

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: P252634

Luminaire Tested: **LD6B60D010TE EU6B60709730 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252634
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: LD6B60D010TE EU6B60709730 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4444.0 lumens
Efficiency: N/A
Efficacy: 71.1 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

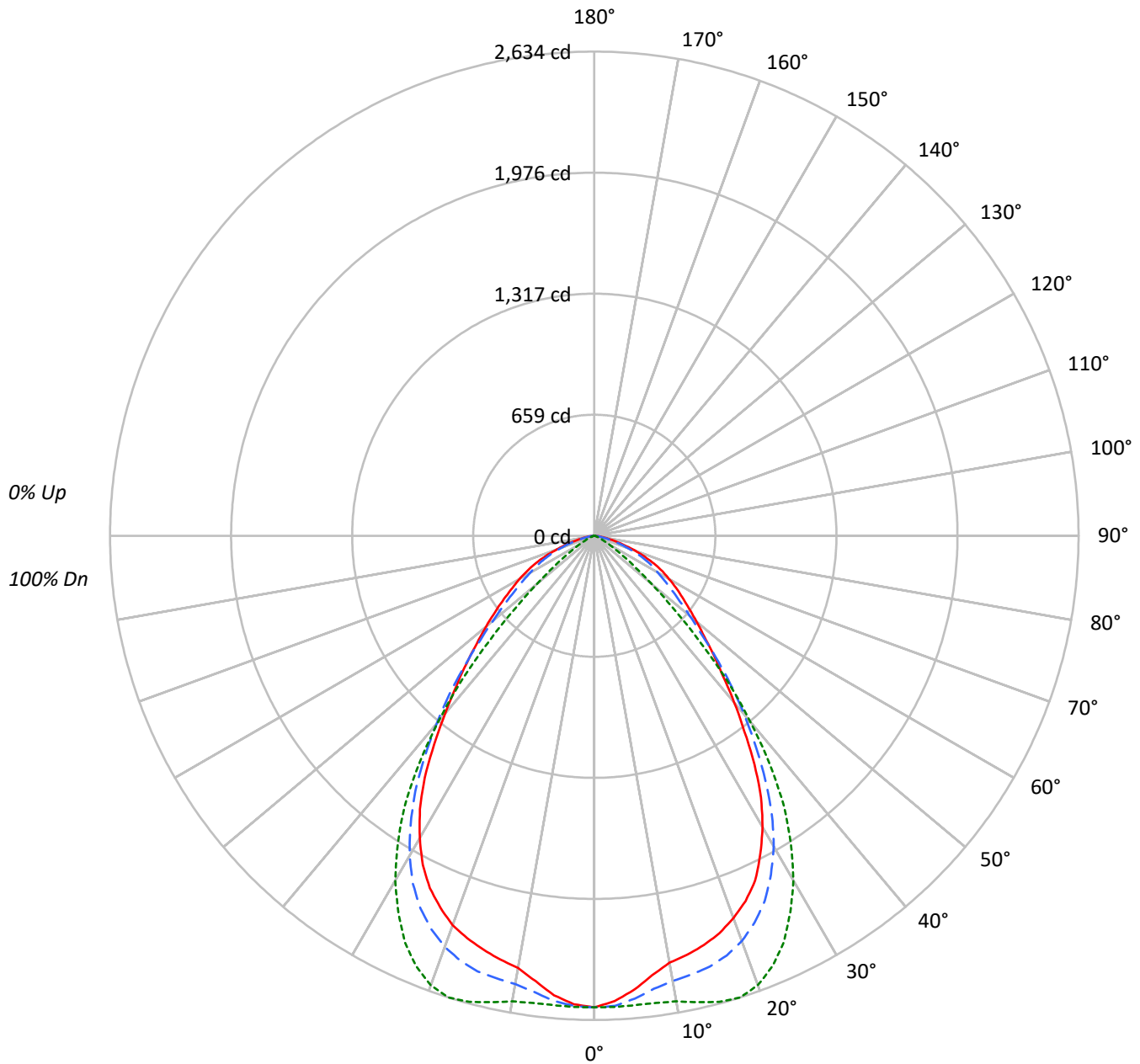
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

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°	167388	167388	167388
5°	162395	167837	164340
10°	156217	170368	158185
15°	155664	177305	157468
20°	153629	180602	156511
25°	149038	175514	152241
30°	137868	163119	143013
35°	120955	143399	128044
40°	100793	112410	107360
45°	84837	74162	90585
50°	73453	40639	77970
55°	66460	21589	68155
60°	61157	11221	61157
65°	55404	5959	54030
70°	44693	3395	41298
75°	30652	2243	28408
80°	20063	1127	17846
85°	13324	2246	11079



TEST NUMBER: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.3	5.4
10°-20°	691.8	15.6
20°-30°	1022.2	23.0
30°-40°	1032.5	23.2
40°-50°	711.6	16.0
50°-60°	408.7	9.2
60°-70°	237.9	5.4
70°-80°	86.8	2.0
80°-90°	13.3	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°	1953.2	44.0
0°-40°	2985.7	67.2
0°-60°	4106.1	92.4
0°-90°	4444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4444.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2566	2566	2566	2566	2566	
5°	2480	2527	2563	2539	2509	233
15°	2305	2426	2625	2453	2331	649
25°	2070	2192	2438	2236	2115	943
35°	1519	1622	1800	1697	1608	943
45°	920	931	804	991	982	715
55°	584	513	190	534	599	526
65°	359	302	39	300	350	351
75°	122	98	9	95	113	137
85°	18	9	3	12	15	23
90°	0	0	0	0	0	



TEST NUMBER: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7
2.5°	2533.1	2536.1	2539.0	2536.1	2539.0	2550.9	2542.0	2547.9	2547.9	2550.9	2559.8
5°	2479.7	2479.7	2485.7	2482.7	2491.6	2503.5	2494.6	2503.5	2506.4	2512.4	2527.2
7.5°	2411.5	2411.5	2414.5	2414.5	2426.3	2438.2	2432.3	2444.1	2456.0	2467.9	2485.7
10°	2358.1	2364.0	2364.0	2367.0	2378.9	2393.7	2390.7	2405.6	2417.4	2435.2	2459.0
12.5°	2334.4	2337.3	2337.3	2343.3	2355.1	2370.0	2367.0	2381.8	2399.6	2420.4	2444.1
15°	2304.7	2310.7	2307.7	2313.6	2325.5	2340.3	2337.3	2352.2	2372.9	2393.7	2426.3
17.5°	2266.2	2269.1	2272.1	2272.1	2284.0	2295.8	2295.8	2310.7	2334.4	2358.1	2393.7
