

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: P252298

Luminaire Tested: **LD6B50D010TE EU6B30508030 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252298  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B50D010TE EU6B30508030 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4940.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

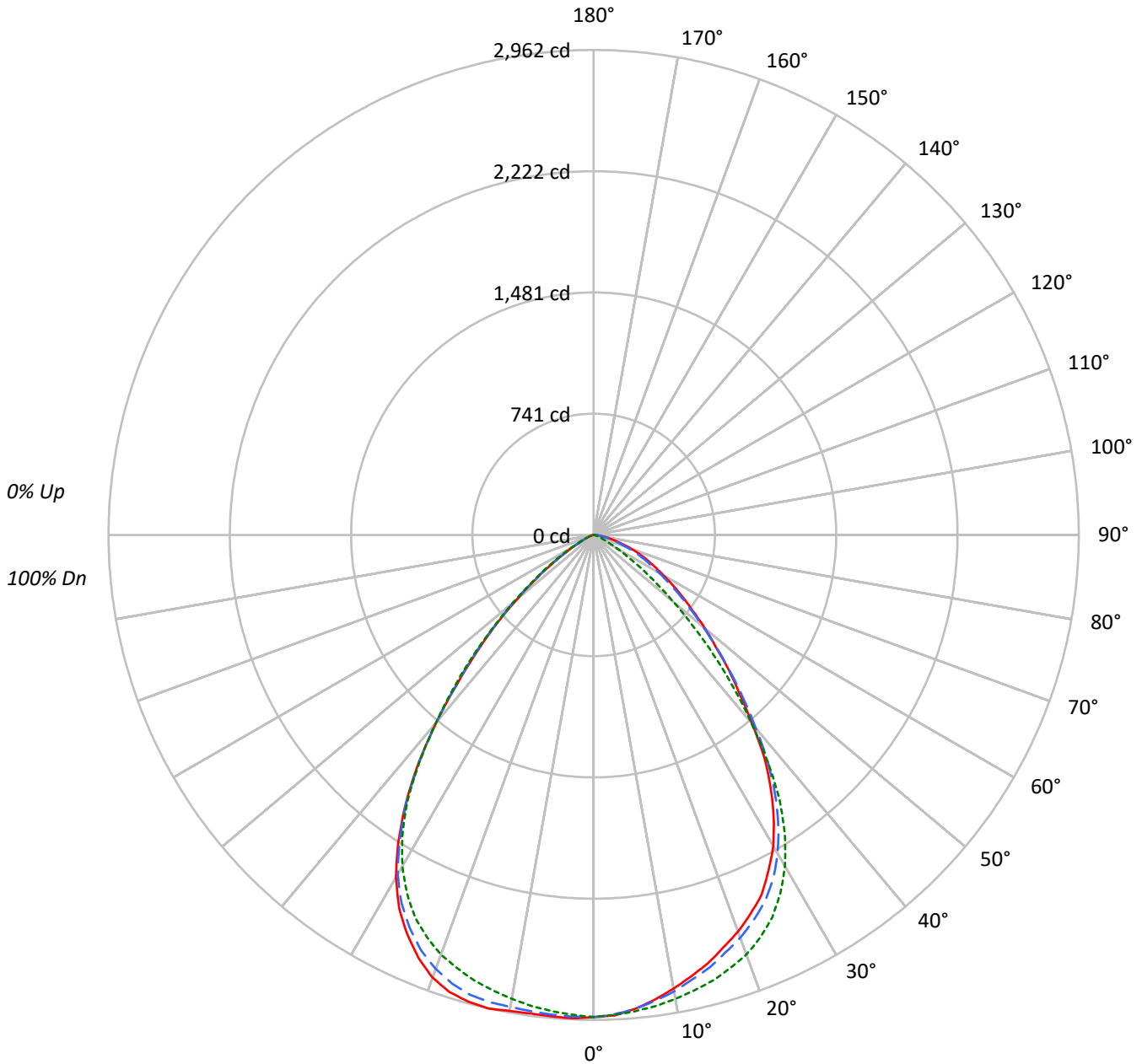
Input Watts (W): 58.77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252298

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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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																			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

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

	0°	90°	180°
0°	192101	192101	192101
5°	190274	191211	193306
10°	186353	190593	195541
15°	182789	190232	199364
20°	179005	189371	199743
25°	174585	185599	193791
30°	165297	176009	181908
35°	150113	157759	159177
40°	128115	127510	126905
45°	107617	95484	92532
50°	89875	64613	61365
55°	75639	39640	36000
60°	64040	20877	18098
65°	55451	10976	8784
70°	46124	6791	4750
75°	34055	4487	2697
80°	26713	2668	1353
85°	21259	2695	0



