

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: P236327

Luminaire Tested: **4SWLED-67HL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236327
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-67HL-LN-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

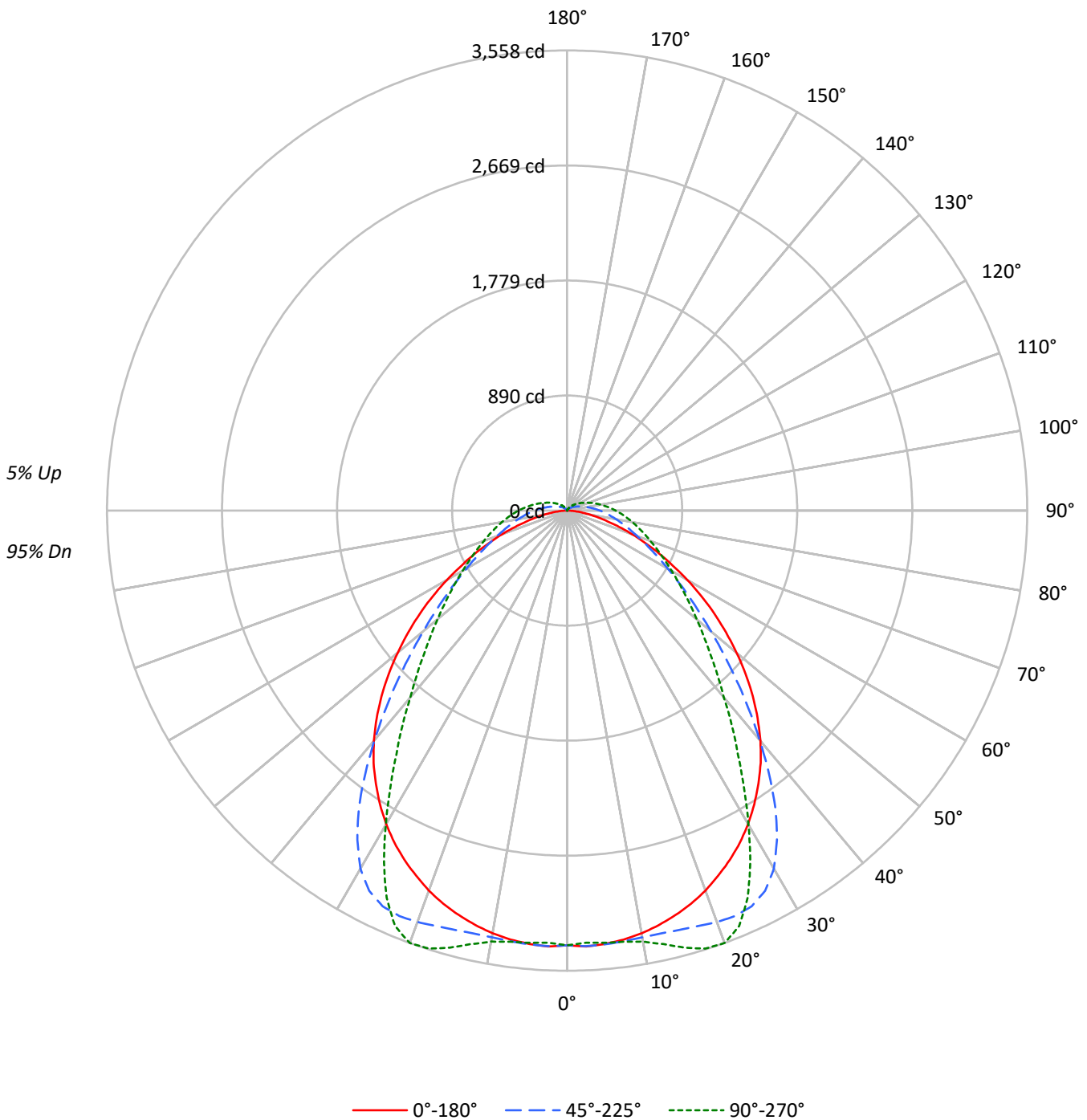
Lumens per Lamp: N/A
Luminaire Lumens: 8982.0 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 65.7
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: P236327

CATALOG NUMBER: 4SWLED-67HL-LN-UNV-L850-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°	24117	24117	24117
5°	24150	23624	23371
10°	24029	23179	23074
15°	23821	23071	23536
20°	23565	23302	23802
25°	23194	23438	22136
30°	22707	22576	18975
35°	22020	20322	15850
40°	21126	17314	13316
45°	19873	14422	11430
50°	18307	11915	9973
55°	16540	9968	8860
60°	14512	8477	8010
65°	12358	7403	7368
70°	10193	6622	6946
75°	7980	6134	6692
80°	5965	5868	6604
85°	3923	5815	6662



