



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

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

ORDERING GUIDE

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)	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	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
687986	New Construction Frame Kit-1 pack
791427	New Construction Frame Kit-2 pack
791429	New Construction Frame Kit-1 pack with Self-Diagnostic EM
791430	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	1184	84.6	1184	84.6	1467	104.8	1467	104.8	14
	NF	1156	82.6	1156	82.6	1432	102.3	1432	102.3	
	FL	1152	82.3	1152	82.3	1428	102.0	1428	102.0	
	WF	1079	77.1	1079	77.1	1337	95.5	1337	95.5	
25L	SP	2066	93.9	2066	93.9	2560	116.4	2560	116.4	22
	NF	2017	91.7	2017	91.7	2499	113.6	2499	113.6	
	FL	2011	91.4	2011	91.4	2492	113.3	2492	113.3	
	WF	1883	85.6	1883	85.6	2333	106.0	2333	106.0	
32L	SP	2665	83.3	2665	83.3	3302	103.2	3302	103.2	32
	NF	2602	81.3	2602	81.3	3224	100.8	3224	100.8	
	FL	2594	81.1	2594	81.1	3215	100.5	3215	100.5	
	WF	2429	75.9	2429	75.9	3010	94.1	3010	94.1	
41L	SP	3409	81.2	3409	81.2	4224	100.6	4224	100.6	42
	NF	3328	79.2	3328	79.2	4123	98.2	4123	98.2	
	FL	3318	79.0	3318	79.0	4112	97.9	4112	97.9	
	WF	3107	74.0	3107	74.0	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

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

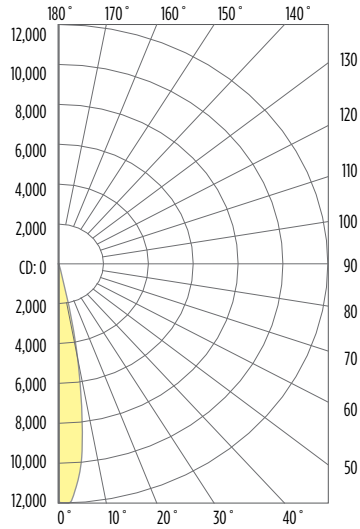
Watts: 22.2

Efficacy: 115

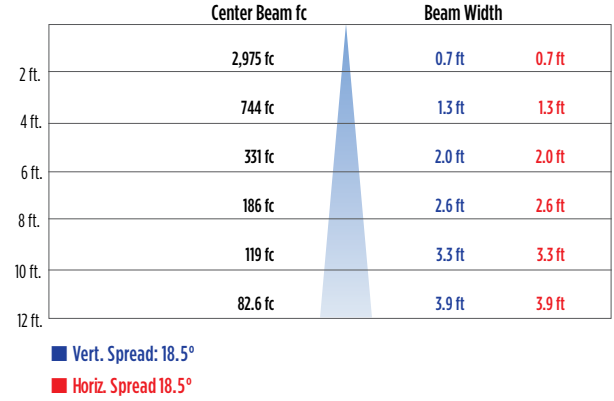
ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	797	31.2%
10-20	766	29.9%
20-30	611	23.9%
30-40	315	12.3%
40-50	51	2.0%
50-60	14	0.5%
60-70	3	0.1%
70-80	1	0.0%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,560	100.0%

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



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

Lumens: 2,499

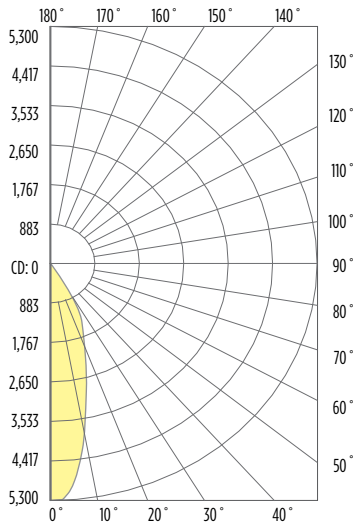
Watts: 22.2

Efficacy: 113

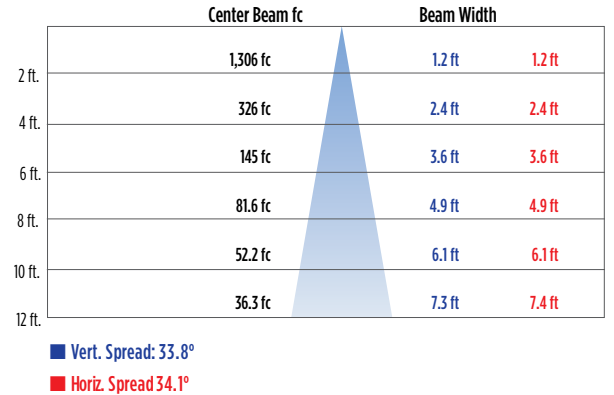
ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	445	17.8%
10-20	831	33.2%
20-30	755	30.2%
30-40	375	15.0%
40-50	71	2.9%
50-60	17	0.7%
60-70	4	0.1%
70-80	1	0.1%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,499	100.0%

