

HIGH-POWER INTERIOR/EXTERIOR LED UPLIGHT



CB | R+R



Design: Brilliant Lighting
Project: Private Residence
Product: LD153

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DIMENSIONS

Dimensions in mm

- > E3 engine featuring NICHIA LED, delivering up to 647 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 316 Stainless Steel, Brass, Flamed Solid Bronze and RAL 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 12° 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

For full dimensions please go to page 4.



WHITE LED ENGINE SPECIFICATION

Engine	E3			F1		
Beam angles	12°, 19°, 34°, 54°, 15° x 49°			25°, 46°, 65°, 25° x 43°		
LED manufacturer	NICHIA			CREE		
Colour temperature*	2200K, 2700K, 3000K, 4000K, 5000K			2200K, 2700K, 3000K, 4000K, 5000K		
Current	350mA [5W]	500mA [7W]	700mA [10W]**	350mA [3.5W]	500mA [5W]	700mA [7W]
LED power (Max)***	4.2W	6W	8.4W	3.2W	4.5W	6.3W
Delivered lumens (L ₁₀₀)****	363	477	647	211	272	348
Lumens per circuit watt	73	68	65	61	55	50
CRI (Typ)	85		90*****	90		
Forward voltage (V ₁₀₀)	14V			9V		
Colour consistency	2 SDCM			3 SDCM		
Peak intensity	6890 cd			1664 cd		
LED lumens	840			623		
LOR	0.77			0.63		
TM30	RF85		RG98	RF90		RG103
UGR*****	7.0			9.1		
LED lifetime	L90B5 at 90,000hrs					
Applications						

These values are based around a LD153-E3-700/830/NB & LD153-F1-700/922/MSB

*Lumen output data applies to all colour temperatures

**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

*****90 CRI available in 2700K/3000K only. Approx. 10% lumen drop will occur compared to 85 CRI variants

*****UGR values based on room parameters of 4H 8H, C70 W50 F20

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)

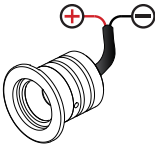
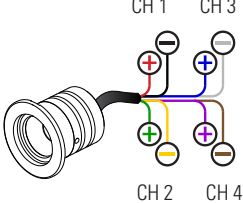
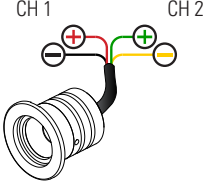
ENVIRONMENTAL

TM65	Available on request
TM66	2.7
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.

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 black 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
- > Pristine 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 SOLID 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

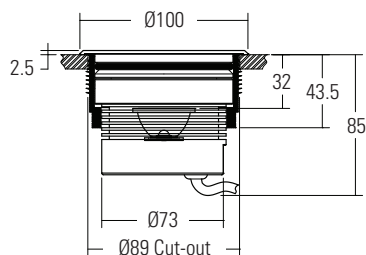
- > Matt Black, Matt White, and other RAL colours available
- > Not recommended for footlights in high traffic areas
- > Interior & exterior use

DIMENSIONS AND FIXING ACCESSORIES

Dimensions in mm

/483S First fix sleeve

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

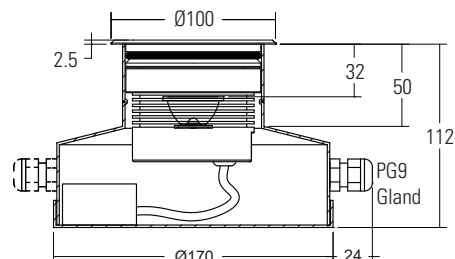


/ID Optional integral non dimming driver (single colour only at 350mA or 500mA).



/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.



/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 is available with a choice of glare control options. Please refer to our photometric files for lumen data.