20°	2212.8	2218.7	2218.7	2221.7	2230.6	2248.4	2245.4	2260.2	2284.0	2307.7	2346.2
22.5°	2150.5	2153.4	2153.4	2156.4	2171.2	2180.1	2183.1	2195.0	2215.7	2242.4	2278.0
25°	2070.4	2073.4	2070.4	2079.3	2085.2	2103.0	2097.1	2111.9	2135.6	2156.4	2192.0
27.5°	1954.7	1960.6	1960.6	1963.6	1978.4	1993.3	1993.3	2008.1	2028.9	2043.7	2079.3
30°	1830.1	1839.0	1830.1	1845.0	1850.9	1862.8	1871.7	1880.6	1898.4	1919.1	1951.7
32.5°	1687.8	1684.8	1687.8	1693.7	1711.5	1720.4	1726.3	1735.2	1753.0	1770.8	1797.5
35°	1518.7	1524.6	1527.6	1539.4	1539.4	1554.3	1557.2	1563.2	1589.9	1601.7	1622.5
37.5°	1340.7	1346.6	1349.6	1355.5	1367.4	1373.3	1382.2	1391.1	1408.9	1429.7	1441.6
40°	1183.5	1183.5	1186.5	1192.4	1201.3	1204.3	1213.2	1225.0	1236.9	1254.7	1266.6
42.5°	1035.2	1038.2	1035.2	1041.1	1050.0	1061.9	1058.9	1073.8	1076.7	1088.6	1097.5
45°	919.5	919.5	913.6	919.5	919.5	931.4	928.4	934.3	931.4	937.3	931.4
47.5°	809.8	812.7	809.8	812.7	812.7	812.7	815.7	809.8	812.7	803.8	786.0
50°	723.7	726.7	720.8	723.7	720.8	717.8	720.8	711.9	708.9	697.1	679.3
52.5°	649.6	646.6	643.7	643.7	643.7	640.7	637.7	628.8	619.9	608.1	587.3
55°	584.3	581.4	578.4	578.4	572.5	569.5	569.5	560.6	551.7	536.9	513.1
57.5°	525.0	522.0	519.1	519.1	516.1	510.2	510.2	501.3	489.4	471.6	450.9
60°	468.7	468.7	468.7	465.7	465.7	459.8	459.8	450.9	439.0	421.2	397.5
62.5°	418.2	415.3	415.3	415.3	415.3	412.3	409.3	403.4	391.5	373.7	353.0
65°	358.9	358.9	358.9	358.9	355.9	355.9	355.9	347.0	341.1	323.3	302.5
67.5°	293.7	293.7	293.7	293.7	290.7	293.7	293.7	287.7	281.8	264.0	246.2
70°	234.3	231.4	228.4	231.4	228.4	228.4	231.4	225.4	222.5	207.6	189.8
72.5°	172.0	175.0	172.0	172.0	172.0	169.1	172.0	169.1	163.1	151.3	139.4
75°	121.6	124.6	124.6	121.6	121.6	121.6	118.6	118.6	112.7	103.8	97.9
77.5°	83.1	83.1	83.1	83.1	80.1	80.1	80.1	77.1	74.2	68.2	62.3
80°	53.4	53.4	53.4	53.4	50.4	50.4	50.4	47.5	47.5	41.5	35.6
82.5°	32.6	32.6	32.6	32.6	32.6	32.6	29.7	29.7	26.7	23.7	20.8
85°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	14.8	14.8	11.9	8.9
87.5°	5.9	5.9	8.9	8.9	8.9	8.9	8.9	8.9	5.9	5.9	5.9
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: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7
2.5°	2553.9	2556.8	2556.8	2556.8	2565.7	2568.7	2559.8	2550.9	2568.7	2565.7	2571.7
5°	2524.2	2533.1	2539.0	2542.0	2550.9	2556.8	2547.9	2545.0	2559.8	2562.8	2565.7
7.5°	2488.6	2503.5	2518.3	2524.2	2536.1	2542.0	2539.0	2539.0	2556.8	2562.8	2562.8
