

LD151

HIGH POWER INTERIOR/EXTERIOR LED UPLIGHT



The LD151 is a powerful uplight with a compact size and depth, designed specifically to produce low glare illumination onto interior and exterior walls and columns. It can be specified with a wide range of options allowing it to suit most project requirements. Available LED engines include E2, Tunable White, RGBW and F1 which offer a range of colour temperatures between 2200K-5000K and beam angles, with multiple accessories and bezel finishes to choose from. The bezel aesthetic is minimal featuring black trim glass and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials, ensuring excellent thermal and light output performance.

KEY FEATURES

- > E2 engine option with CREE LED, up to 595 lumens and built-in reverse polarity protection
- > F1 COB, Tunable White, RGBW, 2nd channel LEDs also available
- > Straight edged bezel available in 316 Stainless Steel, Polished & Passivated Stainless Steel, Brass, Flamed Bronze and paint finishes
- > Multiple optic options for lighting columns, arches or wall washing in interior and exterior applications, rated IP67
- > Choice of glare shields to minimise the view of the intense light source without affecting the wash of light on the wall/column
- > Single light source and optic produces a very consistent beam with no multiple shadows
- > LED and lens are recessed in a matt black anodised body for reduced glare
- > Toughened glass with a ceramic black trim
- > Fitting rated IK08
- > Hidden fixing options include first fix sleeve, ground tube and concrete housing
- > Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers available




DIMENSIONS

Dimensions in mm

For full dimensions and for accessory dimensions please go to page 4.



WHITE LED ENGINE SPECIFICATION

| Engine |  E2 | | |  F1 | | |
|--|--|------------|---------------|--|--------------|--------------|
| Beam angles | 10°, 19°, 34°, 54°, 49° x 15° | | | 25°, 46°, 65°, 43° x 25° | | |
| LED manufacturer | CREE | | | CREE | | |
| Colour temperature* | 2700K / 3000K / 4000K / 5000K | | | 2200K | | |
| Current | 350mA | 500mA | 700mA** | 350mA | 500mA | 700mA** |
| LED power (Max) | 4.2W (5W***) | 6W (7W***) | 8.4W (10W***) | 3.2W (3.5W***) | 4.5W (5W***) | 6.3W (7W***) |
| Delivered lumens (L ₁₀₀)**** | 361 | 474 | 595 | 211 | 272 | 348 |
| Lumens per circuit watt | 73 | 68 | 60 | 61 | 55 | 50 |
| CRI (Min) | 85 | | | 90 | | |
| Forward voltage (V ₁₀₀) | 14V | | | 9V | | |
| Colour consistency | 2 SCDM | | | 3 SCDM | | |
| Peak intensity | 9052 cd | | | 1664 cd | | |
| LED lumens | 873 | | | 623 | | |
| LOR | 0.68 | | | 0.63 | | |
| TM30 | RF85 | RG98 | | RF90 | RG103 | |
| UGR***** | 10.1 | | | 9.1 | | |
| LED lifetime | L90B5 at 90,000hrs | | | | | |
| Applications |  | | | | | |

These values are based around a LD151-E2-700-LW30-NB & LD151-F1-700-LW22-MSB

*see lumen variance table to the right

**can only be specified with /484N concrete housing

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

****lumen output indicated is without the glare shield. Allow 30% less with the /GS glare shield.

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

| Lumen variance by CCT | |
|-----------------------|--------|
| 2700K | +/- 0% |
| 4000K | +7% |
| 5000K | +16% |

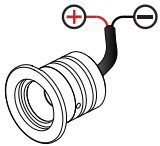
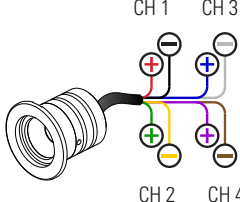
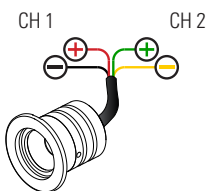
MECHANICAL

| | |
|---------------------|--|
| Ambient temperature | -20° to 45° (500mA) or -20° to 35° (700mA) |
| Glass | 6mm thick toughened glass with black ceramic screen print |
| Materials | Stainless steel bezel, anodised aluminium body |
| Weight of product | 0.52kg |
| IP rating | IP67 |
| IK rating | IK08 |
| Wiring | In-series constant current wiring (pre-wired with 2 core cable at a length of 250mm) |

