

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P229358

Luminaire Tested: **24ALNG-LD5-31-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ALNG-LD5-31-UNV-L830-CD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2994.0 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

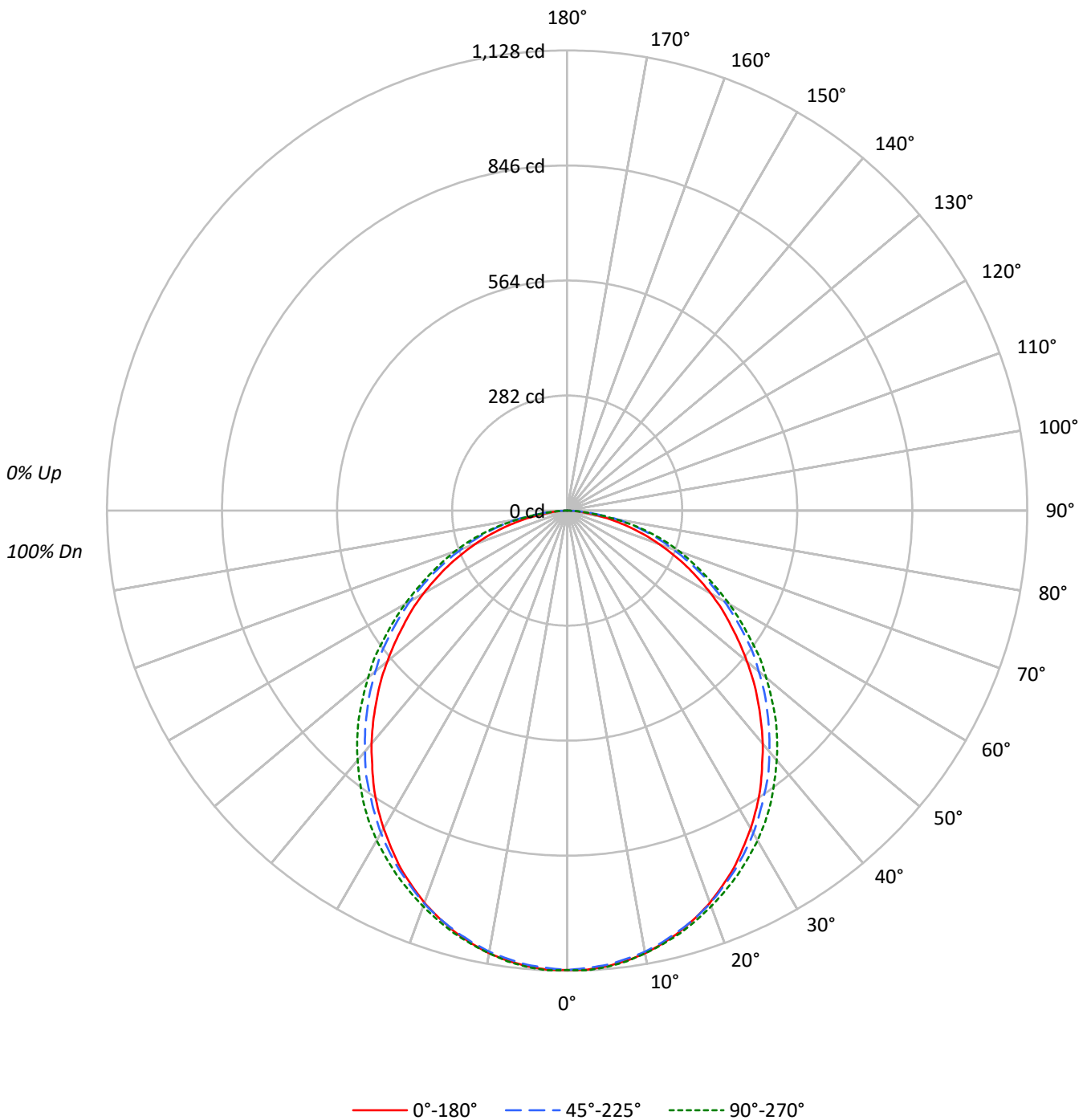
Input Watts (W): 22.13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1725	1725	1725
5°	1724	1719	1726
10°	1714	1708	1714
15°	1694	1690	1700
20°	1668	1671	1683
25°	1634	1644	1668
30°	1591	1615	1651
35°	1546	1578	1630
40°	1492	1542	1598
45°	1433	1503	1566
50°	1371	1461	1517
55°	1308	1416	1463
60°	1246	1363	1406
65°	1170	1303	1347
70°	1074	1234	1312
75°	943	1184	1247
80°	761	1105	1047
85°	540	729	583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	3.6
10°-20°	301.3	10.1
20°-30°	449.0	15.0
30°-40°	529.7	17.7
40°-50°	534.8	17.9
50°-60°	469.7	15.7
60°-70°	350.3	11.7
70°-80°	204.0	6.8
80°-90°	48.7	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	856.7	28.6
0°-40°	1386.4	46.3
0°-60°	2390.9	79.9
0°-90°	2994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1121	1120	1118	1121	1123	106
15°	1068	1067	1066	1071	1072	301
25°	967	968	973	984	987	445
35°	827	832	844	864	872	516
45°	662	671	694	715	723	510
55°	490	505	530	547	548	439
65°	323	336	359	370	372	319
75°	159	178	200	210	211	170
85°	31	45	42	35	33	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1126.3	1126.3	1126.3	1126.3	1126.3
2.5°	1126.3	1125.4	1122.1	1125.4	1127.9
5°	1121.3	1120.4	1118.0	1121.3	1122.9
7.5°	1113.0	1112.1	1108.8	1113.8	1114.6
10°	1102.2	1100.5	1098.0	1101.4	1102.2
12.5°	1086.4	1085.6	1083.1	1087.2	1088.1
15°	1068.2	1067.3	1065.7	1070.7	1072.3
17.5°	1046.6	1047.4	1046.6	1052.4	1053.2
20°	1023.3	1024.2	1025.0	1031.6	1032.5
22.5°	995.1	996.0	998.4	1007.6	1010.1
25°	966.9	967.7	972.7	983.5	986.8
27.5°	932.9	936.2	943.7	956.9	960.3
30°	899.7	903.0	913.0	928.7	933.7
32.5°	864.0	867.3	878.9	896.4	903.8
35°	826.6	831.6	844.1	864.0	871.5
37.5°	785.1	794.3	810.9	830.0	834.9
40°	746.1	752.8	771.0	794.3	799.3
42.5°	703.8	712.9	732.9	756.1	761.9
45°	661.5	671.4	693.8	714.6	722.9
47.5°	620.0	630.8	654.8	676.4	678.9
50°	575.2	588.4	613.3	634.1	636.6
52.5°	532.0	547.8	574.3	590.9	596.7
55°	489.7	504.6	530.3	546.9	547.8
57.5°	449.8	462.3	487.2	501.3	503.8
60°	406.7	419.1	444.9	456.5	459.0
62.5°	363.5	376.8	401.7	413.3	415.0
65°	322.9	336.1	359.4	370.2	371.8
67.5°	279.7	296.3	316.2	330.3	332.0
70°	239.9	256.5	275.5	289.7	293.0
72.5°	200.0	219.1	238.2	249.0	253.1
75°	159.4	178.4	200.0	210.0	210.8
77.5°	122.0	140.3	162.7	168.5	166.0
80°	86.3	106.2	125.3	124.5	118.7
82.5°	54.8	73.9	81.3	76.4	73.0
85°	30.7	44.8	41.5	34.9	33.2
87.5°	12.4	13.3	10.0	6.6	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)