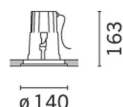


Last information update: May 2018

**Ceiling-mounted recessed luminaire with IP66 protection rating, small body, Neutral White COB Leds, fixed Flood Optic****Product code**

BV28

Technical description

Downlighter designed to use Neutral White COB Led lamps with a fixed Flood optic. Consists of a round optical assembly, frame, output cable, and outer casing, to be ordered separately where necessary. The optical assembly and frame are made of EN1706AC 46100LF aluminium alloy and subjected to a multi-step, pre-treatment process, in which the main phases are degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The next painting stage consists of a primer and a liquid acrylic paint, cured at 150°C, with a high level of weather and UV ray resistance. The tempered sodium-calcium sealing glass is transparent, with customised serigraphy on the edge, 4 mm thick, joined to the frame with silicone. Complete with monochrome Neutral White COB LED circuit and an optic with a 99.93% polished super-pure aluminium reflector with a polished, anodized surface and built-in electronic ballast. Supplied with an output cable L=1m long. Ceiling-mounting system consists of special A2 stainless steel screws complete with black aluminium alloy and plastic coupling supports. The frame comes complete with A2 stainless steel captive screws. There is a single tool (No. 3 Allen key) for opening the frame and for the fixing system. The outer casing for concrete ceilings is made of black-painted ready-galvanised sheet aluminium complete with an end cap and threaded bar, to be ordered separately. All external screws used are made of A2 stainless steel.

Installation

Recessed in false ceilings 5 - 50mm thick. Hole for preparation of false ceiling $\varnothing=125$ mm. Installed on concrete ceilings using an outer casing, to be ordered separately.

Dimension (mm) $\varnothing 140 \times 163$ **Colour**

Grey (15)

Weight (Kg)

0.95

Mounting

ceiling recessed

Wiring

Control gear complete with electronic ballast (220÷240Vac 50/60Hz)

Notes

Plastic adapter disk available for flush-mounting the frame on ceilings made of concrete exposed to view (can only be used with the product with aluminium frame, without the stainless cover). Products set up for installation of a stainless steel safety kit L=2000mm.

Complies with EN60598-1 and pertinent regulations

**Product configuration: BV28****Product characteristics**

Total lighting output [Lm]: 1367
 Total power [W]: 13.5
 Luminous efficacy [Lm/W]: 101.3
 Life Time: 100,000h - L80 - B10 (Ta 25°C)
 Ambient temperature range: from -20°C to +35°C.

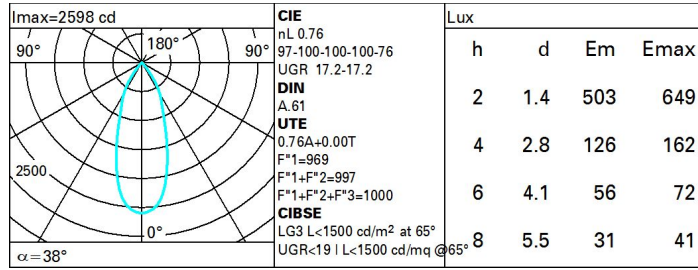
Total luminous flux at or above an angle of 90° [Lm]: 0
 Emergency luminous flux [Lm]: /
 Voltage [V]: -
 Life Time: 93,000h - L80 - B10 (Ta 40°C)
 Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 76
 Lamp code: LED
 ZVEI Code: LED
 Nominal power [W]: 12
 Nominal luminous [Lm]: 1800
 Lamp maximum intensity [cd]: /
 Beam angle [°]: 38°

Number of lamps for optical assembly: 1
 Socket: /
 Ballast losses [W]: 1.5
 Colour temperature [K]: 4000
 CRI: 80
 Wavelength [Nm]: /
 MacAdam Step: 2

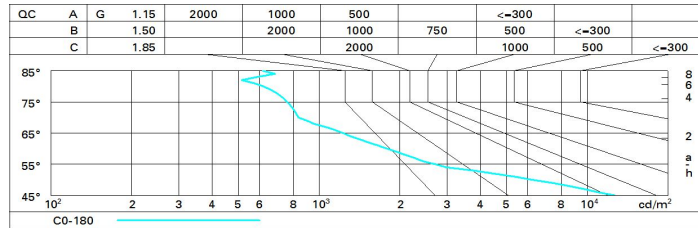
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	68	64	61	59	63	61	60	58	76
1.0	71	67	65	63	67	64	64	61	81
1.5	75	72	70	68	71	69	69	66	87
2.0	77	75	74	72	74	73	72	70	92
2.5	78	77	76	75	76	75	74	72	95
3.0	79	78	78	77	77	76	75	74	97
4.0	80	80	79	79	78	78	77	75	99
5.0	81	80	80	80	79	79	77	76	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1800 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
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		viewed crosswise					viewed endwise				
x	y										
2H	2H	17.7	18.4	18.0	18.6	18.9	17.7	18.4	18.0	18.6	18.9
	3H	17.6	18.2	17.9	18.5	18.7	17.6	18.2	17.9	18.5	18.7
	4H	17.5	18.1	17.9	18.4	18.7	17.5	18.1	17.9	18.4	18.7
	6H	17.4	18.0	17.8	18.3	18.6	17.4	17.9	17.8	18.3	18.6
	8H	17.4	17.9	17.8	18.2	18.6	17.4	17.9	17.8	18.2	18.6
	12H	17.4	17.8	17.7	18.2	18.5	17.4	17.8	17.7	18.2	18.5
4H	2H	17.5	18.1	17.9	18.4	18.7	17.5	18.1	17.9	18.4	18.7
	3H	17.4	17.8	17.8	18.2	18.5	17.4	17.8	17.8	18.2	18.5
	4H	17.3	17.7	17.7	18.1	18.5	17.3	17.7	17.7	18.1	18.5
	6H	17.2	17.6	17.6	18.0	18.4	17.2	17.6	17.6	18.0	18.4
	8H	17.2	17.5	17.6	17.9	18.3	17.2	17.5	17.6	17.9	18.3
	12H	17.1	17.4	17.6	17.8	18.3	17.1	17.4	17.6	17.8	18.3
8H	4H	17.2	17.5	17.6	17.9	18.3	17.2	17.5	17.6	17.9	18.3
	6H	17.1	17.3	17.5	17.8	18.3	17.1	17.3	17.5	17.8	18.3
	8H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	12H	17.0	17.2	17.5	17.7	18.2	17.0	17.2	17.5	17.7	18.2
12H	4H	17.1	17.4	17.6	17.8	18.3	17.1	17.4	17.6	17.8	18.3
	6H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	8H	17.0	17.2	17.5	17.7	18.2	17.0	17.2	17.5	17.7	18.2
Variations with the observer position at spacing:											
S =	1.0H	5.2 / -12.6					5.2 / -12.6				
	1.5H	8.0 / -14.5					8.0 / -14.5				
	2.0H	10.0 / -15.7					10.0 / -15.7				