

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: P252201

Luminaire Tested: **LD6B50D010TE EU6B30509035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252201
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 EU6B30509035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5894.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

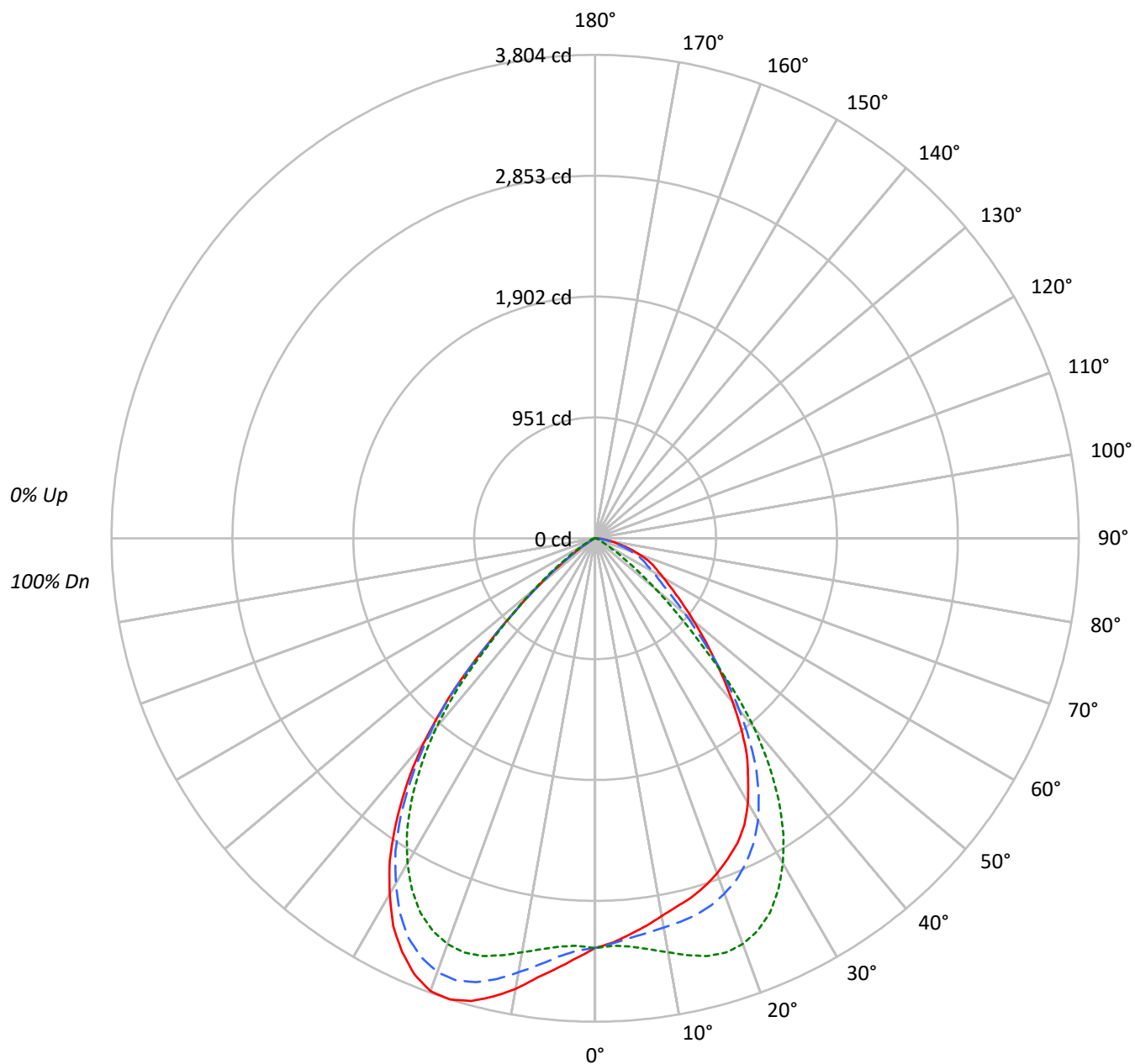
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	210368	210368	210368
5°	204911	211172	222273
10°	199927	219125	238529
15°	197594	229866	254640
20°	194758	235853	263249
25°	190616	234110	258520
30°	181139	222475	243372
35°	165723	200584	217285
40°	143342	165664	178260
45°	120875	108650	116613
50°	102623	62887	59132
55°	89061	30153	22794
60°	80442	14079	5637
65°	78051	8089	1899
70°	69967	6466	1755
75°	57497	4663	781
80°	42868	2329	0
85°	36904	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.5	5.3
10°-20°	949.2	16.1
20°-30°	1450.3	24.6
30°-40°	1516.9	25.7
40°-50°	984.0	16.7
50°-60°	390.7	6.6
60°-70°	185.3	3.1
70°-80°	88.1	1.5
80°-90°	18.0	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°	2711.0	46.0
0°-40°	4227.8	71.7
0°-60°	5602.5	95.1
0°-90°	5894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5894.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3224	3224	3224	3224	3224	
5°	3129	3157	3224	3305	3394	295
15°	2926	3067	3403	3616	3770	824
25°	2648	2814	3252	3471	3591	1213
35°	2081	2207	2518	2666	2728	1287
45°	1310	1298	1178	1248	1264	1019
55°	783	666	265	206	200	709
65°	506	419	52	12	12	494
75°	228	185	18	6	3	246
85°	49	31	0	0	0	57
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°	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5
2.5°	3184.4	3190.6	3156.7	3147.4	3172.1	3181.3	3184.4	3175.2	3178.2	3190.6	3190.6
5°	3128.9	3135.1	3104.3	3095.0	3119.7	3125.8	3135.1	3132.0	3141.3	3159.7	3156.7
7.5°	3076.5	3085.8	3051.9	3039.5	3070.3	3085.8	3091.9	3091.9	3104.3	3128.9	3132.0
10°	3017.9	3030.3	2999.4	2993.3	3027.2	3042.6	3045.7	3051.9	3070.3	3104.3	3110.4
12.5°	2968.6	2981.0	2959.4	2950.1	2987.1	3002.5	3008.7	3021.0	3042.6	3085.8	3091.9
15°	2925.5	2934.7	2910.0	2903.9	2940.9	2959.4	2962.5	2981.0	3008.7	3058.0	3067.3
17.5°	2870.0	2876.1	2857.6	2851.5	2888.5	2907.0	2910.0	2931.6	2965.5	3014.9	3030.3
