

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: P252185

Luminaire Tested: **LE_6B40D010 EC6B30509024 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252185
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_6B40D010 EC6B30509024 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4803.7 lumens
Efficiency: N/A
Efficacy: 111.7 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

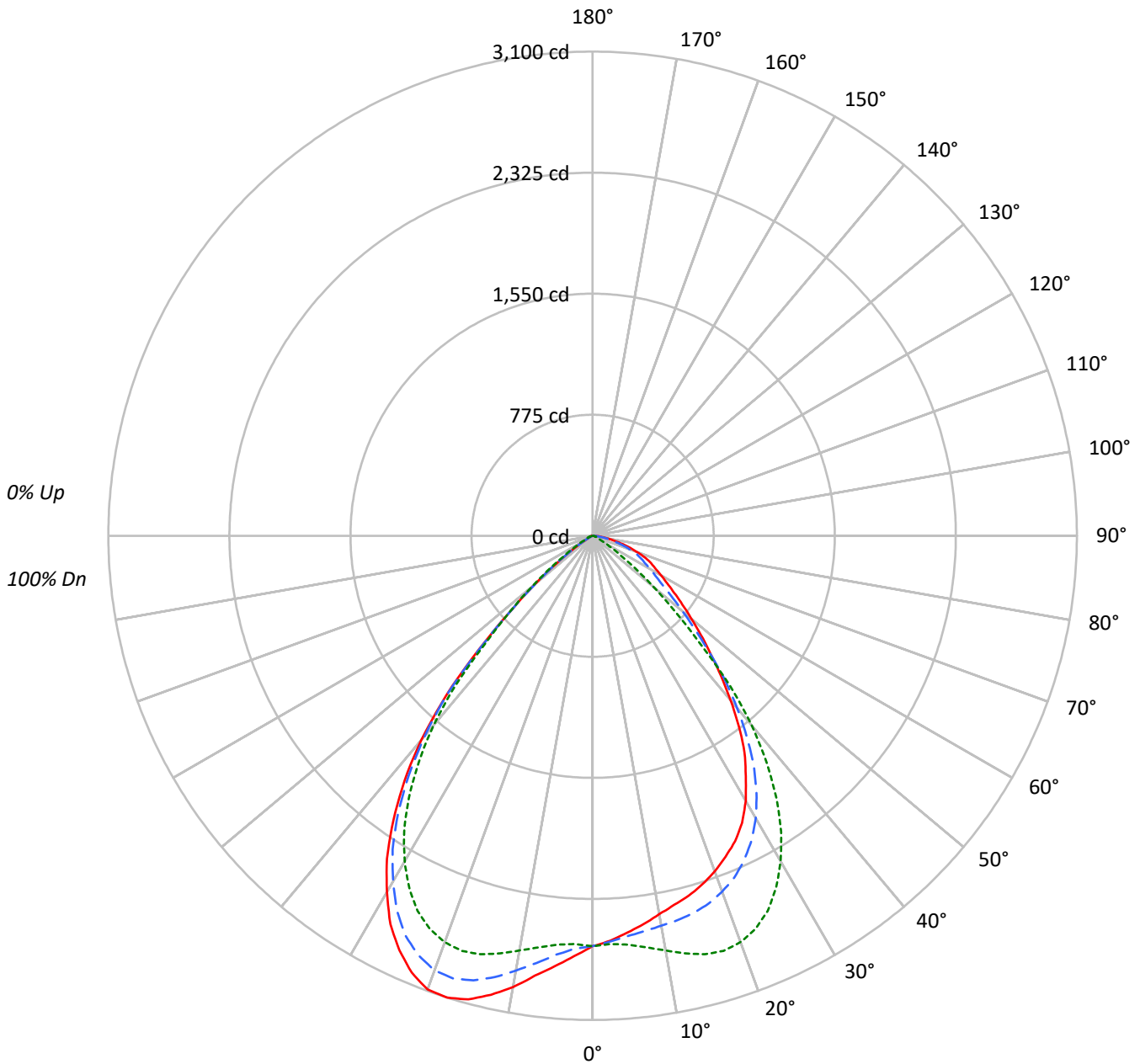
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	171452	171452	171452
5°	167006	172107	181158
10°	162955	178595	194402
15°	161047	187348	207543
20°	158739	192231	214559
25°	155358	190804	210700
30°	147638	181320	198353
35°	135068	163477	177089
40°	116830	135022	145292
45°	98520	88555	95041
50°	83643	51256	48201
55°	72580	24580	18563
60°	65567	11469	4580
65°	63601	6607	1544
70°	57034	5265	1431
75°	46860	3806	630
80°	34941	1879	0
85°	30092	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.8	5.3
10°-20°	773.6	16.1
20°-30°	1182.0	24.6
30°-40°	1236.3	25.7
40°-50°	802.0	16.7
50°-60°	318.4	6.6
60°-70°	151.0	3.1
70°-80°	71.8	1.5
80°-90°	14.6	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°	2209.5	46.0
0°-40°	3445.8	71.7
0°-60°	4566.2	95.1
0°-90°	4803.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4803.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2628	2628	2628	2628	2628	
5°	2550	2573	2628	2693	2766	241
15°	2384	2500	2774	2947	3073	672
25°	2158	2294	2651	2829	2927	988
35°	1696	1799	2053	2173	2224	1049
45°	1068	1058	960	1018	1030	831
55°	638	543	216	168	163	578
65°	412	342	43	10	10	402
75°	186	151	15	5	2	201
85°	40	25	0	0	0	47
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°	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0
2.5°	2595.4	2600.4	2572.8	2565.2	2585.4	2592.9	2595.4	2587.9	2590.4	2600.4	2600.4
5°	2550.1	2555.1	2530.0	2522.5	2542.6	2547.6	2555.1	2552.6	2560.2	2575.2	2572.8
7.5°	2507.4	2515.0	2487.4	2477.2	2502.4	2515.0	2520.0	2520.0	2530.0	2550.1	2552.6
10°	2459.8	2469.8	2444.6	2439.6	2467.2	2479.8	2482.2	2487.4	2502.4	2530.0	2535.1
12.5°	2419.5	2429.5	2412.0	2404.4	2434.6	2447.1	2452.1	2462.2	2479.8	2515.0	2520.0
15°	2384.4	2391.9	2371.8	2366.8	2396.9	2412.0	2414.5	2429.5	2452.1	2492.4	2499.9
