

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: P252299

Luminaire Tested: **LD6B50D010TE EU6B30508035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252299
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 EU6B30508035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5067.0 lumens
Efficiency: N/A
Efficacy: 86.2 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

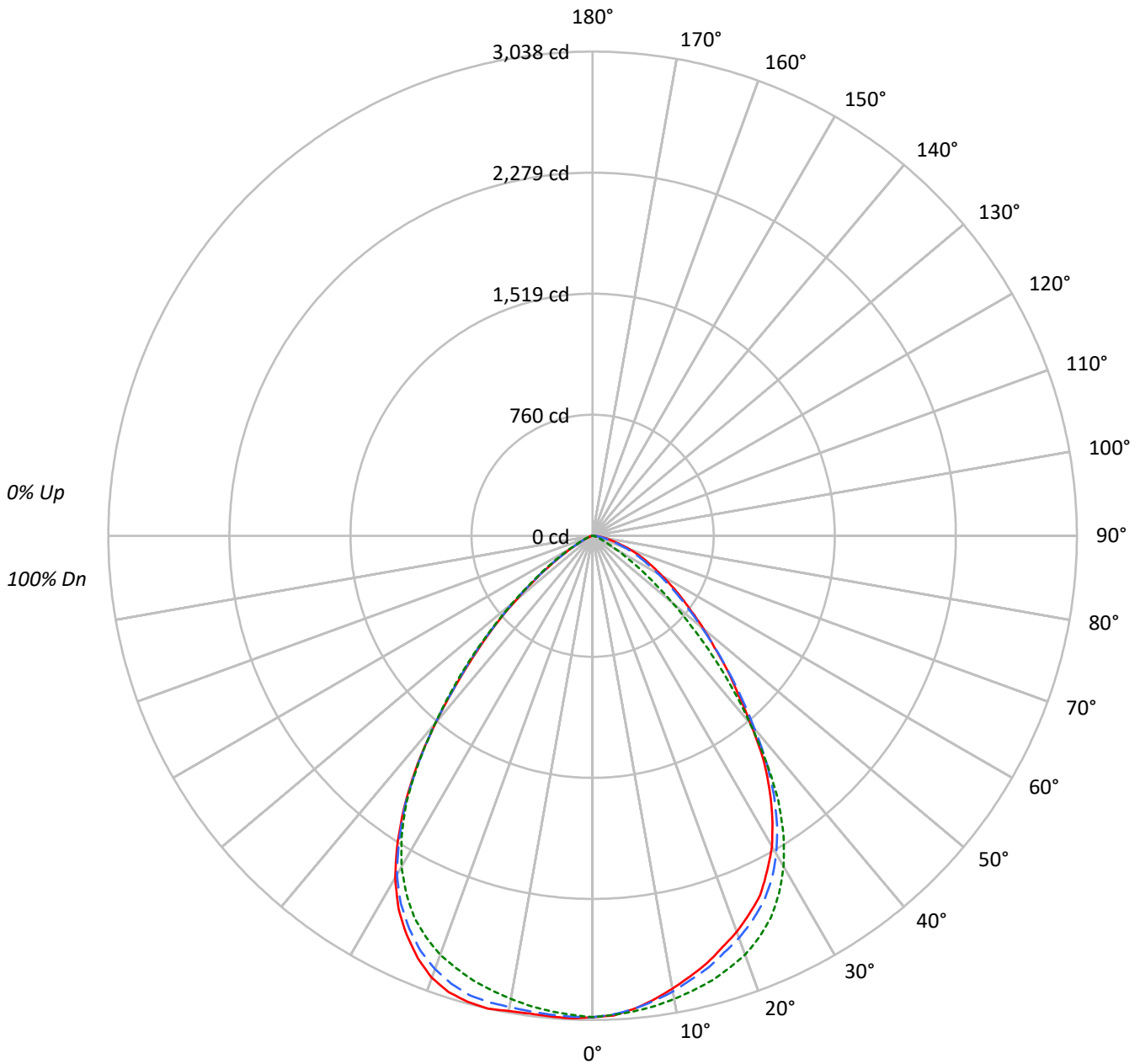
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

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°	197040	197040	197040
5°	195166	196122	198270
10°	191143	195488	200563
15°	187490	195122	204484
20°	183601	194238	204874
25°	179077	190365	198772
30°	169545	180536	186578
35°	153968	161813	163270
40°	131411	130789	130167
45°	110385	97938	94903
50°	92189	66267	62938
55°	77584	40663	36921
60°	65684	21412	18567
65°	56871	11269	9015
70°	47306	6962	4864
75°	34937	4588	2748
80°	27427	2743	1353
85°	21858	2695	0



TEST NUMBER: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.6	5.6
10°-20°	815.0	16.1
20°-30°	1203.5	23.8
30°-40°	1240.3	24.5
40°-50°	856.7	16.9
50°-60°	422.2	8.3
60°-70°	171.1	3.4
70°-80°	61.0	1.2
80°-90°	12.6	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°	2303.1	45.5
0°-40°	3543.4	69.9
0°-60°	4822.3	95.2
0°-90°	5067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5067.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3020	3020	3020	3020	3020	
5°	2980	2980	2995	3017	3028	281
15°	2776	2805	2889	2984	3028	782
25°	2488	2535	2644	2721	2761	1137
35°	1933	1981	2032	2043	2050	1198
45°	1196	1204	1062	1047	1029	925
55°	682	657	358	336	325	616
65°	368	332	73	58	58	366
75°	139	117	18	11	11	156
85°	29	22	4	0	0	36
90°	0	0	0	0	0	



TEST NUMBER: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2
2.5°	3012.9	3002.0	3009.3	2994.7	3012.9	2994.7	2998.4	3002.0	2998.4	3002.0	3005.7
5°	2980.1	2969.2	2980.1	2961.9	2980.1	2969.2	2969.2	2972.8	2972.8	2976.5	2980.1
7.5°	2936.3	2925.4	2936.3	2918.1	2940.0	2929.1	2929.1	2936.3	2932.7	2936.3	2943.6
10°	2885.3	2870.7	2881.6	2870.7	2892.6	2878.0	2885.3	2885.3	2885.3	2896.2	2903.5
12.5°	2830.6	2816.0	2830.6	2812.3	2834.2	2823.3	2826.9	2837.9	2841.5	2848.8	2852.5
15°	2775.9	2757.6	2764.9	2754.0	2775.9	2764.9	2768.6	2783.1	2783.1	2794.1	2805.0
17.5°	2706.5	2692.0	2706.5	2692.0	2710.2	2702.9	2710.2	2721.1	2721.1	2732.1	2743.0
