

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: P236217

Luminaire Tested: **2SWLED-24HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236217  
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-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
2FT FIXTURE WITH 2 ROW LED, WIDE LENS  
Light Source: (112) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

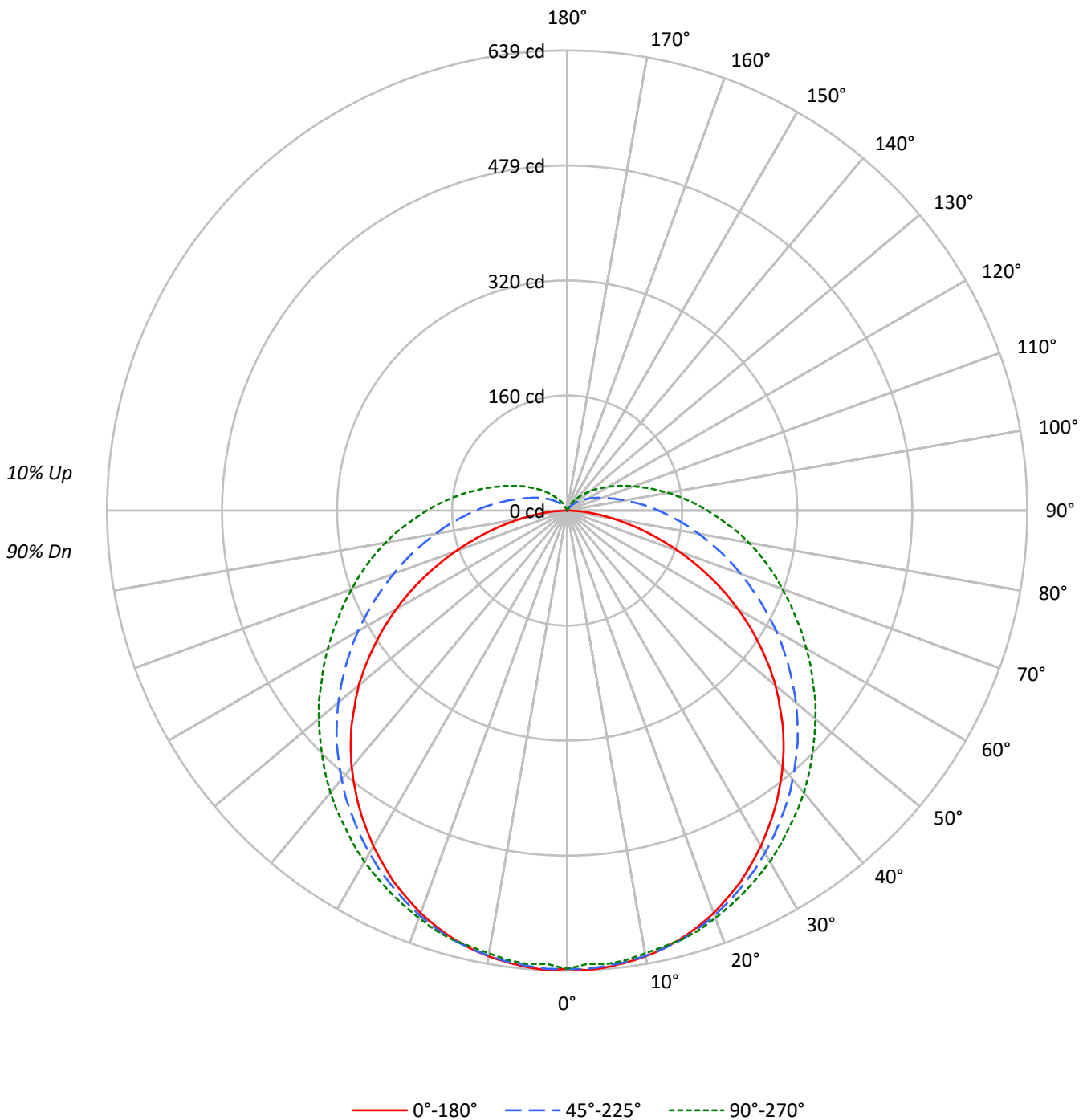
Lumens per Lamp: N/A  
Luminaire Lumens: 2426.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')  
CIE Type: Semi-Direct

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

TEST NUMBER: P236217

CATALOG NUMBER: 2SWLED-24HL-LW-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P236217

CATALOG NUMBER: 2SWLED-24HL-LW-UNV-L835-CD1-U

**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°	9134	9134	9134
5°	9110	8889	8805
10°	9044	8650	8514
15°	8960	8423	8296
20°	8852	8168	8053
25°	8716	7904	7826
30°	8557	7659	7621
35°	8395	7402	7398
40°	8220	7165	7222
45°	8010	6926	7031
50°	7759	6667	6867
55°	7406	6401	6700
60°	6988	6149	6581
65°	6431	5890	6483
70°	5758	5664	6455
75°	4886	5496	6494
80°	3783	5373	6603
85°	2398	5369	6780



