

Entry / ECO

Standard / STD

Professional / PRO

ODM & OEM

Intelligent / INT



2019

**ECO**  
Specifications



LED Downlight  
DL229 Series

**luzon**  
lighting™



## Introduction

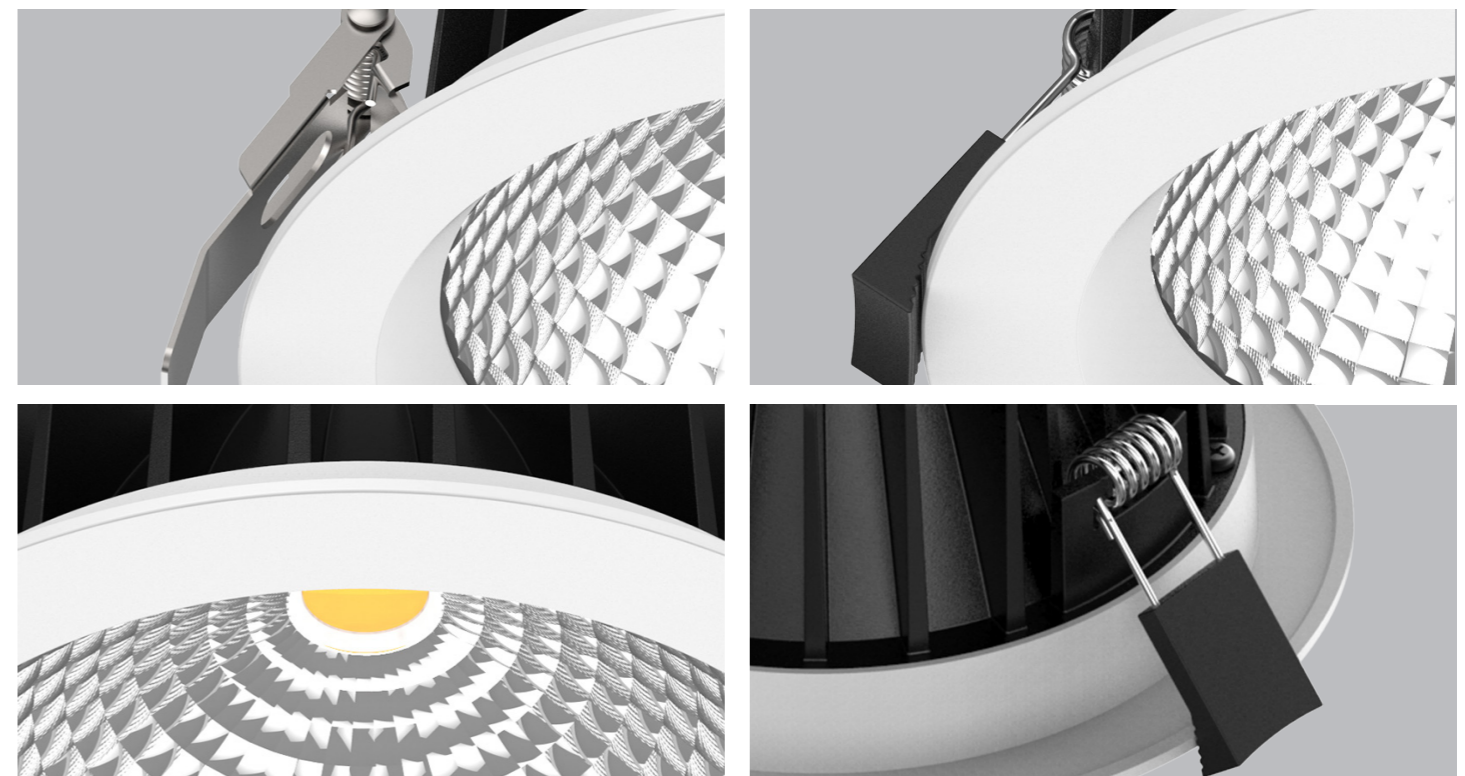
LUZON COB downlight is unique designed with reflector and COB high power LED chip. ADC12 Aluminum profile provides excellent thermal dissipation. Short heatsink designed for any ceiling installations. Isolated driver solution both in dimmable and non-dimmable version achieves great dimming compatibility with worldwide brand dimmers

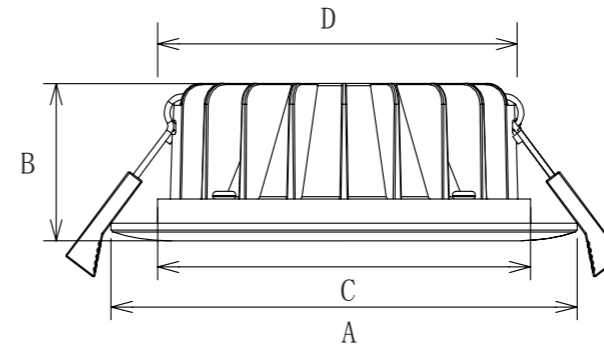
## Features

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 50,000 hours
- Triac dim, 0-10V dim, DALI dim
- 90-210mm cutout
- CCT: 2700K 3000K 4000K 5000K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

## Application Areas

It is designed for general lighting applications in office, supermarket, shop, school, hotel, etc. It is also widely used for public areas, such as stairway, lobby, reception, corridors etc.





