



Catalog #: _____ Project: _____

Prepared By: _____ Date: _____ Type: _____

1x4 LPEC

Low Profile Recessed Troffer



OVERVIEW

Lumen Range (lm)	1950 - 8450
CCT (K)	3000, 3500, 4000, 5000
Wattage Range (W)	17 - 64
Efficacy Range (LPW)	120 - 139
Weight lbs (kg)	15 (6.8)

QUICK LINKS

[Ordering Guide](#)[Performance](#)[Photometrics](#)[Dimensions](#)

FEATURES & SPECIFICATIONS

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.
- 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.

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.

Electrical

- High-performance programmable driver features overvoltage, under voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 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. 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.
- Sensor Ready Drivers available; consult factory for limitations.

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.
- Suitable For Damp Locations.





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ORDERING GUIDE

[Back to Quick Links](#)TYPICAL ORDER EXAMPLE: **LPEC14 LED 30L UNV SR 40 ALDCS EM10 U**

Family/Size	LED Gen	Lumen Package*	Voltage	Driver	Color Temperature	Controls	Options	Packaging
LPEC14 - (1x4)	LED	20L - 2000 25L - 2500 30L - 3000 35L - 3500 45L - 4500 50L - 5000 55L - 5500 65L - 6500 70L - 7000 75L - 7500 80L - 8000 Custom Lumen Packages ⁶	UNV - 120-277V HV - 347V ¹	DIM1 - Dims to 1% (0-10 volt dimming) ¹ LDE1 - Hi-Lume 1% (with Soft on Fade to Black) ¹ L3D -Lutron Hi-Lume 1% ¹ LDE5 - Lutron 5-Series ¹ SR - Sensor Ready ^{4,5}	30 - 3000K ^{3,4} 35 - 3500K 40 - 4000K 50 - 5000K	BLANK - (No Controls) ALDCS - AirLink/Lutron Integral Fixture Control with motion and daylighting sensing ALDC - AirLink/Lutron Integral Fixture Control (RF only)	EM10- 10 watt Emergency Battery Backup FC1 - 6' 3/8" (3) #18 Leads (For use in Non-Dimming Applications) FC15D - 6' 3/8" (5) #18 Leads (For use in Dimming Applications) FC16DEM - 6' 3/8" (6) #18 Leads (For use in Dimming & EM Applications) 90C - 90 CRI ^{3,4}	U - Single Pack JP - Job Pack

Accessory Ordering Information

Description	Order Number
Flange Kit 1x4	FK14

FOOTNOTES:

- 1 - Not available with ALDCS Control option.
- 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.
- 5 - Required with ALDCS Control option.
- 6 - Custom lumen packages available, please consult factory. Values are within industry standard tolerances and not DLC listed.

AirLink™ Control Accessories Order as separate catalog number.

Wireless switches	Catalog number	Part Number	Wireless Occupancy Sensors	Part Number
On/Off & Raise Lower	ALWS 3B-(color)-KIT ²	6241032	Wireless 360° 400 ft², Ceiling Mount	624094
			Wireless 180° 3000 ft², Wall Mount	632617
Wireless Photocell controls	Catalog number	Part Number	Wireless 90° 2500 ft², Corner Mount	624096
On/Off & Dimming	ALCM-W-PC	624090	Wireless, Hallway 150 ft Length	632620
Commission Laser Kit				
(See Laser warnings)		634574		

PERFORMANCE

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DELIVERED LUMENS									
Lumen Package	3000K CCT		3500K CCT		4000K CCT		5000K CCT		Wattage
	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
20L	1984	120.3	1966	119.2	2047	124.1	2166	131.3	16.5
25L	2448	121.2	2426	120.1	2526	125.0	2673	132.3	20.2
30L	2938	122.4	2911	121.3	3031	126.3	3207	133.6	24.0
35L	3397	120.5	3366	119.4	3505	124.3	3709	131.5	28.2
40L	3904	119.0	3869	117.9	4028	122.8	4262	129.9	32.8
45L	4430	127.7	4389	126.5	4570	131.7	4836	139.4	34.7
50L	4893	126.1	4848	125.0	5048	130.1	5341	137.7	38.8
55L	5342	126.0	5293	124.8	5511	130.0	5831	137.5	42.4
60L	5854	124.8	5801	123.7	6040	128.8	6391	136.3	46.9
65L	6346	124.4	6288	123.3	6547	128.4	6928	135.8	51.0
70L	6860	122.9	6797	121.8	7077	126.8	7488	134.2	55.8
75L	7336	122.1	7269	120.9	7568	125.9	8008	133.2	60.1
80L	7719	121.6	7649	120.5	7964	125.4	8427	132.7	63.5

*LED Chips are frequently updated therefore values are nominal.





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PERFORMANCE (CONT.)

ELECTRICAL DATA*						
Lumens	Watts	120V	208V	240V	277V	347V
20L	16.5	0.138	0.079	0.069	0.060	0.048
25L	20.2	0.168	0.097	0.084	0.073	0.058
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	32.8	0.273	0.158	0.137	0.118	0.095
45L	34.7	0.289	0.167	0.145	0.125	0.100
50L	38.8	0.323	0.187	0.162	0.140	0.112
55L	42.4	0.353	0.204	0.177	0.153	0.122
60L	46.9	0.391	0.225	0.195	0.169	0.135
65L	51.0	0.425	0.245	0.213	0.184	0.147
70L	55.8	0.465	0.268	0.233	0.201	0.161
75L	60.1	0.501	0.289	0.250	0.217	0.173
80L	63.5	0.529	0.305	0.265	0.229	0.183

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

APPLICATION REFERENCE*						
Lumens	Spacing	Lumens	LPW	W/FT2	Avg Fc	# of Luminaires
30L	10' x 8'	3031	126	0.300	35	20
30L	8' x 8'	3031	126	0.375	44	25
30L	8' x 6'	3031	126	0.450	53	30

*Based on a 9' Mtg.Ht., 4K color Temp, 80/50/20 reflectances, 2.5' work plane, LLF:1.0, 40' x 40' Room

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%	95.20%	92.70%	90.20%	87.90%

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).

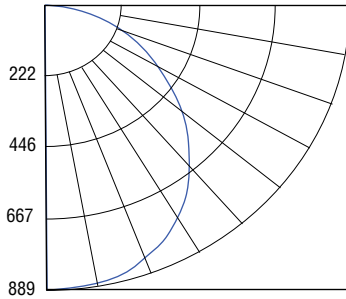
3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).





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PHOTOMETRICS

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LPEC14 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	% Luminaire
0-20	327.6	10.8
0-30	712.9	23.5
0-40	1,199.4	39.6
0-60	2,242.9	74.0
0-80	2,945.6	97.2
0-90	3,030.7	100.0
10-90	2,947.5	97.3
20-40	871.7	28.8
20-50	1,403.4	46.3
40-70	1,468.7	48.5
60-80	702.7	23.2
70-80	277.5	9.2
80-90	85.1	2.8
90-180	0.0	0
0-180	3,030.7	100.0

PRODUCT DIMENSIONS

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