

LD154T / LD154TD0

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
- > LD154TD0 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 (5W**)	6.0 (7W**)	8.4 (10W**)	5.8 (7W**)	8.3 (10W**)	11.6 (14W**)	12.0 (14W**)	18.0 (20W**)
Delivered lumens (L ₁₀₀)	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 ₁₀₀)	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

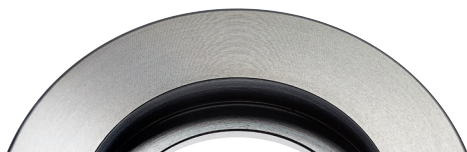
Ambient temperature	-20°C to 45°C (350mA/500mA/700mA)
Glass	8mm thick, low iron glass
Materials	Black hard anodised aluminium body, 316 Stainless Steel bezel
Weight of product	0.68kg
IP rating	IP67
IK rating	IK09
Wiring	In-series constant current wiring (pre-wired with 2 core cable at 350mm)

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

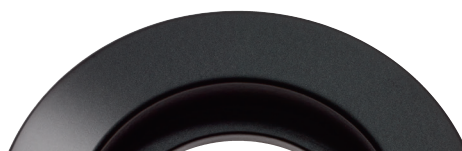


POLISHED & PASSIVATED 316 STAINLESS STEEL

- > 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

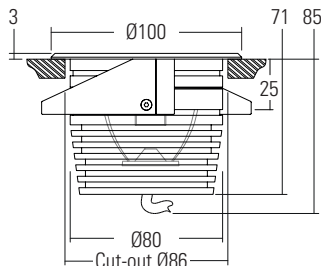
- > The powder coated finish is very matt
- > Not recommended for high traffic in-ground applications, unless placed to one side where the bezel will not be walked on
- > Powder coat paint is generally used on stainless steel or anodised aluminium components
- > Interior and exterior use

DIMENSIONS AND FIXING OPTIONS

Dimensions in mm

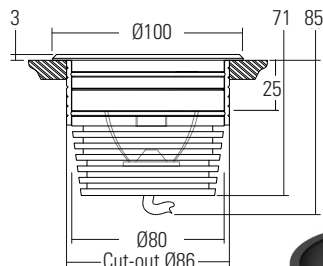
/SC Spring clips

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.



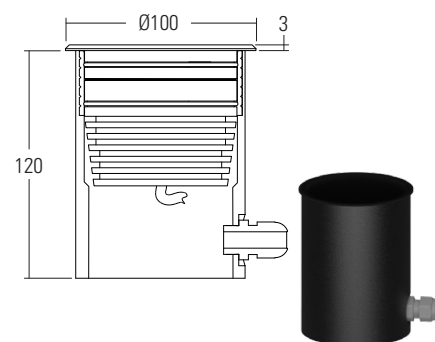
/485S Fixing sleeve and O-rings

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.



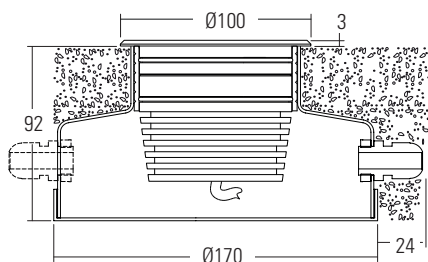
/485GT Ground tube

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

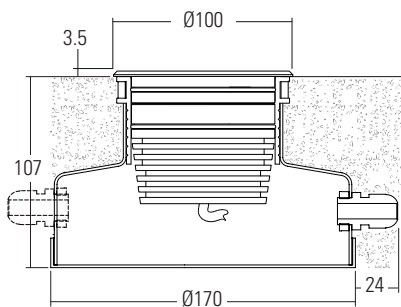
/485N-2

Concrete housing with 2x PG9 IP67 gland

LD154TD0 (DRIVE OVER APPLICATION)