20°	2644.5	2629.9	2640.9	2629.9	2651.8	2640.9	2644.5	2659.1	2662.8	2673.7	2684.7
22.5°	2567.9	2557.0	2564.3	2553.3	2575.2	2567.9	2571.6	2586.2	2589.8	2597.1	2615.4
25°	2487.7	2465.8	2476.7	2469.5	2491.3	2480.4	2487.7	2502.3	2509.6	2520.5	2535.1
27.5°	2371.0	2360.0	2367.3	2367.3	2385.6	2374.6	2378.3	2392.9	2403.8	2414.7	2433.0
30°	2250.6	2232.4	2239.6	2243.3	2257.9	2250.6	2257.9	2272.5	2276.1	2290.7	2305.3
32.5°	2097.4	2090.1	2104.7	2097.4	2104.7	2104.7	2108.3	2119.3	2126.6	2133.9	2152.1
35°	1933.2	1918.7	1933.2	1926.0	1944.2	1933.2	1944.2	1955.1	1955.1	1969.7	1980.7
37.5°	1754.5	1736.3	1743.6	1743.6	1750.9	1747.2	1747.2	1765.5	1769.1	1780.0	1791.0
40°	1543.0	1535.7	1550.2	1546.6	1550.2	1550.2	1553.9	1564.8	1572.1	1575.8	1579.4
42.5°	1353.3	1356.9	1360.6	1360.6	1360.6	1360.6	1360.6	1375.2	1371.5	1382.5	1386.1
45°	1196.4	1181.8	1189.1	1185.5	1196.4	1185.5	1196.4	1207.4	1200.1	1211.0	1203.7
47.5°	1035.9	1035.9	1035.9	1032.3	1039.6	1035.9	1043.2	1046.9	1046.9	1046.9	1043.2
50°	908.3	897.3	901.0	901.0	904.6	901.0	908.3	911.9	911.9	904.6	890.0
52.5°	784.2	780.6	780.6	787.9	787.9	784.2	784.2	784.2	784.2	773.3	766.0
55°	682.1	674.8	678.5	678.5	678.5	678.5	682.1	678.5	678.5	667.5	656.6
57.5°	590.9	583.6	583.6	583.6	587.3	583.6	583.6	583.6	580.0	569.0	554.4
60°	503.4	499.7	503.4	503.4	507.0	503.4	503.4	503.4	496.1	485.1	470.5
62.5°	430.4	430.4	430.4	434.1	434.1	430.4	430.4	426.8	423.1	408.5	393.9
65°	368.4	364.8	368.4	368.4	372.1	372.1	368.4	364.8	361.1	346.5	331.9
67.5°	306.4	302.8	306.4	306.4	310.0	306.4	306.4	306.4	295.5	288.2	273.6
70°	248.0	244.4	244.4	244.4	248.0	240.7	244.4	244.4	237.1	226.2	211.6
72.5°	189.7	189.7	189.7	189.7	189.7	189.7	186.0	186.0	178.7	167.8	160.5
75°	138.6	138.6	142.3	142.3	138.6	138.6	138.6	135.0	131.3	124.0	116.7
77.5°	102.1	102.1	102.1	102.1	98.5	98.5	98.5	94.8	91.2	87.5	80.2
80°	73.0	73.0	73.0	69.3	73.0	69.3	69.3	69.3	62.0	58.4	54.7
82.5°	51.1	47.4	47.4	47.4	47.4	47.4	47.4	43.8	43.8	40.1	36.5
85°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	25.5	21.9	21.9
87.5°	14.6	18.2	18.2	18.2	18.2	18.2	18.2	14.6	14.6	14.6	10.9
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: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2
2.5°	3005.7	3005.7	3012.9	3002.0	3020.2	3009.3	3005.7	3023.9	3012.9	3009.3	3016.6
