

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: P252181

Luminaire Tested: **LD6B40D010 EU6B30508030 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252181
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: LD6B40D010 EU6B30508030 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5318.0 lumens
Efficiency: N/A
Efficacy: 123.6 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

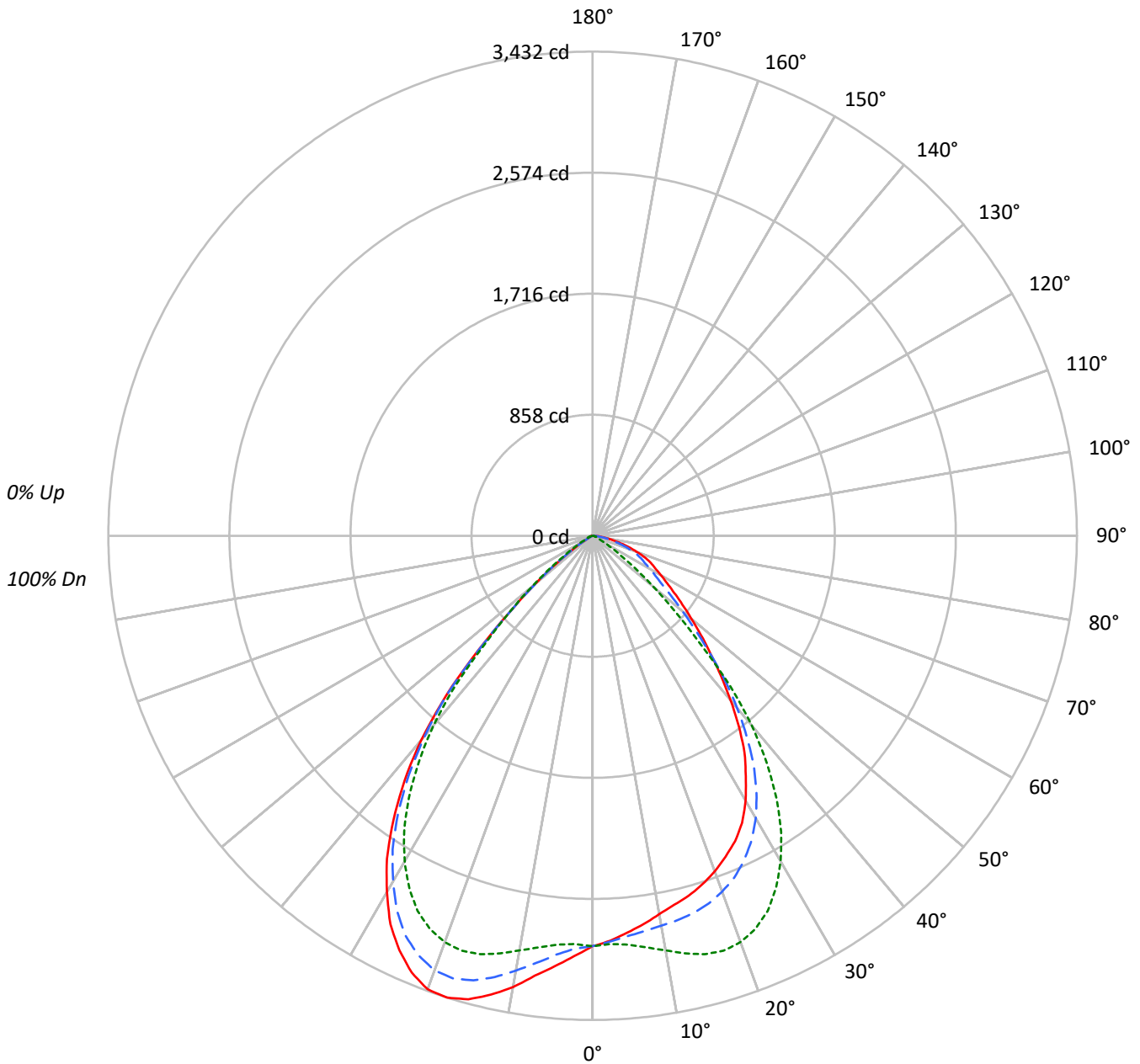
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			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			100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65			65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53			53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48			48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40			40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37			37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	189811	189811	189811
5°	184884	190536	200550
10°	180391	197714	215217
15°	178284	207401	229758
20°	175728	212803	237519
25°	171987	211233	233260
30°	163436	200733	219589
35°	149532	180983	196052
40°	129341	149474	160844
45°	109065	98031	105218
50°	92595	56747	53357
55°	80360	27207	20565
60°	72587	12696	5076
65°	70425	7302	1714
70°	63139	5837	1583
75°	51876	4210	706
80°	38660	2104	0
85°	33311	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.0	5.3
10°-20°	856.4	16.1
20°-30°	1308.6	24.6
30°-40°	1368.6	25.7
40°-50°	887.8	16.7
50°-60°	352.5	6.6
60°-70°	167.2	3.1
70°-80°	79.5	1.5
80°-90°	16.2	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°	2446.0	46.0
0°-40°	3814.7	71.7
0°-60°	5055.0	95.1
0°-90°	5318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5318.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2909	2909	2909	2909	2909	
5°	2823	2848	2909	2982	3062	267
15°	2640	2768	3071	3263	3402	744
25°	2389	2539	2934	3132	3240	1094
35°	1878	1992	2272	2406	2462	1161
45°	1182	1171	1062	1126	1140	920
55°	706	601	239	186	181	640
65°	456	378	47	11	11	446
75°	206	167	17	6	3	222
85°	44	28	0	0	0	52
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°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2873.2	2878.8	2848.2	2839.8	2862.1	2870.4	2873.2	2864.9	2867.6	2878.8	2878.8
5°	2823.1	2828.7	2800.9	2792.5	2814.8	2820.4	2828.7	2825.9	2834.3	2851.0	2848.2
7.5°	2775.9	2784.2	2753.6	2742.5	2770.3	2784.2	2789.8	2789.8	2800.9	2823.1	2825.9
