

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: P236261

Luminaire Tested: **4SWLED-16SL-LW-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-15)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SWLED-16SL-LW-UNV-L850-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 1 ROW LED, WIDE LENS  
Light Source: (112) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

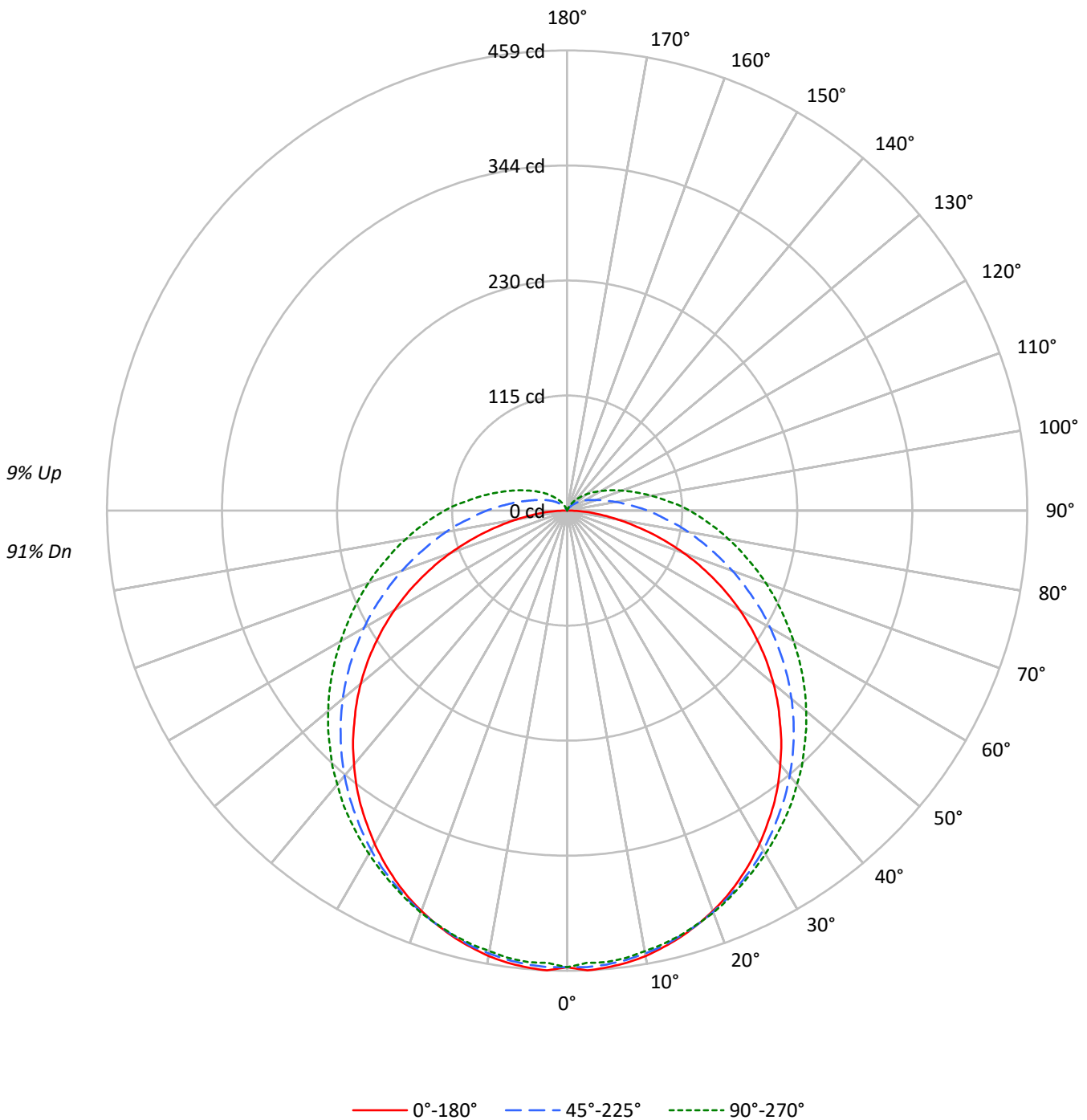
Lumens per Lamp: N/A  
Luminaire Lumens: 1668.0 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 14.3  
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	0
RCR																		
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	104	99	94	89	101	96	91	87	90	86	82	84	81	78	79	76	74	71
2	94	85	77	71	91	82	75	69	77	71	66	72	68	63	68	64	61	58
3	85	74	65	58	82	72	63	57	67	60	55	63	57	53	60	55	51	48
4	78	65	56	49	75	63	55	48	59	52	46	56	50	45	53	47	43	40
5	71	58	49	42	69	56	47	41	53	45	40	50	43	38	47	42	37	35
6	66	52	43	36	63	51	42	35	48	40	34	45	39	33	43	37	32	30
7	61	47	38	32	59	46	37	31	43	36	30	41	34	29	39	33	29	26
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	23
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21
10	50	36	28	23	48	35	28	22	34	27	22	32	26	21	31	25	21	19

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

	0°	45°	90°
0°	3268	3268	3268
5°	3285	3190	3149
10°	3267	3105	3043
15°	3237	3017	2949
20°	3203	2931	2854
25°	3163	2845	2760
30°	3115	2760	2676
35°	3067	2670	2598
40°	3006	2583	2518
45°	2941	2493	2444
50°	2876	2401	2374
55°	2792	2305	2306
60°	2686	2207	2237
65°	2545	2106	2181
70°	2361	2014	2137
75°	2089	1927	2105
80°	1764	1872	2105
85°	1377	1835	2143



