

# **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
- 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

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° >	∢46°	20°, 28°, 34°, 48°, 63°, 20° x 46°		
LED manufacturer	NICHIA			CREE			CREE		
Colour temperature	2200K, 2700k	(, 3000K, 4000K	, 5000K	2200K, 2700l	K, 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 Im/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 Im	574	740	949	694	937	1264	1449	1983	
Source Im/W	144	128	114	120	112	105	121	113	
Forward voltage (V <sub>100</sub> )	11.3V	11.6V	11.8V	16.6V	6.6V 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

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

# **MECHANICAL**

	E3	Concrete	-20°C to 50°C (350mA-700mA) in concrete					
Ambient temperature	N1	Soil	-20°C to 50°C (350mA-500mA) or -20°C to 35°C (700mA)					
Ambient temperature	INI	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)					
	ГІ	Concrete	-20°C to 50°C (350mA-700mA) in concrete					
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	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.								







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

<sup>\*\*</sup>LED wattage includes losses assocaited with using a 90% efficient driver

## **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



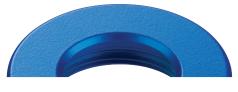
WHITE (RAL 9016)



**CLASSIC BRONZE** 



**TEXTURED FIR GREEN** (RAL 6009)



**RAL COLOURS** 



**BLACK** (RAL 9005)



**TEXTURED MARS BRONZE** 



**GUNMETAL GREY** (RAL 7021)







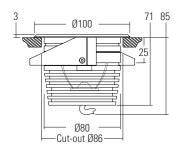


## **DIMENSIONS AND FIXING OPTIONS**

Dimensions in mm

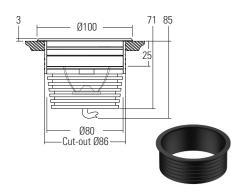
## /SC Spring clips

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.



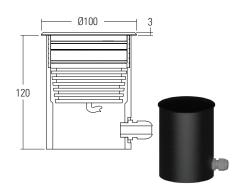
### /485\$ Fixing sleeve and O-rings

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.



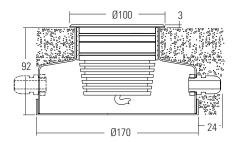
### /485GT Ground tube

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.







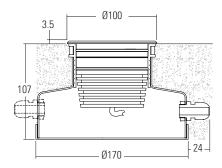
Concrete housing with 1x PG9 IP67 gland

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

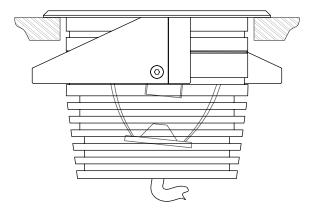
Helps reduce glare from all angles and can be used with



# 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 comprismising on output.









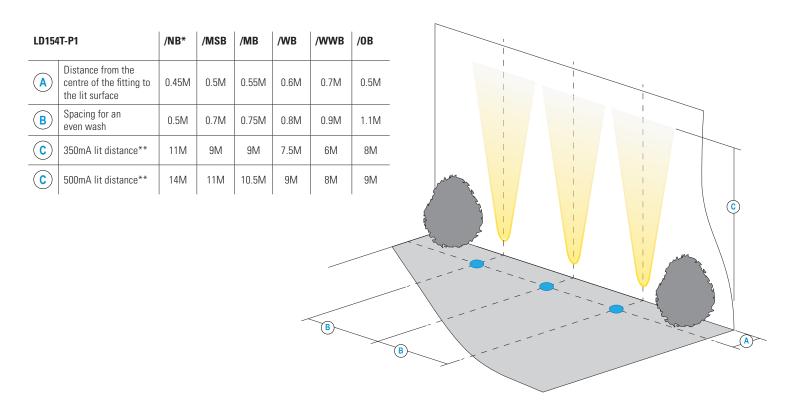


# **INSTALLATION GUIDE**

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.