COLOUR & DYNAMIC LED ENGINE SPECIFICATION

| | | | |
|--------------------|---|--|--|
| Engine |  CL - Colour |  RGBW |  TW - Tunable White |
| Beam Angles | 24°, 38°, 54°, 20° x 46° | 38° colour mix lens | |
| LED manufacturer | CREE | CREE | |
| Colour temperature | Red, Green, Blue, Amber | Red, Green, Blue, 4000K White | |
| Current | 500mA | 350mA | 500mA |
| LED power (Max) | 7W | 3.5W | 5W |
| Applications |  | | |

MECHANICAL

| | | | |
|-------------------|---|--|---|
| Glass | 6mm thick toughened glass with black ceramic screen print | | |
| Materials | Stainless steel bezel, anodised aluminium body | | |
| Weight of product | 0.52kg | | |
| IP rating | IP67 | | |
| IK rating | IK08 | | |
| Wiring | CL - 2 core cables at 250mm in length  | RGBW - 8 core cables at 250mm in length  | TW - 4 core cables at 250mm in length  |

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 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

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 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

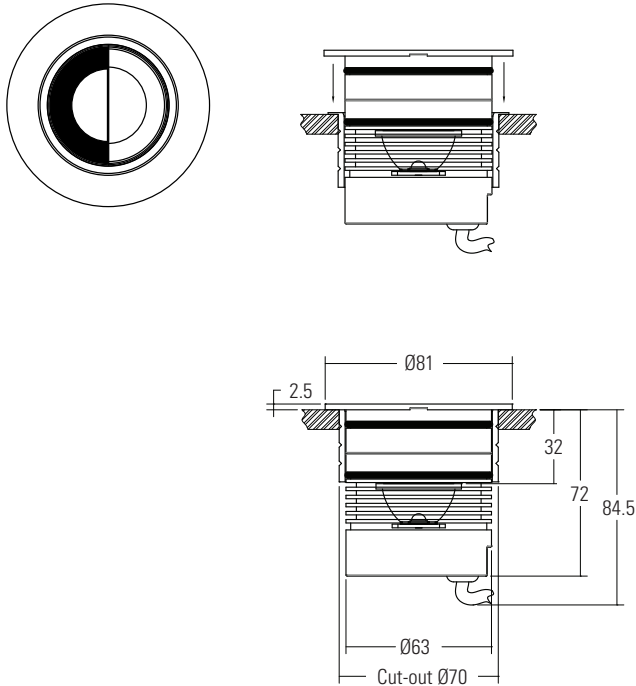
- > Matt Black, Matt White, and other RAL colours available
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

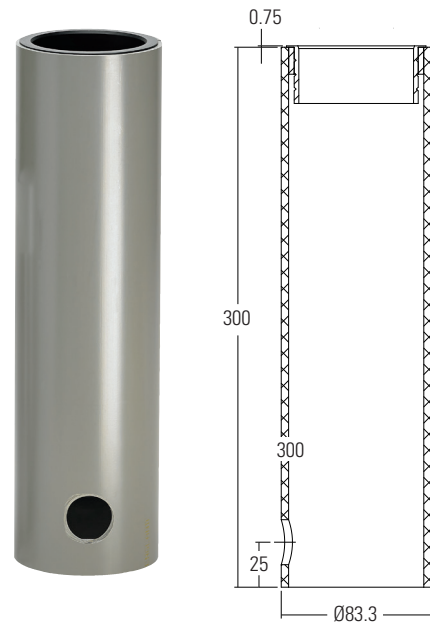
/484S First Fix Sleeve

The fitting is supplied as standard with a fixing sleeve; this is bonded into the mounting surface first. The LD151 is secured into the sleeve by 2 'O' rings on the body. When pushed into the sleeve it creates a watertight seal.



