

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: P252199

Luminaire Tested: **LD6B50D010TE EU6B30509027 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252199
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 EU6B30509027 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5589.0 lumens
Efficiency: N/A
Efficacy: 95.1 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

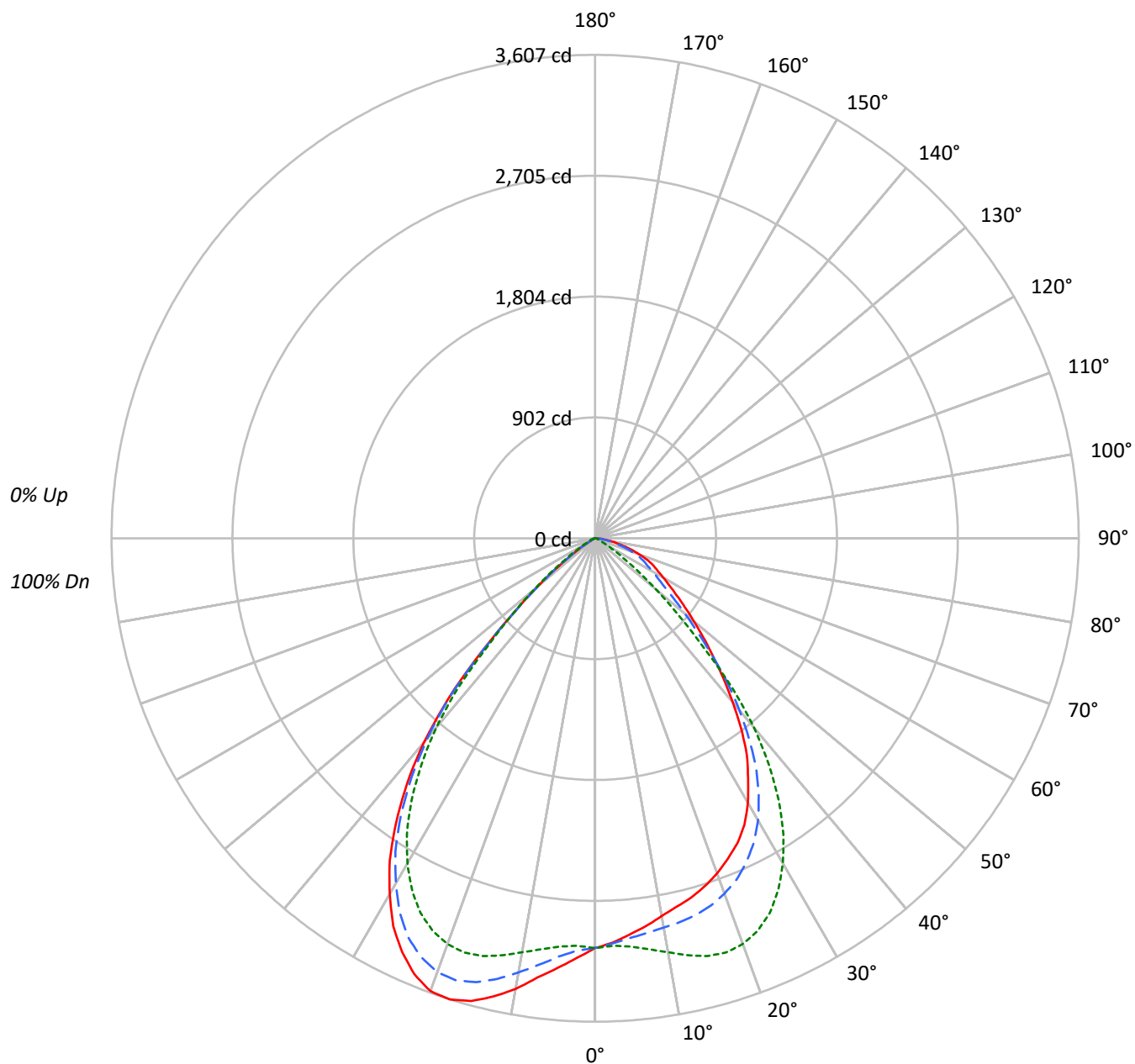
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

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°	199480	199480	199480
5°	194308	200242	210772
10°	189586	207784	226181
15°	187368	217972	241463
20°	184684	223647	249627
25°	180755	221995	245145
30°	171768	210964	230784
35°	157146	190206	206039
40°	135924	157088	169037
45°	114620	103022	110579
50°	97315	59639	56077
55°	84455	28595	21611
60°	76279	13348	5337
65°	74006	7672	1806
70°	66362	6142	1679
75°	54523	4411	731
80°	40651	2179	0
85°	35032	0	0



TEST NUMBER: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.3	5.3
10°-20°	900.1	16.1
20°-30°	1375.2	24.6
30°-40°	1438.4	25.7
40°-50°	933.1	16.7
50°-60°	370.5	6.6
60°-70°	175.8	3.1
70°-80°	83.6	1.5
80°-90°	17.0	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°	2570.7	46.0
0°-40°	4009.1	71.7
0°-60°	5312.6	95.1
0°-90°	5589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5589.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3058	3058	3058	3058	3058	
5°	2967	2993	3058	3134	3218	280
15°	2774	2908	3227	3429	3575	782
25°	2511	2669	3084	3292	3406	1150
35°	1973	2093	2388	2528	2587	1220
45°	1242	1231	1117	1184	1198	967
55°	742	631	251	196	190	673
65°	479	398	50	12	12	468
75°	216	175	18	6	3	233
85°	47	29	0	0	0	54
90°	0	0	0	0	0	



TEST NUMBER: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6
2.5°	3019.6	3025.5	2993.3	2984.5	3007.9	3016.7	3019.6	3010.9	3013.8	3025.5	3025.5
5°	2967.0	2972.9	2943.6	2934.9	2958.2	2964.1	2972.9	2969.9	2978.7	2996.2	2993.3
7.5°	2917.3	2926.1	2893.9	2882.2	2911.5	2926.1	2931.9	2931.9	2943.6	2967.0	2969.9
10°	2861.8	2873.5	2844.2	2838.4	2870.5	2885.2	2888.1	2893.9	2911.5	2943.6	2949.5
12.5°	2815.0	2826.7	2806.2	2797.5	2832.5	2847.2	2853.0	2864.7	2885.2	2926.1	2931.9
15°	2774.1	2782.8	2759.5	2753.6	2788.7	2806.2	2809.2	2826.7	2853.0	2899.8	2908.5
