

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: io LED

Report Number: P252205

Luminaire Tested: **LD6B50D010TE EU6B30509730 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252205
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: io LED
Catalog Number: LD6B50D010TE EU6B30509730 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: 5079.0 lumens
Efficiency: N/A
Efficacy: 86.4 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

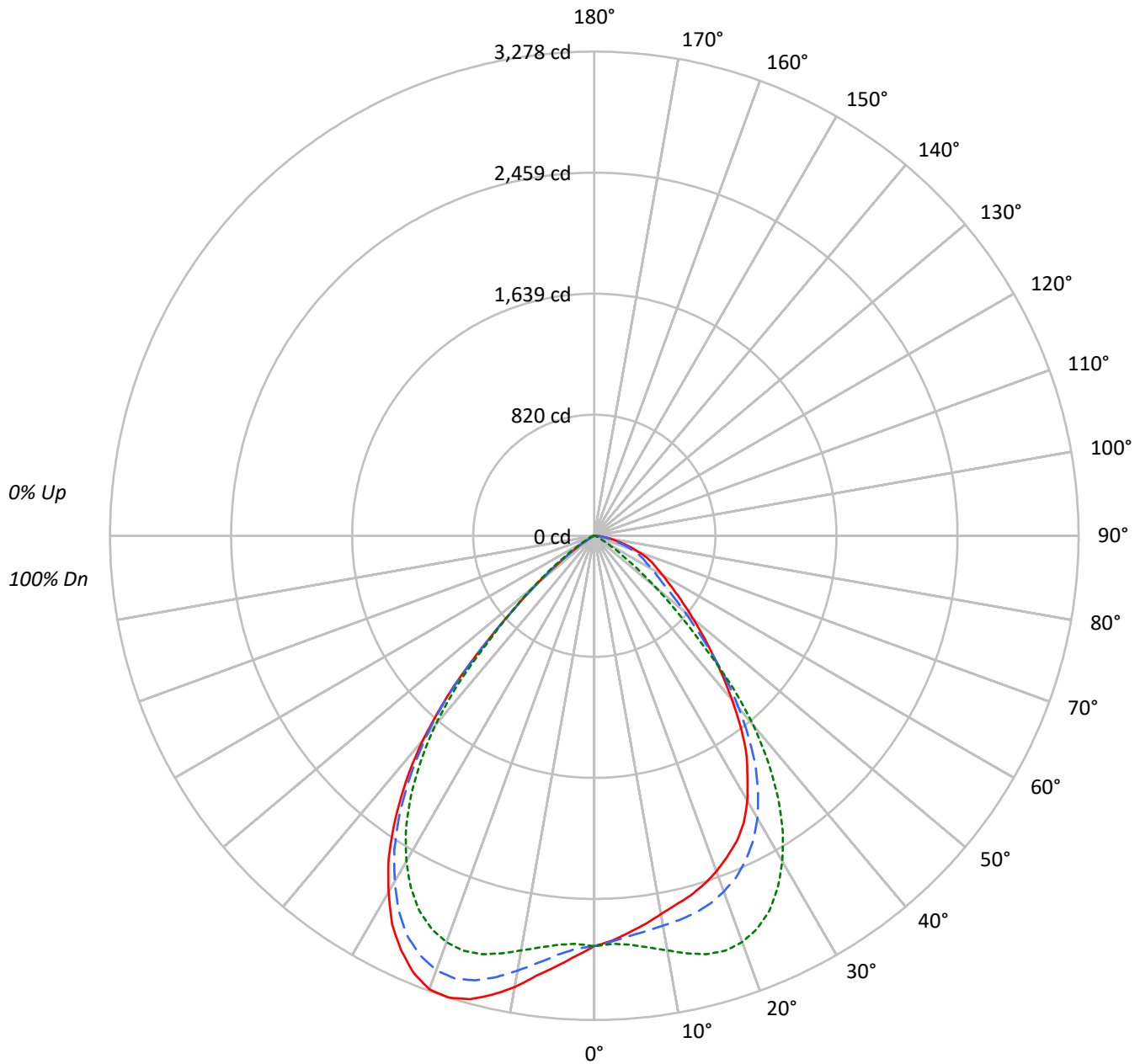
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50		
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102		
1	112	108	105	103		109	106	103	101		102	100	98		98	96	95		95		
2	105	98	93	89		102	97	92	88		93	89	86		90	87	84		87		
3	98	89	83	78		95	88	82	78		85	80	76		83	78	75		80		
4	91	82	75	69		89	80	74	69		78	72	68		76	71	67		74		
5	85	75	67	62		83	74	67	62		72	66	61		70	65	61		68		
6	80	69	61	56		78	68	61	56		66	60	55		64	59	55		63		
7	74	63	56	51		73	62	55	50		61	55	50		60	54	50		58		
8	70	58	51	46		69	58	51	46		57	50	46		55	50	46		54		
9	66	54	47	42		64	54	47	42		53	46	42		52	46	42		51		
10	62	50	43	39		61	50	43	39		49	43	39		48	43	39		47		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	181278	181278	181278
5°	176580	181970	191538
10°	172282	188824	205545
15°	170267	198081	219431
20°	167827	203242	226848
25°	164263	201738	222772
30°	156091	191708	209721
35°	142810	172852	187235
40°	123524	142755	153613
45°	104166	93630	100485
50°	88434	54189	50961
55°	76743	25990	19644
60°	69325	12135	4854
65°	67260	6978	1636
70°	60296	5570	1526
75°	49557	4008	681
80°	36932	1991	0
85°	31813	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.4	5.3
10°-20°	818.0	16.1
20°-30°	1249.8	24.6
30°-40°	1307.1	25.7
40°-50°	847.9	16.7
50°-60°	336.7	6.6
60°-70°	159.7	3.1
70°-80°	76.0	1.5
80°-90°	15.5	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°	2336.1	46.0
0°-40°	3643.2	71.7
0°-60°	4827.8	95.1
0°-90°	5079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5079.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2779	2779	2779	2779	2779	
5°	2696	2720	2779	2848	2925	255
15°	2521	2643	2933	3116	3249	710
25°	2282	2425	2802	2991	3095	1045
35°	1793	1902	2170	2298	2351	1109
45°	1129	1118	1015	1076	1089	878
55°	675	574	228	178	173	611
65°	436	361	45	11	11	426
75°	197	159	16	5	3	212
85°	42	27	0	0	0	50
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°	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6
