

## LD234

### COMPACT SURFACE MOUNTED ADJUSTABLE WINDOW REVEAL



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.



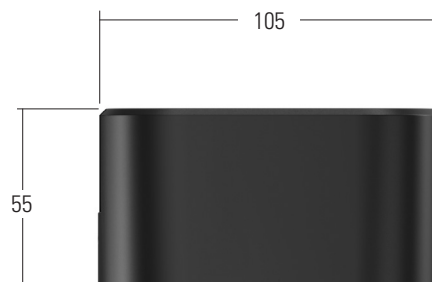
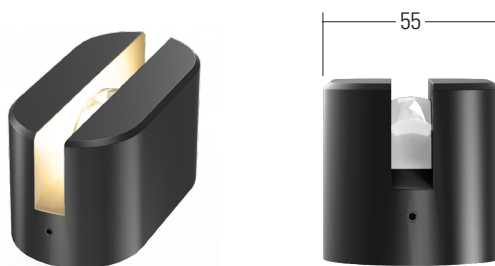
## KEY FEATURES

- > 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°						
LED manufacturer	NICHIA						
Colour temperature*	2200K, 2700K, 3000K, 4000K, 5000K						
Current [Rated Output]	350mA [5W]	500mA [7W]	700mA [10W]	<div>24V [5W]</div> <div>24V [7W]</div> <div>24V [10W]</div>	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 <sub>100</sub> )*	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 <sub>100</sub> )	11.4V	11.6V	11.8V		24V constant voltage		
CRI	85						
Colour consistency	2SCDM						
Peak intensity	532.8 cd						
LOR	0.15						
TM30	RF85   RG98						
BUG rating ('downlight' mounted)	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

Ambient temperature	E3	-20°C to 50°C (350-500mA) or -20°C to 35°C (700mA).
	E3-24V	-20°C to 35°C (24V)
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	 <p>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.</p>	

## 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.

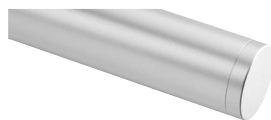
### WET SPRAY



**BLACK**  
(RAL 9005)



**WHITE**  
(RAL 9016)



**SILVER ANODISED**



**ANTIQUE BRONZE**



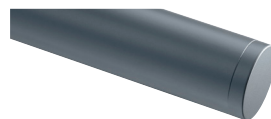
**ANTIQUE WHITE**  
(RAL 9001)



**SATIN ANTIQUE BRASS**



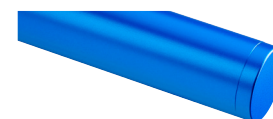
**SATIN BRASS**



**ANTHRACITE GREY**  
(RAL 7016)



**TEXTURED FIR GREEN**  
(RAL 6009)



**RAL COLOURS**

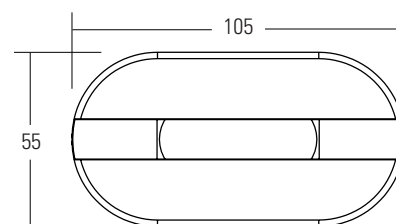
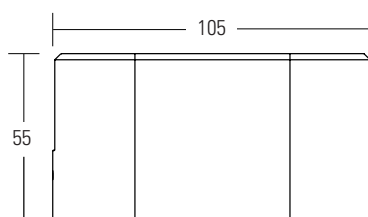
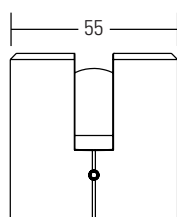
### POWDER COAT



**TEXTURED MARS BRONZE**

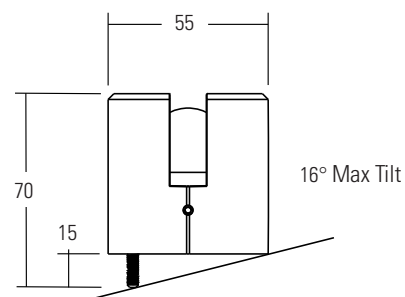
## DIMENSIONS & MOUNTING OPTIONS

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.



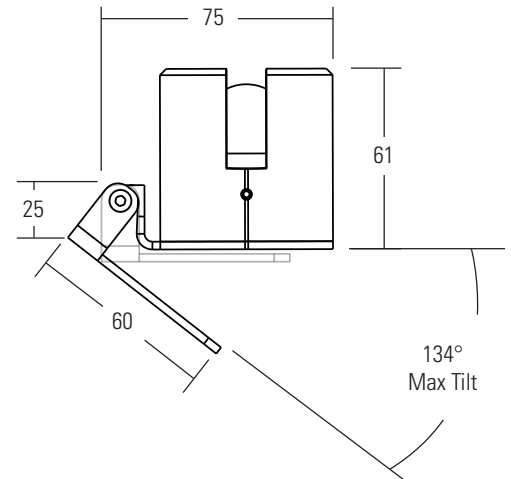
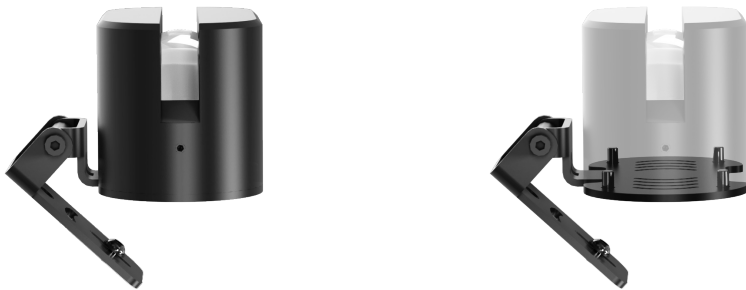
## HOW TO USE THE DIRECT MOUNT STANDARD FIXING AND TILT SCREWS

