

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: P252203

Luminaire Tested: **LD6B50D010TE EU6B30509050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30509050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5930.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

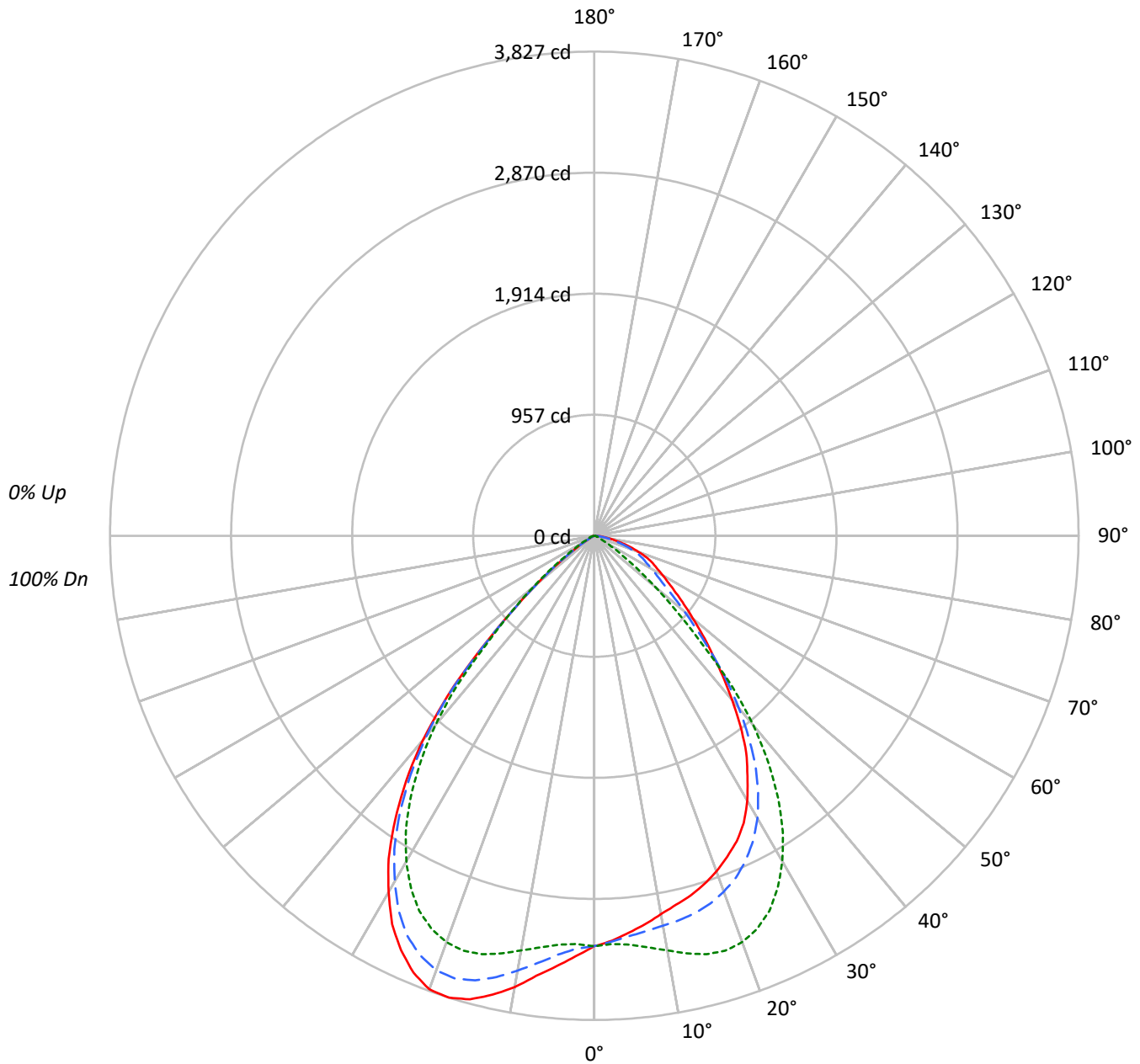
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	103		109	106	103	101		102	100	98		98	96	95		95	93	92
2	105	98	93	89		102	97	92	88		93	89	86		90	87	84		87	85	82
3	98	89	83	78		95	88	82	78		85	80	76		83	78	75		80	77	74
4	91	82	75	69		89	80	74	69		78	72	68		76	71	67		74	70	66
5	85	75	67	62		83	74	67	62		72	66	61		70	65	61		68	64	60
6	80	69	61	56		78	68	61	56		66	60	55		64	59	55		63	58	54
7	74	63	56	51		73	62	55	50		61	55	50		60	54	50		58	53	50
8	70	58	51	46		69	58	51	46		57	50	46		55	50	46		54	49	45
9	66	54	47	42		64	54	47	42		53	46	42		52	46	42		51	45	42
10	62	50	43	39		61	50	43	39		49	43	39		48	43	39		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	211654	211654	211654
5°	206162	212462	223635
10°	201153	220464	239987
15°	198797	231271	256194
20°	195953	237297	264859
25°	191783	235542	260104
30°	182247	223831	244864
35°	166735	201810	218607
40°	144219	166678	179350
45°	121613	109315	117323
50°	103252	63273	59497
55°	89607	30335	22931
60°	80938	14170	5663
65°	78514	8135	1914
70°	70406	6505	1774
75°	57850	4689	781
80°	43131	2329	0
85°	37128	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.4	5.3
10°-20°	955.0	16.1
20°-30°	1459.2	24.6
30°-40°	1526.1	25.7
40°-50°	990.0	16.7
50°-60°	393.1	6.6
60°-70°	186.5	3.1
70°-80°	88.7	1.5
80°-90°	18.1	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°	2727.5	46.0
0°-40°	4253.7	71.7
0°-60°	5636.7	95.1
0°-90°	5930.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5930.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3244	3244	3244	3244	3244	
5°	3148	3176	3244	3325	3415	297
15°	2943	3086	3424	3638	3793	829
25°	2664	2832	3272	3492	3613	1220
35°	2094	2221	2534	2683	2745	1295
45°	1318	1306	1185	1256	1272	1026
55°	788	670	267	208	202	714
65°	509	422	53	12	12	497
75°	230	186	19	6	3	248
85°	50	31	0	0	0	58
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°	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2
2.5°	3203.9	3210.1	3175.9	3166.6	3191.5	3200.8	3203.9	3194.6	3197.7	3210.1	3210.1
5°	3148.0	3154.2	3123.2	3113.9	3138.7	3144.9	3154.2	3151.1	3160.4	3179.0	3175.9
