

# Metalux AP Series

## DESCRIPTION

The Metalux ST commercial LED strip light is a DLC listed, full width strip with 40% energy savings as compared to a similar output fluorescent fixture. The ST is ideal for retrofit applications as no painting is required and the circular lens exterior matches the aesthetic of a traditional fluorescent strip light. Standard features include an aligner bracket that enables clean continuous row mounting as well as a tool-less channel cover and surface/toggle/chain mount options to simplify installation and reduce labor costs. The series comes standard with a 5 year warranty.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Construction

- Die formed post painted white steel construction
- Continuous row mount aligner included. U-bracket aligner type on ST2 models only
- Snap and lock tool-less channel cover for easy maintenance
- Powder coated white finish for a clean exterior
- Two channel widths: ST1 – 1.8" wide and ST2 – 3.6"
- Available sizes: 2ft, 4ft and 8ft lengths

### Electrical

- Universal voltage (120V-277V) non-dimming driver
- L70 at 50,000 rated life-hours (TM-21), or up to 20 years at 7 hrs/day
- 4000K CCT LEDs
- 80 CRI LEDs

### Emergency Battery Pack Option

- Field installed remote mount UNV battery pack available, 7 and 14 watts, ships separately
- Batteries provide 90 minutes of backup power
- Factory installed battery pack not available

### Shielding

- Classic single or double fluorescent tube exterior
- Impact resistant, UV-stabilized frosted acrylic lens
- Standard LED blended optics for wide area coverage up to 15' mounting
- ST1=single lens; ST2=double lens

### Installation

- Surface or suspended mount capable
- ST1 can be chain mounted using standard AYC chain-set

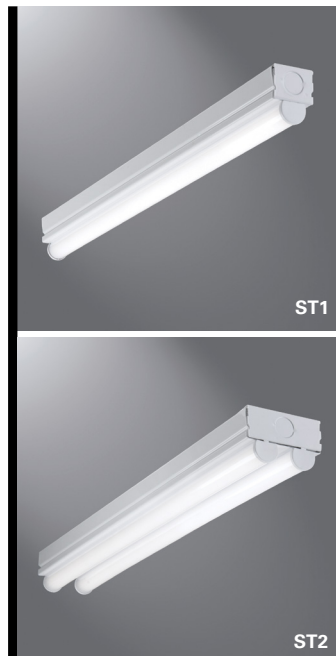
- ST2 uses HBAYC hanger or toggle mounting kits
- Channel and end knockouts (7/8") for conduit entry and continuous row
- Wire nuts and aligners included

### Compliance

- UL/cUL listed for damp location
- Rated for 0F (-20C) to 104F (40C) ambient operating temperatures
- RoHS compliant
- LED complies with IESNA LM-79 and LM-80
- DesignLights Consortium® Qualified and classified for DLC Standard, refer to www.designlights.org for details
- NFPA-70 and NEC 410.16 for closet storage space installations

### Warranty

- Five year warranty



	Feature	Benefit
Performance	Up to 118 lm/W, 50K life hours at L70	40% energy savings versus LFL strips
	DLC® certification	Potential for energy rebates
	5-year warranty	Certified and guaranteed performance
	Length & width match LFL	No painting required for retrofits
Construction	Row aligner included	Clean continuous rows of any length
	Tool less channel cover/access from below	Reduced labor for installation
	Surface/chain/toggle mount capability	Design flexibility/simplified installation

## ORDERING INFORMATION

Catalog #	UPC	CCT (K)	CRI	Delivered lumens	Watts	Efficacy (lm/W)	Controls	Input current (A)	
								120V	277V
2ST1L1040R	080083838165	4000	84	1165	10	119	Non-Dimming	0.08	0.04
2ST2L2040R	080083838172	4000	84	2298	19	118	Non-Dimming	0.16	0.07
4ST1L2040R	080083838189	4000	84	2153	20	109	Non-Dimming	0.16	0.07
4ST2L4040R	080083838196	4000	84	4433	39	113	Non-Dimming	0.33	0.14
8ST2L8040R	080083838202	4000	84	8867	78	113	Non-Dimming	0.65	0.28

### Accessories (Order Separately)

**AYC-Chain/Set**=36" Chain Hanger (Use 1 set per fixture)  
**HBAYC-CHAIN/SET/U**=(2) V-Hook Hangers, 36" Chain Sets w/S-Hooks  
**SCF**=Fixed Stem Set (Specify Length)  
**SCS**=Swivel Stem Set (Specify Length)  
**SCA**=Adjustable 48" Stem Set  
**TOGGLE**=Single Toggle No. 2 (Specify Length)

