

## LD42D

### ULTRA-LOW GLARE MINIATURE SEMI-RECESSED DOMED LED WALL LIGHT



CB | RLE | R + R



The miniature LD42D is ideal for discreet lighting of steps and pathways within interior, exterior and marine applications. The fitting is an evolution of our popular LD42, offering a new bezel aesthetic. When viewed from above, the machined, domed bezel obscures the light source, resulting in ultra-low glare. LD42D offers a powerful floor wash reaching up to 3 metres, with an optional 20° Tilt lens to focus the beam down onto the lit surface. With Narrow to Oval beam angles available and a high IP rating, a range of lighting effects can be created even in the harshest environments.

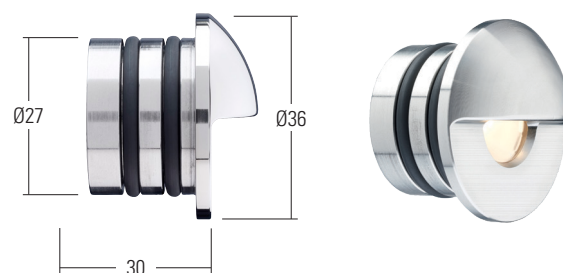
## KEY FEATURES

- > Machined domed body offers an ultra low glare solution by obscuring the light source from view and directing it only onto the lit surface
- > High-power C1 engine with NICHIA LED delivering up to 73lm
- > Miniature fitting with very minimal body depth and bezel diameter
- > Optional 20° Tilt lens to focus the light down onto to the lit surface
- > Range of beam angles including new Extra Oval beam, a wall grazing optic now available for floor washing across the LD42 range
- > Wide range of high-quality machined metal and painted bezel finishes available, including: 316 Stainless Steel, Polished & Passivated 316 Stainless Steel, Machined Brass, Flamed Solid Bronze, White (RAL 9016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass, Anthracite Grey (RAL 7016) or any RAL colour
- > Use with our LD43 uplight for a uniform floor and wall washing effect
- > Hidden 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 fixing dimensions please go to page 3.



## WHITE LED ENGINE SPECIFICATION

|                                       |   |       |  |       |
|---------------------------------------|---|-------|--|-------|
| Product                               | LD42D   |       | LD42D with Tilt lens   |       |
| Engine                                |  C1  |       |  C1 |       |
| Beam angles                           | 12°, 31°, 50°, 30° x 66°  |       | 26°, 31°, 40°, 25° x 57°   |       |
| LED manufacturer                      | NICHIA  |       | NICHIA   |       |
| Colour temperature*                   | 2200K, 2700K, 3000K, 4000K, 5000K   |       | 2200K, 2700K, 3000K, 4000K, 5000K  |       |
| Current                               | 350mA   | 500mA | 350mA  | 500mA |
| LED power (Max)**                     | 1.2W  | 1.7W  | 1.2W   | 1.7W  |
| Delivered lumens (L <sub>100</sub> )* | 61  | 73    | 57   | 69    |
| Lumens per circuit watt               | 58  | 49    | 54   | 46    |
| CRI (Typ)                             | 93  |       | 93   |       |
| Forward voltage (V <sub>100</sub> )   | 3.2V  |       | 3.2V   |       |
| Colour consistency                    | 2 SDCM  |       | 2 SDCM   |       |
| Peak intensity                        | 448 cd  |       | 371 cd   |       |
| LED Lumens                            | 157lm   |       | 157lm  |       |
| LOR                                   | 0.34  |       | 0.32   |       |
| TM30                                  | RF92  | RG100 | RF92   | RG99  |
| LED lifetime                          | L90B5 at 90,000hrs  |       |  |       |
| Applications                          |       |       |  |       |

This data is based on LD42D-C1-500-NB and LD42D-C1-500-NB

\*Lumen output data applies to all colour temperatures

\*\*Indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver

## MECHANICAL

|                     |  |  |
|---------------------|--|--|
| Ambient temperature | C1   | -20°C to 45°C (350mA) or -20°C to 35°C (500mA) |
|                     | C1 (AUS/NZ)  | -20°C to 25°C (350mA-500mA)                    |
| Glass               | 1.2mm thick low iron glass   |  |
| Materials           | 316 stainless steel bezel and body, stainless steel spring clips, acetal sleeve and rubber o-rings |  |
| Weight of product   | 0.078kg  |  |
| IP rating           | IP67   |  |
| Wiring              | In-series constant current wiring (pre-wired with 2 x single core cable at a length of 150mm)      |  |