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.1	2.6
10°-20°	123.6	7.4
20°-30°	188.2	11.3
30°-40°	229.9	13.8
40°-50°	245.3	14.7
50°-60°	234.1	14.0
60°-70°	199.7	12.0
70°-80°	150.8	9.0
80°-90°	101.2	6.1
90°-100°	63.5	3.8
100°-110°	39.5	2.4
110°-120°	24.2	1.5
120°-130°	14.2	0.8
130°-140°	7.2	0.4
140°-150°	2.8	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	354.9	21.3
0°-40°	584.7	35.1
0°-60°	1064.1	63.8
0°-90°	1515.9	90.9
90°-120°	127.2	7.6
90°-150°	151.4	9.1
90°-180°	152.0	9.1
0°-180°	1668.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	458	452	454	452	452	43
15°	440	435	439	438	438	124
25°	406	403	410	410	412	187
35°	359	359	369	373	377	224
45°	300	305	320	329	334	232
55°	235	244	263	278	287	210
65°	162	177	204	226	236	160
75°	86	110	148	177	186	91
85°	24	55	99	131	142	25
90°	0	37	80	111	122	2
95°	0	24	63	91	102	0
105°	0	12	39	62	71	0
115°	0	7	25	41	48	0
125°	0	4	16	27	32	0
135°	0	1	9	17	20	0
145°	0	0	4	8	10	0
155°	0	0	1	2	3	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°	455.4	455.4	455.4	455.4	455.4
2.5°	459.1	453.7	455.8	454.1	451.6
5°	457.5	452.5	454.5	452.5	452.1
7.5°	455.0	450.0	452.1	450.4	450.0
10°	451.2	445.8	448.7	446.7	446.2
12.5°	445.8	441.3	444.6	442.5	442.9
15°	440.0	435.4	438.8	437.9	438.3
17.5°	432.9	428.8	432.9	432.1	432.5
20°	425.0	421.3	425.9	425.5	426.7
22.5°	416.3	412.6	418.4	417.6	419.6
25°	406.3	403.4	409.7	410.1	411.8
27.5°	395.5	393.5	400.9	401.4	403.9
30°	383.9	382.3	391.0	392.6	395.5
32.5°	371.4	371.0	380.2	383.1	386.4
35°	359.0	358.6	369.0	372.7	377.3
37.5°	345.3	346.1	357.7	362.7	367.7
40°	330.7	332.0	345.3	351.5	356.5
42.5°	316.2	319.5	332.8	340.7	346.5
45°	300.4	305.4	319.5	328.7	334.5
47.5°	285.0	290.8	306.2	316.6	323.3
50°	268.8	275.5	292.1	304.1	311.2
52.5°	252.2	259.7	278.0	291.7	299.2
55°	234.8	243.9	263.4	278.4	286.7
57.5°	217.3	227.7	248.5	265.9	273.8
60°	199.0	210.7	233.9	252.2	260.9
62.5°	180.7	194.0	219.4	239.7	248.0
65°	161.6	176.6	204.0	226.0	235.6
67.5°	142.9	160.0	189.5	213.1	223.1
70°	123.8	142.5	175.3	200.7	210.7
72.5°	104.7	125.9	161.2	188.6	198.6
75°	85.6	109.7	147.5	176.6	186.1
77.5°	67.7	93.5	134.6	164.1	174.9
80°	51.5	79.4	122.6	152.9	163.3
82.5°	36.6	66.9	110.9	141.7	152.5
85°	23.7	55.3	98.9	130.9	141.7
87.5°	11.6	45.3	89.3	120.9	131.7
90°	0.4	37.4	80.2	111.4	122.2
92.5°	0.0	29.9	71.0	101.0	112.6
95°	0.0	24.1	62.7	91.4	101.8
97.5°	0.0	19.9	55.7	83.5	93.5
100°	0.0	16.2	49.4	75.6	85.2
102.5°	0.0	13.7	43.6	68.6	77.7
105°	0.0	11.6	38.6	61.9	70.6
107.5°	0.0	10.4	34.5	56.1	64.0
110°	0.0	9.1	30.7	50.7	58.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	7.9	27.4	45.7	52.8
115°	0.0	6.6	24.9	41.1	47.8
117.5°	0.0	5.8	22.4	37.0	43.2
120°	0.0	5.0	19.9	33.7	39.1
122.5°	0.0	4.2	17.9	30.3	35.3
125°	0.0	3.7	15.8	27.0	31.6
127.5°	0.0	2.9	14.1	24.1	28.7
130°	0.0	2.5	12.0	21.6	25.3
132.5°	0.0	1.7	10.4	19.1	22.4
135°	0.0	1.2	8.7	16.6	19.5
137.5°	0.0	0.8	7.5	14.5	17.0
140°	0.0	0.8	5.8	12.5	14.5
142.5°	0.0	0.4	4.6	10.4	12.5
145°	0.0	0.4	3.7	8.3	10.4
147.5°	0.4	0.0	2.5	6.6	8.3
150°	0.4	0.0	2.1	5.0	6.6
152.5°	0.4	0.0	1.2	3.7	5.0
155°	0.4	0.0	0.8	2.5	3.3
157.5°	0.4	0.4	0.4	1.2	2.1
160°	0.4	0.0	0.0	0.8	1.2
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)