LD154	IT-E3	/ENB*	/NB*	/MSB	/MB	/WB	/WWB	/0B
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
В	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

LD154	IT-N1	/NB*	/MSB	/MB	/WB	/WWB	/0B
A	Distance from the centre of the fitting to the lit surface	0.4M	0.45M	0.5M	0.65M	0.7M	0.4M
В	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



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









<sup>\*\*</sup>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 engi	ne & drive current		LED Colo	ur		Beam An	ngle		Accessory		Finish		Fixing
LD154T-		/			/			/		/		/	
<b>(</b>	E3												
5W LED at 350mA	LD154T-E3-350		Super Warm White (2200K)	/LW22		10° Extra Narrow	/ENB	7					
7W LED at 500mA	LD154T-E3-500		Extra Warm White (2700K)	/LW27		11° Narrow	/NB						
10W LED at 700mA	LD154T-E3-700		Warm White (3000K)	/LW30		22° Medium Spot	/MSB		/NGS		316 Stainless Steel		/SC
			White (4000K) on request	/LW40		29° Medium	/MB						
			Cool White (5000K)	/LW50		42° Wide	/WB						
						53° Extra Wide	/WWB		/GSHM154		Polished & Passivated 316 Stainless Steel (for marine environments)		/485S
						10° x 56° Oval	/OB				(to mains of morning)		
	N1								/GS0B154		Paint Finish White (RAL 9016)		/485N
7W LED at 350mA	LD154T-N1-350		Super Warm White (2200K)	/LW22		14° Narrow	/NB						
10W LED at 500mA	LD154T-N1-500		Extra Warm White (2700K)	/LW27		25° Medium Spot	/MSB				Paint Finish		
14W LED at 700mA	LD154T-N1-700		Warm White (3000K)	/LW30		31° Medium	/MB		/HL		Black (RAL 9005)		/485N-2
			White (4000K) on request	/LW40		45° Wide	/WB						
			Cool White (5000K)	/LW50		62° Extra Wide	/WWB				Paint Finish		
						14° x 46° Oval	/OB				Classic Bronze (YM262E)		
	P1												
14W LED at 350mA	LD154T-P1-350		Super Warm White (2200K)	/LW22		20° Narrow	/NB				Paint Finish Textured Mars Bronze		
20W LED at 500mA	LD154T-P1-500		Extra Warm White (2700K)	/LW27		28° Medium Spot	/MSB						
		J	Warm White (3000K)	/LW30		34° Medium	/MB				Paint Finish		
		٠	White (4000K) on request	/LW40		48° Wide	/WB				Textured Fir Green (RAL 6009)		
			Cool White (5000K)	/LW50		63° Extra Wide	/WWB						
		l				20° x 46° Oval	/0B				Paint Finish		
											Gunmetal Grey (RAL 7021)		
Drivers													
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Paint Finish - RAL







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 - LD154TD0**

Example: LD154TD0-E3-700 / LW30 / OB / GS0B154 / 316 STAINLESS STEEL / 485N-D0

Light engine & drive current	LED Colour		Beam Ar	ngle	Accessory	Finish	Fixing
LD154TD0 -	/		/		/	/	/
<b>⊕</b> E3							
5W LED at 350mA LD154TD0-E3-350	Super Warm White (2200K)	/LW22	10° Extra Narrow	/ENB			
7W LED at 500mA LD154TD0-E3-500	Extra Warm White (2700K)	/LW27	11° Narrow	/NB			
10W LED at 700mA LD154TD0-E3-700	Warm White (3000K)	/LW30	22° Medium Spot	/MSB	/NGS	316 Stainless Steel	/485N-DO
	White (4000K) on request	/LW40	29° Medium	/MB			
	Cool White (5000K)	/LW50	42° Wide	/WB			
			53° Extra Wide	/WWB	/GSHM154		/485N-D0-2
			10° x 56° Oval	/0B			
O N1					/GS0B154		
7W LED at 350mA LD154TD0-N1-350	Super Warm White (2200K)	/LW22	14° Narrow	/NB			
10W LED at 500mA LD154TD0-N1-500	Extra Warm White (2700K)	/LW27	25° Medium Spot	/MSB			
14W LED at 700mA LD154TD0-N1-700	Warm White (3000K)	/LW30	31° Medium	/MB	/HL		
	White (4000K) on request	/LW40	45° Wide	/WB			
	Cool White (5000K)	/LW50	62° Extra Wide	/WWB			
			14° x 46° Oval	/0B			
P1							
14W LED at 350mA LD154TD0-P1-350	Super Warm White (2200K)	/LW22	20° Narrow	/NB	$\vdash$		
20W LED at 500mA LD154TD0-P1-500	Extra Marm	/LW27	28° Medium Spot	/MSB			
	Marm Mhita	/LW30	34° Medium	/MB			
	\\/\bito /4000\/\	/LW40	48° Wide	/WB			
	Cool White (5000K)	/LW50	63° Extra Wide	/WWB			
			20° x 46° Oval	/OB			

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.





