

LD153

HIGH POWER INTERIOR/EXTERIOR LED UPLIGHT



The LD153 is a powerful and robust uplight with a compact size and depth, ideal for lighting interior or exterior walls. This product can be specified with a wide range of options allowing it to suit many project requirements with multiple bezel finishes to choose from. Available LED engines include E2, Tunable White, CLR, RGBW and F1 which offer a range of colour temperatures between 2200K-5000K and various beam angles. The bezel is secured by 4 screws that lock into the mounting surface using our clever O-ring compression system, acting as an additional layer of security in public areas. The LD153 features a black trim, toughened glass and emits a powerful but low glare illumination which can be further enhanced through the use of optional glare shield accessories. 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 featuring CREE LED, delivering up to 595 lumens with built-in reverse polarity protection
- > F1 COB, Tunable White, CLR, RGBW, 2nd channel LEDs also available
- > Chamfered edged bezel available in 316 Stainless Steel, Polished & Passivated Stainless Steel, Brass, Flamed Bronze and paint finishes
- > 4 screws in the bezel are tightened to expand O-rings on the body and secure it into the first fix sleeve, or concrete housing, creating a water tight seal
- > Optics feature an impressively narrow 10° spot is for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- > Single optic produces a very consistent beam with no multiple shadows
- > LED and lens recessed in a matt black anodised body for reduced glare
- > Choice of glare shields, to minimise the view of the intense light source without affecting the wash of light on the wall/column
- > Toughened, black ceramic trim glass
- > Offering 700mA when specified with 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.



WHITE LED ENGINE 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)****	361 474 595	211 272 348
Lumens per circuit watt	73 68 60	61 55 50
CRI (Min)	85+	90+
Forward voltage (V ₁₀₀)	14V	9V
Colour consistency	2 SCDM	3 SCDM
Peak intensity	9052 cd	1664 cd
LED lumens	873	623
LOR	0.68	0.63
TM30	RF85 RG98	RF90 RG103
UGR*****	10.1	9.1
LED lifetime	L90B5 at 90,000hrs	
Applications		

These values are based around a LD153-E2-700-LW30-NB & LD153-F1-700-LW22-MSB

*see lumen variance table to the right

**can only be specified with /483N 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%

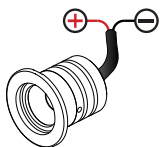
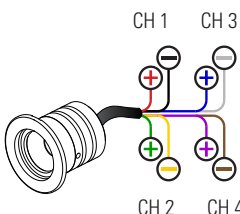
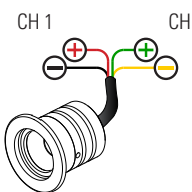
MECHANICAL

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)

COLOUR & DYNAMIC LED ENGINE SPECIFICATION

Engine	 CLR - Colour	 RGBW	 TW - Tunable White
Beam Angles	24°, 38°, 54°, 20°x 46°	38° colour mix lens	24°, 38°, 54°, 20°x 46°
LED manufacturer	CREE	CREE	CREE
Colour temperature	Red, Green, Blue, Amber	Red, Green, Blue, 4000K White	Warm White 2700K or 3000K Cool White 4000K or 5000K
Current	500mA	350mA 500mA	500mA
LED power (Max)	7W	3.5W 5W	6.3W (7W) 3.5W per channel
Applications			

MECHANICAL

Glass	6mm thick toughened glass with back ceramic screen print		
Materials	Stainless steel bezel, anodised aluminium body		
Weight of product	0.52kg		
IP rating	IP67		
IK rating	IK08		
Wiring	CLR - 2 core cables at 250mm in length 	RGBW - 8 core cables at 250mm in length 	TW - 4 core cables at 250mm in length 

AVAILABLE FINISHES

Please refer to our finishes guide for full details



316 STAINLESS STEEL

- > Marine grade 316 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 Steel
- > Mirror like finish
- > Extremely durable
- > Passivated to extensively prolong resistance to corrosion and brown stains caused by oxidation in marine environments
- > Interior & exterior use



