



PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

## INFINITY LED LINEAR STRIP

## ILL Series

Infinity LED Linear Luminaire

### DESCRIPTION

The Alphalite ILL Series makes it an ideal choice for size restricted architecture applications. The ILL Series can be the illumination solution in commercial, industrial, retail and residential applications. Fixtures can be used in storage/utility areas, coves, display cases, shops, task and general area lighting.

### APPLICATION

Versatile solution for general purpose applications. Ideal for parking garages, corridors, hallways, stairwells, offices, closets, storage rooms, warehouse, manufacturing facilities, and spaces that demand energy demand reduction and high quality light.



### SPECIFICATION FEATURES

#### Benefits

- Lower installation costs and maintenance costs
- Attractive ROI
- Ideal for use with sensors and advanced controls
- Lower energy costs
- High quality light for a more productive space
- Convenient access to replaceable, standard components reduces life cycle costs

#### Construction

Reflector utilizes highly reflective powder coat finish. Diffuser lens provides even and consistent light while eliminating pixelation. Tool-less removal of diffuser allows access to LED array. LED module and driver are replaceable. Housing and optics maintain damp location rating with all internal components.

#### Finish

Highly reflective finish. Baked white paint, applied after fabrication.

#### Electrical

Luminaire utilizes long life, high efficacy LEDs and a highly efficient, reliable LED driver. 120V-277V input voltage for increased versatility. 0-10V continuous dimming comes standard. Ideal when used in conjunction with controls and sensors. Comes equipped with quick disconnect for compliance with US code.

#### Optics

The ILL's LED light engine and integrated optics delivers enhanced light quality and distribution. Precision-formed diffuser and reflector are designed LED light consistently, reducing glare and pixelation.

#### Certifications / Regulatory

All components used have UL approval. UL Class 2. Power supply: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2.

#### Warranty

7-year limited warranty. See complete warranty terms for details.

### Quick Ship Product

- ILL-4L(23S)/835
- ILL-4L(23S)/840
- ILL-4L(23S)/850
- ILL-4H(32S)/840
- ILL-4H(32S)/850
- ILL-4H(46S)/840
- ILL-8L(38S)/840
- ILL-8H(54S)/850
- ILL-8H(65S)/840

## ORDERING INFORMATION

Sample Number: ILL-8H(65S)/840

ILL	8	H	8	40	(Blank)	(Blank)
Series	Form Factor	Lumen Package	CRI	CCT	Input Voltage	Dimming
ILL - LED Linear Strip	2 - 2' 4 - 4' 8 - 8'	VL - Very Low Wattage L - Low Wattage H - High Lumen VH - Very High Lumen *See energy data for details	8 - 83+ CRI	35 - 3500K 40 - 4000K 50 - 5000K	(Blank) - 120V-277V	(Blank) - 0-10V Continuous Dimming

### Options

#### Controls

- PIR** - PIR Occupancy On/Off Sensor
- OS** - Integrated step dimming PIR occupancy sensor (Requires OS-618-RC101 Sensor Configuration Tool, Not Included)
- MMS** - Integrated step dimming microwave motion sensor with sync function
- DL** - Integrated daylight harvesting
- SMC** - Smart Control System

