

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: P252538

Luminaire Tested: **LD6B70D010TE EU6B60709030 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252538  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B70D010TE EU6B60709030 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5139.0 lumens  
Efficiency: N/A  
Efficacy: 64.7 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

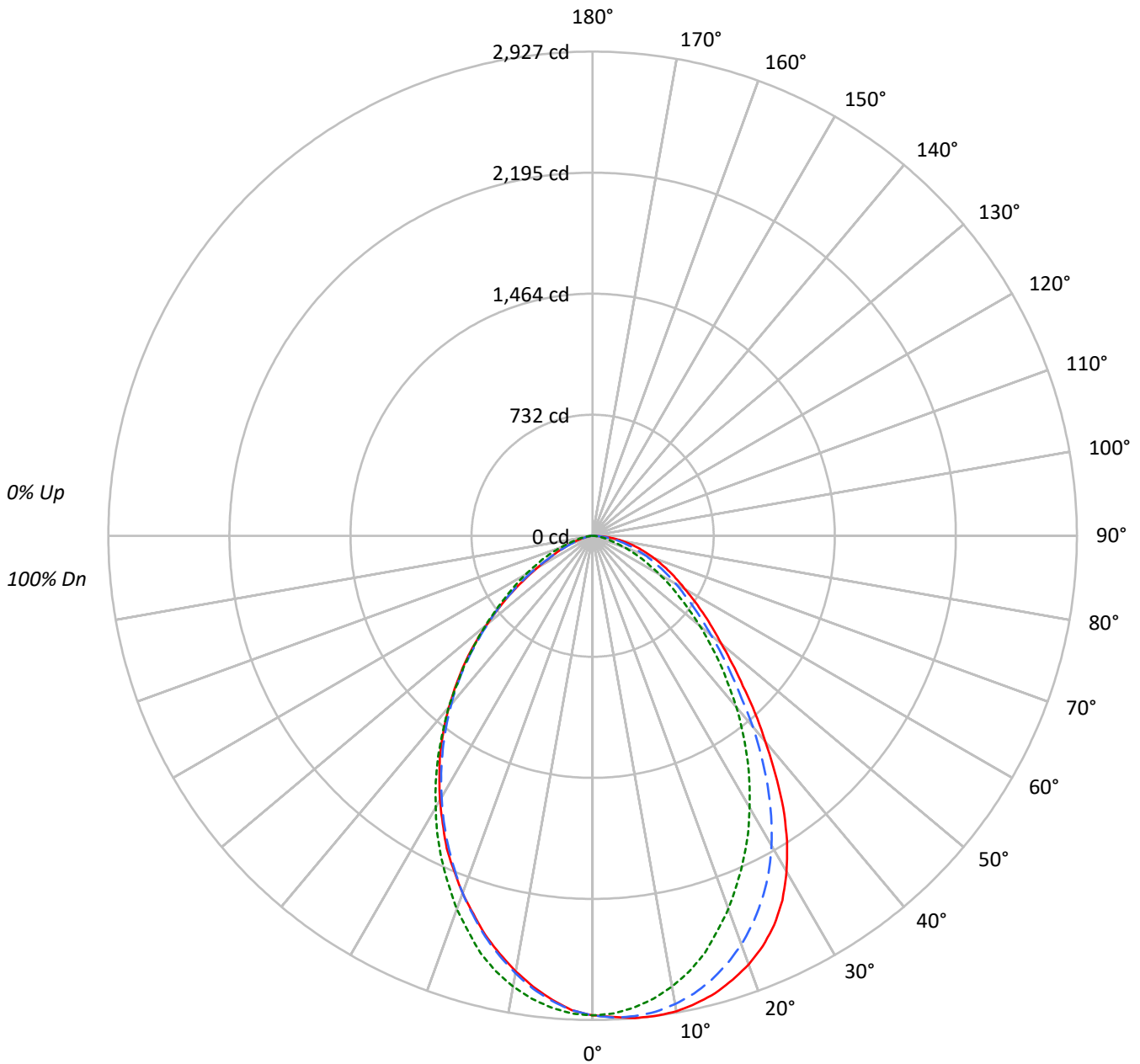
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20				
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	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47			47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43			43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35			35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33			33

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

	0°	90°	180°
0°	189146	189146	189146
5°	191708	187491	184328
10°	193395	183259	177125
15°	193366	176508	168889
20°	191495	166619	159628
25°	186960	155365	150146
30°	176544	142870	138930
35°	160029	129557	127956
40°	138198	115221	114880
45°	118513	100310	101048
50°	102988	85825	84597
55°	92519	72364	67780
60°	84069	60948	49909
65°	78946	50356	36679
70°	75270	39180	26877
75°	72067	28408	18275
80°	68078	19649	12098
85°	60258	12052	6063



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.2	5.3
10°-20°	742.8	14.5
20°-30°	1031.1	20.1
30°-40°	1068.1	20.8
40°-50°	877.7	17.1
50°-60°	603.2	11.7
60°-70°	346.8	6.7
70°-80°	159.4	3.1
80°-90°	38.8	0.8
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°	2045.1	39.8
0°-40°	3113.1	60.6
0°-60°	4594.0	89.4
0°-90°	5139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5139.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2899	2899	2899	2899	2899	
5°	2927	2915	2863	2823	2815	279
15°	2863	2778	2613	2509	2500	806
25°	2597	2424	2158	2066	2086	1188
35°	2009	1844	1627	1578	1607	1246
45°	1284	1188	1087	1075	1095	1000
55°	813	737	636	600	596	732
65°	511	447	326	230	238	509
75°	286	226	113	72	72	302
85°	80	56	16	8	8	90
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°	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2
2.5°	2911.2	2935.4	2919.3	2915.3	2923.3	2923.3	2923.3	2911.2	2919.3	2907.2	2915.3
5°	2927.3	2947.5	2931.4	2923.3	2931.4	2935.4	2923.3	2915.3	2927.3	2911.2	2915.3
7.5°	2927.3	2947.5	2931.4	2927.3	2931.4	2931.4	2927.3	2911.2	2919.3	2903.2	2903.2
10°	2919.3	2935.4	2919.3	2911.2	2915.3	2911.2	2911.2	2891.1	2895.1	2875.0	2875.0
12.5°	2895.1	2915.3	2895.1	2887.1	2887.1	2887.1	2875.0	2858.9	2862.9	2838.8	2834.7
