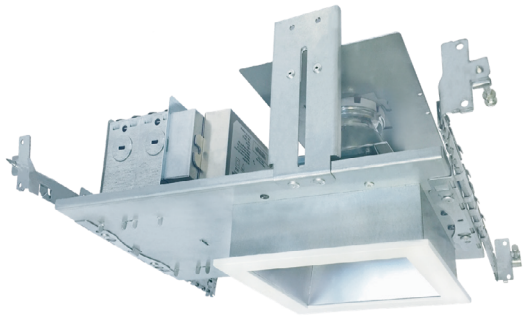
Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

6" LED Architectural Square Downlight (LAD6SQ)

New Construction



OVERVIEW	
Lumen Package (lm)	1,050 - 3,650
Wattage Range (W)	14 - 42
Efficacy Range (LPW)	77 - 87
Weight lbs (kg)	8.0 (3.6)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

New Construction Housing/Plaster Frame

- Designed for use in non-insulated ceiling where insulation must be kept a minimum of 3" from the fixture.
- Junction box listed for (8) #12 AWG (four in, four out) 90°C conductors and thru branch wiring.
- Junction box contains (5) 1/2" knockouts with trade pry-out slots and (4) Romex cable clamp knockouts.
- Frame accommodates up to 1 ¼" ceiling thickness.
- Standard 24" nailer bars ship with each unit and field installed.

Optical System

- LED source provides superior lumen output with maximum visual comfort.
- Tailored spot, narrow flood and flood beam optics deliver glare free illumination.
- Flangeless spun reflector utilizing heavy gauge highly reflective diffuse anodized aluminum to deliver low glare, even illumination of the space.
- Reflectors are retained with torsion springs holding the flange tight to the finished ceiling surface.
- Available in 3500K, and 4000K color temperatures per ANSI C78.377.
- Minimum CRI of 80.

Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (1% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz.
- L70 Calculated Life: > 50k Hours projected @ 25°C per IESNA TM-21-11.
- Total harmonic distortion: <20%
- Power factor: >.90
- Input power stays constant over life.
- Compatible with Triac (forward-phase or leading-edge), ELV (reverse-phase or trailing edge) dimming only at 120 Vac.
- Driver can be accessed from below plenum for servicing.
- High-efficacy LEDs with integrated circuit board mount directly to an extruded aluminum heatsink to maximize heat dissipation and promote long life.
- Remote Emergency Battery (120-277V) field installed is available to meet critical life safety lighting requirements. The 90-minute battery provides 7.8watts constant power to the LED system, ensuring code compliance.To calculate light output during emergency mode(EM battery 7.8 watts x LPW of fixture being powered - see spec sheet). Detailed wiring diagram and installation instructions located on website.

Installation

- 24" nailer bars provide stability and support for installation on joists, T-Grid and suspended ceilings.
- Housing can be positioned at any point within the 24" joist span.
- Score lines allow adjustment for 12" joists without tools.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.
- 1 Year warranty on optional Emergency Battery. Test regularly in accordance with local codes.

Listings

- cETLus Listed to UL 1598 and UL 8750 standards for 25°C Ambient applications.
- RoHS Compliant.
- EMI/RFI compliant with FCC 47CFR Part 15 Class B Consumer limits and Class A Commercial and Industrial.
- Damp location rated.
- Title 24 Compliant.

