

LD154T/LD154TDO
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 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
- > 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
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated 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

For full dimensions please go to page 4.



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 ₁₀₀)*	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 ₁₀₀)	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)	7.2	8.2	9	6.6	7.8	8.7	7.9	9
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 LD154T-E3-700-LW30-ENB, LD154T-N1-700-LW30-NB and LD154T-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

		350mA	500mA	700mA	
Ambient temperature ● 55°C	E3	Soil/Sleeve	-20°C to 55°C	-20°C to 55°C	-20°C to 40°C
		Concrete	-20°C to 55°C	-20°C to 55°C	-20°C to 50°C
	N1	Soil/Sleeve	-20°C to 55°C	-20°C to 50°C	-20°C to 35°C
		Concrete	-20°C to 55°C	-20°C to 55°C	-20°C to 50°C
	P1	Soil/Sleeve	-20°C to 25°C	N/A	-
		Concrete	-20°C to 50°C	-20°C to 25°C	-
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	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>

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

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



WHITE
(RAL 9016)



BLACK
(RAL 9005)



CLASSIC BRONZE
(YM262E)



TEXTURED MARS BRONZE



TEXTURED FIR GREEN
(RAL 6009)



GUNMETAL GREY
(RAL 7021)



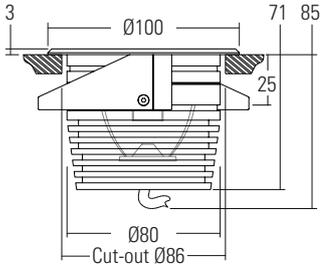
RAL COLOURS

DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

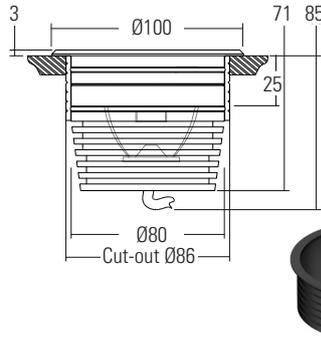
/SC Spring clips

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.



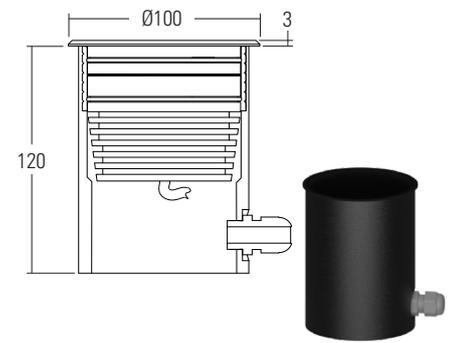
/485S Fixing sleeve and O-rings

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.



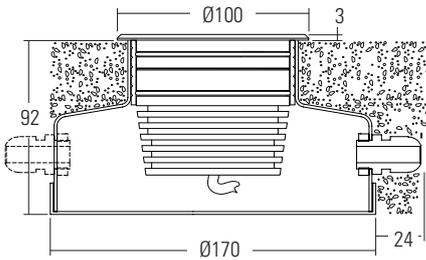
/485GT Ground tube

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

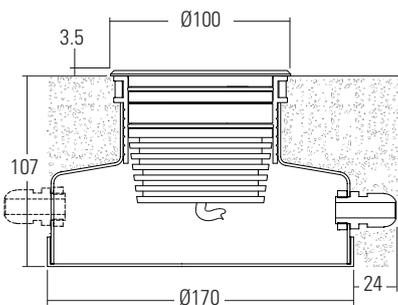


/485N-2
Concrete housing with 2x PG9 IP67 gland

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

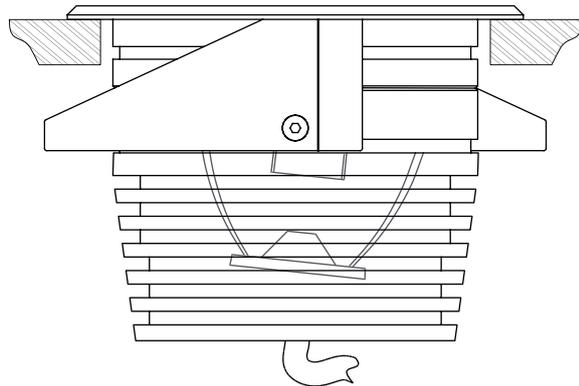
Helps reduce glare from all angles and can be used with glare shields.



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.



