

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: P236192

Luminaire Tested: **2SWLED-16SL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236192  
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-16SL-LN-UNV-L850-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 1 ROW LED, NARROW LENS  
Light Source: (56) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

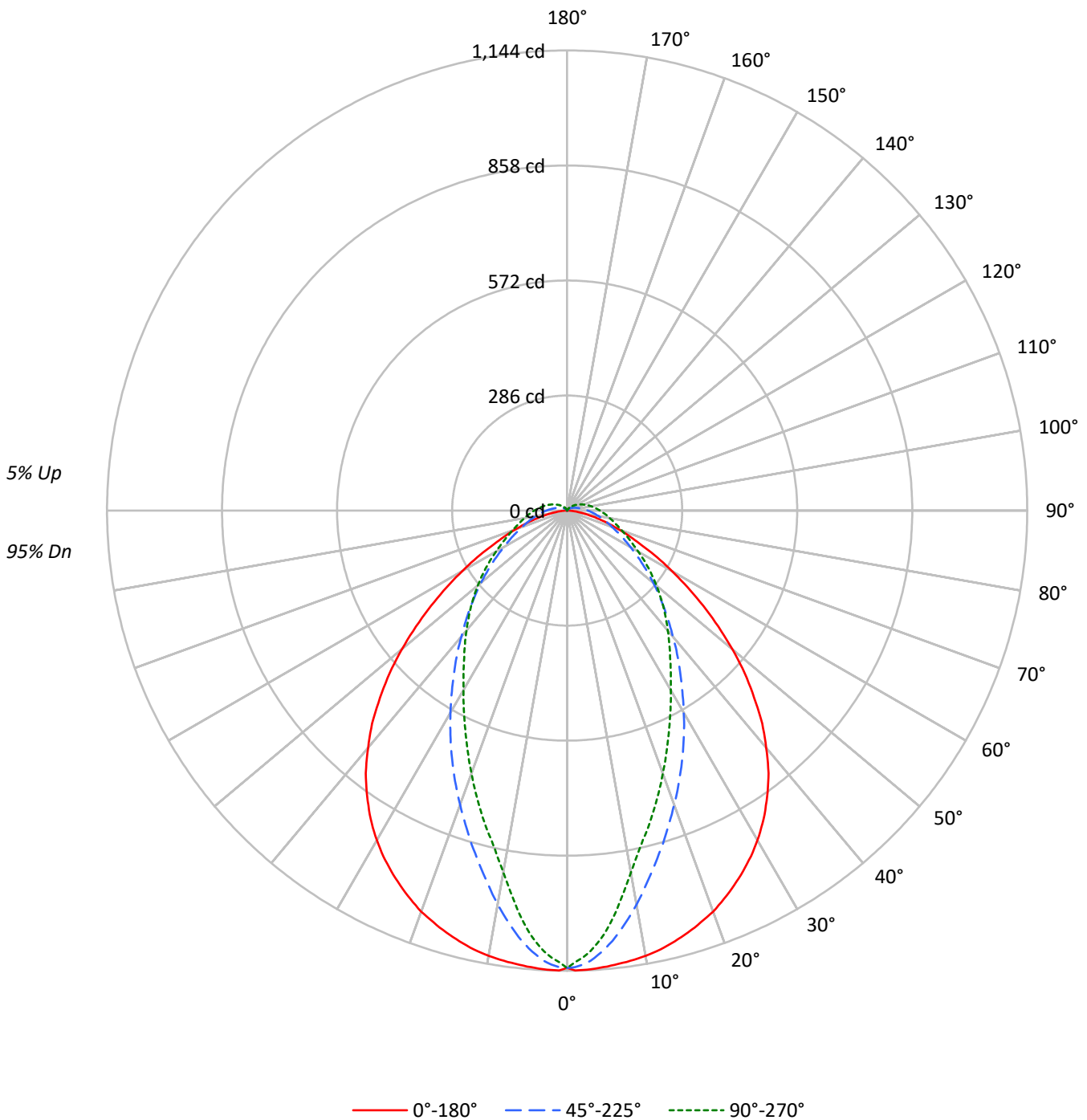
Lumens per Lamp: N/A  
Luminaire Lumens: 2035.1 lumens  
Efficiency: N/A  
Efficacy: 128.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 15.9  
Input Voltage (V): 120  
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	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	108	103	99	96	105	101	97	93	95	92	90	91	88	86	86	84	83	80
2	99	91	85	80	96	89	83	78	85	80	76	81	77	73	77	74	71	69
3	91	81	74	68	88	79	72	67	76	70	65	72	67	63	69	65	62	59
4	84	73	65	59	82	71	64	58	68	62	57	65	60	55	63	58	54	52
5	78	66	58	52	76	65	57	51	62	55	50	60	54	49	57	52	48	46
6	73	60	52	46	70	59	51	45	57	50	45	55	49	44	53	47	43	41
7	68	55	47	41	66	54	46	41	52	45	40	50	44	40	49	43	39	37
8	63	51	43	37	62	50	42	37	48	41	36	47	40	36	45	40	35	34
9	59	47	39	34	58	46	39	34	45	38	33	43	37	33	42	36	32	31
10	56	44	36	31	55	43	36	31	42	35	31	40	34	30	39	34	30	28

