

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: P252640

Luminaire Tested: **LD6B70D010TE EU6B60709024 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709024 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5105.0 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

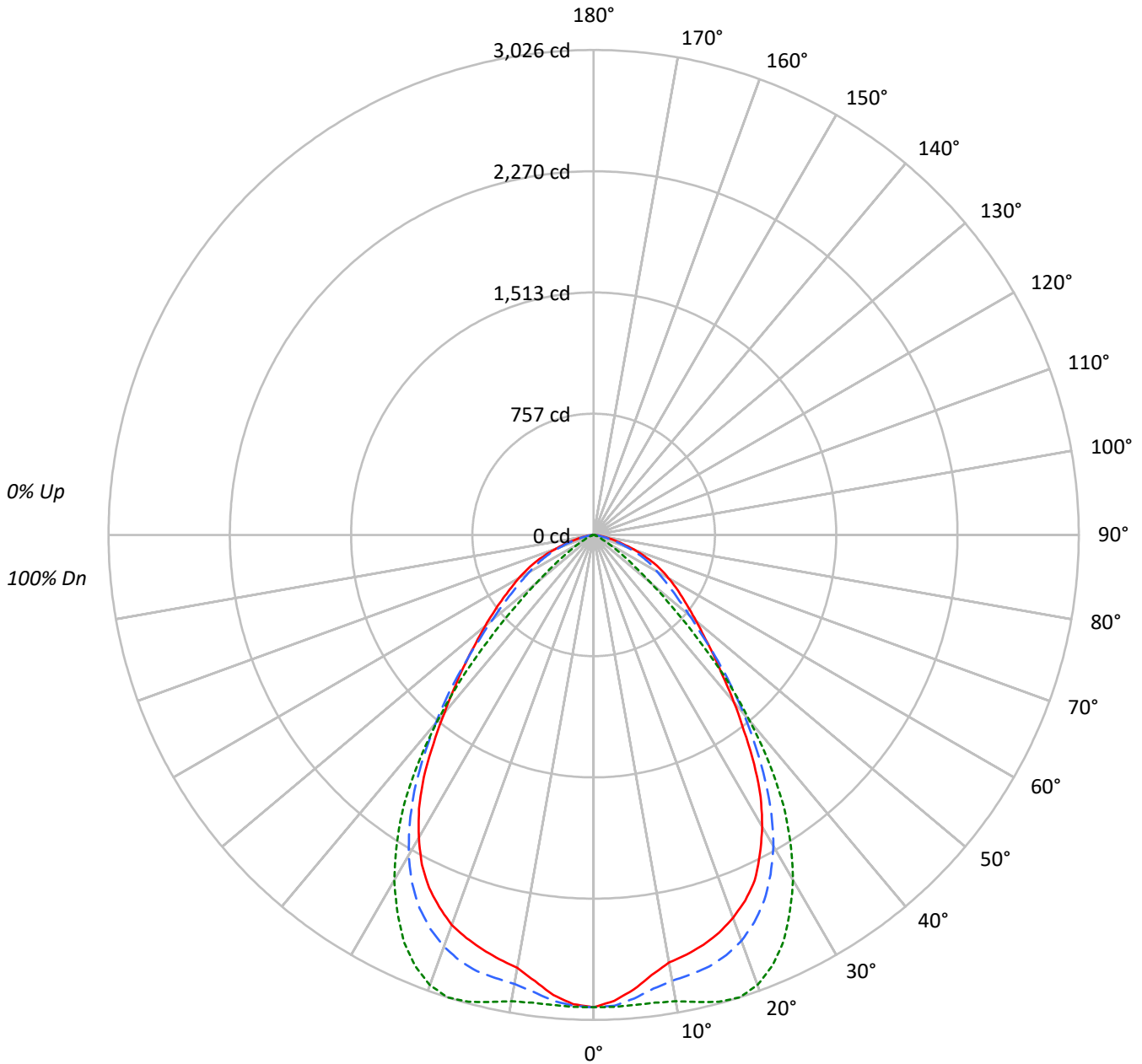
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	192290	192290	192290
5°	186554	192802	188781
10°	179457	195707	181709
15°	178818	203673	180891
20°	176478	207471	179790
25°	171202	201623	174888
30°	158373	187384	164280
35°	138947	164728	147087
40°	115783	129137	123328
45°	97459	85197	104056
50°	84384	46688	89571
55°	76356	24807	78290
60°	70251	12892	70251
65°	63648	6839	62073
70°	51350	3891	47440
75°	35214	2571	32643
80°	23031	1277	20476
85°	15270	2545	12725



TEST NUMBER: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.8	5.4
10°-20°	794.7	15.6
20°-30°	1174.2	23.0
30°-40°	1186.0	23.2
40°-50°	817.5	16.0
50°-60°	469.5	9.2
60°-70°	273.3	5.4
70°-80°	99.7	2.0
80°-90°	15.2	0.3
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°	2243.8	44.0
0°-40°	3429.8	67.2
0°-60°	4716.8	92.4
0°-90°	5105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5105.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2947	2947	2947	2947	2947	
5°	2849	2903	2944	2917	2883	267
15°	2648	2787	3016	2818	2678	746
25°	2378	2518	2801	2569	2430	1084
35°	1745	1864	2068	1949	1847	1083
45°	1056	1070	923	1138	1128	821
55°	671	590	218	613	688	604
65°	412	348	44	344	402	404
75°	140	112	10	109	130	157
85°	20	10	3	14	17	26
90°	0	0	0	0	0	



TEST NUMBER: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4
2.5°	2909.9	2913.3	2916.7	2913.3	2916.7	2930.3	2920.1	2926.9	2926.9	2930.3	2940.6
5°	2848.6	2848.6	2855.4	2852.0	2862.2	2875.8	2865.6	2875.8	2879.2	2886.0	2903.1
7.5°	2770.2	2770.2	2773.6	2773.6	2787.2	2800.9	2794.0	2807.7	2821.3	2834.9	2855.4
10°	2708.9	2715.7	2715.7	2719.1	2732.7	2749.7	2746.3	2763.4	2777.0	2797.4	2824.7
12.5°	2681.6	2685.0	2685.0	2691.8	2705.4	2722.5	2719.1	2736.1	2756.6	2780.4	2807.7
15°	2647.5	2654.3	2650.9	2657.7	2671.4	2688.4	2685.0	2702.0	2725.9	2749.7	2787.2
17.5°	2603.2	2606.6	2610.0	2610.0	2623.7	2637.3	2637.3	2654.3	2681.6	2708.9	2749.7
20°	2541.9	2548.7	2548.7	2552.1	2562.3	2582.8	2579.4	2596.4	2623.7	2650.9	2695.2
22.5°	2470.3	2473.7	2473.7	2477.2	2494.2	2504.4	2507.8	2521.5	2545.3	2576.0	2616.9
