

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: P252168

Luminaire Tested: **LE\_6B30D010 EC6B30508030 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252168  
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\_6B30D010 EC6B30508030 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4702.5 lumens  
Efficiency: N/A  
Efficacy: 167.9 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

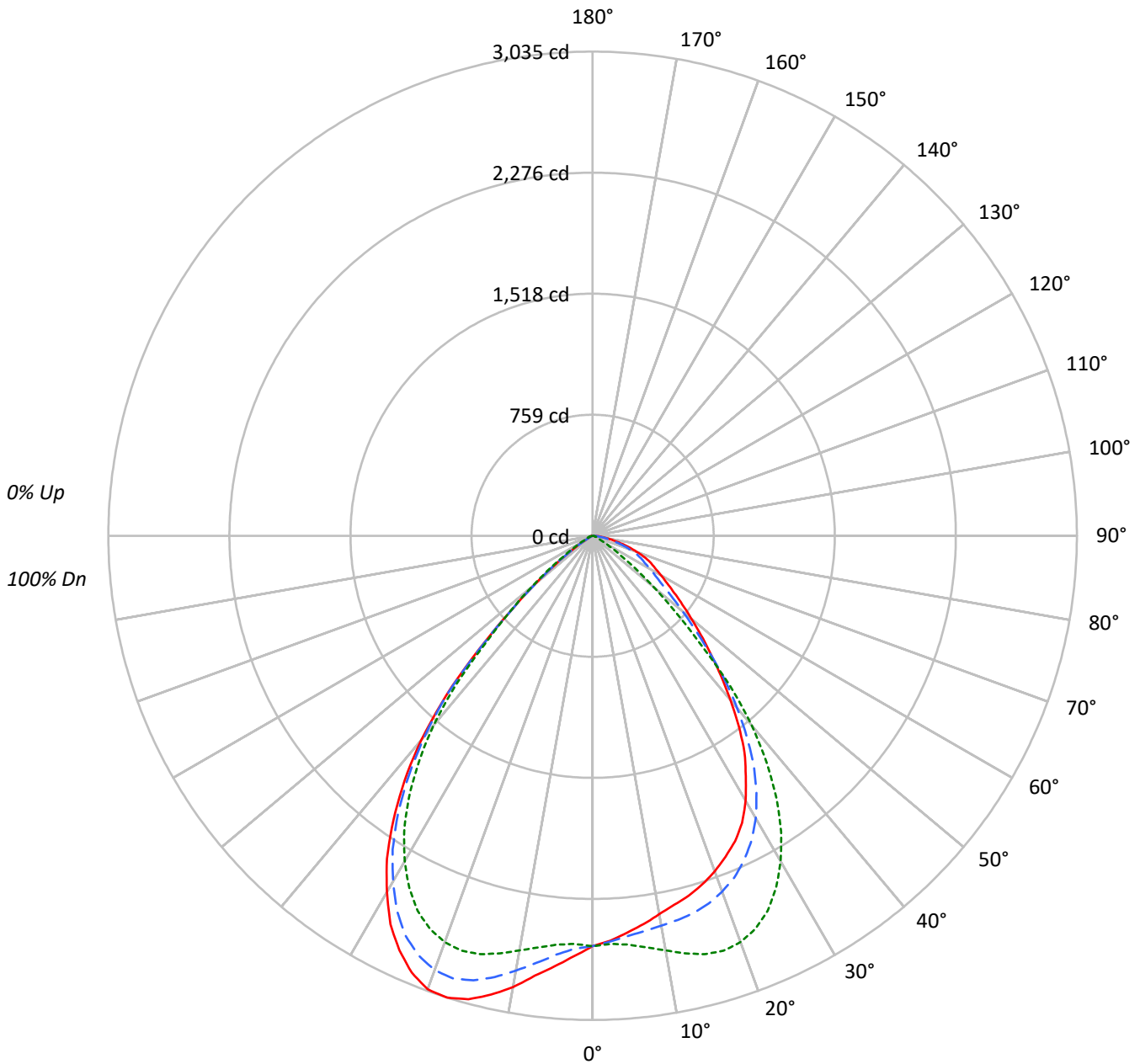
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

