

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: P192439

Luminaire Tested: **4WSL-LD2-80-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSL-LD2-80-UNV-L840-CD1-U
Description: 4FT Linear Wavestream System, L840
Light Source: (238) 4000K CCT, 80 CRI LEDS
EL236N0119D840
Ballast/Driver: OSRAM
OT85W1202772A0DIML

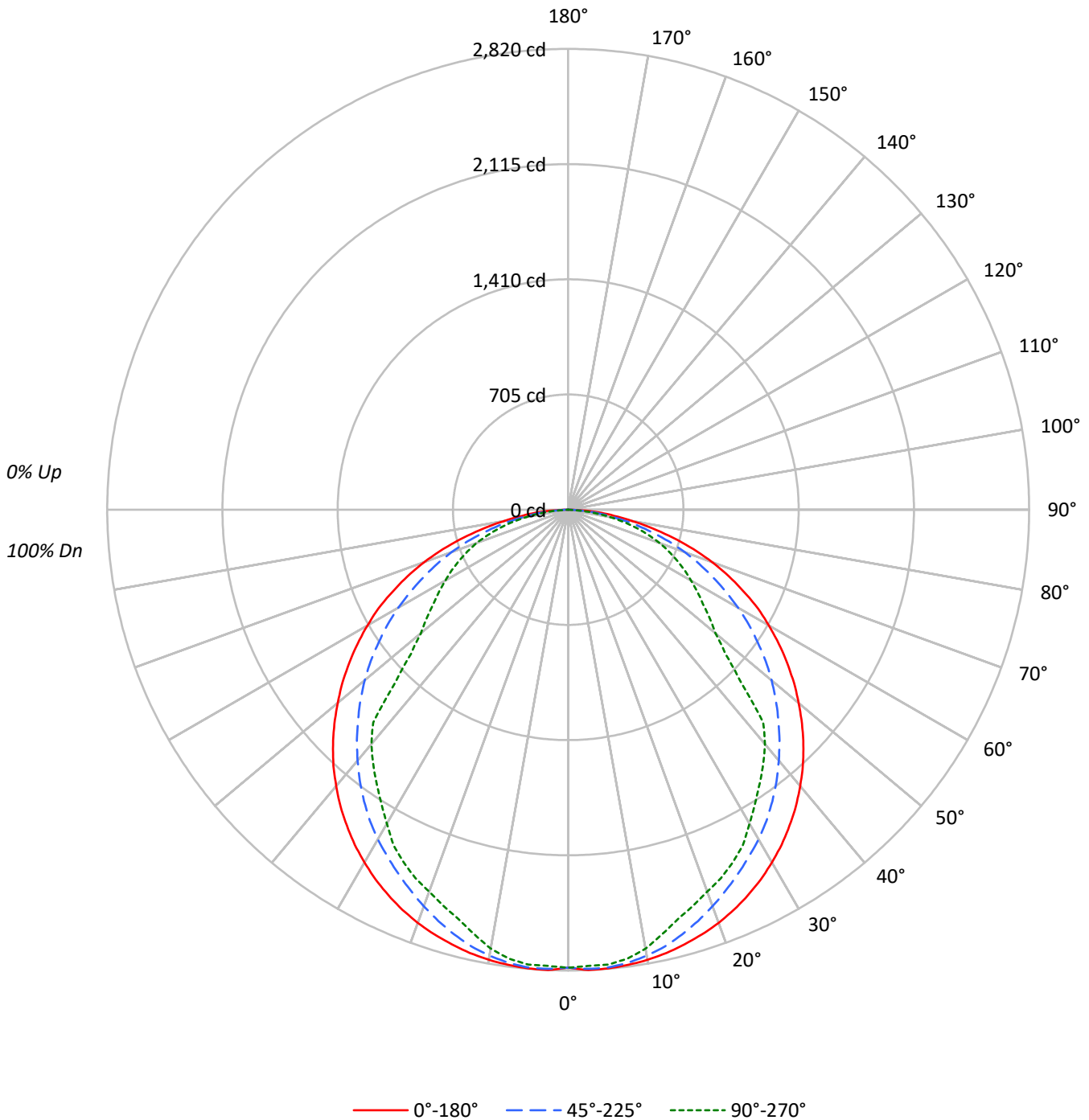
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7806.0 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 76
Input Voltage (V): NR
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	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15874	15874	15874
5°	16023	15993	15890
10°	16089	15940	15688
15°	16146	15782	15207
20°	16223	15569	14993
25°	16272	15368	14883
30°	16302	15238	14511
35°	16324	15056	14127
40°	16329	14820	13846
45°	16304	14566	11979
50°	16228	14317	10379
55°	16146	13978	9948
60°	16064	13577	9831
65°	15855	13086	9831
70°	15527	12575	9839
75°	14528	11588	9552
80°	12975	10026	8509
85°	11921	7722	6214