25°	2378.3	2381.7	2378.3	2388.6	2395.4	2415.8	2409.0	2426.0	2453.3	2477.2	2518.0
27.5°	2245.5	2252.3	2252.3	2255.7	2272.7	2289.7	2289.7	2306.8	2330.6	2347.7	2388.6
30°	2102.3	2112.6	2102.3	2119.4	2126.2	2139.8	2150.0	2160.3	2180.7	2204.6	2242.0
32.5°	1938.8	1935.4	1938.8	1945.6	1966.0	1976.3	1983.1	1993.3	2013.8	2034.2	2064.9
35°	1744.6	1751.4	1754.8	1768.4	1768.4	1785.5	1788.9	1795.7	1826.3	1840.0	1863.8
37.5°	1540.1	1546.9	1550.4	1557.2	1570.8	1577.6	1587.8	1598.1	1618.5	1642.4	1656.0
40°	1359.5	1359.5	1362.9	1369.8	1380.0	1383.4	1393.6	1407.2	1420.9	1441.3	1454.9
42.5°	1189.2	1192.6	1189.2	1196.0	1206.2	1219.8	1216.4	1233.5	1236.9	1250.5	1260.7
45°	1056.3	1056.3	1049.5	1056.3	1056.3	1069.9	1066.5	1073.3	1069.9	1076.7	1069.9
47.5°	930.2	933.6	930.2	933.6	933.6	933.6	937.0	930.2	933.6	923.4	903.0
50°	831.4	834.8	828.0	831.4	828.0	824.6	828.0	817.8	814.4	800.7	780.3
52.5°	746.2	742.8	739.4	739.4	739.4	736.0	732.6	722.4	712.1	698.5	674.7
55°	671.3	667.8	664.4	664.4	657.6	654.2	654.2	644.0	633.8	616.7	589.5
57.5°	603.1	599.7	596.3	596.3	592.9	586.1	586.1	575.8	562.2	541.8	517.9
60°	538.4	538.4	538.4	535.0	535.0	528.1	528.1	517.9	504.3	483.8	456.6
62.5°	480.4	477.0	477.0	477.0	477.0	473.6	470.2	463.4	449.8	429.3	405.5
65°	412.3	412.3	412.3	412.3	408.9	408.9	408.9	398.7	391.8	371.4	347.6
67.5°	337.3	337.3	337.3	337.3	333.9	337.3	337.3	330.5	323.7	303.3	282.8
70°	269.2	265.8	262.4	265.8	262.4	262.4	265.8	259.0	255.6	238.5	218.1
72.5°	197.6	201.0	197.6	197.6	197.6	194.2	197.6	194.2	187.4	173.8	160.1
75°	139.7	143.1	143.1	139.7	139.7	139.7	136.3	136.3	129.5	119.3	112.4
77.5°	95.4	95.4	95.4	95.4	92.0	92.0	92.0	88.6	85.2	78.4	71.6
80°	61.3	61.3	61.3	61.3	57.9	57.9	57.9	54.5	54.5	47.7	40.9
82.5°	37.5	37.5	37.5	37.5	37.5	37.5	34.1	34.1	30.7	27.3	23.9
85°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.0	17.0	13.6	10.2
87.5°	6.8	6.8	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8	6.8
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: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4
2.5°	2933.7	2937.1	2937.1	2937.1	2947.4	2950.8	2940.6	2930.3	2950.8	2947.4	2954.2
5°	2899.7	2909.9	2916.7	2920.1	2930.3	2937.1	2926.9	2923.5	2940.6	2944.0	2947.4
7.5°	2858.8	2875.8	2892.9	2899.7	2913.3	2920.1	2916.7	2916.7	2937.1	2944.0	2944.0
10°	2831.5	2855.4	2875.8	2892.9	2909.9	2920.1	2920.1	2923.5	2947.4	2954.2	2961.0