FLAMED BRONZE

- > Solid Bronze
- > Hand finished Flamed Bronze unique to LightGraphix
- > Extremely durable with very high corrosion 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

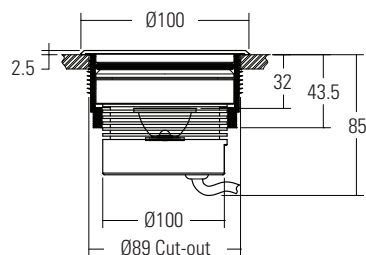
- > Matt Black, Matt White, and other RAL colours available
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

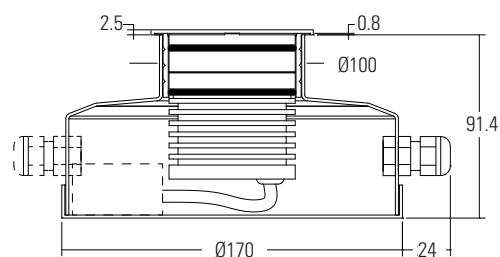
/483S

First fix sleeve is polypropylene, with a finned top to fix into various surfaces.



/483N or /483N-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.



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



/483N
Concrete housing with 1x PG9 IP67 gland



/483N-2
Concrete housing with 2x PG9 IP67 gland

FIXING MECHANISM



1 Fitting pushed into housing

2 Orientate fitting. Then tighten 4 screws

3 Ring is pulled up and expands the O ring, locking fitting into the housing

GLARE SHIELD OPTIONS

LD153 comes with a choice of glare control options. Please refer to our photometric files for lumen data.



/NGS

For maximum lumen output. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



/GS

Standard glare shield. This glare shield provides an excellent balance between glare control and lumen output and works well in most applications.



/GSHM

Half-moon glare shield. For applications that require very low glare. Lumen output typically reduced by 60%.

