

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: P252180

Luminaire Tested: **LD6B40D010 EU6B30508027 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252180
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 EU6B30508027 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5087.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

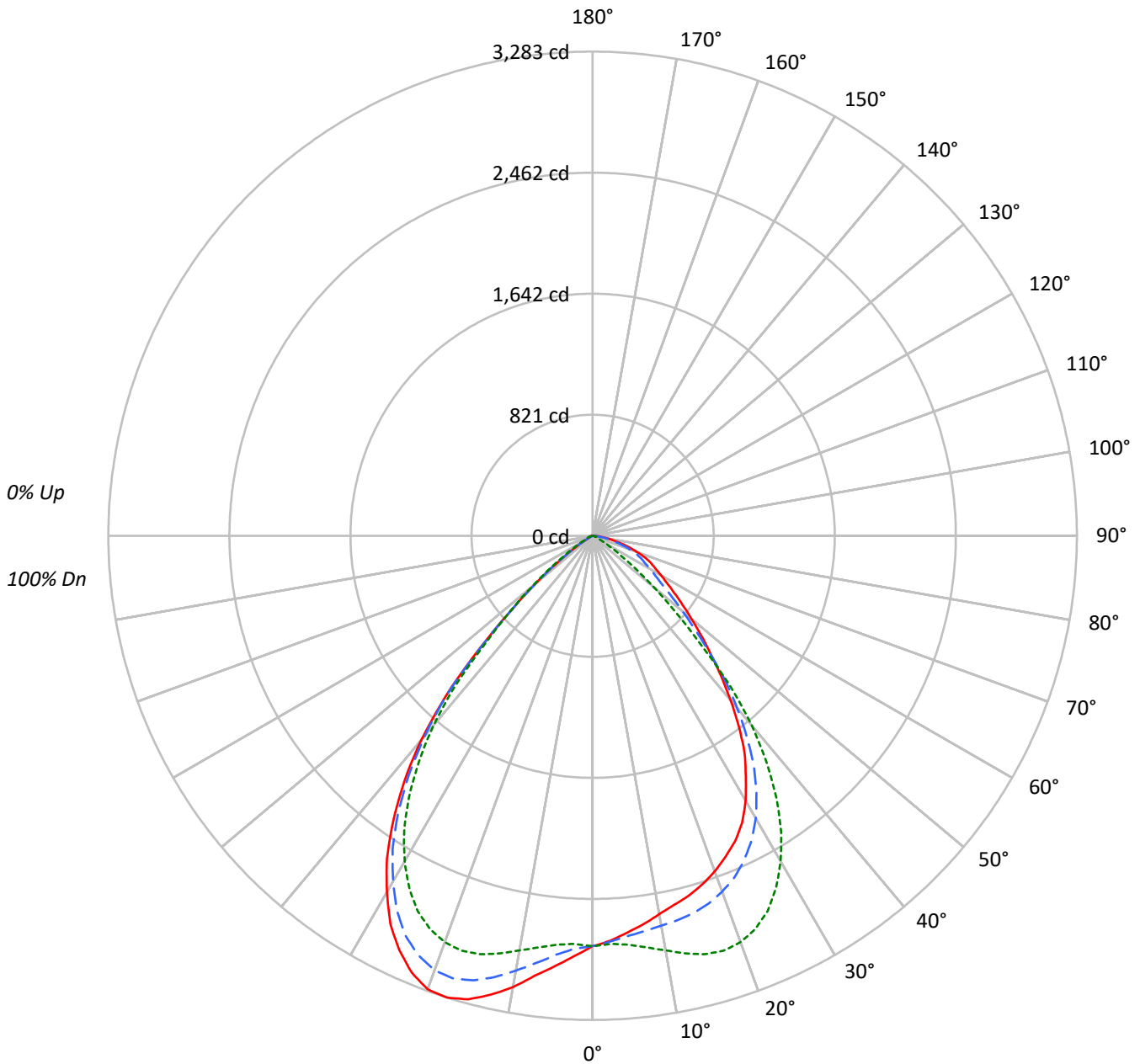
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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°	181565	181565	181565
5°	176855	182258	191839
10°	172554	189122	205869
15°	170537	198391	219775
20°	168091	203562	227202
25°	164522	202055	223125
30°	156339	192017	210052
35°	143033	173122	187530
40°	123720	142976	153852
45°	104332	93777	100642
50°	88576	54280	51043
55°	76868	26025	19666
60°	69429	12148	4854
65°	67353	6978	1636
70°	60392	5589	1526
75°	49633	4033	681
80°	36969	1991	0
85°	31888	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.8	5.3
10°-20°	819.2	16.1
20°-30°	1251.7	24.6
30°-40°	1309.2	25.7
40°-50°	849.3	16.7
50°-60°	337.2	6.6
60°-70°	160.0	3.1
70°-80°	76.1	1.5
80°-90°	15.5	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°	2339.8	46.0
0°-40°	3649.0	71.7
0°-60°	4835.4	95.1
0°-90°	5087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5087.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2783	2783	2783	2783	2783	
5°	2700	2724	2783	2852	2929	255
15°	2525	2647	2937	3121	3254	712
25°	2286	2429	2807	2996	3100	1047
35°	1796	1905	2174	2301	2355	1111
45°	1131	1120	1016	1078	1091	880
55°	676	575	229	178	173	612
65°	436	362	45	11	11	426
75°	197	160	16	5	3	212
85°	43	27	0	0	0	50
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°	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0
2.5°	2748.4	2753.7	2724.5	2716.5	2737.8	2745.7	2748.4	2740.4	2743.1	2753.7	2753.7
5°	2700.5	2705.8	2679.2	2671.2	2692.5	2697.9	2705.8	2703.2	2711.2	2727.1	2724.5
7.5°	2655.3	2663.3	2634.0	2623.4	2650.0	2663.3	2668.6	2668.6	2679.2	2700.5	2703.2
10°	2604.7	2615.4	2588.8	2583.4	2612.7	2626.0	2628.7	2634.0	2650.0	2679.2	2684.5
12.5°	2562.2	2572.8	2554.2	2546.2	2578.1	2591.4	2596.7	2607.4	2626.0	2663.3	2668.6
15°	2524.9	2532.9	2511.6	2506.3	2538.2	2554.2	2556.8	2572.8	2596.7	2639.3	2647.3
17.5°	2477.0	2482.3	2466.4	2461.1	2493.0	2508.9	2511.6	2530.2	2559.5	2602.1	2615.4