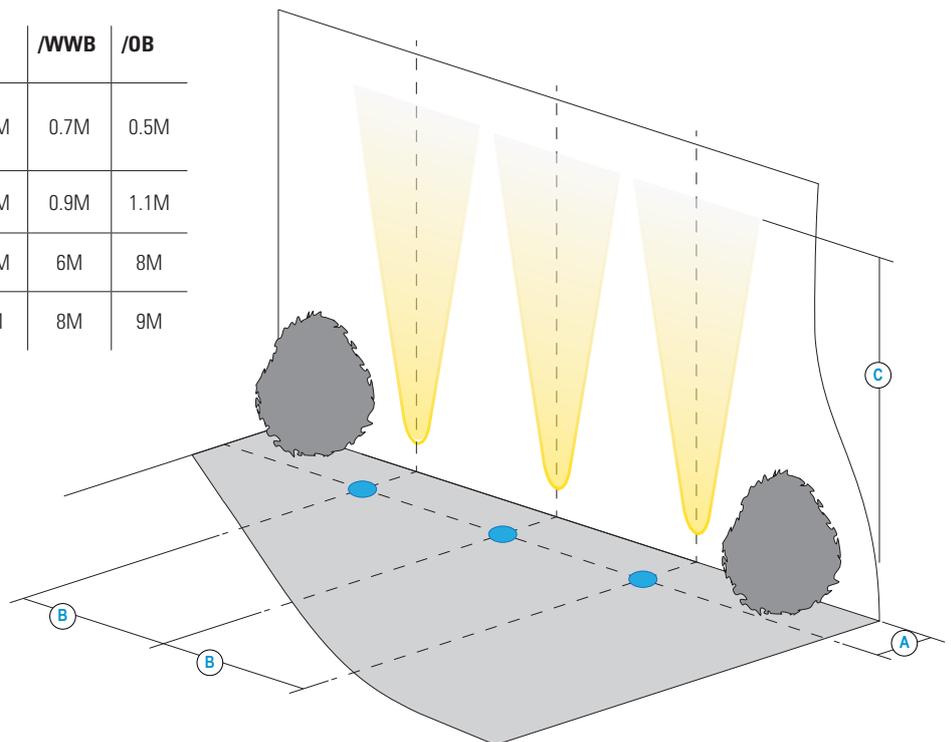
INSTALLATION GUIDE

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
A	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	Spacing for an even wash	0.4M	0.45M	0.5M	0.7M	0.8M	0.85M	1M
C	500mA lit distance**	10M	7M	6.5M	5.5M	4.5M	4M	6M
C	700mA lit distance**	11M	8M	7M	6M	5M	4.5M	7M

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

LD154T-P1		/NB*	/MSB	/MB	/WB	/WWB	/OB
A	Distance from the centre of the fitting to the lit surface	0.45M	0.5M	0.55M	0.6M	0.7M	0.5M
B	Spacing for an even wash	0.5M	0.7M	0.75M	0.8M	0.9M	1.1M
C	350mA lit distance**	11M	9M	9M	7.5M	6M	8M
C	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/GSOB154/316 STAINLESS STEEL/SC

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

LD154T- / / / / / /

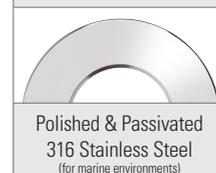
Ambient temperature key: ● 55°C

⊕ E3

● 55°C Ta	5W LED at 350mA	LD154T-E3-350
● 55°C Ta	7W LED at 500mA	LD154T-E3-500
	10W LED at 700mA	LD154T-E3-700

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

10° Extra Narrow	/ENB
11° Narrow	/NB
22° Medium Spot	/MSB
29° Medium	/MB
42° Wide	/WB
53° Extra Wide	/WWB
10° x 56° Oval	/OB



○ N1

● 55°C Ta	7W LED at 350mA	LD154T-N1-350
● 55°C Ta	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

*55°C ambient when placed in a 485N / 485N-2 concrete can in concrete.

⊙ 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



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.

ORDER CODES & OPTIONS - LD154TDO

Example: LD154TDO-E3-700/LW30/OB/GSOB154/316 STAINLESS STEEL/485N-DO

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

LD154TDO - / / / / / /

Ambient temperature key: ● 55°C

⊕ E3

55°C 5W LED at 350mA	LD154TDO-E3-350
55°C 7W LED at 500mA	LD154TDO-E3-500
10W LED at 700mA	LD154TDO-E3-700

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

10° Extra Narrow	/ENB
11° Narrow	/NB
22° Medium Spot	/MSB
29° Medium	/MB
42° Wide	/WB
53° Extra Wide	/WWB
10° x 56° Oval	/OB



○ N1

55°C 7W LED at 350mA	LD154TDO-N1-350
55°C 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

*55°C ambient when placed in a 485N / 485N-2 concrete can in concrete.

⊙ 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

Drivers
Use with 350mA, 500mA & 700mA constant current LED drivers
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