

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: P252532

Luminaire Tested: **LD6B70D010TE EU6B60708030 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252532
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: LD6B70D010TE EU6B60708030 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6018.0 lumens
Efficiency: N/A
Efficacy: 75.7 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

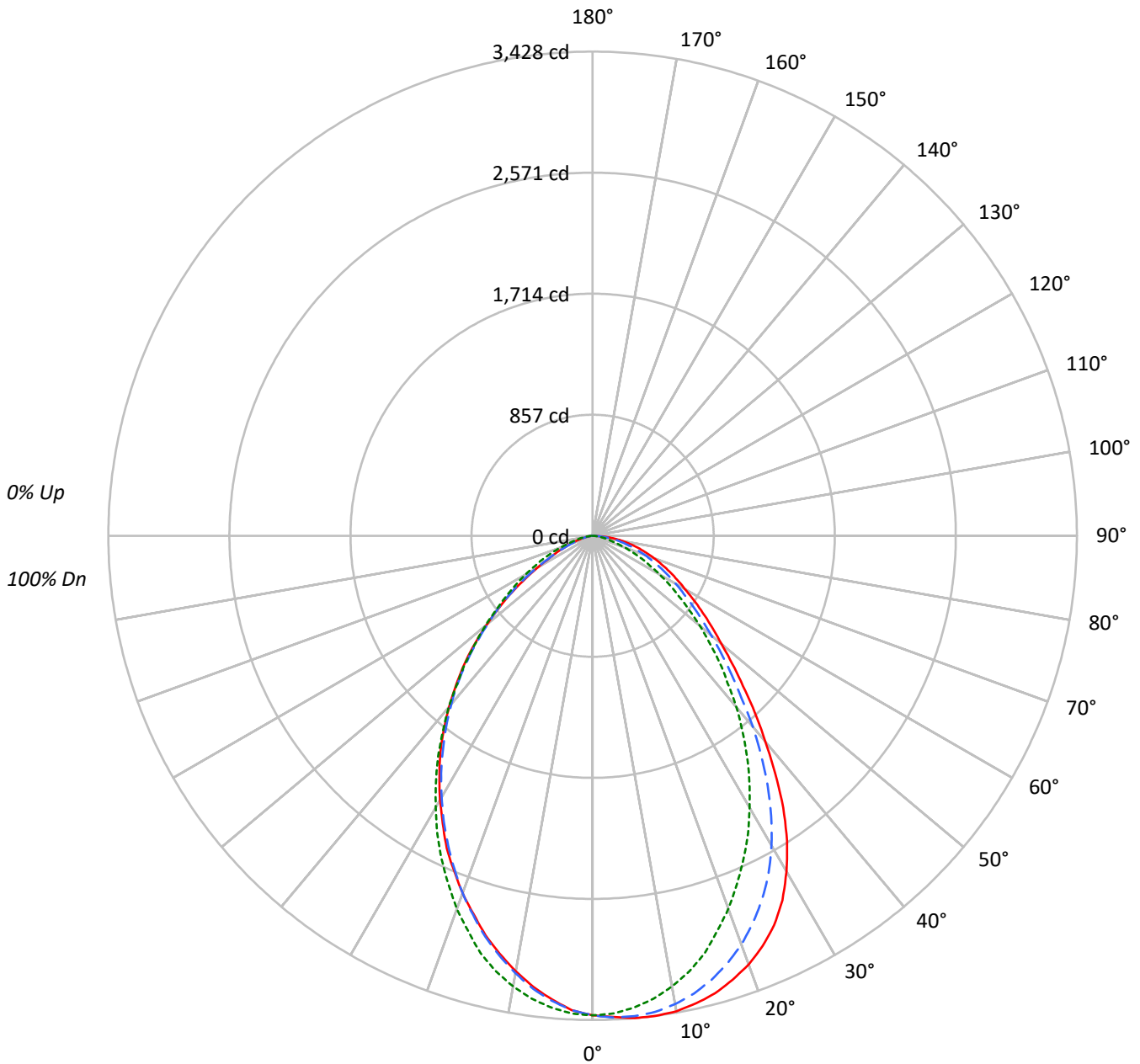
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

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	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°	221492	221492	221492
5°	224506	219561	215854
10°	226472	214601	207420
15°	226442	206699	197777
20°	224251	195112	186934
25°	218935	181935	175824
30°	206737	167308	162690
35°	187403	151722	149842
40°	161840	134936	134528
45°	138784	117462	118338
50°	120608	100502	99071
55°	108341	84739	79382
60°	98448	71373	58456
65°	92438	58955	42946
70°	88146	45876	31474
75°	84393	33273	21401
80°	79725	23031	14164
85°	70588	14148	7036



TEST NUMBER: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.5	5.3
10°-20°	869.8	14.5
20°-30°	1207.5	20.1
30°-40°	1250.7	20.8
40°-50°	1027.8	17.1
50°-60°	706.4	11.7
60°-70°	406.1	6.7
70°-80°	186.7	3.1
80°-90°	45.5	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°	2394.9	39.8
0°-40°	3645.6	60.6
0°-60°	5379.8	89.4
0°-90°	6018.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6018.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3395	3395	3395	3395	3395	
5°	3428	3414	3353	3306	3296	327
15°	3353	3254	3060	2938	2928	944
25°	3041	2839	2527	2419	2442	1392
35°	2353	2160	1905	1848	1881	1459
45°	1504	1391	1273	1259	1283	1171
55°	952	863	745	703	698	857
65°	599	523	382	269	278	596
75°	335	264	132	85	85	354
85°	94	66	19	9	9	106
90°	0	0	0	0	0	



TEST NUMBER: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3409.2	3437.5	3418.6	3413.9	3423.3	3423.3	3423.3	3409.2	3418.6	3404.5	3413.9
5°	3428.1	3451.6	3432.8	3423.3	3432.8	3437.5	3423.3	3413.9	3428.1	3409.2	3413.9
7.5°	3428.1	3451.6	3432.8	3428.1	3432.8	3432.8	3428.1	3409.2	3418.6	3399.8	3399.8
10°	3418.6	3437.5	3418.6	3409.2	3413.9	3409.2	3409.2	3385.6	3390.3	3366.8	3366.8
12.5°	3390.3	3413.9	3390.3	3380.9	3380.9	3380.9	3366.8	3347.9	3352.6	3324.3	3319.6
15°	3352.6	3371.5	3347.9	3338.5	3338.5	3333.7	3324.3	3296.0	3296.0	3267.7	3253.6
17.5°	3296.0	3314.9	3296.0	3281.9	3277.2	3267.7	3258.3	3230.0	3220.6	3187.6	3173.4