20°	2421.1	2426.5	2410.5	2405.2	2437.1	2455.7	2458.4	2474.4	2508.9	2554.2	2567.5
22.5°	2354.6	2365.3	2346.7	2341.3	2373.3	2389.2	2397.2	2410.5	2445.1	2490.3	2508.9
25°	2285.5	2285.5	2272.2	2269.5	2298.8	2317.4	2314.7	2333.3	2367.9	2413.2	2429.1
27.5°	2195.0	2192.3	2179.0	2176.4	2208.3	2224.3	2218.9	2237.6	2269.5	2314.7	2330.7
30°	2075.3	2080.6	2062.0	2056.6	2083.3	2109.9	2107.2	2125.8	2157.7	2200.3	2211.0
32.5°	1931.6	1936.9	1934.3	1926.3	1950.2	1963.5	1971.5	1984.8	2011.4	2056.6	2067.3
35°	1795.9	1787.9	1777.3	1777.3	1801.2	1822.5	1814.5	1830.5	1857.1	1902.3	1905.0
37.5°	1628.3	1625.6	1620.3	1615.0	1641.6	1646.9	1649.6	1660.2	1684.2	1721.4	1716.1
40°	1452.7	1455.3	1452.7	1442.0	1458.0	1479.3	1476.6	1482.0	1503.2	1529.8	1521.9
42.5°	1287.7	1287.7	1287.7	1277.1	1295.7	1306.4	1311.7	1309.0	1314.3	1338.3	1327.6
45°	1130.8	1133.4	1130.8	1128.1	1130.8	1136.1	1130.8	1128.1	1128.1	1136.1	1120.1
47.5°	995.1	995.1	987.1	979.1	987.1	989.7	981.8	973.8	971.1	968.5	941.9
50°	872.7	870.0	867.4	854.1	862.0	864.7	854.1	848.7	838.1	824.8	792.9
52.5°	766.3	763.6	760.9	747.6	753.0	755.6	745.0	734.3	721.0	710.4	670.5
55°	675.8	673.1	673.1	665.2	659.8	665.2	654.5	646.5	627.9	614.6	574.7
57.5°	598.6	598.6	593.3	585.3	588.0	588.0	577.4	566.7	550.7	534.8	502.9
60°	532.1	532.1	532.1	524.1	524.1	524.1	518.8	508.2	494.9	478.9	447.0
62.5°	478.9	478.9	476.2	468.3	470.9	470.9	465.6	455.0	441.7	431.0	399.1
65°	436.3	436.3	436.3	428.4	428.4	431.0	425.7	415.1	404.4	391.1	361.8
67.5°	383.1	380.5	380.5	375.1	377.8	380.5	375.1	367.2	353.9	345.9	319.3
70°	316.6	319.3	321.9	314.0	316.6	316.6	314.0	306.0	298.0	290.0	266.1
72.5°	258.1	258.1	255.4	252.8	252.8	255.4	250.1	242.1	236.8	231.5	212.8
75°	196.9	194.2	196.9	191.6	191.6	191.6	186.2	183.6	180.9	172.9	159.6
77.5°	143.7	141.0	141.0	135.7	138.4	138.4	135.7	130.4	125.0	122.4	111.7
80°	98.4	98.4	98.4	95.8	95.8	93.1	93.1	90.5	85.1	82.5	77.2
82.5°	66.5	66.5	66.5	63.9	63.9	63.9	61.2	58.5	55.9	53.2	47.9
85°	42.6	42.6	42.6	39.9	39.9	39.9	37.2	37.2	34.6	31.9	26.6
87.5°	23.9	23.9	23.9	21.3	21.3	21.3	21.3	21.3	18.6	16.0	13.3
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°	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0
2.5°	2772.3	2735.1	2759.0	2759.0	2751.1	2772.3	2785.7	2796.3	2793.6	2769.7	2767.0
