


## LD10238

### HIGH-POWER SURFACE MOUNTED ADJUSTABLE INTERIOR/EXTERIOR LED SPOTLIGHT



The LD10238 is a compact, high powered surface mounted spotlight, suitable for use in interior or exterior applications. It can be specified with a wide range of options allowing it to suit most project requirements. Available LED engines include E3, Tunable White, CLR, N1 and F1 LEDs offering multiple outputs, excellent CRIs of 90+ (N1 & F1 COBs) and colour temperatures between 2200K-5000K. It has a minimal design and is supplied with an anti-glare cowl as well as a choice of mounting methods, such as a bracket, mount base, tree strap or adjustable ground spike. The use of a matt black inner baffle, recessed LED, single optic and optional honeycomb louvre ensure excellent low glare illumination. With a large selection of paint finishes available and fixing options, the LD10238 can blend discreetly into many environments. This is a very tough, high quality fitting, machined from high grade materials, ensuring excellent thermal and light output performance.

## KEY FEATURES

- > Compact but powerful fitting, delivering up to 891 lumens at 700mA in 3000K
- > E3 engine featuring NICHIA LED, with 2-step binning and built-in reverse polarity protection
- > Multiple engine options include N1 & F1 COB LEDs with 90+ CRI and 2200K colour option - Tunable White, CLR and RGBW engine also available
- > Machined aluminium fitting, paint finishes include: White (RAL 9016), Silver, Anthracite Grey (RAL 7016), Black (RAL 9005), Antique Bronze, Satin Antique Brass, Satin Brass or any RAL finish
- > 90° head tilt adjustment
- > Beam angles include, narrow 12° spot for lighting columns and arches, or a 15°x49° spreader lens, ideal for wall washing applications
- > Single light source and optic produces a consistent beam removing multiple shadows and includes black trim glass with peak intensity up to 7851
- > 47mm recessed LED lens assembly within the body for reduced glare
- > Anti-glare cowl included and optional honeycomb louvre for low-glare
- > Fixing options include adjustable and non adjustable surface mount, surface mounting base and ground spike
- >  Contains our integral moisture guard (anti-wicking barrier), stopping water ingress from going up the cable into the product from incorrect IP-rated connections
- > Switched, 0-10V, Casambi, DMX, DALI, or Mains dimmable drivers available

## DIMENSIONS

Dimensions in mm

For fitting and accessory dimensions please go to page 5.



## WHITE LED ENGINE SPECIFICATION

Engine	E3			N1			F1		
Beam angles	12°, 19°, 34°, 54°, 15°x 49°			25°, 35°, 46°, 65°, 22°x 43°			25°, 46°, 65°, 18°x 45°		
LED manufacturer	NICHIA			CREE			CREE		
Colour temperature	2700K / 3000K / 4000K / 5000K			2200K / 2700K / 3000K / 4000K / 5000K			2200K, 2700K, 3000K, 4000K, 5000K		
Current [Rated Output]	350mA [5W]	500mA [7W]	700mA [10W]	350mA [7W]	500mA [10W]	700mA [14W]	350mA [3.5W]	500mA [5W]	700mA [7W]
Typical LED Circuit wattage	4.4W	6.4W	9.2W	6.4W	9.3W	13.3W	3.3W	5W	7.2W
Delivered lumens (L <sub>100</sub> )*	379	493	653	494	677	891	247	323	413
Delivered lm/Circuit W**	85	77	71	77	73	67	74	65	57
Typical LED Source wattage	4W	5.8W	8.3W	5.8W	8.4W	12.0W	3W	4.5W	6.5W
Source LED lm	574	740	949	694	937	1264	377	497	654
Source lm/W	144	128	114	120	112	105	126	110	101
Forward voltage (V <sub>100</sub> )	11.3V	11.6V	11.8V	16.6V	16.8V	17.1V	8.7V	9V	9.3V
CRI	85			93			90		
Colour consistency	2 SCDM			2 SCDM			3 SCDM		
Peak intensity	6,104 cd			2,922 cd			1,641 cd		
LOR	0.69			0.70			0.63		
TM30	RF85   RG99			RF91   RF91			RF90   RG103		
UGR rating	UGR unavailable for asymmetric light distribution								
BUG rating ('downlight' mounted)	B1-U0-G0								
LED lifetime	L90B5 at 90,000hrs								
Applications									