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

	0°	45°	90°
0°	16318	16318	16318
5°	16288	15301	14727
10°	16170	13700	12457
15°	15993	12063	10758
20°	15787	10621	9307
25°	15454	9309	8040
30°	15050	8087	6968
35°	14456	6977	6147
40°	13591	6019	5501
45°	12440	5201	4944
50°	11017	4496	4418
55°	9350	3872	3943
60°	7676	3342	3495
65°	6035	2934	3163
70°	4758	2628	2946
75°	3596	2434	2800
80°	2508	2295	2767
85°	1482	2241	2846



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	5.0
10°-20°	256.3	12.6
20°-30°	337.0	16.6
30°-40°	350.0	17.2
40°-50°	311.0	15.3
50°-60°	239.1	11.8
60°-70°	163.2	8.0
70°-80°	105.8	5.2
80°-90°	66.4	3.3
90°-100°	42.3	2.1
100°-110°	27.4	1.3
110°-120°	17.2	0.8
120°-130°	10.0	0.5
130°-140°	5.0	0.2
140°-150°	2.1	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	694.9	34.1
0°-40°	1044.9	51.3
0°-60°	1595.0	78.4
0°-90°	1930.4	94.9
90°-120°	86.9	4.3
90°-150°	104.0	5.1
90°-180°	105.0	5.2
0°-180°	2035.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1137	1137	1137	1137	1137	
5°	1138	1123	1092	1065	1057	108
15°	1097	1009	883	814	800	310
25°	1009	836	677	614	600	465
35°	867	640	489	450	446	541
45°	658	438	340	334	338	506
55°	413	271	227	238	245	370
65°	206	152	147	164	171	209
75°	82	78	97	118	124	90
85°	16	35	64	87	94	19
90°	0	23	51	73	82	1
95°	0	15	40	63	71	0
105°	0	7	26	44	52	0
115°	0	4	16	30	36	0
125°	0	2	11	20	24	0
135°	1	1	6	12	14	0
145°	1	1	2	6	7	1
155°	1	1	1	2	2	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°	1137.0	1137.0	1137.0	1137.0	1137.0
1°	1143.6	1141.1	1135.3	1126.3	1123.0
2°	1142.8	1138.6	1129.6	1117.2	1112.2
3°	1141.9	1134.5	1120.5	1103.2	1097.4
4°	1139.5	1129.6	1107.3	1085.8	1078.4
5°	1137.8	1123.0	1092.4	1065.2	1057.0
6°	1135.3	1115.5	1075.9	1041.3	1030.6
7°	1132.9	1107.3	1057.0	1015.7	1002.5
8°	1130.4	1098.2	1036.3	987.6	972.0
9°	1127.1	1088.3	1015.7	960.4	942.3
10°	1123.8	1077.6	994.2	933.2	913.4
11°	1119.7	1066.0	972.0	906.0	887.0
12°	1115.5	1052.8	948.9	881.2	862.2
13°	1109.8	1038.8	926.6	858.1	839.1
14°	1104.0	1024.8	905.1	835.8	820.2
15°	1097.4	1009.1	882.9	814.4	799.5
16°	1090.8	993.4	862.2	792.9	778.1
