

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: P236221

Luminaire Tested: **2SWLED-28HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236221
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-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

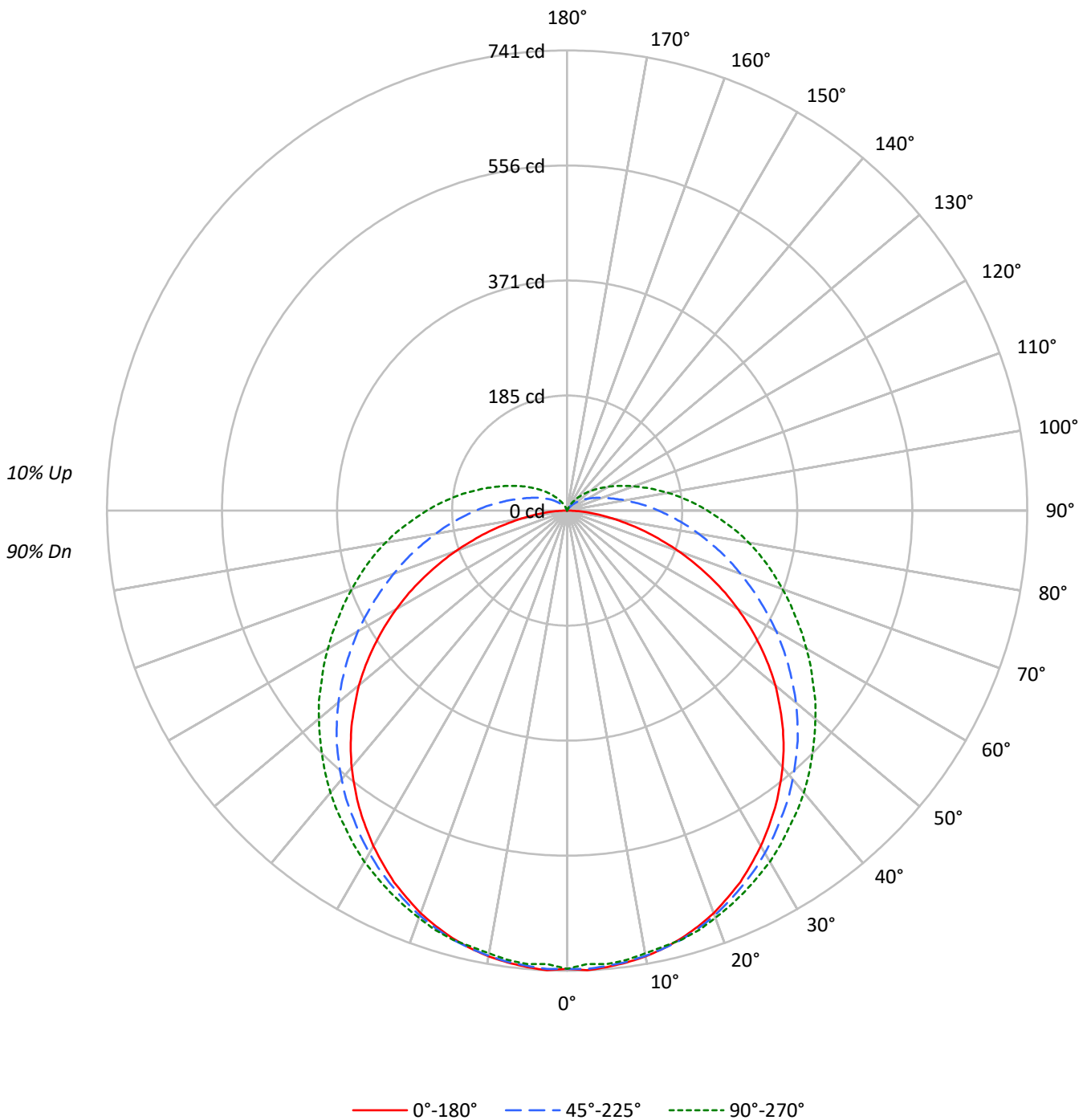
Lumens per Lamp: N/A
Luminaire Lumens: 2813.1 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Semi-Direct