**Y-TOGGLE**=Y Toggle No. 2 (Specify Length)  
**EBPLED7W**=User Installed, Remote Mount, 7 Watt LED Emergency Battery Pack  
**EBPLED14W**=User Installed, Remote Mount, 14 Watt LED Emergency Battery Pack  
**WG/SNF-4FT4**=Wireguard for 4 ft. ST1  
**WG/SSF-4FT8**=Wireguard for 4 ft. ST2

## ST1, ST2 LED Striplight

2', 4', 8'

Linear Single or Dual Lens LED Striplight

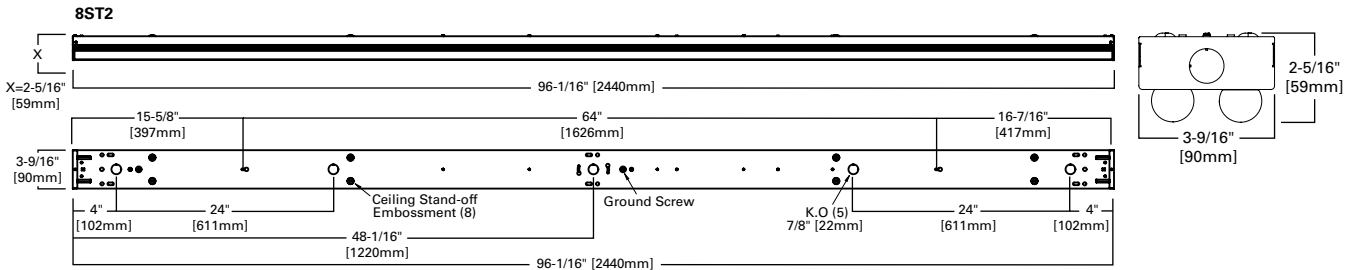
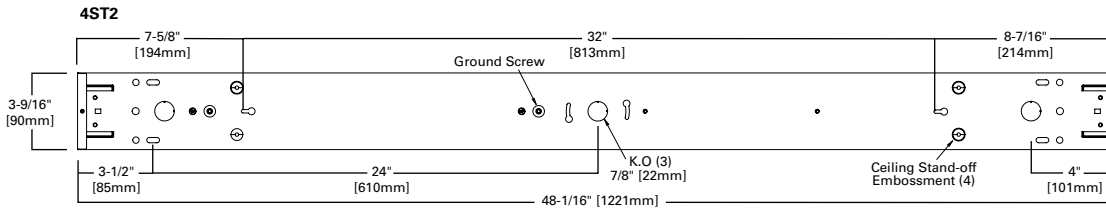
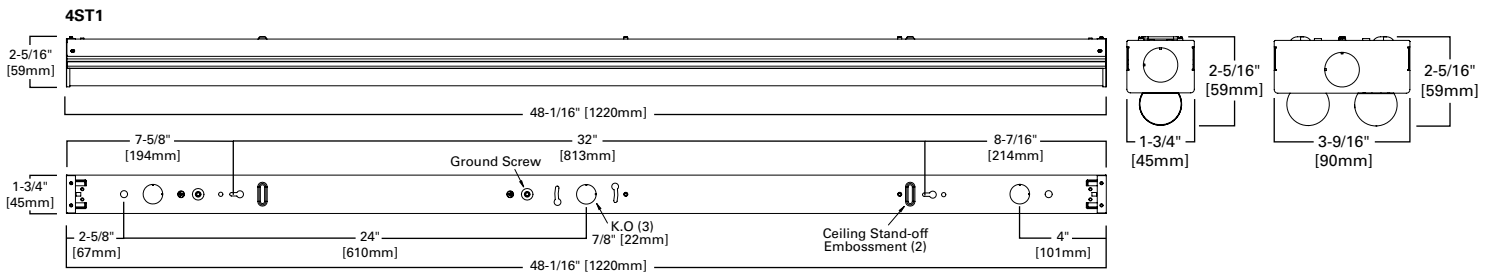
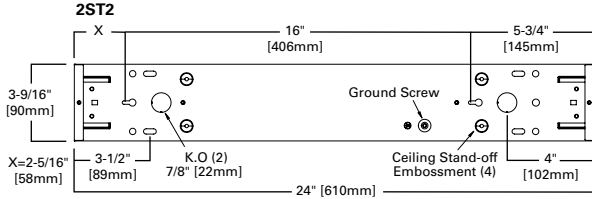
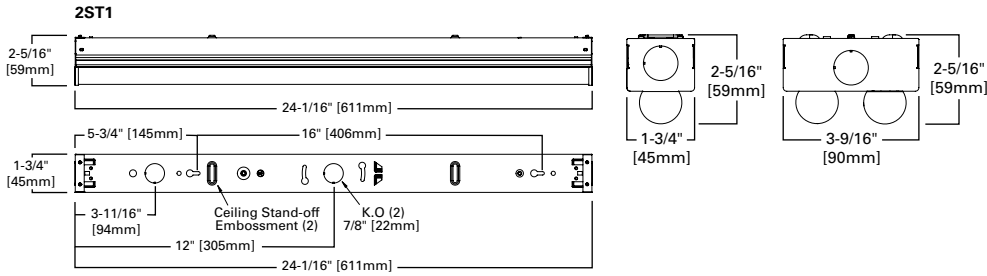


