

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: P236290

Luminaire Tested: **4SWLED-60HL-LC-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26870)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SWLED-60HL-LC-UNV-L840-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 2 ROW LED, CLEAR LENS  
Light Source: (224) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

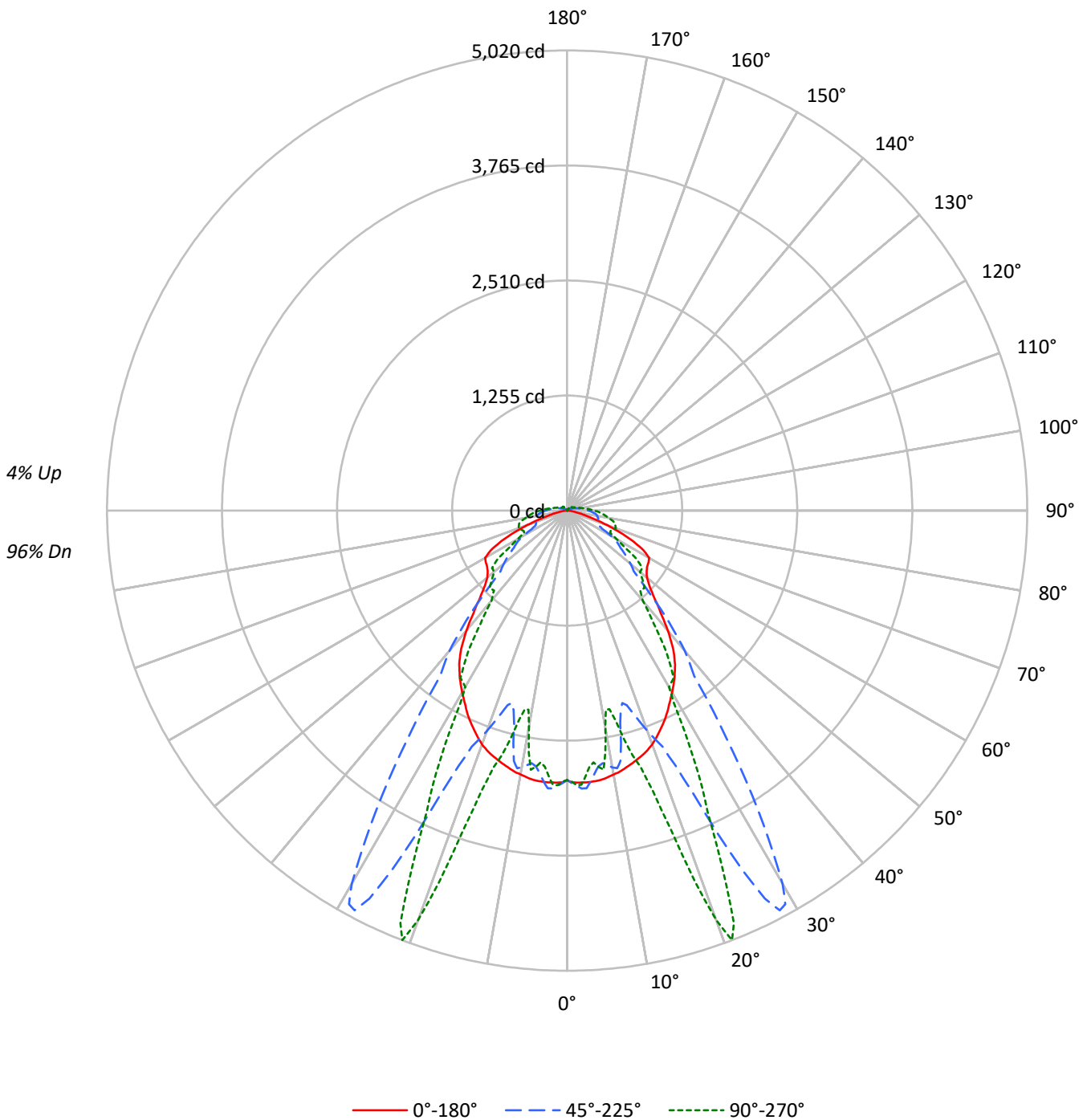
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8017.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.15 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct  
  
Input Watts (W): 57.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	108	103	99	96	105	101	97	94	96	93	90	91	89	86	87	85	83	81				
2	99	91	85	80	96	89	83	78	85	80	76	81	77	74	78	74	71	69				
3	91	81	74	68	88	79	72	67	76	70	65	73	68	63	70	65	62	59				
4	84	73	65	58	81	71	64	58	68	62	56	65	60	55	63	58	54	52				
5	78	66	57	51	75	64	56	50	62	55	49	59	53	49	57	52	48	46				
6	72	59	51	45	70	58	50	45	56	49	44	54	48	43	52	47	42	40				
7	67	54	46	40	65	53	45	40	51	44	39	49	43	39	48	42	38	36				
8	62	50	41	36	61	49	41	36	47	40	35	46	39	35	44	38	34	32				
9	58	46	38	32	57	45	37	32	43	37	32	42	36	31	41	35	31	29				
10	55	42	35	29	53	41	34	29	40	34	29	39	33	29	38	32	28	27				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	21107	21107	21107
5°	21328	20798	19527
10°	21166	19685	16323
15°	20864	15492	18618
20°	20457	17614	31800
25°	19613	27021	24299
30°	18602	33203	15026
35°	17539	21876	12999
40°	15513	14919	9065
45°	13133	9843	8731
50°	12144	7422	7923
55°	12669	6222	7481
60°	13940	5280	5337
65°	12482	3916	4850
70°	8830	4118	5727
75°	5079	4592	6127
80°	3205	5080	5879
85°	1738	5431	5782



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.3	3.4
10°-20°	774.5	9.7
20°-30°	1526.0	19.0
30°-40°	1574.5	19.6
40°-50°	1323.1	16.5
50°-60°	975.9	12.2
60°-70°	553.3	6.9
70°-80°	397.2	5.0
80°-90°	269.3	3.4
90°-100°	160.9	2.0
100°-110°	84.0	1.0
110°-120°	47.0	0.6
120°-130°	27.5	0.3
130°-140°	19.1	0.2
140°-150°	6.9	0.1
150°-160°	2.0	0.0
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	2575.8	32.1
