

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: P252202

Luminaire Tested: **LD6B50D010TE EU6B30509040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252202
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 EU6B30509040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5904.0 lumens
Efficiency: N/A
Efficacy: 100.5 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

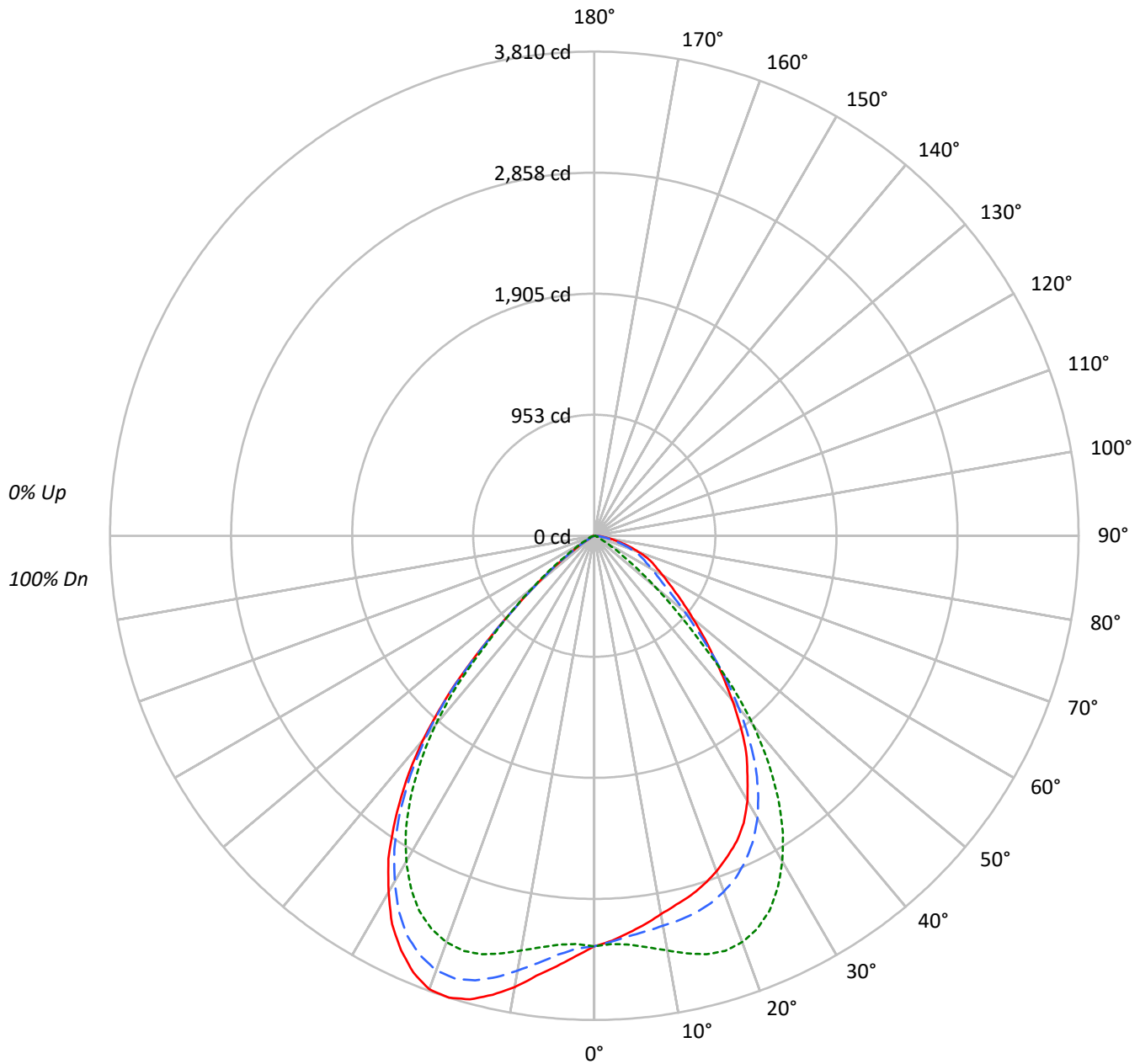
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	210727	210727	210727
5°	205258	211532	222652
10°	200272	219496	238933
15°	197925	230258	255073
20°	195092	236255	263693
25°	190940	234506	258959
30°	181448	222851	243786
35°	166002	200926	217651
40°	143589	165945	178567
45°	121088	108835	116806
50°	102796	62999	59233
55°	89209	30210	22828
60°	80585	14105	5637
65°	78174	8105	1914
70°	70101	6486	1774
75°	57598	4663	781
80°	42943	2329	0
85°	36978	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.0	5.3
10°-20°	950.8	16.1
20°-30°	1452.8	24.6
30°-40°	1519.4	25.7
40°-50°	985.7	16.7
50°-60°	391.4	6.6
60°-70°	185.7	3.1
70°-80°	88.3	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°	2715.6	46.0
0°-40°	4235.0	71.7
0°-60°	5612.0	95.1
0°-90°	5904.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5904.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3230	3230	3230	3230	3230	
5°	3134	3162	3230	3310	3400	296
15°	2930	3072	3409	3622	3776	826
25°	2652	2819	3258	3477	3597	1215
35°	2084	2211	2523	2671	2733	1289
45°	1312	1300	1180	1251	1266	1021
55°	784	667	266	207	201	711
65°	506	420	52	12	12	495
75°	228	185	18	6	3	246
85°	49	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°	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0
2.5°	3189.8	3196.0	3162.0	3152.8	3177.5	3186.7	3189.8	3180.5	3183.6	3196.0	3196.0
5°	3134.2	3140.4	3109.5	3100.3	3125.0	3131.1	3140.4	3137.3	3146.6	3165.1	3162.0
7.5°	3081.7	3091.0	3057.0	3044.7	3075.6	3091.0	3097.2	3097.2	3109.5	3134.2	3137.3
10°	3023.1	3035.4	3004.5	2998.4	3032.3	3047.8	3050.9	3057.0	3075.6	3109.5	3115.7
12.5°	2973.7	2986.0	2964.4	2955.1	2992.2	3007.6	3013.8	3026.2	3047.8	3091.0	3097.2
15°	2930.4	2939.7	2915.0	2908.8	2945.9	2964.4	2967.5	2986.0	3013.8	3063.2	3072.5