20°	3230.0	3244.2	3225.3	3211.1	3201.7	3192.3	3173.4	3145.1	3135.7	3102.7	3079.1
22.5°	3145.1	3164.0	3135.7	3121.6	3112.1	3098.0	3079.1	3050.8	3036.7	2994.2	2965.9
25°	3041.4	3050.8	3027.2	3013.1	2994.2	2984.8	2970.7	2932.9	2918.8	2871.6	2838.6
27.5°	2909.4	2918.8	2890.5	2881.1	2857.5	2848.1	2829.2	2796.2	2777.3	2730.2	2697.2
30°	2744.3	2753.8	2734.9	2720.7	2701.9	2683.0	2668.9	2635.9	2607.6	2560.4	2532.1
32.5°	2560.4	2574.6	2555.7	2536.9	2503.8	2508.6	2485.0	2452.0	2428.4	2386.0	2353.0
35°	2353.0	2362.4	2338.8	2334.1	2315.2	2296.4	2272.8	2249.2	2235.1	2187.9	2159.6
37.5°	2121.9	2145.5	2121.9	2103.0	2093.6	2079.5	2065.3	2032.3	2022.9	1994.6	1956.9
40°	1900.3	1914.4	1900.3	1881.4	1867.3	1867.3	1848.4	1829.6	1806.0	1777.7	1763.5
42.5°	1702.2	1692.8	1688.1	1678.7	1659.8	1655.1	1650.4	1626.8	1612.6	1584.4	1560.8
45°	1504.2	1508.9	1499.5	1494.8	1480.6	1471.2	1461.8	1442.9	1438.2	1409.9	1391.0
47.5°	1339.2	1334.4	1325.0	1325.0	1315.6	1306.1	1296.7	1282.6	1277.9	1254.3	1235.4
50°	1188.3	1193.0	1188.3	1183.5	1169.4	1164.7	1155.3	1145.8	1136.4	1112.8	1094.0
52.5°	1065.7	1061.0	1056.2	1056.2	1042.1	1037.4	1027.9	1018.5	1009.1	985.5	971.4
55°	952.5	952.5	947.8	943.1	928.9	924.2	919.5	910.1	895.9	877.1	862.9
57.5°	848.8	848.8	844.0	839.3	829.9	829.9	820.5	811.0	801.6	782.7	763.9
60°	754.5	759.2	754.5	749.7	740.3	740.3	735.6	721.4	716.7	693.2	679.0
62.5°	674.3	674.3	674.3	669.6	664.9	655.4	655.4	641.3	631.9	617.7	598.8
65°	598.8	598.8	598.8	594.1	584.7	580.0	575.3	565.8	556.4	542.3	523.4
67.5°	528.1	528.1	528.1	523.4	514.0	509.3	504.5	499.8	485.7	471.5	452.7
70°	462.1	462.1	457.4	452.7	448.0	443.2	438.5	429.1	419.7	400.8	386.7
72.5°	396.1	396.1	396.1	386.7	381.9	381.9	372.5	367.8	358.4	339.5	325.4
75°	334.8	330.1	330.1	325.4	320.6	315.9	311.2	306.5	292.4	282.9	264.1
77.5°	273.5	273.5	268.8	264.1	264.1	259.3	254.6	245.2	240.5	226.3	212.2
80°	212.2	212.2	212.2	212.2	207.5	202.8	202.8	193.3	188.6	174.5	165.0
82.5°	160.3	155.6	155.6	155.6	150.9	146.2	146.2	141.5	136.7	127.3	117.9
85°	94.3	89.6	89.6	89.6	84.9	84.9	80.2	80.2	75.4	66.0	66.0
87.5°	28.3	28.3	33.0	33.0	28.3	28.3	28.3	28.3	28.3	23.6	23.6
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: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3404.5	3418.6	3399.8	3395.0	3413.9	3404.5	3399.8	3390.3	3395.0	3385.6	3371.5
5°	3399.8	3418.6	3395.0	3380.9	3404.5	3390.3	3380.9	3371.5	3371.5	3352.6	3343.2
7.5°	3385.6	3395.0	3371.5	3357.3	3371.5	3357.3	3347.9	3333.7	3329.0	3305.5	3291.3
