1x4 LPEC
Low Profile Recessed Troffer

OVERVIEW	
Lumen Range (lm)	1,950 - 8,450
CCT (K)	3000, 3500, 4000, 5000 Tunable White
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 22-gauge cold-rolled steel for consistency and strength.

- Luminaire comes equipped with integral NEC-compliant earthquake clips.

- Ultra-slim (< 4") luminaire height and light-weight design effectively targets a broad range of plenum/wall spaces and allows for easy installation.

- Thermally optimized housing allows for direct insulation contact (IC rated).

- Luminaire is treated with phosphate rust inhibitor prior to powder coating. Reflecting surfaces are coated with high-reflectance (minimum 92%) white polyester powder.

- Luminaire is proudly manufactured in the U.S.A.

Optical System

- High-transmission diffuse acrylic radial lens eliminates bright spots from individual LEDs and provides high vertical illuminance and visual comfort.

- Tunable White with digital control option with a CCT range of 2700K - 6500K.

- State of the art LED chips for reliability and extended lumen maintenance.

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) or optional High Voltage (347 VAC) 50/60 Hz input.

- L80 Calculated Life: >100k Hours (See lumen maintenance table on Page 3)

- Total harmonic distortion (THD): <20%

- Power factor: >.95

- Sensor-ready drivers available; consult factory for details.

- Optional 120-277VAC integral emergency battery backup is available to meet critical life-safety standby lighting requirements. A test switch/indicator button is installed in the housing for ease of visibility and maintenance.

Controls

- Available with AirLink™ Blue. AirLink Blue (ALB) is a low-power wireless Bluetooth mesh control system. ALB provides significant energy savings while ensuring code compliance and security. The integrated fixture sensor module can control multiple luminaires based on motion or daylight and events can be scheduled based on time of day or an astronomical clock.

- Available with 3rd party controls. Check out the ordering guide for compatibility.

- Tunable White powered by LSI Airlink™ Blue offers wireless digital CCT tuning between 2700K and 6500K. Tunable White technology provides ultimate flexibility and control to the end user and future-proofs any space.

- Stand-alone integral passive infrared sensor (IMS1) enables motion and daylight sensing. Optional IR remote (REM-SOLO) makes configuration changes easy.

- LSI AirLink™ controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication network with other AirLink™ control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and daylight harvester.

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 luminaires carry a 5-year limited warranty. Refer to https://www.lsiindustries.com/resources/terms-and-warranty.aspx for more information.

Listings

- Listed to UL® 1598 and UL® 8750.

- DesignLights Consortium® (DLC) Premium and/or standard. Not all versions of this product may be DLC listed. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which SKUs are listed.

- Meets Buy American Act (BAA) requirements.

- Title 24 Compliant; see local ordinance for qualification information.

- IC Rated for direct contact with building insulation.

- Suitable for damp locations.

1x4 LPEC Low Profile Recessed Troffer

ORDERING GUIDE

TYPICAL ORDER EXAMPLE:	LPEC14　LED　75L　UNV　DIM1　TW　ALBC　U

Family/Size	LED Gen	Lumen Package*	Voltage	Driver	Color Temperature	Controls	Options	Packaging
LPEC14 - (1x4)	LED	**20L** - 2,000 **25L** - 2,500 **30L** - 3,000 **35L** - 3,500 **40L** - 4,000 **45L** - 4,500 **50L** - 5,000 **55L** - 5,500 **65L** - 6,500 **70L** - 7,000 **75L** - 7,500 **80L** - 8,000 **Custom Lumen Packages**	**UNV** - 120-277VAC **HV** - 347VAC[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] **SR** - Sensor Ready[3,5]	**30** - 3000K[3,4] **35** - 3500K **40** - 4000K **50** - 5000K	**BLANK** - (No Controls) **IMS1** - Integral PIR Motion and Daylight sensor **ALBCSD** - Integrated AirLink™ Blue Wireless Motion and Daylight Harvesting Sensor **WSCS** - Wattstopper LMFS-601 integrated wireless PIR motion/daylight sensor **AVC** - Avi-on LVFA integrated wireless controller single channel **AVCM** - Avi-on IFA integrated wireless controller 5 Amp 120-277VAC **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] **AR** - Air Return	**U** - Single Pack
LPEC14 - (1x4)	LED	**75L** - 7,500	**UNV** - 120-277VAC	**DIM1** - Dims to 1% (0-10 volt dimming) [1]	**TW**[1,7] - Tunable White	**ALBC**[7]	**90C** - 90 CRI[3,4]	**U** - Single Pack

