Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

4” Architectural Downlight (LAD4)

New Construction



OVERVIEW	
Lumen Package (lm)	1,050 - 2,500
Wattage Range (W)	14 - 22
Efficacy Range (LPW)	93 - 112
Weight lbs (kg)	7.5 (3.4)

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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4” Architectural Downlight (LAD4) New Construction

Type : _____

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ORDERING GUIDE

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TYPICAL ORDER EXAMPLE: LAD4 LED 24L UNV DIM1 35 NF TR4R HAZ

Prefix	Light Source	Lumen Package	Voltage	Driver	Color Temperature	CRI[2]	Beam Optics[3]
LAD4 - 4” New Construction[1]	**LED**	**14L** - 1,400 Lumens **24L** - 2,400 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	Frame Options
Self-flanged	**TR4R** - Open Reflector	**SF HAZ** - Haze semi- diffused	**Blank** - Full Fixture (new construction rough-in kit included) **LF** - Less Frame (no rough-in kit)
		SF SPC - Specular clear	
	TR4RWW - Wall Wash[4]	**SF HAZ** - Haze semi-diffused	
Flangeless (Ships standard w/ white plastic trim ring)	**TR4R** - Open Reflector	**HAZ** - Haze semi-diffused, white trim ring	
		SPC - Specular clear, white trim ring	
	TR4RWW - Wall Wash[4]	**HAZ** - Haze semi-diffused wall wash reflector, white trim ring	
	TR4RL - 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

Have additional questions?
Call us at (800) 436-7800

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)
698364	BL1 - Black metal trim ring
778196	Remote Mount Battery
786277	Remote Battery with Grid Mount Kit[5]
687986	New Construction Rough-in Kit-1 pack
791427	New Construction Rough-in Kit-2 pack
791429	New Construction Rough-in Kit-1 pack with Self-Diagnostic Emergency Battery (field installed)
791430	New Construction Rough-in Kit-2 pack with Self-Diagnostic Emergency Battery (field installed)
791431	T-Grid Bracket for EM[6]

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 Self-flanged TR4RWW wall wash reflector comes with 40° integrated optic; additional beam optics not compatible.
4 Regressed lens trims are wet location listed. All other trims are rated for damp location.
5 For complete fixture with remote mount EM for T-Grid install, order remote battery with grid mount kit.
6 For new construction frame kit with EM for T-Grid install, order T-Grid bracket separately.

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4” Architectural Downlight (LAD4) New Construction

Type : _____

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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	1414	101.0	1414	101.0	14
	NF	1401	100.1	1401	100.1	
	FL	1386	99.0	1386	99.0	
	WF	1304	93.1	1304	93.1	
24L	SP	2455	111.6	2455	111.6	22
	NF	2432	110.5	2432	110.5	
	FL	2407	109.4	2407	109.4	
	WF	2264	102.9	2264	102.9	

*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
24L	0.18	0.11	0.09	0.08

*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.

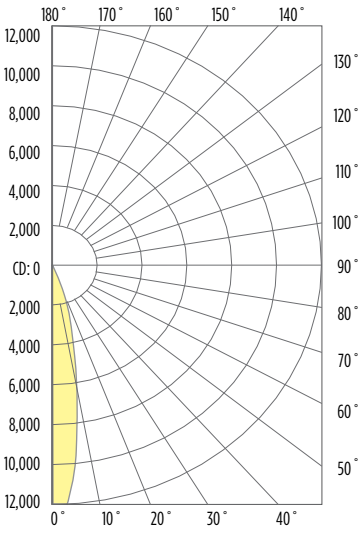
LAD4-LED-24L-35-SP-TR4R-SF-HAZ

Lumens: 2,455
Watts: 22.2
Efficacy: 111

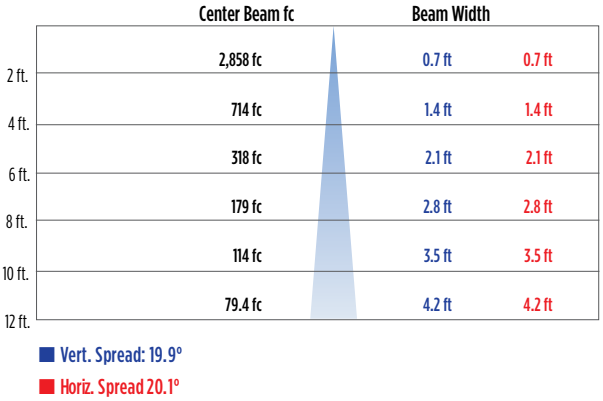
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	803	32.7%
10-20	892	36.3%
20-30	569	23.2%
30-40	129	5.2%
40-50	43	1.7%
50-60	14	0.6%
60-70	3	0.1%
70-80	1	0.1%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,455	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	5,756
5	5,523
10	4,611
15	3,473
20	2,446
25	1,609
30	685
35	275
40	136
45	76
50	39
55	15
60	5
65	3
70	2
75	1
80	0
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance



