



6" LED Architectural Downlight

LAD6



OVERVIEW

Lumen Package	1,100 - 4,200
Wattage Range	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 cold 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.

Listing

- 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.



6" LED Architectural Downlight

ORDERING GUIDE

[Back to Quick Links](#)TYPICAL ORDER EXAMPLE: **LAD6 LED 25L UNV DIM1 35 NF TR6R HAZ**

Family	LED Technology	Lumen Package	Voltage	Driver	Color Temperature	CRI ²	Beam Optics ³
LAD6 - 6" New Construction ¹	LED	14L - 1400 Lumens 25L - 2500 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
	TR6RFL - Frosted floating Lens ⁵	HAZ - Haze semi-diffused Reflector w/ Frosted Floating Lens, w/ integrated white metal trim ring (optional trim ring not compatible)
		SPC - Specular Clear Reflector w/ Frosted Floating Lens, w/ integrated white metal trim ring (optional ring not compatible)
	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
	R6RL - 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

Accessory Ordering Information (Accessories are field installed)

Description	Order Number
WH - White metal trim ring (only compatible w/ flangeless trims)	616106
EM - Emergency Battery	658633
C27 - 27" channel bars (pair)	205599
C52 - 52" channel bars (pair)	287522
NB - Nailer bar kt (set of 4)	345989
SCIK - Suspended ceiling installation kit (set of 4 channel bars & 4 T-grid clips)	234808
BLI - Black metal trim ring	647671
Remote Mount Battery	778196
Remote Battery with Grid Mount Kit ⁷	786277
New Construction Frame Kit-1 pack	634327
New Construction Frame Kit-2 pack	635859
New Construction Frame Kit-1 pack with Self-Diagnostic EM	791416
New Construction Frame Kit-2 pack with Self-Diagnostic EM	791417
T-Grid Bracket for EM ⁸	791431

Controls

Part Number	Order Number	Description
755249	ALBC 5A	5A Circuit controller
760580	ALBCM DHS	AirLink Blue Daylight Harvesting Sensor
760380	ALBCM	AirLink Blue Ceiling Mount Motion Sensor
754823	ALBWS E02B WH	AirLink Blue Two Button Switch
754824	ALBWS E04B WH	AirLink Blue Four Button Switch
741967	ALBTK	AirLink Blue Time Keeper
760921	ALBWS MW4B	AirLink Blue Wall Dimmer Four Button Switch
754821	ALBWS MW1B	AirLink Blue Wall Dimmer Switch
754822	ALBWS MW OS	AirLink Blue Wall Motion Sensor Dimmer Switch

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.



6" LED Architectural Downlight

PERFORMANCE

[Back to Quick Links](#)

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	
24L	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.



6" LED Architectural Downlight

PHOTOMETRICS

[Back to Quick Links](#)

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

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

Lumens: 2,560

Watts: 22.2

Efficacy: 115

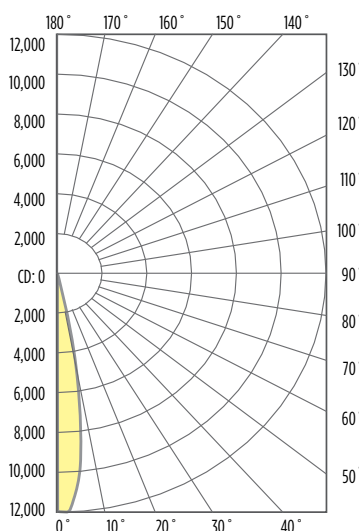
ZONAL LUMEN SUMMARY

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

	Center Beam fc	Beam Width	
2 ft.	2,975 fc	0.7 ft	0.7 ft
4 ft.	744 fc	1.3 ft	1.3 ft
6 ft.	331 fc	2.0 ft	2.0 ft
8 ft.	186 fc	2.6 ft	2.6 ft
10 ft.	119 fc	3.3 ft	3.3 ft
12 ft.	82.6 fc	3.9 ft	3.9 ft

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

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

Lumens: 2,499

Watts: 22.2

Efficacy: 113

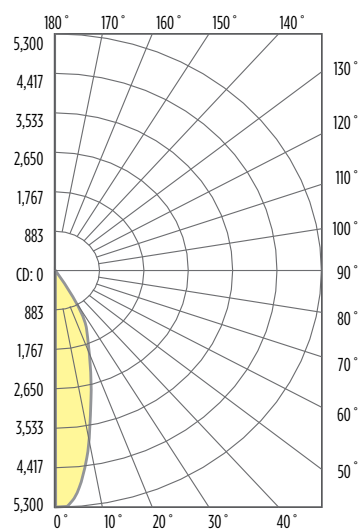
ZONAL LUMEN SUMMARY

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

	Center Beam fc	Beam Width	
2 ft.	1,306 fc	1.2 ft	1.2 ft
4 ft.	326 fc	2.4 ft	2.4 ft
6 ft.	145 fc	3.6 ft	3.6 ft
8 ft.	81.6 fc	4.9 ft	4.9 ft
10 ft.	52.2 fc	6.1 ft	6.1 ft
12 ft.	36.3 fc	7.3 ft	7.4 ft

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





6" LED Architectural Downlight

PHOTOMETRICS

[Back to Quick Links](#)

