

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: P229378

Luminaire Tested: **24ALNG-LD5-31-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229378
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-L840-CD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3119.0 lumens
Efficiency: N/A
Efficacy: 140.9 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

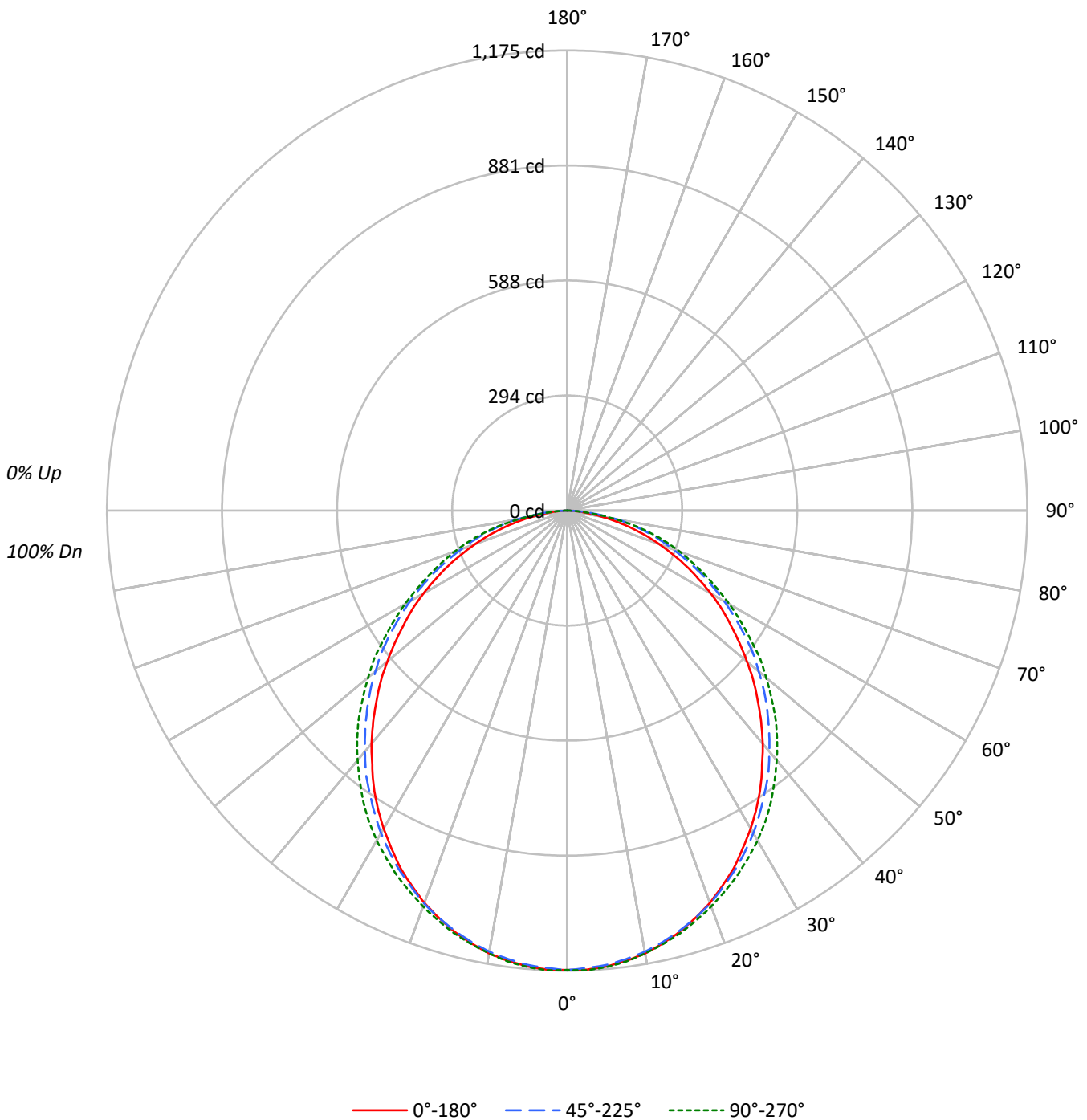
Input Watts (W): 22.13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1797	1797	1797
5°	1796	1791	1799
10°	1786	1779	1786
15°	1765	1760	1771
20°	1738	1740	1753
25°	1702	1712	1737
30°	1658	1682	1720
35°	1610	1644	1697
40°	1554	1606	1665
45°	1493	1566	1631
50°	1428	1522	1580
55°	1362	1475	1524
60°	1298	1420	1465
65°	1219	1357	1404
70°	1119	1286	1367
75°	982	1233	1300
80°	793	1152	1090
85°	562	759	608