17.5°	2874.8	2881.0	2862.5	2856.3	2893.4	2911.9	2915.0	2936.6	2970.6	3020.0	3035.4
20°	2810.0	2816.2	2797.6	2791.5	2828.5	2850.1	2853.2	2871.8	2911.9	2964.4	2979.8
22.5°	2732.8	2745.2	2723.5	2717.4	2754.4	2772.9	2782.2	2797.6	2837.8	2890.3	2911.9
25°	2652.5	2652.5	2637.1	2634.0	2668.0	2689.6	2686.5	2708.1	2748.2	2800.7	2819.3
27.5°	2547.5	2544.4	2529.0	2525.9	2563.0	2581.5	2575.3	2596.9	2634.0	2686.5	2705.0
30°	2408.6	2414.7	2393.1	2387.0	2417.8	2448.7	2445.6	2467.2	2504.3	2553.7	2566.1
32.5°	2241.8	2248.0	2244.9	2235.6	2263.4	2278.9	2288.1	2303.6	2334.5	2387.0	2399.3
35°	2084.3	2075.1	2062.7	2062.7	2090.5	2115.2	2106.0	2124.5	2155.4	2207.9	2210.9
37.5°	1889.8	1886.7	1880.5	1874.4	1905.2	1911.4	1914.5	1926.9	1954.6	1997.9	1991.7
40°	1686.0	1689.1	1686.0	1673.6	1692.2	1716.9	1713.8	1720.0	1744.7	1775.5	1766.3
42.5°	1494.5	1494.5	1494.5	1482.2	1503.8	1516.2	1522.3	1519.3	1525.4	1553.2	1540.9
45°	1312.4	1315.4	1312.4	1309.3	1312.4	1318.5	1312.4	1309.3	1309.3	1318.5	1300.0
47.5°	1154.9	1154.9	1145.6	1136.4	1145.6	1148.7	1139.4	1130.2	1127.1	1124.0	1093.1
50°	1012.8	1009.7	1006.7	991.2	1000.5	1003.6	991.2	985.0	972.7	957.3	920.2
52.5°	889.3	886.2	883.1	867.7	873.9	877.0	864.6	852.3	836.8	824.5	778.2
55°	784.3	781.2	781.2	772.0	765.8	772.0	759.6	750.4	728.7	713.3	667.0
57.5°	694.8	694.8	688.6	679.3	682.4	682.4	670.1	657.7	639.2	620.7	583.6
60°	617.6	617.6	617.6	608.3	608.3	608.3	602.1	589.8	574.4	555.8	518.8
62.5°	555.8	555.8	552.7	543.5	546.6	546.6	540.4	528.0	512.6	500.2	463.2
65°	506.4	506.4	506.4	497.2	497.2	500.2	494.1	481.7	469.4	453.9	420.0
67.5°	444.7	441.6	441.6	435.4	438.5	441.6	435.4	426.1	410.7	401.4	370.5
70°	367.5	370.5	373.6	364.4	367.5	367.5	364.4	355.1	345.8	336.6	308.8
72.5°	299.5	299.5	296.4	293.4	293.4	296.4	290.3	281.0	274.8	268.6	247.0
75°	228.5	225.4	228.5	222.3	222.3	222.3	216.2	213.1	210.0	200.7	185.3
77.5°	166.7	163.7	163.7	157.5	160.6	160.6	157.5	151.3	145.1	142.0	129.7
80°	114.3	114.3	114.3	111.2	111.2	108.1	108.1	105.0	98.8	95.7	89.5
82.5°	77.2	77.2	77.2	74.1	74.1	74.1	71.0	67.9	64.8	61.8	55.6
85°	49.4	49.4	49.4	46.3	46.3	46.3	43.2	43.2	40.1	37.1	30.9