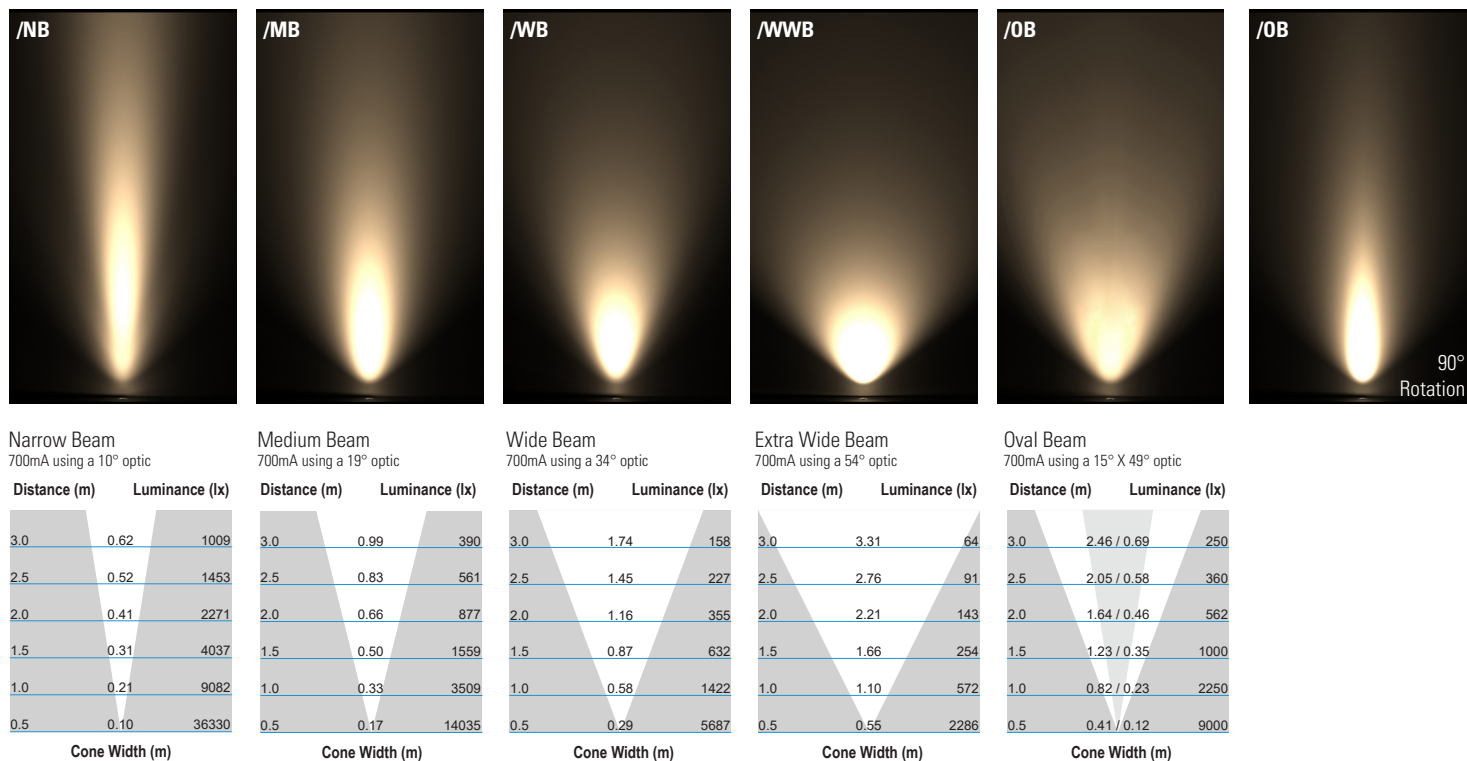


Design: RH
Project: Richards House
Product: LD153

CONE DIAGRAMS