/NGS No glare shield

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



/GS Glare shield

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

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

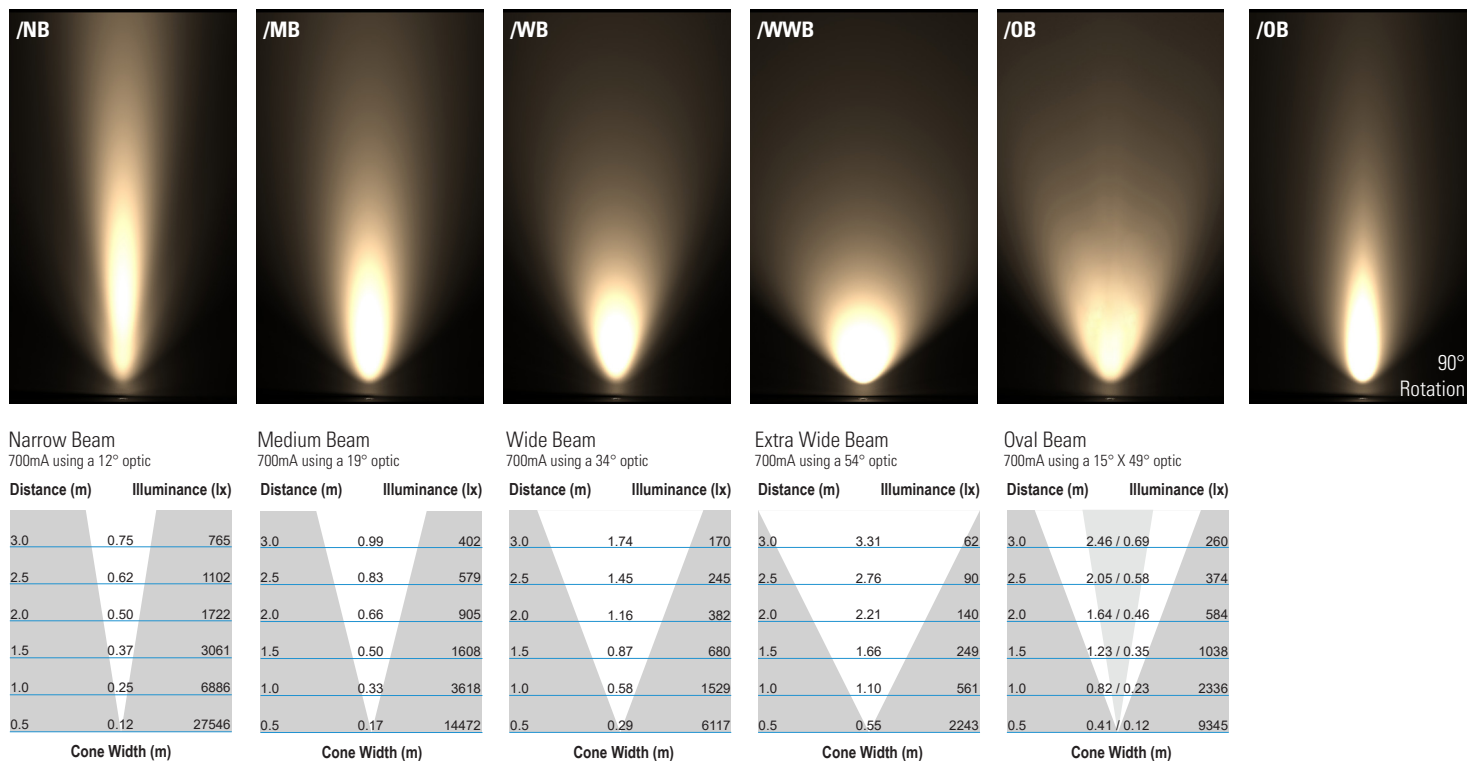