5°	2751.1	2719.1	2745.7	2748.4	2740.4	2769.7	2788.3	2801.6	2804.3	2783.0	2785.7
7.5°	2735.1	2708.5	2743.1	2753.7	2751.1	2777.7	2799.0	2820.2	2830.9	2814.9	2817.6
10°	2727.1	2705.8	2743.1	2759.0	2761.7	2791.0	2822.9	2852.2	2865.5	2854.8	2862.8
12.5°	2716.5	2703.2	2745.7	2769.7	2780.3	2809.6	2849.5	2884.1	2905.4	2900.1	2916.0
15°	2705.8	2695.2	2745.7	2780.3	2793.6	2820.2	2865.5	2916.0	2940.0	2937.3	2958.6
17.5°	2679.2	2676.6	2729.8	2767.0	2785.7	2817.6	2860.1	2921.3	2945.3	2950.6	2977.2
20°	2636.7	2636.7	2695.2	2735.1	2756.4	2785.7	2838.9	2897.4	2926.7	2932.0	2961.3
22.5°	2578.1	2583.4	2639.3	2679.2	2711.2	2732.4	2788.3	2849.5	2876.1	2884.1	2916.0
25°	2501.0	2506.3	2559.5	2599.4	2634.0	2657.9	2711.2	2767.0	2799.0	2806.9	2830.9
27.5°	2399.9	2410.5	2461.1	2501.0	2530.2	2546.2	2602.1	2660.6	2684.5	2692.5	2716.5
30°	2282.8	2285.5	2336.0	2370.6	2399.9	2413.2	2461.1	2522.3	2540.9	2548.9	2583.4
32.5°	2139.1	2136.5	2184.4	2216.3	2240.2	2256.2	2306.7	2346.7	2365.3	2378.6	2397.2
35°	1966.2	1963.5	1998.1	2035.4	2054.0	2059.3	2109.9	2152.4	2163.1	2173.7	2197.7
37.5°	1772.0	1772.0	1801.2	1819.9	1841.1	1849.1	1873.1	1921.0	1939.6	1936.9	1955.5
40°	1567.1	1556.5	1577.7	1596.4	1601.7	1604.3	1628.3	1665.5	1678.8	1678.8	1692.1
42.5°	1351.6	1335.6	1338.3	1348.9	1354.2	1335.6	1351.6	1375.5	1367.5	1378.2	1380.9
45°	1122.8	1098.8	1088.2	1064.2	1069.6	1050.9	1040.3	1045.6	1043.0	1016.4	1021.7
47.5°	936.5	894.0	875.3	840.8	832.8	811.5	798.2	774.2	753.0	753.0	739.6
50°	779.6	737.0	699.7	659.8	646.5	627.9	598.6	566.7	550.7	534.8	521.5
52.5°	654.5	609.3	564.0	521.5	502.9	478.9	439.0	407.1	377.8	361.8	345.9
55°	553.4	502.9	455.0	409.7	385.8	361.8	321.9	284.7	250.1	228.8	215.5
57.5°	476.2	428.4	377.8	329.9	308.6	282.0	239.5	199.5	167.6	143.7	130.4
60°	420.4	372.5	327.3	276.7	255.4	228.8	183.6	146.3	114.4	93.1	77.2
62.5°	372.5	329.9	282.0	236.8	215.5	188.9	146.3	109.1	79.8	58.5	45.2
65°	337.9	295.3	255.4	210.2	191.6	165.0	125.0	90.5	63.9	45.2	31.9
67.5°	298.0	260.7	220.8	183.6	165.0	143.7	106.4	77.2	53.2	37.2	26.6
70°	250.1	220.8	186.2	151.7	138.4	119.7	87.8	63.9	42.6	29.3	21.3
72.5°	199.5	175.6	149.0	122.4	111.7	93.1	71.8	50.6	31.9	21.3	16.0
75°	151.7	133.0	111.7	93.1	82.5	71.8	53.2	37.2	23.9	16.0	10.6
