

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: PORTFOLIO

Report Number: P252205

Luminaire Tested: **LE\_6B50D010R EC6B30509730 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252205  
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: PORTFOLIO  
Catalog Number: LE\_6B50D010R EC6B30509730 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6348.8 lumens  
Efficiency: N/A  
Efficacy: 108.0 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

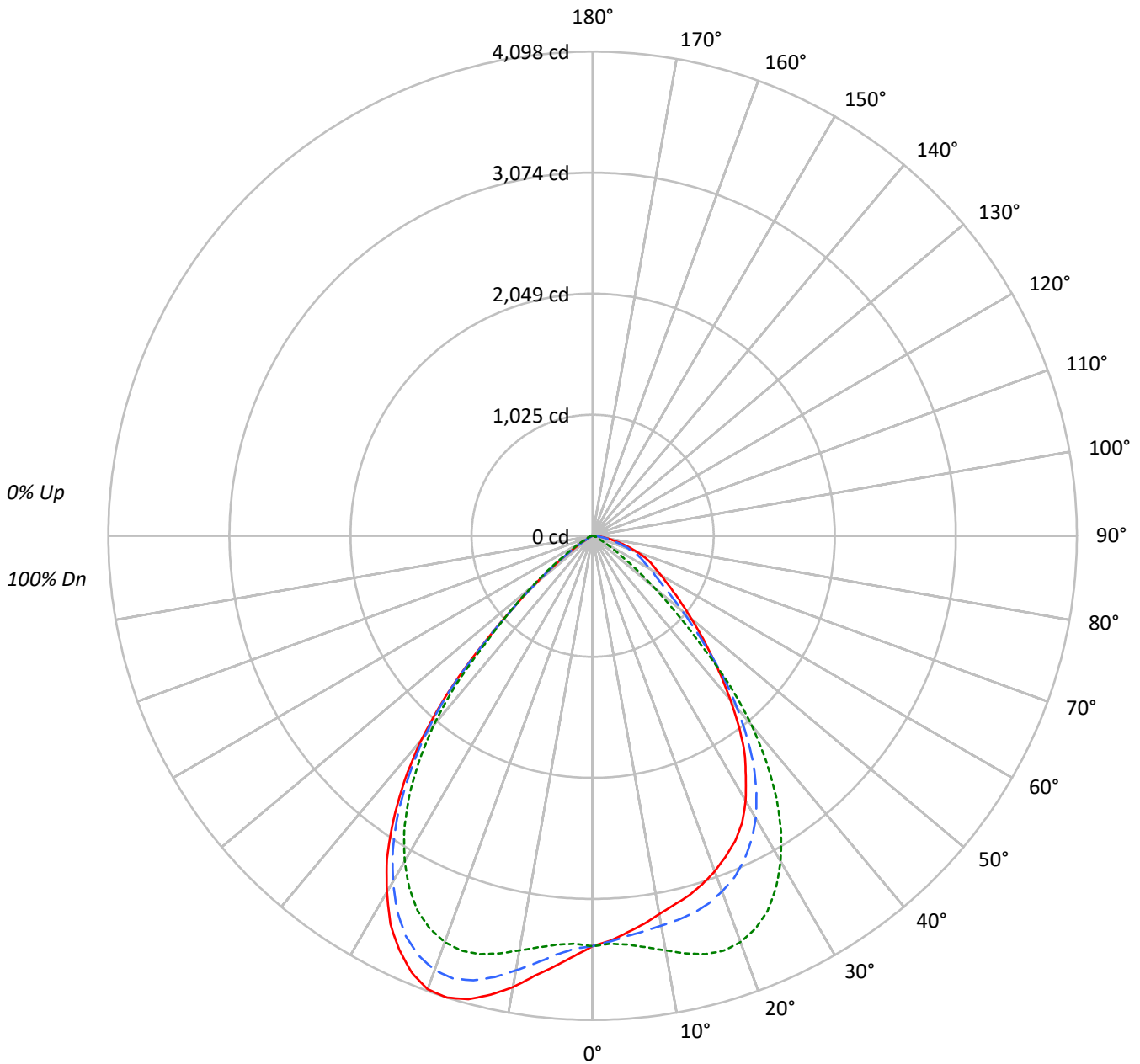
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	226594	226594	226594
5°	220727	227459	239424
10°	215356	236032	256933
15°	212832	247602	274288
20°	209783	254050	283556
25°	205330	252171	278467
30°	195113	239636	262153
35°	178514	216066	234042
40°	154405	178439	192014
45°	130203	117037	125608
50°	110540	67739	63699
55°	95931	32485	24557
60°	86653	15162	6067
65°	84071	8722	2038
70°	75366	6962	1908
75°	61959	5016	857
80°	46174	2480	0
85°	39748	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	335.5	5.3
10°-20°	1022.4	16.1
20°-30°	1562.2	24.6
30°-40°	1633.9	25.7
40°-50°	1059.9	16.7
50°-60°	420.8	6.6
60°-70°	199.6	3.1
70°-80°	94.9	1.5
80°-90°	19.4	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°	2920.1	46.0
0°-40°	4554.0	71.7
0°-60°	6034.8	95.1
0°-90°	6348.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6348.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3473	3473	3473	3473	3473	
5°	3370	3400	3473	3560	3656	318
15°	3151	3304	3666	3895	4061	888
25°	2852	3032	3503	3739	3868	1306
35°	2241	2378	2713	2872	2939	1386
45°	1411	1398	1268	1345	1361	1098
55°	843	717	286	222	216	764
65°	545	452	56	13	13	532
75°	246	199	20	7	3	265
85°	53	33	0	0	0	62
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°	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2
2.5°	3430.1	3436.8	3400.2	3390.2	3416.9	3426.8	3430.1	3420.1	3423.5	3436.8	3436.8
5°	3370.4	3377.0	3343.8	3333.8	3360.4	3367.0	3377.0	3373.6	3383.6	3403.5	3400.2
7.5°	3313.9	3323.9	3287.4	3274.0	3307.2	3323.9	3330.5	3330.5	3343.8	3370.4	3373.6
10°	3250.8	3264.1	3230.9	3224.2	3260.8	3277.4	3280.6	3287.4	3307.2	3343.8	3350.4
12.5°	3197.6	3211.0	3187.8	3177.8	3217.6	3234.2	3240.9	3254.1	3277.4	3323.9	3330.5
15°	3151.1	3161.1	3134.6	3127.9	3167.8	3187.8	3191.0	3211.0	3240.9	3294.0	3303.9