10°	2464.9	2485.7	2503.5	2518.3	2533.1	2542.0	2542.0	2545.0	2565.7	2571.7	2577.6
12.5°	2459.0	2485.7	2509.4	2530.1	2542.0	2556.8	2559.8	2568.7	2589.5	2598.4	2598.4
15°	2444.1	2479.7	2509.4	2536.1	2553.9	2571.7	2577.6	2595.4	2619.1	2625.1	2631.0
17.5°	2417.4	2453.0	2488.6	2521.2	2545.0	2559.8	2577.6	2595.4	2625.1	2634.0	2636.9
20°	2370.0	2411.5	2447.1	2479.7	2503.5	2524.2	2542.0	2562.8	2589.5	2601.3	2604.3
22.5°	2298.8	2340.3	2375.9	2411.5	2435.2	2453.0	2470.8	2494.6	2521.2	2533.1	2533.1
25°	2212.8	2251.3	2289.9	2316.6	2340.3	2361.1	2370.0	2396.7	2423.4	2438.2	2438.2
27.5°	2103.0	2138.6	2174.2	2203.9	2218.7	2236.5	2251.3	2275.1	2295.8	2307.7	2319.5
30°	1963.6	1999.2	2031.8	2061.5	2079.3	2097.1	2111.9	2129.7	2150.5	2165.3	2168.3
32.5°	1812.3	1842.0	1874.6	1904.3	1922.1	1928.0	1942.8	1960.6	1978.4	1990.3	1993.3
35°	1646.2	1667.0	1687.8	1714.4	1732.2	1732.2	1747.1	1758.9	1773.8	1800.5	1794.5
37.5°	1450.5	1480.1	1495.0	1503.9	1515.7	1527.6	1530.5	1545.4	1563.2	1569.1	1578.0
40°	1266.6	1275.5	1284.4	1284.4	1296.2	1296.2	1296.2	1299.2	1317.0	1319.9	1331.8
42.5°	1082.7	1082.7	1073.8	1064.9	1067.8	1064.9	1050.0	1050.0	1058.9	1070.8	1070.8
45°	910.6	889.9	863.2	842.4	827.6	821.6	803.8	803.8	800.9	803.8	815.7
47.5°	765.3	729.7	685.2	643.7	628.8	617.0	590.3	578.4	572.5	575.4	581.4
50°	643.7	605.1	554.7	504.2	477.6	462.7	430.1	409.3	406.4	400.4	412.3
52.5°	554.7	507.2	453.8	394.5	367.8	344.1	308.5	290.7	278.8	278.8	281.8
55°	477.6	427.1	367.8	308.5	281.8	264.0	228.4	204.7	192.8	189.8	198.7
57.5°	412.3	364.8	305.5	246.2	219.5	198.7	163.1	142.4	133.5	127.5	130.5
60°	361.9	314.4	255.1	198.7	175.0	151.3	121.6	97.9	86.0	86.0	89.0
62.5°	314.4	269.9	216.5	163.1	142.4	121.6	89.0	68.2	59.3	56.4	59.3
65°	267.0	225.4	180.9	136.4	115.7	97.9	71.2	53.4	41.5	38.6	41.5
67.5°	216.5	183.9	145.3	109.7	92.0	77.1	53.4	38.6	29.7	26.7	29.7
70°	169.1	139.4	109.7	80.1	68.2	56.4	38.6	29.7	20.8	17.8	20.8
72.5°	121.6	100.8	77.1	56.4	47.5	38.6	26.7	20.8	14.8	11.9	14.8
75°	83.1	68.2	50.4	35.6	29.7	26.7	17.8	11.9	8.9	8.9	8.9
77.5°	53.4	41.5	32.6	23.7	17.8	14.8	8.9	5.9	5.9	5.9	5.9
80°	29.7	23.7	17.8	11.9	8.9	8.9	5.9	5.9	3.0	3.0	3.0
82.5°	17.8	11.9	8.9	5.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0
85°	8.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	3.0	3.0	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: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7