17.5°	2339.1	2344.1	2329.0	2324.0	2354.1	2369.2	2371.8	2389.4	2417.0	2457.1	2469.8
20°	2286.4	2291.4	2276.2	2271.2	2301.4	2319.0	2321.5	2336.6	2369.2	2412.0	2424.5
22.5°	2223.5	2233.6	2216.0	2211.0	2241.1	2256.1	2263.8	2276.2	2309.0	2351.6	2369.2
25°	2158.2	2158.2	2145.6	2143.1	2170.8	2188.4	2185.9	2203.4	2236.1	2278.8	2293.9
27.5°	2072.8	2070.2	2057.8	2055.2	2085.4	2100.4	2095.4	2113.0	2143.1	2185.9	2200.9
30°	1959.8	1964.8	1947.1	1942.1	1967.2	1992.4	1989.9	2007.5	2037.6	2077.8	2087.9
32.5°	1824.0	1829.1	1826.5	1819.0	1841.6	1854.2	1861.8	1874.2	1899.4	1942.1	1952.1
35°	1695.9	1688.4	1678.4	1678.4	1700.9	1721.0	1713.5	1728.6	1753.8	1796.4	1798.9
37.5°	1537.6	1535.1	1530.1	1525.0	1550.1	1555.2	1557.8	1567.8	1590.4	1625.5	1620.5
40°	1371.8	1374.4	1371.8	1361.8	1376.9	1396.9	1394.4	1399.5	1419.5	1444.6	1437.1
42.5°	1216.0	1216.0	1216.0	1206.0	1223.6	1233.6	1238.6	1236.1	1241.1	1263.8	1253.8
45°	1067.8	1070.2	1067.8	1065.2	1067.8	1072.9	1067.8	1065.2	1065.2	1072.9	1057.8
47.5°	939.6	939.6	932.1	924.6	932.1	934.6	927.1	919.5	917.0	914.5	889.4
50°	824.1	821.6	819.0	806.5	814.0	816.5	806.5	801.5	791.4	778.9	748.8
52.5°	723.6	721.1	718.6	706.0	711.0	713.5	703.5	693.5	680.9	670.9	633.1
55°	638.1	635.6	635.6	628.1	623.1	628.1	618.1	610.5	593.0	580.4	542.8
57.5°	565.2	565.2	560.2	552.8	555.2	555.2	545.2	535.1	520.1	505.0	474.9
60°	502.5	502.5	502.5	495.0	495.0	495.0	489.9	479.9	467.4	452.2	422.1
62.5°	452.2	452.2	449.8	442.2	444.8	444.8	439.6	429.6	417.1	407.0	376.9
65°	412.0	412.0	412.0	404.5	404.5	407.0	402.0	392.0	381.9	369.4	341.8
67.5°	361.8	359.2	359.2	354.2	356.8	359.2	354.2	346.8	334.1	326.6	301.5
70°	299.0	301.5	304.0	296.5	299.0	299.0	296.5	288.9	281.4	273.9	251.2
72.5°	243.8	243.8	241.2	238.6	238.6	241.2	236.1	228.6	223.6	218.6	201.0
75°	185.9	183.4	185.9	180.9	180.9	180.9	175.9	173.4	170.9	163.2	150.8
77.5°	135.6	133.1	133.1	128.1	130.6	130.6	128.1	123.1	118.1	115.6	105.5
80°	93.0	93.0	93.0	90.5	90.5	87.9	87.9	85.4	80.4	77.9	72.9
82.5°	62.8	62.8	62.8	60.2	60.2	60.2	57.8	55.2	52.8	50.2	45.2
85°	40.2	40.2	40.2	37.6	37.6	37.6	35.1	35.1	32.6	30.1	25.1
87.5°	22.6	22.6	22.6	20.1	20.1	20.1	20.1	20.1	17.6	15.1	12.5
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°	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0