10°	2723.0	2734.1	2706.3	2700.8	2731.4	2745.3	2748.0	2753.6	2770.3	2800.9	2806.5
12.5°	2678.5	2689.6	2670.2	2661.8	2695.2	2709.1	2714.7	2725.8	2745.3	2784.2	2789.8
15°	2639.6	2647.9	2625.7	2620.1	2653.5	2670.2	2672.9	2689.6	2714.7	2759.2	2767.5
17.5°	2589.5	2595.1	2578.4	2572.8	2606.2	2622.9	2625.7	2645.1	2675.7	2720.2	2734.1
20°	2531.1	2536.7	2520.0	2514.4	2547.8	2567.3	2570.0	2586.7	2622.9	2670.2	2684.1
22.5°	2461.6	2472.7	2453.2	2447.6	2481.0	2497.7	2506.1	2520.0	2556.1	2603.4	2622.9
25°	2389.2	2389.2	2375.3	2372.6	2403.1	2422.6	2419.8	2439.3	2475.5	2522.7	2539.4
27.5°	2294.7	2291.9	2278.0	2275.2	2308.6	2325.3	2319.7	2339.2	2372.6	2419.8	2436.5
30°	2169.5	2175.1	2155.6	2150.0	2177.9	2205.7	2202.9	2222.4	2255.7	2300.2	2311.4
32.5°	2019.3	2024.9	2022.1	2013.7	2038.8	2052.7	2061.0	2074.9	2102.8	2150.0	2161.2
35°	1877.5	1869.1	1858.0	1858.0	1883.0	1905.3	1896.9	1913.6	1941.4	1988.7	1991.5
37.5°	1702.2	1699.4	1693.9	1688.3	1716.1	1721.7	1724.5	1735.6	1760.6	1799.6	1794.0
40°	1518.7	1521.4	1518.7	1507.5	1524.2	1546.5	1543.7	1549.3	1571.5	1599.3	1591.0
42.5°	1346.2	1346.2	1346.2	1335.1	1354.6	1365.7	1371.2	1368.5	1374.0	1399.1	1387.9
45°	1182.1	1184.9	1182.1	1179.3	1182.1	1187.7	1182.1	1179.3	1179.3	1187.7	1171.0
47.5°	1040.3	1040.3	1031.9	1023.6	1031.9	1034.7	1026.3	1018.0	1015.2	1012.4	984.6
50°	912.3	909.5	906.7	892.8	901.2	904.0	892.8	887.3	876.1	862.2	828.9
52.5°	801.0	798.3	795.5	781.6	787.1	789.9	778.8	767.7	753.8	742.6	700.9
55°	706.5	703.7	703.7	695.4	689.8	695.4	684.2	675.9	656.4	642.5	600.8
57.5°	625.8	625.8	620.3	611.9	614.7	614.7	603.6	592.4	575.8	559.1	525.7
60°	556.3	556.3	556.3	547.9	547.9	547.9	542.4	531.3	517.3	500.7	467.3
62.5°	500.7	500.7	497.9	489.5	492.3	492.3	486.7	475.6	461.7	450.6	417.2
65°	456.2	456.2	456.2	447.8	447.8	450.6	445.0	433.9	422.8	408.9	378.3
67.5°	400.5	397.7	397.7	392.2	395.0	397.7	392.2	383.8	369.9	361.6	333.8
70°	331.0	333.8	336.6	328.2	331.0	331.0	328.2	319.9	311.5	303.2	278.1
72.5°	269.8	269.8	267.0	264.2	264.2	267.0	261.5	253.1	247.5	242.0	222.5
75°	205.8	203.0	205.8	200.3	200.3	200.3	194.7	191.9	189.1	180.8	166.9
77.5°	150.2	147.4	147.4	141.9	144.6	144.6	141.9	136.3	130.7	127.9	116.8
80°	102.9	102.9	102.9	100.1	100.1	97.3	97.3	94.6	89.0	86.2	80.7
82.5°	69.5	69.5	69.5	66.8	66.8	66.8	64.0	61.2	58.4	55.6	50.1
85°	44.5	44.5	44.5	41.7	41.7	41.7	38.9	38.9	36.2	33.4	27.8