12.5°	2824.7	2855.4	2882.6	2906.5	2920.1	2937.1	2940.6	2950.8	2974.6	2984.9	2984.9
15°	2807.7	2848.6	2882.6	2913.3	2933.7	2954.2	2961.0	2981.4	3008.7	3015.5	3022.3
17.5°	2777.0	2817.9	2858.8	2896.3	2923.5	2940.6	2961.0	2981.4	3015.5	3025.7	3029.1
20°	2722.5	2770.2	2811.1	2848.6	2875.8	2899.7	2920.1	2944.0	2974.6	2988.3	2991.7
22.5°	2640.7	2688.4	2729.3	2770.2	2797.4	2817.9	2838.3	2865.6	2896.3	2909.9	2909.9
25°	2541.9	2586.2	2630.5	2661.2	2688.4	2712.3	2722.5	2753.2	2783.8	2800.9	2800.9
27.5°	2415.8	2456.7	2497.6	2531.7	2548.7	2569.2	2586.2	2613.4	2637.3	2650.9	2664.6
30°	2255.7	2296.6	2334.0	2368.1	2388.6	2409.0	2426.0	2446.5	2470.3	2487.4	2490.8
32.5°	2081.9	2116.0	2153.5	2187.5	2208.0	2214.8	2231.8	2252.3	2272.7	2286.3	2289.7
35°	1891.1	1914.9	1938.8	1969.5	1989.9	1989.9	2006.9	2020.6	2037.6	2068.3	2061.5
37.5°	1666.2	1700.3	1717.3	1727.5	1741.2	1754.8	1758.2	1775.2	1795.7	1802.5	1812.7
40°	1454.9	1465.2	1475.4	1475.4	1489.0	1489.0	1489.0	1492.4	1512.9	1516.3	1529.9
42.5°	1243.7	1243.7	1233.5	1223.2	1226.7	1223.2	1206.2	1206.2	1216.4	1230.1	1230.1
45°	1046.1	1022.2	991.5	967.7	950.7	943.8	923.4	923.4	920.0	923.4	937.0
47.5°	879.1	838.2	787.1	739.4	722.4	708.7	678.1	664.4	657.6	661.0	667.8
50°	739.4	695.1	637.2	579.3	548.6	531.5	494.1	470.2	466.8	460.0	473.6
52.5°	637.2	582.7	521.3	453.2	422.5	395.3	354.4	333.9	320.3	320.3	323.7
55°	548.6	490.7	422.5	354.4	323.7	303.3	262.4	235.1	221.5	218.1	228.3
57.5°	473.6	419.1	351.0	282.8	252.1	228.3	187.4	163.6	153.3	146.5	149.9
60°	415.7	361.2	293.0	228.3	201.0	173.8	139.7	112.4	98.8	98.8	102.2
62.5°	361.2	310.1	248.7	187.4	163.6	139.7	102.2	78.4	68.1	64.7	68.1
65°	306.7	259.0	207.8	156.7	132.9	112.4	81.8	61.3	47.7	44.3	47.7
67.5°	248.7	211.3	167.0	126.1	105.6	88.6	61.3	44.3	34.1	30.7	34.1
70°	194.2	160.1	126.1	92.0	78.4	64.7	44.3	34.1	23.9	20.4	23.9
72.5°	139.7	115.9	88.6	64.7	54.5	44.3	30.7	23.9	17.0	13.6	17.0
75°	95.4	78.4	57.9	40.9	34.1	30.7	20.4	13.6	10.2	10.2	10.2
77.5°	61.3	47.7	37.5	27.3	20.4	17.0	10.2	6.8	6.8	6.8	6.8
80°	34.1	27.3	20.4	13.6	10.2	10.2	6.8	6.8	3.4	3.4	3.4
82.5°	20.4	13.6	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	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: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4
2.5°	2940.6	2944.0	2933.7	2947.4	2937.1	2950.8	2950.8	2937.1	2940.6	2933.7	2947.4