2.5°	2618.0	2582.8	2605.4	2605.4	2597.9	2618.0	2630.5	2640.6	2638.1	2615.5	2613.0
5°	2597.9	2567.8	2592.9	2595.4	2587.9	2615.5	2633.0	2645.6	2648.1	2628.0	2630.5
7.5°	2582.8	2557.6	2590.4	2600.4	2597.9	2623.0	2643.1	2663.2	2673.2	2658.1	2660.8
10°	2575.2	2555.1	2590.4	2605.4	2607.9	2635.6	2665.8	2693.4	2705.9	2695.9	2703.4
12.5°	2565.2	2552.6	2592.9	2615.5	2625.5	2653.1	2690.9	2723.5	2743.6	2738.6	2753.6
15°	2555.1	2545.1	2592.9	2625.5	2638.1	2663.2	2705.9	2753.6	2776.2	2773.8	2793.9
17.5°	2530.0	2527.5	2577.8	2613.0	2630.5	2660.8	2700.9	2758.6	2781.2	2786.4	2811.5
20°	2489.9	2489.9	2545.1	2582.8	2602.9	2630.5	2680.8	2736.1	2763.8	2768.8	2796.4
22.5°	2434.6	2439.6	2492.4	2530.0	2560.2	2580.2	2633.0	2690.9	2716.0	2723.5	2753.6
25°	2361.8	2366.8	2417.0	2454.6	2487.4	2510.0	2560.2	2613.0	2643.1	2650.6	2673.2
27.5°	2266.2	2276.2	2324.0	2361.8	2389.4	2404.4	2457.1	2512.5	2535.1	2542.6	2565.2
30°	2155.8	2158.2	2205.9	2238.6	2266.2	2278.8	2324.0	2381.8	2399.4	2406.9	2439.6
32.5°	2020.0	2017.5	2062.8	2092.9	2115.5	2130.6	2178.2	2216.0	2233.6	2246.1	2263.8
35°	1856.8	1854.2	1886.9	1922.0	1939.6	1944.6	1992.4	2032.6	2042.6	2052.6	2075.2
37.5°	1673.2	1673.2	1700.9	1718.5	1738.6	1746.1	1768.8	1814.0	1831.6	1829.1	1846.6
40°	1479.9	1469.8	1489.9	1507.5	1512.5	1515.0	1537.6	1572.8	1585.4	1585.4	1597.9
42.5°	1276.4	1261.2	1263.8	1273.9	1278.9	1261.2	1276.4	1299.0	1291.4	1301.5	1304.0
45°	1060.2	1037.6	1027.6	1005.0	1010.0	992.4	982.4	987.4	984.9	959.8	964.8
47.5°	884.4	844.1	826.6	793.9	786.4	766.2	753.8	731.1	711.0	711.0	698.5
50°	736.1	696.0	660.8	623.1	610.5	593.0	565.2	535.1	520.1	505.0	492.5
52.5°	618.1	575.4	532.6	492.5	474.9	452.2	414.5	384.4	356.8	341.8	326.6
55°	522.6	474.9	429.6	386.9	364.2	341.8	304.0	268.9	236.1	216.1	203.5
57.5°	449.8	404.5	356.8	311.5	291.5	266.4	226.1	188.4	158.2	135.6	123.1
60°	397.0	351.8	309.0	261.2	241.2	216.1	173.4	138.1	108.0	87.9	72.9
62.5°	351.8	311.5	266.4	223.6	203.5	178.4	138.1	103.0	75.4	55.2	42.8
65°	319.1	278.9	241.2	198.5	180.9	155.8	118.1	85.4	60.2	42.8	30.1
67.5°	281.4	246.2	208.5	173.4	155.8	135.6	100.5	72.9	50.2	35.1	25.1
70°	236.1	208.5	175.9	143.2	130.6	113.0	82.9	60.2	40.2	27.6	20.1
72.5°	188.4	165.9	140.8	115.6	105.5	87.9	67.9	47.8	30.1	20.1	15.1
