

LD234

COMPACT SURFACE MOUNTED ADJUSTABLE WINDOW REVEAL



R+R



The LD234 is the LightGraphix solution for window reveal lighting, embodying our Product DNA in terms of glare control, superior beam quality, versatile mounting options and adaptability. As experts in exterior façade lighting, the LD234 was designed and engineered in-house with input from architects and lighting designers to eliminate common frustrations associated with lighting window reveals.

With three beam angles, multiple contractor-friendly power options, and our advanced E3 engine, the LD234 delivers up to 140 lumens whilst maintaining consistent colour temperatures and colour over angle. Its in-house developed Dual Optic system provides a greater than 180° visible beam spread, minimising glare and creating the perfect lit effect.

A machined aluminium body and IP65 rating ensure durability for indoor and outdoor use. Its versatile mounting options include a standard direct mount fixing with integrated tilt screws, to compensate for surface imperfections and sill angles up to 16°. Additional mounting options include adjustable and lockable brackets for surface, wall, or corner mounting. The LD234 flat top design supports levelling equipment, enabling you to record the installed angle, share it with contractors, and minimise the need to return to site to re-focus the project.



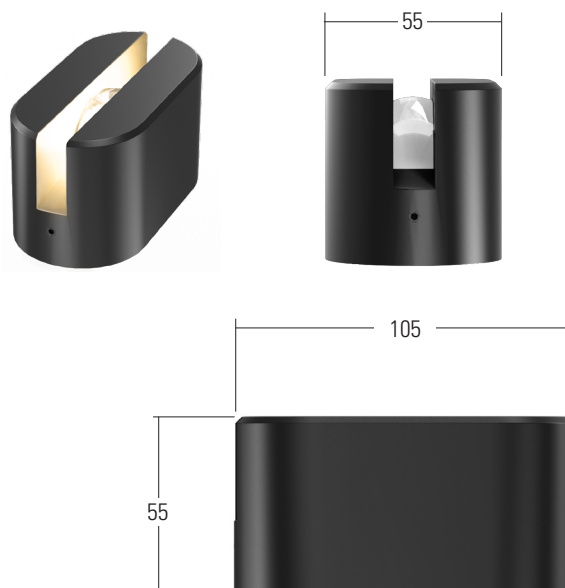
KEY FEATURES

- > Highly versatile with a wide range of mounting options to suit all project types and installation requirements
- > Industry-leading output with three constant current, three 24V options and three different beam angles: ENB (5°x210°), NB (7°x210°) and MB (19°x210°)
- > Available in colour temperatures: 2200K, 2700K, 3000K, 4000K, 5000K
- > LightGraphix in-house developed, built-in Dual Optic system for creating unrivalled soft edge beam quality (NB and MB)
- > Designed for low-glare illumination, when viewed from outside and inside the building
- > IP65 rated
- > High quality machined aluminium metal parts
- > Wide range of standard exterior (including coastal) rated finishes and custom RALs available to enable colour matching of all project and architectural styles
- > Product compatible with our R+R (Repair & Refurbish) initiative
- > Switched, 0-10V, Casambi, DMX, DALI or Mains dimmable drivers/controllers available

DIMENSIONS

Dimensions in mm

For full dimensions please go to page 3.



WHITE LED ENGINE SPECIFICATION

Engine	⊕ E3			⊙ E3-24V		
Beam angles	5° x 210°, 7° x 210°, 19° x 210°			5° x 210°, 7° x 210°, 19° x 210°		
LED manufacturer	NICHIA			NICHIA		
Colour temperature*	2200K, 2700K, 3000K, 4000K, 5000K			2200K, 2700K, 3000K, 4000K, 5000K		
Current [Rated Output]	350mA [5W]	500mA [7W]	700mA [10W]	24V [5W]	24V [7W]	24V [10W]
Typical LED Circuit wattage	4.4W	6.4W	9.2W	4.4W	6.4W	9.2W
Delivered lumens (L ₁₀₀)*	86	109	140	86	109	140
Delivered lm/Circuit W**	20	17	15	20	17	15
Typical LED Source wattage	4W	5.8W	8.3W	4W	5.8W	8.3W
Source LED lm	574	740	949	574	740	949
Source lm/W	144	128	114	144	128	114
Forward voltage (V ₁₀₀)	11.4V	11.6V	11.8V	24V constant voltage		
CRI	85			85		
Colour consistency	2 SDCM			2 SDCM		
Peak intensity**	532.8 cd			532.8 cd		
LOR	0.15			0.15		
TM30	RF85 RG98			RF85 RG98		
BUG rating ('uplight' mounted)	B0-U2-G1			B0-U2-G1		
LED lifetime	L90B5 at 90,000hrs					
Applications						