0°-40°	4150.3	51.8
0°-60°	6449.3	80.4
0°-90°	7669.1	95.7
90°-120°	291.9	3.6
90°-150°	345.5	4.3
90°-180°	348.0	4.3
0°-180°	8017.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2941	2941	2941	2941	2941	
5°	2970	3014	2963	2824	2803	282
15°	2836	2713	2253	2537	2767	799
25°	2519	2248	3891	4369	3626	1156
35°	2053	2529	3023	2049	1888	1270
45°	1341	3378	1262	1139	1195	1057
55°	1065	1895	711	897	930	962
65°	793	761	379	465	524	768
75°	208	307	352	505	542	248
85°	30	128	293	358	382	38
90°	2	94	233	288	297	2
95°	1	75	182	211	221	1
105°	1	39	96	114	122	1
115°	2	18	53	75	84	2
125°	2	8	31	49	60	2
135°	2	4	23	47	58	2
145°	2	2	9	17	22	1
155°	3	3	4	5	7	1
165°	3	3	3	1	2	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236290

CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4
1°	2966.3	2964.3	2952.4	2946.4	2945.4	2943.4	2944.4	2946.4	2951.4	2951.4	2974.3
2°	2969.3	2968.3	2960.3	2956.4	2956.4	2956.4	2958.3	2964.3	2968.3	2969.3	3004.2
3°	2970.3	2971.3	2966.3	2963.3	2970.3	2970.3	2973.3	2981.2	2995.2	3000.2	3036.0
4°	2972.3	2976.3	2973.3	2972.3	2986.2	2996.2	3002.2	3013.1	3022.1	3023.1	3037.0
5°	2970.3	2975.3	2975.3	2987.2	3006.1	3014.1	3019.1	3026.1	3012.1	2974.3	2963.3
6°	2968.3	2976.3	2981.2	3003.2	3020.1	3027.1	3028.0	2997.2	2960.3	2916.5	2880.7
7°	2963.3	2971.3	2987.2	3016.1	3027.1	3026.1	3009.1	2945.4	2880.7	2824.9	2809.0
8°	2951.4	2963.3	2995.2	3019.1	3011.1	2980.3	2948.4	2878.7	2817.9	2778.1	2781.1
9°	2937.4	2950.4	2995.2	3012.1	2973.3	2929.5	2889.6	2803.0	2764.2	2758.2	2812.0
10°	2923.5	2944.4	2996.2	2997.2	2912.5	2867.7	2813.0	2754.2	2753.2	2786.1	2844.8
11°	2911.5	2936.4	2990.2	2967.3	2860.8	2811.0	2755.2	2738.3	2777.1	2814.0	2863.8
12°	2894.6	2928.5	2977.3	2927.5	2794.1	2746.3	2717.4	2749.2	2796.0	2829.9	2792.1
13°	2874.7	2912.5	2952.4	2867.7	2739.3	2706.4	2717.4	2770.2	2800.0	2780.1	2611.8
14°	2853.8	2902.6	2922.5	2815.0	2689.5	2697.5	2732.3	2774.1	2779.1	2606.9	2395.8
15°	2835.9	2889.6	2890.6	2756.2	2672.6	2713.4	2740.3	2760.2	2681.5	2439.6	2253.4
16°	2815.0	2875.7	2855.8	2714.4	2688.5	2726.3	2741.3	2724.3	2496.3	2260.3	2183.7
17°	2794.1	2855.8	2812.0	2677.5	2707.4	2728.3	2727.3	2620.8	2358.9	2180.7	2217.5
