

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P859389

Luminaire Tested: **LX4C65D010 EX4C659040 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859389
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C65D010 EX4C659040 4LBLWWH
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

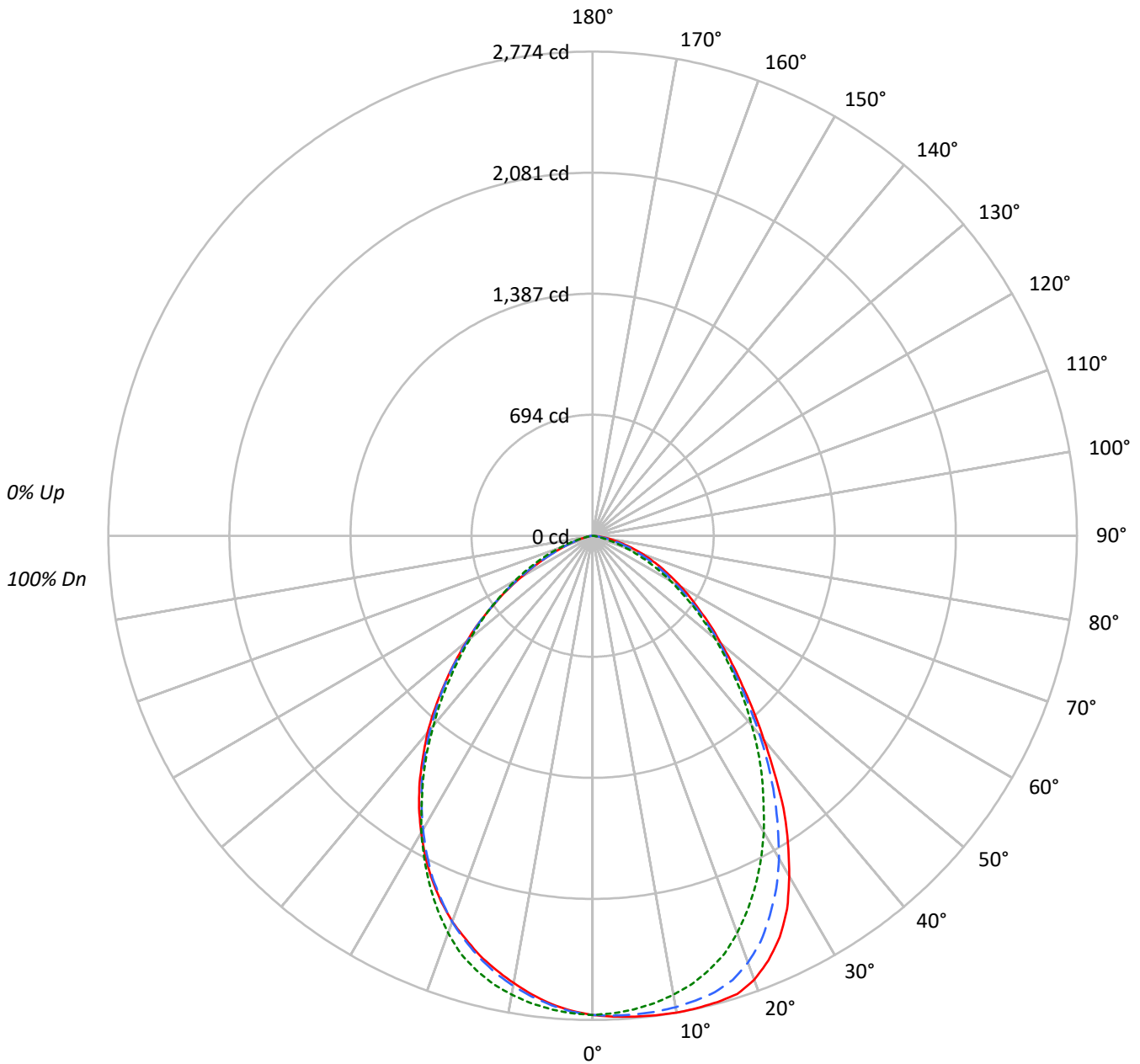
Lumens per Lamp: N/A
Luminaire Lumens: 5174.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72.4
Input Voltage (V):
Input Current (A_{in}): 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: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

Luminous Intensity Polar Plot





TEST NUMBER: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	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	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60			
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39			
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	47	41	37	35			
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	337294	337294	337294
5°	341049	335845	332195
10°	346053	333004	324571
15°	351736	327698	316824
20°	353960	316556	307443
25°	343819	299438	294857
30°	319509	278313	278469
35°	286005	253700	259084
40°	244875	227426	235733
45°	210800	200515	208038
50°	183252	174575	179811
55°	161263	150168	148818
60°	143468	125311	115458
65°	125842	100377	83488
70°	108083	70942	56502
75°	87719	41106	33084
80°	62754	17899	16414
85°	23822	7471	7471



TEST NUMBER: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.7	5.0
10°-20°	732.4	14.2
20°-30°	1045.9	20.2
30°-40°	1094.1	21.1
40°-50°	916.7	17.7
50°-60°	641.6	12.4
60°-70°	349.4	6.8
70°-80°	121.2	2.3
80°-90°	14.0	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°	2037.0	39.4
0°-40°	3131.1	60.5
0°-60°	4689.5	90.6
0°-90°	5174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2746	2746	2746	2746	2746	
5°	2766	2753	2723	2700	2694	264
15°	2766	2707	2576	2503	2491	781
25°	2536	2401	2209	2166	2175	1158
35°	1907	1813	1692	1704	1728	1182
45°	1213	1186	1154	1192	1197	943
55°	753	728	701	701	695	680
65°	433	395	345	290	287	431
75°	185	150	87	70	70	199
85°	17	10	5	5	5	30
90°	0	0	0	0	0	



TEST NUMBER: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5
2.5°	2758.1	2755.0	2756.0	2756.0	2756.0	2755.0	2756.0	2755.0	2755.0	2753.9	2751.8
5°	2765.5	2763.4	2763.4	2763.4	2762.3	2761.3	2761.3	2760.2	2758.1	2757.1	2752.8
7.5°	2770.8	2768.7	2768.7	2767.6	2766.6	2765.5	2764.5	2761.3	2758.1	2756.0	2750.7
10°	2774.0	2770.8	2770.8	2768.7	2766.6	2765.5	2763.4	2759.2	2755.0	2749.7	2742.3