This data is based on LD234-E3-700/2700K/NB

*Lumen output data applies to all E3 colour temperatures

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

MECHANICAL

		350mA	500mA	700mA
Ambient temperature ⊙ 55°C	⊕ E3	-20°C to 55°C	-20°C to 55°C	-20°C to 35°C
	24V constant voltage			
	⊕ E3-24V	-20°C to 55°C	-20°C to 55°C	-20°C to 35°C
Materials	Aluminium 6026, Polycarbonate optic			
Weight of product	575g			
IP rating	IP65			
IK rating	IK08			
Wiring	External 2 core cable 1000mm			

ENVIRONMENTAL

TM65	Available on request	
TM66	2.5	
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.

AVAILABLE FINISHES

Please refer to our finishes guide for full details

The LD234 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, and we can accommodate any RAL request. Please view our full finishes guide online for more information.

WET SPRAY



BLACK
(RAL 9005)



WHITE
(RAL 9016)



SILVER ANODISED



ANTIQUE BRONZE



ANTIQUE WHITE
(RAL 9001)



SATIN ANTIQUE BRASS



SATIN BRASS



ANTHRACITE GREY
(RAL 7016)



TEXTURED FIR GREEN
(RAL 6009)



RAL COLOURS

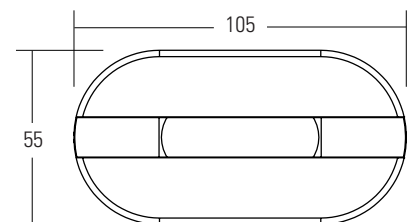
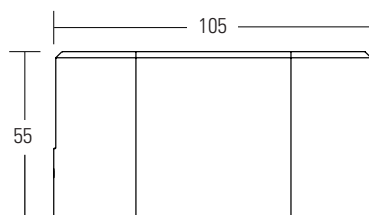
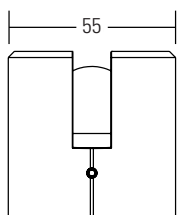
POWDER COAT



TEXTURED MARS BRONZE

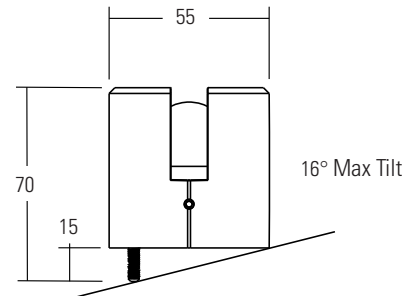
DIMENSIONS & MOUNTING OPTIONS

The LD234 has been designed with a range of mounting options to cover all installation requirements and structures, whilst keeping the lit effect consistent throughout. Fixing accessories can be specified in advance or ordered and fitted later depending on on-site details identified during installation. The product's flat top profile allows levelling equipment to be used ensuring all lights are set at the correct angle.



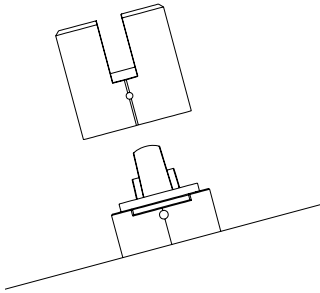
/DM Direct mount standard fixing and tilt screws

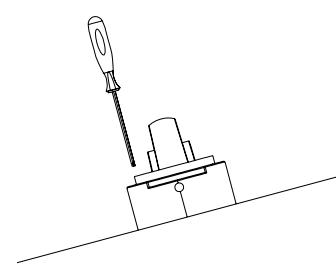
The LD234 direct mount has built-in tilt adjustment as standard. Utilising the 4 discreet tilt screws (one in each corner of the body) the product can be adjusted for level on uneven surfaces and set at a tilt from 0-16° on-site.