TEST NUMBER: P236217

CATALOG NUMBER: 2SWLED-24HL-LW-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.3	2.5
10°-20°	173.8	7.2
20°-30°	265.5	10.9
30°-40°	325.6	13.4
40°-50°	349.2	14.4
50°-60°	334.6	13.8
60°-70°	288.0	11.9
70°-80°	223.1	9.2
80°-90°	155.9	6.4
90°-100°	103.1	4.3
100°-110°	66.1	2.7
110°-120°	40.6	1.7
120°-130°	23.4	1.0
130°-140°	11.6	0.5
140°-150°	4.4	0.2
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	499.7	20.6
0°-40°	825.3	34.0
0°-60°	1509.1	62.2
0°-90°	2176.0	89.7
90°-120°	209.8	8.6
90°-150°	249.2	10.3
90°-180°	250.0	10.3
0°-180°	2426.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	636	636	635	632	632	60
15°	615	616	616	616	616	173
25°	569	571	575	580	584	262
35°	504	508	519	532	537	315
45°	423	432	453	473	481	326
55°	327	343	375	405	416	292
65°	219	248	295	335	350	217
75°	112	154	220	269	287	119
85°	27	82	154	205	224	30
90°	0	57	127	178	195	2
95°	0	39	103	150	167	0
105°	0	19	65	104	119	0
115°	0	10	41	70	81	0
125°	0	5	26	46	54	0
135°	0	2	14	27	33	0
145°	1	0	6	13	16	0
155°	0	0	1	3	4	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236217

CATALOG NUMBER: 2SWLED-24HL-LW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	636.4	636.4	636.4	636.4	636.4
2.5°	638.9	638.9	637.2	632.9	630.3
5°	636.4	636.4	634.6	632.0	632.0
7.5°	632.9	632.9	632.0	630.3	629.5
10°	628.6	629.5	627.7	625.1	624.3
12.5°	622.6	623.4	622.6	620.8	620.0
15°	614.8	615.7	616.5	616.5	616.5
17.5°	605.3	606.2	607.9	609.6	610.5
20°	595.0	595.8	598.4	600.1	601.9
22.5°	582.0	584.6	587.2	590.7	593.2
25°	569.1	570.8	575.1	580.3	583.8
27.5°	553.6	556.2	563.1	570.0	573.4
30°	538.1	541.5	549.3	557.9	563.1
32.5°	520.8	525.1	534.6	545.0	551.0
35°	503.6	507.9	519.1	532.0	537.2
37.5°	484.6	490.6	504.4	518.2	525.1
40°	465.6	471.7	487.2	503.6	511.3
42.5°	444.9	451.8	469.9	488.9	496.7
45°	423.4	432.0	452.7	473.4	481.1
47.5°	400.1	411.3	433.7	456.1	465.6
50°	377.7	388.9	414.8	439.8	450.1
52.5°	352.7	366.5	394.9	422.5	434.6
55°	326.8	343.2	375.1	405.3	416.5
57.5°	300.9	319.0	355.3	388.0	401.0
60°	274.2	294.9	335.4	369.9	383.7
62.5°	247.5	271.6	314.7	352.7	367.3
65°	219.0	247.5	294.9	334.6	350.1
67.5°	191.4	223.3	275.1	318.2	334.6
70°	164.7	198.3	256.1	300.9	318.2
72.5°	137.1	175.9	238.0	285.4	302.7
75°	112.1	154.3	219.9	269.0	287.1
77.5°	87.1	133.7	201.8	253.5	271.6
80°	64.7	114.7	185.4	238.0	256.1
82.5°	44.8	97.4	169.9	221.6	240.6
85°	26.7	81.9	154.3	205.2	224.2
87.5°	12.9	68.1	139.7	191.4	208.7
90°	0.0	56.9	126.8	177.6	194.9
92.5°	0.0	46.6	114.7	163.8	181.1
95°	0.0	38.8	102.6	150.0	167.3
97.5°	0.0	31.9	91.4	138.0	154.3
100°	0.0	26.7	81.9	125.9	142.3
102.5°	0.0	22.4	72.4	114.7	129.3
105°	0.0	19.0	64.7	104.3	119.0
107.5°	0.0	16.4	57.8	94.9	107.8
110°	0.0	13.8	51.7	85.4	98.3



TEST NUMBER: P236217

CATALOG NUMBER: 2SWLED-24HL-LW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	12.1	46.6	77.6	89.7
115°	0.0	10.3	41.4	69.8	81.1
117.5°	0.0	8.6	37.1	62.9	73.3
120°	0.0	6.9	32.8	56.9	66.4
122.5°	0.0	6.0	29.3	50.9	59.5
125°	0.0	5.2	25.9	45.7	53.5
127.5°	0.0	4.3	22.4	40.5	47.4
130°	0.0	3.4	19.0	35.4	42.3
132.5°	0.0	1.7	16.4	31.0	37.1
135°	0.0	1.7	13.8	26.7	32.8
137.5°	0.0	0.9	12.1	23.3	27.6
140°	0.0	0.9	9.5	19.8	23.3
142.5°	0.0	0.0	7.8	16.4	19.0
145°	0.9	0.0	6.0	12.9	15.5
147.5°	0.0	0.0	4.3	10.3	12.9
150°	0.9	0.0	2.6	7.8	9.5
152.5°	0.9	0.0	0.9	5.2	6.9
155°	0.0	0.0	0.9	3.4	4.3
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)