

**LD242A**  
UNDERWATER LED POOL LIGHT



The LD242A has been designed specifically for permanent submersion applications. It is manufactured from high grade 316 stainless steel and anodised aluminium. The LED module is potted to prevent moisture ingress via the cable and the fitting is mechanically sealed. The bezel is polished and passivated for extra protection against chlorine or salt water.



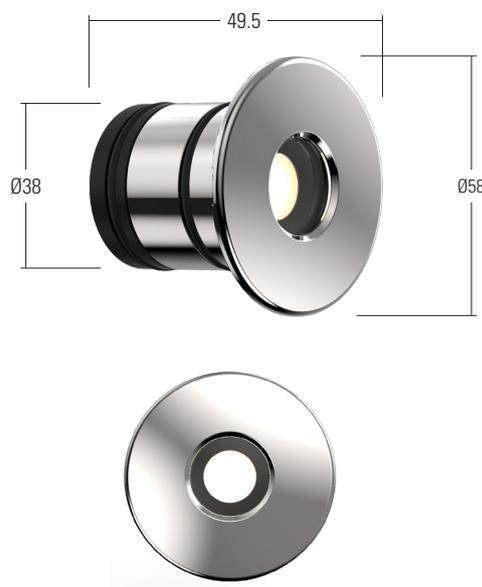
Design: Spectron Project: Private Residence Product: LD242A

**KEY FEATURES**

- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > LD242A is mechanically sealed, allowing it to be a serviceable product by LightGraphix
- > Excellent diffused beam shape from a range of optics
- > New optional glare shield accessory
- > Typical 93 CRI in 3000K warm white
- > Reverse polarity protection
- > First fix sleeve and O-rings to seal fitting into mounting surface
- > Optional concrete-in first fix housing
- > Bezel is polished and passivated for pool and sea environments
- > LD242A RGB also available
- > Please specify with long cables to enable connections to be made in a dry location
- > Available with 0-10V, DMX, DALI or Mains dimmable drivers

**DIMENSIONS**

For fixings and dimensions please go to page 3.



## WHITE LED ENGINE SPECIFICATION

Engine	 C1		
Beam angles	12°, 31°, 48°, 12° x 36°		
LED manufacturer	NICHIA		
Colour temperature	2200K / 2700K / 3000K / 4000K / 5000K		
Current [Rated Output]	350mA [1.2W]	500mA [1.7W]	700mA [2.4W]
Typical LED Circuit wattage	1.1W	1.6W	2.3W
Delivered lumens (L <sub>100</sub> )*	103	134	174
Delivered lm/Circuit W**	95	83	75
Typical LED Source wattage	1W	1.5W	2.1W
Source LED lm	133	187	206
Source lm/W	136	129	98
Forward voltage (V <sub>100</sub> )	2.8V	2.9V	3V
CRI	93		
Colour consistency	2 SCDM		
Peak intensity	374 cd		
LOR	0.84		
TM30	RF91   RG101		
UGR rating (Sideways mounted)	UGR unavailable for sideways/uplight mounted wet location products		
BUG rating (Sideways mounted)	B0-U2-G1		
BUG rating ('uplight' mounted)	B0-U3-G0		
LED lifetime	L90B5 at 90,000hrs		
Applications			

This data is based on LD242A-C1-700-LW30-WB-GS

\*LED wattage includes losses associated with using a 90% efficient driver

\*\* Lumen output data applies to all colour temperatures.

## MECHANICAL

	350mA	500mA	700mA
Ambient temperature 55°C	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C
Glass	5mm thick low iron glass		
Materials	Hard black anodised aluminium body, machine finish 316 stainless steel bezel		
IP rating	IP68 up to 2m (not suitable for saltwater pools)		
Wiring	Comes pre-wired with 2 core 5m lead, can be specified with up to 10m at extra cost		

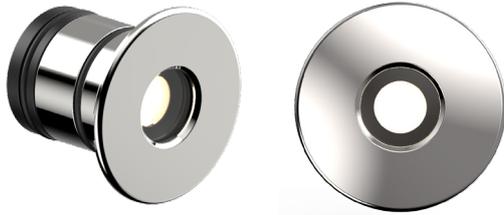
## ENVIRONMENTAL

TM65	Available on request	
TM66	2.6	
Repair + Refurbish		This product is included in our Repair and Refurbish scheme. This offers customers the ability to send back products to us for repair or refurbishment to extend their life without having to buy new fittings.