5°	2980.1	2983.8	2987.4	2980.1	2998.4	2987.4	2987.4	3005.7	2998.4	2994.7	3005.7
7.5°	2947.3	2950.9	2958.2	2954.6	2969.2	2961.9	2965.5	2983.8	2976.5	2976.5	2987.4
10°	2907.2	2914.5	2921.8	2921.8	2940.0	2932.7	2932.7	2954.6	2947.3	2950.9	2965.5
12.5°	2859.7	2870.7	2881.6	2885.3	2903.5	2892.6	2896.2	2921.8	2918.1	2921.8	2936.3
15°	2808.7	2823.3	2834.2	2834.2	2856.1	2845.2	2856.1	2881.6	2874.3	2888.9	2907.2
17.5°	2750.3	2764.9	2779.5	2783.1	2805.0	2797.7	2812.3	2837.9	2837.9	2845.2	2867.0
20°	2695.6	2713.8	2721.1	2732.1	2754.0	2750.3	2757.6	2786.8	2786.8	2797.7	2819.6
22.5°	2622.7	2640.9	2655.5	2666.4	2684.7	2684.7	2695.6	2721.1	2721.1	2728.4	2750.3
25°	2542.4	2564.3	2575.2	2586.2	2604.4	2600.8	2611.7	2633.6	2637.2	2644.5	2666.4
27.5°	2440.3	2458.5	2473.1	2480.4	2505.9	2491.3	2502.3	2527.8	2524.2	2531.5	2549.7
30°	2312.6	2330.8	2345.4	2345.4	2367.3	2367.3	2378.3	2389.2	2389.2	2396.5	2411.1
32.5°	2163.0	2184.9	2184.9	2195.9	2210.5	2195.9	2210.5	2225.1	2217.8	2228.7	2239.6
35°	1991.6	2002.6	2006.2	2006.2	2017.1	2013.5	2009.8	2020.8	2013.5	2031.7	2042.7
37.5°	1783.7	1798.3	1791.0	1798.3	1794.6	1783.7	1783.7	1801.9	1787.3	1791.0	1801.9
40°	1583.1	1583.1	1579.4	1561.2	1564.8	1553.9	1550.2	1553.9	1539.3	1535.7	1550.2
42.5°	1375.2	1371.5	1360.6	1335.0	1338.7	1320.4	1305.9	1305.9	1298.6	1294.9	1298.6
45°	1189.1	1178.2	1159.9	1130.8	1123.5	1108.9	1079.7	1072.4	1061.5	1061.5	1065.1
47.5°	1017.7	1003.1	973.9	941.1	922.9	904.6	875.4	864.5	846.3	839.0	846.3
50°	875.4	849.9	813.4	766.0	747.8	725.9	696.7	678.5	660.2	652.9	649.3
52.5°	744.1	707.6	671.2	612.8	598.2	576.3	536.2	518.0	499.7	485.1	485.1
55°	631.0	598.2	547.1	492.4	470.5	448.7	408.5	383.0	364.8	357.5	350.2
57.5°	528.9	492.4	445.0	386.6	364.8	342.9	302.8	277.2	259.0	248.0	240.7
60°	445.0	404.9	357.5	306.4	280.9	259.0	218.9	193.3	175.1	164.1	156.8
62.5°	364.8	331.9	284.5	237.1	215.2	193.3	160.5	135.0	116.7	109.4	98.5
65°	306.4	273.6	229.8	189.7	171.4	149.6	120.4	98.5	83.9	73.0	65.7
67.5°	248.0	222.5	186.0	149.6	131.3	116.7	91.2	73.0	58.4	51.1	47.4
70°	197.0	171.4	142.3	113.1	102.1	87.5	69.3	51.1	43.8	36.5	32.8
72.5°	145.9	127.7	105.8	83.9	73.0	65.7	47.4	40.1	29.2	25.5	21.9
75°	105.8	91.2	76.6	58.4	51.1	47.4	36.5	25.5	21.9	18.2	14.6
77.5°	73.0	65.7	51.1	40.1	36.5	32.8	25.5	18.2	14.6	10.9	10.9
80°	47.4	40.1	32.8	25.5	25.5	21.9	14.6	10.9	10.9	7.3	7.3
