

# Metalux AP Series

## DESCRIPTION

The Metalux ST commercial LED strip light is a DLC listed, full width strip with 40% energy savings compared to 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 traditional fluorescent strip light. Standard features include an aligner bracket that enables clean continuous row mounting, 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 polycarbonate 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 aligner 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](http://www.designlights.org) for details
- NFPA-70 and NEC 410.16 for closet storage space installations

### Warranty

- Five year warranty



## ST1, ST2 LED Striplight

2', 4', 8'

Linear Single or Dual Lens LED Striplight

	Features	Benefits
<b>Construction</b>	Full length and standard width channel design	No painting required. Ideal for any retrofit LFL project
	Tool-less channel cover, integrated LEDs and wireless access from below	Simple install and maintenance for life of product
	Surface, chain or toggle mount	Ideal for new construction or retrofit
	Continuous row mount aligner included	Add-on length as needed regardless of application or layout
<b>Performance</b>	Up to 118 lm/W, 4000 or 5000K CCT options	Save over 40% energy over existing LFL strips
	Classic single or double lens tube appearance	One for one replacement of 2 or 4-lamp LFL strips
	DLC®, 5-year warranty, 50K life hours at L70	Certified and guaranteed performance



### LOAD DATA\*

	2'	4'	8'
PF	0.99	0.99	0.99
THD% (min.)	11.6	11.7	10.6
Weight	0.7/1.0	1.1/2.9	3.8
Low Temp Start	-20C	-20C	-20C

\*120V data.