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

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

	0°	90°	180°
0°	167838	167838	167838
5°	163489	168479	177340
10°	159516	174826	190315
15°	157650	183390	203167
20°	155386	188177	210026
25°	152090	186787	206266
30°	144520	177501	194172
35°	132217	160037	173353
40°	114369	132177	142227
45°	96435	86682	93039
50°	81887	50180	47186
55°	71067	24057	18188
60°	64184	11234	4489
65°	62274	6453	1528
70°	55814	5150	1412
75°	45877	3731	630
80°	34189	1841	0
85°	29493	0	0



TEST NUMBER: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.5	5.3
10°-20°	757.3	16.1
20°-30°	1157.1	24.6
30°-40°	1210.2	25.7
40°-50°	785.1	16.7
50°-60°	311.7	6.6
60°-70°	147.9	3.1
70°-80°	70.3	1.5
80°-90°	14.3	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°	2162.9	46.0
0°-40°	3373.2	71.7
0°-60°	4470.0	95.1
0°-90°	4702.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4702.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2573	2573	2573	2573	2573	
5°	2496	2518	2573	2637	2708	236
15°	2334	2447	2715	2885	3008	658
25°	2113	2246	2595	2769	2865	967
35°	1660	1761	2009	2128	2177	1027
45°	1045	1036	940	996	1008	813
55°	625	531	212	165	160	566
65°	403	334	42	10	10	394
75°	182	148	15	5	2	196
85°	39	25	0	0	0	46
90°	0	0	0	0	0	



