

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: P252301

Luminaire Tested: **LD6B50D010TE EU6B30508050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252301
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 EU6B30508050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5114.0 lumens
Efficiency: N/A
Efficacy: 87.0 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

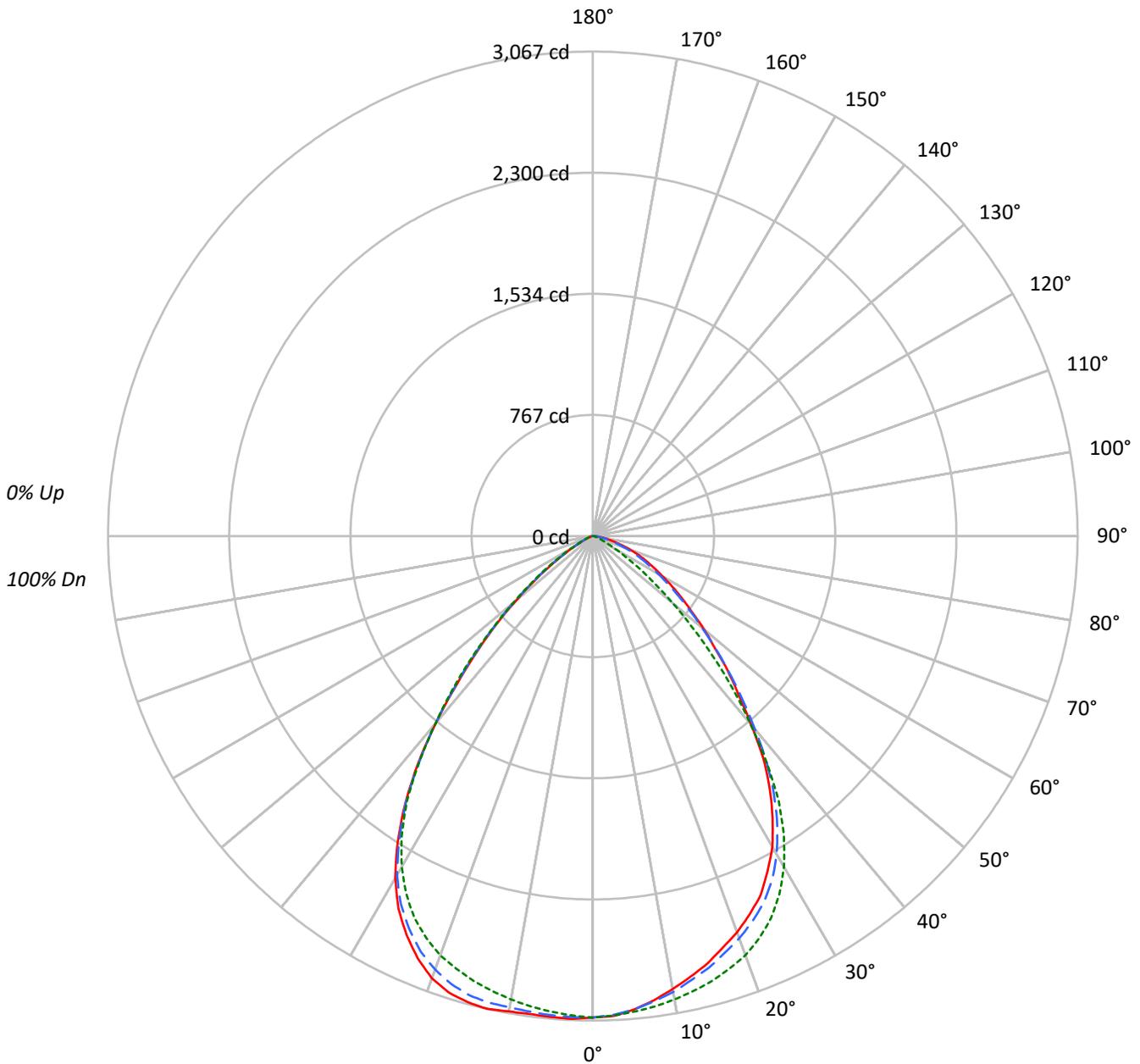
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

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								
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°	198873	198873	198873
5°	196980	197943	200111
10°	192911	197304	202425
15°	189226	196932	206382
20°	185309	196043	206776
25°	180740	192135	200615
30°	171120	182209	188311
35°	155402	163318	164784
40°	132628	131998	131368
45°	111409	98843	95789
50°	93042	66886	63527
55°	78301	41039	37274
60°	66284	21621	18737
65°	57396	11362	9093
70°	47745	7020	4921
75°	35265	4638	2773
80°	27652	2780	1390
85°	22082	2770	0



TEST NUMBER: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.3	5.6
10°-20°	822.6	16.1
20°-30°	1214.6	23.8
30°-40°	1251.8	24.5
40°-50°	864.6	16.9
50°-60°	426.2	8.3
60°-70°	172.7	3.4
70°-80°	61.5	1.2
80°-90°	12.7	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°	2324.5	45.5
0°-40°	3576.3	69.9
0°-60°	4867.1	95.2
0°-90°	5114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5114.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3048	3048	3048	3048	3048	
5°	3008	3008	3022	3045	3056	284
15°	2802	2831	2916	3011	3056	789
25°	2511	2559	2669	2746	2787	1148
35°	1951	1999	2051	2062	2069	1209
45°	1208	1215	1071	1057	1038	933
55°	688	663	361	339	328	622
65°	372	335	74	59	59	369
75°	140	118	18	11	11	157
85°	30	22	4	0	0	36
90°	0	0	0	0	0	



TEST NUMBER: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3
2.5°	3040.9	3029.9	3037.2	3022.5	3040.9	3022.5	3026.2	3029.9	3026.2	3029.9	3033.5
5°	3007.8	2996.7	3007.8	2989.4	3007.8	2996.7	2996.7	3000.4	3000.4	3004.1	3007.8
7.5°	2963.6	2952.5	2963.6	2945.2	2967.3	2956.2	2956.2	2963.6	2959.9	2963.6	2970.9
10°	2912.0	2897.3	2908.4	2897.3	2919.4	2904.7	2912.0	2912.0	2912.0	2923.1	2930.5
12.5°	2856.8	2842.1	2856.8	2838.4	2860.5	2849.5	2853.1	2864.2	2867.9	2875.2	2878.9
15°	2801.6	2783.2	2790.6	2779.5	2801.6	2790.6	2794.2	2809.0	2809.0	2820.0	2831.1
17.5°	2731.7	2716.9	2731.7	2716.9	2735.3	2728.0	2735.3	2746.4	2746.4	2757.4	2768.5