Design: RH
Project: Richards House
Product: LD153

CONE DIAGRAMS

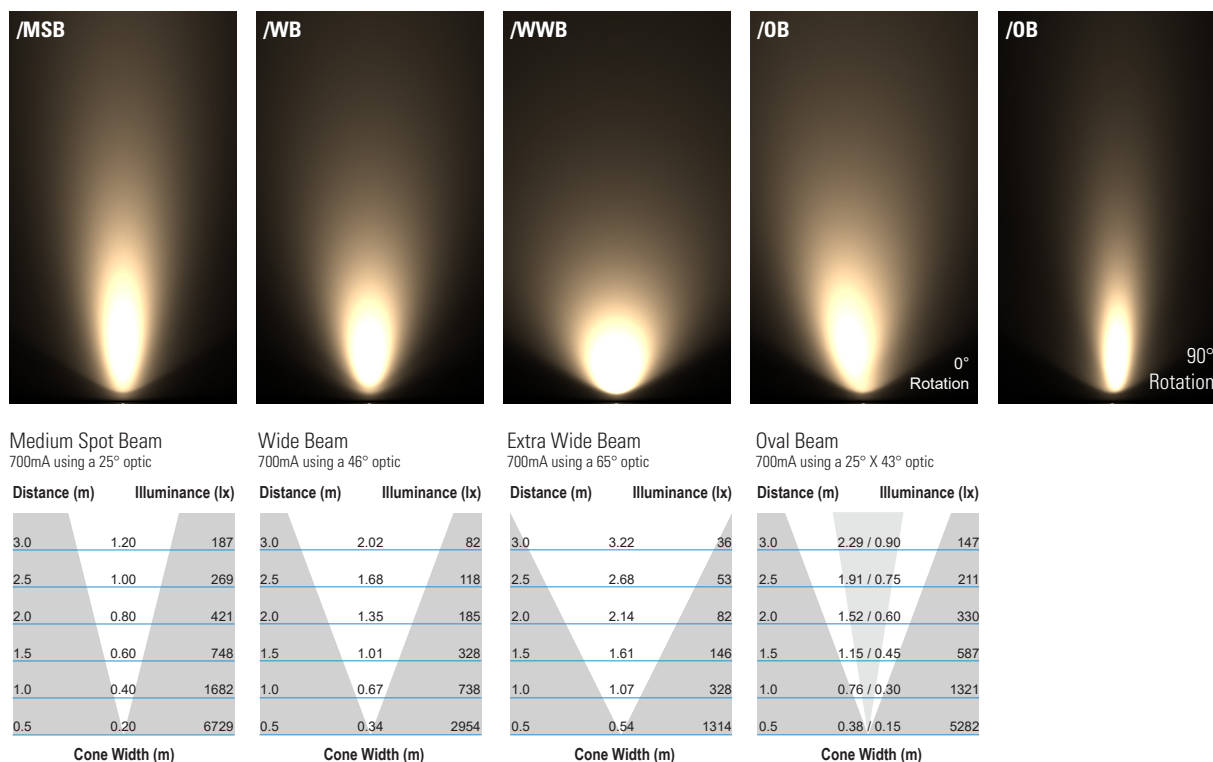
E3 LED Engine

Cone diagrams 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 LD153 product page on the website.



