

COOPER LIGHTING - METALUX®

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.

Catalog #		Type
Project		
Comments		Date
Prepared by		

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. Ample KOs are provided 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 ensure positive lamp retention. 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 baked white enamel finish. Positive light seals. Light stabilized, acrylic frosted lens.



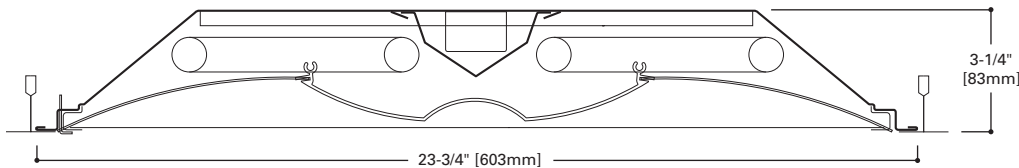
2ALN
2BX40
2U1-5/8

2' X 2' TROFFER
2 LAMPS

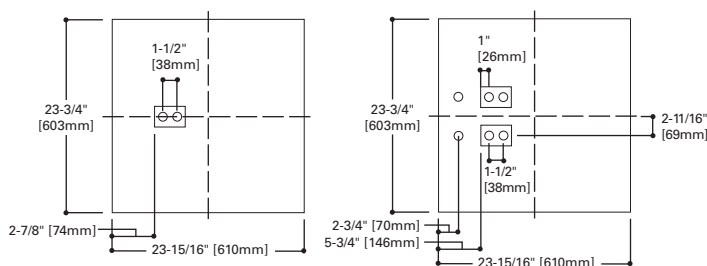
Specification Architectural
Troffer

For Use In Insulated
Ceilings

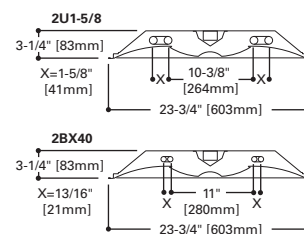
ArcLine



MOUNTING DATA

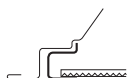


LAMP CONFIGURATIONS



DOOR FRAMES

ALN
Flat, White Steel

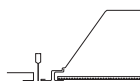


CEILING COMPATIBILITY

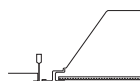
G
Grid/Lay-in
Standard



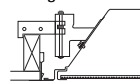
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



**Ceiling
Type**

Exposed Grid
Concealed T
Slot Grid
Flange

(Verify compatibility/ consult
factory.)

**Trim
Type**

G
G
G
F

COOPER LIGHTING

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps
2U1-5/8 (55), 2BX40 (69)

*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**

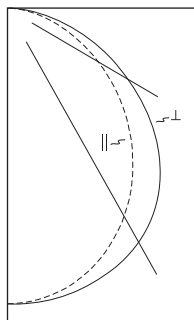
LINEAR DISCONNECT

Safe and convenient means of
disconnecting power.



ADF111822

PHOTOMETRICS

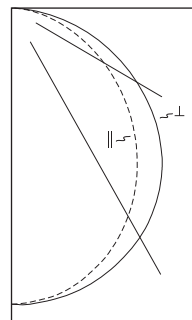


2ALNG-BX40-UNV-EB81-U
Electronic Ballast
(2) F40BX/SPX35/RS
Lamps, 3150 Lumens
Spacing criterion:
(II) 1.2 x mounting
height, (⊥) 1.3 x
mounting height
Efficiency 74.4%
Test Report: 2ALNG-
BX40-UNV-EB81-U.IES
LER = FL61

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.93

Candlepower

Angle	Along II	45°	Across ⊥
0	1675	1675	1675
5	1664	1670	1675
10	1634	1650	1665
15	1585	1615	1643
20	1518	1566	1610
25	1433	1503	1568
30	1335	1428	1511
35	1226	1338	1435
40	1103	1234	1338
45	976	1115	1219
50	846	986	1085
55	713	846	932
60	583	701	775
65	456	560	626
70	340	429	478
75	234	307	328
80	139	192	202
85	58	83	89
90	0	0	0



2ALNG-BX40-SDL-UNV-EB81-U
Electronic Ballast
(2) F40BX/SPX35/RS
Lamps, 3150 Lumens
Spacing criterion:
(II) 1.2 x mounting
height, (⊥) 1.3 x
mounting height
Efficiency 68.5%
Test Report: 2ALNG-
BX40-SDL-UNV-EB81-
U.IES

