

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: P252433

Luminaire Tested: **LD6B70D010TE EU6B60709027 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709027 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5265.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

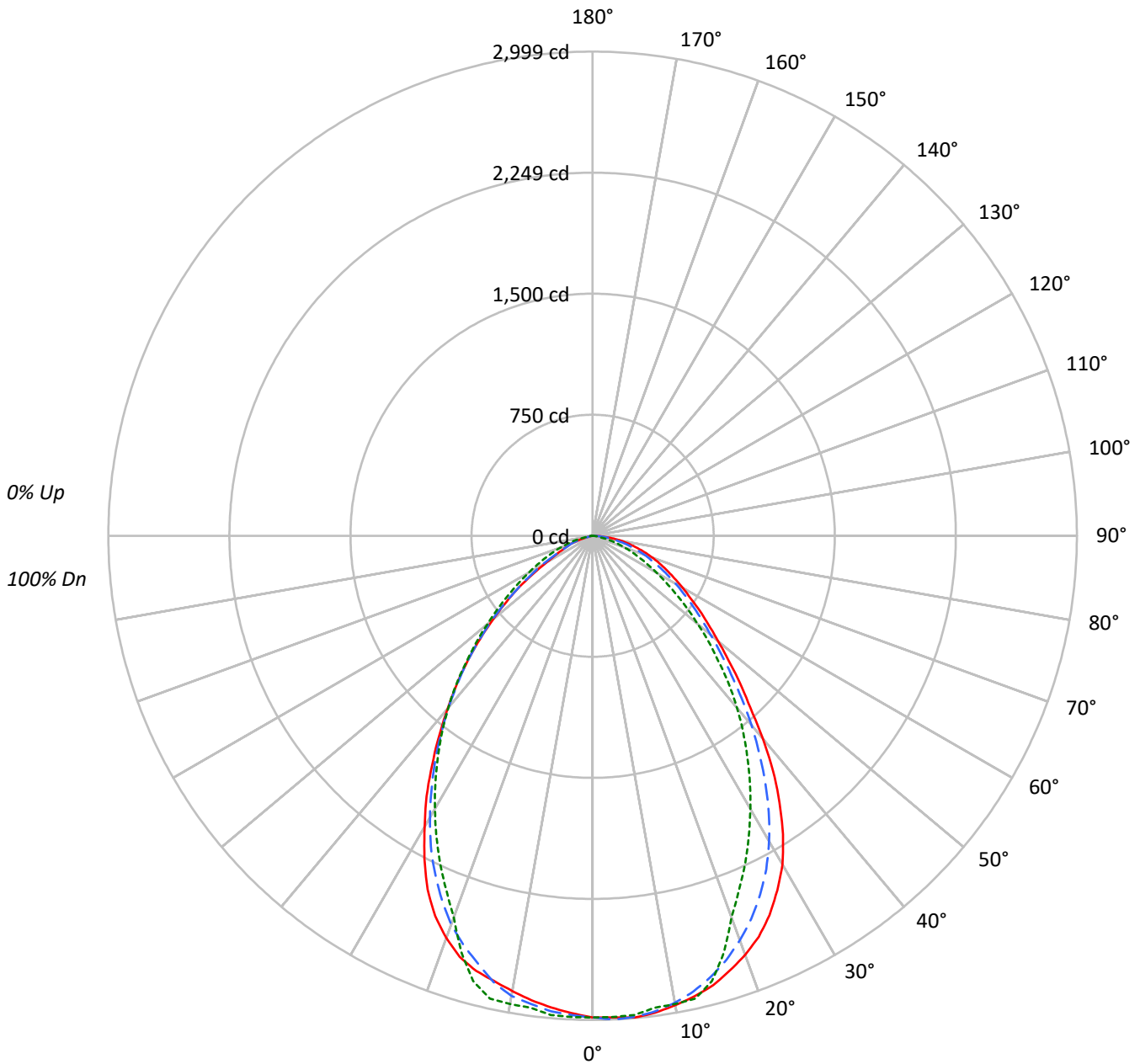
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54				54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48				48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44				44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40				40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36				36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	194626	194626	194626
5°	196129	195114	192069
10°	195575	195064	189672
15°	194690	192853	188409
20°	191787	174569	183983
25°	186578	160923	174024
30°	177162	147096	156731
35°	160762	132990	137928
40°	139569	118457	118780
45°	119030	101878	100799
50°	103029	86120	81400
55°	92098	71829	63014
60°	83912	59656	42459
65°	78344	49044	31693
70°	74641	39905	26610
75°	70302	28333	8797
80°	66951	14540	2893
85°	55093	8683	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.7	5.4
10°-20°	787.9	15.0
20°-30°	1087.6	20.7
30°-40°	1106.7	21.0
40°-50°	889.4	16.9
50°-60°	591.4	11.2
60°-70°	337.0	6.4
70°-80°	151.4	2.9
80°-90°	31.9	0.6
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°	2157.2	41.0
0°-40°	3263.9	62.0
0°-60°	4744.7	90.1
0°-90°	5265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5265.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2983	2983	2983	2983	2983	
5°	2995	2991	2979	2956	2933	284
15°	2882	2828	2855	2743	2790	811
25°	2592	2452	2236	2309	2418	1188
35°	2018	1864	1670	1701	1732	1254
45°	1290	1213	1104	1092	1092	1000
55°	810	756	632	562	554	728
65°	508	453	318	205	205	506
75°	279	232	112	46	35	298
85°	74	50	12	4	0	87
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°	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2
2.5°	2987.1	3002.6	2998.7	2994.8	2998.7	2994.8	2987.1	2987.1	2979.3	2979.3	2998.7
5°	2994.8	3002.6	2998.7	2994.8	2994.8	2998.7	2983.2	2983.2	2975.4	2971.6	2990.9
7.5°	2979.3	2990.9	2983.2	2983.2	2979.3	2983.2	2967.7	2967.7	2956.1	2952.2	2971.6
10°	2952.2	2967.7	2959.9	2959.9	2959.9	2952.2	2944.5	2940.6	2929.0	2925.1	2936.7
12.5°	2921.2	2932.8	2929.0	2921.2	2921.2	2921.2	2905.7	2901.8	2886.3	2878.6	2890.2
15°	2882.5	2890.2	2886.3	2882.5	2874.7	2874.7	2859.2	2851.5	2836.0	2820.5	2828.2
