

## LD45

### LOW GLARE INTERIOR/EXTERIOR WALL OR STEP LIGHT



**CB** | **RLE** | **R+R** | **MOISTURE GUARD**



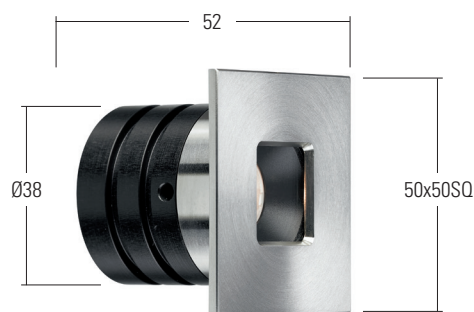
The LD45 will fit into most architectural styles, and is also available with a round bezel (see LD46). Manufactured with a machined stainless steel 316 bezel and black anodized body, these can be used for indoor and outdoor use. The compact design with the optic set back makes them ideal for steplighting. The 12° beam will wash light narrowly across steps, while the 31° beam will wash light closer to the edges of each section. Available with a choice of beam angles and LED colours.

## KEY FEATURES

- > LED and lens assembly recessed within a black anodised body for reduced glare
- > High quality machined bezel and body
- > Square and round versions available
- > Glass fixed with hidden gasket, so no unsightly glue line
- > No visible fixings. Options include spring fixing clips or O-rings and a first fix sleeve
- > Can be used for external and internal applications
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > Range of bezel finish options including stainless steel and paint finishes
- > Available with Switch, 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 [1.7] | 700mA [2.4W] |
| Typical LED Circuit wattage           | 1.1W                                                                                 | 1.6W        | 2.3W         |
| Delivered lumens (L <sub>100</sub> )* | 106                                                                                  | 138         | 177          |
| Delivered lm/Circuit W**              | 97                                                                                   | 86          | 76           |
| Typical LED Source wattage            | 1W                                                                                   | 1.6W        | 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 SDCM                                                                               |             |              |
| Peak intensity                        | 1,075 cd                                                                             |             |              |
| LOR                                   | 0.86                                                                                 |             |              |
| TM30                                  | RF93   RG100                                                                         |             |              |
| UGR***                                | 48.5                                                                                 | 49.3        | 50.2         |
| BUG rating (Sideways mounted)         | B0-U2-G1                                                                             |             |              |
| LED lifetime                          | L90B5 at 90,000hrs                                                                   |             |              |
| Applications                          |   |             |              |

This data is based on LD45-C1-700/927/NB

\*Lumen output data applies to all colour temperatures

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

\*\*\*UGR values based on room parameters of 4H 8H, C70 W50 F20

## MECHANICAL

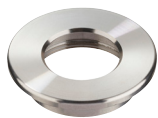
|                               |                                                                                                   | 350mA         | 500mA         | 700mA         |
|-------------------------------|---------------------------------------------------------------------------------------------------|---------------|---------------|---------------|
| Ambient temperature<br>○ 55°C |  C1            | -20°C to 55°C | -20°C to 55°C | -20°C to 55°C |
|                               | AUS/NZ                                                                                            | -20°C to 25°C |               |               |
| Glass                         | 5mm thick borosilicate                                                                            |               |               |               |
| Materials                     | Black anodised aluminium body, Machine finish 316 stainless steel bezel (other options available) |               |               |               |
| IP rating                     | IP67                                                                                              |               |               |               |
| Wiring                        | Comes pre-wired with 2 core 100mm lead, can be specified with up to 10m at extra cost             |               |               |               |

## ENVIRONMENTAL

|                                   |                                                                                                                                                                                                                                                                                                     |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| TM65                              | Available on request                                                                                                                                                                                                                                                                                |  |  |
| TM66                              | 2.7                                                                                                                                                                                                                                                                                                 |  |  |
| 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. |  |  |
| RLE<br>(REPLACEABLE LIGHT ENGINE) |   Visit page 4 for replacement parts                                                                                          |  |  |

## AVAILABLE FINISHES

Please refer to our finishes guide for full details



### 316 STAINLESS STEEL

- > Marine grade 316 Steel
- > Standard machined finish
- > Extremely durable with very high corrosion resistance
- > Passivation recommended for marine environments to prevent corrosion and build up of brown stains caused by oxidation
- > Interior & exterior use

### POLISHED & PASSIVATED 316 STAINLESS STEEL

- > Marine Grade 316 Steel
- > Mirror like finish
- > Extremely durable with very high corrosion resistance
- > Passivated to extensively prolong resistance to corrosion and brown stains caused by oxidation in marine environments
- > Interior & exterior use

### FLAMED SOLID BRONZE

- > Solid Bronze
- > Hand finished Flamed Bronze unique to LightGraphix
- > Extremely durable with very high corrosion resistance.
- > Please note a natural dark patination layer will form after long term exposure to the elements, the extent of this discolouration will be dependant on its location.
- > Interior & exterior use

### PAINT FINISH - WET SPRAY

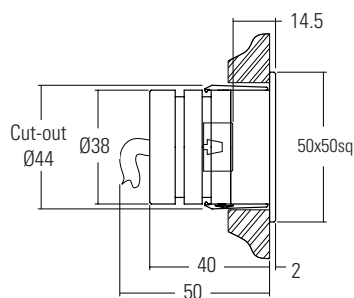
- > White (RAL 9016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass, Anthracite Grey (7016) or any RAL colour available
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

## DIMENSIONS & FIXING OPTIONS

Dimensions in mm

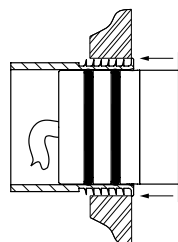
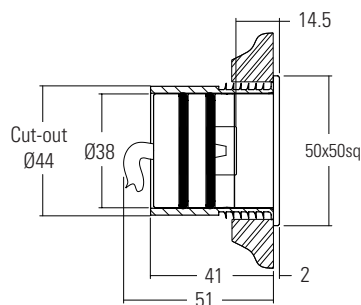
### /SC Spring clip fixing

