

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: P236323

Luminaire Tested: **4SWLED-64HL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-29)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-64HL-LN-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

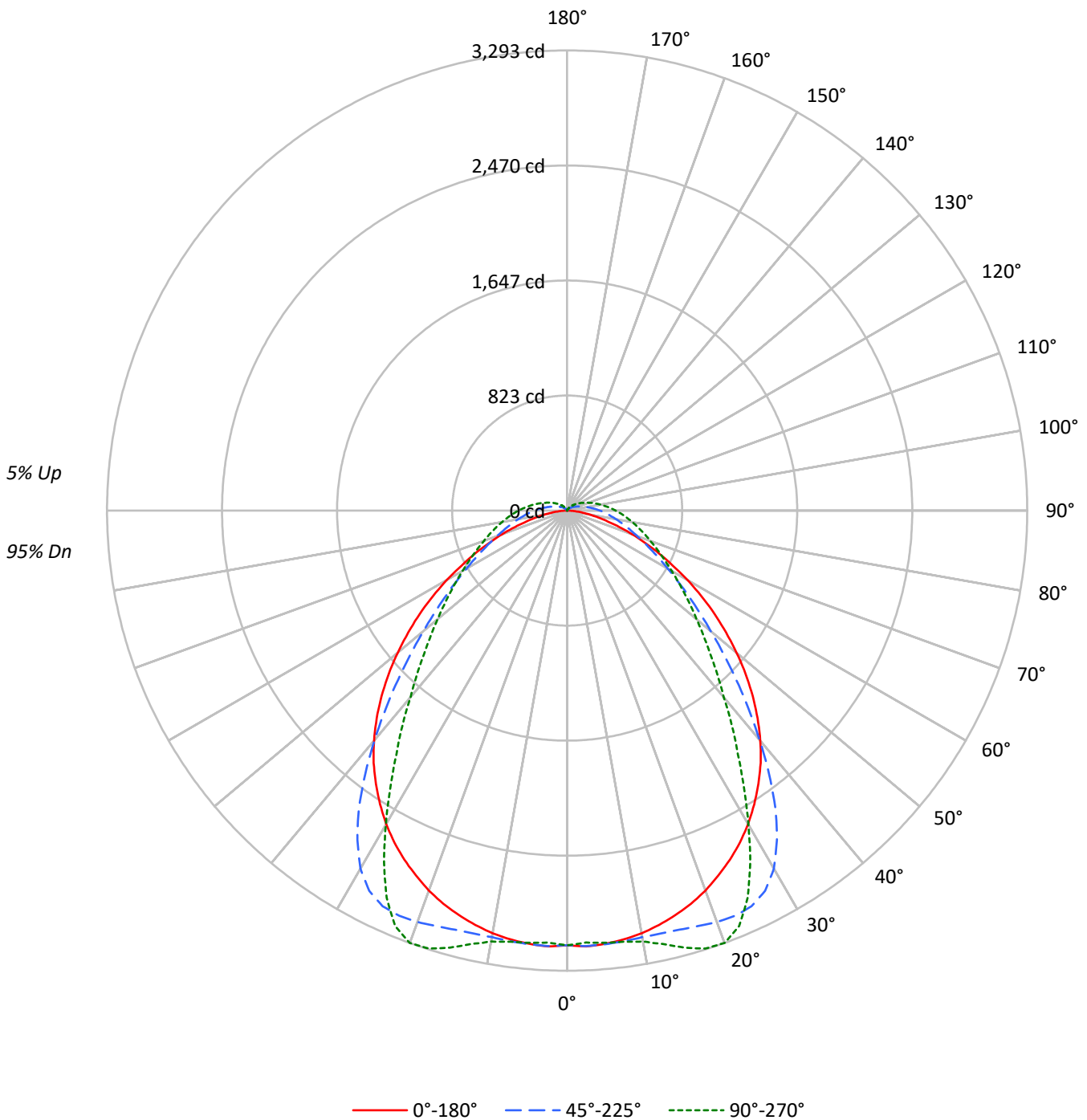
Lumens per Lamp: N/A
Luminaire Lumens: 8312.0 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 62
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	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95				
1	108	103	99	95	104	100	96	93	95	92	89	90	88	85	86	84	82	79				
2	98	90	84	78	95	88	82	77	84	79	74	80	76	72	76	73	70	67				
3	90	80	72	66	87	78	71	65	75	68	63	71	66	62	68	64	60	58				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	54	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	56	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	43	53	47	42	51	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	47	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	43	36	31	41	35	31	40	34	30	28				
10	54	41	34	29	53	41	33	29	39	33	28	38	32	28	37	32	28	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22318	22318	22318
5°	22349	21862	21628
10°	22237	21450	21353
15°	22044	21349	21781
20°	21808	21564	22026
25°	21464	21689	20485
30°	21014	20892	17559
35°	20377	18806	14668
40°	19550	16023	12323
45°	18390	13347	10577
50°	16942	11026	9228
55°	15307	9225	8199
60°	13429	7844	7413
65°	11437	6851	6818
70°	9432	6128	6428
75°	7385	5677	6194
80°	5520	5431	6112
85°	3626	5380	6165