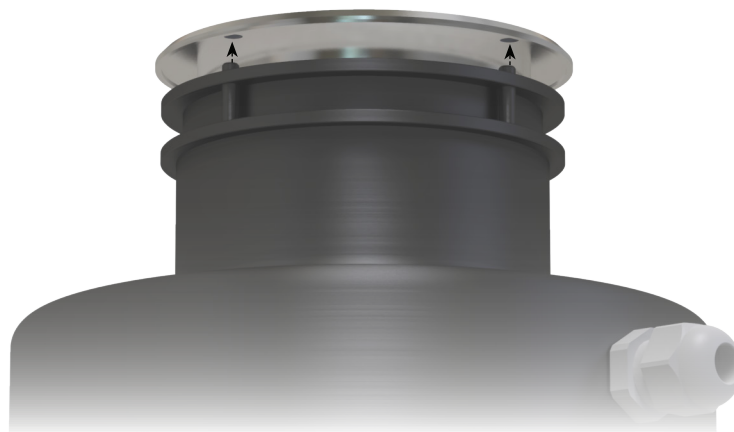
For drive over applications please specify the LD154TD0, which is supplied with a dedicated drive over bezel that has an increased thickness of 3.5mm. The bezel features pins that secured into the concrete housing, preventing the luminaire from rotating when driven over. When specifying LD154TD0, please use the dedicated configurator on page 9.

/485N-D0 Drive over concrete housing with 1x PG9 IP67 gland.



/485N-D0-2

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

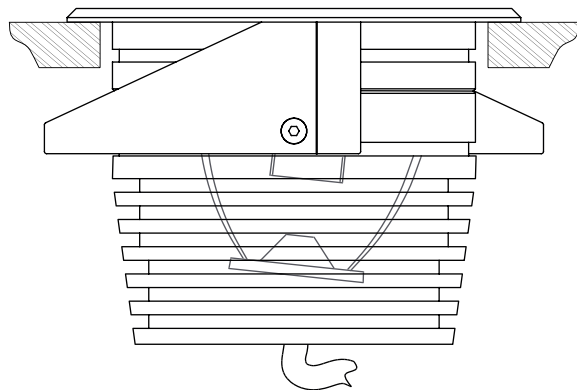
Helps reduce glare from all angles and can be used with glare shields.



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.

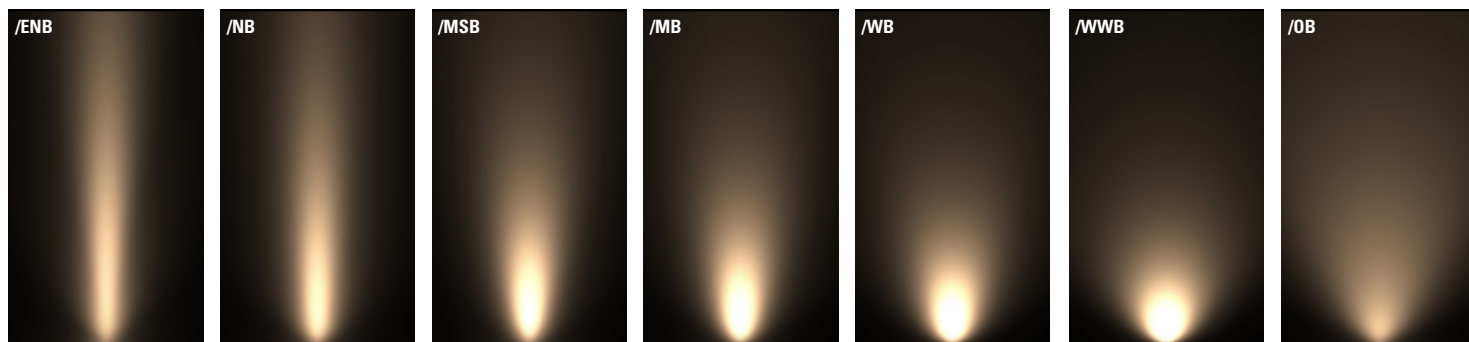
Should there be any obstructions preventing installation, then the tilt also allows the luminaire to be placed further away from the lit surface, without compromising on output.



BEAM OUTPUT VISUAL

E3 LED Engine

The visuals 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 LD154T product page on the website.



