

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: P236259

Luminaire Tested: **4SWLED-16SL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236259  
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-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 1 ROW LED, WIDE LENS  
Light Source: (112) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

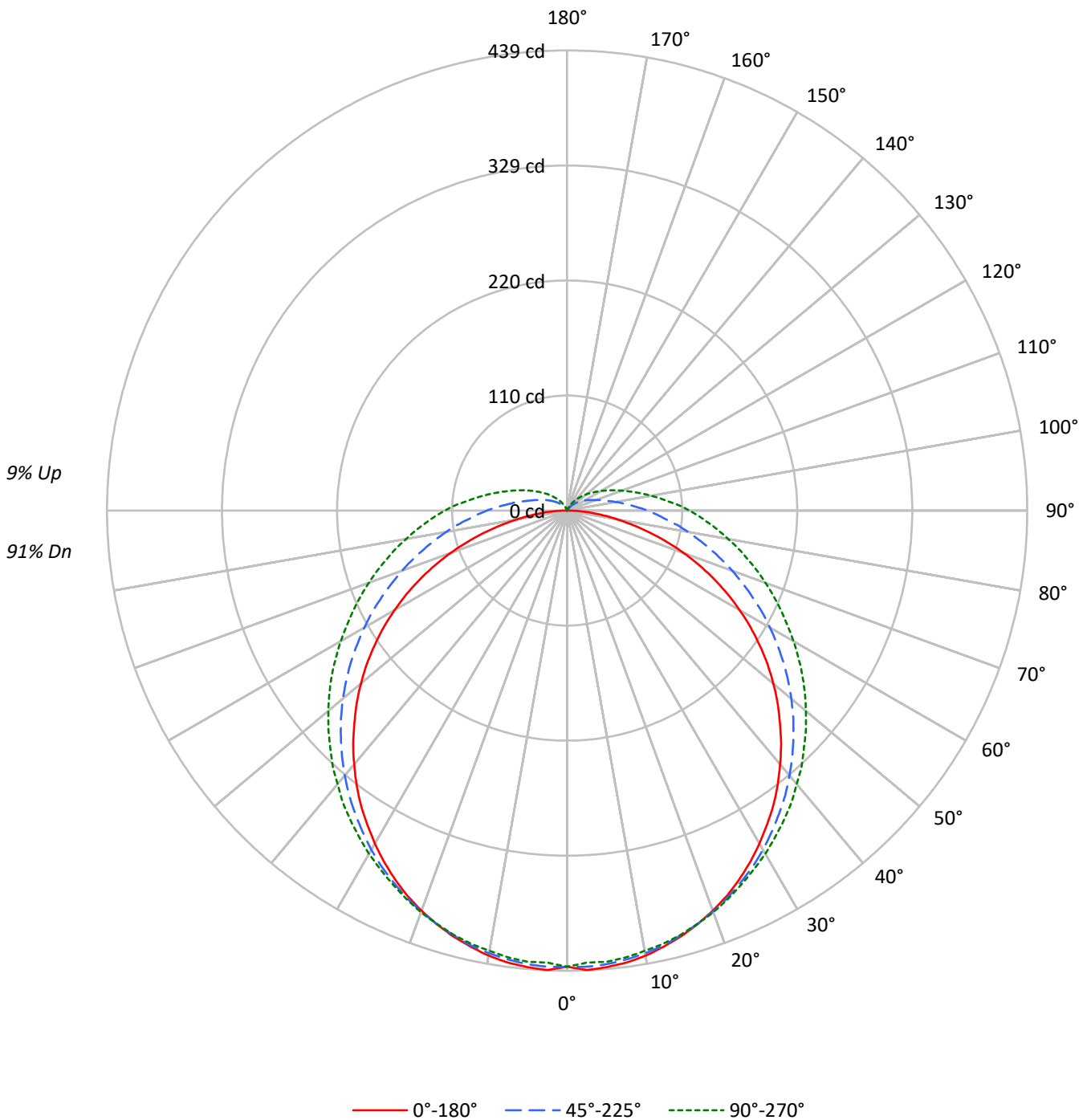
Lumens per Lamp: N/A  
Luminaire Lumens: 1594.0 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

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°	3123	3123	3123
5°	3139	3049	3009
10°	3122	2967	2908
15°	3094	2883	2818
20°	3061	2801	2728
25°	3023	2719	2637
30°	2977	2638	2558
35°	2931	2552	2482
40°	2873	2468	2406
45°	2811	2382	2335
50°	2749	2294	2269
55°	2667	2203	2204
60°	2568	2109	2139
65°	2433	2013	2084
70°	2256	1925	2042
75°	1996	1842	2012
80°	1685	1788	2011
85°	1313	1753	2047