- Remove outer case by loosening locking screws located at both ends of the fitting using a 2mm Hex tool
- 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
- Temporarily replace outer case, check level, remove outer case, and fix direct mount onto desired surface using screws or similar (not supplied)
- Replace cover, check angle/level, and tighten locking screws in outer case using a 2mm Hex tool



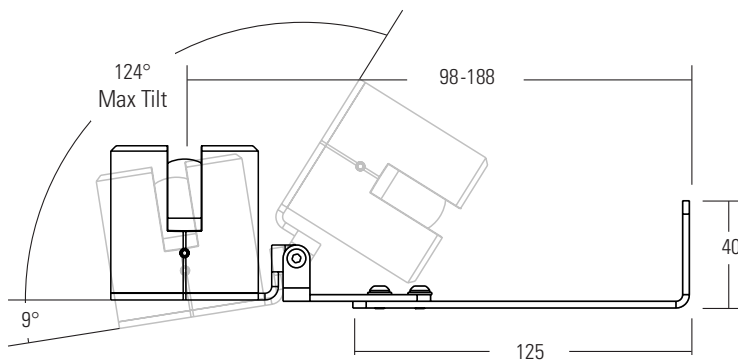
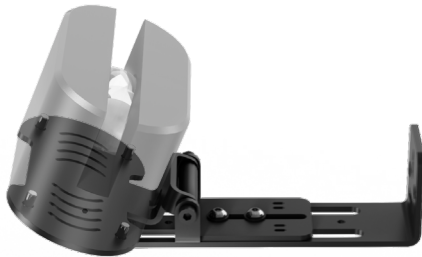
**/ABM Adjustable bracket mount**

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.



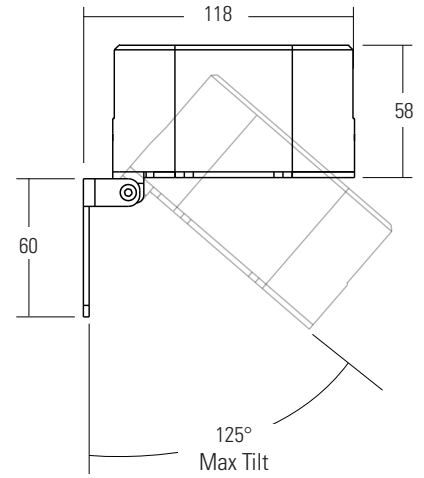
**/AWB Adjustable wall bracket**

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)	Beam Diameter (m)	Illuminance (lx)
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

Cone Width (m)

#### Narrow Beam

7° x 210° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
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

Cone Width (m)

#### Medium Beam

19° x 210° optic

Distance (m)	Beam Diameter (m)	Illuminance (lx)
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

Cone Width (m)

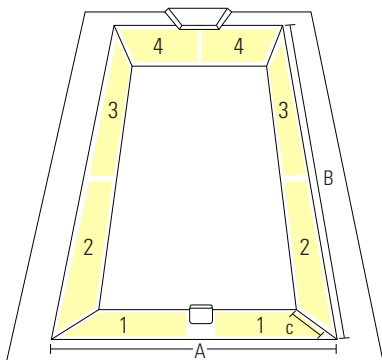




## 1 x LD234 APPLICATION GUIDE

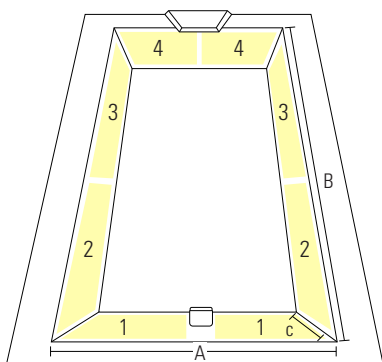
Below is a suggested application guide for the LD234 and different sized window reveals. The numbers displayed are the average and peak lux values found on the different areas of the window reveals surface, at the minimum and maximum suggested dimensions. Photometric files are available to download from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