17.5°	3091.4	3098.0	3078.1	3071.5	3111.4	3131.2	3134.6	3157.9	3194.4	3247.5	3264.1
20°	3021.6	3028.4	3008.4	3001.8	3041.6	3064.9	3068.1	3088.1	3131.2	3187.8	3204.2
22.5°	2938.6	2952.0	2928.8	2922.0	2961.9	2981.9	2991.8	3008.4	3051.5	3108.0	3131.2
25°	2852.4	2852.4	2835.8	2832.4	2868.9	2892.1	2888.9	2912.1	2955.2	3011.8	3031.6
27.5°	2739.4	2736.1	2719.5	2716.2	2756.0	2776.0	2769.4	2792.5	2832.4	2888.9	2908.8
30°	2590.0	2596.6	2573.4	2566.8	2600.0	2633.1	2629.9	2653.1	2693.0	2746.1	2759.4
32.5°	2410.8	2417.4	2414.0	2404.0	2434.0	2450.5	2460.5	2477.1	2510.4	2566.8	2580.0
35°	2241.4	2231.4	2218.1	2218.1	2248.0	2274.5	2264.6	2284.5	2317.8	2374.1	2377.5
37.5°	2032.1	2028.9	2022.2	2015.5	2048.8	2055.4	2058.8	2072.0	2101.9	2148.4	2141.8
40°	1813.0	1816.4	1813.0	1799.8	1819.6	1846.2	1842.9	1849.5	1876.1	1909.2	1899.4
42.5°	1607.1	1607.1	1607.1	1593.9	1617.1	1630.4	1637.0	1633.8	1640.4	1670.2	1657.0
45°	1411.2	1414.5	1411.2	1407.9	1411.2	1417.9	1411.2	1407.9	1407.9	1417.9	1398.0
47.5°	1241.9	1241.9	1231.9	1222.0	1231.9	1235.2	1225.2	1215.2	1212.0	1208.6	1175.5
50°	1089.1	1085.8	1082.5	1065.9	1075.9	1079.1	1065.9	1059.2	1046.0	1029.4	989.5
52.5°	956.2	953.0	949.6	933.1	939.8	943.0	929.8	916.5	899.9	886.6	836.8
55°	843.4	840.1	840.1	830.1	823.5	830.1	816.9	806.9	783.6	767.0	717.2
57.5°	747.1	747.1	740.5	730.5	733.9	733.9	720.5	707.2	687.4	667.4	627.6
60°	664.1	664.1	664.1	654.1	654.1	654.1	647.5	634.2	617.6	597.8	557.9
62.5°	597.8	597.8	594.4	584.4	587.8	587.8	581.1	567.8	551.2	537.9	498.1
65°	544.6	544.6	544.6	534.6	534.6	537.9	531.2	518.0	504.8	488.1	451.6
67.5°	478.1	474.9	474.9	468.2	471.5	474.9	468.2	458.2	441.6	431.6	398.5
70°	395.1	398.5	401.8	391.9	395.1	395.1	391.9	381.9	371.9	361.9	332.0
72.5°	322.1	322.1	318.8	315.5	315.5	318.8	312.1	302.1	295.5	288.9	265.6
75°	245.8	242.4	245.8	239.1	239.1	239.1	232.4	229.1	225.8	215.9	199.2
77.5°	179.2	176.0	176.0	169.4	172.6	172.6	169.4	162.8	156.1	152.8	139.5
80°	122.9	122.9	122.9	119.5	119.5	116.2	116.2	112.9	106.2	102.9	96.2
82.5°	83.0	83.0	83.0	79.8	79.8	79.8	76.4	73.0	69.8	66.4	59.8
85°	53.1	53.1	53.1	49.8	49.8	49.8	46.5	46.5	43.1	39.9	33.2
87.5°	29.9	29.9	29.9	26.6	26.6	26.6	26.6	26.6	23.2	19.9	16.6
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°	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2
