


LD151T

HIGH-POWER TILTED INTERIOR/EXTERIOR LED UPLIGHT



The LD151T is a powerful interior and exterior uplight with a compact size and depth that has been designed with the LED and optics at a 6° tilt. This feature focuses the light onto the lit surface reducing spill onto any ceiling or canopy. By angling the light it reduces glare and allows installation further away from the wall or column. This product can be specified with a wide range of options allowing it to suit many project requirements with multiple bezel finishes to choose from as well as accessories, including its own unique glare shield. The E3 engine delivers a high output of 626lm, 12° narrow beam, and both engines are available in a wide range of colour temperatures from 2200K to 5000K. When used with an oval beam the LD151T offers a superb wall washing effect. The bezel aesthetic is minimal and features 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

- > E3 engine with NICHIA LED, delivering up to 626 lumens when specified at 700mA with concrete housing in 3000K
- > Available in a wide range of colour temperatures from 2200K to 5000K.
- > Optics set at a 6° tilt to focus the beam onto the lit surface from a distance with glare angled away from view
- > Half-moon glare shield option to minimise the view of the intense light source without affecting the wash of light on the wall/column
- > Straight cut edged bezel available in 316 Stainless Steel, Polished & Passivated 316 Stainless Steel, Machined Brass, Flamed Solid Bronze, and RAL paint finishes
- > Optics recessed within a black anodised body for reduced glare
- > Multiple optic options for lighting columns, arches or wall washing in interior and exterior applications, rated IP67
- > Toughened glass with ceramic black trim
- > Fitting rated IK08
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > 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 please go to page 3.



SPECIFICATION

| Engine | ⊕ E3 | | | ⊕ E3-90 | | | ⦿ F1 | | |
|--|---|------------|-------------|------------------------------|------------|-------------|-----------------------------------|------------|------------|
| Beam angles | 12°, 19°, 34°, 54°, 15°x 49° | | | 12°, 19°, 34°, 54°, 15°x 49° | | | 25°, 35°, 52°, 17° x 48° | | |
| LED manufacturer | NICHIA | | | NICHIA | | | CREE | | |
| Colour temperature* | 2200K, 2700K, 3000K, 4000K, 5000K | | | 2700K, 3000K | | | 2200K, 2700K, 3000K, 4000K, 5000K | | |
| Current [Rated Output] | 350mA [5W] | 500mA [7W] | 700mA [10W] | 350mA [5W] | 500mA [7W] | 700mA [10W] | 350mA [3.5W] | 500mA [5W] | 700mA [7W] |
| Typical LED Circuit wattage | 4.4W | 6.4W | 9.2W | 4.4W | 6.4W | 9.2W | 3.3W | 5W | 7.2W |
| Delivered lumens (L ₁₀₀)* | 372 | 487 | 626 | 372 | 487 | 626 | 163 | 215 | 308 |
| Delivered lm/Circuit W** | 84 | 76 | 68 | 84 | 76 | 68 | 49 | 43 | 43 |
| Typical LED Source wattage | 4W | 5.8W | 8.3W | 4W | 5.8W | 8.3W | 3W | 4.5W | 6.5W |
| Source LED lm | 574 | 740 | 949 | 574 | 740 | 949 | 377 | 497 | 654 |
| Source lm/W | 144 | 128 | 114 | 144 | 128 | 114 | 126 | 110 | 101 |
| Forward voltage (V ₁₀₀) | 11.3V | 11.6V | 11.8V | 11.3V | 11.6V | 11.8V | 8.7V | 9V | 9.3V |
| CRI | 85 | | | 90 | | | 90 | | |
| Colour consistency | 2 SCDM | | | 2 SCDM | | | 3 SCDM | | |
| Peak intensity** | 6,433 cd | | | 6,433 cd | | | 1,565 cd | | |
| LOR | 0.66 | | | 0.66 | | | 0.47 | | |
| TM30 | RF85 RG98 | | | RF85 RG98 | | | RF90 RG103 | | |
| UGR rating (‘downlight’ mounted) ***** | 2.9 | 3.8 | 5.1 | 2.9 | 3.8 | 5.1 | 3.4 | 4.4 | 5.5 |
| BUG rating (‘uplight’ mounted) | B0-U3-G0 | B0-U3-G0 | B0-U3-G0 | B0-U3-G0 | B0-U3-G0 | B0-U3-G0 | B0-U3-G0 | | |
| LED lifetime | L90B5 at 90,000hrs | | | | | | | | |
| Applications |    | | | | | | | | |

