

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: P252522

Luminaire Tested: **LD6B60D010TE EU6B60708050 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252522
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: LD6B60D010TE EU6B60708050 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5249.0 lumens
Efficiency: N/A
Efficacy: 84.0 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

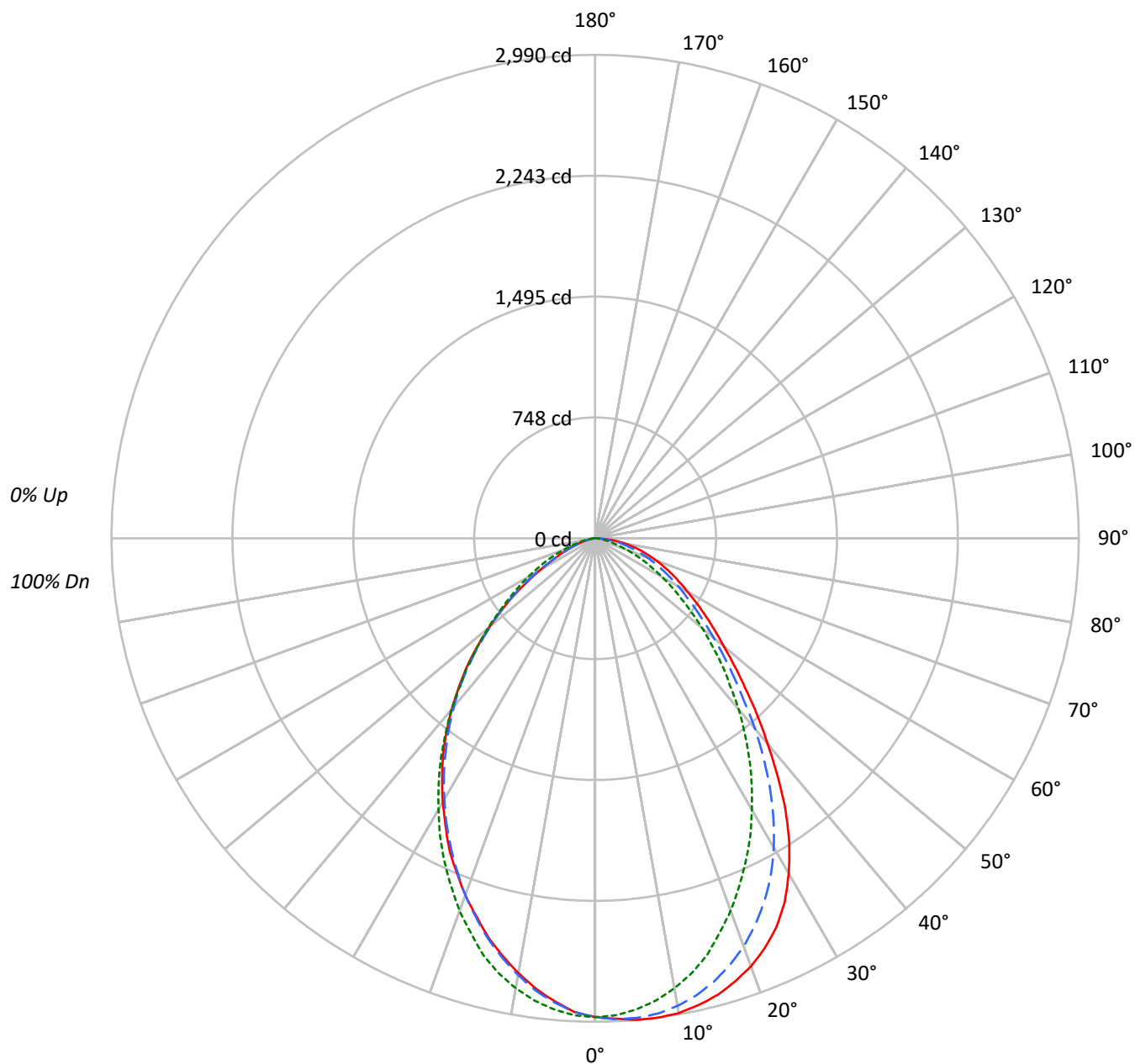
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

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	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	193191	193191	193191
5°	195815	191505	188270
10°	197536	187181	180914
15°	197507	180283	172502
20°	195598	170181	163044
25°	190962	158691	153357
30°	180318	145928	141906
35°	163454	132337	130696
40°	141162	117690	117341
45°	121051	102459	103216
50°	105191	87662	86404
55°	94498	73911	69236
60°	85857	62253	50979
65°	80629	51421	37466
70°	76892	40020	27449
75°	73605	29039	18653
80°	69543	20100	12361
85°	61606	12351	6138



TEST NUMBER: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.0	5.3
10°-20°	758.7	14.5
20°-30°	1053.2	20.1
30°-40°	1090.9	20.8
40°-50°	896.5	17.1
50°-60°	616.1	11.7
60°-70°	354.2	6.7
70°-80°	162.8	3.1
80°-90°	39.6	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°	2088.8	39.8
0°-40°	3179.8	60.6
0°-60°	4692.3	89.4
0°-90°	5249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5249.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2961	2961	2961	2961	2961	
5°	2990	2978	2924	2883	2875	285
15°	2924	2838	2669	2562	2554	824
25°	2653	2476	2204	2110	2130	1214
35°	2052	1884	1662	1612	1641	1273
45°	1312	1213	1110	1098	1119	1022
55°	831	753	650	613	609	748
65°	522	456	333	234	243	520
75°	292	230	115	74	74	309
85°	82	58	16	8	8	92
90°	0	0	0	0	0	



TEST NUMBER: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2
2.5°	2973.6	2998.2	2981.8	2977.7	2985.9	2985.9	2985.9	2973.6	2981.8	2969.4	2977.7
5°	2990.0	3010.6	2994.1	2985.9	2994.1	2998.2	2985.9	2977.7	2990.0	2973.6	2977.7
7.5°	2990.0	3010.6	2994.1	2990.0	2994.1	2994.1	2990.0	2973.6	2981.8	2965.3	2965.3
10°	2981.8	2998.2	2981.8	2973.6	2977.7	2973.6	2973.6	2953.0	2957.1	2936.5	2936.5
12.5°	2957.1	2977.7	2957.1	2948.9	2948.9	2948.9	2936.5	2920.1	2924.2	2899.5	2895.4
15°	2924.2	2940.6	2920.1	2911.9	2911.9	2907.7	2899.5	2874.8	2874.8	2850.2	2837.8
17.5°	2874.8	2891.3	2874.8	2862.5	2858.4	2850.2	2841.9	2817.3	2809.0	2780.3	2767.9