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

Lumens: 2,492
Watts: 22.2
Efficacy: 112

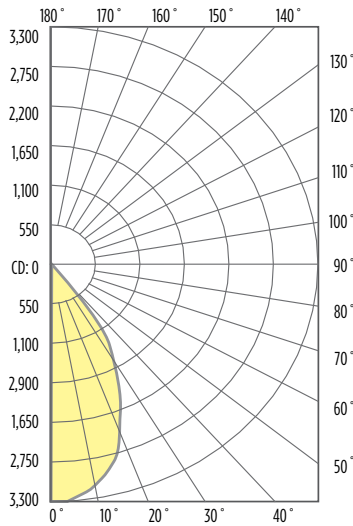
ZONAL LUMEN SUMMARY

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

	Center Beam fc	Beam Width
2 ft.	818 fc	2.0 ft 2.1 ft
4 ft.	204 fc	4.1 ft 4.1 ft
6 ft.	90.9 fc	6.1 ft 6.2 ft
8 ft.	51.1 fc	8.1 ft 8.3 ft
10 ft.	32.7 fc	10.2 ft 10.4 ft
12 ft.	22.7 fc	12.2 ft 12.4 ft

■ Vert. Spread: 54.0°

■ Horiz. Spread 54.8°

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

Lumens: 2,333
Watts: 22.2
Efficacy: 105

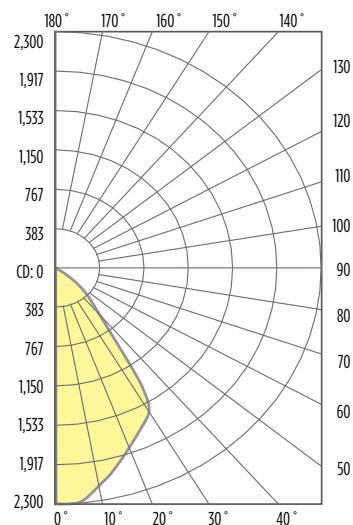
ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-10	203	8.7%
10-20	532	22.8%
20-30	754	32.3%
30-40	558	23.9%
40-50	218	9.4%
50-60	53	2.3%
60-70	10	0.4%
70-80	4	0.2%
80-90	1	0.0%
90-100	0	0.0%
0-180	2,333	100.0%

CANDELA TABLE

Degree Vertical	Candela
0	2,204
5	2,176
10	2,044
15	1,885
20	1,752
25	1,642
30	1,502
35	820
40	473
45	277
50	135
55	48
60	18
65	9
70	5
75	3
80	2
85	1
90	0

POLAR CANDELA DISTRIBUTION



ILLUMINANCE AT A DISTANCE

	Center Beam fc	Beam Width
2 ft.	515 fc	2.6 ft 2.6 ft
4 ft.	138 fc	5.3 ft 5.3 ft
6 ft.	61.2 fc	7.9 ft 7.9 ft
8 ft.	34.4 fc	10.5 ft 10.5 ft
10 ft.	22.0 fc	13.1 ft 13.1 ft
12 ft.	15.3 fc	15.8 ft 15.8 ft

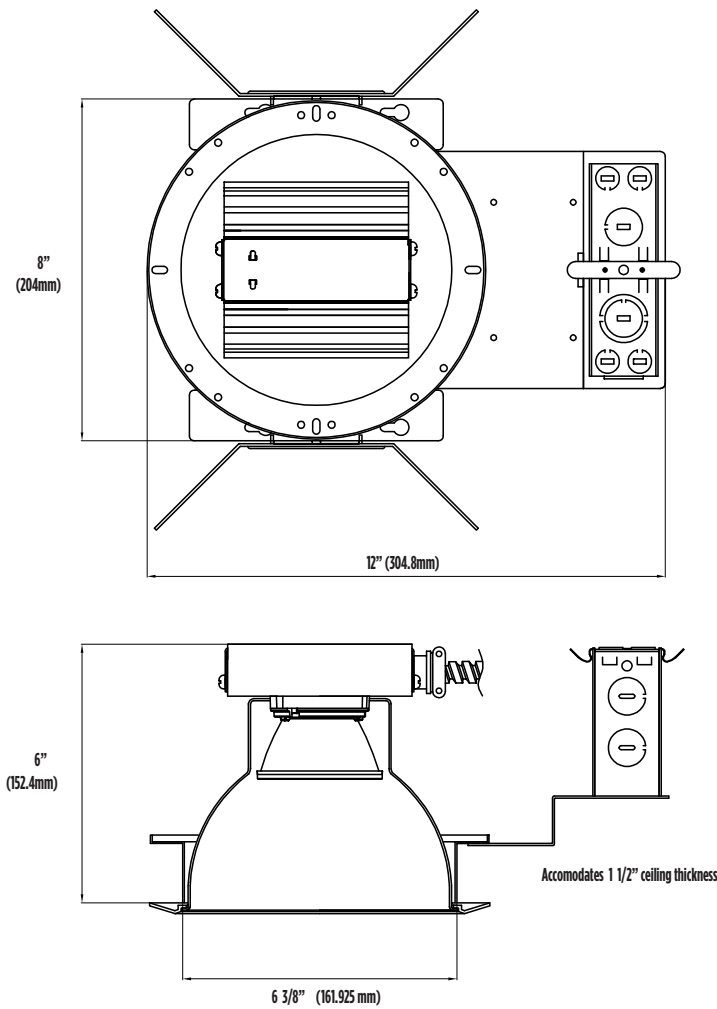
■ Vert. Spread: 66.6°

■ Horiz. Spread 66.6°



6" LED Architectural Downlight

PRODUCT DIMENSIONS

[Back to Quick Links](#)

6" RECESSED DOWNLIGHT REFLECTORS



TR6R - Open Reflector

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



TR6RFL - Frosted Floating Lens

Flangeless
HAZ - Haze semi-diffused
SPC - Specular clear
Integrated white metal trim ring



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/ Kick Reflector

Self-Flange or Flangeless
HAZ - Haze semi-diffused



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