

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: P236213

Luminaire Tested: **2SWLED-24HL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236213  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-9)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2SWLED-24HL-LN-UNV-L850-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 2 ROW LED, NARROW LENS  
Light Source: (112) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

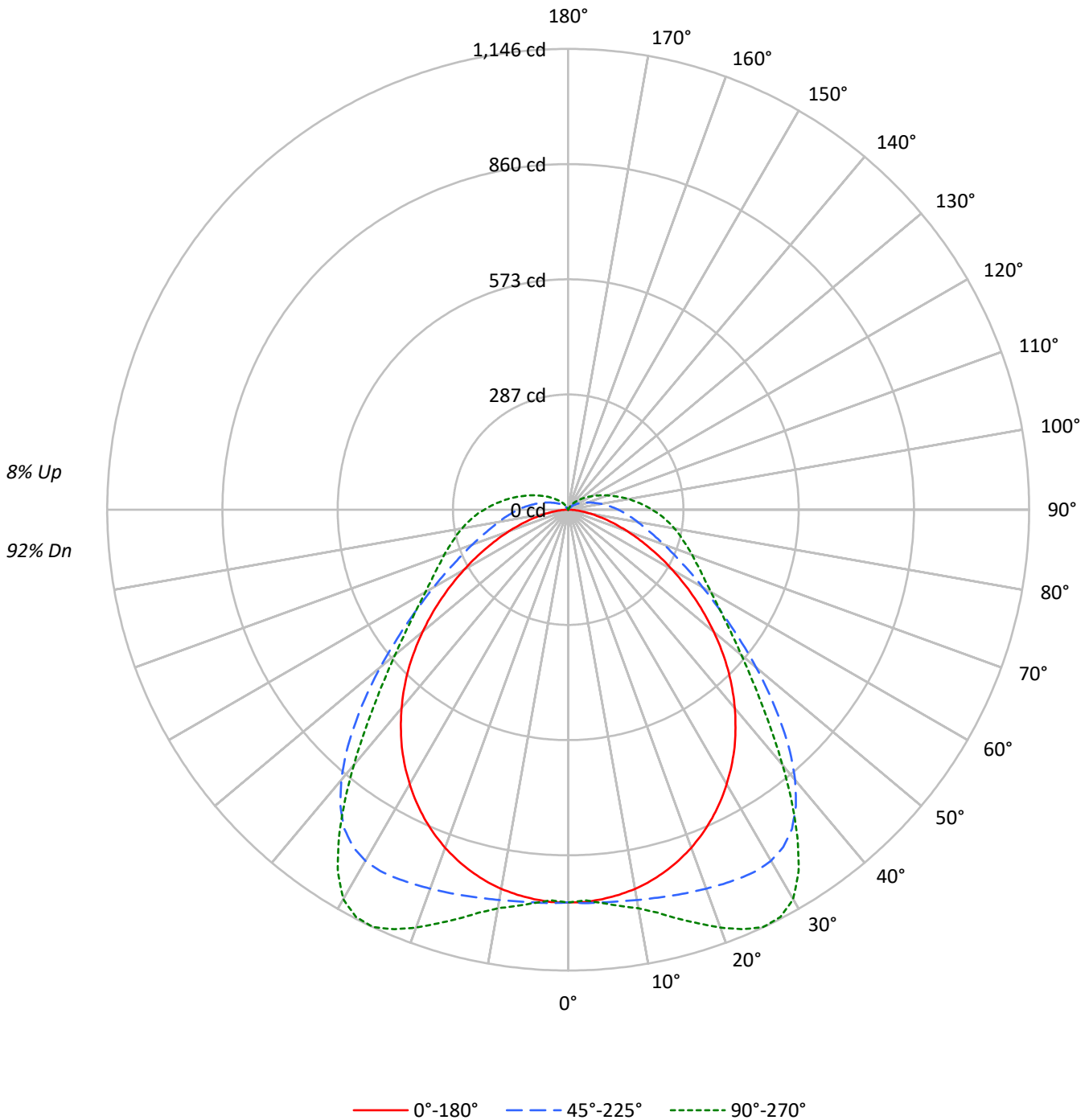
Lumens per Lamp: N/A  
Luminaire Lumens: 3280.0 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.48 / 1.45  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Direct

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	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	106	101	96	92	103	98	94	90	92	89	86	87	84	82	82	80	78	75
2	97	88	81	75	93	85	79	74	81	75	71	76	72	68	72	69	65	63
3	88	77	69	63	85	75	68	62	71	65	60	67	62	58	64	59	56	53
4	81	69	60	53	78	67	59	53	63	57	51	60	54	49	57	52	48	46
5	74	62	53	46	72	60	52	45	57	50	44	54	48	43	52	46	42	40
6	69	56	47	40	66	54	46	40	52	44	39	49	43	38	47	41	37	35
7	64	50	42	36	62	49	41	35	47	40	34	45	38	34	43	37	33	31
8	59	46	38	32	57	45	37	31	43	36	31	41	35	30	39	34	30	28
9	55	42	34	29	54	41	34	28	40	33	28	38	32	27	36	31	27	25
10	52	39	31	26	50	38	31	26	37	30	25	35	29	25	34	28	24	22

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

	0°	45°	90°
0°	14017	14017	14017
5°	13917	13731	13683
10°	13780	13583	13727
15°	13577	13578	14162
20°	13308	13690	14795
25°	12967	13894	15355
30°	12531	14059	15136
35°	12022	13825	13685
40°	11379	12903	11706
45°	10622	11435	9907
50°	9698	9793	8567
55°	8693	8271	7624
60°	7615	7082	7029
65°	6496	6184	6736
70°	5461	5611	6648
75°	4368	5211	6698
80°	3274	5074	6913
85°	2111	5150	7234