These values are based around a LD151T-E3-700-LW30-NB & LD151T-F1-700-LW22-MSB

*Lumen output data applies to all colour temperatures

**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

| | | 350mA | 500mA | 700mA |
|-----------------------------|---|-------------|---------------|---------------|
| Ambient temperature 55°C | E3 | Soil/Sleeve | -20°C to 55°C | -20°C to 50°C |
| | | Concrete | -20°C to 55°C | -20°C to 55°C |
| | E3-90 | Soil/Sleeve | -20°C to 55°C | -20°C to 50°C |
| | | Concrete | -20°C to 55°C | -20°C to 55°C |
| | F1 | Soil/Sleeve | -20°C to 55°C | -20°C to 50°C |
| | | Concrete | -20°C to 55°C | -20°C to 55°C |
| 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 exterior cable at a length of 250mm) | | | |

ENVIRONMENTAL

| | | | |
|--------------------|--|--|--|
| TM65 | Available on request | | |
| TM66 | 2.7 | | |
| Repair + Refurbish |  <p>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.</p> | | |

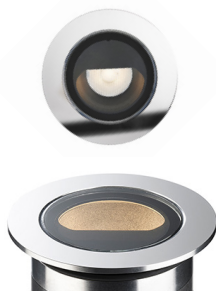
AVAILABLE FINISHES

Please refer to our finishes guide for full details



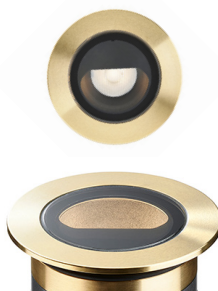
316 STAINLESS STEEL

- > 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



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.
- > High wear 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

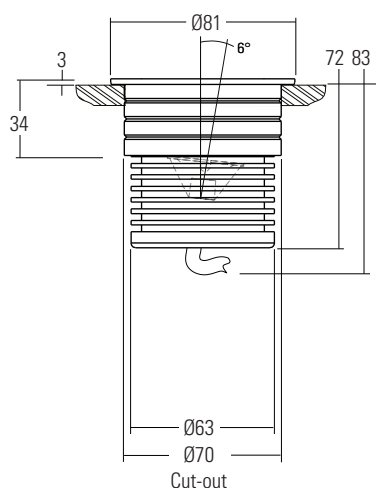
- > Paint finish on Stainless Steel
- > Matt Black, Matt White, Bronze and other RAL colours available
- > Not recommended for footlights in high traffic areas
- > Options for interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

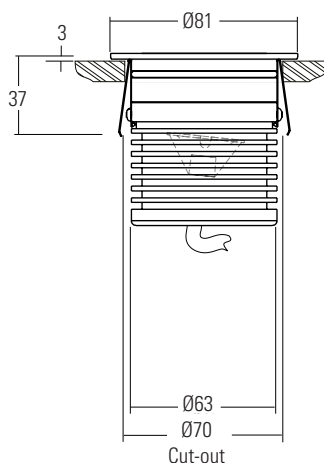
/484S First Fix Sleeve

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.



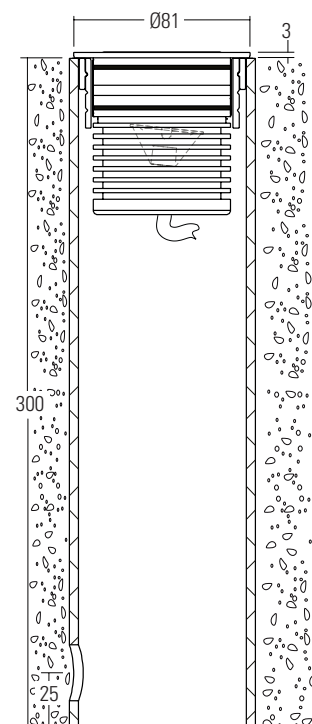
/SC Spring clip fixing

Suitable for use in surfaces with a thickness of 1mm – 25mm. Spring clips can provide a simple, single fix mounting method. We recommend that spring clips are only used in interior applications.