2.5°	2744.1	2749.4	2720.2	2712.2	2733.5	2741.4	2744.1	2736.1	2738.8	2749.4	2749.4
5°	2696.3	2701.6	2675.0	2667.0	2688.3	2693.6	2701.6	2698.9	2706.9	2722.8	2720.2
7.5°	2651.1	2659.1	2629.9	2619.2	2645.8	2659.1	2664.4	2664.4	2675.0	2696.3	2698.9
10°	2600.6	2611.3	2584.7	2579.4	2608.6	2621.9	2624.5	2629.9	2645.8	2675.0	2680.3
12.5°	2558.1	2568.8	2550.2	2542.2	2574.1	2587.4	2592.7	2603.3	2621.9	2659.1	2664.4
15°	2520.9	2528.9	2507.7	2502.3	2534.2	2550.2	2552.8	2568.8	2592.7	2635.2	2643.1
17.5°	2473.1	2478.4	2462.5	2457.2	2489.1	2505.0	2507.7	2526.3	2555.5	2598.0	2611.3
20°	2417.3	2422.7	2406.7	2401.4	2433.3	2451.9	2454.5	2470.5	2505.0	2550.2	2563.4
22.5°	2350.9	2361.6	2343.0	2337.6	2369.5	2385.5	2393.4	2406.7	2441.2	2486.4	2505.0
25°	2281.9	2281.9	2268.6	2265.9	2295.1	2313.7	2311.1	2329.7	2364.2	2409.4	2425.3
27.5°	2191.5	2188.9	2175.6	2173.0	2204.8	2220.8	2215.5	2234.0	2265.9	2311.1	2327.0
30°	2072.0	2077.3	2058.7	2053.4	2080.0	2106.5	2103.9	2122.5	2154.4	2196.9	2207.5
32.5°	1928.6	1933.9	1931.2	1923.2	1947.2	1960.4	1968.4	1981.7	2008.3	2053.4	2064.0
35°	1793.1	1785.1	1774.5	1774.5	1798.4	1819.6	1811.7	1827.6	1854.2	1899.3	1902.0
37.5°	1625.7	1623.1	1617.8	1612.4	1639.0	1644.3	1647.0	1657.6	1681.5	1718.7	1713.4
40°	1450.4	1453.1	1450.4	1439.8	1455.7	1477.0	1474.3	1479.6	1500.9	1527.4	1519.5
42.5°	1285.7	1285.7	1285.7	1275.1	1293.7	1304.3	1309.6	1307.0	1312.3	1336.2	1325.6
45°	1129.0	1131.6	1129.0	1126.3	1129.0	1134.3	1129.0	1126.3	1126.3	1134.3	1118.4
47.5°	993.5	993.5	985.5	977.6	985.5	988.2	980.2	972.2	969.6	966.9	940.4
50°	871.3	868.6	866.0	852.7	860.7	863.3	852.7	847.4	836.8	823.5	791.6
52.5°	765.0	762.4	759.7	746.5	751.8	754.4	743.8	733.2	719.9	709.3	669.4
55°	674.7	672.1	672.1	664.1	658.8	664.1	653.5	645.5	626.9	613.6	573.8
57.5°	597.7	597.7	592.4	584.4	587.1	587.1	576.4	565.8	549.9	533.9	502.1
60°	531.3	531.3	531.3	523.3	523.3	523.3	518.0	507.4	494.1	478.2	446.3
62.5°	478.2	478.2	475.5	467.5	470.2	470.2	464.9	454.2	441.0	430.3	398.5
65°	435.7	435.7	435.7	427.7	427.7	430.3	425.0	414.4	403.8	390.5	361.3
67.5°	382.5	379.9	379.9	374.6	377.2	379.9	374.6	366.6	353.3	345.3	318.8
70°	316.1	318.8	321.4	313.5	316.1	316.1	313.5	305.5	297.5	289.5	265.6
72.5°	257.7	257.7	255.0	252.4	252.4	255.0	249.7	241.7	236.4	231.1	212.5
75°	196.6	193.9	196.6	191.3	191.3	191.3	185.9	183.3	180.6	172.7	159.4
77.5°	143.4	140.8	140.8	135.5	138.1	138.1	135.5	130.2	124.9	122.2	111.6