7.5°	3095.3	3104.6	3070.5	3058.1	3089.1	3104.6	3110.8	3110.8	3123.2	3148.0	3151.1
10°	3036.4	3048.8	3017.8	3011.6	3045.7	3061.2	3064.3	3070.5	3089.1	3123.2	3129.4
12.5°	2986.8	2999.2	2977.4	2968.1	3005.4	3020.9	3027.1	3039.5	3061.2	3104.6	3110.8
15°	2943.3	2952.6	2927.8	2921.6	2958.8	2977.4	2980.5	2999.2	3027.1	3076.7	3086.0
17.5°	2887.5	2893.7	2875.1	2868.9	2906.1	2924.7	2927.8	2949.5	2983.7	3033.3	3048.8
20°	2822.4	2828.6	2810.0	2803.8	2841.0	2862.7	2865.8	2884.4	2924.7	2977.4	2993.0
22.5°	2744.8	2757.2	2735.5	2729.3	2766.5	2785.2	2794.5	2810.0	2850.3	2903.0	2924.7
25°	2664.2	2664.2	2648.7	2645.6	2679.7	2701.4	2698.3	2720.0	2760.3	2813.1	2831.7
27.5°	2558.7	2555.6	2540.1	2537.0	2574.3	2592.9	2586.7	2608.4	2645.6	2698.3	2716.9
30°	2419.2	2425.4	2403.7	2397.5	2428.5	2459.5	2456.4	2478.1	2515.3	2564.9	2577.4
32.5°	2251.7	2257.9	2254.8	2245.5	2273.4	2288.9	2298.2	2313.7	2344.7	2397.5	2409.9
35°	2093.5	2084.2	2071.8	2071.8	2099.7	2124.5	2115.2	2133.8	2164.9	2217.6	2220.7
37.5°	1898.1	1895.0	1888.8	1882.6	1913.6	1919.8	1922.9	1935.3	1963.3	2006.7	2000.5
40°	1693.4	1696.5	1693.4	1681.0	1699.6	1724.4	1721.3	1727.5	1752.4	1783.4	1774.1
42.5°	1501.1	1501.1	1501.1	1488.7	1510.4	1522.8	1529.0	1525.9	1532.1	1560.1	1547.7
45°	1318.1	1321.2	1318.1	1315.0	1318.1	1324.3	1318.1	1315.0	1315.0	1324.3	1305.7
47.5°	1160.0	1160.0	1150.7	1141.4	1150.7	1153.8	1144.5	1135.2	1132.1	1128.9	1097.9
50°	1017.3	1014.2	1011.1	995.6	1004.9	1008.0	995.6	989.4	977.0	961.5	924.2
52.5°	893.2	890.1	887.0	871.5	877.7	880.8	868.4	856.0	840.5	828.1	781.6
55°	787.8	784.7	784.7	775.4	769.2	775.4	763.0	753.7	732.0	716.4	669.9
57.5°	697.8	697.8	691.6	682.3	685.4	685.4	673.0	660.6	642.0	623.4	586.2
60°	620.3	620.3	620.3	611.0	611.0	611.0	604.8	592.4	576.9	558.3	521.1
62.5°	558.3	558.3	555.2	545.9	549.0	549.0	542.8	530.4	514.9	502.4	465.2
65°	508.6	508.6	508.6	499.3	499.3	502.4	496.2	483.8	471.4	455.9	421.8
67.5°	446.6	443.5	443.5	437.3	440.4	443.5	437.3	428.0	412.5	403.2	372.2
70°	369.1	372.2	375.3	366.0	369.1	369.1	366.0	356.7	347.4	338.1	310.2
72.5°	300.8	300.8	297.7	294.6	294.6	297.7	291.5	282.2	276.0	269.8	248.1
75°	229.5	226.4	229.5	223.3	223.3	223.3	217.1	214.0	210.9	201.6	186.1
77.5°	167.5	164.4	164.4	158.2	161.3	161.3	158.2	152.0	145.8	142.7	130.3
80°	114.8	114.8	114.8	111.7	111.7	108.6	108.6	105.5	99.2	96.1	89.9
82.5°	77.5	77.5	77.5	74.4	74.4	74.4	71.3	68.2	65.1	62.0	55.8
