

DESCRIPTION

6 inch LED recessed narrow, medium, or wide beam downlight for remodel or international applications 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, 1500, 2000, and 3000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

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.

Housing

Galvanized steel plaster ring accommodates up to 1" ceiling thickness.

Thermal

Extruded aluminum heat sink conducts heat away from the LED module for optimal performance and long 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.

D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

Driver

Driver can be serviced from above or through the aperture.

Catalog

Project

Comments

Prepared by

Type

Date

Code Compliance

Thermally protected and cULus listed for protected wet locations. IP66 rated when used with IP66 gasket kit accessory. 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.



LD6AR, LD6AI Series 6LM0

1000, 1500 Lumen LED

2000, 3000 Lumen LED

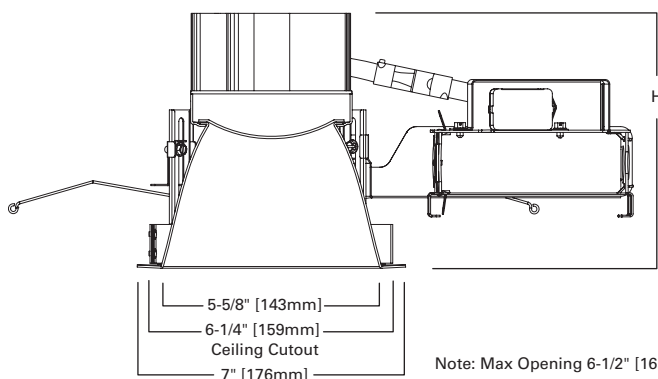
6-Inch

Narrow, Medium, or Wide Beam

Downlight

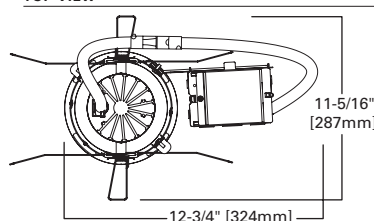
Remodel or International

D2W™

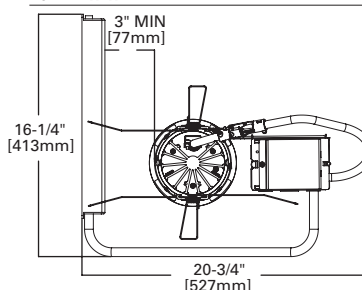


Note: Max Opening 6-1/2" [165mm]

TOP VIEW



TOP VIEW WITH BATTERY



Distribution	Lumens	Height
Narrow	1000/1500	6-3/16"
Medium	1000/1500	6-9/16"
Wide	1000/1500	5-5/8"
Narrow	2000/3000	8-3/16"
Medium	2000/3000	8-9/16"
Wide	2000/3000	6-1/2"



Refer to ENERGY STAR® Qualified Products List.

ORDERING INFORMATION

EXAMPLE: LD6AI15D010TE ERM6A15835 6LM0LI=6" International LED Wide Reflector, 1500 Lumen 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing	Lumens ¹	Driver	Options ³	Power Module	Lumens	CRI	Color
LD6AR=6" Aperture, Remodel LD6ARCP=6" Aperture, Remodel Chicago Plenum LD6AI=6" Aperture, International	10=1000 Lumens 15=1500 Lumens 20=2000 Lumens 30=3000 Lumens	<u>1000, 1500, 2000 and 3000 Lumen</u> D010TE=120-277V 0-10V 10% Dimming or Trailing Edge 120V Dimming D5LT=Fifth Light® (DALI) 0% Dimming DE010=0 to 100% Dimming, 120-277V 50/60Hz, 0-10V ⁵ 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 2-wire Dimming 120V DMX=DMX 0% Dimming <u>1000, 1500 and 2000 Lumen</u> D010TR=120-277V 0-10V 10% Dimming or Leading Edge 120V Dimming	EMBOD=7W Bodine® Emergency Module with Remote Test Switch EM7=7W Emergency Module with Remote Test Switch ⁴ EM14=14W Emergency Module with Remote Test Switch ⁴	ERN6A=6" Module for Narrow Beam Reflector ERM6A=6" Module for Medium Beam Reflector ERW6A=6" Module for Wide Beam Reflector 10=1000 Lumen 15=1500 Lumen 20=2000 Lumen 30=3000 Lumen	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 30D2W= Dim to warm 3000° K to 1850° K (2000 lumen and below, 90 CRI)	

