

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252169

Luminaire Tested: **LE\_6B30D010 EC6B30508035 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B30D010 EC6B30508035 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4818.7 lumens  
Efficiency: N/A  
Efficacy: 172.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

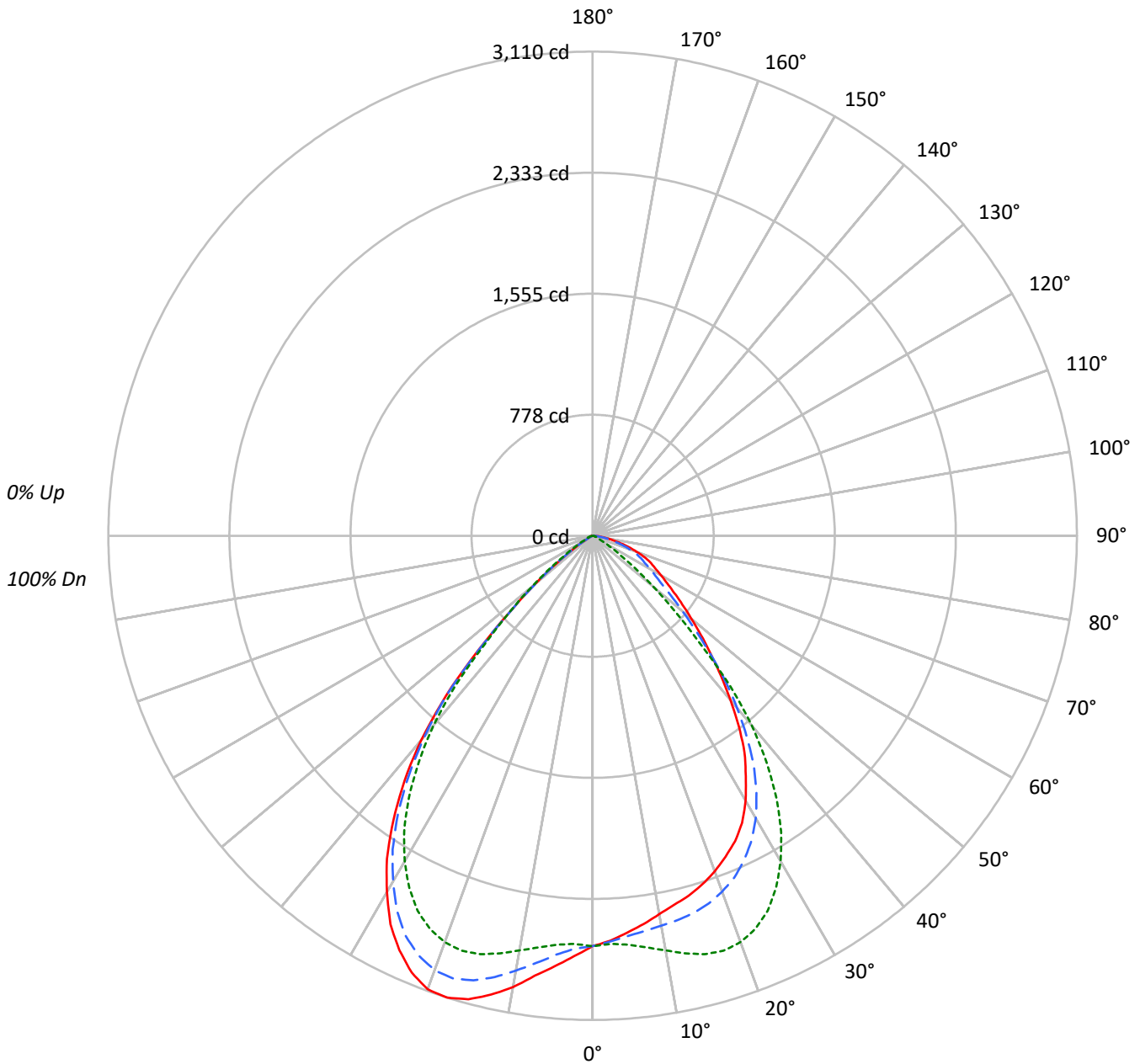
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

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

	0°	90°	180°
0°	171987	171987	171987
5°	167530	172644	181728
10°	163458	179145	195018
15°	161547	187929	208192
20°	159232	192828	215226
25°	155848	191401	211355
30°	148098	181892	198971
35°	135491	163995	177646
40°	117196	135430	145735
45°	98824	88832	95346
50°	83897	51418	48353
55°	72807	24660	18643
60°	65763	11508	4593
65°	63818	6623	1559
70°	57206	5303	1431
75°	47011	3806	630
80°	35016	1879	0
85°	30242	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.6	5.3
10°-20°	776.0	16.1
20°-30°	1185.7	24.6
30°-40°	1240.1	25.7
40°-50°	804.5	16.7
50°-60°	319.4	6.6
60°-70°	151.5	3.1
70°-80°	72.0	1.5
80°-90°	14.7	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2216.4	46.0
0°-40°	3456.5	71.7
0°-60°	4580.5	95.1
0°-90°	4818.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4818.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2636	2636	2636	2636	2636	
5°	2558	2581	2636	2702	2775	242
15°	2392	2508	2782	2956	3082	674
25°	2165	2301	2659	2838	2936	991
35°	1701	1804	2059	2180	2230	1052
45°	1071	1061	963	1021	1033	833
55°	640	544	217	169	164	580
65°	413	343	43	10	10	404
75°	186	151	15	5	2	201
85°	40	25	0	0	0	47
90°	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°	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2
2.5°	2603.5	2608.5	2580.8	2573.2	2593.4	2601.0	2603.5	2595.9	2598.4	2608.5	2608.5
5°	2558.1	2563.1	2538.0	2530.4	2550.5	2555.6	2563.1	2560.6	2568.2	2583.2	2580.8
7.5°	2515.2	2522.9	2495.1	2485.0	2510.2	2522.9	2527.9	2527.9	2538.0	2558.1	2560.6
10°	2467.4	2477.5	2452.2	2447.2	2474.9	2487.5	2490.0	2495.1	2510.2	2538.0	2543.0
12.5°	2427.0	2437.1	2419.5	2411.9	2442.1	2454.8	2459.9	2469.9	2487.5	2522.9	2527.9
15°	2391.8	2399.4	2379.1	2374.1	2404.4	2419.5	2422.0	2437.1	2459.9	2500.1	2507.8
