

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: P252405

Luminaire Tested: **LE\_6B50D010R EC6B30508050 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B50D010R EC6B30508050 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6255.0 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

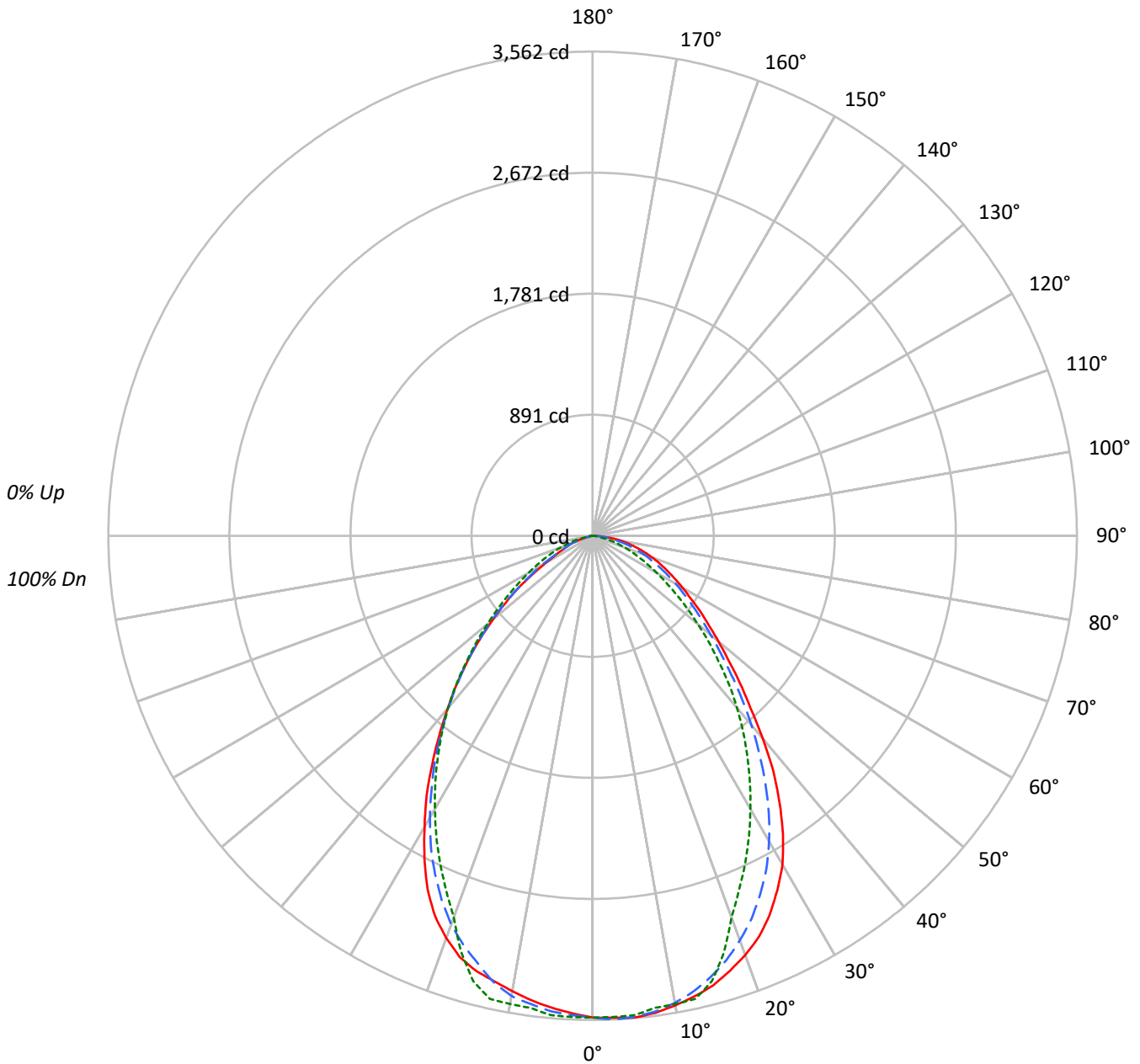
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68																			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60																			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54																			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48																			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44																			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33																			

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

	0°	90°	180°
0°	231219	231219	231219
5°	233013	231801	228180
10°	232355	231739	225339
15°	231298	229116	223834
20°	227848	207394	218572
25°	221656	191178	206748
30°	210474	174758	186209
35°	190987	157998	163868
40°	165817	140728	141119
45°	141423	121032	119759
50°	122395	102308	96706
55°	109421	85330	74866
60°	99688	70864	50444
65°	93087	58260	37667
70°	88680	47402	31626
75°	83536	33651	10436
80°	79574	17282	3456
85°	65498	10330	0



TEST NUMBER: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.7	5.4
10°-20°	936.1	15.0
20°-30°	1292.1	20.7
30°-40°	1314.8	21.0
40°-50°	1056.7	16.9
50°-60°	702.6	11.2
60°-70°	400.4	6.4
70°-80°	179.8	2.9
80°-90°	37.9	0.6
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°	2562.8	41.0
0°-40°	3877.6	62.0
0°-60°	5636.9	90.1
0°-90°	6255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6255.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3544	3544	3544	3544	3544	
5°	3558	3553	3540	3512	3484	338
15°	3424	3360	3392	3259	3314	964
25°	3079	2914	2656	2743	2872	1411
35°	2398	2214	1984	2021	2058	1490
45°	1533	1441	1312	1298	1298	1189
55°	962	898	750	667	658	864
65°	603	538	377	244	244	601
75°	331	276	134	55	41	354
85°	88	60	14	5	0	104
90°	0	0	0	0	0	



TEST NUMBER: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1
2.5°	3548.8	3567.1	3562.5	3558.0	3562.5	3558.0	3548.8	3548.8	3539.5	3539.5	3562.5
5°	3558.0	3567.1	3562.5	3558.0	3558.0	3562.5	3544.1	3544.1	3534.9	3530.4	3553.4
7.5°	3539.5	3553.4	3544.1	3544.1	3539.5	3544.1	3525.8	3525.8	3511.9	3507.4	3530.4
10°	3507.4	3525.8	3516.5	3516.5	3516.5	3507.4	3498.1	3493.5	3479.8	3475.1	3488.9
12.5°	3470.5	3484.2	3479.8	3470.5	3470.5	3470.5	3452.1	3447.5	3429.1	3419.9	3433.6
