

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: P236188

Luminaire Tested: **2SWLED-8SL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236188  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2SWLED-8SL-LN-UNV-L840-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 1 ROW LED, NARROW LENS  
Light Source: (56) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

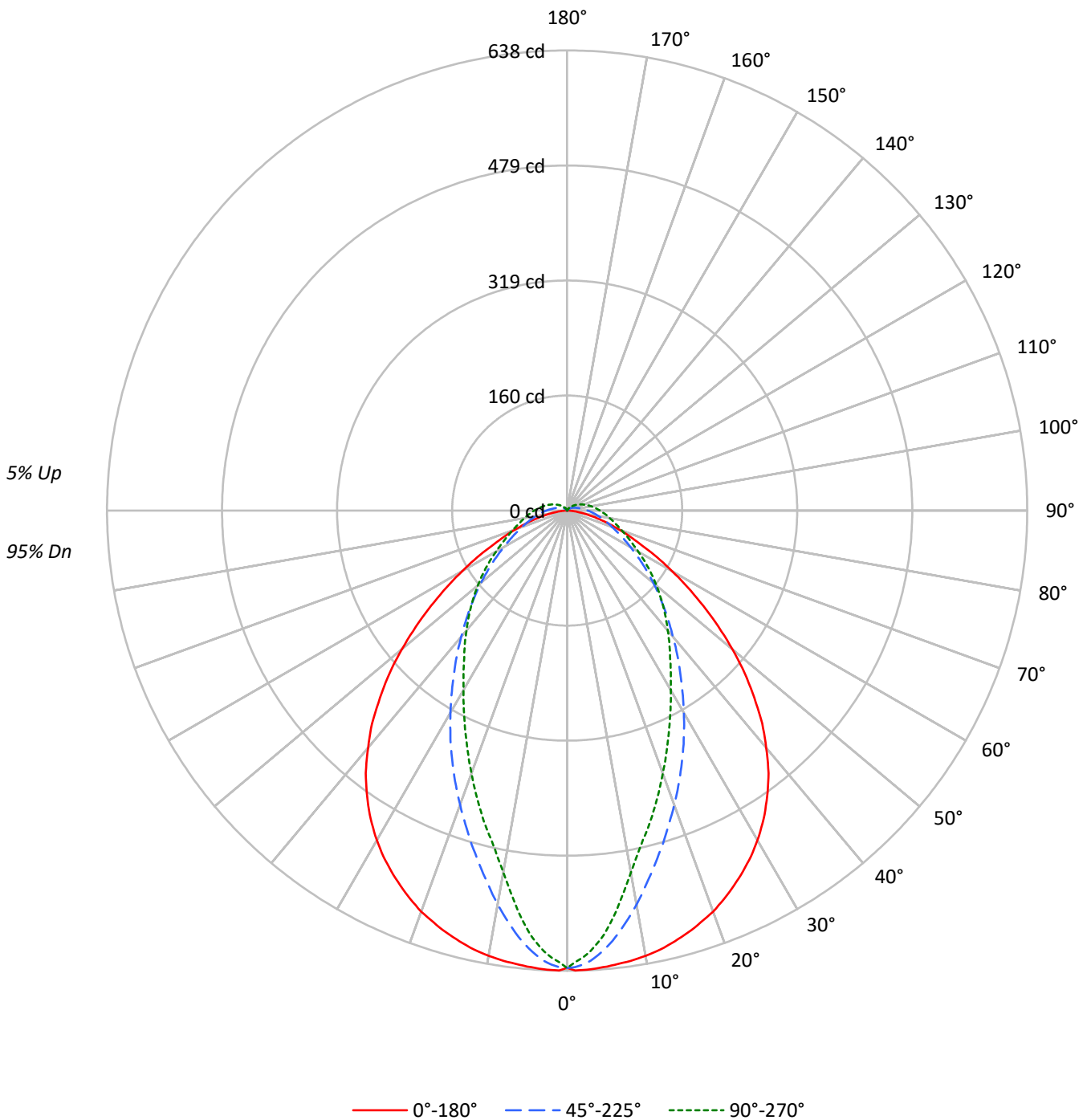
Lumens per Lamp: N/A  
Luminaire Lumens: 1135.0 lumens  
Efficiency: N/A  
Efficacy: 126.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 8.98  
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	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95				95
1	108	103	99	96	105	101	97	93	95	92	90	91	88	86	86	84	83	80				80
2	99	91	85	80	96	89	83	78	85	80	76	81	77	73	77	74	71	69				69
3	91	81	74	68	88	79	72	67	76	70	65	72	67	63	69	65	62	59				59
4	84	73	65	59	82	71	64	58	68	62	57	65	60	55	63	58	54	52				52
5	78	66	58	52	76	65	57	51	62	55	50	60	54	49	57	52	48	46				46
6	73	60	52	46	70	59	51	45	57	50	45	55	49	44	53	47	43	41				41
7	68	55	47	41	66	54	46	41	52	45	40	50	44	40	49	43	39	37				37
8	63	51	43	37	62	50	42	37	48	41	36	47	40	36	45	40	35	34				34
9	59	47	39	34	58	46	39	34	45	38	33	43	37	33	42	36	32	31				31
10	56	44	36	31	55	43	36	31	42	35	31	40	34	30	39	34	30	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9101	9101	9101
5°	9085	8534	8213
10°	9019	7641	6947
15°	8920	6728	6000
20°	8805	5924	5190
25°	8619	5192	4485
30°	8393	4511	3887
35°	8063	3892	3429
40°	7581	3357	3068
45°	6939	2901	2758
50°	6144	2507	2464
55°	5214	2160	2199
60°	4282	1865	1950
65°	3365	1636	1765
70°	2653	1466	1643
75°	2005	1357	1561
80°	1397	1281	1542
85°	826	1249	1588



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.6	5.0