20°	2817.3	2829.6	2813.2	2800.8	2792.6	2784.4	2767.9	2743.2	2735.0	2706.2	2685.7
22.5°	2743.2	2759.7	2735.0	2722.7	2714.4	2702.1	2685.7	2661.0	2648.6	2611.6	2586.9
25°	2652.8	2661.0	2640.4	2628.1	2611.6	2603.4	2591.1	2558.2	2545.8	2504.7	2475.9
27.5°	2537.6	2545.8	2521.1	2512.9	2492.4	2484.1	2467.7	2438.9	2422.4	2381.3	2352.5
30°	2393.6	2401.9	2385.4	2373.1	2356.6	2340.2	2327.8	2299.1	2274.4	2233.2	2208.6
32.5°	2233.2	2245.6	2229.1	2212.7	2183.9	2188.0	2167.4	2138.7	2118.1	2081.1	2052.3
35°	2052.3	2060.5	2039.9	2035.8	2019.4	2002.9	1982.4	1961.8	1949.5	1908.3	1883.7
37.5°	1850.8	1871.3	1850.8	1834.3	1826.1	1813.7	1801.4	1772.6	1764.4	1739.7	1706.8
40°	1657.5	1669.8	1657.5	1641.0	1628.7	1628.7	1612.2	1595.8	1575.2	1550.5	1538.2
42.5°	1484.7	1476.5	1472.4	1464.2	1447.7	1443.6	1439.5	1418.9	1406.6	1381.9	1361.3
45°	1312.0	1316.1	1307.9	1303.8	1291.4	1283.2	1275.0	1258.5	1254.4	1229.7	1213.3
47.5°	1168.0	1163.9	1155.7	1155.7	1147.5	1139.2	1131.0	1118.7	1114.6	1094.0	1077.6
50°	1036.4	1040.5	1036.4	1032.3	1020.0	1015.9	1007.6	999.4	991.2	970.6	954.2
52.5°	929.5	925.4	921.3	921.3	908.9	904.8	896.6	888.4	880.1	859.6	847.2
55°	830.8	830.8	826.7	822.6	810.2	806.1	802.0	793.8	781.4	765.0	752.6
57.5°	740.3	740.3	736.2	732.1	723.9	723.9	715.6	707.4	699.2	682.7	666.3
60°	658.0	662.2	658.0	653.9	645.7	645.7	641.6	629.3	625.1	604.6	592.2
62.5°	588.1	588.1	588.1	584.0	579.9	571.7	571.7	559.3	551.1	538.8	522.3
65°	522.3	522.3	522.3	518.2	510.0	505.9	501.8	493.5	485.3	473.0	456.5
67.5°	460.6	460.6	460.6	456.5	448.3	444.2	440.1	436.0	423.6	411.3	394.8
70°	403.1	403.1	398.9	394.8	390.7	386.6	382.5	374.3	366.0	349.6	337.2
72.5°	345.5	345.5	345.5	337.2	333.1	333.1	324.9	320.8	312.6	296.1	283.8
75°	292.0	287.9	287.9	283.8	279.7	275.6	271.4	267.3	255.0	246.8	230.3
77.5°	238.5	238.5	234.4	230.3	230.3	226.2	222.1	213.9	209.8	197.4	185.1
80°	185.1	185.1	185.1	185.1	181.0	176.9	176.9	168.6	164.5	152.2	143.9
82.5°	139.8	135.7	135.7	135.7	131.6	127.5	127.5	123.4	119.3	111.0	102.8
85°	82.3	78.1	78.1	78.1	74.0	74.0	69.9	69.9	65.8	57.6	57.6
87.5°	24.7	24.7	28.8	28.8	24.7	24.7	24.7	24.7	24.7	20.6	20.6
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: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2
2.5°	2969.4	2981.8	2965.3	2961.2	2977.7	2969.4	2965.3	2957.1	2961.2	2953.0	2940.6
5°	2965.3	2981.8	2961.2	2948.9	2969.4	2957.1	2948.9	2940.6	2940.6	2924.2	2916.0
7.5°	2953.0	2961.2	2940.6	2928.3	2940.6	2928.3	2920.1	2907.7	2903.6	2883.1	2870.7