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.8	3.6
10°-20°	950.3	10.6
20°-30°	1480.6	16.5
30°-40°	1632.7	18.2
40°-50°	1445.8	16.1
50°-60°	1106.9	12.3
60°-70°	767.3	8.5
70°-80°	500.9	5.6
80°-90°	316.2	3.5
90°-100°	197.8	2.2
100°-110°	121.1	1.3
110°-120°	71.5	0.8
120°-130°	40.3	0.4
130°-140°	20.4	0.2
140°-150°	8.2	0.1
150°-160°	2.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2750.8	30.6
0°-40°	4383.4	48.8
0°-60°	6936.1	77.2
0°-90°	8520.6	94.9
90°-120°	390.4	4.3
90°-150°	459.3	5.1
90°-180°	461.0	5.1
0°-180°	8982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3361	3361	3361	3361	3361	
5°	3363	3340	3366	3354	3355	320
15°	3238	3240	3356	3452	3498	914
25°	2979	3077	3375	3362	3303	1371
35°	2578	2820	2808	2407	2302	1610
45°	2030	2253	1849	1591	1564	1562
55°	1391	1456	1139	1083	1102	1242
65°	785	797	717	766	796	781
75°	327	383	470	562	592	356
85°	68	168	313	411	441	77
90°	1	112	253	348	375	4
95°	0	73	199	288	316	0
105°	0	33	120	190	218	0
115°	0	18	72	123	143	0
125°	0	9	44	78	91	0
135°	1	3	26	47	56	1
145°	1	1	11	24	29	1
155°	2	1	2	7	10	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236327

CATALOG NUMBER: 4SWLED-67HL-LN-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3360.8	3360.8	3360.8	3360.8	3360.8
2.5°	3373.6	3348.0	3371.0	3358.2	3343.7
5°	3363.3	3340.3	3365.9	3353.9	3354.8
7.5°	3345.4	3324.9	3359.1	3354.8	3362.5
10°	3318.9	3301.0	3349.7	3370.2	3383.8
12.5°	3282.2	3271.1	3348.8	3398.3	3433.4
15°	3237.8	3240.4	3355.7	3452.1	3498.2
17.5°	3186.6	3202.8	3368.5	3500.0	3551.2
20°	3126.8	3165.2	3385.5	3520.4	3558.0
22.5°	3054.2	3122.6	3392.4	3482.0	3476.9
25°	2979.1	3077.3	3375.3	3362.5	3302.7
27.5°	2893.7	3026.9	3314.7	3167.0	3067.1
30°	2798.1	2969.7	3197.7	2921.9	2804.1
32.5°	2693.1	2901.4	3019.2	2660.6	2544.5
35°	2577.8	2820.3	2808.3	2407.0	2302.0
37.5°	2458.3	2707.6	2564.1	2169.6	2091.1
40°	2324.2	2580.4	2314.8	1953.6	1885.3
42.5°	2179.9	2431.8	2074.9	1760.7	1718.0
45°	2029.6	2253.3	1848.6	1590.7	1564.3
47.5°	1871.7	2055.2	1638.5	1438.7	1428.5
50°	1711.1	1856.3	1449.8	1305.5	1307.3
52.5°	1548.0	1647.1	1284.2	1188.6	1198.8
55°	1390.9	1455.8	1139.0	1082.7	1101.5
57.5°	1228.7	1270.5	1011.8	989.6	1013.5
60°	1075.0	1098.1	898.3	906.8	934.1
62.5°	919.6	938.4	802.6	831.7	860.7
65°	784.7	796.6	717.2	765.9	795.8
67.5°	653.2	673.7	642.1	707.0	737.7
70°	534.5	562.7	576.4	654.9	684.8
72.5°	422.7	465.4	520.0	607.1	637.0
75°	327.0	383.4	469.6	561.8	591.7
77.5°	247.6	313.4	424.4	521.7	550.7
80°	174.2	255.3	384.2	483.3	512.3
82.5°	113.6	208.3	346.7	445.7	473.9
85°	67.5	168.2	313.4	410.7	440.6
87.5°	30.7	136.6	281.8	379.1	407.3
90°	0.9	111.9	252.7	347.5	374.8
92.5°	0.0	90.5	225.4	317.6	345.0
95°	0.0	72.6	198.9	287.7	315.9
97.5°	0.0	58.9	175.0	261.3	288.6
100°	0.0	48.7	154.5	236.5	263.8
102.5°	0.0	40.1	135.8	213.5	239.9
105°	0.0	33.3	119.5	190.4	217.7
107.5°	0.0	28.2	105.0	170.8	196.4
110°	0.0	23.9	92.2	152.8	176.7



TEST NUMBER: P236327

CATALOG NUMBER: 4SWLED-67HL-LN-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	21.3	81.1	137.5	159.7
115°	0.0	17.9	71.7	123.0	143.4
117.5°	0.0	16.2	63.2	110.1	128.9
120°	0.0	13.7	56.4	98.2	115.3
122.5°	0.0	12.0	49.5	87.1	102.5
125°	0.0	9.4	44.4	77.7	91.4
127.5°	0.0	7.7	39.3	69.2	81.1
130°	0.9	6.0	35.0	60.6	71.7
132.5°	0.9	4.3	29.9	53.8	62.3
135°	0.9	3.4	25.6	47.0	55.5
137.5°	0.9	1.7	21.3	41.0	47.8
140°	0.9	0.9	17.1	35.0	41.0
142.5°	0.9	0.9	13.7	29.9	35.0
145°	0.9	0.9	11.1	23.9	29.0
147.5°	0.9	0.9	7.7	18.8	23.9
150°	1.7	0.9	5.1	14.5	18.8
152.5°	1.7	0.9	3.4	10.2	14.5
155°	1.7	0.9	1.7	6.8	10.2
157.5°	1.7	1.7	0.9	4.3	6.0
160°	1.7	1.7	0.9	1.7	3.4
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)