

PRODUCT DATASHEET

BIOLUX HCL DL DN150 S 20W TW ZB

BIOLUX HCL DOWNLIGHT ZIGBEE GEN 2 | Downlight luminaires, Tunable White, 105 lm/W, tool-free installation, Zigbee 3.0



SUPERIOR
CLASS

Areas of application

- Direct replacement for luminaires with compact fluorescent lamps
- Offices, conference rooms
- Nursery and elderly homes
- Reception areas, foyers and corridors

Product benefits

- Luminaire suitable for VIVARES ZIGBEE, BIOLUX HCL and other Zigbee 3.0 light controls
- Individual Tunable White or HCL light through connection to compatible Zigbee 3.0 controls
- Light quality of CRI 90 supports increased well-being in HCL applications
- 7 year system guarantee when operated in a BIOLUX HCL or VIVARES ZIGBEE system
- Compatible with VIVARES CLOUD SERVICE for energy monitoring
- External Zigbee driver for extended flexibility and easy installation
- Good glare reduction ($UGR \leq 19$)

Product features

- IoT-ready luminaire with Zigbee 3.0 technology
- Housing material: Aluminum mirror-finished reflector
- Connector box with push wire terminal for tool-free connection
- Through-wiring possible
- Adjustable color temperature via Tunable White: 2,700...6,500 K



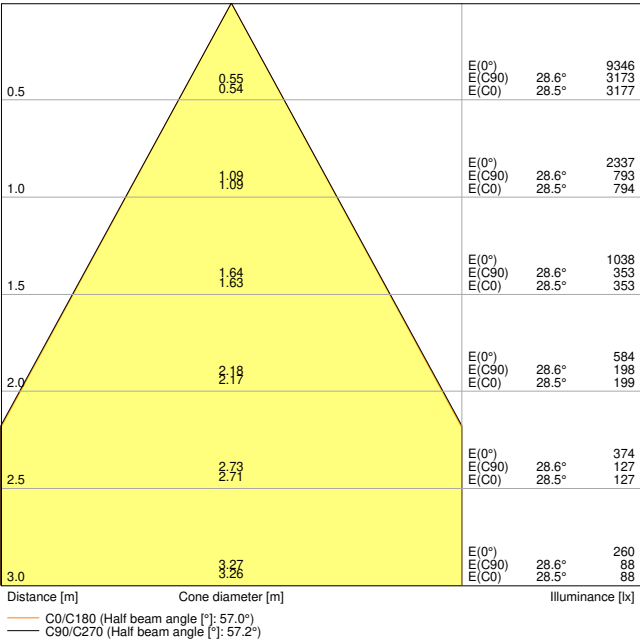
- Very high color rendering index Ra: > 90

TECHNICAL DATA**Electrical data**

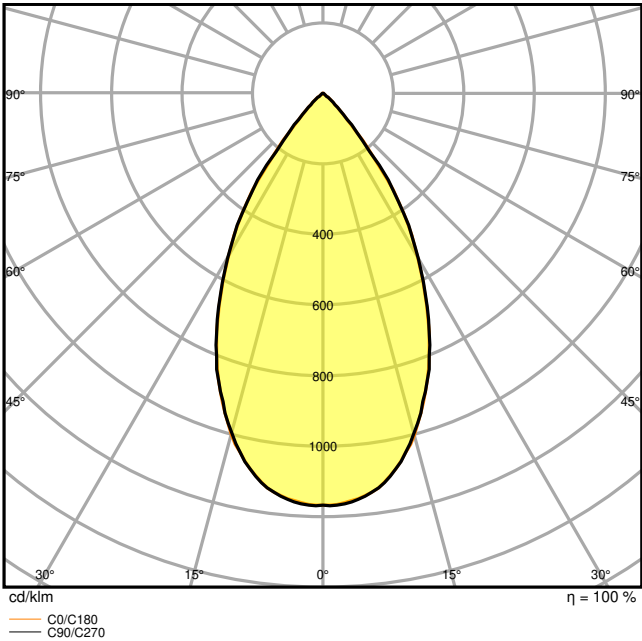
Nominal wattage	20.00 W
Nominal voltage	220...240 V
Mains frequency	50...60 Hz
Nominal current	95.000 mA
Inrush current	7.84 A
Inrush current time T_{h50}	91 μ s
Max. number of luminaires per miniature circuit breaker B16	145
Max. number of luminaires per miniature circuit breaker C10	92
Max. number of luminaires per miniature circuit breaker C16	147
Power factor λ	> 0.90
Total harmonic distortion	< 20 %
Protection class	II
Operating mode	External LED driver
Dimming interface	Zigbee 3.0 / IoT

Photometrical data

Luminous flux	2100 lm
Luminous efficacy	105 lm/W
Color temperature	2700...6500 K
Reference control setting of contained light source (Kelvin)	4000 K
Light color (designation)	Tunable White
Color rendering index Ra	≥ 90
Standard deviation of color matching	≤ 3 sdc _m
Luminous intensity	-
Low flicker	Yes
Flickering metric (Pst LM)	≤ 1
Stroboscope effect metric (SVM)	≤ 0.4
Photobiological safety group acc. to EN62778	RG1
Beam angle	60 °
UGR	≤ 19



