

## LD154T / LD154TDO

### TILTED HIGH-POWER RECESSED EXTERIOR LED UPLIGHT



The LD154T is part of our highest output uplight range, delivering up to 1375lm from a minimal body depth of 71mm. It features an asymmetric beam with optics set at a 3° tilt, allowing the fitting to be installed further away from the lit surface and focus the light where needed. The lens assembly features large 50mm optics which offer ultra-high efficiency, superior beam quality and low glare. There are 3 LED engine options available. Our new P1 engine delivers the highest output, whilst the E3 offers an exceptional extra narrow beam of 10° and the N1, a 14° beam. Reaching heights of up to 14 metres, the LD154T demonstrates excellent size to output ratio and has been designed with a repairable engine, providing a robust circular solution for high-power uplight applications.



## KEY FEATURES

- > Features an asymmetric beam with optics set at a 3° tilt, helping to reduce glare and focus the light where needed
- > New high-power P1 engine with CREE COB delivering upto 1375lm at 700mA in 3000K
- > E3 engine with NICHIA LED delivering up to 631lm at 700mA in 3000K offering an exceptional 10° extra narrow beam with peak intensity reaching 13,539cd
- > N1 engine with CREE COB delivering up to 851lm at 700mA in 3000K offering a 14° narrow beam
- > LD154TDO for drive over applications with thickened bezel and dedicated concrete housing to prevent rotation of the fitting
- > Utilises large 50mm low glare optics, chosen for efficiency, quality of beam and ability to produce narrow beams at high outputs
- > Repairable engine with integral anti-wicking barrier to increase protection against moisture ingress due to incorrect IP rated cable connections
- > Chamfered bezel available in 316 Stainless Steel, Polished & Passivated Stainless Steel and a wide range of powder coat paint finishes or any RAL colour
- > Switched, 0-10V, Casambi, DMX, DALI, or Mains dimmable drivers available

## DIMENSIONS



## WHITE LED ENGINE SPECIFICATION

| Engine                               | E3                                      |               |                | N1                                 |                |                 | P1                                 |                 |
|--------------------------------------|---|---------------|----------------|------------------------------------|----------------|-----------------|------------------------------------|-----------------|
| Beam angles                          | 10°, 12°, 23°, 30°, 44°, 62°, 11° x 46° |               |                | 14°, 25°, 31°, 45°, 62°, 14° x 46° |                |                 | 20°, 28°, 34°, 48°, 63°, 20° x 46° |                 |
| LED manufacturer                     | NICHIA                                  |               |                | CREE                               |                |                 | CREE                               |                 |
| Colour temperature*                  | 2700K, 3000K, 4000K, 5000K              |               |                | 2200K, 2700K, 3000K, 4000K, 5000K  |                |                 | 2200K, 2700K, 3000K, 4000K, 5000K  |                 |
| Current                              | 350mA                                   | 500mA         | 700mA          | 350mA                              | 500mA          | 700mA           | 350mA                              | 500mA           |
| LED power (Max)                      | 4.2<br>(5W**)                           | 6.0<br>(7W**) | 8.4<br>(10W**) | 5.8<br>(7W**)                      | 8.3<br>(10W**) | 11.6<br>(14W**) | 12.0<br>(14W**)                    | 18.0<br>(20W**) |
| Delivered lumens (L <sub>100</sub> ) | 362                                     | 490           | 631            | 463                                | 634            | 851             | 963                                | 1375            |
| Lumens per circuit watt              | 86                                      | 82            | 75             | 80                                 | 76             | 73              | 80                                 | 76              |
| CRI (Typ)                            | 85                                      |               |                | 93                                 |                |                 | 93                                 |                 |
| Forward voltage (V <sub>100</sub> )  | 14V                                     |               |                | 18.5V                              |                |                 | 38.5V                              |                 |
| Colour consistency                   | 2 SCDM                                  |               |                | 2 SCDM                             |                |                 | 2 SCDM                             |                 |
| Peak intensity                       | 13539 cd                                |               |                | 10837 cd                           |                |                 | 10060 cd                           |                 |
| LED Lumens                           | 840                                     |               |                | 1393                               |                |                 | 2303                               |                 |
| LOR                                  | 0.75                                    |               |                | 0.61                               |                |                 | 0.60                               |                 |
| TM30                                 | RF86                                    | RG98          |                | RF91                               | RG98           |                 | RF91                               | RG98            |
| LED lifetime                         | L90B5 @ 90,000hrs                       |               |                |                                    |                |                 |                                    |                 |
| Applications                         |   |               |                |                                    |                |                 |                                    |                 |

These values are based around a LD154T-E3-700-LW30-ENB, LD154T-N1-700-LW30-NB and LD154T-P1-700-LW30-NB

\*Lumen output data applies to all E3 colour temperatures. For N1 and P1 engines, please see lumen variance table to the right.