17.5°	2824.3	2836.0	2828.2	2824.3	2812.7	2812.7	2797.2	2789.5	2766.2	2750.7	2754.6
20°	2762.4	2766.2	2762.4	2754.6	2743.0	2739.1	2723.6	2708.1	2688.7	2669.4	2665.5
22.5°	2688.7	2692.6	2681.0	2673.3	2661.6	2657.8	2638.4	2626.8	2595.8	2572.5	2568.6
25°	2591.9	2595.8	2595.8	2576.4	2568.6	2560.9	2541.5	2522.2	2495.0	2464.0	2452.4
27.5°	2475.7	2487.3	2479.5	2460.2	2444.7	2440.8	2421.4	2405.9	2371.1	2343.9	2328.4
30°	2351.7	2347.8	2343.9	2332.3	2309.1	2305.2	2285.8	2266.5	2239.3	2204.5	2185.1
32.5°	2192.8	2192.8	2189.0	2177.3	2154.1	2146.3	2130.9	2107.6	2076.6	2049.5	2030.1
35°	2018.5	2022.4	2018.5	1995.3	1979.8	1972.0	1964.3	1937.1	1910.0	1879.0	1863.5
37.5°	1836.4	1824.8	1828.7	1809.3	1789.9	1797.7	1774.4	1762.8	1731.8	1708.6	1693.1
40°	1638.8	1646.6	1631.1	1623.3	1611.7	1600.1	1600.1	1580.7	1565.2	1538.1	1530.3
42.5°	1445.1	1456.7	1452.9	1445.1	1429.6	1433.5	1414.1	1406.4	1387.0	1375.4	1363.7
45°	1290.1	1290.1	1290.1	1282.4	1278.5	1270.8	1259.1	1247.5	1235.9	1220.4	1212.6
47.5°	1139.0	1139.0	1142.9	1135.2	1127.4	1123.5	1115.8	1115.8	1096.4	1080.9	1073.2
50°	1015.1	1015.1	1015.1	1007.3	999.6	999.6	991.8	984.1	972.4	960.8	953.1
52.5°	902.7	902.7	902.7	895.0	891.1	887.2	883.3	879.5	864.0	856.2	848.5
55°	809.7	805.8	805.8	802.0	794.2	794.2	790.4	782.6	771.0	759.4	755.5
57.5°	716.7	720.6	716.7	716.7	709.0	709.0	701.2	697.4	685.7	678.0	670.2
60°	643.1	643.1	643.1	639.3	631.5	635.4	627.6	623.8	612.1	600.5	592.8
62.5°	569.5	573.4	573.4	569.5	561.8	561.8	557.9	554.0	542.4	530.8	519.2
65°	507.5	507.5	507.5	503.7	499.8	499.8	495.9	492.0	480.4	464.9	453.3
67.5°	449.4	445.5	445.5	445.5	441.7	437.8	433.9	430.0	418.4	406.8	391.3
70°	391.3	391.3	391.3	387.4	379.7	383.6	379.7	375.8	364.2	352.6	340.9
72.5°	337.1	337.1	333.2	329.3	329.3	325.4	325.4	321.6	309.9	294.4	282.8
75°	278.9	278.9	278.9	278.9	271.2	275.1	267.3	263.5	255.7	244.1	232.5
77.5°	228.6	228.6	228.6	224.7	220.8	220.8	217.0	213.1	201.5	193.7	178.2
80°	178.2	178.2	178.2	178.2	174.3	170.5	166.6	162.7	155.0	143.3	131.7
82.5°	131.7	131.7	127.9	127.9	127.9	124.0	120.1	116.2	108.5	100.7	93.0
85°	73.6	77.5	77.5	69.7	73.6	69.7	69.7	62.0	62.0	54.2	50.4
87.5°	27.1	23.2	23.2	23.2	23.2	23.2	23.2	19.4	19.4	19.4	15.5
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°	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2
2.5°	2983.2	2979.3	2994.8	2994.8	2971.6	2983.2	2987.1	2979.3	2979.3	2983.2	2971.6