These values are based on LD10238-E3-700-LW30-NB, LD10238-N1-700-LW30-MSB & LD10238-F1-700-LW22-MSB

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

\*\*LED wattage includes losses associated with using a 90% efficient driver

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





## MECHANICAL

Ambient temperature	E3   F1	-20° to 50° (350mA-500mA) or -20° to 35° (700mA)
	N1	-20° to 50° (350mA-500mA) or -20° to 25° (700mA)
Glass	Low iron glass 3mm thick	
Materials	Anodised aluminium body, with stainless steel fixing brackets	
Weight of product	0.72kg	
IP rating	IP67	
IK rating	IK08	
Wiring	In-series constant current wiring (pre-wired with 2 core cable at a length of 1m)	

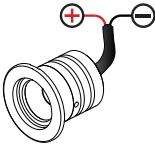
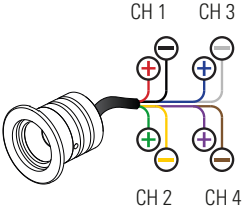
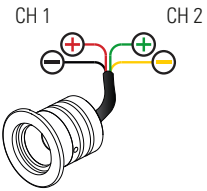
## ENVIRONMENTAL

TM65	Available on request	
TM66	2.6	
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	5W      7W	7W 3.5W per channel
Applications			

MECHANICAL

Glass	Low iron glass 3mm thick		
Materials	Anodised aluminium body, with stainless steel fixing brackets		
Weight of product	0.72kg		
IP rating	IP67		
IK rating	IK08		
Wiring	<p><b>CLR</b> - 2 core cables at 1m in length</p> 	<p><b>RGBW</b> - 8 core cables at 1m in length</p> 	<p><b>TW</b> - 4 core cables at 1m in length</p> 

## AVAILABLE FINISHES

*Please refer to our finishes guide for full details*

The LD10238 body is machined from aluminium and painted in-house at LightGraphix. Paint finishes are suitable for interior and exterior use on surface mounted products. Our standard colours are below but we can accommodate any RAL request.

### WET SPRAY



SILVER ANODISED



ANTIQUE BRONZE



SATIN ANTIQUE BRASS



SATIN BRASS



BLACK  
(RAL 9005)



ANTHRACITE GREY  
(RAL 7016)



WHITE  
(RAL 9016)



RAL COLOURS

### POWDER COAT



TEXTURED MARS BRONZE

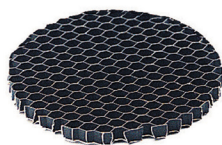


TEXTURED FIR GREEN  
(RAL 6009)

## GLARE SHIELD & ACCESSORY OPTIONS

### /HL Honeycomb louvre

the honeycomb louvre can be used for further reducing glare. Please note this is not suitable for use with the 15° x 49° oval beam or RGBW optic due to the quality of the beam.



**MOUNTING OPTIONS AND DIMENSIONS**

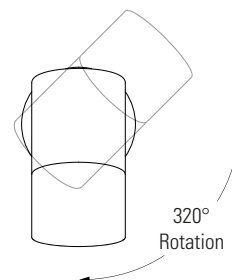
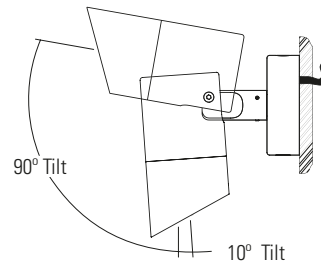
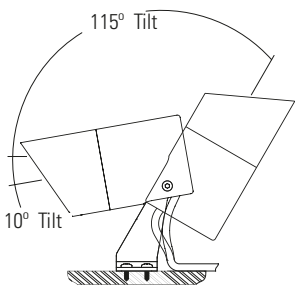
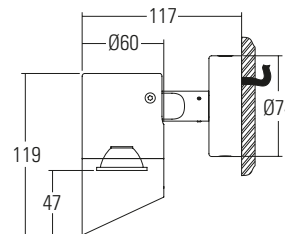
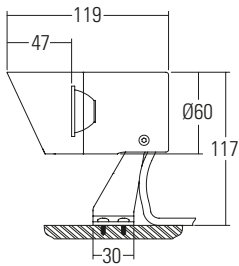
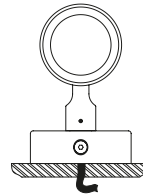
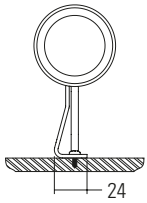
*Dimensions in mm*

