

LD10235

HIGH-POWER FLOOR OR CEILING MOUNTED SPOTLIGHT



The LD10235 is a powerful floor and ceiling mounted spotlight suitable for interior or exterior applications and designed around our powerful LD150 and LD151 uplights. 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, RGBW and F1 which offer a range of colour temperatures between 2200K-5000K and beam angles with multiple accessories to choose from. The deep recessed LED and matt black inner baffle allow for an ultra-low glare illumination. Equipped with a built-in anti-wicking barrier for added protection against water ingress, the LD10235 has a sleek body that is a machined billet of aluminium, available in multiple paint finishes. This is a very tough, high quality fitting, machined from high grade materials, ensuring excellent thermal and light output performance.



Project: Scott's Riverside Lighting Designer: 18-1111 Lighting Product: LD10235

Photography: Gavril (www.gavrilux.com)

KEY FEATURES

- > E3 engine featuring the NICHIA LED, delivering up to 653 lumens in 3000K with 2-step binning and built-in reverse polarity protection
- > Available with F1, CLR, RGBW and Tunable White LED engines and optional 2nd channel LEDs for secondary lighting applications
- > Surface mounted version of the LD151/LD150 recessed uplight
- > Range of beam angles, featuring narrow 12° spot for lighting columns and arches, or a 15°x 49° spreader lens, which is ideal for wall washing applications
- > Single light source and optic produces a very consistent beam with no multiple shadows
- > LED and lens recessed in a matt black anodised body for reduced glare
- > Optional glare shield accessories available for reduced glare
- > Body is a machined solid billet of aluminium
- > 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
- > Available with Switched, 0-10V, Casambi, DMX, Dali or Mains dimmable drivers

DIMENSIONS

Dimensions in mm

For fitting 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°, 43° x 25°		
LED manufacturer	NICHIA			CREE		
Colour temperature*	2700K / 3000K / 4000K / 5000K			2200K, 2700K, 3000K, 4000K, 5000K		
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)	379	493	653	227	241	367
Lumens per circuit watt	76	70	65	65	49	52
CRI (Typ)	85			90		
Forward voltage (V ₁₀₀)	14V			9V		
Colour consistency	2 SCDM			3 SCDM		
Peak intensity	6104 cd			1641 cd		
LED lumens	840			623		
LOR	0.78			0.63		
TM30	RF85	RG99		RF90	RG103	
UGR***	8.0			8.1		
LED lifetime	L90B5 at 90,000hrs					
Applications						

These values are based around a LD10235-E3-700-LW30-NB & LD10235-F1-700-LW22-MSB

*Lumen output data applies to all colour temperatures


**indicates the nominal power for the LED run at that particular current and includes losses associated with using an 85% efficient driver

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

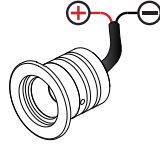
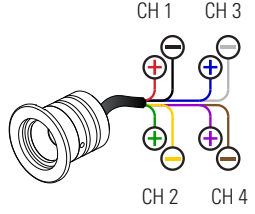
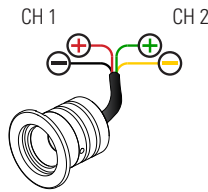
MECHANICAL

Ambient temp	-20° to 45° (500mA) or -20° to 35° (700mA)
Glass	Low iron glass 3mm thick
Materials	Anodised aluminium body, with black anodised bezel
Weight of product	0.55kg
IP rating	IP67
IK rating	IK08
Wiring	In-series constant current wiring (pre-wired with 2 core cable at a length of 1m)

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	350mA 500mA
LED power (Max)	7W	5W 7W	6.3W (7W) 3.5W per channel
Applications			

MECHANICAL

Glass	Low iron glass 3mm thick		
Materials	Anodised aluminium body, with black anodised bezel		
Weight of product	0.55kg		
IP rating	IP67		
IK rating	IK08		
Wiring	CLR - 2 core cables at 1m in length 	RGBW - 8 core cables at 1m in length 	TW - 4 core cables at 1m in length 

AVAILABLE FINISHES

Please refer to our finishes guide for full details

The LD10235 body is a machined single billet of aluminium and is 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.