87.5°	27.8	27.8	27.8	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°	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0
2.5°	3217.6	3174.4	3202.2	3202.2	3192.9	3217.6	3233.0	3245.4	3242.3	3214.5	3211.4
5°	3192.9	3155.8	3186.7	3189.8	3180.5	3214.5	3236.1	3251.6	3254.7	3230.0	3233.0
7.5°	3174.4	3143.5	3183.6	3196.0	3192.9	3223.8	3248.5	3273.2	3285.5	3267.0	3270.1
10°	3165.1	3140.4	3183.6	3202.2	3205.3	3239.2	3276.3	3310.2	3325.7	3313.3	3322.6
12.5°	3152.8	3137.3	3186.7	3214.5	3226.9	3260.8	3307.2	3347.3	3372.0	3365.8	3384.3
15°	3140.4	3128.1	3186.7	3226.9	3242.3	3273.2	3325.7	3384.3	3412.1	3409.1	3433.8
17.5°	3109.5	3106.4	3168.2	3211.4	3233.0	3270.1	3319.5	3390.5	3418.3	3424.5	3455.4
20°	3060.1	3060.1	3128.1	3174.4	3199.1	3233.0	3294.8	3362.7	3396.7	3402.9	3436.8
22.5°	2992.2	2998.4	3063.2	3109.5	3146.6	3171.3	3236.1	3307.2	3338.0	3347.3	3384.3
25°	2902.6	2908.8	2970.6	3016.9	3057.0	3084.8	3146.6	3211.4	3248.5	3257.7	3285.5
27.5°	2785.3	2797.6	2856.3	2902.6	2936.6	2955.1	3020.0	3087.9	3115.7	3125.0	3152.8
30°	2649.4	2652.5	2711.2	2751.3	2785.3	2800.7	2856.3	2927.3	2949.0	2958.2	2998.4
32.5°	2482.7	2479.6	2535.2	2572.2	2600.0	2618.5	2677.2	2723.5	2745.2	2760.6	2782.2
35°	2282.0	2278.9	2319.0	2362.3	2383.9	2390.0	2448.7	2498.1	2510.5	2522.8	2550.6
37.5°	2056.5	2056.5	2090.5	2112.1	2136.8	2146.1	2173.9	2229.5	2251.1	2248.0	2269.6
40°	1818.8	1806.4	1831.1	1852.7	1858.9	1862.0	1889.8	1933.0	1948.5	1948.5	1963.9
42.5°	1568.7	1550.1	1553.2	1565.6	1571.7	1550.1	1568.7	1596.4	1587.2	1599.5	1602.6
45°	1303.1	1275.3	1263.0	1235.2	1241.3	1219.7	1207.4	1213.5	1210.5	1179.6	1185.8
47.5°	1086.9	1037.5	1015.9	975.8	966.5	941.8	926.4	898.6	873.9	873.9	858.4
50°	904.8	855.4	812.1	765.8	750.4	728.7	694.8	657.7	639.2	620.7	605.2
52.5°	759.6	707.1	654.6	605.2	583.6	555.8	509.5	472.5	438.5	420.0	401.4
55°	642.3	583.6	528.0	475.5	447.7	420.0	373.6	330.4	290.3	265.6	250.1
57.5°	552.7	497.2	438.5	382.9	358.2	327.3	277.9	231.6	194.5	166.7	151.3
60°	487.9	432.3	379.8	321.1	296.4	265.6	213.1	169.8	132.8	108.1	89.5
62.5°	432.3	382.9	327.3	274.8	250.1	219.2	169.8	126.6	92.6	67.9	52.5
65°	392.2	342.8	296.4	243.9	222.3	191.5	145.1	105.0	74.1	52.5	37.1
