PRODUCT DATASHEET
DL IP44 DN 165 13W 830 WT

DOWNLIGHT IP44 | Downlights with IP44 grade

Areas of application

– Direct replacement for luminaires with fluorescent lamps
– General illumination
– Public areas
– Stairways
– Corridors
– Shops
– Bathrooms

Product benefits

– High luminous efficacy
– Very homogenous light
– Simple installation thanks to integrated driver

Product features
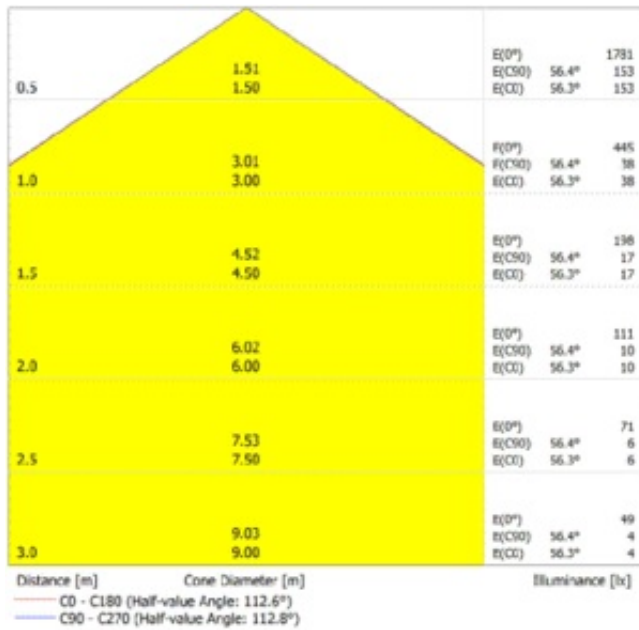
– Type of protection: IP44
– Luminous efficacy: 100 lm/W
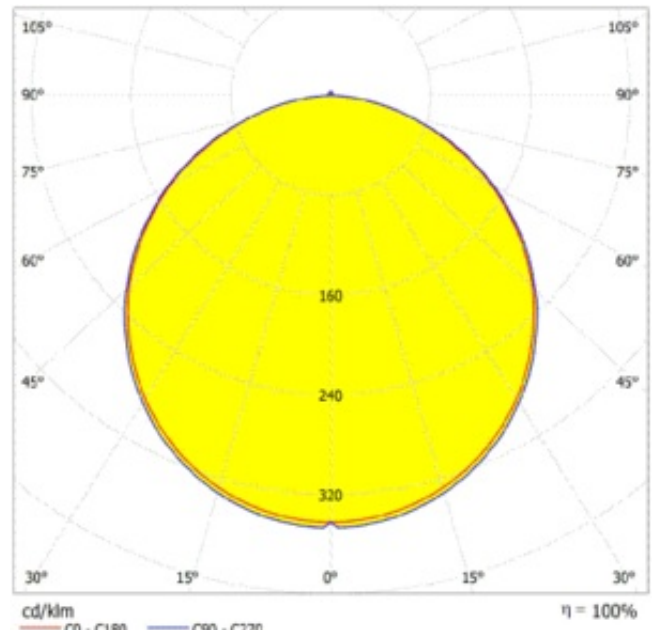
TECHNICAL DATA

Electrical data

Nominal wattage	13.00 W
Nominal voltage	220...240 V
Mains frequency	50...60 Hz
Nominal current	100.000 mA
Inrush current	2.9 A
Inrush current time T_{h50}	250 μs
Max. no. of lum. on circuit break. B16 A	112
Max. no. of lum. on circuit break. C10 A	60
Max. no. of lum. on circuit break. C16 A	96
Power factor λ	0.50
Total harmonic distortion	< 90 %
Protection class	II
Operating mode	Integrated LED driver