**/SAM Surface adjustable mount**

Surface adjustable mounting is screwed to the surface via a strong mounting stand which allows for minor rotational adjustment. The fitting tilt adjustment is lockable via the socket head screw located on the side. Weight: 0.05kg

**/SMB Surface mount base**

Surface mount base offers hidden wiring and a machined pivot arm with lockable tilt and rotation of the fitting. Weight: 0.14kg



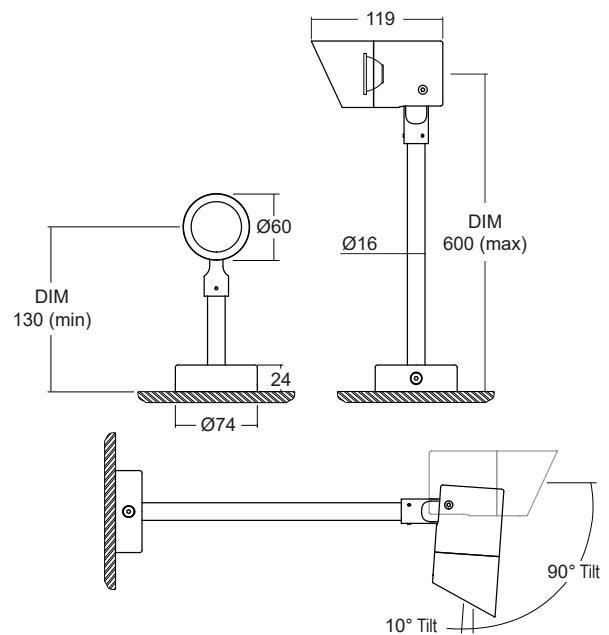
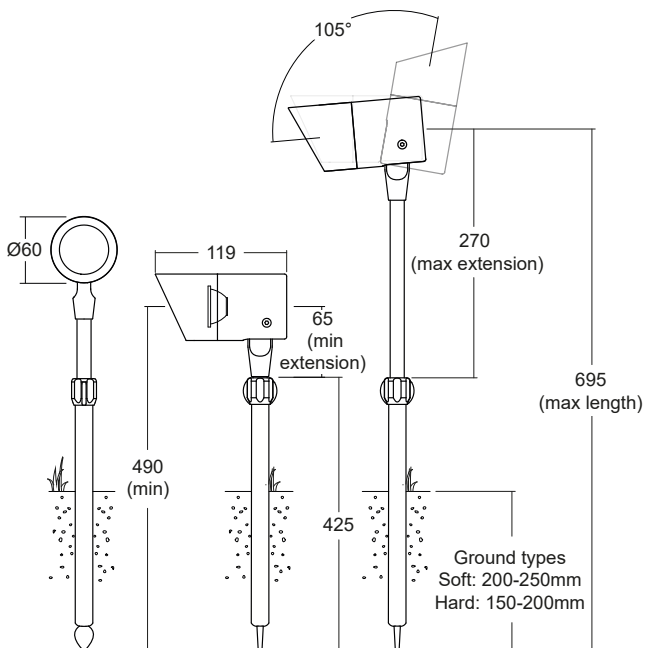
**/GSA Adjustable ground spike**

Adjustable ground spike with a lockable fitting tilt adjustment, for in-ground applications. Height adjustment of 490mm to 695mm to the centre of the fitting. Weight: 0.18kg



