

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: P236325

Luminaire Tested: **4SWLED-67HL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236325  
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-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**

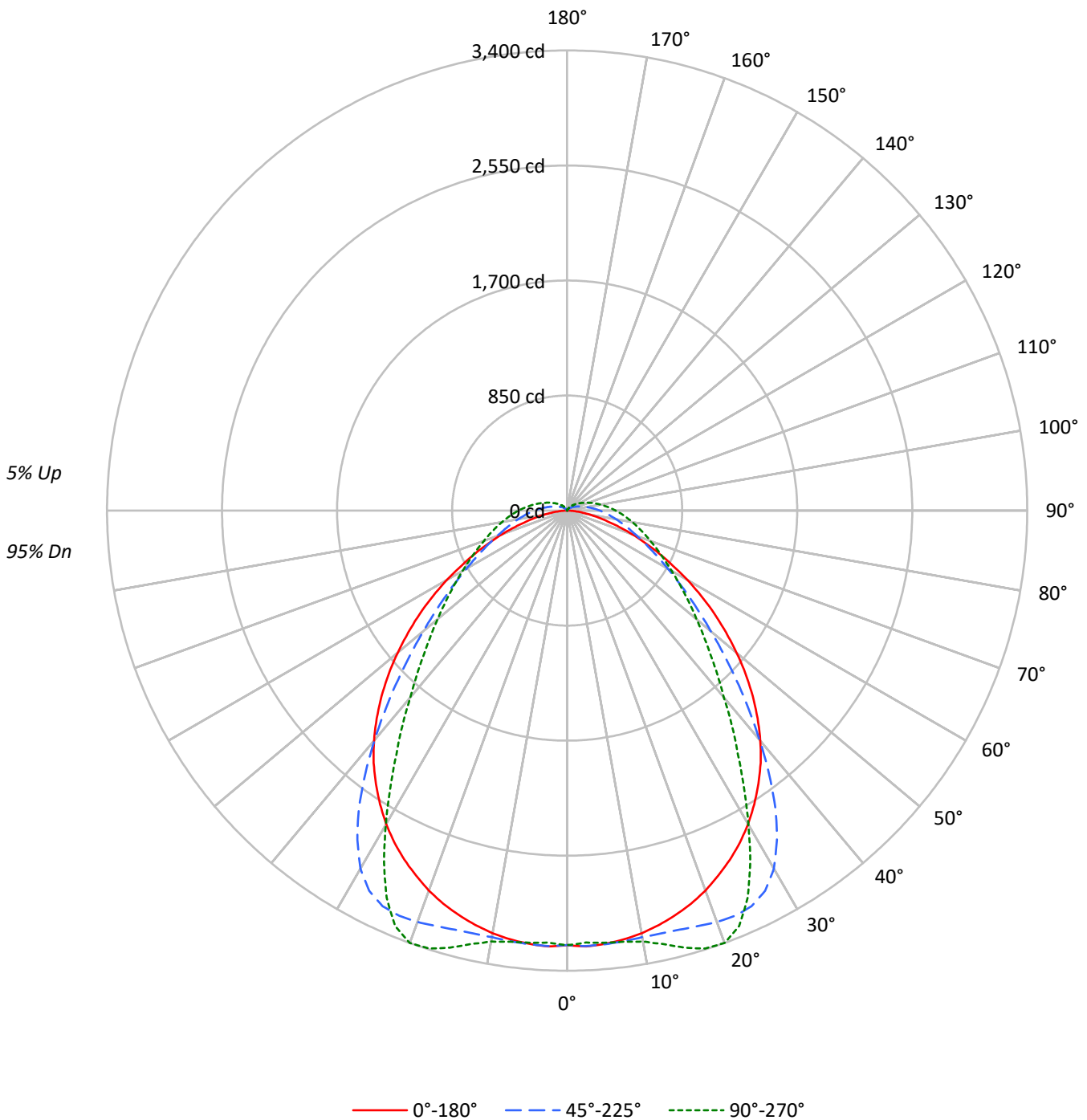
Lumens per Lamp: N/A  
Luminaire Lumens: 8582.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

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

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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°	23043	23043	23043
5°	23075	22572	22330
10°	22959	22146	22047
15°	22760	22043	22488
20°	22516	22265	22742
25°	22160	22394	21150
30°	21696	21571	18130
35°	21039	19417	15144
40°	20185	16543	12723
45°	18987	13780	10921
50°	17492	11385	9528
55°	15804	9524	8465
60°	13865	8099	7654
65°	11807	7074	7040
70°	9739	6326	6637
75°	7627	5861	6395
80°	5698	5607	6311
85°	3749	5555	6366