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6" LED Architectural Square Downlight (LAD6SQ)

Type : _____

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ORDERING GUIDE

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TYPICAL ORDER EXAMPLE: LAD6SQ LED 28L UNV DIM1 35 NF TSQ6 HAZ WH

Prefix	Light Source	Lumen Package	Voltage	Driver	Color Temperature	CRI	Beam Optics[2]
LAD6SQ - 6" Square Downlight	**LED**	**12L** - 1200 Lumens **22L** - 2200 Lumens **28L** - 2800 Lumens **36L** - 3600 Lumens	**UNV** - 120-277V	**DIM1** - Dims to 1% (0-10V dimming)	**35** - 3500K **40** - 4000K	**Blank** - 80 CRI	**SP** - Spot **NF** - Narrow Flood **FL** - Flood

Need more information?
Click here for our glossary

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ACCESSORY ORDERING INFORMATION

Order Number	Description
658633	EM - Emergency Battery

REFLECTOR ORDERING INFORMATION

Reflector Type	Reflector Finish
TSQ6 - Open Reflector	**HAZ** - Haze Semi-Diffused Reflector
	WH - White Trim Ring

FEATURES & SPECIFICATIONS

Back to Quick Links

Delivered Lumens[3]

Lumen Package	Distribution	3500K		4000K		Wattage
		Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
12L	SP	1309	93.5	1309	93.5	14
	NF	1266	90.4	1266	90.4	
	FL	1262	90.1	1262	90.1	
22L	SP	2284	103.8	2284	103.8	22
	NF	2210	100.5	2210	100.5	
	FL	2203	100.1	2203	101.1	
28L	SP	2946	92.1	2946	92.1	32
	NF	2851	89.1	2851	89.1	
	FL	2842	88.8	2842	88.8	
36L	SP	3769	89.7	3769	89.7	42
	NF	3647	86.8	3647	86.8	
	FL	3635	86.5	3635	86.5	

Electrical Data - Current Draw AMPS[4]

Lumen Package	120V	208V	240V	277V
12L	0.12	0.07	0.06	0.05
22L	0.18	0.11	0.09	0.08
28L	0.27	0.15	0.13	0.12
36L	0.35	0.20	0.18	0.15

1 90 CRI requires 55 day leadtime & 100 MOQ; Consult Factory.
2 Refer to IES Files for Beam Spread.
3 Electrical Data at 25C (77F)/ Actual Wattage may differ +/-10%
4 LED Chips are frequently updated therefore values may change.

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PHOTOMETRICS

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Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

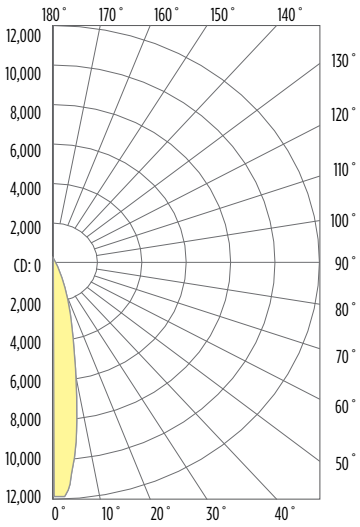
LAD6SQ-LED-22L-35-SP-TSQ6-HAZ

Lumens: 2,284
Watts: 21.7
Efficacy: 105

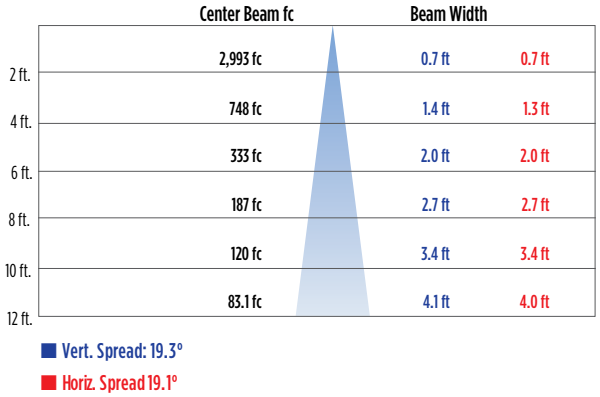
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	350	15.9%
10-20	840	38.1%
20-30	738	33.5%
30-40	230	10.4%
40-50	27	1.2%
50-60	6	0.3%
60-70	5	0.2%
70-80	4	0.2%
80-90	3	0.1%
90-100	0	0.0%
0-180	2,203	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	3,937
5	3,794
10	3,591
15	3,210
20	2,520
25	1,670
30	569
35	244
40	63
45	13
50	8
55	6
60	5
65	4
70	5
75	4
80	2
85	2
90	0