20°	2805.2	2811.4	2792.9	2786.7	2823.7	2845.3	2848.4	2866.9	2907.0	2959.4	2974.8
22.5°	2728.2	2740.5	2718.9	2712.8	2749.8	2768.2	2777.5	2792.9	2833.0	2885.4	2907.0
25°	2648.0	2648.0	2632.6	2629.5	2663.4	2685.0	2681.9	2703.5	2743.6	2796.0	2814.5
27.5°	2543.2	2540.1	2524.7	2521.6	2558.6	2577.1	2571.0	2592.5	2629.5	2681.9	2700.4
30°	2404.5	2410.7	2389.1	2382.9	2413.7	2444.6	2441.5	2463.1	2500.1	2549.4	2561.7
32.5°	2238.0	2244.2	2241.1	2231.9	2259.6	2275.0	2284.3	2299.7	2330.5	2382.9	2395.2
35°	2080.8	2071.6	2059.2	2059.2	2087.0	2111.6	2102.4	2120.9	2151.7	2204.1	2207.2
37.5°	1886.6	1883.5	1877.4	1871.2	1902.0	1908.2	1911.3	1923.6	1951.3	1994.5	1988.3
40°	1683.1	1686.2	1683.1	1670.8	1689.3	1714.0	1710.9	1717.1	1741.7	1772.5	1763.3
42.5°	1492.0	1492.0	1492.0	1479.7	1501.3	1513.6	1519.8	1516.7	1522.8	1550.6	1538.3
45°	1310.1	1313.2	1310.1	1307.1	1310.1	1316.3	1310.1	1307.1	1307.1	1316.3	1297.8
47.5°	1152.9	1152.9	1143.7	1134.4	1143.7	1146.8	1137.5	1128.3	1125.2	1122.1	1091.3
50°	1011.1	1008.0	1005.0	989.5	998.8	1001.9	989.5	983.4	971.0	955.6	918.6
52.5°	887.8	884.7	881.6	866.2	872.4	875.5	863.2	850.8	835.4	823.1	776.8
55°	783.0	779.9	779.9	770.7	764.5	770.7	758.3	749.1	727.5	712.1	665.9
57.5°	693.6	693.6	687.4	678.2	681.3	681.3	668.9	656.6	638.1	619.6	582.6
60°	616.5	616.5	616.5	607.3	607.3	607.3	601.1	588.8	573.4	554.9	517.9
62.5°	554.9	554.9	551.8	542.6	545.6	545.6	539.5	527.1	511.7	499.4	462.4
65°	505.6	505.6	505.6	496.3	496.3	499.4	493.2	480.9	468.6	453.2	419.2
67.5°	443.9	440.8	440.8	434.7	437.7	440.8	434.7	425.4	410.0	400.7	369.9
70°	366.8	369.9	373.0	363.8	366.8	366.8	363.8	354.5	345.3	336.0	308.3
72.5°	299.0	299.0	295.9	292.9	292.9	295.9	289.8	280.5	274.4	268.2	246.6
75°	228.1	225.0	228.1	222.0	222.0	222.0	215.8	212.7	209.6	200.4	185.0
77.5°	166.5	163.4	163.4	157.2	160.3	160.3	157.2	151.1	144.9	141.8	129.5
80°	114.1	114.1	114.1	111.0	111.0	107.9	107.9	104.8	98.6	95.6	89.4
82.5°	77.1	77.1	77.1	74.0	74.0	74.0	70.9	67.8	64.7	61.7	55.5
85°	49.3	49.3	49.3	46.2	46.2	46.2	43.2	43.2	40.1	37.0	30.8
87.5°	27.7	27.7	27.7	24.7	24.7	24.7	24.7	24.7	21.6	18.5	15.4
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°	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5
