

Catalog # :

Project :

Prepared By :

Date :

Type :



LPASC 1'x4'

LED Low Profile Recessed Troffer



The LPASC's low profile design makes it ideal for shallow plenum applications. Best in class configurable lumen packages and efficiencies that target DLC Standard/Premium. This fixture delivers even illumination with excellent, low angle brightness control throughout the space. Available in 1x4, 2x2, and 2x4.

Features & Specifications

Optical System

- High transmission impact resistant diffuse acrylic radius lens eliminates bright spots from individual LED's and provides high vertical illumination and visual comfort.
- Use of closely spaced medium-power, high brightness chips minimizes pixelation and provides uniform lens luminance.
- Available in 5000K and 4000K color temperatures.
- Minimum CRI of 80. Optional 90 CRI available, consult factory for lead times.

Electrical

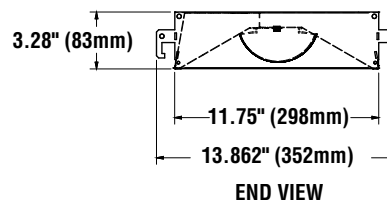
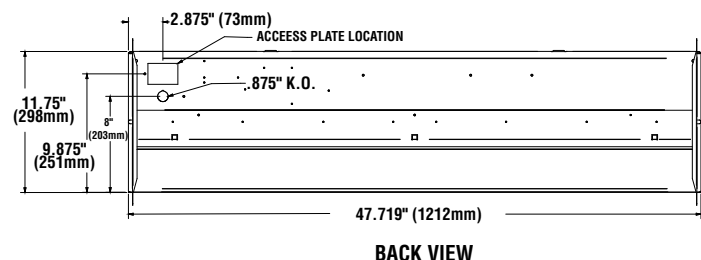
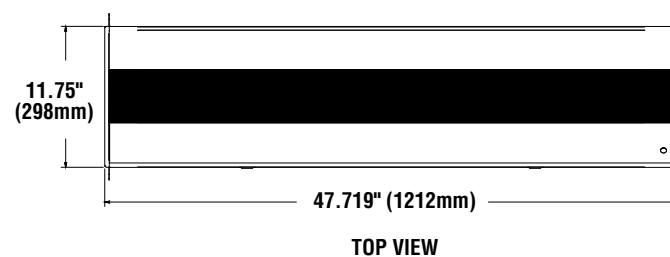
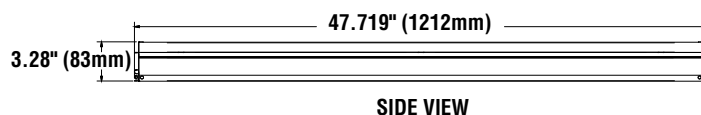
- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (1% - 100%) standard.
- Standard Universal voltage (120-277 Vac) Input 50/60 Hz or optional High voltage (347Vac).
- L70 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2)
- Total harmonic distortion: <20%
- Power factor: >.95
- Input power stays constant over life.
- Optional 120v-277v integral emergency battery pack is available to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed in the housing for ease of maintenance.

Controls

- LSI AirLink™ controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication with other AirLink™ control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and photocell.
- Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.



Dimensions





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Features & Specifications (Cont.)

Construction

- Rigid housing is die-formed 20-gauge cold rolled steel for consistency and strength.
- End plates come equipped with integral NEC compliant earthquake clips.
- Ultra-slim < 4" luminaire height and lightweight design effectively target a broad range of plenum/wall spaces and allow for easy installations.
- Below plenum room side access to optical chamber and driver compartment via pressure removable radius lens and side panel.
- Luminaire is proudly manufactured in the U.S.
- Luminaire is painted after fabrication following treatment with phosphate rust inhibitor. Finish coating of housing reflecting surfaces is with high-reflectance white (minimum 92%) polyester powder.

Installation

- Luminaire installs by lifting it through grid ceiling and resting it on the T-bars.
- Luminaire installs onto standard 15/16" and narrow 9/16" T-grid ceiling systems.
- An accessory flange kit is available for installing into drywall or plaster.

