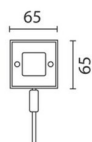
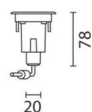


Last information update: October 2023

**Product configuration: BB48+B976.04**BB48: small body with swivel optic  $\pm 7^\circ$ 

B976.04: Outer casing in aluminium for concrete wall installation + end cap - Black

**Product code**BB48: small body with swivel optic  $\pm 7^\circ$  **Attention! Code no longer in production****Technical description**

Luminaire designed to use white LEDs for illumination purposes that can be recessed, wall-mounted, applied to the floor or into a garden. It is made up of main body, closing glass, frame and outer casing (upon request). The small square body is made of high-resistance plastic material. The AISI 304-stainless-steel frame is 2.5 mm thick. It has two AISI 304-stainless-steel captive screws (used to anchor the body to the outer casing) and welded stud bolts. The outer casing used for installation must be ordered separately from the optical assembly. It is made of either painted cast aluminium (wall or floor application) or plastic material (garden installation). The optical assembly is closed at the top by a transparent hardened sodium-lime glass 8 mm thick. Black silicone rubber gaskets ensure perfect tightness. The body is fixed to the frame/glass unit by means of turned elements in stainless steel AISI 304. The product comes complete with antiglare spill rings in thermoplastic material and plastic lenses with  $10^\circ$  cones. An AISI-304 stainless-steel cable clamp M14x1 is used on the wiring system. The product comes complete with power supply cable L = 300 mm type H05RN-F 2x1 mm<sup>2</sup>. The power supply cable includes an anti-transpiration device. The product can be inclined around the horizontal axis by  $\pm 7^\circ$  and can rotate around the vertical axis by  $355^\circ$ . The unit made up of frame, glass, optical assembly and outer casing ensures resistance to 1000-kg static load (500 Kg in the version with plastic outer casing) in compliance with Standard EN60598-2-13. The LEDs are controlled by means of Effect Equalizer. Maximum glass surface temperature is lower than  $40^\circ\text{C}$ . All external screws are made of stainless steel AISI 304.

**Installation**

Recessed application by means of an outer casing for embedding (to be ordered separately). The outer casing is available in the 100-mm painted cast-aluminium version complete with end cap (application to the wall or into the ground) or in the 150-mm plastic version (garden installation).

**Colour**

Steel (13)

**Mounting**

wall recessed/ground recessed

**Wiring**

The product comes complete with an outgoing power-supply cord (L = 300 mm) H05RNF 2x1 mm<sup>2</sup> type and an electronic plate with LED 4V DC. Power supply only with code 9913 to be ordered separately.

**Notes**

Fitting complete with lamp. Cool white (6700K), green and amber colours available upon request.

Complies with EN60598-1 and pertinent regulations

**Accessory code**B976.04: Outer casing in aluminium for concrete wall installation + end cap - Black **Attention! Code no longer in production****Technical description**

Aluminium casing for installation on cement concrete walls + top end cap for B294-B295-B297-B299-B300-B304-B305

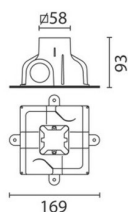
**Colour**

Black (04)

**Weight (Kg)**

0.45

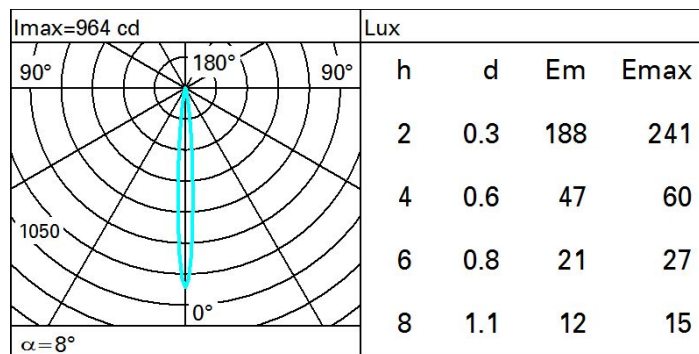
Complies with EN60598-1 and pertinent regulations



