

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: P252615

Luminaire Tested: **LD6B50D010TE EU6B30509027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252615
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 EU6B30509027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 4376.0 lumens
Efficiency: N/A
Efficacy: 74.5 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

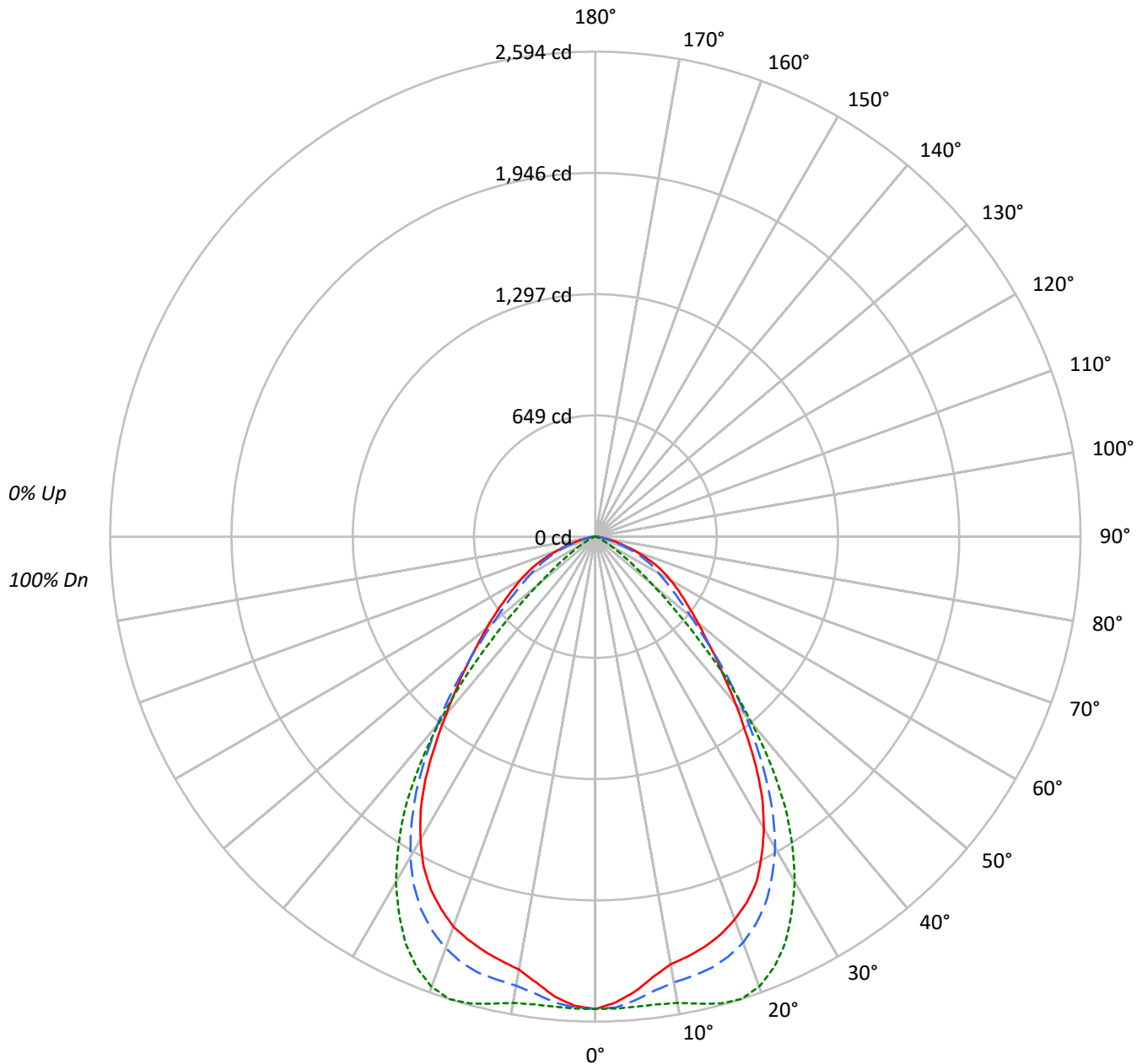
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	108	105	102	109	106	103	100	102	99	97		98	96	94		94
2	104	97	92	87	101	95	91	86	92	88	84		89	86	83		86
3	96	88	81	76	94	86	80	76	84	79	74		81	77	73		79
4	90	80	73	67	88	79	72	67	76	70	66		74	69	65		72
5	84	73	65	60	82	72	65	59	70	64	59		68	63	58		66
6	78	67	59	54	76	66	59	53	64	58	53		63	57	53		61
7	73	61	54	49	72	61	53	48	59	53	48		58	52	48		57
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	164830	164830	164830
5°	159913	165270	161825
10°	153826	167757	155760
15°	153287	174589	155056
20°	151276	177839	154115
25°	146756	172829	149909
30°	135758	160626	140821
35°	119100	141201	126085
40°	99252	110698	105716
45°	83536	73027	89201
50°	72336	40020	76782
55°	65448	21259	67109
60°	60217	11052	60217
65°	54555	5866	53212
70°	44006	3338	40668
75°	30198	2218	27980
80°	19762	1090	17545
85°	13100	2171	10929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.6	5.4
10°-20°	681.2	15.6
20°-30°	1006.5	23.0
30°-40°	1016.7	23.2
40°-50°	700.7	16.0
50°-60°	402.5	9.2
60°-70°	234.2	5.4
70°-80°	85.5	2.0
80°-90°	13.1	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°	1923.4	44.0
0°-40°	2940.0	67.2
0°-60°	4043.2	92.4
0°-90°	4376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4376.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2526	2526	2526	2526	2526	
5°	2442	2488	2524	2500	2471	229
15°	2270	2389	2585	2416	2296	639
25°	2039	2158	2401	2202	2082	929
35°	1495	1598	1773	1671	1583	928
45°	905	917	792	976	967	704
55°	575	505	187	526	590	518
65°	353	298	38	295	345	346
75°	120	96	9	94	111	135
85°	18	9	3	12	15	22