Warranty

- LSI LED Fixtures carry a 5-year warranty.
- 1 Year warranty on optional Battery Back Up. Test regularly in accordance with local codes.

Listings

- Listed to UL 1598 and UL 8750 for 25°C Ambient applications.
- IC Rated.
- DesignLights Consortium® (DLC) Premium and/or standard qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- RoHS Compliant.
- American Recovery and Reinvestment Act Funding Compliant.
- Lighting Facts Approved.
- Suitable For Damp Locations.

Performance

DELIVERED LUMENS*									
Lumens	3000K		3500K		4000K		5000K		Wattage
	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
20L	1946	119.4	1963	120.4	2018	123.8	2152	132.0	16.3
25L	2435	120.0	2457	121.0	2526	124.4	2694	132.7	20.3
30L	2892	120.5	2918	121.6	3000	125.0	3199	133.3	24.0
35L	3381	119.9	3411	121.0	3507	124.4	3740	132.6	28.2
40L	3890	119.0	3925	120.0	4035	123.4	4303	131.6	32.7
45L	4358	125.6	4397	126.7	4520	130.3	4820	138.9	34.7
50L	4887	124.0	4931	125.1	5069	128.7	5406	137.2	39.4
55L	5373	123.5	5421	124.6	5573	128.1	5943	136.6	43.5
60L	5794	122.5	5846	123.6	6010	127.1	6409	135.5	47.3
65L	6284	122.3	6340	123.4	6518	126.8	6951	135.2	51.4
70L	6819	120.5	6880	121.6	7073	125.0	7543	133.3	56.6
75L	7280	119.7	7345	120.8	7551	124.2	8052	132.4	60.8
80L	7510	118.5	7578	119.5	7790	122.9	8307	131.0	63.4

*LED Chips are frequently updated therefore values are nominal.

ELECTRICAL DATA*						
Lumens	Watts	120V	208V	240V	277V	347V
20L	16.3	0.136	0.078	0.068	0.059	0.047
25L	20.3	0.169	0.098	0.085	0.073	0.059
30L	24.0	0.200	0.115	0.100	0.087	0.069
35L	28.2	0.235	0.136	0.118	0.102	0.081
40L	32.7	0.273	0.157	0.136	0.118	0.094
45L	34.7	0.289	0.167	0.145	0.125	0.100
50L	39.4	0.328	0.189	0.164	0.142	0.114
55L	43.5	0.363	0.209	0.181	0.157	0.125
60L	47.3	0.394	0.227	0.197	0.171	0.136
65L	51.4	0.428	0.247	0.214	0.186	0.148
70L	56.6	0.472	0.272	0.236	0.204	0.163
75L	60.8	0.507	0.292	0.253	0.219	0.175
80L	63.4	0.528	0.305	0.264	0.229	0.183

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE ¹					
Ambient Temp C	0 hrs. ²	25K hrs. ²	50K hrs. ³	75K hrs. ³	100K hrs. ³
25	100.00%	94.49%	91.48%	88.47%	85.56%

1 - Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.

2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).



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Luminaire Ordering Guide

TYPICAL ORDER EXAMPLE: **LPASC14 LED 30L UNV DIM1 40 ALC EM10 U**

Family/Size	LED Gen	Lumen Package*	Voltage	Driver	Color Temperature	Controls	Options	Packaging	
LPASC14 - (1x4)	LED	20L - 2000	UNV - 120-277V HV - 347V ¹	DIM1 - Dims to 1% (0-10 volt dimming)	40 - 4000K 50 - 5000K	BLANK - (No Controls)	EM10 - 10 watt Emergency Battery Backup	U - Single Pack JP - Job Pack	
		30L - 3000							
		35L - 3500							
		40L - 4000		SR - Sensor Ready ^{1,3}		ALC - AirLink™ Controller			FC1 - 6' 3/8" (3) #18 Leads (For use in Non-Dimming Applications)
		45L - 4500							
		50L - 5000							
		55L - 5500		SD50 - Step Dimming Driver to 50% ^{3,4}					FC15D - 6' 3/8" (5) #18 Leads (For use in Dimming Applications)
		60L - 6000							
		65L - 6500							
		70L - 7000							
		75L - 7500							
		80L - 8000							FC16DEM - 6' 3/8" (6) #18 Leads (For use in Dimming & EM Applications)
			90C - 90 CRI ^{3,4}						