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	3.6
10°-20°	313.9	10.1
20°-30°	467.8	15.0
30°-40°	551.9	17.7
40°-50°	557.1	17.9
50°-60°	489.3	15.7
60°-70°	364.9	11.7
70°-80°	212.6	6.8
80°-90°	50.8	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°	892.4	28.6
0°-40°	1444.3	46.3
0°-60°	2490.8	79.9
0°-90°	3119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3119.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1173	1173	1173	1173	1173	
5°	1168	1167	1165	1168	1170	111
15°	1113	1112	1110	1115	1117	314
25°	1007	1008	1013	1025	1028	463
35°	861	866	879	900	908	538
45°	689	700	723	744	753	532
55°	510	526	552	570	571	457
65°	336	350	374	386	387	332
75°	166	186	208	219	220	177
85°	32	47	43	36	35	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1173.3	1173.3	1173.3	1173.3	1173.3
2.5°	1173.3	1172.4	1169.0	1172.4	1175.0
5°	1168.1	1167.2	1164.6	1168.1	1169.8
7.5°	1159.4	1158.6	1155.1	1160.3	1161.2
10°	1148.2	1146.5	1143.9	1147.3	1148.2
12.5°	1131.8	1130.9	1128.3	1132.6	1133.5
15°	1112.8	1111.9	1110.2	1115.3	1117.1
17.5°	1090.3	1091.1	1090.3	1096.3	1097.2
20°	1066.1	1066.9	1067.8	1074.7	1075.6
22.5°	1036.7	1037.5	1040.1	1049.6	1052.2
25°	1007.3	1008.1	1013.3	1024.6	1028.0
27.5°	971.8	975.3	983.1	996.9	1000.4
30°	937.2	940.7	951.1	967.5	972.7
32.5°	900.1	903.5	915.6	933.8	941.6
35°	861.2	866.3	879.3	900.1	907.8
37.5°	817.9	827.4	844.7	864.6	869.8
40°	777.3	784.2	803.2	827.4	832.6
42.5°	733.2	742.7	763.5	787.7	793.7
45°	689.1	699.5	722.8	744.4	753.1
47.5°	645.9	657.1	682.2	704.7	707.3
50°	599.2	613.0	638.9	660.6	663.2
52.5°	554.2	570.6	598.3	615.6	621.7
55°	510.1	525.7	552.5	569.8	570.6
57.5°	468.6	481.6	507.5	522.2	524.8
60°	423.7	436.6	463.4	475.5	478.1
62.5°	378.7	392.5	418.5	430.6	432.3
65°	336.3	350.2	374.4	385.6	387.3
67.5°	291.4	308.7	329.4	344.1	345.8
70°	249.9	267.2	287.1	301.7	305.2
72.5°	208.4	228.3	248.1	259.4	263.7
75°	166.0	185.9	208.4	218.7	219.6
77.5°	127.1	146.1	169.5	175.5	172.9
80°	89.9	110.7	130.6	129.7	123.6
82.5°	57.1	77.0	84.7	79.5	76.1
85°	32.0	46.7	43.2	36.3	34.6
87.5°	13.0	13.8	10.4	6.9	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)