

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: P236200

Luminaire Tested: **2SWLED-16SL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236200  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2SWLED-16SL-LW-UNV-L840-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 1 ROW LED, WIDE LENS  
Light Source: (56) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

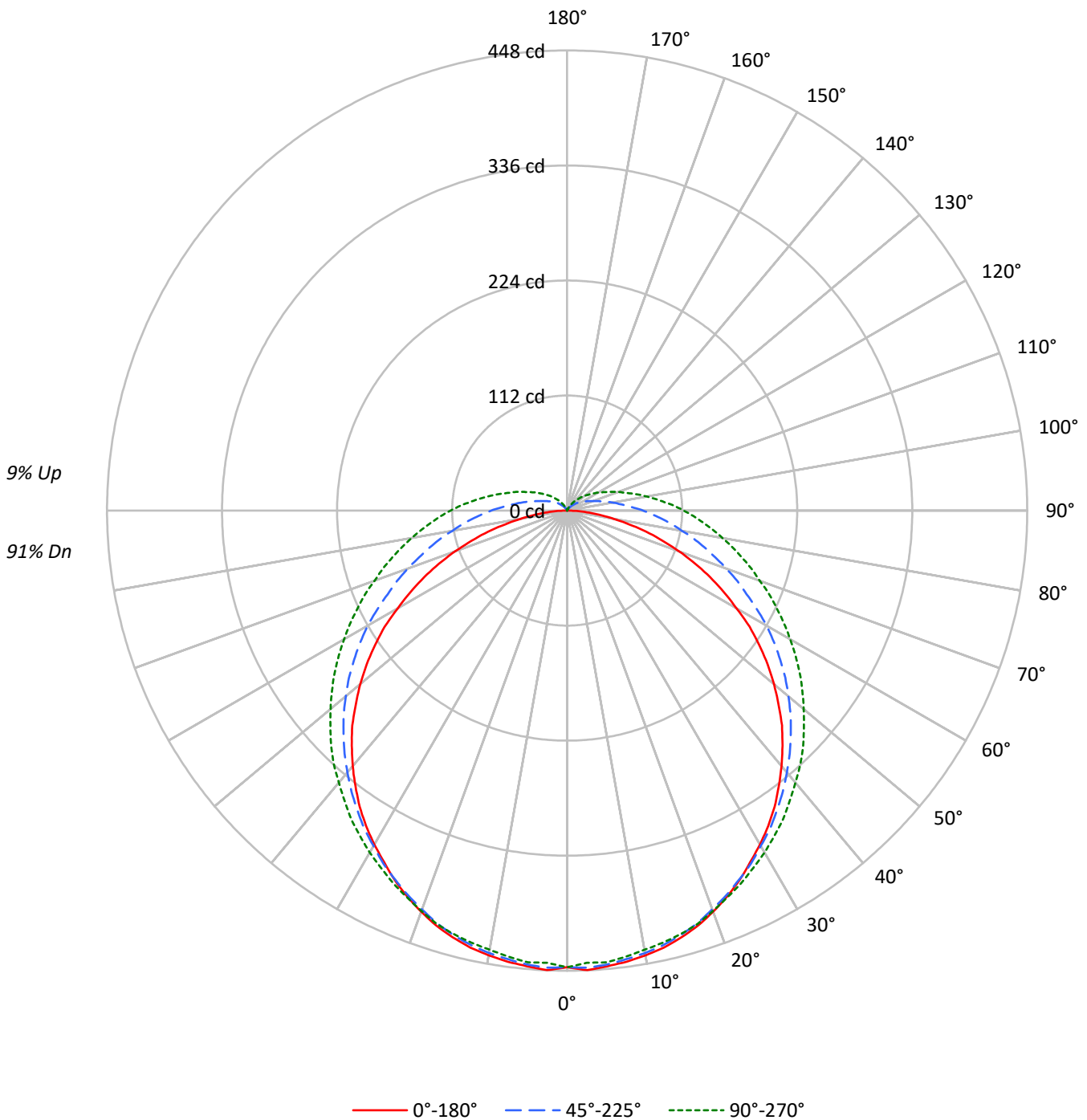
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1597.0 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.4  
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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	105	99	94	89	101	96	91	87	90	86	83	85	82	79	80	77	75	72
2	94	85	78	71	91	83	76	70	78	72	67	73	68	64	69	65	61	59
3	86	74	65	58	82	72	64	57	68	61	55	64	58	53	60	55	51	49
4	78	65	56	49	75	64	55	48	60	52	47	56	50	45	53	48	44	41
5	72	58	49	42	69	57	48	41	53	46	40	51	44	39	48	42	38	35
6	66	52	43	36	64	51	42	36	48	41	35	46	39	34	43	37	33	31
7	61	47	38	32	59	46	38	32	44	36	31	42	35	30	39	34	29	27
8	57	43	34	28	55	42	34	28	40	33	27	38	31	27	36	30	26	24
9	53	39	31	25	51	39	31	25	37	30	25	35	29	24	33	28	23	21
10	50	36	28	23	48	36	28	23	34	27	22	32	26	22	31	25	21	19

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

	0°	45°	90°
0°	6381	6381	6381
5°	6376	6216	6150
10°	6327	6026	5920
15°	6268	5844	5744
20°	6183	5640	5550
25°	6082	5446	5367
30°	5970	5257	5201
35°	5869	5078	5048
40°	5734	4894	4883
45°	5596	4711	4746
50°	5401	4523	4588
55°	5174	4321	4450
60°	4855	4112	4302
65°	4511	3853	4168
70°	4048	3645	4045
75°	3470	3457	3984
80°	2678	3286	3960
85°	1733	3219	4010



