

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: P252192

Luminaire Tested: **LE\_6B40D010 EC6B30509730 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252192  
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\_6B40D010 EC6B30509730 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4962.5 lumens  
Efficiency: N/A  
Efficacy: 115.4 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

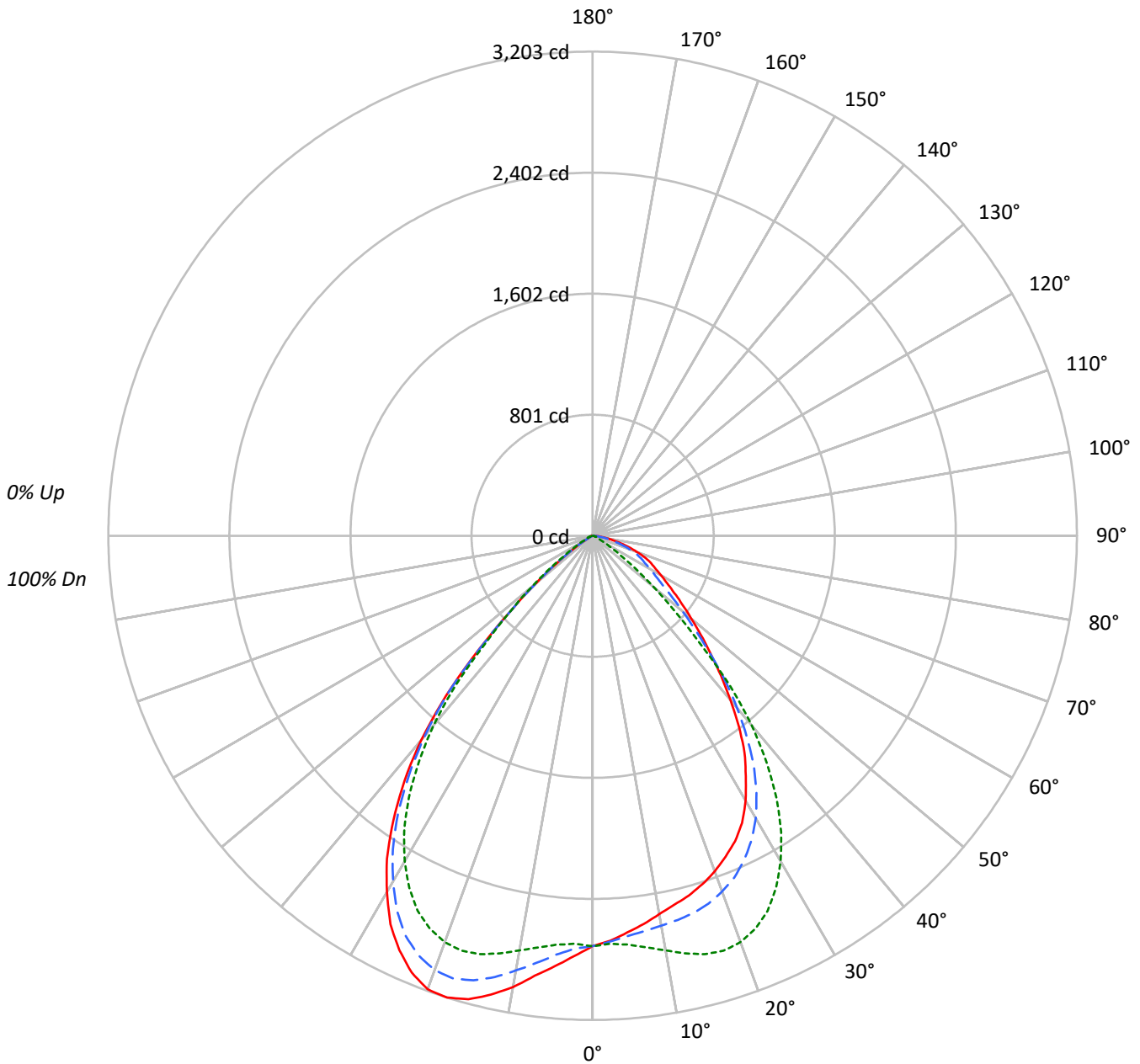
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20				
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°	177122	177122	177122
5°	172526	177798	187144
10°	168334	184498	200828
15°	166363	193535	214392
20°	163981	198577	221648
25°	160491	197110	217668
30°	152512	187316	204914
35°	139536	168885	182942
40°	120688	139484	150096
45°	101777	91480	98178
50°	86414	52961	49784
55°	74980	25388	19200
60°	67733	11861	4750
65°	65701	6808	1605
70°	58923	5436	1488
75°	48423	3932	655
80°	36068	1954	0
85°	31065	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	262.2	5.3
10°-20°	799.2	16.1
20°-30°	1221.1	24.6
30°-40°	1277.1	25.7
40°-50°	828.5	16.7
50°-60°	328.9	6.6
60°-70°	156.1	3.1
70°-80°	74.2	1.5
80°-90°	15.1	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°	2282.5	46.0
0°-40°	3559.7	71.7
0°-60°	4717.1	95.1
0°-90°	4962.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4962.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2715	2715	2715	2715	2715	
5°	2634	2658	2715	2782	2858	249
15°	2463	2582	2865	3044	3174	694
25°	2230	2370	2738	2922	3024	1021
35°	1752	1858	2120	2245	2297	1083
45°	1103	1093	992	1051	1064	858
55°	659	561	223	174	169	597
65°	426	353	44	10	10	416
75°	192	156	16	5	3	207
85°	42	26	0	0	0	48
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°	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9
2.5°	2681.1	2686.4	2657.8	2650.0	2670.8	2678.5	2681.1	2673.4	2676.0	2686.4	2686.4
5°	2634.4	2639.6	2613.6	2605.9	2626.6	2631.9	2639.6	2637.0	2644.8	2660.4	2657.8
7.5°	2590.2	2598.1	2569.5	2559.1	2585.1	2598.1	2603.2	2603.2	2613.6	2634.4	2637.0
10°	2541.0	2551.4	2525.4	2520.2	2548.8	2561.8	2564.4	2569.5	2585.1	2613.6	2618.9
12.5°	2499.5	2509.9	2491.6	2483.9	2515.0	2528.0	2533.2	2543.6	2561.8	2598.1	2603.2
15°	2463.1	2470.9	2450.1	2445.0	2476.1	2491.6	2494.2	2509.9	2533.2	2574.8	2582.5
