

## LD44X

### LOW GLARE MINIATURE RECESSED INTERIOR & EXTERIOR LED UPLIGHT




CB | RLE | R+R



The LD44 has been designed for interior & exterior applications and can be specified as an uplight (LD44X) or wall light (LD44Y). Developed around our LD42 and LD43 range, it features a 2-core sheathed cable for exterior installations, delivering up to 180 lumens with a drive current option of 700mA. Optics are recessed 10mm for low glare and glare shield options allow aperture reductions of 45% or 70%. An optional 20° Tilt lens can be used to focus the light onto the lit surface for a more concentrated effect. With a replaceable light engine and anti-wicking barrier, the LD44 offers a robust, miniature solution for exterior rated uplighting and wall light applications in harsh environments.

## KEY FEATURES

- > High-power C1 engine with NICHIA LED delivering up to 180lm at 700mA
- > For interior and exterior uplight (LD44X) or wall light (LD44Y) applications, with a 2-core sheathed cable for exterior installations
- > Minimal body depth and bezel diameter with optics recessed 10mm for low glare
- > Range of beam angles including 12°, 31°, 48°, 12° x 36°
- > Available with a 45% or 70% glare shield accessory
- > Optional 20° Tilt lens angles the light onto the lit surface for a more concentrated effect
- > Features an RLE (Replaceable Light Engine) engine with Moisture Guard to increase protection against moisture ingress
- > Wide range of high-quality machined metal, painted wet spray and powder coated bezel finishes available, including: 316 Stainless Steel, Polished & Passivated 316 Stainless Steel, Brass, Flamed Solid Bronze
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > Fixing options include spring clips or /480 first fix sleeve with O-rings
- > Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers available



## DIMENSIONS

Dimensions in mm

For fixings and dimensions please go to page 4.



## 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> )*	103	134	180
Delivered lm/Circuit W**	95	83	77
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 SDCM		
Peak intensity	1,057 cd		
LOR	0.87		
TM30	RF93   RG100		
UGR***	2.9	3.6	4.9
BUG rating (Sideways mounted)	B0-U3-G1		
BUG rating (Uplight mounted)	B0-U3-G0		
LED lifetime	L90B5 at 90,000hrs		
Applications			

This data is based on LD44X-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 parameters of 4H 8H, C70 W50 F20

## MECHANICAL

Ambient temperature	-20°C to 45°C (350mA-500mA) or -20°C to 35°C (700mA)
Glass	3.3mm thick borosilicate glass with black ceramic screen print
Materials	Hard anodised aluminium body, machined 316 stainless steel bezel
Weight of product	0.078kg
IP rating	IP68 (Not for permanent submersion)
IK rating	IK06
Wiring	In-series constant current wiring (pre-wired with 2 x core cable at a length of 250mm)

## 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 (REPLACEABLE LIGHT ENGINE)	 Visit page 6 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
- > 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
- > 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 (LD44X) & WET SPRAY (LD44Y)

- > The powder coated finish is very matt with a smooth texture unless stated otherwise
- > Powder coat finishes: White (RAL 9016), Black (RAL 9005), Classic Bronze (YM262E), Gunmetal Grey (RAL 7021) Textured Mars Bronze (SX350F), Textured Fir Green (RAL 6009) or any RAL colour
- > Powder coat is not recommended for high-traffic in-ground applications, unless placed to one side where it will not be walked on
- > The wet spray finish offers a fine coating with a slightly metallic finish
- > Wet spray finishes: White (RAL 9016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass, Anthracite Grey (7016) or any RAL colour
- > Wet spray finishes are not recommended for in-ground applications
- > Both paints are suitable for interior & exterior use

## LD44 APPLICATION

In an effort to bring a modular approach to our new products, we now offer a further level of configuration to allow the same products for multiple applications. This includes bezel options and optical Tilt lenses. These products will feature the suffix of LD44X for in-ground applications and LD44Y for wall/downlight applications referring to the axis of the mounting surface of the luminaire.

### LD44X (Uplight)

The LD44X bezel is designed for in-ground applications. The glass is glued from the front to provide the bezel with a flush glass to help prevent the build-up of dirt and dust in the aperture.



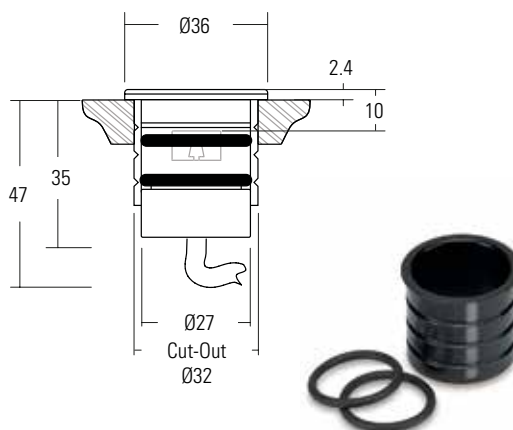
### LD44Y (Wall light)

The LD44Y bezel is designed for recessed wall applications. The glass is secured from behind with no glue line, allowing for a slightly smaller aperture and a more aesthetically pleasing luminaire. Pair the LD44Y bezel with our asymmetric Tilt-lens for a great wall mounted floor washer.