Polar Candela Distribution



Illuminance at a Distance



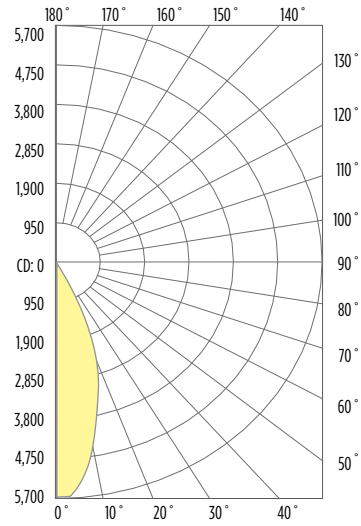
LAD6SQ-LED-22L-35-NF-TSQ6-HAZ

Lumens: 2,210
Watts: 21.7
Efficacy: 102

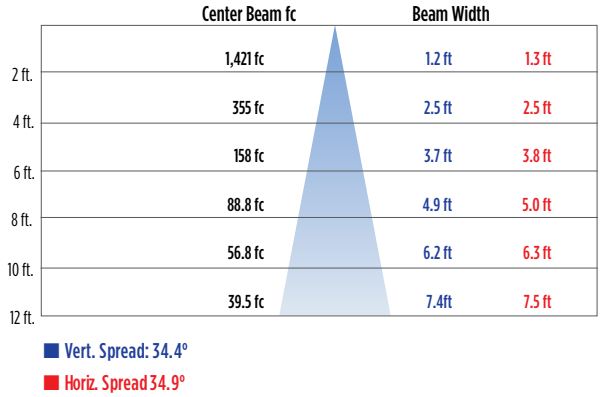
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	478	21.5%
10-20	889	40.2%
20-30	646	29.2%
30-40	168	7.5%
40-50	18	0.8%
50-60	5	0.2%
60-70	5	0.2%
70-80	4	0.2%
80-90	3	0.1%
90-100	0	0.0%
0-180	2,210	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	5,683
5	5,356
10	4,386
15	3,291
20	2,269
25	1,431
30	413
35	144
40	40
45	11
50	7
55	5
60	4
65	4
70	5
75	3
80	2
85	2
90	0

Polar Candela Distribution



Illuminance at a Distance



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6" LED Architectural Square Downlight (LAD6SQ)

Type : _____

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PHOTOMETRICS

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LAD6SQ-LED-22L-35-FL-TSQ6-HAZ