5°	2975.4	2967.7	2983.2	2987.1	2963.8	2975.4	2979.3	2971.6	2975.4	2979.3	2963.8
7.5°	2948.3	2948.3	2959.9	2963.8	2940.6	2952.2	2952.2	2944.5	2948.3	2948.3	2936.7
10°	2921.2	2909.6	2921.2	2921.2	2901.8	2905.7	2913.5	2909.6	2925.1	2944.5	2944.5
12.5°	2870.8	2859.2	2878.6	2878.6	2867.0	2882.5	2901.8	2913.5	2929.0	2936.7	2913.5
15°	2808.9	2812.7	2847.6	2874.7	2863.1	2886.3	2905.7	2898.0	2878.6	2855.3	2820.5
17.5°	2727.5	2715.9	2746.9	2762.4	2746.9	2754.6	2770.1	2754.6	2723.6	2704.2	2657.8
20°	2634.5	2603.5	2603.5	2595.8	2568.6	2568.6	2564.8	2537.7	2526.0	2514.4	2495.0
22.5°	2529.9	2495.0	2483.4	2460.2	2436.9	2433.0	2421.4	2394.3	2378.8	2371.1	2347.8
25°	2409.8	2378.8	2359.4	2336.2	2301.3	2293.6	2281.9	2254.8	2247.1	2235.5	2216.1
27.5°	2285.8	2247.1	2220.0	2196.7	2165.7	2161.8	2138.6	2119.2	2103.7	2096.0	2080.5
30°	2142.5	2099.9	2080.5	2049.5	2026.2	2018.5	1999.1	1972.0	1960.4	1952.6	1941.0
32.5°	1983.6	1948.8	1929.4	1902.3	1871.3	1875.1	1851.9	1828.7	1820.9	1813.2	1801.5
35°	1828.7	1793.8	1770.5	1747.3	1727.9	1720.2	1704.7	1685.3	1673.7	1669.8	1662.1
37.5°	1658.2	1631.1	1611.7	1588.5	1573.0	1565.2	1557.5	1538.1	1530.3	1530.3	1514.8
40°	1491.6	1468.4	1452.9	1441.2	1421.9	1418.0	1410.2	1398.6	1394.7	1390.9	1379.2
42.5°	1340.5	1309.5	1297.9	1290.1	1278.5	1270.8	1266.9	1259.1	1255.3	1251.4	1239.8
45°	1197.2	1170.0	1158.4	1150.7	1139.0	1135.2	1131.3	1119.7	1111.9	1104.2	1100.3
47.5°	1057.7	1038.3	1034.4	1015.1	1007.3	999.6	991.8	984.1	980.2	976.3	960.8
50°	937.6	926.0	906.6	895.0	887.2	883.3	867.8	856.2	852.3	848.5	836.8
52.5°	829.1	813.6	802.0	782.6	778.7	771.0	763.2	747.7	740.0	736.1	724.5
55°	732.2	720.6	705.1	689.6	678.0	674.1	662.5	647.0	639.3	631.5	623.8
57.5°	650.9	631.5	616.0	600.5	592.8	581.1	569.5	561.8	550.1	538.5	526.9
60°	573.4	557.9	538.5	523.0	515.3	507.5	492.0	480.4	468.8	457.2	445.5
62.5°	499.8	484.3	464.9	449.4	441.7	433.9	418.4	406.8	395.2	383.6	368.1
65°	433.9	418.4	402.9	387.4	379.7	371.9	356.4	340.9	329.3	317.7	302.2
67.5°	379.7	360.3	344.8	329.3	321.6	313.8	298.3	286.7	271.2	259.6	244.1
70°	321.6	306.1	294.4	278.9	271.2	263.5	248.0	232.5	220.8	209.2	193.7
72.5°	271.2	251.8	240.2	224.7	217.0	213.1	197.6	186.0	174.3	158.8	147.2
75°	217.0	201.5	186.0	174.3	166.6	162.7	147.2	135.6	124.0	112.4	100.7
77.5°	166.6	155.0	139.5	127.9	120.1	116.2	100.7	89.1	77.5	69.7	58.1
80°	124.0	108.5	100.7	89.1	85.2	77.5	69.7	58.1	50.4	38.7	31.0
82.5°	85.2	73.6	65.9	58.1	54.2	50.4	42.6	34.9	27.1	23.2	19.4