85°	49.6	49.6	49.6	46.5	46.5	46.5	43.4	43.4	40.3	37.2	31.0
87.5°	27.9	27.9	27.9	24.8	24.8	24.8	24.8	24.8	21.7	18.6	15.5
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°	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2
2.5°	3231.8	3188.4	3216.3	3216.3	3207.0	3231.8	3247.3	3259.7	3256.6	3228.7	3225.6
5°	3207.0	3169.7	3200.8	3203.9	3194.6	3228.7	3250.4	3265.9	3269.0	3244.2	3247.3
7.5°	3188.4	3157.3	3197.7	3210.1	3207.0	3238.0	3262.8	3287.6	3300.0	3281.4	3284.5
10°	3179.0	3154.2	3197.7	3216.3	3219.4	3253.5	3290.7	3324.8	3340.3	3327.9	3337.2
12.5°	3166.6	3151.1	3200.8	3228.7	3241.1	3275.2	3321.7	3362.0	3386.8	3380.6	3399.3
15°	3154.2	3141.8	3200.8	3241.1	3256.6	3287.6	3340.3	3399.3	3427.2	3424.1	3448.9
17.5°	3123.2	3120.1	3182.1	3225.6	3247.3	3284.5	3334.1	3405.5	3433.4	3439.6	3470.6
20°	3073.6	3073.6	3141.8	3188.4	3213.2	3247.3	3309.3	3377.5	3411.7	3417.9	3452.0
22.5°	3005.4	3011.6	3076.7	3123.2	3160.4	3185.2	3250.4	3321.7	3352.7	3362.0	3399.3
25°	2915.4	2921.6	2983.7	3030.2	3070.5	3098.4	3160.4	3225.6	3262.8	3272.1	3300.0
27.5°	2797.6	2810.0	2868.9	2915.4	2949.5	2968.1	3033.3	3101.5	3129.4	3138.7	3166.6
30°	2661.1	2664.2	2723.1	2763.4	2797.6	2813.1	2868.9	2940.2	2961.9	2971.2	3011.6
32.5°	2493.6	2490.5	2546.3	2583.6	2611.5	2630.1	2689.0	2735.5	2757.2	2772.7	2794.5
35°	2292.0	2288.9	2329.2	2372.7	2394.4	2400.6	2459.5	2509.1	2521.5	2533.9	2561.8
37.5°	2065.6	2065.6	2099.7	2121.4	2146.2	2155.5	2183.5	2239.3	2261.0	2257.9	2279.6
40°	1826.8	1814.4	1839.2	1860.9	1867.1	1870.2	1898.1	1941.5	1957.1	1957.1	1972.6
42.5°	1575.6	1557.0	1560.1	1572.5	1578.7	1557.0	1575.6	1603.5	1594.2	1606.6	1609.7
45°	1308.8	1280.9	1268.5	1240.6	1246.8	1225.1	1212.7	1218.9	1215.8	1184.8	1191.0
47.5°	1091.7	1042.1	1020.4	980.1	970.8	946.0	930.5	902.5	877.7	877.7	862.2
50°	908.7	859.1	815.7	769.2	753.7	732.0	697.8	660.6	642.0	623.4	607.9
52.5°	763.0	710.2	657.5	607.9	586.2	558.3	511.7	474.5	440.4	421.8	403.2
55°	645.1	586.2	530.4	477.6	449.7	421.8	375.3	331.9	291.5	266.7	251.2
57.5°	555.2	499.3	440.4	384.6	359.8	328.8	279.1	232.6	195.4	167.5	152.0
60°	490.0	434.2	381.5	322.6	297.7	266.7	214.0	170.6	133.4	108.6	89.9
62.5°	434.2	384.6	328.8	276.0	251.2	220.2	170.6	127.2	93.0	68.2	52.7
65°	393.9	344.3	297.7	245.0	223.3	192.3	145.8	105.5	74.4	52.7	37.2
67.5°	347.4	303.9	257.4	214.0	192.3	167.5	124.1	89.9	62.0	43.4	31.0
70°	291.5	257.4	217.1	176.8	161.3	139.6	102.3	74.4	49.6	34.1	24.8
