

FEATURES

- 7 years warranty based on Ta45°C (24/7)
- EPD (Environmental Product Datasheet)
- Registered in NMD (Nationale Milieu Database, in progress)
- Reliable High-end Eldoled driver (Dali DT8)
- High Lm/W (3600Lm 167Lm/W)
- UGR <16 (max 3000Lm)
UGR <18 (max 5500Lm)
- Long lifetime of 102.000 hrs (TM21 L90B10 reported)
- Delivered with self-locking AMP plug for easy connection with the driver
- Extra strong housing material to prevent bending
- Recess, Surface mounting and pendant options available
- Environmental packaging (10 pcs per carton)
- Engineered in the Netherlands
- ENEC approved



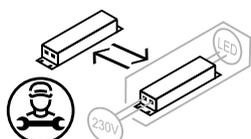
LED panel B 595x595 BCL

Preliminary

SPECIFICATIONS

Beam angle	84°
Color	White 9016
Fixture material	Frame & backside - Aluminium / UGR Prisma PS
LEDs	Bridgelux 2835
CRI	93
Driver type (included)	Eldoled Dualdrive 562/A Dali DT8
IK rate	IK03
IP rate	IP44
Operating temperature	-20°C / +45°C
Safety marks	EN60598 / EN62031 / EN62471
Colour consistency	MacAdam step 3
LV Plug	AMP
Safety class	I
Warranty	7 years (within the European Union and the countries of the Free Trade Association for products delivered after 1 May 2015)
Energy class	These products contain a light source of energy efficiency class D

This luminaire contains built-in LED lamps. There are no exchangeable parts inside the luminaire. EU 874/2012



LED PANEL B 595X595 BCL

2700-6500K



+



ITEM SPECIFICATIONS

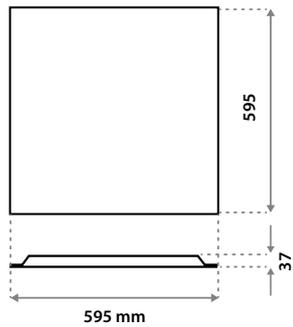
Description	Item code	Input	Vf	W	Lm	Lm/W	CRI (typ.)	UGR	Pf	Ripple	Inrush current	B-16A Fuse
LED panel B 595x595 BCL 5500Lm CRI93 2700-6500K ¹	301L03MWIC02	120-250V	34,6	41,5	5500	133	93	18.2	0.95	<3%	< 100mA ² s	80 pcs

Description	mDER ratings	Energy class	Expected Lifetime			Reported Lifetime*		
			L70B10	L80B10	L90B10	L70B10	L80B10	L90B10
LED panel B 595x595 BCL	40-95%	D	195.000 hrs	120.000 hrs	53.000 hrs	>102.000 hrs	>102.000 hrs	53.000 hrs

Description	Weight	Packaging	Dimension bulk packaging	Pallet 120x80x210cm	40Ft without pallets	20Ft without pallets
LED panel B 595x595 BCL	2060 gr	Bulk per 10 pcs	630x380x630mm	90 pcs	5000 pcs	2000 pcs

All values are measured at 230V (+/- 7%). * Based on 17.000hrs of LM80 testing at 120mA and a Tc55°C.
¹ This is the maximum light output, but depending on fluctuations in the lighting plan, the actual output will be lower.

DIMENSIONS



AWARENESS OF HEALTHY LIGHT FOR DIFFERENT ACTIVITIES



The lighting plan consists of two lighting groups. The panels provide a high mDER value for the eyes, while the downlights create comfort for the employee. Both groups operate independently to create a dynamic atmosphere.

**MEASURABLE GENERAL HEALTH EFFECTS
BASED ON 20+ YEARS STUDIES**

A survey from 248 scientists who have delivered more than 2,600 peer-reviewed publications on light and circadian clocks since 2008 leads to common agreement on the importance of light for health:

- Better sleep
 - Better performance
 - Greater focus
 - Improved immune system
 - Reduced risk of burnout
 - Minimize health risk: Obesity, Cancer, Dementia, etc.
- Brainlit can provide proof of the health advantages of their long implemented BCL lighting plans.

