

## LD154TG


### TRIMLESS HIGH-POWER TITLED RECESSED EXTERIOR LED UPLIGHT



The LD154TG is part of our Ultra range, delivering up to 1375lm from a minimal body depth of 85mm including the seamless glass bezel. 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.

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 9°, and the N1, a narrow 13° beam. The lens assembly features large 50mm optics which offer ultra-high efficiency, superior beam quality and low glare. Reaching heights of up to 14 metres and designed with our robust glass bezel, the LD154TG demonstrates an excellent size-to-output ratio, offering a discreet yet powerful exterior solution.

## KEY FEATURES

- > Features an asymmetric beam with optics set at a 3° tilt, helping to reduce glare and focus the light where needed
- > High-power P1 engine with CREE COB delivering upto 1375lm at 500mA 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
- > Durable all glass bezel, suitable for a wide range of applications
- > Utilises large 50mm low glare optics, chosen for efficiency, quality of beam and ability to produce narrow beams at high outputs
- > Low glare product with a choice of accessories to minimise the view of the light source at various angles
- > Fixing options include rebated trimless fixing sleeve, concrete housing and trimless ground tube
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > Switched, 0-10V, Casambi, DMX, DALI, or Mains dimmable drivers available







## DIMENSIONS

*Dimensions in mm*

For fixings and dimensions please go to page 3.



## 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	2200K, 2700K, 3000K, 4000K, 5000K			2200K, 2700K, 3000K, 4000K, 5000K			2200K, 2700K, 3000K, 4000K, 5000K	
Current [Rated Output]	350mA [5W]	500mA [7W]	700mA [10W]	350mA [7W]	500mA [10W]	700mA [14W]	350mA [14W]	500mA [20W]
Typical LED Circuit wattage	4.4W	6.4W	9.2W	6.4W	9.3W	13.3W	13.3W	19.6W
Delivered lumens (L <sub>100</sub> )*	362	490	631	463	634	851	963	1375
Delivered lm/Circuit W**	82	76	68	72	68	64	72	70
Typical LED Source wattage	4W	5.8W	8.3W	5.8W	8.4W	12.0W	12.0W	17.6W
Source LED lm	574	740	949	694	937	1264	1449	1983
Source lm/W	144	128	114	120	112	105	121	113
Forward voltage (V <sub>100</sub> )	11.3V	11.6V	11.8V	16.6V	16.8V	17.1V	34.3V	35.2V
CRI	85			93			90	
Colour consistency	2 SDCM			2 SDCM			3 SDCM	
Peak intensity	13,539 cd			10,837 cd			10,060 cd	
LOR	0.66			0.67			0.69	
TM30	RF86   RG98			RF91   RF98			RF91   RG98	
UGR rating ('downlight' mounted)	6.4	7.4	8.2	5.8	6.8	7.8	8.6	9.7
BUG rating ('uplight' mounted)	B0-U3-G0	B0-U4-G0		B0-U4-G0	B0-U5-G0		B0-U5-G1	
LED lifetime	L90B5 at 90,000hrs							
Applications	  							

These values are based on LD154TG-E3-700-LW30-ENB, LD154TG-N1-700-LW30-NB and LD154TG-P1-700-LW30-NB

\*See lumen variance table to the right for N1 engine. E3 lumens apply across all colour temperatures

\*\*LED wattage includes losses associated with using a 90% efficient driver

Lumen variance by CCT	
2200K	-7%
2700K	+/- 0%
4000K	+7%
5000K	+16%

## MECHANICAL

Ambient temperature	E3	Soil	-20°C to 50°C (350mA-500mA) or -20°C to 35°C (700mA)
		Concrete	-20°C to 50°C (350mA-700mA) in concrete
	N1	Soil	-20°C to 50°C (350mA-500mA) or -20°C to 35°C (700mA)
		Concrete	-20°C to 50°C (350mA-700mA) in concrete
	P1	Soil	-20°C to 50°C (350mA-500mA) or -20°C to 35°C (700mA)
		Concrete	-20°C to 50°C (350mA-700mA) in concrete
Glass	6mm thick toughened glass with black ceramic screen print		
Materials	Black anodised aluminium body with black anodised bezel and glass front		
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)		

## ENVIRONMENTAL

TM65	Available on request	
TM66	2.5	
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>	

## DIMENSIONS AND FIXING OPTIONS

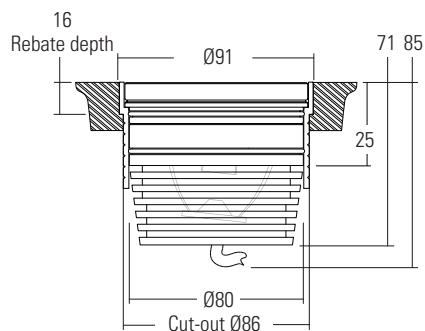
Dimensions in mm

### /485SG

#### Rebated trimless fixing sleeve

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

Mounting surface will require an 16mm rebate to allow for flush installation. Fixing ring available with a passivated stainless steel or powder coat black finish.\*

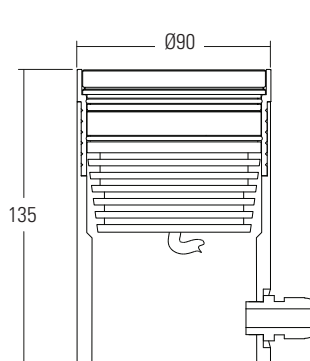


### /485GTG

#### Trimless Ground tube fixing

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.

