



8" Architectural Downlight (LAD8)

New Construction



OVERVIEW

Lumen Package (lm)	1,150 - 4,250
Wattage Range (W)	14 - 42
Efficacy Range (LPW)	95 - 115
Weight lbs (kg)	9.25 (4.2)

QUICK LINKS

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.
- Frame 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

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

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ORDERING GUIDE

TYPICAL ORDER EXAMPLE: LAD8 LED 25L UNV DIM1 35 NF TR6R HAZ							
Prefix	Light Source	Lumen Package	Voltage	Driver	Color Temperature	CRI ²	Beam Optics ³
LAD8 - 8" 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)	27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	Blank - 80 min.	SP - Spot NF - Narrow Flood FL - Flood WF - Wide Flood
Reflector			Finish				
Self-flanged	TR8R - Open Reflector		SF HAZ - Haze semi- diffused				
			SF SPC - Specular clear				
Flangeless (Ships standard w/ white plastic trim ring)	TR8R - Open Reflector		HAZ - Haze semi-diffused, white trim ring				
			SPC - Specular clear, white trim ring				
	TR6RL - Regressed Lens ⁶		HAZ - Haze semi-diffused reflector w/ specular clear regressed lens and white trim ring				
		SPC - Specular clear reflector 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
616107	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)
778196	Remote Mount Battery
786277	Remote Battery with Grid Mount Kit ⁷
640194	New Construction Frame Kit-1 pack
640197	New Construction Frame Kit-2 pack
791425	New Construction Frame Kit-1 pack with Self-Diagnostic EM
791426	New Construction Frame Kit-2 pack with Self-Diagnostic EM
791431	T-Grid Bracket for EM ⁸

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

DELIVERED LUMENS*										
Lumen Package	Distribution	2700K CCT		3000K CCT		3500K CCT		4000K CCT		Wattage
		Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
14L	SP	1213	88.6	1213	86.6	1489	106.4	1489	106.4	14
	NF	1192	85.1	1192	95.1	1463	104.5	1463	104.5	
	FL	1181	84.4	1181	84.4	1450	103.6	1450	103.6	
	WF	1121	80.1	1121	80.1	1376	98.3	1376	98.3	
25L	SP	2099	95.4	2099	95.4	2576	117.1	2576	117.1	22
	NF	2063	93.8	2063	93.8	2531	115.0	2531	115.0	
	FL	2044	92.9	2044	92.9	2508	114.0	2508	114.0	
	WF	1940	88.2	1940	88.2	2380	108.2	2380	108.2	
32L	SP	2750	85.9	2750	85.9	3375	105.5	3375	105.5	32
	NF	2702	84.4	2702	84.4	3316	103.6	3316	103.6	
	FL	2678	83.7	2678	83.7	3285	102.7	3285	102.7	
	WF	2541	79.4	2541	79.4	3118	97.4	3118	97.4	
41L	SP	3527	84.0	3527	84.0	4328	103.0	4328	103.0	42
	NF	3465	82.5	3465	82.5	4252	101.2	4252	101.2	
	FL	3434	81.8	3434	81.8	4213	100.3	4213	100.3	
	WF	3259	77.6	3259	77.6	3998	95.2	3998	95.2	

*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

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.