ADVANTAGES IN SPORTS

- Better overall health which leads to better performances.
- Dedicated team support for games and tournaments (avoid jet lag and shift best performance time).
- Feedback loop for continuously improvements.

**ADVANTAGES IN ELDERLY
CARE ENVIRONMENTS**

- Increased sleep length up to 87 minutes.
- Increased sleep efficiency.
- 56% less naps during the day.
- 55% less night-time bed wandering.
- Reduced risk of major depressive disorder.
- 43% less fall accidents in long term care environments.
- Better cognitive function

**EXTRA ADVANTAGES IN HOSPITALS
AND HEALTH CARE ENVIRONMENTS**

- Reduction of "Length of stay" (LOS) within health care.
- Improved health and wellbeing for shift workers.
- A special recipe is used for ICU (patient/ doctor/ nurse)

ADVANTAGES IN OFFICES

- Productivity increase by 18%.
- Improved cognitive functions and alertness.
- Better concentration and work accuracy improvement by 12%.
- Better sleep.
- More than 70% feel happier and with a feeling of more energy.
- Reduced sick leave of 2%.

DIFFERENCES BETWEEN A BCL AND HCL LIGHTING PLAN

HCL is mainly used as a visual system where the colour of a group of lights is changing over the day. BCL takes the circadian rhythm in consideration and tries to focus on maximum health effects. It uses a seamless integration of Spectrum, Intensity, Volume and Modulation.

INSTALLATION OF A BCL SYSTEM

All system components have a Wago plug and once connected, the components find each other automatically (even in case of a replacement of one of the components). An HCL system typically requires an electrician and a DT8 integrator to verify proper operation. The same procedure should be followed if any of the components need to be replaced.

SYSTEM HARDWARE

- A plug and play system built around standard protocols - DALI, IP/Ethernet, WiFi and Bluetooth.
- Available interfaces to BMS, alarm systems and other controllers.
- Wago plugs and battery-free switches & sensors ensure easy installation.

RELEVANT NORMS

- ISO 8995-1 (Global norm released 31st 2025)
- LEED (North American norm for sustainable buildings)
- Well Building Standard (North American Standard to improve human health and well-being)
- Breeam circadian demands (European norm with different levels for future proof buildings)
- DIN/TS 67600 (Germany)



The most important norm for HCL is the Well Building Standard which requires a value of 250 mEDI. BCL exceed all of the norms to deliver the greatest healthy impact by using a 2nd warmer group of lighting. This makes it possible to reach higher circadian values (up to 1300 mEDI) and still have a comfortable lighting environment. The norms for HCL are behind the technological possibilities; it is the expectation that the norms will be stricter in the future.

GENERAL BCL BENEFITS

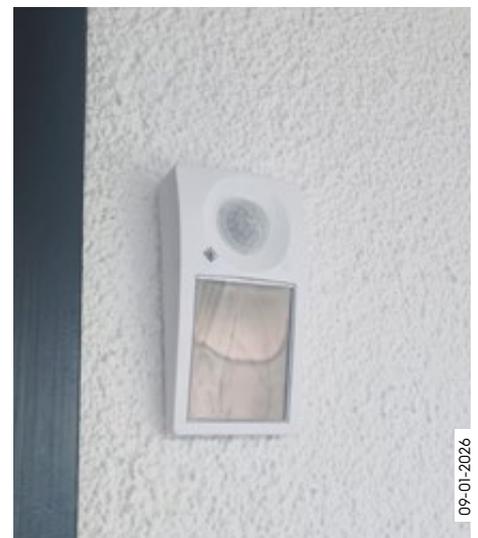
- BrainLit stands behind the circadian impact and health benefits of Biocentric Lighting
- Cost savings and exceeding all norms of HCL systems
- The Light Control Box contains the dedicated recipe and does not need special commissioning
- All components have Wago plugs for easy installation