Accessory Ordering Information

Description	Order Number
Flange Kit 1x4	FK14
IR remote configuration tool for IMS1	REM-SOLO
SMK14 - 1x4 Surface Mount Kit	772275

Integral PIR Motion and Daylight Sensor (IMS1)
Low profile sensor provides bi-level control based on motion and/or daylight. All control parameters are adjustable using the IR remote (sold separately).

Click here to learn more about IMS1

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		

FOOTNOTES:
1 - Not available with ALDCS Control option.
2 - Consult factory for other colors
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.
7 - Only available with 120-277VAC input

PERFORMANCE

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	1,984	120.3	1,966	119.2	2,047	124.1	2,166	131.3	16.5
25L	2,448	121.2	2,426	120.1	2,526	125.0	2,673	132.3	20.2
30L	2,938	122.4	2,911	121.3	3,031	126.3	3,207	133.6	24.0
35L	3,397	120.5	3,366	119.4	3,505	124.3	3,709	131.5	28.2
40L	3,904	119.0	3,869	117.9	4,028	122.8	4,262	129.9	32.8
45L	4,430	127.7	4,389	126.5	4,570	131.7	4,836	139.4	34.7
50L	4,893	126.1	4,848	125.0	5,048	130.1	5,341	137.7	38.8
55L	5,342	126.0	5,293	124.8	5,511	130.0	5,831	137.5	42.4
60L	5,854	124.8	5,801	123.7	6,040	128.8	6,391	136.3	46.9
65L	6,346	124.4	6,288	123.3	6,547	128.4	6,928	135.8	51.0
70L	6,860	122.9	6,797	121.8	7,077	126.8	7,488	134.2	55.8
75L	7,336	122.1	7,269	120.9	7,568	125.9	8,008	133.2	60.1
80L	7,719	121.6	7,649	120.5	7,964	125.4	8,427	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 (AMPS)* - TUNABLE WHITE

Lumens	Watts	120V	208V	240V	277V
75L	63	0.53	0.30	0.26	0.23

*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'	3,031	126	0.300	35	20
30L	8' x 8'	3,031	126	0.375	44	25
30L	8' x 6'	3,031	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%	95.20%	92.70%	90.20%	87.90%

RECOMMENDED LUMEN MAINTENANCE[1] - TUNABLE WHITE

Ambient Temp C	0 hrs.[2]	25K hrs.[2]	50K hrs.[3]	75K hrs.[3]	100K hrs.[3]
25 C	100%	95%	91%	87%	83%

SCALING FACTORS - TUNABLE WHITE

CCT	Lumens	Wattage
2700K	0.95	1.05
3000K	0.97	1.02
3500K	0.99	1.01
4000K	1.00	1.00
5000K	1.00	1.01
6500K	0.98	1.05

1 - Lumen maintenance values at 25℃ 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).
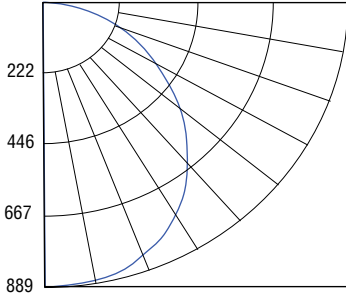
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PHOTOMETRICS

All published luminaire photometric testing performed to IESNA LM-79 standards by a certified laboratory. For complete specifications and IES files, see website. See http://www.lsi-industries.com/products/led-lighting-solutions.aspx for detailed photometric data.

LPEC14 LED 30L 40

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

47.029" (1195mm)

47.719" (1212mm)

SIDE VIEW

11.75" (298mm)

3.625" (92mm) 2.25" (57mm)

13.875" (352mm)

END VIEW

47.719" (1212mm)

11.75" (298mm)

TOP VIEW

11.75" (298mm)

4.375" (111mm) 3" (76mm)

END VIEW - Air Return Option

4.36" (111mm)

47.719" (1212mm)

ACCESS PLATE LOCATION

.875" K.O.

11.75" (298mm)

BACK VIEW