67.5°	345.8	302.6	256.3	213.1	191.5	166.7	123.5	89.5	61.8	43.2	30.9
70°	290.3	256.3	216.2	176.0	160.6	139.0	101.9	74.1	49.4	34.0	24.7
72.5°	231.6	203.8	172.9	142.0	129.7	108.1	83.4	58.7	37.1	24.7	18.5
75°	176.0	154.4	129.7	108.1	95.7	83.4	61.8	43.2	27.8	18.5	12.4
77.5°	120.4	111.2	92.6	74.1	67.9	58.7	40.1	27.8	18.5	12.4	6.2
80°	83.4	74.1	61.8	49.4	43.2	37.1	24.7	18.5	9.3	6.2	3.1
82.5°	52.5	43.2	37.1	30.9	27.8	21.6	15.4	9.3	6.2	3.1	3.1
85°	27.8	24.7	21.6	15.4	15.4	12.4	9.3	6.2	3.1	0.0	0.0
87.5°	15.4	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°	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0
2.5°	3248.5	3248.5	3245.4	3282.4	3239.2	3282.4	3260.8	3282.4	3251.6	3248.5	3251.6
5°	3273.2	3282.4	3285.5	3319.5	3279.4	3331.9	3313.3	3331.9	3310.2	3316.4	3325.7
7.5°	3322.6	3338.0	3334.9	3378.2	3338.0	3396.7	3384.3	3412.1	3390.5	3396.7	3409.1
10°	3378.2	3396.7	3399.8	3443.0	3406.0	3477.0	3461.5	3492.4	3473.9	3483.2	3498.6
12.5°	3443.0	3464.6	3467.7	3517.1	3477.0	3551.1	3541.8	3572.7	3557.3	3566.5	3585.1
15°	3492.4	3523.3	3529.5	3578.9	3535.7	3612.9	3606.7	3646.8	3622.1	3637.6	3653.0
17.5°	3517.1	3544.9	3557.3	3603.6	3566.5	3643.7	3637.6	3671.5	3653.0	3668.4	3687.0
20°	3501.7	3535.7	3544.9	3591.2	3554.2	3631.4	3622.1	3656.1	3637.6	3649.9	3668.4
22.5°	3446.1	3480.1	3492.4	3535.7	3501.7	3572.7	3569.6	3600.5	3575.8	3591.2	3606.7
25°	3347.3	3384.3	3390.5	3430.7	3393.6	3467.7	3461.5	3495.5	3477.0	3486.3	3507.9
27.5°	3205.3	3248.5	3257.7	3291.7	3263.9	3325.7	3325.7	3353.5	3331.9	3331.9	3353.5
30°	3035.4	3078.6	3084.8	3112.6	3087.9	3143.5	3146.6	3174.4	3140.4	3158.9	3162.0
32.5°	2828.5	2856.3	2874.8	2899.5	2862.5	2933.5	2924.3	2945.9	2927.3	2927.3	2942.8
35°	2578.4	2612.4	2621.6	2652.5	2621.6	2677.2	2677.2	2689.6	2671.0	2671.0	2695.7
37.5°	2306.7	2331.4	2334.5	2365.3	2340.6	2387.0	2383.9	2393.1	2374.6	2387.0	2387.0
40°	1988.6	2007.1	2013.3	2028.8	2025.7	2059.6	2056.5	2062.7	2053.5	2056.5	2062.7
42.5°	1618.1	1642.8	1655.1	1667.5	1648.9	1695.3	1686.0	1695.3	1692.2	1695.3	1704.5
45°	1191.9	1210.5	1219.7	1222.8	1216.6	1244.4	1266.0	1247.5	1250.6	1244.4	1256.8
47.5°	861.5	864.6	858.4	877.0	861.5	873.9	880.1	883.1	864.6	861.5	873.9
