

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: P236190

Luminaire Tested: **2SWLED-16SL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236190  
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-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 1 ROW LED, NARROW LENS  
Light Source: (56) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

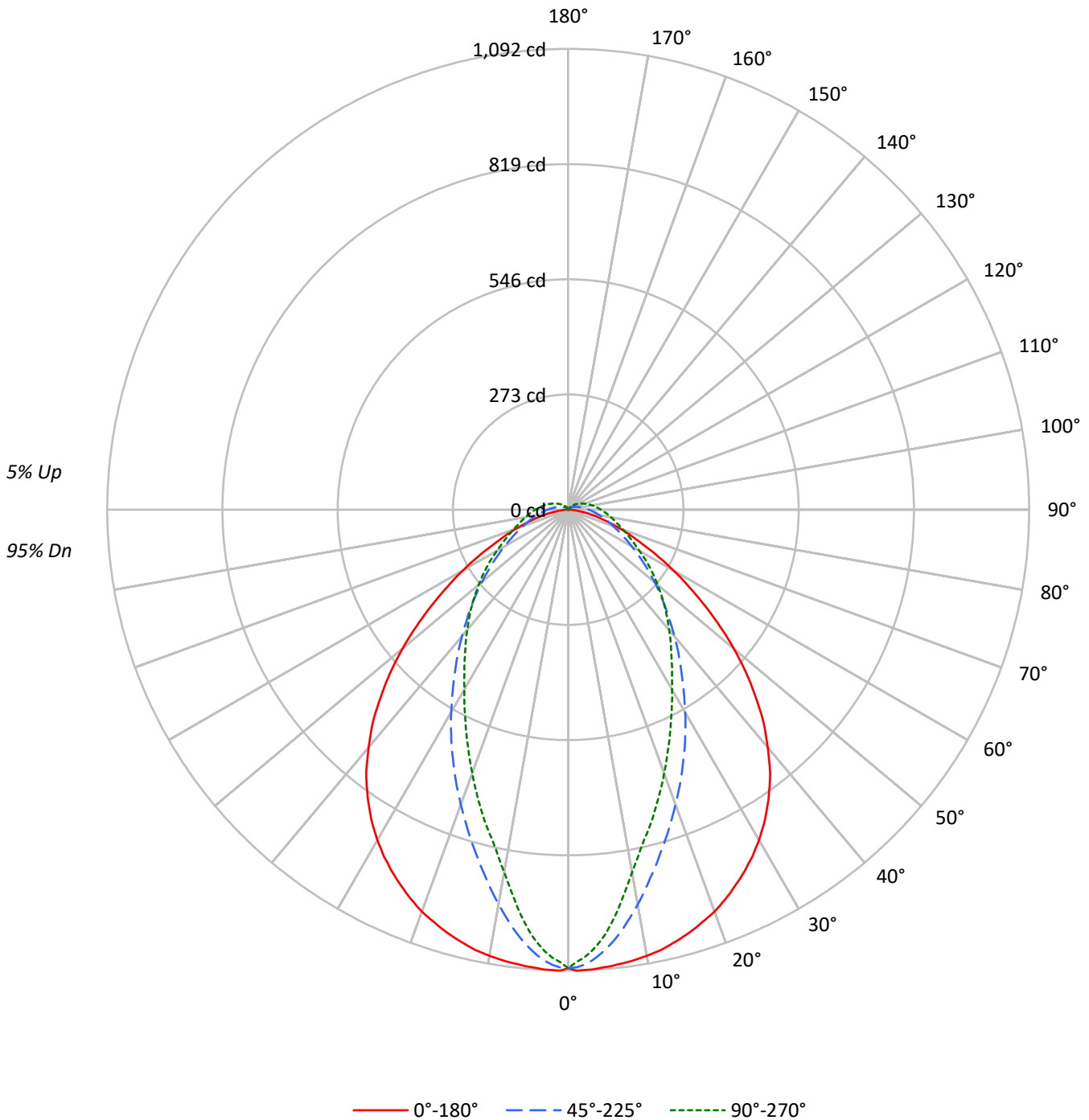
Lumens per Lamp: N/A  
Luminaire Lumens: 1944.0 lumens  
Efficiency: N/A  
Efficacy: 122.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 0.74 / 0.96  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 15.9  
Input Voltage (V): 120  
Input Current (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°	15588	15588	15588
5°	15559	14617	14068
10°	15446	13088	11899
15°	15277	11523	10278
20°	15080	10146	8890
25°	14763	8893	7681
30°	14378	7726	6656
35°	13809	6665	5872
40°	12983	5750	5255
45°	11884	4968	4723
50°	10524	4295	4222
55°	8931	3699	3766
60°	7332	3194	3339
65°	5765	2802	3022
70°	4548	2510	2814
75°	3435	2324	2674
80°	2397	2194	2643
85°	1419	2140	2719



