

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: P236266

Luminaire Tested: **4SWLED-28SL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-28SL-LW-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, WIDE LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

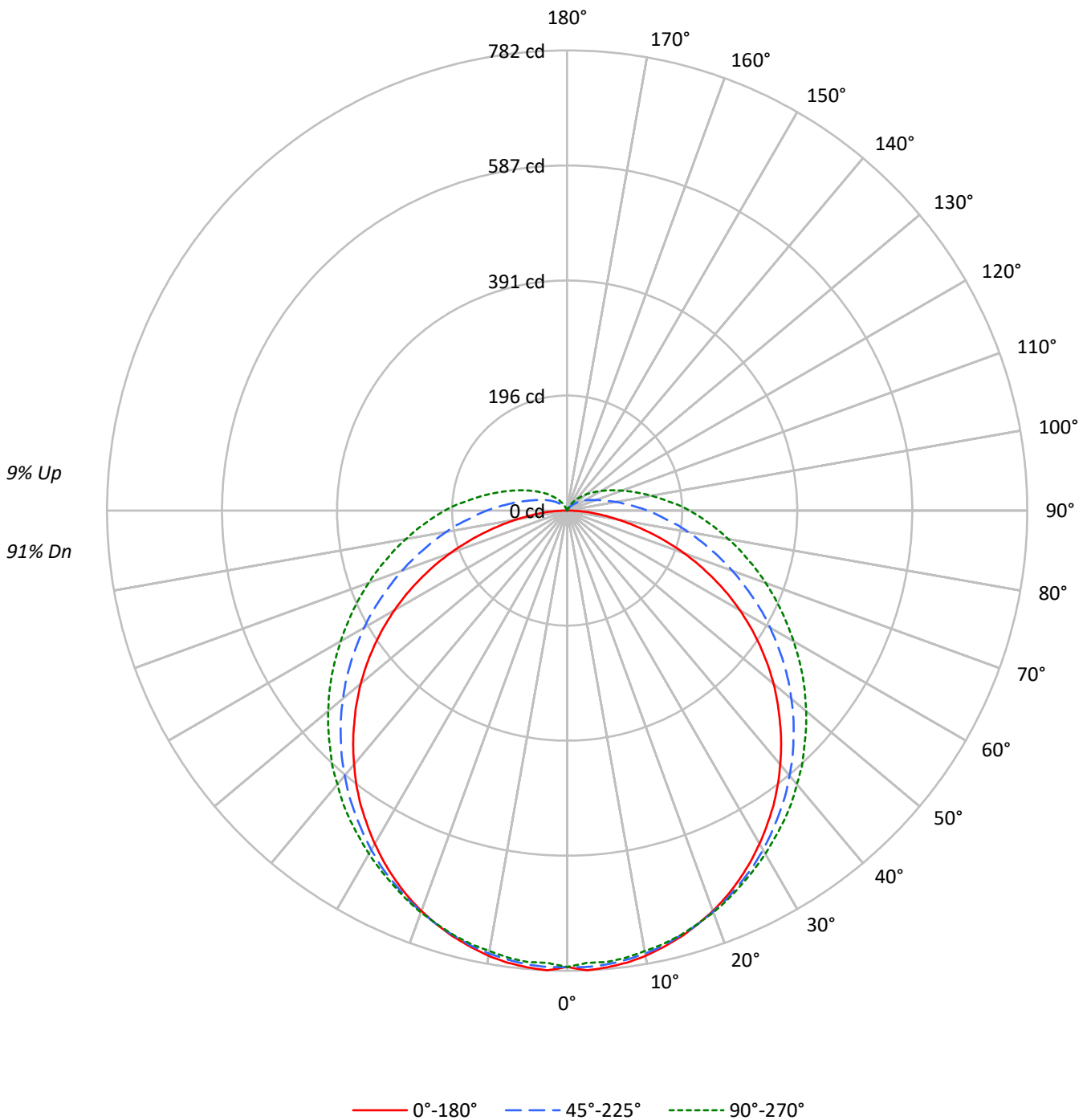
Lumens per Lamp: N/A
Luminaire Lumens: 2841.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 24.8
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	106	106	106	100	100	100	94	94	94	91
1	104	99	94	89	101	96	91	87	90	86	82	84	81	78	79	76	74	71
2	94	85	77	71	91	82	75	69	77	71	66	72	68	63	68	64	61	58
3	85	74	65	58	82	72	63	57	67	60	55	63	57	53	60	55	51	48
4	78	65	56	49	75	63	55	48	59	52	46	56	50	45	53	47	43	40
5	71	58	49	42	69	56	47	41	53	45	40	50	43	38	47	42	37	35
6	66	52	43	36	63	51	42	35	48	40	34	45	39	33	43	37	32	30
7	61	47	38	32	59	46	37	31	43	36	30	41	34	29	39	33	29	26
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	23
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21
10	50	36	28	23	48	35	28	22	34	27	22	32	26	21	31	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5566	5566	5566
5°	5595	5434	5364
10°	5564	5289	5182
15°	5513	5138	5023
20°	5456	4993	4862
25°	5388	4845	4700
30°	5307	4701	4559
35°	5223	4547	4425
40°	5120	4399	4289
45°	5010	4246	4163
50°	4899	4089	4044
55°	4754	3927	3928
60°	4576	3759	3811
65°	4336	3587	3715
70°	4022	3430	3639
75°	3558	3281	3585
80°	3007	3189	3585
85°	2342	3124	3649