TEST NUMBER: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6
2.5°	2540.6	2545.6	2518.5	2511.1	2530.9	2538.2	2540.6	2533.2	2535.8	2545.6	2545.6
5°	2496.4	2501.4	2476.8	2469.4	2489.0	2493.9	2501.4	2498.9	2506.2	2521.0	2518.5
7.5°	2454.6	2462.0	2434.9	2425.1	2449.6	2462.0	2466.9	2466.9	2476.8	2496.4	2498.9
10°	2407.9	2417.8	2393.1	2388.1	2415.2	2427.5	2430.0	2434.9	2449.6	2476.8	2481.6
12.5°	2368.5	2378.4	2361.1	2353.8	2383.2	2395.5	2400.5	2410.2	2427.5	2462.0	2466.9
15°	2334.1	2341.5	2321.8	2316.9	2346.4	2361.1	2363.6	2378.4	2400.5	2439.9	2447.2
17.5°	2289.8	2294.8	2280.0	2275.0	2304.5	2319.2	2321.8	2339.0	2366.0	2405.4	2417.8
20°	2238.1	2243.1	2228.2	2223.4	2252.9	2270.1	2272.6	2287.4	2319.2	2361.1	2373.4
22.5°	2176.6	2186.5	2169.2	2164.4	2193.9	2208.6	2216.0	2228.2	2260.2	2302.1	2319.2
25°	2112.8	2112.8	2100.4	2098.0	2125.0	2142.2	2139.8	2157.0	2189.0	2230.8	2245.5
27.5°	2029.1	2026.6	2014.4	2011.9	2041.4	2056.1	2051.2	2068.5	2098.0	2139.8	2154.5
30°	1918.4	1923.4	1906.1	1901.2	1925.8	1950.4	1947.9	1965.1	1994.6	2034.0	2043.9
32.5°	1785.6	1790.5	1788.0	1780.6	1802.9	1815.1	1822.5	1834.8	1859.4	1901.2	1911.0
35°	1660.1	1652.8	1643.0	1643.0	1665.1	1684.8	1677.4	1692.1	1716.8	1758.5	1761.0
37.5°	1505.2	1502.8	1497.9	1492.9	1517.5	1522.4	1524.9	1534.8	1556.9	1591.2	1586.4
40°	1342.9	1345.4	1342.9	1333.0	1347.8	1367.5	1365.0	1370.0	1389.6	1414.2	1406.9
42.5°	1190.4	1190.4	1190.4	1180.5	1197.8	1207.6	1212.5	1210.1	1215.0	1237.1	1227.2
45°	1045.2	1047.8	1045.2	1042.9	1045.2	1050.2	1045.2	1042.9	1042.9	1050.2	1035.5
47.5°	919.9	919.9	912.5	905.1	912.5	914.9	907.5	900.1	897.8	895.2	870.6
50°	806.8	804.2	801.8	789.5	796.9	799.4	789.5	784.6	774.8	762.5	732.9
52.5°	708.4	705.9	703.4	691.1	696.0	698.5	688.6	678.9	666.5	656.6	619.8
55°	624.8	622.2	622.2	614.9	610.0	614.9	605.0	597.6	580.5	568.1	531.2
57.5°	553.4	553.4	548.5	541.1	543.5	543.5	533.8	523.9	509.1	494.4	464.9
60°	491.9	491.9	491.9	484.5	484.5	484.5	479.6	469.8	457.5	442.8	413.2
62.5°	442.8	442.8	440.2	432.9	435.4	435.4	430.4	420.6	408.2	398.5	368.9
65°	403.4	403.4	403.4	396.0	396.0	398.5	393.5	383.6	373.9	361.5	334.5
67.5°	354.1	351.8	351.8	346.8	349.2	351.8	346.8	339.4	327.1	319.8	295.1
70°	292.6	295.1	297.6	290.2	292.6	292.6	290.2	282.9	275.5	268.1	246.0
72.5°	238.6	238.6	236.1	233.6	233.6	236.1	231.2	223.9	218.9	214.0	196.8
75°	182.0	179.5	182.0	177.1	177.1	177.1	172.1	169.8	167.2	159.9	147.6
77.5°	132.9	130.4	130.4	125.4	127.9	127.9	125.4	120.5	115.6	113.1	103.2
80°	91.0	91.0	91.0	88.5	88.5	86.1	86.1	83.6	78.8	76.2	71.4
82.5°	61.5	61.5	61.5	59.0	59.0	59.0	56.6	54.1	51.6	49.2	44.2
85°	39.4	39.4	39.4	36.9	36.9	36.9	34.4	34.4	32.0	29.5	24.6
87.5°	22.1	22.1	22.1	19.6	19.6	19.6	19.6	19.6	17.2	14.8	12.2
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: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6
2.5°	2562.8	2528.4	2550.5	2550.5	2543.1	2562.8	2575.1	2584.9	2582.5	2560.4	2557.9
5°	2543.1	2513.6	2538.2	2540.6	2533.2	2560.4	2577.5	2589.9	2592.4	2572.6	2575.1
7.5°	2528.4	2503.8	2535.8	2545.6	2543.1	2567.8	2587.4	2607.1	2616.9	2602.1	2604.6
10°	2521.0	2501.4	2535.8	2550.5	2553.0	2580.0	2609.5	2636.6	2648.9	2639.0	2646.4
12.5°	2511.1	2498.9	2538.2	2560.4	2570.1	2597.2	2634.1	2666.1	2685.8	2680.9	2695.6
15°	2501.4	2491.5	2538.2	2570.1	2582.5	2607.1	2648.9	2695.6	2717.8	2715.2	2735.0
17.5°	2476.8	2474.2	2523.5	2557.9	2575.1	2604.6	2644.0	2700.5	2722.6	2727.6	2752.1
20°	2437.4	2437.4	2491.5	2528.4	2548.0	2575.1	2624.2	2678.4	2705.5	2710.4	2737.4
22.5°	2383.2	2388.1	2439.9	2476.8	2506.2	2525.9	2577.5	2634.1	2658.8	2666.1	2695.6
25°	2311.9	2316.9	2366.0	2402.9	2434.9	2457.0	2506.2	2557.9	2587.4	2594.8	2616.9
27.5°	2218.5	2228.2	2275.0	2311.9	2339.0	2353.8	2405.4	2459.5	2481.6	2489.0	2511.1
30°	2110.2	2112.8	2159.5	2191.4	2218.5	2230.8	2275.0	2331.6	2348.9	2356.2	2388.1
32.5°	1977.5	1975.0	2019.2	2048.8	2070.9	2085.6	2132.4	2169.2	2186.5	2198.8	2216.0