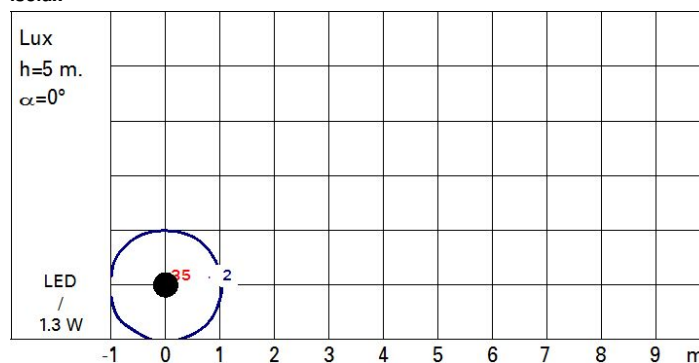
# Technical data

Im system:	43	MacAdam Step:	3
W system:	1.3	Life Time LED 1:	84,000h - L80 - B10 (Ta 25°C)
Im source:	80	Ballast losses [W]:	0.3
W source:	1	Voltage [Vin]:	4
Luminous efficiency (Im/W, real value):	33.1	Lamp code:	LED
Im 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.) [%]:	54	Number of optical assemblies:	1
Beam angle [°]:	8°	Intervallo temperatura ambiente:	from -20°C to +35°C.
CRI:	80	LED current [mA]:	350
Colour temperature [K]:	3000		

## Polar



## Isolux



# UGR diagram

Corrected UGR values (at 88 lm bare lamp luminous flux)											
Reflect.: ceiling/cav 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	2.3	4.2	2.6	4.5	4.8	2.3	4.2	2.6	4.5	4.8
	3H	2.2	3.3	2.5	3.6	4.0	2.2	3.3	2.5	3.6	4.0
	4H	2.1	3.0	2.5	3.3	3.6	2.1	3.0	2.5	3.3	3.6
	6H	2.1	2.7	2.5	3.0	3.4	2.1	2.7	2.5	3.0	3.4
	8H	2.0	2.8	2.4	3.1	3.4	2.0	2.8	2.4	3.1	3.4
	12H	1.9	2.8	2.3	3.2	3.5	1.9	2.8	2.3	3.2	3.5
4H	2H	2.1	3.0	2.5	3.3	3.6	2.1	3.0	2.5	3.3	3.6
	3H	1.9	2.8	2.3	3.2	3.5	1.9	2.8	2.3	3.2	3.5
	4H	1.7	2.9	2.1	3.3	3.7	1.7	2.9	2.1	3.3	3.7
	6H	1.4	3.1	1.9	3.6	4.0	1.4	3.1	1.9	3.6	4.0
	8H	1.3	3.1	1.8	3.6	4.1	1.3	3.1	1.8	3.6	4.1
	12H	1.2	3.0	1.7	3.5	4.0	1.2	3.0	1.7	3.5	4.0
8H	4H	1.3	3.1	1.8	3.6	4.1	1.3	3.1	1.8	3.6	4.1
	6H	1.2	2.8	1.7	3.2	3.8	1.2	2.8	1.7	3.2	3.8
	8H	1.3	2.5	1.8	2.9	3.5	1.3	2.5	1.8	2.9	3.5
	12H	1.4	2.1	1.9	2.6	3.1	1.4	2.1	1.9	2.6	3.1
12H	4H	1.2	3.0	1.7	3.5	4.0	1.2	3.0	1.7	3.5	4.0
	6H	1.3	2.5	1.8	2.9	3.5	1.3	2.5	1.8	2.9	3.5
	8H	1.4	2.1	1.9	2.6	3.1	1.4	2.1	1.9	2.6	3.1
Variations with the observer position at spacing:											
S =		1.0H	0.9 / -2.8		0.9 / -2.8						
		1.5H	2.3 / -9.8		2.3 / -9.8						
		2.0H	2.8 / -12.8		2.8 / -12.8						