## Technical Data Sheet (1)

Model No.	DL229-3-10W	DL229-3-12W	DL229-4-12W	DL229-4-18W	DL229-4-25W		
Dimension(mm)	Ø110*53mm		Ø145*65mm				
Cutout (mm)	Ø90-95mm		Ø120-130mm				
Watt(W)	10W	12W	12W	18W	25W		
Rated Input Voltage(V)	AC230V						
Input Voltage(V)	AC200-240V						
LED Module Input	DC33-38V						
Light Source	COB						
SDCM	<6						
CCT(K)	1-CCT: 2700K/3000K/4000K/5000K						
CCT Selection DIP Switch	-						
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	837~988lm	1097~1312lm	1309~1485lm	1777~1997lm	2354~2733lm
			DIM	780~950lm	950~1200lm	1150~1250lm	1500~1720lm
	Non-DIM	3-CCT	-	-	-	-	-
			DIM	-	-	-	-
CRI	≥80						
Beam Angle (°)	60°		24°/45°/60°				
UGR	-						
LED Driver	Built-out						
Dimming Option	Triac/ DALI/ 0-10V						
Sensor	-						
Emergency Kits	-						
Electrical Class	Class II						
Ingress Protection (IP Rating)	IP54						
Impact Resistance (IK Rating)	-						
Product Finishing(Base)	White RAL 9016 (Trim) / Black RAL9005 (Heatsink)						
Materials of Optics	PC						
Materials of Housing	PC/Aluminium						
Lifetime (hr)	50,000h						
Glow wire test (°C)	850°C						
Operating Temp. (°C)	-20°C ~45°C						
Storage Temp. (°C)	-20°C ~65°C						
Installation	Recessed						

## Measurement

Model	Dimension(mm)				Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)
	A	B	C	D		N.W/PC	G.W/PC	N.W/CTN	G.W/CTN				
3"	110	53	79.7	88.5	110*53	0.25	0.305	9.15	10.35	39*28*57	30PCS	14400	29040
4"	145	65	109.7	118.5	145*65	0.405	0.49	9.8	11.1	35*33*59	20PCS	6780	18480
6"	190	75	149.7	158.5	190*75	0.69	0.8	9.6	10.8	66*46*20.5	12PCS	5676	12672
8"	225	87	180.7	193.5	225*87	0.96	1.125	13.5	15.1	54.5*51*35	12PCS	3168	7392

## Technical Data Sheet (2)

Model No.	DL229-6-18W	DL229-6-25W	DL229-6-33W	DL229-8-18W	DL229-8-25W	DL229-8-33W	DL229-8-42W		
Dimension(mm)	Ø190*75mm			Ø225*87mm					
Cutout (mm)	Ø160-170mm			Ø200-210mm					
Watt(W)	18W	25W	33W	18W	25W	33W	42W		
Rated Input Voltage(V)	AC230V								
Input Voltage(V)	AC200-240V								
LED Module Input	DC33-38V								
Light Source	COB								
SDCM	<6								
CCT(K)	1-CCT: 2700K/3000K/4000K/5000K								
CCT Selection DIP Switch	-								
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	1798~2079lm	2423~2798lm	3151-3674lm	1851~2066lm	2474~2801lm	3296~3659lm	4184~4823lm
			DIM	1500~1600lm	2200~2400lm	2950-3380lm	1600~1800lm	2200~2600lm	3050~3450lm
	Non-DIM	3-CCT	-	-	-	-	-	-	-
			DIM	-	-	-	-	-	-
CRI	≥80								
Beam Angle (°)	24°/36°/45°/60°			24°/36°/60°					
UGR	-								
LED Driver	Built-out								
Dimming Option	Triac/ DALI/ 0-10V								
Sensor	-								
Emergency Kits	-								
Electrical Class	Class II								
Ingress Protection (IP Rating)	IP54								
Impact Resistance (IK Rating)	-								
Product Finishing(Base)	White RAL 9016 (Trim) / Black RAL9005 (Heatsink)								
Materials of Optics	PC								
Materials of Housing	PC/Aluminium								
Lifetime (hr)	50,000h								
Glow wire test (°C)	850°C								
Operating Temp. (°C)	-20°C ~45°C								
Storage Temp. (°C)	-20°C ~65°C								
Installation	Recessed								