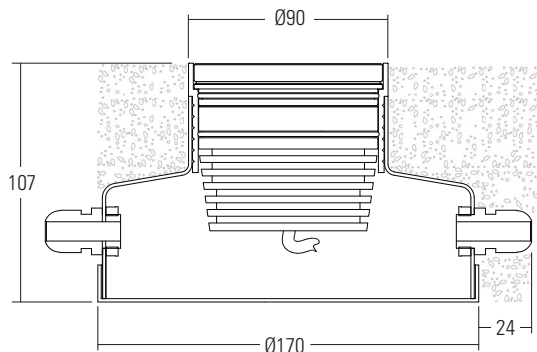
Fixing ring available with a passivated stainless steel or powder coat black finish.\*



### /485NG or /485NG-2

#### Trimless 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 the housing and a second gland is available for cabling onto the next luminaire. The housing can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. Weight: 2.90kg. Fixing ring available with a passivated stainless steel or powder coat black finish.\*



### /485NG

Trimless concrete housing with 1x PG9 IP67 gland

### /485NG-2

Trimless concrete housing with 2x PG9 IP67 gland



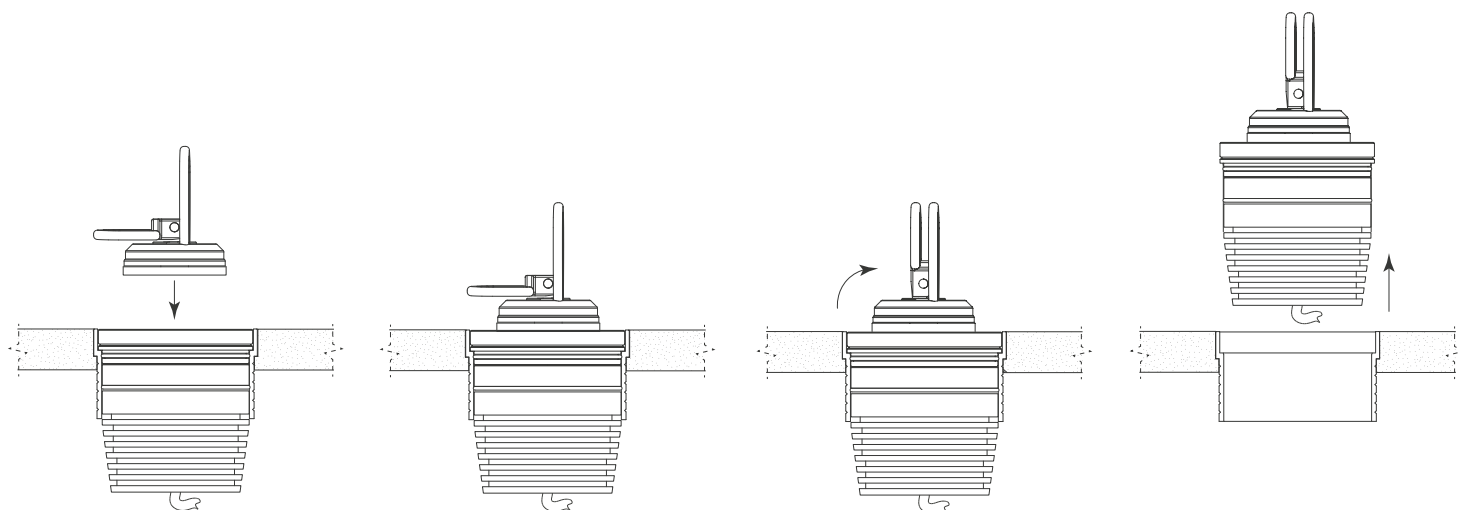
#### /HT-154-G Trimless Family Hand tool

Our Trimless family fittings use a hand tool for easy installation and removal that can be ordered separately. Use the /HT-154-G suction cup or a similar suction tool for the removal of the fittings from their fixing options. Please contact your LightGraphix sales representative for more information.



#### How to use the hand tool

- 1 Place suction cup over the glass surface and lock in place by pulling the lever into a vertical position.
- 2 Once secured, pull the fitting from its fixing accessory. Apply force vertically to ensure the suction cup does not detach.



When adjusting or rotating the fitting do not use the HT-154-G hand tool to move in situ. Remove the fitting entirely, realign and then place the fitting back into its fixing option.