2.5°	3212.2	3169.0	3196.7	3196.7	3187.5	3212.2	3227.6	3239.9	3236.8	3209.1	3206.0
5°	3187.5	3150.5	3181.3	3184.4	3175.2	3209.1	3230.6	3246.1	3249.1	3224.5	3227.6
7.5°	3169.0	3138.2	3178.2	3190.6	3187.5	3218.3	3243.0	3267.6	3280.0	3261.5	3264.6
10°	3159.7	3135.1	3178.2	3196.7	3199.8	3233.7	3270.7	3304.6	3320.0	3307.7	3317.0
12.5°	3147.4	3132.0	3181.3	3209.1	3221.4	3255.3	3301.6	3341.6	3366.3	3360.1	3378.6
15°	3135.1	3122.8	3181.3	3221.4	3236.8	3267.6	3320.0	3378.6	3406.4	3403.3	3427.9
17.5°	3104.3	3101.2	3162.8	3206.0	3227.6	3264.6	3313.9	3384.8	3412.5	3418.7	3449.5
20°	3054.9	3054.9	3122.8	3169.0	3193.7	3227.6	3289.2	3357.0	3390.9	3397.1	3431.0
22.5°	2987.1	2993.3	3058.0	3104.3	3141.3	3165.9	3230.6	3301.6	3332.4	3341.6	3378.6
25°	2897.7	2903.9	2965.5	3011.8	3051.9	3079.6	3141.3	3206.0	3243.0	3252.2	3280.0
27.5°	2780.6	2792.9	2851.5	2897.7	2931.6	2950.1	3014.9	3082.7	3110.4	3119.7	3147.4
30°	2644.9	2648.0	2706.6	2746.7	2780.6	2796.0	2851.5	2922.4	2944.0	2953.2	2993.3
32.5°	2478.5	2475.4	2530.9	2567.9	2595.6	2614.1	2672.7	2718.9	2740.5	2755.9	2777.5
35°	2278.1	2275.0	2315.1	2358.3	2379.8	2386.0	2444.6	2493.9	2506.2	2518.5	2546.3
37.5°	2053.1	2053.1	2087.0	2108.6	2133.2	2142.5	2170.2	2225.7	2247.3	2244.2	2265.8
40°	1815.7	1803.4	1828.0	1849.6	1855.8	1858.9	1886.6	1929.8	1945.2	1945.2	1960.6
42.5°	1566.0	1547.5	1550.6	1562.9	1569.1	1547.5	1566.0	1593.7	1584.5	1596.8	1599.9
45°	1300.9	1273.1	1260.8	1233.1	1239.2	1217.7	1205.3	1211.5	1208.4	1177.6	1183.7
47.5°	1085.1	1035.8	1014.2	974.1	964.9	940.2	924.8	897.1	872.4	872.4	857.0
50°	903.2	853.9	810.7	764.5	749.1	727.5	693.6	656.6	638.1	619.6	604.2
52.5°	758.3	705.9	653.5	604.2	582.6	554.9	508.6	471.7	437.7	419.2	400.7
55°	641.2	582.6	527.1	474.7	447.0	419.2	373.0	329.8	289.8	265.1	249.7
57.5°	551.8	496.3	437.7	382.3	357.6	326.8	277.4	231.2	194.2	166.5	151.1
60°	487.1	431.6	379.2	320.6	295.9	265.1	212.7	169.5	132.6	107.9	89.4
62.5°	431.6	382.3	326.8	274.4	249.7	218.9	169.5	126.4	92.5	67.8	52.4
65°	391.5	342.2	295.9	243.5	222.0	191.1	144.9	104.8	74.0	52.4	37.0
67.5°	345.3	302.1	255.9	212.7	191.1	166.5	123.3	89.4	61.7	43.2	30.8
70°	289.8	255.9	215.8	175.7	160.3	138.7	101.7	74.0	49.3	33.9	24.7
72.5°	231.2	203.5	172.6	141.8	129.5	107.9	83.2	58.6	37.0	24.7	18.5
75°	175.7	154.1	129.5	107.9	95.6	83.2	61.7	43.2	27.7	18.5	12.3
