

## DESCRIPTION

6 inch LED recessed wide downlight specially designed for below ceiling installation. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 1000 and 1500 delivered lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction and exceeds high efficacy requirements (with designated trims) for Title 24-2008 and IECC-2009.

## 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". Remodel Housing: Galvanized steel plaster ring adjusts to accept up to 1" ceiling thickness.

### Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling (new construction housing only).

### 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 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. 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.

Catalog #		Type
Project		
Comments		Date
Prepared by		

### Driver

Driver can be serviced from above or through the aperture.

### Environmental

Fixture should not be operated in ambient temperatures above 40° C.

### Code Compliance

Thermally protected and cULus listed for protected wet locations. IP54 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. Title 24 2008 Compliant with designated trims. ARRA 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.



**LD610  
LD615  
LD6R10  
LD6R15**

**6LW**

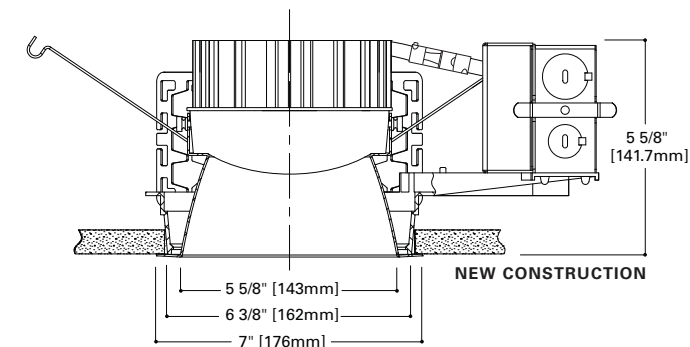
**LED**

**6 Inch**

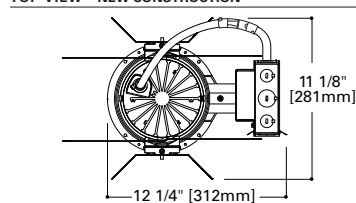
**Wide Beam Downlight**



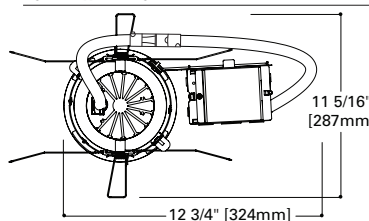
Qualified & Compliant with designated LED modules and trims.



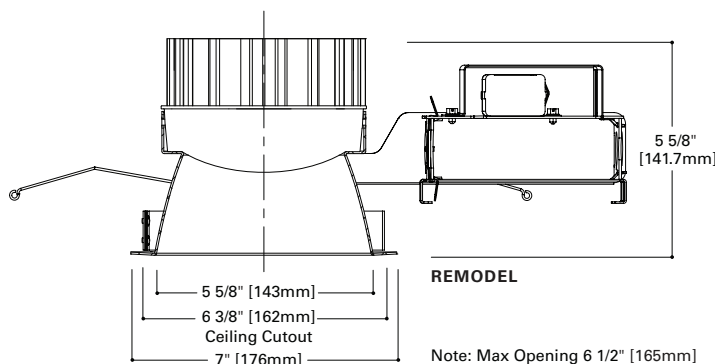
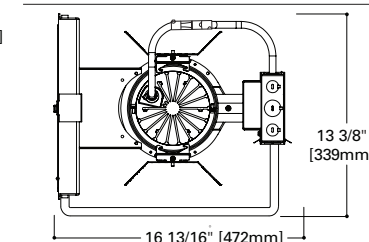
TOP VIEW - NEW CONSTRUCTION



TOP VIEW - REMODEL



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



REMODEL

Note: Max Opening 6 1/2" [165mm]

Energy Data	
Sound Rating: Class A standards	
Operating Temperature: 40°C (104°F)	
1500 Lumen	
(Values at non-dimming line voltage)	
Minimum Starting Temp: -30°C (-22°F)	
EMI/RFI: FCC Title 47 CFR, Part 18, Class B (Consumer)	
Input Voltage: UNV (90V - 305V)	
Power Factor: >0.90 (at nominal input 120/230/240/277 VAC & 100% of Rated Output Power)	
Input Power: 24.8W	THD: <21%
120V Input Current: .21A	277V Input Current: .09A
Maximum Non-IC Ambient Continuous	
Input Frequency: 47-63Hz	
Rated Wattage: 24.8W	
1000 Lumen D120 / D010	
(Values at non-dimming line voltage)	
Minimum Starting Temp: -30°C (-22°F)	
EMI/RFI: FCC Title 47 CFR, Part 18, Class B (Consumer)	
Input Voltage: 120/120-305V	
Power Factor: >0.90	
Input Power: 14.3W	THD: <20%
Input Frequency: 50/60Hz	
Rated Wattage: 14.3W/17.5W	

## ORDERING INFORMATION

Example:

LD615D010 ERW6835 6LW0LI = 6" LED Wide Reflector Lens, 1500 lumen 3,500 K CCT with Universal 120 - 277V, 0 - 10 Driver