15°	2862.9	2879.0	2858.9	2850.8	2850.8	2846.8	2838.8	2814.6	2814.6	2790.4	2778.4
17.5°	2814.6	2830.7	2814.6	2802.5	2798.5	2790.4	2782.4	2758.2	2750.2	2722.0	2709.9
20°	2758.2	2770.3	2754.2	2742.1	2734.1	2726.0	2709.9	2685.7	2677.7	2649.5	2629.4
22.5°	2685.7	2701.9	2677.7	2665.6	2657.6	2645.5	2629.4	2605.2	2593.1	2556.9	2532.7
25°	2597.2	2605.2	2585.1	2573.0	2556.9	2548.8	2536.8	2504.5	2492.5	2452.2	2424.0
27.5°	2484.4	2492.5	2468.3	2460.3	2440.1	2432.1	2416.0	2387.8	2371.7	2331.4	2303.2
30°	2343.5	2351.5	2335.4	2323.4	2307.2	2291.1	2279.1	2250.9	2226.7	2186.4	2162.3
32.5°	2186.4	2198.5	2182.4	2166.3	2138.1	2142.2	2122.0	2093.8	2073.7	2037.5	2009.3
35°	2009.3	2017.3	1997.2	1993.2	1977.1	1961.0	1940.8	1920.7	1908.6	1868.3	1844.2
37.5°	1812.0	1832.1	1812.0	1795.9	1787.8	1775.7	1763.7	1735.5	1727.4	1703.3	1671.0
40°	1622.7	1634.8	1622.7	1606.6	1594.5	1594.5	1578.4	1562.3	1542.2	1518.0	1506.0
42.5°	1453.6	1445.6	1441.5	1433.5	1417.4	1413.3	1409.3	1389.2	1377.1	1352.9	1332.8
45°	1284.5	1288.5	1280.5	1276.4	1264.4	1256.3	1248.2	1232.1	1228.1	1204.0	1187.8
47.5°	1143.6	1139.5	1131.5	1131.5	1123.4	1115.4	1107.3	1095.2	1091.2	1071.1	1055.0
50°	1014.7	1018.7	1014.7	1010.7	998.6	994.6	986.5	978.5	970.4	950.3	934.2
52.5°	910.0	906.0	902.0	902.0	889.9	885.9	877.8	869.7	861.7	841.6	829.5
55°	813.4	813.4	809.3	805.3	793.2	789.2	785.2	777.1	765.1	748.9	736.9
57.5°	724.8	724.8	720.8	716.7	708.7	708.7	700.6	692.6	684.5	668.4	652.3
60°	644.3	648.3	644.3	640.2	632.2	632.2	628.2	616.1	612.0	591.9	579.8
62.5°	575.8	575.8	575.8	571.8	567.8	559.7	559.7	547.6	539.6	527.5	511.4
65°	511.4	511.4	511.4	507.4	499.3	495.3	491.2	483.2	475.1	463.1	447.0
67.5°	451.0	451.0	451.0	447.0	438.9	434.9	430.8	426.8	414.7	402.7	386.6
70°	394.6	394.6	390.6	386.6	382.5	378.5	374.5	366.4	358.4	342.3	330.2
72.5°	338.2	338.2	338.2	330.2	326.2	326.2	318.1	314.1	306.0	289.9	277.8
75°	285.9	281.9	281.9	277.8	273.8	269.8	265.8	261.7	249.6	241.6	225.5
77.5°	233.5	233.5	229.5	225.5	225.5	221.5	217.4	209.4	205.4	193.3	181.2
80°	181.2	181.2	181.2	181.2	177.2	173.1	173.1	165.1	161.1	149.0	140.9
82.5°	136.9	132.9	132.9	132.9	128.9	124.8	124.8	120.8	116.8	108.7	100.7
85°	80.5	76.5	76.5	76.5	72.5	72.5	68.5	68.5	64.4	56.4	56.4
87.5°	24.2	24.2	28.2	28.2	24.2	24.2	24.2	24.2	24.2	20.1	20.1
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°	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2
2.5°	2907.2	2919.3	2903.2	2899.2	2915.3	2907.2	2903.2	2895.1	2899.2	2891.1	2879.0