TEST NUMBER: P252298

CATALOG NUMBER: LD6B50D010TE EU6B30508030 6LBSW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.5	5.6
10°-20°	794.6	16.1
20°-30°	1173.3	23.8
30°-40°	1209.2	24.5
40°-50°	835.2	16.9
50°-60°	411.7	8.3
60°-70°	166.8	3.4
70°-80°	59.5	1.2
80°-90°	12.3	0.2
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°	2245.4	45.5
0°-40°	3454.6	69.9
0°-60°	4701.5	95.2
0°-90°	4940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4940.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2944	2944	2944	2944	2944	
5°	2905	2905	2920	2941	2952	274
15°	2706	2735	2816	2909	2952	762
25°	2425	2472	2578	2653	2692	1109
35°	1885	1931	1981	1992	1999	1168
45°	1166	1174	1035	1021	1003	902
55°	665	640	348	327	316	601
65°	359	324	71	57	57	357
75°	135	114	18	11	11	152
85°	28	21	4	0	0	35
90°	0	0	0	0	0	



TEST NUMBER: P252298

CATALOG NUMBER: LD6B50D010TE EU6B30508030 6LBSW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5
2.5°	2937.4	2926.8	2933.9	2919.7	2937.4	2919.7	2923.2	2926.8	2923.2	2926.8	2930.3
5°	2905.4	2894.8	2905.4	2887.6	2905.4	2894.8	2894.8	2898.3	2898.3	2901.9	2905.4
7.5°	2862.8	2852.1	2862.8	2845.0	2866.3	2855.6	2855.6	2862.8	2859.2	2862.8	2869.9
10°	2813.0	2798.7	2809.4	2798.7	2820.1	2805.9	2813.0	2813.0	2813.0	2823.6	2830.7
12.5°	2759.6	2745.4	2759.6	2741.8	2763.2	2752.5	2756.1	2766.7	2770.3	2777.4	2781.0
15°	2706.3	2688.5	2695.6	2684.9	2706.3	2695.6	2699.2	2713.4	2713.4	2724.1	2734.7
17.5°	2638.7	2624.5	2638.7	2624.5	2642.3	2635.2	2642.3	2652.9	2652.9	2663.6	2674.3
20°	2578.3	2564.0	2574.7	2564.0	2585.4	2574.7	2578.3	2592.5	2596.0	2606.7	2617.4
22.5°	2503.6	2492.9	2500.0	2489.3	2510.7	2503.6	2507.1	2521.4	2524.9	2532.0	2549.8
25°	2425.3	2404.0	2414.7	2407.6	2428.9	2418.2	2425.3	2439.6	2446.7	2457.3	2471.6
27.5°	2311.5	2300.9	2308.0	2308.0	2325.8	2315.1	2318.7	2332.9	2343.5	2354.2	2372.0
30°	2194.2	2176.4	2183.5	2187.1	2201.3	2194.2	2201.3	2215.5	2219.1	2233.3	2247.5
32.5°	2044.8	2037.7	2051.9	2044.8	2051.9	2051.9	2055.5	2066.2	2073.3	2080.4	2098.2
35°	1884.8	1870.6	1884.8	1877.7	1895.5	1884.8	1895.5	1906.1	1906.1	1920.4	1931.0
37.5°	1710.5	1692.8	1699.9	1699.9	1707.0	1703.4	1703.4	1721.2	1724.8	1735.4	1746.1
40°	1504.3	1497.2	1511.4	1507.8	1511.4	1511.4	1514.9	1525.6	1532.7	1536.3	1539.8
42.5°	1319.4	1322.9	1326.5	1326.5	1326.5	1326.5	1326.5	1340.7	1337.1	1347.8	1351.4
45°	1166.4	1152.2	1159.3	1155.8	1166.4	1155.8	1166.4	1177.1	1170.0	1180.7	1173.6
47.5°	1010.0	1010.0	1010.0	1006.4	1013.5	1010.0	1017.1	1020.6	1020.6	1020.6	1017.1
50°	885.5	874.8	878.4	878.4	881.9	878.4	885.5	889.1	889.1	881.9	867.7
52.5°	764.6	761.0	761.0	768.1	768.1	764.6	764.6	764.6	764.6	753.9	746.8
55°	665.0	657.9	661.5	661.5	661.5	661.5	665.0	661.5	661.5	650.8	640.1
57.5°	576.1	569.0	569.0	569.0	572.6	569.0	569.0	569.0	565.4	554.8	540.5
60°	490.8	487.2	490.8	490.8	494.3	490.8	490.8	490.8	483.6	473.0	458.8
62.5°	419.6	419.6	419.6	423.2	423.2	419.6	419.6	416.1	412.5	398.3	384.1
65°	359.2	355.6	359.2	359.2	362.7	362.7	359.2	355.6	352.1	337.8	323.6
67.5°	298.7	295.2	298.7	298.7	302.3	298.7	298.7	298.7	288.1	280.9	266.7
70°	241.8	238.3	238.3	238.3	241.8	234.7	238.3	238.3	231.2	220.5	206.3
72.5°	184.9	184.9	184.9	184.9	184.9	184.9	181.4	181.4	174.3	163.6	156.5
75°	135.1	135.1	138.7	138.7	135.1	135.1	135.1	131.6	128.0	120.9	113.8
77.5°	99.6	99.6	99.6	99.6	96.0	96.0	96.0	92.5	88.9	85.3	78.2
80°	71.1	71.1	71.1	67.6	71.1	67.6	67.6	67.6	60.5	56.9	53.3
82.5°	49.8	46.2	46.2	46.2	46.2	46.2	46.2	42.7	42.7	39.1	35.6
85°	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	24.9	21.3	21.3
87.5°	14.2	17.8	17.8	17.8	17.8	17.8	17.8	14.2	14.2	14.2	10.7
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: P252298