80°	98.3	98.3	98.3	95.6	95.6	93.0	93.0	90.3	85.0	82.3	77.0
82.5°	66.4	66.4	66.4	63.8	63.8	63.8	61.1	58.4	55.8	53.1	47.8
85°	42.5	42.5	42.5	39.8	39.8	39.8	37.2	37.2	34.5	31.9	26.6
87.5°	23.9	23.9	23.9	21.3	21.3	21.3	21.3	21.3	18.6	15.9	13.3
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°	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6
2.5°	2768.0	2730.8	2754.7	2754.7	2746.7	2768.0	2781.3	2791.9	2789.2	2765.3	2762.7
5°	2746.7	2714.9	2741.4	2744.1	2736.1	2765.3	2783.9	2797.2	2799.9	2778.6	2781.3
7.5°	2730.8	2704.2	2738.8	2749.4	2746.7	2773.3	2794.6	2815.8	2826.4	2810.5	2813.1
10°	2722.8	2701.6	2738.8	2754.7	2757.4	2786.6	2818.5	2847.7	2861.0	2850.3	2858.3
12.5°	2712.2	2698.9	2741.4	2765.3	2776.0	2805.2	2845.0	2879.6	2900.8	2895.5	2911.4
15°	2701.6	2691.0	2741.4	2776.0	2789.2	2815.8	2861.0	2911.4	2935.3	2932.7	2953.9
17.5°	2675.0	2672.4	2725.5	2762.7	2781.3	2813.1	2855.6	2916.7	2940.7	2946.0	2972.5
20°	2632.5	2632.5	2691.0	2730.8	2752.0	2781.3	2834.4	2892.8	2922.1	2927.4	2956.6
22.5°	2574.1	2579.4	2635.2	2675.0	2706.9	2728.1	2783.9	2845.0	2871.6	2879.6	2911.4
25°	2497.0	2502.3	2555.5	2595.3	2629.9	2653.8	2706.9	2762.7	2794.6	2802.5	2826.4
27.5°	2396.1	2406.7	2457.2	2497.0	2526.3	2542.2	2598.0	2656.4	2680.3	2688.3	2712.2
30°	2279.2	2281.9	2332.3	2366.9	2396.1	2409.4	2457.2	2518.3	2536.9	2544.8	2579.4
32.5°	2135.8	2133.1	2180.9	2212.8	2236.7	2252.6	2303.1	2343.0	2361.6	2374.8	2393.4
35°	1963.1	1960.4	1995.0	2032.2	2050.8	2056.1	2106.5	2149.0	2159.7	2170.3	2194.2
37.5°	1769.2	1769.2	1798.4	1817.0	1838.2	1846.2	1870.1	1917.9	1936.5	1933.9	1952.5
40°	1564.6	1554.0	1575.3	1593.9	1599.2	1601.8	1625.7	1662.9	1676.2	1676.2	1689.5
42.5°	1349.5	1333.5	1336.2	1346.8	1352.1	1333.5	1349.5	1373.4	1365.4	1376.0	1378.7
45°	1121.0	1097.1	1086.5	1062.6	1067.9	1049.3	1038.7	1044.0	1041.3	1014.8	1020.1
47.5°	935.1	892.6	874.0	839.4	831.5	810.2	796.9	773.0	751.8	751.8	738.5
50°	778.3	735.8	698.6	658.8	645.5	626.9	597.7	565.8	549.9	533.9	520.7
52.5°	653.5	608.3	563.2	520.7	502.1	478.2	438.3	406.4	377.2	361.3	345.3
55°	552.5	502.1	454.2	409.1	385.2	361.3	321.4	284.2	249.7	228.5	215.2
57.5°	475.5	427.7	377.2	329.4	308.1	281.6	239.1	199.2	167.4	143.4	130.2
60°	419.7	371.9	326.7	276.3	255.0	228.5	183.3	146.1	114.2	93.0	77.0
62.5°	371.9	329.4	281.6	236.4	215.2	188.6	146.1	108.9	79.7	58.4	45.2
65°	337.4	294.9	255.0	209.9	191.3	164.7	124.9	90.3	63.8	45.2	31.9
