

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: P189269

Luminaire Tested: **4SWLED-LD4-60HL-LC-UNV-L840-CD2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P189269  
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-LD4-60HL-LC-UNV-L840-CD2-U  
Description: [LUMINAIRE]METALUX LED STAIRWELL WITH NARROW CLEAR LENS  
  
Light Source: EATON LED 4000K  
Ballast/Driver: ELECTRONIC DRIVER

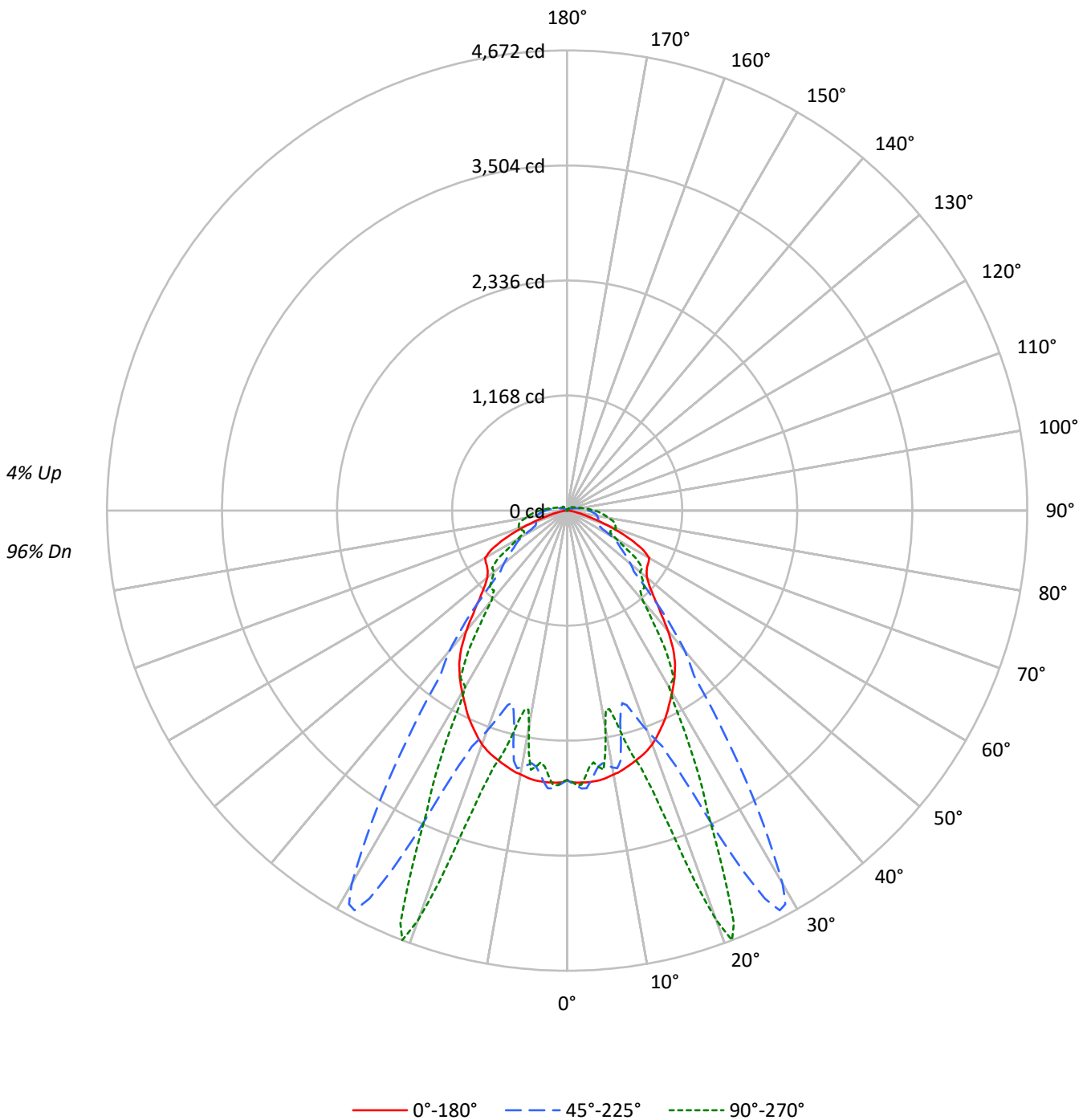
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7461.2 lumens  
Efficiency: N/A  
Efficacy: 123.5 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.15 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.75' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 60.4  
Input Voltage (V): NR  
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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### 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	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°	20954	20954	20954
5°	21158	20568	19294
10°	20983	19396	16057
15°	20668	15209	18236
20°	20250	17231	31019
25°	19400	26340	23604
30°	18383	32248	14535
35°	17317	21166	12521
40°	15301	14377	8693
45°	12938	9444	8333
50°	11947	7088	7525
55°	12443	5912	7065
60°	13660	4987	5010
65°	12198	3673	4520
70°	8594	3829	5294
75°	4913	4224	5607
80°	3066	4608	5314
85°	1619	4833	5141



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.2	3.4
10°-20°	720.8	9.7
20°-30°	1420.2	19.0
30°-40°	1465.3	19.6
40°-50°	1231.4	16.5
50°-60°	908.2	12.2
60°-70°	514.9	6.9
70°-80°	369.7	5.0
80°-90°	250.6	3.4
90°-100°	149.7	2.0
100°-110°	78.2	1.0
110°-120°	43.8	0.6
120°-130°	25.6	0.3
130°-140°	17.8	0.2
140°-150°	6.4	0.1
150°-160°	1.8	0.0
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	2397.2	32.1
0°-40°	3862.5	51.8
0°-60°	6002.1	80.4
0°-90°	7137.3	95.7
90°-120°	271.7	3.6
90°-150°	321.5	4.3
90°-180°	324.0	4.3
0°-180°	7461.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2738	2738	2738	2738	2738	
5°	2764	2805	2758	2628	2609	263
15°	2639	2525	2097	2361	2575	744
25°	2345	2092	3622	4066	3374	1076
35°	1911	2354	2814	1907	1757	1182