## GLARE CONTROL

### /NGS No glare Shield

Recessed optic and matt black anodised optic holder aids in glare reduction.



### /GS Glare Shield

For reduced glare applications, a half-moon glare shield can be specified. Covering 45% of the lit surface of the optic behind it, without being too disruptive to the beam output. Please note that this option is not available for the oval beam lens.

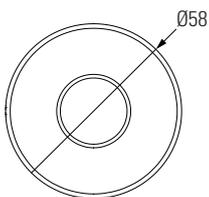
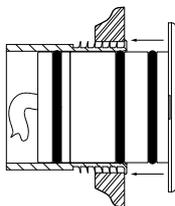
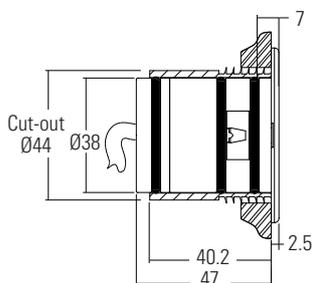


## DIMENSIONS & FIXING OPTIONS

*Dimensions in mm*

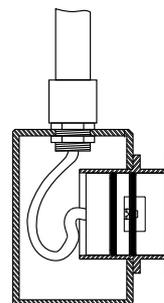
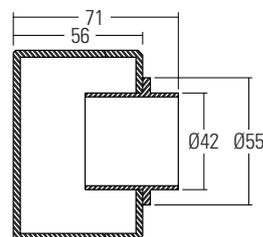
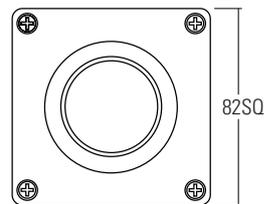
### /476 Fixing sleeve and O-rings

The fitting can be supplied with a rebated fixing sleeve. This is bonded into the mounting surface first. The fitting is secured into the sleeve with the 'O' rings on the body. When pushed into the sleeve it creates a watertight seal.



### /242N Concrete housing

The aluminium housing is used as a heat sink which keeps the LED fitting cool through the thermal transfer of the heat within the housing to the surrounding concrete. The housings are big enough for IP rated connections to be made inside the housing and a second gland is available for cabling onto the next luminaire. The housing can be buried with the necessary wiring, and then the fitting installed after the fixing work has been completed.



## ORDER CODES & OPTIONS

Example: LD242A-500 / LW30 / MB/GS/Polished & Passivated 316 Stainless Steel/476

Light Engine & Drive Current

LED Colour

Beam Angle

Glare Control

Finish

Fixing

LD242A- / / / / / / /

Ambient temperature key: ● 55°C

○ **C1**

55°C<sub>Ta</sub>

1.2W LED at 350mA  
LD242A-C1-350

Super Warm White (2200K) /LW22

12° Narrow /NB



55°C<sub>Ta</sub>

1.7W LED at 500mA  
LD242A-C1-500

Extra Warm White (2700K) /LW27

31° Medium /MB

NGS

Polished & Passivated 316 Stainless Steel (for marine environments)

/476

55°C<sub>Ta</sub>

2.4W LED at 700mA  
LD242A-C1-700

Warm White (3000K) /LW30

48° Wide /WB



GS (Not applicable with Oval beam.)



/242N

White (4000K) - on request /LW40

Cool White (5000K) /LW50

Red /LR

Green /LG

Blue /LB

Amber /LA

### Drivers

Use with 350mA, 500mA & 700mA constant current LED drivers  
We have a wide range of LED drivers available. Please see the downloads section of our website.