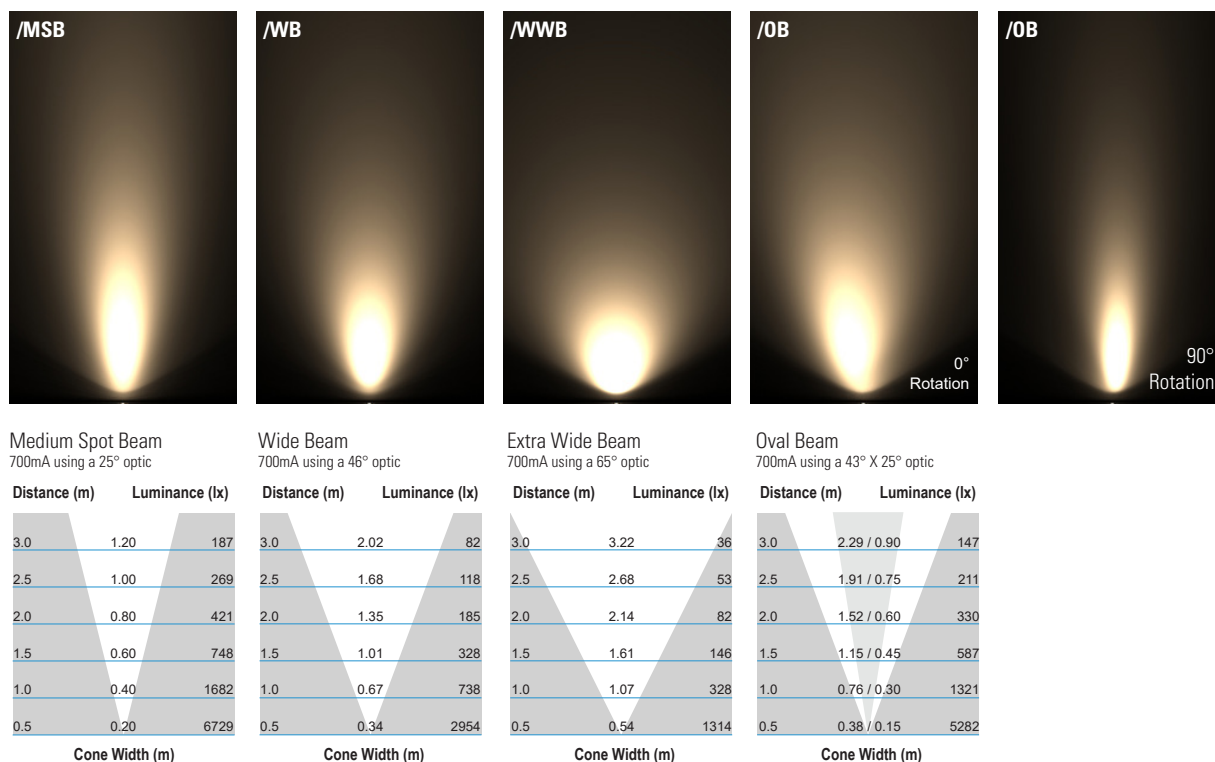
E2 LED Engine

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 LD153 product page on the website.