17.5°	2346.4	2351.5	2336.4	2331.2	2361.5	2376.6	2379.1	2396.8	2424.5	2464.9	2477.5
20°	2293.5	2298.5	2283.4	2278.4	2308.6	2326.2	2328.8	2343.9	2376.6	2419.5	2432.1
22.5°	2230.5	2240.5	2222.9	2217.9	2248.1	2263.2	2270.8	2283.4	2316.1	2359.0	2376.6
25°	2165.0	2165.0	2152.4	2149.9	2177.5	2195.1	2192.6	2210.2	2243.1	2285.9	2301.0
27.5°	2079.2	2076.8	2064.1	2061.6	2091.9	2107.0	2101.9	2119.6	2149.9	2192.6	2207.8
30°	1965.9	1970.9	1953.2	1948.2	1973.4	1998.6	1996.1	2013.8	2044.0	2084.2	2094.4
32.5°	1829.8	1834.8	1832.2	1824.8	1847.4	1860.0	1867.5	1880.1	1905.4	1948.2	1958.2
35°	1701.2	1693.6	1683.5	1683.5	1706.2	1726.4	1718.9	1734.0	1759.1	1802.0	1804.5
37.5°	1542.4	1539.9	1534.9	1529.9	1555.0	1560.1	1562.6	1572.6	1595.4	1630.6	1625.6
40°	1376.1	1378.6	1376.1	1366.0	1381.1	1401.2	1398.8	1403.8	1424.0	1449.1	1441.6
42.5°	1219.9	1219.9	1219.9	1209.8	1227.4	1237.5	1242.5	1240.0	1245.0	1267.8	1257.6
45°	1071.1	1073.6	1071.1	1068.6	1071.1	1076.1	1071.1	1068.6	1068.6	1076.1	1061.0
47.5°	942.6	942.6	935.0	927.5	935.0	937.5	930.0	922.4	919.9	917.4	892.1
50°	826.6	824.1	821.6	809.0	816.6	819.1	809.0	804.0	793.9	781.2	751.0
52.5°	725.9	723.4	720.8	708.2	713.2	715.8	705.6	695.6	683.0	672.9	635.1
55°	640.1	637.6	637.6	630.1	625.0	630.1	620.0	612.4	594.8	582.2	544.4
57.5°	567.1	567.1	562.0	554.5	557.0	557.0	546.9	536.9	521.8	506.6	476.4
60°	504.0	504.0	504.0	496.5	496.5	496.5	491.5	481.4	468.8	453.6	423.4
62.5°	453.6	453.6	451.1	443.6	446.1	446.1	441.0	431.0	418.4	408.2	378.0
65°	413.4	413.4	413.4	405.8	405.8	408.2	403.2	393.1	383.1	370.5	342.8
67.5°	362.9	360.4	360.4	355.4	357.9	360.4	355.4	347.8	335.2	327.6	302.4
70°	299.9	302.4	305.0	297.4	299.9	299.9	297.4	289.9	282.2	274.8	252.0
72.5°	244.5	244.5	242.0	239.4	239.4	242.0	236.9	229.4	224.2	219.2	201.6
75°	186.5	184.0	186.5	181.5	181.5	181.5	176.4	173.9	171.4	163.9	151.2
77.5°	136.1	133.6	133.6	128.5	131.0	131.0	128.5	123.5	118.5	115.9	105.9
80°	93.2	93.2	93.2	90.8	90.8	88.2	88.2	85.8	80.6	78.1	73.1
82.5°	63.0	63.0	63.0	60.5	60.5	60.5	58.0	55.5	52.9	50.4	45.4
85°	40.4	40.4	40.4	37.8	37.8	37.8	35.2	35.2	32.8	30.2	25.2
87.5°	22.6	22.6	22.6	20.1	20.1	20.1	20.1	20.1	17.6	15.1	12.6
90°	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°	95°
0°	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2