87.5°	25.0	25.0	25.0	22.3	22.3	22.3	22.3	22.3	19.5	16.7	13.9
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°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2898.2	2859.3	2884.3	2884.3	2876.0	2898.2	2912.1	2923.3	2920.5	2895.5	2892.7
5°	2876.0	2842.6	2870.4	2873.2	2864.9	2895.5	2914.9	2928.8	2931.6	2909.4	2912.1
7.5°	2859.3	2831.5	2867.6	2878.8	2876.0	2903.8	2926.1	2948.3	2959.4	2942.7	2945.5
10°	2851.0	2828.7	2867.6	2884.3	2887.1	2917.7	2951.1	2981.7	2995.6	2984.5	2992.8
12.5°	2839.8	2825.9	2870.4	2895.5	2906.6	2937.2	2978.9	3015.1	3037.3	3031.7	3048.4
15°	2828.7	2817.6	2870.4	2906.6	2920.5	2948.3	2995.6	3048.4	3073.5	3070.7	3092.9
17.5°	2800.9	2798.1	2853.7	2892.7	2912.1	2945.5	2990.0	3054.0	3079.0	3084.6	3112.4
20°	2756.4	2756.4	2817.6	2859.3	2881.6	2912.1	2967.8	3029.0	3059.6	3065.1	3095.7
22.5°	2695.2	2700.8	2759.2	2800.9	2834.3	2856.5	2914.9	2978.9	3006.7	3015.1	3048.4
25°	2614.5	2620.1	2675.7	2717.4	2753.6	2778.6	2834.3	2892.7	2926.1	2934.4	2959.4
27.5°	2508.8	2520.0	2572.8	2614.5	2645.1	2661.8	2720.2	2781.4	2806.5	2814.8	2839.8
30°	2386.5	2389.2	2442.1	2478.2	2508.8	2522.7	2572.8	2636.8	2656.3	2664.6	2700.8
32.5°	2236.3	2233.5	2283.5	2316.9	2342.0	2358.6	2411.5	2453.2	2472.7	2486.6	2506.1
35°	2055.5	2052.7	2088.8	2127.8	2147.3	2152.8	2205.7	2250.2	2261.3	2272.4	2297.5
37.5°	1852.4	1852.4	1883.0	1902.5	1924.7	1933.1	1958.1	2008.2	2027.7	2024.9	2044.3
40°	1638.3	1627.1	1649.4	1668.9	1674.4	1677.2	1702.2	1741.2	1755.1	1755.1	1769.0
42.5°	1413.0	1396.3	1399.1	1410.2	1415.7	1396.3	1413.0	1438.0	1429.7	1440.8	1443.6
45°	1173.8	1148.7	1137.6	1112.6	1118.1	1098.7	1087.5	1093.1	1090.3	1062.5	1068.1
47.5°	979.1	934.6	915.1	878.9	870.6	848.3	834.4	809.4	787.1	787.1	773.2
50°	815.0	770.5	731.5	689.8	675.9	656.4	625.8	592.4	575.8	559.1	545.2
52.5°	684.2	636.9	589.7	545.2	525.7	500.7	458.9	425.6	395.0	378.3	361.6
55°	578.5	525.7	475.6	428.3	403.3	378.3	336.6	297.6	261.5	239.2	225.3
57.5°	497.9	447.8	395.0	344.9	322.6	294.8	250.3	208.6	175.2	150.2	136.3
60°	439.5	389.4	342.1	289.3	267.0	239.2	191.9	153.0	119.6	97.3	80.7
62.5°	389.4	344.9	294.8	247.5	225.3	197.5	153.0	114.0	83.4	61.2	47.3
65°	353.2	308.7	267.0	219.7	200.3	172.4	130.7	94.6	66.8	47.3	33.4
67.5°	311.5	272.6	230.9	191.9	172.4	150.2	111.3	80.7	55.6	38.9	27.8
70°	261.5	230.9	194.7	158.5	144.6	125.2	91.8	66.8	44.5	30.6	22.3