## 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 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
- > Pristine, mirror like finish
- > Recommended for pools and marine applications
- > 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 - WET SPRAY

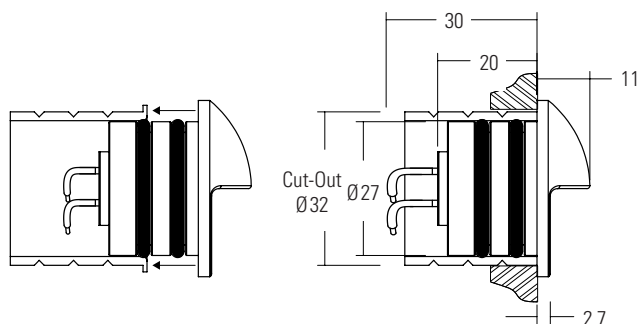
- > Fine coating with slightly metallic finish
- > White (RAL 9016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass, Anthracite Grey (7016) or any RAL colour available
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

## DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

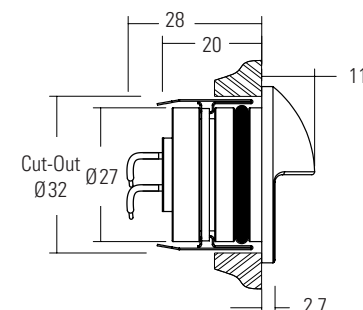
### /480 O-rings and sleeve

Acetal sleeve rubber o-rings provide a robust, watertight method fixing.



### /SC Spring clip fixing

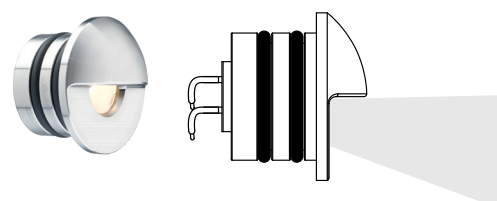
Stainless steel spring clips provide a simple single-fix mounting method.



## LIGHT OUTPUT OPTIONS

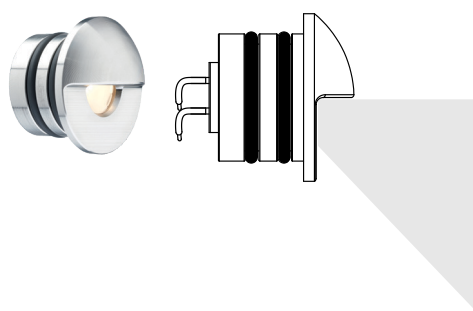
### LD42D without Tilt lens

Provides a throw of light up to 3 metres when specified at 500mA, ideal for lighting wide staircases and pathways.



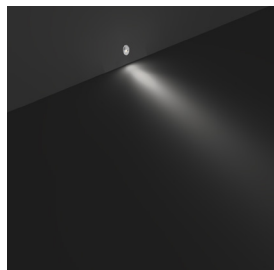
### LD42D with Tilt lens

The addition of a 20° Tilt lens focuses the light down onto the lit surface for a concentrated effect. Ideal for discreet lighting or narrow applications.