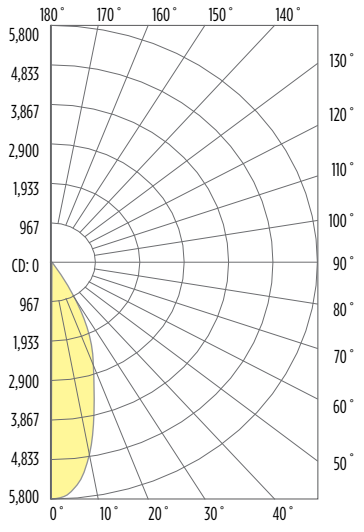
LAD4-LED-24L-35-NF-TR4R-SF-HAZ

Lumens: 2.432
Watts: 22.2
Efficacy: 110

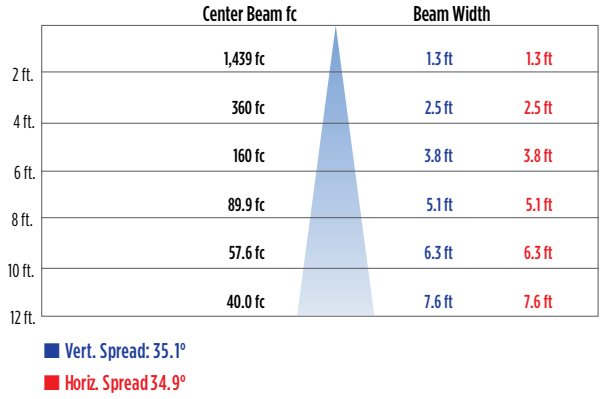
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	497	20.4%
10-20	949	39.0%
20-30	710	29.2%
30-40	196	8.0%
40-50	60	2.5%
50-60	16	0.6%
60-70	3	0.1%
70-80	1	0.0%
80-90	0	0.0%
90-100	0	0.0%
0-180	2, 432	100.0%

CANDELA TABLE	
Degree Vertical	**Candela**
0	5,756
5	5,523
10	4,611
15	3,473
20	2,446
25	1,609
30	685
35	275
40	136
45	76
50	39
55	15
60	5
65	3
70	2
75	1
80	0
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance



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PHOTOMETRICS

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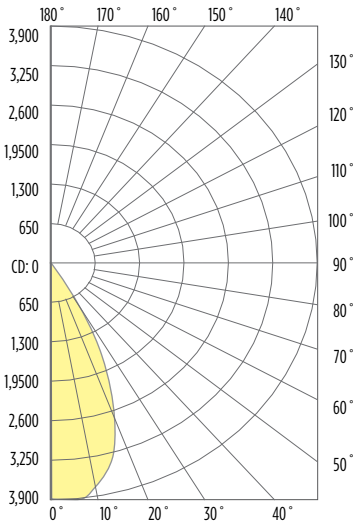
LAD4-LED-24L-35-FL-TR4R-SF-HAZ

Lumens: 2,407
Watts: 22.2
Efficacy: 108

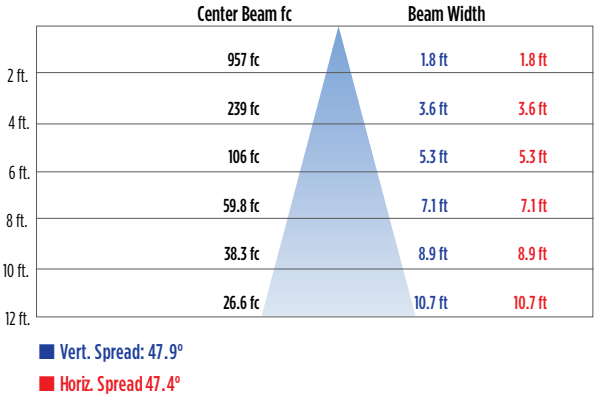
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	359	14.9%
10-20	884	36.7%
20-30	792	32.9%
30-40	265	11.0%
40-50	85	3.5%
50-60	18	0.7%
60-70	4	0.1%
70-80	1	0.1%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,407	100.0%