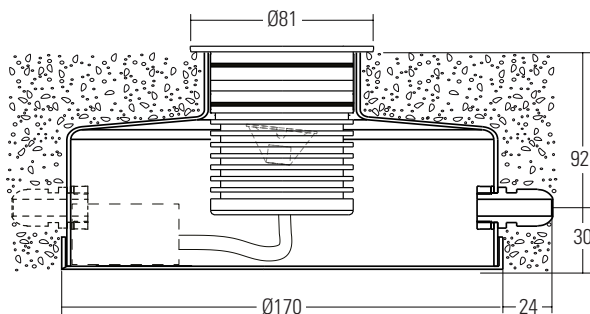
/484GT Ground tube

The in-ground tube has been designed for applications here 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 SHIELDS



/NGS No glare shield

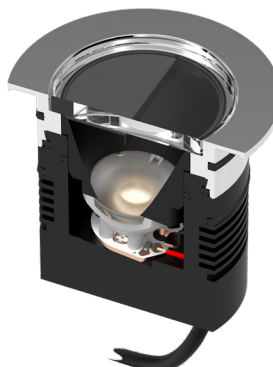
No glare shield. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



/GS Glare shield

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

6° TILT



Both the LED and the optic are set at a 6° tilt, allowing for more efficient use of a glare shield, as more of the light output is directed towards the open aperture of the fitting.

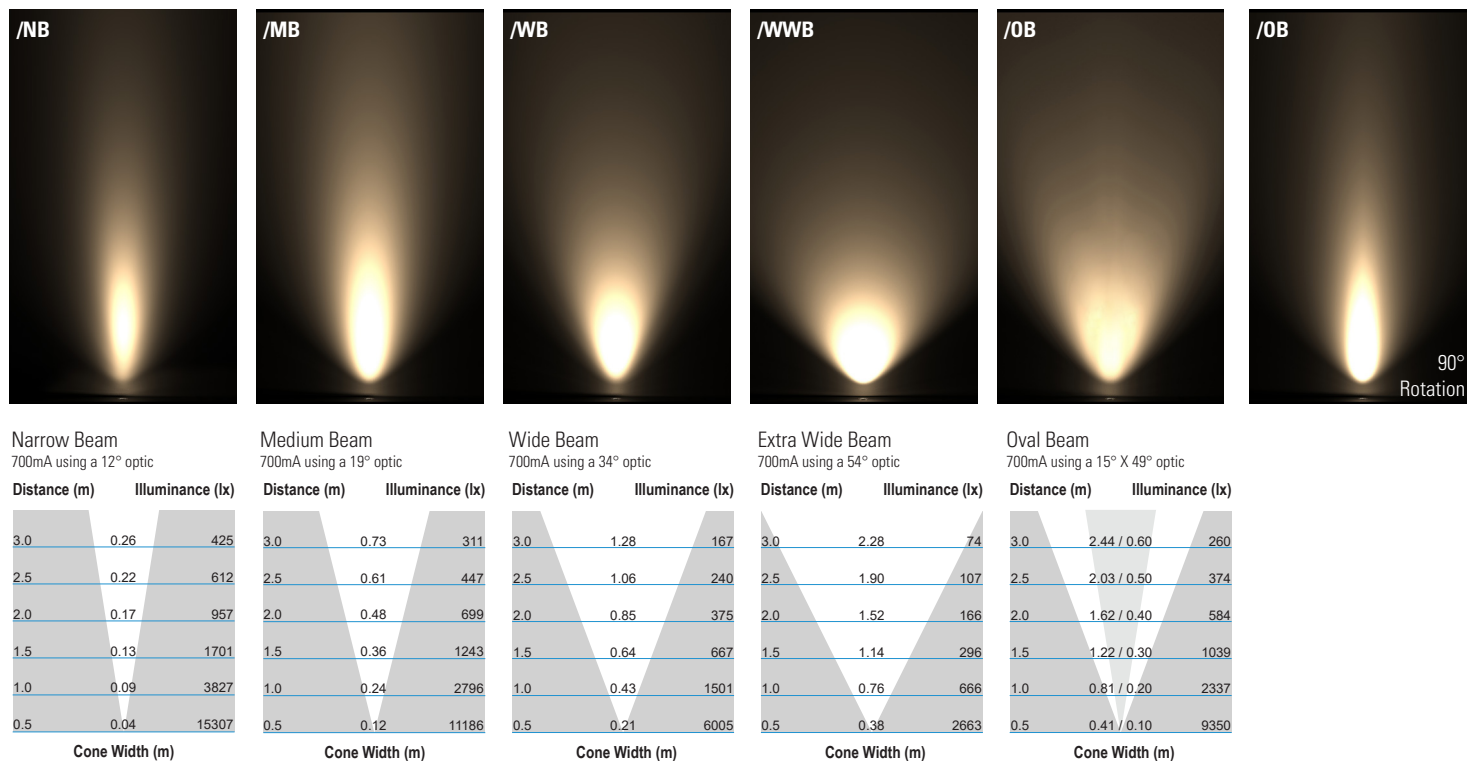
Please refer to our photometric files for lumen data.