77.5°	120.2	111.0	92.5	74.0	67.8	58.6	40.1	27.7	18.5	12.3	6.2
80°	83.2	74.0	61.7	49.3	43.2	37.0	24.7	18.5	9.2	6.2	3.1
82.5°	52.4	43.2	37.0	30.8	27.7	21.6	15.4	9.2	6.2	3.1	3.1
85°	27.7	24.7	21.6	15.4	15.4	12.3	9.2	6.2	3.1	0.0	0.0
87.5°	15.4	12.3	9.2	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°	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5
2.5°	3243.0	3243.0	3239.9	3276.9	3233.7	3276.9	3255.3	3276.9	3246.1	3243.0	3246.1
5°	3267.6	3276.9	3280.0	3313.9	3273.8	3326.2	3307.7	3326.2	3304.6	3310.8	3320.0
7.5°	3317.0	3332.4	3329.3	3372.5	3332.4	3390.9	3378.6	3406.4	3384.8	3390.9	3403.3
10°	3372.5	3390.9	3394.0	3437.2	3400.2	3471.1	3455.7	3486.5	3468.0	3477.3	3492.7
12.5°	3437.2	3458.8	3461.8	3511.2	3471.1	3545.1	3535.8	3566.7	3551.2	3560.5	3579.0
15°	3486.5	3517.3	3523.5	3572.8	3529.7	3606.7	3600.6	3640.6	3616.0	3631.4	3646.8
17.5°	3511.2	3538.9	3551.2	3597.5	3560.5	3637.6	3631.4	3665.3	3646.8	3662.2	3680.7
20°	3495.8	3529.7	3538.9	3585.2	3548.2	3625.2	3616.0	3649.9	3631.4	3643.7	3662.2
22.5°	3440.3	3474.2	3486.5	3529.7	3495.8	3566.7	3563.6	3594.4	3569.7	3585.2	3600.6
25°	3341.6	3378.6	3384.8	3424.9	3387.9	3461.8	3455.7	3489.6	3471.1	3480.3	3501.9
27.5°	3199.8	3243.0	3252.2	3286.1	3258.4	3320.0	3320.0	3347.8	3326.2	3326.2	3347.8
30°	3030.3	3073.4	3079.6	3107.3	3082.7	3138.2	3141.3	3169.0	3135.1	3153.6	3156.7
32.5°	2823.7	2851.5	2870.0	2894.6	2857.6	2928.5	2919.3	2940.9	2922.4	2922.4	2937.8
35°	2574.0	2607.9	2617.2	2648.0	2617.2	2672.7	2672.7	2685.0	2666.5	2666.5	2691.2
37.5°	2302.8	2327.4	2330.5	2361.3	2336.7	2382.9	2379.8	2389.1	2370.6	2382.9	2382.9
40°	1985.2	2003.7	2009.9	2025.3	2022.2	2056.1	2053.1	2059.2	2050.0	2053.1	2059.2
42.5°	1615.3	1640.0	1652.3	1664.6	1646.2	1692.4	1683.1	1692.4	1689.3	1692.4	1701.6
45°	1189.9	1208.4	1217.7	1220.7	1214.6	1242.3	1263.9	1245.4	1248.5	1242.3	1254.7
47.5°	860.1	863.2	857.0	875.5	860.1	872.4	878.6	881.6	863.2	860.1	872.4
50°	588.8	604.2	582.6	591.9	588.8	601.1	595.0	598.0	579.5	588.8	582.6
52.5°	391.5	388.4	382.3	385.3	379.2	379.2	379.2	385.3	373.0	366.8	360.7
55°	237.4	231.2	218.9	215.8	215.8	218.9	212.7	206.5	206.5	203.5	203.5
57.5°	138.7	129.5	123.3	120.2	114.1	111.0	107.9	107.9	101.7	101.7	101.7