77.5°	103.8	95.8	79.8	63.9	58.5	50.6	34.6	23.9	16.0	10.6	5.3
80°	71.8	63.9	53.2	42.6	37.2	31.9	21.3	16.0	8.0	5.3	2.7
82.5°	45.2	37.2	31.9	26.6	23.9	18.6	13.3	8.0	5.3	2.7	2.7
85°	23.9	21.3	18.6	13.3	13.3	10.6	8.0	5.3	2.7	0.0	0.0
87.5°	13.3	10.6	8.0	5.3	5.3	2.7	2.7	2.7	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°	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0
2.5°	2799.0	2799.0	2796.3	2828.2	2791.0	2828.2	2809.6	2828.2	2801.6	2799.0	2801.6
5°	2820.2	2828.2	2830.9	2860.1	2825.6	2870.8	2854.8	2870.8	2852.2	2857.5	2865.5
7.5°	2862.8	2876.1	2873.5	2910.7	2876.1	2926.7	2916.0	2940.0	2921.3	2926.7	2937.3
10°	2910.7	2926.7	2929.3	2966.6	2934.6	2995.8	2982.5	3009.1	2993.2	3001.2	3014.5
12.5°	2966.6	2985.2	2987.9	3030.4	2995.8	3059.7	3051.7	3078.3	3065.0	3073.0	3089.0
15°	3009.1	3035.7	3041.1	3083.6	3046.4	3112.9	3107.6	3142.2	3120.9	3134.2	3147.5
17.5°	3030.4	3054.4	3065.0	3104.9	3073.0	3139.5	3134.2	3163.5	3147.5	3160.8	3176.8
20°	3017.1	3046.4	3054.4	3094.3	3062.4	3128.9	3120.9	3150.2	3134.2	3144.8	3160.8
22.5°	2969.2	2998.5	3009.1	3046.4	3017.1	3078.3	3075.7	3102.3	3081.0	3094.3	3107.6
25°	2884.1	2916.0	2921.3	2955.9	2924.0	2987.9	2982.5	3011.8	2995.8	3003.8	3022.4
27.5°	2761.7	2799.0	2806.9	2836.2	2812.3	2865.5	2865.5	2889.4	2870.8	2870.8	2889.4
30°	2615.4	2652.6	2657.9	2681.9	2660.6	2708.5	2711.2	2735.1	2705.8	2721.8	2724.5
32.5°	2437.1	2461.1	2477.0	2498.3	2466.4	2527.6	2519.6	2538.2	2522.3	2522.3	2535.6
35°	2221.6	2250.9	2258.9	2285.5	2258.9	2306.7	2306.7	2317.4	2301.4	2301.4	2322.7
37.5°	1987.5	2008.8	2011.4	2038.0	2016.7	2056.6	2054.0	2062.0	2046.0	2056.6	2056.6
40°	1713.4	1729.4	1734.7	1748.0	1745.4	1774.6	1772.0	1777.3	1769.3	1772.0	1777.3
42.5°	1394.2	1415.4	1426.1	1436.7	1420.8	1460.7	1452.7	1460.7	1458.0	1460.7	1468.7
45°	1027.0	1043.0	1050.9	1053.6	1048.3	1072.2	1090.8	1074.9	1077.5	1072.2	1082.9
47.5°	742.3	745.0	739.6	755.6	742.3	753.0	758.3	760.9	745.0	742.3	753.0
50°	508.2	521.5	502.9	510.8	508.2	518.8	513.5	516.2	500.2	508.2	502.9
52.5°	337.9	335.2	329.9	332.6	327.3	327.3	327.3	332.6	321.9	316.6	311.3
55°	204.9	199.5	188.9	186.2	186.2	188.9	183.6	178.3	178.3	175.6	175.6
57.5°	119.7	111.7	106.4	103.8	98.4	95.8	93.1	93.1	87.8	87.8	87.8
60°	66.5	58.5	53.2	47.9	47.9	45.2	42.6	39.9	39.9	39.9	37.2