18°	2770.2	2830.9	2772.1	2651.7	2715.4	2716.4	2693.5	2499.3	2221.5	2164.7	2321.1
19°	2743.3	2802.0	2729.3	2635.7	2705.4	2683.5	2623.8	2363.9	2168.7	2225.5	2438.6
20°	2714.4	2769.2	2690.5	2637.7	2680.5	2631.7	2541.1	2258.3	2165.7	2323.1	2559.1
21°	2678.5	2730.3	2653.7	2647.7	2634.7	2549.1	2435.6	2196.6	2213.5	2413.7	2668.6
22°	2639.7	2689.5	2624.8	2647.7	2565.0	2469.4	2341.0	2171.7	2295.2	2508.3	2777.1
23°	2597.9	2651.7	2597.9	2634.7	2479.4	2380.8	2264.3	2193.6	2353.9	2600.9	3021.1
24°	2560.1	2608.8	2580.0	2603.9	2402.7	2306.1	2216.5	2241.4	2408.7	2705.4	3361.6
25°	2519.2	2568.0	2564.0	2554.1	2333.0	2248.4	2206.6	2280.2	2481.4	2961.3	3891.4
26°	2474.4	2524.2	2549.1	2481.4	2280.2	2218.5	2220.5	2309.1	2579.0	3283.0	4368.3
27°	2426.6	2483.4	2520.2	2401.7	2243.4	2215.5	2249.4	2330.0	2805.0	3786.8	4748.7
28°	2378.8	2436.6	2479.4	2322.1	2221.5	2235.4	2261.3	2374.8	3093.8	4220.0	4938.9
29°	2333.0	2392.8	2433.6	2260.3	2218.5	2260.3	2259.3	2507.3	3542.8	4593.4	4909.0
30°	2292.2	2349.0	2380.8	2219.5	2234.4	2263.3	2258.3	2726.3	3926.2	4784.5	4702.9
32.5°	2176.7	2221.5	2222.5	2182.7	2260.3	2255.4	2433.6	3603.6	4567.5	4595.3	3878.4
35°	2053.2	2067.2	2087.1	2208.6	2277.3	2529.2	3123.6	4175.1	4527.6	3820.7	3023.1
37.5°	1899.9	1897.9	2032.3	2227.5	2614.8	3197.3	3672.3	4265.8	3877.4	2958.3	2276.3
40°	1706.7	1728.6	2022.4	2302.2	3161.5	3484.1	3721.1	3997.9	3006.1	2280.2	1994.5
42.5°	1509.5	1609.1	2022.4	2607.8	3268.0	3446.3	3687.2	3338.7	2380.8	1944.7	1631.0
45°	1341.3	1546.4	2037.3	2860.8	3163.5	3377.6	3415.4	2665.6	1973.6	1505.6	1261.6
47.5°	1216.8	1487.6	2166.7	2762.2	3053.9	3105.7	2963.3	2224.5	1472.7	1106.3	988.8
50°	1135.1	1417.9	2222.5	2568.0	2826.9	2762.2	2552.1	1641.0	1016.7	895.2	903.1
52.5°	1092.3	1403.0	2070.1	2386.8	2540.1	2400.7	2012.4	1110.3	819.5	801.6	806.6
55°	1065.4	1358.2	1847.1	2138.9	2180.7	1894.9	1485.6	835.4	701.0	691.0	711.0
57.5°	1052.5	1230.7	1627.0	1813.2	1712.7	1458.8	1128.2	637.3	570.6	590.5	650.2
60°	1032.6	1097.3	1306.4	1425.9	1364.2	1155.1	855.3	506.8	495.9	532.7	559.6
62.5°	939.0	942.0	914.1	1126.2	1116.2	937.0	676.1	434.1	415.2	426.2	432.2