17.5°	2416.4	2421.6	2406.0	2400.9	2432.0	2447.5	2450.1	2468.2	2496.9	2538.4	2551.4
20°	2361.9	2367.1	2351.5	2346.4	2377.5	2395.6	2398.2	2413.8	2447.5	2491.6	2504.6
22.5°	2297.0	2307.4	2289.2	2284.0	2315.1	2330.8	2338.5	2351.5	2385.2	2429.4	2447.5
25°	2229.5	2229.5	2216.5	2214.0	2242.5	2260.6	2258.1	2276.2	2310.0	2354.1	2369.6
27.5°	2141.2	2138.6	2125.8	2123.1	2154.2	2169.9	2164.6	2182.8	2214.0	2258.1	2273.6
30°	2024.5	2029.6	2011.5	2006.2	2032.2	2058.2	2055.6	2073.8	2105.0	2146.5	2156.9
32.5°	1884.4	1889.5	1886.9	1879.1	1902.5	1915.5	1923.2	1936.2	1962.2	2006.2	2016.8
35°	1752.0	1744.1	1733.8	1733.8	1757.1	1777.9	1770.1	1785.8	1811.6	1855.8	1858.4
37.5°	1588.5	1585.9	1580.6	1575.5	1601.4	1606.6	1609.2	1619.6	1643.0	1679.2	1674.1
40°	1417.1	1419.8	1417.1	1406.8	1422.4	1443.1	1440.5	1445.6	1466.5	1492.4	1484.6
42.5°	1256.2	1256.2	1256.2	1245.9	1264.0	1274.4	1279.6	1277.0	1282.1	1305.5	1295.1
45°	1103.1	1105.6	1103.1	1100.5	1103.1	1108.2	1103.1	1100.5	1100.5	1108.2	1092.8
47.5°	970.8	970.8	962.9	955.1	962.9	965.5	957.8	950.0	947.4	944.8	918.8
50°	851.4	848.8	846.1	833.1	841.0	843.5	833.1	828.0	817.6	804.6	773.5
52.5°	747.5	744.9	742.2	729.4	734.5	737.1	726.8	716.4	703.4	693.0	654.1
55°	659.2	656.6	656.6	648.9	643.6	648.9	638.5	630.8	612.5	599.5	560.6
57.5°	584.0	584.0	578.8	571.0	573.6	573.6	563.2	552.9	537.2	521.8	490.5
60°	519.1	519.1	519.1	511.2	511.2	511.2	506.1	495.8	482.8	467.2	436.0
62.5°	467.2	467.2	464.6	456.8	459.4	459.4	454.2	443.9	430.9	420.5	389.4
65°	425.6	425.6	425.6	417.9	417.9	420.5	415.2	404.9	394.5	381.5	353.0
67.5°	373.8	371.1	371.1	366.0	368.5	371.1	366.0	358.1	345.2	337.4	311.5
70°	308.9	311.5	314.0	306.2	308.9	308.9	306.2	298.5	290.8	282.9	259.5
72.5°	251.8	251.8	249.1	246.6	246.6	249.1	244.0	236.2	231.0	225.8	207.6
75°	192.1	189.5	192.1	186.9	186.9	186.9	181.6	179.1	176.5	168.8	155.8
77.5°	140.1	137.5	137.5	132.4	135.0	135.0	132.4	127.1	122.0	119.4	109.0
80°	96.0	96.0	96.0	93.5	93.5	90.9	90.9	88.2	83.0	80.5	75.2
82.5°	64.9	64.9	64.9	62.2	62.2	62.2	59.8	57.1	54.5	51.9	46.8
85°	41.5	41.5	41.5	38.9	38.9	38.9	36.4	36.4	33.8	31.1	26.0
87.5°	23.4	23.4	23.4	20.8	20.8	20.8	20.8	20.8	18.1	15.6	13.0
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9
2.5°	2704.5	2668.1	2691.5	2691.5	2683.8	2704.5	2717.5	2727.9	2725.2	2701.9	2699.2