75°	143.2	125.6	105.5	87.9	77.9	67.9	50.2	35.1	22.6	15.1	10.0
77.5°	98.0	90.5	75.4	60.2	55.2	47.8	32.6	22.6	15.1	10.0	5.0
80°	67.9	60.2	50.2	40.2	35.1	30.1	20.1	15.1	7.5	5.0	2.5
82.5°	42.8	35.1	30.1	25.1	22.6	17.6	12.5	7.5	5.0	2.5	2.5
85°	22.6	20.1	17.6	12.5	12.5	10.0	7.5	5.0	2.5	0.0	0.0
87.5°	12.5	10.0	7.5	5.0	5.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0
2.5°	2643.1	2643.1	2640.6	2670.8	2635.6	2670.8	2653.1	2670.8	2645.6	2643.1	2645.6
5°	2663.2	2670.8	2673.2	2700.9	2668.2	2711.0	2695.9	2711.0	2693.4	2698.4	2705.9
7.5°	2703.4	2716.0	2713.5	2748.6	2716.0	2763.8	2753.6	2776.2	2758.6	2763.8	2773.8
10°	2748.6	2763.8	2766.2	2801.4	2771.2	2829.0	2816.5	2841.6	2826.5	2834.0	2846.6
12.5°	2801.4	2819.0	2821.5	2861.8	2829.0	2889.4	2881.8	2906.9	2894.4	2901.9	2917.0
15°	2841.6	2866.8	2871.8	2912.0	2876.8	2939.6	2934.5	2967.2	2947.1	2959.6	2972.2
17.5°	2861.8	2884.2	2894.4	2932.0	2901.9	2964.8	2959.6	2987.2	2972.2	2984.8	2999.9
20°	2849.1	2876.8	2884.2	2922.0	2891.9	2954.6	2947.1	2974.8	2959.6	2969.8	2984.8
22.5°	2803.9	2831.5	2841.6	2876.8	2849.1	2906.9	2904.4	2929.5	2909.4	2922.0	2934.5
25°	2723.5	2753.6	2758.6	2791.4	2761.2	2821.5	2816.5	2844.1	2829.0	2836.6	2854.1
27.5°	2607.9	2643.1	2650.6	2678.2	2655.6	2705.9	2705.9	2728.5	2711.0	2711.0	2728.5
30°	2469.8	2504.9	2510.0	2532.5	2512.5	2557.6	2560.2	2582.8	2555.1	2570.2	2572.8
32.5°	2301.4	2324.0	2339.1	2359.2	2329.0	2386.9	2379.2	2396.9	2381.8	2381.8	2394.4
35°	2097.9	2125.5	2133.1	2158.2	2133.1	2178.2	2178.2	2188.4	2173.2	2173.2	2193.4
37.5°	1876.8	1896.9	1899.4	1924.5	1904.5	1942.1	1939.6	1947.1	1932.1	1942.1	1942.1
40°	1618.0	1633.1	1638.1	1650.6	1648.1	1675.8	1673.2	1678.4	1670.8	1673.2	1678.4
42.5°	1316.5	1336.6	1346.6	1356.8	1341.6	1379.4	1371.8	1379.4	1376.9	1379.4	1386.9
45°	969.8	984.9	992.4	994.9	989.9	1012.5	1030.1	1015.0	1017.5	1012.5	1022.6
47.5°	701.0	703.5	698.5	713.5	701.0	711.0	716.0	718.6	703.5	701.0	711.0
50°	479.9	492.5	474.9	482.4	479.9	489.9	484.9	487.4	472.4	479.9	474.9
52.5°	319.1	316.6	311.5	314.0	309.0	309.0	309.0	314.0	304.0	299.0	294.0
55°	193.5	188.4	178.4	175.9	175.9	178.4	173.4	168.4	168.4	165.9	165.9
57.5°	113.0	105.5	100.5	98.0	93.0	90.5	87.9	87.9	82.9	82.9	82.9
60°	62.8	55.2	50.2	45.2	45.2	42.8	40.2	37.6	37.6	37.6	35.1
