

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: P859346

Luminaire Tested: **LX4C65D010 EX4C659030 4LBLWW***

Issue Date: 2/9/2022

Test Information

Test Method: LM-79-08
Report Number: P859346
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C65D010 EX4C659030 4LBLWW*
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

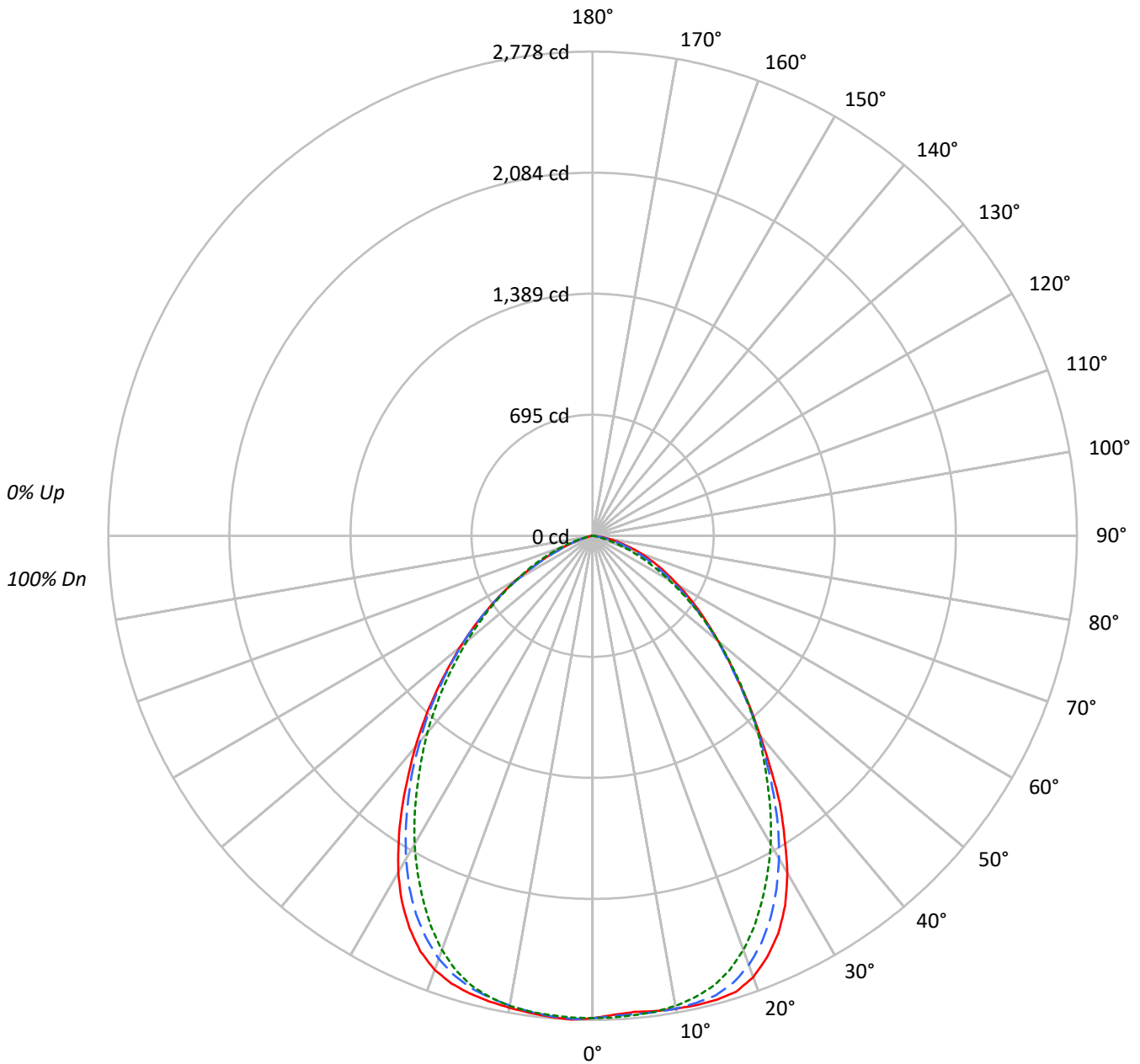
Lumens per Lamp: N/A
Luminaire Lumens: 5307.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	109	105	102	99	101	99	96	97	95	93	94	92	91	89								
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78								
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54								
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48								
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43								
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39								
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36								
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	340071	340071	340071
5°	338163	340469	341752
10°	343757	341687	342984
15°	350477	340175	345860
20°	352247	330636	346403
25°	341406	312248	336756
30°	316885	289761	316303
35°	280621	262849	285915
40°	239214	236728	253551
45°	205518	207864	220877
50°	179391	179792	189329
55°	158521	151838	156957
60°	138947	123861	123369
65°	122994	96104	85523
70°	104922	66093	50791
75°	84871	35505	23211
80°	58085	8844	5872
85°	17620	2960	2960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.1	5.0
10°-20°	761.6	14.4
20°-30°	1100.4	20.7
30°-40°	1137.6	21.4
40°-50°	940.0	17.7
50°-60°	648.7	12.2
60°-70°	339.6	6.4
70°-80°	106.9	2.0
80°-90°	9.1	0.2
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°	2125.1	40.0
0°-40°	3262.7	61.5
0°-60°	4851.4	91.4
0°-90°	5307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5307.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2768	2768	2768	2768	2768	
5°	2742	2756	2761	2766	2771	263
15°	2756	2730	2675	2687	2719	777
25°	2519	2417	2304	2396	2484	1150
35°	1871	1809	1753	1844	1906	1161
45°	1183	1178	1196	1252	1271	922
55°	740	717	709	729	733	665
65°	423	384	331	274	294	419
75°	179	140	75	51	49	192
85°	12	6	2	2	2	26
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°	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1
2.5°	2750.5	2751.5	2751.5	2753.6	2753.6	2753.6	2754.6	2754.6	2755.6	2756.7	2757.7
5°	2742.1	2742.1	2744.2	2745.3	2747.3	2748.4	2750.5	2751.5	2753.6	2754.6	2755.6
7.5°	2750.5	2750.5	2751.5	2752.5	2752.5	2753.6	2753.6	2754.6	2755.6	2756.7	2756.7
10°	2755.6	2755.6	2755.6	2755.6	2756.7	2756.7	2756.7	2755.6	2755.6	2755.6	2754.6
12.5°	2757.7	2757.7	2756.7	2755.6	2756.7	2755.6	2755.6	2752.5	2750.5	2748.4	2745.3
