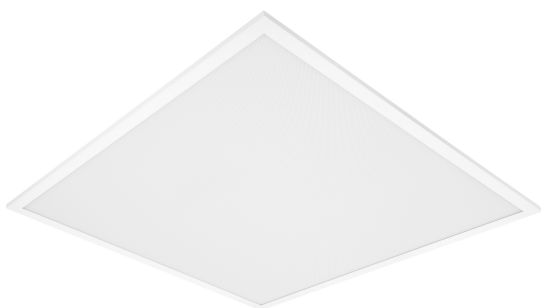# PRODUCT DATASHEET
BIOLUX HCL PL 600 S 40W TW ZB

BIOLUX HCL PANEL ZIGBEE GEN 2 | Recessed panel luminaires, Tunable White, 110 lm/W, tool-free installation, Zigbee 3.0

Areas of application

- Available for grid sizes of 600 x 600 mm, 625 x 625 mm and 1200 x 300 mm
- BIOLUX HCL system: Lighting solution for single office areas with up to 48 BIOLUX HCL products
- VIVARES Zigbee system: Open-plan office solution for up to 200 BIOLUX HCL products
- Hotel and office rooms with little daylight
- Nursery and elderly homes

Product benefits

- Suitable luminaire for BIOLUX, VIVARES and other Zigbee 3.0 light management systems for simple integration into partner systems
- Compatible with VIVARES cloud services
- Through-wiring possible with included connector box
- Good glare reduction (UGR ≤ 19)
- Low flicker light thanks to special electronic control gear
- 5 years BIOLUX HCL system guarantee when operated as part of a BIOLUX HCL system

Product features

- Adjustable color temperature via Tunable White: 2,700...6,500 K
- Very high color rendering index Ra: > 90
- Initial color consistency: 3 SDCM
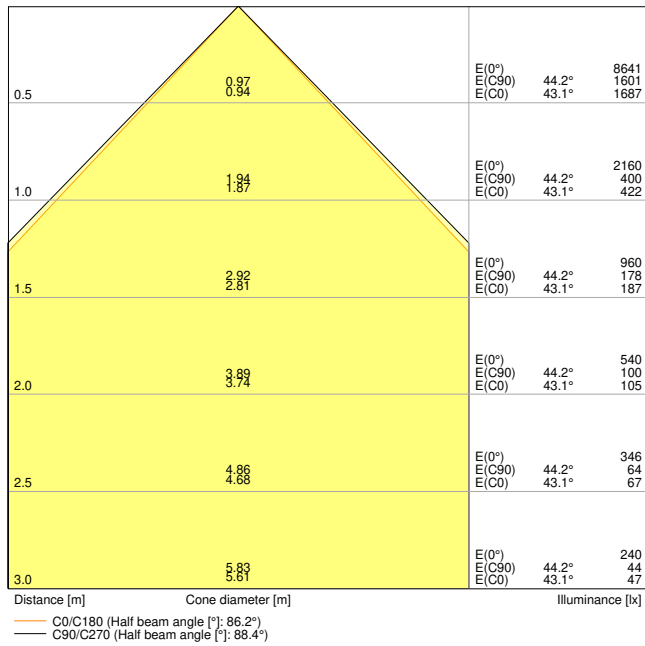- High luminous efficacy: up to 110 lm/W

TECHNICAL DATA

Electrical data

Nominal wattage	40.00 W
Nominal voltage	220...240 V
Mains frequency	50...60 Hz
Nominal current	190.000 mA
Inrush current	8.8 A
Inrush current time T_{h50}	88 µs
Max. no. of lum. on circuit break. B16 A	74
Max. no. of lum. on circuit break. C10 A	46
Max. no. of lum. on circuit break. C16 A	74
Power factor λ	> 0.90
Total harmonic distortion	< 20 %
Protection class	II
Operating mode	External LED driver

Photometrical data

|	
Luminous flux	4400 lm
Luminous efficacy	110 lm/W
Color temperature	2700...6500 K
Light color (designation)	Tunable White
Color rendering index Ra	≥90
Standard deviation of color matching	3 sdcm
Low flicker	Yes
Flickering metric (Pst LM)	≤1
Stroboscope effect metric (SVM)	≤ 0.4
Photobiological safety group acc. to EN62778	RG0
Beam angle	90 °
UGR	< 19

Distance [m]	Cone diameter [m]		Illuminance [lx]
0.5	0.97 / 0.94	E(0°) E(C90) 44.2° E(C0) 43.1°	8641 1601 1687
1.0	1.94 / 1.87	E(0°) E(C90) 44.2° E(C0) 43.1°	2160 400 422
1.5	2.92 / 2.81	E(0°) E(C90) 44.2° E(C0) 43.1°	960 178 187
2.0	3.89 / 3.74	E(0°) E(C90) 44.2° E(C0) 43.1°	540 100 105
2.5	4.86 / 4.68	E(0°) E(C90) 44.2° E(C0) 43.1°	346 64 67
3.0	5.83 / 5.61	E(0°) E(C90) 44.2° E(C0) 43.1°	240 44 47

C0/C180 (Half beam angle [°]: 86.2°)
C90/C270 (Half beam angle [°]: 88.4°)

