

DESCRIPTION

8-inch LED recessed wide downlight specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 1,000-15,000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Lower Shielding Reflector

Self-flanged, spun .060" 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

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

Forged aluminum heat sink conducts heat away from the LED module for improved performance and longer 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. 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.

Driver

Combination 0-10V/trailing edge 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. 1,000, 1,500, 2,000 lumen utilize one driver. 3,000-10,000 utilize two drivers, 12,000-15,000 utilizes three drivers.

Code Compliance

Thermally protected and cULus listed for protected wet locations with covered ceiling. cCSAus certified. 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. 8,000 lumen and above are marked spacing and must follow spacing requirements.

Warranty

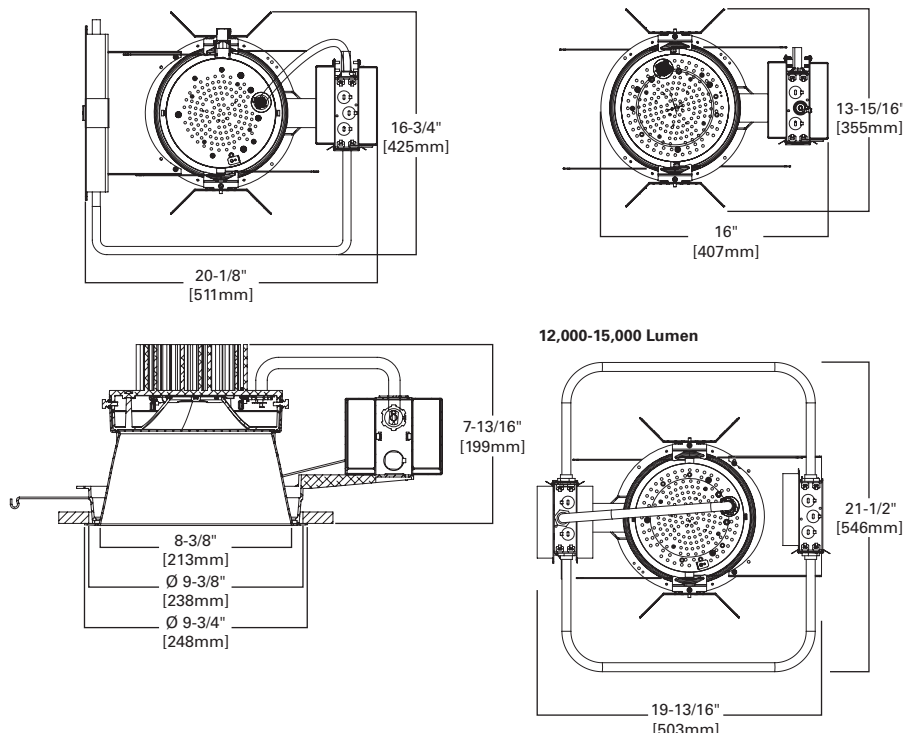
5 year warranty.



LD8A ER8A 8LW

1,000-15,000 Lumen LED

8-Inch Wide Beam Downlight
New Construction



ORDERING INFORMATION

EXAMPLE: LD8A501DE010 ER8A50835 8LW1LI= 8" LED Wide Beam Reflector Lens, 5000 Lumen, 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Voltage	Driver	Options ²	Power Module	Lumens	CRI	Color
LD8A =8" Aperture LD8ACP =8" Aperture, Chicago Plenum	1 =120V 2 =277V Blank =120-277V 1000, 1500, and 2000 lumen only		1000, 1500, 2000, 3000, 4000, 5000, 6000, 8000, 9000 10,000⁵ 12,000 AND 15,000 LUMEN D010TE =0-10V 10% Dimming or Trailing Edge Dimming ³ 1000, 1500, 2000, 3000, 4000, 5000, 6000 AND 8000 LUMEN D5LT =Fifth Light® DALI 0% Dimming DMX =DMX 0% Dimming DE010 =0-10V 1% Dimming 1000, 1500, 2000, 3000, 4000, 5000 AND 6000 LUMEN DL3 =1% Lutron® Hi-Lume 3-Wire or Ecosystem D010TR =0-10V 10% Dimming or Leading Edge ³ 6500 LUMEN D010 =0-10V 10% Dimming DE010 =0-10V 1% Dimming	EM7 =7W Emergency Module with Remote Test Switch ⁶ EM14 =14W Emergency Module with Remote Test Switch ⁶ IEM7 =7W Emergency Module with Integral Test Switch ⁶ IEM14 =14W Emergency Module with Integral Test Switch ⁶ EMBOD =7W Bodine® Emergency Module with Remote Test Switch IEMBOD =7W Bodine® Emergency Module with Integral Test Switch	ER8A =8" Module ER8ACP =8" Module, Chicago Plenum	10 =1000 Lumens 15 =1500 Lumens 20 =2000 Lumens 30 =3000 Lumens 40 =4000 Lumens 50 =5000 Lumens 60 =6000 Lumens 65 =6500 Lumens 80 =8000 Lumens ⁴ 90 =9000 Lumens ⁴ 100 =10000 Lumens ⁴ 120 =12000 Lumens ⁴ 150 =15000 Lumens ⁴	8 =80 CRI 9 =90 CRI	27 =2700° K 30 =3000° K 35 =3500° K 40 =4000° K