5°	2903.2	2919.3	2899.2	2887.1	2907.2	2895.1	2887.1	2879.0	2879.0	2862.9	2854.9
7.5°	2891.1	2899.2	2879.0	2866.9	2879.0	2866.9	2858.9	2846.8	2842.8	2822.7	2810.6
10°	2858.9	2866.9	2842.8	2826.7	2838.8	2822.7	2810.6	2798.5	2790.4	2766.3	2750.2
12.5°	2814.6	2818.6	2790.4	2770.3	2778.4	2766.3	2746.1	2730.0	2722.0	2697.8	2677.7
15°	2754.2	2758.2	2726.0	2697.8	2705.9	2689.8	2665.6	2649.5	2637.4	2613.3	2585.1
17.5°	2681.7	2677.7	2641.5	2613.3	2617.3	2597.2	2573.0	2548.8	2532.7	2504.5	2484.4
20°	2601.2	2589.1	2548.8	2516.6	2520.7	2496.5	2468.3	2444.2	2424.0	2399.9	2371.7
22.5°	2500.5	2484.4	2448.2	2407.9	2411.9	2391.8	2351.5	2331.4	2311.3	2279.1	2254.9
25°	2391.8	2367.6	2331.4	2291.1	2291.1	2267.0	2234.8	2210.6	2190.5	2158.3	2130.1
27.5°	2263.0	2250.9	2202.6	2170.3	2166.3	2142.2	2114.0	2085.8	2061.6	2033.4	2005.3
30°	2122.0	2101.9	2065.6	2029.4	2021.4	2001.2	1973.0	1940.8	1924.7	1896.5	1872.4
32.5°	1973.0	1952.9	1912.6	1876.4	1872.4	1856.3	1832.1	1799.9	1783.8	1763.7	1747.5
35°	1803.9	1795.9	1755.6	1727.4	1727.4	1711.3	1687.1	1659.0	1646.9	1626.7	1606.6
37.5°	1642.9	1630.8	1594.5	1570.4	1570.4	1550.2	1526.1	1514.0	1501.9	1485.8	1473.7
40°	1473.7	1465.7	1437.5	1413.3	1417.4	1401.3	1385.2	1369.0	1361.0	1352.9	1340.9
42.5°	1316.7	1308.6	1288.5	1268.4	1268.4	1256.3	1240.2	1228.1	1220.1	1208.0	1204.0
45°	1175.8	1163.7	1147.6	1127.4	1127.4	1115.4	1107.3	1099.3	1095.2	1087.2	1075.1
47.5°	1038.9	1030.8	1014.7	994.6	994.6	994.6	978.5	966.4	966.4	958.3	954.3
50°	922.1	910.0	897.9	881.8	881.8	873.8	861.7	849.6	849.6	845.6	837.5
52.5°	813.4	805.3	789.2	773.1	773.1	765.1	753.0	748.9	744.9	732.8	728.8
55°	720.8	712.7	700.6	680.5	676.5	672.4	660.4	652.3	648.3	636.2	636.2
57.5°	636.2	628.2	608.0	595.9	591.9	583.9	571.8	563.7	559.7	551.6	543.6
60°	563.7	551.6	535.5	519.4	515.4	507.4	495.3	487.2	483.2	467.1	459.0
62.5°	495.3	483.2	467.1	451.0	447.0	438.9	422.8	414.7	406.7	390.6	382.5
65°	430.8	418.8	402.7	386.6	378.5	374.5	358.4	346.3	338.2	326.2	310.0
67.5°	370.4	358.4	342.3	322.1	322.1	310.0	298.0	285.9	273.8	261.7	249.6
70°	314.1	302.0	285.9	269.8	265.8	257.7	245.6	229.5	221.5	205.4	193.3
72.5°	261.7	249.6	233.5	217.4	213.4	205.4	193.3	177.2	165.1	153.0	140.9
75°	213.4	201.3	185.2	173.1	169.1	161.1	149.0	132.9	120.8	112.7	100.7
77.5°	169.1	157.0	145.0	132.9	128.9	120.8	108.7	100.7	88.6	80.5	68.5
80°	128.9	120.8	108.7	100.7	96.6	88.6	80.5	68.5	60.4	52.3	48.3
82.5°	92.6	84.6	76.5	64.4	64.4	56.4	52.3	44.3	36.2	32.2	28.2
85°	52.3	44.3	40.3	36.2	32.2	32.2	28.2	24.2	20.1	16.1	16.1