**/SMBEX Extended surface adjustable mount**

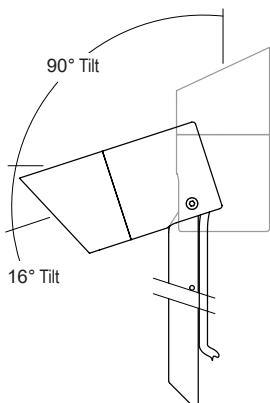
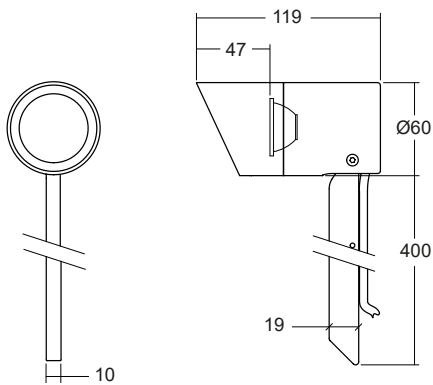
Surface mount base with a lockable fitting tilt adjustment and customisable arm length between 130mm and 600mm to the centre of the fitting. Suitable for vertical and horizontal mounting. Weight: 0.14kg



Specify DIM  
(All dimensions are shown in millimetres.)

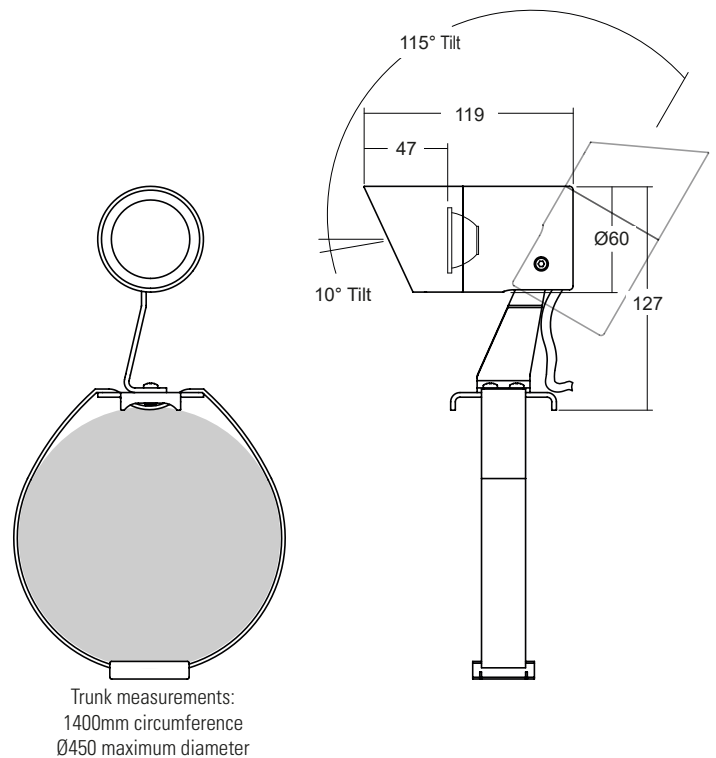
**/GS** Ground spike

Fixed height 400mm ground spike for in-ground applications. Lockable tilt adjustment.  
Weight: 0.21kg



