

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: P192431

Luminaire Tested: **4WSL-LD2-70-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192431
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-LD2-70-UNV-L840-CD1-U
Description: 4FT Linear Wavestream System, L840
Light Source: (238) 4000K CCT, 80 CRI LEDS
EL236N0119D840
Ballast/Driver: OSRAM
OT85W1202772A0DIML

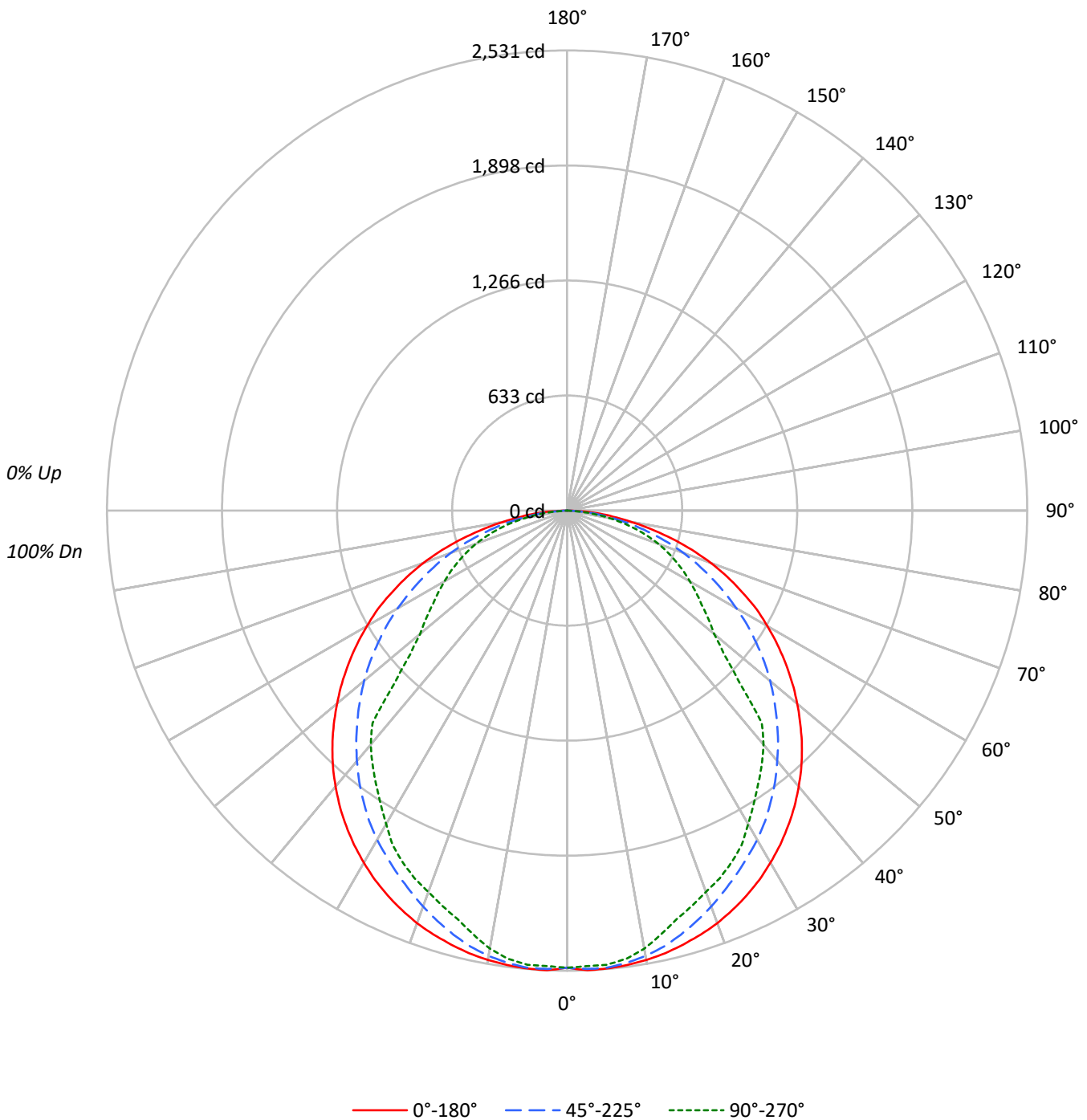
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7005.0 lumens
Efficiency: N/A
Efficacy: 102.0 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): 68.7
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°	14245	14245	14245
5°	14378	14352	14260
10°	14438	14304	14078
15°	14489	14163	13646
20°	14558	13972	13454
25°	14602	13791	13356
30°	14629	13674	13022
35°	14649	13511	12678
40°	14653	13299	12426
45°	14631	13071	10750
50°	14563	12847	9314
55°	14490	12544	8927
60°	14416	12184	8823
65°	14228	11743	8823
70°	13934	11285	8829
75°	13037	10399	8574
80°	11644	8998	7637
85°	10693	6929	5571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.9	3.4
10°-20°	677.9	9.7
20°-30°	1021.9	14.6
30°-40°	1226.9	17.5
40°-50°	1249.6	17.8
50°-60°	1096.7	15.7
60°-70°	853.1	12.2
70°-80°	507.4	7.2
80°-90°	132.8	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°	1938.6	27.7
0°-40°	3165.6	45.2
0°-60°	5511.8	78.7
0°-90°	7005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2514	2514	2514	2514	2514	
5°	2528	2505	2524	2514	2508	241
15°	2470	2436	2415	2354	2327	698
25°	2336	2283	2206	2148	2137	1077
35°	2118	2051	1954	1861	1833	1326
45°	1826	1766	1632	1506	1342	1408