15°	3424.5	3433.6	3429.1	3424.5	3415.2	3415.2	3396.9	3387.6	3369.2	3350.9	3360.0
17.5°	3355.4	3369.2	3360.0	3355.4	3341.6	3341.6	3323.2	3314.0	3286.4	3268.0	3272.6
20°	3281.8	3286.4	3281.8	3272.6	3258.8	3254.1	3235.8	3217.4	3194.4	3171.2	3166.8
22.5°	3194.4	3198.9	3185.1	3175.9	3162.1	3157.5	3134.5	3120.6	3083.9	3056.2	3051.6
25°	3079.2	3083.9	3083.9	3060.9	3051.6	3042.4	3019.4	2996.4	2964.1	2927.4	2913.5
27.5°	2941.1	2955.0	2945.8	2922.8	2904.4	2899.8	2876.8	2858.4	2816.9	2784.6	2766.2
30°	2793.9	2789.2	2784.6	2770.9	2743.2	2738.6	2715.6	2692.6	2660.4	2619.0	2596.0
32.5°	2605.1	2605.1	2600.6	2586.8	2559.1	2549.9	2531.5	2503.9	2467.1	2434.9	2411.9
35°	2398.0	2402.6	2398.0	2370.4	2352.0	2342.8	2333.6	2301.4	2269.1	2232.4	2213.9
37.5°	2181.8	2167.9	2172.5	2149.5	2126.5	2135.6	2108.1	2094.2	2057.5	2029.9	2011.4
40°	1947.0	1956.1	1937.8	1928.5	1914.8	1901.0	1901.0	1877.9	1859.5	1827.2	1818.1
42.5°	1716.9	1730.6	1726.0	1716.9	1698.4	1703.0	1680.0	1670.8	1647.8	1634.0	1620.1
45°	1532.8	1532.8	1532.8	1523.5	1518.9	1509.8	1495.9	1482.1	1468.2	1449.9	1440.6
47.5°	1353.2	1353.2	1357.9	1348.6	1339.4	1334.8	1325.6	1325.6	1302.6	1284.1	1275.0
50°	1205.9	1205.9	1205.9	1196.8	1187.5	1187.5	1178.2	1169.1	1155.2	1141.5	1132.2
52.5°	1072.5	1072.5	1072.5	1063.2	1058.6	1054.0	1049.4	1044.9	1026.4	1017.2	1008.0
55°	962.0	957.4	957.4	952.8	943.6	943.6	939.0	929.8	916.0	902.1	897.5
57.5°	851.5	856.1	851.5	851.5	842.2	842.2	833.1	828.5	814.8	805.5	796.2
60°	764.0	764.0	764.0	759.5	750.2	754.9	745.6	741.0	727.2	713.4	704.2
62.5°	676.6	681.2	681.2	676.6	667.4	667.4	662.8	658.2	644.4	630.6	616.8
65°	603.0	603.0	603.0	598.4	593.8	593.8	589.1	584.5	570.8	552.4	538.5
67.5°	533.9	529.4	529.4	529.4	524.8	520.1	515.5	510.9	497.1	483.2	464.9
70°	464.9	464.9	464.9	460.2	451.1	455.6	451.1	446.5	432.6	418.9	405.0
72.5°	400.5	400.5	395.9	391.2	391.2	386.6	386.6	382.0	368.2	349.8	336.0
75°	331.4	331.4	331.4	331.4	322.2	326.8	317.6	313.0	303.8	290.0	276.1
77.5°	271.6	271.6	271.6	267.0	262.4	262.4	257.8	253.1	239.4	230.1	211.8
80°	211.8	211.8	211.8	211.8	207.1	202.5	197.9	193.4	184.1	170.2	156.5
82.5°	156.5	156.5	151.9	151.9	151.9	147.2	142.6	138.1	128.9	119.6	110.5
85°	87.5	92.0	92.0	82.9	87.5	82.9	82.9	73.6	73.6	64.5	59.9
87.5°	32.2	27.6	27.6	27.6	27.6	27.6	27.6	23.0	23.0	23.0	18.4
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: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1
2.5°	3544.1	3539.5	3558.0	3558.0	3530.4	3544.1	3548.8	3539.5	3539.5	3544.1	3530.4
