

DESCRIPTION

6 inch LED recessed medium beam downlight with 50° cut off 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 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction and exceeds high efficacy requirements (with designated trims) for T24. Energy Star qualified.

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 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. Available in 80 or 90 CRI.

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.

Catalog

Project

Comments

Prepared by

Type

Date

Environmental

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

Code Compliance

cULus listed for protected wet locations. 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. Title 24 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 on LED housings, LED Modules and LED Trims.



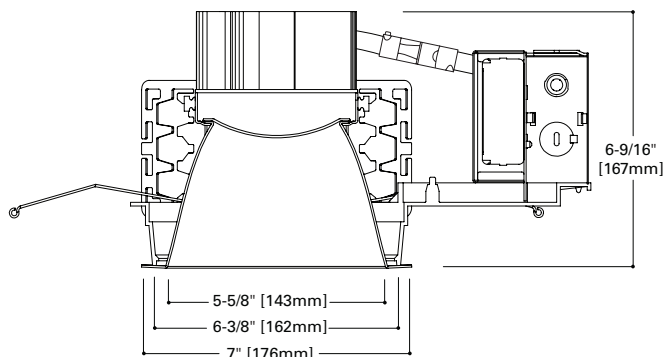
LD6A10
LD6A15

6LM
1000 LUMEN LED
1500 LUMEN LED

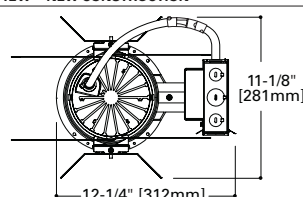
6 Inch
Medium Downlight
New Construction



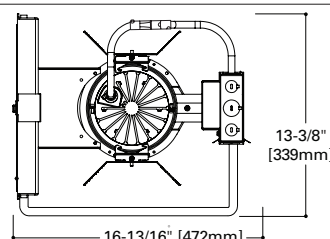
Qualified and compliant. Refer to the ENERGY STAR® Qualified Product List and CEC (T24) Appliance Database for listings.



TOP VIEW - NEW CONSTRUCTION



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



Energy Data

Sound Rating: Class A standards
Operating Temperature: 40°C (104°F)
1500 Lumen D010TE
(Values at non-dimming line voltage)
Minimum Starting Temp: -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 Power: 22.4W THD: < 20%
120V Input Current: .12A 277V Input Current: .09A
Maximum Non-IC Ambient Continuous
Input Frequency: 50/60Hz
1000 Lumen D010TE
(Values at non-dimming line voltage)
Minimum Starting Temp: -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 Power: 14.1W THD: < 20%
120V Input Current: .12A 277V Input Current: .06A
Maximum Non-IC Ambient Continuous
Input Frequency: 50/60Hz

ORDERING INFORMATION

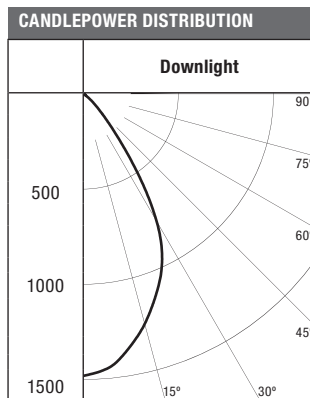
Example: LD6A15D010TE ERM6A15835 6LM0LI = 6" LED Medium Beam Reflector, 1500 Lumen 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Driver	Options	Power Module	CRI	Color
LD6A = 6" Aperture, LD6ACP = 6" Aperture	10 = 1000 Lumens 15 = 1500 Lumens	D010TE = 120-277V 0-10V 10% Dimming or Trailing Edge 120V Dimming D5LT = Fifth Light® (DALI) Dimming DL3 = 1 to 100% Dimming, 120-277V Lutron® Hi-Lume, Ecosystem or 3 Wire DLT = 1 to 100% Dimming, 120V Lutron® Hi-Lume Forward Phase Dimming DMX = DMX Dimming	EMBOD = Bodine® Emergency Module with Remote Test Switch IEMBOD = Bodine® Emergency Module with Integral test Switch ³	ERM6A10 = 6", 1000 Lumen Module for Medium Beam Reflector ERM6A15 = 6", 1500 Lumen Module for Medium Beam Reflector	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

Reflector	Finish	Options	Accessories
6LM0 = 6" Medium Reflector, Polymer Trim Ring 6LM1 = 6" Medium Reflector, Self-flanged 6LM0E = 6" Medium Reflector, Polymer Trim Ring for use with IEM Integral Emergency Option 6LM1E = 6" Medium Reflector, Self-flanged 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 6LM0, 6LM0E 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 H277 = 277 To 120V Step Down Transformer, 300VA H347 = 347 To 120V Step Down Transformer, 75VA

- 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.

PHOTOMETRICS



Test Number	P98227
LD6A15D010TE ERM6A835 6LM1H	
Lumens	1347
Efficacy	61.8 Lm/W
Watts	21.8
CCT	3500K
SC	0.92

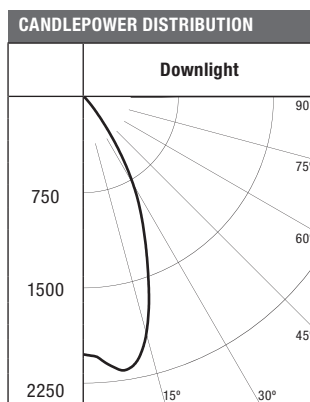
CONE OF LIGHT		
Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	48	5.0
7'	30	6.5
8'	22	7.0
9'	18	8.0
10'	14	9.0
12'	10	11.0

CANDELA TABLE	
Degrees Vertical	Candela
0	1468
5	1436
15	1238
25	969
35	468
45	116
55	25
65	8
75	2
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	919	68.2
0-40	1213	90.1
0-60	1336	99.2
0-90	1347	100
90-180	0	0
0-180	1347	100

LUMINANCE	
Average Candella Degrees	Average 0° Luminance
45	10749
55	2889
65	1158
75	378
85	0

EMBOD MULTIPLIER	
1000 Lumen=	.64
1500 Lumen=	.45



Test Number	P97379
LD6A15D010TE ERM6A835 6LM1LI	
Lumens	1509
Efficacy	69.2 Lm/W
Watts	21.8
CCT	3500K
SC	0.83

CONE OF LIGHT		
Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	69	4.0
7'	42	5.6
8'	32	6.0
9'	25	7.0
10'	21	8.0
12'	14	9.5

CANDELA TABLE	
Degrees Vertical	Candela
0	2018
5	2098
15	1908
25	1097
35	381
45	29
55	4
65	1
75	0
85	0
90	0

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-30	1225	81.2
0-40	1471	97.5
0-60	1507	99.9
0-90	1509	100
90-180	0	0
0-180	1509	100

LUMINANCE	
Average Candella Degrees	Average 0° Luminance
45	2676
55	455
65	154
75	0
85	0

EMBOD MULTIPLIER	
1000 Lumen=	.64
1500 Lumen=	.45

Lumen Output Bodine...Emergency .45

CCT Multiplication Factors		CCT [K]	Multiplier from 3500K	80 -> 90 CRI
80 CRI	1000 Lumen	2700	0.93	
		3000	0.99	
		3500	1.00	
		4000	1.01	
	1500 Lumen	2700	0.93	
		3000	0.99	
		3500	1.00	
		4000	1.01	
90 CRI	1000 Lumen	2700	0.88	0.79
		3000	0.95	0.80
		3500	1.00	0.84
		4000	1.03	0.86
	1500 Lumen	2700	0.88	0.79
		3000	0.94	0.79
		3500	1.00	0.84
		4000	1.03	0.86