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	2.6
10°-20°	210.5	7.4
20°-30°	320.5	11.3
30°-40°	391.5	13.8
40°-50°	417.9	14.7
50°-60°	398.7	14.0
60°-70°	340.1	12.0
70°-80°	256.9	9.0
80°-90°	172.4	6.1
90°-100°	108.1	3.8
100°-110°	67.3	2.4
110°-120°	41.3	1.5
120°-130°	24.1	0.8
130°-140°	12.3	0.4
140°-150°	4.8	0.2
150°-160°	1.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	604.4	21.3
0°-40°	995.9	35.1
0°-60°	1812.5	63.8
0°-90°	2581.9	90.9
90°-120°	216.7	7.6
90°-150°	258.0	9.1
90°-180°	259.0	9.1
0°-180°	2841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	779	771	774	771	770	74
15°	749	742	747	746	747	211
25°	692	687	698	698	701	319
35°	611	611	628	635	643	382
45°	512	520	544	560	570	395
55°	400	415	449	474	488	357
65°	275	301	348	385	401	273
75°	146	187	251	301	317	155
85°	40	94	168	223	241	43
90°	1	64	137	190	208	3
95°	0	41	107	156	173	0
105°	0	20	66	105	120	0
115°	0	11	42	70	81	0
125°	0	6	27	46	54	0
135°	0	2	15	28	33	0
145°	0	1	6	14	18	0
155°	1	0	1	4	6	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°	775.6	775.6	775.6	775.6	775.6
2.5°	782.0	772.8	776.3	773.5	769.2
5°	779.2	770.7	774.2	770.7	770.0
7.5°	774.9	766.4	770.0	767.1	766.4
10°	768.5	759.3	764.3	760.8	760.0
12.5°	759.3	751.6	757.2	753.7	754.4
15°	749.4	741.6	747.3	745.9	746.6
17.5°	737.4	730.3	737.4	736.0	736.7
20°	724.0	717.6	725.4	724.7	726.8
22.5°	709.1	702.7	712.6	711.2	714.8
25°	692.1	687.2	697.8	698.5	701.3
27.5°	673.7	670.2	682.9	683.6	687.9
30°	653.9	651.1	665.9	668.8	673.7
32.5°	632.7	632.0	647.5	652.5	658.1
35°	611.4	610.7	628.4	634.8	642.6
37.5°	588.1	589.5	609.3	617.8	626.3
40°	563.3	565.4	588.1	598.7	607.2
42.5°	538.5	544.2	566.9	580.3	590.2
45°	511.7	520.1	544.2	559.8	569.7
47.5°	485.5	495.4	521.6	539.3	550.6
50°	457.9	469.2	497.5	518.0	530.1
52.5°	429.6	442.3	473.4	496.8	509.5
55°	399.8	415.4	448.7	474.1	488.3
57.5°	370.1	387.8	423.2	452.9	466.4
60°	339.0	358.8	398.4	429.6	444.4
62.5°	307.8	330.5	373.7	408.3	422.5
65°	275.3	300.8	347.5	385.0	401.3
67.5°	243.4	272.5	322.7	363.0	380.0
70°	210.9	242.7	298.6	341.8	358.8
72.5°	178.3	214.4	274.6	321.3	338.3
75°	145.8	186.8	251.2	300.8	317.0
77.5°	115.4	159.2	229.3	279.5	297.9
80°	87.8	135.2	208.8	260.4	278.1
82.5°	62.3	113.9	189.0	241.3	259.7
85°	40.3	94.1	168.4	222.9	241.3
87.5°	19.8	77.1	152.2	205.9	224.3
90°	0.7	63.7	136.6	189.7	208.1
92.5°	0.0	51.0	121.0	172.0	191.8
95°	0.0	41.0	106.9	155.7	173.4
97.5°	0.0	34.0	94.8	142.2	159.2
100°	0.0	27.6	84.2	128.8	145.1
102.5°	0.0	23.4	74.3	116.8	132.3
105°	0.0	19.8	65.8	105.4	120.3
107.5°	0.0	17.7	58.7	95.5	109.0
110°	0.0	15.6	52.4	86.3	99.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.4	46.7	77.8	89.9
115°	0.0	11.3	42.5	70.1	81.4
117.5°	0.0	9.9	38.2	63.0	73.6
120°	0.0	8.5	34.0	57.3	66.5
122.5°	0.0	7.1	30.4	51.7	60.2
125°	0.0	6.4	26.9	46.0	53.8
127.5°	0.0	5.0	24.1	41.0	48.8
130°	0.0	4.2	20.5	36.8	43.2
132.5°	0.0	2.8	17.7	32.6	38.2
135°	0.0	2.1	14.9	28.3	33.3
137.5°	0.0	1.4	12.7	24.8	29.0
140°	0.0	1.4	9.9	21.2	24.8
142.5°	0.0	0.7	7.8	17.7	21.2
145°	0.0	0.7	6.4	14.2	17.7
147.5°	0.7	0.0	4.2	11.3	14.2
150°	0.7	0.0	3.5	8.5	11.3
152.5°	0.7	0.0	2.1	6.4	8.5
155°	0.7	0.0	1.4	4.2	5.7
157.5°	0.7	0.7	0.7	2.1	3.5
160°	0.7	0.0	0.0	1.4	2.1
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)