55°	1467	1423	1270	1017	904	1312
65°	1061	1020	876	691	658	1051
75°	596	566	475	385	392	630
85°	164	146	107	86	86	180
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2514.4	2514.4	2514.4	2514.4	2514.4
2.5°	2530.7	2505.2	2523.7	2519.1	2507.5
5°	2528.3	2505.2	2523.7	2514.4	2507.5
7.5°	2521.4	2498.2	2509.8	2495.9	2486.6
10°	2509.8	2484.3	2486.6	2463.5	2447.2
12.5°	2493.6	2463.5	2456.5	2410.2	2387.0
15°	2470.4	2435.6	2414.8	2354.5	2326.7
17.5°	2444.9	2405.5	2368.4	2301.2	2280.4
20°	2414.8	2368.4	2317.5	2247.9	2231.7
22.5°	2377.7	2329.0	2261.8	2199.3	2190.0
25°	2336.0	2282.7	2206.2	2148.3	2136.7
27.5°	2289.6	2227.1	2148.3	2090.3	2076.4
30°	2236.3	2171.5	2090.3	2023.1	1990.7
32.5°	2180.7	2113.5	2025.5	1939.7	1909.6
35°	2118.2	2051.0	1953.6	1860.9	1833.1
37.5°	2053.3	1983.7	1879.5	1782.1	1759.0
40°	1981.4	1914.2	1798.3	1703.3	1680.2
42.5°	1907.3	1842.4	1717.2	1622.2	1585.1
45°	1826.2	1765.9	1631.5	1506.3	1341.8
47.5°	1740.4	1684.8	1545.7	1360.3	1170.3
50°	1652.3	1601.4	1457.7	1230.6	1056.8
52.5°	1562.0	1515.6	1367.3	1117.0	978.0
55°	1467.0	1422.9	1270.0	1017.4	903.8
57.5°	1371.9	1327.9	1177.3	927.0	841.2
60°	1272.3	1230.6	1075.3	843.6	778.7
62.5°	1175.0	1128.6	975.7	767.1	720.7
65°	1061.4	1019.7	876.0	690.6	658.2
67.5°	954.8	910.8	778.7	616.4	597.9
70°	841.2	797.2	681.3	540.0	533.0
72.5°	720.7	686.0	579.4	465.8	461.2
75°	595.6	565.5	475.1	384.7	391.7
77.5°	472.8	454.2	375.4	308.2	312.9
80°	356.9	343.0	275.8	229.4	234.1
82.5°	254.9	243.3	187.7	153.0	153.0
85°	164.5	146.0	106.6	85.7	85.7
87.5°	64.9	53.3	32.4	9.3	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)