5°	2683.8	2652.6	2678.5	2681.1	2673.4	2701.9	2720.1	2733.0	2735.6	2714.9	2717.5
7.5°	2668.1	2642.2	2676.0	2686.4	2683.8	2709.8	2730.5	2751.2	2761.6	2746.0	2748.6
10°	2660.4	2639.6	2676.0	2691.5	2694.1	2722.6	2753.8	2782.4	2795.4	2785.0	2792.8
12.5°	2650.0	2637.0	2678.5	2701.9	2712.2	2740.9	2779.8	2813.5	2834.2	2829.1	2844.6
15°	2639.6	2629.2	2678.5	2712.2	2725.2	2751.2	2795.4	2844.6	2868.0	2865.4	2886.1
17.5°	2613.6	2611.0	2663.0	2699.2	2717.5	2748.6	2790.1	2849.9	2873.2	2878.4	2904.4
20°	2572.1	2572.1	2629.2	2668.1	2688.9	2717.5	2769.4	2826.5	2855.0	2860.2	2888.8
22.5°	2515.0	2520.2	2574.8	2613.6	2644.8	2665.6	2720.1	2779.8	2805.8	2813.5	2844.6
25°	2439.8	2445.0	2496.9	2535.8	2569.5	2592.9	2644.8	2699.2	2730.5	2738.2	2761.6
27.5°	2341.1	2351.5	2400.9	2439.8	2468.2	2483.9	2538.4	2595.5	2618.9	2626.6	2650.0
30°	2226.9	2229.5	2278.9	2312.6	2341.1	2354.1	2400.9	2460.5	2478.8	2486.5	2520.2
32.5°	2086.8	2084.1	2130.9	2162.0	2185.4	2201.0	2250.2	2289.2	2307.4	2320.4	2338.5
35°	1918.1	1915.5	1949.2	1985.5	2003.8	2008.9	2058.2	2099.8	2110.1	2120.5	2143.9
37.5°	1728.6	1728.6	1757.1	1775.4	1796.1	1803.9	1827.2	1874.0	1892.1	1889.5	1907.6
40°	1528.8	1518.4	1539.1	1557.2	1562.5	1565.1	1588.5	1624.8	1637.8	1637.8	1650.8
42.5°	1318.5	1302.9	1305.5	1315.9	1321.1	1302.9	1318.5	1341.9	1334.1	1344.5	1347.0
45°	1095.2	1071.9	1061.5	1038.2	1043.4	1025.2	1014.9	1020.0	1017.4	991.5	996.6
47.5°	913.6	872.1	853.9	820.1	812.4	791.6	778.6	755.2	734.5	734.5	721.5
50°	760.5	719.0	682.6	643.6	630.8	612.5	584.0	552.9	537.2	521.8	508.8
52.5°	638.5	594.4	550.2	508.8	490.5	467.2	428.2	397.1	368.5	353.0	337.4
55°	539.9	490.5	443.9	399.8	376.4	353.0	314.0	277.8	244.0	223.2	210.2
57.5°	464.6	417.9	368.5	321.9	301.1	275.1	233.6	194.6	163.5	140.1	127.1
60°	410.1	363.4	319.2	269.9	249.1	223.2	179.1	142.8	111.6	90.9	75.2
62.5°	363.4	321.9	275.1	231.0	210.2	184.2	142.8	106.4	77.9	57.1	44.1
65°	329.6	288.1	249.1	205.0	186.9	160.9	122.0	88.2	62.2	44.1	31.1
67.5°	290.8	254.4	215.4	179.1	160.9	140.1	103.9	75.2	51.9	36.4	26.0
70°	244.0	215.4	181.6	148.0	135.0	116.8	85.6	62.2	41.5	28.5	20.8
72.5°	194.6	171.2	145.4	119.4	109.0	90.9	70.1	49.4	31.1	20.8	15.6
75°	148.0	129.8	109.0	90.9	80.5	70.1	51.9	36.4	23.4	15.6	10.4