17.5°	2721.5	2727.3	2709.8	2703.9	2739.0	2756.5	2759.5	2779.9	2812.1	2858.8	2873.5
20°	2660.1	2665.9	2648.4	2642.5	2677.6	2698.1	2701.0	2718.5	2756.5	2806.2	2820.8
22.5°	2587.0	2598.7	2578.2	2572.4	2607.5	2625.0	2633.8	2648.4	2686.4	2736.1	2756.5
25°	2511.0	2511.0	2496.4	2493.5	2525.6	2546.1	2543.1	2563.6	2601.6	2651.3	2668.8
27.5°	2411.6	2408.7	2394.1	2391.1	2426.2	2443.8	2437.9	2458.4	2493.5	2543.1	2560.7
30°	2280.1	2285.9	2265.4	2259.6	2288.8	2318.1	2315.1	2335.6	2370.7	2417.5	2429.1
32.5°	2122.2	2128.1	2125.1	2116.4	2142.7	2157.3	2166.1	2180.7	2209.9	2259.6	2271.3
35°	1973.1	1964.4	1952.7	1952.7	1979.0	2002.4	1993.6	2011.1	2040.4	2090.1	2093.0
37.5°	1789.0	1786.0	1780.2	1774.4	1803.6	1809.4	1812.4	1824.1	1850.4	1891.3	1885.4
40°	1596.0	1599.0	1596.0	1584.4	1601.9	1625.3	1622.4	1628.2	1651.6	1680.8	1672.0
42.5°	1414.8	1414.8	1414.8	1403.1	1423.6	1435.3	1441.1	1438.2	1444.0	1470.3	1458.7
45°	1242.3	1245.3	1242.3	1239.4	1242.3	1248.2	1242.3	1239.4	1239.4	1248.2	1230.6
47.5°	1093.3	1093.3	1084.5	1075.7	1084.5	1087.4	1078.6	1069.9	1067.0	1064.0	1034.8
50°	958.8	955.9	952.9	938.3	947.1	950.0	938.3	932.5	920.8	906.2	871.1
52.5°	841.9	838.9	836.0	821.4	827.3	830.2	818.5	806.8	792.2	780.5	736.6
55°	742.5	739.6	739.6	730.8	724.9	730.8	719.1	710.3	689.9	675.2	631.4
57.5°	657.7	657.7	651.9	643.1	646.0	646.0	634.3	622.6	605.1	587.6	552.5
60°	584.6	584.6	584.6	575.9	575.9	575.9	570.0	558.3	543.7	526.2	491.1
62.5°	526.2	526.2	523.2	514.5	517.4	517.4	511.6	499.9	485.2	473.6	438.5
65°	479.4	479.4	479.4	470.6	470.6	473.6	467.7	456.0	444.3	429.7	397.5
67.5°	420.9	418.0	418.0	412.2	415.1	418.0	412.2	403.4	388.8	380.0	350.8
70°	347.9	350.8	353.7	344.9	347.9	347.9	344.9	336.2	327.4	318.6	292.3
72.5°	283.5	283.5	280.6	277.7	277.7	280.6	274.8	266.0	260.2	254.3	233.9
75°	216.3	213.4	216.3	210.5	210.5	210.5	204.6	201.7	198.8	190.0	175.4
77.5°	157.9	154.9	154.9	149.1	152.0	152.0	149.1	143.2	137.4	134.5	122.8
80°	108.2	108.2	108.2	105.2	105.2	102.3	102.3	99.4	93.5	90.6	84.8
82.5°	73.1	73.1	73.1	70.2	70.2	70.2	67.2	64.3	61.4	58.5	52.6
85°	46.8	46.8	46.8	43.8	43.8	43.8	40.9	40.9	38.0	35.1	29.2
87.5°	26.3	26.3	26.3	23.4	23.4	23.4	23.4	23.4	20.5	17.5	14.6
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: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6
2.5°	3045.9	3005.0	3031.3	3031.3	3022.5	3045.9	3060.5	3072.2	3069.3	3043.0	3040.1