5°	2933.7	2933.7	2926.9	2937.1	2923.5	2937.1	2933.7	2909.9	2916.7	2903.1	2916.7
7.5°	2933.7	2926.9	2916.7	2926.9	2909.9	2920.1	2906.5	2882.6	2875.8	2858.8	2858.8
10°	2944.0	2933.7	2920.1	2923.5	2906.5	2909.9	2889.4	2855.4	2845.1	2824.7	2817.9
12.5°	2967.8	2957.6	2937.1	2944.0	2920.1	2920.1	2892.9	2852.0	2831.5	2804.3	2797.4
15°	3001.9	2984.9	2961.0	2964.4	2940.6	2926.9	2892.9	2845.1	2817.9	2780.4	2770.2
17.5°	3008.7	2991.7	2961.0	2961.0	2930.3	2913.3	2872.4	2817.9	2783.8	2746.3	2725.9
20°	2971.2	2954.2	2920.1	2916.7	2889.4	2865.6	2821.3	2766.8	2732.7	2691.8	2674.8
22.5°	2892.9	2872.4	2841.7	2838.3	2811.1	2797.4	2749.7	2695.2	2661.2	2620.3	2606.6
25°	2777.0	2766.8	2736.1	2732.7	2708.9	2691.8	2650.9	2599.8	2569.2	2528.3	2514.6
27.5°	2640.7	2630.5	2599.8	2599.8	2572.6	2562.3	2524.9	2477.2	2453.3	2415.8	2398.8
30°	2477.2	2463.5	2446.5	2443.1	2419.2	2409.0	2374.9	2330.6	2306.8	2276.1	2269.3
32.5°	2282.9	2272.7	2262.5	2259.1	2235.2	2225.0	2201.2	2156.9	2136.4	2109.2	2098.9
35°	2058.0	2051.2	2041.0	2037.6	2027.4	2017.2	1993.3	1959.2	1949.0	1928.6	1918.3
37.5°	1799.1	1805.9	1799.1	1799.1	1788.9	1792.3	1771.8	1751.4	1741.2	1727.5	1720.7
40°	1519.7	1533.3	1543.5	1543.5	1540.1	1553.8	1550.4	1533.3	1529.9	1523.1	1519.7
42.5°	1236.9	1243.7	1264.1	1277.8	1274.4	1308.4	1311.8	1325.5	1335.7	1328.9	1332.3
45°	940.4	960.9	988.1	1001.8	1018.8	1063.1	1086.9	1114.2	1138.1	1151.7	1148.3
47.5°	678.1	701.9	732.6	753.0	783.7	838.2	899.5	933.6	967.7	984.7	1001.8
50°	490.7	514.5	552.0	582.7	603.1	678.1	742.8	787.1	824.6	848.4	865.5
52.5°	344.1	371.4	412.3	439.6	470.2	541.8	616.7	667.8	708.7	739.4	756.4
55°	238.5	269.2	306.7	333.9	368.0	443.0	514.5	569.0	613.3	640.6	661.0
57.5°	167.0	194.2	231.7	255.6	289.6	361.2	432.7	487.3	531.5	558.8	582.7
60°	112.4	139.7	177.2	201.0	228.3	299.8	364.6	422.5	463.4	490.7	514.5
62.5°	78.4	102.2	139.7	163.6	187.4	248.7	310.1	361.2	402.1	432.7	453.2
65°	61.3	81.8	112.4	132.9	156.7	207.8	259.0	303.3	344.1	374.8	388.4
67.5°	44.3	64.7	88.6	105.6	122.7	167.0	211.3	245.3	282.8	306.7	323.7
70°	30.7	44.3	64.7	78.4	92.0	126.1	160.1	190.8	218.1	235.1	248.7
72.5°	23.9	30.7	44.3	54.5	64.7	88.6	115.9	139.7	160.1	173.8	187.4
75°	13.6	20.4	30.7	37.5	44.3	61.3	78.4	95.4	109.0	119.3	126.1
77.5°	6.8	10.2	17.0	20.4	27.3	37.5	51.1	61.3	71.6	78.4	85.2
80°	6.8	6.8	10.2	10.2	13.6	20.4	27.3	34.1	40.9	47.7	51.1
