

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: P197375

Luminaire Tested: **8WSL-LD2-90-UNV-L840-CD2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P197375  
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: 8WSL-LD2-90-UNV-L840-CD2-U  
Description: 8FT. Linear Wavestream System, L840  
Light Source: (476) 4000K CCT, 80 CRI LEDS  
EL236N0119D840  
Ballast/Driver: OSRAM  
OT50W

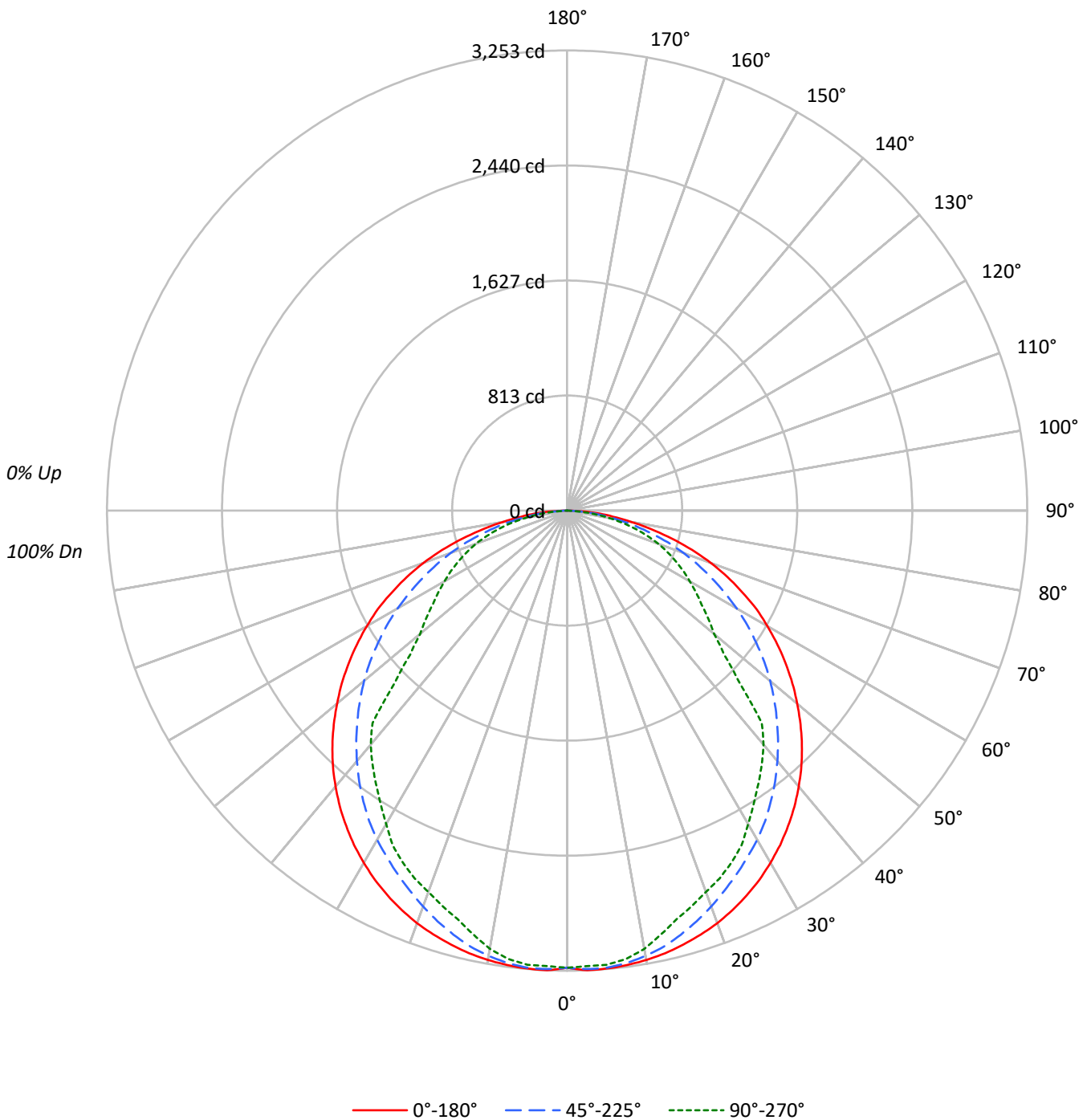
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9004.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35  
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 80.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	9155	9155	9155
5°	9241	9224	9164
10°	9279	9193	9048
15°	9312	9102	8770
20°	9356	8979	8647
25°	9384	8863	8584
30°	9402	8788	8369
35°	9415	8683	8148
40°	9418	8547	7986
45°	9403	8401	6909
50°	9360	8257	5986
55°	9312	8062	5737
60°	9265	7830	5670
65°	9144	7547	5670
70°	8955	7253	5674
75°	8378	6684	5509
80°	7482	5783	4908
85°	6874	4453	3582



