 - B10 (Ta 25°C)

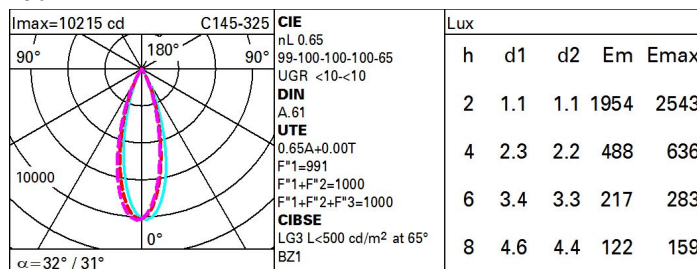
Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 65
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 33
Nominal luminous [Lm]: 5000
Lamp maximum intensity [cd]: /
Beam angle [°]: 32° / 31°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.9
Colour temperature [K]: 3000
CRI: 80
Wavelength [Nm]: /
MacAdam Step: 2

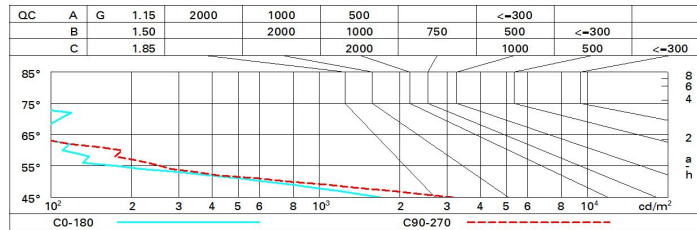
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	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 5000 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceiling	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											
x	y										
2H	2H	7.2	7.7	7.4	7.9	8.2	5.7	6.2	5.9	6.4	6.7
	3H	7.0	7.5	7.3	7.8	8.1	5.5	6.0	5.8	6.3	6.6
	4H	7.0	7.4	7.3	7.7	8.0	5.5	5.9	5.8	6.2	6.5
	6H	6.9	7.3	7.2	7.6	7.9	5.4	5.8	5.7	6.1	6.5
	8H	6.8	7.2	7.2	7.6	7.9	5.4	5.8	5.7	6.1	6.4
	12H	6.8	7.2	7.2	7.5	7.9	5.3	5.7	5.7	6.0	6.4
4H	2H	7.0	7.4	7.3	7.7	8.0	5.5	5.9	5.8	6.2	6.5
	3H	6.8	7.2	7.2	7.5	7.9	5.3	5.7	5.7	6.0	6.4
	4H	6.7	7.1	7.1	7.4	7.8	5.2	5.6	5.6	5.9	6.3
	6H	6.6	6.9	7.1	7.3	7.7	5.1	5.4	5.6	5.8	6.3
	8H	6.6	6.9	7.0	7.3	7.7	5.1	5.4	5.5	5.8	6.2
	12H	6.5	6.8	7.0	7.2	7.7	5.0	5.3	5.5	5.7	6.2
8H	4H	6.6	6.9	7.0	7.3	7.7	5.1	5.4	5.5	5.8	6.2
	6H	6.5	6.7	7.0	7.2	7.6	5.0	5.2	5.5	5.7	6.1
	8H	6.4	6.6	6.9	7.1	7.6	4.9	5.1	5.4	5.6	6.1
	12H	6.4	6.6	6.9	7.0	7.6	4.9	5.1	5.4	5.5	6.1
12H	4H	6.5	6.8	7.0	7.2	7.7	5.0	5.3	5.5	5.7	6.2
	6H	6.4	6.6	6.9	7.1	7.6	4.9	5.1	5.4	5.6	6.1
	8H	6.4	6.6	6.9	7.0	7.6	4.9	5.1	5.4	5.5	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				