LAD8-LED-25L-35-SP-TR8R-SF-HAZ

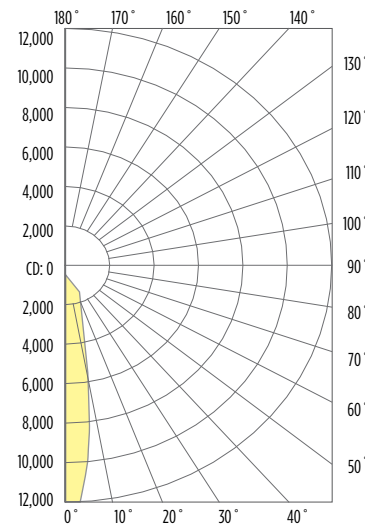
Lumens: 2,576

Watts: 22.4

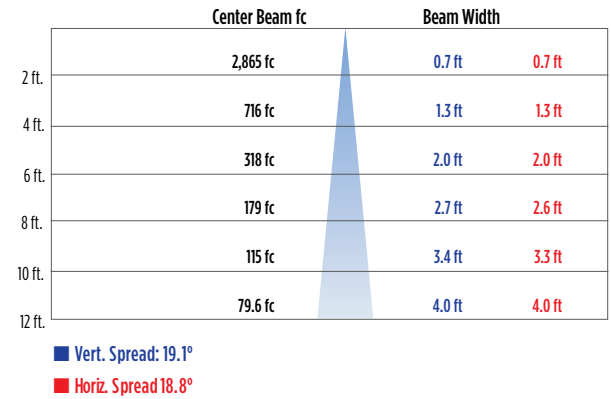
Efficacy: 115

ZONAL LUMEN SUMMARY			CANDELA TABLE	
Zone	Lumens	%Fixture	Degree Vertical	Candela
0-10	781	30.3%	0	11,459
10-20	772	30.0%	5	9,884
20-30	588	22.8%	10	5,312
30-40	388	15.1%	15	2,573
40-50	40	1.5%	20	1,647
50-60	6	0.2%	25	1,272
60-70	1	0.0%	30	1,023
70-80	1	0.0%	35	700
80-90	0	0.0%	40	146
90-100	0	0.0%	45	37
0-180	2,576	100.0%	50	15
			55	5
			60	2
			65	1
			70	1
			75	1
			80	0
			85	0
			90	0

Polar Candela Distribution



Illuminance at a Distance



LAD8-LED-25L-35-NF-TR8R-SF-HAZ

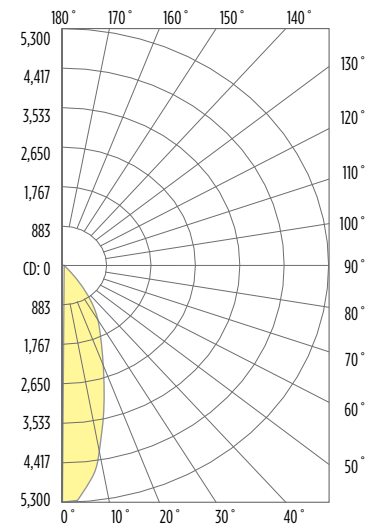
Lumens: 2,531

Watts: 22.4

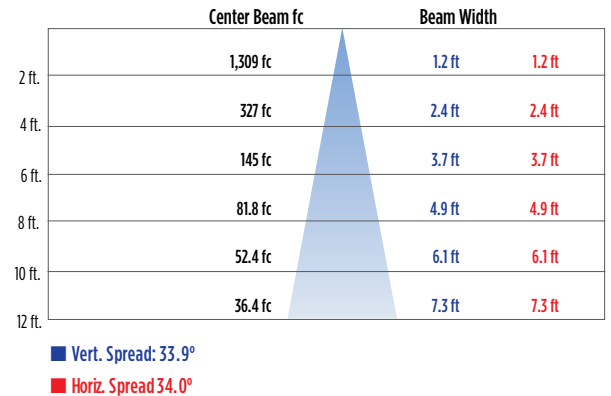
Efficacy: 113

ZONAL LUMEN SUMMARY			CANDELA TABLE	
Zone	Lumens	%Fixture	Degree Vertical	Candela
0-10	445	17.6%	0	5,235
10-20	830	32.8%	5	5,002
20-30	733	29.0%	10	4,057
30-40	454	17.9%	15	2,968
40-50	60	2.4%	20	2,127
50-60	7	0.3%	25	1,565
60-70	1	0.0%	30	1,189
70-80	1	0.0%	35	821
80-90	0	0.0%	40	203
90-100	0	0.0%	45	63
0-180	2,531	100.0%	50	23
			55	5
			60	1
			65	1
			70	1
			75	0
			80	0
			85	0
			90	0

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Illuminance at a Distance



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PHOTOMETRICS

LAD8-LED-25L-35-FL-TR8R-SF-HAZ

Lumens: 2,509

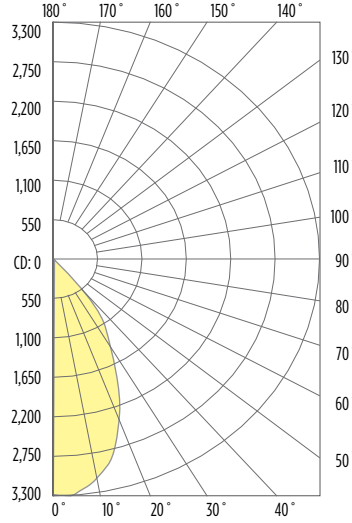
Watts: 22.4

Efficacy: 112

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	302	12.60%
10-20	764	30.5%
20-30	820	32.7%
30-40	520	20.7%
40-50	90	3.6%
50-60	10	0.4%
60-70	1	0.1%
70-80	1	0.0%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,509	100.0%