10°	2920.1	2928.3	2903.6	2887.2	2899.5	2883.1	2870.7	2858.4	2850.2	2825.5	2809.0
12.5°	2874.8	2879.0	2850.2	2829.6	2837.8	2825.5	2804.9	2788.5	2780.3	2755.6	2735.0
15°	2813.2	2817.3	2784.4	2755.6	2763.8	2747.3	2722.7	2706.2	2693.9	2669.2	2640.4
17.5°	2739.1	2735.0	2698.0	2669.2	2673.3	2652.8	2628.1	2603.4	2586.9	2558.2	2537.6
20°	2656.9	2644.5	2603.4	2570.5	2574.6	2549.9	2521.1	2496.5	2475.9	2451.2	2422.4
22.5°	2554.0	2537.6	2500.6	2459.5	2463.6	2443.0	2401.9	2381.3	2360.7	2327.8	2303.2
25°	2443.0	2418.3	2381.3	2340.2	2340.2	2315.5	2282.6	2257.9	2237.4	2204.5	2175.7
27.5°	2311.4	2299.1	2249.7	2216.8	2212.7	2188.0	2159.2	2130.4	2105.8	2077.0	2048.2
30°	2167.4	2146.9	2109.9	2072.8	2064.6	2044.1	2015.3	1982.4	1965.9	1937.1	1912.5
32.5°	2015.3	1994.7	1953.6	1916.6	1912.5	1896.0	1871.3	1838.4	1822.0	1801.4	1785.0
35°	1842.5	1834.3	1793.2	1764.4	1764.4	1747.9	1723.3	1694.5	1682.1	1661.6	1641.0
37.5°	1678.0	1665.7	1628.7	1604.0	1604.0	1583.4	1558.7	1546.4	1534.1	1517.6	1505.3
40°	1505.3	1497.1	1468.3	1443.6	1447.7	1431.3	1414.8	1398.4	1390.1	1381.9	1369.6
42.5°	1344.9	1336.7	1316.1	1295.5	1295.5	1283.2	1266.7	1254.4	1246.2	1233.8	1229.7
45°	1200.9	1188.6	1172.1	1151.6	1151.6	1139.2	1131.0	1122.8	1118.7	1110.5	1098.1
47.5°	1061.1	1052.9	1036.4	1015.9	1015.9	1015.9	999.4	987.1	987.1	978.8	974.7
50°	941.8	929.5	917.2	900.7	900.7	892.5	880.1	867.8	867.8	863.7	855.5
52.5°	830.8	822.6	806.1	789.7	789.7	781.4	769.1	765.0	760.9	748.5	744.4
55°	736.2	728.0	715.6	695.1	690.9	686.8	674.5	666.3	662.2	649.8	649.8
57.5°	649.8	641.6	621.0	608.7	604.6	596.4	584.0	575.8	571.7	563.5	555.2
60°	575.8	563.5	547.0	530.6	526.4	518.2	505.9	497.6	493.5	477.1	468.9
62.5°	505.9	493.5	477.1	460.6	456.5	448.3	431.8	423.6	415.4	398.9	390.7
65°	440.1	427.7	411.3	394.8	386.6	382.5	366.0	353.7	345.5	333.1	316.7
67.5°	378.4	366.0	349.6	329.0	329.0	316.7	304.3	292.0	279.7	267.3	255.0
70°	320.8	308.5	292.0	275.6	271.4	263.2	250.9	234.4	226.2	209.8	197.4
72.5°	267.3	255.0	238.5	222.1	218.0	209.8	197.4	181.0	168.6	156.3	143.9
75°	218.0	205.6	189.2	176.9	172.7	164.5	152.2	135.7	123.4	115.2	102.8
77.5°	172.7	160.4	148.1	135.7	131.6	123.4	111.0	102.8	90.5	82.3	69.9
80°	131.6	123.4	111.0	102.8	98.7	90.5	82.3	69.9	61.7	53.5	49.4
82.5°	94.6	86.4	78.1	65.8	65.8	57.6	53.5	45.2	37.0	32.9	28.8
85°	53.5	45.2	41.1	37.0	32.9	32.9	28.8	24.7	20.6	16.5	16.5
87.5°	16.5	16.5	12.3	12.3	12.3	12.3	8.2	8.2	8.2	8.2	8.2