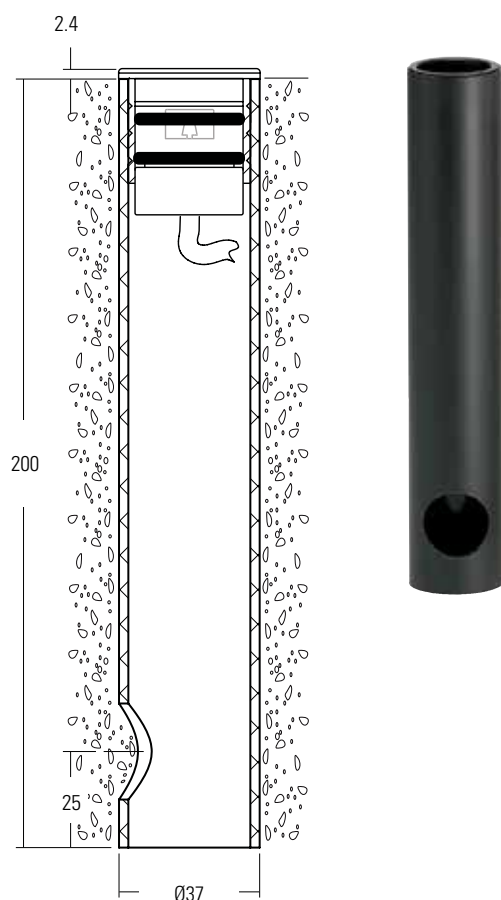


*Dimensions in mm*

Robust, watertight method of fixing for in-ground exterior applications.



The in-ground tube has been designed for applications where a recessed uplighter is required in soil or gravel terrain. 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 AND LIGHT OUTPUT OPTIONS

Dimensions in mm

### LD44

Circular aperture with lens and LED assembly recessed into the body by 10mm.



### LD44 with GS44-45

Addition of a half-moon glare shield in front of the lens to further reduce glare. Please note that the Oval beam cannot be used with GS44-45.



### LD44 with Tilt lens and GS44-45

Features a half-moon glare shield, but with the addition of an integral 20° Tilt lens which angles the light towards the lit surface. Please note that the Oval beam cannot be used with the Tilt lens and GS44-45.



### LD44 with GS44-70

Features a 70% glare shield for applications that require minimal output and glare. Please note that the Oval beam cannot be used with the GS44-70.



### LD44 with Tilt lens and GS44-70

Features a 70% glare shield, but with the addition of an integral 20° Tilt lens which angles the light towards the lit surface. Please note this option is only available in a Narrow beam.



## 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.

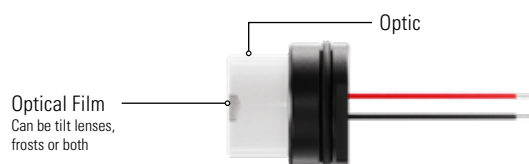
### RLE Engines

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.



## LD42 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	
RLE 2 ENGINE	RLE2/	Super Warm White (2200K)	/LW22	Narrow beam 16mm optic	RLE/OP-16/NB	Optical Filter / Tilt Lens 1	RLE/OF/TL1
		Extra Warm White (2700K)	/LW27	Medium beam 16mm optic	RLE/OP-16/MB		
		Warm White (3000K)	/LW30	Wide beam 16mm optic	RLE/OP-16/WB		
		White (4000K) - on request	/LW40	Oval beam 16mm optic	RLE/OP-16/OB		
		Cool White (5000K)	/LW50				

## ORDER CODES & OPTIONS - LD44X

Example: LD44X-C1-700 / LW30 / OB / L / NGS / 316 STAINLESS STEEL / SC

Light engine & drive current	LED colour	Beam angle	Optical option	Glare shield	Finish	Fixing

### C1

1.2W LED at 350mA	LD44X-C1-350	Super Warm White (2200K)	/LW22	12° Narrow	/NB	20° Tilt	A	NGS	316 Stainless Steel	/480
1.7W LED at 500mA	LD44X-C1-500	Extra Warm White (2700K)	/LW27	31° Medium	/MB	No tilt	L	GS44-45 (not applicable with Oval beam)	Polished & Passivated 316 Stainless Steel (for marine environments)	/SC
2.4W LED at 700mA	LD44X-C1-700	Warm White (3000K)	/LW30	48° Wide	/WB			GS44-70 (Not applicable with Oval beam. When using Tilt lens, only Narrow beam can be specified)	Machined Brass	/480GT
		White (4000K) on request	/LW40	12° x 36° Oval	/OB				Flamed Solid Bronze	
		Cool White (5000K)	/LW50						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	

#### Drivers

Use with 350mA, 500mA and 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.