77.5°	101.2	93.5	77.9	62.2	57.1	49.4	33.8	23.4	15.6	10.4	5.2
80°	70.1	62.2	51.9	41.5	36.4	31.1	20.8	15.6	7.8	5.2	2.6
82.5°	44.1	36.4	31.1	26.0	23.4	18.1	13.0	7.8	5.2	2.6	2.6
85°	23.4	20.8	18.1	13.0	13.0	10.4	7.8	5.2	2.6	0.0	0.0
87.5°	13.0	10.4	7.8	5.2	5.2	2.6	2.6	2.6	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°	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9
2.5°	2730.5	2730.5	2727.9	2759.0	2722.6	2759.0	2740.9	2759.0	2733.0	2730.5	2733.0
5°	2751.2	2759.0	2761.6	2790.1	2756.4	2800.5	2785.0	2800.5	2782.4	2787.5	2795.4
7.5°	2792.8	2805.8	2803.1	2839.5	2805.8	2855.0	2844.6	2868.0	2849.9	2855.0	2865.4
10°	2839.5	2855.0	2857.6	2894.0	2862.9	2922.5	2909.5	2935.5	2919.9	2927.8	2940.6
12.5°	2894.0	2912.1	2914.8	2956.2	2922.5	2984.8	2977.0	3003.0	2990.0	2997.8	3013.4
15°	2935.5	2961.5	2966.6	3008.1	2971.9	3036.8	3031.5	3065.2	3044.5	3057.5	3070.5
17.5°	2956.2	2979.6	2990.0	3028.9	2997.8	3062.6	3057.5	3086.0	3070.5	3083.5	3099.0
20°	2943.2	2971.9	2979.6	3018.5	2987.4	3052.2	3044.5	3073.0	3057.5	3067.9	3083.5
22.5°	2896.6	2925.1	2935.5	2971.9	2943.2	3003.0	3000.4	3026.4	3005.6	3018.5	3031.5
25°	2813.5	2844.6	2849.9	2883.6	2852.5	2914.8	2909.5	2938.1	2922.5	2930.2	2948.5
27.5°	2694.1	2730.5	2738.2	2766.8	2743.4	2795.4	2795.4	2818.8	2800.5	2800.5	2818.8
30°	2551.4	2587.8	2592.9	2616.2	2595.5	2642.2	2644.8	2668.1	2639.6	2655.1	2657.8
32.5°	2377.5	2400.9	2416.4	2437.1	2406.0	2465.8	2457.9	2476.1	2460.5	2460.5	2473.5
35°	2167.2	2195.8	2203.6	2229.5	2203.6	2250.2	2250.2	2260.6	2245.1	2245.1	2265.9
37.5°	1938.9	1959.6	1962.2	1988.1	1967.4	2006.2	2003.8	2011.5	1995.9	2006.2	2006.2
40°	1671.5	1687.1	1692.2	1705.2	1702.6	1731.2	1728.6	1733.8	1726.0	1728.6	1733.8
42.5°	1360.0	1380.8	1391.1	1401.6	1386.0	1424.9	1417.1	1424.9	1422.4	1424.9	1432.8
45°	1001.9	1017.4	1025.2	1027.9	1022.6	1046.0	1064.1	1048.6	1051.1	1046.0	1056.4
47.5°	724.1	726.8	721.5	737.1	724.1	734.5	739.8	742.2	726.8	724.1	734.5
50°	495.8	508.8	490.5	498.4	495.8	506.1	500.9	503.5	488.0	495.8	490.5
52.5°	329.6	327.0	321.9	324.4	319.2	319.2	319.2	324.4	314.0	308.9	303.6
55°	199.9	194.6	184.2	181.6	181.6	184.2	179.1	173.9	173.9	171.2	171.2
57.5°	116.8	109.0	103.9	101.2	96.0	93.5	90.9	90.9	85.6	85.6	85.6
60°	64.9	57.1	51.9	46.8	46.8	44.1	41.5	38.9	38.9	38.9	36.4
