Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

6” Architectural Downlight (LAD6)

New Construction



OVERVIEW	
Lumen Package (lm)	1,100 - 4,200
Wattage Range (W)	14 - 42
Efficacy Range (LPW)	92 - 116
Weight lbs (kg)	9 (4.1)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Optical System

- LED source provides superior lumen output with maximum visual comfort.
- Tailored spot, narrow flood, flood and wide flood beam optics designed for glare free illumination.
- Choice of flanged or flangeless spun reflector utilizing heavy gauge highly reflective diffuse anodized aluminum to deliver low glare, even illumination of the space.
- Reflectors are retained with three retention clips holding the flange tight to the finished ceiling surface.
- Minimum CRI of 80.

Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0 - 10V 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.
- 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) 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 can be located on the website..

Controls

- 0 - 10V dimming standard.
- Compatible with most 0-10V dimmers
- Compatible with LSI AirLink® Blue for networked controls
- See controls table for more information

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.
- Accommodates ceiling thickness up to 1.5”.
- Plaster frame with collar is designed with 20-gauge colled rolled steel, black-painted
- Universal mounting brackets provide up to 5” vertical adjustment and accepts 1/2” EMT conduit.
- Additional channel bar, nailer bar and suspended ceiling accessories available. See accessories.
- Rough-in kit can be ordered separately for new construction build.

Installation

- Additional channel bar, nailer bar and suspended ceiling accessories available to accommodate a variety of ceiling types.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- CSA 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 & Industrial.
- Damp location rated.
- Wet location rated with regressed lens.
- Title 24 Compliant.

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6” Architectural Downlight (LAD6) New Construction

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ORDERING GUIDE

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TYPICAL ORDER EXAMPLE: LAD6 LED 25L UNV DIM1 35 NF TR6R HAZ

Prefix	Light Source	Lumen Package	Voltage	Driver	Color Temperature	CRI[2]	Beam Optics[3]
LAD6 - 6” New Construction[1]	**LED**	**14L** - 1,400 Lumens **25L** - 2,500 Lumens **32L** - 3200 Lumens **41L** - 4100 Lumens	**UNV** - 120 - 277V	**DIM1** - Dims to 1% (0-10V dimming)	**35** - 3500K **40** - 4000K	**Blank** - 80 min.	**SP** - Spot **NF** - Narrow Flood **FL** - Flood **WF** - Wide Flood

	Reflector	Finish	
Self-flanged	**TR6R** - Open Reflector	**SF HAZ** - Haze semi- diffused	
		SF SPC - Specular clear	
	TR6RWW - Wall Wash[4]	**SF HAZ** - Haze semi-diffused	
Flangeless (Ships standard w/ white plastic trim ring)	**TR6R** - Open Reflector	**HAZ** - Haze semi-diffused, white trim ring	
		SPC - Specular clear, white trim ring	
	TR6RWW - Wall Wash[4]	**HAZ** - Haze semi-diffused wall wash reflector, white trim ring	
	TR6B - Baffle	**HAZ** - Haze semi-diffused Reflector	**WH** - White baffle and white trim ring
			BLK - Black Baffle and white trim ring
	TR6BL - Baffle w/ Regressed Lens[6]	**HAZ** - Haze semi-diffused reflector	**WH** - White baffle and white trim ring
		SPC - Specular clear	**BLK** - Black Baffle and white trim ring
	TR6RL - Regressed Lens[6]	**HAZ** - Haze semi-diffused reflector w/ specular clear regressed lens and white trim ring	
		SPC - Specular clear refector w/ specular clear regressed lens and white trim ring	

Need more information?
Click here for our glossary

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ACCESSORY ORDERING INFORMATION

Part Number	Description
616105	WH - White metal trim ring (only compatible w/ flangeless trims)
205599	C27 - 27” channel bars (pair)
287522	C52 - 52” channel bars (pair)
345989	NB - Nailer bar kt (set of 4)
234808	SCIK - Suspended ceiling installation kit (set of 4 channel bars & 4 T-grid clips)
647671	BL1 - Black metal trim ring
778196	Remote Mount Battery
786277	Remote Battery with Grid Mount Kit[7]
634327	New Construction Rough-in Kit-1 pack
635859	New Construction Rough-in Kit-2 pack
791416	New Construction Rough-in Kit-1 pack with Self-Diagnostic Emergency Battery (field installed)
791417	New Construction Rough-in Kit-2 pack with Self-Diagnostic Emergency Battery (field installed)
791431	T-Grid Bracket for EM[8]