2.5°	2559.8	2562.8	2553.9	2565.7	2556.8	2568.7	2568.7	2556.8	2559.8	2553.9	2565.7
5°	2553.9	2553.9	2547.9	2556.8	2545.0	2556.8	2553.9	2533.1	2539.0	2527.2	2539.0
7.5°	2553.9	2547.9	2539.0	2547.9	2533.1	2542.0	2530.1	2509.4	2503.5	2488.6	2488.6
10°	2562.8	2553.9	2542.0	2545.0	2530.1	2533.1	2515.3	2485.7	2476.8	2459.0	2453.0
12.5°	2583.5	2574.6	2556.8	2562.8	2542.0	2542.0	2518.3	2482.7	2464.9	2441.2	2435.2
15°	2613.2	2598.4	2577.6	2580.6	2559.8	2547.9	2518.3	2476.8	2453.0	2420.4	2411.5
17.5°	2619.1	2604.3	2577.6	2577.6	2550.9	2536.1	2500.5	2453.0	2423.4	2390.7	2372.9
20°	2586.5	2571.7	2542.0	2539.0	2515.3	2494.6	2456.0	2408.5	2378.9	2343.3	2328.4
22.5°	2518.3	2500.5	2473.8	2470.8	2447.1	2435.2	2393.7	2346.2	2316.6	2281.0	2269.1
25°	2417.4	2408.5	2381.8	2378.9	2358.1	2343.3	2307.7	2263.2	2236.5	2200.9	2189.0
27.5°	2298.8	2289.9	2263.2	2263.2	2239.5	2230.6	2197.9	2156.4	2135.6	2103.0	2088.2
30°	2156.4	2144.5	2129.7	2126.7	2106.0	2097.1	2067.4	2028.9	2008.1	1981.4	1975.5
32.5°	1987.3	1978.4	1969.5	1966.6	1945.8	1936.9	1916.1	1877.6	1859.8	1836.1	1827.2
35°	1791.6	1785.6	1776.7	1773.8	1764.9	1756.0	1735.2	1705.6	1696.7	1678.9	1670.0
37.5°	1566.1	1572.1	1566.1	1566.1	1557.2	1560.2	1542.4	1524.6	1515.7	1503.9	1497.9
40°	1322.9	1334.8	1343.7	1343.7	1340.7	1352.6	1349.6	1334.8	1331.8	1325.9	1322.9
42.5°	1076.7	1082.7	1100.5	1112.3	1109.3	1139.0	1142.0	1153.8	1162.7	1156.8	1159.8
45°	818.7	836.5	860.2	872.1	886.9	925.4	946.2	969.9	990.7	1002.6	999.6
47.5°	590.3	611.0	637.7	655.5	682.2	729.7	783.1	812.7	842.4	857.2	872.1
50°	427.1	447.9	480.5	507.2	525.0	590.3	646.6	685.2	717.8	738.6	753.4
52.5°	299.6	323.3	358.9	382.6	409.3	471.6	536.9	581.4	617.0	643.7	658.5
55°	207.6	234.3	267.0	290.7	320.3	385.6	447.9	495.4	533.9	557.6	575.4
57.5°	145.3	169.1	201.7	222.5	252.1	314.4	376.7	424.2	462.7	486.5	507.2
60°	97.9	121.6	154.2	175.0	198.7	261.0	317.4	367.8	403.4	427.1	447.9
62.5°	68.2	89.0	121.6	142.4	163.1	216.5	269.9	314.4	350.0	376.7	394.5
65°	53.4	71.2	97.9	115.7	136.4	180.9	225.4	264.0	299.6	326.3	338.1
67.5°	38.6	56.4	77.1	92.0	106.8	145.3	183.9	213.6	246.2	267.0	281.8
70°	26.7	38.6	56.4	68.2	80.1	109.7	139.4	166.1	189.8	204.7	216.5
72.5°	20.8	26.7	38.6	47.5	56.4	77.1	100.8	121.6	139.4	151.3	163.1
75°	11.9	17.8	26.7	32.6	38.6	53.4	68.2	83.1	94.9	103.8	109.7
77.5°	5.9	8.9	14.8	17.8	23.7	32.6	44.5	53.4	62.3	68.2	74.2
