LD151T

HIGH POWER INTERIOR/EXTERIOR TILTED LED UPLIGHT

⊕ ◉ 350 mA 500 mA 700 mA IP67

The LD151T is a powerful interior and exterior uplight with a compact size and depth that has been designed with the LED and optics at a 6° tilt. This feature focuses the light onto the lit surface reducing spill onto any ceiling or canopy. By angling the light it reduces glare and allows installation further away from the wall or column. This product can be specified with a wide range options allowing it to suit many project requirements with multiple bezel finishes to choose from as well as accessories, including its own unique glare shield. Available LED engines include E2, Tunable White, RGBW and F1 which offer a range of colour temperatures between 2200K-5000K and various beam angles. When used with an oval beam the LD151T offers a superb wall washing effect. The bezel aesthetic is minimal and features black trim glass and no visible fixings. This is a very tough, high quality fitting, machined from high grade materials, ensuring excellent thermal and light output performance.

KEY FEATURES

> E2 engine option with CREE LED, 2-step binning and built-in reverse polarity protection

> Delivering 611 lumens when specified at 700mA with concrete housing in 3000K

> F1 COB, Tunable White, RGBW, 2nd channel LEDs also available

> 6° integral tilt film focuses the beam onto the lit surface from a distance with glare angled away from view

> Half-moon glare shield option to minimise the view of the intense light source without affecting the wash of light on the wall/column

> Straight cut edged bezel available in 316 Stainless Steel, Polished & Passivated Stainless Steel, Brass, Bronze, and paint finishes

> LED/Lens assembly recessed within a black anodised body for reduced glare

> Multiple optic options for lighting columns, arches or wall washing in interior and exterior applications, rated IP67

> Toughened glass with ceramic black trim

> Fitting rated IK08

> Hidden fixing options include first fix sleeve, ground tube and concrete housing

> Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers available

DIMENSIONS

Dimensions in mm

For full dimensions and for accessory dimensions please go to page 4.

Ø81
85
Ø63

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SPECIFICATION

Engine	⊕ E2			◉ F1		
Beam angles	10°, 19°, 34°, 54°, 49° x 15°			25°, 46°, 65°, 43° x 25°		
LED manufacturer	CREE			CREE		
Colour temperature*	2700K / 3000K / 4000K / 5000K			2200K		
Current	350mA	500mA	700mA**	350mA	500mA	700mA**
LED power (Max)	4.2W (5W***)	6W (7W***)	8.4W (10W***)	3.2W (3.5W***)	4.5W (5W***)	6.3W (7W***)
Delivered lumens (L_{100})****	336	427	611	163	215	308
Lumens per circuit watt	67	61	61	47	43	44
CRI (Min)	85			90		
Forward voltage (V_{100})	14V			9V		
Colour consistency	2 SCDM			3 SCDM		
Peak intensity	4391 cd			1565 cd		
LED lumens	873			623		
LOR	0.69			0.49		
TM30	RF85		RG98	RF90		RG103
UGR*****	10.1			9.1		
LED lifetime	L90B5 at 90,000hrs					
Applications	◖ ◗ ◖					

These values are based around a LD151T-E2-700-LW30-NB & LD151T-F1-700-LW22-MSB
*see lumen variance table to the right
**can only be specified with /484N concrete housing
***indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver
****lumen output indicated is without the glare shield. Allow 30% less with the /GS glare shield.
*****UGR values based on room parameters of 4H 8H, C70 W50 F20

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

MECHANICAL

Ambient temperature	-20° to 45° (500mA) or -20° to 35° (700mA)
Glass	6mm thick toughened glass with black ceramic screen print
Materials	Stainless steel bezel, anodised aluminium body
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)

AVAILABLE FINISHES

Please refer to our finishes guide for full details

316 STAINLESS STEEL

> Marine grade 316 Steel

> Standard machined finish

> Extremely durable with very high corrosion resistance

> Passivation recommended for marine environments to prevent corrosion and build up of brown stains caused by oxidation

> Interior & exterior use

POLISHED & PASSIVATED STAINLESS STEEL

> Marine Grade 316 Steel

> Mirror like finish

> 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

BRASS

> Solid CZ121 Brass

> Standard machined finish

> Corrosion resistance rated fair to excellent

> Please note a natural green/brown patination layer will form after long term exposure to the elements, the extent of this discolouration will be dependant on its location.