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.0	3.4
10°-20°	871.3	9.7
20°-30°	1313.5	14.6
30°-40°	1577.1	17.5
40°-50°	1606.2	17.8
50°-60°	1409.6	15.7
60°-70°	1096.5	12.2
70°-80°	652.1	7.2
80°-90°	170.7	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°	2491.9	27.7
0°-40°	4068.9	45.2
0°-60°	7084.7	78.7
0°-90°	9004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9004.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3232	3232	3232	3232	3232	
5°	3250	3220	3244	3232	3223	309
15°	3175	3131	3104	3026	2991	897
25°	3003	2934	2836	2761	2746	1384
35°	2723	2636	2511	2392	2356	1704
45°	2347	2270	2097	1936	1725	1810
55°	1886	1829	1632	1308	1162	1686
65°	1364	1311	1126	888	846	1351
75°	766	727	611	494	503	809
85°	212	188	137	110	110	232
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3232.0	3232.0	3232.0	3232.0	3232.0
2.5°	3252.8	3220.1	3243.9	3237.9	3223.0
5°	3249.9	3220.1	3243.9	3232.0	3223.0
7.5°	3240.9	3211.1	3226.0	3208.2	3196.2
10°	3226.0	3193.3	3196.2	3166.4	3145.6
12.5°	3205.2	3166.4	3157.5	3097.9	3068.1
15°	3175.4	3130.7	3103.9	3026.4	2990.7
17.5°	3142.6	3092.0	3044.3	2957.9	2931.1
20°	3103.9	3044.3	2978.8	2889.4	2868.6
22.5°	3056.2	2993.7	2907.3	2826.9	2815.0
25°	3002.6	2934.1	2835.8	2761.3	2746.4
27.5°	2943.0	2862.6	2761.3	2686.9	2669.0
30°	2874.5	2791.1	2686.9	2600.5	2558.8
32.5°	2803.0	2716.7	2603.5	2493.2	2454.5
35°	2722.6	2636.2	2511.1	2392.0	2356.2
37.5°	2639.2	2549.8	2415.8	2290.7	2260.9
40°	2546.9	2460.5	2311.5	2189.4	2159.6
42.5°	2451.5	2368.1	2207.3	2085.2	2037.5
45°	2347.3	2269.8	2097.1	1936.2	1724.7
47.5°	2237.1	2165.6	1986.9	1748.5	1504.3
50°	2123.9	2058.3	1873.7	1581.7	1358.3
52.5°	2007.7	1948.1	1757.5	1435.8	1257.0
55°	1885.6	1829.0	1632.4	1307.7	1161.7
57.5°	1763.4	1706.8	1513.2	1191.5	1081.3
60°	1635.4	1581.7	1382.2	1084.3	1000.9
62.5°	1510.2	1450.7	1254.1	986.0	926.4
65°	1364.3	1310.7	1126.0	887.7	846.0
67.5°	1227.3	1170.7	1000.9	792.4	768.5
70°	1081.3	1024.7	875.8	694.1	685.1
72.5°	926.4	881.7	744.7	598.7	592.8
75°	765.5	726.8	610.7	494.5	503.4
77.5°	607.7	583.8	482.6	396.2	402.1
80°	458.7	440.9	354.5	294.9	300.9
82.5°	327.7	312.8	241.3	196.6	196.6
85°	211.5	187.7	137.0	110.2	110.2
87.5°	83.4	68.5	41.7	11.9	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)