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°	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5
2.5°	2494.4	2497.3	2500.2	2497.3	2500.2	2511.9	2503.1	2509.0	2509.0	2511.9	2520.6
5°	2441.8	2441.8	2447.6	2444.7	2453.5	2465.1	2456.4	2465.1	2468.1	2473.9	2488.5
7.5°	2374.6	2374.6	2377.5	2377.5	2389.2	2400.9	2395.0	2406.7	2418.4	2430.1	2447.6
10°	2322.0	2327.9	2327.9	2330.8	2342.5	2357.1	2354.2	2368.8	2380.4	2398.0	2421.3
12.5°	2298.7	2301.6	2301.6	2307.4	2319.1	2333.7	2330.8	2345.4	2362.9	2383.4	2406.7
15°	2269.5	2275.3	2272.4	2278.2	2289.9	2304.5	2301.6	2316.2	2336.6	2357.1	2389.2
17.5°	2231.5	2234.4	2237.3	2237.3	2249.0	2260.7	2260.7	2275.3	2298.7	2322.0	2357.1
20°	2178.9	2184.8	2184.8	2187.7	2196.4	2214.0	2211.0	2225.6	2249.0	2272.4	2310.3
22.5°	2117.6	2120.5	2120.5	2123.4	2138.0	2146.8	2149.7	2161.4	2181.8	2208.1	2243.2
25°	2038.7	2041.6	2038.7	2047.5	2053.3	2070.8	2065.0	2079.6	2103.0	2123.4	2158.5
27.5°	1924.8	1930.6	1930.6	1933.6	1948.2	1962.8	1962.8	1977.4	1997.8	2012.4	2047.5
30°	1802.1	1810.9	1802.1	1816.7	1822.6	1834.3	1843.0	1851.8	1869.3	1889.8	1921.9
32.5°	1661.9	1659.0	1661.9	1667.8	1685.3	1694.1	1699.9	1708.7	1726.2	1743.7	1770.0
35°	1495.4	1501.3	1504.2	1515.9	1515.9	1530.5	1533.4	1539.3	1565.5	1577.2	1597.7
37.5°	1320.2	1326.0	1329.0	1334.8	1346.5	1352.3	1361.1	1369.9	1387.4	1407.8	1419.5
40°	1165.4	1165.4	1168.3	1174.2	1182.9	1185.8	1194.6	1206.3	1218.0	1235.5	1247.2
42.5°	1019.4	1022.3	1019.4	1025.2	1034.0	1045.6	1042.7	1057.3	1060.2	1071.9	1080.7
45°	905.4	905.4	899.6	905.4	905.4	917.1	914.2	920.0	917.1	923.0	917.1
47.5°	797.4	800.3	797.4	800.3	800.3	800.3	803.2	797.4	800.3	791.5	774.0
50°	712.7	715.6	709.8	712.7	709.8	706.8	709.8	701.0	698.1	686.4	668.9
52.5°	639.7	636.7	633.8	633.8	633.8	630.9	628.0	619.2	610.4	598.8	578.3
55°	575.4	572.5	569.6	569.6	563.7	560.8	560.8	552.0	543.3	528.7	505.3
57.5°	517.0	514.1	511.1	511.1	508.2	502.4	502.4	493.6	481.9	464.4	444.0
60°	461.5	461.5	461.5	458.6	458.6	452.7	452.7	444.0	432.3	414.8	391.4
62.5°	411.8	408.9	408.9	408.9	408.9	406.0	403.1	397.2	385.5	368.0	347.6