CONTROLS INFORMATION

Click here to learn more details about AirLink Blue

1 Housing can ship ahead of the light engine and reflector.
2 90 CRI requires 55 day leadtime & 100 MOQ; Consult Factory.
3 Refer to IES Files for Beam Spread.
4 Self-flanged TR6RWW wall wash reflector comes with 40° integrated optic; additional beam optics not compatible.
5 Flangeless TR6RFL frosted floating lens comes with integrated white metal trim; accessory white metal trim ring not required.
6 Regressed lens trims are wet location listed. All other trims are rated for damp location.
7 For complete fixture with remote mount EM for T-Grid install, order remote battery with grid mount kit.
8 For new construction frame kit with EM for T-Grid install, order T-Grid bracket separately.

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PERFORMANCE

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DELIVERED LUMENS*						
Lumen Package	Distribution	3500K CCT		4000K CCT		Wattage
		Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
14L	SP	1467	104.8	1467	104.8	14
	NF	1432	102.3	1432	102.3	
	FL	1428	102.0	1428	102.0	
	WF	1337	95.5	1337	95.5	
25L	SP	2560	116.4	2560	116.4	22
	NF	2499	113.6	2499	113.6	
	FL	2492	113.3	2492	113.3	
	WF	2333	106.0	2333	106.0	
32L	SP	3302	103.2	3302	103.2	32
	NF	3224	100.8	3224	100.8	
	FL	3215	100.5	3215	100.5	
	WF	3010	94.1	3010	94.1	
41L	SP	4224	100.6	4224	100.6	42
	NF	4123	98.2	4123	98.2	
	FL	4112	97.9	4112	97.9	
	WF	3849	91.6	3849	91.6	

*Electrical Data at 25C (77F)/ Actual Wattage may differ +/-10%

ELECTRICAL DATA (AMPS)*				
Lumen Package	120V	208V	240V	277V
14L	0.12	0.07	0.06	0.05
25L	0.18	0.11	0.09	0.08
32L	0.27	0.15	0.13	0.12
41L	0.35	0.20	0.18	0.15

*LED Chips are frequently updated therefore values may change.
Data is based on Haze Reflector.

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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.

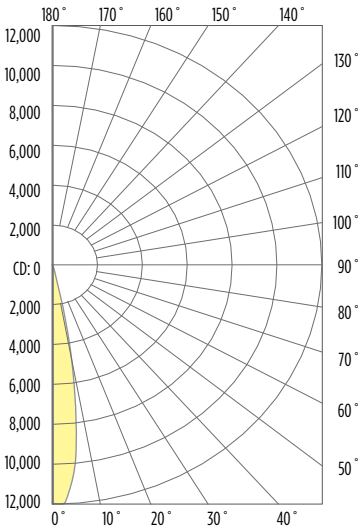
LAD6-LED-25L-35-SP-TR6R-SF-HAZ

Lumens: 2,560
Watts: 22.2
Efficacy: 115

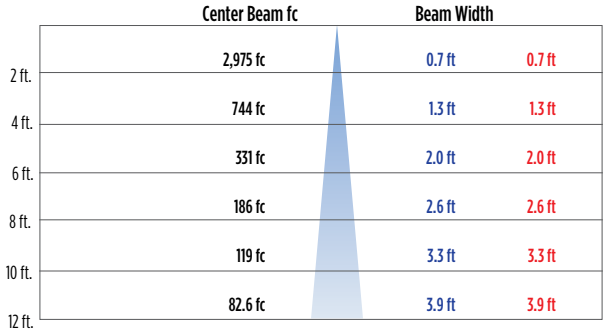
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	797	31.2%
10-20	766	29.9%
20-30	611	23.9%
30-40	315	12.3%
40-50	51	2.0%
50-60	14	0.5%
60-70	3	0.1%
70-80	1	0.0%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,560	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	11,901
5	10,123
10	5,266
15	2,578
20	1,645
25	1,309
30	1,091
35	426
40	128
45	60
50	32
55	14
60	6
65	3
70	1
75	1
80	0
85	1
90	0