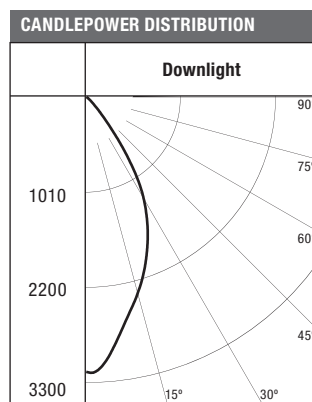
Reflector	Finish	Options	Accessories
8LW0 =8" Wide Reflector, Polymer Trim Ring 8LW1 =8" Wide Reflector, Self-flanged 8LW0E =8" Wide Reflector, Polymer Trim Ring for use with IEM Integral Emergency option 8LW1E =8" Wide Reflector, Self-flanged Trim Ring for use with IEM Integral Emergency option	LI =Specular 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 Self-ignited Only WF =White Painted Flange	H347200 =347 to 120V Step Down Transformer, 200VA Housings, Specify Slope HSA8 =Slope Adapter for 8" Aperture Housings, Specify Slope LGSKT8IP65 =IP65 Gasket Kit

- Notes:**
1. Nominal Lumens will vary depending on selected color, driver and reflector finish.
 2. Not available with Chicago Plenum.
 3. Trailing edge and leading edge 120V only.
 4. Product is marked spacing and must be installed with the following minimum spacing:
Center to Center of adjacent luminaires : 36"
Center of Luminaire to Side of Building Member : 18"
Minimum Overhead Clearance: 9"
 5. 0-10V recommended
 6. Not CSA approved.