45°	1248	3143	1174	1060	1112	983
55°	992	1764	662	835	866	896
65°	738	708	353	433	487	715
75°	194	285	327	470	504	231
85°	28	120	272	334	356	35
90°	2	87	217	268	276	2
95°	1	70	170	196	206	1
105°	1	36	89	106	113	1
115°	2	17	49	70	78	2
125°	2	7	29	45	56	2
135°	2	4	21	44	54	1
145°	2	2	8	16	20	1
155°	3	3	4	5	6	1
165°	3	3	3	1	2	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5
1°	2760.6	2758.8	2747.7	2742.1	2741.2	2739.3	2740.3	2742.1	2746.7	2746.7	2768.1
2°	2763.4	2762.5	2755.1	2751.4	2751.4	2751.4	2753.2	2758.8	2762.5	2763.4	2795.9
3°	2764.4	2765.3	2760.6	2757.9	2764.4	2764.4	2767.1	2774.5	2787.5	2792.2	2825.5
4°	2766.2	2769.9	2767.1	2766.2	2779.2	2788.4	2794.0	2804.2	2812.5	2813.5	2826.4
5°	2764.4	2769.0	2769.0	2780.1	2797.7	2805.1	2809.8	2816.2	2803.3	2768.1	2757.9
6°	2762.5	2769.9	2774.5	2794.9	2810.7	2817.2	2818.1	2789.4	2755.1	2714.3	2681.0
7°	2757.9	2765.3	2780.1	2807.0	2817.2	2816.2	2800.5	2741.2	2681.0	2629.1	2614.2
8°	2746.7	2757.9	2787.5	2809.8	2802.3	2773.6	2744.0	2679.1	2622.6	2585.5	2588.3
9°	2733.8	2745.8	2787.5	2803.3	2767.1	2726.4	2689.3	2608.7	2572.5	2567.0	2617.0
10°	2720.8	2740.3	2788.4	2789.4	2710.6	2668.9	2617.9	2563.3	2562.3	2592.9	2647.6
11°	2709.7	2732.8	2782.9	2761.6	2662.4	2616.1	2564.2	2548.4	2584.6	2618.9	2665.2
12°	2693.9	2725.4	2770.8	2724.5	2600.3	2555.8	2529.0	2558.6	2602.2	2633.7	2598.5
13°	2675.4	2710.6	2747.7	2668.9	2549.4	2518.8	2529.0	2578.1	2605.9	2587.4	2430.7
14°	2655.9	2701.3	2719.9	2619.8	2503.0	2510.4	2542.9	2581.8	2586.4	2426.1	2229.6
15°	2639.2	2689.3	2690.2	2565.1	2487.3	2525.3	2550.3	2568.8	2495.6	2270.4	2097.1
16°	2619.8	2676.3	2657.8	2526.2	2502.1	2537.3	2551.2	2535.5	2323.2	2103.6	2032.3
17°	2600.3	2657.8	2617.0	2491.9	2519.7	2539.2	2538.2	2439.1	2195.4	2029.5	2063.8
18°	2578.1	2634.6	2579.9	2467.8	2527.1	2528.0	2506.7	2326.0	2067.5	2014.7	2160.1
19°	2553.1	2607.7	2540.1	2453.0	2517.9	2497.5	2441.9	2200.0	2018.4	2071.2	2269.5
20°	2526.2	2577.2	2503.9	2454.8	2494.7	2449.3	2364.9	2101.8	2015.6	2162.0	2381.6
21°	2492.8	2541.0	2469.7	2464.1	2452.1	2372.4	2266.7	2044.3	2060.1	2246.3	2483.6