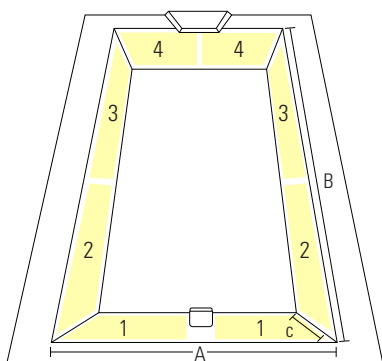
Area	(B) Height	(A) Width							
		1500mm				3000mm			
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak
1	2000mm	5	8	9	25	3	7	4	24
2		61	137	82	176	19	36	25	46
3		43	94	53	115	28	36	35	47
4		65	83	78	98	51	81	61	96
1	3500mm	5	8	8	24	2	6	3.3	23
2		54	137	70	175	22	36	29	46
3		14	34	17	40	15	28	19	35
4		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
2		55	117	71	150	21	21	27	54
3		60	107	77	137	36	36	46	57
4		89	125	114	161	70	70	90	158
1	3000mm	5	8	6	11	3	6	3.5	9
2		55	116	70	149	27	43	34	55
3		18	40	23	51	18	33	23	42
4		29	31	37	40	26	31	34	39

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

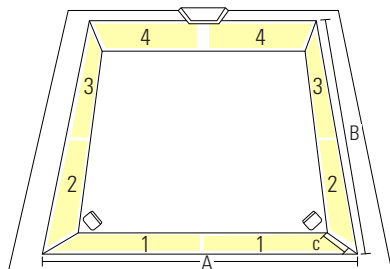


Area	(B) Height	(A) Width							
		1000mm				2000mm			
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak
1	1500mm	7	8	9	11	3	5	4	7
2		68	136	89	179	19	36	24	47
3		37	72	48	95	27	36	36	47
4		47	51	62	68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

## 2 x LD234 APPLICATION GUIDE

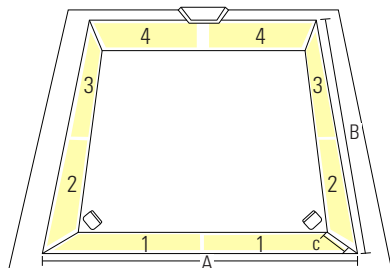
Below is a suggested application guide for 2 x LD234s, positioned in opposing corners and different sized window reveals. The numbers displayed are the average and peak lux values found on the different areas of the window reveals surface, at the minimum and maximum suggested dimensions. Photometric 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



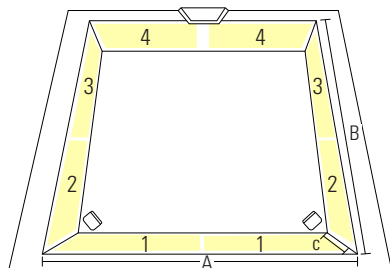
Area	(B) Height	(A) Width							
		2500mm				6000mm			
		7W - 500mA / 24V		10W - 700mA / 24V		7W - 500mA / 24V		10W - 700mA / 24V	
		Average (lx)	Peak (lx)	Average (lx)	Peak (lx)	Average	Peak	Average	Peak
1	2500mm	32	137	41	184	12	121	15	160
2		69	380	96	704	39	300	58	489
3		32	55	38	65	12	24	15	28
4		57	76	70	92	32	45	39	56
1	5000mm	31	137	39	179	11	121	14	162
2		49	391	64	686	25	292	35	508
3		11	21	13	25	7	9	8	11
4		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
2		66	339	85	434	49	374	63	477
3		37	61	48	79	15	30	20	38
4		69	92	88	118	37	59	48	76
1	4000mm	31	155	40	199	12	142	16	182
2		49	313	63	399	31	391	40	499
3		14	26	19	34	10	10	10	13
4		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
2		56	222	73	289	37	224	48	294
3		46	46	40	61	16	28	21	37
4		58	65	76	86	33	48	44	63
1	3000mm	29	162	38	212	13	153	17	200
2		39	234	51	308	24	215	31	283
3		12	18	15	24	7	9	9	11
4		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

LED Colour

Beam Angle

Finish

Fixing

LD234- / / / /



E3

5W LED at 350mA*	LD234-E3-350
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
9° x 210° Medium	/MB

	WET SPRAY Black (RAL 9005)
	WET SPRAY White (RAL 9016)
	WET SPRAY Silver Anodised
	WET SPRAY Antique Bronze
	WET SPRAY Antique White (RAL 9001)
	WET SPRAY Satin Antique Brass
	WET SPRAY Satin Brass
	WET SPRAY Anthracite Grey (RAL 7016)
	WET SPRAY Fir Green (RAL 6009)
	WET SPRAY RAL Colours
	POWDER COAT Textured Mars Bronze

	/DM
	/ABM
	/AWB
	/ACM



E3-24V

5W LED 24V supply**	LD234-E3-24V-5W
7W LED 24V supply**	LD234-E3-24V-7W
10W LED 24V supply**	LD234-E3-24V-10W

### 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.