### LOAD DATA\*

	2'	4'	8'
PF	0.99	0.99	0.99
THD%	11.59	10.7	8.5
Weight	0.7/1.0	1.1/2.9	3.8
Low Temp Start	-20C	-20C	-20C

\*120V data.

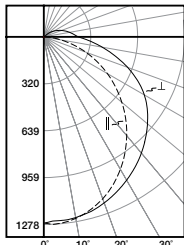
DIMENSION AND MOUNTING DATA



SHIPPING DATA

Catalog Base	Wt.	Units per Pallet	Gross wt. Pallet
2ST1	.70	288	391
2ST2	1.0	180	267
4ST1	1.1	252	387.4
4ST2	2.9	150	612.6
8ST2	3.8	150	701.5

PHOTOMETRICS



**4ST2L4040R**  
 Electronic Driver  
 Linear LED 4000K  
 Spacing criterion:  
 (II) 1.2 x mounting  
 height, (⊥) 1.32 x  
 mounting height  
 Lumens: 4433  
 Input Watts: 39W  
 Efficacy: 113 lm/W  
 Test Report:  
 4ST2L4040R.IES

Candlepower				
Angle	Along II	45°	Across ⊥	
0	1267	1267	1267	
5	1273	1266	1255	
10	1252	1251	1247	
15	1216	1226	1229	
20	1168	1190	1199	
25	1107	1142	1163	
30	1035	1089	1122	
35	955	1027	1077	
40	869	960	1027	
45	779	889	972	
50	683	817	914	
55	586	742	853	
60	488	667	782	
65	389	591	695	
70	289	506	598	
75	190	413	493	
80	101	317	394	
85	31	224	303	
90	0	150	227	

Coefficients of Utilization

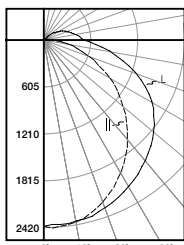
rc rw RCR	Effective floor cavity reflectance 20%																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94								
1	105	100	95	90	102	97	92	88	91	88	84	86	83	81	82	79	77	74								
2	95	86	78	72	92	83	77	71	79	73	68	74	70	65	70	67	63	60								
3	86	75	66	59	83	73	65	58	69	62	56	65	59	54	62	57	53	50								
4	79	66	57	49	76	64	55	49	61	53	47	58	51	46	55	49	45	42								
5	72	59	49	42	70	57	48	42	54	47	41	52	45	40	49	43	39	36								
6	66	53	43	37	64	51	43	36	49	41	35	46	40	35	44	38	34	31								
7	62	48	39	32	59	46	38	32	44	37	31	42	36	30	40	34	30	28								
8	57	43	35	29	55	42	34	28	40	33	28	39	32	27	37	31	27	25								
9	53	40	31	26	52	39	31	25	37	30	25	36	29	24	34	28	24	22								
10	50	37	28	23	48	36	28	23	34	27	23	33	27	22	32	26	22	20								

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	988	22.3
0-40	1624	36.6
0-60	2956	66.7
0-90	4147	93.5
0-180	4434	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	17424	14835	14796
55	16019	13688	14008
65	14226	12615	12813
75	10998	10851	10731
85	4638	7966	8359



