

DESCRIPTION

ArcLine is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest lamp and micro electronic ballast technology for optimal performance and energy efficiency. The ArcLine is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The ArcLine series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Micro ballast cover*** reduces ballast shadow for superior lens brightness uniformity and is easily removed without tools. Die formed captive lampholder brackets fully enclose lampholder wiring permitting easy lampholder replacement. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Rotor lock lampholders. UL/CUL listed. Suitable for damp locations.**

Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and ballast cover finished with new 90% reflective white enamel for superior performance.

Hinging/Latching

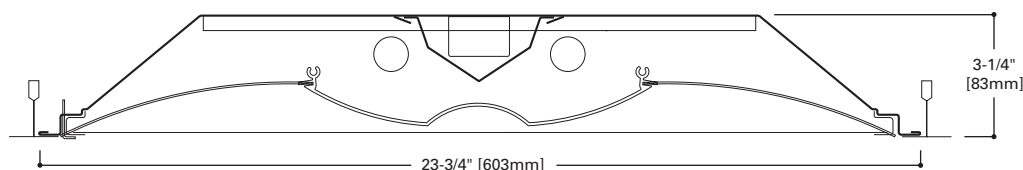
Positive cam action steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side. Door assembly hinges down for easy access from below without tools.

Frame/Shielding

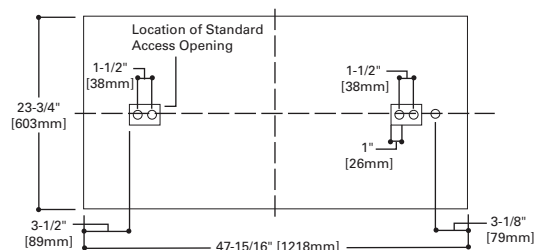
Die formed, heavy gauge, flat steel door with reinforced mitered corners and paint after fabrication, baked matte white enamel finish. Positive light seals. Light stabilized, acrylic frosted lens.

Controls

Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energysaving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.

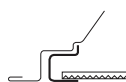


MOUNTING DATA

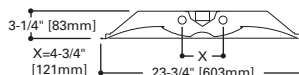


DOOR FRAMES

ALN
Flat, White Steel



LAMP CONFIGURATIONS



CEILING COMPATIBILITY

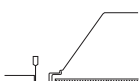
G
Grid/Lay-in
Standard



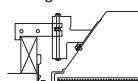
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



**Ceiling
Type**

Exposed Grid
Concealed T
Slot Grid
Flange

**Trim
Type**

G
G
G
F

(Verify compatibility/ consult factory.)



**2ALN
228T8
232**

**2' X 4' TROFFER
2 T8 LAMPS**

Specification Architectural
Troffer

For Use In Insulated
Ceilings

powered by
fifthlight
technology

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
228T8 (47), 232 (55)

*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

***Low profile emergency unit option only.

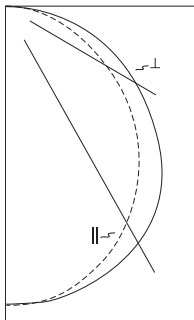
****When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

PHOTOMETRICS

**2ALNG-232-UNV-EB81-U**

Electronic Ballast

(2) F32T8 Lamps

2950 Lumens

Spacing criterion:

(II) 1.2 x mounting

height, (I) 1.3 x

mounting height

Efficiency 81.5%

Test Report: P31447

LER = FL83

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$2.89

Candlepower

Angle	Along II	45°	Across I
0	1654	1654	1654
5	1653	1645	1655
10	1626	1630	1644
15	1582	1598	1625
20	1519	1550	1590
25	1444	1495	1544
30	1351	1422	1491
35	1251	1338	1410
40	1136	1234	1323
45	1012	1127	1209
50	886	1000	1080
55	750	867	947
60	621	730	808
65	490	596	666
70	371	470	530
75	261	348	392
80	158	229	255
85	72	104	105
90	0	0	0