2.5°	2626.1	2590.9	2613.5	2613.5	2606.0	2626.1	2638.8	2648.9	2646.4	2623.6	2621.1
5°	2606.0	2575.8	2601.0	2603.5	2595.9	2623.6	2641.2	2653.9	2656.4	2636.2	2638.8
7.5°	2590.9	2565.6	2598.4	2608.5	2606.0	2631.2	2651.4	2671.5	2681.6	2666.5	2669.0
10°	2583.2	2563.1	2598.4	2613.5	2616.1	2643.8	2674.0	2701.8	2714.4	2704.2	2711.9
12.5°	2573.2	2560.6	2601.0	2623.6	2633.8	2661.5	2699.2	2732.0	2752.1	2747.1	2762.2
15°	2563.1	2553.1	2601.0	2633.8	2646.4	2671.5	2714.4	2762.2	2784.9	2782.4	2802.6
17.5°	2538.0	2535.4	2585.9	2621.1	2638.8	2669.0	2709.4	2767.2	2790.0	2795.0	2820.2
20°	2497.6	2497.6	2553.1	2590.9	2611.0	2638.8	2689.1	2744.6	2772.4	2777.4	2805.1
22.5°	2442.1	2447.2	2500.1	2538.0	2568.2	2588.4	2641.2	2699.2	2724.5	2732.0	2762.2
25°	2369.1	2374.1	2424.5	2462.4	2495.1	2517.8	2568.2	2621.1	2651.4	2658.9	2681.6
27.5°	2273.4	2283.4	2331.2	2369.1	2396.8	2411.9	2464.9	2520.2	2543.0	2550.5	2573.2
30°	2162.4	2165.0	2212.9	2245.6	2273.4	2285.9	2331.2	2389.2	2406.9	2414.5	2447.2
32.5°	2026.4	2023.8	2069.1	2099.4	2122.1	2137.2	2185.1	2222.9	2240.5	2253.1	2270.8
35°	1862.5	1860.0	1892.8	1928.0	1945.6	1950.8	1998.6	2038.9	2049.0	2059.1	2081.8
37.5°	1678.5	1678.5	1706.2	1723.9	1744.0	1751.6	1774.2	1819.6	1837.2	1834.8	1852.4
40°	1484.5	1474.4	1494.5	1512.1	1517.2	1519.8	1542.4	1577.8	1590.2	1590.2	1602.9
42.5°	1280.4	1265.2	1267.8	1277.8	1282.9	1265.2	1280.4	1303.0	1295.4	1305.5	1308.0
45°	1063.6	1040.9	1030.8	1008.1	1013.1	995.5	985.5	990.5	988.0	962.8	967.8
47.5°	887.1	846.9	829.1	796.4	788.9	768.8	756.1	733.4	713.2	713.2	700.6
50°	738.5	698.1	662.9	625.0	612.4	594.8	567.1	536.9	521.8	506.6	494.0
52.5°	620.0	577.1	534.2	494.0	476.4	453.6	415.9	385.6	357.9	342.8	327.6
55°	524.2	476.4	431.0	388.1	365.5	342.8	305.0	269.6	236.9	216.8	204.1
57.5°	451.1	405.8	357.9	312.5	292.4	267.1	226.9	189.0	158.8	136.1	123.5
60°	398.2	352.9	310.0	262.1	242.0	216.8	173.9	138.6	108.4	88.2	73.1
62.5°	352.9	312.5	267.1	224.2	204.1	179.0	138.6	103.4	75.6	55.5	42.9
65°	320.1	279.8	242.0	199.1	181.5	156.2	118.5	85.8	60.5	42.9	30.2
67.5°	282.2	247.0	209.1	173.9	156.2	136.1	100.8	73.1	50.4	35.2	25.2
70°	236.9	209.1	176.4	143.6	131.0	113.4	83.1	60.5	40.4	27.8	20.1
72.5°	189.0	166.4	141.1	115.9	105.9	88.2	68.0	47.9	30.2	20.1	15.1
75°	143.6	126.0	105.9	88.2	78.1	68.0	50.4	35.2	22.6	15.1	10.1