CATALOG NUMBER: LD6B50D010TE EU6B30508030 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5
2.5°	2930.3	2930.3	2937.4	2926.8	2944.5	2933.9	2930.3	2948.1	2937.4	2933.9	2941.0
5°	2905.4	2909.0	2912.5	2905.4	2923.2	2912.5	2912.5	2930.3	2923.2	2919.7	2930.3
7.5°	2873.4	2877.0	2884.1	2880.5	2894.8	2887.6	2891.2	2909.0	2901.9	2901.9	2912.5
10°	2834.3	2841.4	2848.5	2848.5	2866.3	2859.2	2859.2	2880.5	2873.4	2877.0	2891.2
12.5°	2788.1	2798.7	2809.4	2813.0	2830.7	2820.1	2823.6	2848.5	2845.0	2848.5	2862.8
15°	2738.3	2752.5	2763.2	2763.2	2784.5	2773.8	2784.5	2809.4	2802.3	2816.5	2834.3
17.5°	2681.4	2695.6	2709.8	2713.4	2734.7	2727.6	2741.8	2766.7	2766.7	2773.8	2795.2
20°	2628.0	2645.8	2652.9	2663.6	2684.9	2681.4	2688.5	2716.9	2716.9	2727.6	2749.0
22.5°	2556.9	2574.7	2588.9	2599.6	2617.4	2617.4	2628.0	2652.9	2652.9	2660.0	2681.4
25°	2478.7	2500.0	2510.7	2521.4	2539.1	2535.6	2546.2	2567.6	2571.1	2578.3	2599.6
27.5°	2379.1	2396.9	2411.1	2418.2	2443.1	2428.9	2439.6	2464.5	2460.9	2468.0	2485.8
30°	2254.6	2272.4	2286.6	2286.6	2308.0	2308.0	2318.7	2329.3	2329.3	2336.4	2350.7
32.5°	2108.8	2130.2	2130.2	2140.8	2155.1	2140.8	2155.1	2169.3	2162.2	2172.8	2183.5
35°	1941.7	1952.4	1955.9	1955.9	1966.6	1963.0	1959.5	1970.1	1963.0	1980.8	1991.5
37.5°	1739.0	1753.2	1746.1	1753.2	1749.7	1739.0	1739.0	1756.8	1742.5	1746.1	1756.8
40°	1543.4	1543.4	1539.8	1522.1	1525.6	1514.9	1511.4	1514.9	1500.7	1497.2	1511.4
42.5°	1340.7	1337.1	1326.5	1301.6	1305.1	1287.3	1273.1	1273.1	1266.0	1262.5	1266.0
45°	1159.3	1148.7	1130.9	1102.4	1095.3	1081.1	1052.6	1045.5	1034.9	1034.9	1038.4
47.5°	992.2	978.0	949.5	917.5	899.7	881.9	853.5	842.8	825.0	817.9	825.0
50°	853.5	828.6	793.0	746.8	729.0	707.7	679.2	661.5	643.7	636.6	633.0
52.5°	725.5	689.9	654.3	597.4	583.2	561.9	522.8	505.0	487.2	473.0	473.0
55°	615.2	583.2	533.4	480.1	458.8	437.4	398.3	373.4	355.6	348.5	341.4
57.5°	515.7	480.1	433.9	377.0	355.6	334.3	295.2	270.3	252.5	241.8	234.7
60°	433.9	394.7	348.5	298.7	273.8	252.5	213.4	188.5	170.7	160.0	152.9
62.5°	355.6	323.6	277.4	231.2	209.8	188.5	156.5	131.6	113.8	106.7	96.0
65°	298.7	266.7	224.0	184.9	167.1	145.8	117.4	96.0	81.8	71.1	64.0
67.5°	241.8	216.9	181.4	145.8	128.0	113.8	88.9	71.1	56.9	49.8	46.2
70°	192.0	167.1	138.7	110.2	99.6	85.3	67.6	49.8	42.7	35.6	32.0
72.5°	142.2	124.5	103.1	81.8	71.1	64.0	46.2	39.1	28.4	24.9	21.3
75°	103.1	88.9	74.7	56.9	49.8	46.2	35.6	24.9	21.3	17.8	14.2
77.5°	71.1	64.0	49.8	39.1	35.6	32.0	24.9	17.8	14.2	10.7	10.7
80°	46.2	39.1	32.0	24.9	24.9	21.3	14.2	10.7	10.7	7.1	7.1
82.5°	28.4	24.9	21.3	17.8	14.2	14.2	10.7	7.1	7.1	3.6	3.6
85°	17.8	14.2	10.7	10.7	7.1	7.1	7.1	3.6	3.6	3.6	3.6
87.5°	7.1	7.1	7.1	3.6	3.6	3.6	3.6	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: P252298