62.5°	33.8	28.5	23.4	20.8	20.8	18.1	15.6	15.6	15.6	15.6	13.0
65°	23.4	18.1	15.6	13.0	13.0	10.4	10.4	10.4	10.4	10.4	10.4
67.5°	18.1	15.6	13.0	10.4	10.4	10.4	7.8	7.8	7.8	7.8	7.8
70°	15.6	10.4	10.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
72.5°	10.4	10.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
75°	7.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0
80°	2.6	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: P252192

CATALOG NUMBER: LE\_6B40D010 EC6B30509730 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9	2714.9
2.5°	2756.4	2753.8	2756.4	2761.6	2751.2	2782.4	2766.8	2782.4
5°	2816.1	2818.8	2821.2	2829.1	2816.1	2855.0	2834.2	2857.6
7.5°	2894.0	2896.6	2899.1	2907.0	2899.1	2938.1	2914.8	2935.5
10°	2974.4	2979.6	2979.6	2992.6	2984.8	3021.1	3005.6	3031.5
12.5°	3049.8	3054.9	3060.1	3067.9	3062.6	3101.6	3088.6	3109.4
15°	3109.4	3119.8	3122.4	3132.8	3127.5	3169.1	3153.5	3174.2
17.5°	3138.0	3148.4	3148.4	3161.2	3156.1	3200.2	3179.5	3202.9
20°	3122.4	3130.1	3132.8	3145.8	3140.5	3184.6	3163.9	3192.5
22.5°	3073.0	3075.6	3078.2	3091.2	3088.6	3127.5	3109.4	3127.5
25°	2982.2	2990.0	2987.4	2997.8	2997.8	3028.9	3008.1	3023.8
27.5°	2852.5	2860.2	2860.2	2873.2	2862.9	2894.0	2873.2	2896.6
30°	2694.1	2701.9	2696.8	2707.1	2696.8	2727.9	2712.2	2720.1
32.5°	2504.6	2504.6	2507.2	2509.9	2504.6	2533.2	2517.6	2533.2
35°	2278.9	2284.0	2286.6	2289.2	2284.0	2304.8	2286.6	2297.0
37.5°	2024.5	2037.5	2034.9	2037.5	2029.6	2055.6	2040.0	2045.2
40°	1752.0	1752.0	1749.4	1754.5	1746.8	1767.5	1757.1	1762.4
42.5°	1435.2	1443.1	1432.8	1445.6	1424.9	1453.5	1443.1	1435.2
45°	1077.1	1066.8	1064.1	1066.8	1059.0	1061.5	1069.4	1064.1
47.5°	734.5	734.5	729.4	721.5	731.9	734.5	724.1	724.1
50°	493.1	493.1	488.0	485.4	490.5	488.0	482.8	490.5
52.5°	314.0	303.6	303.6	308.9	303.6	298.5	306.2	301.1
55°	171.2	166.1	166.1	171.2	166.1	166.1	163.5	168.8
57.5°	83.0	85.6	83.0	83.0	83.0	83.0	80.5	83.0
60°	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
62.5°	15.6	15.6	13.0	13.0	13.0	13.0	13.0	13.0
65°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
67.5°	7.8	7.8	7.8	7.8	7.8	10.4	7.8	7.8
70°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
72.5°	7.8	7.8	10.4	10.4	10.4	10.4	10.4	10.4
75°	5.2	5.2	5.2	2.6	2.6	2.6	2.6	2.6
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)