22°	2456.7	2503.0	2442.8	2464.1	2387.2	2298.2	2178.7	2021.1	2136.0	2334.4	2584.6
23°	2417.8	2467.8	2417.8	2452.1	2307.5	2215.7	2107.3	2041.5	2190.7	2420.5	2811.6
24°	2382.6	2428.0	2401.1	2423.3	2236.1	2146.2	2062.8	2086.0	2241.7	2517.9	3128.5
25°	2344.6	2390.0	2386.3	2377.0	2171.3	2092.5	2053.6	2122.1	2309.3	2756.0	3621.6
26°	2302.9	2349.2	2372.4	2309.3	2122.1	2064.7	2066.5	2149.0	2400.2	3055.3	4065.4
27°	2258.4	2311.2	2345.5	2235.2	2087.9	2061.9	2093.4	2168.5	2610.5	3524.2	4419.4
28°	2213.9	2267.6	2307.5	2161.1	2067.5	2080.4	2104.5	2210.2	2879.3	3927.4	4596.4
29°	2171.3	2226.9	2264.9	2103.6	2064.7	2103.6	2102.7	2333.4	3297.2	4274.9	4568.6
30°	2133.3	2186.1	2215.7	2065.6	2079.5	2106.4	2101.8	2537.3	3654.0	4452.8	4376.8
32.5°	2025.8	2067.5	2068.4	2031.3	2103.6	2099.0	2264.9	3353.7	4250.8	4276.7	3609.5
35°	1910.9	1923.8	1942.4	2055.4	2119.4	2353.8	2907.1	3885.7	4213.7	3555.8	2813.5
37.5°	1768.1	1766.3	1891.4	2073.0	2433.5	2975.6	3417.7	3970.0	3608.6	2753.2	2118.4
40°	1588.4	1608.8	1882.1	2142.5	2942.3	3242.5	3463.1	3720.7	2797.7	2122.1	1856.2
42.5°	1404.9	1497.6	1882.1	2427.0	3041.4	3207.3	3431.6	3107.2	2215.7	1809.8	1517.9
45°	1248.3	1439.2	1896.0	2662.4	2944.1	3143.4	3178.6	2480.8	1836.7	1401.2	1174.1
47.5°	1132.4	1384.5	2016.5	2570.7	2842.2	2890.4	2757.9	2070.3	1370.6	1029.6	920.2
50°	1056.4	1319.6	2068.4	2390.0	2630.9	2570.7	2375.1	1527.2	946.2	833.1	840.5
52.5°	1016.6	1305.7	1926.6	2221.3	2364.0	2234.3	1872.9	1033.3	762.7	746.0	750.6
55°	991.6	1264.0	1719.0	1990.6	2029.5	1763.5	1382.6	777.5	652.4	643.1	661.7
57.5°	979.5	1145.4	1514.2	1687.5	1593.9	1357.6	1050.0	593.1	531.0	549.5	605.1
60°	961.0	1021.2	1215.8	1327.0	1269.6	1075.0	796.0	471.7	461.5	495.8	520.8
62.5°	873.9	876.7	850.7	1048.1	1038.8	872.0	629.2	404.0	386.4	396.6	402.2
65°	737.7	680.2	588.5	861.8	857.2	708.0	501.3	320.6	312.3	335.5	353.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	585.7	490.2	441.1	689.5	681.1	560.7	401.3	276.2	291.9	316.0	342.0
70°	430.9	360.5	347.5	543.0	536.6	449.5	336.4	255.8	281.7	306.7	333.6
72.5°	293.8	266.9	273.4	409.6	419.8	359.6	285.4	242.8	266.0	294.7	335.5