Accessory Ordering Information (Accessories are field installed)

Description	Order Number
Flange Kit 1x4	FK14

AirLink™ Control Accessories		Order as separate catalog number. Visit http://www.lsi-airlink.com for complete listing of AirLink™ controls.	
Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors
On/Off & Raise Lower	ALWS 3B-(color)-KIT ²	6241032	Wireless 360° 400 ft ² ; Ceiling Mount
			Wireless 180° 3000 ft ² ; Wall Mount
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft ² ; Corner Mount
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length
Commission Laser Kit		634574	
(See Laser warnings)			

Footnotes:

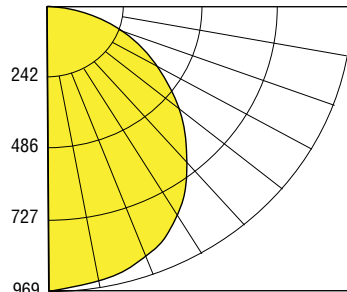
- 1 - Not available with AirLink
- 2 - Available colors are White, Ivory and Light Almond (WH, IV, LA)
- 3 - Consult Factory for lead times
- 4 - Consult factory for DLC qualification information.

Photometry

LPASC14 LED 30L 40

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 <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.



ZONAL LUMEN SUMMARY		
ZONE	LUMENS	% OF LUMINAIRE
0-20	353.0	11.8%
0-30	759.4	25.3%
0-40	1,258.2	41.9%
0-60	2,276.5	75.9%
0-80	2,918.7	97.3%
0-90	2,999.6	100.0%
10-90	2,909.3	97.0%
20-40	905.2	30.2%
20-50	1,432.0	47.7%
40-70	1,416.3	47.2%
60-80	642.2	21.4%
70-80	244.3	8.1%
80-90	80.9	2.7%
90-180	0	0
0-180	2,999.6	100



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Controls



AirLink is LSI's wireless indoor lighting control system. This fixture is compatible with the AirLink system & contains a factory-installed fixture controller (ALC) & sensor (ALOS/ALVS). For further information on these components, you can view their specsheets at www.lsi-airlink.com/airlink

Applications

- Small offices, conference rooms, lounges, classrooms

Features

- Minimum Light Level Setting (optional). Certain applications, such as hallways, may require that the lights never turn off. For these areas, select the minimum light level option and the load will lower to programed low-end level
- Daylighting dims lights down to OFF. Occupancy sensor must go unoccupied (vacant) in order for the fixture sensor to turn the lights off
- Occupancy sensor timeout (fixture sensor): 15 minutes
- Power failure memory: If power is interrupted, connected loads will return to the previous level
- Low-end trim adjustment (default is 1V or ballasts/drivers minimum for Lutron EcoSystem ballasts/drivers). High-end trim adjustment (default is 10V or 100% for Lutron EcoSystem ballasts/drivers)
- Includes integrated power measurement circuit that provides data to the wireless hub with +/- 2% accuracy or 0.5W whichever is higher
- Passive infrared motion detection with exclusive Lutron XCT Technology for major and minor motion detection
- Up to 300 ft² (27.9 m²) major motion coverage and 150 ft² (13.9 m²) minor motion coverage & 360° field-of-view
- Daylight sensor has simple, automatic calibration straight out-of-the-box
- Designed to give a linear response to changes in perceived light level. Detects ambient light level changes from 0 to 150 fc (0 to 1600 lx)

Range

Wireless Sensors & Controls must be located within 60ft (18m) line of sight or 30ft (9m) through walls of the associated control module

Major motion: Movement of a person entering or passing through an area

Minor motion: Movement of a person occupying an area and engaging in small activities (e.g., reaching for a telephone, turning the pages of a book, etc.)