65°	792.6	730.9	632.3	926.0	921.1	760.7	538.7	344.5	335.6	360.5	379.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	629.3	526.7	474.0	740.8	731.9	602.4	431.2	296.7	313.7	339.5	367.4
70°	463.0	387.3	373.4	583.5	576.5	482.9	361.5	274.8	302.7	329.6	358.5
72.5°	315.7	286.8	293.7	440.1	451.1	386.3	306.7	260.9	285.8	316.6	360.5
75°	208.1	210.1	226.0	323.6	345.5	306.7	258.9	243.0	269.8	306.7	351.5
77.5°	142.4	149.4	168.3	232.0	257.9	239.0	220.1	224.0	252.9	295.7	342.5
80°	93.6	100.6	120.5	164.3	191.2	190.2	189.2	208.1	241.0	286.8	332.6
82.5°	56.8	63.7	82.6	116.5	144.4	153.3	165.3	193.2	233.0	283.8	320.6
85°	29.9	36.8	54.8	83.6	112.5	128.5	145.4	181.2	229.0	272.8	292.7
87.5°	11.9	18.9	35.8	60.7	91.6	109.5	129.4	172.3	222.1	250.9	261.9
90°	2.0	9.0	22.9	45.8	75.7	93.6	115.5	165.3	206.1	219.1	233.0
92.5°	1.0	5.0	15.9	34.9	63.7	82.6	105.5	153.3	180.2	193.2	206.1
95°	1.0	3.0	11.9	27.9	54.8	74.7	96.6	134.4	154.3	167.3	182.2
97.5°	1.0	3.0	9.0	22.9	49.8	67.7	86.6	113.5	130.4	145.4	158.3
100°	1.0	2.0	8.0	19.9	43.8	57.8	71.7	92.6	107.5	123.5	135.4
102.5°	1.0	2.0	7.0	17.9	37.8	48.8	58.7	74.7	90.6	103.6	115.5
105°	1.0	2.0	6.0	15.9	30.9	38.8	46.8	61.7	75.7	87.6	95.6
107.5°	1.0	2.0	5.0	12.9	24.9	31.9	38.8	51.8	63.7	72.7	80.7
110°	1.0	1.0	4.0	11.0	20.9	26.9	31.9	42.8	52.8	61.7	68.7
112.5°	2.0	2.0	4.0	9.0	16.9	21.9	26.9	35.8	44.8	52.8	59.7
115°	2.0	2.0	3.0	7.0	13.9	17.9	21.9	29.9	37.8	45.8	52.8
117.5°	2.0	2.0	3.0	6.0	11.0	14.9	17.9	24.9	31.9	39.8	46.8
120°	2.0	2.0	2.0	5.0	10.0	11.9	14.9	20.9	27.9	34.9	40.8
122.5°	2.0	2.0	2.0	4.0	8.0	10.0	11.9	17.9	23.9	29.9	35.8
125°	2.0	2.0	2.0	3.0	6.0	8.0	10.0	14.9	19.9	25.9	30.9
127.5°	2.0	2.0	2.0	3.0	5.0	7.0	8.0	11.9	16.9	20.9	26.9
130°	2.0	2.0	2.0	2.0	4.0	5.0	7.0	10.0	13.9	18.9	23.9
132.5°	2.0	2.0	2.0	2.0	4.0	5.0	6.0	9.0	13.9	17.9	22.9
135°	2.0	2.0	2.0	2.0	3.0	4.0	6.0	9.0	12.9	17.9	22.9
137.5°	2.0	2.0	2.0	2.0	3.0	4.0	5.0	8.0	11.9	16.9	20.9
140°	2.0	2.0	2.0	2.0	2.0	3.0	4.0	7.0	10.0	12.9	16.9
142.5°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	5.0	7.0	10.0	12.9
145°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	4.0	5.0	7.0	9.0
