

DESCRIPTION

4 inch LED recessed narrow, medium, or wide beam downlight specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 900, 1300, 1800 and 2800 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

SPECIFICATION FEATURES

Lower Shielding Reflector

Self-flanged, spun .050" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Plaster Frame / Collar

New Construction Housing: Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C

conductors and feed thru branch wiring.

Thermal

Extruded aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80 or 90 CRI.

D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

Driver

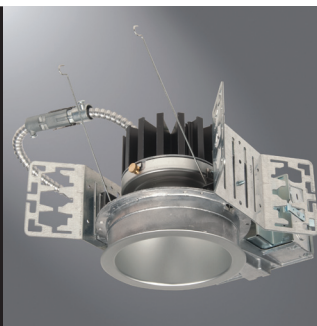
Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

Code Compliance

Thermally protected and cULus listed for protected wet locations. IP66 rated when used with IP66 gasket kit accessory. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards.

Warranty

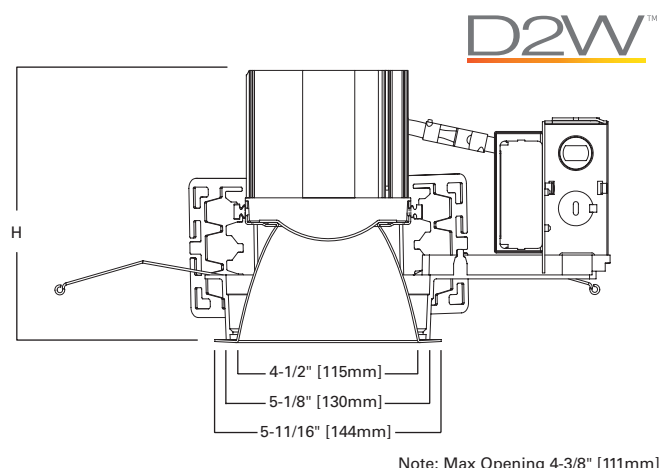
5-year warranty.



LD4A09 LD4A13 LD4A18 LD4A28 4L

900, 1300 Lumen LED
1800, 2800 Lumen LED

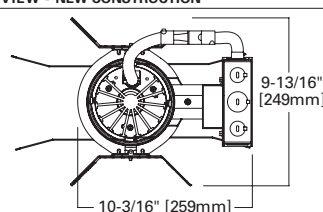
4-Inch
Narrow, Medium, or Wide Beam
Downlight
New Construction



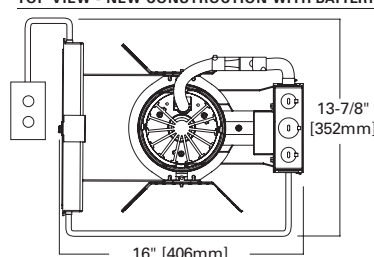
Note: Max Opening 4-3/8" [111mm]

Distribution	Lumens	Height
Narrow	900/1300	5-7/16"
Medium	900/1300	5-11/16"
Wide	900/1300	5-3/16"
Narrow	1800/2800	7-7/16"
Medium	1800/2800	7-11/16"
Wide	1800/2800	7-3/16"

TOP VIEW - NEW CONSTRUCTION



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



Refer to ENERGY STAR® Qualified Products List.

