

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: P252316

Luminaire Tested: **LD6B60D010TE EU6B60709027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252316
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: LD6B60D010TE EU6B60709027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4534.0 lumens
Efficiency: N/A
Efficacy: 72.6 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

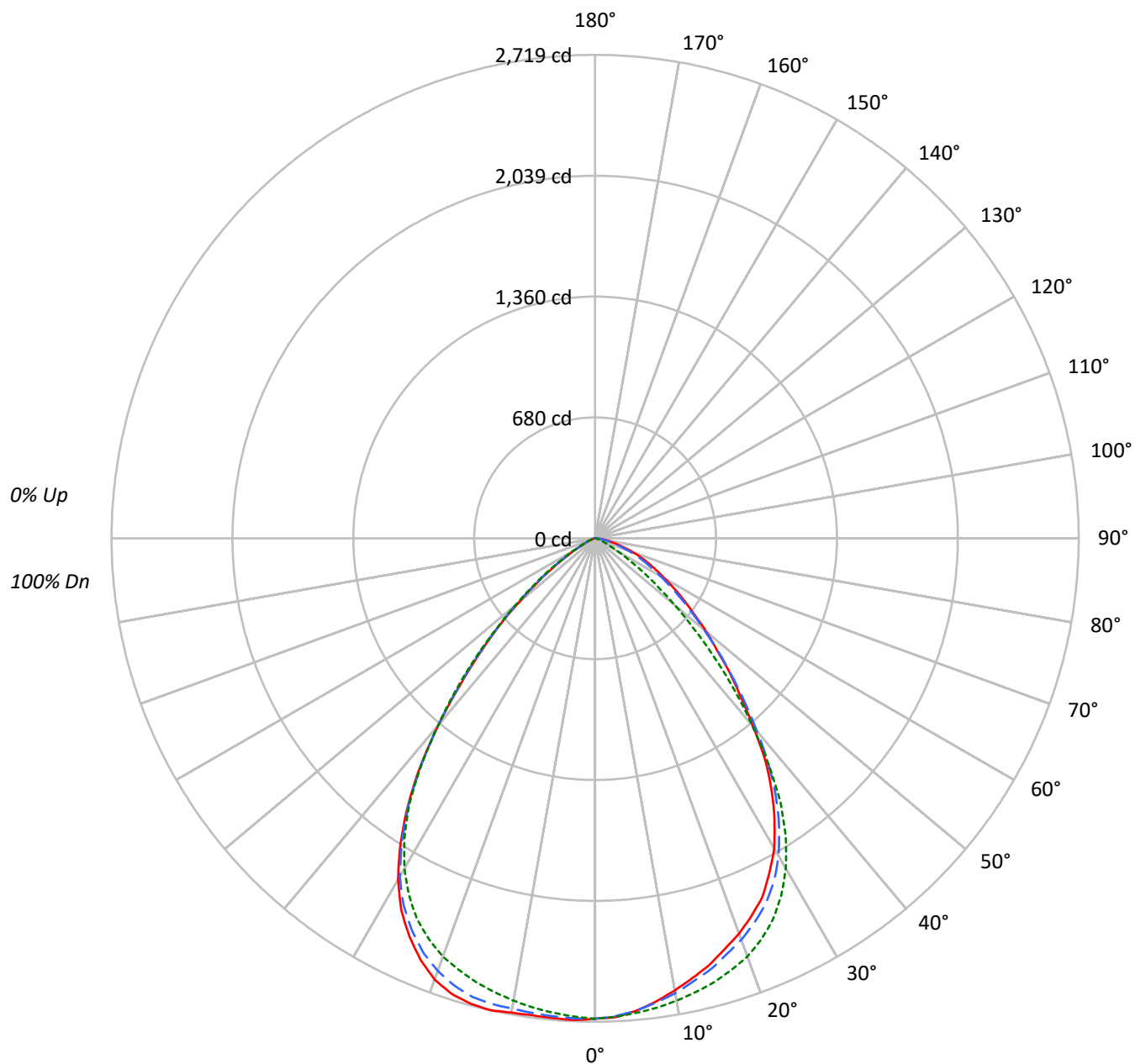
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

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°	176313	176313	176313
5°	174635	175493	177419
10°	171037	174925	179470
15°	167768	174596	182978
20°	164294	173805	183324
25°	160239	170345	177861
30°	151714	161545	166954
35°	137776	144793	146091
40°	117580	117026	116472
45°	98778	87633	84920
50°	82486	59294	56320
55°	69429	36387	33043
60°	58769	19168	16610
65°	50897	10081	8058
70°	42328	6218	4349
75°	31257	4109	2470
80°	24534	2442	1240
85°	19537	2470	0



TEST NUMBER: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.7	5.6
10°-20°	729.3	16.1
20°-30°	1076.9	23.8
30°-40°	1109.8	24.5
40°-50°	766.5	16.9
50°-60°	377.8	8.3
60°-70°	153.1	3.4
70°-80°	54.6	1.2
80°-90°	11.3	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°	2060.9	45.5
0°-40°	3170.7	69.9
0°-60°	4315.1	95.2
0°-90°	4534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4534.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2702	2702	2702	2702	2702	
5°	2667	2667	2680	2699	2709	252
15°	2484	2510	2585	2670	2709	699
25°	2226	2268	2366	2435	2471	1018
35°	1730	1772	1818	1828	1834	1072
45°	1071	1077	950	937	920	828
55°	610	588	320	300	290	551
65°	330	297	65	52	52	327
75°	124	104	16	10	10	139
85°	26	20	3	0	0	32
90°	0	0	0	0	0	



TEST NUMBER: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5
2.5°	2696.0	2686.2	2692.8	2679.7	2696.0	2679.7	2683.0	2686.2	2683.0	2686.2	2689.5
5°	2666.6	2656.8	2666.6	2650.3	2666.6	2656.8	2656.8	2660.1	2660.1	2663.4	2666.6
7.5°	2627.5	2617.7	2627.5	2611.2	2630.7	2620.9	2620.9	2627.5	2624.2	2627.5	2634.0
10°	2581.8	2568.7	2578.5	2568.7	2588.3	2575.2	2581.8	2581.8	2581.8	2591.6	2598.1
12.5°	2532.8	2519.8	2532.8	2516.5	2536.1	2526.3	2529.6	2539.3	2542.6	2549.1	2552.4
15°	2483.9	2467.5	2474.1	2464.3	2483.9	2474.1	2477.3	2490.4	2490.4	2500.2	2510.0
17.5°	2421.8	2408.8	2421.8	2408.8	2425.1	2418.6	2425.1	2434.9	2434.9	2444.7	2454.5