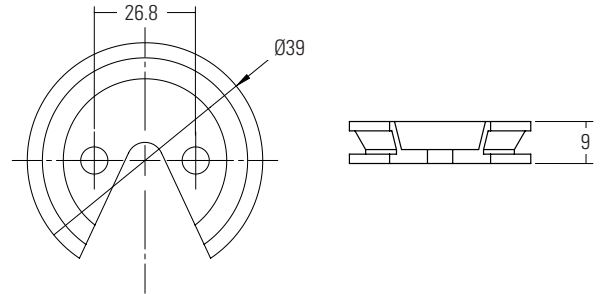
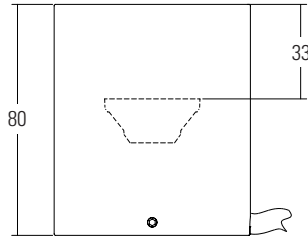
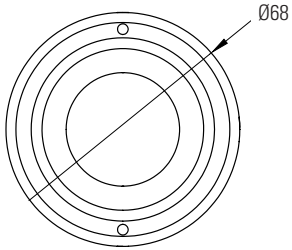
DIMENSIONS

Dimensions in mm

Top view

Side view

Mounting plate



GLARE SHIELD OPTIONS

LD10235 comes with a choice of glare control options to further reduce glare from the powerful LED and optic. This does not reduce the light on the lit surface (wall) but it will cut out some light onto the ceiling or floor. Please refer to our photometric files for lumen data that is available to download from our website.



/NGS No glare shield

No glare shield. Deep recessed optic and matt black anodised optic holder aids in glare reduction.



/GS Glare shield

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



/GSHM Half moon glare shield

Half-moon glare shield for applications that require very low glare. Minimal loss of light on lit surface (wall) but overall lumen output typically reduced by 50-60%.



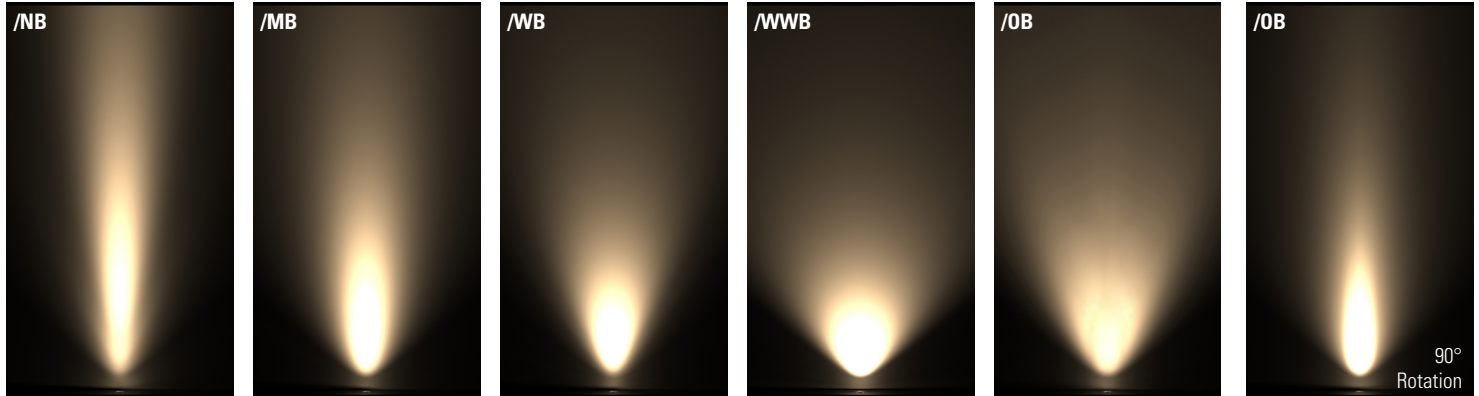
Photography: Gavril (www.gavrilix.com)

Project: Scott's Riverside Lighting Designer: 18Fifty Lighting Product: LD10235

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 LD10235 product page on the website.