5°	3534.9	3525.8	3544.1	3548.8	3521.1	3534.9	3539.5	3530.4	3534.9	3539.5	3521.1
7.5°	3502.8	3502.8	3516.5	3521.1	3493.5	3507.4	3507.4	3498.1	3502.8	3502.8	3488.9
10°	3470.5	3456.6	3470.5	3470.5	3447.5	3452.1	3461.2	3456.6	3475.1	3498.1	3498.1
12.5°	3410.6	3396.9	3419.9	3419.9	3406.0	3424.5	3447.5	3461.2	3479.8	3488.9	3461.2
15°	3337.0	3341.6	3383.0	3415.2	3401.5	3429.1	3452.1	3442.9	3419.9	3392.2	3350.9
17.5°	3240.4	3226.5	3263.4	3281.8	3263.4	3272.6	3291.0	3272.6	3235.8	3212.8	3157.5
20°	3129.9	3093.1	3093.1	3083.9	3051.6	3051.6	3047.0	3014.9	3001.0	2987.2	2964.1
22.5°	3005.6	2964.1	2950.4	2922.8	2895.1	2890.5	2876.8	2844.5	2826.1	2816.9	2789.2
25°	2862.9	2826.1	2803.1	2775.5	2734.0	2724.9	2711.0	2678.9	2669.6	2655.8	2632.8
27.5°	2715.6	2669.6	2637.4	2609.8	2573.0	2568.4	2540.8	2517.8	2499.2	2490.1	2471.8
30°	2545.4	2494.8	2471.8	2434.9	2407.2	2398.0	2375.0	2342.8	2329.0	2319.8	2306.0
32.5°	2356.6	2315.2	2292.1	2260.0	2223.1	2227.8	2200.1	2172.5	2163.2	2154.1	2140.2
35°	2172.5	2131.1	2103.5	2075.9	2052.9	2043.6	2025.2	2002.2	1988.4	1983.8	1974.6
37.5°	1970.0	1937.8	1914.8	1887.1	1868.8	1859.5	1850.4	1827.2	1818.1	1818.1	1799.6
40°	1772.1	1744.5	1726.0	1712.2	1689.2	1684.6	1675.4	1661.6	1657.0	1652.4	1638.6
42.5°	1592.5	1555.8	1541.9	1532.8	1518.9	1509.8	1505.1	1495.9	1491.2	1486.8	1472.9
45°	1422.2	1390.0	1376.2	1367.0	1353.2	1348.6	1344.0	1330.2	1321.0	1311.8	1307.2
47.5°	1256.5	1233.5	1229.0	1205.9	1196.8	1187.5	1178.2	1169.1	1164.5	1159.9	1141.5
50°	1113.9	1100.1	1077.0	1063.2	1054.0	1049.4	1031.0	1017.2	1012.6	1008.0	994.2
52.5°	985.0	966.6	952.8	929.8	925.1	916.0	906.8	888.4	879.1	874.5	860.8
55°	869.9	856.1	837.8	819.2	805.5	800.9	787.1	768.6	759.5	750.2	741.0
57.5°	773.2	750.2	731.9	713.4	704.2	690.4	676.6	667.4	653.6	639.8	626.0
60°	681.2	662.8	639.8	621.4	612.1	603.0	584.5	570.8	556.9	543.1	529.4
62.5°	593.8	575.4	552.4	533.9	524.8	515.5	497.1	483.2	469.5	455.6	437.2
65°	515.5	497.1	478.8	460.2	451.1	441.9	423.5	405.0	391.2	377.4	359.0
67.5°	451.1	428.0	409.6	391.2	382.0	372.9	354.4	340.6	322.2	308.4	290.0
70°	382.0	363.6	349.8	331.4	322.2	313.0	294.6	276.1	262.4	248.5	230.1
72.5°	322.2	299.1	285.4	267.0	257.8	253.1	234.8	220.9	207.1	188.8	174.9
75°	257.8	239.4	220.9	207.1	197.9	193.4	174.9	161.1	147.2	133.5	119.6
77.5°	197.9	184.1	165.8	151.9	142.6	138.1	119.6	105.9	92.0	82.9	69.0
80°	147.2	128.9	119.6	105.9	101.2	92.0	82.9	69.0	59.9	46.0	36.9
82.5°	101.2	87.5	78.2	69.0	64.5	59.9	50.6	41.4	32.2	27.6	23.0