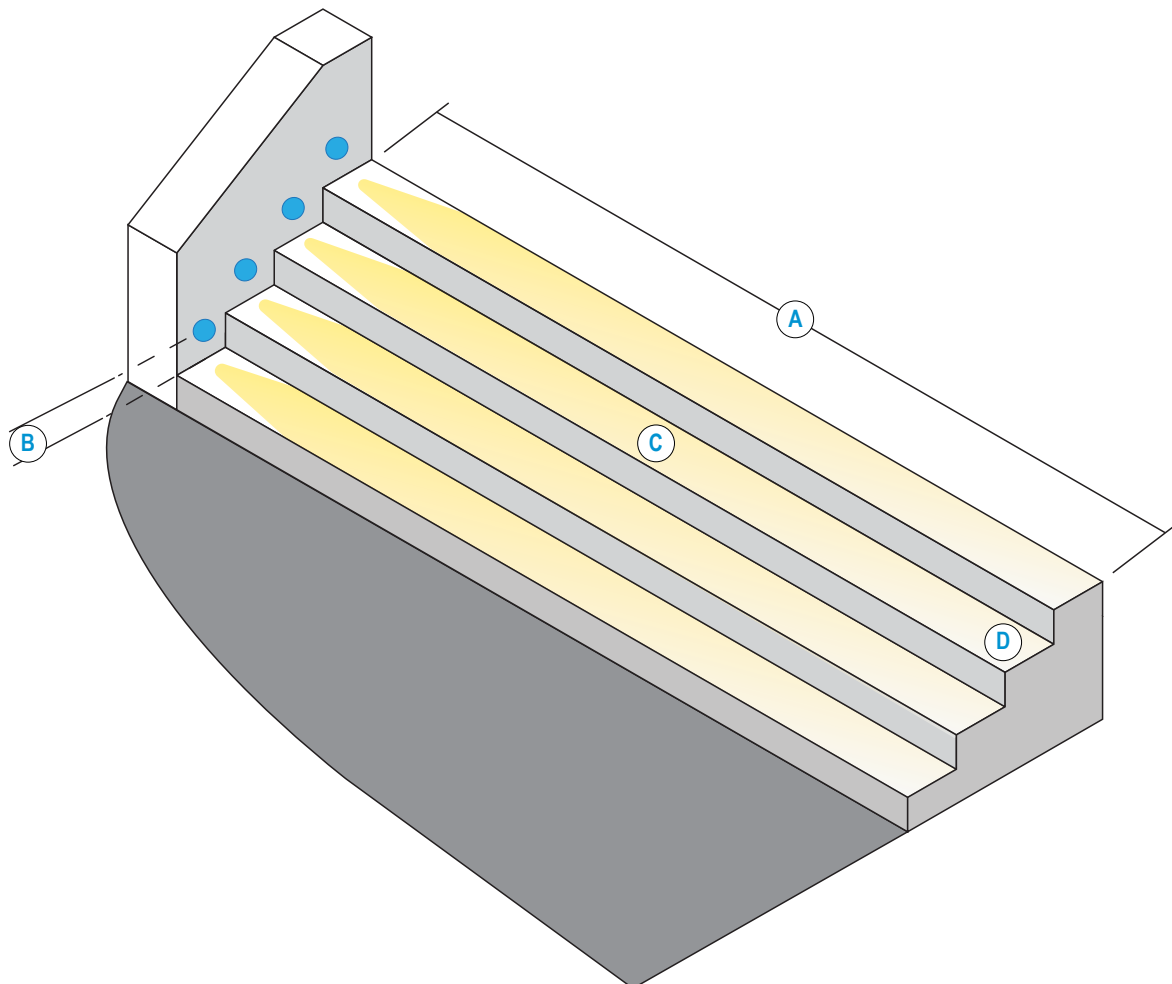


## INSTALLATION GUIDE - STEP LIGHTING

Below is a step application guide with suggested luminaire mounting heights for lighting across steps. Every project and lighting scenario will be different and the table below is to be used as a starting point. Please use our photometric files to further test the desired effect for your application. Files are available on the LD42D product page on our website.



LD42D - NB



LD42D-350-NB

| A | Step width                    | 1000mm             | 1500mm | 2000mm | 2500mm | 3000mm |
|---|-------------------------------|--------------------|--------|--------|--------|--------|
| B | Height of fittings            | 100mm (above step) |        |        |        |        |
| C | Mid-step illuminance (Lux)    | 67 LX              | 44 LX  | 25 LX  | 15 LX  | 9 LX   |
| D | End of step illuminance (Lux) | 29 LX              | 10 LX  | 5 LX   | 3 LX   | 2 LX   |

LD42D-500-NB

| A | Step width                    | 1000mm             | 1500mm | 2000mm | 2500mm | 3000mm |
|---|-------------------------------|--------------------|--------|--------|--------|--------|
| B | Height of fittings            | 100mm (above step) |        |        |        |        |
| C | Mid-step illuminance (Lux)    | 95 LX              | 53 LX  | 29 LX  | 17 LX  | 11 LX  |
| D | End of step illuminance (Lux) | 33 LX              | 12 LX  | 5 LX   | 3 LX   | 2 LX   |