75°	193.7	195.5	210.4	301.2	321.6	285.4	240.9	226.1	251.1	285.4	327.1
77.5°	132.5	139.0	156.6	215.9	240.0	222.4	204.8	208.5	235.4	275.2	318.8
80°	87.1	93.6	112.1	152.9	177.9	177.0	176.1	193.7	224.3	266.9	309.5
82.5°	52.8	59.3	76.9	108.4	134.4	142.7	153.8	179.8	216.8	264.1	298.4
85°	27.8	34.3	51.0	77.8	104.7	119.5	135.3	168.7	213.1	253.9	272.5
87.5°	11.1	17.6	33.4	56.5	85.3	101.9	120.5	160.3	206.7	233.5	243.7
90°	1.9	8.3	21.3	42.6	70.4	87.1	107.5	153.8	191.8	203.9	216.8
92.5°	0.9	4.6	14.8	32.4	59.3	76.9	98.2	142.7	167.7	179.8	191.8
95°	0.9	2.8	11.1	25.9	51.0	69.5	89.9	125.1	143.6	155.7	169.6
97.5°	0.9	2.8	8.3	21.3	46.3	63.0	80.6	105.6	121.4	135.3	147.3
100°	0.9	1.9	7.4	18.5	40.8	53.7	66.7	86.2	100.1	114.9	126.0
102.5°	0.9	1.9	6.5	16.7	35.2	45.4	54.7	69.5	84.3	96.4	107.5
105°	0.9	1.9	5.6	14.8	28.7	36.1	43.6	57.5	70.4	81.5	89.0
107.5°	0.9	1.9	4.6	12.0	23.2	29.7	36.1	48.2	59.3	67.6	75.1
110°	0.9	0.9	3.7	10.2	19.5	25.0	29.7	39.8	49.1	57.5	63.9
112.5°	1.9	1.9	3.7	8.3	15.8	20.4	25.0	33.4	41.7	49.1	55.6
115°	1.9	1.9	2.8	6.5	13.0	16.7	20.4	27.8	35.2	42.6	49.1
117.5°	1.9	1.9	2.8	5.6	10.2	13.9	16.7	23.2	29.7	37.1	43.6
120°	1.9	1.9	1.9	4.6	9.3	11.1	13.9	19.5	25.9	32.4	38.0
122.5°	1.9	1.9	1.9	3.7	7.4	9.3	11.1	16.7	22.2	27.8	33.4
125°	1.9	1.9	1.9	2.8	5.6	7.4	9.3	13.9	18.5	24.1	28.7
127.5°	1.9	1.9	1.9	2.8	4.6	6.5	7.4	11.1	15.8	19.5	25.0
130°	1.9	1.9	1.9	1.9	3.7	4.6	6.5	9.3	13.0	17.6	22.2
132.5°	1.9	1.9	1.9	1.9	3.7	4.6	5.6	8.3	13.0	16.7	21.3
135°	1.9	1.9	1.9	1.9	2.8	3.7	5.6	8.3	12.0	16.7	21.3
137.5°	1.9	1.9	1.9	1.9	2.8	3.7	4.6	7.4	11.1	15.8	19.5
140°	1.9	1.9	1.9	1.9	1.9	2.8	3.7	6.5	9.3	12.0	15.8
142.5°	1.9	1.9	1.9	1.9	1.9	1.9	2.8	4.6	6.5	9.3	12.0
145°	1.9	1.9	1.9	1.9	1.9	1.9	2.8	3.7	4.6	6.5	8.3
147.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	3.7	4.6	6.5
150°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.7	4.6
152.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.7	3.7
155°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.7
157.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
160°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