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.0	5.0
10°-20°	244.8	12.6
20°-30°	322.0	16.6
30°-40°	334.4	17.2
40°-50°	297.0	15.3
50°-60°	228.4	11.8
60°-70°	155.9	8.0
70°-80°	101.0	5.2
80°-90°	63.4	3.3
90°-100°	40.4	2.1
100°-110°	26.2	1.3
110°-120°	16.5	0.8
120°-130°	9.5	0.5
130°-140°	4.8	0.2
140°-150°	2.0	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	663.8	34.1
0°-40°	998.2	51.3
0°-60°	1523.7	78.4
0°-90°	1844.1	94.9
90°-120°	83.0	4.3
90°-150°	99.3	5.1
90°-180°	100.0	5.1
0°-180°	1944.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1087	1073	1044	1018	1010	103
15°	1048	964	843	778	764	296
25°	964	798	647	586	573	444
35°	828	612	467	430	426	517
45°	628	418	325	319	323	484
55°	394	258	217	228	234	354
65°	196	145	140	157	163	200
75°	79	74	93	113	118	86
85°	16	33	62	83	90	18
90°	0	22	49	70	78	1
95°	0	14	39	60	68	0
105°	0	7	24	42	50	0
115°	0	4	16	29	35	0
125°	0	2	10	19	23	0
135°	1	1	6	11	13	0
145°	1	1	2	6	6	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°	1086.1	1086.1	1086.1	1086.1	1086.1
1°	1092.5	1090.1	1084.6	1075.9	1072.7
2°	1091.7	1087.7	1079.1	1067.2	1062.5
3°	1090.9	1083.8	1070.4	1053.8	1048.3
4°	1088.5	1079.1	1057.8	1037.3	1030.2
5°	1086.9	1072.7	1043.6	1017.6	1009.7
6°	1084.6	1065.7	1027.8	994.7	984.5
7°	1082.2	1057.8	1009.7	970.3	957.7
8°	1079.8	1049.1	990.0	943.5	928.5
9°	1076.7	1039.6	970.3	917.5	900.1
10°	1073.5	1029.4	949.8	891.5	872.5
11°	1069.6	1018.4	928.5	865.5	847.3
12°	1065.7	1005.8	906.4	841.8	823.7
13°	1060.1	992.4	885.2	819.7	801.6
14°	1054.6	979.0	864.7	798.5	783.5
15°	1048.3	964.0	843.4	778.0	763.8
16°	1042.0	949.0	823.7	757.5	743.3
17°	1035.7	933.2	803.2	737.8	723.6
18°	1027.8	917.5	782.7	718.1	703.9
19°	1020.7	901.7	763.0	699.1	684.2
20°	1013.6	885.2	743.3	679.4	664.5
22.5°	990.0	843.4	695.2	632.1	617.2
25°	964.0	798.5	647.1	586.4	573.0
26°	952.9	781.1	629.0	569.1	555.7
27°	941.1	763.0	610.1	551.7	539.1
28°	930.1	744.9	591.2	535.2	523.4
29°	916.7	726.7	573.0	518.6	508.4
30°	904.1	707.8	554.1	502.9	491.8
32.5°	868.6	659.7	509.2	465.0	457.9
35°	828.4	611.6	467.4	430.4	426.4
37.5°	785.8	562.8	428.8	401.2	398.8
40°	735.4	513.9	391.0	372.0	372.0
42.5°	685.7	465.0	356.3	345.2	346.8
45°	628.2	418.5	324.7	319.2	323.2
47.5°	572.2	373.6	294.8	294.8	299.5
50°	512.3	332.6	267.2	271.1	276.7
52.5°	452.4	294.0	240.4	249.1	255.4
55°	394.1	258.5	216.8	227.8	234.1
57.5°	338.9	226.2	193.9	208.1	214.4
60°	287.7	194.7	174.2	189.2	194.7
62.5°	241.2	168.7	156.1	171.8	178.1
65°	196.3	145.0	140.3	156.9	163.2
67.5°	161.6	124.5	126.1	144.2	149.8
70°	130.1	105.6	113.5	132.4	138.7
72.5°	103.3	89.1	102.5	122.2	127.7



TEST NUMBER: P236190

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	78.8	74.1	93.0	112.7	118.2
77.5°	58.3	61.5	83.5	104.0	110.3
80°	41.0	50.4	75.7	96.2	102.5
82.5°	26.8	41.0	67.8	89.1	96.2
85°	15.8	33.1	61.5	82.8	89.9
87.5°	7.1	26.8	55.2	76.5	83.5
90°	0.0	22.1	48.9	70.2	78.0
92.5°	0.0	17.3	44.1	64.6	72.5
95°	0.0	14.2	38.6	59.9	67.8
97.5°	0.0	11.8	34.7	55.2	62.3
100°	0.0	9.5	30.7	50.4	58.3
102.5°	0.0	7.9	27.6	45.7	53.6
105°	0.0	7.1	24.4	41.8	49.7
107.5°	0.0	5.5	22.1	38.6	45.7
110°	0.0	4.7	19.7	35.5	41.8
112.5°	0.0	4.7	17.3	31.5	37.8
115°	0.0	3.9	15.8	29.2	34.7
117.5°	0.0	3.2	14.2	26.0	31.5
120°	0.0	2.4	12.6	23.6	28.4
122.5°	0.0	2.4	11.0	21.3	25.2
125°	0.0	1.6	10.2	18.9	22.9
127.5°	0.0	1.6	8.7	16.6	19.7
130°	0.0	0.8	7.9	15.0	17.3
132.5°	0.0	0.8	7.1	12.6	15.0
135°	0.8	0.8	5.5	11.0	13.4
137.5°	0.0	0.8	4.7	9.5	11.0
140°	0.8	0.8	3.9	7.9	9.5
142.5°	0.8	0.8	3.2	7.1	7.9
145°	0.8	0.8	2.4	5.5	6.3
147.5°	0.8	0.8	1.6	4.7	5.5
150°	0.8	0.8	1.6	3.2	3.9
152.5°	0.8	0.8	0.8	2.4	3.2
155°	0.8	0.8	0.8	1.6	2.4
157.5°	0.8	0.8	0.8	0.8	1.6
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)