

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: P236326

Luminaire Tested: **4SWLED-67HL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236326
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-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

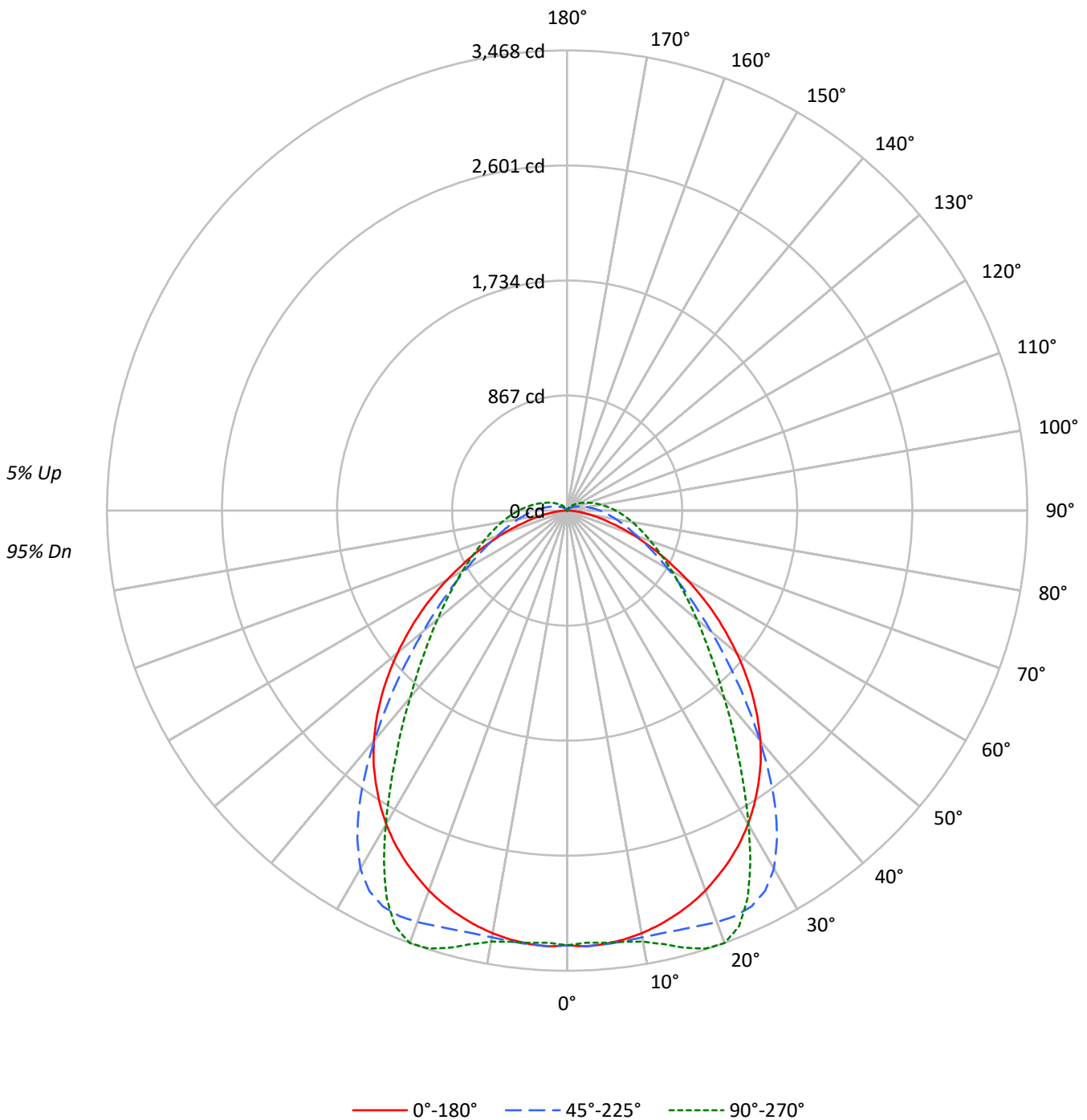
Lumens per Lamp: N/A
Luminaire Lumens: 8755.0 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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	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°	23507	23507	23507
5°	23540	23027	22780
10°	23422	22593	22491
15°	23219	22487	22941
20°	22970	22714	23200
25°	22607	22845	21576
30°	22134	22006	18495
35°	21463	19809	15449
40°	20592	16877	12979
45°	19370	14058	11141
50°	17845	11614	9720
55°	16123	9717	8636
60°	14145	8262	7808
65°	12046	7216	7182
70°	9936	6454	6771
75°	7780	5980	6524
80°	5815	5720	6438
85°	3818	5666	6495



