

DESCRIPTION

6 inch LED recessed narrow 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 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 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		Date	
Comments			
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. 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

6LN

LED

6 Inch

Narrow Downlight

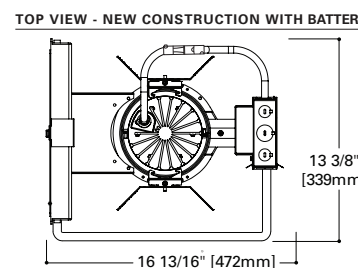
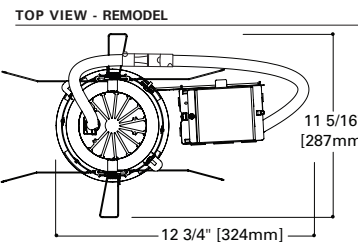
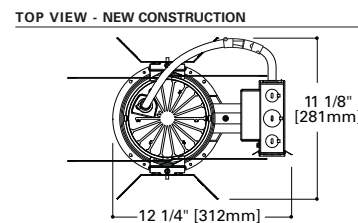
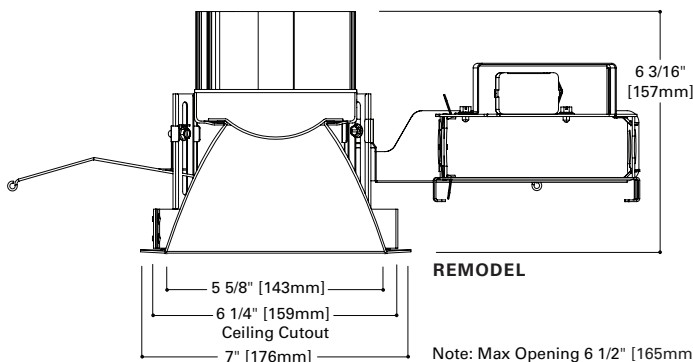
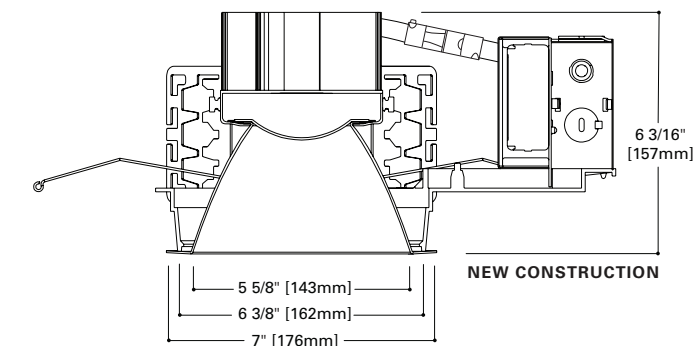
New Construction or Remodel



Qualified & Compliant with designated LED modules and trims.

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:

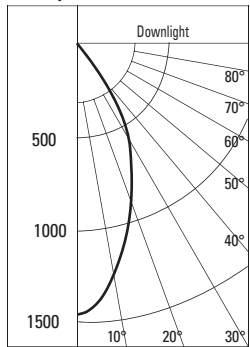
LD615D010 ERN6835 6LN0LI = 6" LED Narrow Beam Reflector Lens, 1500 lumen 3,500 K CCT with Universal 120 - 277V, 0 - 10 Driver

Housing	Delivered Lumens ¹	Driver	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 ² EMBOD = Bodine Emergency module with remote test switch ² . ⁴ IEM = Iota Emergency with integral test switch ² . ⁵ IEMBOD = Bodine Emergency with integral test switch ² . ^{4, 5}	ERN6 = 6" module for narrow beam 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		6LN0 = Narrow reflector, polymer trim ring 6LN1 = Narrow reflector, self-flanged 6LN0E = Narrow reflector, polymer trim ring for use with IEM integral emergency option 6LN1E = Narrow reflector, self-flanged for use with IEM integral emergency option	LI = Specular Clear H = Semi-Specular Clear WMH = Warm Haze G = Specular Gold W = 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	WF = White painted flange (self-flanged only)	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 ³ TRR6 = Rimless Trim Ring ³ DT6 = Deco trim ³ LGSKT6IP66 = IP66 Gasket Kit ABR6P = Remodel Adaptor Ring for 7" OD ABR7P = Remodel Adaptor Ring for 8" OD ABR8P = Remodel Adaptor Ring for 9" OD

- Notes:** 1 Nominal delivered Lumens will vary depending on selected CCT, driver and reflector finish.
 2 Not available with Chicago Plenum.
 3 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
 4 Not CSA approved.
 5 Not available with remodel.

PHOTOMETRICS

Candlepower Distribution Curve



Test No. P83010
 LD615D010 ERN6835 6LN1H
 Lumens = 1208
 Watts = 24.4 Watts
 LPW = 49.5
 CCT = 3500K
 SC = 0.8

Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
8'	23	6.5'
9'	18	7'
10'	15	8'
12'6"	9	10'
15'	7	

Lumen Output Iota: 453
 Lumen Output Bodine: 269

Candela Distribution

Degrees Vertical	Candela
0	1469
5	1417
15	1120
25	797
35	446
45	105
55	22
65	8
75	2
85	0
90	0

Zonal Lumen Summary

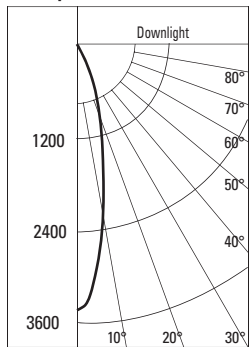
Zone	Lumens	%Fixture
0-30	813	67.3
0-40	1088	90.1
0-60	1196	99.0
0-90	1208	100.0
90-180	0	0.0
0-180	1208	100.0

Luminance

Average Candela/M ²	
Degrees	Avg. 0° Luminance
45	4260
55	548
65	298
75	243
85	0

PHOTOMETRICS

Candlepower Distribution Curve



Test No. P83066
 LD615D010 ERN6835 6LN1LI
 Lumens = 1393
 Watts = 24.4 Watts
 LPW = 57.0
 CCT = 3500K
 SC = 0.5

Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
8'	54	4'
9'	43	4.5'
10'	35	5'
12'6"	22	6'
15'	15	7'

Lumen Output Iota: 522
 Lumen Output Bodine: 310

Candela Distribution

Degrees Vertical	Candela
0	3478
5	3118
15	1628
25	779
35	374
45	65
55	3
65	1
75	0
85	0
90	0

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	1101	79.0
0-40	1332	95.6
0-60	1391	99.9
0-90	1393	100.0
90-180	0	0.0
0-180	1393	100.0

Luminance

Average Candela/M ²	
Degrees	Avg. 0° Luminance
45	4279
55	269
65	122
75	0
85	0