

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: P252617

Luminaire Tested: **LD6B50D010TE EU6B30509035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252617
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: LD6B50D010TE EU6B30509035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4615.0 lumens
Efficiency: N/A
Efficacy: 78.5 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

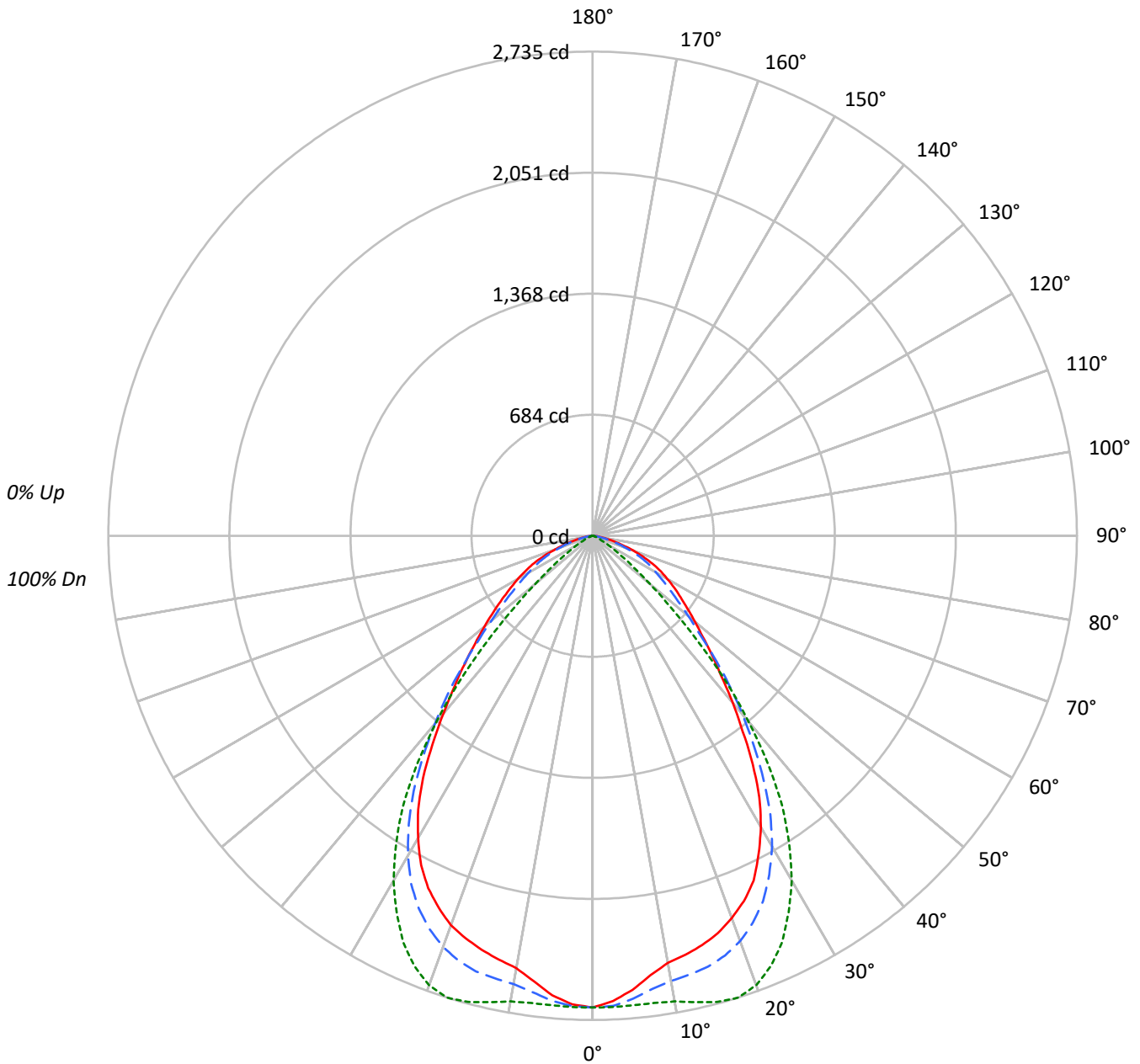
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	173834	173834	173834
5°	168643	174295	170660
10°	162226	176919	164273
15°	161655	184126	163526
20°	159538	187552	162530
25°	154775	182266	158101
30°	143179	169395	148512
35°	125607	148911	132966
40°	104669	116736	111490
45°	88103	77022	94073
50°	76285	42202	80974
55°	69020	22419	70771
60°	63505	11652	63505
65°	57535	6175	56114
70°	46410	3529	42900
75°	31836	2319	29517
80°	20814	1165	18522
85°	13848	2321	11528



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.5	5.4
10°-20°	718.4	15.6
20°-30°	1061.5	23.0
30°-40°	1072.2	23.2
40°-50°	739.0	16.0
50°-60°	424.4	9.2
60°-70°	247.0	5.4
70°-80°	90.1	2.0
80°-90°	13.8	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°	2028.4	44.0
0°-40°	3100.6	67.2
0°-60°	4264.1	92.4
0°-90°	4615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4615.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2664	2664	2664	2664	2664	
5°	2575	2624	2661	2637	2606	242
15°	2393	2520	2726	2547	2421	674
25°	2150	2276	2532	2323	2196	980
35°	1577	1685	1870	1762	1670	979
45°	955	967	835	1029	1020	743
55°	607	533	197	554	622	546
65°	373	314	40	311	364	365
75°	126	102	9	99	117	142
85°	18	9	3	12	15	23
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°	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5
2.5°	2630.6	2633.7	2636.7	2633.7	2636.7	2649.1	2639.8	2646.0	2646.0	2649.1	2658.3
5°	2575.1	2575.1	2581.3	2578.2	2587.5	2599.8	2590.5	2599.8	2602.9	2609.0	2624.4
7.5°	2504.3	2504.3	2507.4	2507.4	2519.7	2532.0	2525.9	2538.2	2550.5	2562.8	2581.3
10°	2448.8	2455.0	2455.0	2458.1	2470.4	2485.8	2482.7	2498.1	2510.5	2528.9	2553.6
12.5°	2424.2	2427.3	2427.3	2433.4	2445.8	2461.2	2458.1	2473.5	2492.0	2513.5	2538.2
15°	2393.4	2399.6	2396.5	2402.6	2415.0	2430.4	2427.3	2442.7	2464.2	2485.8	2519.7
17.5°	2353.4	2356.4	2359.5	2359.5	2371.8	2384.2	2384.2	2399.6	2424.2	2448.8	2485.8