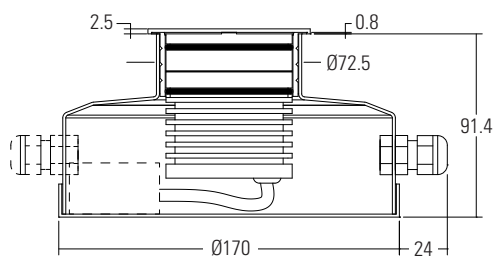
/484GT Ground tube

The in-ground tube has been designed for applications where a recessed uplight is required in soil or gravel surfaces. 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.



/484N or /484N-2 Concrete housing

Must be used when specifying the 700mA fitting. 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.



/484N
Concrete housing with 1x PG9 IP67 gland



/484N-2
Concrete housing with 2x PG9 IP67 gland

/ID Optional integral non dimming driver (single colour only at 350mA or 500mA)



GLARE SHIELD OPTIONS

LD151 comes with a choice of glare control options. Please refer to our photometric files for lumen data, these are available to download from the website.



/NGS

No glare shield. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



/GS

Standard glare shield, which provides an excellent balance between glare control and light output. This accessory works well in most applications.



/GSHM

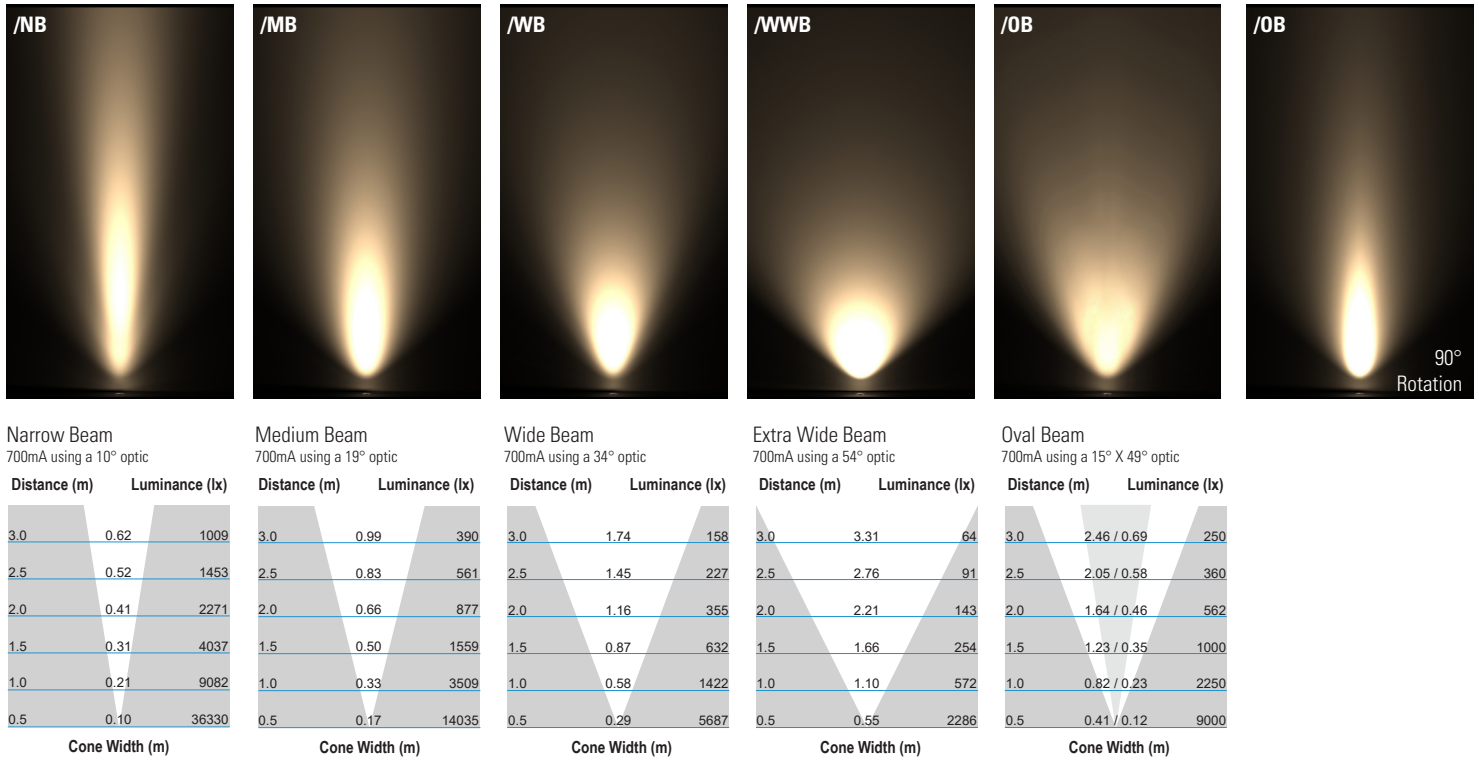
Half-moon glare shield for applications that require very low glare. Lumen output typically reduced by 60%.