2.5°	3460.0	3413.5	3443.4	3443.4	3433.4	3460.0	3476.6	3489.9	3486.5	3456.6	3453.4
5°	3433.4	3393.6	3426.8	3430.1	3420.1	3456.6	3479.9	3496.5	3499.9	3473.2	3476.6
7.5°	3413.5	3380.2	3423.5	3436.8	3433.4	3466.6	3493.2	3519.8	3533.0	3513.1	3516.4
10°	3403.5	3377.0	3423.5	3443.4	3446.8	3483.2	3523.1	3559.6	3576.2	3562.9	3572.9
12.5°	3390.2	3373.6	3426.8	3456.6	3470.0	3506.5	3556.2	3599.5	3626.0	3619.4	3639.2
15°	3377.0	3363.8	3426.8	3470.0	3486.5	3519.8	3576.2	3639.2	3669.1	3665.9	3692.4
17.5°	3343.8	3340.5	3406.9	3453.4	3476.6	3516.4	3569.5	3645.9	3675.9	3682.5	3715.6
20°	3290.6	3290.6	3363.8	3413.5	3440.0	3476.6	3543.0	3616.0	3652.6	3659.2	3695.8
22.5°	3217.6	3224.2	3294.0	3343.8	3383.6	3410.1	3479.9	3556.2	3589.5	3599.5	3639.2
25°	3121.2	3127.9	3194.4	3244.1	3287.4	3317.2	3383.6	3453.4	3493.2	3503.1	3533.0
27.5°	2995.1	3008.4	3071.5	3121.2	3157.9	3177.8	3247.5	3320.5	3350.4	3360.4	3390.2
30°	2849.0	2852.4	2915.4	2958.6	2995.1	3011.8	3071.5	3147.9	3171.1	3181.0	3224.2
32.5°	2669.8	2666.4	2726.1	2766.0	2795.9	2815.8	2878.9	2928.8	2952.0	2968.5	2991.8
35°	2453.9	2450.5	2493.8	2540.2	2563.5	2570.1	2633.1	2686.2	2699.6	2712.9	2742.8
37.5°	2211.5	2211.5	2248.0	2271.2	2297.8	2307.8	2337.6	2397.4	2420.6	2417.4	2440.6
40°	1955.8	1942.5	1969.1	1992.4	1999.0	2002.2	2032.1	2078.6	2095.2	2095.2	2111.9
42.5°	1686.9	1666.9	1670.2	1683.5	1690.1	1666.9	1686.9	1716.8	1706.8	1720.0	1723.4
45°	1401.2	1371.4	1358.1	1328.2	1334.9	1311.6	1298.4	1305.0	1301.6	1268.5	1275.1
47.5°	1168.9	1115.8	1092.5	1049.2	1039.4	1012.8	996.1	966.2	939.8	939.8	923.1
50°	972.9	919.8	873.2	823.5	806.9	783.6	747.1	707.2	687.4	667.4	650.9
52.5°	816.9	760.4	704.0	650.9	627.6	597.8	547.9	508.0	471.5	451.6	431.6
55°	690.6	627.6	567.8	511.4	481.5	451.6	401.8	355.2	312.1	285.6	269.0
57.5°	594.4	534.6	471.5	411.8	385.1	352.0	298.9	249.0	209.2	179.2	162.8
60°	524.6	464.9	408.4	345.4	318.8	285.6	229.1	182.6	142.8	116.2	96.2
62.5°	464.9	411.8	352.0	295.5	269.0	235.8	182.6	136.1	99.6	73.0	56.5
65°	421.8	368.6	318.8	262.4	239.1	205.9	156.1	112.9	79.8	56.5	39.9
67.5°	371.9	325.4	275.6	229.1	205.9	179.2	132.9	96.2	66.4	46.5	33.2
70°	312.1	275.6	232.4	189.2	172.6	149.4	109.6	79.8	53.1	36.5	26.6
72.5°	249.0	219.1	186.0	152.8	139.5	116.2	89.6	63.1	39.9	26.6	19.9
75°	189.2	166.0	139.5	116.2	102.9	89.6	66.4	46.5	29.9	19.9	13.2