20°	2669.1	2654.3	2665.4	2654.3	2676.4	2665.4	2669.1	2683.8	2687.5	2698.5	2709.6
22.5°	2591.8	2580.7	2588.1	2577.0	2599.1	2591.8	2595.4	2610.2	2613.8	2621.2	2639.6
25°	2510.8	2488.7	2499.7	2492.4	2514.4	2503.4	2510.8	2525.5	2532.9	2543.9	2558.6
27.5°	2393.0	2381.9	2389.3	2389.3	2407.7	2396.6	2400.3	2415.0	2426.1	2437.1	2455.5
30°	2271.5	2253.1	2260.4	2264.1	2278.8	2271.5	2278.8	2293.6	2297.2	2312.0	2326.7
32.5°	2116.8	2109.5	2124.2	2116.8	2124.2	2124.2	2127.9	2138.9	2146.3	2153.7	2172.1
35°	1951.2	1936.5	1951.2	1943.8	1962.2	1951.2	1962.2	1973.3	1973.3	1988.0	1999.0
37.5°	1770.8	1752.4	1759.7	1759.7	1767.1	1763.4	1763.4	1781.8	1785.5	1796.6	1807.6
40°	1557.3	1549.9	1564.6	1560.9	1564.6	1564.6	1568.3	1579.4	1586.7	1590.4	1594.1
42.5°	1365.8	1369.5	1373.2	1373.2	1373.2	1373.2	1373.2	1387.9	1384.2	1395.3	1399.0
45°	1207.5	1192.8	1200.2	1196.5	1207.5	1196.5	1207.5	1218.6	1211.2	1222.2	1214.9
47.5°	1045.5	1045.5	1045.5	1041.9	1049.2	1045.5	1052.9	1056.6	1056.6	1056.6	1052.9
50°	916.7	905.6	909.3	909.3	913.0	909.3	916.7	920.4	920.4	913.0	898.3
52.5°	791.5	787.8	787.8	795.2	795.2	791.5	791.5	791.5	791.5	780.5	773.1
55°	688.4	681.1	684.8	684.8	684.8	684.8	688.4	684.8	684.8	673.7	662.7
57.5°	596.4	589.0	589.0	589.0	592.7	589.0	589.0	589.0	585.4	574.3	559.6
60°	508.0	504.4	508.0	508.0	511.7	508.0	508.0	508.0	500.7	489.6	474.9
62.5°	434.4	434.4	434.4	438.1	438.1	434.4	434.4	430.7	427.1	412.3	397.6
65°	371.8	368.1	371.8	371.8	375.5	375.5	371.8	368.1	364.5	349.7	335.0
67.5°	309.2	305.6	309.2	309.2	312.9	309.2	309.2	309.2	298.2	290.8	276.1
70°	250.3	246.7	246.7	246.7	250.3	243.0	246.7	246.7	239.3	228.3	213.5
72.5°	191.4	191.4	191.4	191.4	191.4	191.4	187.8	187.8	180.4	169.3	162.0
75°	139.9	139.9	143.6	143.6	139.9	139.9	139.9	136.2	132.5	125.2	117.8
77.5°	103.1	103.1	103.1	103.1	99.4	99.4	99.4	95.7	92.0	88.4	81.0
80°	73.6	73.6	73.6	69.9	73.6	69.9	69.9	69.9	62.6	58.9	55.2
82.5°	51.5	47.9	47.9	47.9	47.9	47.9	47.9	44.2	44.2	40.5	36.8
85°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	25.8	22.1	22.1
87.5°	14.7	18.4	18.4	18.4	18.4	18.4	18.4	14.7	14.7	14.7	11.0
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: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3
2.5°	3033.5	3033.5	3040.9	3029.9	3048.3	3037.2	3033.5	3051.9	3040.9	3037.2	3044.6
5°	3007.8	3011.4	3015.1	3007.8	3026.2	3015.1	3015.1	3033.5	3026.2	3022.5	3033.5