CONE DIAGRAMS

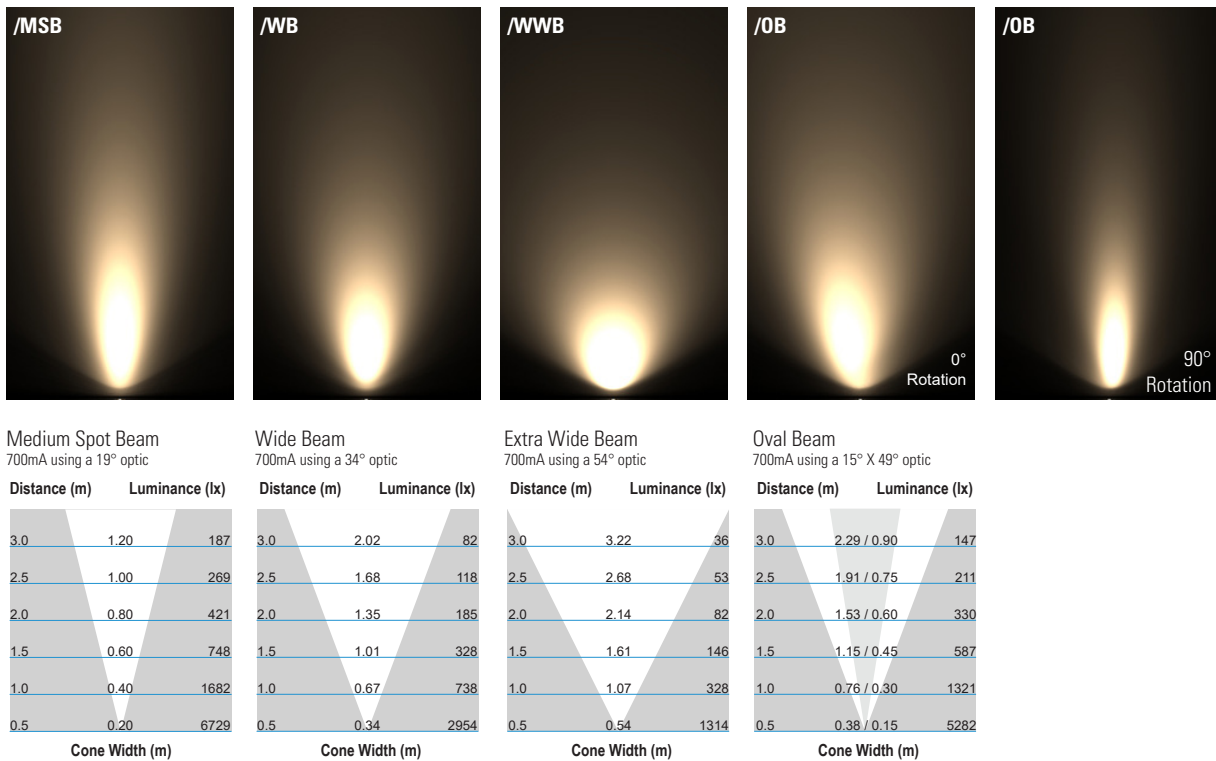
E2 LED Engine

Cone diagrams below are based on a 3000K E2 LED engine run at maximum output 700mA, 10W. Images below represents beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD151 product page on the website.