CATALOG NUMBER: LD6B50D010TE EU6B30508030 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5
2.5°	2941.0	2941.0	2948.1	2937.4	2944.5	2944.5	2951.7	2937.4	2944.5	2948.1	2955.2
5°	2926.8	2930.3	2937.4	2933.9	2937.4	2937.4	2944.5	2926.8	2941.0	2941.0	2951.7
7.5°	2912.5	2912.5	2919.7	2916.1	2923.2	2926.8	2933.9	2919.7	2933.9	2933.9	2944.5
10°	2894.8	2894.8	2905.4	2901.9	2912.5	2916.1	2926.8	2912.5	2926.8	2930.3	2941.0
12.5°	2869.9	2873.4	2884.1	2884.1	2894.8	2901.9	2912.5	2905.4	2923.2	2926.8	2941.0
15°	2841.4	2848.5	2862.8	2859.2	2869.9	2880.5	2894.8	2884.1	2909.0	2916.1	2930.3
17.5°	2805.9	2813.0	2823.6	2823.6	2834.3	2841.4	2859.2	2852.1	2873.4	2877.0	2894.8
20°	2752.5	2763.2	2777.4	2773.8	2784.5	2791.6	2805.9	2798.7	2820.1	2827.2	2845.0
22.5°	2688.5	2695.6	2706.3	2706.3	2716.9	2724.1	2738.3	2727.6	2749.0	2752.5	2766.7
25°	2603.1	2610.3	2617.4	2620.9	2631.6	2635.2	2642.3	2635.2	2652.9	2656.5	2674.3
27.5°	2492.9	2496.5	2507.1	2507.1	2514.2	2517.8	2528.5	2514.2	2539.1	2539.1	2549.8
30°	2361.3	2357.8	2372.0	2364.9	2372.0	2372.0	2382.7	2375.5	2393.3	2386.2	2396.9
32.5°	2187.1	2194.2	2194.2	2187.1	2201.3	2197.7	2197.7	2190.6	2201.3	2204.9	2212.0
35°	1984.4	1995.0	1995.0	1998.6	2002.1	1991.5	1995.0	1973.7	1991.5	1995.0	1998.6
37.5°	1763.9	1753.2	1760.3	1749.7	1767.4	1746.1	1746.1	1731.9	1746.1	1746.1	1749.7
40°	1511.4	1507.8	1514.9	1507.8	1504.3	1500.7	1493.6	1482.9	1497.2	1490.1	1500.7
42.5°	1273.1	1269.6	1269.6	1262.5	1258.9	1258.9	1251.8	1244.7	1241.1	1241.1	1258.9
45°	1027.7	1034.9	1027.7	1024.2	1031.3	1024.2	1027.7	1013.5	1020.6	1013.5	1020.6
47.5°	821.5	825.0	817.9	810.8	821.5	810.8	810.8	800.1	814.4	814.4	807.3
50°	636.6	633.0	625.9	633.0	629.4	629.4	629.4	618.8	625.9	615.2	622.3
52.5°	469.4	465.9	465.9	462.3	465.9	462.3	462.3	458.8	458.8	455.2	458.8
55°	341.4	337.8	330.7	330.7	330.7	334.3	330.7	327.2	327.2	323.6	327.2
57.5°	231.2	224.0	224.0	224.0	224.0	220.5	220.5	216.9	220.5	216.9	220.5
60°	149.4	149.4	142.2	142.2	142.2	142.2	142.2	138.7	142.2	142.2	142.2
62.5°	92.5	92.5	88.9	85.3	88.9	85.3	85.3	85.3	88.9	85.3	88.9
65°	60.5	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
67.5°	42.7	39.1	39.1	39.1	39.1	39.1	39.1	35.6	39.1	39.1	39.1
70°	28.4	28.4	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
72.5°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
75°	14.2	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
77.5°	10.7	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
80°	7.1	7.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
85°	3.6	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	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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: P252298