72.5°	208.6	183.6	155.8	127.9	116.8	97.3	75.1	52.8	33.4	22.3	16.7
75°	158.5	139.1	116.8	97.3	86.2	75.1	55.6	38.9	25.0	16.7	11.1
77.5°	108.5	100.1	83.4	66.8	61.2	52.8	36.2	25.0	16.7	11.1	5.6
80°	75.1	66.8	55.6	44.5	38.9	33.4	22.3	16.7	8.3	5.6	2.8
82.5°	47.3	38.9	33.4	27.8	25.0	19.5	13.9	8.3	5.6	2.8	2.8
85°	25.0	22.3	19.5	13.9	13.9	11.1	8.3	5.6	2.8	0.0	0.0
87.5°	13.9	11.1	8.3	5.6	5.6	2.8	2.8	2.8	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°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2926.1	2926.1	2923.3	2956.6	2917.7	2956.6	2937.2	2956.6	2928.8	2926.1	2928.8
5°	2948.3	2956.6	2959.4	2990.0	2953.9	3001.2	2984.5	3001.2	2981.7	2987.2	2995.6
7.5°	2992.8	3006.7	3003.9	3042.9	3006.7	3059.6	3048.4	3073.5	3054.0	3059.6	3070.7
10°	3042.9	3059.6	3062.3	3101.3	3067.9	3131.9	3118.0	3145.8	3129.1	3137.4	3151.3
12.5°	3101.3	3120.8	3123.5	3168.0	3131.9	3198.6	3190.3	3218.1	3204.2	3212.5	3229.2
15°	3145.8	3173.6	3179.2	3223.7	3184.7	3254.3	3248.7	3284.9	3262.6	3276.5	3290.4
17.5°	3168.0	3193.1	3204.2	3245.9	3212.5	3282.1	3276.5	3307.1	3290.4	3304.3	3321.0
20°	3154.1	3184.7	3193.1	3234.8	3201.4	3271.0	3262.6	3293.2	3276.5	3287.6	3304.3
22.5°	3104.1	3134.7	3145.8	3184.7	3154.1	3218.1	3215.3	3243.1	3220.9	3234.8	3248.7
25°	3015.1	3048.4	3054.0	3090.2	3056.8	3123.5	3118.0	3148.6	3131.9	3140.2	3159.7
27.5°	2887.1	2926.1	2934.4	2965.0	2940.0	2995.6	2995.6	3020.6	3001.2	3001.2	3020.6
30°	2734.1	2773.1	2778.6	2803.7	2781.4	2831.5	2834.3	2859.3	2828.7	2845.4	2848.2
32.5°	2547.8	2572.8	2589.5	2611.8	2578.4	2642.3	2634.0	2653.5	2636.8	2636.8	2650.7
35°	2322.5	2353.1	2361.4	2389.2	2361.4	2411.5	2411.5	2422.6	2405.9	2405.9	2428.2
37.5°	2077.7	2100.0	2102.8	2130.6	2108.3	2150.0	2147.3	2155.6	2138.9	2150.0	2150.0
40°	1791.2	1807.9	1813.5	1827.4	1824.6	1855.2	1852.4	1858.0	1849.6	1852.4	1858.0
42.5°	1457.5	1479.7	1490.8	1502.0	1485.3	1527.0	1518.7	1527.0	1524.2	1527.0	1535.3
45°	1073.6	1090.3	1098.7	1101.4	1095.9	1120.9	1140.4	1123.7	1126.5	1120.9	1132.0
47.5°	776.0	778.8	773.2	789.9	776.0	787.1	792.7	795.5	778.8	776.0	787.1
50°	531.3	545.2	525.7	534.0	531.3	542.4	536.8	539.6	522.9	531.3	525.7
52.5°	353.2	350.5	344.9	347.7	342.1	342.1	342.1	347.7	336.6	331.0	325.4
55°	214.2	208.6	197.5	194.7	194.7	197.5	191.9	186.4	186.4	183.6	183.6
57.5°	125.2	116.8	111.3	108.5	102.9	100.1	97.3	97.3	91.8	91.8	91.8