20°	2366.4	2353.3	2363.1	2353.3	2372.9	2363.1	2366.4	2379.4	2382.7	2392.5	2402.3
22.5°	2297.8	2288.0	2294.6	2284.8	2304.3	2297.8	2301.1	2314.1	2317.4	2323.9	2340.2
25°	2226.0	2206.4	2216.2	2209.7	2229.3	2219.5	2226.0	2239.1	2245.6	2255.4	2268.4
27.5°	2121.6	2111.8	2118.3	2118.3	2134.6	2124.8	2128.1	2141.1	2150.9	2160.7	2177.0
30°	2013.9	1997.5	2004.1	2007.3	2020.4	2013.9	2020.4	2033.4	2036.7	2049.8	2062.8
32.5°	1876.8	1870.2	1883.3	1876.8	1883.3	1883.3	1886.6	1896.3	1902.9	1909.4	1925.7
35°	1729.9	1716.8	1729.9	1723.4	1739.7	1729.9	1739.7	1749.5	1749.5	1762.5	1772.3
37.5°	1570.0	1553.6	1560.2	1560.2	1566.7	1563.4	1563.4	1579.7	1583.0	1592.8	1602.6
40°	1380.6	1374.1	1387.2	1383.9	1387.2	1387.2	1390.4	1400.2	1406.8	1410.0	1413.3
42.5°	1210.9	1214.2	1217.4	1217.4	1217.4	1217.4	1217.4	1230.5	1227.2	1237.0	1240.3
45°	1070.6	1057.5	1064.0	1060.8	1070.6	1060.8	1070.6	1080.4	1073.8	1083.6	1077.1
47.5°	927.0	927.0	927.0	923.7	930.2	927.0	933.5	936.8	936.8	936.8	933.5
50°	812.7	802.9	806.2	806.2	809.5	806.2	812.7	816.0	816.0	809.5	796.4
52.5°	701.7	698.5	698.5	705.0	705.0	701.7	701.7	701.7	701.7	692.0	685.4
55°	610.4	603.8	607.1	607.1	607.1	607.1	610.4	607.1	607.1	597.3	587.5
57.5°	528.8	522.2	522.2	522.2	525.5	522.2	522.2	522.2	519.0	509.2	496.1
60°	450.4	447.2	450.4	450.4	453.7	450.4	450.4	450.4	443.9	434.1	421.0
62.5°	385.1	385.1	385.1	388.4	388.4	385.1	385.1	381.9	378.6	365.6	352.5
65°	329.7	326.4	329.7	329.7	332.9	332.9	329.7	326.4	323.1	310.1	297.0
67.5°	274.2	270.9	274.2	274.2	277.4	274.2	274.2	274.2	264.4	257.9	244.8
70°	221.9	218.7	218.7	218.7	221.9	215.4	218.7	218.7	212.2	202.4	189.3
72.5°	169.7	169.7	169.7	169.7	169.7	169.7	166.5	166.5	159.9	150.1	143.6
75°	124.0	124.0	127.3	127.3	124.0	124.0	124.0	120.8	117.5	111.0	104.4
77.5°	91.4	91.4	91.4	91.4	88.1	88.1	88.1	84.9	81.6	78.3	71.8
80°	65.3	65.3	65.3	62.0	65.3	62.0	62.0	62.0	55.5	52.2	49.0
82.5°	45.7	42.4	42.4	42.4	42.4	42.4	42.4	39.2	39.2	35.9	32.6
85°	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	22.8	19.6	19.6
87.5°	13.1	16.3	16.3	16.3	16.3	16.3	16.3	13.1	13.1	13.1	9.8
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: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5
2.5°	2689.5	2689.5	2696.0	2686.2	2702.5	2692.8	2689.5	2705.8	2696.0	2692.8	2699.3
5°	2666.6	2669.9	2673.2	2666.6	2683.0	2673.2	2673.2	2689.5	2683.0	2679.7	2689.5
7.5°	2637.3	2640.5	2647.1	2643.8	2656.8	2650.3	2653.6	2669.9	2663.4	2663.4	2673.2