Input Watts (W): 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°	10590	10590	10590
5°	10563	10307	10211
10°	10488	10030	9873
15°	10389	9767	9620
20°	10264	9472	9337
25°	10106	9165	9074
30°	9922	8881	8836
35°	9733	8583	8578
40°	9532	8307	8375
45°	9286	8031	8153
50°	8996	7729	7962
55°	8587	7421	7768
60°	8102	7130	7631
65°	7459	6829	7516
70°	6677	6567	7484
75°	5667	6373	7530
80°	4385	6231	7655
85°	2784	6228	7863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	2.5
10°-20°	201.6	7.2
20°-30°	307.9	10.9
30°-40°	377.6	13.4
40°-50°	404.9	14.4
50°-60°	387.9	13.8
60°-70°	333.9	11.9
70°-80°	258.6	9.2
80°-90°	180.8	6.4
90°-100°	119.6	4.3
100°-110°	76.6	2.7
110°-120°	47.1	1.7
120°-130°	27.1	1.0
130°-140°	13.4	0.5
140°-150°	5.1	0.2
150°-160°	1.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	579.4	20.6
0°-40°	957.0	34.0
0°-60°	1749.8	62.2
0°-90°	2523.1	89.7
90°-120°	243.3	8.6
90°-150°	288.9	10.3
90°-180°	290.0	10.3
0°-180°	2813.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	738	738	736	733	733	70
15°	713	714	715	715	715	201
25°	660	662	667	673	677	304
35°	584	589	602	617	623	365
45°	491	501	525	549	558	378
55°	379	398	435	470	483	339
65°	254	287	342	388	406	252
75°	130	179	255	312	333	138
85°	31	95	179	238	260	35
90°	0	66	147	206	226	2
95°	0	45	119	174	194	0
105°	0	22	75	121	138	0
115°	0	12	48	81	94	0
125°	0	6	30	53	62	0
135°	0	2	16	31	38	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°	737.9	737.9	737.9	737.9	737.9
2.5°	740.9	740.9	738.9	733.9	730.9
5°	737.9	737.9	735.9	732.9	732.9
7.5°	733.9	733.9	732.9	730.9	729.9
10°	728.9	729.9	727.9	724.9	723.9
12.5°	721.9	722.9	721.9	719.9	718.9
15°	712.9	713.9	714.9	714.9	714.9
17.5°	701.9	702.9	704.9	706.9	707.9
20°	689.9	690.9	693.9	695.9	697.9
22.5°	674.9	677.9	680.9	684.9	687.9
25°	659.9	661.9	666.9	672.9	676.9
27.5°	641.9	644.9	652.9	660.9	664.9
30°	623.9	627.9	636.9	646.9	652.9
32.5°	603.9	608.9	619.9	631.9	638.9
35°	583.9	588.9	601.9	616.9	622.9
37.5°	561.9	568.9	584.9	600.9	608.9
40°	539.9	546.9	564.9	583.9	592.9
42.5°	515.9	523.9	544.9	566.9	575.9
45°	490.9	500.9	524.9	548.9	557.9
47.5°	463.9	476.9	502.9	528.9	539.9
50°	437.9	450.9	480.9	509.9	521.9
52.5°	408.9	424.9	457.9	489.9	503.9
55°	378.9	397.9	434.9	469.9	482.9
57.5°	348.9	369.9	411.9	449.9	464.9
60°	317.9	341.9	388.9	428.9	444.9
62.5°	286.9	314.9	364.9	408.9	425.9
65°	254.0	286.9	341.9	387.9	405.9
67.5°	222.0	259.0	318.9	368.9	387.9
70°	191.0	230.0	296.9	348.9	368.9
72.5°	159.0	204.0	276.0	330.9	350.9
75°	130.0	179.0	255.0	311.9	332.9
77.5°	101.0	155.0	234.0	293.9	314.9
80°	75.0	133.0	215.0	276.0	296.9
82.5°	52.0	113.0	197.0	257.0	279.0
85°	31.0	95.0	179.0	238.0	260.0
87.5°	15.0	79.0	162.0	222.0	242.0
90°	0.0	66.0	147.0	206.0	226.0
92.5°	0.0	54.0	133.0	190.0	210.0
95°	0.0	45.0	119.0	174.0	194.0
97.5°	0.0	37.0	106.0	160.0	179.0
100°	0.0	31.0	95.0	146.0	165.0
102.5°	0.0	26.0	84.0	133.0	150.0
105°	0.0	22.0	75.0	121.0	138.0
107.5°	0.0	19.0	67.0	110.0	125.0
110°	0.0	16.0	60.0	99.0	114.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.0	54.0	90.0	104.0
115°	0.0	12.0	48.0	81.0	94.0
117.5°	0.0	10.0	43.0	73.0	85.0
120°	0.0	8.0	38.0	66.0	77.0
122.5°	0.0	7.0	34.0	59.0	69.0
125°	0.0	6.0	30.0	53.0	62.0
127.5°	0.0	5.0	26.0	47.0	55.0
130°	0.0	4.0	22.0	41.0	49.0
132.5°	0.0	2.0	19.0	36.0	43.0
135°	0.0	2.0	16.0	31.0	38.0
137.5°	0.0	1.0	14.0	27.0	32.0
140°	0.0	1.0	11.0	23.0	27.0
142.5°	0.0	0.0	9.0	19.0	22.0
145°	1.0	0.0	7.0	15.0	18.0
147.5°	0.0	0.0	5.0	12.0	15.0
150°	1.0	0.0	3.0	9.0	11.0
152.5°	1.0	0.0	1.0	6.0	8.0
155°	0.0	0.0	1.0	4.0	5.0
157.5°	0.0	0.0	0.0	1.0	3.0
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)