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.6	3.6
10°-20°	908.0	10.6
20°-30°	1414.7	16.5
30°-40°	1560.0	18.2
40°-50°	1381.4	16.1
50°-60°	1057.6	12.3
60°-70°	733.2	8.5
70°-80°	478.6	5.6
80°-90°	302.2	3.5
90°-100°	189.0	2.2
100°-110°	115.7	1.3
110°-120°	68.3	0.8
120°-130°	38.5	0.4
130°-140°	19.5	0.2
140°-150°	7.8	0.1
150°-160°	1.9	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2628.3	30.6
0°-40°	4188.2	48.8
0°-60°	6627.2	77.2
0°-90°	8141.2	94.9
90°-120°	373.0	4.3
90°-150°	438.8	5.1
90°-180°	441.0	5.1
0°-180°	8582.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3211	3211	3211	3211	3211	
5°	3214	3192	3216	3205	3205	305
15°	3094	3096	3206	3298	3342	873
25°	2846	2940	3225	3213	3156	1310
35°	2463	2695	2683	2300	2200	1539
45°	1939	2153	1766	1520	1495	1492
55°	1329	1391	1088	1034	1052	1186
65°	750	761	685	732	760	747
75°	312	366	449	537	565	340
85°	64	161	299	392	421	74
90°	1	107	242	332	358	4
95°	0	69	190	275	302	0
105°	0	32	114	182	208	0
115°	0	17	68	118	137	0
125°	0	9	42	74	87	0
135°	1	3	24	45	53	1
145°	1	1	11	23	28	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°	3211.1	3211.1	3211.1	3211.1	3211.1
2.5°	3223.3	3198.9	3220.9	3208.7	3194.8
5°	3213.6	3191.5	3216.0	3204.6	3205.4
7.5°	3196.4	3176.8	3209.5	3205.4	3212.7
10°	3171.1	3154.0	3200.5	3220.1	3233.1
12.5°	3136.1	3125.4	3199.7	3247.0	3280.5
15°	3093.6	3096.1	3206.2	3298.4	3342.5
17.5°	3044.7	3060.2	3218.5	3344.1	3393.0
20°	2987.6	3024.3	3234.8	3363.7	3399.6
22.5°	2918.2	2983.5	3241.3	3327.0	3322.1
25°	2846.4	2940.3	3225.0	3212.7	3155.6
27.5°	2764.9	2892.1	3167.1	3025.9	2930.5
30°	2673.5	2837.5	3055.3	2791.8	2679.2
32.5°	2573.1	2772.2	2884.8	2542.1	2431.2
35°	2463.0	2694.7	2683.3	2299.8	2199.5
37.5°	2348.8	2587.0	2449.9	2073.0	1998.0
40°	2220.7	2465.4	2211.7	1866.6	1801.4
42.5°	2082.8	2323.5	1982.5	1682.2	1641.5
45°	1939.2	2153.0	1766.3	1519.9	1494.6
47.5°	1788.3	1963.7	1565.6	1374.7	1364.9
50°	1634.9	1773.6	1385.3	1247.4	1249.0
52.5°	1479.1	1573.7	1227.0	1135.6	1145.4
55°	1329.0	1391.0	1088.3	1034.5	1052.4
57.5°	1174.0	1214.0	966.8	945.5	968.4
60°	1027.1	1049.2	858.3	866.4	892.5
62.5°	878.6	896.6	766.9	794.6	822.4
65°	749.7	761.2	685.3	731.8	760.4
67.5°	624.1	643.7	613.5	675.5	704.9
70°	510.7	537.6	550.7	625.7	654.3
72.5°	403.8	444.6	496.8	580.1	608.6
75°	312.5	366.3	448.7	536.8	565.4
77.5°	236.6	299.4	405.5	498.5	526.2
80°	166.4	243.9	367.1	461.8	489.5
82.5°	108.5	199.1	331.2	425.9	452.8
85°	64.5	160.7	299.4	392.4	421.0
87.5°	29.4	130.5	269.2	362.2	389.2
90°	0.8	106.9	241.5	332.0	358.1
92.5°	0.0	86.5	215.4	303.5	329.6
95°	0.0	69.3	190.1	274.9	301.9
97.5°	0.0	56.3	167.2	249.6	275.8
100°	0.0	46.5	147.7	226.0	252.1
102.5°	0.0	38.3	129.7	204.0	229.2
105°	0.0	31.8	114.2	181.9	208.0
107.5°	0.0	26.9	100.3	163.2	187.6
110°	0.0	22.8	88.1	146.0	168.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	20.4	77.5	131.3	152.6
115°	0.0	17.1	68.5	117.5	137.1
117.5°	0.0	15.5	60.4	105.2	123.2
120°	0.0	13.1	53.8	93.8	110.1
122.5°	0.0	11.4	47.3	83.2	97.9
125°	0.0	9.0	42.4	74.2	87.3
127.5°	0.0	7.3	37.5	66.1	77.5
130°	0.8	5.7	33.4	57.9	68.5
132.5°	0.8	4.1	28.6	51.4	59.6
135°	0.8	3.3	24.5	44.9	53.0
137.5°	0.8	1.6	20.4	39.2	45.7
140°	0.8	0.8	16.3	33.4	39.2
142.5°	0.8	0.8	13.1	28.6	33.4
145°	0.8	0.8	10.6	22.8	27.7
147.5°	0.8	0.8	7.3	17.9	22.8
150°	1.6	0.8	4.9	13.9	17.9
152.5°	1.6	0.8	3.3	9.8	13.9
155°	1.6	0.8	1.6	6.5	9.8
157.5°	1.6	1.6	0.8	4.1	5.7
160°	1.6	1.6	0.8	1.6	3.3
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)