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.0	3.6
10°-20°	879.4	10.6
20°-30°	1370.2	16.5
30°-40°	1510.9	18.2
40°-50°	1338.0	16.1
50°-60°	1024.3	12.3
60°-70°	710.1	8.5
70°-80°	463.6	5.6
80°-90°	292.7	3.5
90°-100°	183.0	2.2
100°-110°	112.0	1.3
110°-120°	66.2	0.8
120°-130°	37.3	0.4
130°-140°	18.9	0.2
140°-150°	7.6	0.1
150°-160°	1.9	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2545.6	30.6
0°-40°	4056.5	48.8
0°-60°	6418.7	77.2
0°-90°	7885.0	94.9
90°-120°	361.3	4.3
90°-150°	425.0	5.1
90°-180°	427.0	5.1
0°-180°	8312.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3110	3110	3110	3110	3110	
5°	3112	3091	3115	3104	3105	296
15°	2996	2999	3105	3195	3237	845
25°	2757	2848	3124	3112	3056	1269
35°	2386	2610	2599	2228	2130	1490
45°	1878	2085	1711	1472	1448	1445
55°	1287	1347	1054	1002	1019	1149
65°	726	737	664	709	736	723
75°	303	355	435	520	548	330
85°	62	156	290	380	408	71
90°	1	104	234	322	347	4
95°	0	67	184	266	292	0
105°	0	31	111	176	202	0
115°	0	17	66	114	133	0
125°	0	9	41	72	84	0
135°	1	3	24	44	51	1
145°	1	1	10	22	27	1
155°	2	1	2	6	10	1
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°	3110.1	3110.1	3110.1	3110.1	3110.1
2.5°	3121.9	3098.2	3119.6	3107.7	3094.3
5°	3112.5	3091.1	3114.8	3103.8	3104.6
7.5°	3095.9	3076.9	3108.5	3104.6	3111.7
10°	3071.4	3054.8	3099.8	3118.8	3131.4
12.5°	3037.4	3027.1	3099.0	3144.9	3177.2
15°	2996.3	2998.7	3105.3	3194.6	3237.3
17.5°	2948.9	2963.9	3117.2	3238.9	3286.3
20°	2893.6	2929.1	3133.0	3257.8	3292.6
22.5°	2826.4	2889.6	3139.3	3222.3	3217.5
25°	2756.9	2847.8	3123.5	3111.7	3056.4
27.5°	2677.9	2801.1	3067.4	2930.7	2838.3
30°	2589.4	2748.2	2959.2	2703.9	2594.9
32.5°	2492.2	2685.0	2794.0	2462.2	2354.7
35°	2385.5	2609.9	2598.8	2227.5	2130.3
37.5°	2274.9	2505.6	2372.9	2007.8	1935.1
40°	2150.8	2387.9	2142.1	1807.9	1744.7
42.5°	2017.3	2250.4	1920.1	1629.3	1589.8
45°	1878.2	2085.2	1710.7	1472.1	1447.6
47.5°	1732.0	1901.9	1516.3	1331.4	1321.9
50°	1583.5	1717.8	1341.7	1208.2	1209.7
52.5°	1432.6	1524.2	1188.4	1099.9	1109.4
55°	1287.2	1347.2	1054.1	1001.9	1019.3
57.5°	1137.0	1175.8	936.3	915.8	937.9
60°	994.8	1016.2	831.3	839.2	864.4
62.5°	851.0	868.4	742.8	769.6	796.5
65°	726.2	737.2	663.7	708.8	736.4
67.5°	604.5	623.4	594.2	654.3	682.7
70°	494.6	520.7	533.4	606.1	633.7
72.5°	391.1	430.6	481.2	561.8	589.5
75°	302.6	354.8	434.6	519.9	547.6
77.5°	229.1	290.0	392.7	482.8	509.7
80°	161.2	236.3	355.6	447.2	474.1
82.5°	105.1	192.8	320.8	412.5	438.5
85°	62.4	155.7	290.0	380.1	407.7
87.5°	28.4	126.4	260.8	350.8	376.9
90°	0.8	103.5	233.9	321.6	346.9
92.5°	0.0	83.8	208.6	293.9	319.2
95°	0.0	67.2	184.1	266.3	292.4
97.5°	0.0	54.5	162.0	241.8	267.1
100°	0.0	45.0	143.0	218.9	244.2
102.5°	0.0	37.1	125.6	197.5	222.0
105°	0.0	30.8	110.6	176.2	201.5
107.5°	0.0	26.1	97.2	158.0	181.7
110°	0.0	22.1	85.3	141.4	163.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	19.8	75.1	127.2	147.8
115°	0.0	16.6	66.4	113.8	132.7
117.5°	0.0	15.0	58.5	101.9	119.3
120°	0.0	12.6	52.2	90.9	106.7
122.5°	0.0	11.1	45.8	80.6	94.8
125°	0.0	8.7	41.1	71.9	84.5
127.5°	0.0	7.1	36.3	64.0	75.1
130°	0.8	5.5	32.4	56.1	66.4
132.5°	0.8	4.0	27.7	49.8	57.7
135°	0.8	3.2	23.7	43.5	51.4
137.5°	0.8	1.6	19.8	37.9	44.2
140°	0.8	0.8	15.8	32.4	37.9
142.5°	0.8	0.8	12.6	27.7	32.4
145°	0.8	0.8	10.3	22.1	26.9
147.5°	0.8	0.8	7.1	17.4	22.1
150°	1.6	0.8	4.7	13.4	17.4
152.5°	1.6	0.8	3.2	9.5	13.4
155°	1.6	0.8	1.6	6.3	9.5
157.5°	1.6	1.6	0.8	4.0	5.5
160°	1.6	1.6	0.8	1.6	3.2
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)