Photometrical data

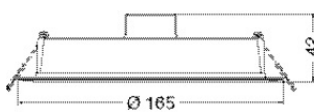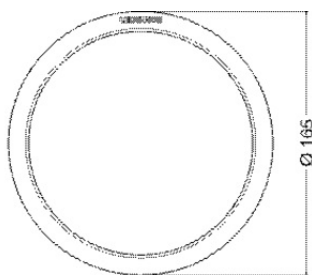|	
Luminous flux	1300 lm
Luminous efficacy	100 lm/W
Color temperature	3000 K
Light color (designation)	Warm White
Color rendering index Ra	> 80
Standard deviation of color matching	< 6 sdcm
Low flicker	Yes
Photobiological safety group acc. to EN62778	RG0
Photobiological safety group acc. to EN62471	RG0
Beam angle	100 °

Distance [m]	Cone Diameter [m]		Illuminance [lx]
0.5	1.51	E(0°)	1781
	1.50	E(C90) 56.4°	153
		E(CE) 56.3°	153
1.0	3.01	E(0°)	445
	3.00	E(C90) 56.4°	38
		E(CE) 56.3°	38
1.5	4.52	E(0°)	198
	4.50	E(C90) 56.4°	17
		E(CE) 56.3°	17
2.0	6.02	E(0°)	111
	6.00	E(C90) 56.4°	10
		E(CE) 56.3°	10
2.5	7.53	E(0°)	71
	7.50	E(C90) 56.4°	6
		E(CE) 56.3°	6
3.0	9.03	E(0°)	49
	9.00	E(C90) 56.4°	4
		E(CE) 56.3°	4

— C0 - C180 (Half-value Angle: 112.6°)
— C90 - C270 (Half-value Angle: 112.8°)

LDC typ cone

cd/klm
— C0 - C180   — C90 - C270
η = 100%

LDC typ polar

Dimensions & Weight

Diameter	165.00 mm
Height	42.00 mm
Product weight	140.00 g

Materials & Colors

Product color	White
Housing color	White
Body material	Polycarbonate (PC)
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	Cable, 2-pole
Type of protection	IP44
Protection class IK (shock resistance)	IK03
Dimmable	No
Mounting type	Recessed
Mounting location	Ceiling
Application environment	Indoor
Mounting diameter	150 mm
Mounting depth	40 mm
Adjustable	No
LED module replaceable	Not replaceable
With light source	Yes

Lifespan

Lifespan L70/B50 at 25 °C	20000 h
Lifespan L80/B10 at 25 °C	18000 h
Lifespan L90/B10 at 25 °C	15000 h
Number of switching cycles	100000

Control gear

|	
Output current	95 mA
ECG - Output ripple current	< 5 %

Certificates & Standards

Standards	CE / EMC / ROHS 2.0 / REACH
Luminaire with limited surface temperature, "D sign"	No
Ball shot safe	No

EQUIPMENT / ACCESSORIES

– Surface mounting frames available as accessories

DOWNLOAD DATA

	Documents and certificates
PDF	User instruction
PDF	Addon Technical Information
PDF	Packaging insert
PDF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA

	Photometric and lighting design files
	IES file (IES)
	LDT file (Eulumdat)
	ULD file (DIALux)
	ROLF file (RELUX)
	UGR file (UGR table)
	LDC typ cone
	LDC typ polar

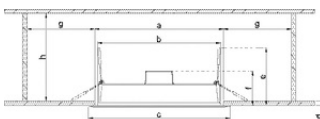| CAD/BIM files	
ZIP	BIM_Revit_3D
	CAD_STEP_3D

Tender texts	
	Tender documents

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075703049	Folding box 1	170 mm x 51 mm x 170 mm	184.00 g	1.47 dm³
4058075703056	Shipping box 10	350 mm x 269 mm x 186 mm	2113.00 g	17.51 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

Model	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	g [mm]	h [mm]
DL IP44 DN90	Ø75	Ø58	Ø90	5-25	68	40	>50	>70
DL IP44 DN115	Ø100	Ø93	Ø115	5-25	68	40	>50	>70
DL IP44 DN165	Ø150	Ø149	Ø165	5-25	68	40	>50	>70
DL IP44 DN190	Ø174	Ø168	Ø190	5-25	68	40	>50	>70
DL IP44 DN215	Ø200	Ø194	Ø215	5-25	68	40	>50	>70

DISCLAIMER

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