BCL Wireless Light and Recipe Switch



BCL Light Control Box



BCL Wireless Motion Sensor

BCL ACCESSOIRES



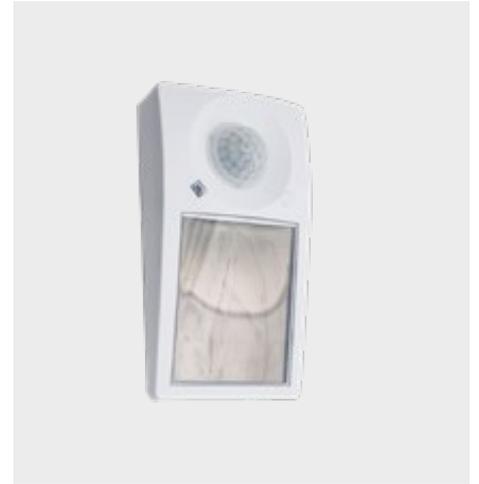
BCL Wireless Light and Recipe Switch

Colour	Glossy white
Type	Kinetic (battery less)
Supplier code	300032 Office
	300036 Elderly Care
	300072 Education
	300046 Sport



BCL Light Control Box

Colour	Black
Type	Dali DT8 (automatic commissioning)
Supplier code	200100 Office
	200101 Elderly Care
	200103 Education
	200104 Sport



BCL Wireless Motion Sensor

Colour	White
Type	Powered by solar cell
Supplier code	300024



Wago T-splitter 5P

Colour	Black
Description	WAGO 770-621
Item code	Not supplied



WAGO 5P extension cable 3,0 m

Colour	Black
Description	WAGO 771-9985/006-301
Type	16A 1,5 mm² H05VV-F 70°C
Item code	Not supplied

T-BAR CEILING SYSTEM 600X600



**2L Recessed frame
for T-bar ceiling system 600x600**

Colour	White
Description	2L Recessed frame 600x600
Type of material	Aluminium



T-BAR CEILING SYSTEM 625X625



**2L Recessed frame
for T-bar ceiling system 625x625**

Colour	White
Description	2L Recessed frame 600x600
Type of material	Aluminium



ACCESSOIRES - SURFACE MOUNTING



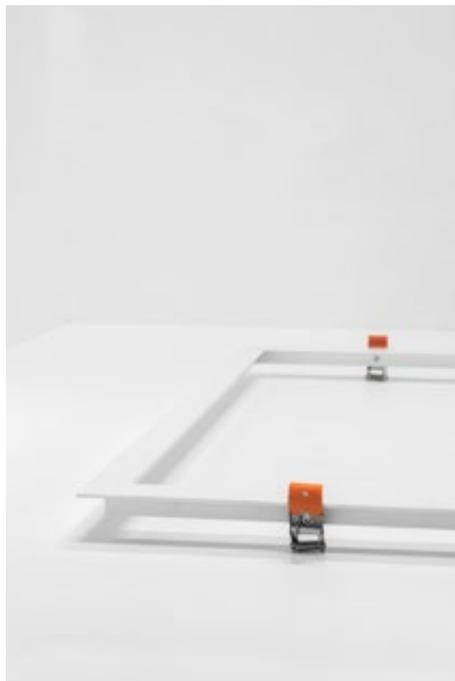
Pendant kits

Colour	Chrome
Description	Pendant set (4x 1,0m)
Item code	001K03000402
Type of material	

Surface mounting frame

Colour	White
Description	Surface mounting frame
Dimension	600x600x65 mm
Item code	001K03MW0102
Type of material	

ACCESSOIRES - RECESSED



Recessed frame gyproc

Colour	White Ral 9016
Description	Recessed frame gyproc
Dimension	634x634 mm
Hole size	620x620 mm
Item code	00IK03MW0002
Weight	540gr
Type of material	Steel