**Note:** Rotating the fitting while still in place may result in a compromised IP seal.



## GLARE CONTROL OPTIONS

### /NGS No glare shield

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



### /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

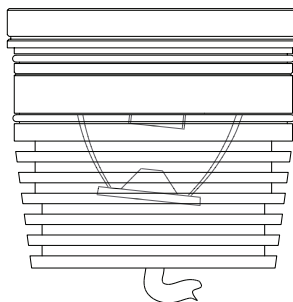
Helps reduce glare from all angles and can be used with glare shields.



## 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.



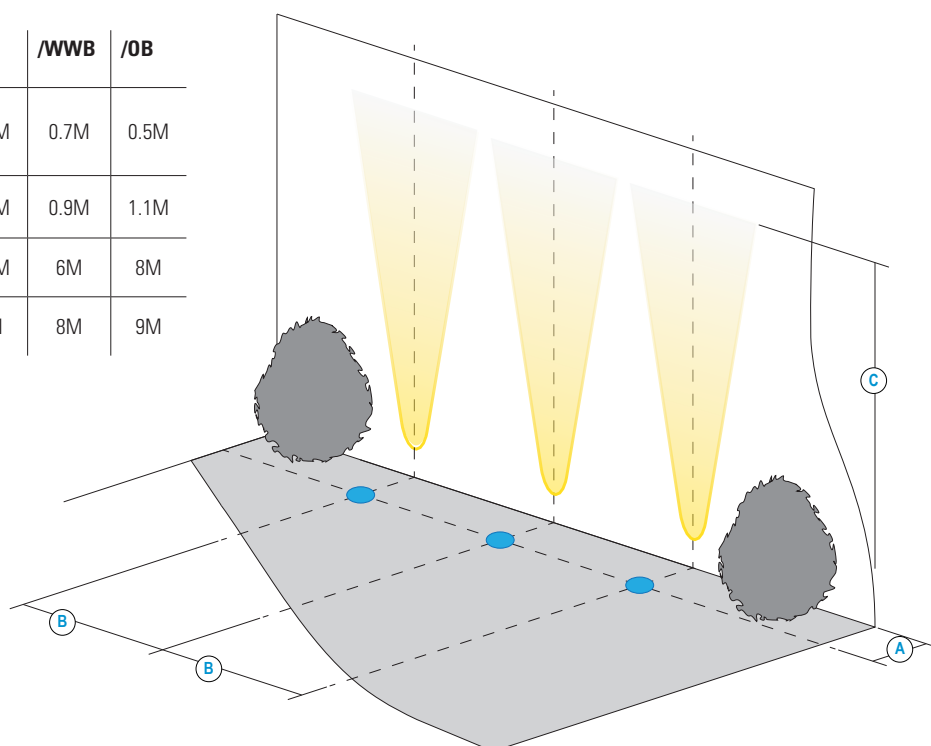
## INSTALLATION GUIDE

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.

LD154TG-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

LD154TG-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

LD154TG-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 - LD154TG

Example: LD154TG-E3-500 / LW30 / NB / GSHM154 / 485SG / Paint finish black

Light engine & drive current	LED Colour	Beam Angle	Accessory	Finish	Fixing
LD154TG -	/	/	/	/	/




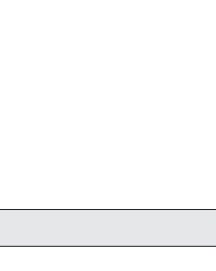
### E3

5W LED at 350mA	LD154-E3-350	Super Warm White (2200K)	/LW22	10° Extra Narrow	/ENB			
7W LED at 500mA	LD154-E3-500	Extra Warm White (2700K)	/LW27	12° Narrow	/NB	/NGS	/485SG	
10W LED at 700mA	LD154-E3-700	Warm White (3000K)	/LW30	23° Medium Spot	/MSB			
		White (4000K) on request	/LW40	30° Medium	/MB	/GSHM154	/485GTG	
		Cool White (5000K)	/LW50	44° Wide	/WB			
				62° Extra Wide	/WWB			
				11° x 46° Oval	/OB			

### N1

7W LED at 350mA	LD154-N1-350	Super Warm White (2200K)	/LW22	14° Narrow	/NB			
10W LED at 500mA	LD154-N1-500	Extra Warm White (2700K)	/LW27	25° Medium Spot	/MSB	/GSOB154	/485NG	
14W LED at 700mA	LD154-N1-700	Warm White (3000K)	/LW30	31° Medium	/MB			
		White (4000K) on request	/LW40	45° Wide	/WB			
		Cool White (5000K)	/LW50	62° Extra Wide	/WWB			
				14° x 46° Oval	/OB			

### P1

14W LED at 350mA	LD154-P1-350	Super Warm White (2200K)	/LW22	20° Narrow	/NB			
20W LED at 500mA	LD154-P1-500	Extra Warm White (2700K)	/LW27	28° Medium Spot	/MSB	/HL	/485NG-2	
		Warm White (3000K)	/LW30	34° Medium	/MB			
		White (4000K) on request	/LW40	48° Wide	/WB			
		Cool White (5000K)	/LW50	63° 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.