

DESCRIPTION

6 inch LED square recessed 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 2000 delivered lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction and exceeds high efficacy requirements of IECC-2009, and T24-2008.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Lower Parabolic Reflector

Parabolic aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness.

Trim Retention

Reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Plaster Frame / Collar

Galvanized steel plaster frame with adjustable collar adjusts for up to 2" thick ceilings and rotates +/- 7.5°.

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.

Driver

Driver can be serviced from above or through the aperture.

Environmental

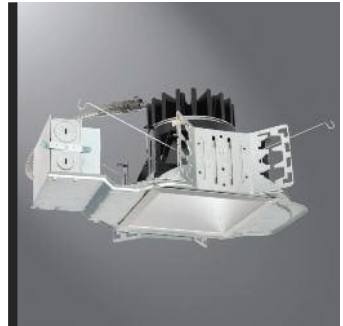
Fixture should not be operated in ambient temperatures above 40° C.

Code Compliance

Thermally protected and cULus listed for protected wet locations. 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.



LDSQ620

6LSQ

2000 LUMEN

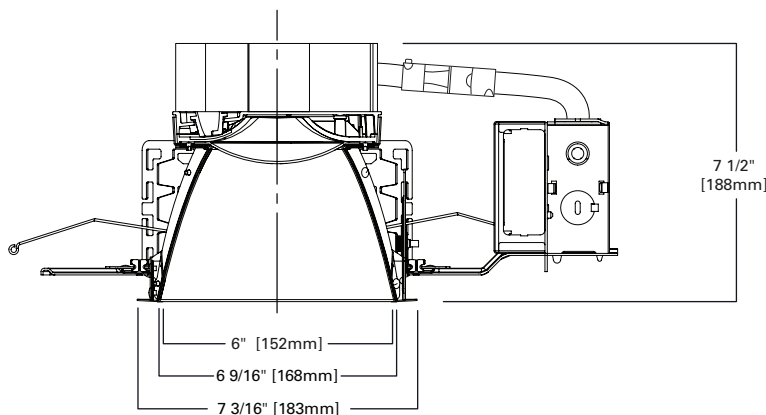
LED

6 Inch

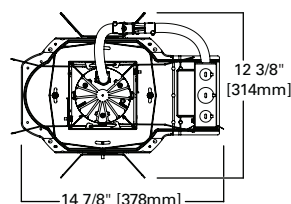
Square Downlight



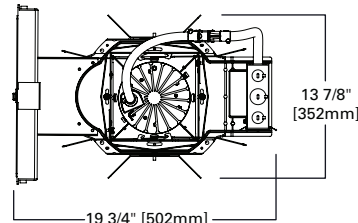
Qualified & Compliant with designated LED modules and trims.



TOP VIEW



TOP VIEW WITH BATTERY



Energy Data

Sound Rating: Class A standards	
Operating Temperature: 40°C (104°F)	
2000 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: 36W	THD: <21%
120V Input Current: .4A	277V Input Current: .14A
Maximum Non-IC Ambient Continuous	
Input Frequency: 47-63Hz	
Rated Wattage: 39W	

ORDERING INFORMATION

Example:

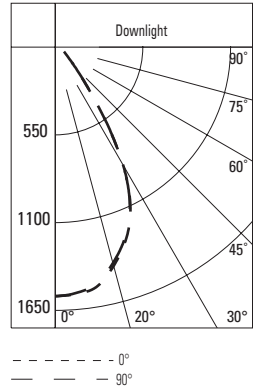
LDSQ620D010 ESQ6835H20 6LSQ0LI = 6" Square LED Downlight, 2000 lumen, 3,500 K CCT with Universal 120 - 277V, 0 - 10 Driver

Housing	Delivered Lumens ¹	Driver	Options	Power Module	Color	Reflector	Finish	Options	Accessories
LDSQ6 = 6" aperture LDSQ6CP = 6" aperture, Chicago Plenum	20 = 2000 lumens	D010 = 10 to 100% dimming, 120-277V, 50/60Hz, 0-10V DLUT = 1 to 100% dimming, 120-277V Lutron Hi-lume	EMBOD = Bodine Emergency module with remote test switch ^{2, 3}	ESQ6 = 6" module for square reflector	827H20 = 80 CRI, 2700° K 830H20 = 80 CRI, 3000° K 835H20 = 80 CRI, 3500° K 840H20 = 80 CRI, 4000° K 827CPH20 = 80 CRI, 2700° K, Chicago Plenum 830CPH20 = 80 CRI, 3000° K, Chicago Plenum 835CPH20 = 80 CRI, 3500° K, Chicago Plenum 840CH20P = 80 CRI, 4000° K, Chicago Plenum	6LSQ0 = Reflector lens assembly polymer trim ring 6LSQ1 = Reflector lens assembly self flanged polymer trim ring	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	WF = White painted flange (self flanged only) IP66 = IP66 Gasket	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

Notes: 1 Nominal delivered Lumens will vary depending on selected CCT, driver and reflector finish.
2 Not available with Chicago Plenum.
3 Not CSA approved.

PHOTOMETRICS

Candlepower Distribution Curve



Test No. P21768
LDSQ620D010 ESQ6835H20 6LSQ1LI
Lumens = 1944
Watts = 33.8 Watts
LPW = 54
CCT = 3500K
SC = 1

Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
7'	41	6.5'
8'	31	7.5'
9'	25	8.5'
10'	20	9.5'
15'	9	14'

Candela Distribution

Degrees Vertical	Candela
0	2011
5	1991
15	1991
25	1402
35	540
45	99
55	23
65	7
75	2
85	1
90	0

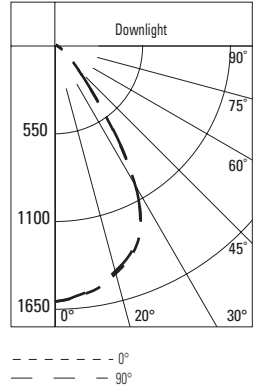
Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	1356	69.8
0-40	1796	92.4
0-60	1935	99.6
0-90	1944	100.0
90-180	0	0.0
0-180	1944	100.0

Luminance

Degrees	Avg. 0° Luminance
45	6026
55	1726
65	815
75	333
85	0

Candlepower Distribution Curve



Test No. P221769
LDSQ620D010 ESQ6835H20 6LSQ1H
Lumens = 1847
Watts = 33.8 Watts
LPW = 51.3
CCT = 3500K
SC = 1

Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
7'	33	7.5'
8'	25	8'
9'	20	9'
10'	16	10.5'
15'	7	15.5'

Candela Distribution

Degrees Vertical	Candela
0	1611
5	1581
15	1469
25	1260
35	608
45	183
55	64
65	20
75	5
85	1
90	0

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	1141	61.8
0-40	1597	86.5
0-60	1824	98.8
0-90	1847	100.0
90-180	0	0.0
0-180	1847	100.0

Luminance

Degrees	Avg. 0° Luminance
45	11017
55	4652
65	1935
75	831
85	494