**/TS** Tree strap

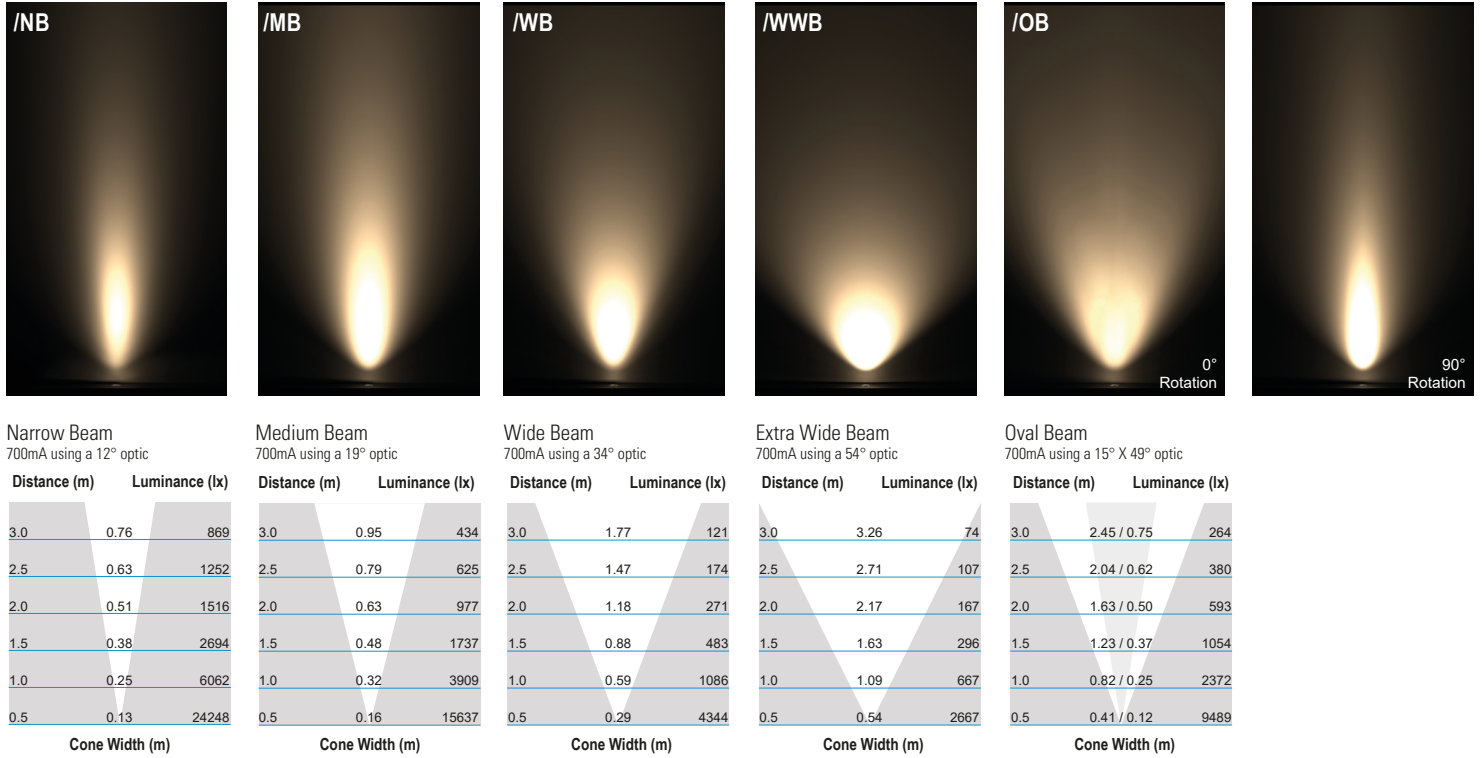
Tree strap/surface mount base with lockable fitting tilt adjustment, has a customisable arm length. It can be specified between 130mm and 600mm to the centre of the fitting. Suitable for vertical and horizontal mounting. Weight: 0.21kg