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



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PHOTOMETRICS

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

Lumens: 2,492

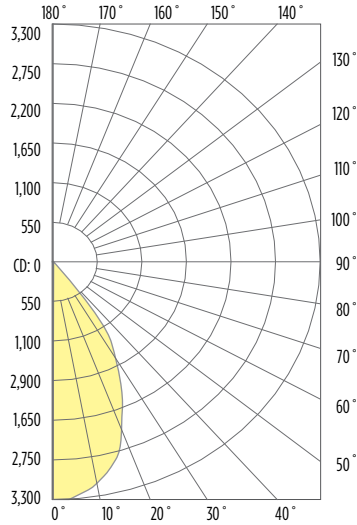
Watts: 22.2

Efficacy: 112

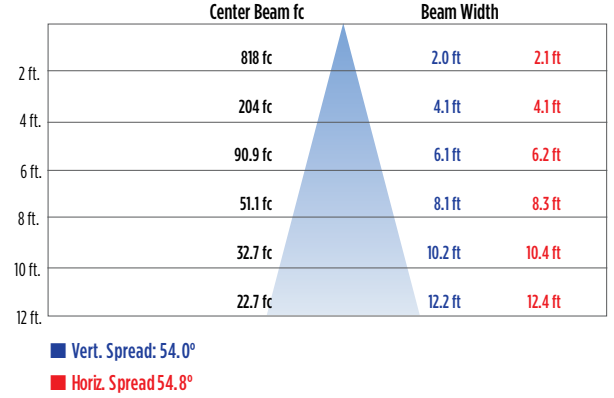
ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	304	12.2%
10-20	773	31.0%
20-30	8475	34.0%
30-40	443	17.8%
40-50	99	4.0%
50-60	19	0.8%
60-70	4	0.2%
70-80	2	0.1%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,492	100.0%

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



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

Lumens: 2,333

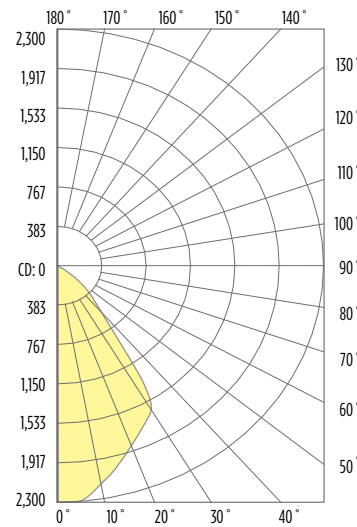
Watts: 22.2

Efficacy: 105

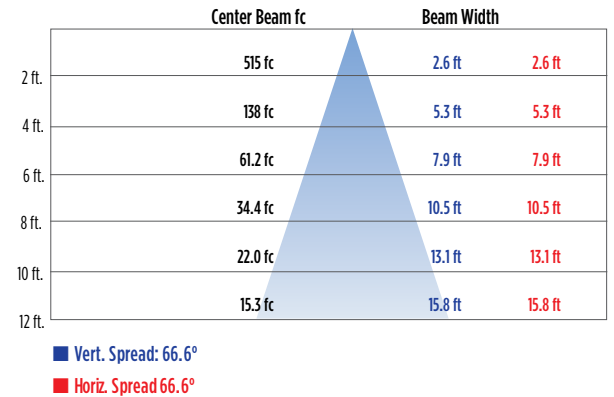
ZONAL LUMEN SUMMARY		
Zone	Lumens	%Fixture
0-10	237	10.5%
10-20	617	27.2%
20-30	722	31.9%
30-40	405	17.9%
40-50	219	9.7%
50-60	53	2.3%
60-70	9	0.4%
70-80	2	0.1%
80-90	0	0.0%
90-100	0	0.0%
0-180	2,264	100.0%

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

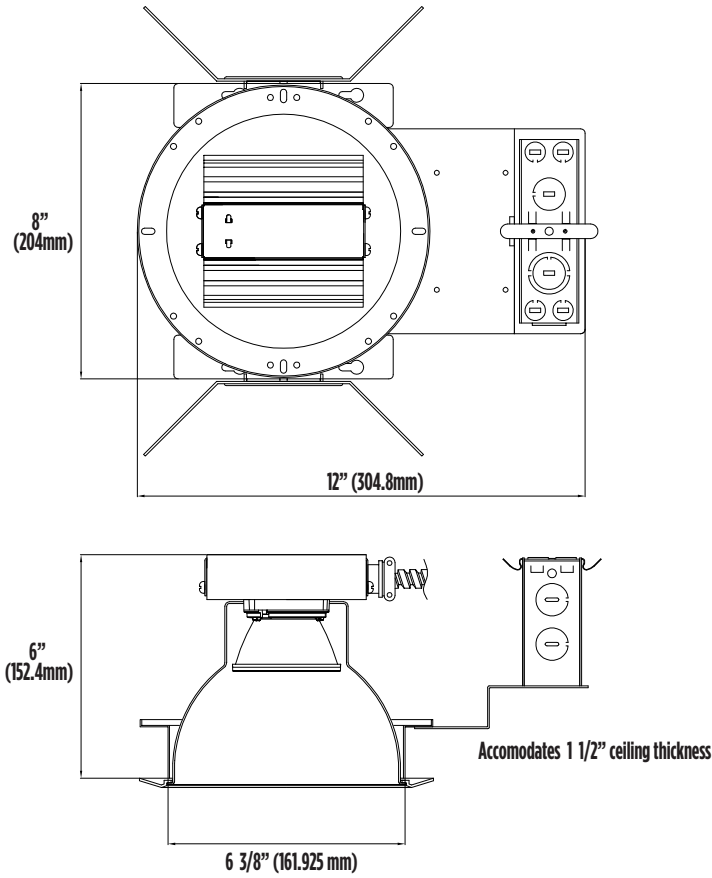


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PRODUCT DIMENSIONS



6" RECESSED DOWNLIGHT REFLECTORS



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