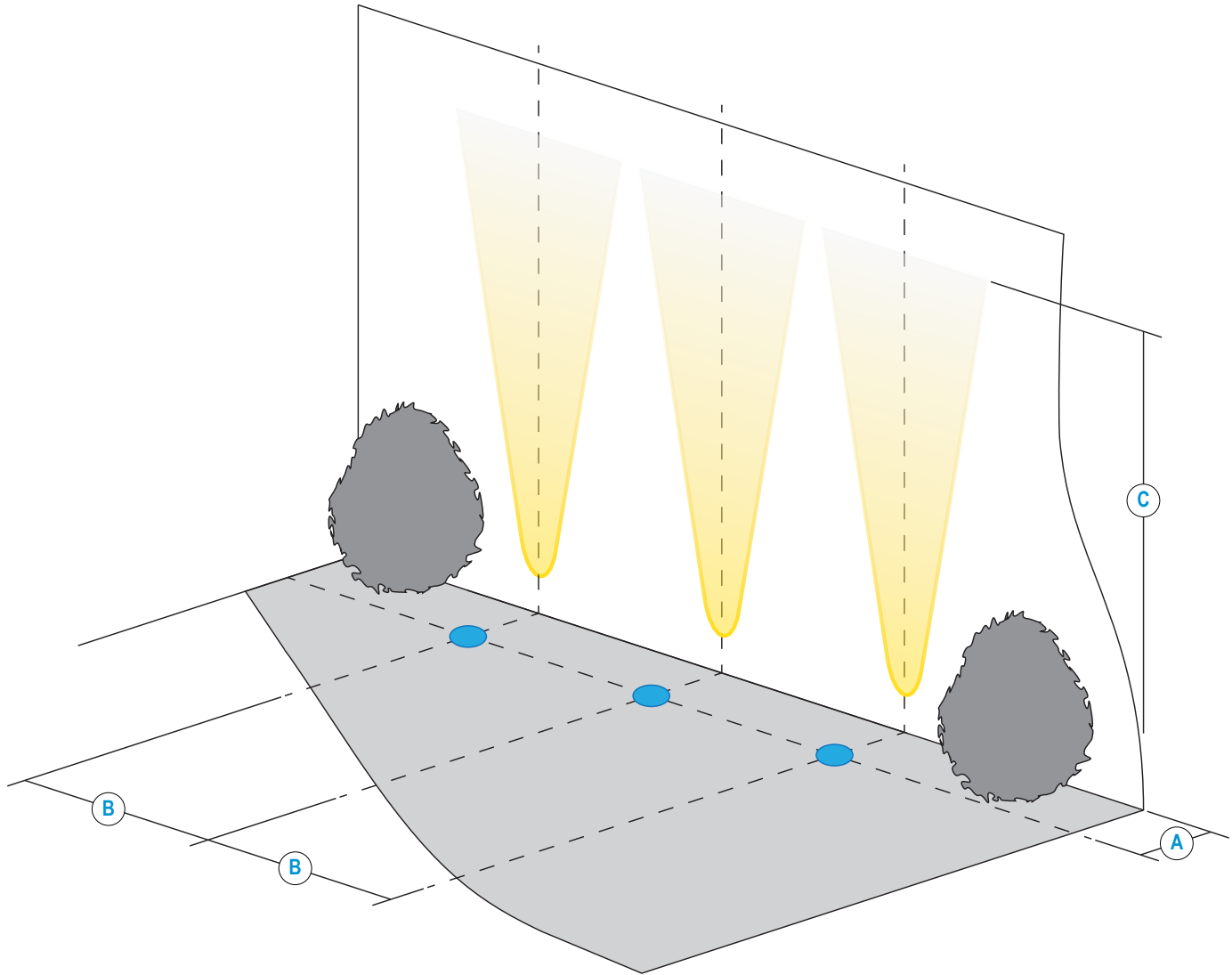
F1 LED Engine

Cone diagrams below are based on a 3000K F1 LED engine run at maximum output 700mA, 10W. Images below represents beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD151 product page on the website.