CONE DIAGRAMS

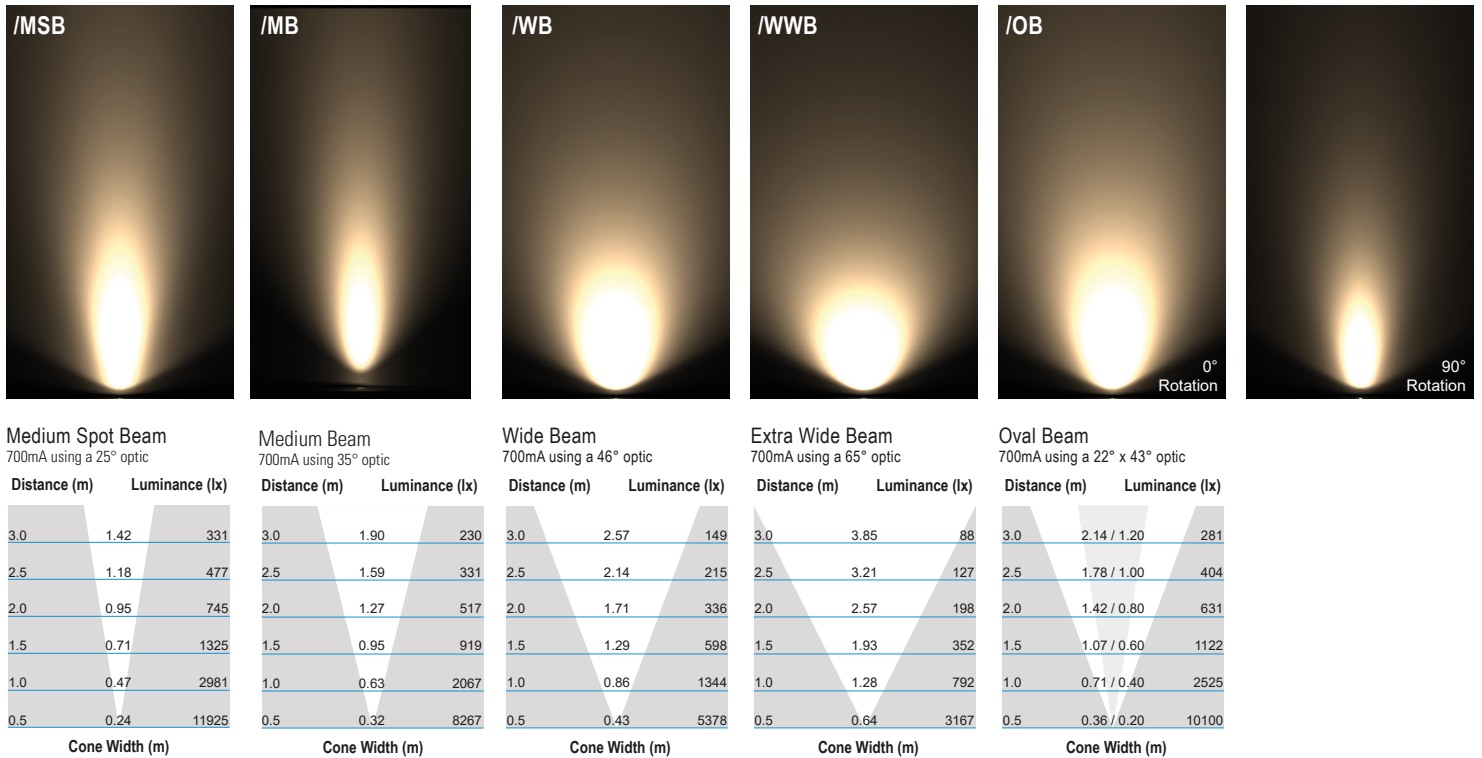
E3 LED Engine

Cone diagrams below are based on a 3000K E3 LED engine run at maximum output 700mA, 10W. Images below represent 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 LD10238 product page on the website.



N1 LED Engine

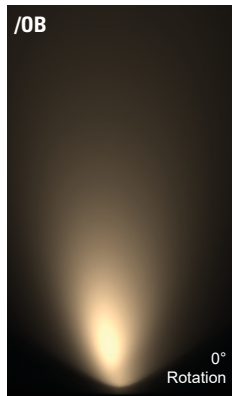
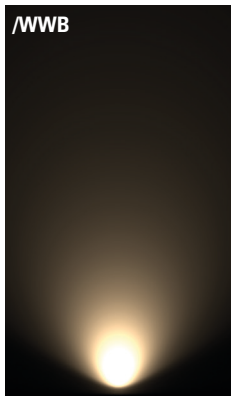
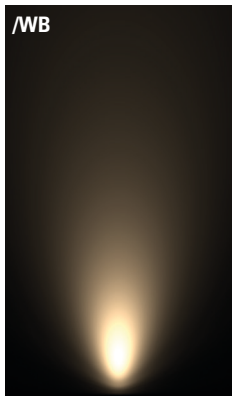
Cone diagrams below are based on a 3000K N1 LED engine run at maximum output 700mA, 14W. Images below represent beam outputs when wall washing a 3m wall, spaced 125mm away from the lit surface. Photometric files (LDT) are included in the design pack which can be downloaded from the LD10238 product page on the website.