Coefficients of Utilization

Effective floor cavity reflectance												20%											
rc	80%				70%				50%				30%				10%				0%		
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																							
0	97	97	97	97	95	95	95	95	91	91	91	87	87	87	83	83	83	82					
1	88	84	81	78	86	83	79	76	79	76	74	76	74	72	73	71	70	68					
2	80	73	68	63	78	72	67	62	69	65	61	66	63	59	64	61	58	56					
3	73	64	58	52	71	63	57	52	61	55	51	58	54	50	56	52	49	47					
4	67	57	50	44	65	56	49	44	54	48	43	52	47	43	50	46	42	40					
5	62	51	44	38	60	50	43	38	48	42	37	47	41	37	45	40	37	35					
6	57	46	38	33	55	45	38	33	44	37	33	42	37	32	41	36	32	30					
7	53	42	34	29	51	41	34	29	40	33	29	38	33	29	37	32	29	27					
8	49	38	31	26	48	37	31	26	36	30	26	35	30	26	34	29	26	24					
9	46	35	28	23	45	34	28	23	33	27	23	32	27	23	32	27	23	22					
10	43	32	26	21	42	32	25	21	31	25	21	30	25	21	29	24	21	19					

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1298	22.0	27.0
0-40	2132	36.1	44.3
0-60	3760	63.7	78.2
0-90	4810	81.5	100.0
0-180	4810	81.5	-100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2306	2568	2755
55	2107	2436	2660
65	1868	2272	2539
75	1625	2167	2441
85	1331	1923	1941

ORDERING INFORMATION

SAMPLE NUMBER: 2ALNG-232-UNV-EB81-U

Rating Blank = Standard ATW-SW4 = Chicago Rated	Number of Lamps 2 =2 Lamps (Not included)	Voltage ⁽²⁾ 347V =347 Volt UNV =Universal Voltage 120-277 ⁽³⁾	Ballast Type ⁽²⁾ EB8 =T8 Electronic Start. Total Harmonic Distortion < 10% EB8 /PLUS = T8 Electronic Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15. ER8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% High Performance T8 Ballasts HB8 =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HB8_L =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .77 – .82 HB8_N =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.0 HB8_H =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.15 – 1.20 HR8_T8 =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HR8_DIM =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88 HR8_L =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79 HR8_H =T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 0-10V Dimming Ballasts ⁽⁷⁾ 5LTV8 =T8 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 ⁽⁸⁾ 5LTVS8 =T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 ⁽⁸⁾ Fifth Light DALI Ballasts ⁽⁶⁾ 5LT8 =T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0	Options G1 =Gasket, Door Frame and Housing G2 =G1 plus Gasket between Lens and Door G3 =G1 and G2 plus Gasketing on Mounting Surface of Fixture Trims	Packaging U =Unit Pack PALC =Job Pack, in carton	
Width 2=2' Width	Wattage (Length) 28T8 =28W T8 (48") 32 =32W T8 (48")	Options GL =Single Element Fuse GM =Double Element Fuse Lamps =Lamps Installed (see options and accessories) Flex =Flex Installed (Reference Flex ordering information) EL =Emergency Installed ⁽⁵⁾	Trim Type G =Grid/Lay-in (Standard) ⁽¹⁾ G=Concealed T G=Slot Grid F =Flange Trim	Shielding Blank =Smooth Frosted Acrylic (standard)	Option – Aluminum Flange Trim ⁽⁴⁾ Blank =SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row	Door Frame Standard =Flat White Steel Door (Leave Blank)

NOTES: ⁽¹⁾ An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾ Products also available in non-US voltages and frequencies for international markets. ⁽³⁾ Not available when specifying emergencies, voltage must be specific. ⁽⁴⁾ Specify row configuration, type in catalog number when ordering complete fixture. ⁽⁵⁾ Low profile emergency unit only, must specify voltage. ⁽⁶⁾ For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. ⁽⁷⁾ 0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. ⁽⁸⁾ Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. ⁽⁹⁾ Standard 0-10V ballast not available for 28W T8 lamps.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips ⁽¹⁾
FCTKA-24W-U=Field Installed Flange Kit

FCTK Trim Kit Field Convertible	A – 24 22=2' x 2' 24=2' x 4'	R W – U N =Natural W =White Blank =Single R =In Row E =End Row
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SHIPPING DATA

Catalog No.	Wt.
2ALNG-228T8	20 lbs.
2ALNG-232	20 lbs.