

DESCRIPTION

6 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 2000 delivered 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 #		Type	
Project		Date	
Comments			
Prepared by			

Environmental

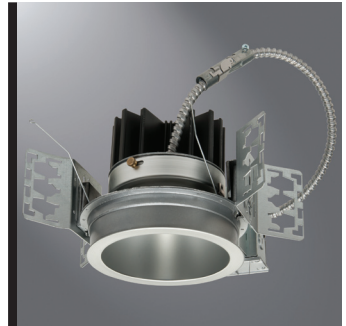
Fixture should not be operated in ambient temperatures above 40° C.

Code Compliance

Thermally protected and cULus listed for protected wet locations. 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.



LD6A20

6LW

2000 Lumen LED

6-Inch

Wide Beam Downlight

New Construction

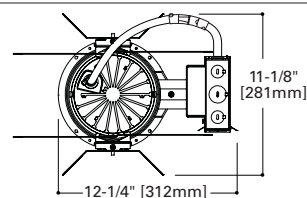


Qualified and Compliant. Refer to the ENERGY STAR® Qualified Product List and CEC (T24) Appliance Database for listings.

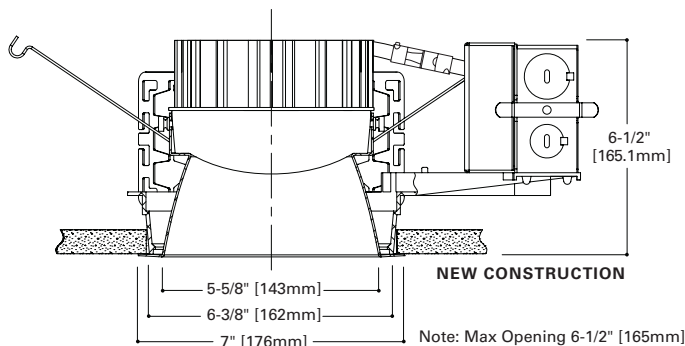
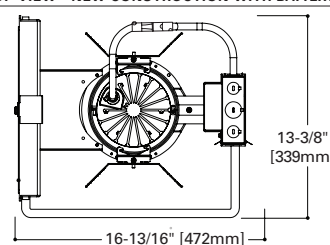
ENERGY DATA

Sound Rating: Class A standards	
Operating Temperature: 40°C (104°F)	
2000 Lumen D010TE	
(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 Power: 31.5W	THD: <20%
120V Input Current: 27A	277V Input Current: 12A
Maximum Non-IC Ambient Continuous	
Input Frequency: 50-60Hz	

TOP VIEW - NEW CONSTRUCTION



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



NEW CONSTRUCTION

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



ORDERING INFORMATION

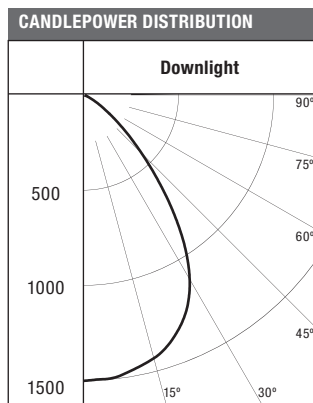
EXAMPLE: LD6A20D010TE ERW6A20835 6LW1LI=6" LED Wide Beam Reflector, 2000 Lumen 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Driver	Options	Power Module	CRI	Color
LD6A=6" Aperture LD6ACP=6" Aperture, Chicago Plenum	20=2000 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 ^{3,4}	ERW6A20=6" 2000 Lumen Module for Wide 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

Reflector	Finish	Options	Accessories
6LW0=6" Wide Beam Reflector, Polymer Trim Ring 6LW1=6" Wide Beam 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 6LW0 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 H347200=347 to 120V Step Down Transformer, 200VA Housings, Specify Slope HSA6=Slope Adapter for 6" Aperture Housings, Specify Slope TRM6=Metal Trim Ring, Specify Color ² TRR6=Rimless Trim Ring ² DT6=Deco trim ² LGSKT6IP66=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.

PHOTOMETRICS



Test Number	P98615
LD6A20D010TE ERW6A835 6LW1H	
Lumens	2179
Efficacy	69.2 Lm/W
Watts	31.5
CCT	3500K
SC	1.13

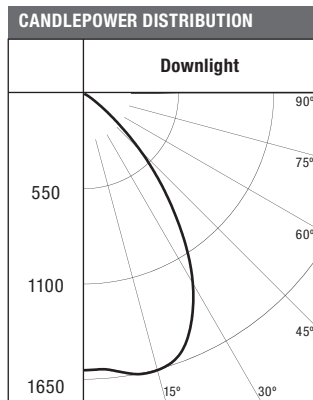
Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	49	6.0
7'	30	7.8
8'	23	9.0
9'	18	10.0
10'	14	11.2
12'	10	13.4

Degrees Vertical	Candela
0	1491
5	1486
15	1421
25	1258
35	891
45	424
55	147
65	30
75	6
85	1
90	0

Zone	Lumens	%Fixture
0-30	1114	51.1
0-40	1664	76.4
0-60	2134	98.0
0-90	2179	100
90-180	0	0
0-180	2179	100

Average Candella Degrees	Average 0° Luminaire
45	39074
55	16709
65	4662
75	1638
85	823

EMBOB MULTIPLIER
2000 Lumen= 31



Test Number	P97715
LD6A20D010TE ERW6A835 6LW1LI	
Lumens	2349
Efficacy	74.6 Lm/W
Watts	31.5
CCT	3500K
SC	1.17

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
5'5"	52	6.4
7'	32	8.0
8'	24	9.2
9'	19	10.4
10'	15	11.6
12'	11	14.0

Degrees Vertical	Candela
0	1587
5	1588
15	1641
25	1458
35	989
45	453
55	93
65	5
75	2
85	0
90	0

Zone	Lumens	%Fixture
0-30	1280	54.5
0-40	1893	80.6
0-60	2337	99.5
0-90	2349	100
90-180	0	0
0-180	2349	100

Average Candella Degrees	Average 0° Luminaire
45	35128
55	8927
65	687
75	381
85	0

EMBOB MULTIPLIER
2000 Lumen= 31

PHOTOMETRICS

CCT Multiplication Factors		CCT [K]	Multiplier from 3500K	80 -> 90 CRI
80 CRI	2000 Lumen	2700	0.93	
		3000	0.99	
		3500	1.00	
		4000	1.01	
90 CRI	2000 Lumen	2700	0.88	0.79
		3000	0.94	0.80
		3500	1.00	0.84
		4000	1.03	0.85