> Interior & exterior use

FLAMED BRONZE

> Solid Bronze

> Hand finished Flamed Bronze unique to LightGraphix

> Extremely durable with very high corrosion resistance.

> High wear resistance. Please note a natural dark patination layer will form after long term exposure to the elements, the extent of this discolouration will be dependant on its location.

> Interior & exterior use

PAINT FINISH

> Paint finish on Stainless Steel

> Matt Black, Matt White, Bronze and other RAL colours available

> Not recommended for footlights in high traffic areas

> Options for interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

/484S - First Fix Sleeve

The fitting is supplied as standard with a fixing sleeve; this is bonded into the mounting surface first. The LD151T is secured into the sleeve by 2 'O' rings on the body. When pushed into the sleeve it creates a watertight seal.
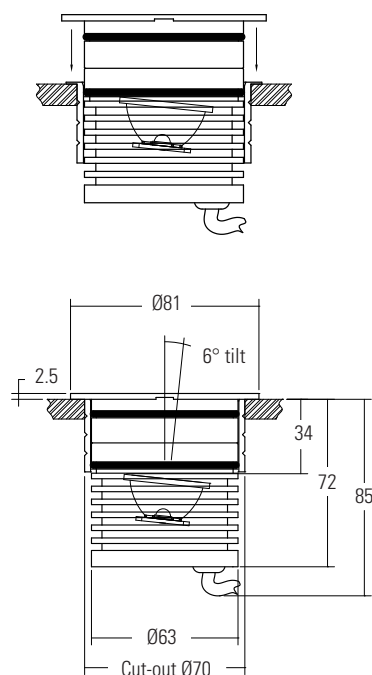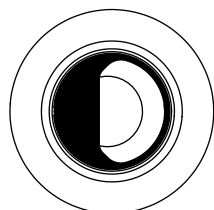
/484GT - Ground tube

The in-ground tube has been designed for applications where a recessed uplight is required in soil or gravel surfaces. The tube can be buried with the necessary wiring, and then the fitting installed after the landscaping work has been completed. It is supplied with the fixing sleeve bonded into the tube, and can be cut down on site.

Ø81

6° tilt

2.5

34

72

85

Ø63

Cut-out Ø70

0.75

300

300

25

Ø83.3

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/484N or /484N-2 - Concrete housing

Must be used when specifying the 700mA fitting. 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.

2.5   0.8
Ø72.5
91.4
Ø170   24
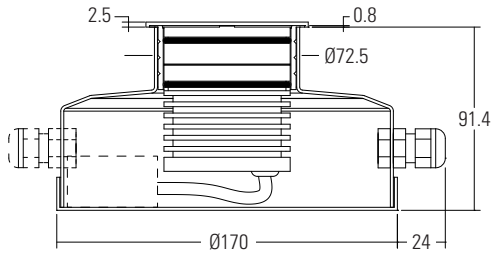
/484N
Concrete housing with 1x PG9 IP67 gland

/484N-2
Concrete housing with 2x PG9 IP67 gland

/ID Optional integral non dimming driver (single colour only at 350mA or 500mA)

GLARE SHIELDS

6° TILT
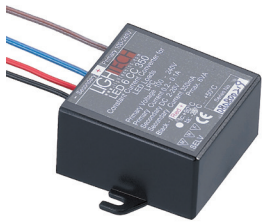
/NGS
No glare shield. Deep recessed optic and matt black anodised optic holder aids in glare reduction.

/GS
Standard glare shield provides an excellent balance between glare control and light output. This accessory works well in most applications.
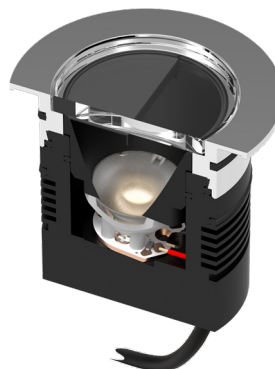
Both the LED and the optic are set at a 6° tilt, allowing for more efficient use of a glare shield, as more of the light output is directed towards the open aperture of the fitting.