Extra Narrow Beam
700mA using a 10° optic

Narrow Beam
700mA using a 12° optic

Medium Spot Beam
700mA using a 23° optic

Medium Beam
700mA using a 30° optic

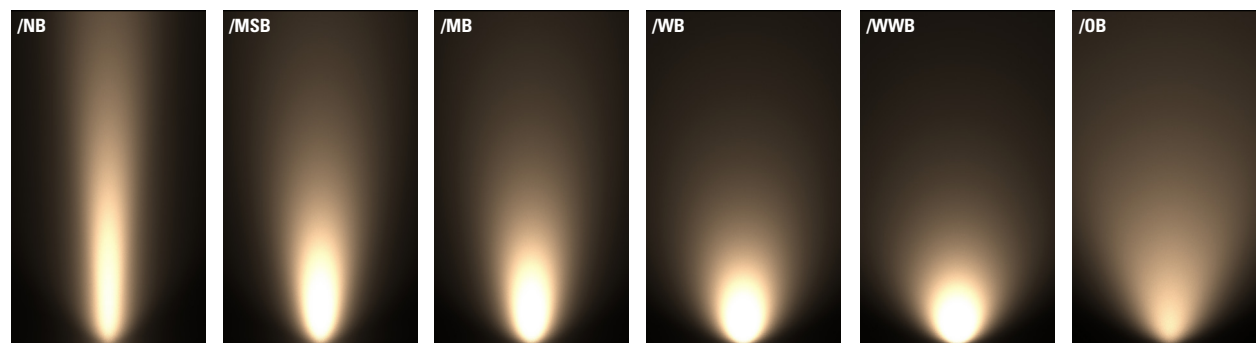
Wide Beam
700mA using a 44° optic

Extra Wide Beam
700mA using a 62° optic

Oval Beam
700mA using a 11° x 46° optic

N1 LED Engine

The visuals below are based on a 3000K N1 LED engine run at maximum output 700mA, 14W. 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 LD154T product page on the website.



Narrow Beam
700mA using a 14° optic

Medium Spot Beam
700mA using a 25° optic

Medium Beam
700mA using a 31° optic

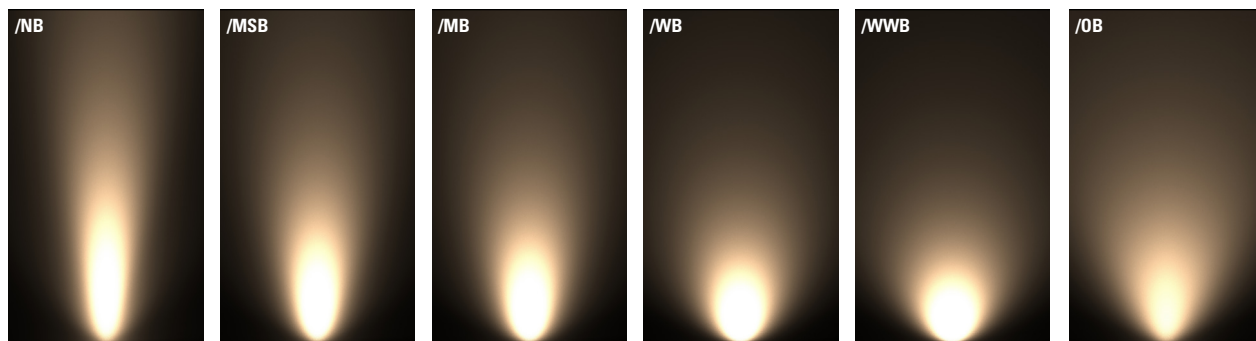
Wide Beam
700mA using a 45° optic

Extra Wide Beam
700mA using a 62° optic

Oval Beam
700mA using a 14° x 46° optic

P1 LED Engine

The visuals below are based on a 3000K P1 LED engine run at maximum output 500mA, 20W. 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 LD154T product page on the website.



