

Project	
Notes	
Type	Date
Cat. No.	

LLS™ XE Series

LED Linear Strip Luminaire

DESCRIPTION

The Aleo LLS™ XE Series Linear Strip Luminaire delivers industry-leading performance with deep energy savings and continuous dimming. Low profile design offers easy handling and storage. This versatile luminaire produces energy-efficient, comfortable illumination for a myriad of applications.

APPLICATIONS

Excellent for general utility applications: Parking garage, warehouse, offices, restrooms, storage units, stairwell.



LLS Series

4' 25W, 26W 41W
8' 52W, 68W, 78W



Specification Features

Construction

Integral LED gear tray and reflector with driver on board allows for easy installation and handling. Luminaire features matte white durable finish. Diffuser requires no additional frame or fastener for easy installation.

Optical System

Reflector systems features highly reflective coating and delivers balanced, comfortable illuminance for productive spaces. Diffuser lens reduces glare and improves occupant comfort while maintaining high efficiency emission.

Certification

UL Listed. All components have UL certification. UL Class 2. Driver: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2. DLC Premium.

Warranty

7-year Limited Warranty. See warranty documentation for more information.

Electrical

Luminaire utilizes high-efficacy LED packages maintained at cool temperatures for long life, high efficacy. Reliable driver features continuous dimming. Universal voltage (120-277V) for convenient installation. Comes equipped with luminaire quick-disconnect.

Installation / Mounting

Luminaire back housing includes holes and slots for various mounting methods. V-hook hangers available for suspension mount.

Controls / Dimming

Continuous dimming (0-10V) comes standard. Suitable for use with dimmers, sensors, daylight harvesting and other control strategies to achieve deeper energy-savings and code compliance. Sensor accessory available: occupancy sensing with daylight cut-off.

Rated Life 75,000 hours
Limited Warranty 7-years
Efficacy Up to 130 LPW
Continuous Dimming



Quick Ship

LLS-4HE-25/840 XE G3
LLS-4HE-25/850 XE G3
LLS-8HE-52/840 XE G3
LLS-8HE-52/850 XE G3
LLS-8H-68/8XX XE
LLS-8VHE-78/850 XE

Ordering Information

Example: LLS-8HE-52/840 XE G2

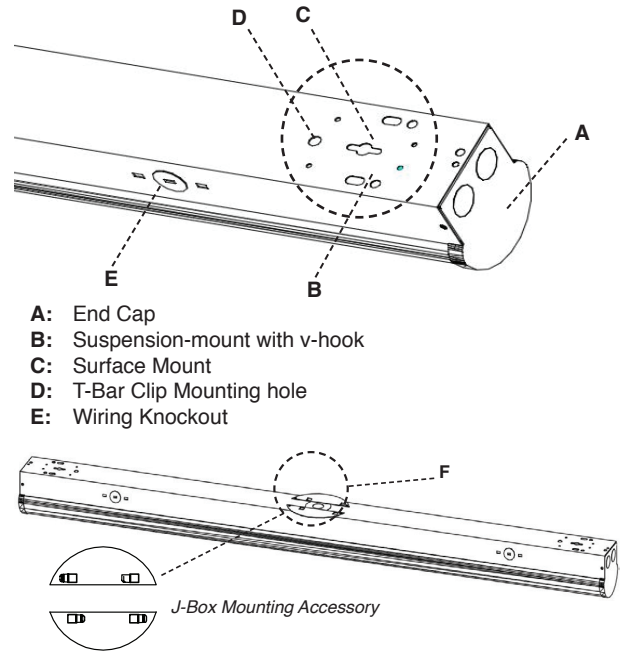
LLS	8	HE	52	8	40	[Blank]	Options
Series LLS LED Linear Strip Luminaire	Form Factor 4 4' 8 8'	Lumen Package LE Low Wattage HE High Lumen VHE Very High Lumen	Nom. Wattage 25 25W (4') 26 26W (4') 41 41W (4') 52 52W (8') 68 68W (8') 78 78W (8')	CRI 8 83+	Color Temp 40 4000K 50 5000K	Dimming Blank 0-10V Continuous Dimming	Emergency Backup EM700 700lm EM1400 1400lm EM2000 2000lm
						Controls¹ OS Occupancy Sensor OSDL Occ. Sensor w/ Daylight WA Fixture-integrated high-end trim	
						* Contact factory for other control options and wireless capabilities	
						¹ See page 3 for factory pre-commissioned sensor options	

Specifications and Dimensions subject to change without notice.