#### Emergency Backup (Lumen will maintain over the 90-minute duration)

- EM700 - 700lm
- EM1400 - 1400lm
- EM2000 - 2000lm

SUMMARY

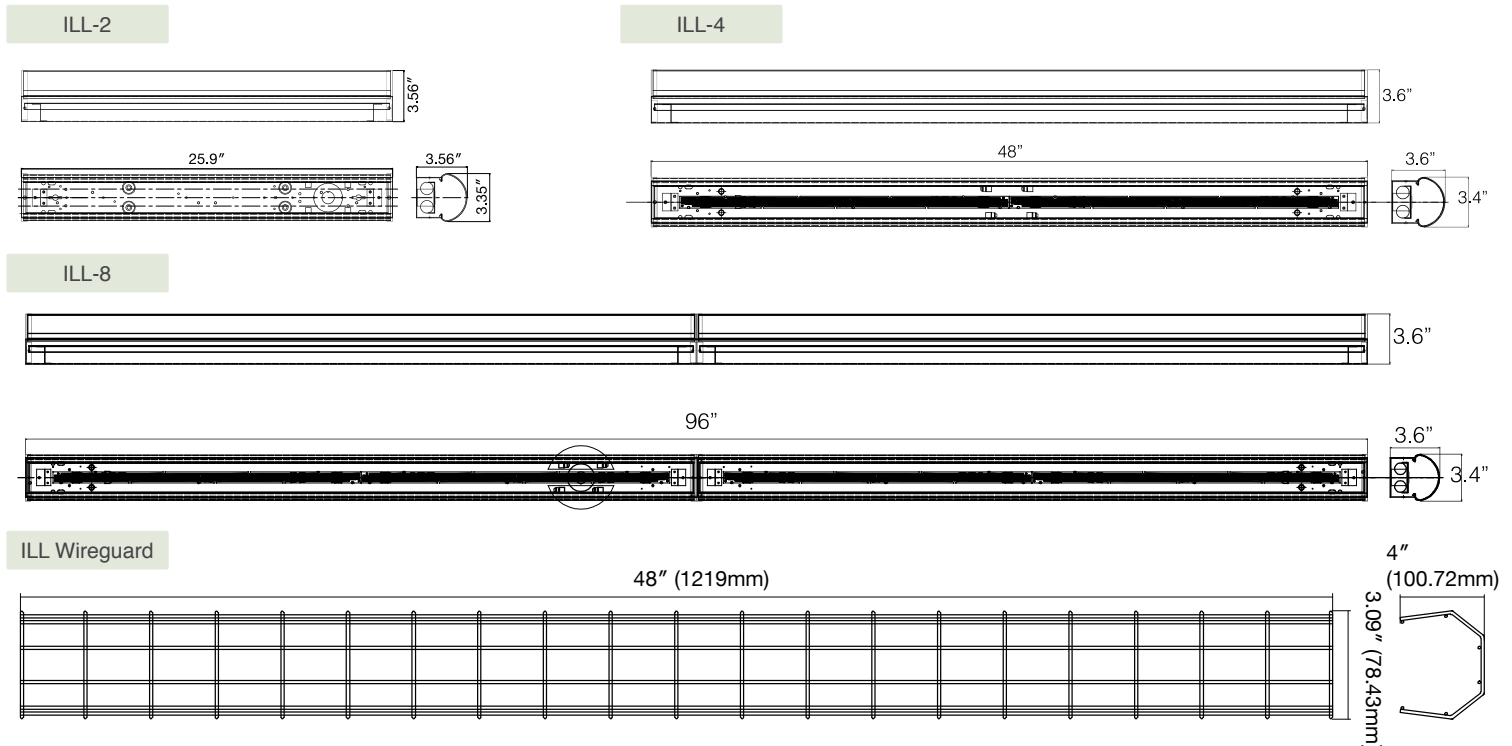
Input Voltage	120V-277V
Input Power	See energy data for details
Power Factor	> 0.90
THD (Max.)	10%
Efficacy	> 125 LPW
Delivered Lumens	See energy data for details
Controls/ Dimming	Full Range 0-10V dimming standard
Dimming Range	10-100%
CRI	> 80
CCT	3500K, 4000K, 5000K
Operating Temp.	-20- +55C
Rated Life	70,000 hours

ENERGY PERFORMANCE DATA

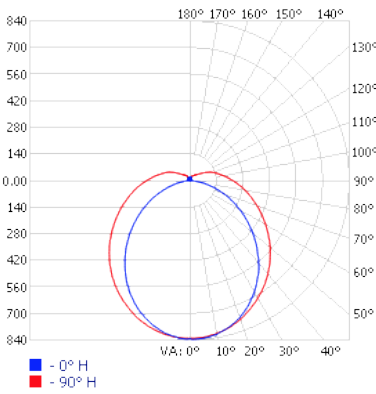
Form Factor	Part No.	Rated Wattage (W)	Tested Wattage (W)	Delivered Lumens (lm)	Efficacy (lm/W)	
8'	ILL-8L(38S)/835	38	37	4742	129	
	ILL-8L(38S)/840			4940	130	
	ILL-8L(38S)/850			4978	131	
	8'	ILL-8H(54S)/835	54	54	7128	132
		ILL-8H(54S)/840			7182	133
		ILL-8H(54S)/850			7315	135
	8'	ILL-8H(65S)/835	65	65	8450	130
		ILL-8H(65S)/840			8580	132
		ILL-8H(65S)/850			8645	133
	8'	ILL-8VH(90S)/835	90	90	11520	128
		ILL-8VH(90S)/840			11700	130
		ILL-8VH(90S)/850			11790	131
4'	ILL-4VL(18S)/835	18	17	2152	126	
	ILL-4VL(18S)/840			2340	130	
	ILL-4VL(18S)/850			2339	129	
	4'	ILL-4L(23S)/835	23	22	2750	125
		ILL-4L(23S)/840			2990	130
		ILL-4L(23S)/850			2989	130
	4'	ILL-4H(32S)/835	32	30	3811	128
		ILL-4H(32S)/840			4224	132
		ILL-4H(32S)/850			4256	133
	4'	ILL-4H(46S)/835	46	45	5679	127
		ILL-4H(46S)/840			5980	130
		ILL-4H(46S)/850			6026	131
2'	ILL-2L(20S)/835	20	19	2348	126	
	ILL-2L(20S)/840			2600	130	
	ILL-2L(20S)/850			2432	131	