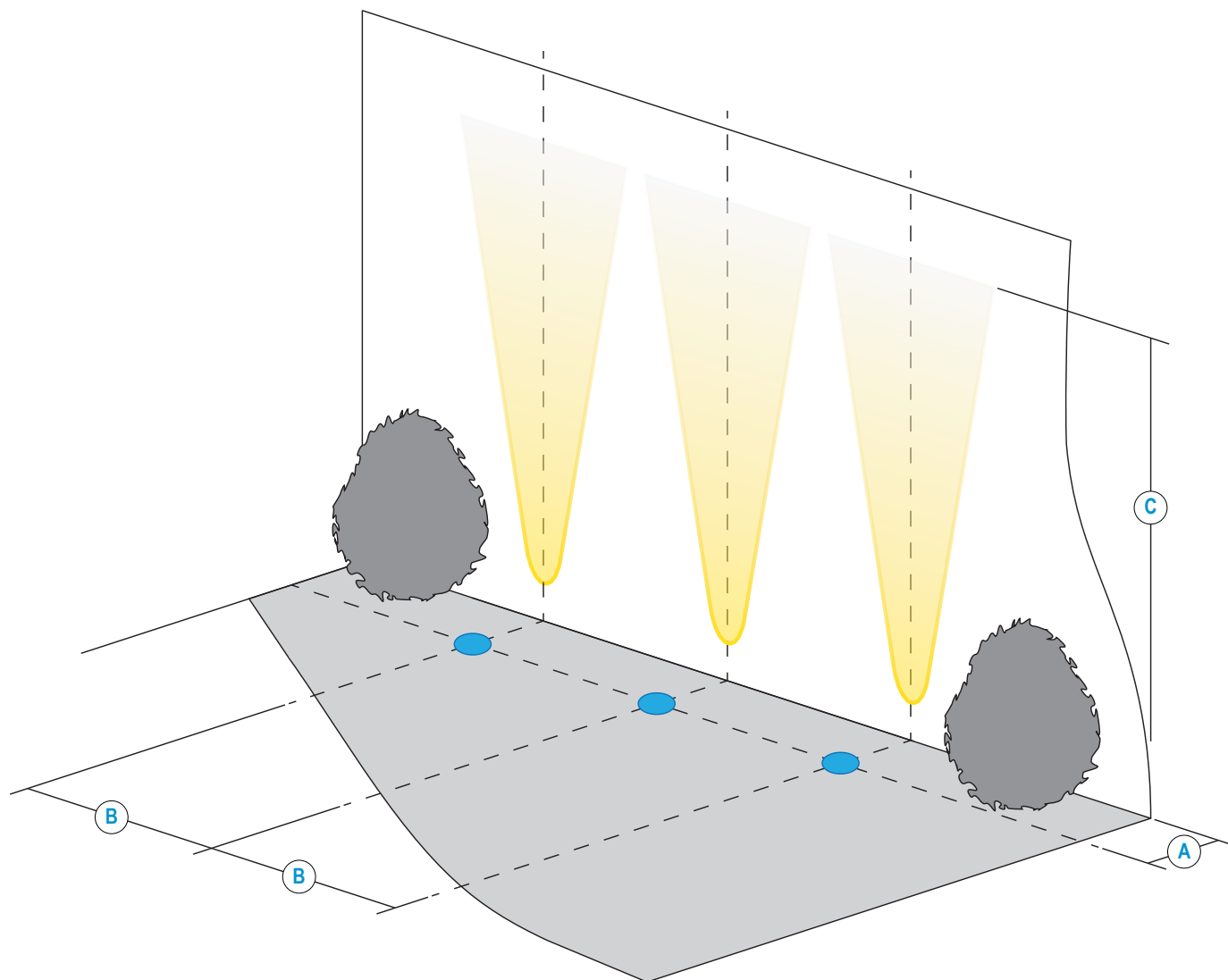
F1 LED Engine

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 LD153 product page on the website.



INSTALLATION GUIDE

Below is a luminaire positioning guide. 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 LD153 product page on our website.



LD153-E2	/NB	/MB	/WB	/WWB	/OB
A Distance from the centre of the fitting to the lit surface	125mm				
B Spacing for an even wash	250mm*	350mm	400mm	500mm	500mm
C 500mA Lit distance	6m	4.5m	2m	2m	4m
C 700mA Lit distance	9m	5.5m	4m	3m	5m

LD153-F1	/MSB	/WB	/WWB	/OB
A Distance from the centre of the fitting to the lit surface	125mm			
B Spacing for an even wash	350mm	400mm	500mm	500mm
C 500mA Lit distance	2.5m	2m	1.5m	3m
C 700mA Lit distance	5m	4m	2m	4m

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

ORDER CODES & OPTIONS

Example: LD153-E2-700 / LW30 / NB / NGS / Stainless Steel / 483N

Light Engine & Drive Current	LED Colour	Beam Angle	Glare Shield	Bezel Finish	Fixing Accessories
LD153 -	/	/	/	/	/

WHITE LED ENGINES

E2

5W LED at 350mA	LD153-E2-350	Extra Warm White (2700K) /LW27	10° Narrow spot /NB
7W LED at 500mA	LD153-E2-500	Warm White (3000K) /LW30	19° Medium /MB
10W LED at 700mA	LD153-E2-700	White (4000K)-on request /LW40	34° Wide /WB
		Cool White (5000K) /LW50	54° Extra wide /WWB
			15° x 49° Oval /OB

F1

3.5W LED at 350mA	LD153-F1-350	Super Warm White (2200K) /LW22	25° Medium spot /MSB
5W LED at 500mA	LD153-F1-500		46° Wide /WB
7W LED at 700mA	LD153-F1-700		65° Extra wide /WWB
			43° x 25° Oval /OB

COLOUR & DYNAMIC LED ENGINES

CLR

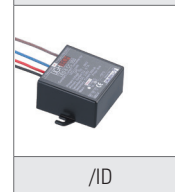
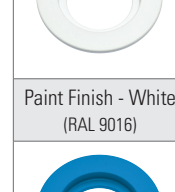
7W LED at 500mA	LD153-CLR-500	Red /LR	24° Medium /MB
		Green /LG	38° Wide /WB
		Blue /LB	54° Extra wide /WWB
		Amber /LA	20° x 46° Oval /OB

RGBW

3.5W LED at 350mA	LD153-RGBW-350	38° Colour mix lens	
5W LED at 500mA	LD153-RGBW-500		

TW

3.5W LED at 350mA	LD153-TW-350	Tunable White 2700K & 4000K (standard option) /LW27 + LW40	24° Medium /MB
		Tunable White 2700K & 5000K /LW27 + LW50	38° Wide /WB
		Custom /LW** + L**	54° 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.