77.5°	98.2	90.8	75.6	60.5	55.5	47.9	32.8	22.6	15.1	10.1	5.0
80°	68.0	60.5	50.4	40.4	35.2	30.2	20.1	15.1	7.5	5.0	2.5
82.5°	42.9	35.2	30.2	25.2	22.6	17.6	12.6	7.5	5.0	2.5	2.5
85°	22.6	20.1	17.6	12.6	12.6	10.1	7.5	5.0	2.5	0.0	0.0
87.5°	12.6	10.1	7.5	5.0	5.0	2.5	2.5	2.5	0.0	0.0	0.0
90°	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2
2.5°	2651.4	2651.4	2648.9	2679.1	2643.8	2679.1	2661.5	2679.1	2653.9	2651.4	2653.9
5°	2671.5	2679.1	2681.6	2709.4	2676.5	2719.4	2704.2	2719.4	2701.8	2706.8	2714.4
7.5°	2711.9	2724.5	2721.9	2757.2	2724.5	2772.4	2762.2	2784.9	2767.2	2772.4	2782.4
10°	2757.2	2772.4	2774.9	2810.1	2779.9	2837.9	2825.2	2850.5	2835.4	2842.9	2855.5
12.5°	2810.1	2827.8	2830.2	2870.6	2837.9	2898.4	2890.8	2916.0	2903.4	2911.0	2926.1
15°	2850.5	2875.6	2880.8	2921.0	2885.8	2948.8	2943.8	2976.5	2956.4	2968.9	2981.5
17.5°	2870.6	2893.2	2903.4	2941.2	2911.0	2974.0	2968.9	2996.6	2981.5	2994.1	3009.2
20°	2858.0	2885.8	2893.2	2931.1	2900.9	2963.9	2956.4	2984.0	2968.9	2979.0	2994.1
22.5°	2812.6	2840.4	2850.5	2885.8	2858.0	2916.0	2913.5	2938.6	2918.5	2931.1	2943.8
25°	2732.0	2762.2	2767.2	2800.0	2769.9	2830.2	2825.2	2853.0	2837.9	2845.4	2863.1
27.5°	2616.1	2651.4	2658.9	2686.6	2664.0	2714.4	2714.4	2737.0	2719.4	2719.4	2737.0
30°	2477.5	2512.8	2517.8	2540.5	2520.2	2565.6	2568.2	2590.9	2563.1	2578.2	2580.8
32.5°	2308.6	2331.2	2346.4	2366.6	2336.4	2394.2	2386.8	2404.4	2389.2	2389.2	2401.9
35°	2104.5	2132.1	2139.8	2165.0	2139.8	2185.1	2185.1	2195.1	2180.0	2180.0	2200.2
37.5°	1882.6	1902.9	1905.4	1930.5	1910.4	1948.2	1945.6	1953.2	1938.1	1948.2	1948.2
40°	1623.1	1638.2	1643.2	1655.9	1653.4	1681.0	1678.5	1683.5	1676.0	1678.5	1683.5
42.5°	1320.6	1340.8	1350.9	1361.0	1345.9	1383.6	1376.1	1383.6	1381.1	1383.6	1391.2
45°	972.9	988.0	995.5	998.0	993.0	1015.6	1033.4	1018.2	1020.8	1015.6	1025.8
47.5°	703.1	705.6	700.6	715.8	703.1	713.2	718.2	720.8	705.6	703.1	713.2
50°	481.4	494.0	476.4	483.9	481.4	491.5	486.4	489.0	473.9	481.4	476.4
52.5°	320.1	317.5	312.5	315.0	310.0	310.0	310.0	315.0	305.0	299.9	294.9
55°	194.1	189.0	179.0	176.4	176.4	179.0	173.9	168.9	168.9	166.4	166.4
57.5°	113.4	105.9	100.8	98.2	93.2	90.8	88.2	88.2	83.1	83.1	83.1
60°	63.0	55.5	50.4	45.4	45.4	42.9	40.4	37.8	37.8	37.8	35.2