LD42D-350-MB - with Tilt

| A | Step width                    | 1000mm | 1500mm | 2000mm | 2500mm | 3000mm |
|---|-------------------------------|--------|--------|--------|--------|--------|
| B | Height of fittings            | 175mm  | 200mm  | 225mm  | 250mm  | 275mm  |
| C | Mid-step illuminance (Lux)    | 311 LX | 84 LX  | 31 LX  | 14 LX  | 8 LX   |
| D | End of step illuminance (Lux) | 21 LX  | 5 LX   | 2 LX   | 1 LX   | 1 LX   |

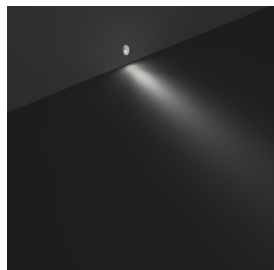
LD42D-500-MB - with Tilt

| A | Step width                    | 1000mm | 1500mm | 2000mm | 2500mm | 3000mm |
|---|-------------------------------|--------|--------|--------|--------|--------|
| B | Height of fittings            | 175mm  | 200mm  | 225mm  | 250mm  | 275mm  |
| C | Mid-step illuminance (Lux)    | 372 LX | 104 LX | 3 LX   | 1 LX   | 1 LX   |
| D | End of step illuminance (Lux) | 26 LX  | 6 LX   | 38 LX  | 17 LX  | 10 LX  |

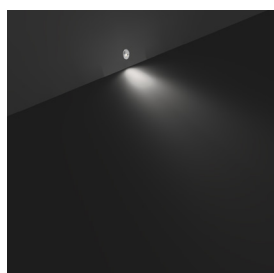
## INSTALLATION GUIDE - BULWARK/PATHWAY LIGHTING

Below is an application guide for narrow corridors and pathways with suggested luminaire spacing and mounting heights for achieving an even floor wash. Every project and lighting scenario will be different and the table below is to be used as a starting point. Please use our photometric files to further test the desired effect for your application. Files are available on the LD42D product page on our website.

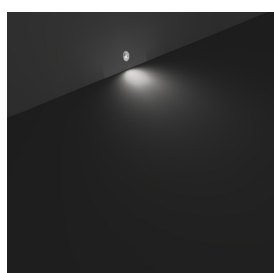
LD42D - NB



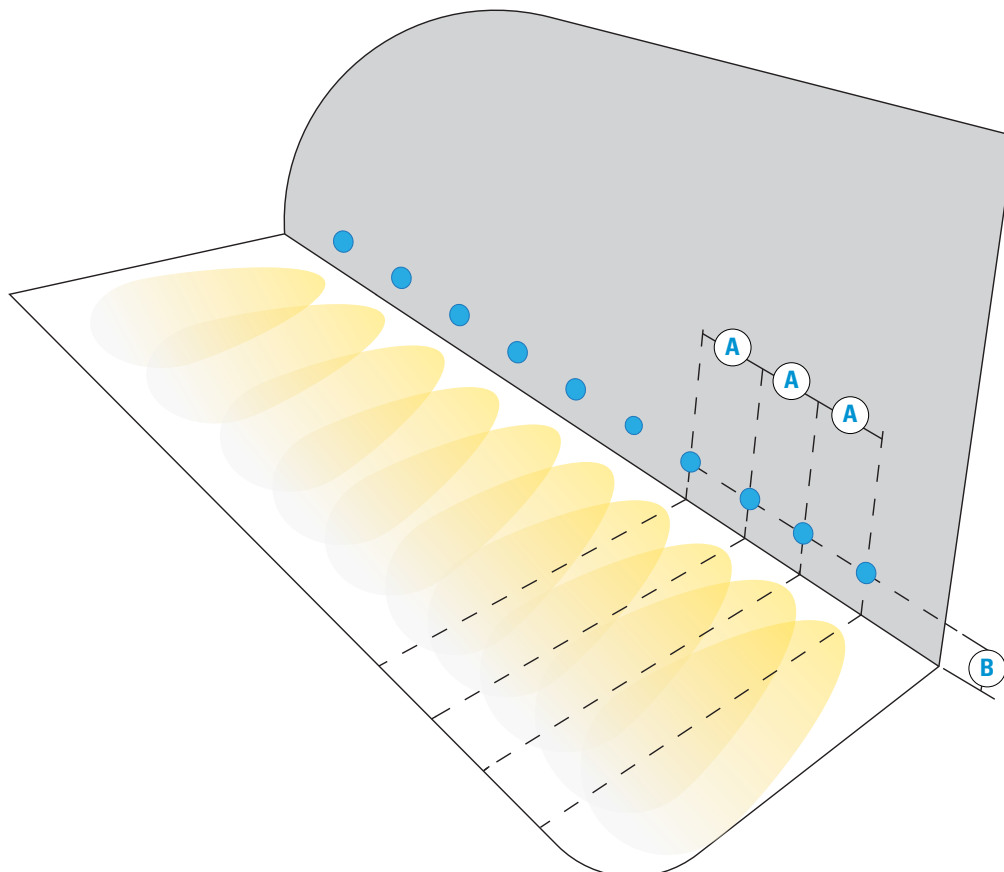
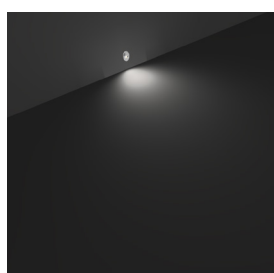
LD42D - MB