162.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
165°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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



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**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





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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5	2737.5
1°	2775.5	2771.8	2769.0	2765.3	2761.6	2760.6	2758.8	2757.9	2750.5	2751.4
2°	2802.3	2805.1	2803.3	2799.6	2802.3	2798.6	2796.8	2793.1	2790.3	2791.2
3°	2834.8	2833.9	2825.5	2815.3	2808.8	2808.8	2794.9	2789.4	2772.7	2787.5
4°	2806.1	2786.6	2755.1	2740.3	2726.4	2724.5	2707.8	2692.1	2683.7	2698.6
5°	2728.2	2699.5	2659.6	2643.9	2628.1	2630.0	2616.1	2605.9	2599.4	2608.7
6°	2650.4	2624.4	2596.6	2579.9	2573.5	2568.8	2567.0	2569.7	2571.6	2570.7
7°	2595.7	2590.1	2587.4	2594.8	2601.3	2601.3	2612.4	2621.6	2624.4	2622.6
8°	2605.9	2624.4	2636.5	2641.1	2642.0	2643.9	2661.5	2661.5	2655.9	2657.8
9°	2647.6	2660.6	2673.5	2656.9	2624.4	2617.9	2556.8	2520.6	2469.7	2484.5
10°	2680.0	2655.9	2555.8	2473.4	2417.8	2399.2	2306.6	2265.8	2213.0	2227.8
11°	2624.4	2494.7	2343.6	2240.8	2187.9	2157.4	2097.1	2072.1	2061.9	2059.1
12°	2417.8	2266.7	2131.4	2072.1	2048.0	2038.7	2032.3	2039.7	2056.4	2061.0
13°	2229.6	2104.5	2042.5	2047.1	2059.1	2074.0	2125.9	2156.4	2186.1	2187.0
14°	2077.7	2039.7	2089.7	2152.7	2188.9	2212.0	2284.3	2334.4	2389.0	2399.2
15°	2037.8	2100.8	2219.5	2315.8	2361.2	2410.4	2505.8	2546.6	2577.2	2575.3
16°	2106.4	2214.8	2379.8	2492.8	2539.2	2571.6	2632.8	2669.8	2706.0	2711.5
17°	2221.3	2387.2	2539.2	2626.3	2659.6	2696.7	2809.8	2887.6	2953.4	2974.7
18°	2341.8	2516.0	2636.5	2777.3	2865.4	2937.6	3095.2	3238.8	3376.9	3402.9
19°	2476.1	2628.1	2829.2	3071.1	3179.5	3341.7	3622.5	3797.6	3937.6	3983.0
20°	2564.2	2804.2	3116.5	3571.5	3724.4	3904.2	4172.9	4306.4	4402.8	4424.1
21°	2718.9	3112.8	3649.4	4098.8	4253.6	4353.6	4531.6	4615.9	4640.0	4671.5
22°	2975.6	3602.1	4153.5	4480.6	4584.4	4641.9	4661.3	4598.3	4541.8	4519.5
23°	3446.4	4084.0	4487.1	4668.7	4658.5	4588.1	4429.6	4280.4	4183.1	4142.4