CONE DIAGRAMS

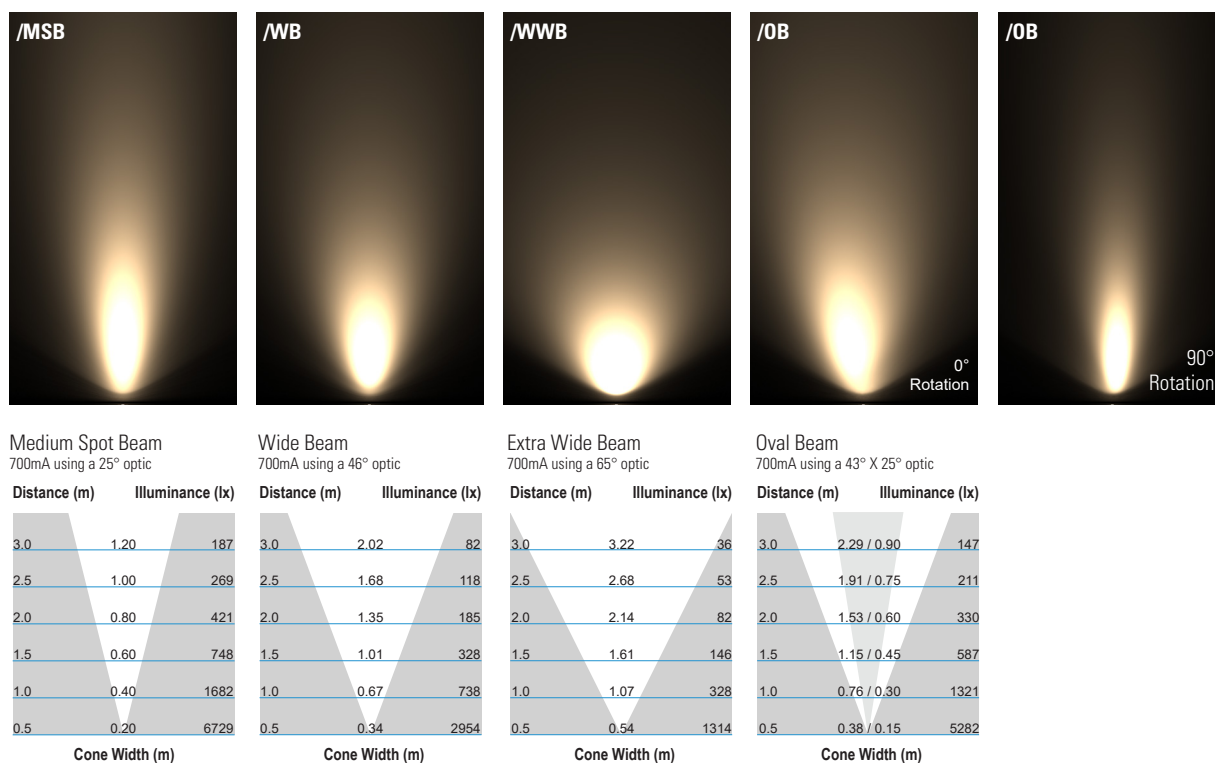
E3 LED Engine

Cone diagrams below are based on a 3000K E3 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 LD151T product page on the website.