10°-20°	143.0	12.6
20°-30°	188.0	16.6
30°-40°	195.2	17.2
40°-50°	173.4	15.3
50°-60°	133.4	11.8
60°-70°	91.0	8.0
70°-80°	59.0	5.2
80°-90°	37.0	3.3
90°-100°	23.6	2.1
100°-110°	15.3	1.3
110°-120°	9.6	0.8
120°-130°	5.5	0.5
130°-140°	2.8	0.2
140°-150°	1.2	0.1
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	387.6	34.1
0°-40°	582.8	51.3
0°-60°	889.6	78.4
0°-90°	1076.7	94.9
90°-120°	48.5	4.3
90°-150°	58.0	5.1
90°-180°	58.0	5.1
0°-180°	1135.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	635	626	609	594	590	60
15°	612	563	492	454	446	173
25°	563	466	378	342	335	259
35°	484	357	273	251	249	302
45°	367	244	190	186	189	282
55°	230	151	127	133	137	207
65°	115	85	82	92	95	116
75°	46	43	54	66	69	50
85°	9	19	36	48	52	11
90°	0	13	28	41	46	1
95°	0	8	22	35	40	0
105°	0	4	14	24	29	0
115°	0	2	9	17	20	0
125°	0	1	6	11	13	0
135°	0	0	3	6	8	0
145°	0	0	1	3	4	0
155°	0	0	0	1	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	634.1	634.1	634.1	634.1	634.1
1°	637.8	636.4	633.2	628.2	626.3
2°	637.4	635.1	630.0	623.1	620.3
3°	636.9	632.8	624.9	615.3	612.1
4°	635.5	630.0	617.6	605.6	601.5
5°	634.6	626.3	609.3	594.1	589.5
6°	633.2	622.2	600.1	580.8	574.8
7°	631.8	617.6	589.5	566.5	559.1
8°	630.5	612.5	578.0	550.9	542.1
9°	628.6	607.0	566.5	535.7	525.5
10°	626.8	601.0	554.5	520.5	509.4
11°	624.5	594.6	542.1	505.3	494.7
12°	622.2	587.2	529.2	491.5	480.9
13°	619.0	579.4	516.8	478.6	468.0
14°	615.7	571.6	504.8	466.2	457.4
15°	612.1	562.8	492.4	454.2	445.9
16°	608.4	554.1	480.9	442.2	434.0
17°	604.7	544.9	468.9	430.7	422.5
18°	600.1	535.7	457.0	419.2	411.0
19°	595.9	526.5	445.5	408.2	399.4
20°	591.8	516.8	434.0	396.7	387.9
22.5°	578.0	492.4	405.9	369.1	360.3
25°	562.8	466.2	377.8	342.4	334.6
26°	556.4	456.1	367.2	332.3	324.4
27°	549.5	445.5	356.2	322.1	314.8