87.5°	16.1	16.1	12.1	12.1	12.1	12.1	8.1	8.1	8.1	8.1	8.1
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°	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2
2.5°	2879.0	2883.1	2875.0	2883.1	2875.0	2879.0	2871.0	2879.0	2871.0	2879.0	2862.9
5°	2850.8	2850.8	2838.8	2846.8	2838.8	2842.8	2826.7	2830.7	2822.7	2830.7	2814.6
7.5°	2802.5	2806.5	2786.4	2794.5	2782.4	2782.4	2770.3	2774.3	2762.3	2766.3	2754.2
10°	2746.1	2742.1	2722.0	2730.0	2713.9	2713.9	2701.9	2701.9	2685.7	2689.8	2673.7
12.5°	2665.6	2661.6	2637.4	2645.5	2629.4	2629.4	2617.3	2617.3	2601.2	2609.2	2593.1
15°	2573.0	2569.0	2544.8	2548.8	2532.7	2532.7	2516.6	2520.7	2508.6	2516.6	2500.5
17.5°	2468.3	2464.3	2440.1	2444.2	2424.0	2428.0	2416.0	2411.9	2403.9	2407.9	2395.8
20°	2359.6	2351.5	2327.4	2331.4	2323.4	2311.3	2303.2	2307.2	2299.2	2307.2	2295.2
22.5°	2246.8	2230.7	2210.6	2210.6	2202.6	2202.6	2190.5	2198.5	2182.4	2194.5	2186.4
25°	2118.0	2105.9	2089.8	2097.9	2081.8	2081.8	2069.7	2073.7	2065.6	2073.7	2065.6
27.5°	1993.2	1985.1	1961.0	1969.0	1956.9	1961.0	1948.9	1952.9	1948.9	1956.9	1948.9
30°	1860.3	1856.3	1840.2	1840.2	1836.1	1832.1	1828.1	1828.1	1824.1	1836.1	1828.1
32.5°	1735.5	1723.4	1707.3	1719.4	1699.2	1711.3	1703.3	1711.3	1703.3	1711.3	1707.3
35°	1606.6	1602.6	1582.5	1586.5	1582.5	1582.5	1578.4	1578.4	1578.4	1590.5	1590.5
37.5°	1469.7	1465.7	1453.6	1457.6	1449.6	1445.6	1445.6	1453.6	1453.6	1461.7	1461.7
40°	1336.8	1340.9	1328.8	1328.8	1324.8	1324.8	1324.8	1332.8	1328.8	1336.8	1332.8
42.5°	1204.0	1204.0	1191.9	1195.9	1191.9	1195.9	1195.9	1204.0	1204.0	1208.0	1204.0
45°	1079.1	1079.1	1075.1	1079.1	1071.1	1075.1	1071.1	1079.1	1075.1	1079.1	1079.1
47.5°	954.3	954.3	954.3	950.3	950.3	950.3	950.3	950.3	946.3	954.3	950.3
50°	837.5	841.6	837.5	837.5	833.5	837.5	833.5	833.5	825.5	829.5	829.5
52.5°	732.8	732.8	724.8	724.8	724.8	720.8	720.8	720.8	716.7	716.7	708.7
55°	632.2	632.2	624.1	624.1	620.1	616.1	612.0	612.0	600.0	600.0	587.9
57.5°	539.6	535.5	523.5	523.5	515.4	511.4	507.4	503.3	495.3	487.2	483.2
60°	455.0	447.0	438.9	434.9	426.8	418.8	410.7	402.7	394.6	390.6	386.6
62.5°	374.5	362.4	354.3	350.3	342.3	330.2	322.1	314.1	306.0	302.0	293.9
65°	302.0	289.9	277.8	273.8	265.8	257.7	245.6	237.6	229.5	225.5	225.5
67.5°	237.6	225.5	209.4	209.4	201.3	193.3	185.2	177.2	173.1	177.2	177.2
70°	177.2	169.1	157.0	153.0	145.0	136.9	132.9	132.9	132.9	136.9	132.9
72.5°	132.9	120.8	112.7	108.7	104.7	100.7	100.7	100.7	96.6	100.7	100.7
75°	92.6	84.6	76.5	76.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