F1 LED Engine

Cone diagrams below are based on a 2200K F1 LED engine run at maximum output 700mA, 7W. Images below represent 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 LD10238 product page on the website.



Medium Spot Beam  
700mA using a 25° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.17	202
2.5	0.97	290
2.0	0.78	454
1.5	0.58	806
1.0	0.39	1814
0.5	0.19	7256

Wide Beam  
700mA using a 46° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	2.02	82
2.5	1.68	119
2.0	1.35	185
1.5	1.01	330
1.0	0.67	742
0.5	0.34	2968

Extra Wide Beam  
700mA using a 65° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	3.85	39
2.5	3.21	56
2.0	2.57	88
1.5	1.93	156
1.0	1.28	351
0.5	0.64	1402

Oval Beam  
700mA using a 18° X 45° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	2.47 / 0.91	149
2.5	2.06 / 0.76	214
2.0	1.65 / 0.60	335
1.5	1.24 / 0.45	595
1.0	0.82 / 0.30	1339
0.5	0.41 / 0.15	5357



Design: Lighting Design International  
Project: Four Seasons Astir Palace Hotel, Athens  
Product: LD10238  
Photography: Gavril (www.gavrilux.com)

ORDER CODES & OPTIONS

Example: LD10238-E3-700 / LW30 / NB / Black / SMB / HL

Light engine & drive current	LED colour	Beam angle	Finish	Accessories
LD10238 -				

WHITE LED ENGINES

 E3

5W LED at 350mA	LD10238-E3-350
7W LED at 500mA	LD10238-E3-500
10W LED at 700mA	LD10238-E3-700

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

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



WET SPRAY  
Silver anodised



/SAM




WET SPRAY  
Antique Bronze



/SMB



WET SPRAY  
Satin Antique Brass




/GSA



WET SPRAY  
Satin Brass



WET SPRAY  
Anthracite Grey  
(RAL 7016)



/GS




WET SPRAY  
Black  
(RAL 9005)



WET SPRAY  
White  
(RAL 9016)



/SMBEX (DIM)



WET SPRAY  
RAL Colours



/TS



POWDER COAT  
Textured Mars Bronze  
(SX350F)



POWDER COAT  
Textured Fir Green  
(RAL 6009)



/HL  
(Not suitable for use with /OB or RGBW LED)

 N1

7W LED at 350mA	LD10238-N1-350
10W LED at 700mA	LD10238-N1-500
14W LED at 700mA	LD10238-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

25° Medium spot	/MSB
35° Medium	/MB
46° Wide	/WB
65° Extra wide	/WWB
22° x 43° Oval	/OB

 F1

3.5W LED at 350mA	LD10238-F1-350
5W LED at 700mA	LD10238-F1-500
7W LED at 700mA	LD10238-F1-700

Super Warm White (2200K)	/LW22
Extra Warm White (2700K)	/LW27
Warm White (3000K)	/LW30
White (4000K) - on request	/LW40
Cool White (5000K)	/LW50

25° Medium spot	/MSB
46° Wide	/WB
65° Extra wide	/WWB
18° x 45° Oval	/OB

COLOUR & DYNAMIC LED ENGINES

 CLR

7W LED at 500mA	LD10238-CLR-500
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Red	/LR
Green	/LG
Blue	/LB
Amber	/LA

24° Medium	/MB
38° Wide	/WB
54° Extra wide	/WWB
20° x 46° Oval	/OB

 RGBW

5W LED at 350mA	LD10238-RGBW-350
7W LED at 500mA	LD10238-RGBW-500

38° Colour mix lens	
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 TW

3.5W LED at 350mA	LD10238-TW-350
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Tunable White 2700K & 4000K (standard option)	/LW27 + LW40
Tunable White 2700K & 5000K	/LW27 + LW50
Custom	/LW** + L**

24° Medium	/MB
38° Wide	/WB
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.