24°	3957.9	4454.7	4653.9	4500.1	4412.0	4261.9	4059.9	3909.8	3806.0	3755.9
25°	4319.4	4638.1	4469.5	4178.5	4066.4	3910.7	3666.0	3522.4	3420.5	3374.1
26°	4590.0	4549.2	4158.1	3824.5	3692.9	3542.8	3327.8	3247.2	3172.1	3127.6
27°	4615.0	4284.1	3827.3	3459.4	3341.7	3235.1	3073.9	2958.0	2879.3	2837.6
28°	4413.9	3974.6	3475.1	3180.4	3085.0	2955.3	2772.7	2658.7	2603.1	2540.1
29°	4157.2	3619.7	3182.3	2875.6	2771.8	2641.1	2459.5	2309.3	2273.2	2234.3
30°	3812.5	3296.3	2891.3	2549.4	2450.2	2309.3	2170.3	2121.2	2097.1	2066.5
32.5°	3001.6	2483.6	2146.2	2016.5	1986.8	1973.9	2024.8	2033.2	2031.3	2014.7
35°	2246.3	1963.7	1951.6	1932.2	1907.2	1883.1	1835.8	1808.9	1785.8	1757.0
37.5°	1918.3	1839.5	1729.2	1633.8	1591.1	1558.7	1509.6	1482.7	1460.5	1443.8
40°	1681.0	1518.9	1408.6	1341.9	1318.7	1280.7	1250.1	1233.4	1216.8	1194.5
42.5°	1356.7	1212.1	1125.0	1077.8	1063.9	1049.0	1061.1	1080.5	1089.8	1100.0
45°	1044.4	978.6	999.0	1042.5	1060.1	1078.7	1105.6	1111.1	1113.0	1112.0
47.5°	910.0	957.3	981.4	995.3	992.5	999.9	1022.2	1037.0	1046.2	1037.9
50°	864.6	871.1	904.5	938.7	944.3	935.0	939.7	951.7	964.7	966.6
52.5°	782.1	809.9	835.9	859.1	879.4	899.8	933.2	949.9	960.1	960.1
55°	702.4	753.4	789.6	822.0	835.0	840.5	857.2	863.7	870.2	865.5
57.5°	652.4	676.5	700.6	696.0	685.8	670.9	680.2	691.3	696.0	693.2
60°	527.3	528.2	531.0	538.4	550.5	561.6	572.7	575.5	580.1	579.2
62.5°	417.0	426.3	441.1	465.2	471.7	471.7	482.8	491.2	493.9	490.2
65°	374.4	392.9	418.9	432.8	432.8	435.6	455.9	480.0	489.3	487.4



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CATALOG NUMBER: 4SWLED-LD4-60HL-LC-UNV-L840-CD2-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
67.5°	366.0	398.5	411.5	430.9	445.7	460.6	481.0	494.9	503.2	506.0
70°	371.6	395.7	421.6	448.5	460.6	473.5	497.6	517.1	524.5	525.4
72.5°	370.7	402.2	428.1	460.6	474.5	486.5	504.1	511.5	514.3	514.3
75°	367.9	399.4	435.6	458.7	469.8	481.9	492.1	497.6	502.3	504.1
77.5°	355.9	390.1	407.7	429.1	436.5	442.0	455.0	464.3	470.8	471.7
80°	341.0	356.8	369.8	387.4	392.9	401.3	414.2	419.8	424.4	424.4
82.5°	312.3	323.4	337.3	355.9	366.0	374.4	384.6	388.3	391.1	392.0