65°	353.4	353.4	353.4	353.4	350.5	350.5	350.5	341.7	335.9	318.4	297.9
67.5°	289.2	289.2	289.2	289.2	286.2	289.2	289.2	283.3	277.5	260.0	242.4
70°	230.7	227.8	224.9	227.8	224.9	224.9	227.8	222.0	219.1	204.5	186.9
72.5°	169.4	172.3	169.4	169.4	169.4	166.5	169.4	166.5	160.6	149.0	137.3
75°	119.8	122.7	122.7	119.8	119.8	119.8	116.8	116.8	111.0	102.2	96.4
77.5°	81.8	81.8	81.8	81.8	78.9	78.9	78.9	75.9	73.0	67.2	61.3
80°	52.6	52.6	52.6	52.6	49.7	49.7	49.7	46.7	46.7	40.9	35.0
82.5°	32.1	32.1	32.1	32.1	32.1	32.1	29.2	29.2	26.3	23.4	20.4
85°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	14.6	14.6	11.7	8.8
87.5°	5.8	5.8	8.8	8.8	8.8	8.8	8.8	8.8	5.8	5.8	5.8
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°	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5
2.5°	2514.8	2517.7	2517.7	2517.7	2526.5	2529.4	2520.6	2511.9	2529.4	2526.5	2532.3
5°	2485.6	2494.4	2500.2	2503.1	2511.9	2517.7	2509.0	2506.0	2520.6	2523.6	2526.5
7.5°	2450.5	2465.1	2479.8	2485.6	2497.3	2503.1	2500.2	2500.2	2517.7	2523.6	2523.6
10°	2427.2	2447.6	2465.1	2479.8	2494.4	2503.1	2503.1	2506.0	2526.5	2532.3	2538.2
12.5°	2421.3	2447.6	2471.0	2491.4	2503.1	2517.7	2520.6	2529.4	2549.8	2558.6	2558.6
15°	2406.7	2441.8	2471.0	2497.3	2514.8	2532.3	2538.2	2555.7	2579.1	2584.9	2590.7
17.5°	2380.4	2415.5	2450.5	2482.7	2506.0	2520.6	2538.2	2555.7	2584.9	2593.7	2596.6
20°	2333.7	2374.6	2409.7	2441.8	2465.1	2485.6	2503.1	2523.6	2549.8	2561.5	2564.5
22.5°	2263.6	2304.5	2339.6	2374.6	2398.0	2415.5	2433.0	2456.4	2482.7	2494.4	2494.4
25°	2178.9	2216.9	2254.8	2281.1	2304.5	2324.9	2333.7	2360.0	2386.3	2400.9	2400.9
27.5°	2070.8	2105.9	2140.9	2170.1	2184.8	2202.3	2216.9	2240.2	2260.7	2272.4	2284.1
30°	1933.6	1968.6	2000.7	2029.9	2047.5	2065.0	2079.6	2097.1	2117.6	2132.2	2135.1
32.5°	1784.6	1813.8	1845.9	1875.1	1892.7	1898.5	1913.1	1930.6	1948.2	1959.8	1962.8
35°	1621.0	1641.5	1661.9	1688.2	1705.7	1705.7	1720.3	1732.0	1746.6	1772.9	1767.1
37.5°	1428.3	1457.5	1472.1	1480.8	1492.5	1504.2	1507.1	1521.7	1539.3	1545.1	1553.9