LER = FL57
Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$4.21

Candlepower

Angle	Along II	45°	Across ⊥
0	1537	1537	1537
5	1524	1530	1536
10	1500	1509	1522
15	1453	1472	1497
20	1392	1424	1459
25	1315	1363	1411
30	1225	1291	1355
35	1125	1205	1284
40	1015	1110	1202
45	900	1006	1107
50	782	893	996
55	661	773	871
60	543	648	741
65	427	525	608
70	319	408	477
75	220	297	339
80	130	187	207
85	55	80	85
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%											
	80%				70%				50%			
	70	50	30	10	70	50	30	10	50	30	10	0
0	89	89	89	89	87	87	87	87	83	83	83	79
1	81	77	74	71	79	76	73	70	73	70	68	70
2	74	68	63	58	72	66	62	58	64	60	56	61
3	67	59	53	49	65	58	53	48	56	51	47	54
4	62	53	46	41	60	52	46	41	50	44	40	48
5	57	47	40	35	55	46	40	35	45	39	35	43
6	52	42	36	31	51	42	35	31	40	35	31	39
7	49	38	32	27	47	38	32	27	37	31	27	36
8	45	35	29	24	44	35	29	24	34	28	24	33
9	42	32	26	22	41	32	26	22	31	26	22	30
10	40	30	24	20	39	29	24	20	29	23	20	28

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1307	20.7	27.9
0-40	2140	34.0	45.6
0-60	3739	59.4	79.7
0-90	4690	74.4	100.0
0-180	4690	74.4	-100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	4736	5411	5915
55	4265	5061	5575
65	3702	4547	5083
75	3102	4070	4348
85	2283	3268	3504

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%											
	80%				70%				50%			
	70	50	30	10	70	50	30	10	50	30	10	0
0	82	82	82	82	80	80	80	80	76	76	76	73
1	74	71	68	66	73	70	67	64	67	64	62	64
2	68	62	57	53	66	61	56	53	58	55	51	56
3	62	54	49	44	60	53	48	44	51	47	43	49
4	56	48	42	38	55	47	42	37	46	41	37	44
5	52	43	37	32	50	42	37	32	41	36	32	39
6	48	39	33	28	47	38	32	28	37	32	28	36
7	44	35	29	25	43	35	29	25	34	28	25	33
8	41	32	26	22	40	32	26	22	31	26	22	30
9	39	29	24	20	38	29	24	20	28	23	20	27
10	36	27	22	18	35	27	22	18	26	21	18	25

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1190	18.9	27.6
0-40	1944	30.9	45.0
0-60	3407	54.1	78.9
0-90	4316	68.5	100.0
0-180	4316	68.5	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	4367	4882	5372
55	3954	4624	5211
65	3467	4263	4936
75	2917	3937	4494
85	2165	3150	3346

ORDERING INFORMATION

SAMPLE NUMBER: 2ALNG-2U1-5/8-UNV-EB81-U

Rating
Blank= Standard
ATW-SW4= Chicago Rated

Width
2=2' Width

Series
ALN=ArcLine Series

Trim Type
G=Grid/Lay-in (Standard)⁽¹⁾
G=Concealed T
G=Slot Grid
F=Flange Trim

Door Frame
Standard=Flat White Steel Door (Leave Blank)

Number of Lamps
2=2 Lamps (Not included)

Wattage (Length)
U1-5/8=31W T8 (24")
BX40=40W Biaxial (24")

Shielding
Blank=Smooth Frosted Acrylic (standard)
SDL=Smooth Diffused Lens with Insert

Option – Aluminum Flange Trim⁽⁴⁾

Blank=SW (Single White)
Type Color
'S' Single 'N' Natural
'R' In Row 'W' White
'E' End of Row

Voltage⁽²⁾
347V=347 Volt
UNV=Universal Voltage 120-277⁽³⁾

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⁾

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%
EB5_=T5 Biax Electronic Instant⁽⁷⁾ Start. Total Harmonic Distortion < 20%
TEB5_=T5 Biax Electronic Instant⁽⁷⁾ Start. Total Harmonic Distortion < 10%
ER5_=T5 Biax Electronic Program Rapid Start. Total Harmonic Distortion < 10%

Number of Ballasts
1=1 Ballast

Options
LAO=Less Access Opening⁽⁶⁾
FR=Fire Rated Label

Packaging
U=Unit Pack
PALC=Job Pack, in carton

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, no access plate wire through end plate. Please specify voltage. ⁽⁶⁾Consult Pre Sales Technical Support. ⁽⁷⁾Not available in UNV voltages. Must specify voltage.

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-22W-U=Field Installed Flange Kit

FCTK **A** **- 24** **R** **W** **- U**

Trim Kit
Field
Convertible

22=2' x 2'
24=2' x 4'

N=Natural
W=White

Blank=Single
R=In Row
E=End Row

U=Unit Pack

Aluminum

SHIPPING INFORMATION

Catalog No.	Wt.
2ALNG-2U1-5/8A	12 lbs.
2ALNG-2BX40A	15 lbs.