12.5°	2771.8	2768.7	2767.6	2765.5	2761.3	2759.2	2757.1	2751.8	2744.4	2737.0	2727.5
15°	2765.5	2763.4	2761.3	2758.1	2752.8	2749.7	2747.6	2739.1	2729.6	2719.1	2707.4
17.5°	2752.8	2749.7	2745.5	2741.2	2733.8	2730.7	2725.4	2714.8	2701.1	2686.3	2668.4
20°	2707.4	2705.3	2701.1	2693.7	2682.1	2677.9	2670.5	2656.8	2638.8	2620.8	2601.8
22.5°	2632.5	2629.3	2623.0	2616.6	2606.1	2598.7	2592.3	2573.3	2553.3	2534.3	2516.3
25°	2536.4	2533.2	2524.8	2516.3	2505.8	2493.1	2486.7	2472.0	2451.9	2427.6	2401.2
27.5°	2412.8	2402.3	2399.1	2389.6	2373.8	2369.5	2360.0	2341.0	2322.0	2300.9	2278.7
30°	2252.3	2252.3	2246.0	2241.8	2227.0	2222.8	2212.2	2192.1	2181.6	2152.0	2135.1
32.5°	2082.3	2080.2	2074.9	2071.8	2063.3	2055.9	2045.4	2034.8	2011.6	1996.8	1973.6
35°	1907.0	1894.4	1896.5	1890.1	1884.9	1876.4	1875.4	1863.7	1842.6	1834.2	1813.1
37.5°	1707.5	1702.2	1709.6	1700.1	1694.8	1695.8	1687.4	1680.0	1671.6	1656.8	1652.6
40°	1526.9	1531.1	1530.1	1521.6	1525.8	1520.6	1512.1	1504.7	1500.5	1491.0	1487.8
42.5°	1365.3	1359.0	1356.9	1356.9	1357.9	1357.9	1353.7	1348.4	1348.4	1338.9	1329.4
45°	1213.3	1213.3	1211.2	1217.5	1208.0	1208.0	1204.8	1203.8	1199.6	1197.4	1185.8
47.5°	1082.3	1081.3	1080.2	1079.2	1078.1	1078.1	1071.8	1066.5	1065.4	1059.1	1052.8
50°	958.8	965.1	963.0	957.7	955.6	956.7	952.5	949.3	948.2	937.7	938.7
52.5°	855.3	854.3	856.4	853.2	847.9	849.0	844.8	840.5	836.3	831.0	826.8
55°	752.9	758.2	756.1	752.9	751.8	749.7	746.6	741.3	740.2	728.6	727.5
57.5°	667.4	666.3	664.2	658.9	657.9	654.7	654.7	650.5	644.1	637.8	632.5
60°	583.9	583.9	580.8	579.7	575.5	574.4	573.4	569.2	561.8	556.5	548.0
62.5°	503.7	505.8	503.7	500.5	497.3	493.1	491.0	487.8	481.5	476.2	468.8
65°	432.9	431.9	430.8	426.6	425.5	421.3	420.3	413.9	407.6	403.4	394.9
67.5°	365.4	362.2	362.2	360.1	358.0	354.8	352.7	346.3	339.0	334.7	326.3
70°	300.9	298.8	298.8	298.8	293.6	290.4	289.3	286.2	275.6	271.4	262.9
72.5°	241.8	240.8	239.7	236.5	233.4	233.4	229.1	222.8	217.5	212.2	205.9
75°	184.8	186.9	184.8	180.6	179.5	177.4	174.2	169.0	163.7	157.3	149.9
77.5°	135.2	133.0	130.9	130.9	128.8	124.6	123.5	119.3	113.0	108.8	101.4
80°	88.7	87.6	85.5	83.4	82.4	81.3	80.3	76.0	69.7	66.5	60.2
82.5°	48.6	47.5	47.5	46.5	43.3	43.3	42.2	38.0	34.8	32.7	29.6
85°	16.9	16.9	16.9	15.8	15.8	15.8	14.8	13.7	12.7	11.6	9.5
87.5°	2.1	1.1	2.1	1.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1
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: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5