## Driver Datasheet (Non-dimmable )

Total load wattage		10W	12W	18W	25W	33W	42W
Output	Output Voltage range	DC27-40V					
	Rated output current	230mA	300mA	420mA	580mA	820mA	1050mA
	Line Regulation	±5%					
	Setup, Rise Time	<1S					
	Flickering Index	-					
Input	Input Voltage	AC200-240V					
	Rated Input Voltage(V)	AC230V					
	Frequency	50Hz					
	Input Current	≤0.06A	≤0.08A	≤0.12A	≤0.15A	≤0.2A	≤0.25A
	Rated Input Current	0.05A	0.07A	0.11A	0.13A	0.18A	0.23A
	Power Factor	0.9					
	THD	<20% @230V					
	Efficiency	75%	78%	82%	83%	84%	84%
	No load wattage	≤1W		≤1.25W		≤1.65W	≤2.1W
	Protection	Short circuit protection	Pass				
Over voltage protection		Pass					
Over temperature protection		Pass					
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVac,<5mA 60S;I/P-FG:1.6KVac,<5mA 60S;O/P-FG:0.5KVac,<5mA 60S					
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω					
	Surge	L-N:0.5KV			L-N:1KV		
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

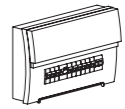
## Driver Datasheet (Triac Dimmable)

Total load wattage		10W	12W	18W	25W	33W	42W
Output	Output Voltage range	DC23-40V					
	Rated output current	230mA	280mA	430mA	600mA	800mA	1000mA
	Line Regulation	±5%					
	Setup, Rise Time	<1S					
	Flickering Index	-	-	-	<10%	<10%	<10%
Input	Input Voltage	AC200-240V					
	Rated Input Voltage(V)	AC230V					
	Frequency	50Hz					
	Input Current	≤0.06A	≤0.08A	≤0.1A	≤0.14A	≤0.2A	≤0.24A
	Rated Input Current	0.05A	0.07A	0.09A	0.13A	0.17A	0.21A
	Power Factor	0.9					
	THD	<20% @230V					
	Efficiency	80%	82%	85%	85%	86%	84%
	No load wattage	≤1W		≤1.25W		≤1.65W	≤2.1W
	Protection	Short circuit protection	Pass				
Over voltage protection		Pass					
Over temperature protection		Pass					
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVac,<5mA 60S;I/P-FG:1.6KVac,<5mA 60S;O/P-FG:0.5KVac,<5mA 60S					
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω					
	Surge	L-N:0.5KV			L-N:1KV		
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

## Installation Procedure

### WARNING ⚡

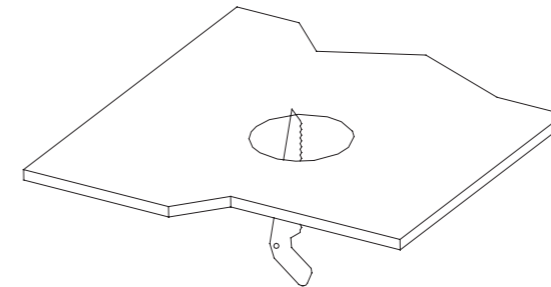
- 1.Switch off before installation / maintenance.
- 2.Switch on only after complete installation and examination of the circuit.
- 3.Professional electrician for installation and maintenance only.



Turn Off power supply before starting any installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

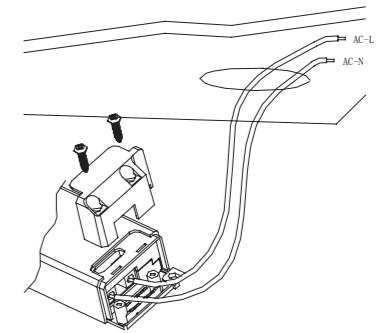
### Recessed Installation

#### Step 1



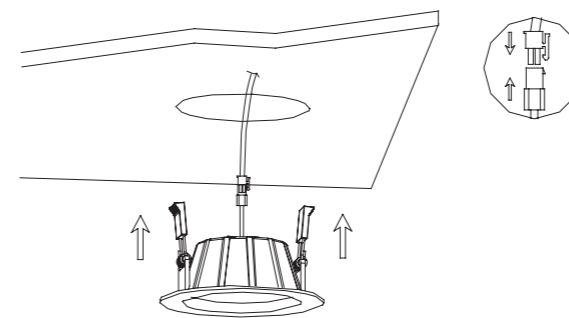
Open a hole according to the cutout size of led downlight.

#### Step 2



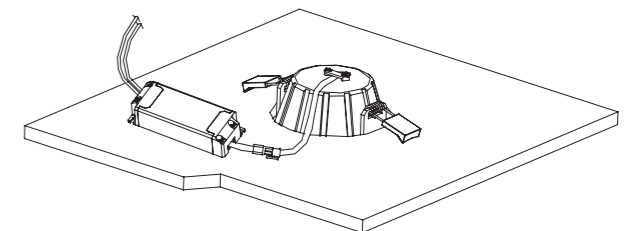
Use screw-driver to open the driver terminal cover,feed the main AC wire L,N.in terminal block respectively,then fix the cover back.

#### Step 3



Connect the downlight with driver,hold back the spring clip then push the downlight into the hole

#### Step 4



Make sure the downlight fixed tightly in ceiling turn on the power

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