85°	281.7	292.8	310.4	326.2	333.6	341.0	350.3	355.9	357.7	355.9
87.5°	253.9	269.7	286.4	298.4	301.2	304.9	312.3	316.9	318.8	320.6
90°	228.9	244.6	257.6	267.8	267.8	271.5	275.2	276.2	274.3	276.2
92.5°	206.7	216.8	224.3	228.9	228.9	231.7	236.3	238.2	237.2	238.2
95°	179.8	187.2	190.9	193.7	196.5	200.2	203.9	204.8	204.8	205.7
97.5°	155.7	161.2	165.0	167.7	168.7	171.4	171.4	172.4	172.4	173.3
100°	134.4	139.9	140.9	139.9	140.9	141.8	142.7	144.6	145.5	146.4
102.5°	114.0	118.6	120.5	121.4	122.3	124.2	126.0	127.0	128.8	128.8
105°	94.5	100.1	103.8	105.6	105.6	107.5	109.4	111.2	112.1	113.1
107.5°	80.6	86.2	90.8	92.7	94.5	95.5	97.3	99.2	100.1	101.0
110°	69.5	75.1	80.6	84.3	85.3	87.1	89.0	90.8	91.7	92.7
112.5°	62.1	66.7	71.4	75.1	76.9	78.8	80.6	82.5	84.3	84.3
115°	54.7	60.2	63.9	67.6	69.5	70.4	73.2	76.0	76.9	77.8
117.5°	49.1	53.7	57.5	61.2	63.0	64.9	66.7	68.6	70.4	70.4
120°	43.6	48.2	51.9	54.7	56.5	57.5	60.2	62.1	63.0	63.9
122.5°	38.0	42.6	45.4	49.1	50.0	51.9	54.7	56.5	57.5	58.4
125°	33.4	37.1	40.8	44.5	45.4	47.3	51.0	52.8	54.7	55.6
127.5°	29.7	33.4	38.0	41.7	43.6	46.3	50.0	52.8	54.7	55.6
130°	26.9	32.4	37.1	41.7	44.5	46.3	51.0	54.7	56.5	56.5
132.5°	26.9	32.4	38.0	42.6	45.4	47.3	51.9	55.6	57.5	58.4
135°	25.9	30.6	36.1	40.8	43.6	45.4	49.1	51.9	53.7	53.7
137.5°	23.2	26.9	30.6	34.3	37.1	38.9	41.7	43.6	45.4	45.4
140°	18.5	21.3	24.1	26.9	28.7	30.6	33.4	34.3	36.1	36.1
142.5°	13.9	15.8	18.5	20.4	21.3	23.2	25.0	26.9	27.8	27.8
145°	10.2	12.0	13.0	14.8	15.8	16.7	18.5	19.5	20.4	20.4
147.5°	7.4	8.3	9.3	11.1	11.1	12.0	13.9	14.8	14.8	14.8
150°	5.6	6.5	7.4	7.4	8.3	8.3	10.2	11.1	11.1	11.1
152.5°	4.6	4.6	5.6	5.6	6.5	6.5	7.4	8.3	8.3	8.3
155°	3.7	3.7	3.7	3.7	4.6	4.6	5.6	5.6	6.5	6.5
157.5°	2.8	2.8	2.8	2.8	2.8	2.8	3.7	3.7	4.6	4.6
160°	2.8	2.8	1.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8
162.5°	2.8	1.9	1.9	1.9	0.9	1.9	1.9	1.9	1.9	1.9
165°	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9
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: P189269

CATALOG NUMBER: 4SWLED-LD4-60HL-LC-UNV-L840-CD2-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)