


LD56

LOW GLARE INTERIOR/EXTERIOR IN-GROUND LED UPLIGHT



The LD56 packs a lot of features into a very compact product with a recess depth of just 52mm. The optics are deep recessed for reduced glare and offer fantastic beam shape and spread, with narrow, medium, wide and oval beams available. Featuring a high IP68 rating, the LD56 is incredibly versatile and has been used in projects all over the world in a multitude of applications, including as a downlight. This is a very tough, high quality fitting, available in a wide range of high-grade machined metals and paint finishes.

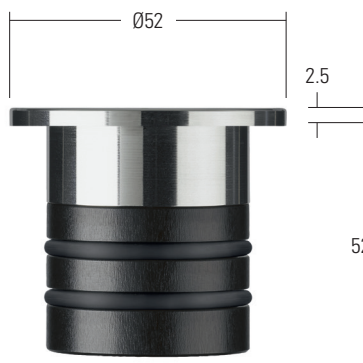
KEY FEATURES

- > High-power C1 engine with NICHIA LED, delivering up to 177 lumens and CRI of 93
- > Compact fitting producing excellent diffused beam shape from a range of optics
- > Can be used for uplighting or downlighting
- > Low glare with optics recessed into the body by 17mm
- > Glare shield available to further reduce glare without affecting the wash of light
- > High quality machined bezel available in: 316 Stainless Steel, 316 Polished & Passivated Stainless Steel, Brass, Flamed Solid Bronze and powder coat White (RAL 9016), Black (RAL 9005), Classic Bronze (YM262E), any RAL
- > Fixing options include spring clips, O-rings, first fix sleeve and ground tube
- > Integral anti wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- > Not designed for permanent submersion, please use our LD242A
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > Switched, 0-10V, Casambi, DMX, Dali or Mains dimmable drivers available



DIMENSIONS

Dimensions in mm

For fixing and accessory 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 ₁₀₀)* | 106 | 138 | 177 |
| Delivered lm/Circuit W** | 97 | 86 | 76 |
| Typical LED Source wattage | 1W | 1.5W | 2.1W |
| Source LED lm | 133 | 187 | 206 |
| Source lm/W | 136 | 129 | 98 |
| Forward voltage (V ₁₀₀) | 2.8V | 2.9V | 3V |
| CRI | 93 | | |
| Colour consistency | 2 SCDM | | |
| Peak intensity | 1,075 cd | | |
| LOR | 0.86 | | |
| TM30 | RF93 RG99 | | |
| UGR rating ('downlight' mounted)*** | 3 | 3.9 | 4.8 |
| BUG rating ('uplight' mounted) | B0-U3-G0 | | |
| LED lifetime | L90B5 at 90,000hrs | | |
| Applications |  | | |

This data is based on LD56-C1-700-LW30-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 parameter of 4H 8H, C70 W50 F20

MECHANICAL

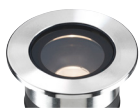
| | 350mA | 500mA | 700mA |
|-------------------------------|--|---------------|---------------|
| Ambient temperature ○ 55°C | -20°C to 55°C | -20°C to 55°C | -20°C to 55°C |
| Glass | 5mm thick borosilicate glass with black ceramic screen print | | |
| Materials | 316 stainless steel bezel, black anodised aluminium body | | |
| Weight of product | 0.158kg | | |
| IP rating | IP68 - not for permanent submersion | | |
| Static load | 1000kg | | |
| IK rating | IK07 | | |
| Wiring | In-series constant current wiring (pre-wired with 2 core cable at a length of 250mm) | | |

ENVIRONMENTAL

| | | | |
|-----------------------------------|---|--|--|
| TM65 | Available on request | | |
| TM66 | 2.8 | | |
| 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 (REPLACEABLE LIGHT ENGINE) |  Visit page 5 for replacement parts | | |

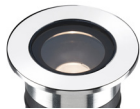
AVAILABLE FINISHES

Please refer to our finishes guide for full details



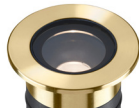
316 STAINLESS STEEL

- > Marine grade 316 Steel
- > Standard machined finish
- > Extremely durable with very high corrosion resistance
- > Passivation is recommended to further strengthen the existing high corrosion resistance, if the fitting is to be continuously subjected to salt water
- > Interior & exterior use



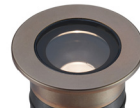
POLISHED & PASSIVATED 316 STAINLESS STEEL

- > Marine Grade 316 Steel
- > Pristine 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



MACHINED BRASS

- > Solid CZ121 Brass
- > Standard machined finish
- > Corrosion resistance rated fair to excellent
- > Please note a natural green/brown 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