Performance Summary

Input Voltage	120V-277V
Input Frequency	50/60 Hz
Rated Wattage	See Performance Table
Delivered Lumens	See Performance Table
Efficacy	> 127 LPW (typ.)
CRI	83+, R9 > 0
Available CCT ¹	4000K, 5000K
Color Consistency ²	5-step MacAdam Ellipse
Rated Life	75,000 hours
L70 ³	> 72,000 hours
Power Factor	> 0.9
THD	< 20%
Dimming	0-10V Continuous (10-100%)

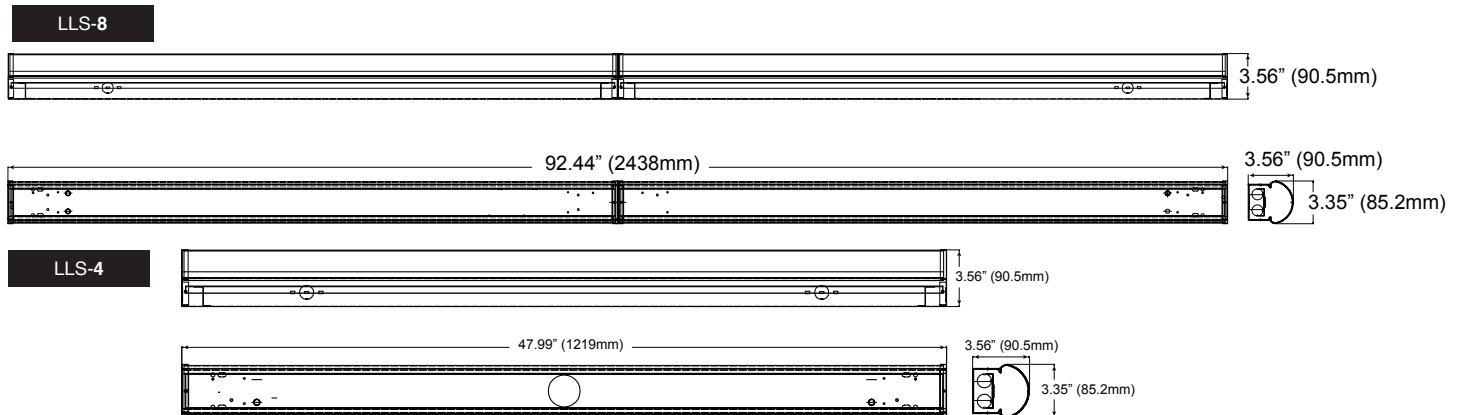
Mounting Information



Performance Data

Form Factor	Catalog No.	Rated Wattage (W)	Tested Wattage (W)	4000K		5000K	
				Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)
4'	LLS-4HE-25/8XX XE	25	25	3325	133	3350	134
	LLS-4HE-26/8XX XE	26	25.6	3380	130	3406	131
	LLS-4VHE-41/8XX XE	41	37.3	5330	130	5412	132
8'	LLS-8HE-52/8XX XE	52	-	6916	133	6968	134
	LLS-8H-68/8XX XE	68	65	8636	127	8704	128
	LLS-8VHE-78/8XX XE	78	76.5	10140	130	10296	132

Product Dimensions



NOTES:

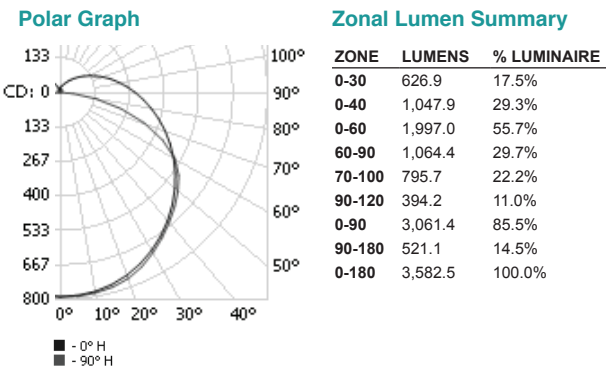
- Quick ship: 4000K. Other CCTs may require a lead time or be special order
- Typical color consistency. May vary or be changed.
- L70 hours calculated based on LED package manufacturer LM80 report and ISTMT report of LED in luminaire. Stated values are for select catalog numbers. Contact manufacturer for detailed information

Specifications and Dimensions subject to change without notice.



