

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: P236218

Luminaire Tested: **2SWLED-24HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236218  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2SWLED-24HL-LW-UNV-L840-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 2 ROW LED, WIDE LENS  
Light Source: (112) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

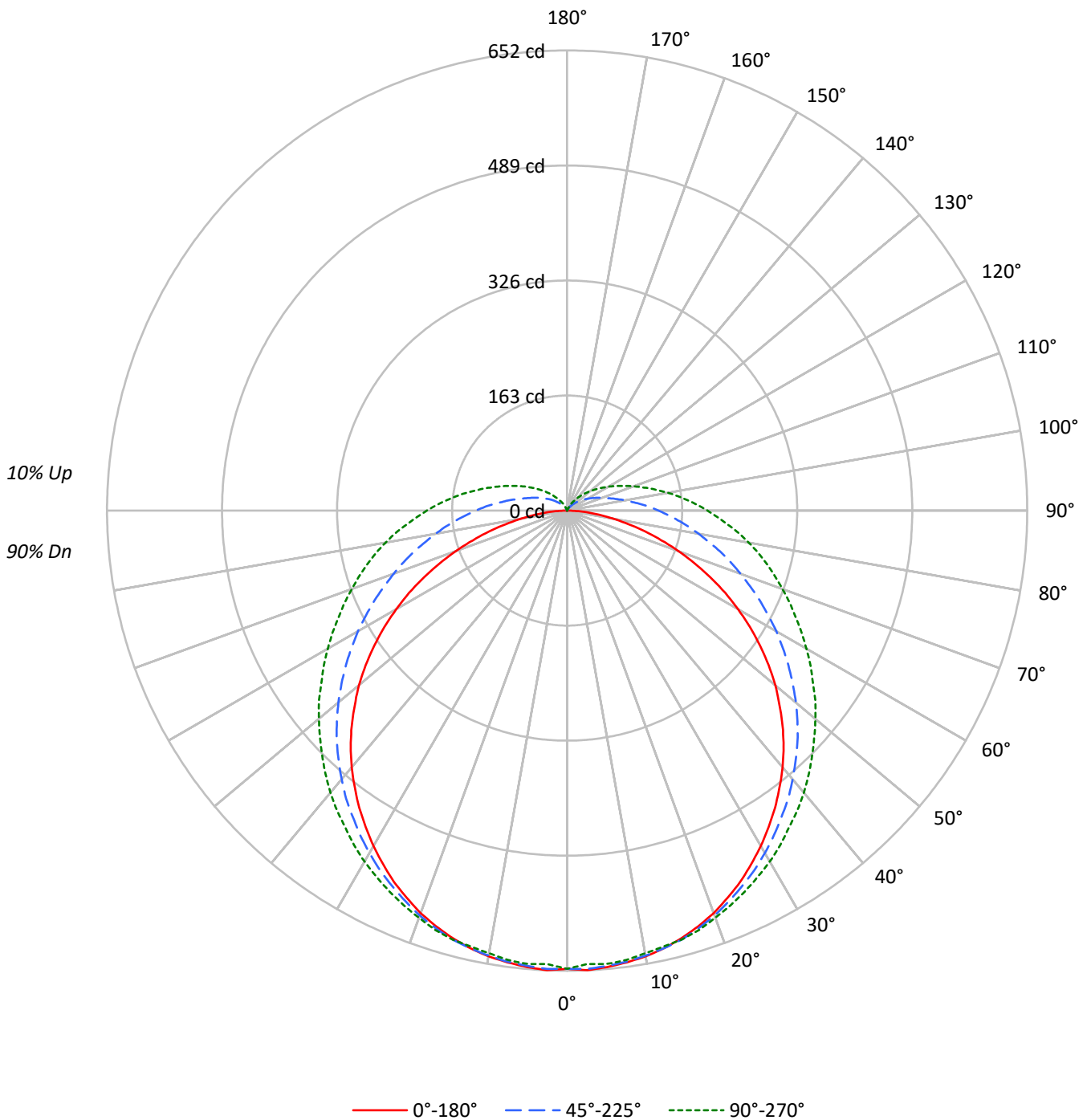
Lumens per Lamp: N/A  
Luminaire Lumens: 2475.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Semi-Direct

Input Watts (W): 24  
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	105	105	105	99	99	99	93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	81	83	80	77	78	75	73	70
2	94	84	77	70	90	82	75	69	76	70	65	71	67	62	67	63	59	57
3	85	73	65	57	81	71	63	56	66	60	54	62	56	52	58	54	49	47
4	77	65	55	48	74	63	54	47	59	51	45	55	49	44	52	46	42	39
5	71	57	48	41	68	56	47	40	52	45	39	49	43	38	46	41	36	34
6	65	52	42	36	63	50	41	35	47	39	34	44	38	33	42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	26	37	30	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	20
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	18

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

	0°	45°	90°
0°	9317	9317	9317
5°	9294	9069	8984
10°	9227	8825	8686
15°	9140	8594	8464
20°	9031	8334	8215
25°	8892	8064	7984
30°	8729	7814	7774
35°	8563	7552	7546
40°	8386	7309	7369
45°	8170	7066	7174
50°	7915	6800	7006
55°	7555	6530	6835
60°	7128	6274	6715
65°	6561	6010	6614
70°	5873	5779	6585
75°	4987	5606	6626
80°	3859	5480	6737
85°	2452	5480	6916