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 - POWDER COAT

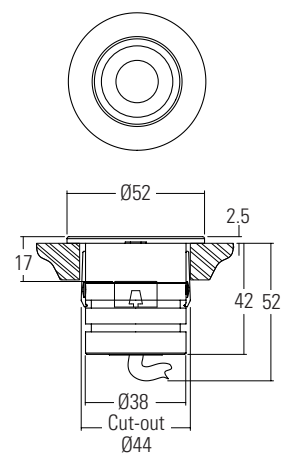
- > White (RAL 9016), Black (RAL 9005), Classic Bronze (YM262E), Gunmetal Grey (RAL 7021) Textured Mars Bronze (SX350F), Textured Fir Green (RAL 6009), and other RAL colours available
- > Smooth matt texture unless stated otherwise
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

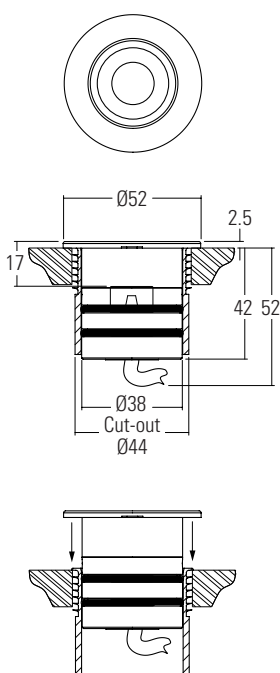
/SC Spring clip fixing

Useful for plinth or downlight applications



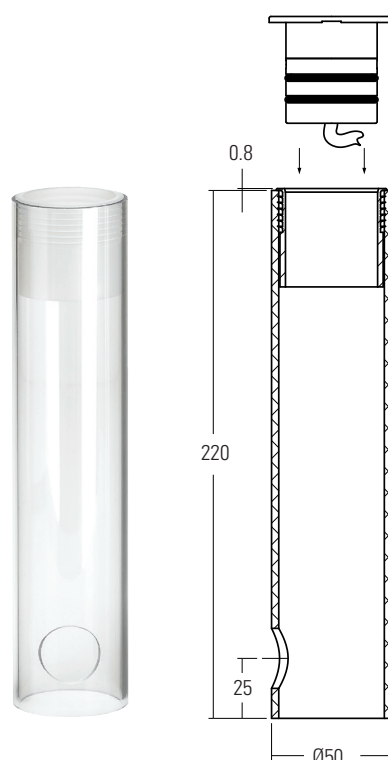
/476 O-rings and sleeve

A more robust and water tight method of fixing for in-ground applications



/476GT Ground tube

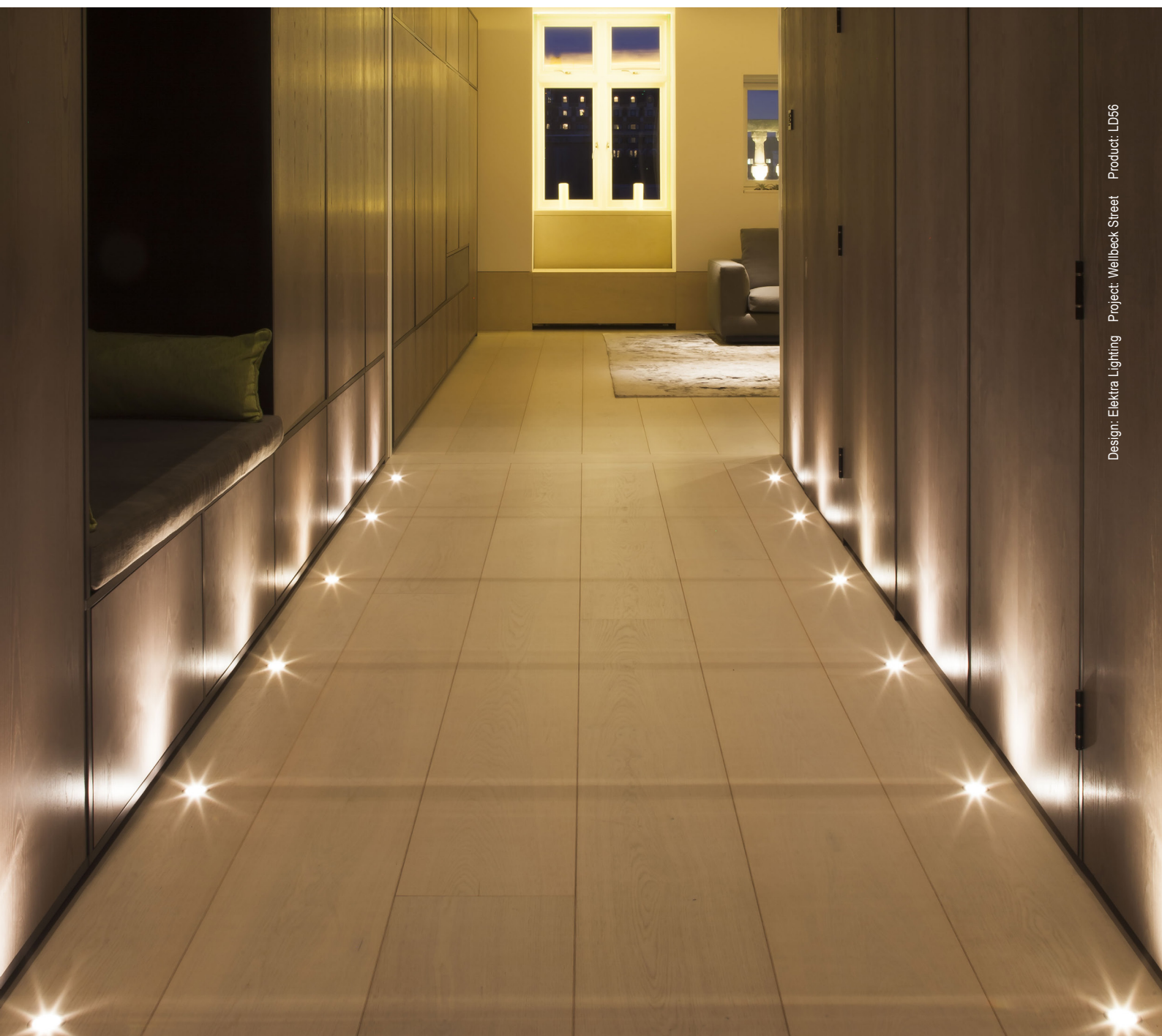
The in-ground tube has been designed for applications where a recessed uplight is required in soil or gravel terrains. The tube can be buried with the necessary wiring and then the fitting installed after the landscaping work has been completed. It is supplied with the fixing sleeve bonded into the tube, and can be cut down on site.