Housing	Delivered Lumens <sup>1</sup>	Driver	Options	Power Module	Color	Reflector	Finish	Options	Accessories
LD6 = 6" aperture LD6CP = 6" aperture, Chicago Plenum LD6R = 6" aperture remodel LD6RCP = 6" aperture remodel, Chicago Plenum	10 = 1000 lumens 15 = 1500 lumens	D010 = 10 to 100% dimming, 120-277V, 50/60Hz, 0-10V D120 = 15 to 100% dimming, 120V, 2 wire phase control, (1000 lumen only) DLUT = 1 to 100% dimming, 120-277V Lutron Hi-lume	EM = Iota Emergency module with remote test switch <sup>2</sup> EMBOD = Bodine Emergency module with remote test switch <sup>2</sup>	ERW6 = 6" module for wide reflector  827 = 80 CRI, 2700° K 830 = 80 CRI, 3000° K 835 = 80 CRI, 3500° K 840 = 80 CRI, 4000° K 827CP = 80 CRI, 2700° K, Chicago Plenum 830CP = 80 CRI, 3000° K, Chicago Plenum 835CP = 80 CRI, 3500° K, Chicago Plenum 840CP = 80 CRI, 4000° K, Chicago Plenum		6LW0 = Wide reflector, polymer trim ring 6LW1 = Wide reflector, self flanged (not available with baffles)	LI = Specular Clear H = Semi-Specular Clear WMH = Warm Haze G = Specular Gold WH = Wheat WHH = Wheat Haze GP = Graphite GPH = Graphite Haze CC = Chocolate CCH = Chocolate Haze K = Cognac KH = Cognac Haze B = Specular Black W = Gloss White BB = Black Baffle (6LW0 only) WB = White Baffle (6LW0 only)	WF = White painted flange (self flanged only) IP66 = IP66 Certified  HB26 = C Channel Bar Hanger, 26" Long, Pair HB50 = C Channel Bar Hanger, 50" Long, Pair RMB22 = Wood Joist Bar Hanger, 22" Long, Pair H277 = 277 to 120V step down transformer, 300VA H347 = 347 to 120V step down transformer, 75VA H347200 = 347 to 120V step down transformer, 200VA HSA6 = Slope Adapter for 6" Aperture Housings, Specify Slope TRM6 = Metal Trim Ring, Specify Color <sup>3</sup> TRR6 = Rimless Trim Ring <sup>3</sup> DT6 = Deco trim <sup>3</sup>	

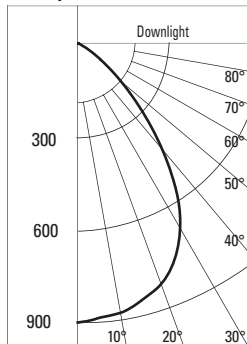
Notes: 1 Nominal delivered Lumens will vary depending on selected CCT, driver and reflector finish.

2 Not available with Chicago Plenum, not CSA approved.

3 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).

## PHOTOMETRICS

## Candlepower Distribution Curve



Test No. P20530  
LD615835D010 6LW51H  
Lumens = 1322  
Watts = 24.8  
LPW = 54.2  
CCT = 3500K  
SC = 1.1

## Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	29	6'
7'	18	8'
8'	14	9'
9'	11	10'
10'	9	11'

## Candela Distribution

Degrees Vertical	Candela
0	889
5	876
15	839
25	746
35	540
45	274
55	94
65	17
75	3
85	1
90	0

## Zonal Lumen Summary

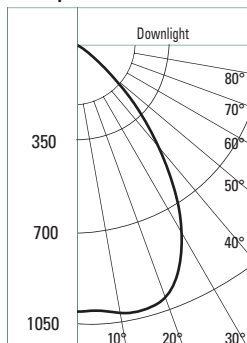
Zone	Lumens	%Fixture
0-30	663	50.2
0-40	998	75.5
0-60	1298	98.2
0-90	1322	100.0
90-180	0	0.0
0-180	1322	100.0

## Luminance

Average Candela/M <sup>2</sup>	Avg. 0° Luminance
45	47778
55	20207
65	4960
75	1429
85	1415

## PHOTOMETRICS

## Candlepower Distribution Curve



Test No. P20529  
LD615835D010 6LW51LI  
Lumens = 1427  
Watts = 24.8  
LPW = 57.5  
CCT = 3500K  
SC = 1.1

## Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	32	6.5'
7'	20	8'
8'	15	9'
9'	12	10.5'
10'	10	11.5'

## Candela Distribution

Degrees Vertical	Candela
0	964
5	966
15	997
25	885
35	601
45	275
55	57
65	3
75	1
85	0
90	0

## Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	780	54.7
0-40	1153	80.9
0-60	1420	99.6
0-90	1426	100.0
90-180	0	0.0
0-180	1426	100.0

## Luminance

Average Candela/M <sup>2</sup>	Avg. 0° Luminance
45	47953
55	12253
65	875
75	476
85	0

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