20°	2297.9	2304.1	2304.1	2307.2	2316.4	2334.9	2331.8	2347.2	2371.8	2396.5	2436.5
22.5°	2233.2	2236.3	2236.3	2239.4	2254.8	2264.0	2267.1	2279.4	2301.0	2328.7	2365.7
25°	2150.1	2153.1	2150.1	2159.3	2165.5	2183.9	2177.8	2193.2	2217.8	2239.4	2276.4
27.5°	2029.9	2036.1	2036.1	2039.2	2054.6	2070.0	2070.0	2085.4	2106.9	2122.3	2159.3
30°	1900.6	1909.8	1900.6	1916.0	1922.1	1934.4	1943.7	1952.9	1971.4	1993.0	2026.8
32.5°	1752.7	1749.6	1752.7	1758.9	1777.3	1786.6	1792.7	1802.0	1820.5	1838.9	1866.7
35°	1577.1	1583.3	1586.4	1598.7	1598.7	1614.1	1617.2	1623.3	1651.0	1663.4	1684.9
37.5°	1392.3	1398.5	1401.5	1407.7	1420.0	1426.2	1435.4	1444.7	1463.1	1484.7	1497.0
40°	1229.0	1229.0	1232.1	1238.3	1247.5	1250.6	1259.8	1272.2	1284.5	1303.0	1315.3
42.5°	1075.0	1078.1	1075.0	1081.2	1090.4	1102.8	1099.7	1115.1	1118.2	1130.5	1139.7
45°	954.9	954.9	948.7	954.9	954.9	967.2	964.1	970.3	967.2	973.4	967.2
47.5°	840.9	844.0	840.9	844.0	844.0	844.0	847.1	840.9	844.0	834.8	816.3
50°	751.6	754.7	748.5	751.6	748.5	745.4	748.5	739.3	736.2	723.9	705.4
52.5°	674.6	671.5	668.4	668.4	668.4	665.3	662.3	653.0	643.8	631.5	609.9
55°	606.8	603.7	600.7	600.7	594.5	591.4	591.4	582.2	572.9	557.5	532.9
57.5°	545.2	542.1	539.1	539.1	536.0	529.8	529.8	520.6	508.3	489.8	468.2
60°	486.7	486.7	486.7	483.6	483.6	477.4	477.4	468.2	455.9	437.4	412.8
62.5°	434.3	431.2	431.2	431.2	431.2	428.2	425.1	418.9	406.6	388.1	366.6
65°	372.7	372.7	372.7	372.7	369.6	369.6	369.6	360.4	354.2	335.8	314.2
67.5°	305.0	305.0	305.0	305.0	301.9	305.0	305.0	298.8	292.6	274.1	255.7
70°	243.3	240.3	237.2	240.3	237.2	237.2	240.3	234.1	231.0	215.6	197.1
72.5°	178.7	181.7	178.7	178.7	178.7	175.6	178.7	175.6	169.4	157.1	144.8
75°	126.3	129.4	129.4	126.3	126.3	126.3	123.2	123.2	117.1	107.8	101.7
77.5°	86.2	86.2	86.2	86.2	83.2	83.2	83.2	80.1	77.0	70.8	64.7
80°	55.4	55.4	55.4	55.4	52.4	52.4	52.4	49.3	49.3	43.1	37.0
82.5°	33.9	33.9	33.9	33.9	33.9	33.9	30.8	30.8	27.7	24.6	21.6
85°	18.5	18.5	18.5	18.5	18.5	18.5	18.5	15.4	15.4	12.3	9.2
87.5°	6.2	6.2	9.2	9.2	9.2	9.2	9.2	9.2	6.2	6.2	6.2
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°	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5
2.5°	2652.1	2655.2	2655.2	2655.2	2664.5	2667.5	2658.3	2649.1	2667.5	2664.5	2670.6
5°	2621.3	2630.6	2636.7	2639.8	2649.1	2655.2	2646.0	2642.9	2658.3	2661.4	2664.5
7.5°	2584.4	2599.8	2615.2	2621.3	2633.7	2639.8	2636.7	2636.7	2655.2	2661.4	2661.4