PHYSICAL PARAMETERS

DIMENSION



ILL-4L(23S)/835



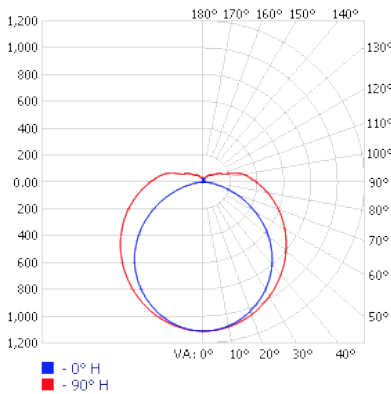
Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	638.3	21.60%
0-40	1,040.50	35.10%
0-60	1,845.70	62.30%
60-90	764.5	25.80%
70-100	566.1	19.10%
90-120	272	9.20%
0-90	2,610.20	88.20%
90-180	350.1	11.80%
0-180	2,960.30	100%

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80		70		50		30		10		0							
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0	1.16	1.16	1.16	1.16	1.12	1.12	1.12	0.88	1.05	1.05	0.98	0.98	0.98	0.91	0.91	0.88		
1	1.04	0.98	0.93	0.89	1	0.95	0.9	0.7	0.88	0.85	0.81	0.82	0.79	0.77	0.74	0.72	0.69	
2	0.94	0.85	0.77	0.71	0.9	0.82	0.75	0.58	0.76	0.71	0.66	0.71	0.66	0.62	0.66	0.63	0.59	0.56
3	0.85	0.74	0.65	0.58	0.82	0.71	0.63	0.49	0.67	0.6	0.54	0.62	0.57	0.52	0.58	0.54	0.5	0.47
4	0.78	0.65	0.56	0.49	0.75	0.63	0.55	0.41	0.59	0.52	0.46	0.55	0.49	0.44	0.52	0.47	0.42	0.4
5	0.71	0.58	0.49	0.42	0.68	0.56	0.48	0.36	0.53	0.45	0.4	0.5	0.43	0.38	0.47	0.41	0.37	0.34
6	0.66	0.52	0.43	0.36	0.63	0.51	0.42	0.32	0.48	0.4	0.35	0.45	0.38	0.33	0.42	0.37	0.32	0.3
7	0.61	0.47	0.38	0.32	0.59	0.46	0.38	0.28	0.43	0.36	0.31	0.41	0.34	0.3	0.38	0.33	0.28	0.26
8	0.57	0.43	0.34	0.29	0.55	0.42	0.34	0.25	0.4	0.32	0.27	0.37	0.31	0.26	0.35	0.3	0.25	0.23
9	0.53	0.39	0.31	0.26	0.51	0.38	0.31	0.23	0.36	0.29	0.24	0.34	0.28	0.24	0.33	0.27	0.23	0.21
10	0.5	0.36	0.28	0.23	0.48	0.35	0.28	0.21	0.34	0.27	0.22	0.32	0.26	0.22	0.3	0.25	0.21	0.19

ILL-4H(32)/835



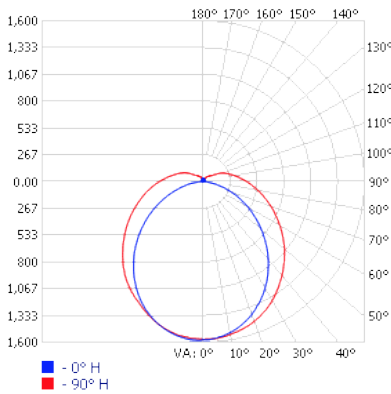
Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	860.4	19.80%
0-40	1,414.70	32.60%
0-60	2,577.40	59.40%
60-90	1,225.10	28.30%
70-100	941.8	21.70%
90-120	421.2	9.70%
0-90	3,802.50	87.70%
90-180	533.3	12.30%
0-180	4,335.70	100%