10°	2601.4	2607.9	2614.4	2614.4	2630.7	2624.2	2624.2	2643.8	2637.3	2640.5	2653.6
12.5°	2558.9	2568.7	2578.5	2581.8	2598.1	2588.3	2591.6	2614.4	2611.2	2614.4	2627.5
15°	2513.2	2526.3	2536.1	2536.1	2555.7	2545.9	2555.7	2578.5	2572.0	2585.0	2601.4
17.5°	2461.0	2474.1	2487.1	2490.4	2510.0	2503.4	2516.5	2539.3	2539.3	2545.9	2565.5
20°	2412.1	2428.4	2434.9	2444.7	2464.3	2461.0	2467.5	2493.7	2493.7	2503.4	2523.0
22.5°	2346.8	2363.1	2376.1	2385.9	2402.3	2402.3	2412.1	2434.9	2434.9	2441.4	2461.0
25°	2275.0	2294.6	2304.3	2314.1	2330.5	2327.2	2337.0	2356.6	2359.8	2366.4	2385.9
27.5°	2183.6	2199.9	2213.0	2219.5	2242.3	2229.3	2239.1	2261.9	2258.6	2265.2	2281.5
30°	2069.3	2085.7	2098.7	2098.7	2118.3	2118.3	2128.1	2137.9	2137.9	2144.4	2157.5
32.5°	1935.5	1955.1	1955.1	1964.9	1977.9	1964.9	1977.9	1991.0	1984.5	1994.3	2004.1
35°	1782.1	1791.9	1795.2	1795.2	1805.0	1801.7	1798.4	1808.2	1801.7	1818.0	1827.8
37.5°	1596.1	1609.1	1602.6	1609.1	1605.9	1596.1	1596.1	1612.4	1599.3	1602.6	1612.4
40°	1416.6	1416.6	1413.3	1397.0	1400.2	1390.4	1387.2	1390.4	1377.4	1374.1	1387.2
42.5°	1230.5	1227.2	1217.4	1194.6	1197.9	1181.5	1168.5	1168.5	1162.0	1158.7	1162.0
45°	1064.0	1054.3	1037.9	1011.8	1005.3	992.2	966.1	959.6	949.8	949.8	953.1
47.5°	910.6	897.6	871.5	842.1	825.8	809.5	783.3	773.6	757.2	750.7	757.2
50°	783.3	760.5	727.9	685.4	669.1	649.5	623.4	607.1	590.8	584.2	581.0
52.5°	665.8	633.2	600.6	548.3	535.3	515.7	479.8	463.5	447.2	434.1	434.1
55°	564.7	535.3	489.6	440.6	421.0	401.5	365.6	342.7	326.4	319.9	313.3
57.5°	473.3	440.6	398.2	346.0	326.4	306.8	270.9	248.1	231.7	221.9	215.4
60°	398.2	362.3	319.9	274.2	251.3	231.7	195.8	173.0	156.7	146.9	140.3
62.5°	326.4	297.0	254.6	212.2	192.6	173.0	143.6	120.8	104.4	97.9	88.1
65°	274.2	244.8	205.6	169.7	153.4	133.8	107.7	88.1	75.1	65.3	58.8
67.5°	221.9	199.1	166.5	133.8	117.5	104.4	81.6	65.3	52.2	45.7	42.4
70°	176.3	153.4	127.3	101.2	91.4	78.3	62.0	45.7	39.2	32.6	29.4
72.5°	130.6	114.2	94.7	75.1	65.3	58.8	42.4	35.9	26.1	22.8	19.6
75°	94.7	81.6	68.5	52.2	45.7	42.4	32.6	22.8	19.6	16.3	13.1
77.5°	65.3	58.8	45.7	35.9	32.6	29.4	22.8	16.3	13.1	9.8	9.8
80°	42.4	35.9	29.4	22.8	22.8	19.6	13.1	9.8	9.8	6.5	6.5
82.5°	26.1	22.8	19.6	16.3	13.1	13.1	9.8	6.5	6.5	3.3	3.3
85°	16.3	13.1	9.8	9.8	6.5	6.5	6.5	3.3	3.3	3.3	3.3