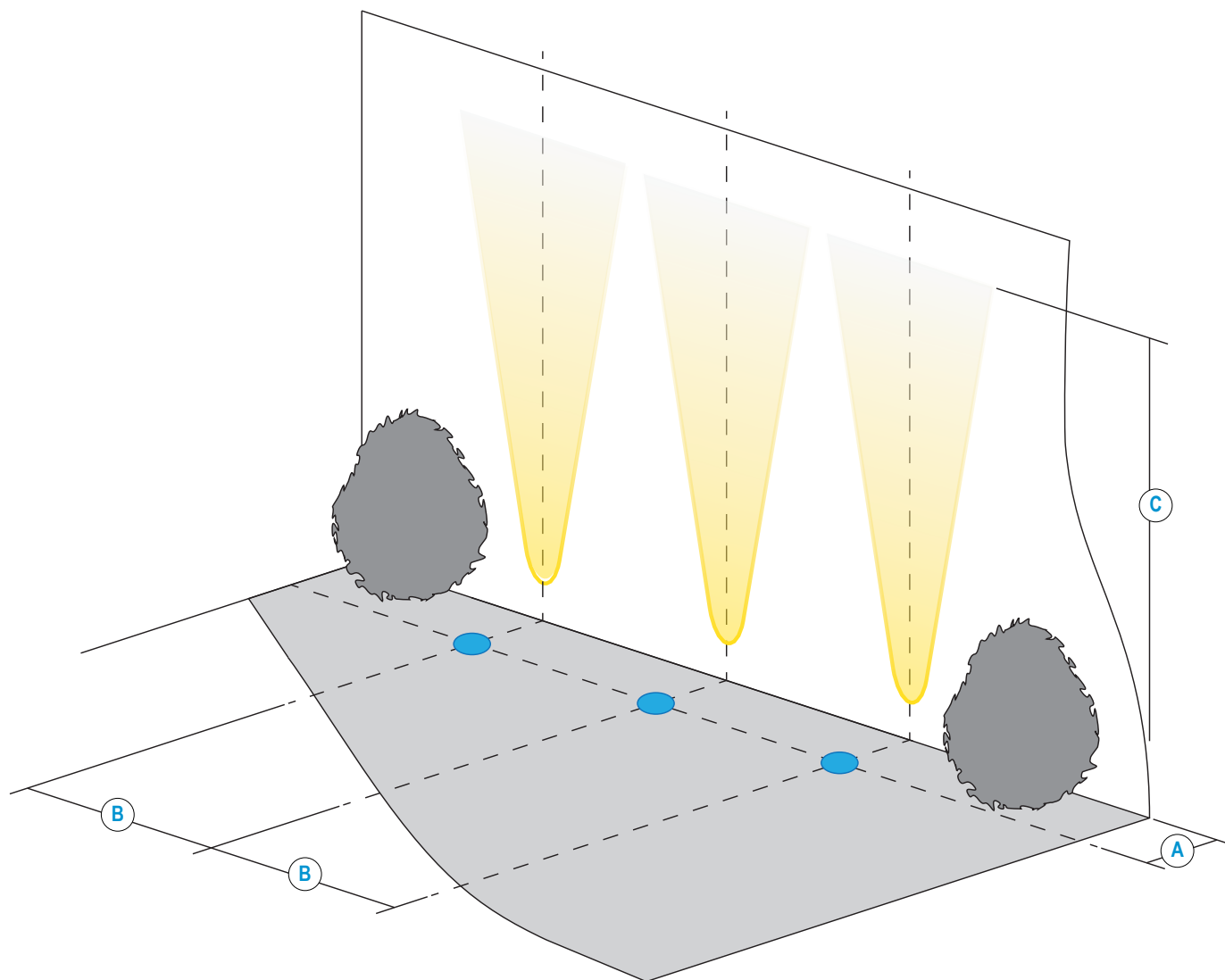
F1 LED Engine

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-E3		/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-E3-700/830/NB/NGS/316 Stainless Steel/483N

Light Engine & Drive Current	LED Colour	Beam Angle	Glare shield	Finish	Fixing Accessories
	/		/		/

WHITE LED ENGINES

E3

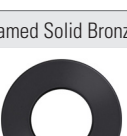
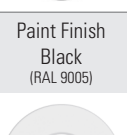
5W LED at 350mA	LD153-E3-350
7W LED at 500mA	LD153-E3-500
10W LED at 700mA	LD153-E3-700*

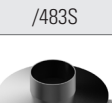
* For use with /441N(-2) only

2200K 85+ CRI	/822
2700K 85+ CRI	/827
3000K 85+ CRI	/830
4000K 85+ CRI on request	/840
5000K 85+ CRI	/850
2700K 90+ CRI	/927
3000K 90+ CRI	/930

12° Narrow spot	/NB
19° Medium	/MB
34° Wide	/WB
54° Extra wide	/WWB
15° x 49° Oval	/OB

	/NGS
	/GS
	/GSHM

	316 Stainless Steel
	Polished & Passivated 316 Stainless Steel (for marine environments)
	Flamed Solid Bronze
	Paint Finish Black (RAL 9005)
	Paint Finish White (RAL 9016)
	Paint Finish RAL

	/483S
	/483N
	/483N-2
	/ID

F1

3.5W LED at 350mA	LD153-F1-350
5W LED at 500mA	LD153-F1-500
7W LED at 700mA	LD153-F1-700

2200K 90+ CRI	/922
2700K 90+ CRI	/927
3000K 90+ CRI	/930
4000K 90+ CRI on request	/940
5000K 90+ CRI	/950

25° Medium spot	/MSB
46° Wide	/WB
65° Extra wide	/WWB
25° x 43° 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

EXAMPLE: LD153-CLR-500/830/MSB/NGS/316 stainless steel/483N

Light Engine & Drive Current	LED Colour	Beam Angle	Glare shield	Finish	Fixing Accessories
	/		/		

COLOUR & DYNAMIC LED ENGINES

CLR											
3.5W LED at 350mA	LD153-CLR-500	Red	/LR	24° Medium	/MSB		/NGS		316 Stainless Steel		/483S
		Green	/LG	38° Wide	/WB		/GS		Polished & Passivated 316 Stainless Steel (for marine environments)		/483N
		Blue	/LB	54° Extra wide	/WWB		/GSHM		Flamed Solid Bronze		/483N-2
		Amber	/LA	20° x 46° Oval	/OB				Paint Finish Black (RAL 9005)		/ID
									Paint Finish White (RAL 9016)		
									Paint Finish RAL		

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*	/827 + 840	24° Medium	/MSB
		Tunable White 2700K & 5000K	/827 + 850	38° Wide	/WB
		Custom	/8** + 8**	54° Extra wide	/WWB
				20° x 46° Oval	/OB

*Standard option

*Standard option

Drivers

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