82.5°	3.4	3.4	6.8	6.8	6.8	10.2	13.6	20.4	23.9	27.3	30.7
85°	3.4	3.4	3.4	3.4	3.4	6.8	6.8	10.2	13.6	17.0	17.0
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.8	6.8	6.8	10.2
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: P252640

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4	2947.4
2.5°	2937.1	2944.0	2940.6	2947.4	2937.1	2933.7	2940.6	2930.3
5°	2899.7	2903.1	2899.7	2899.7	2892.9	2886.0	2892.9	2882.6
7.5°	2841.7	2841.7	2831.5	2831.5	2817.9	2811.1	2811.1	2807.7
10°	2794.0	2783.8	2773.6	2777.0	2756.6	2749.7	2746.3	2742.9
12.5°	2770.2	2763.4	2746.3	2746.3	2725.9	2719.1	2715.7	2712.3
15°	2742.9	2729.3	2715.7	2712.3	2695.2	2688.4	2685.0	2678.2
17.5°	2695.2	2685.0	2668.0	2668.0	2650.9	2647.5	2640.7	2637.3
20°	2644.1	2630.5	2616.9	2616.9	2596.4	2596.4	2586.2	2589.6
22.5°	2572.6	2562.3	2548.7	2548.7	2531.7	2528.3	2518.0	2514.6
25°	2487.4	2473.7	2463.5	2460.1	2446.5	2439.7	2436.3	2429.5
27.5°	2374.9	2364.7	2354.5	2347.7	2330.6	2327.2	2317.0	2320.4
30°	2235.2	2228.4	2225.0	2218.2	2197.8	2190.9	2190.9	2180.7
32.5°	2081.9	2071.7	2064.9	2054.6	2037.6	2034.2	2024.0	2027.4
35°	1894.5	1880.9	1870.6	1874.1	1853.6	1850.2	1843.4	1846.8
37.5°	1700.3	1686.6	1673.0	1669.6	1652.6	1652.6	1642.4	1642.4
40°	1499.2	1485.6	1478.8	1478.8	1458.4	1461.8	1451.5	1448.1
42.5°	1318.7	1305.0	1301.6	1298.2	1288.0	1284.6	1274.4	1277.8
45°	1148.3	1144.9	1144.9	1138.1	1127.8	1124.4	1127.8	1127.8
47.5°	998.4	1001.8	998.4	998.4	991.5	998.4	991.5	995.0
50°	872.3	879.1	879.1	879.1	875.7	879.1	879.1	882.5
52.5°	766.7	776.9	773.5	776.9	773.5	780.3	776.9	780.3
55°	674.7	681.5	684.9	688.3	688.3	688.3	688.3	688.3
57.5°	589.5	599.7	603.1	606.5	606.5	613.3	606.5	606.5
60°	521.3	531.5	535.0	538.4	538.4	541.8	535.0	538.4
62.5°	460.0	470.2	470.2	473.6	473.6	473.6	466.8	470.2
65°	398.7	402.1	405.5	405.5	402.1	402.1	398.7	402.1
67.5°	330.5	333.9	330.5	330.5	327.1	327.1	320.3	323.7
70°	255.6	255.6	259.0	255.6	252.1	255.6	252.1	248.7
72.5°	190.8	190.8	190.8	187.4	187.4	184.0	187.4	187.4
75°	129.5	129.5	132.9	132.9	132.9	132.9	129.5	129.5
77.5°	85.2	85.2	85.2	85.2	88.6	85.2	85.2	85.2
80°	54.5	54.5	57.9	57.9	54.5	54.5	54.5	54.5
82.5°	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.4	20.4	20.4	17.0	17.0	17.0	17.0
87.5°	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8
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)