72.5°	232.6	204.7	173.7	142.7	130.3	108.6	83.7	58.9	37.2	24.8	18.6
75°	176.8	155.1	130.3	108.6	96.1	83.7	62.0	43.4	27.9	18.6	12.4
77.5°	121.0	111.7	93.0	74.4	68.2	58.9	40.3	27.9	18.6	12.4	6.2
80°	83.7	74.4	62.0	49.6	43.4	37.2	24.8	18.6	9.3	6.2	3.1
82.5°	52.7	43.4	37.2	31.0	27.9	21.7	15.5	9.3	6.2	3.1	3.1
85°	27.9	24.8	21.7	15.5	15.5	12.4	9.3	6.2	3.1	0.0	0.0
87.5°	15.5	12.4	9.3	6.2	6.2	3.1	3.1	3.1	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°	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2
2.5°	3262.8	3262.8	3259.7	3296.9	3253.5	3296.9	3275.2	3296.9	3265.9	3262.8	3265.9
5°	3287.6	3296.9	3300.0	3334.1	3293.8	3346.5	3327.9	3346.5	3324.8	3331.0	3340.3
7.5°	3337.2	3352.7	3349.6	3393.1	3352.7	3411.7	3399.3	3427.2	3405.5	3411.7	3424.1
10°	3393.1	3411.7	3414.8	3458.2	3421.0	3492.3	3476.8	3507.8	3489.2	3498.5	3514.0
12.5°	3458.2	3479.9	3483.0	3532.6	3492.3	3566.7	3557.4	3588.4	3572.9	3582.2	3600.9
15°	3507.8	3538.8	3545.0	3594.6	3551.2	3628.8	3622.6	3662.9	3638.1	3653.6	3669.1
17.5°	3532.6	3560.5	3572.9	3619.5	3582.2	3659.8	3653.6	3687.7	3669.1	3684.6	3703.2
20°	3517.1	3551.2	3560.5	3607.1	3569.8	3647.4	3638.1	3672.2	3653.6	3666.0	3684.6
22.5°	3461.3	3495.4	3507.8	3551.2	3517.1	3588.4	3585.3	3616.4	3591.5	3607.1	3622.6
25°	3362.0	3399.3	3405.5	3445.8	3408.6	3483.0	3476.8	3510.9	3492.3	3501.6	3523.3
27.5°	3219.4	3262.8	3272.1	3306.2	3278.3	3340.3	3340.3	3368.2	3346.5	3346.5	3368.2
30°	3048.8	3092.2	3098.4	3126.3	3101.5	3157.3	3160.4	3188.4	3154.2	3172.8	3175.9
32.5°	2841.0	2868.9	2887.5	2912.3	2875.1	2946.4	2937.1	2958.8	2940.2	2940.2	2955.7
35°	2589.8	2623.9	2633.2	2664.2	2633.2	2689.0	2689.0	2701.4	2682.8	2682.8	2707.6
37.5°	2316.8	2341.6	2344.7	2375.8	2350.9	2397.5	2394.4	2403.7	2385.1	2397.5	2397.5
40°	1997.4	2016.0	2022.2	2037.7	2034.6	2068.7	2065.6	2071.8	2062.5	2065.6	2071.8
42.5°	1625.2	1650.0	1662.4	1674.8	1656.2	1702.7	1693.4	1702.7	1699.6	1702.7	1712.0
45°	1197.2	1215.8	1225.1	1228.2	1222.0	1249.9	1271.6	1253.0	1256.1	1249.9	1262.3
47.5°	865.3	868.4	862.2	880.8	865.3	877.7	883.9	887.0	868.4	865.3	877.7
50°	592.4	607.9	586.2	595.5	592.4	604.8	598.6	601.7	583.1	592.4	586.2
52.5°	393.9	390.8	384.6	387.7	381.5	381.5	381.5	387.7	375.3	369.1	362.9
55°	238.8	232.6	220.2	217.1	217.1	220.2	214.0	207.8	207.8	204.7	204.7
57.5°	139.6	130.3	124.1	121.0	114.8	111.7	108.6	108.6	102.3	102.3	102.3
60°	77.5	68.2	62.0	55.8	55.8	52.7	49.6	46.5	46.5	46.5	43.4