Please refer to our photometric files for lumen data.

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CONE DIAGRAMS

E2 LED Engine

Cone diagrams below are based on a 3000K E2 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 LD151T product page on the website.

Narrow Beam
700mA using a 10° optic

Distance (m)		Luminance (lx)
3.0	0.40	313
2.5	0.33	451
2.0	0.27	705
1.5	0.20	1253
1.0	0.13	2819
0.5	0.07	11274

Cone Width (m)

Medium Beam
700mA using a 19° optic

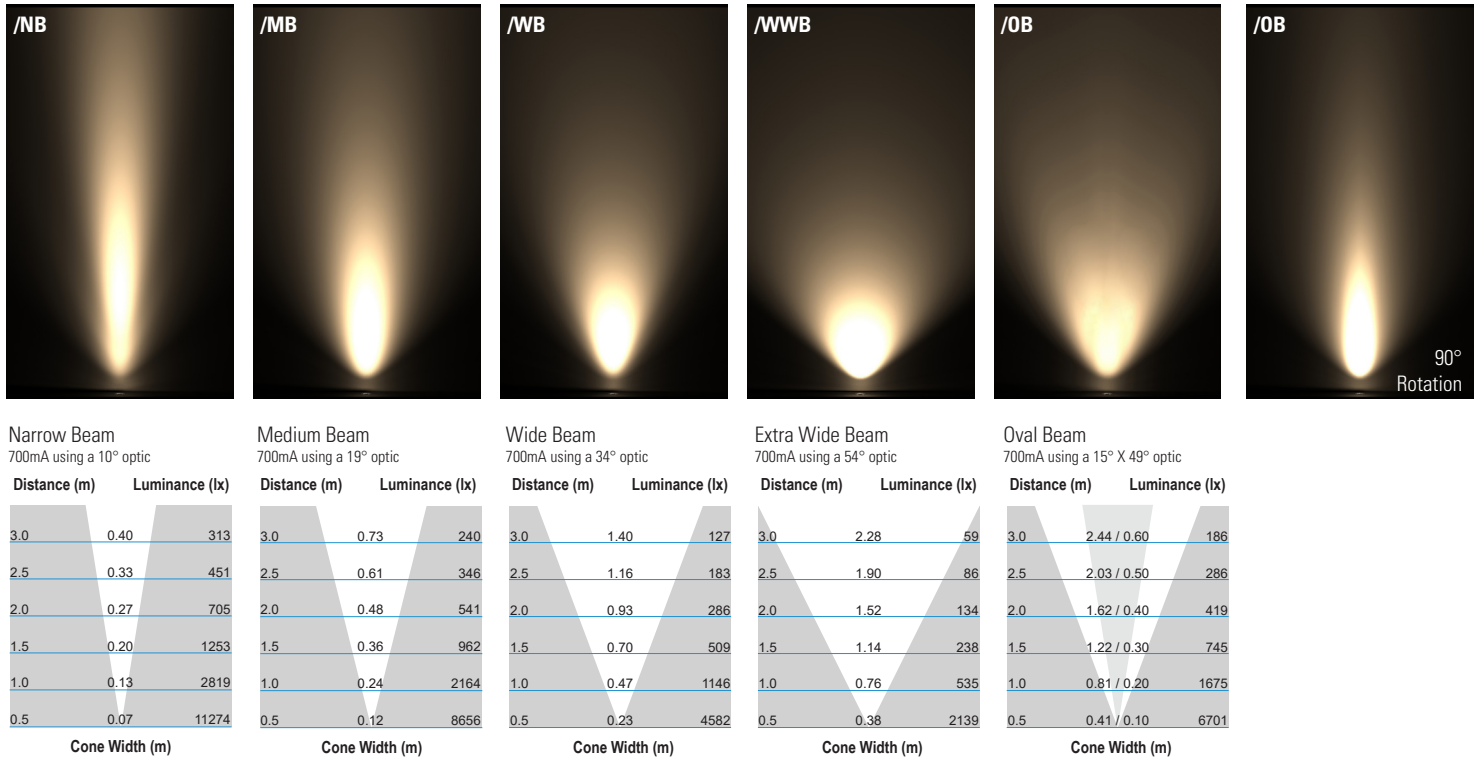| Distance (m)		Luminance (lx)
3.0	0.73	240
2.5	0.61	346
2.0	0.48	541
1.5	0.36	962
1.0	0.24	2164
0.5	0.12	8656