62.5°	34.6	29.3	23.9	21.3	21.3	18.6	16.0	16.0	16.0	16.0	13.3
65°	23.9	18.6	16.0	13.3	13.3	10.6	10.6	10.6	10.6	10.6	10.6
67.5°	18.6	16.0	13.3	10.6	10.6	10.6	8.0	8.0	8.0	8.0	8.0
70°	16.0	10.6	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
72.5°	10.6	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
75°	8.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0
80°	2.7	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: P252180

CATALOG NUMBER: LD6B40D010 EU6B30508027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0	2783.0
2.5°	2825.6	2822.9	2825.6	2830.9	2820.2	2852.2	2836.2	2852.2
5°	2886.8	2889.4	2892.1	2900.1	2886.8	2926.7	2905.4	2929.3
7.5°	2966.6	2969.2	2971.9	2979.9	2971.9	3011.8	2987.9	3009.1
10°	3049.1	3054.4	3054.4	3067.7	3059.7	3096.9	3081.0	3107.6
12.5°	3126.2	3131.5	3136.9	3144.8	3139.5	3179.4	3166.1	3187.4
15°	3187.4	3198.0	3200.7	3211.3	3206.0	3248.6	3232.6	3253.9
17.5°	3216.7	3227.3	3227.3	3240.6	3235.3	3280.5	3259.2	3283.2
20°	3200.7	3208.7	3211.3	3224.7	3219.3	3264.6	3243.3	3272.5
22.5°	3150.2	3152.8	3155.5	3168.8	3166.1	3206.0	3187.4	3206.0
25°	3057.0	3065.0	3062.4	3073.0	3073.0	3104.9	3083.6	3099.6
27.5°	2924.0	2932.0	2932.0	2945.3	2934.6	2966.6	2945.3	2969.2
30°	2761.7	2769.7	2764.4	2775.0	2764.4	2796.3	2780.3	2788.3
32.5°	2567.5	2567.5	2570.1	2572.8	2567.5	2596.7	2580.8	2596.7
35°	2336.0	2341.3	2344.0	2346.7	2341.3	2362.6	2344.0	2354.6
37.5°	2075.3	2088.6	2085.9	2088.6	2080.6	2107.2	2091.2	2096.6
40°	1795.9	1795.9	1793.2	1798.6	1790.6	1811.9	1801.2	1806.5
42.5°	1471.3	1479.3	1468.7	1482.0	1460.7	1489.9	1479.3	1471.3
45°	1104.2	1093.5	1090.8	1093.5	1085.5	1088.2	1096.2	1090.8
47.5°	753.0	753.0	747.6	739.6	750.3	753.0	742.3	742.3
50°	505.5	505.5	500.2	497.5	502.9	500.2	494.9	502.9
52.5°	321.9	311.3	311.3	316.6	311.3	306.0	314.0	308.6
55°	175.6	170.3	170.3	175.6	170.3	170.3	167.6	172.9
57.5°	85.1	87.8	85.1	85.1	85.1	85.1	82.5	85.1
60°	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2
62.5°	16.0	16.0	13.3	13.3	13.3	13.3	13.3	13.3
65°	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
67.5°	8.0	8.0	8.0	8.0	8.0	10.6	8.0	8.0
70°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
72.5°	8.0	8.0	10.6	10.6	10.6	10.6	10.6	10.6
75°	5.3	5.3	5.3	2.7	2.7	2.7	2.7	2.7
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)