67.5°	297.5	260.3	220.5	183.3	164.7	143.4	106.3	77.0	53.1	37.2	26.6
70°	249.7	220.5	185.9	151.4	138.1	119.5	87.7	63.8	42.5	29.2	21.3
72.5°	199.2	175.3	148.8	122.2	111.6	93.0	71.7	50.5	31.9	21.3	15.9
75°	151.4	132.8	111.6	93.0	82.3	71.7	53.1	37.2	23.9	15.9	10.6
77.5°	103.6	95.6	79.7	63.8	58.4	50.5	34.5	23.9	15.9	10.6	5.3
80°	71.7	63.8	53.1	42.5	37.2	31.9	21.3	15.9	8.0	5.3	2.7
82.5°	45.2	37.2	31.9	26.6	23.9	18.6	13.3	8.0	5.3	2.7	2.7
85°	23.9	21.3	18.6	13.3	13.3	10.6	8.0	5.3	2.7	0.0	0.0
87.5°	13.3	10.6	8.0	5.3	5.3	2.7	2.7	2.7	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°	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6
2.5°	2794.6	2794.6	2791.9	2823.8	2786.6	2823.8	2805.2	2823.8	2797.2	2794.6	2797.2
5°	2815.8	2823.8	2826.4	2855.6	2821.1	2866.3	2850.3	2866.3	2847.7	2853.0	2861.0
7.5°	2858.3	2871.6	2868.9	2906.1	2871.6	2922.1	2911.4	2935.3	2916.7	2922.1	2932.7
10°	2906.1	2922.1	2924.7	2961.9	2930.0	2991.1	2977.8	3004.4	2988.5	2996.4	3009.7
12.5°	2961.9	2980.5	2983.2	3025.7	2991.1	3054.9	3046.9	3073.5	3060.2	3068.2	3084.1
15°	3004.4	3031.0	3036.3	3078.8	3041.6	3108.0	3102.7	3137.2	3116.0	3129.3	3142.5
17.5°	3025.7	3049.6	3060.2	3100.0	3068.2	3134.6	3129.3	3158.5	3142.5	3155.8	3171.8
20°	3012.4	3041.6	3049.6	3089.4	3057.5	3123.9	3116.0	3145.2	3129.3	3139.9	3155.8
22.5°	2964.6	2993.8	3004.4	3041.6	3012.4	3073.5	3070.8	3097.4	3076.1	3089.4	3102.7
25°	2879.6	2911.4	2916.7	2951.3	2919.4	2983.2	2977.8	3007.1	2991.1	2999.1	3017.7
27.5°	2757.4	2794.6	2802.5	2831.7	2807.8	2861.0	2861.0	2884.9	2866.3	2866.3	2884.9
30°	2611.3	2648.4	2653.8	2677.7	2656.4	2704.2	2706.9	2730.8	2701.6	2717.5	2720.2
32.5°	2433.3	2457.2	2473.1	2494.4	2462.5	2523.6	2515.6	2534.2	2518.3	2518.3	2531.6
35°	2218.1	2247.3	2255.3	2281.9	2255.3	2303.1	2303.1	2313.7	2297.8	2297.8	2319.1
37.5°	1984.3	2005.6	2008.3	2034.8	2013.6	2053.4	2050.8	2058.7	2042.8	2053.4	2053.4
40°	1710.7	1726.7	1732.0	1745.3	1742.6	1771.8	1769.2	1774.5	1766.5	1769.2	1774.5
42.5°	1392.0	1413.2	1423.8	1434.5	1418.5	1458.4	1450.4	1458.4	1455.7	1458.4	1466.3
45°	1025.4	1041.3	1049.3	1051.9	1046.6	1070.5	1089.1	1073.2	1075.8	1070.5	1081.2
47.5°	741.1	743.8	738.5	754.4	741.1	751.8	757.1	759.7	743.8	741.1	751.8
50°	507.4	520.7	502.1	510.0	507.4	518.0	512.7	515.3	499.4	507.4	502.1
52.5°	337.4	334.7	329.4	332.1	326.7	326.7	326.7	332.1	321.4	316.1	310.8
55°	204.5	199.2	188.6	185.9	185.9	188.6	183.3	178.0	178.0	175.3	175.3