10°	3347.9	3357.3	3329.0	3310.2	3324.3	3305.5	3291.3	3277.2	3267.7	3239.4	3220.6
12.5°	3296.0	3300.7	3267.7	3244.2	3253.6	3239.4	3215.9	3197.0	3187.6	3159.3	3135.7
15°	3225.3	3230.0	3192.3	3159.3	3168.7	3149.8	3121.6	3102.7	3088.5	3060.3	3027.2
17.5°	3140.4	3135.7	3093.3	3060.3	3065.0	3041.4	3013.1	2984.8	2965.9	2932.9	2909.4
20°	3046.1	3032.0	2984.8	2947.1	2951.8	2923.5	2890.5	2862.2	2838.6	2810.3	2777.3
22.5°	2928.2	2909.4	2866.9	2819.8	2824.5	2800.9	2753.8	2730.2	2706.6	2668.9	2640.6
25°	2800.9	2772.6	2730.2	2683.0	2683.0	2654.7	2617.0	2588.7	2565.1	2527.4	2494.4
27.5°	2650.0	2635.9	2579.3	2541.6	2536.9	2508.6	2475.6	2442.5	2414.3	2381.2	2348.2
30°	2485.0	2461.4	2419.0	2376.5	2367.1	2343.5	2310.5	2272.8	2253.9	2220.9	2192.6
32.5°	2310.5	2286.9	2239.8	2197.3	2192.6	2173.8	2145.5	2107.8	2088.9	2065.3	2046.5
35°	2112.5	2103.0	2055.9	2022.9	2022.9	2004.0	1975.7	1942.7	1928.6	1905.0	1881.4
37.5°	1923.9	1909.7	1867.3	1839.0	1839.0	1815.4	1787.1	1773.0	1758.8	1740.0	1725.8
40°	1725.8	1716.4	1683.4	1655.1	1659.8	1640.9	1622.1	1603.2	1593.8	1584.4	1570.2
42.5°	1541.9	1532.5	1508.9	1485.3	1485.3	1471.2	1452.3	1438.2	1428.7	1414.6	1409.9
45°	1376.9	1362.7	1343.9	1320.3	1320.3	1306.1	1296.7	1287.3	1282.6	1273.1	1259.0
47.5°	1216.6	1207.1	1188.3	1164.7	1164.7	1164.7	1145.8	1131.7	1131.7	1122.3	1117.5
50°	1079.8	1065.7	1051.5	1032.7	1032.7	1023.2	1009.1	994.9	994.9	990.2	980.8
52.5°	952.5	943.1	924.2	905.3	905.3	895.9	881.8	877.1	872.3	858.2	853.5
55°	844.0	834.6	820.5	796.9	792.2	787.5	773.3	763.9	759.2	745.0	745.0
57.5°	745.0	735.6	712.0	697.9	693.2	683.7	669.6	660.1	655.4	646.0	636.6
60°	660.1	646.0	627.1	608.3	603.6	594.1	580.0	570.6	565.8	547.0	537.5
62.5°	580.0	565.8	547.0	528.1	523.4	514.0	495.1	485.7	476.2	457.4	448.0
65°	504.5	490.4	471.5	452.7	443.2	438.5	419.7	405.5	396.1	381.9	363.1
67.5°	433.8	419.7	400.8	377.2	377.2	363.1	348.9	334.8	320.6	306.5	292.4
70°	367.8	353.7	334.8	315.9	311.2	301.8	287.6	268.8	259.3	240.5	226.3
72.5°	306.5	292.4	273.5	254.6	249.9	240.5	226.3	207.5	193.3	179.2	165.0
75°	249.9	235.8	216.9	202.8	198.0	188.6	174.5	155.6	141.5	132.0	117.9
77.5°	198.0	183.9	169.8	155.6	150.9	141.5	127.3	117.9	103.7	94.3	80.2
80°	150.9	141.5	127.3	117.9	113.2	103.7	94.3	80.2	70.7	61.3	56.6
82.5°	108.5	99.0	89.6	75.4	75.4	66.0	61.3	51.9	42.4	37.7	33.0
85°	61.3	51.9	47.2	42.4	37.7	37.7	33.0	28.3	23.6	18.9	18.9
87.5°	18.9	18.9	14.1	14.1	14.1	14.1	9.4	9.4	9.4	9.4	9.4