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

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

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

## MECHANICAL

|                     |  |
|---------------------|--|
| Ambient temperature | -20°C to 45°C (350mA/500mA/700mA)  |
| Glass               | 8mm thick, low iron glass  |
| Materials           | Black hard anodised aluminium body, 316 Stainless Steel bezel            |
| Weight of product   | 0.68kg   |
| IP rating           | IP67   |
| IK rating           | IK09   |
| Wiring              | In-series constant current wiring (pre-wired with 2 core cable at 350mm) |

## ENVIRONMENTAL

|      |                      |
|------|----------------------|
| TM65 | Available on request |
| TM66 | 2.5                  |

## AVAILABLE FINISHES

*Please refer to our finishes guide for full details*



### 316 STAINLESS STEEL

- > Marine grade 316 Stainless 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 Stainless Steel
- > Pristine mirror like finish
- > Recommended for pools and marine applications
- > 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



**WHITE (RAL 9016)**



**BLACK (RAL 9005)**



**CLASSIC BRONZE (YM262E)**



**TEXTURED MARS BRONZE (SX350F)**



**TEXTURED FIR GREEN (RAL 6009)**



**GUNMETAL GREY (RAL 7021)**



**RAL**

### PAINT FINISH - POWDER COAT

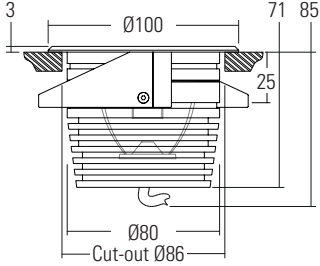
- > The powder coated finish is very matt
- > Not recommended for high traffic in-ground applications, unless placed to one side where the bezel will not be walked on
- > Powder coat paint is generally used on stainless steel or anodised aluminium components
- > Interior and exterior use

## DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

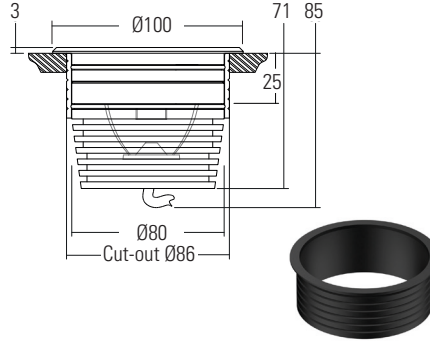
### /SC Spring clips

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



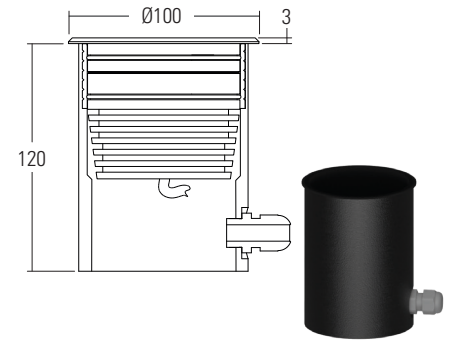
### /485S Fixing sleeve and O-rings

Acetal sleeve is bonded into the mounting surface first and the fitting is held in with O-rings. We recommend this method for mounting in exterior in-ground applications.



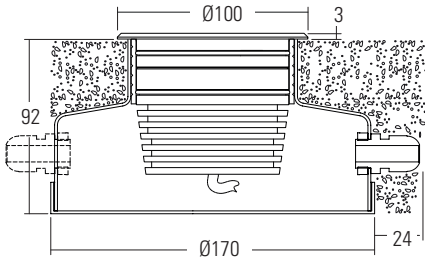
### /485GT Ground tube

Designed for soil or gravel surfaces. It is supplied with the fixing sleeve bonded into the tube and can be cut down on site. The tube can be buried with the necessary wiring via the PG9 IP67 gland and then the fitting installed after the landscaping work has been completed.



### /485N Concrete Housing

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 and a second gland is available for cabling onto the next luminaire.



