

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: P236222

Luminaire Tested: **2SWLED-28HL-LW-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236222
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-28HL-LW-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

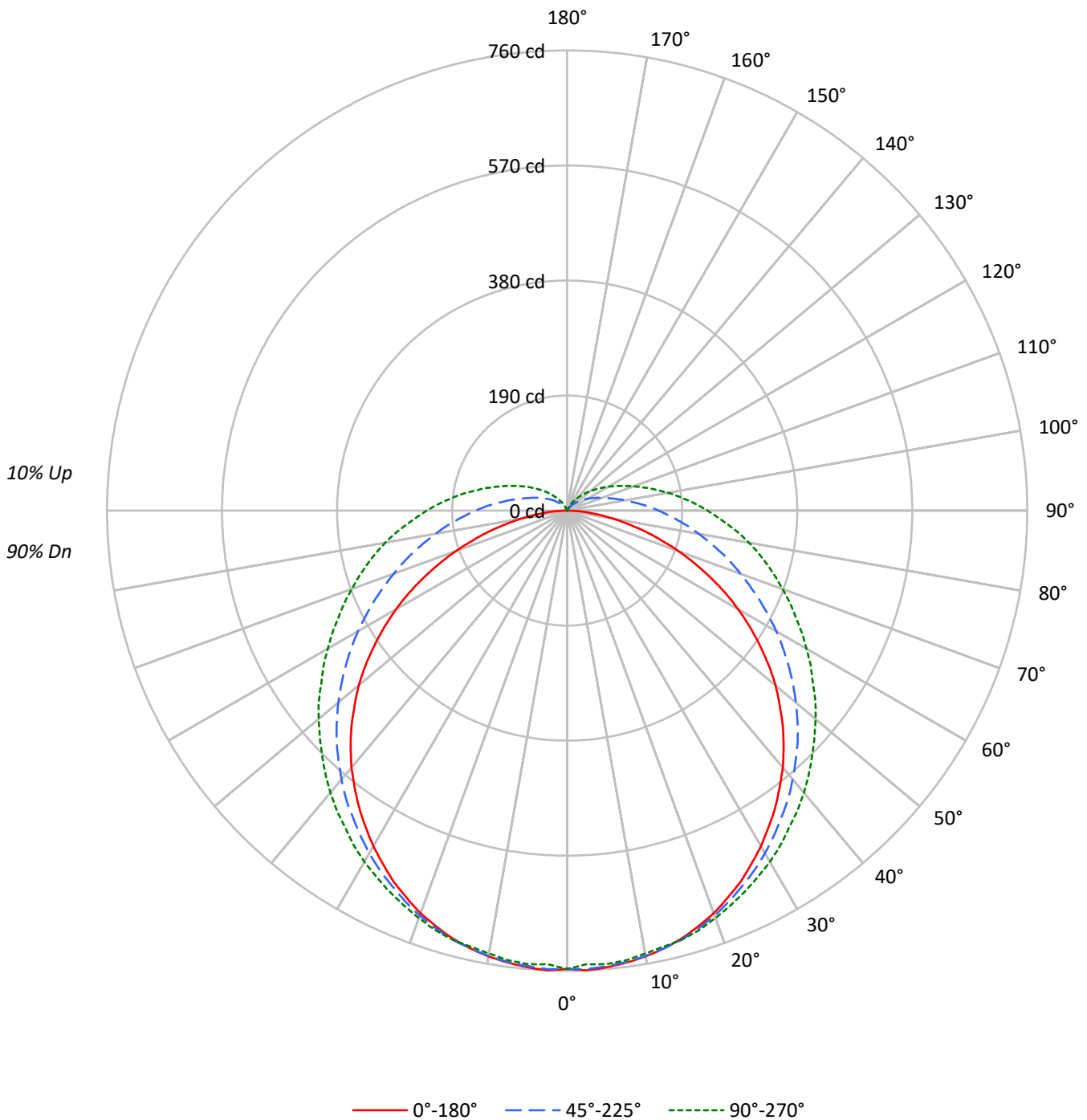
Lumens per Lamp: N/A
Luminaire Lumens: 2886.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Semi-Direct