CANDELA TABLE	
Degree Vertical	Candela
0	3,249
5	3,216
10	3,034
15	2,713
20	2,249
25	1,729
30	1,319
35	920
40	271
45	104
50	38
55	7
60	2
65	1
70	1
75	1
80	0
85	0
90	0

Polar Candela Distribution



Illuminance at a Distance

	Center Beam fc	Beam Width	
2 ft.	812 fc	2.0 ft	2.0 ft
4 ft.	203 fc	3.9 ft	4.0 ft
6 ft.	90.3 fc	5.9 ft	6.17 ft
8 ft.	50.8 fc	7.9 ft	8.1 ft
10 ft.	32.5 fc	9.8 ft	10.1 ft
12 ft.	22.6 fc	11.8 ft	12.1 ft

■ Vert. Spread: 52.3°

■ Horiz. Spread: 53.6°

LAD8-LED-25L-35-WF-TR8R-SF-HAZ

Lumens: 2,380

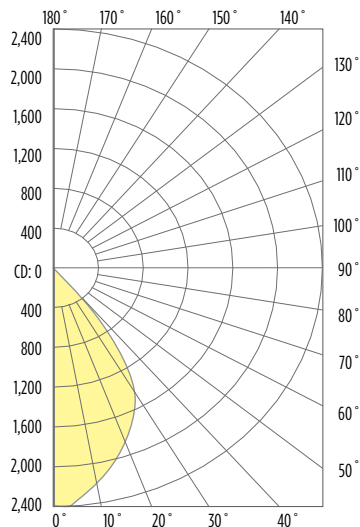
Watts: 22.4

Efficacy: 106

ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	216	9.05%
10-20	557	23.38%
20-30	746	31.33%
30-40	629	26.42%
40-50	199	8.34%
50-60	29	1.23%
60-70	4	0.15%
70-80	2	0.07%
80-90	0	0.02%
90-100	0	0.0%
0-180	2,380	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

	Center Beam fc	Beam Width	
2 ft.	586 fc	2.7 ft	2.7 ft
4 ft.	146 fc	5.4 ft	5.4 ft
6 ft.	65.1 fc	8.1 ft	8.0 ft
8 ft.	36.6 fc	10.8 ft	10.7 ft
10 ft.	23.4 fc	13.5 ft	13.4 ft
12 ft.	16.3 fc	16.2 ft	16.1 ft

■ Vert. Spread: 68.0°

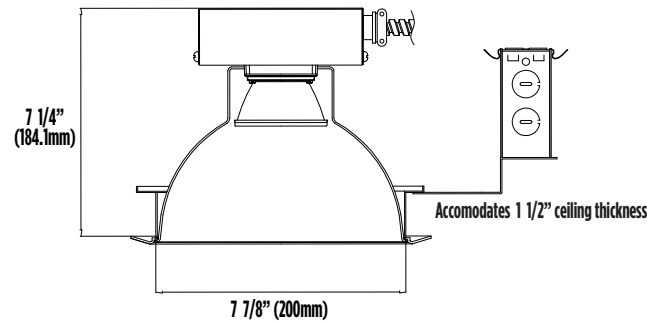
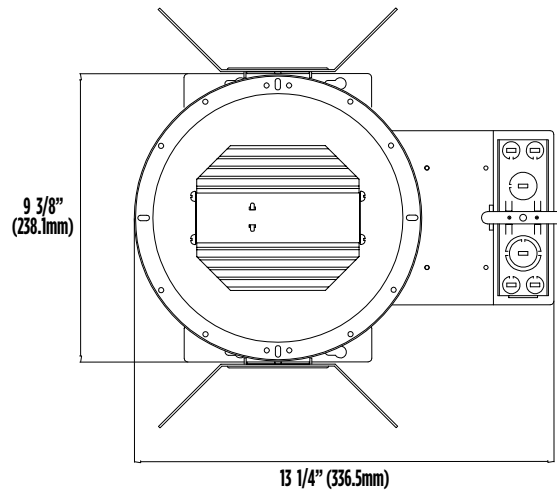
■ Horiz. Spread: 67.7°

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PRODUCT DIMENSIONS



8" RECESSED DOWNLIGHT REFLECTORS



TR8R - Open Reflector

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



TR8RL - Regressed Lens w/ Specular Clear Reflector

Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Wet Location Listed