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.2	2.6
10°-20°	118.1	7.4
20°-30°	179.8	11.3
30°-40°	219.7	13.8
40°-50°	234.4	14.7
50°-60°	223.7	14.0
60°-70°	190.8	12.0
70°-80°	144.1	9.0
80°-90°	96.7	6.1
90°-100°	60.7	3.8
100°-110°	37.8	2.4
110°-120°	23.2	1.5
120°-130°	13.5	0.8
130°-140°	6.9	0.4
140°-150°	2.7	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	339.1	21.3
0°-40°	558.8	35.1
0°-60°	1016.9	63.8
0°-90°	1448.6	90.9
90°-120°	121.6	7.6
90°-150°	144.7	9.1
90°-180°	145.0	9.1
0°-180°	1594.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	435	435	435	435	435	
5°	437	432	434	432	432	42
15°	420	416	419	418	419	119
25°	388	386	392	392	394	179
35°	343	343	353	356	360	214
45°	287	292	305	314	320	222
55°	224	233	252	266	274	201
65°	154	169	195	216	225	153
75°	82	105	141	169	178	87
85°	23	53	94	125	135	24
90°	0	36	77	106	117	2
95°	0	23	60	87	97	0
105°	0	11	37	59	68	0
115°	0	6	24	39	46	0
125°	0	4	15	26	30	0
135°	0	1	8	16	19	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°	435.2	435.2	435.2	435.2	435.2
2.5°	438.7	433.6	435.6	434.0	431.6
5°	437.2	432.4	434.4	432.4	432.0
7.5°	434.8	430.0	432.0	430.4	430.0
10°	431.2	426.0	428.8	426.8	426.4
12.5°	426.0	421.7	424.9	422.9	423.3
15°	420.5	416.1	419.3	418.5	418.9
17.5°	413.7	409.8	413.7	412.9	413.3
20°	406.2	402.6	407.0	406.6	407.8
22.5°	397.9	394.3	399.8	399.0	401.0
25°	388.3	385.5	391.5	391.9	393.5
27.5°	378.0	376.0	383.2	383.6	385.9
30°	366.9	365.3	373.6	375.2	378.0
32.5°	355.0	354.6	363.3	366.1	369.3
35°	343.1	342.7	352.6	356.2	360.5
37.5°	330.0	330.7	341.9	346.6	351.4
40°	316.1	317.2	330.0	335.9	340.7
42.5°	302.2	305.3	318.0	325.6	331.1
45°	287.1	291.8	305.3	314.1	319.6
47.5°	272.4	277.9	292.6	302.6	308.9
50°	256.9	263.2	279.1	290.6	297.4
52.5°	241.0	248.2	265.6	278.7	285.9
55°	224.3	233.1	251.7	266.0	274.0
57.5°	207.7	217.6	237.4	254.1	261.7
60°	190.2	201.3	223.5	241.0	249.4
62.5°	172.7	185.4	209.6	229.1	237.0
65°	154.5	168.7	195.0	216.0	225.1
67.5°	136.6	152.9	181.1	203.7	213.2
70°	118.3	136.2	167.6	191.8	201.3
72.5°	100.1	120.3	154.1	180.3	189.8
75°	81.8	104.8	141.0	168.7	177.9
77.5°	64.7	89.3	128.6	156.8	167.2
80°	49.2	75.8	117.1	146.1	156.0
82.5°	34.9	63.9	106.0	135.4	145.7
85°	22.6	52.8	94.5	125.1	135.4
87.5°	11.1	43.3	85.4	115.5	125.9
90°	0.4	35.7	76.6	106.4	116.7
92.5°	0.0	28.6	67.9	96.5	107.6
95°	0.0	23.0	60.0	87.4	97.3
97.5°	0.0	19.1	53.2	79.8	89.3
100°	0.0	15.5	47.2	72.3	81.4
102.5°	0.0	13.1	41.7	65.5	74.2
105°	0.0	11.1	36.9	59.2	67.5
107.5°	0.0	9.9	33.0	53.6	61.1
110°	0.0	8.7	29.4	48.4	55.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	7.5	26.2	43.7	50.4
115°	0.0	6.4	23.8	39.3	45.7
117.5°	0.0	5.6	21.4	35.3	41.3
120°	0.0	4.8	19.1	32.2	37.3
122.5°	0.0	4.0	17.1	29.0	33.7
125°	0.0	3.6	15.1	25.8	30.2
127.5°	0.0	2.8	13.5	23.0	27.4
130°	0.0	2.4	11.5	20.6	24.2
132.5°	0.0	1.6	9.9	18.3	21.4
135°	0.0	1.2	8.3	15.9	18.7
137.5°	0.0	0.8	7.1	13.9	16.3
140°	0.0	0.8	5.6	11.9	13.9
142.5°	0.0	0.4	4.4	9.9	11.9
145°	0.0	0.4	3.6	7.9	9.9
147.5°	0.4	0.0	2.4	6.4	7.9
150°	0.4	0.0	2.0	4.8	6.4
152.5°	0.4	0.0	1.2	3.6	4.8
155°	0.4	0.0	0.8	2.4	3.2
157.5°	0.4	0.4	0.4	1.2	2.0
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)