2.5°	2749.7	2747.6	2746.5	2745.5	2744.4	2743.3	2742.3	2740.2	2739.1	2738.1	2735.9
5°	2749.7	2745.5	2743.3	2740.2	2738.1	2735.9	2732.8	2729.6	2726.4	2723.3	2720.1
7.5°	2745.5	2739.1	2734.9	2728.6	2726.4	2723.3	2716.9	2712.7	2707.4	2701.1	2693.7
10°	2734.9	2727.5	2719.1	2710.6	2707.4	2702.2	2693.7	2686.3	2677.9	2669.4	2662.0
12.5°	2718.0	2706.4	2695.8	2684.2	2677.9	2672.6	2661.0	2650.4	2639.9	2630.4	2617.7
15°	2692.7	2678.9	2665.2	2649.4	2642.0	2635.6	2618.7	2606.1	2589.2	2576.5	2563.8
17.5°	2651.5	2630.4	2613.5	2593.4	2582.8	2575.4	2560.7	2540.6	2524.8	2511.0	2496.2
20°	2580.7	2560.7	2537.4	2515.3	2503.6	2494.1	2473.0	2451.9	2436.1	2421.3	2405.4
22.5°	2487.8	2462.5	2445.6	2418.1	2408.6	2397.0	2371.6	2352.6	2334.7	2319.9	2305.1
25°	2374.8	2352.6	2329.4	2304.1	2292.5	2278.7	2257.6	2237.5	2225.9	2209.0	2191.1
27.5°	2244.9	2227.0	2198.5	2176.3	2164.7	2154.1	2134.1	2116.1	2099.2	2087.6	2070.7
30°	2107.7	2086.5	2061.2	2038.0	2031.6	2019.0	2001.0	1987.3	1969.3	1961.9	1954.5
32.5°	1956.7	1932.4	1913.4	1898.6	1885.9	1875.4	1865.9	1843.7	1840.5	1821.5	1819.4
35°	1791.9	1781.4	1763.4	1750.8	1740.2	1732.8	1717.0	1706.4	1694.8	1691.6	1684.2
37.5°	1636.7	1624.0	1607.1	1595.5	1588.1	1587.1	1575.5	1569.1	1560.7	1556.5	1548.0
40°	1474.1	1468.8	1454.0	1451.9	1440.3	1439.2	1432.9	1425.5	1418.1	1418.1	1419.2
42.5°	1324.2	1317.8	1311.5	1304.1	1297.8	1297.8	1294.6	1292.5	1290.4	1287.2	1292.5
45°	1183.7	1175.3	1171.0	1163.6	1166.8	1160.5	1158.4	1158.4	1155.2	1154.1	1161.5
47.5°	1052.8	1043.3	1039.0	1036.9	1036.9	1038.0	1028.5	1031.7	1030.6	1032.7	1035.9
50°	933.5	925.0	918.7	918.7	919.7	915.5	911.3	914.4	911.3	913.4	920.8
52.5°	822.6	814.1	811.0	811.0	804.6	803.6	805.7	801.5	802.5	803.6	807.8
55°	720.2	714.9	709.6	704.3	705.4	703.3	699.0	698.0	700.1	701.1	706.4
57.5°	628.3	620.9	613.5	611.4	609.3	609.3	604.0	602.9	605.1	599.8	599.8
60°	540.6	536.4	526.9	523.7	523.7	518.5	514.2	516.4	511.1	510.0	511.1
62.5°	459.3	456.2	449.8	443.5	441.4	439.3	434.0	431.9	429.8	425.5	419.2
65°	388.6	381.2	373.8	369.6	366.4	361.1	358.0	353.7	347.4	345.3	339.0
67.5°	317.8	310.4	303.1	299.9	296.7	293.6	288.3	283.0	275.6	267.2	259.8
70°	255.5	246.0	241.8	233.4	231.3	227.0	219.6	214.4	207.0	197.5	190.1
72.5°	195.3	189.0	182.7	175.3	170.0	166.8	160.5	152.1	143.6	138.3	130.9
75°	140.4	137.3	128.8	120.4	118.3	114.0	106.7	101.4	95.0	86.6	80.3
77.5°	95.0	88.7	83.4	76.0	73.9	69.7	65.5	60.2	56.0	50.7	46.5
80°	56.0	50.7	47.5	42.2	40.1	38.0	34.8	30.6	27.5	25.3	24.3