147.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	4.0	5.0	7.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0
152.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0
155°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0
157.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
160°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
162.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
165°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P236290

CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P236290

CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4	2941.4
1°	2982.2	2978.3	2975.3	2971.3	2967.3	2966.3	2964.3	2963.3	2955.4	2956.4
2°	3011.1	3014.1	3012.1	3008.1	3011.1	3007.1	3005.1	3001.2	2998.2	2999.2
3°	3046.0	3045.0	3036.0	3025.1	3018.1	3018.1	3003.2	2997.2	2979.3	2995.2
4°	3015.1	2994.2	2960.3	2944.4	2929.5	2927.5	2909.6	2892.6	2883.7	2899.6
5°	2931.5	2900.6	2857.8	2840.9	2823.9	2825.9	2811.0	2800.0	2793.1	2803.0
6°	2847.8	2819.9	2790.1	2772.1	2765.2	2760.2	2758.2	2761.2	2763.2	2762.2
7°	2789.1	2783.1	2780.1	2788.1	2795.0	2795.0	2807.0	2817.0	2819.9	2817.9
8°	2800.0	2819.9	2832.9	2837.9	2838.9	2840.9	2859.8	2859.8	2853.8	2855.8
9°	2844.8	2858.8	2872.7	2854.8	2819.9	2813.0	2747.3	2708.4	2653.7	2669.6
10°	2879.7	2853.8	2746.3	2657.6	2597.9	2578.0	2478.4	2434.6	2377.8	2393.8
11°	2819.9	2680.5	2518.2	2407.7	2350.9	2318.1	2253.4	2226.5	2215.5	2212.5
12°	2597.9	2435.6	2290.2	2226.5	2200.6	2190.6	2183.7	2191.6	2209.6	2214.5
13°	2395.8	2261.3	2194.6	2199.6	2212.5	2228.5	2284.2	2317.1	2349.0	2349.9
14°	2232.5	2191.6	2245.4	2313.1	2351.9	2376.8	2454.5	2508.3	2567.0	2578.0
15°	2189.6	2257.3	2384.8	2488.4	2537.1	2589.9	2692.5	2736.3	2769.2	2767.2
16°	2263.3	2379.8	2557.1	2678.5	2728.3	2763.2	2828.9	2868.7	2907.6	2913.5
17°	2386.8	2565.0	2728.3	2821.9	2857.8	2897.6	3019.1	3102.7	3173.4	3196.3
18°	2516.2	2703.4	2832.9	2984.2	3078.8	3156.5	3325.8	3480.1	3628.5	3656.4
19°	2660.6	2823.9	3040.0	3299.9	3416.4	3590.6	3892.4	4080.5	4230.9	4279.7
20°	2755.2	3013.1	3348.7	3837.6	4001.9	4195.1	4483.8	4627.2	4730.8	4753.7
21°	2921.5	3344.7	3921.2	4404.2	4570.5	4678.0	4869.2	4959.8	4985.7	5019.5