10°	2559.7	2581.3	2599.8	2615.2	2630.6	2639.8	2639.8	2642.9	2664.5	2670.6	2676.8
12.5°	2553.6	2581.3	2605.9	2627.5	2639.8	2655.2	2658.3	2667.5	2689.1	2698.4	2698.4
15°	2538.2	2575.1	2605.9	2633.7	2652.1	2670.6	2676.8	2695.3	2719.9	2726.1	2732.2
17.5°	2510.5	2547.4	2584.4	2618.3	2642.9	2658.3	2676.8	2695.3	2726.1	2735.3	2738.4
20°	2461.2	2504.3	2541.3	2575.1	2599.8	2621.3	2639.8	2661.4	2689.1	2701.4	2704.5
22.5°	2387.2	2430.4	2467.3	2504.3	2528.9	2547.4	2565.9	2590.5	2618.3	2630.6	2630.6
25°	2297.9	2338.0	2378.0	2405.7	2430.4	2451.9	2461.2	2488.9	2516.6	2532.0	2532.0
27.5°	2183.9	2220.9	2257.9	2288.7	2304.1	2322.6	2338.0	2362.6	2384.2	2396.5	2408.8
30°	2039.2	2076.1	2110.0	2140.8	2159.3	2177.8	2193.2	2211.7	2233.2	2248.6	2251.7
32.5°	1882.1	1912.9	1946.8	1977.6	1996.0	2002.2	2017.6	2036.1	2054.6	2066.9	2070.0
35°	1709.6	1731.1	1752.7	1780.4	1798.9	1798.9	1814.3	1826.6	1842.0	1869.7	1863.6
37.5°	1506.3	1537.1	1552.5	1561.7	1574.0	1586.4	1589.4	1604.8	1623.3	1629.5	1638.7
40°	1315.3	1324.5	1333.8	1333.8	1346.1	1346.1	1346.1	1349.2	1367.7	1370.7	1383.1
42.5°	1124.3	1124.3	1115.1	1105.8	1108.9	1105.8	1090.4	1090.4	1099.7	1112.0	1112.0
45°	945.7	924.1	896.4	874.8	859.4	853.2	834.8	834.8	831.7	834.8	847.1
47.5°	794.7	757.8	711.6	668.4	653.0	640.7	613.0	600.7	594.5	597.6	603.7
50°	668.4	628.4	576.0	523.7	495.9	480.5	446.6	425.1	422.0	415.8	428.2
52.5°	576.0	526.7	471.3	409.7	382.0	357.3	320.4	301.9	289.5	289.5	292.6
55°	495.9	443.6	382.0	320.4	292.6	274.1	237.2	212.5	200.2	197.1	206.4
57.5°	428.2	378.9	317.3	255.7	227.9	206.4	169.4	147.9	138.6	132.5	135.5
60°	375.8	326.5	264.9	206.4	181.7	157.1	126.3	101.7	89.3	89.3	92.4
62.5°	326.5	280.3	224.9	169.4	147.9	126.3	92.4	70.8	61.6	58.5	61.6
65°	277.2	234.1	187.9	141.7	120.1	101.7	73.9	55.4	43.1	40.0	43.1
67.5°	224.9	191.0	150.9	114.0	95.5	80.1	55.4	40.0	30.8	27.7	30.8
70°	175.6	144.8	114.0	83.2	70.8	58.5	40.0	30.8	21.6	18.5	21.6
72.5°	126.3	104.7	80.1	58.5	49.3	40.0	27.7	21.6	15.4	12.3	15.4
75°	86.2	70.8	52.4	37.0	30.8	27.7	18.5	12.3	9.2	9.2	9.2
77.5°	55.4	43.1	33.9	24.6	18.5	15.4	9.2	6.2	6.2	6.2	6.2
80°	30.8	24.6	18.5	12.3	9.2	9.2	6.2	6.2	3.1	3.1	3.1
82.5°	18.5	12.3	9.2	6.2	6.2	3.1	3.1	3.1	3.1	3.1	3.1
85°	9.2	6.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	3.1	3.1	3.1	3.1	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5
2.5°	2658.3	2661.4	2652.1	2664.5	2655.2	2667.5	2667.5	2655.2	2658.3	2652.1	2664.5