80°	5.9	5.9	8.9	8.9	11.9	17.8	23.7	29.7	35.6	41.5	44.5
82.5°	3.0	3.0	5.9	5.9	5.9	8.9	11.9	17.8	20.8	23.7	26.7
85°	3.0	3.0	3.0	3.0	3.0	5.9	5.9	8.9	11.9	14.8	14.8
87.5°	0.0	0.0	3.0	3.0	3.0	3.0	3.0	5.9	5.9	5.9	8.9
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: P252634

CATALOG NUMBER: LD6B60D010TE EU6B60709730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7	2565.7
2.5°	2556.8	2562.8	2559.8	2565.7	2556.8	2553.9	2559.8	2550.9
5°	2524.2	2527.2	2524.2	2524.2	2518.3	2512.4	2518.3	2509.4
7.5°	2473.8	2473.8	2464.9	2464.9	2453.0	2447.1	2447.1	2444.1
10°	2432.3	2423.4	2414.5	2417.4	2399.6	2393.7	2390.7	2387.8
12.5°	2411.5	2405.6	2390.7	2390.7	2372.9	2367.0	2364.0	2361.1
15°	2387.8	2375.9	2364.0	2361.1	2346.2	2340.3	2337.3	2331.4
17.5°	2346.2	2337.3	2322.5	2322.5	2307.7	2304.7	2298.8	2295.8
20°	2301.8	2289.9	2278.0	2278.0	2260.2	2260.2	2251.3	2254.3
22.5°	2239.5	2230.6	2218.7	2218.7	2203.9	2200.9	2192.0	2189.0
25°	2165.3	2153.4	2144.5	2141.6	2129.7	2123.8	2120.8	2114.9
27.5°	2067.4	2058.5	2049.6	2043.7	2028.9	2025.9	2017.0	2020.0
30°	1945.8	1939.9	1936.9	1931.0	1913.2	1907.3	1907.3	1898.4
32.5°	1812.3	1803.4	1797.5	1788.6	1773.8	1770.8	1761.9	1764.9
35°	1649.2	1637.3	1628.4	1631.4	1613.6	1610.6	1604.7	1607.7
37.5°	1480.1	1468.3	1456.4	1453.4	1438.6	1438.6	1429.7	1429.7
40°	1305.1	1293.3	1287.3	1287.3	1269.5	1272.5	1263.6	1260.6
42.5°	1147.9	1136.0	1133.1	1130.1	1121.2	1118.2	1109.3	1112.3
45°	999.6	996.6	996.6	990.7	981.8	978.8	981.8	981.8
47.5°	869.1	872.1	869.1	869.1	863.2	869.1	863.2	866.1
50°	759.3	765.3	765.3	765.3	762.3	765.3	765.3	768.2
52.5°	667.4	676.3	673.3	676.3	673.3	679.3	676.3	679.3
55°	587.3	593.2	596.2	599.2	599.2	599.2	599.2	599.2
57.5°	513.1	522.0	525.0	528.0	528.0	533.9	528.0	528.0
60°	453.8	462.7	465.7	468.7	468.7	471.6	465.7	468.7
62.5°	400.4	409.3	409.3	412.3	412.3	412.3	406.4	409.3
65°	347.0	350.0	353.0	353.0	350.0	350.0	347.0	350.0
67.5°	287.7	290.7	287.7	287.7	284.8	284.8	278.8	281.8
70°	222.5	222.5	225.4	222.5	219.5	222.5	219.5	216.5
72.5°	166.1	166.1	166.1	163.1	163.1	160.2	163.1	163.1
75°	112.7	112.7	115.7	115.7	115.7	115.7	112.7	112.7
77.5°	74.2	74.2	74.2	74.2	77.1	74.2	74.2	74.2
80°	47.5	47.5	50.4	50.4	47.5	47.5	47.5	47.5
82.5°	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
85°	17.8	17.8	17.8	17.8	14.8	14.8	14.8	14.8
87.5°	8.9	8.9	8.9	8.9	8.9	8.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)