

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: P236322

Luminaire Tested: **4SWLED-64HL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236322
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-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

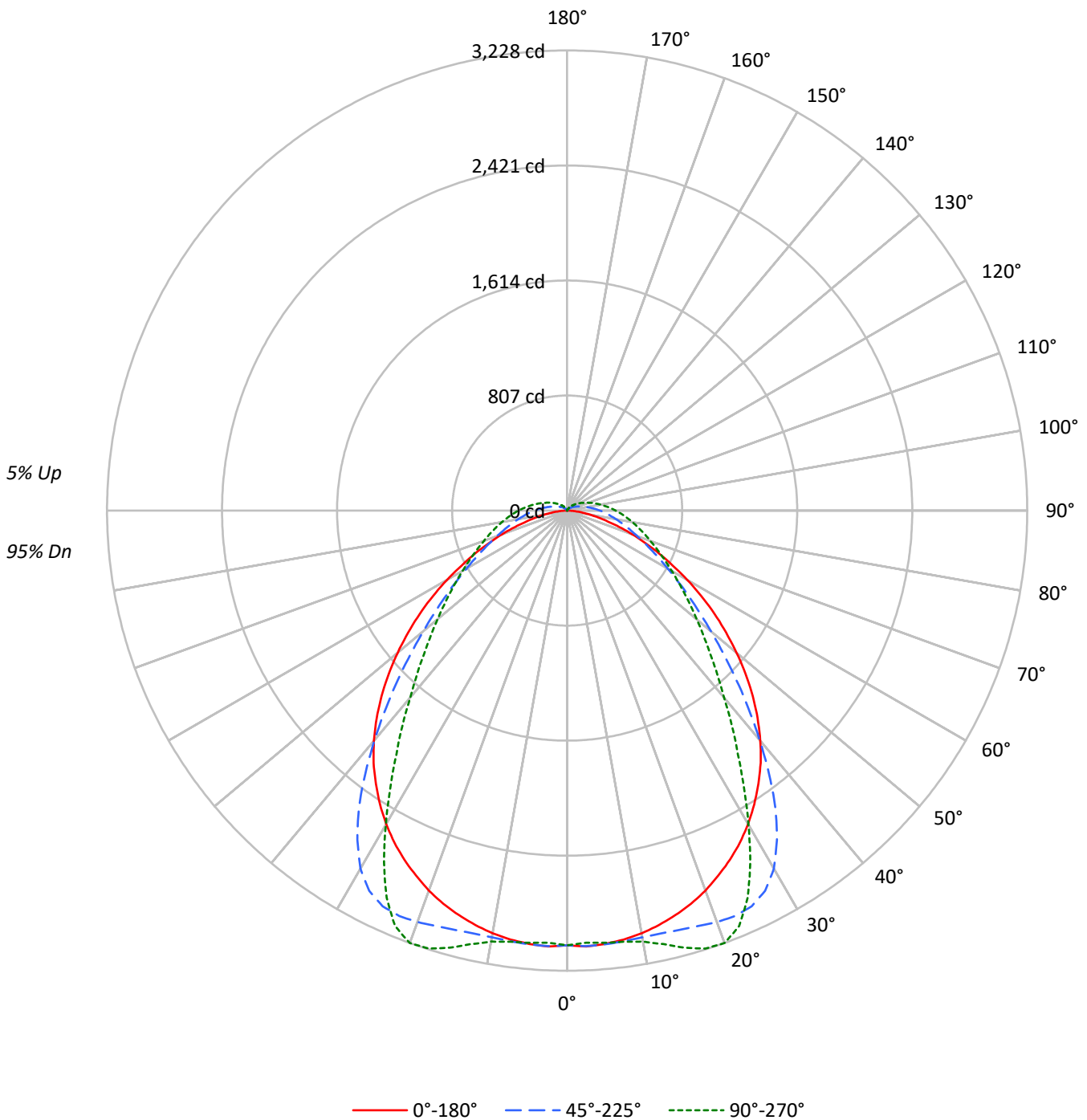
Lumens per Lamp: N/A
Luminaire Lumens: 8149.0 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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

TEST NUMBER: P236322

CATALOG NUMBER: 4SWLED-64HL-LN-UNV-L835-CD1-U

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	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°	21880	21880	21880
5°	21910	21433	21203
10°	21801	21029	20934
15°	21612	20930	21353
20°	21379	21142	21594
25°	21042	21264	20083
30°	20601	20482	17215
35°	19978	18437	14380
40°	19166	15708	12081
45°	18030	13085	10370
50°	16609	10810	9047
55°	15006	9044	8038
60°	13166	7690	7268
65°	11211	6717	6685
70°	9247	6007	6302
75°	7241	5566	6071
80°	5411	5324	5992
85°	3557	5275	6044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.2	3.6
10°-20°	862.2	10.6
20°-30°	1343.3	16.5
30°-40°	1481.3	18.2
40°-50°	1311.7	16.1
50°-60°	1004.2	12.3
60°-70°	696.2	8.5
70°-80°	454.5	5.6
80°-90°	286.9	3.5
90°-100°	179.4	2.2
100°-110°	109.9	1.3
110°-120°	64.9	0.8
120°-130°	36.6	0.4
130°-140°	18.5	0.2
140°-150°	7.4	0.1
150°-160°	1.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2495.7	30.6
0°-40°	3976.9	48.8
0°-60°	6292.8	77.2
0°-90°	7730.4	94.9
90°-120°	354.2	4.3
90°-150°	416.7	5.1
90°-180°	419.0	5.1
0°-180°	8149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3049	3049	3049	3049	3049	
5°	3051	3030	3054	3043	3044	290
15°	2938	2940	3044	3132	3174	829
25°	2703	2792	3062	3051	2996	1244
35°	2339	2559	2548	2184	2088	1461
45°	1841	2044	1677	1443	1419	1417
55°	1262	1321	1033	982	999	1127
65°	712	723	651	695	722	709
75°	297	348	426	510	537	323
85°	61	153	284	373	400	70
90°	1	102	229	315	340	4
95°	0	66	180	261	287	0
105°	0	30	108	173	198	0
115°	0	16	65	112	130	0
125°	0	8	40	70	83	0
135°	1	3	23	43	50	1
145°	1	1	10	22	26	1
155°	2	1	2	6	9	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236322