35°	1817.6	1815.1	1847.1	1881.5	1898.8	1903.6	1950.4	1989.8	1999.6	2009.4	2031.5
37.5°	1638.0	1638.0	1665.1	1682.2	1702.0	1709.4	1731.5	1775.8	1793.0	1790.5	1807.8
40°	1448.6	1438.8	1458.5	1475.8	1480.6	1483.1	1505.2	1539.6	1552.0	1552.0	1564.2
42.5°	1249.4	1234.6	1237.1	1247.0	1251.9	1234.6	1249.4	1271.5	1264.1	1274.0	1276.5
45°	1037.9	1015.8	1005.9	983.8	988.8	971.5	961.6	966.6	964.1	939.5	944.5
47.5°	865.8	826.4	809.1	777.2	769.9	750.1	737.9	715.8	696.0	696.0	683.8
50°	720.6	681.2	646.9	610.0	597.6	580.5	553.4	523.9	509.1	494.4	482.0
52.5°	605.0	563.2	521.4	482.0	464.9	442.8	405.9	376.2	349.2	334.5	319.8
55°	511.6	464.9	420.6	378.8	356.6	334.5	297.6	263.1	231.2	211.5	199.2
57.5°	440.2	396.0	349.2	305.0	285.2	260.8	221.4	184.5	155.0	132.9	120.5
60°	388.6	344.4	302.5	255.8	236.1	211.5	169.8	135.2	105.8	86.1	71.4
62.5°	344.4	305.0	260.8	218.9	199.2	174.6	135.2	100.9	73.8	54.1	41.8
65°	312.4	273.0	236.1	194.2	177.1	152.5	115.6	83.6	59.0	41.8	29.5
67.5°	275.5	241.0	204.1	169.8	152.5	132.9	98.4	71.4	49.2	34.4	24.6
70°	231.2	204.1	172.1	140.2	127.9	110.6	81.1	59.0	39.4	27.0	19.6
72.5°	184.5	162.4	137.8	113.1	103.2	86.1	66.4	46.8	29.5	19.6	14.8
75°	140.2	123.0	103.2	86.1	76.2	66.4	49.2	34.4	22.1	14.8	9.9
77.5°	95.9	88.5	73.8	59.0	54.1	46.8	32.0	22.1	14.8	9.9	4.9
80°	66.4	59.0	49.2	39.4	34.4	29.5	19.6	14.8	7.4	4.9	2.5
82.5°	41.8	34.4	29.5	24.6	22.1	17.2	12.2	7.4	4.9	2.5	2.5
85°	22.1	19.6	17.2	12.2	12.2	9.9	7.4	4.9	2.5	0.0	0.0
87.5°	12.2	9.9	7.4	4.9	4.9	2.5	2.5	2.5	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: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6
2.5°	2587.4	2587.4	2584.9	2614.5	2580.0	2614.5	2597.2	2614.5	2589.9	2587.4	2589.9
5°	2607.1	2614.5	2616.9	2644.0	2612.0	2653.8	2639.0	2653.8	2636.6	2641.5	2648.9
7.5°	2646.4	2658.8	2656.2	2690.8	2658.8	2705.5	2695.6	2717.8	2700.5	2705.5	2715.2
10°	2690.8	2705.5	2707.9	2742.4	2712.9	2769.4	2757.1	2781.8	2767.0	2774.4	2786.6
12.5°	2742.4	2759.5	2762.0	2801.4	2769.4	2828.4	2821.0	2845.6	2833.4	2840.8	2855.5
15°	2781.8	2806.2	2811.2	2850.5	2816.1	2877.6	2872.8	2904.6	2885.0	2897.2	2909.6
17.5°	2801.4	2823.5	2833.4	2870.2	2840.8	2902.2	2897.2	2924.4	2909.6	2921.9	2936.6
20°	2789.1	2816.1	2823.5	2860.4	2830.9	2892.4	2885.0	2912.0	2897.2	2907.1	2921.9
22.5°	2744.8	2771.9	2781.8	2816.1	2789.1	2845.6	2843.1	2867.8	2848.1	2860.4	2872.8
25°	2666.1	2695.6	2700.5	2732.5	2703.0	2762.0	2757.1	2784.1	2769.4	2776.8	2794.0
27.5°	2553.0	2587.4	2594.8	2621.9	2599.8	2648.9	2648.9	2671.0	2653.8	2653.8	2671.0
30°	2417.8	2452.1	2457.0	2479.1	2459.5	2503.8	2506.2	2528.4	2501.4	2516.1	2518.5
32.5°	2252.9	2275.0	2289.8	2309.5	2280.0	2336.5	2329.1	2346.4	2331.6	2331.6	2343.9
35°	2053.6	2080.8	2088.1	2112.8	2088.1	2132.4	2132.4	2142.2	2127.5	2127.5	2147.1
37.5°	1837.2	1856.9	1859.4	1884.0	1864.2	1901.2	1898.8	1906.1	1891.4	1901.2	1901.2
40°	1583.9	1598.6	1603.6	1615.9	1613.4	1640.5	1638.0	1643.0	1635.6	1638.0	1643.0
42.5°	1288.8	1308.5	1318.2	1328.1	1313.4	1350.2	1342.9	1350.2	1347.8	1350.2	1357.6
45°	949.4	964.1	971.5	974.0	969.0	991.1	1008.4	993.6	996.1	991.1	1001.0
47.5°	686.2	688.6	683.8	698.5	686.2	696.0	701.0	703.4	688.6	686.2	696.0
50°	469.8	482.0	464.9	472.2	469.8	479.6	474.6	477.1	462.4	469.8	464.9
52.5°	312.4	309.9	305.0	307.5	302.5	302.5	302.5	307.5	297.6	292.6	287.8
55°	189.4	184.5	174.6	172.1	172.1	174.6	169.8	164.8	164.8	162.4	162.4
57.5°	110.6	103.2	98.4	95.9	91.0	88.5	86.1	86.1	81.1	81.1	81.1
60°	61.5	54.1	49.2	44.2	44.2	41.8	39.4	36.9	36.9	36.9	34.4
62.5°	32.0	27.0	22.1	19.6	19.6	17.2	14.8	14.8	14.8	14.8	12.2
65°	22.1	17.2	14.8	12.2	12.2	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	17.2	14.8	12.2	9.9	9.9	9.9	7.4	7.4	7.4	7.4	7.4
70°	14.8	9.9	9.9	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	9.9	9.9	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
75°	7.4	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0
80°	2.5	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: P252168