GLARE CONTROL OPTIONS

/GS56 Glare shield (not available with oval beam)

An optional glare shield is available to further reduce glare from the LED and optic. This is useful in narrow details where people may stand directly over the fitting. The glare shield does not reduce the light on the lit surface (wall) but will cut out some light onto the ceiling.



Design: Elektra Lighting Project: Wellbeck Street Product: LD56

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.

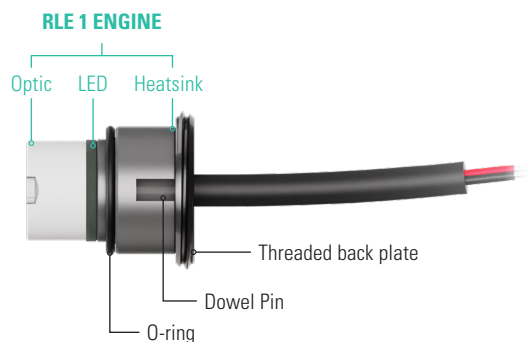
RLE Engines

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.



LD56 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/ | Super Warm White (2200K) | /LW22 | Narrow beam 16mm optic | RLE/OP-16/NB | Dowel pin for Oval beam orientation | RLE1/OP-16/DP |
| | | Extra Warm White (2700K) | /LW27 | Medium beam 16mm optic | RLE/OP-16/MB | O-ring | RLE/OR2 |
| | | Warm White (3000K) | /LW30 | Wide beam 16mm optic | RLE/OP-16/WB | Threaded back plate | RLE/TBP |
| | | White (4000K) - on request | /LW40 | Oval beam 16mm optic | RLE/OP-16/OB | | |
| | | Cool White (5000K) | /LW50 | | | | |

ORDER CODES & OPTIONS

Example: LD56-C1-700 / LW30 / MB / Stainless steel / GS56 / 476

Light Engine & Drive Current


LED Colour

Beam Angle


Finish

Fixing & Accessories

LD56 - / / / /

Ambient temperature key:  55°C

WHITE LED ENGINES

|  C1 | |
|--|-------------|
| 1.2W LED at 350mA | LD56-C1-350 |
| 1.7W LED at 500mA | LD56-C1-500 |
| 2.4W LED at 700mA | LD56-C1-700 |

| | |
|----------------------------|-------|
| Super Warm White (2200K) | /LW22 |
| Extra Warm White (2700K) | /LW27 |
| Warm White (3000K) | /LW30 |
| White (4000K) - on request | /LW40 |
| Cool White (5000K) | /LW50 |
| Red | /LR |
| Green | /LG |
| Blue | /LB |
| Amber | /LA |

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

| | |
|---|---|
|  | 316 Stainless Steel |
|  | Polished & Passivated 316 Stainless Steel (for marine environments) |
|  | Machined Brass |
|  | Flamed Solid Bronze |
|  | Powder Coat White (RAL 9016) |
|  | Powder Coat Black (RAL 9005) |
|  | Powder Coat Classic Bronze (YM262E) |
|  | Powder Coat Gunmetal Grey (RAL 7021) |
|  | Powder Coat Textured Fir Green (RAL 6009) |
|  | Powder Coat Textured Mars Bronze (SX350F) |
|  | Powder Coat RAL |

| | |
|---|--|
|  | /SC |
|  | /476 |
|  | /476GT |
|  | /GS56 (Not applicable with Oval Beam) |

Drivers

Use with 350mA, 500mA & 700mA constant current LED drivers
We have a range of dimmable LED drivers including DMX and DALI compatible. Please see the downloads section on our website.