5°	3022.5	2987.5	3016.7	3019.6	3010.9	3043.0	3063.5	3078.1	3081.0	3057.6	3060.5
7.5°	3005.0	2975.8	3013.8	3025.5	3022.5	3051.8	3075.2	3098.5	3110.2	3092.7	3095.6
10°	2996.2	2972.9	3013.8	3031.3	3034.2	3066.4	3101.5	3133.6	3148.2	3136.5	3145.3
12.5°	2984.5	2969.9	3016.7	3043.0	3054.7	3086.9	3130.7	3168.7	3192.1	3186.2	3203.8
15°	2972.9	2961.2	3016.7	3054.7	3069.3	3098.5	3148.2	3203.8	3230.1	3227.2	3250.6
17.5°	2943.6	2940.7	2999.2	3040.1	3060.5	3095.6	3142.4	3209.6	3235.9	3241.8	3271.0
20°	2896.9	2896.9	2961.2	3005.0	3028.4	3060.5	3119.0	3183.3	3215.5	3221.3	3253.5
22.5°	2832.5	2838.4	2899.8	2943.6	2978.7	3002.1	3063.5	3130.7	3159.9	3168.7	3203.8
25°	2747.8	2753.6	2812.1	2855.9	2893.9	2920.2	2978.7	3040.1	3075.2	3083.9	3110.2
27.5°	2636.7	2648.4	2703.9	2747.8	2779.9	2797.5	2858.8	2923.2	2949.5	2958.2	2984.5
30°	2508.1	2511.0	2566.5	2604.5	2636.7	2651.3	2703.9	2771.2	2791.6	2800.4	2838.4
32.5°	2350.2	2347.3	2399.9	2435.0	2461.3	2478.8	2534.4	2578.2	2598.7	2613.3	2633.8
35°	2160.2	2157.3	2195.3	2236.2	2256.7	2262.5	2318.1	2364.8	2376.5	2388.2	2414.5
37.5°	1946.8	1946.8	1979.0	1999.4	2022.8	2031.6	2057.9	2110.5	2131.0	2128.1	2148.5
40°	1721.7	1710.0	1733.4	1753.9	1759.7	1762.7	1789.0	1829.9	1844.5	1844.5	1859.1
42.5°	1485.0	1467.4	1470.3	1482.0	1487.9	1467.4	1485.0	1511.3	1502.5	1514.2	1517.1
45°	1233.6	1207.3	1195.6	1169.3	1175.1	1154.6	1143.0	1148.8	1145.9	1116.6	1122.5
47.5°	1029.0	982.2	961.7	923.7	914.9	891.6	876.9	850.6	827.3	827.3	812.6
50°	856.5	809.7	768.8	724.9	710.3	689.9	657.7	622.6	605.1	587.6	572.9
52.5°	719.1	669.4	619.7	572.9	552.5	526.2	482.3	447.2	415.1	397.5	380.0
55°	608.0	552.5	499.9	450.2	423.9	397.5	353.7	312.8	274.8	251.4	236.8
57.5°	523.2	470.6	415.1	362.5	339.1	309.9	263.1	219.2	184.2	157.9	143.2
60°	461.9	409.2	359.5	304.0	280.6	251.4	201.7	160.8	125.7	102.3	84.8
62.5°	409.2	362.5	309.9	260.2	236.8	207.5	160.8	119.8	87.7	64.3	49.7
65°	371.2	324.5	280.6	230.9	210.5	181.2	137.4	99.4	70.2	49.7	35.1
67.5°	327.4	286.5	242.6	201.7	181.2	157.9	116.9	84.8	58.5	40.9	29.2
70°	274.8	242.6	204.6	166.6	152.0	131.5	96.5	70.2	46.8	32.2	23.4
72.5°	219.2	192.9	163.7	134.5	122.8	102.3	78.9	55.5	35.1	23.4	17.5
75°	166.6	146.2	122.8	102.3	90.6	78.9	58.5	40.9	26.3	17.5	11.7
77.5°	114.0	105.2	87.7	70.2	64.3	55.5	38.0	26.3	17.5	11.7	5.8