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80		70		50		30		10		0							
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0	1.16	1.16	1.16	1.16	1.12	1.12	1.12	0.88	1.04	1.04	1.04	0.97	0.97	0.97	0.91	0.91	0.91	0.88
1	1.03	0.97	0.92	0.87	0.99	0.94	0.89	0.69	0.87	0.83	0.8	0.81	0.78	0.75	0.75	0.73	0.71	0.68
2	0.93	0.83	0.76	0.69	0.89	0.8	0.73	0.56	0.75	0.69	0.64	0.7	0.65	0.61	0.65	0.61	0.57	0.54
3	0.84	0.73	0.64	0.56	0.8	0.7	0.62	0.47	0.65	0.58	0.53	0.61	0.55	0.5	0.57	0.52	0.48	0.45
4	0.77	0.64	0.54	0.47	0.73	0.62	0.53	0.4	0.58	0.5	0.44	0.54	0.47	0.42	0.5	0.45	0.4	0.38
5	0.7	0.57	0.47	0.4	0.67	0.55	0.46	0.34	0.51	0.44	0.38	0.48	0.41	0.36	0.45	0.39	0.35	0.32
6	0.65	0.51	0.42	0.35	0.62	0.49	0.41	0.3	0.46	0.39	0.33	0.43	0.37	0.32	0.41	0.35	0.3	0.28
7	0.6	0.46	0.37	0.31	0.57	0.45	0.36	0.26	0.42	0.34	0.29	0.39	0.33	0.28	0.37	0.31	0.27	0.25
8	0.56	0.42	0.33	0.27	0.54	0.41	0.32	0.24	0.38	0.31	0.26	0.36	0.3	0.25	0.34	0.28	0.24	0.22
9	0.52	0.38	0.3	0.24	0.5	0.37	0.29	0.21	0.35	0.28	0.23	0.33	0.27	0.22	0.31	0.26	0.22	0.2
10	0.49	0.35	0.27	0.22	0.47	0.34	0.27	0.19	0.33	0.26	0.21	0.31	0.25	0.2	0.29	0.24	0.2	0.18

ILL-4H(46S)/835



Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	1,209.10	21.40%
0-40	1,973.30	35%
0-60	3,508.40	62.20%
60-90	1,464.60	26%
70-100	1,083.60	19.20%
90-120	521.5	9.20%
0-90	4,973.00	88.20%
90-180	664.9	11.80%
0-180	5,638.00	100%

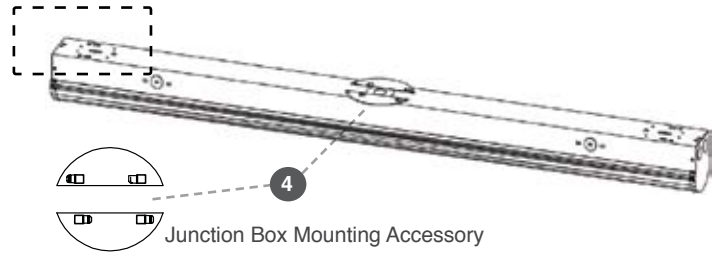
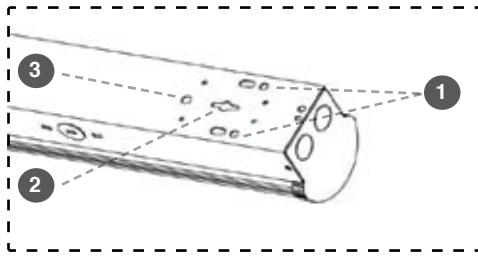
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RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0	1.16	1.16	1.16	1.16	1.12	1.12	1.12	0.88	1.05	1.05	1.05	0.98	0.98	0.98	0.91	0.91	0.91	0.88
1	1.04	0.98	0.93	0.89	1	0.95	0.9	0.7	0.88	0.85	0.81	0.82	0.79	0.77	0.77	0.74	0.72	0.69
2	0.94	0.85	0.77	0.71	0.9	0.82	0.75	0.58	0.76	0.71	0.66	0.71	0.66	0.62	0.66	0.63	0.59	0.56
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7	0.61	0.47	0.38	0.32	0.59	0.46	0.37	0.28	0.43	0.36	0.3	0.41	0.34	0.29	0.38	0.33	0.28	0.26
8	0.57	0.43	0.34	0.28	0.54	0.42	0.34	0.25	0.39	0.32	0.27	0.37	0.31	0.26	0.35	0.3	0.25	0.23
9	0.53	0.39	0.31	0.25	0.51	0.38	0.3	0.23	0.36	0.29	0.24	0.34	0.28	0.24	0.33	0.27	0.23	0.21
10	0.5	0.36	0.28	0.23	0.48	0.35	0.28	0.2	0.34	0.27	0.22	0.32	0.26	0.21	0.3	0.25	0.21	0.19