40°	1247.2	1255.9	1264.7	1264.7	1276.4	1276.4	1276.4	1279.3	1296.8	1299.8	1311.4
42.5°	1066.1	1066.1	1057.3	1048.6	1051.5	1048.6	1034.0	1034.0	1042.7	1054.4	1054.4
45°	896.7	876.2	849.9	829.5	814.9	809.1	791.5	791.5	788.6	791.5	803.2
47.5°	753.6	718.5	674.7	633.8	619.2	607.5	581.2	569.6	563.7	566.6	572.5
50°	633.8	595.8	546.2	496.5	470.2	455.6	423.5	403.1	400.1	394.3	406.0
52.5°	546.2	499.5	446.9	388.5	362.2	338.8	303.8	286.2	274.6	274.6	277.5
55°	470.2	420.6	362.2	303.8	277.5	260.0	224.9	201.5	189.9	186.9	195.7
57.5°	406.0	359.3	300.8	242.4	216.1	195.7	160.6	140.2	131.4	125.6	128.5
60°	356.3	309.6	251.2	195.7	172.3	149.0	119.8	96.4	84.7	84.7	87.6
62.5°	309.6	265.8	213.2	160.6	140.2	119.8	87.6	67.2	58.4	55.5	58.4
65°	262.9	222.0	178.2	134.4	113.9	96.4	70.1	52.6	40.9	38.0	40.9
67.5°	213.2	181.1	143.1	108.1	90.5	75.9	52.6	38.0	29.2	26.3	29.2
70°	166.5	137.3	108.1	78.9	67.2	55.5	38.0	29.2	20.4	17.5	20.4
72.5°	119.8	99.3	75.9	55.5	46.7	38.0	26.3	20.4	14.6	11.7	14.6
75°	81.8	67.2	49.7	35.0	29.2	26.3	17.5	11.7	8.8	8.8	8.8
77.5°	52.6	40.9	32.1	23.4	17.5	14.6	8.8	5.8	5.8	5.8	5.8
80°	29.2	23.4	17.5	11.7	8.8	8.8	5.8	5.8	2.9	2.9	2.9
82.5°	17.5	11.7	8.8	5.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9
85°	8.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	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°	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5
2.5°	2520.6	2523.6	2514.8	2526.5	2517.7	2529.4	2529.4	2517.7	2520.6	2514.8	2526.5
5°	2514.8	2514.8	2509.0	2517.7	2506.0	2517.7	2514.8	2494.4	2500.2	2488.5	2500.2
7.5°	2514.8	2509.0	2500.2	2509.0	2494.4	2503.1	2491.4	2471.0	2465.1	2450.5	2450.5
10°	2523.6	2514.8	2503.1	2506.0	2491.4	2494.4	2476.8	2447.6	2438.9	2421.3	2415.5
12.5°	2544.0	2535.2	2517.7	2523.6	2503.1	2503.1	2479.8	2444.7	2427.2	2403.8	2398.0
15°	2573.2	2558.6	2538.2	2541.1	2520.6	2509.0	2479.8	2438.9	2415.5	2383.4	2374.6
17.5°	2579.1	2564.5	2538.2	2538.2	2511.9	2497.3	2462.2	2415.5	2386.3	2354.2	2336.6
20°	2546.9	2532.3	2503.1	2500.2	2476.8	2456.4	2418.4	2371.7	2342.5	2307.4	2292.8