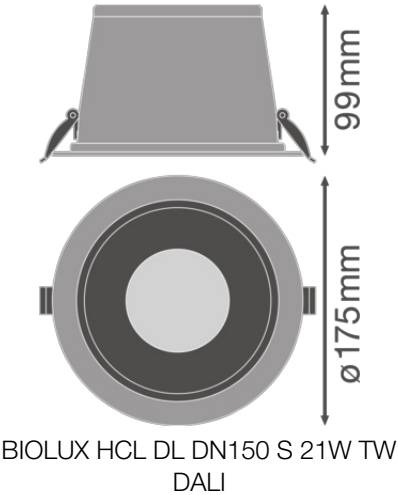
BIOLUX HCL DL DN150 S 20W TW ZB



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Dimensions & Weight

Diameter	175.00 mm
Height	99.00 mm
Product weight	570.00 g



Materials & Colors

Product color	White
Housing color	White
Body material	Aluminum
Cover material	Polycarbonate (PC)
Light emitting surface material	Polycarbonate (PC)
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	Terminal, 3-Pole (L, N, PE)
Type of protection	IP20
Protection class IK (shock resistance)	IK03
Dimmable	Yes
Type of dimming	ZIGBEE
Dimming range	1...100 %
Mounting type	Recessed
Mounting location	Ceiling
Application environment	Indoor
Mounting diameter	160 mm
Mounting depth	125 mm
Adjustable	No
With light source	Yes
Replaceable light source	No

Lifespan

Lifespan L70/B50 at 25 °C	50000 h ¹⁾
Lifespan L80/B10 at 25 °C	40000 h ¹⁾
Lifespan L80/B50 at 25 °C	40000 h
Lifespan L90/B10 at 25 °C	25000 h
Number of switching cycles	50000

¹⁾ t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

Control gear

Output current	550 mA
ECG - Output ripple current	< 20 %
ECG - Length	160 mm
ECG - Width	70 mm
ECG - Height	33 mm

Certificates & Standards

Standards	CE / CB / UKCA / EAC
Luminaire with limited surface temperature, "D sign"	No
Ball shot safe	No
Replaceable light source (EPREL)	Not replaceable

Additional product data

Added function	VIVARES / BIOLUX
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Accessories Optional

Product image	Product name	EAN
	BIOLUX HCL CONTROL UNIT S ZB	4058075724624
	ZIGBEE 3.0 DALI CONV LI	4062172044776
	VIVARES ZB CONTROL	4058075427488
	VIVARES ZB COUPLER	4058075463806
	VIVARES ZB L/O SENS 220-240	4058075446182
	VIVARES ZB O SENS 220-240	4058075544222

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)

Upgrade and replacement components

Components Light Control		
Product image	Product name	EAN
	MANUAL CONTROL UNIT SELECT DIRECT 100-240 TW RGB ZB	4099854476334
	SENSOR DIRECT LS-PD-7 IR CI ZB	4099854476358
	VIVARES ZB CONTROL	4058075427488
	VIVARES ZB L/O SENS 220-240	4058075446182
	VIVARES ZB O SENS 220-240	4058075544222
	VIVARES ZB COUPLER	4058075463806
	VIVARES ZB SENS ADAPTER	4058075650107

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

Documents and certificates		Document name
	User instruction / safety instructions	BIOLUX HCL CONTROL UNIT
	User instruction / safety instructions	BIOLUX HCL DL DN150 S 20W TW ZB
	Legal information	BIOLUX HCL
	Legal information	BIOLUX HCL DL DN150 S 20W TW ZB
	Legal information	Informationstext 18 Abs 4 ElektroG
	Legal information	Safety Insert G11215256
	Declarations of conformity	CE_BIOLUX HCL DL
	Declarations of conformity UKCA	BIOLUX HCL DL
	EU Data Act	SMART ZigBee Lamps and Luminaires
Photometric and lighting design files		Document name
	IES file (IES)	BIOLUX HCL DL DN150 S 20W TW ZB
	LDT file (Eulumdat)	BIOLUX HCL DL DN150 S 20W TW ZB
	ULD file (DIALux)	BIOLUX HCL DL DN150 S 20W TW ZB
	ROLF file (RELUX)	BIOLUX HCL DL GEN 2 DN150 S 20W TW ZB
	UGR file (UGR table)	BIOLUX HCL DL DN150 S 20W TW ZB
	Light distribution curve type cone	BIOLUX HCL DL DN150 S 20W TW ZB
	Light distribution curve type polar	BIOLUX HCL DL DN150 S 20W TW ZB

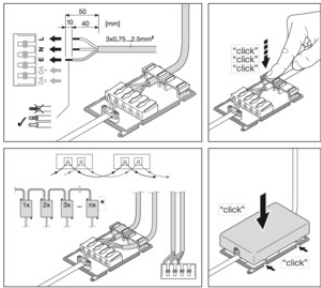
CAD/BIM files		Document name
	BIM Revit 3D	BIOLUX HCL DL G2
	CAD STEP 3D	HCL DL
Tender texts		Document name
	Tender documents	BIOLUX HCL DOWNLIGHT ZIGBEE GEN 2 DN150 S 20W TW ZB-en

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075724600	Folding box 1	190 mm x 190 mm x 143 mm	776.00 g	5.16 dm ³
4058075724617	Shipping box 4	398 mm x 208 mm x 312 mm	3513.00 g	25.83 dm ³

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



B25	B16	B10	C32	C25	C16	C10
n=227	n=145	n=90	n=294	n=230	n=147	n=92



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.