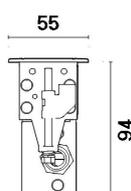


Last information update: May 2018

**Mini Linear Recessed Luminaire - Warm White LEDs - 48Vdc DALI - L=1080mm - Flood Optic and non-slip glass****Product code**

BW45

Technical description

Direct light luminaire, designed to use Warm White monochrome LED lamps, 48V dc with DALI control, and a flood optic with non-slip glass. Ground-, wall- and ceiling-recessed. Consists of a body, a lower box for the Dali driver and an outer casing for installation to be ordered separately. Extruded aluminium body and box, with die-cast aluminium end caps complete with silicone seals. The painting process includes 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 following 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 top of the optical assembly is closed by an 8 mm thick non-slip glass screen (conforming to class R13 in accordance with DIN 51130), fixed with silicone. Complete with multi-LED plate in Warm White, and a lower box with 48V dc Dali electronic driver (ballast to be ordered separately). The lower box has two PG13.5 nickel-plated brass cable glands and outgoing cables for pass-through wiring. Fitted with optics with plastic (methacrylate) lens for Flood lighting. To fix the optical assembly to the outer casing or false ceiling the product has a quick coupling system using an Allen key. Outer casing for installation made of aluminium with technopolymer covers, to be ordered separately. All external screws used are made of A2 stainless steel. The luminaire technical characteristics conform to EN 60598-1 standards and particular requirements.

Installation

Ground- and wall-recessed using the outer casing, to be ordered separately. For ground installation a drainage channel must be created or gravel inserted for drainage under the outer casing before installation, to guarantee the degree of protection stated. For ceiling-mounting with plasterboard panels (1-30 mm thick), make the preparation openings as indicated in the instructions sheet and use the accessory with code X013 (kit containing steel cables with reinforcement plates).

Dimension (mm)

1080x55x94

Colour

Grey (15)

Weight (Kg)

2.81

Mounting

wall recessed|ceiling recessed|ground recessed

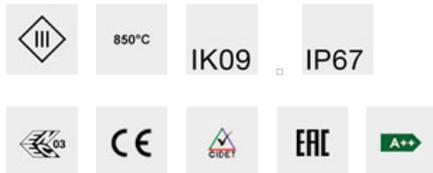
Wiring

Complete with 48V dc Dali electronic driver mounted in the lower box. Box supplied with double PG13.5 cable gland and 05RN-F rubber output cables 4x (2x1.5mm²+2x0.35mm²) for pass-through wiring: each cable is wired for both the Dali signal and the 48V dc power supply. For the electrical connection there are 5-pole IP68 linear connectors (BZS6), a cap for the IP68 (BZQ7) connectors, a 5-pole Y connector for the connection between the DALI signal cable and the power supply cable (BZN7) and DIN 48V dc bar electronic ballasts to be ordered separately.

Notes

Product complete with LED lamp. The frame, glass, optical assembly and outer casing together guarantee a maximum static load of 1000 kg. The electronic card consumes 1 Dali load, occupies 1 Dali address and is equipped with a DIRECT DIM that adjusts lighting by means of a standard button with the following functions: Soft ON/OFF, dimming, last lighting level recall.

Complies with EN60598-1 and pertinent regulations

**Product configuration: BW45****Product characteristics**

Total lighting output [Lm]: 431.8

Total power [W]: 14.1

Luminous efficacy [Lm/W]: 30.6

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]: 48

Life Time: 84,000h - L80 - B10 (Ta 40°C)

Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 40

Lamp code: LED

ZVEI Code: LED

Nominal power [W]: 12

Nominal luminous [Lm]: 1080

Lamp maximum intensity [cd]: /

Beam angle [°]: 46°

Number of lamps for optical assembly: 1

Socket: /

Ballast losses [W]: 2.1

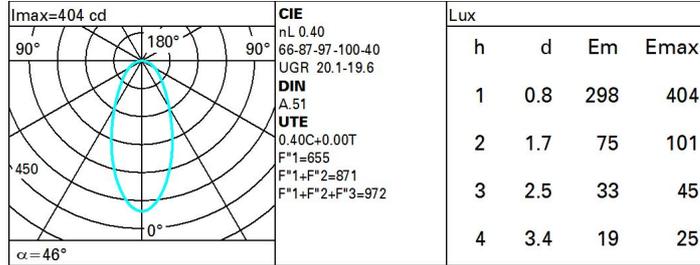
Colour temperature [K]: 3000

CRI: 80

Wavelength [Nm]: /

MacAdam Step: 3

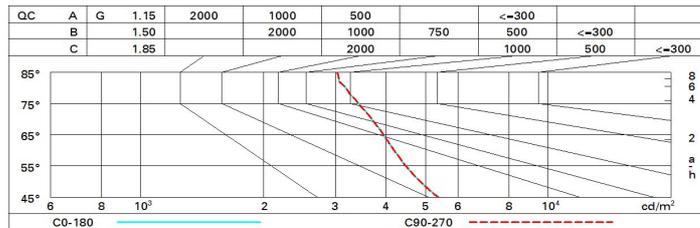
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	30	26	24	22	26	24	23	21	53
1.0	32	29	26	25	28	26	26	24	59
1.5	35	33	31	29	32	30	30	28	70
2.0	37	35	34	32	35	33	33	31	77
2.5	39	37	36	34	36	35	34	33	82
3.0	39	38	37	36	37	36	36	34	85
4.0	40	39	38	37	38	38	37	35	89
5.0	41	40	39	39	39	39	38	36	91

Luminance curve limit



UGR diagram

Corrected UGR values (at 1080 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	16.6	17.6	16.9	17.9	18.2	16.6	17.6	16.9	17.9	18.2
	3H	17.9	18.8	18.3	19.1	19.4	17.0	18.0	17.4	18.2	18.5
	4H	18.5	19.3	18.8	19.6	19.9	17.2	18.0	17.5	18.4	18.7
	6H	18.9	19.7	19.3	20.0	20.3	17.2	18.0	17.6	18.4	18.7
	8H	19.0	19.8	19.4	20.1	20.5	17.2	18.0	17.6	18.3	18.7
	12H	19.1	19.9	19.5	20.2	20.6	17.2	18.0	17.6	18.3	18.7
4H	2H	17.2	18.0	17.5	18.4	18.7	18.5	19.3	18.8	19.6	19.9
	3H	18.7	19.4	19.1	19.8	20.1	19.1	19.8	19.5	20.2	20.5
	4H	19.3	20.0	19.8	20.4	20.8	19.3	20.0	19.8	20.4	20.8
	6H	19.9	20.5	20.3	20.9	21.3	19.5	20.1	20.0	20.5	20.9
	8H	20.1	20.6	20.5	21.0	21.5	19.6	20.1	20.0	20.5	21.0
	12H	20.2	20.7	20.7	21.2	21.6	19.6	20.1	20.1	20.5	21.0
8H	4H	19.6	20.1	20.0	20.5	21.0	20.1	20.6	20.5	21.0	21.5
	6H	20.3	20.7	20.8	21.2	21.7	20.4	20.9	20.9	21.3	21.8
	8H	20.6	20.9	21.1	21.4	21.9	20.6	20.9	21.1	21.4	21.9
	12H	20.8	21.1	21.3	21.6	22.1	20.7	21.0	21.2	21.5	22.0
12H	4H	19.6	20.1	20.1	20.5	21.0	20.2	20.7	20.7	21.2	21.6
	6H	20.3	20.7	20.8	21.2	21.7	20.6	21.0	21.1	21.5	22.0
	8H	20.7	21.0	21.2	21.5	22.0	20.8	21.1	21.3	21.6	22.1
Variations with the observer position at spacing:											
S =	1.0H	0.2 / -0.2					0.2 / -0.2				
	1.5H	0.2 / -0.5					0.2 / -0.5				
	2.0H	0.4 / -0.7					0.4 / -0.7				