22.5°	2479.8	2462.2	2435.9	2433.0	2409.7	2398.0	2357.1	2310.3	2281.1	2246.1	2234.4
25°	2380.4	2371.7	2345.4	2342.5	2322.0	2307.4	2272.4	2228.6	2202.3	2167.2	2155.5
27.5°	2263.6	2254.8	2228.6	2228.6	2205.2	2196.4	2164.3	2123.4	2103.0	2070.8	2056.2
30°	2123.4	2111.7	2097.1	2094.2	2073.8	2065.0	2035.8	1997.8	1977.4	1951.1	1945.2
32.5°	1956.9	1948.2	1939.4	1936.5	1916.0	1907.3	1886.8	1848.9	1831.3	1808.0	1799.2
35°	1764.2	1758.3	1749.6	1746.6	1737.9	1729.1	1708.7	1679.5	1670.7	1653.2	1644.4
37.5°	1542.2	1548.0	1542.2	1542.2	1533.4	1536.3	1518.8	1501.3	1492.5	1480.8	1475.0
40°	1302.7	1314.4	1323.1	1323.1	1320.2	1331.9	1329.0	1314.4	1311.4	1305.6	1302.7
42.5°	1060.2	1066.1	1083.6	1095.3	1092.4	1121.6	1124.5	1136.2	1144.9	1139.1	1142.0
45°	806.1	823.7	847.0	858.7	873.3	911.3	931.7	955.1	975.5	987.2	984.3
47.5°	581.2	601.7	628.0	645.5	671.8	718.5	771.1	800.3	829.5	844.1	858.7
50°	420.6	441.0	473.2	499.5	517.0	581.2	636.7	674.7	706.8	727.3	741.9
52.5°	295.0	318.4	353.4	376.8	403.1	464.4	528.7	572.5	607.5	633.8	648.4
55°	204.5	230.7	262.9	286.2	315.4	379.7	441.0	487.8	525.7	549.1	566.6
57.5°	143.1	166.5	198.6	219.1	248.3	309.6	370.9	417.7	455.6	479.0	499.5
60°	96.4	119.8	151.9	172.3	195.7	257.0	312.5	362.2	397.2	420.6	441.0
62.5°	67.2	87.6	119.8	140.2	160.6	213.2	265.8	309.6	344.7	370.9	388.5
65°	52.6	70.1	96.4	113.9	134.4	178.2	222.0	260.0	295.0	321.3	333.0
67.5°	38.0	55.5	75.9	90.5	105.1	143.1	181.1	210.3	242.4	262.9	277.5
70°	26.3	38.0	55.5	67.2	78.9	108.1	137.3	163.6	186.9	201.5	213.2
72.5°	20.4	26.3	38.0	46.7	55.5	75.9	99.3	119.8	137.3	149.0	160.6
75°	11.7	17.5	26.3	32.1	38.0	52.6	67.2	81.8	93.5	102.2	108.1
77.5°	5.8	8.8	14.6	17.5	23.4	32.1	43.8	52.6	61.3	67.2	73.0
80°	5.8	5.8	8.8	8.8	11.7	17.5	23.4	29.2	35.0	40.9	43.8
82.5°	2.9	2.9	5.8	5.8	5.8	8.8	11.7	17.5	20.4	23.4	26.3
85°	2.9	2.9	2.9	2.9	2.9	5.8	5.8	8.8	11.7	14.6	14.6
87.5°	0.0	0.0	2.9	2.9	2.9	2.9	2.9	5.8	5.8	5.8	8.8
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: P252615

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5	2526.5