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.5	2.5
10°-20°	177.3	7.2
20°-30°	270.9	10.9
30°-40°	332.2	13.4
40°-50°	356.2	14.4
50°-60°	341.3	13.8
60°-70°	293.8	11.9
70°-80°	227.6	9.2
80°-90°	159.0	6.4
90°-100°	105.2	4.3
100°-110°	67.4	2.7
110°-120°	41.5	1.7
120°-130°	23.8	1.0
130°-140°	11.8	0.5
140°-150°	4.5	0.2
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	509.8	20.6
0°-40°	842.0	34.0
0°-60°	1539.5	62.2
0°-90°	2220.0	89.7
90°-120°	214.1	8.6
90°-150°	254.2	10.3
90°-180°	255.0	10.3
0°-180°	2475.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	649	649	648	645	645	62
15°	627	628	629	629	629	177
25°	581	582	587	592	596	267
35°	514	518	530	543	548	321
45°	432	441	462	483	491	333
55°	333	350	383	414	425	298
65°	223	252	301	341	357	221
75°	114	158	224	274	293	121
85°	27	84	158	209	229	31
90°	0	58	129	181	199	2
95°	0	40	105	153	171	0
105°	0	19	66	106	121	0
115°	0	11	42	71	83	0
125°	0	5	26	47	54	0
135°	0	2	14	27	33	0
145°	1	0	6	13	16	0
155°	0	0	1	4	4	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°	649.2	649.2	649.2	649.2	649.2
2.5°	651.9	651.9	650.1	645.7	643.1
5°	649.2	649.2	647.5	644.8	644.8
7.5°	645.7	645.7	644.8	643.1	642.2
10°	641.3	642.2	640.4	637.8	636.9
12.5°	635.1	636.0	635.1	633.4	632.5
15°	627.2	628.1	629.0	629.0	629.0
17.5°	617.5	618.4	620.2	621.9	622.8
20°	607.0	607.9	610.5	612.3	614.0
22.5°	593.8	596.4	599.1	602.6	605.2
25°	580.6	582.4	586.8	592.0	595.6
27.5°	564.8	567.4	574.4	581.5	585.0
30°	548.9	552.4	560.4	569.2	574.4
32.5°	531.3	535.7	545.4	556.0	562.1
35°	513.7	518.1	529.6	542.8	548.0
37.5°	494.4	500.5	514.6	528.7	535.7
40°	475.0	481.2	497.0	513.7	521.7
42.5°	453.9	461.0	479.4	498.8	506.7
45°	431.9	440.7	461.8	482.9	490.9
47.5°	408.2	419.6	442.5	465.4	475.0
50°	385.3	396.7	423.1	448.6	459.2
52.5°	359.8	373.9	402.9	431.0	443.4
55°	333.4	350.1	382.7	413.5	424.9
57.5°	307.0	325.5	362.4	395.9	409.1
60°	279.7	300.9	342.2	377.4	391.5
62.5°	252.5	277.1	321.1	359.8	374.7
65°	223.4	252.5	300.9	341.3	357.2
67.5°	195.3	227.8	280.6	324.6	341.3
70°	168.0	202.3	261.3	307.0	324.6
72.5°	139.9	179.5	242.8	291.2	308.8
75°	114.4	157.5	224.3	274.5	292.9
77.5°	88.8	136.4	205.8	258.6	277.1
80°	66.0	117.0	189.1	242.8	261.3
82.5°	45.7	99.4	173.3	226.1	245.4
85°	27.3	83.6	157.5	209.4	228.7
87.5°	13.2	69.5	142.5	195.3	212.9
90°	0.0	58.1	129.3	181.2	198.8
92.5°	0.0	47.5	117.0	167.1	184.7
95°	0.0	39.6	104.7	153.1	170.7
97.5°	0.0	32.5	93.2	140.8	157.5
100°	0.0	27.3	83.6	128.4	145.1
102.5°	0.0	22.9	73.9	117.0	132.0
105°	0.0	19.4	66.0	106.4	121.4
107.5°	0.0	16.7	58.9	96.8	110.0
110°	0.0	14.1	52.8	87.1	100.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	12.3	47.5	79.2	91.5
115°	0.0	10.6	42.2	71.3	82.7
117.5°	0.0	8.8	37.8	64.2	74.8
120°	0.0	7.0	33.4	58.1	67.7
122.5°	0.0	6.2	29.9	51.9	60.7
125°	0.0	5.3	26.4	46.6	54.5
127.5°	0.0	4.4	22.9	41.3	48.4
130°	0.0	3.5	19.4	36.1	43.1
132.5°	0.0	1.8	16.7	31.7	37.8
135°	0.0	1.8	14.1	27.3	33.4
137.5°	0.0	0.9	12.3	23.8	28.2
140°	0.0	0.9	9.7	20.2	23.8
142.5°	0.0	0.0	7.9	16.7	19.4
145°	0.9	0.0	6.2	13.2	15.8
147.5°	0.0	0.0	4.4	10.6	13.2
150°	0.9	0.0	2.6	7.9	9.7
152.5°	0.9	0.0	0.9	5.3	7.0
155°	0.0	0.0	0.9	3.5	4.4
157.5°	0.0	0.0	0.0	0.9	2.6
160°	0.9	0.0	0.0	0.9	0.9
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)