60°	69.5	61.2	55.6	50.1	50.1	47.3	44.5	41.7	41.7	41.7	38.9
62.5°	36.2	30.6	25.0	22.3	22.3	19.5	16.7	16.7	16.7	16.7	13.9
65°	25.0	19.5	16.7	13.9	13.9	11.1	11.1	11.1	11.1	11.1	11.1
67.5°	19.5	16.7	13.9	11.1	11.1	11.1	8.3	8.3	8.3	8.3	8.3
70°	16.7	11.1	11.1	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
72.5°	11.1	11.1	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
75°	8.3	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0
80°	2.8	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: P252181

CATALOG NUMBER: LD6B40D010 EU6B30508030 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4	2909.4
2.5°	2953.9	2951.1	2953.9	2959.4	2948.3	2981.7	2965.0	2981.7
5°	3017.8	3020.6	3023.4	3031.7	3017.8	3059.6	3037.3	3062.3
7.5°	3101.3	3104.1	3106.8	3115.2	3106.8	3148.6	3123.5	3145.8
10°	3187.5	3193.1	3193.1	3207.0	3198.6	3237.6	3220.9	3248.7
12.5°	3268.2	3273.7	3279.3	3287.6	3282.1	3323.8	3309.9	3332.1
15°	3332.1	3343.3	3346.0	3357.2	3351.6	3396.1	3379.4	3401.7
17.5°	3362.7	3373.9	3373.9	3387.8	3382.2	3429.5	3407.2	3432.3
20°	3346.0	3354.4	3357.2	3371.1	3365.5	3412.8	3390.6	3421.1
22.5°	3293.2	3296.0	3298.8	3312.7	3309.9	3351.6	3332.1	3351.6
25°	3195.9	3204.2	3201.4	3212.5	3212.5	3245.9	3223.7	3240.4
27.5°	3056.8	3065.1	3065.1	3079.0	3067.9	3101.3	3079.0	3104.1
30°	2887.1	2895.5	2889.9	2901.0	2889.9	2923.3	2906.6	2914.9
32.5°	2684.1	2684.1	2686.9	2689.6	2684.1	2714.7	2698.0	2714.7
35°	2442.1	2447.6	2450.4	2453.2	2447.6	2469.9	2450.4	2461.6
37.5°	2169.5	2183.4	2180.6	2183.4	2175.1	2202.9	2186.2	2191.8
40°	1877.5	1877.5	1874.7	1880.2	1871.9	1894.1	1883.0	1888.6
42.5°	1538.1	1546.5	1535.3	1549.3	1527.0	1557.6	1546.5	1538.1
45°	1154.3	1143.2	1140.4	1143.2	1134.8	1137.6	1145.9	1140.4
47.5°	787.1	787.1	781.6	773.2	784.4	787.1	776.0	776.0
50°	528.5	528.5	522.9	520.1	525.7	522.9	517.3	525.7
52.5°	336.6	325.4	325.4	331.0	325.4	319.9	328.2	322.6
55°	183.6	178.0	178.0	183.6	178.0	178.0	175.2	180.8
57.5°	89.0	91.8	89.0	89.0	89.0	89.0	86.2	89.0
60°	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
62.5°	16.7	16.7	13.9	13.9	13.9	13.9	13.9	13.9
65°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
67.5°	8.3	8.3	8.3	8.3	8.3	11.1	8.3	8.3
70°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
72.5°	8.3	8.3	11.1	11.1	11.1	11.1	11.1	11.1
75°	5.6	5.6	5.6	2.8	2.8	2.8	2.8	2.8
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)