Narrow Beam
700mA using a 12° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.76	674
2.5	0.63	970
2.0	0.51	1516
1.5	0.38	2694
1.0	0.25	6062
0.5	0.13	24248

Medium Beam
700mA using a 19° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	0.95	434
2.5	0.79	625
2.0	0.63	977
1.5	0.48	1737
1.0	0.32	3909
0.5	0.16	15637

Wide Beam
700mA using a 34° optic

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	1.77	160
2.5	1.47	230
2.0	1.18	360
1.5	0.88	639
1.0	0.59	1438
0.5	0.29	5753

Extra Wide Beam
700mA using a 54° optic

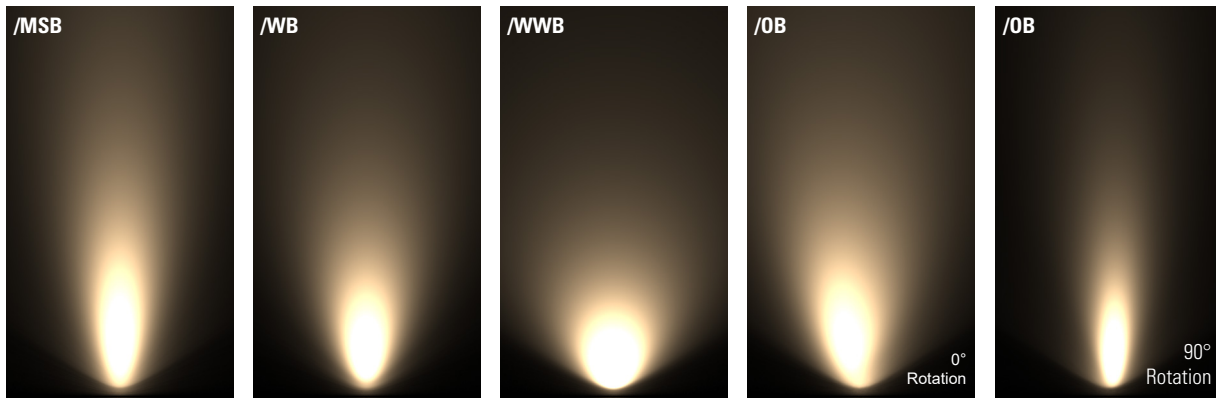
Distance (m)	Cone Width (m)	Luminance (lx)
3.0	3.24	74
2.5	2.70	107
2.0	2.16	167
1.5	1.62	296
1.0	1.08	667
0.5	0.54	2667

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

Distance (m)	Cone Width (m)	Luminance (lx)
3.0	2.45 / 0.75	264
2.5	2.04 / 0.62	380
2.0	1.63 / 0.50	593
1.5	1.22 / 0.37	1054
1.0	0.82 / 0.25	2372
0.5	0.41 / 0.12	9489

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 LD10235 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