22°	3197.3	3870.4	4462.9	4814.4	4925.9	4987.7	5008.6	4940.9	4880.1	4856.2
23°	3703.2	4388.2	4821.4	5016.5	5005.6	4929.9	4759.6	4599.3	4494.8	4451.0
24°	4252.8	4786.5	5000.6	4835.3	4740.7	4579.4	4362.3	4201.0	4089.5	4035.7
25°	4641.2	4983.7	4802.5	4489.8	4369.3	4202.0	3939.2	3784.8	3675.3	3625.5
26°	4931.9	4888.1	4467.9	4109.4	3968.0	3806.7	3575.7	3489.1	3408.4	3360.6
27°	4958.8	4603.3	4112.4	3717.1	3590.6	3476.1	3302.9	3178.4	3093.8	3049.0
28°	4742.7	4270.7	3734.0	3417.4	3314.8	3175.4	2979.3	2856.8	2797.0	2729.3
29°	4466.9	3889.4	3419.4	3089.8	2978.3	2837.9	2642.7	2481.4	2442.6	2400.7
30°	4096.5	3541.9	3106.7	2739.3	2632.7	2481.4	2332.0	2279.3	2253.4	2220.5
32.5°	3225.2	2668.6	2306.1	2166.7	2134.9	2120.9	2175.7	2184.7	2182.7	2164.7
35°	2413.7	2110.0	2097.0	2076.1	2049.2	2023.3	1972.6	1943.7	1918.8	1887.9
37.5°	2061.2	1976.5	1858.1	1755.5	1709.7	1674.8	1622.1	1593.2	1569.3	1551.4
40°	1806.3	1632.0	1513.5	1441.8	1416.9	1376.1	1343.3	1325.3	1307.4	1283.5
42.5°	1457.8	1302.4	1208.8	1158.0	1143.1	1127.2	1140.1	1161.0	1171.0	1181.9
45°	1122.2	1051.5	1073.4	1120.2	1139.1	1159.0	1187.9	1193.9	1195.9	1194.9
47.5°	977.8	1028.6	1054.5	1069.4	1066.4	1074.4	1098.3	1114.2	1124.2	1115.2
50°	929.0	936.0	971.8	1008.7	1014.7	1004.7	1009.7	1022.6	1036.6	1038.6
52.5°	840.4	870.3	898.2	923.1	945.0	966.9	1002.7	1020.6	1031.6	1031.6
55°	754.8	809.5	848.4	883.2	897.2	903.1	921.1	928.0	935.0	930.0
57.5°	701.0	726.9	752.8	747.8	736.8	720.9	730.9	742.8	747.8	744.8
60°	566.6	567.6	570.6	578.5	591.5	603.4	615.4	618.4	623.3	622.3
62.5°	448.1	458.0	474.0	499.9	506.8	506.8	518.8	527.7	530.7	526.7
65°	402.3	422.2	450.1	465.0	465.0	468.0	489.9	515.8	525.8	523.8



TEST NUMBER: P236290

CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
67.5°	393.3	428.2	442.1	463.0	479.0	494.9	516.8	531.7	540.7	543.7
70°	399.3	425.2	453.1	481.9	494.9	508.8	534.7	555.6	563.6	564.6
72.5°	398.3	432.2	460.0	494.9	509.8	522.8	541.7	549.6	552.6	552.6
75°	395.3	429.2	468.0	492.9	504.8	517.8	528.7	534.7	539.7	541.7
77.5°	382.4	419.2	438.1	461.0	469.0	475.0	488.9	498.9	505.8	506.8
80°	366.4	383.4	397.3	416.2	422.2	431.2	445.1	451.1	456.0	456.0