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: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2
2.5°	2940.6	2944.8	2936.5	2944.8	2936.5	2940.6	2932.4	2940.6	2932.4	2940.6	2924.2
5°	2911.9	2911.9	2899.5	2907.7	2899.5	2903.6	2887.2	2891.3	2883.1	2891.3	2874.8
7.5°	2862.5	2866.6	2846.1	2854.3	2841.9	2841.9	2829.6	2833.7	2821.4	2825.5	2813.2
10°	2804.9	2800.8	2780.3	2788.5	2772.0	2772.0	2759.7	2759.7	2743.2	2747.3	2730.9
12.5°	2722.7	2718.6	2693.9	2702.1	2685.7	2685.7	2673.3	2673.3	2656.9	2665.1	2648.6
15°	2628.1	2624.0	2599.3	2603.4	2586.9	2586.9	2570.5	2574.6	2562.3	2570.5	2554.0
17.5°	2521.1	2517.0	2492.4	2496.5	2475.9	2480.0	2467.7	2463.6	2455.3	2459.5	2447.1
20°	2410.1	2401.9	2377.2	2381.3	2373.1	2360.7	2352.5	2356.6	2348.4	2356.6	2344.3
22.5°	2294.9	2278.5	2257.9	2257.9	2249.7	2249.7	2237.4	2245.6	2229.1	2241.5	2233.2
25°	2163.3	2151.0	2134.5	2142.8	2126.3	2126.3	2114.0	2118.1	2109.9	2118.1	2109.9
27.5°	2035.8	2027.6	2002.9	2011.2	1998.8	2002.9	1990.6	1994.7	1990.6	1998.8	1990.6
30°	1900.1	1896.0	1879.5	1879.5	1875.4	1871.3	1867.2	1867.2	1863.1	1875.4	1867.2
32.5°	1772.6	1760.3	1743.8	1756.2	1735.6	1747.9	1739.7	1747.9	1739.7	1747.9	1743.8
35°	1641.0	1636.9	1616.3	1620.4	1616.3	1616.3	1612.2	1612.2	1612.2	1624.6	1624.6
37.5°	1501.2	1497.1	1484.7	1488.8	1480.6	1476.5	1476.5	1484.7	1484.7	1492.9	1492.9
40°	1365.4	1369.6	1357.2	1357.2	1353.1	1353.1	1353.1	1361.3	1357.2	1365.4	1361.3
42.5°	1229.7	1229.7	1217.4	1221.5	1217.4	1221.5	1221.5	1229.7	1229.7	1233.8	1229.7
45°	1102.2	1102.2	1098.1	1102.2	1094.0	1098.1	1094.0	1102.2	1098.1	1102.2	1102.2
47.5°	974.7	974.7	974.7	970.6	970.6	970.6	970.6	970.6	966.5	974.7	970.6
50°	855.5	859.6	855.5	855.5	851.3	855.5	851.3	851.3	843.1	847.2	847.2
52.5°	748.5	748.5	740.3	740.3	740.3	736.2	736.2	736.2	732.1	732.1	723.9
55°	645.7	645.7	637.5	637.5	633.4	629.3	625.1	625.1	612.8	612.8	600.5
57.5°	551.1	547.0	534.7	534.7	526.4	522.3	518.2	514.1	505.9	497.6	493.5
60°	464.7	456.5	448.3	444.2	436.0	427.7	419.5	411.3	403.1	398.9	394.8
62.5°	382.5	370.2	361.9	357.8	349.6	337.2	329.0	320.8	312.6	308.5	300.2
65°	308.5	296.1	283.8	279.7	271.4	263.2	250.9	242.7	234.4	230.3	230.3
67.5°	242.7	230.3	213.9	213.9	205.6	197.4	189.2	181.0	176.9	181.0	181.0
70°	181.0	172.7	160.4	156.3	148.1	139.8	135.7	135.7	135.7	139.8	135.7
72.5°	135.7	123.4	115.2	111.0	106.9	102.8	102.8	102.8	98.7	102.8	102.8
75°	94.6	86.4	78.1	78.1	74.0	74.0	74.0	74.0	74.0	74.0	74.0
77.5°	65.8	57.6	53.5	53.5	53.5	49.4	49.4	49.4	49.4	49.4	49.4