62.5°	32.6	27.6	22.6	20.1	20.1	17.6	15.1	15.1	15.1	15.1	12.5
65°	22.6	17.6	15.1	12.5	12.5	10.0	10.0	10.0	10.0	10.0	10.0
67.5°	17.6	15.1	12.5	10.0	10.0	10.0	7.5	7.5	7.5	7.5	7.5
70°	15.1	10.0	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	10.0	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
75°	7.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
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: P252185

CATALOG NUMBER: LE_6B40D010 EC6B30509024 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0	2628.0
2.5°	2668.2	2665.8	2668.2	2673.2	2663.2	2693.4	2678.2	2693.4
5°	2726.0	2728.5	2731.0	2738.6	2726.0	2763.8	2743.6	2766.2
7.5°	2801.4	2803.9	2806.4	2814.0	2806.4	2844.1	2821.5	2841.6
10°	2879.2	2884.2	2884.2	2896.9	2889.4	2924.5	2909.4	2934.5
12.5°	2952.1	2957.1	2962.1	2969.8	2964.8	3002.4	2989.9	3009.9
15°	3009.9	3020.0	3022.5	3032.5	3027.5	3067.8	3052.6	3072.8
17.5°	3037.5	3047.6	3047.6	3060.1	3055.1	3097.9	3077.8	3100.4
20°	3022.5	3030.0	3032.5	3045.1	3040.1	3082.8	3062.6	3090.4
22.5°	2974.8	2977.2	2979.8	2992.4	2989.9	3027.5	3009.9	3027.5
25°	2886.9	2894.4	2891.9	2901.9	2901.9	2932.0	2912.0	2927.0
27.5°	2761.2	2768.8	2768.8	2781.2	2771.2	2801.4	2781.2	2803.9
30°	2607.9	2615.5	2610.5	2620.5	2610.5	2640.6	2625.5	2633.0
32.5°	2424.5	2424.5	2427.0	2429.5	2424.5	2452.1	2437.1	2452.1
35°	2205.9	2211.0	2213.5	2216.0	2211.0	2231.0	2213.5	2223.5
37.5°	1959.8	1972.2	1969.8	1972.2	1964.8	1989.9	1974.8	1979.9
40°	1695.9	1695.9	1693.4	1698.4	1690.9	1711.0	1700.9	1706.0
42.5°	1389.4	1396.9	1386.9	1399.5	1379.4	1407.0	1396.9	1389.4
45°	1042.6	1032.6	1030.1	1032.6	1025.1	1027.6	1035.1	1030.1
47.5°	711.0	711.0	706.0	698.5	708.5	711.0	701.0	701.0
50°	477.4	477.4	472.4	469.9	474.9	472.4	467.4	474.9
52.5°	304.0	294.0	294.0	299.0	294.0	288.9	296.5	291.5
55°	165.9	160.8	160.8	165.9	160.8	160.8	158.2	163.2
57.5°	80.4	82.9	80.4	80.4	80.4	80.4	77.9	80.4
60°	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1
62.5°	15.1	15.1	12.5	12.5	12.5	12.5	12.5	12.5
65°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
67.5°	7.5	7.5	7.5	7.5	7.5	10.0	7.5	7.5
70°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	7.5	7.5	10.0	10.0	10.0	10.0	10.0	10.0
75°	5.0	5.0	5.0	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)