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.2	3.4
10°-20°	755.4	9.7
20°-30°	1138.7	14.6
30°-40°	1367.2	17.5
40°-50°	1392.5	17.8
50°-60°	1222.1	15.7
60°-70°	950.6	12.2
70°-80°	565.4	7.2
80°-90°	148.0	1.9
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°	2160.3	27.7
0°-40°	3527.6	45.2
0°-60°	6142.1	78.7
0°-90°	7806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2802	2802	2802	2802	2802	
5°	2818	2792	2812	2802	2794	268
15°	2753	2714	2691	2624	2593	778
25°	2603	2544	2458	2394	2381	1200
35°	2360	2286	2177	2074	2043	1477
45°	2035	1968	1818	1679	1495	1569
55°	1635	1586	1415	1134	1007	1462
65°	1183	1136	976	770	733	1172
75°	664	630	529	429	436	702
85°	183	163	119	96	96	201
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2802.0	2802.0	2802.0	2802.0	2802.0
2.5°	2820.0	2791.6	2812.3	2807.1	2794.2
5°	2817.5	2791.6	2812.3	2802.0	2794.2
7.5°	2809.7	2783.9	2796.8	2781.3	2771.0
10°	2796.8	2768.4	2771.0	2745.1	2727.1
12.5°	2778.7	2745.1	2737.4	2685.8	2659.9
15°	2752.9	2714.2	2690.9	2623.8	2592.8
17.5°	2724.5	2680.6	2639.3	2564.4	2541.1
20°	2690.9	2639.3	2582.5	2505.0	2486.9
22.5°	2649.6	2595.4	2520.5	2450.7	2440.4
25°	2603.1	2543.7	2458.5	2393.9	2381.0
27.5°	2551.5	2481.7	2393.9	2329.4	2313.9
30°	2492.1	2419.8	2329.4	2254.5	2218.3
32.5°	2430.1	2355.2	2257.1	2161.5	2127.9
35°	2360.4	2285.5	2177.0	2073.7	2042.7
37.5°	2288.1	2210.6	2094.4	1985.9	1960.1
40°	2208.0	2133.1	2004.0	1898.1	1872.3
42.5°	2125.4	2053.1	1913.6	1807.7	1766.4
45°	2035.0	1967.8	1818.0	1678.6	1495.2
47.5°	1939.4	1877.4	1722.5	1515.9	1304.1
50°	1841.3	1784.5	1624.4	1371.3	1177.6
52.5°	1740.6	1688.9	1523.6	1244.7	1089.8
55°	1634.7	1585.6	1415.2	1133.7	1007.2
57.5°	1528.8	1479.7	1311.9	1033.0	937.4
60°	1417.8	1371.3	1198.3	940.0	867.7
62.5°	1309.3	1257.7	1087.2	854.8	803.1
65°	1182.8	1136.3	976.2	769.6	733.4
67.5°	1064.0	1014.9	867.7	686.9	666.3
70°	937.4	888.4	759.2	601.7	594.0
72.5°	803.1	764.4	645.6	519.1	513.9
75°	663.7	630.1	529.4	428.7	436.4
77.5°	526.8	506.2	418.4	343.5	348.6
80°	397.7	382.2	307.3	255.7	260.8
82.5°	284.1	271.2	209.2	170.4	170.4
85°	183.4	162.7	118.8	95.6	95.6
87.5°	72.3	59.4	36.2	10.3	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)