Useful for most wall mounted applications



### /476 O-rings and sleeve

A robust and water tight method of fixing useful for wet areas



Design: Light IQ Project: Private Residence

## RLE - REPLACEABLE LIGHT ENGINES



### What is RLE

On the surface, RLE is LightGraphix's answer to the Circular economy question that is facing many industries at the moment. However for us, RLE is an ethos; a commitment that LightGraphix will factor in the principles of good circular design into all of its future product design. It allows us to offer luminaires that contain replaceable, energy-efficient light engines. This gives customers the ability to refurbish existing lighting installations rather than having to replace the entire luminaire. This will fall into two types of refurbishments: replaceable, and repairable.

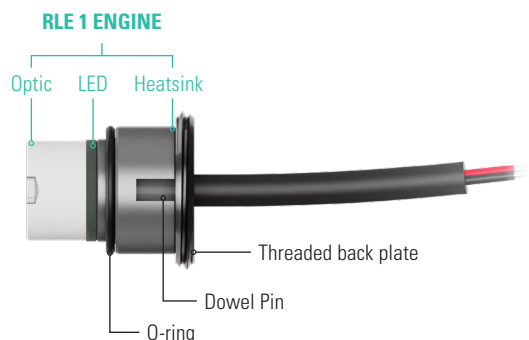
### RLE Engines

Repairs can be conducted on any site worldwide, or in our factory, with a small tool. Simply swap out the singular modular LED insert, and replace it with another, along with a new optic, which are both supplied by us. The warranty provided with the product varies based on who is performing RLE repairs. There are three types of RLE engine, categorised based on the size of the product. RLE1 is the smallest, with RLE3 being the largest.



## LD45 RLE REPLACEMENT PARTS

Please use the configurator below to specify your replacement engine and optic. If you are unsure of your original specifications, please check the label on your LightGraphix fitting, or get in touch with our sales team. Installation sheets will be supplied with the new components.



| RLE Engine   |       | LED Colour                  |      | Beam Angle                |              | Accessories                            |               |
|--------------|-------|-----------------------------|------|---------------------------|--------------|----------------------------------------|---------------|
| RLE1/        |       |                             |      |                           |              |                                        |               |
| RLE 1 ENGINE | RLE1/ | 2200K 93+ CRI               | /922 | Narrow beam<br>16mm optic | RLE/OP-16/NB | Dowel pin for Oval<br>beam orientation | RLE1/OP-16/DP |
|              |       | 2700K 93+ CRI               | /927 | Medium beam<br>16mm optic | RLE/OP-16/MB | O-ring                                 | RLE/OR1       |
|              |       | 3000K 93+ CRI               | /930 | Wide beam<br>16mm optic   | RLE/OP-16/WB | Threaded back plate                    | RLE/TBP       |
|              |       | 4000K 93+ CRI<br>on request | /940 | Oval beam<br>16mm optic   | RLE/OP-16/OB |                                        |               |
|              |       | 5000K 93+ CRI               | /950 |                           |              |                                        |               |

## ORDER CODES & OPTIONS

Example: LD45-C1-500/930/MB/Polished & Passivated 316 Stainless Steel/476

Light Engine & Drive Current

LED Colour

Beam Angle

Finish

Fixing

Ambient temperature key: ● 55°C

○ **C1**

|                                               |                      |             |
|-----------------------------------------------|----------------------|-------------|
| <span style="color: red;">●</span> 55°C<br>Ta | 1.2W LED<br>at 350mA | LD45-C1-350 |
| <span style="color: red;">●</span> 55°C<br>Ta | 1.7W LED<br>at 500mA | LD45-C1-500 |
| <span style="color: red;">●</span> 55°C<br>Ta | 2.4W LED<br>at 700mA | LD45-C1-700 |

**\*AUS/NZ:**  
Add - AU - suffix to the product code e.g.  
LD45-AU-C1-350

|                                |      |
|--------------------------------|------|
| 2200K<br>93+ CRI               | /922 |
| 2700K<br>93+ CRI               | /927 |
| 3000K<br>93+ CRI               | /930 |
| 4000K<br>93+ CRI<br>on request | /940 |
| 5000K<br>93+ CRI               | /950 |
| Red                            | /LR  |
| Green                          | /LG  |
| Blue                           | /LB  |
| Amber                          | /LA  |

|                   |     |
|-------------------|-----|
| 12°<br>Narrow     | /NB |
| 31°<br>Medium     | /MB |
| 48°<br>Wide       | /WB |
| 12° x 36°<br>Oval | /OB |

|                                                                                       |                                                                           |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
|    | 316 Stainless Steel                                                       |
|    | Polished & Passivated<br>316 Stainless Steel<br>(for marine environments) |
|    | Flamed Solid Bronze                                                       |
|    | WET SPRAY<br>Silver Anodised                                              |
|  | WET SPRAY<br>Antique Bronze                                               |
|  | WET SPRAY<br>Satin Antique Brass                                          |
|  | WET SPRAY<br>Satin Brass                                                  |
|  | WET SPRAY<br>Black<br>(RAL 9005)                                          |
|  | WET SPRAY<br>Anthracite Grey<br>(RAL 7016)                                |
|  | WET SPRAY<br>White<br>(RAL 9016)                                          |
|  | WET SPRAY<br>RAL                                                          |

|                                                                                     |      |
|-------------------------------------------------------------------------------------|------|
|  | /SC  |
|  | /476 |

### 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.