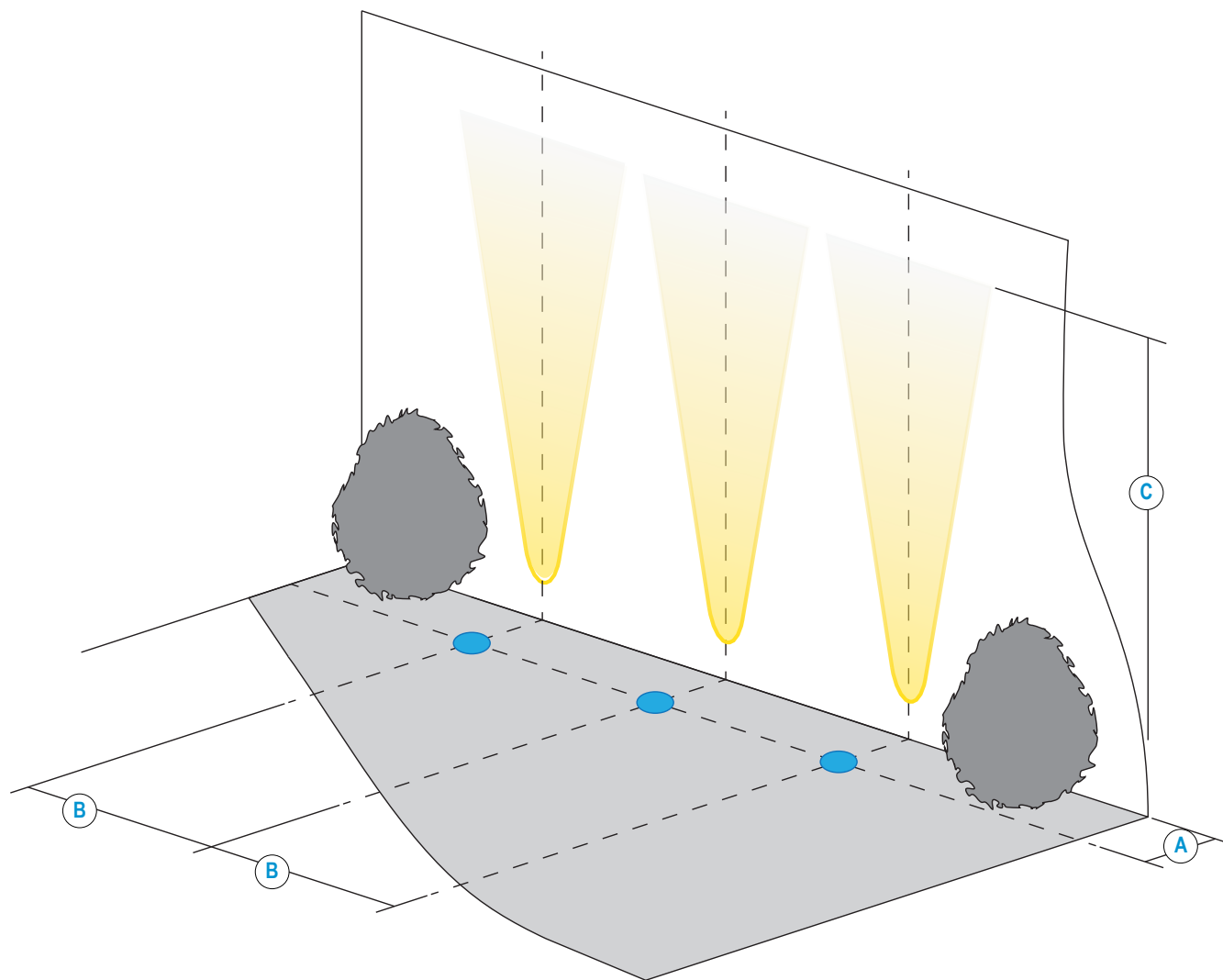
F1 LED Engine

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 LD151T 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 LD151T product page on our website.