7.5°	2974.6	2978.3	2985.7	2982.0	2996.7	2989.4	2993.0	3011.4	3004.1	3004.1	3015.1
10°	2934.1	2941.5	2948.9	2948.9	2967.3	2959.9	2959.9	2982.0	2974.6	2978.3	2993.0
12.5°	2886.3	2897.3	2908.4	2912.0	2930.5	2919.4	2923.1	2948.9	2945.2	2948.9	2963.6
15°	2834.7	2849.5	2860.5	2860.5	2882.6	2871.5	2882.6	2908.4	2901.0	2915.7	2934.1
17.5°	2775.8	2790.6	2805.3	2809.0	2831.1	2823.7	2838.4	2864.2	2864.2	2871.5	2893.6
20°	2720.6	2739.0	2746.4	2757.4	2779.5	2775.8	2783.2	2812.6	2812.6	2823.7	2845.8
22.5°	2647.0	2665.4	2680.1	2691.2	2709.6	2709.6	2720.6	2746.4	2746.4	2753.7	2775.8
25°	2566.0	2588.1	2599.1	2610.2	2628.6	2624.9	2635.9	2658.0	2661.7	2669.1	2691.2
27.5°	2462.9	2481.3	2496.0	2503.4	2529.2	2514.4	2525.5	2551.3	2547.6	2554.9	2573.3
30°	2334.1	2352.5	2367.2	2367.2	2389.3	2389.3	2400.3	2411.4	2411.4	2418.7	2433.5
32.5°	2183.1	2205.2	2205.2	2216.2	2231.0	2216.2	2231.0	2245.7	2238.3	2249.4	2260.4
35°	2010.1	2021.1	2024.8	2024.8	2035.9	2032.2	2028.5	2039.5	2032.2	2050.6	2061.6
37.5°	1800.2	1815.0	1807.6	1815.0	1811.3	1800.2	1800.2	1818.6	1803.9	1807.6	1818.6
40°	1597.8	1597.8	1594.1	1575.7	1579.4	1568.3	1564.6	1568.3	1553.6	1549.9	1564.6
42.5°	1387.9	1384.2	1373.2	1347.4	1351.1	1332.7	1318.0	1318.0	1310.6	1306.9	1310.6
45°	1200.2	1189.1	1170.7	1141.3	1133.9	1119.2	1089.7	1082.4	1071.3	1071.3	1075.0
47.5°	1027.1	1012.4	983.0	949.8	931.4	913.0	883.6	872.5	854.1	846.7	854.1
50°	883.6	857.8	821.0	773.1	754.7	732.6	703.2	684.8	666.3	659.0	655.3
52.5°	751.0	714.2	677.4	618.5	603.8	581.7	541.2	522.8	504.4	489.6	489.6
55°	636.9	603.8	552.2	497.0	474.9	452.8	412.3	386.6	368.1	360.8	353.4
57.5°	533.8	497.0	449.1	390.2	368.1	346.1	305.6	279.8	261.4	250.3	243.0
60°	449.1	408.6	360.8	309.2	283.5	261.4	220.9	195.1	176.7	165.7	158.3
62.5°	368.1	335.0	287.2	239.3	217.2	195.1	162.0	136.2	117.8	110.4	99.4
65°	309.2	276.1	231.9	191.4	173.0	150.9	121.5	99.4	84.7	73.6	66.3
67.5°	250.3	224.6	187.8	150.9	132.5	117.8	92.0	73.6	58.9	51.5	47.9
70°	198.8	173.0	143.6	114.1	103.1	88.4	69.9	51.5	44.2	36.8	33.1
72.5°	147.3	128.9	106.8	84.7	73.6	66.3	47.9	40.5	29.5	25.8	22.1
75°	106.8	92.0	77.3	58.9	51.5	47.9	36.8	25.8	22.1	18.4	14.7
77.5°	73.6	66.3	51.5	40.5	36.8	33.1	25.8	18.4	14.7	11.0	11.0
80°	47.9	40.5	33.1	25.8	25.8	22.1	14.7	11.0	11.0	7.4	7.4
82.5°	29.5	25.8	22.1	18.4	14.7	14.7	11.0	7.4	7.4	3.7	3.7
85°	18.4	14.7	11.0	11.0	7.4	7.4	7.4	3.7	3.7	3.7	3.7