82.5°	27.5	23.2	22.2	19.0	18.0	16.9	14.8	13.7	11.6	11.6	11.6
85°	9.5	7.4	7.4	6.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	1.1
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: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5
2.5°	2734.9	2733.8	2732.8	2731.7	2731.7	2730.7	2730.7	2729.6	2729.6	2728.6	2728.6
5°	2715.9	2712.7	2710.6	2708.5	2708.5	2705.3	2703.2	2701.1	2700.0	2700.0	2697.9
7.5°	2689.5	2685.3	2681.0	2677.9	2676.8	2671.5	2667.3	2667.3	2663.1	2661.0	2658.9
10°	2654.6	2647.2	2640.9	2637.7	2633.5	2630.4	2625.1	2621.9	2618.7	2613.5	2612.4
12.5°	2607.1	2601.8	2592.3	2588.1	2586.0	2579.7	2571.2	2567.0	2565.9	2561.7	2558.5
15°	2553.3	2541.7	2533.2	2527.9	2527.9	2517.4	2513.1	2506.8	2502.6	2499.4	2498.4
17.5°	2483.6	2472.0	2463.5	2456.1	2454.0	2445.6	2439.2	2437.1	2431.8	2433.9	2428.7
20°	2393.8	2384.3	2378.0	2368.5	2368.5	2363.2	2361.1	2355.8	2353.7	2351.6	2353.7
22.5°	2297.7	2286.1	2275.6	2274.5	2274.5	2267.1	2266.1	2265.0	2260.8	2263.9	2262.9
25°	2184.7	2176.3	2170.0	2168.9	2168.9	2164.7	2160.5	2162.6	2165.7	2164.7	2167.8
27.5°	2067.5	2059.1	2057.0	2055.9	2053.8	2052.8	2054.9	2054.9	2058.0	2062.3	2066.5
30°	1940.8	1938.7	1935.5	1934.5	1932.4	1937.7	1939.8	1942.9	1941.9	1948.2	1952.4
32.5°	1814.1	1809.9	1808.8	1810.9	1814.1	1813.1	1819.4	1821.5	1823.6	1831.0	1834.2
35°	1686.3	1685.3	1683.2	1683.2	1684.2	1692.7	1692.7	1700.1	1704.3	1706.4	1714.9
37.5°	1549.1	1553.3	1555.4	1558.6	1559.6	1562.8	1564.9	1572.3	1576.5	1580.7	1585.0
40°	1423.4	1421.3	1430.8	1424.5	1426.6	1436.1	1440.3	1439.2	1445.6	1451.9	1456.1
42.5°	1289.3	1292.5	1294.6	1296.7	1302.0	1303.0	1308.3	1315.7	1317.8	1325.2	1327.3
45°	1159.4	1160.5	1164.7	1168.9	1172.1	1180.5	1182.7	1185.8	1192.2	1192.2	1195.3
47.5°	1036.9	1041.2	1041.2	1047.5	1052.8	1051.7	1059.1	1061.2	1060.2	1065.4	1067.6
50°	919.7	926.1	925.0	929.2	931.3	932.4	938.7	940.8	936.6	941.9	943.0
52.5°	807.8	811.0	815.2	816.2	814.1	819.4	817.3	821.5	820.5	824.7	820.5
55°	705.4	704.3	704.3	706.4	704.3	706.4	708.5	704.3	701.1	705.4	704.3
57.5°	602.9	602.9	600.8	604.0	600.8	597.7	596.6	593.4	590.3	590.3	589.2
60°	506.9	504.7	500.5	499.5	499.5	494.2	492.1	487.8	487.8	483.6	479.4
62.5°	417.1	411.8	408.6	408.6	406.5	401.3	391.8	385.4	383.3	377.0	375.9
65°	332.6	327.3	324.2	317.8	312.6	310.4	300.9	293.6	290.4	284.0	285.1
67.5°	255.5	247.1	237.6	233.4	230.2	222.8	219.6	214.4	211.2	211.2	211.2
70°	183.7	176.3	166.8	163.7	161.6	155.2	152.1	151.0	154.2	153.1	154.2
72.5°	123.5	116.2	111.9	109.8	107.7	104.5	106.7	107.7	105.6	106.7	107.7