87.5°	6.5	6.5	6.5	3.3	3.3	3.3	3.3	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: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5
2.5°	2699.3	2699.3	2705.8	2696.0	2702.5	2702.5	2709.1	2696.0	2702.5	2705.8	2712.3
5°	2686.2	2689.5	2696.0	2692.8	2696.0	2696.0	2702.5	2686.2	2699.3	2699.3	2709.1
7.5°	2673.2	2673.2	2679.7	2676.4	2683.0	2686.2	2692.8	2679.7	2692.8	2692.8	2702.5
10°	2656.8	2656.8	2666.6	2663.4	2673.2	2676.4	2686.2	2673.2	2686.2	2689.5	2699.3
12.5°	2634.0	2637.3	2647.1	2647.1	2656.8	2663.4	2673.2	2666.6	2683.0	2686.2	2699.3
15°	2607.9	2614.4	2627.5	2624.2	2634.0	2643.8	2656.8	2647.1	2669.9	2676.4	2689.5
17.5°	2575.2	2581.8	2591.6	2591.6	2601.4	2607.9	2624.2	2617.7	2637.3	2640.5	2656.8
20°	2526.3	2536.1	2549.1	2545.9	2555.7	2562.2	2575.2	2568.7	2588.3	2594.8	2611.2
22.5°	2467.5	2474.1	2483.9	2483.9	2493.7	2500.2	2513.2	2503.4	2523.0	2526.3	2539.3
25°	2389.2	2395.7	2402.3	2405.5	2415.3	2418.6	2425.1	2418.6	2434.9	2438.2	2454.5
27.5°	2288.0	2291.3	2301.1	2301.1	2307.6	2310.9	2320.7	2307.6	2330.5	2330.5	2340.2
30°	2167.3	2164.0	2177.0	2170.5	2177.0	2177.0	2186.8	2180.3	2196.6	2190.1	2199.9
32.5°	2007.3	2013.9	2013.9	2007.3	2020.4	2017.1	2017.1	2010.6	2020.4	2023.6	2030.2
35°	1821.3	1831.1	1831.1	1834.3	1837.6	1827.8	1831.1	1811.5	1827.8	1831.1	1834.3
37.5°	1618.9	1609.1	1615.7	1605.9	1622.2	1602.6	1602.6	1589.5	1602.6	1602.6	1605.9
40°	1387.2	1383.9	1390.4	1383.9	1380.6	1377.4	1370.9	1361.1	1374.1	1367.6	1377.4
42.5°	1168.5	1165.2	1165.2	1158.7	1155.4	1155.4	1148.9	1142.4	1139.1	1139.1	1155.4
45°	943.3	949.8	943.3	940.0	946.5	940.0	943.3	930.2	936.8	930.2	936.8
47.5°	754.0	757.2	750.7	744.2	754.0	744.2	744.2	734.4	747.4	747.4	740.9
50°	584.2	581.0	574.5	581.0	577.7	577.7	577.7	567.9	574.5	564.7	571.2
52.5°	430.8	427.6	427.6	424.3	427.6	424.3	424.3	421.0	421.0	417.8	421.0
55°	313.3	310.1	303.5	303.5	303.5	306.8	303.5	300.3	300.3	297.0	300.3
57.5°	212.2	205.6	205.6	205.6	205.6	202.4	202.4	199.1	202.4	199.1	202.4
60°	137.1	137.1	130.6	130.6	130.6	130.6	130.6	127.3	130.6	130.6	130.6
62.5°	84.9	84.9	81.6	78.3	81.6	78.3	78.3	78.3	81.6	78.3	81.6
65°	55.5	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2
67.5°	39.2	35.9	35.9	35.9	35.9	35.9	35.9	32.6	35.9	35.9	35.9
70°	26.1	26.1	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
72.5°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
75°	13.1	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