Cone Width (m)

Wide Beam
700mA using a 34° optic

Distance (m)		Luminance (lx)
3.0	1.40	127
2.5	1.16	183
2.0	0.93	286
1.5	0.70	509
1.0	0.47	1146
0.5	0.23	4582

Cone Width (m)

Extra Wide Beam
700mA using a 54° optic

Distance (m)		Luminance (lx)
3.0	2.28	59
2.5	1.90	86
2.0	1.52	134
1.5	1.14	238
1.0	0.76	535
0.5	0.38	2139

Cone Width (m)

Oval Beam
700mA using a 15° X 49° optic

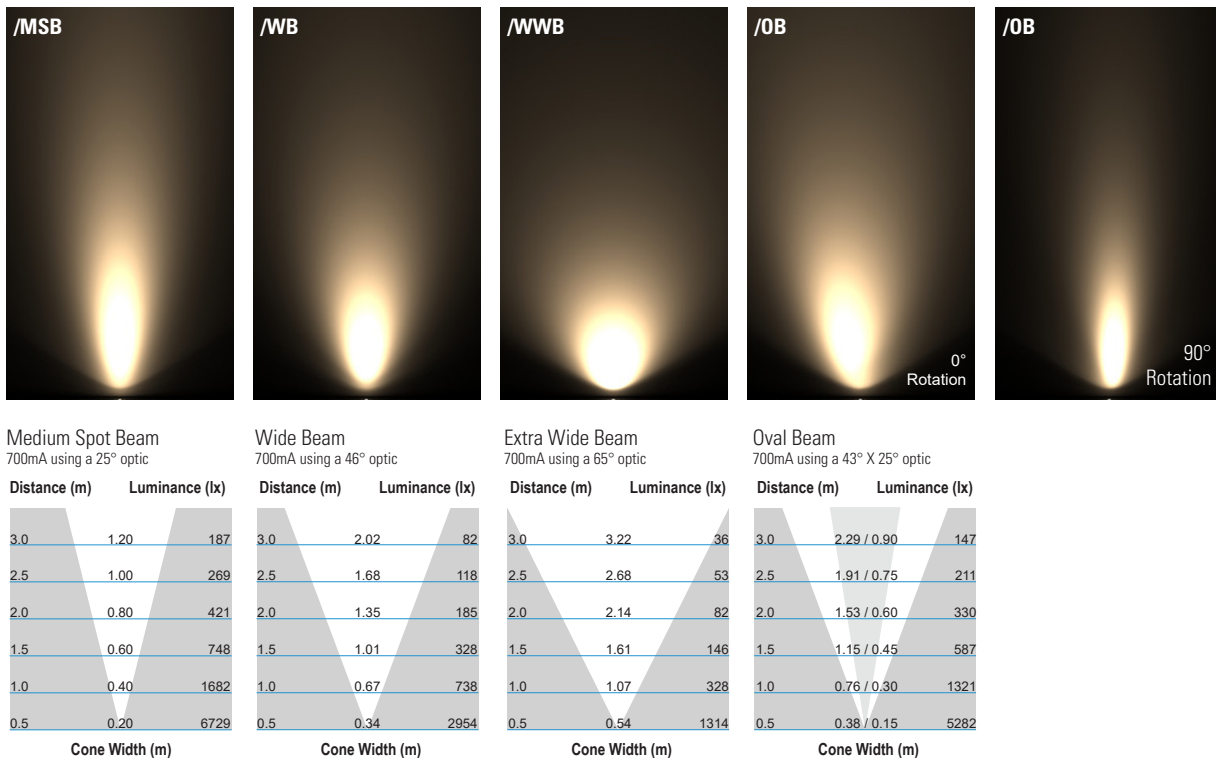| Distance (m)		Luminance (lx)
3.0	2.44 / 0.60	186
2.5	2.03 / 0.50	286
2.0	1.62 / 0.40	419
1.5	1.22 / 0.30	745
1.0	0.81 / 0.20	1675
0.5	0.41 / 0.10	6701

Cone Width (m)

F1 LED Engine

Cone diagrams below are based on a 3000K F1 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 LD151T product page on the website.