Narrow Beam
500mA using a 20° optic

Medium Spot Beam
500mA using a 28° optic

Medium Beam
500mA using a 34° optic

Wide Beam
500mA using a 48° optic

Extra Wide Beam
500mA using a 63° optic

Oval Beam
500mA using a 20 x 46° optic

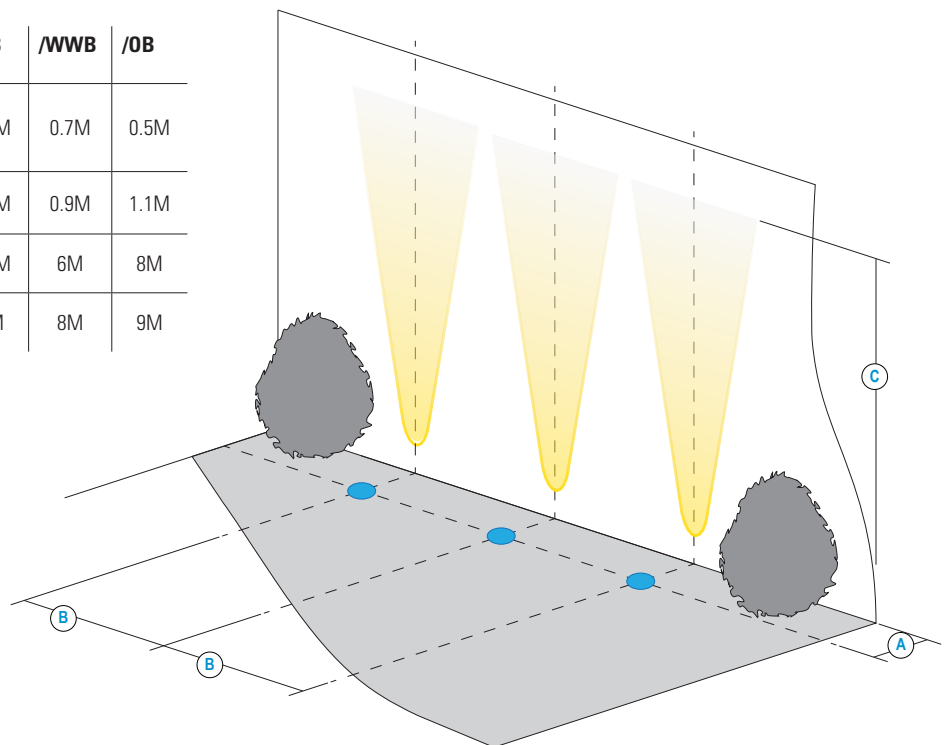
INSTALLATION GUIDE

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











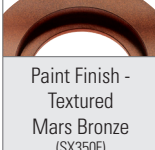








*Wall washing using narrow beam optics should only be used if the designer requires long distance lighting up the lit surface.









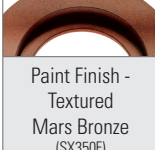








**Illuminated distance is calculated based on achieving 10% of the initial lux calculated at the start of the beam.









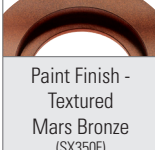








ORDER CODES & OPTIONS - LD154T

Example: LD154T-E3-700 / LW30 / OB / 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	Extra Warm White (2700K)	/LW27	10° Extra Narrow	/ENB	 /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
7W LED at 500mA	LD154T-E3-500	Warm White (3000K)	/LW30	12° Narrow	/NB			
10W LED at 700mA	LD154T-E3-700	White (4000K) - on request	/LW40	23° Medium Spot	/MSB			
		Cool White (5000K)	/LW50	30° Medium	/MB			
				44° Wide	/WB			
				62° Extra Wide	/WWB			
				11° x 46° Oval	/OB			

N1								
7W LED at 350mA	LD154T-N1-350	Super Warm White (2200K)	/LW22	14° Narrow	/NB	 /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
10W LED at 500mA	LD154T-N1-500	Extra Warm White (2700K)	/LW27	25° Medium Spot	/MSB			
14W LED at 700mA	LD154T-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	LD154T-P1-350	Super Warm White (2200K)	/LW22	20° Narrow	/NB	 /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
20W LED at 500mA	LD154T-P1-500	Extra Warm White (2700K)	/LW27	28° Medium Spot	/MSB			
		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			

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



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