77.5°	129.5	119.5	99.6	79.8	73.0	63.1	43.1	29.9	19.9	13.2	6.6
80°	89.6	79.8	66.4	53.1	46.5	39.9	26.6	19.9	10.0	6.6	3.4
82.5°	56.5	46.5	39.9	33.2	29.9	23.2	16.6	10.0	6.6	3.4	3.4
85°	29.9	26.6	23.2	16.6	16.6	13.2	10.0	6.6	3.4	0.0	0.0
87.5°	16.6	13.2	10.0	6.6	6.6	3.4	3.4	3.4	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°	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2
2.5°	3493.2	3493.2	3489.9	3529.8	3483.2	3529.8	3506.5	3529.8	3496.5	3493.2	3496.5
5°	3519.8	3529.8	3533.0	3569.5	3526.4	3582.9	3562.9	3582.9	3559.6	3566.2	3576.2
7.5°	3572.9	3589.5	3586.1	3632.6	3589.5	3652.6	3639.2	3669.1	3645.9	3652.6	3665.9
10°	3632.6	3652.6	3655.9	3702.4	3662.5	3738.9	3722.2	3755.5	3735.6	3745.5	3762.1
12.5°	3702.4	3725.6	3729.0	3782.1	3738.9	3818.6	3808.6	3841.9	3825.2	3835.2	3855.1
15°	3755.5	3788.8	3795.4	3848.5	3802.0	3885.0	3878.4	3921.5	3895.0	3911.6	3928.1
17.5°	3782.1	3812.0	3825.2	3875.0	3835.2	3918.2	3911.6	3948.1	3928.1	3944.8	3964.8
20°	3765.5	3802.0	3812.0	3861.8	3821.9	3904.9	3895.0	3931.5	3911.6	3924.9	3944.8
22.5°	3705.8	3742.2	3755.5	3802.0	3765.5	3841.9	3838.5	3871.8	3845.1	3861.8	3878.4
25°	3599.5	3639.2	3645.9	3689.1	3649.2	3729.0	3722.2	3758.9	3738.9	3748.9	3772.1
27.5°	3446.8	3493.2	3503.1	3539.6	3509.8	3576.2	3576.2	3606.1	3582.9	3582.9	3606.1
30°	3264.1	3310.5	3317.2	3347.1	3320.5	3380.2	3383.6	3413.5	3377.0	3396.9	3400.2
32.5°	3041.6	3071.5	3091.4	3118.0	3078.1	3154.5	3144.5	3167.8	3147.9	3147.9	3164.5
35°	2772.6	2809.1	2819.1	2852.4	2819.1	2878.9	2878.9	2892.1	2872.2	2872.2	2898.9
37.5°	2480.4	2507.0	2510.4	2543.5	2517.0	2566.8	2563.5	2573.4	2553.5	2566.8	2566.8
40°	2138.4	2158.4	2165.0	2181.6	2178.2	2214.8	2211.5	2218.1	2208.1	2211.5	2218.1
42.5°	1740.0	1766.5	1779.8	1793.1	1773.1	1823.0	1813.0	1823.0	1819.6	1823.0	1832.9
45°	1281.8	1301.6	1311.6	1314.9	1308.2	1338.1	1361.4	1341.5	1344.8	1338.1	1351.5
47.5°	926.4	929.8	923.1	943.0	926.4	939.8	946.4	949.6	929.8	926.4	939.8
50°	634.2	650.9	627.6	637.5	634.2	647.5	640.9	644.1	624.2	634.2	627.6
52.5°	421.8	418.4	411.8	415.1	408.4	408.4	408.4	415.1	401.8	395.1	388.5
55°	255.6	249.0	235.8	232.4	232.4	235.8	229.1	222.5	222.5	219.1	219.1
57.5°	149.4	139.5	132.9	129.5	122.9	119.5	116.2	116.2	109.6	109.6	109.6
60°	83.0	73.0	66.4	59.8	59.8	56.5	53.1	49.8	49.8	49.8	46.5