ORDERING INFORMATION

EXAMPLE: LD4A13D010TE ERM4A13835 4LM0LI=4" LED Medium Beam Reflector Lens, 1300 lumen, 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Driver	Options ³	Power Module	Lumens	CRI	Color
LD4A=4" Aperture LD4ACP=4" Aperture, Chicago Plenum	09=900 Lumens 13=1300 Lumens 18=1800 Lumens 28=2800 Lumens	<u>900, 1300, 1800 and 2800 Lumen</u> D010TE=120-277V 0-10V 10% Dimming or Trailing Edge 120V Dimming D5LT=Fifth Light® (DALI) 0% Dimming DE010=0 to 100% Dimming, 120-277V 50/60Hz, 0-10V DL3=1 to 100% Dimming, 120-277V Lutron® Hi-Lume, Ecosystem or 3 Wire DLT=Hi-Lume Forward Phase 2-wire Dimming 120V DMX=DMX 0% Dimming <u>900, 1300 and 1800 Lumen</u> D010TR=120-277V 0-10V 10% Dimming or Leading Edge 120V Dimming	EMBOD=7W Bodine® Emergency Module with Remote Test Switch IEMBOD=7W Bodine® Emergency Module with Integral Test Switch EM7=7W Emergency Module with Remote Test Switch ⁴ EM14=14W Emergency Module with Remote Test Switch ^{4,5} IEM7=7W Emergency Module with Integral Test Switch ^{4,5,6} IEM14=14W Emergency Module with Integral Test Switch ^{4,5,6}	ERN4A=4" Module for Narrow Beam Reflector ERM4A=4" Module for Medium Beam Reflector ERW4A=4" Module for Wide Beam Reflector 09=900 Lumen 13=1300 18=1800 Lumen 28=2800 Lumen	8=80 CRI 9=90 CRI	27=2700° K 30=3000° K 35=3500° K 40=4000° K 27CP=2700° K, Chicago Plenum 30CP=3000° K, Chicago plenum 35CP=3500° K, Chicago Plenum 40CP=4000° K, Chiago Plenum 30D2W= Dim to warm 3000° K to 1850° K (2000 lumen and below, 90 CRI)	

Reflector	Finish	Options	Accessories
4LN0=4" Narrow Reflector Lens Assembly, White Polymer Trim Ring 4LN1=4" Narrow Reflector, Self-flanged 4LM0=4" Medium Reflector Lens Assembly, White Polymer Trim Ring 4LM1=4" Medium Reflector, Self-flanged 4LM0E=4" Medium Reflector Lens Assembly, White Polymer Trim Ring for Integral Emergency Option ⁵ 4LM1E=4" Medium Reflector Self-flanged for Integral Emergency Option ⁵ 4LW0=4" Wide Reflector Lens Assembly, White Polymer Trim Ring 4LW1=4" Wide Reflector, Self-flanged	LI=Specular Clear H=Semi-Specular Clear WMH=Warm Haze G=Specular Gold WH=Wheat WHH=Wheat Haze GP=Graphite GPH=Graphite Haze B=Specular Black W=Gloss White 4LM0 Only BB=Black Baffle WB=White Baffle	Self-flanged Only WF= White Painted Flange	HB26=C-channel Bar Hanger, 26" Long, Pair HB50=C-channel Bar Hanger, 50" Long, Pair RMB22=Wood Joist Bar Hanger, 22" Long, Pair H347= 347 to 120V Step Down Transformer, 75VA H347200=347 to 120V Step Down Transformer, 200VA TRM4P= Metal Trim Ring, White ² TRM4MB= Metal Trim Ring, Black ² TRR4=Rimless Trim Ring ² LGSKT4IP66=IP66 Gasket Kit

- Notes: 1 Nominal Lumens will vary depending on selected color, driver and reflector finish.
2 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
3 Not available with Chicago Plenum.
4 Not CSA approved.
5 For use in accessible ceilings only.
6 For use with medium beam accessible ceilings only.

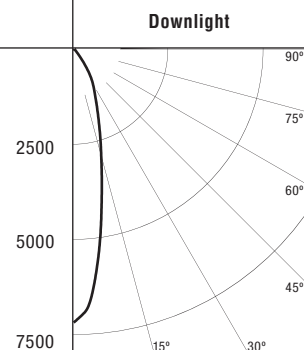
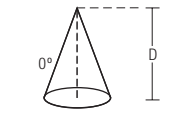
ENERGY

ENERGY DATA			
Sound Rating: Class A standards			
(Values at non-dimming line voltage)			
Minimum Starting Temperature: -30°C (-22°F)			
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)			
Input Voltage: UNV (120V - 277V)			
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)			
Input Frequency: 50/60Hz			
2800 Lumen D010TE		1800 Lumen D010TE	
Input Power: 43.4W	THD: <17%	Input Power: 31.5W	THD: <20%
120V Input Current: .36A	277V Input Current: .16A	120V Input Current: .27A	277V Input Current: .06A