77.5°	64.4	56.4	52.3	52.3	52.3	48.3	48.3	48.3	48.3	48.3	48.3
80°	40.3	40.3	36.2	36.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
82.5°	24.2	24.2	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
85°	12.1	12.1	12.1	12.1	12.1	8.1	8.1	8.1	8.1	8.1	8.1
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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: P252538

CATALOG NUMBER: LD6B70D010TE EU6B60709030 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2	2899.2
2.5°	2862.9	2875.0	2858.9	2871.0	2866.9	2862.9	2854.9	2871.0
5°	2814.6	2818.6	2802.5	2818.6	2814.6	2806.5	2798.5	2814.6
7.5°	2746.1	2758.2	2738.1	2754.2	2750.2	2742.1	2734.1	2750.2
10°	2669.6	2681.7	2665.6	2677.7	2677.7	2669.6	2657.6	2673.7
12.5°	2585.1	2593.1	2577.0	2593.1	2589.1	2581.1	2577.0	2589.1
15°	2492.5	2504.5	2488.4	2500.5	2496.5	2492.5	2488.4	2500.5
17.5°	2391.8	2403.9	2391.8	2403.9	2403.9	2391.8	2387.8	2395.8
20°	2291.1	2299.2	2287.1	2299.2	2295.2	2295.2	2287.1	2299.2
22.5°	2178.4	2190.5	2182.4	2190.5	2186.4	2186.4	2182.4	2190.5
25°	2065.6	2077.7	2065.6	2077.7	2073.7	2073.7	2065.6	2085.8
27.5°	1952.9	1961.0	1948.9	1965.0	1961.0	1952.9	1956.9	1961.0
30°	1832.1	1840.2	1832.1	1844.2	1844.2	1844.2	1836.1	1844.2
32.5°	1711.3	1723.4	1711.3	1723.4	1719.4	1719.4	1715.3	1723.4
35°	1590.5	1594.5	1586.5	1598.6	1598.6	1602.6	1594.5	1606.6
37.5°	1465.7	1469.7	1465.7	1469.7	1477.8	1465.7	1473.7	1477.8
40°	1336.8	1344.9	1340.9	1344.9	1344.9	1348.9	1344.9	1348.9
42.5°	1208.0	1216.0	1208.0	1220.1	1216.0	1216.0	1220.1	1220.1
45°	1075.1	1087.2	1079.1	1087.2	1091.2	1087.2	1087.2	1095.2
47.5°	950.3	958.3	954.3	958.3	958.3	958.3	958.3	966.4
50°	825.5	829.5	829.5	833.5	833.5	837.5	829.5	833.5
52.5°	700.6	708.7	708.7	708.7	704.7	708.7	708.7	708.7
55°	587.9	591.9	583.9	591.9	591.9	587.9	587.9	595.9
57.5°	479.2	479.2	479.2	479.2	479.2	475.1	479.2	479.2
60°	378.5	382.5	378.5	378.5	378.5	378.5	374.5	382.5
62.5°	293.9	293.9	289.9	293.9	293.9	293.9	298.0	298.0
65°	229.5	233.5	229.5	233.5	233.5	233.5	233.5	237.6
67.5°	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
70°	136.9	136.9	136.9	140.9	136.9	136.9	136.9	140.9
72.5°	100.7	100.7	100.7	100.7	100.7	100.7	104.7	104.7
75°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
77.5°	48.3	48.3	48.3	52.3	48.3	52.3	48.3	48.3
80°	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
82.5°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
85°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
87.5°	8.1	8.1	8.1	8.1	4.0	4.0	4.0	4.0
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)