**/485N**  
Concrete housing with 1x PG9 IP67 gland

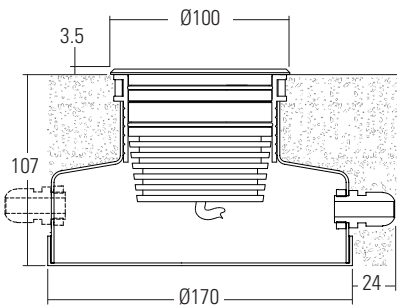


**/485N-2**  
Concrete housing with 2x PG9 IP67 gland

## LD154TDO (DRIVE OVER APPLICATION)

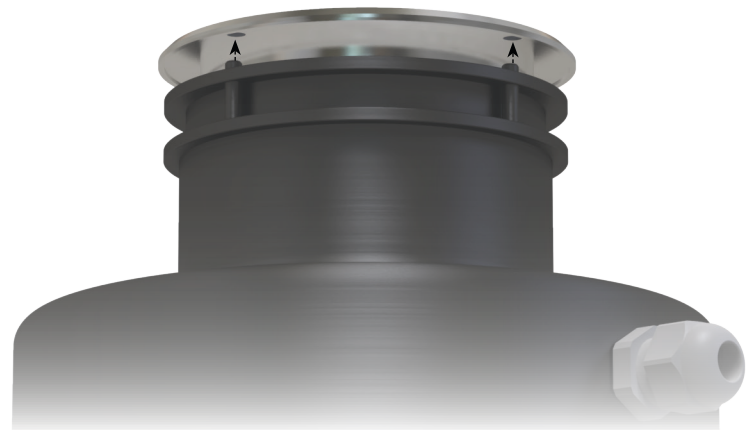
For drive over applications please specify the LD154TDO, which is supplied with a dedicated drive over bezel that has an increased thickness of 3.5mm. The bezel features pins that secured into the concrete housing, preventing the luminaire from rotating when driven over. When specifying LD154TDO, please use the dedicated configurator on page 9.

**/485N-DO** Drive over concrete housing with 1x PG9 IP67 gland.



### /485N-DO-2

Drive over concrete housing with 2x PG9 IP67 gland.



## GLARE CONTROL OPTIONS

### **/GSHM154** Half-moon glare shield

For applications that require low glare. Lumen output is typically reduced by 60% with no light lost on the lit surface.



### **/GSOB154** Oval beam glare shield

Reduces the angles at which glare is visible without compromising the oval output of the beam. Useful when used in applications where glare can be seen from two sides, for example archways.



### **/HL** Honeycomb Louvre

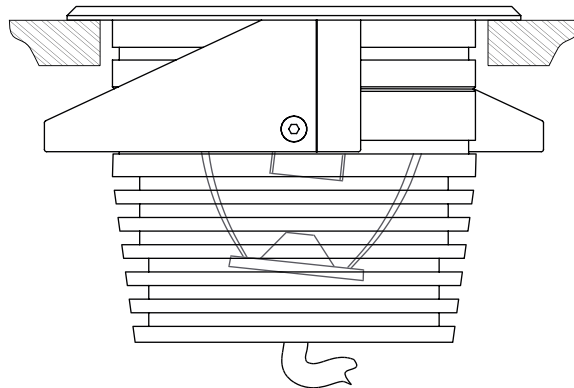
Helps reduce glare from all angles and can be used with glare shields.



## 3° TILT

Both the LED and the optic are set at a 3° 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.

Should there be any obstructions preventing installation, then the tilt also allows the luminaire to be placed further away from the lit surface, without compromising on output.