85°	55.2	46.0	41.4	36.9	32.2	32.2	27.6	23.0	18.4	13.8	9.2
87.5°	18.4	13.8	13.8	13.8	13.8	9.2	9.2	9.2	4.6	4.6	4.6
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: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1
2.5°	3539.5	3539.5	3539.5	3534.9	3534.9	3534.9	3530.4	3548.8	3530.4	3525.8	3539.5
5°	3534.9	3525.8	3525.8	3525.8	3525.8	3521.1	3516.5	3525.8	3511.9	3507.4	3507.4
7.5°	3507.4	3502.8	3502.8	3498.1	3493.5	3488.9	3484.2	3488.9	3475.1	3470.5	3470.5
10°	3511.9	3502.8	3502.8	3488.9	3479.8	3465.9	3452.1	3456.6	3438.2	3424.5	3424.5
12.5°	3456.6	3433.6	3419.9	3406.0	3396.9	3392.2	3373.9	3383.0	3364.6	3360.0	3360.0
15°	3332.4	3304.8	3281.8	3272.6	3272.6	3263.4	3249.5	3268.0	3258.8	3263.4	3286.4
17.5°	3139.1	3125.2	3111.5	3106.9	3111.5	3120.6	3129.9	3157.5	3157.5	3171.2	3194.4
20°	2968.8	2959.6	2968.8	2968.8	2973.4	2991.8	3010.2	3033.2	3042.4	3056.2	3088.5
22.5°	2803.1	2803.1	2812.2	2826.1	2821.5	2853.8	2858.4	2899.8	2899.8	2927.4	2955.0
25°	2642.0	2642.0	2651.2	2655.8	2665.0	2683.4	2701.9	2734.0	2743.2	2770.9	2793.9
27.5°	2485.5	2480.9	2480.9	2485.5	2494.8	2517.8	2526.9	2563.8	2577.5	2596.0	2619.0
30°	2310.6	2306.0	2315.2	2324.4	2319.8	2342.8	2356.6	2384.2	2393.5	2411.9	2430.2
32.5°	2144.9	2144.9	2144.9	2154.1	2154.1	2172.5	2172.5	2204.8	2204.8	2218.5	2237.0
35°	1974.6	1974.6	1979.2	1983.8	1988.4	1993.0	1997.6	2016.0	2020.6	2025.2	2034.4
37.5°	1813.5	1808.9	1813.5	1813.5	1804.2	1822.8	1822.8	1841.1	1827.2	1841.1	1845.8
40°	1647.8	1647.8	1643.2	1643.2	1643.2	1652.4	1643.2	1657.0	1647.8	1657.0	1652.4
42.5°	1477.5	1477.5	1468.2	1477.5	1472.9	1472.9	1472.9	1482.1	1468.2	1477.5	1482.1
45°	1307.2	1302.6	1302.6	1298.0	1298.0	1298.0	1302.6	1302.6	1298.0	1307.2	1307.2
47.5°	1141.5	1136.9	1136.9	1136.9	1136.9	1141.5	1127.6	1136.9	1127.6	1127.6	1127.6
50°	998.8	994.2	989.6	985.0	980.4	980.4	975.8	975.8	966.6	962.0	957.4
52.5°	860.8	856.1	846.9	846.9	842.2	837.8	823.9	823.9	810.1	805.5	805.5
55°	736.5	722.6	718.0	708.9	708.9	699.6	690.4	681.2	667.4	658.2	658.2
57.5°	621.4	607.6	598.4	593.8	589.1	580.0	561.5	556.9	538.5	533.9	529.4
60°	520.1	506.2	492.5	483.2	478.8	464.9	446.5	437.2	428.0	414.2	400.5
62.5°	423.5	409.6	391.2	386.6	377.4	363.6	349.8	336.0	326.8	313.0	303.8
65°	340.6	326.8	313.0	303.8	294.6	280.8	267.0	253.1	244.0	239.4	234.8
67.5°	276.1	257.8	244.0	239.4	230.1	220.9	207.1	202.5	193.4	193.4	193.4
70°	216.4	202.5	188.8	184.1	179.5	170.2	161.1	161.1	161.1	161.1	161.1
72.5°	161.1	151.9	138.1	133.5	128.9	124.2	115.1	119.6	115.1	115.1	115.1