Photometric Data

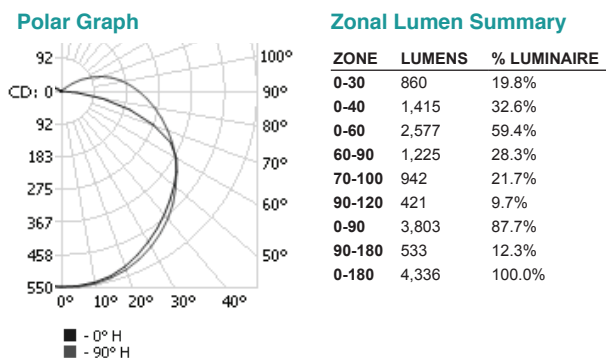
LLS-4HE-26/830 Tested in accordance to IESNA LM-79



Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%

RCC%	80				70				50	
	70	50	30	0	70	50	30	0	50	30
RW%										
RCR										
0	1.16	1.16	1.16	1.16	1.11	1.11	1.11	0.85	1.03	1.03
1	1.02	0.96	0.91	0.86	0.98	0.93	0.88	0.66	0.86	0.82
2	0.92	0.82	0.74	0.68	0.88	0.79	0.72	0.53	0.73	0.67
3	0.83	0.71	0.62	0.55	0.79	0.68	0.6	0.44	0.63	0.56
4	0.75	0.62	0.53	0.45	0.72	0.6	0.51	0.37	0.56	0.48
5	0.69	0.55	0.46	0.39	0.66	0.53	0.44	0.32	0.49	0.42
6	0.64	0.49	0.4	0.33	0.61	0.48	0.39	0.27	0.44	0.37
7	0.59	0.45	0.35	0.29	0.56	0.43	0.34	0.24	0.4	0.33
8	0.55	0.4	0.32	0.26	0.52	0.39	0.31	0.22	0.37	0.29
9	0.51	0.37	0.29	0.23	0.49	0.36	0.28	0.19	0.34	0.26
10	0.48	0.34	0.26	0.2	0.46	0.33	0.25	0.17	0.31	0.24

LLS-4VHE-41/840 Tested in accordance to IESNA LM-79



Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%

RCC%	80				70				50	
	70	50	30	0	70	50	30	0	50	30
RW%										
RCR										
0	1.16	1.16	1.16	1.16	1.12	1.12	1.12	0.88	1.04	1.04
1	1.03	0.97	0.92	0.87	0.99	0.94	0.89	0.69	0.87	0.83
2	0.93	0.83	0.76	0.69	0.89	0.8	0.73	0.56	0.75	0.69
3	0.84	0.73	0.64	0.56	0.8	0.7	0.62	0.47	0.65	0.58
4	0.77	0.64	0.54	0.47	0.73	0.62	0.53	0.4	0.58	0.5
5	0.7	0.57	0.47	0.4	0.67	0.55	0.46	0.34	0.51	0.44
6	0.65	0.51	0.42	0.35	0.62	0.49	0.41	0.3	0.46	0.39
7	0.6	0.46	0.37	0.31	0.57	0.45	0.36	0.26	0.42	0.34
8	0.56	0.42	0.33	0.27	0.54	0.41	0.32	0.24	0.38	0.31
9	0.52	0.38	0.3	0.24	0.5	0.37	0.29	0.21	0.35	0.28
10	0.49	0.35	0.27	0.22	0.47	0.34	0.27	0.19	0.33	0.26

Control Pre-Commissioning

Example: LLS-4HE-26/840 XE-OSDL L2-10H-3L-10M-30M-5S-30S

L2	10H	3L	10M	30M	5S	30S
Lens / Coverage	High Level	Low Level	Time Delay	Cut-Off	Ramp Up	Fade Down
L2 8' height (48' dia.)	10H 100%	1L 10%	30S 30 sec.	#M 1-59 min.	#S 1-60 sec.	#S 1-60 sec.
L3 20' height (40' dia.)	9H 90%	2L 20%	#M 1-30 min.	#H 1-5 hrs.	0 Disabled	0 Disabled
L4 40' height (60' dia.)	8H 80%	3L 30%	# = enter no. of minutes from 1 to 30 min.	0 Disabled		
L7 40' height (100' dia.)	7H 70%	4L 40%		# = enter no. of minutes or hours		
	6H 60%	5L 50%				
	5H 50%	6L 60%				
		7L 70%				

High Level When the sensor detects motion the dimming control output ramps up to the selected HIGH light level.

Low Level After the sensor stops detecting motion and the time delay expires the dimming control output fades down to the selected LOW light level.

Time Delay The selected time period that must elapse after the last time the sensor detects motion for the electric lights to fade to LOW mode

Cut-Off The time period that must elapse after the lights fade to LOW mode and the sensor detects no motion for the electric lights to turn OFF.

Ramp Up Time period for light level to increase from LOW to HIGH.

Fade Down Time period for light level to decrease from HIGH to LOW.