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.7	3.6
10°-20°	926.3	10.6
20°-30°	1443.2	16.5
30°-40°	1591.4	18.2
40°-50°	1409.3	16.1
50°-60°	1078.9	12.3
60°-70°	747.9	8.5
70°-80°	488.3	5.6
80°-90°	308.3	3.5
90°-100°	192.8	2.2
100°-110°	118.0	1.3
110°-120°	69.7	0.8
120°-130°	39.3	0.4
130°-140°	19.9	0.2
140°-150°	8.0	0.1
150°-160°	2.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2681.2	30.6
0°-40°	4272.7	48.8
0°-60°	6760.8	77.2
0°-90°	8305.3	94.9
90°-120°	380.5	4.3
90°-150°	447.6	5.1
90°-180°	450.0	5.1
0°-180°	8755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3276	3276	3276	3276	3276	
5°	3278	3256	3281	3269	3270	312
15°	3156	3158	3271	3365	3410	890
25°	2904	3000	3290	3278	3219	1337
35°	2513	2749	2737	2346	2244	1570
45°	1978	2196	1802	1550	1525	1522
55°	1356	1419	1110	1055	1074	1210
65°	765	776	699	747	776	762
75°	319	374	458	548	577	347
85°	66	164	305	400	430	75
90°	1	109	246	339	365	4
95°	0	71	194	280	308	0
105°	0	32	116	186	212	0
115°	0	18	70	120	140	0
125°	0	9	43	76	89	0
135°	1	3	25	46	54	1
145°	1	1	11	23	28	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3275.8	3275.8	3275.8	3275.8	3275.8
2.5°	3288.3	3263.4	3285.8	3273.3	3259.2
5°	3278.3	3255.9	3280.8	3269.2	3270.0
7.5°	3260.9	3240.9	3274.2	3270.0	3277.5
10°	3235.1	3217.6	3265.0	3285.0	3298.3
12.5°	3199.3	3188.5	3264.2	3312.5	3346.6
15°	3156.0	3158.5	3270.8	3364.9	3409.8
17.5°	3106.1	3121.9	3283.3	3411.5	3461.4
20°	3047.8	3085.3	3300.0	3431.5	3468.1
22.5°	2977.1	3043.6	3306.6	3394.0	3389.0
25°	2903.8	2999.5	3290.0	3277.5	3219.2
27.5°	2820.6	2950.4	3230.9	3086.9	2989.5
30°	2727.4	2894.7	3116.9	2848.1	2733.2
32.5°	2625.0	2828.1	2942.9	2593.4	2480.2
35°	2512.6	2749.0	2737.4	2346.2	2243.8
37.5°	2396.1	2639.1	2499.3	2114.8	2038.2
40°	2265.5	2515.1	2256.3	1904.2	1837.7
42.5°	2124.8	2370.3	2022.4	1716.2	1674.5
45°	1978.3	2196.4	1801.9	1550.5	1524.7
47.5°	1824.4	2003.3	1597.1	1402.4	1392.4
50°	1667.9	1809.4	1413.2	1272.6	1274.2
52.5°	1508.9	1605.5	1251.7	1158.5	1168.5
55°	1355.8	1419.0	1110.3	1055.3	1073.6
57.5°	1197.6	1238.4	986.2	964.6	987.9
60°	1047.8	1070.3	875.6	883.9	910.5
62.5°	896.4	914.7	782.3	810.6	838.9
65°	764.9	776.5	699.1	746.6	775.7
67.5°	636.7	656.7	625.9	689.1	719.1
70°	521.0	548.5	561.8	638.4	667.5
72.5°	412.0	453.6	506.9	591.7	620.9
75°	318.8	373.7	457.8	547.6	576.8
77.5°	241.4	305.4	413.6	508.5	536.8
80°	169.8	248.9	374.5	471.1	499.4
82.5°	110.7	203.1	337.9	434.4	461.9
85°	65.7	164.0	305.4	400.3	429.5
87.5°	30.0	133.2	274.7	369.5	397.0
90°	0.8	109.0	246.4	338.7	365.4
92.5°	0.0	88.2	219.7	309.6	336.2
95°	0.0	70.7	193.9	280.5	307.9
97.5°	0.0	57.4	170.6	254.7	281.3
100°	0.0	47.4	150.6	230.5	257.2
102.5°	0.0	39.1	132.3	208.1	233.9
105°	0.0	32.5	116.5	185.6	212.2
107.5°	0.0	27.5	102.4	166.5	191.4
110°	0.0	23.3	89.9	149.0	172.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	20.8	79.1	134.0	155.6
115°	0.0	17.5	69.9	119.8	139.8
117.5°	0.0	15.8	61.6	107.4	125.7
120°	0.0	13.3	54.9	95.7	112.4
122.5°	0.0	11.7	48.3	84.9	99.9
125°	0.0	9.2	43.3	75.7	89.1
127.5°	0.0	7.5	38.3	67.4	79.1
130°	0.8	5.8	34.1	59.1	69.9
132.5°	0.8	4.2	29.1	52.4	60.8
135°	0.8	3.3	25.0	45.8	54.1
137.5°	0.8	1.7	20.8	39.9	46.6
140°	0.8	0.8	16.6	34.1	39.9
142.5°	0.8	0.8	13.3	29.1	34.1
145°	0.8	0.8	10.8	23.3	28.3
147.5°	0.8	0.8	7.5	18.3	23.3
150°	1.7	0.8	5.0	14.1	18.3
152.5°	1.7	0.8	3.3	10.0	14.1
155°	1.7	0.8	1.7	6.7	10.0
157.5°	1.7	1.7	0.8	4.2	5.8
160°	1.7	1.7	0.8	1.7	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)