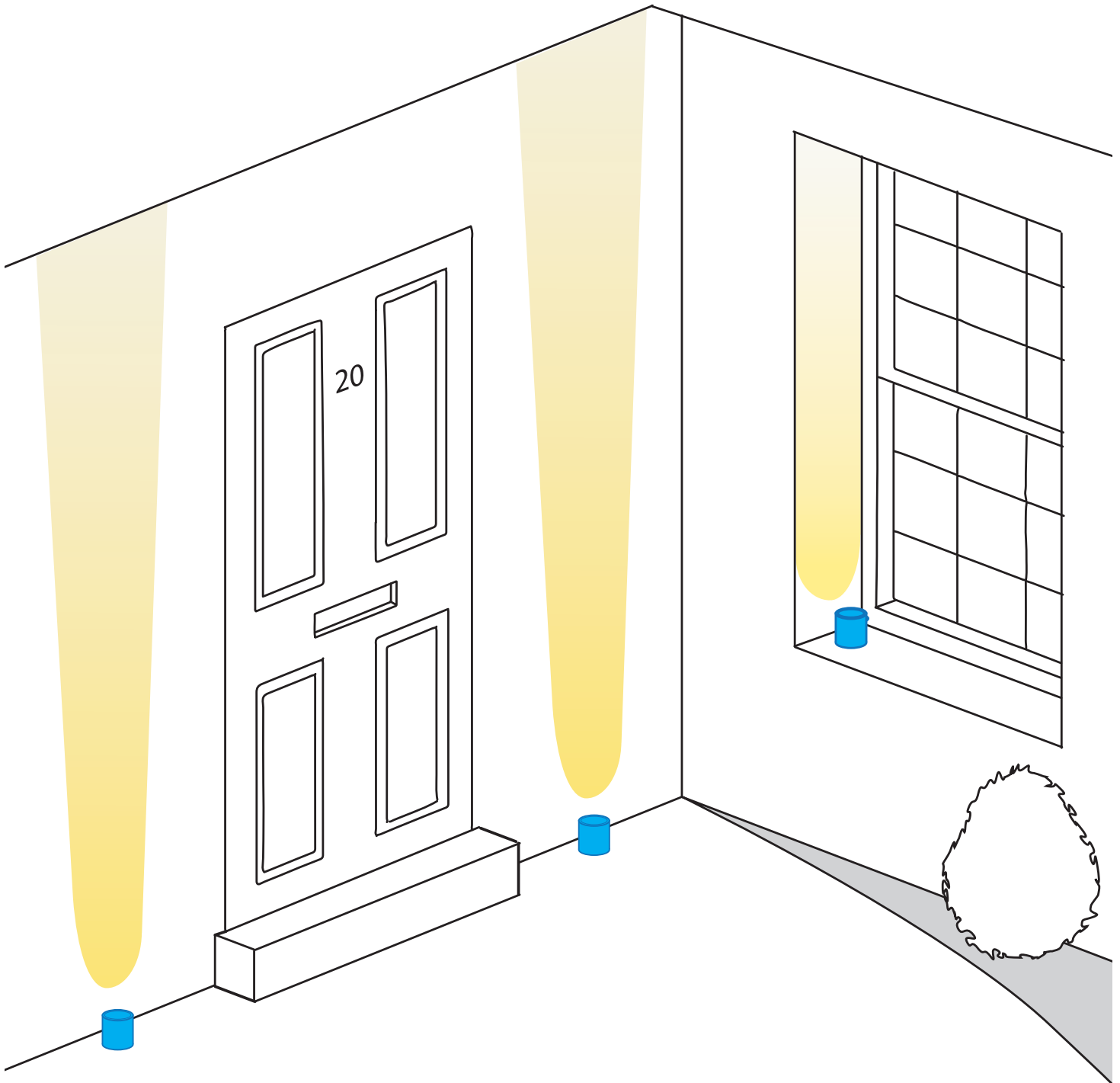
Distance (m)	Cone Width (m)	Luminance (lx)
3.0	3.85	39
2.5	3.21	56
2.0	2.57	88
1.5	1.93	156
1.0	1.28	351
0.5	0.64	1402

Oval Beam
700mA using a 43 X 25° 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

INSTALLATION GUIDE

LD10235 is incredibly versatile, allowing it to be used in a variety of applications from lighting window reveals to wall and floor washing.



ORDER CODES & OPTIONS

Example: LD10235-E3-350 / LW30 / NB / NGS / White

Light engine & drive current	LED colour	Beam angle	Glare shields	Finish
LD10235 -	/	/	/	/

WHITE LED ENGINES

E3

5W LED at 350mA	LD10235-E3-350
7W LED at 500mA	LD10235-E3-500
10W LED at 700mA	LD10235-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

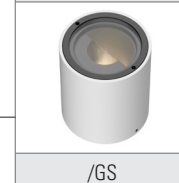


F1

3.5W LED at 350mA	LD10235-F1-350
5W LED at 500mA	LD10235-F1-500
7W LED at 700mA	LD10235-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
43° x 25° Oval	/OB



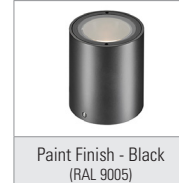
COLOUR & DYNAMIC LED ENGINES

CLR

7W LED at 500mA	LD10235-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	LD10235-RGBW-350
7W LED at 500mA	LD10235-RGBW-500

38° Colour mix lens



TW

3.5W LED at 350mA	LD10235-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.