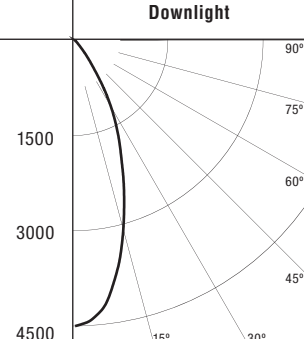
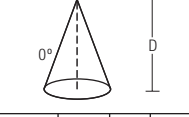
1300 Lumen D010TE		900 Lumen D010TE	
Input Power: 22.4W	THD: <20%	Input Power: 14.1W	THD: <20%
120V Input Current: .12A	277V Input Current: .09A	120V Input Current: .12A	277V Input Current: .06A

120V		277V		
Lumens	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
900/1000	0.486	0.4	0.848	0.182
1300/1500	0.717	1.58	0.531	1.24
1800/2000	0.832	0.405	1.25	0.788
2800/3000	1.09	0.3	1.23	0.294

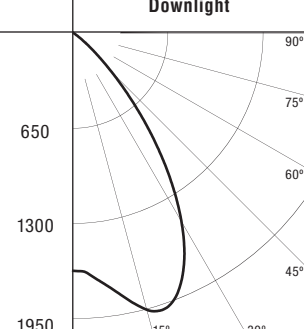
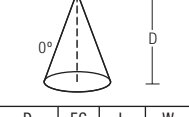
PHOTOMETRICS

Test Number P133618		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Platform	LD4A18D010TE					Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Element	ERN4A18835 4LN1LI					0	7058	0-30	1963	82.9	45	6933
Lumens	2368					5	6145	0-40	2313	97.7	55	442
Efficacy	72.2 Lm/W					15	2836	0-60	2367	100	65	0
SC	0.4					25	1366	0-90	2368	100	75	0
		5.5'		5.5'		35	564	90-180	0	0	85	0
		7'		7'		45	50	0-180	2368	100		
		8'		8'		55	3					
		9'		9'		65	0					
		10'		10'		75	0					
		12'		12'		85	0					
						90	0					

1300 lumen multiplier .62. 2800 lumen multiplier 1.12.

Test Number P133746		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Platform	LD4A18D010TE					Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Element	ERM4A18835 4LM1LI					0	4483	0-30	2055	82.0	45	5954
Lumens	2507					5	4316	0-40	2449	97.7	55	0
Efficacy	76.4 Lm/W					15	3105	0-60	2503	99.8	65	0
SC	0.7					25	1751	0-90	2507	100.0	75	0
		5.5'		5.5'		35	594	90-180	0	0.0	85	0
		7'		7'		45	43	0-180	2507	100.0		
		8'		8'		55	0					
		9'		9'		65	0					
		10'		10'		75	0					
		12'		12'		85	0					
						90	0					

1300 lumen multiplier .62. 2800 lumen multiplier 1.17.

Test Number P134426		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Platform	LD4A18D010TE					Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Element	ERW4A18835 4LW1LI					0	1618	0-30	1520	59.1	45	52140
Lumens	2572					5	1666	0-40	2205	85.7	55	9022
Efficacy	78.4 Lm/W					15	1946	0-60	2567	99.8	65	761
SC	1.3					25	1787	0-90	2572	100	75	0
		5.5'		5.5'		35	1108	90-180	0	0	85	0
		7'		7'		45	378	0-180	2572	100		
		8'		8'		55	53					
		9'		9'		65	3					
		10'		10'		75	0					
		12'		12'		85	0					
						90	0					

1300 lumen multiplier .64. 2800 lumen multiplier 1.19.

EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
900/1000	0.50	0.99
1300/1500	0.29	0.57
1800/2000	0.22	0.44
2800/3000	0.16	0.32