2.5°	2517.7	2523.6	2520.6	2526.5	2517.7	2514.8	2520.6	2511.9
5°	2485.6	2488.5	2485.6	2485.6	2479.8	2473.9	2479.8	2471.0
7.5°	2435.9	2435.9	2427.2	2427.2	2415.5	2409.7	2409.7	2406.7
10°	2395.0	2386.3	2377.5	2380.4	2362.9	2357.1	2354.2	2351.2
12.5°	2374.6	2368.8	2354.2	2354.2	2336.6	2330.8	2327.9	2324.9
15°	2351.2	2339.6	2327.9	2324.9	2310.3	2304.5	2301.6	2295.7
17.5°	2310.3	2301.6	2287.0	2287.0	2272.4	2269.5	2263.6	2260.7
20°	2266.5	2254.8	2243.2	2243.2	2225.6	2225.6	2216.9	2219.8
22.5°	2205.2	2196.4	2184.8	2184.8	2170.1	2167.2	2158.5	2155.5
25°	2132.2	2120.5	2111.7	2108.8	2097.1	2091.3	2088.4	2082.5
27.5°	2035.8	2027.0	2018.3	2012.4	1997.8	1994.9	1986.1	1989.1
30°	1916.0	1910.2	1907.3	1901.4	1883.9	1878.1	1878.1	1869.3
32.5°	1784.6	1775.8	1770.0	1761.2	1746.6	1743.7	1734.9	1737.9
35°	1624.0	1612.3	1603.5	1606.4	1588.9	1586.0	1580.1	1583.1
37.5°	1457.5	1445.8	1434.1	1431.2	1416.6	1416.6	1407.8	1407.8
40°	1285.1	1273.5	1267.6	1267.6	1250.1	1253.0	1244.3	1241.3
42.5°	1130.3	1118.7	1115.7	1112.8	1104.1	1101.1	1092.4	1095.3
45°	984.3	981.4	981.4	975.5	966.8	963.9	966.8	966.8
47.5°	855.8	858.7	855.8	855.8	849.9	855.8	849.9	852.9
50°	747.7	753.6	753.6	753.6	750.6	753.6	753.6	756.5
52.5°	657.2	665.9	663.0	665.9	663.0	668.9	665.9	668.9
55°	578.3	584.2	587.1	590.0	590.0	590.0	590.0	590.0
57.5°	505.3	514.1	517.0	519.9	519.9	525.7	519.9	519.9
60°	446.9	455.6	458.6	461.5	461.5	464.4	458.6	461.5
62.5°	394.3	403.1	403.1	406.0	406.0	406.0	400.1	403.1
65°	341.7	344.7	347.6	347.6	344.7	344.7	341.7	344.7
67.5°	283.3	286.2	283.3	283.3	280.4	280.4	274.6	277.5
70°	219.1	219.1	222.0	219.1	216.1	219.1	216.1	213.2
72.5°	163.6	163.6	163.6	160.6	160.6	157.7	160.6	160.6
75°	111.0	111.0	113.9	113.9	113.9	113.9	111.0	111.0
77.5°	73.0	73.0	73.0	73.0	75.9	73.0	73.0	73.0
80°	46.7	46.7	49.7	49.7	46.7	46.7	46.7	46.7
82.5°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
85°	17.5	17.5	17.5	17.5	14.6	14.6	14.6	14.6
87.5°	8.8	8.8	8.8	8.8	8.8	8.8	5.8	5.8
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)