87.5°	7.4	7.4	7.4	3.7	3.7	3.7	3.7	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: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3
2.5°	3044.6	3044.6	3051.9	3040.9	3048.3	3048.3	3055.6	3040.9	3048.3	3051.9	3059.3
5°	3029.9	3033.5	3040.9	3037.2	3040.9	3040.9	3048.3	3029.9	3044.6	3044.6	3055.6
7.5°	3015.1	3015.1	3022.5	3018.8	3026.2	3029.9	3037.2	3022.5	3037.2	3037.2	3048.3
10°	2996.7	2996.7	3007.8	3004.1	3015.1	3018.8	3029.9	3015.1	3029.9	3033.5	3044.6
12.5°	2970.9	2974.6	2985.7	2985.7	2996.7	3004.1	3015.1	3007.8	3026.2	3029.9	3044.6
15°	2941.5	2948.9	2963.6	2959.9	2970.9	2982.0	2996.7	2985.7	3011.4	3018.8	3033.5
17.5°	2904.7	2912.0	2923.1	2923.1	2934.1	2941.5	2959.9	2952.5	2974.6	2978.3	2996.7
20°	2849.5	2860.5	2875.2	2871.5	2882.6	2890.0	2904.7	2897.3	2919.4	2926.8	2945.2
22.5°	2783.2	2790.6	2801.6	2801.6	2812.6	2820.0	2834.7	2823.7	2845.8	2849.5	2864.2
25°	2694.8	2702.2	2709.6	2713.2	2724.3	2728.0	2735.3	2728.0	2746.4	2750.1	2768.5
27.5°	2580.7	2584.4	2595.4	2595.4	2602.8	2606.5	2617.5	2602.8	2628.6	2628.6	2639.6
30°	2444.5	2440.8	2455.5	2448.2	2455.5	2455.5	2466.6	2459.2	2477.6	2470.3	2481.3
32.5°	2264.1	2271.5	2271.5	2264.1	2278.8	2275.1	2275.1	2267.8	2278.8	2282.5	2289.9
35°	2054.3	2065.3	2065.3	2069.0	2072.7	2061.6	2065.3	2043.2	2061.6	2065.3	2069.0
37.5°	1826.0	1815.0	1822.3	1811.3	1829.7	1807.6	1807.6	1792.9	1807.6	1807.6	1811.3
40°	1564.6	1560.9	1568.3	1560.9	1557.3	1553.6	1546.2	1535.2	1549.9	1542.5	1553.6
42.5°	1318.0	1314.3	1314.3	1306.9	1303.2	1303.2	1295.9	1288.5	1284.8	1284.8	1303.2
45°	1063.9	1071.3	1063.9	1060.3	1067.6	1060.3	1063.9	1049.2	1056.6	1049.2	1056.6
47.5°	850.4	854.1	846.7	839.4	850.4	839.4	839.4	828.3	843.1	843.1	835.7
50°	659.0	655.3	647.9	655.3	651.6	651.6	651.6	640.6	647.9	636.9	644.3
52.5°	486.0	482.3	482.3	478.6	482.3	478.6	478.6	474.9	474.9	471.2	474.9
55°	353.4	349.7	342.4	342.4	342.4	346.1	342.4	338.7	338.7	335.0	338.7
57.5°	239.3	231.9	231.9	231.9	231.9	228.3	228.3	224.6	228.3	224.6	228.3
60°	154.6	154.6	147.3	147.3	147.3	147.3	147.3	143.6	147.3	147.3	147.3
62.5°	95.7	95.7	92.0	88.4	92.0	88.4	88.4	88.4	92.0	88.4	92.0
65°	62.6	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
67.5°	44.2	40.5	40.5	40.5	40.5	40.5	40.5	36.8	40.5	40.5	40.5
70°	29.5	29.5	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
72.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