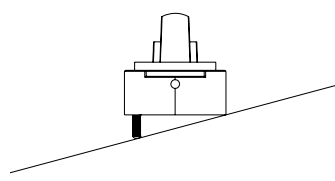


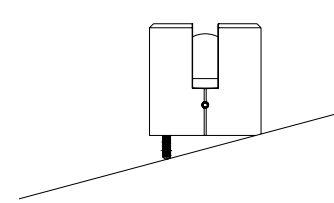
HOW TO USE THE DIRECT MOUNT STANDARD FIXING AND TILT SCREWS

- 1** Remove outer case by loosening locking screws located at both ends of the fitting using a 2mm Hex tool


- 2** Adjust angle/level of fitting by extending the integrated set screws located in each corner of the base unit/direct mount using a 2mm Hex tool


- 3** Temporarily replace outer case, check level, remove outer case, and fix direct mount onto desired surface using screws or similar (not supplied)

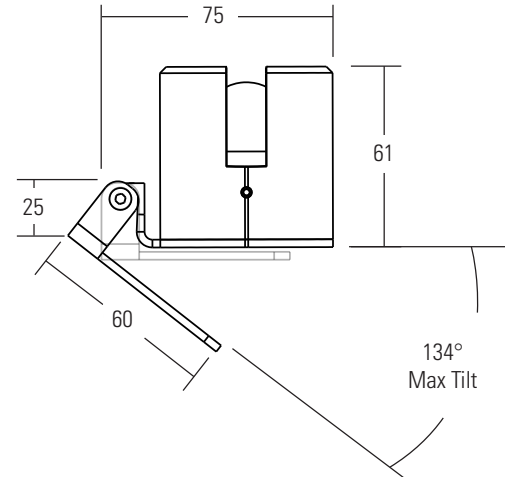

- 4** Replace cover, check angle/level, and tighten locking screws in outer case using a 2mm Hex tool





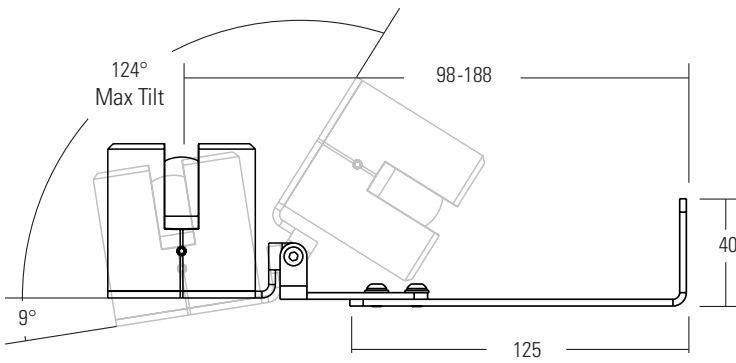
/ABM Adjustable bracket mount

Designed for windowsills with greater than 16° angle, this allows the product to be adjusted and locked quickly on-site. It offers great flexibility with a wider degree of adjustability.



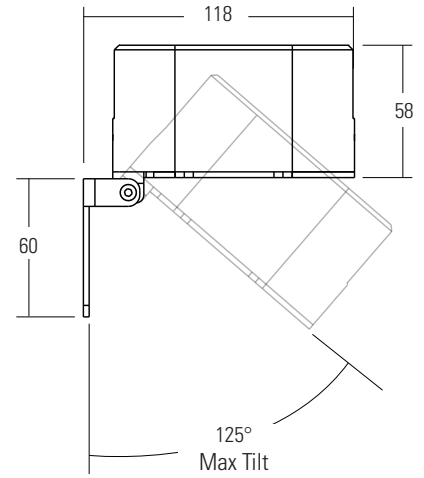
/AWB Adjustable wall bracket

Designed for applications that require no fixings into the windowsill but are fixed to the window frame instead. This also has additional adjustment for the distance from the mounting surface to the product, allowing the light to be centred into the window reveal or focused further to the edge of the reveal if required.



/ACM Adjustable Corner Mount

This adjustable fixing allows the LD234 to be placed in the corner of a window reveal, mounting to either vertical or horizontal surfaces. The fixing can be tilted to the desired angle and locked in place.



CONE DIAGRAMS

E3 LED Engine

Cone diagrams below are based on an 3000K E3 LED engine run at maximum output 700mA constant current or 24v 10W. Photometric files (LDT) are included in the design pack which can be downloaded from the LD234 product page on the website.