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.1	2.6
10°-20°	120.8	7.6
20°-30°	183.3	11.5
30°-40°	223.7	14.0
40°-50°	238.4	14.9
50°-60°	226.1	14.2
60°-70°	190.1	11.9
70°-80°	141.6	8.9
80°-90°	93.8	5.9
90°-100°	58.2	3.6
100°-110°	35.8	2.2
110°-120°	21.5	1.3
120°-130°	12.4	0.8
130°-140°	6.2	0.4
140°-150°	2.4	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	346.2	21.7
0°-40°	569.9	35.7
0°-60°	1034.5	64.8
0°-90°	1460.0	91.4
90°-120°	115.5	7.2
90°-150°	136.5	8.5
90°-180°	137.0	8.6
0°-180°	1597.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	445	445	445	445	445	
5°	445	445	444	441	441	42
15°	430	429	428	427	427	121
25°	397	396	396	399	400	183
35°	352	351	356	363	367	220
45°	296	298	308	320	325	228
55°	228	236	253	270	277	204
65°	154	168	193	217	225	152
75°	80	103	138	166	176	84
85°	19	51	92	122	133	21
90°	1	33	74	103	113	1
95°	0	21	57	84	95	0
105°	0	10	35	56	64	0
115°	0	6	22	37	43	0
125°	0	2	14	24	28	0
135°	0	1	7	14	17	0
145°	0	0	3	7	9	0
155°	0	0	0	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°	444.6	444.6	444.6	444.6	444.6
2.5°	447.8	447.0	445.4	442.2	440.6
5°	445.4	445.4	443.8	441.4	441.4
7.5°	443.0	442.2	440.6	438.9	438.1
10°	439.7	439.7	437.3	434.9	434.1
12.5°	435.7	434.9	433.3	430.9	430.9
15°	430.1	429.3	427.7	426.9	426.9
17.5°	423.7	422.9	421.3	421.3	422.1
20°	415.6	414.8	413.2	414.0	414.8
22.5°	406.8	406.0	405.2	406.0	407.6
25°	397.1	396.3	396.3	398.7	400.4
27.5°	385.9	385.9	387.5	390.7	392.3
30°	375.4	374.6	377.0	381.9	384.3
32.5°	364.2	363.4	367.4	373.0	375.4
35°	352.1	351.3	356.1	362.6	366.6
37.5°	338.5	339.3	344.9	352.9	356.1
40°	324.8	325.6	332.8	342.5	345.7
42.5°	310.3	311.9	320.8	331.2	336.0
45°	295.8	298.3	307.9	320.0	324.8
47.5°	279.0	283.0	295.0	307.9	312.7
50°	262.9	267.7	281.4	295.8	300.7
52.5°	246.0	251.6	267.7	283.0	288.6
55°	228.3	235.6	253.2	270.1	276.6
57.5°	210.6	219.5	238.8	257.3	263.7
60°	190.5	201.0	224.3	243.6	250.8
62.5°	172.0	184.1	208.2	230.7	238.0
65°	153.6	168.0	192.9	217.1	225.1
67.5°	135.1	151.1	179.3	202.6	213.0
70°	115.8	134.3	164.8	189.7	199.4
72.5°	97.3	118.2	151.1	177.7	188.1
75°	79.6	102.9	138.3	166.4	176.1
77.5°	61.9	87.6	126.2	154.4	164.8
80°	45.8	74.0	113.4	143.1	153.6
82.5°	31.4	61.9	102.9	132.6	143.1
85°	19.3	50.6	92.5	122.2	132.6
87.5°	8.8	41.0	82.8	112.5	123.0
90°	0.8	33.0	74.0	102.9	113.4
92.5°	0.0	26.5	65.1	93.3	104.5
95°	0.0	20.9	57.1	84.4	94.9
97.5°	0.0	16.9	50.6	77.2	86.8
100°	0.0	14.5	45.0	69.1	78.8
102.5°	0.0	12.1	39.4	62.7	71.5
105°	0.0	10.5	34.6	56.3	64.3
107.5°	0.0	8.8	30.5	50.6	57.9
110°	0.0	8.0	27.3	45.8	53.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	6.4	24.1	41.0	47.4
115°	0.0	5.6	21.7	37.0	42.6
117.5°	0.0	4.8	19.3	33.0	38.6
120°	0.0	4.0	17.7	30.5	35.4
122.5°	0.0	3.2	15.3	27.3	31.4
125°	0.0	2.4	13.7	24.1	28.1
127.5°	0.0	2.4	12.1	21.7	24.9
130°	0.0	1.6	10.5	19.3	22.5
132.5°	0.0	1.6	8.8	16.9	20.1
135°	0.0	0.8	7.2	14.5	16.9
137.5°	0.0	0.8	6.4	12.1	14.5
140°	0.0	0.8	4.8	10.5	12.9
142.5°	0.0	0.0	4.0	8.8	10.5
145°	0.0	0.0	3.2	7.2	8.8
147.5°	0.0	0.0	2.4	5.6	7.2
150°	0.0	0.0	1.6	4.0	5.6
152.5°	0.8	0.0	0.8	3.2	4.0
155°	0.0	0.0	0.0	1.6	2.4
157.5°	0.0	0.0	0.0	0.8	1.6
160°	0.0	0.0	0.0	0.0	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)