Reflector	Finish	Options	Accessories
6LN0=6" Narrow Reflector, Polymer Trim Ring 6LN1= 6" Narrow Reflector, Self-flanged 6LM0=6" Medium Reflector, Polymer Trim Ring 6LM1= 6" Medium Reflector, Self-flanged 6LW0=6" Wide Reflector, Polymer Trim Ring 6LW1= 6" Wide 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 6LM0, 6LW0 Only BB=Black Baffle WB=White Baffle	Self-Flanged Only WF=White Painted Flange H347=347 to 120V Step Down Transformer, 75VA H347200=347 to 120V Step Down Transformer, 200VA Housings, Specify Slope TRM6=Metal Trim Ring, Specify Color ² TRR6=Rimless Trim Ring ² LGSKT6IP66=IP66 Gasket Kit ABR7P=Remodel Adaptor Ring for 8" OD ABR8P=Remodel Adaptor Ring for 9" OD

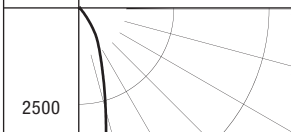
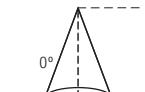
- Notes:** 1 Nominal Lumens will vary depending on selected color, driver and reflector finish.
2 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options).
3 Not available with Chicago Plenum.
4 Not CSA approved.
5 CE compliant with international housing.

ENERGY

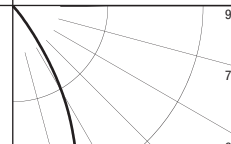
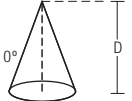
ENERGY DATA			
Sound Rating: Class A standards			
(Values at non-dimming line voltage)			
Minimum Starting Temperature: -30°C (-22°F)			
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)			
Input Voltage: UNV (120V - 277V)			
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)			
Input Frequency: 50/60Hz			
3000 Lumen D010TE		2000 Lumen D010TE	
Input Power: 43.6W	THD: <17%	Input Power: 31.5W	THD: <20%
120V Input Current: .37A	277V Input Current: .16A	120V Input Current: .27A	277V Input Current: .12A
1500 Lumen D010TE		1000 Lumen D010TE	
Input Power: 22.4W	THD: <20%	Input Power: 14.1W	THD: <20%
120V Input Current: .12A	277V Input Current: .09A	120V Input Current: .12A	277V Input Current: .06A

Lumens	120V		277V	
	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
900/1000	0.486	0.4	0.848	0.182
1300/1500	0.717	1.58	0.531	1.24
1800/2000	0.832	0.405	1.25	0.788
2800/3000	1.09	0.3	1.23	0.294

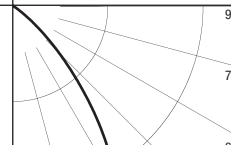
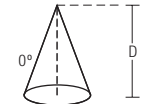
PHOTOMETRICS

		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P133498	Downlight 				Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Platform	LD6A20D010TE					0	7021	0-30	1946	80.8	45	6864
Element	ERN6A20835 6LN1LI					5	6071	0-40	2328	96.6		
Lumens	2409					15	2807					
Efficacy	73.4 Lm/W					25	1368	35	621	0-60		
SC	0.4					45	74	0-90	2409	100.0	65	262
						55	5	90-180	0	0.0	75	0
						65	2					
						75	0	0-180	2409	100.0		
						85	0					
								90	0			

1500 lumen multiplier .64. 3000 lumen multiplier 1.19.

		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P135346					Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Platform	LD6A20D010TE					0	3461	0-30	2028	80.8	45	4844
Element	ERM6A20835 6LM1LI					5	3499	0-40	2444	97.4		
Lumens	2510					15	3103					
Efficacy	76.5 Lm/W					25	1853					
SC	0.8	35	645	0-60	2507	99.9						
		45	53	0-90	2510	100.0	65	262				
		55	7	90-180	0	0.0	75	429				
		65	2									
		75	2	0-180	2510	100.0	85	0				
		85	0									
90	0											

1500 lumen multiplier .63. 3000 lumen multiplier 1.20.

		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P136066					Degrees Vertical	Candela	Zone	Lumens	%Fixture	Average Candela Degrees	Average 0° Luminance
Platform	LD6A20D010TE					0	1650	0-30	1460	57.0	45	40615
Element	ERW6A20835 6LW1LI					5	1686	0-40	2136	83.4		
Lumens	2562					15	1885					
Efficacy	78.1 Lm/W					25	1688					
SC	1.1	35	1094	0-60	2555	99.7						
		45	440	0-90	2562	100.0						
		55	64				90-180	0	0.0			
		65	4									
		75	2	0-180	2562	100.0						
		85	0									
90	0											

1500 lumen multiplier .63. 3000 lumen multiplier 1.19.

EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
900/1000	0.50	0.99
1300/1500	0.29	0.57
1800/2000	0.22	0.44
2800/3000	0.16	0.32