82.5°	29.2	25.5	21.9	18.2	14.6	14.6	10.9	7.3	7.3	3.6	3.6
85°	18.2	14.6	10.9	10.9	7.3	7.3	7.3	3.6	3.6	3.6	3.6
87.5°	7.3	7.3	7.3	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: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2
2.5°	3016.6	3016.6	3023.9	3012.9	3020.2	3020.2	3027.5	3012.9	3020.2	3023.9	3031.2
5°	3002.0	3005.7	3012.9	3009.3	3012.9	3012.9	3020.2	3002.0	3016.6	3016.6	3027.5
7.5°	2987.4	2987.4	2994.7	2991.1	2998.4	3002.0	3009.3	2994.7	3009.3	3009.3	3020.2
10°	2969.2	2969.2	2980.1	2976.5	2987.4	2991.1	3002.0	2987.4	3002.0	3005.7	3016.6
12.5°	2943.6	2947.3	2958.2	2958.2	2969.2	2976.5	2987.4	2980.1	2998.4	3002.0	3016.6
15°	2914.5	2921.8	2936.3	2932.7	2943.6	2954.6	2969.2	2958.2	2983.8	2991.1	3005.7
17.5°	2878.0	2885.3	2896.2	2896.2	2907.2	2914.5	2932.7	2925.4	2947.3	2950.9	2969.2
20°	2823.3	2834.2	2848.8	2845.2	2856.1	2863.4	2878.0	2870.7	2892.6	2899.9	2918.1
22.5°	2757.6	2764.9	2775.9	2775.9	2786.8	2794.1	2808.7	2797.7	2819.6	2823.3	2837.9
25°	2670.1	2677.4	2684.7	2688.3	2699.3	2702.9	2710.2	2702.9	2721.1	2724.8	2743.0
27.5°	2557.0	2560.6	2571.6	2571.6	2578.9	2582.5	2593.5	2578.9	2604.4	2604.4	2615.4
30°	2422.0	2418.4	2433.0	2425.7	2433.0	2433.0	2443.9	2436.6	2454.9	2447.6	2458.5
32.5°	2243.3	2250.6	2250.6	2243.3	2257.9	2254.2	2254.2	2246.9	2257.9	2261.5	2268.8
35°	2035.4	2046.3	2046.3	2050.0	2053.6	2042.7	2046.3	2024.4	2042.7	2046.3	2050.0
37.5°	1809.2	1798.3	1805.6	1794.6	1812.9	1791.0	1791.0	1776.4	1791.0	1791.0	1794.6
40°	1550.2	1546.6	1553.9	1546.6	1543.0	1539.3	1532.0	1521.1	1535.7	1528.4	1539.3
42.5°	1305.9	1302.2	1302.2	1294.9	1291.3	1291.3	1284.0	1276.7	1273.0	1273.0	1291.3
45°	1054.2	1061.5	1054.2	1050.5	1057.8	1050.5	1054.2	1039.6	1046.9	1039.6	1046.9
47.5°	842.6	846.3	839.0	831.7	842.6	831.7	831.7	820.7	835.3	835.3	828.0
50°	652.9	649.3	642.0	649.3	645.6	645.6	645.6	634.7	642.0	631.0	638.3
52.5°	481.5	477.8	477.8	474.2	477.8	474.2	474.2	470.5	470.5	466.9	470.5
55°	350.2	346.5	339.2	339.2	339.2	342.9	339.2	335.6	335.6	331.9	335.6
57.5°	237.1	229.8	229.8	229.8	229.8	226.2	226.2	222.5	226.2	222.5	226.2
60°	153.2	153.2	145.9	145.9	145.9	145.9	145.9	142.3	145.9	145.9	145.9
62.5°	94.8	94.8	91.2	87.5	91.2	87.5	87.5	87.5	91.2	87.5	91.2
65°	62.0	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
67.5°	43.8	40.1	40.1	40.1	40.1	40.1	40.1	36.5	40.1	40.1	40.1