5°	2652.1	2652.1	2646.0	2655.2	2642.9	2655.2	2652.1	2630.6	2636.7	2624.4	2636.7
7.5°	2652.1	2646.0	2636.7	2646.0	2630.6	2639.8	2627.5	2605.9	2599.8	2584.4	2584.4
10°	2661.4	2652.1	2639.8	2642.9	2627.5	2630.6	2612.1	2581.3	2572.1	2553.6	2547.4
12.5°	2683.0	2673.7	2655.2	2661.4	2639.8	2639.8	2615.2	2578.2	2559.7	2535.1	2528.9
15°	2713.8	2698.4	2676.8	2679.9	2658.3	2646.0	2615.2	2572.1	2547.4	2513.5	2504.3
17.5°	2719.9	2704.5	2676.8	2676.8	2649.1	2633.7	2596.7	2547.4	2516.6	2482.7	2464.2
20°	2686.0	2670.6	2639.8	2636.7	2612.1	2590.5	2550.5	2501.2	2470.4	2433.4	2418.0
22.5°	2615.2	2596.7	2569.0	2565.9	2541.3	2528.9	2485.8	2436.5	2405.7	2368.8	2356.4
25°	2510.5	2501.2	2473.5	2470.4	2448.8	2433.4	2396.5	2350.3	2322.6	2285.6	2273.3
27.5°	2387.2	2378.0	2350.3	2350.3	2325.6	2316.4	2282.5	2239.4	2217.8	2183.9	2168.5
30°	2239.4	2227.1	2211.7	2208.6	2187.0	2177.8	2147.0	2106.9	2085.4	2057.6	2051.5
32.5°	2063.8	2054.6	2045.3	2042.2	2020.7	2011.4	1989.9	1949.8	1931.4	1906.7	1897.5
35°	1860.5	1854.3	1845.1	1842.0	1832.8	1823.5	1802.0	1771.2	1761.9	1743.5	1734.2
37.5°	1626.4	1632.6	1626.4	1626.4	1617.2	1620.2	1601.8	1583.3	1574.0	1561.7	1555.6
40°	1373.8	1386.1	1395.4	1395.4	1392.3	1404.6	1401.5	1386.1	1383.1	1376.9	1373.8
42.5°	1118.2	1124.3	1142.8	1155.1	1152.0	1182.8	1185.9	1198.2	1207.5	1201.3	1204.4
45°	850.2	868.6	893.3	905.6	921.0	961.1	982.6	1007.3	1028.8	1041.1	1038.1
47.5°	613.0	634.5	662.3	680.7	708.5	757.8	813.2	844.0	874.8	890.2	905.6
50°	443.6	465.1	499.0	526.7	545.2	613.0	671.5	711.6	745.4	767.0	782.4
52.5°	311.1	335.8	372.7	397.4	425.1	489.8	557.5	603.7	640.7	668.4	683.8
55°	215.6	243.3	277.2	301.9	332.7	400.4	465.1	514.4	554.5	579.1	597.6
57.5°	150.9	175.6	209.5	231.0	261.8	326.5	391.2	440.5	480.5	505.2	526.7
60°	101.7	126.3	160.2	181.7	206.4	271.1	329.6	382.0	418.9	443.6	465.1
62.5°	70.8	92.4	126.3	147.9	169.4	224.9	280.3	326.5	363.5	391.2	409.7
65°	55.4	73.9	101.7	120.1	141.7	187.9	234.1	274.1	311.1	338.8	351.2
67.5°	40.0	58.5	80.1	95.5	110.9	150.9	191.0	221.8	255.7	277.2	292.6
70°	27.7	40.0	58.5	70.8	83.2	114.0	144.8	172.5	197.1	212.5	224.9
72.5°	21.6	27.7	40.0	49.3	58.5	80.1	104.7	126.3	144.8	157.1	169.4
75°	12.3	18.5	27.7	33.9	40.0	55.4	70.8	86.2	98.6	107.8	114.0
77.5°	6.2	9.2	15.4	18.5	24.6	33.9	46.2	55.4	64.7	70.8	77.0
80°	6.2	6.2	9.2	9.2	12.3	18.5	24.6	30.8	37.0	43.1	46.2