80°	78.9	70.2	58.5	46.8	40.9	35.1	23.4	17.5	8.8	5.8	2.9
82.5°	49.7	40.9	35.1	29.2	26.3	20.5	14.6	8.8	5.8	2.9	2.9
85°	26.3	23.4	20.5	14.6	14.6	11.7	8.8	5.8	2.9	0.0	0.0
87.5°	14.6	11.7	8.8	5.8	5.8	2.9	2.9	2.9	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: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6
2.5°	3075.2	3075.2	3072.2	3107.3	3066.4	3107.3	3086.9	3107.3	3078.1	3075.2	3078.1
5°	3098.5	3107.3	3110.2	3142.4	3104.4	3154.1	3136.5	3154.1	3133.6	3139.5	3148.2
7.5°	3145.3	3159.9	3157.0	3197.9	3159.9	3215.5	3203.8	3230.1	3209.6	3215.5	3227.2
10°	3197.9	3215.5	3218.4	3259.3	3224.2	3291.5	3276.9	3306.1	3288.6	3297.3	3311.9
12.5°	3259.3	3279.8	3282.7	3329.5	3291.5	3361.6	3352.9	3382.1	3367.5	3376.2	3393.8
15°	3306.1	3335.3	3341.2	3387.9	3347.0	3420.1	3414.2	3452.3	3428.9	3443.5	3458.1
17.5°	3329.5	3355.8	3367.5	3411.3	3376.2	3449.3	3443.5	3475.6	3458.1	3472.7	3490.3
20°	3314.9	3347.0	3355.8	3399.6	3364.6	3437.6	3428.9	3461.0	3443.5	3455.2	3472.7
22.5°	3262.2	3294.4	3306.1	3347.0	3314.9	3382.1	3379.2	3408.4	3385.0	3399.6	3414.2
25°	3168.7	3203.8	3209.6	3247.6	3212.6	3282.7	3276.9	3309.0	3291.5	3300.2	3320.7
27.5°	3034.2	3075.2	3083.9	3116.1	3089.8	3148.2	3148.2	3174.6	3154.1	3154.1	3174.6
30°	2873.5	2914.4	2920.2	2946.5	2923.2	2975.8	2978.7	3005.0	2972.9	2990.4	2993.3
32.5°	2677.6	2703.9	2721.5	2744.8	2709.8	2777.0	2768.2	2788.7	2771.2	2771.2	2785.8
35°	2440.8	2473.0	2481.8	2511.0	2481.8	2534.4	2534.4	2546.1	2528.5	2528.5	2551.9
37.5°	2183.6	2207.0	2209.9	2239.1	2215.8	2259.6	2256.7	2265.4	2247.9	2259.6	2259.6
40°	1882.5	1900.1	1905.9	1920.5	1917.6	1949.7	1946.8	1952.7	1943.9	1946.8	1952.7
42.5°	1531.7	1555.1	1566.8	1578.5	1561.0	1604.8	1596.0	1604.8	1601.9	1604.8	1613.6
45°	1128.3	1145.9	1154.6	1157.6	1151.7	1178.0	1198.5	1181.0	1183.9	1178.0	1189.7
47.5°	815.6	818.5	812.6	830.2	815.6	827.3	833.1	836.0	818.5	815.6	827.3
50°	558.3	572.9	552.5	561.2	558.3	570.0	564.2	567.1	549.6	558.3	552.5
52.5°	371.2	368.3	362.5	365.4	359.5	359.5	359.5	365.4	353.7	347.9	342.0
55°	225.1	219.2	207.5	204.6	204.6	207.5	201.7	195.9	195.9	192.9	192.9
57.5°	131.5	122.8	116.9	114.0	108.2	105.2	102.3	102.3	96.5	96.5	96.5
60°	73.1	64.3	58.5	52.6	52.6	49.7	46.8	43.8	43.8	43.8	40.9
62.5°	38.0	32.2	26.3	23.4	23.4	20.5	17.5	17.5	17.5	17.5	14.6