Extra Narrow Beam 5° x 210° optic

Distance (m)	Illuminance (lx)		Cone Width (m)
3.0	0.20	52	
2.5	0.17	74	
2.0	0.13	116	
1.5	0.10	207	
1.0	0.07	465	
0.5	0.03	1862	

Narrow Beam 7° x 210° optic

Distance (m)	Illuminance (lx)		Cone Width (m)
3.0	0.31	50	
2.5	0.26	72	
2.0	0.21	113	
1.5	0.16	201	
1.0	0.10	451	
0.5	0.05	1805	

Medium Beam 19° x 210° optic

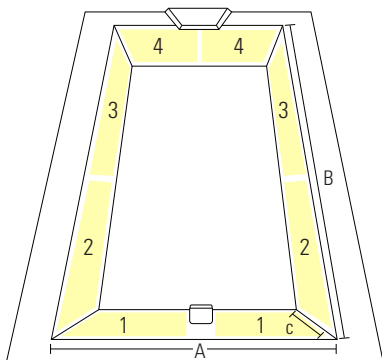
Distance (m)	Illuminance (lx)		Cone Width (m)
3.0	0.88	19	
2.5	0.74	27	
2.0	0.58	43	
1.5	0.41	76	
1.0	0.29	171	
0.5	0.15	685	



1 x LD234 APPLICATION GUIDE

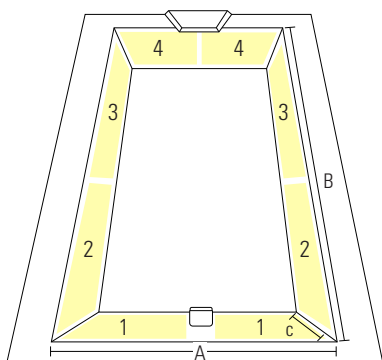
Below is a suggested application guide for the LD234 and different sized window reveals. The numbers displayed are the average and peak lux values found on the different areas of the window reveals surface, at the minimum and maximum suggested dimensions. Photometric files are available to download from the LD234 product page if you wish to further test different applications.

ENB 1 x LD234 mounted in center: Height: 2000mm - 3500mm Width: 1500mm - 3000mm Depth: 300mm - 450mm



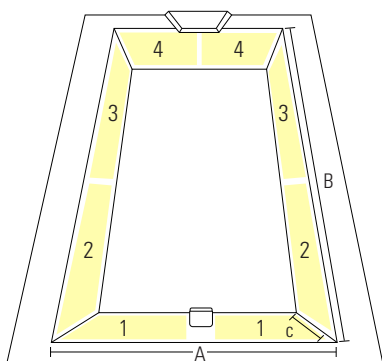
Area		(B) Height		(A) Width							
				1500mm				3000mm			
				7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak		
1	2000mm	5	8	9	25	3	7	4	24		
		61	137	82	176	19	36	25	46		
		43	94	53	115	28	36	35	47		
		65	83	78	98	51	81	61	96		
2	3500mm	5	8	8	24	2	6	3.3	23		
		54	137	70	175	22	36	29	46		
		14	34	17	40	15	28	19	35		
		25	25	30	33	23	26	27	32		

NB 1 x LD234 mounted in center: Height: 1500mm - 3000mm Width: 1500mm - 2500mm Depth: 400mm - 550mm



Area		(B) Height		(A) Width							
				1500mm				2500mm			
				7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak		
1	1500mm	6	10	8	13	4	8	5	11		
		55	117	71	150	21	21	27	54		
		60	107	77	137	36	36	46	57		
		89	125	114	161	70	70	90	158		
2	3000mm	5	8	6	11	3	6	3.5	9		
		55	116	70	149	27	43	34	55		
		18	40	23	51	18	33	23	42		
		29	31	37	40	26	31	34	39		

MB 1 x LD234 mounted in center: Height: 1500mm - 2500mm Width: 2500mm - 2000mm Depth: 450mm - 700mm

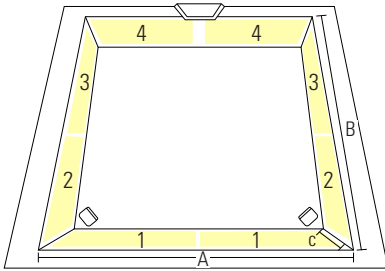


Area		(B) Height		(A) Width							
				1000mm				2000mm			
				7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak		
1	1500mm	7	8	9	11	3	5	4	7		
		68	136	89	179	19	36	24	47		
		37	72	48	95	27	36	36	47		
		47	51	62	68	38	49	51	65		
2	2500mm	6	8	7	10	2.3	4	3	5		
		57	136	74	179	22	35	29	46		
		24	24	15	32	13	23	17	30		
		18	18	24	24	16	18	22	24		

2 x LD234 APPLICATION GUIDE

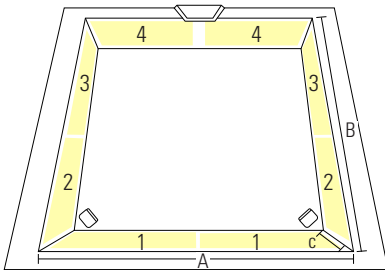
Below is a suggested application guide for 2 x LD234s, positioned in opposing corners and different sized window reveals. The numbers displayed are the average and peak lux values found on the different areas of the window reveals surface, at the minimum and maximum suggested dimensions. Photometric files are available to download from the LD234 product page if you wish to further test different applications.