**8ST2L8040R**  
 Electronic Driver  
 Linear LED 4000K  
 Spacing criterion:  
 (II) 1.22 x mounting  
 height, (⊥) 1.36 x  
 mounting height  
 Lumens: 8867  
 Input Watts: 78.2W  
 Efficacy: 113 lm/W  
 Test Report:  
 8ST2L8040R.IES

Candlepower				
Angle	Along II	45°	Across ⊥	
0	2396	2396	2396	
5	2381	2396	2385	
10	2346	2373	2366	
15	2288	2327	2346	
20	2204	2257	2296	
25	2092	2173	2238	
30	1960	2072	2169	
35	1814	1960	2099	
40	1659	1849	2018	
45	1497	1725	1930	
50	1320	1598	1829	
55	1135	1466	1717	
60	938	1328	1594	
65	737	1189	1432	
70	544	1034	1243	
75	359	857	1042	
80	197	664	849	
85	62	490	660	
90	4	340	506	

Coefficients of Utilization

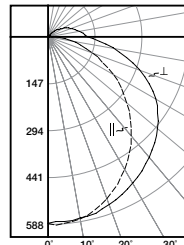
rc rw RCR	Effective floor cavity reflectance 20%																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92								
1	105	99	94	90	101	96	91	87	90	86	83	85	82	79	80	78	75	73								
2	94	85	78	71	91	83	76	70	78	72	67	73	68	64	69	65	61	59								
3	86	74	65	58	82	72	64	57	68	61	55	64	58	53	60	55	51	48								
4	78	65	56	49	75	63	55	48	60	52	46	56	50	45	53	48	43	41								
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7	61	47	38	31	59	46	37	31	43	36	30	41	34	29	39	33	29	27								
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	24								
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21								
10	50	36	28	23	48	35	27	22	34	27	22	32	26	21	31	25	21	19								

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	1879	21.2
0-40	3103	35.0
0-60	5714	64.4
0-90	8158	92.0
0-180	8867	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	33818	22962	22017
55	31451	20420	19897
65	27531	17923	17385
75	21540	14569	13728
85	10209	9900	9830



**4ST1L2040R**  
 Electronic Driver  
 Linear LED 4000K  
 Spacing criterion:  
 (II) 1.22 x mounting  
 height, (⊥) 1.36 x  
 mounting height  
 Lumens: 2153  
 Input Watts: 19.7W  
 Efficacy: 109 lm/W  
 Test Report:  
 4ST1L2040R.IES

Candlepower				
Angle	Along II	45°	Across ⊥	
0	582	582	582	
5	578	582	579	
10	570	576	575	
15	556	565	570	
20	535	548	558	
25	508	528	544	
30	476	503	527	
35	441	476	510	
40	403	449	490	
45	364	419	469	
50	321	388	444	
55	276	356	417	
60	228	322	387	
65	179	289	347	
70	132	251	302	
75	87	208	253	
80	48	161	206	
85	15	119	160	
90	1	83	123	

Coefficients of Utilization

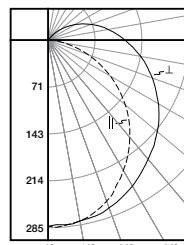
rc rw RCR	Effective floor cavity reflectance 20%																									
	80%				70%				50%				30%				10%				0%					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	117	117	117	117	114	114	114	114	107	107	107	100	100	100	95	95	95	92								
1	105	99	94	90	101	96	91	87	90	86	83	85	82	79	80	78	75	73								
2	94	85	78	71	91	83	76	70	78	72	67	73	68	64	69	65	61	59								
3	86	74	65	58	82	72	64	57	68	61	55	64	58	53	60	55	51	48								
4	78	65	56	49	75	63	55	48	60	52	46	56	50	45	53	48	43	41								
5	71	58	48	41	69	56	47	41	53	45	40	50	44	38	48	42	37	35								
6	66	52	43	36	63	51	42	35	48	40	34	45	39	33	43	37	33	30								
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8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	24								
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21								
10	50	36	28	23	48	35	27	22	34	27	22	32	26	21	31	25	21	19								

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	456	12.2
0-40	754	35.0
0-60	1388	64.4
0-90	1981	92.0
0-180	2153	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	16257	11104	10694
55	15054	9866	9663
65	13085	8653	8444
75	10090	7025	6667
85	4487	4764	4776



**2ST1L1040R**  
 Electronic Driver  
 Linear LED 4000K  
 Spacing criterion:  
 (II) 1.2 x mounting  
 height, (⊥) 1.35 x  
 mounting height  
 Lumens: 1165  
 Input Watts: 9.8W