65°	26.3	20.5	17.5	14.6	14.6	11.7	11.7	11.7	11.7	11.7	11.7
67.5°	20.5	17.5	14.6	11.7	11.7	11.7	8.8	8.8	8.8	8.8	8.8
70°	17.5	11.7	11.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
72.5°	11.7	11.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
75°	8.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
80°	2.9	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: P252199

CATALOG NUMBER: LD6B50D010TE EU6B30509027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6	3057.6
2.5°	3104.4	3101.5	3104.4	3110.2	3098.5	3133.6	3116.1	3133.6
5°	3171.6	3174.6	3177.5	3186.2	3171.6	3215.5	3192.1	3218.4
7.5°	3259.3	3262.2	3265.2	3273.9	3265.2	3309.0	3282.7	3306.1
10°	3349.9	3355.8	3355.8	3370.4	3361.6	3402.6	3385.0	3414.2
12.5°	3434.7	3440.6	3446.4	3455.2	3449.3	3493.2	3478.6	3501.9
15°	3501.9	3513.6	3516.6	3528.3	3522.4	3569.2	3551.6	3575.0
17.5°	3534.1	3545.8	3545.8	3560.4	3554.6	3604.3	3580.9	3607.2
20°	3516.6	3525.3	3528.3	3542.9	3537.0	3586.7	3563.3	3595.5
22.5°	3461.0	3463.9	3466.9	3481.5	3478.6	3522.4	3501.9	3522.4
25°	3358.7	3367.5	3364.6	3376.2	3376.2	3411.3	3387.9	3405.5
27.5°	3212.6	3221.3	3221.3	3235.9	3224.2	3259.3	3235.9	3262.2
30°	3034.2	3043.0	3037.2	3048.9	3037.2	3072.2	3054.7	3063.5
32.5°	2820.8	2820.8	2823.8	2826.7	2820.8	2853.0	2835.5	2853.0
35°	2566.5	2572.4	2575.3	2578.2	2572.4	2595.8	2575.3	2587.0
37.5°	2280.1	2294.7	2291.8	2294.7	2285.9	2315.1	2297.6	2303.4
40°	1973.1	1973.1	1970.2	1976.1	1967.3	1990.7	1979.0	1984.8
42.5°	1616.5	1625.3	1613.6	1628.2	1604.8	1637.0	1625.3	1616.5
45°	1213.1	1201.4	1198.5	1201.4	1192.6	1195.6	1204.3	1198.5
47.5°	827.3	827.3	821.4	812.6	824.3	827.3	815.6	815.6
50°	555.4	555.4	549.6	546.6	552.5	549.6	543.7	552.5
52.5°	353.7	342.0	342.0	347.9	342.0	336.2	344.9	339.1
55°	192.9	187.1	187.1	192.9	187.1	187.1	184.2	190.0
57.5°	93.5	96.5	93.5	93.5	93.5	93.5	90.6	93.5
60°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
62.5°	17.5	17.5	14.6	14.6	14.6	14.6	14.6	14.6
65°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
67.5°	8.8	8.8	8.8	8.8	8.8	11.7	8.8	8.8
70°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
72.5°	8.8	8.8	11.7	11.7	11.7	11.7	11.7	11.7
75°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	2.9
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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)