62.5°	32.8	27.8	22.6	20.1	20.1	17.6	15.1	15.1	15.1	15.1	12.6
65°	22.6	17.6	15.1	12.6	12.6	10.1	10.1	10.1	10.1	10.1	10.1
67.5°	17.6	15.1	12.6	10.1	10.1	10.1	7.5	7.5	7.5	7.5	7.5
70°	15.1	10.1	10.1	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	10.1	10.1	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
75°	7.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0
80°	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P252169

CATALOG NUMBER: LE\_6B30D010 EC6B30508035 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2	2636.2
2.5°	2676.5	2674.0	2676.5	2681.6	2671.5	2701.8	2686.6	2701.8
5°	2734.5	2737.0	2739.6	2747.1	2734.5	2772.4	2752.1	2774.9
7.5°	2810.1	2812.6	2815.1	2822.8	2815.1	2853.0	2830.2	2850.5
10°	2888.2	2893.2	2893.2	2905.9	2898.4	2933.6	2918.5	2943.8
12.5°	2961.4	2966.4	2971.4	2979.0	2974.0	3011.8	2999.1	3019.4
15°	3019.4	3029.4	3031.9	3042.0	3037.0	3077.2	3062.1	3082.4
17.5°	3047.0	3057.1	3057.1	3069.8	3064.8	3107.5	3087.4	3110.0
20°	3031.9	3039.5	3042.0	3054.6	3049.6	3092.4	3072.2	3100.0
22.5°	2984.0	2986.5	2989.1	3001.6	2999.1	3037.0	3019.4	3037.0
25°	2895.9	2903.4	2900.9	2911.0	2911.0	2941.2	2921.0	2936.1
27.5°	2769.9	2777.4	2777.4	2790.0	2779.9	2810.1	2790.0	2812.6
30°	2616.1	2623.6	2618.6	2628.6	2618.6	2648.9	2633.8	2641.2
32.5°	2432.1	2432.1	2434.6	2437.1	2432.1	2459.9	2444.8	2459.9
35°	2212.9	2217.9	2220.4	2222.9	2217.9	2238.0	2220.4	2230.5
37.5°	1965.9	1978.5	1975.9	1978.5	1970.9	1996.1	1981.0	1986.0
40°	1701.2	1701.2	1698.6	1703.8	1696.1	1716.4	1706.2	1711.2
42.5°	1393.8	1401.2	1391.2	1403.8	1383.6	1411.4	1401.2	1393.8
45°	1045.9	1035.9	1033.4	1035.9	1028.2	1030.8	1038.4	1033.4
47.5°	713.2	713.2	708.2	700.6	710.8	713.2	703.1	703.1
50°	478.9	478.9	473.9	471.2	476.4	473.9	468.8	476.4
52.5°	305.0	294.9	294.9	299.9	294.9	289.9	297.4	292.4
55°	166.4	161.2	161.2	166.4	161.2	161.2	158.8	163.9
57.5°	80.6	83.1	80.6	80.6	80.6	80.6	78.1	80.6
60°	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
62.5°	15.1	15.1	12.6	12.6	12.6	12.6	12.6	12.6
65°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
67.5°	7.5	7.5	7.5	7.5	7.5	10.1	7.5	7.5
70°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	7.5	7.5	10.1	10.1	10.1	10.1	10.1	10.1
75°	5.0	5.0	5.0	2.5	2.5	2.5	2.5	2.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)