62.5°	40.3	34.1	27.9	24.8	24.8	21.7	18.6	18.6	18.6	18.6	15.5
65°	27.9	21.7	18.6	15.5	15.5	12.4	12.4	12.4	12.4	12.4	12.4
67.5°	21.7	18.6	15.5	12.4	12.4	12.4	9.3	9.3	9.3	9.3	9.3
70°	18.6	12.4	12.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
72.5°	12.4	12.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
75°	9.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
77.5°	3.1	3.1	3.1	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0
80°	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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: P252203

CATALOG NUMBER: LD6B50D010TE EU6B30509050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2	3244.2
2.5°	3293.8	3290.7	3293.8	3300.0	3287.6	3324.8	3306.2	3324.8
5°	3365.1	3368.2	3371.3	3380.6	3365.1	3411.7	3386.8	3414.8
7.5°	3458.2	3461.3	3464.4	3473.7	3464.4	3510.9	3483.0	3507.8
10°	3554.3	3560.5	3560.5	3576.0	3566.7	3610.2	3591.5	3622.6
12.5°	3644.3	3650.5	3656.7	3666.0	3659.8	3706.3	3690.8	3715.6
15°	3715.6	3728.0	3731.1	3743.5	3737.3	3786.9	3768.3	3793.1
17.5°	3749.7	3762.1	3762.1	3777.6	3771.4	3824.2	3799.3	3827.3
20°	3731.1	3740.4	3743.5	3759.0	3752.8	3805.6	3780.7	3814.9
22.5°	3672.2	3675.3	3678.4	3693.9	3690.8	3737.3	3715.6	3737.3
25°	3563.6	3572.9	3569.8	3582.2	3582.2	3619.5	3594.6	3613.3
27.5°	3408.6	3417.9	3417.9	3433.4	3421.0	3458.2	3433.4	3461.3
30°	3219.4	3228.7	3222.5	3234.9	3222.5	3259.7	3241.1	3250.4
32.5°	2993.0	2993.0	2996.1	2999.2	2993.0	3027.1	3008.5	3027.1
35°	2723.1	2729.3	2732.4	2735.5	2729.3	2754.1	2732.4	2744.8
37.5°	2419.2	2434.7	2431.6	2434.7	2425.4	2456.4	2437.8	2444.0
40°	2093.5	2093.5	2090.4	2096.6	2087.3	2112.1	2099.7	2105.9
42.5°	1715.1	1724.4	1712.0	1727.5	1702.7	1736.8	1724.4	1715.1
45°	1287.1	1274.7	1271.6	1274.7	1265.4	1268.5	1277.8	1271.6
47.5°	877.7	877.7	871.5	862.2	874.6	877.7	865.3	865.3
50°	589.3	589.3	583.1	580.0	586.2	583.1	576.9	586.2
52.5°	375.3	362.9	362.9	369.1	362.9	356.7	366.0	359.8
55°	204.7	198.5	198.5	204.7	198.5	198.5	195.4	201.6
57.5°	99.2	102.3	99.2	99.2	99.2	99.2	96.1	99.2
60°	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
62.5°	18.6	18.6	15.5	15.5	15.5	15.5	15.5	15.5
65°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
67.5°	9.3	9.3	9.3	9.3	9.3	12.4	9.3	9.3
70°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
72.5°	9.3	9.3	12.4	12.4	12.4	12.4	12.4	12.4
75°	6.2	6.2	6.2	3.1	3.1	3.1	3.1	3.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)