CATALOG NUMBER: LE\_6B30D010 EC6B30508030 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6	2572.6
2.5°	2612.0	2609.5	2612.0	2616.9	2607.1	2636.6	2621.9	2636.6
5°	2668.5	2671.0	2673.5	2680.9	2668.5	2705.5	2685.8	2707.9
7.5°	2742.4	2744.8	2747.2	2754.6	2747.2	2784.1	2762.0	2781.8
10°	2818.6	2823.5	2823.5	2835.8	2828.4	2862.9	2848.1	2872.8
12.5°	2889.9	2894.9	2899.8	2907.1	2902.2	2939.1	2926.8	2946.5
15°	2946.5	2956.4	2958.8	2968.6	2963.8	3003.0	2988.2	3008.0
17.5°	2973.5	2983.4	2983.4	2995.6	2990.8	3032.6	3012.9	3035.0
20°	2958.8	2966.1	2968.6	2980.9	2976.0	3017.8	2998.1	3025.1
22.5°	2912.0	2914.5	2917.0	2929.2	2926.8	2963.8	2946.5	2963.8
25°	2826.0	2833.4	2830.9	2840.8	2840.8	2870.2	2850.5	2865.4
27.5°	2703.0	2710.4	2710.4	2722.6	2712.9	2742.4	2722.6	2744.8
30°	2553.0	2560.4	2555.4	2565.2	2555.4	2584.9	2570.1	2577.5
32.5°	2373.4	2373.4	2375.9	2378.4	2373.4	2400.5	2385.8	2400.5
35°	2159.5	2164.4	2166.9	2169.2	2164.4	2184.0	2166.9	2176.6
37.5°	1918.4	1930.8	1928.2	1930.8	1923.4	1947.9	1933.1	1938.1
40°	1660.1	1660.1	1657.8	1662.6	1655.2	1674.9	1665.1	1670.0
42.5°	1360.1	1367.5	1357.6	1370.0	1350.2	1377.4	1367.5	1360.1
45°	1020.8	1010.9	1008.4	1010.9	1003.5	1005.9	1013.4	1008.4
47.5°	696.0	696.0	691.1	683.8	693.6	696.0	686.2	686.2
50°	467.2	467.2	462.4	459.9	464.9	462.4	457.5	464.9
52.5°	297.6	287.8	287.8	292.6	287.8	282.9	290.2	285.2
55°	162.4	157.4	157.4	162.4	157.4	157.4	155.0	159.9
57.5°	78.8	81.1	78.8	78.8	78.8	78.8	76.2	78.8
60°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
62.5°	14.8	14.8	12.2	12.2	12.2	12.2	12.2	12.2
65°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	7.4	7.4	7.4	7.4	7.4	9.9	7.4	7.4
70°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	7.4	7.4	9.9	9.9	9.9	9.9	9.9	9.9
75°	4.9	4.9	4.9	2.5	2.5	2.5	2.5	2.5
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)