## MOUNTING INFORMATION

ILL Series

- 1: Suspension Mount
- 2: Surface Mount
- 3: T-Bar Clip Mount
- 4: Junction Box Mount



## CONTROL OPTION

### -MMS control pre-commissioning

Sample Number: -MMS (5-3M-L3-S10M)

10	3M	L3	S10M	(Blank)	
<b>Detection Area</b> 5 - 50% 1 - 10%	<b>Hold Time</b> 20M - 20 min. 3M - 3 min. 90S - 90 sec. 30S - 30 sec. 5S - 5 sec. N - ∞	<b>Low Mode</b> L5 - 50% L3 - 30% L2 - 20% L1 - 10%	<b>Stand-by Period</b> SN - ∞ S1H - 1 hr. S30M - 30 min. S10M - 10 min. S5M - 5 min. S5S - 5 sec. (Blank) - Disable	<b>Daylight Sensor</b> (Blank) - Disable D100 - 100 lux D50 - 50 lux D25 - 25 lux D10 - 10 lux D5 - 5 lux D2 - 2 lux	
<p><b>Detection Area:</b> Detection area can be reduced to fit precisely each application.</p> <p><b>Hold Time:</b> The time period the luminaire remains at 100% illumination after no motion detected.</p> <p><b>Low Mode:</b> The selected low light level after the hold time.</p> <p><b>Stand-by Period:</b> The time period the luminaire remains at "Low Mode" before it completely switched off in the long absence of people. When set to "∞" mode, the low light level is maintained until motion is detected.</p> <p><b>Daylight Sensor:</b> The sensor can be set to only allow the luminaire to illuminate below a defined ambient brightness threshold. When set to "Disable" mode, the daylight sensor will switch on the luminaire when motion is detected regardless of ambient light level.</p> <p>**Noted that daylight sensor is active only when the luminaire switches off**</p>					

### -OS control pre-commissioning

Sample Number: -OS (L2-5M-L3-S10M)

L2	(Blank)	5M	L3	S10M	(Blank)	(Blank)	(Blank)
<b>Lens / Coverage</b> L2 - 8'H (48' dia.) L3 - 20'H (40' dia.) L4 - 40'H (60' dia.) L7 - 40'H (100' dia.)	<b>High Mode</b> (Blank) - 100% H9 - 90% H8 - 80% H7 - 70%	<b>Hold Time</b> #M - 1-30 min. 30S - 30 sec.	<b>Low Mode</b> L5 - 50% L3 - 30% L2 - 20% L1 - 10%	<b>Stand-by Period</b> SN - ∞ S#H - 1-5 hrs. S#M - 1-59 min. (Blank) - Disable	<b>Ramp Up</b> (Blank) - Disable #Up - 1-60 sec.	<b>Fade Down</b> (Blank) - Disable #Dn - 1-60 sec.	<b>Photocell On/Off</b> (Blank) - Disable PS - Active
<p><b>High Mode:</b> The selected high light level when motion detected.</p> <p><b>Hold Time:</b> Time period the luminaire remains at "High Mode" after no motion detected.</p> <p><b>Low Mode:</b> The selected low light level after the hold time.</p> <p><b>Stand-by Period:</b> Time period the luminaire remains at "Low Mode" before it completely switched off in the long absence of people. When set to "∞" mode, the low light level is maintained until motion is detected.</p> <p><b>Ramp Up:</b> Time period for light level to increase from LOW to HIGH.</p> <p><b>Fade Down:</b> Time period for light level to decrease from HIGH to LOW.</p> <p><b>Photocell On/Off:</b> When the light level exceeds this setting, the lights will turn off even when the space is occupied. Once the light level exceeds this setting, the sensor will wait and monitor for a short period of time in order to confirm the light level increase is not temporary before forcing the lights to go off. When light level goes below the settings, the light will turn on even without motion detection. This feature is disabled by default. If using this setting in combination with the Hold Off set-point, there must be at least 10fc of dead band between the two settings. The Photocell set-point is automatically set to maintain at least 10fc of dead band above the Hold time set-point to help avoid load cycling.</p>							