CATALOG NUMBER: 4SWLED-64HL-LN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3049.1	3049.1	3049.1	3049.1	3049.1
2.5°	3060.7	3037.5	3058.4	3046.8	3033.6
5°	3051.4	3030.5	3053.7	3042.9	3043.7
7.5°	3035.2	3016.6	3047.5	3043.7	3050.6
10°	3011.1	2994.9	3039.0	3057.6	3070.0
12.5°	2977.8	2967.8	3038.3	3083.2	3114.9
15°	2937.5	2939.9	3044.4	3132.0	3173.8
17.5°	2891.1	2905.8	3056.1	3175.4	3221.8
20°	2836.8	2871.7	3071.6	3194.0	3228.0
22.5°	2771.0	2833.0	3077.8	3159.1	3154.5
25°	2702.8	2791.9	3062.3	3050.6	2996.4
27.5°	2625.4	2746.2	3007.3	2873.2	2782.6
30°	2538.6	2694.3	2901.1	2650.9	2544.0
32.5°	2443.3	2632.3	2739.2	2413.9	2308.5
35°	2338.7	2558.7	2547.9	2183.8	2088.5
37.5°	2230.3	2456.5	2326.3	1968.4	1897.2
40°	2108.6	2341.0	2100.1	1772.4	1710.5
42.5°	1977.7	2206.3	1882.4	1597.4	1558.6
45°	1841.4	2044.4	1677.2	1443.2	1419.2
47.5°	1698.1	1864.6	1486.6	1305.3	1296.0
50°	1552.4	1684.1	1315.4	1184.5	1186.0
52.5°	1404.5	1494.3	1165.1	1078.3	1087.6
55°	1261.9	1320.8	1033.4	982.3	999.3
57.5°	1114.7	1152.7	918.0	897.8	919.5
60°	975.3	996.2	815.0	822.7	847.5
62.5°	834.3	851.4	728.2	754.5	780.9
65°	711.9	722.8	650.7	694.9	722.0
67.5°	592.6	611.2	582.6	641.4	669.3
70°	484.9	510.5	522.9	594.2	621.3
72.5°	383.5	422.2	471.8	550.8	577.9
75°	296.7	347.8	426.1	509.7	536.8
77.5°	224.7	284.3	385.0	473.3	499.7
80°	158.0	231.6	348.6	438.5	464.8
82.5°	103.0	189.0	314.5	404.4	429.9
85°	61.2	152.6	284.3	372.6	399.7
87.5°	27.9	123.9	255.6	344.0	369.5
90°	0.8	101.5	229.3	315.3	340.1
92.5°	0.0	82.1	204.5	288.2	313.0
95°	0.0	65.8	180.5	261.1	286.6
97.5°	0.0	53.5	158.8	237.0	261.8
100°	0.0	44.2	140.2	214.6	239.4
102.5°	0.0	36.4	123.2	193.7	217.7
105°	0.0	30.2	108.5	172.8	197.5
107.5°	0.0	25.6	95.3	154.9	178.2
110°	0.0	21.7	83.7	138.7	160.4



TEST NUMBER: P236322

CATALOG NUMBER: 4SWLED-64HL-LN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	19.4	73.6	124.7	144.9
115°	0.0	16.3	65.1	111.6	130.1
117.5°	0.0	14.7	57.3	99.9	117.0
120°	0.0	12.4	51.1	89.1	104.6
122.5°	0.0	10.8	44.9	79.0	93.0
125°	0.0	8.5	40.3	70.5	82.9
127.5°	0.0	7.0	35.6	62.7	73.6
130°	0.8	5.4	31.8	55.0	65.1
132.5°	0.8	3.9	27.1	48.8	56.6
135°	0.8	3.1	23.2	42.6	50.4
137.5°	0.8	1.5	19.4	37.2	43.4
140°	0.8	0.8	15.5	31.8	37.2
142.5°	0.8	0.8	12.4	27.1	31.8
145°	0.8	0.8	10.1	21.7	26.3
147.5°	0.8	0.8	7.0	17.0	21.7
150°	1.5	0.8	4.6	13.2	17.0
152.5°	1.5	0.8	3.1	9.3	13.2
155°	1.5	0.8	1.5	6.2	9.3
157.5°	1.5	1.5	0.8	3.9	5.4
160°	1.5	1.5	0.8	1.5	3.1
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)