## ORDERING INFORMATION

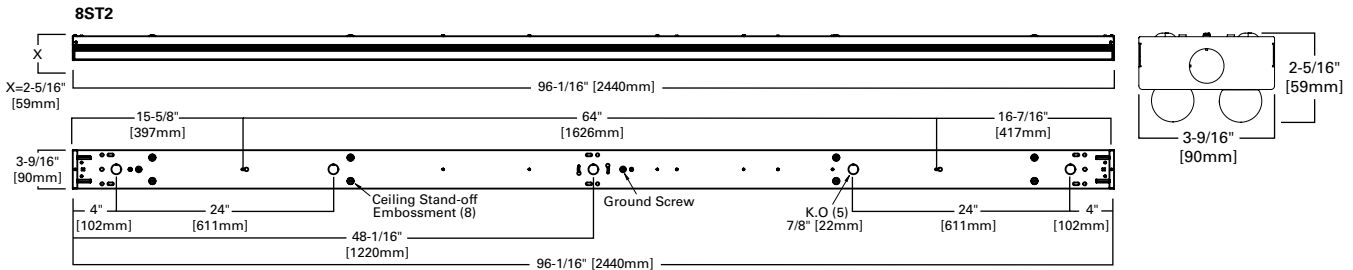
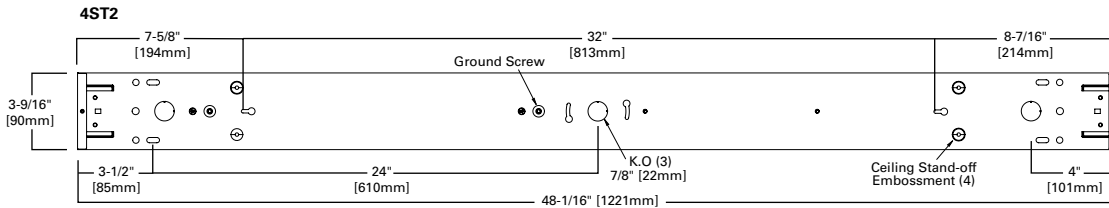
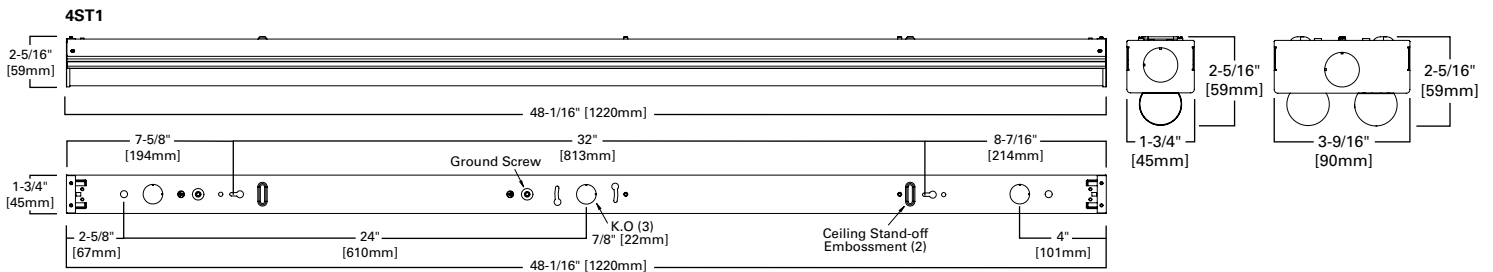
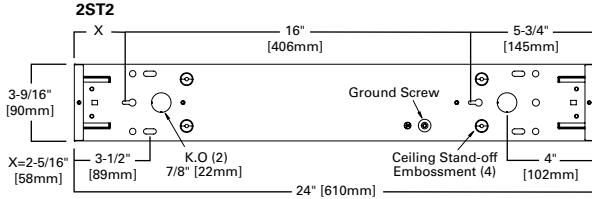
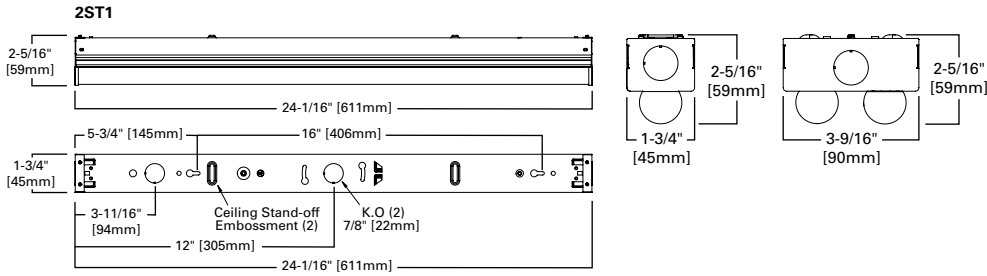
Catalog Number	UPC	CCT (K)	CCT (K)	Delivered lumens	Watts	Efficacy (lm/W)	Controls	Input current (A)	
								120V	277V
2ST1L1040R	080083838165	4000	80	1165	9.8	119	None	0.08	0.04
2ST2L2040R	080083838172	4000	80	2298	19.4	118	None	0.16	0.07
4ST1L2040R	080083838189	4000	80	2298	19.4	118	None	0.16	0.07
4ST2L4040R	080083838196	4000	80	4433	39.2	113	None	0.33	0.14
8ST2L8040R	080083838202	4000	80	8913	81	110	None	0.67	0.29
2ST2L2050R	080083890583	5000	80	2360	20	116	None	0.16	0.07
4ST2L4050R	080083890620	5000	80	4790	39.4	123	None	0.32	0.14
8ST2L8050R	080083890644	5000	80	9412	81	117	None	0.67	0.29

## 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-4FT-4**=Wireguard for 4 ft. ST1  
**WG/SSF-4FT-8**=Wireguard for 4 ft. ST2

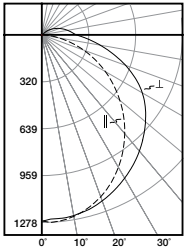
DIMENSION AND MOUNTING DATA



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**

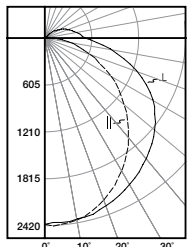
rc rw RCR	Effective floor cavity reflectance 20%																												
	80%				70%				50%				30%				10%				0%								
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94											
1	105	100	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**

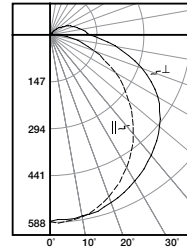
rc rw RCR	Effective floor cavity reflectance 20%																												
	80%				70%				50%				30%				10%				0%								
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92											
1	105	99	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											
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											
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	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											
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	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**