28°	543.0	434.9	345.1	312.5	305.6
29°	535.2	424.3	334.6	302.8	296.8
30°	527.8	413.3	323.5	293.6	287.2
32.5°	507.1	385.2	297.3	271.5	267.4
35°	483.7	357.1	272.9	251.3	249.0
37.5°	458.8	328.6	250.3	234.2	232.9
40°	429.4	300.0	228.3	217.2	217.2
42.5°	400.4	271.5	208.0	201.6	202.5
45°	366.8	244.4	189.6	186.4	188.7
47.5°	334.1	218.1	172.1	172.1	174.9
50°	299.1	194.2	156.0	158.3	161.5
52.5°	264.2	171.7	140.4	145.4	149.1
55°	230.1	150.9	126.6	133.0	136.7
57.5°	197.9	132.1	113.2	121.5	125.2
60°	168.0	113.7	101.7	110.4	113.7
62.5°	140.8	98.5	91.1	100.3	104.0
65°	114.6	84.7	81.9	91.6	95.3
67.5°	94.3	72.7	73.6	84.2	87.4
70°	75.9	61.7	66.3	77.3	81.0
72.5°	60.3	52.0	59.8	71.3	74.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	46.0	43.3	54.3	65.8	69.0
77.5°	34.1	35.9	48.8	60.7	64.4
80°	23.9	29.5	44.2	56.1	59.8
82.5°	15.6	23.9	39.6	52.0	56.1
85°	9.2	19.3	35.9	48.3	52.5
87.5°	4.1	15.6	32.2	44.6	48.8
90°	0.0	12.9	28.5	41.0	45.6
92.5°	0.0	10.1	25.8	37.7	42.3
95°	0.0	8.3	22.5	35.0	39.6
97.5°	0.0	6.9	20.2	32.2	36.4
100°	0.0	5.5	17.9	29.5	34.1
102.5°	0.0	4.6	16.1	26.7	31.3
105°	0.0	4.1	14.3	24.4	29.0
107.5°	0.0	3.2	12.9	22.5	26.7
110°	0.0	2.8	11.5	20.7	24.4
112.5°	0.0	2.8	10.1	18.4	22.1
115°	0.0	2.3	9.2	17.0	20.2
117.5°	0.0	1.8	8.3	15.2	18.4
120°	0.0	1.4	7.4	13.8	16.6
122.5°	0.0	1.4	6.4	12.4	14.7
125°	0.0	0.9	6.0	11.0	13.3
127.5°	0.0	0.9	5.1	9.7	11.5
130°	0.0	0.5	4.6	8.7	10.1
132.5°	0.0	0.5	4.1	7.4	8.7
135°	0.5	0.5	3.2	6.4	7.8
137.5°	0.0	0.5	2.8	5.5	6.4
140°	0.5	0.5	2.3	4.6	5.5
142.5°	0.5	0.5	1.8	4.1	4.6
145°	0.5	0.5	1.4	3.2	3.7
147.5°	0.5	0.5	0.9	2.8	3.2
150°	0.5	0.5	0.9	1.8	2.3
152.5°	0.5	0.5	0.5	1.4	1.8
155°	0.5	0.5	0.5	0.9	1.4
157.5°	0.5	0.5	0.5	0.5	0.9
160°	0.5	0.5	0.5	0.5	0.5
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)