85°	46.5	38.7	34.9	31.0	27.1	27.1	23.2	19.4	15.5	11.6	7.7
87.5°	15.5	11.6	11.6	11.6	11.6	7.7	7.7	7.7	3.9	3.9	3.9
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°	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2
2.5°	2979.3	2979.3	2979.3	2975.4	2975.4	2975.4	2971.6	2987.1	2971.6	2967.7	2979.3
5°	2975.4	2967.7	2967.7	2967.7	2967.7	2963.8	2959.9	2967.7	2956.1	2952.2	2952.2
7.5°	2952.2	2948.3	2948.3	2944.5	2940.6	2936.7	2932.8	2936.7	2925.1	2921.2	2921.2
10°	2956.1	2948.3	2948.3	2936.7	2929.0	2917.3	2905.7	2909.6	2894.1	2882.5	2882.5
12.5°	2909.6	2890.2	2878.6	2867.0	2859.2	2855.3	2839.8	2847.6	2832.1	2828.2	2828.2
15°	2805.0	2781.7	2762.4	2754.6	2754.6	2746.9	2735.2	2750.7	2743.0	2746.9	2766.2
17.5°	2642.3	2630.6	2619.0	2615.1	2619.0	2626.8	2634.5	2657.8	2657.8	2669.4	2688.7
20°	2498.9	2491.2	2498.9	2498.9	2502.8	2518.3	2533.8	2553.1	2560.9	2572.5	2599.6
22.5°	2359.4	2359.4	2367.2	2378.8	2374.9	2402.1	2405.9	2440.8	2440.8	2464.0	2487.3
25°	2223.8	2223.8	2231.6	2235.5	2243.2	2258.7	2274.2	2301.3	2309.1	2332.3	2351.7
27.5°	2092.1	2088.2	2088.2	2092.1	2099.9	2119.2	2127.0	2158.0	2169.6	2185.1	2204.5
30°	1944.9	1941.0	1948.8	1956.5	1952.6	1972.0	1983.6	2006.9	2014.6	2030.1	2045.6
32.5°	1805.4	1805.4	1805.4	1813.2	1813.2	1828.7	1828.7	1855.8	1855.8	1867.4	1882.9
35°	1662.1	1662.1	1665.9	1669.8	1673.7	1677.6	1681.4	1696.9	1700.8	1704.7	1712.4
37.5°	1526.5	1522.6	1526.5	1526.5	1518.7	1534.2	1534.2	1549.7	1538.1	1549.7	1553.6
40°	1387.0	1387.0	1383.1	1383.1	1383.1	1390.9	1383.1	1394.7	1387.0	1394.7	1390.9
42.5°	1243.6	1243.6	1235.9	1243.6	1239.8	1239.8	1239.8	1247.5	1235.9	1243.6	1247.5
45°	1100.3	1096.4	1096.4	1092.5	1092.5	1092.5	1096.4	1096.4	1092.5	1100.3	1100.3
47.5°	960.8	956.9	956.9	956.9	956.9	960.8	949.2	956.9	949.2	949.2	949.2
50°	840.7	836.8	833.0	829.1	825.2	825.2	821.3	821.3	813.6	809.7	805.8
52.5°	724.5	720.6	712.9	712.9	709.0	705.1	693.5	693.5	681.9	678.0	678.0
55°	619.9	608.3	604.4	596.6	596.6	588.9	581.1	573.4	561.8	554.0	554.0
57.5°	523.0	511.4	503.7	499.8	495.9	488.2	472.7	468.8	453.3	449.4	445.5
60°	437.8	426.2	414.5	406.8	402.9	391.3	375.8	368.1	360.3	348.7	337.1
62.5°	356.4	344.8	329.3	325.4	317.7	306.1	294.4	282.8	275.1	263.5	255.7
65°	286.7	275.1	263.5	255.7	248.0	236.3	224.7	213.1	205.3	201.5	197.6
67.5°	232.5	217.0	205.3	201.5	193.7	186.0	174.3	170.5	162.7	162.7	162.7
70°	182.1	170.5	158.8	155.0	151.1	143.3	135.6	135.6	135.6	135.6	135.6