80°	41.1	41.1	37.0	37.0	32.9	32.9	32.9	32.9	32.9	32.9	32.9
82.5°	24.7	24.7	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
85°	12.3	12.3	12.3	12.3	12.3	8.2	8.2	8.2	8.2	8.2	8.2
87.5°	4.1	4.1	4.1	4.1	4.1	8.2	8.2	8.2	8.2	8.2	8.2
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: P252522

CATALOG NUMBER: LD6B60D010TE EU6B60708050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2	2961.2
2.5°	2924.2	2936.5	2920.1	2932.4	2928.3	2924.2	2916.0	2932.4
5°	2874.8	2879.0	2862.5	2879.0	2874.8	2866.6	2858.4	2874.8
7.5°	2804.9	2817.3	2796.7	2813.2	2809.0	2800.8	2792.6	2809.0
10°	2726.8	2739.1	2722.7	2735.0	2735.0	2726.8	2714.4	2730.9
12.5°	2640.4	2648.6	2632.2	2648.6	2644.5	2636.3	2632.2	2644.5
15°	2545.8	2558.2	2541.7	2554.0	2549.9	2545.8	2541.7	2554.0
17.5°	2443.0	2455.3	2443.0	2455.3	2455.3	2443.0	2438.9	2447.1
20°	2340.2	2348.4	2336.1	2348.4	2344.3	2344.3	2336.1	2348.4
22.5°	2225.0	2237.4	2229.1	2237.4	2233.2	2233.2	2229.1	2237.4
25°	2109.9	2122.2	2109.9	2122.2	2118.1	2118.1	2109.9	2130.4
27.5°	1994.7	2002.9	1990.6	2007.0	2002.9	1994.7	1998.8	2002.9
30°	1871.3	1879.5	1871.3	1883.7	1883.7	1883.7	1875.4	1883.7
32.5°	1747.9	1760.3	1747.9	1760.3	1756.2	1756.2	1752.1	1760.3
35°	1624.6	1628.7	1620.4	1632.8	1632.8	1636.9	1628.7	1641.0
37.5°	1497.1	1501.2	1497.1	1501.2	1509.4	1497.1	1505.3	1509.4
40°	1365.4	1373.7	1369.6	1373.7	1373.7	1377.8	1373.7	1377.8
42.5°	1233.8	1242.1	1233.8	1246.2	1242.1	1242.1	1246.2	1246.2
45°	1098.1	1110.5	1102.2	1110.5	1114.6	1110.5	1110.5	1118.7
47.5°	970.6	978.8	974.7	978.8	978.8	978.8	978.8	987.1
50°	843.1	847.2	847.2	851.3	851.3	855.5	847.2	851.3
52.5°	715.6	723.9	723.9	723.9	719.7	723.9	723.9	723.9
55°	600.5	604.6	596.4	604.6	604.6	600.5	600.5	608.7
57.5°	489.4	489.4	489.4	489.4	489.4	485.3	489.4	489.4
60°	386.6	390.7	386.6	386.6	386.6	386.6	382.5	390.7
62.5°	300.2	300.2	296.1	300.2	300.2	300.2	304.3	304.3
65°	234.4	238.5	234.4	238.5	238.5	238.5	238.5	242.7
67.5°	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1
70°	139.8	139.8	139.8	143.9	139.8	139.8	139.8	143.9
72.5°	102.8	102.8	102.8	102.8	102.8	102.8	106.9	106.9
75°	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
77.5°	49.4	49.4	49.4	53.5	49.4	53.5	49.4	49.4
80°	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
82.5°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
85°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
87.5°	8.2	8.2	8.2	8.2	4.1	4.1	4.1	4.1
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)