LD42D - WB



LD42D - EOB



| LD42D-500 |                                | /NB   | /MB   | /WB   | /EOB  |
|-----------|--------------------------------|-------|-------|-------|-------|
| <b>A</b>  | Space between fittings         | 250mm | 400mm | 450mm | 600mm |
| <b>B</b>  | Height of fitting (from floor) | 150mm | 200mm | 300mm | 200mm |
|           | Average (Lux)                  | 77 LX | 54 LX | 48 LX | 46 LX |

| LD42D-500 - with Tilt |                                | /MSB   | /MB    | /WB   | /EOB  |
|-----------------------|--------------------------------|--------|--------|-------|-------|
| <b>A</b>              | Space between fittings         | 180mm  | 250mm  | 350mm | 500mm |
| <b>B</b>              | Height of fitting (from floor) | 350mm  | 400mm  | 450mm | 450mm |
|                       | Average (Lux)                  | 202 LX | 116 LX | 76 LX | 43 LX |

Results based on achieving >0.6 uniformity on a 1.5M wide bulwark/pathway

## 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

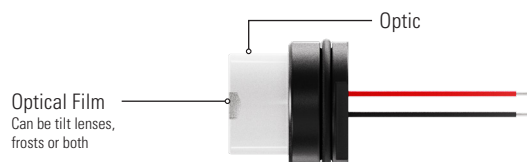
Repairs can be conducted on any site worldwide, or in our factory, with a small tool. Simply swap out the singular modular LED insert, and replace it with another, along with a new optic, which are both supplied by us. The warranty provided with the product varies based on who is performing RLE repairs.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



Used in the following products:  
LD42, LD42D, LD43 & LD43G

## 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/                      |       |                        |              | Optical Filter / Tilt Lens 1 |            |
|              |  | Super Warm White (2200K)   | /LW22 | Narrow beam 16mm optic | RLE/OP-16/NB |                              | 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

EXAMPLE: LD42D-C1-350 / LW30 / MSB / A / 316 STAINLESS STEEL / 480

| Light Engine & Drive Current | LED Colour | Beam Angle | Optical option | Finish | Fixing |
|------------------------------|------------|------------|----------------|--------|--------|
|                              |            |            |                |        |        |

### C1

|                    |              |
|--------------------|--------------|
| 1.2W LED at 350mA* | LD42D-C1-350 |
| 1.7W LED at 500mA* | LD42D-C1-500 |

**\*AUS/NZ:**  
Add - AU - suffix to the product code e.g.  
LD42D-AU-C1-350

|                          |       |
|--------------------------|-------|
| Super Warm White (2200K) | /LW22 |
| Extra Warm White (2700K) | /LW27 |
| Warm White (3000K)       | /LW30 |
| White (4000K) on request | /LW40 |
| Cool White (5000K)       | /LW50 |

|   |      |
|---|------|
| 12° Narrow (only available without Tilt lens)       | /NB  |
| 26° Medium Spot (only available with Tilt lens)     | /MSB |
| 31° Medium  | /MB  |
| 50° Wide (40° when used with Tilt lens)             | /WB  |
| 30° x 66° Oval (25° x 57° when used with Tilt lens) | /EOB |

|   |   |
|---|---|
| 20° Tilt (not available with Narrow beam) | A |
| No tilt                                   | L |

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

|   |      |
|---|------|
|  | /480 |
|  | /SC  |

### Drivers

Use with 350mA and 500mA 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.