| LD151T-E3 | | /NB | /MB | /WB | /WWB | /OB |
|-----------|--|--------|-------|-------|-------|-------|
| A | Distance from the centre of the fitting to the lit surface | 250mm | | | | |
| B | Spacing for an even wash | 250mm* | 350mm | 400mm | 500mm | 500mm |
| C | 500mA Lit distance | 7m | 4.5m | 3.5m | 2m | 4m |
| C | 700mA Lit distance | 9m | 7m | 5m | 3m | 6m |

| LD151T-F1 | | /MSB | /WB | /WWB | /OB |
|-----------|--|--------|-------|-------|-------|
| A | Distance from the centre of the fitting to the lit surface | 250mm | | | |
| B | Spacing for an even wash | 250mm* | 350mm | 400mm | 500mm |
| C | 500mA Lit distance | 3.5m | 2.5m | 2m | 2.5m |
| C | 700mA Lit distance | 5m | 3.5m | 3m | 3.5m |

*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: LD151T-E3-700/LW30/NB/NGS/316 stainless steel/484N

Light Engine & Drive Current

LED Colour

Beam Angle

Glare shield

Finish

Fixing Accessories

| | | | | | | | | |
|--|---|--|---|--|---|--|---|--|
| | / | | / | | / | | / | |
|--|---|--|---|--|---|--|---|--|

Ambient temperature key: 55°C

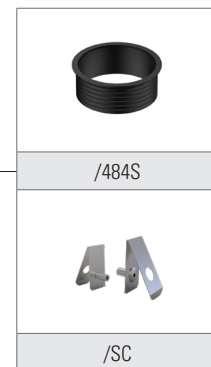
E3

| | | |
|------------|----------------------|---------------|
| 55°C Ta | 5W LED at 350mA* | LD151T-E3-350 |
| 55°C Ta | 7W LED at 500mA* | LD151T-E3-500 |
| 55°C Ta | 10W LED at 700mA* | LD151T-E3-700 |

*55°C ambient when placed in a 484N / 484N-2 concrete can in concrete.

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



E3-90

| | | |
|------------|----------------------|------------------|
| 55°C Ta | 5W LED at 350mA* | LD151T-E3-90-350 |
| 55°C Ta | 7W LED at 500mA* | LD151T-E3-90-500 |
| 55°C Ta | 10W LED at 700mA* | LD151T-E3-90-700 |

*55°C ambient when placed in a 484N / 484N-2 concrete can in concrete.

| | |
|--------------------------|-------|
| Extra Warm White (2700K) | /LW27 |
| Warm White (3000K) | /LW30 |

| | |
|-----------------|------|
| 12° Narrow spot | /NB |
| 19° Medium | /MB |
| 34° Wide | /WB |
| 54° Extra wide | /WWB |
| 15° x 49° Oval | /OB |



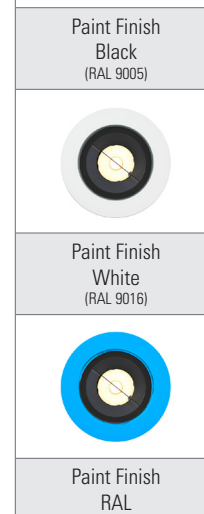
F1

| | | |
|------------|-----------------------|---------------|
| 55°C Ta | 3.5W LED at 350mA* | LD151T-F1-350 |
| 55°C Ta | 5W LED at 500mA* | LD151T-F1-500 |
| 55°C Ta | 7W LED at 700mA* | LD151T-F1-700 |

*55°C ambient when placed in a 484N / 484N-2 concrete can in concrete.

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

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