Medium Spot Beam
700mA using a 25° optic

Distance (m)		Luminance (lx)
3.0	1.20	187
2.5	1.00	269
2.0	0.80	421
1.5	0.60	748
1.0	0.40	1682
0.5	0.20	6729

Cone Width (m)

Wide Beam
700mA using a 46° optic

Distance (m)		Luminance (lx)
3.0	2.02	82
2.5	1.68	118
2.0	1.35	185
1.5	1.01	328
1.0	0.67	738
0.5	0.34	2954

Cone Width (m)

Extra Wide Beam
700mA using a 65° optic

Distance (m)		Luminance (lx)
3.0	3.22	36
2.5	2.68	53
2.0	2.14	82
1.5	1.61	146
1.0	1.07	328
0.5	0.54	1314

Cone Width (m)

Oval Beam
700mA using a 43° X 25° optic

Distance (m)		Luminance (lx)
3.0	2.29 / 0.90	147
2.5	1.91 / 0.75	211
2.0	1.53 / 0.60	330
1.5	1.15 / 0.45	587
1.0	0.76 / 0.30	1321
0.5	0.38 / 0.15	5282

Cone Width (m)

LightGraphix
Creative Lighting Solutions

INSTALLATION GUIDE

Below is a luminaire positioning guide for white LEDs. Every project and lighting scenario will be different; the table below is to be used as a starting point for any wall wash design. Please use our photometric files to further test the desired effect for your application. Files are available on our LD151T product page on our website.
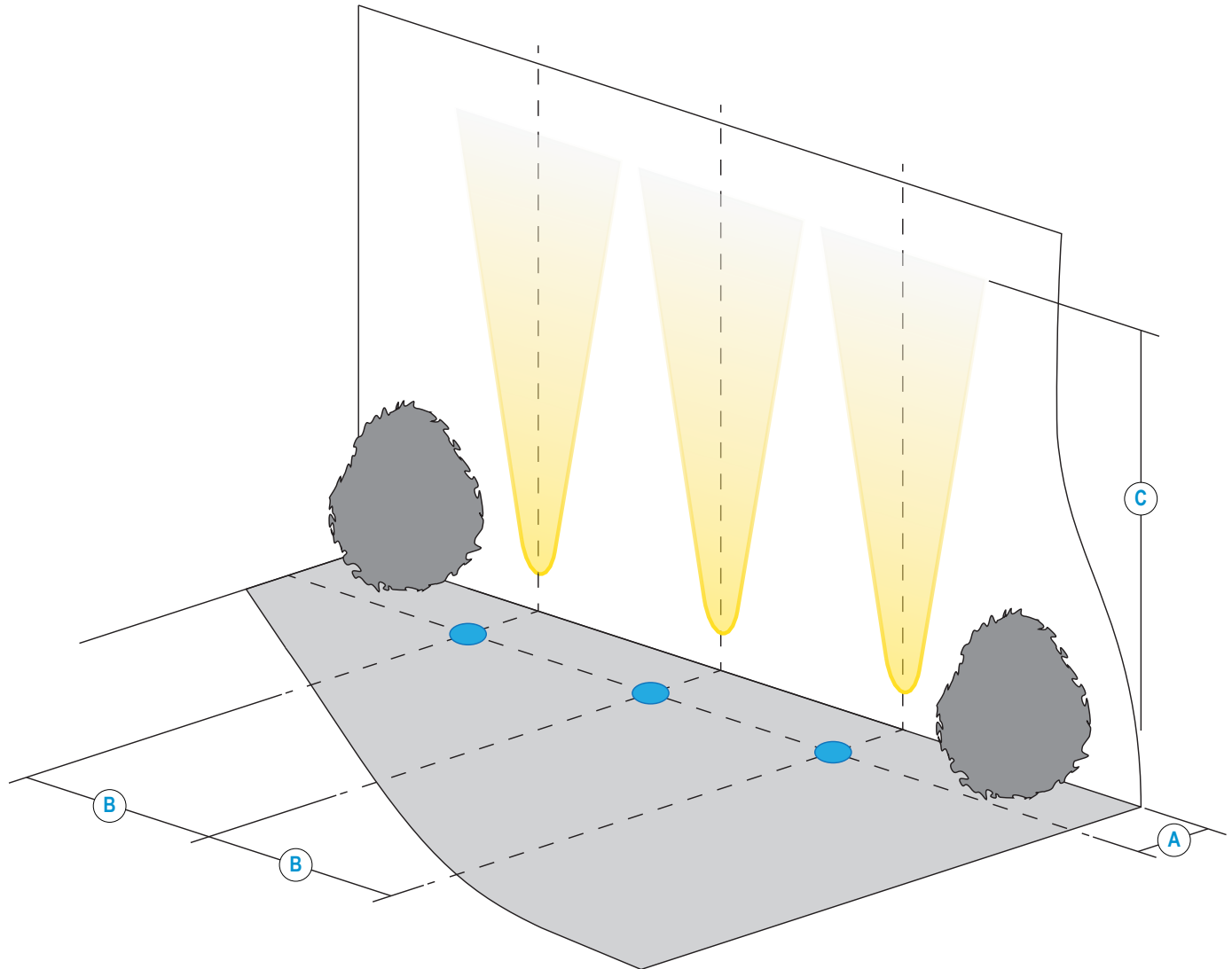
LD151T-E2		/NB	/MB	/WB	/WWB	/OB
A	Distance from the centre of the fitting to the lit surface	250mm				
B	Spacing for an even wash	250mm*	350mm	400mm	500mm	500mm
C	500mA Lit distance	7m	4.5m	3.5m	2m	4m
C	700mA Lit distance	9m	7m	5m	3m	6m