LDC typ cone

cd/klm η = 100 %

C0/C180
C90/C270
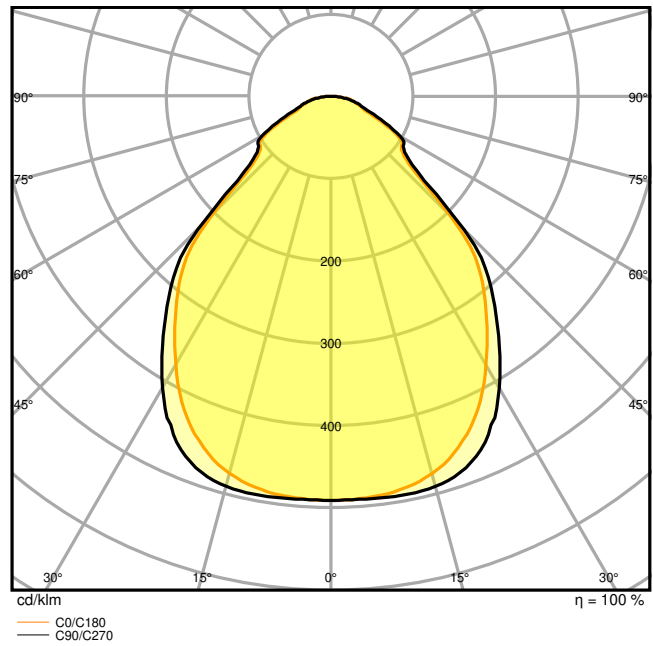
LDC typ polar

Dimensions & Weight

Length	595.00 mm
Width	595.00 mm
Height	11.00 mm
Product weight	3110.00 g

11 mm

595 mm

595 mm
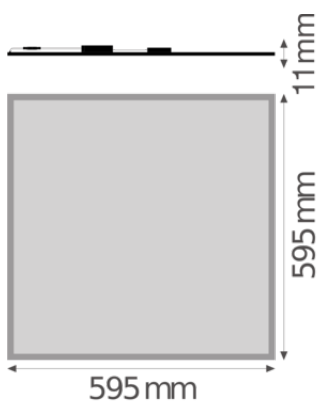
Materials & Colors

Product color	White
Housing color	White
Body material	Aluminum
Cover material	Polymethylmethacrylate (PMMA)
Light emitting surface material	PMMA
Glow Wire Test according to IEC 60695-2-12	650 °C
Mercury content	0.0 mg

Application & Mounting

Ambient temperature range	-20...+40 °C
Temperature range at storage	-20...+80 °C
Type of connection	Screwless terminal, 5-Pole (L, N, PE, DA+, DA-)
Type of protection	IP20/IP20
Protection class IK (shock resistance)	IK02
Dimmable	Yes
Type of dimming	ZIGBEE
Dimming range	0...100 %
Mounting type	Recessed
Mounting location	Ceiling
Application environment	Indoor
Mounting length	575 mm
Mounting width	575 mm
Mounting depth	50,0 mm
Adjustable	No
LED module replaceable	Not replaceable
With light source	Yes

Lifespan

Lifespan L70/B50 at 25 °C	50000 h
Lifespan L80/B10 at 25 °C	40000 h
Lifespan L90/B10 at 25 °C	25000 h
Number of switching cycles	50000

Control gear

Output current	1100 mA

ECG - Output ripple current	< 20 %
ECG - Length	160 mm
ECG - Width	70,0 mm
ECG - Height	35 mm

Certificates & Standards

Standards	CE / CB / ENEC / UKCA / EAC
Luminaire with limited surface temperature, "D sign"	No
Ball shot safe	No

Additional product data

Product remark	Available from December 2022

EQUIPMENT / ACCESSORIES

- Connector box with 5-pole terminal included
- External control gear included
- LEDVANCE BIOLUX app required for commissioning of the BIOLUX HCL system only (available for Android and iOS)
- LEDVANCE VIVARES app for project planning and required for commissioning of the VIVARES ZIGBEE system only (available for Android and iOS)
- Accessories for several mounting options available

Safety advice

- Important operating notice and legal disclaimer: This product is intended for operation as part of a BIOLUX HCL system (BIOLUX HCL- or VIVARES ZIGBEE control unit in combination with BIOLUX HCL-Luminaire(s) / BIOLUX HCL LED strips including built-in or supplied firmware/software). LEDVANCE GmbH assumes no responsibility, liability, warranty or guarantee for the operation of the product in combination or conjunction with third-party products or other products that are not BIOLUX HCL- / VIVARES ZIGBEE system products.

DOWNLOAD DATA

	DOWNLOAD DATA
PDF	User instruction
PDF	User instruction
PDF	Addon Technical Information
PDF	Declarations of conformity
PDF	Declarations of conformity

	DOWNLOAD DATA

|	IES file (IES)
	LDT file (Eulumdat)
	UGR file (UGR table)
	Packaging insert

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075724556	Shipping box 2	718 mm x 123 mm x 672 mm	8004.00 g	59.35 dm³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

ADDITIONAL CATALOG INFORMATION
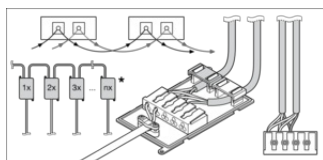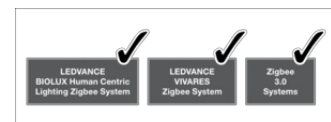
References / Links

– For Guarantee see www.ledvance.com/guarantee

Legal advice

– The use of the LEDVANCE BIOLUX- / VIVARES-app is exclusively subject to the LEDVANCE BIOLUX- - VIVARES-app Terms of Use, which are displayed during installation of the app and are available in the app

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.