ENB 2 x LD234 mounted in opposing corners: Height: 2500mm - 5000mm Width: 2500mm - 6000mm Depth: 300mm - 450mm



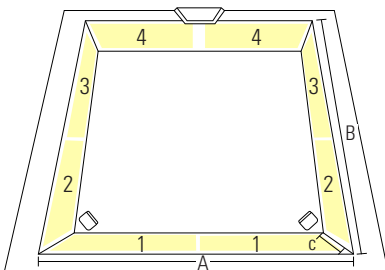
Area	(B) Height	(A) Width								
		2500mm				6000mm				
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V		
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak	
1	2500mm		32	137	41	184	12	121	15	160
			69	380	96	704	39	300	58	489
			32	55	38	65	12	24	15	28
			57	76	70	92	32	45	39	56
2	5000mm		31	137	39	179	11	121	14	162
			49	391	64	686	25	292	35	508
			11	21	13	25	7	9	8	11
			18	20	22	25	14	17	17	20

NB 2 x LD234 mounted in opposing corners: Height: 2000mm - 4000mm Width: 2500mm - 5500mm Depth: 400mm - 550mm



Area	(B) Height	(A) Width								
		2500mm				5500mm				
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V		
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak	
1	2000mm		31	150	41	192	13	142	17	182
			66	339	85	434	49	374	63	477
			37	61	48	79	15	30	20	38
			69	92	88	118	37	59	48	76
2	4000mm		31	155	40	199	12	142	16	182
			49	313	63	399	31	391	40	499
			14	26	19	34	10	10	10	13
			24	27	31	35	18	20	22	26

MB 2 x LD234 mounted in opposing corners: Height: 1500mm - 3000mm Width: 2000mm - 4000mm Depth: 450mm - 700mm



Area	(B) Height	(A) Width								
		2000mm				4000mm				
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V		
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak	
1	1500mm		31	166	40	216	14	147	19	193
			56	222	73	289	37	224	48	294
			46	46	40	61	16	28	21	37
			58	65	76	86	33	48	44	63
2	3000mm		29	162	38	212	13	153	17	200
			39	234	51	308	24	215	31	283
			12	18	15	24	7	9	9	11
			20	21	26	28	14	15	19	20

ORDER CODES & OPTIONS

Example: LD234-E3-700/LW30/MB/Wet Spray Black/AWB

Light engine & drive current

LD234-

LED Colour

Beam Angle

Finish

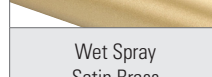
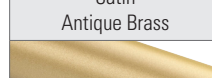
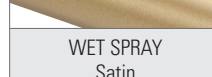
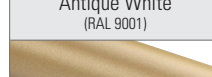
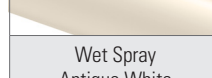
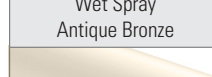
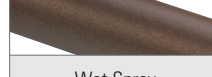
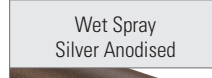
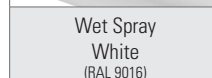
Fixing

E3

55°C Ta	5W LED at 350mA*	LD234-E3-350
55°C Ta	7W LED at 500mA*	LD234-E3-500
	10W LED at 700mA*	LD234-E3-700

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

5° x 210° Extra Narrow	/ENB
7° x 210° Narrow	/NB
19° x 210° Medium	/MB



/DM



/ABM



/AWB



/ACM

E3-24V

55°C Ta	5W LED 24V supply**	LD234-E3-24V-5W
55°C Ta	7W LED 24V supply**	LD234-E3-24V-7W
	10W LED 24V supply**	LD234-E3-24V-10W

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

Drivers

* Use with 350mA, 500mA & 700mA constant current LED drivers
 ** 24V constant voltage LED Drivers and Controllers
 We have a range of dimmable LED drivers DMX and DALI compatible. Please see the downloads section on our website.