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: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3371.5	3376.2	3366.8	3376.2	3366.8	3371.5	3362.0	3371.5	3362.0	3371.5	3352.6
5°	3338.5	3338.5	3324.3	3333.7	3324.3	3329.0	3310.2	3314.9	3305.5	3314.9	3296.0
7.5°	3281.9	3286.6	3263.0	3272.4	3258.3	3258.3	3244.2	3248.9	3234.7	3239.4	3225.3
10°	3215.9	3211.1	3187.6	3197.0	3178.1	3178.1	3164.0	3164.0	3145.1	3149.8	3131.0
12.5°	3121.6	3116.8	3088.5	3098.0	3079.1	3079.1	3065.0	3065.0	3046.1	3055.5	3036.7
15°	3013.1	3008.4	2980.1	2984.8	2965.9	2965.9	2947.1	2951.8	2937.7	2947.1	2928.2
17.5°	2890.5	2885.8	2857.5	2862.2	2838.6	2843.3	2829.2	2824.5	2815.1	2819.8	2805.6
20°	2763.2	2753.8	2725.5	2730.2	2720.7	2706.6	2697.2	2701.9	2692.5	2701.9	2687.7
22.5°	2631.2	2612.3	2588.7	2588.7	2579.3	2579.3	2565.1	2574.6	2555.7	2569.9	2560.4
25°	2480.3	2466.1	2447.3	2456.7	2437.8	2437.8	2423.7	2428.4	2419.0	2428.4	2419.0
27.5°	2334.1	2324.7	2296.4	2305.8	2291.7	2296.4	2282.2	2286.9	2282.2	2291.7	2282.2
30°	2178.5	2173.8	2154.9	2154.9	2150.2	2145.5	2140.8	2140.8	2136.0	2150.2	2140.8
32.5°	2032.3	2018.2	1999.3	2013.4	1989.9	2004.0	1994.6	2004.0	1994.6	2004.0	1999.3
35°	1881.4	1876.7	1853.1	1857.8	1853.1	1853.1	1848.4	1848.4	1848.4	1862.6	1862.6
37.5°	1721.1	1716.4	1702.2	1707.0	1697.5	1692.8	1692.8	1702.2	1702.2	1711.7	1711.7
40°	1565.5	1570.2	1556.1	1556.1	1551.3	1551.3	1551.3	1560.8	1556.1	1565.5	1560.8
42.5°	1409.9	1409.9	1395.7	1400.5	1395.7	1400.5	1400.5	1409.9	1409.9	1414.6	1409.9
45°	1263.7	1263.7	1259.0	1263.7	1254.3	1259.0	1254.3	1263.7	1259.0	1263.7	1263.7
47.5°	1117.5	1117.5	1117.5	1112.8	1112.8	1112.8	1112.8	1112.8	1108.1	1117.5	1112.8
50°	980.8	985.5	980.8	980.8	976.1	980.8	976.1	976.1	966.6	971.4	971.4
52.5°	858.2	858.2	848.8	848.8	848.8	844.0	844.0	844.0	839.3	839.3	829.9
55°	740.3	740.3	730.9	730.9	726.2	721.4	716.7	716.7	702.6	702.6	688.4
57.5°	631.9	627.1	613.0	613.0	603.6	598.8	594.1	589.4	580.0	570.6	565.8
60°	532.8	523.4	514.0	509.3	499.8	490.4	481.0	471.5	462.1	457.4	452.7
62.5°	438.5	424.4	414.9	410.2	400.8	386.7	377.2	367.8	358.4	353.7	344.2
65°	353.7	339.5	325.4	320.6	311.2	301.8	287.6	278.2	268.8	264.1	264.1
67.5°	278.2	264.1	245.2	245.2	235.8	226.3	216.9	207.5	202.8	207.5	207.5
70°	207.5	198.0	183.9	179.2	169.8	160.3	155.6	155.6	155.6	160.3	155.6
72.5°	155.6	141.5	132.0	127.3	122.6	117.9	117.9	117.9	113.2	117.9	117.9
75°	108.5	99.0	89.6	89.6	84.9	84.9	84.9	84.9	84.9	84.9	84.9
77.5°	75.4	66.0	61.3	61.3	61.3	56.6	56.6	56.6	56.6	56.6	56.6