LD151T-F1		/MSB	/WB	/WWB	/OB
A	Distance from the centre of the fitting to the lit surface	250mm			
B	Spacing for an even wash	250mm*	350mm	400mm	500mm
C	500mA Lit distance	3.5m	2.5m	2m	2.5m
C	700mA Lit distance	5m	3.5m	3m	3.5m

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

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ORDER CODES & OPTIONS

EXAMPLE: LD151T-E2-700 / LW30 / NB / NGS / STAINLESS STEEL / 484N

Light Engine & Drive Current	LED Colour	Beam angle	Glare shield	Bezel finish	Fixing accessories
LD151T -	/	/	/	/	/

E2

5W LED at 350mA	LD151T-E2-350
7W LED at 500mA	LD151T-E2-500
10W LED at 700mA	LD151T-E2-700

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

Beam angle	
10° Narrow spot	/NB
19° Medium	/MB
34° Wide	/WB
54° Extra wide	/WWB
15° x 49° Oval	/OB

F1

3.5W LED at 350mA	LD151T-F1-350
5W LED at 500mA	LD151T-F1-500
7W LED at 700mA	LD151T-F1-700

LED Colour	
Super Warm White (2200K)	/LW22

Beam angle	
25° Medium spot	/MSB
46° Wide	/WB
65° Extra wide	/WWB
43° x 25° Oval	/OB

Glare shield

/NGS

/GS

Bezel finish

316 Stainless Steel

Polished & Passivated Stainless Steel (for marine environments)

Flamed Bronze (antique finish)

Brass

Paint Finish - Black (RAL 9005)

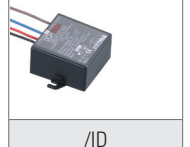Paint Finish - White (RAL 9016)

Paint Finish - RAL

Fixing accessories

/484S

/484N

/484N-2

/ID

/484GT

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.

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