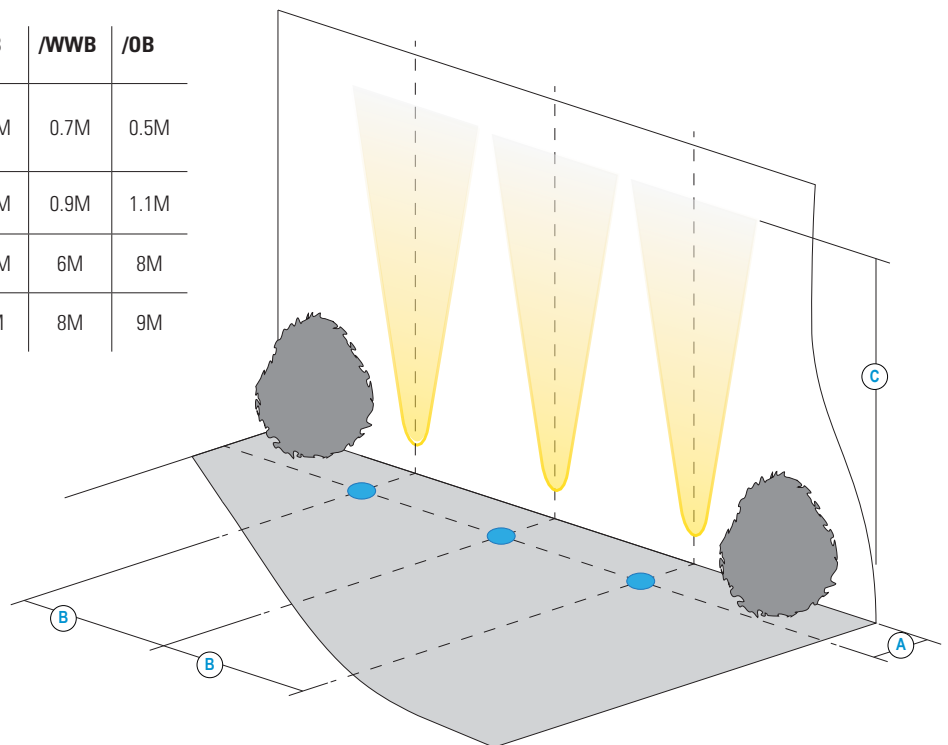
## INSTALLATION GUIDE

Below is an uplighting application guide with suggested luminaire mounting positions for an even wall 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 LD154T product page on our website.

| LD154T-E3 |  | /ENB* | /NB*  | /MSB  | /MB  | /WB   | /WWB  | /OB  |
|-----------|--|-------|-------|-------|------|-------|-------|------|
| <b>A</b>  | Distance from the centre of the fitting to the lit surface | 0.4M  | 0.4M  | 0.45M | 0.5M | 0.65M | 0.7M  | 0.4M |
| <b>B</b>  | Spacing for an even wash                                   | 0.4M  | 0.45M | 0.5M  | 0.7M | 0.8M  | 0.85M | 1M   |
| <b>C</b>  | 500mA lit distance**                                       | 10M   | 7M    | 6.5M  | 5.5M | 4.5M  | 4M    | 6M   |
| <b>C</b>  | 700mA lit distance**                                       | 11M   | 8M    | 7M    | 6M   | 5M    | 4.5M  | 7M   |

| LD154T-N1 |  | /NB*  | /MSB  | /MB  | /WB   | /WWB  | /OB  |
|-----------|--|-------|-------|------|-------|-------|------|
| <b>A</b>  | Distance from the centre of the fitting to the lit surface | 0.4M  | 0.45M | 0.5M | 0.65M | 0.7M  | 0.4M |
| <b>B</b>  | Spacing for an even wash                                   | 0.4M  | 0.5M  | 0.7M | 0.8M  | 0.85M | 1M   |
| <b>C</b>  | 500mA lit distance**                                       | 10M   | 8M    | 6.5M | 5.5M  | 5M    | 7M   |
| <b>C</b>  | 700mA lit distance**                                       | 11.5M | 9M    | 7.5M | 6.5M  | 6M    | 7.5M |

| LD154T-P1 |  | /NB*  | /MSB | /MB   | /WB  | /WWB | /OB  |
|-----------|--|-------|------|-------|------|------|------|
| <b>A</b>  | Distance from the centre of the fitting to the lit surface | 0.45M | 0.5M | 0.55M | 0.6M | 0.7M | 0.5M |
| <b>B</b>  | Spacing for an even wash                                   | 0.5M  | 0.7M | 0.75M | 0.8M | 0.9M | 1.1M |
| <b>C</b>  | 350mA lit distance**                                       | 11M   | 9M   | 9M    | 7.5M | 6M   | 8M   |
| <b>C</b>  | 500mA lit distance**                                       | 14M   | 11M  | 10.5M | 9M   | 8M   | 9M   |



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

\*\*Illuminated distance is calculated based on achieving 10% of the initial lux calculated at the start of the beam.