80°	47.2	47.2	42.4	42.4	37.7	37.7	37.7	37.7	37.7	37.7	37.7
82.5°	28.3	28.3	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
85°	14.1	14.1	14.1	14.1	14.1	9.4	9.4	9.4	9.4	9.4	9.4
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
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: P252532

CATALOG NUMBER: LD6B70D010TE EU6B60708030 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0	3395.0
2.5°	3352.6	3366.8	3347.9	3362.0	3357.3	3352.6	3343.2	3362.0
5°	3296.0	3300.7	3281.9	3300.7	3296.0	3286.6	3277.2	3296.0
7.5°	3215.9	3230.0	3206.4	3225.3	3220.6	3211.1	3201.7	3220.6
10°	3126.3	3140.4	3121.6	3135.7	3135.7	3126.3	3112.1	3131.0
12.5°	3027.2	3036.7	3017.8	3036.7	3032.0	3022.5	3017.8	3032.0
15°	2918.8	2932.9	2914.1	2928.2	2923.5	2918.8	2914.1	2928.2
17.5°	2800.9	2815.1	2800.9	2815.1	2815.1	2800.9	2796.2	2805.6
20°	2683.0	2692.5	2678.3	2692.5	2687.7	2687.7	2678.3	2692.5
22.5°	2551.0	2565.1	2555.7	2565.1	2560.4	2560.4	2555.7	2565.1
25°	2419.0	2433.1	2419.0	2433.1	2428.4	2428.4	2419.0	2442.5
27.5°	2286.9	2296.4	2282.2	2301.1	2296.4	2286.9	2291.7	2296.4
30°	2145.5	2154.9	2145.5	2159.6	2159.6	2159.6	2150.2	2159.6
32.5°	2004.0	2018.2	2004.0	2018.2	2013.4	2013.4	2008.7	2018.2
35°	1862.6	1867.3	1857.8	1872.0	1872.0	1876.7	1867.3	1881.4
37.5°	1716.4	1721.1	1716.4	1721.1	1730.5	1716.4	1725.8	1730.5
40°	1565.5	1574.9	1570.2	1574.9	1574.9	1579.6	1574.9	1579.6
42.5°	1414.6	1424.0	1414.6	1428.7	1424.0	1424.0	1428.7	1428.7
45°	1259.0	1273.1	1263.7	1273.1	1277.9	1273.1	1273.1	1282.6
47.5°	1112.8	1122.3	1117.5	1122.3	1122.3	1122.3	1122.3	1131.7
50°	966.6	971.4	971.4	976.1	976.1	980.8	971.4	976.1
52.5°	820.5	829.9	829.9	829.9	825.2	829.9	829.9	829.9
55°	688.4	693.2	683.7	693.2	693.2	688.4	688.4	697.9
57.5°	561.1	561.1	561.1	561.1	561.1	556.4	561.1	561.1
60°	443.2	448.0	443.2	443.2	443.2	443.2	438.5	448.0
62.5°	344.2	344.2	339.5	344.2	344.2	344.2	348.9	348.9
65°	268.8	273.5	268.8	273.5	273.5	273.5	273.5	278.2
67.5°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
70°	160.3	160.3	160.3	165.0	160.3	160.3	160.3	165.0
72.5°	117.9	117.9	117.9	117.9	117.9	117.9	122.6	122.6
75°	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
77.5°	56.6	56.6	56.6	61.3	56.6	61.3	56.6	56.6
80°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
82.5°	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
85°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
87.5°	9.4	9.4	9.4	9.4	4.7	4.7	4.7	4.7
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)