75°	75.0	72.9	69.7	68.6	68.6	69.7	68.6	68.6	69.7	69.7	70.7
77.5°	43.3	41.2	41.2	40.1	42.2	41.2	41.2	41.2	42.2	42.2	42.2
80°	23.2	23.2	23.2	23.2	24.3	23.2	24.3	24.3	24.3	24.3	24.3
82.5°	11.6	11.6	11.6	12.7	12.7	12.7	12.7	12.7	12.7	12.7	11.6
85°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
87.5°	1.1	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1
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: P859389

CATALOG NUMBER: LX4C65D010 EX4C659040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5	2745.5
2.5°	2726.4	2726.4	2726.4	2724.3	2725.4	2725.4	2724.3	2724.3
5°	2696.9	2695.8	2693.7	2693.7	2691.6	2693.7	2692.7	2693.7
7.5°	2656.8	2656.8	2653.6	2653.6	2652.5	2651.5	2650.4	2651.5
10°	2609.2	2609.2	2607.1	2606.1	2607.1	2602.9	2602.9	2601.8
12.5°	2556.4	2554.3	2552.2	2553.3	2552.2	2549.0	2548.0	2549.0
15°	2495.2	2492.0	2493.1	2489.9	2489.9	2488.9	2491.0	2491.0
17.5°	2427.6	2425.5	2423.4	2424.4	2422.3	2423.4	2422.3	2421.3
20°	2352.6	2351.6	2351.6	2347.4	2348.4	2347.4	2348.4	2351.6
22.5°	2266.1	2265.0	2266.1	2262.9	2265.0	2265.0	2268.2	2268.2
25°	2171.0	2170.0	2172.1	2173.1	2174.2	2177.4	2174.2	2175.2
27.5°	2065.4	2068.6	2071.8	2072.8	2077.0	2073.9	2071.8	2074.9
30°	1958.8	1958.8	1957.7	1961.9	1965.1	1968.3	1963.0	1963.0
32.5°	1836.3	1841.6	1841.6	1842.6	1845.8	1845.8	1845.8	1850.0
35°	1719.1	1722.2	1723.3	1719.1	1721.2	1720.1	1727.5	1727.5
37.5°	1588.1	1588.1	1589.2	1596.6	1596.6	1593.4	1595.5	1595.5
40°	1463.5	1464.6	1460.4	1462.5	1467.8	1465.6	1467.8	1469.9
42.5°	1327.3	1334.7	1330.5	1332.6	1331.5	1332.6	1333.7	1333.7
45°	1197.4	1199.6	1199.6	1200.6	1202.7	1204.8	1198.5	1197.4
47.5°	1070.7	1071.8	1074.9	1069.7	1076.0	1069.7	1076.0	1068.6
50°	943.0	947.2	944.0	946.1	943.0	943.0	941.9	940.8
52.5°	821.5	820.5	820.5	819.4	819.4	821.5	819.4	822.6
55°	700.1	701.1	699.0	698.0	696.9	700.1	696.9	694.8
57.5°	585.0	587.1	582.9	585.0	577.6	580.8	581.8	582.9
60°	478.3	475.2	475.2	471.0	471.0	474.1	469.9	469.9
62.5°	370.6	372.7	369.6	373.8	373.8	378.0	375.9	378.0
65°	284.0	285.1	286.2	286.2	286.2	292.5	290.4	287.2
67.5°	214.4	215.4	216.5	215.4	218.6	216.5	216.5	217.5
70°	155.2	156.3	157.3	157.3	156.3	157.3	157.3	157.3
72.5°	107.7	108.8	107.7	108.8	109.8	108.8	108.8	109.8
75°	70.7	70.7	69.7	69.7	69.7	69.7	70.7	69.7
77.5°	41.2	42.2	41.2	42.2	42.2	42.2	42.2	42.2
80°	24.3	24.3	24.3	23.2	24.3	24.3	24.3	23.2
82.5°	12.7	12.7	11.6	11.6	12.7	12.7	12.7	12.7
85°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)