Input Watts (W): 27.9
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°	10864	10864	10864
5°	10837	10575	10476
10°	10760	10291	10129
15°	10659	10020	9869
20°	10531	9718	9580
25°	10368	9403	9308
30°	10179	9111	9065
35°	9987	8805	8801
40°	9779	8523	8593
45°	9529	8239	8365
50°	9230	7930	8170
55°	8811	7614	7970
60°	8313	7315	7830
65°	7650	7006	7712
70°	6848	6739	7678
75°	5815	6538	7727
80°	4496	6390	7856
85°	2856	6389	8066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	2.5
10°-20°	206.8	7.2
20°-30°	315.9	10.9
30°-40°	387.4	13.4
40°-50°	415.4	14.4
50°-60°	398.0	13.8
60°-70°	342.6	11.9
70°-80°	265.3	9.2
80°-90°	185.4	6.4
90°-100°	122.7	4.3
100°-110°	78.6	2.7
110°-120°	48.4	1.7
120°-130°	27.8	1.0
130°-140°	13.7	0.5
140°-150°	5.3	0.2
150°-160°	1.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	594.4	20.6
0°-40°	981.8	34.0
0°-60°	1795.2	62.2
0°-90°	2588.6	89.7
90°-120°	249.6	8.6
90°-150°	296.4	10.3
90°-180°	297.0	10.3
0°-180°	2886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	757	757	757	757	757	
5°	757	757	755	752	752	72
15°	731	732	733	733	733	206
25°	677	679	684	690	694	312
35°	599	604	618	633	639	375
45°	504	514	538	563	572	388
55°	389	408	446	482	495	348
65°	260	294	351	398	416	258
75°	133	184	262	320	342	141
85°	32	97	184	244	267	36
90°	0	68	151	211	232	2
95°	0	46	122	178	199	0
105°	0	23	77	124	142	0
115°	0	12	49	83	96	0
125°	0	6	31	54	64	0
135°	0	2	16	32	39	0
145°	1	0	7	15	18	0
155°	0	0	1	4	5	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°	757.0	757.0	757.0	757.0	757.0
2.5°	760.1	760.1	758.0	752.9	749.8
5°	757.0	757.0	755.0	751.9	751.9
7.5°	752.9	752.9	751.9	749.8	748.8
10°	747.8	748.8	746.8	743.7	742.7
12.5°	740.6	741.6	740.6	738.6	737.5
15°	731.4	732.4	733.4	733.4	733.4
17.5°	720.1	721.1	723.2	725.2	726.2
20°	707.8	708.8	711.9	713.9	716.0
22.5°	692.4	695.5	698.6	702.7	705.7
25°	677.0	679.1	684.2	690.3	694.4
27.5°	658.5	661.6	669.8	678.0	682.1
30°	640.1	644.2	653.4	663.7	669.8
32.5°	619.6	624.7	636.0	648.3	655.5
35°	599.1	604.2	617.5	632.9	639.1
37.5°	576.5	583.7	600.1	616.5	624.7
40°	553.9	561.1	579.6	599.1	608.3
42.5°	529.3	537.5	559.0	581.6	590.8
45°	503.7	513.9	538.5	563.1	572.4
47.5°	476.0	489.3	516.0	542.6	553.9
50°	449.3	462.6	493.4	523.1	535.5
52.5°	419.5	436.0	469.8	502.6	517.0
55°	388.8	408.3	446.2	482.1	495.4
57.5°	358.0	379.5	422.6	461.6	477.0
60°	326.2	350.8	399.0	440.1	456.5
62.5°	294.4	323.1	374.4	419.5	437.0
65°	260.5	294.4	350.8	398.0	416.5
67.5°	227.7	265.7	327.2	378.5	398.0
70°	195.9	235.9	304.7	358.0	378.5
72.5°	163.1	209.3	283.1	339.5	360.0
75°	133.4	183.6	261.6	320.0	341.6
77.5°	103.6	159.0	240.0	301.6	323.1
80°	76.9	136.4	220.5	283.1	304.7
82.5°	53.3	115.9	202.1	263.6	286.2
85°	31.8	97.4	183.6	244.1	266.7
87.5°	15.4	81.0	166.2	227.7	248.2
90°	0.0	67.7	150.8	211.3	231.8
92.5°	0.0	55.4	136.4	194.9	215.4
95°	0.0	46.2	122.1	178.5	199.0
97.5°	0.0	38.0	108.7	164.1	183.6
100°	0.0	31.8	97.4	149.8	169.3
102.5°	0.0	26.7	86.2	136.4	153.9
105°	0.0	22.6	76.9	124.1	141.6
107.5°	0.0	19.5	68.7	112.8	128.2
110°	0.0	16.4	61.5	101.6	116.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.4	55.4	92.3	106.7
115°	0.0	12.3	49.2	83.1	96.4
117.5°	0.0	10.3	44.1	74.9	87.2
120°	0.0	8.2	39.0	67.7	79.0
122.5°	0.0	7.2	34.9	60.5	70.8
125°	0.0	6.2	30.8	54.4	63.6
127.5°	0.0	5.1	26.7	48.2	56.4
130°	0.0	4.1	22.6	42.1	50.3
132.5°	0.0	2.1	19.5	36.9	44.1
135°	0.0	2.1	16.4	31.8	39.0
137.5°	0.0	1.0	14.4	27.7	32.8
140°	0.0	1.0	11.3	23.6	27.7
142.5°	0.0	0.0	9.2	19.5	22.6
145°	1.0	0.0	7.2	15.4	18.5
147.5°	0.0	0.0	5.1	12.3	15.4
150°	1.0	0.0	3.1	9.2	11.3
152.5°	1.0	0.0	1.0	6.2	8.2
155°	0.0	0.0	1.0	4.1	5.1
157.5°	0.0	0.0	0.0	1.0	3.1
160°	1.0	0.0	0.0	1.0	1.0
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)