50°	589.8	605.2	583.6	592.9	589.8	602.1	596.0	599.1	580.5	589.8	583.6
52.5°	392.2	389.1	382.9	386.0	379.8	379.8	379.8	386.0	373.6	367.5	361.3
55°	237.8	231.6	219.2	216.2	216.2	219.2	213.1	206.9	206.9	203.8	203.8
57.5°	139.0	129.7	123.5	120.4	114.3	111.2	108.1	108.1	101.9	101.9	101.9
60°	77.2	67.9	61.8	55.6	55.6	52.5	49.4	46.3	46.3	46.3	43.2
62.5°	40.1	34.0	27.8	24.7	24.7	21.6	18.5	18.5	18.5	18.5	15.4
65°	27.8	21.6	18.5	15.4	15.4	12.4	12.4	12.4	12.4	12.4	12.4
67.5°	21.6	18.5	15.4	12.4	12.4	12.4	9.3	9.3	9.3	9.3	9.3
70°	18.5	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: P252202

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0	3230.0
2.5°	3279.4	3276.3	3279.4	3285.5	3273.2	3310.2	3291.7	3310.2
5°	3350.4	3353.5	3356.6	3365.8	3350.4	3396.7	3372.0	3399.8
7.5°	3443.0	3446.1	3449.2	3458.5	3449.2	3495.5	3467.7	3492.4
10°	3538.7	3544.9	3544.9	3560.4	3551.1	3594.3	3575.8	3606.7
12.5°	3628.3	3634.5	3640.6	3649.9	3643.7	3690.1	3674.6	3699.3
15°	3699.3	3711.7	3714.8	3727.1	3720.9	3770.3	3751.8	3776.5
17.5°	3733.3	3745.6	3745.6	3761.1	3754.9	3807.4	3782.7	3810.5
20°	3714.8	3724.0	3727.1	3742.5	3736.4	3788.9	3764.2	3798.1
22.5°	3656.1	3659.2	3662.3	3677.7	3674.6	3720.9	3699.3	3720.9
25°	3548.0	3557.3	3554.2	3566.5	3566.5	3603.6	3578.9	3597.4
27.5°	3393.6	3402.9	3402.9	3418.3	3406.0	3443.0	3418.3	3446.1
30°	3205.3	3214.5	3208.3	3220.7	3208.3	3245.4	3226.9	3236.1
32.5°	2979.8	2979.8	2982.9	2986.0	2979.8	3013.8	2995.3	3013.8
35°	2711.2	2717.4	2720.4	2723.5	2717.4	2742.1	2720.4	2732.8
37.5°	2408.6	2424.0	2420.9	2424.0	2414.7	2445.6	2427.1	2433.3
40°	2084.3	2084.3	2081.3	2087.4	2078.2	2102.9	2090.5	2096.7
42.5°	1707.6	1716.9	1704.5	1720.0	1695.3	1729.2	1716.9	1707.6
45°	1281.5	1269.1	1266.0	1269.1	1259.9	1263.0	1272.2	1266.0
47.5°	873.9	873.9	867.7	858.4	870.8	873.9	861.5	861.5
50°	586.7	586.7	580.5	577.4	583.6	580.5	574.4	583.6
52.5°	373.6	361.3	361.3	367.5	361.3	355.1	364.4	358.2
55°	203.8	197.6	197.6	203.8	197.6	197.6	194.5	200.7
57.5°	98.8	101.9	98.8	98.8	98.8	98.8	95.7	98.8
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°	12.4	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)