70°	29.2	29.2	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
72.5°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
75°	14.6	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
77.5°	10.9	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
80°	7.3	7.3	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: P252299

CATALOG NUMBER: LD6B50D010TE EU6B30508035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2	3020.2
2.5°	3020.2	3023.9	3016.6	3020.2	3012.9	3020.2	3023.9	3031.2
5°	3012.9	3016.6	3009.3	3016.6	3009.3	3016.6	3020.2	3027.5
7.5°	3005.7	3012.9	3005.7	3012.9	3005.7	3012.9	3016.6	3023.9
10°	3005.7	3016.6	3009.3	3020.2	3009.3	3016.6	3023.9	3027.5
12.5°	3005.7	3016.6	3012.9	3020.2	3016.6	3023.9	3031.2	3038.5
15°	2998.4	3009.3	3002.0	3012.9	3009.3	3012.9	3027.5	3027.5
17.5°	2958.2	2969.2	2969.2	2976.5	2976.5	2987.4	2994.7	3002.0
20°	2907.2	2918.1	2914.5	2925.4	2925.4	2936.3	2943.6	2950.9
22.5°	2830.6	2845.2	2841.5	2852.5	2848.8	2856.1	2870.7	2867.0
25°	2732.1	2750.3	2746.7	2754.0	2750.3	2750.3	2757.6	2761.3
27.5°	2611.7	2622.7	2619.0	2626.3	2619.0	2626.3	2633.6	2637.2
30°	2454.9	2462.2	2458.5	2462.2	2458.5	2465.8	2469.5	2476.7
32.5°	2265.2	2276.1	2265.2	2272.5	2268.8	2268.8	2283.4	2276.1
35°	2039.0	2042.7	2046.3	2046.3	2039.0	2042.7	2050.0	2050.0
37.5°	1787.3	1805.6	1783.7	1794.6	1791.0	1791.0	1791.0	1801.9
40°	1524.7	1528.4	1521.1	1521.1	1521.1	1517.4	1532.0	1528.4
42.5°	1276.7	1280.3	1276.7	1265.7	1269.4	1269.4	1280.3	1265.7
45°	1035.9	1043.2	1039.6	1039.6	1032.3	1032.3	1035.9	1028.6
47.5°	820.7	828.0	817.1	820.7	813.4	820.7	817.1	824.4
50°	623.7	631.0	627.4	631.0	631.0	623.7	634.7	620.1
52.5°	466.9	470.5	466.9	463.2	459.6	459.6	466.9	463.2
55°	331.9	328.3	328.3	328.3	331.9	331.9	328.3	324.6
57.5°	222.5	222.5	218.9	218.9	222.5	215.2	218.9	215.2
60°	142.3	142.3	142.3	142.3	138.6	142.3	142.3	142.3
62.5°	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
65°	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
67.5°	36.5	40.1	40.1	40.1	36.5	36.5	36.5	36.5
70°	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
72.5°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
75°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
77.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
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)