## ORDER CODES & OPTIONS - LD154T

Example: LD154T-E3-700 / LW30 / OB / GS0B154 / 316 STAINLESS STEEL / SC

| Light engine & drive current |  | LED colour |  | Beam angle |  | Accessory |  | Finish |  | Fixing |  |
|------------------------------|--|------------|--|------------|--|-----------|--|--------|--|--------|--|
| LD154T-                      |  |            |  |            |  |           |  |        |  |        |  |

**E3**

|                  |               |
|------------------|---------------|
| 5W LED at 350mA  | LD154T-E3-350 |
| 7W LED at 500mA  | LD154T-E3-500 |
| 10W LED at 700mA | LD154T-E3-700 |

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

|                  |      |
|------------------|------|
| 10° Extra Narrow | /ENB |
| 12° Narrow       | /NB  |
| 23° Medium Spot  | /MSB |
| 30° Medium       | /MB  |
| 44° Wide         | /WB  |
| 62° Extra Wide   | /WWB |
| 11° x 46° Oval   | /OB  |

**N1**

|                  |               |
|------------------|---------------|
| 7W LED at 350mA  | LD154T-N1-350 |
| 10W LED at 500mA | LD154T-N1-500 |
| 14W LED at 700mA | LD154T-N1-700 |

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

|                 |      |
|-----------------|------|
| 14° Narrow      | /NB  |
| 25° Medium Spot | /MSB |
| 31° Medium      | /MB  |
| 45° Wide        | /WB  |
| 62° Extra Wide  | /WWB |
| 14° x 46° Oval  | /OB  |

**P1**

|                  |               |
|------------------|---------------|
| 14W LED at 350mA | LD154T-P1-350 |
| 20W LED at 500mA | LD154T-P1-500 |

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

|                 |      |
|-----------------|------|
| 20° Narrow      | /NB  |
| 28° Medium Spot | /MSB |
| 34° Medium      | /MB  |
| 48° Wide        | /WB  |
| 63° Extra Wide  | /WWB |
| 20° x 46° Oval  | /OB  |



/GSHM154



/GS0B154



/HL



316 Stainless Steel



Polished & Passivated  
316 Stainless Steel  
(for marine environments)



Paint Finish - White  
(RAL 9016)



Paint Finish - Black  
(RAL 9005)



Paint Finish - Classic Bronze  
(YM262E)



Paint Finish - Textured Mars Bronze  
(SX350F)



Paint Finish - Textured Fir Green  
(RAL 6009)



Paint Finish - Gunmetal Grey  
(RAL 7021)



Paint Finish - RAL



/SC



/485S



/485N



/485N-2



/485GT

## ORDER CODES & OPTIONS - LD154TDO

Example: LD154TDO-E3-700 / LW30 / OB / GS0B154 / 316 STAINLESS STEEL / 485N-DO

|                              |            |            |           |        |        |
|------------------------------|------------|------------|-----------|--------|--------|
| Light engine & drive current | LED colour | Beam angle | Accessory | Finish | Fixing |
| LD154TDO-                    | /          | /          | /         | /      | /      |

### E3

|                  |                 |
|------------------|-----------------|
| 5W LED at 350mA  | LD154TDO-E3-350 |
| 7W LED at 500mA  | LD154TDO-E3-500 |
| 10W LED at 700mA | LD154TDO-E3-700 |

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

|                  |      |
|------------------|------|
| 10° Extra Narrow | /ENB |
| 12° Narrow       | /NB  |
| 23° Medium Spot  | /MSB |
| 30° Medium       | /MB  |
| 44° Wide         | /WB  |
| 62° Extra Wide   | /WWB |
| 11° x 46° Oval   | /OB  |



/GSHM154



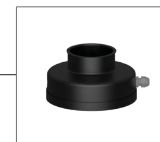
/GS0B154



/HL



316 Stainless Steel



/485N-DO



/485N-2

### N1

|                  |                 |
|------------------|-----------------|
| 7W LED at 350mA  | LD154TDO-N1-350 |
| 10W LED at 500mA | LD154TDO-N1-500 |
| 14W LED at 700mA | LD154TDO-N1-700 |

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

|                 |      |
|-----------------|------|
| 14° Narrow      | /NB  |
| 25° Medium Spot | /MSB |
| 31° Medium      | /MB  |
| 45° Wide        | /WB  |
| 62° Extra Wide  | /WWB |
| 14° x 46° Oval  | /OB  |

### P1

|                  |                 |
|------------------|-----------------|
| 14W LED at 350mA | LD154TDO-P1-350 |
| 20W LED at 500mA | LD154TDO-P1-500 |

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

|                 |      |
|-----------------|------|
| 20° Narrow      | /NB  |
| 28° Medium Spot | /MSB |
| 34° Medium      | /MB  |
| 48° Wide        | /WB  |
| 63° Extra Wide  | /WWB |
| 20° x 46° Oval  | /OB  |