72.5°	135.6	127.9	116.2	112.4	108.5	104.6	96.9	100.7	96.9	96.9	96.9
75°	85.2	77.5	69.7	65.9	62.0	58.1	54.2	50.4	46.5	42.6	42.6
77.5°	46.5	38.7	34.9	31.0	31.0	27.1	23.2	23.2	19.4	19.4	19.4
80°	27.1	23.2	19.4	15.5	15.5	11.6	11.6	11.6	11.6	7.7	7.7
82.5°	15.5	11.6	7.7	7.7	7.7	7.7	3.9	3.9	3.9	3.9	3.9
85°	7.7	7.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	0.0
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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: P252433

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2	2983.2
2.5°	2959.9	2971.6	2959.9	2971.6	2971.6	2971.6	2971.6	2959.9
5°	2940.6	2948.3	2936.7	2944.5	2948.3	2944.5	2944.5	2932.8
7.5°	2905.7	2913.5	2901.8	2913.5	2917.3	2913.5	2909.6	2901.8
10°	2870.8	2874.7	2863.1	2870.8	2878.6	2878.6	2874.7	2863.1
12.5°	2816.6	2828.2	2816.6	2824.3	2832.1	2836.0	2836.0	2824.3
15°	2754.6	2774.0	2766.2	2777.9	2789.5	2793.4	2793.4	2789.5
17.5°	2692.6	2712.0	2700.4	2719.7	2731.4	2739.1	2743.0	2735.2
20°	2603.5	2626.8	2619.0	2634.5	2650.0	2661.6	2661.6	2650.0
22.5°	2487.3	2518.3	2514.4	2526.0	2545.4	2549.3	2557.0	2549.3
25°	2359.4	2382.7	2378.8	2390.4	2413.7	2413.7	2417.5	2417.5
27.5°	2212.2	2235.5	2231.6	2239.3	2254.8	2258.7	2262.6	2254.8
30°	2053.4	2065.0	2065.0	2076.6	2088.2	2092.1	2092.1	2080.5
32.5°	1879.0	1894.5	1902.3	1898.4	1910.0	1917.8	1913.9	1913.9
35°	1720.2	1724.1	1727.9	1731.8	1735.7	1743.4	1735.7	1731.8
37.5°	1549.7	1561.3	1553.6	1561.3	1569.1	1565.2	1561.3	1561.3
40°	1394.7	1398.6	1390.9	1398.6	1402.5	1402.5	1402.5	1394.7
42.5°	1239.8	1247.5	1239.8	1247.5	1247.5	1247.5	1247.5	1243.6
45°	1084.8	1092.5	1092.5	1096.4	1096.4	1092.5	1092.5	1092.5
47.5°	941.4	949.2	941.4	949.2	953.1	945.3	945.3	945.3
50°	805.8	802.0	802.0	805.8	805.8	805.8	805.8	802.0
52.5°	666.4	670.2	670.2	670.2	674.1	670.2	674.1	674.1
55°	546.3	546.3	546.3	550.1	546.3	546.3	550.1	554.0
57.5°	437.8	433.9	430.0	430.0	433.9	430.0	430.0	430.0
60°	337.1	333.2	329.3	329.3	329.3	329.3	329.3	325.4
62.5°	251.8	251.8	251.8	255.7	255.7	255.7	255.7	259.6
65°	201.5	201.5	201.5	201.5	201.5	201.5	201.5	205.3
67.5°	162.7	162.7	162.7	166.6	166.6	166.6	166.6	166.6
70°	135.6	135.6	139.5	135.6	139.5	139.5	139.5	139.5
72.5°	93.0	93.0	93.0	93.0	93.0	89.1	93.0	89.1
75°	38.7	38.7	38.7	38.7	38.7	38.7	38.7	34.9
77.5°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
80°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	3.9	3.9	3.9	3.9	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)