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.6	2.9
10°-20°	281.7	8.6
20°-30°	462.0	14.1
30°-40°	565.5	17.2
40°-50°	527.7	16.1
50°-60°	416.3	12.7
60°-70°	305.2	9.3
70°-80°	219.0	6.7
80°-90°	154.8	4.7
90°-100°	105.9	3.2
100°-110°	68.5	2.1
110°-120°	41.1	1.3
120°-130°	22.7	0.7
130°-140°	11.0	0.3
140°-150°	4.2	0.1
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	837.4	25.5
0°-40°	1402.8	42.8
0°-60°	2346.8	71.5
0°-90°	3025.9	92.3
90°-120°	215.6	6.6
90°-150°	253.4	7.7
90°-180°	254.0	7.7
0°-180°	3280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	972	977	980	982	982	92
15°	932	952	994	1034	1052	263
25°	847	897	1011	1109	1146	390
35°	721	812	970	1003	994	450
45°	562	672	747	695	678	432
55°	384	467	485	469	474	343
65°	221	276	310	344	364	222
75°	100	144	208	272	296	108
85°	24	70	148	214	239	26
90°	0	50	125	187	208	1
95°	0	35	102	159	180	0
105°	0	18	66	110	126	0
115°	0	10	41	71	84	0
125°	0	4	24	44	52	0
135°	0	1	14	26	31	0
145°	1	0	5	13	15	0
155°	1	1	0	3	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°	976.7	976.7	976.7	976.7	976.7
2.5°	976.7	980.3	979.4	975.8	972.2
5°	972.2	976.7	980.3	982.1	982.1
7.5°	965.9	973.1	982.1	991.1	993.8
10°	957.7	968.6	985.7	1001.1	1006.5
12.5°	946.0	961.3	989.3	1014.6	1026.3
15°	931.6	952.3	993.8	1034.5	1052.5
17.5°	914.4	941.5	998.4	1054.3	1078.7
20°	894.5	928.8	1002.9	1075.1	1105.8
22.5°	872.0	914.4	1007.4	1094.0	1129.2
25°	846.7	897.3	1011.0	1109.4	1145.5
27.5°	818.7	879.2	1012.8	1113.9	1141.9
30°	788.0	859.3	1008.3	1098.6	1118.4
32.5°	755.5	837.7	994.7	1061.5	1066.1
35°	721.2	812.4	969.5	1002.9	993.8
37.5°	683.3	784.4	929.8	929.8	911.7
40°	644.5	752.8	877.4	851.2	828.7
42.5°	603.9	714.9	816.0	771.8	749.2
45°	561.5	672.5	747.4	695.1	677.9
47.5°	517.2	625.6	677.9	627.4	615.6
50°	472.1	574.1	609.3	566.9	561.5
52.5°	427.9	520.8	544.3	514.5	514.5
55°	383.6	466.7	484.7	469.4	473.9
57.5°	340.3	415.2	432.4	430.6	439.6
60°	298.8	364.7	386.3	397.2	409.8
62.5°	260.0	317.7	345.7	368.3	384.5
65°	221.2	276.2	309.6	343.9	363.8
67.5°	187.8	237.4	279.8	322.3	343.9
70°	156.2	200.4	253.7	304.2	327.7
72.5°	126.4	169.7	229.3	288.0	311.4
75°	100.2	143.5	208.5	271.7	296.1
77.5°	76.7	121.0	190.5	257.3	282.5
80°	56.0	101.1	175.1	243.7	268.1
82.5°	38.8	84.9	161.6	228.4	253.7
85°	23.5	70.4	148.0	213.9	239.2
87.5°	10.8	59.6	135.4	200.4	224.8
90°	0.0	49.6	124.6	186.9	208.5
92.5°	0.0	41.5	113.7	172.4	194.1
95°	0.0	35.2	102.0	158.9	179.6
97.5°	0.0	29.8	92.1	146.2	165.2
100°	0.0	24.4	83.0	133.6	152.6
102.5°	0.0	20.8	74.0	121.0	139.0
105°	0.0	18.1	65.9	110.1	126.4
107.5°	0.0	15.3	58.7	99.3	114.6
110°	0.0	13.5	51.5	89.4	103.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	11.7	46.0	80.3	93.9
115°	0.0	9.9	40.6	71.3	83.9
117.5°	0.0	8.1	36.1	63.2	74.9
120°	0.0	7.2	31.6	56.0	66.8
122.5°	0.0	5.4	28.0	50.5	59.6
125°	0.0	4.5	24.4	44.2	52.4
127.5°	0.0	3.6	21.7	38.8	46.0
130°	0.0	2.7	19.0	34.3	40.6
132.5°	0.0	1.8	16.2	29.8	35.2
135°	0.0	0.9	13.5	26.2	30.7
137.5°	0.0	0.0	10.8	21.7	26.2
140°	0.0	0.0	9.0	18.1	22.6
142.5°	0.0	0.0	7.2	15.3	19.0
145°	0.9	0.0	5.4	12.6	15.3
147.5°	0.9	0.0	3.6	9.9	11.7
150°	0.9	0.0	1.8	7.2	9.0
152.5°	0.9	0.0	0.0	4.5	6.3
155°	0.9	0.9	0.0	2.7	3.6
157.5°	0.9	0.9	0.0	0.0	1.8
160°	0.9	0.9	0.0	0.0	0.0
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)