75°	101.2	92.0	82.9	78.2	73.6	69.0	64.5	59.9	55.2	50.6	50.6
77.5°	55.2	46.0	41.4	36.9	36.9	32.2	27.6	27.6	23.0	23.0	23.0
80°	32.2	27.6	23.0	18.4	18.4	13.8	13.8	13.8	13.8	9.2	9.2
82.5°	18.4	13.8	9.2	9.2	9.2	9.2	4.6	4.6	4.6	4.6	4.6
85°	9.2	9.2	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0
87.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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: P252405

CATALOG NUMBER: LE\_6B50D010R EC6B30508050 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1	3544.1
2.5°	3516.5	3530.4	3516.5	3530.4	3530.4	3530.4	3530.4	3516.5
5°	3493.5	3502.8	3488.9	3498.1	3502.8	3498.1	3498.1	3484.2
7.5°	3452.1	3461.2	3447.5	3461.2	3465.9	3461.2	3456.6	3447.5
10°	3410.6	3415.2	3401.5	3410.6	3419.9	3419.9	3415.2	3401.5
12.5°	3346.2	3360.0	3346.2	3355.4	3364.6	3369.2	3369.2	3355.4
15°	3272.6	3295.6	3286.4	3300.2	3314.0	3318.6	3318.6	3314.0
17.5°	3198.9	3222.0	3208.1	3231.1	3245.0	3254.1	3258.8	3249.5
20°	3093.1	3120.6	3111.5	3129.9	3148.2	3162.1	3162.1	3148.2
22.5°	2955.0	2991.8	2987.2	3001.0	3024.0	3028.6	3037.9	3028.6
25°	2803.1	2830.8	2826.1	2839.9	2867.5	2867.5	2872.1	2872.1
27.5°	2628.1	2655.8	2651.2	2660.4	2678.9	2683.4	2688.0	2678.9
30°	2439.5	2453.2	2453.2	2467.1	2480.9	2485.5	2485.5	2471.8
32.5°	2232.4	2250.8	2260.0	2255.4	2269.1	2278.4	2273.8	2273.8
35°	2043.6	2048.2	2052.9	2057.5	2062.0	2071.2	2062.0	2057.5
37.5°	1841.1	1854.9	1845.8	1854.9	1864.1	1859.5	1854.9	1854.9
40°	1657.0	1661.6	1652.4	1661.6	1666.2	1666.2	1666.2	1657.0
42.5°	1472.9	1482.1	1472.9	1482.1	1482.1	1482.1	1482.1	1477.5
45°	1288.8	1298.0	1298.0	1302.6	1302.6	1298.0	1298.0	1298.0
47.5°	1118.5	1127.6	1118.5	1127.6	1132.2	1123.1	1123.1	1123.1
50°	957.4	952.8	952.8	957.4	957.4	957.4	957.4	952.8
52.5°	791.6	796.2	796.2	796.2	800.9	796.2	800.9	800.9
55°	649.0	649.0	649.0	653.6	649.0	649.0	653.6	658.2
57.5°	520.1	515.5	510.9	510.9	515.5	510.9	510.9	510.9
60°	400.5	395.9	391.2	391.2	391.2	391.2	391.2	386.6
62.5°	299.1	299.1	299.1	303.8	303.8	303.8	303.8	308.4
65°	239.4	239.4	239.4	239.4	239.4	239.4	239.4	244.0
67.5°	193.4	193.4	193.4	197.9	197.9	197.9	197.9	197.9
70°	161.1	161.1	165.8	161.1	165.8	165.8	165.8	165.8
72.5°	110.5	110.5	110.5	110.5	110.5	105.9	110.5	105.9
75°	46.0	46.0	46.0	46.0	46.0	46.0	46.0	41.4
77.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
80°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
82.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	4.6	4.6	4.6	4.6	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)