75°	14.7	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
77.5°	11.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
80°	7.4	7.4	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
85°	3.7	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	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
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: P252301

CATALOG NUMBER: LD6B50D010TE EU6B30508050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3	3048.3
2.5°	3048.3	3051.9	3044.6	3048.3	3040.9	3048.3	3051.9	3059.3
5°	3040.9	3044.6	3037.2	3044.6	3037.2	3044.6	3048.3	3055.6
7.5°	3033.5	3040.9	3033.5	3040.9	3033.5	3040.9	3044.6	3051.9
10°	3033.5	3044.6	3037.2	3048.3	3037.2	3044.6	3051.9	3055.6
12.5°	3033.5	3044.6	3040.9	3048.3	3044.6	3051.9	3059.3	3066.7
15°	3026.2	3037.2	3029.9	3040.9	3037.2	3040.9	3055.6	3055.6
17.5°	2985.7	2996.7	2996.7	3004.1	3004.1	3015.1	3022.5	3029.9
20°	2934.1	2945.2	2941.5	2952.5	2952.5	2963.6	2970.9	2978.3
22.5°	2856.8	2871.5	2867.9	2878.9	2875.2	2882.6	2897.3	2893.6
25°	2757.4	2775.8	2772.1	2779.5	2775.8	2775.8	2783.2	2786.9
27.5°	2635.9	2647.0	2643.3	2650.7	2643.3	2650.7	2658.0	2661.7
30°	2477.6	2485.0	2481.3	2485.0	2481.3	2488.7	2492.4	2499.7
32.5°	2286.2	2297.2	2286.2	2293.6	2289.9	2289.9	2304.6	2297.2
35°	2057.9	2061.6	2065.3	2065.3	2057.9	2061.6	2069.0	2069.0
37.5°	1803.9	1822.3	1800.2	1811.3	1807.6	1807.6	1807.6	1818.6
40°	1538.9	1542.5	1535.2	1535.2	1535.2	1531.5	1546.2	1542.5
42.5°	1288.5	1292.2	1288.5	1277.5	1281.2	1281.2	1292.2	1277.5
45°	1045.5	1052.9	1049.2	1049.2	1041.9	1041.9	1045.5	1038.2
47.5°	828.3	835.7	824.6	828.3	821.0	828.3	824.6	832.0
50°	629.5	636.9	633.2	636.9	636.9	629.5	640.6	625.9
52.5°	471.2	474.9	471.2	467.5	463.9	463.9	471.2	467.5
55°	335.0	331.3	331.3	331.3	335.0	335.0	331.3	327.7
57.5°	224.6	224.6	220.9	220.9	224.6	217.2	220.9	217.2
60°	143.6	143.6	143.6	143.6	139.9	143.6	143.6	143.6
62.5°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
65°	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
67.5°	36.8	40.5	40.5	40.5	36.8	36.8	36.8	36.8
70°	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
72.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
75°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
77.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	3.7	3.7	3.7	3.7	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)