CATALOG NUMBER: LD6B50D010TE EU6B30508030 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5	2944.5
2.5°	2944.5	2948.1	2941.0	2944.5	2937.4	2944.5	2948.1	2955.2
5°	2937.4	2941.0	2933.9	2941.0	2933.9	2941.0	2944.5	2951.7
7.5°	2930.3	2937.4	2930.3	2937.4	2930.3	2937.4	2941.0	2948.1
10°	2930.3	2941.0	2933.9	2944.5	2933.9	2941.0	2948.1	2951.7
12.5°	2930.3	2941.0	2937.4	2944.5	2941.0	2948.1	2955.2	2962.3
15°	2923.2	2933.9	2926.8	2937.4	2933.9	2937.4	2951.7	2951.7
17.5°	2884.1	2894.8	2894.8	2901.9	2901.9	2912.5	2919.7	2926.8
20°	2834.3	2845.0	2841.4	2852.1	2852.1	2862.8	2869.9	2877.0
22.5°	2759.6	2773.8	2770.3	2781.0	2777.4	2784.5	2798.7	2795.2
25°	2663.6	2681.4	2677.8	2684.9	2681.4	2681.4	2688.5	2692.1
27.5°	2546.2	2556.9	2553.4	2560.5	2553.4	2560.5	2567.6	2571.1
30°	2393.3	2400.4	2396.9	2400.4	2396.9	2404.0	2407.6	2414.7
32.5°	2208.4	2219.1	2208.4	2215.5	2212.0	2212.0	2226.2	2219.1
35°	1987.9	1991.5	1995.0	1995.0	1987.9	1991.5	1998.6	1998.6
37.5°	1742.5	1760.3	1739.0	1749.7	1746.1	1746.1	1746.1	1756.8
40°	1486.5	1490.1	1482.9	1482.9	1482.9	1479.4	1493.6	1490.1
42.5°	1244.7	1248.2	1244.7	1234.0	1237.6	1237.6	1248.2	1234.0
45°	1010.0	1017.1	1013.5	1013.5	1006.4	1006.4	1010.0	1002.9
47.5°	800.1	807.3	796.6	800.1	793.0	800.1	796.6	803.7
50°	608.1	615.2	611.7	615.2	615.2	608.1	618.8	604.6
52.5°	455.2	458.8	455.2	451.6	448.1	448.1	455.2	451.6
55°	323.6	320.1	320.1	320.1	323.6	323.6	320.1	316.5
57.5°	216.9	216.9	213.4	213.4	216.9	209.8	213.4	209.8
60°	138.7	138.7	138.7	138.7	135.1	138.7	138.7	138.7
62.5°	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
65°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
67.5°	35.6	39.1	39.1	39.1	35.6	35.6	35.6	35.6
70°	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
72.5°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
75°	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
77.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	3.6	3.6	3.6	3.6	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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















(END OF REPORT)