82.5°	3.1	3.1	6.2	6.2	6.2	9.2	12.3	18.5	21.6	24.6	27.7
85°	3.1	3.1	3.1	3.1	3.1	6.2	6.2	9.2	12.3	15.4	15.4
87.5°	0.0	0.0	3.1	3.1	3.1	3.1	3.1	6.2	6.2	6.2	9.2
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: P252617

CATALOG NUMBER: LD6B50D010TE EU6B30509035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5	2664.5
2.5°	2655.2	2661.4	2658.3	2664.5	2655.2	2652.1	2658.3	2649.1
5°	2621.3	2624.4	2621.3	2621.3	2615.2	2609.0	2615.2	2605.9
7.5°	2569.0	2569.0	2559.7	2559.7	2547.4	2541.3	2541.3	2538.2
10°	2525.9	2516.6	2507.4	2510.5	2492.0	2485.8	2482.7	2479.7
12.5°	2504.3	2498.1	2482.7	2482.7	2464.2	2458.1	2455.0	2451.9
15°	2479.7	2467.3	2455.0	2451.9	2436.5	2430.4	2427.3	2421.1
17.5°	2436.5	2427.3	2411.9	2411.9	2396.5	2393.4	2387.2	2384.2
20°	2390.3	2378.0	2365.7	2365.7	2347.2	2347.2	2338.0	2341.0
22.5°	2325.6	2316.4	2304.1	2304.1	2288.7	2285.6	2276.4	2273.3
25°	2248.6	2236.3	2227.1	2224.0	2211.7	2205.5	2202.4	2196.3
27.5°	2147.0	2137.7	2128.5	2122.3	2106.9	2103.9	2094.6	2097.7
30°	2020.7	2014.5	2011.4	2005.3	1986.8	1980.6	1980.6	1971.4
32.5°	1882.1	1872.8	1866.7	1857.4	1842.0	1838.9	1829.7	1832.8
35°	1712.7	1700.3	1691.1	1694.2	1675.7	1672.6	1666.4	1669.5
37.5°	1537.1	1524.8	1512.4	1509.4	1494.0	1494.0	1484.7	1484.7
40°	1355.3	1343.0	1336.9	1336.9	1318.4	1321.5	1312.2	1309.1
42.5°	1192.1	1179.8	1176.7	1173.6	1164.4	1161.3	1152.0	1155.1
45°	1038.1	1035.0	1035.0	1028.8	1019.6	1016.5	1019.6	1019.6
47.5°	902.5	905.6	902.5	902.5	896.4	902.5	896.4	899.5
50°	788.6	794.7	794.7	794.7	791.6	794.7	794.7	797.8
52.5°	693.1	702.3	699.2	702.3	699.2	705.4	702.3	705.4
55°	609.9	616.1	619.1	622.2	622.2	622.2	622.2	622.2
57.5°	532.9	542.1	545.2	548.3	548.3	554.5	548.3	548.3
60°	471.3	480.5	483.6	486.7	486.7	489.8	483.6	486.7
62.5°	415.8	425.1	425.1	428.2	428.2	428.2	422.0	425.1
65°	360.4	363.5	366.6	366.6	363.5	363.5	360.4	363.5
67.5°	298.8	301.9	298.8	298.8	295.7	295.7	289.5	292.6
70°	231.0	231.0	234.1	231.0	227.9	231.0	227.9	224.9
72.5°	172.5	172.5	172.5	169.4	169.4	166.3	169.4	169.4
75°	117.1	117.1	120.1	120.1	120.1	120.1	117.1	117.1
77.5°	77.0	77.0	77.0	77.0	80.1	77.0	77.0	77.0
80°	49.3	49.3	52.4	52.4	49.3	49.3	49.3	49.3
82.5°	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8
85°	18.5	18.5	18.5	18.5	15.4	15.4	15.4	15.4
87.5°	9.2	9.2	9.2	9.2	9.2	9.2	6.2	6.2
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)