Polar Candela Distribution



Illuminance at a Distance



■ Vert. Spread: 18.5°
■ Horiz. Spread 18.5°

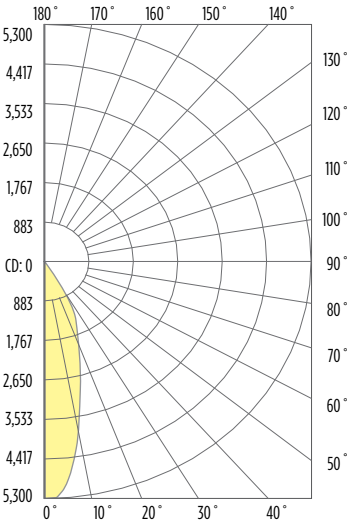
LAD6-LED-25L-35-NF-TR6R-SF-HAZ

Lumens: 2,499
Watts: 22.2
Efficacy: 113

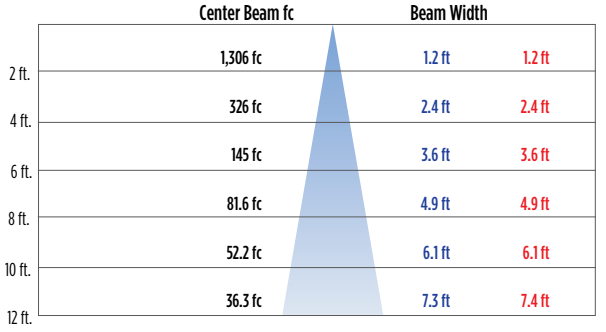
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	445	17.8%
10-20	831	33.2%
20-30	755	30.2%
30-40	375	15.0%
40-50	71	2.9%
50-60	17	0.7%
60-70	4	0.1%
70-80	1	0.1%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,499	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	5,233
5	4,982
10	4,023
15	2,984
20	2,165
25	1,607
30	1,246
35	493
40	180
45	82
50	40
55	16
60	7
65	3
70	2
75	1
80	1
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance



■ Vert. Spread: 33.8°
■ Horiz. Spread 34.1°

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PHOTOMETRICS

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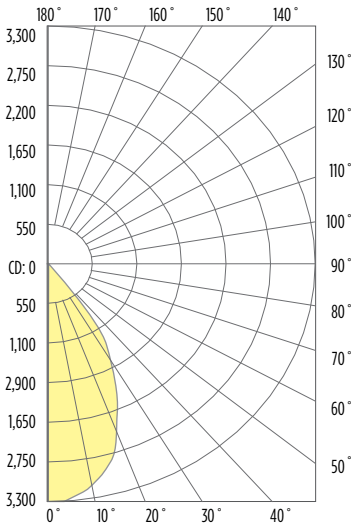
LAD6-LED-25L-35-FL-TR6R-SF-HAZ

Lumens: 2,492
Watts: 22.2
Efficacy: 112

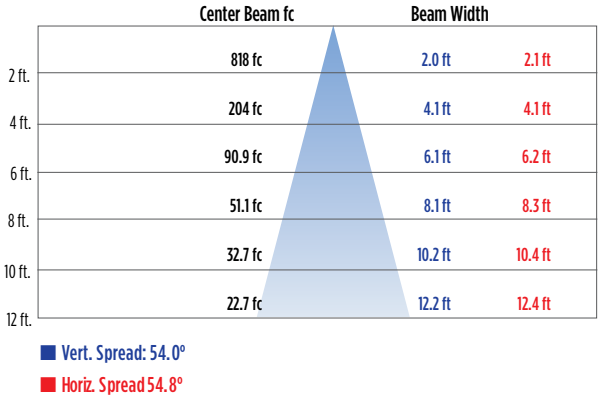
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	304	12.2%
10-20	773	31.0%
20-30	8475	34.0%
30-40	443	17.8%
40-50	99	4.0%
50-60	19	0.8%
60-70	4	0.2%
70-80	2	0.1%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,492	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	3,271
5	3,236
10	3,071
15	2,780
20	2,315
25	1,812
30	1,415
35	624
40	257
45	120
50	52
55	18
60	7
65	4
70	2
75	1
80	1
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance



Vert. Spread: 54.0°
Horiz. Spread 54.8°

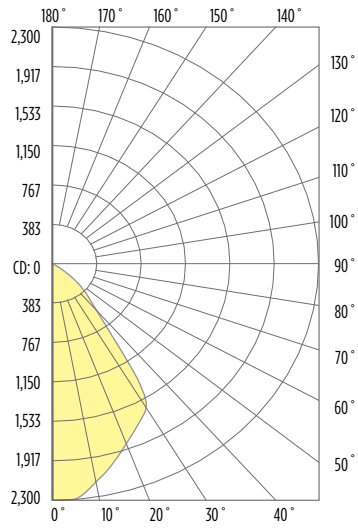
LAD6-LED-25L-35-WF-TR6R-SF-HAZ

Lumens: 2,333
Watts: 22.2
Efficacy: 105

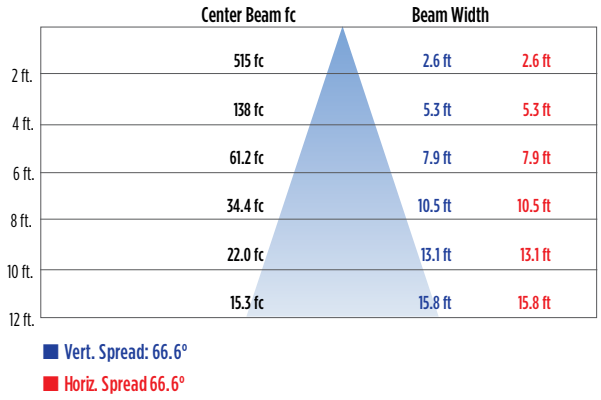
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	237	10.5%
10-20	617	27.2%
20-30	722	31.9%
30-40	405	17.9%
40-50	219	9.7%
50-60	53	2.3%
60-70	9	0.4%
70-80	2	0.1%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,264	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	3,826
5	3,844
10	3,654
15	3,182
20	2,513
25	1,770
30	852
35	391
40	206
45	104
50	45
55	17
60	6
65	3
70	2
75	1
80	1
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance



Vert. Spread: 66.6°
Horiz. Spread 66.6°

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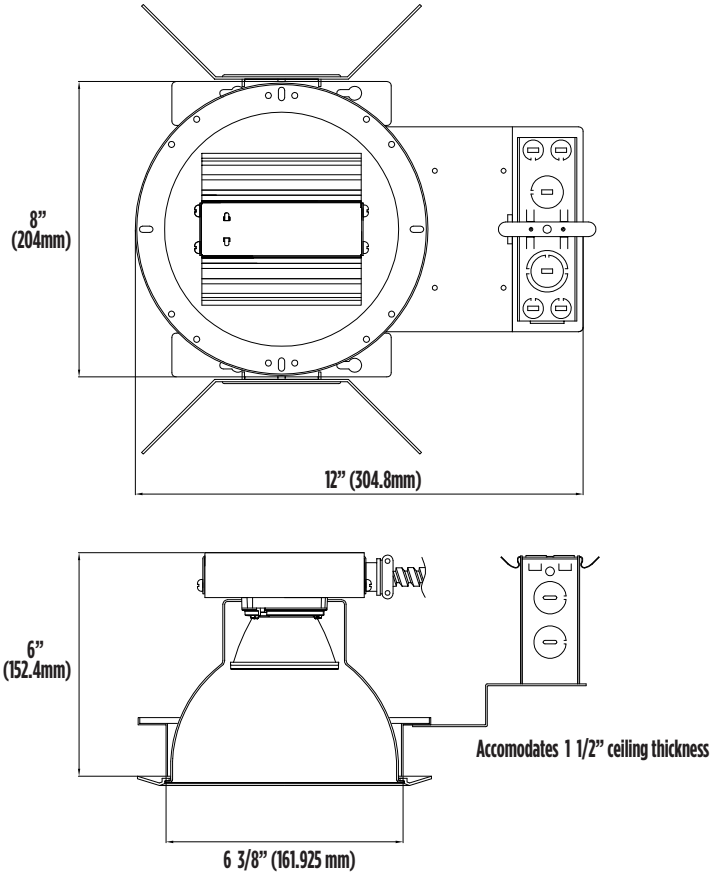
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PRODUCT DIMENSIONS

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6” RECESSED DOWNLIGHT REFLECTORS

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TR6R - Open Reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear



TR6B - Baffle
Flangeless
HAZ - Haze semi-diffused reflector
Choice of white or black baffle



TR6RL - Regressed Lens w/ Specular Clear Reflector
Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Wet Location Listed



TR6BL - Baffle w/ Regressed Lens
Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Choice of white or black baffle
Wet Location listed



TR6RWW - Wall wash w/ reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused

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