57.5°	119.5	111.6	106.3	103.6	98.3	95.6	93.0	93.0	87.7	87.7	87.7
60°	66.4	58.4	53.1	47.8	47.8	45.2	42.5	39.8	39.8	39.8	37.2
62.5°	34.5	29.2	23.9	21.3	21.3	18.6	15.9	15.9	15.9	15.9	13.3
65°	23.9	18.6	15.9	13.3	13.3	10.6	10.6	10.6	10.6	10.6	10.6
67.5°	18.6	15.9	13.3	10.6	10.6	10.6	8.0	8.0	8.0	8.0	8.0
70°	15.9	10.6	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
72.5°	10.6	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
75°	8.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0
80°	2.7	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: P252205

CATALOG NUMBER: LD6B50D010TE EU6B30509730 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6	2778.6
2.5°	2821.1	2818.5	2821.1	2826.4	2815.8	2847.7	2831.7	2847.7
5°	2882.2	2884.9	2887.5	2895.5	2882.2	2922.1	2900.8	2924.7
7.5°	2961.9	2964.6	2967.2	2975.2	2967.2	3007.1	2983.2	3004.4
10°	3044.3	3049.6	3049.6	3062.9	3054.9	3092.1	3076.1	3102.7
12.5°	3121.3	3126.6	3131.9	3139.9	3134.6	3174.4	3161.1	3182.4
15°	3182.4	3193.0	3195.7	3206.3	3201.0	3243.5	3227.5	3248.8
17.5°	3211.6	3222.2	3222.2	3235.5	3230.2	3275.4	3254.1	3278.0
20°	3195.7	3203.6	3206.3	3219.6	3214.3	3259.4	3238.2	3267.4
22.5°	3145.2	3147.9	3150.5	3163.8	3161.1	3201.0	3182.4	3201.0
25°	3052.2	3060.2	3057.5	3068.2	3068.2	3100.0	3078.8	3094.7
27.5°	2919.4	2927.4	2927.4	2940.7	2930.0	2961.9	2940.7	2964.6
30°	2757.4	2765.3	2760.0	2770.6	2760.0	2791.9	2776.0	2783.9
32.5°	2563.4	2563.4	2566.1	2568.8	2563.4	2592.7	2576.7	2592.7
35°	2332.3	2337.6	2340.3	2343.0	2337.6	2358.9	2340.3	2350.9
37.5°	2072.0	2085.3	2082.6	2085.3	2077.3	2103.9	2087.9	2093.3
40°	1793.1	1793.1	1790.4	1795.7	1787.8	1809.0	1798.4	1803.7
42.5°	1469.0	1477.0	1466.3	1479.6	1458.4	1487.6	1477.0	1469.0
45°	1102.4	1091.8	1089.1	1091.8	1083.8	1086.5	1094.4	1089.1
47.5°	751.8	751.8	746.5	738.5	749.1	751.8	741.1	741.1
50°	504.7	504.7	499.4	496.8	502.1	499.4	494.1	502.1
52.5°	321.4	310.8	310.8	316.1	310.8	305.5	313.5	308.1
55°	175.3	170.0	170.0	175.3	170.0	170.0	167.4	172.7
57.5°	85.0	87.7	85.0	85.0	85.0	85.0	82.3	85.0
60°	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
62.5°	15.9	15.9	13.3	13.3	13.3	13.3	13.3	13.3
65°	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
67.5°	8.0	8.0	8.0	8.0	8.0	10.6	8.0	8.0
70°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
72.5°	8.0	8.0	10.6	10.6	10.6	10.6	10.6	10.6
75°	5.3	5.3	5.3	2.7	2.7	2.7	2.7	2.7
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)