77.5°	9.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
80°	6.5	6.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
82.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
85°	3.3	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	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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: P252316

CATALOG NUMBER: LD6B60D010TE EU6B60709027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5	2702.5
2.5°	2702.5	2705.8	2699.3	2702.5	2696.0	2702.5	2705.8	2712.3
5°	2696.0	2699.3	2692.8	2699.3	2692.8	2699.3	2702.5	2709.1
7.5°	2689.5	2696.0	2689.5	2696.0	2689.5	2696.0	2699.3	2705.8
10°	2689.5	2699.3	2692.8	2702.5	2692.8	2699.3	2705.8	2709.1
12.5°	2689.5	2699.3	2696.0	2702.5	2699.3	2705.8	2712.3	2718.9
15°	2683.0	2692.8	2686.2	2696.0	2692.8	2696.0	2709.1	2709.1
17.5°	2647.1	2656.8	2656.8	2663.4	2663.4	2673.2	2679.7	2686.2
20°	2601.4	2611.2	2607.9	2617.7	2617.7	2627.5	2634.0	2640.5
22.5°	2532.8	2545.9	2542.6	2552.4	2549.1	2555.7	2568.7	2565.5
25°	2444.7	2461.0	2457.7	2464.3	2461.0	2461.0	2467.5	2470.8
27.5°	2337.0	2346.8	2343.5	2350.0	2343.5	2350.0	2356.6	2359.8
30°	2196.6	2203.2	2199.9	2203.2	2199.9	2206.4	2209.7	2216.2
32.5°	2026.9	2036.7	2026.9	2033.4	2030.2	2030.2	2043.2	2036.7
35°	1824.5	1827.8	1831.1	1831.1	1824.5	1827.8	1834.3	1834.3
37.5°	1599.3	1615.7	1596.1	1605.9	1602.6	1602.6	1602.6	1612.4
40°	1364.3	1367.6	1361.1	1361.1	1361.1	1357.8	1370.9	1367.6
42.5°	1142.4	1145.6	1142.4	1132.6	1135.9	1135.9	1145.6	1132.6
45°	927.0	933.5	930.2	930.2	923.7	923.7	927.0	920.4
47.5°	734.4	740.9	731.1	734.4	727.9	734.4	731.1	737.7
50°	558.1	564.7	561.4	564.7	564.7	558.1	567.9	554.9
52.5°	417.8	421.0	417.8	414.5	411.3	411.3	417.8	414.5
55°	297.0	293.8	293.8	293.8	297.0	297.0	293.8	290.5
57.5°	199.1	199.1	195.8	195.8	199.1	192.6	195.8	192.6
60°	127.3	127.3	127.3	127.3	124.0	127.3	127.3	127.3
62.5°	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
65°	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2
67.5°	32.6	35.9	35.9	35.9	32.6	32.6	32.6	32.6
70°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
72.5°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
75°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
77.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
82.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	3.3	3.3	3.3	3.3	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)