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



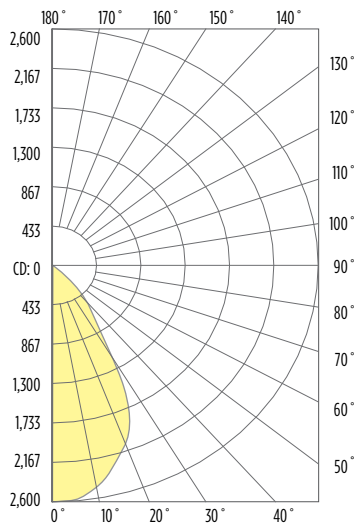
LAD4R-LED-24L-35-WF-TR4R-SF-HAZ

Lumens: 2,264
Watts: 22.2
Efficacy: 102

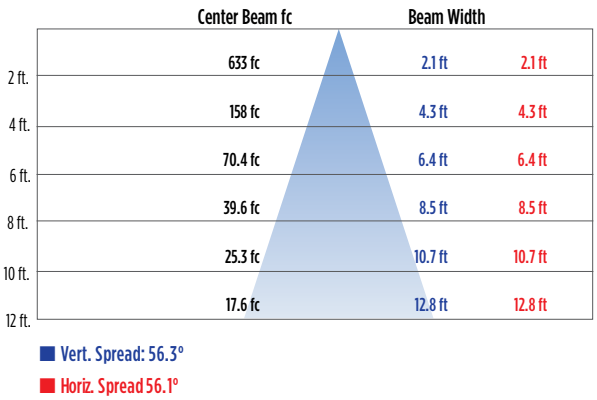
ZONAL LUMEN SUMMARY		
Zone	**Lumens**	**%Fixture**
0-10	237	10.5%
10-20	617	27.2%
20-30	722	31.9%
30-40	405	17.9%
40-50	219	9.7%
50-60	53	2.3%
60-70	9	0.4%
70-80	2	0.1%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,264	100.0%

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



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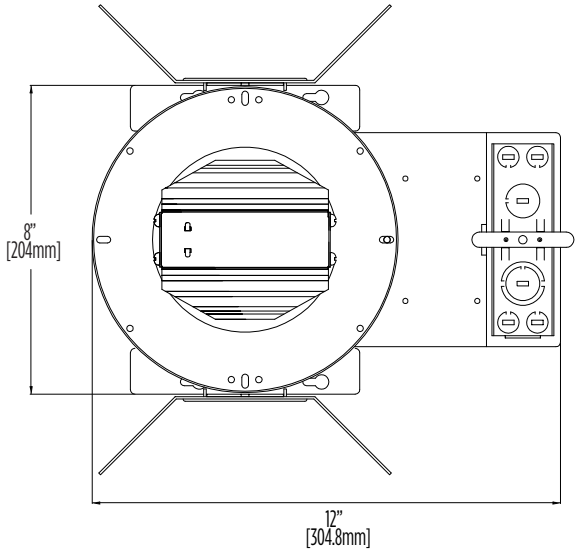
4” Architectural Downlight (LAD4) New Construction

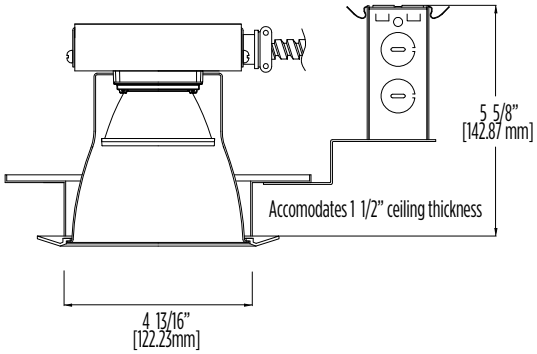
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PRODUCT DIMENSIONS

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4” RECESSED DOWNLIGHT REFLECTORS

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TR4R - Open Reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear



TR4RWW - Wall Wash w/ Kick Reflector
Self-Flange or Flangeless
HAZ - Haze semi-diffused



TR4RL - Regressed Lens w/ Specular Clear Reflector
Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Wet Location Listed

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