ENERGY DATA

ENERGY DATA	ENERGY DATA	ENERGY DATA	ENERGY DATA
Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90
1000 Lumen D010TE 120V Input Power: 15W 277V Input Power: 16W 120V Input Current: 0.13A 277V Input Current: 0.06A Inrush 120 (Ap): 0.486 Inrush 277 (Ap): 0.848 Duration 120 (ms): 0.4 Duration 277 (ms): 0.182 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	4000 Lumen D010TE EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 58W THD: <20% 120V Input Current: 48A 277V Input Current: 21A Inrush 120 (Ap): 0.787 Inrush 277 (Ap): 1.09 Duration 120 (ms): 1.16 Duration 277 (ms): 1.75 Input Frequency: 50-60Hz	8000 Lumen D010TE 120V Input Power: 96W 277V Input Power: 96W 120V Input Current: 79A 277V Input Current: 36A Inrush 120 (Ap): 1.09 Inrush 277 (Ap): 1.23 Duration 120 (ms): 0.3 Duration 277 (ms): 0.294 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	15,000 Lumen D010TE 120V Input Power: 161W 277V Input Power: 159W 120V Input Current: 1.33A 277V Input Current: 0.58A Inrush 120 (Ap): 0.48 Inrush 277 (Ap): 1.316 Duration 120 (ms): 0.1 Duration 277 (ms): 0.52 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz
1500 Lumen D010TE 120V Input Power: 23W 277V Input Power: 24W 120V Input Current: 0.19A 277V Input Current: 0.09A Inrush 120 (Ap): 0.717 Inrush 277 (Ap): 0.531 Duration 120 (ms): 1.58 Duration 277 (ms): 1.24 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	5000 Lumen D010TE EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 62W THD: <17% 120V Input Current: 52A 277V Input Current: 22A Inrush 120 (Ap): 0.787 Inrush 277 (Ap): 1.09 Duration 120 (ms): 1.16 Duration 277 (ms): 1.75 Input Frequency: 50-60Hz	9000 Lumen D010TE 120V Input Power: 108W 277V Input Power: 107W 120V Input Current: 89A 277V Input Current: 39A Inrush 120 (Ap): 0.48 Inrush 277 (Ap): 1.316 Duration 120 (ms): 0.1 Duration 277 (ms): 0.52 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	
2000 Lumen D010TE 120V Input Power: 23W 277V Input Power: 24W 120V Input Current: 0.19A 277V Input Current: 0.09A Inrush 120 (Ap): 0.717 Inrush 277 (Ap): 0.531 Duration 120 (ms): 1.58 Duration 277 (ms): 1.24 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	6000 Lumen D010TE EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 77W THD: <17% 120V Input Current: 64A 277V Input Current: 28A Inrush 120 (Ap): 0.87 Inrush 277 (Ap): 0.96 Duration 120 (ms): 0.39 Duration 277 (ms): 0.31 Input Frequency: 50-60Hz	10,000 Lumen D010TE 120V Input Power: 126W 277V Input Power: 123W 120V Input Current: 1.05A 277V Input Current: 47A Inrush 120 (Ap): 1.312 Inrush 277 (Ap): 1.856 Duration 120 (ms): 0.05 Duration 277 (ms): 0.1 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	
3000 Lumen EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 42W THD: <20% 120V Input Current: 35A 277V Input Current: 16A Inrush 120 (Ap): 0.531 Inrush 277 (Ap): 1.15 Duration 120 (ms): 0.405 Duration 277 (ms): 0.255 Input Frequency: 50-60Hz	6500 Lumen D010 Input Power: 84W THD: <17% 120V Input Current: 70A 277V Input Current: 30A Inrush 120 (Ap): 2.88 Inrush 277 (Ap): 3.68 Duration 120 (ms): 0.815 Duration 277 (ms): 1.29 Input Frequency: 50-60Hz	12,000 Lumen D010TE 120V Input Power: 140W 277V Input Power: 141W 120V Input Current: 1.17A 277V Input Current: 0.51A Inrush 120 (Ap): 1.09 Inrush 277 (Ap): 1.23 Duration 120 (ms): 0.3 Duration 277 (ms): 0.294 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	

PHOTOMETRICS



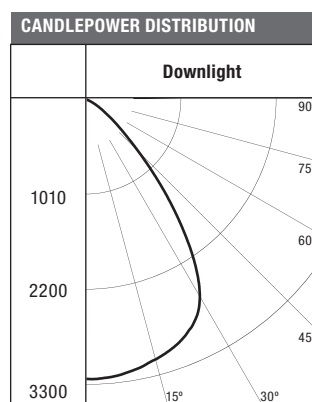
Test Number	P110167
LD8A50D010TE ER8A50835 8LWOLI	
Lumens	5083 Lm
Efficacy	81.9 Lm/W
CCT	3500K
SC	1

CONE OF LIGHT		
Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
12.5'	22	15
15'	15	18
20'	8	24
24'	6	29
28'	4	34

CANDELA TABLE	
Degrees Vertical	Candela
0	3304
5	3395
15	3658
25	3398
35	2268
45	967
55	203
65	18
75	1
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	2740	54
0-40	4147	81
0-60	5052	99
0-90	5083	100
90-180	0	0
0-180	5083	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	42170
55	10921
65	1320
75	166
85	0



Test Number	P110039
LD8A50D010TE ER8A50835 8LW0H	
Lumens	4790 Lm
Efficacy	77.2 Lm/W
CCT	3500K
SC	1

CONE OF LIGHT		
Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
12.5'	21	15
15'	14	18
20'	8	24
24'	5	29
28'	4	34

CANDELA TABLE	
Degrees Vertical	Candela
0	3200
5	3288
15	3542
25	3291
35	2196
45	936
55	197
65	18
75	1
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	2478	51
0-40	3754	78
0-60	4696	98
0-90	4790	100
90-180	0	0
0-180	4790	100

LUMINANCE	
Average Candela Degrees	Average 0° Luminance
45	40840
55	10577
65	1278
75	161
85	0

EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
1000	0.47	0.93
1500	0.30	0.61
2000	0.30	0.61
3000	0.17	0.33
4000	0.12	0.24
5000	0.11	0.23
6000	0.09	0.18
6500		0.17
8000		0.15
9000		0.13
10000		0.11
120000		0.09
150000		0.08