82.5°	335.6	347.5	362.4	382.4	393.3	402.3	413.2	417.2	420.2	421.2
85°	302.7	314.7	333.6	350.5	358.5	366.4	376.4	382.4	384.4	382.4
87.5°	272.8	289.8	307.7	320.6	323.6	327.6	335.6	340.5	342.5	344.5
90°	245.9	262.9	276.8	287.8	287.8	291.8	295.7	296.7	294.7	296.7
92.5°	222.1	233.0	241.0	245.9	245.9	248.9	253.9	255.9	254.9	255.9
95°	193.2	201.1	205.1	208.1	211.1	215.1	219.1	220.1	220.1	221.1
97.5°	167.3	173.3	177.2	180.2	181.2	184.2	184.2	185.2	185.2	186.2
100°	144.4	150.4	151.4	150.4	151.4	152.3	153.3	155.3	156.3	157.3
102.5°	122.5	127.5	129.4	130.4	131.4	133.4	135.4	136.4	138.4	138.4
105°	101.6	107.5	111.5	113.5	113.5	115.5	117.5	119.5	120.5	121.5
107.5°	86.6	92.6	97.6	99.6	101.6	102.6	104.6	106.5	107.5	108.5
110°	74.7	80.7	86.6	90.6	91.6	93.6	95.6	97.6	98.6	99.6
112.5°	66.7	71.7	76.7	80.7	82.6	84.6	86.6	88.6	90.6	90.6
115°	58.7	64.7	68.7	72.7	74.7	75.7	78.7	81.7	82.6	83.6
117.5°	52.8	57.8	61.7	65.7	67.7	69.7	71.7	73.7	75.7	75.7
120°	46.8	51.8	55.8	58.7	60.7	61.7	64.7	66.7	67.7	68.7
122.5°	40.8	45.8	48.8	52.8	53.8	55.8	58.7	60.7	61.7	62.7
125°	35.8	39.8	43.8	47.8	48.8	50.8	54.8	56.8	58.7	59.7
127.5°	31.9	35.8	40.8	44.8	46.8	49.8	53.8	56.8	58.7	59.7
130°	28.9	34.9	39.8	44.8	47.8	49.8	54.8	58.7	60.7	60.7
132.5°	28.9	34.9	40.8	45.8	48.8	50.8	55.8	59.7	61.7	62.7
135°	27.9	32.9	38.8	43.8	46.8	48.8	52.8	55.8	57.8	57.8
137.5°	24.9	28.9	32.9	36.8	39.8	41.8	44.8	46.8	48.8	48.8
140°	19.9	22.9	25.9	28.9	30.9	32.9	35.8	36.8	38.8	38.8
142.5°	14.9	16.9	19.9	21.9	22.9	24.9	26.9	28.9	29.9	29.9
145°	11.0	12.9	13.9	15.9	16.9	17.9	19.9	20.9	21.9	21.9
147.5°	8.0	9.0	10.0	11.9	11.9	12.9	14.9	15.9	15.9	15.9
150°	6.0	7.0	8.0	8.0	9.0	9.0	11.0	11.9	11.9	11.9
152.5°	5.0	5.0	6.0	6.0	7.0	7.0	8.0	9.0	9.0	9.0
155°	4.0	4.0	4.0	4.0	5.0	5.0	6.0	6.0	7.0	7.0
157.5°	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0
160°	3.0	3.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
162.5°	3.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0
165°	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P236290

CATALOG NUMBER: 4SWLED-60HL-LC-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)