INSTALLATION GUIDE

Below is a luminaire positioning guide for white LEDs. Every project and lighting scenario will be different; the table below is to be used as a starting point for any wall wash design. Please use our photometric files to further test the desired effect for your application. Files are available on our LD151 product page on our website.



| LD151-E2 | /NB | /MB | /WB | /WWB | /OB |
|---|--------|-------|-------|-------|-------|
| A Distance from the centre of the fitting to the lit surface | 125mm | | | | |
| B Spacing for an even wash | 250mm* | 350mm | 400mm | 500mm | 500mm |
| C 500mA Lit distance | 6m | 4.5m | 2m | 2m | 4m |
| C 700mA Lit distance | 9m | 5.5m | 4m | 3m | 5m |

| LD151-F1 | /MSB | /WB | /WWB | /OB |
|---|-------|-------|-------|-------|
| A Distance from the centre of the fitting to the lit surface | 125mm | | | |
| B Spacing for an even wash | 350mm | 400mm | 500mm | 500mm |
| C 500mA Lit distance | 2.5m | 2m | 1.5m | 3m |
| C 700mA Lit distance | 5m | 4m | 2m | 4m |

*Wall washing using narrow beam optics should only be used if the designer requires long distance lighting up the lit surface.

ORDER CODES & OPTIONS

Example: LD151-E2-700 / LW30 / NB / NGS / Stainless Steel / 484N

| Light Engine & Drive Current | LED Colour | Beam angle | Glare shield | Bezel finish | Fixing accessories |
|------------------------------|------------|------------|--------------|--------------|--------------------|
| LD151 - | / | / | / | / | / |

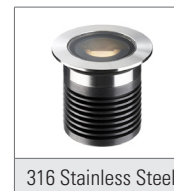
WHITE LED ENGINES

 E2

| | |
|------------------|--------------|
| 5W LED at 350mA | LD151-E2-350 |
| 7W LED at 500mA | LD151-E2-500 |
| 10W LED at 700mA | LD151-E2-700 |

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

| | |
|-----------------|------|
| 10° Narrow spot | /NB |
| 19° Medium | /MB |
| 34° Wide | /WB |
| 54° Extra wide | /WWB |
| 15° x 49° Oval | /OB |



 F1

| | |
|-------------------|--------------|
| 3.5W LED at 350mA | LD151-F1-350 |
| 5W LED at 500mA | LD151-F1-500 |
| 7W LED at 700mA | LD151-F1-700 |

| | |
|--------------------------|-------|
| Super Warm White (2200K) | /LW22 |
|--------------------------|-------|

| | |
|-----------------|------|
| 25° Medium spot | /MSB |
| 46° Wide | /WB |
| 65° Extra wide | /WWB |
| 43° x 25° Oval | /OB |



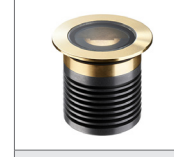
COLOUR & DYNAMIC LED ENGINES

 CL

| | |
|-----------------|--------------|
| 7W LED at 500mA | LD151-CL-500 |
|-----------------|--------------|

| | |
|-------|-----|
| Red | /LR |
| Green | /LG |
| Blue | /LB |
| Amber | /LA |

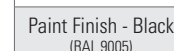
| | |
|----------------|------|
| 24° Medium | /MB |
| 38° Wide | /WB |
| 54° Extra wide | /WWB |
| 20° x 46° Oval | /OB |



 RGBW

| | |
|-------------------|----------------|
| 3.5W LED at 350mA | LD151-RGBW-350 |
| 5W LED at 500mA | LD151-RGBW-500 |

| |
|---------------------|
| 38° Colour mix lens |
|---------------------|



 TW

| | |
|-------------------|--------------|
| 3.5W LED at 350mA | LD151-TW-350 |
|-------------------|--------------|

| | |
|---|--------------|
| Tunable White 2700K & 4000K (standard option) | /LW27 + LW40 |
| Tunable White 2700K & 5000K | /LW27 + LW50 |
| Custom | /LW** + L** |

| | |
|----------------|------|
| 24° Medium | /MB |
| 38° Wide | /WB |
| 54° Extra wide | /WWB |
| 20° x 46° Oval | /OB |



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