Lumens: 2,203

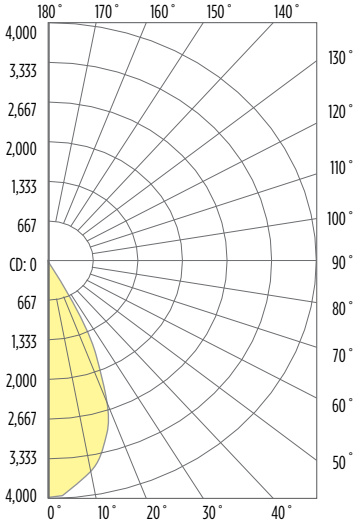
Watts: 21.7

Efficacy: 102

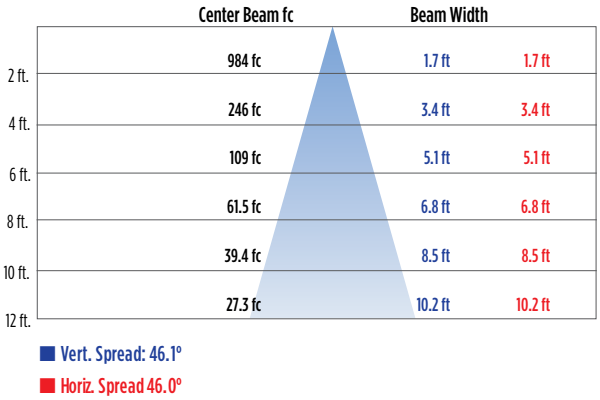
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	350	15.9%
10-20	840	38.1%
20-30	738	33.5%
30-40	230	10.4%
40-50	27	1.2%
50-60	6	0.3%
60-70	5	0.2%
70-80	4	0.2%
80-90	3	0.1%
90-100	0	0.0%
0-180	2,203	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	3,937
5	3,794
10	3,591
15	3,210
20	2,520
25	1,670
30	569
35	244
40	63
45	13
50	8
55	6
60	5
65	4
70	5
75	4
80	2
85	2
90	0

Polar Candela Distribution



Illuminance at a Distance



Vert. Spread: 46.1°

Horiz. Spread 46.0°

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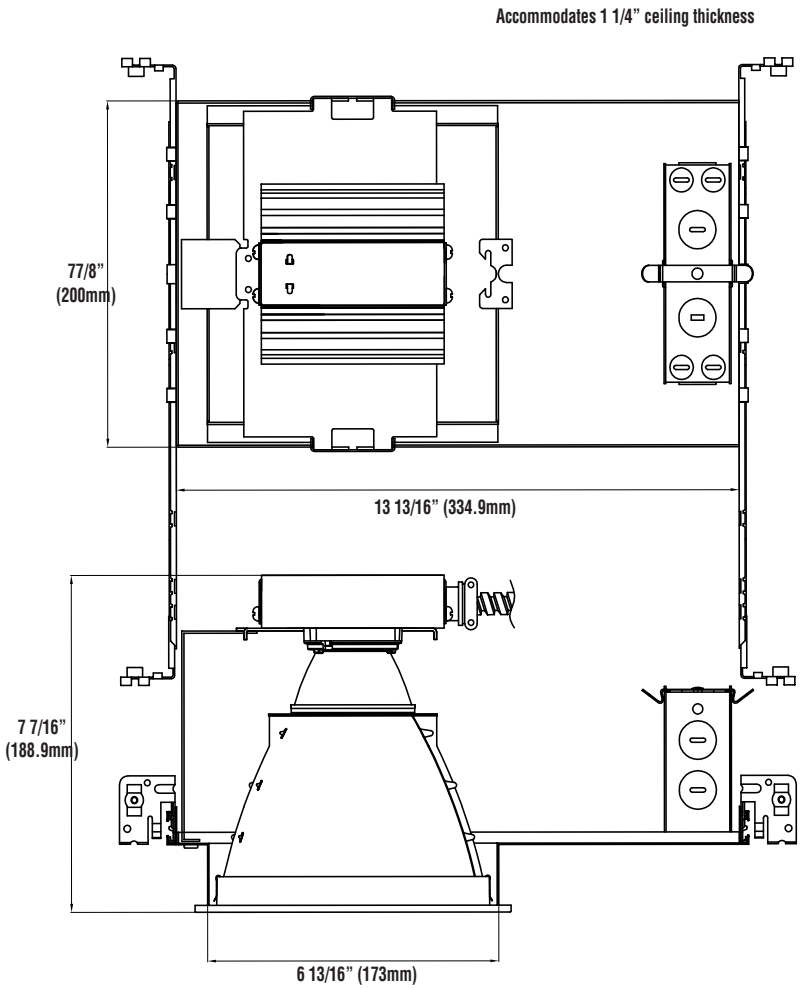
6" LED Architectural Square Downlight (LAD6SQ)

Type : _____

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PRODUCT DIMENSIONS

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4" RECESSED DOWNLIGHT REFLECTORS

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TSQ6 - Haze semi-diffused reflector with white trim ring

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