17°	1084.2	976.9	840.8	772.3	757.4
18°	1075.9	960.4	819.3	751.7	736.8
19°	1068.5	943.9	798.7	731.9	716.2
20°	1061.1	926.6	778.1	711.2	695.6
22.5°	1036.3	882.9	727.7	661.7	646.1
25°	1009.1	835.8	677.4	613.9	599.8
26°	997.5	817.7	658.4	595.7	581.7
27°	985.2	798.7	638.6	577.6	564.4
28°	973.6	779.7	618.8	560.2	547.9
29°	959.6	760.7	599.8	542.9	532.2
30°	946.4	740.9	580.0	526.4	514.9
32.5°	909.3	690.6	533.0	486.8	479.4
35°	867.2	640.3	489.3	450.5	446.4
37.5°	822.6	589.1	448.9	420.0	417.5
40°	769.8	538.0	409.3	389.4	389.4
42.5°	717.8	486.8	372.9	361.4	363.0
45°	657.6	438.1	339.9	334.2	338.3
47.5°	599.0	391.1	308.6	308.6	313.5
50°	536.3	348.2	279.7	283.8	289.6
52.5°	473.6	307.8	251.7	260.7	267.3
55°	412.6	270.6	226.9	238.5	245.1
57.5°	354.8	236.8	203.0	217.8	224.4
60°	301.2	203.8	182.3	198.0	203.8
62.5°	252.5	176.6	163.4	179.9	186.5
65°	205.5	151.8	146.9	164.2	170.8
67.5°	169.1	130.4	132.0	151.0	156.8
70°	136.1	110.6	118.8	138.6	145.2
72.5°	108.1	93.2	107.3	127.9	133.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	82.5	77.6	97.4	118.0	123.8
77.5°	61.1	64.4	87.5	108.9	115.5
80°	42.9	52.8	79.2	100.7	107.3
82.5°	28.1	42.9	71.0	93.2	100.7
85°	16.5	34.7	64.4	86.6	94.1
87.5°	7.4	28.1	57.8	80.0	87.5
90°	0.0	23.1	51.2	73.4	81.7
92.5°	0.0	18.2	46.2	67.7	75.9
95°	0.0	14.9	40.4	62.7	71.0
97.5°	0.0	12.4	36.3	57.8	65.2
100°	0.0	9.9	32.2	52.8	61.1
102.5°	0.0	8.3	28.9	47.9	56.1
105°	0.0	7.4	25.6	43.7	52.0
107.5°	0.0	5.8	23.1	40.4	47.9
110°	0.0	5.0	20.6	37.1	43.7
112.5°	0.0	5.0	18.2	33.0	39.6
115°	0.0	4.1	16.5	30.5	36.3
117.5°	0.0	3.3	14.9	27.2	33.0
120°	0.0	2.5	13.2	24.8	29.7
122.5°	0.0	2.5	11.6	22.3	26.4
125°	0.0	1.7	10.7	19.8	23.9
127.5°	0.0	1.7	9.1	17.3	20.6
130°	0.0	0.8	8.3	15.7	18.2
132.5°	0.0	0.8	7.4	13.2	15.7
135°	0.8	0.8	5.8	11.6	14.0
137.5°	0.0	0.8	5.0	9.9	11.6
140°	0.8	0.8	4.1	8.3	9.9
142.5°	0.8	0.8	3.3	7.4	8.3
145°	0.8	0.8	2.5	5.8	6.6
147.5°	0.8	0.8	1.7	5.0	5.8
150°	0.8	0.8	1.7	3.3	4.1
152.5°	0.8	0.8	0.8	2.5	3.3
155°	0.8	0.8	0.8	1.7	2.5
157.5°	0.8	0.8	0.8	0.8	1.7
160°	0.8	0.8	0.8	0.8	0.8
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)