60°	77.1	67.8	61.7	55.5	55.5	52.4	49.3	46.2	46.2	46.2	43.2
62.5°	40.1	33.9	27.7	24.7	24.7	21.6	18.5	18.5	18.5	18.5	15.4
65°	27.7	21.6	18.5	15.4	15.4	12.3	12.3	12.3	12.3	12.3	12.3
67.5°	21.6	18.5	15.4	12.3	12.3	12.3	9.2	9.2	9.2	9.2	9.2
70°	18.5	12.3	12.3	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
72.5°	12.3	12.3	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
75°	9.2	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: P252201

CATALOG NUMBER: LD6B50D010TE EU6B30509035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5	3224.5
2.5°	3273.8	3270.7	3273.8	3280.0	3267.6	3304.6	3286.1	3304.6
5°	3344.7	3347.8	3350.9	3360.1	3344.7	3390.9	3366.3	3394.0
7.5°	3437.2	3440.3	3443.4	3452.6	3443.4	3489.6	3461.8	3486.5
10°	3532.8	3538.9	3538.9	3554.3	3545.1	3588.2	3569.7	3600.6
12.5°	3622.1	3628.3	3634.5	3643.7	3637.6	3683.8	3668.4	3693.1
15°	3693.1	3705.4	3708.5	3720.8	3714.6	3764.0	3745.5	3770.1
17.5°	3727.0	3739.3	3739.3	3754.7	3748.5	3800.9	3776.3	3804.0
20°	3708.5	3717.7	3720.8	3736.2	3730.0	3782.4	3757.8	3791.7
22.5°	3649.9	3653.0	3656.1	3671.5	3668.4	3714.6	3693.1	3714.6
25°	3542.0	3551.2	3548.2	3560.5	3560.5	3597.5	3572.8	3591.3
27.5°	3387.9	3397.1	3397.1	3412.5	3400.2	3437.2	3412.5	3440.3
30°	3199.8	3209.1	3202.9	3215.2	3202.9	3239.9	3221.4	3230.6
32.5°	2974.8	2974.8	2977.9	2981.0	2974.8	3008.7	2990.2	3008.7
35°	2706.6	2712.8	2715.8	2718.9	2712.8	2737.4	2715.8	2728.2
37.5°	2404.5	2419.9	2416.8	2419.9	2410.7	2441.5	2423.0	2429.2
40°	2080.8	2080.8	2077.7	2083.9	2074.6	2099.3	2087.0	2093.1
42.5°	1704.7	1714.0	1701.6	1717.1	1692.4	1726.3	1714.0	1704.7
45°	1279.3	1267.0	1263.9	1267.0	1257.7	1260.8	1270.1	1263.9
47.5°	872.4	872.4	866.2	857.0	869.3	872.4	860.1	860.1
50°	585.7	585.7	579.5	576.5	582.6	579.5	573.4	582.6
52.5°	373.0	360.7	360.7	366.8	360.7	354.5	363.8	357.6
55°	203.5	197.3	197.3	203.5	197.3	197.3	194.2	200.4
57.5°	98.6	101.7	98.6	98.6	98.6	98.6	95.6	98.6
60°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
62.5°	18.5	18.5	15.4	15.4	15.4	15.4	15.4	15.4
65°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
67.5°	9.2	9.2	9.2	9.2	9.2	12.3	9.2	9.2
70°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
72.5°	9.2	9.2	12.3	12.3	12.3	12.3	12.3	12.3
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)