62.5°	43.1	36.5	29.9	26.6	26.6	23.2	19.9	19.9	19.9	19.9	16.6
65°	29.9	23.2	19.9	16.6	16.6	13.2	13.2	13.2	13.2	13.2	13.2
67.5°	23.2	19.9	16.6	13.2	13.2	13.2	10.0	10.0	10.0	10.0	10.0
70°	19.9	13.2	13.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
72.5°	13.2	13.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
75°	10.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0
80°	3.4	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: P252205

CATALOG NUMBER: LE\_6B50D010R EC6B30509730 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2	3473.2
2.5°	3526.4	3523.1	3526.4	3533.0	3519.8	3559.6	3539.6	3559.6
5°	3602.8	3606.1	3609.4	3619.4	3602.8	3652.6	3626.0	3655.9
7.5°	3702.4	3705.8	3709.0	3719.0	3709.0	3758.9	3729.0	3755.5
10°	3805.4	3812.0	3812.0	3828.6	3818.6	3865.1	3845.1	3878.4
12.5°	3901.6	3908.2	3914.9	3924.9	3918.2	3968.0	3951.4	3978.0
15°	3978.0	3991.2	3994.6	4007.9	4001.2	4054.4	4034.4	4061.0
17.5°	4014.5	4027.8	4027.8	4044.4	4037.8	4094.2	4067.6	4097.5
20°	3994.6	4004.5	4007.9	4024.5	4017.9	4074.2	4047.8	4084.2
22.5°	3931.5	3934.9	3938.1	3954.8	3951.4	4001.2	3978.0	4001.2
25°	3815.2	3825.2	3821.9	3835.2	3835.2	3875.0	3848.5	3868.4
27.5°	3649.2	3659.2	3659.2	3675.9	3662.5	3702.4	3675.9	3705.8
30°	3446.8	3456.6	3450.0	3463.2	3450.0	3489.9	3470.0	3479.9
32.5°	3204.2	3204.2	3207.6	3211.0	3204.2	3240.9	3220.9	3240.9
35°	2915.4	2922.0	2925.4	2928.8	2922.0	2948.6	2925.4	2938.6
37.5°	2590.0	2606.6	2603.2	2606.6	2596.6	2629.9	2609.9	2616.6
40°	2241.4	2241.4	2238.0	2244.6	2234.8	2261.2	2248.0	2254.6
42.5°	1836.2	1846.2	1832.9	1849.5	1823.0	1859.5	1846.2	1836.2
45°	1378.0	1364.8	1361.4	1364.8	1354.8	1358.1	1368.0	1361.4
47.5°	939.8	939.8	933.1	923.1	936.4	939.8	926.4	926.4
50°	630.9	630.9	624.2	621.0	627.6	624.2	617.6	627.6
52.5°	401.8	388.5	388.5	395.1	388.5	381.9	391.9	385.1
55°	219.1	212.5	212.5	219.1	212.5	212.5	209.2	215.9
57.5°	106.2	109.6	106.2	106.2	106.2	106.2	102.9	106.2
60°	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
62.5°	19.9	19.9	16.6	16.6	16.6	16.6	16.6	16.6
65°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
67.5°	10.0	10.0	10.0	10.0	10.0	13.2	10.0	10.0
70°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
72.5°	10.0	10.0	13.2	13.2	13.2	13.2	13.2	13.2
75°	6.6	6.6	6.6	3.4	3.4	3.4	3.4	3.4
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)