15°	2755.6	2755.6	2754.6	2753.6	2752.5	2750.5	2749.4	2744.2	2740.1	2733.8	2729.7
17.5°	2742.1	2740.1	2738.0	2735.9	2731.7	2728.6	2726.5	2717.2	2709.9	2699.5	2688.1
20°	2694.3	2692.2	2689.1	2683.9	2678.7	2674.6	2668.3	2654.8	2647.5	2632.0	2620.5
22.5°	2616.4	2614.3	2615.3	2606.0	2595.6	2589.3	2585.2	2573.7	2561.3	2541.5	2529.0
25°	2518.6	2512.4	2512.4	2497.9	2492.7	2488.5	2483.3	2469.8	2451.1	2433.4	2416.8
27.5°	2391.8	2383.5	2379.4	2377.3	2364.8	2355.5	2348.2	2337.8	2322.2	2306.6	2283.7
30°	2233.8	2232.8	2227.6	2218.2	2208.9	2204.7	2196.4	2178.7	2164.2	2152.8	2138.2
32.5°	2047.8	2046.7	2046.7	2046.7	2040.5	2039.5	2027.0	2017.6	2006.2	1988.5	1979.2
35°	1871.1	1870.0	1871.1	1855.5	1851.3	1848.2	1847.1	1840.9	1825.3	1817.0	1808.7
37.5°	1671.5	1674.6	1672.5	1668.4	1673.6	1664.2	1671.5	1658.0	1651.7	1649.6	1640.3
40°	1491.6	1500.0	1491.6	1492.7	1497.9	1488.5	1488.5	1486.4	1482.3	1480.2	1478.1
42.5°	1337.8	1327.4	1333.6	1328.4	1333.6	1330.5	1325.3	1328.4	1329.5	1325.3	1324.3
45°	1182.9	1185.0	1187.1	1184.0	1184.0	1180.8	1189.2	1184.0	1184.0	1185.0	1177.7
47.5°	1057.1	1054.0	1056.1	1054.0	1055.1	1053.0	1055.1	1056.1	1054.0	1054.0	1047.8
50°	938.6	936.6	943.8	937.6	937.6	936.6	937.6	935.5	932.4	932.4	934.5
52.5°	835.7	831.6	830.5	835.7	828.5	828.5	829.5	827.4	823.3	821.2	816.0
55°	740.1	739.1	740.1	735.9	733.9	733.9	728.7	726.6	725.6	720.4	717.2
57.5°	650.7	647.6	648.6	647.6	643.4	642.4	638.2	638.2	634.1	629.9	624.7
60°	565.5	565.5	568.6	564.4	561.3	559.2	557.2	555.1	547.8	540.5	534.3
62.5°	489.6	490.6	489.6	486.5	484.4	482.3	480.2	474.0	467.8	463.6	456.3
65°	423.1	422.0	418.9	416.8	411.6	411.6	407.5	404.4	397.1	390.8	383.6
67.5°	354.5	352.4	352.4	352.4	346.1	345.1	343.0	336.8	330.6	322.2	316.0
70°	292.1	294.2	291.1	287.9	284.8	283.8	280.7	274.4	267.1	258.8	253.6
72.5°	232.8	234.9	231.8	230.8	224.5	222.4	221.4	216.2	207.9	202.7	194.4
75°	178.8	179.8	177.8	175.7	171.5	170.5	165.3	161.1	155.9	147.6	140.3
77.5°	128.9	126.8	126.8	122.7	118.5	118.5	117.5	111.2	103.9	97.7	91.5
80°	82.1	81.1	78.0	75.9	72.8	71.7	70.7	65.5	60.3	56.1	52.0
82.5°	41.6	40.5	39.5	38.5	36.4	34.3	35.3	31.2	29.1	24.9	21.8
85°	12.5	13.5	13.5	12.5	11.4	11.4	11.4	10.4	8.3	7.3	6.2
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1
2.5°	2758.8	2759.8	2760.8	2761.9	2761.9	2762.9	2764.0	2765.0	2766.0	2766.0	2767.1
5°	2756.7	2758.8	2758.8	2759.8	2759.8	2759.8	2760.8	2760.8	2760.8	2760.8	2761.9
7.5°	2757.7	2757.7	2757.7	2756.7	2756.7	2755.6	2755.6	2755.6	2753.6	2753.6	2753.6
10°	2752.5	2751.5	2750.5	2748.4	2747.3	2746.3	2744.2	2742.1	2740.1	2739.0	2736.9
12.5°	2742.1	2738.0	2733.8	2729.7	2727.6	2726.5	2722.4	2719.3	2716.1	2713.0	2711.0
15°	2721.3	2715.1	2707.8	2699.5	2697.4	2695.4	2688.1	2681.8	2677.7	2674.6	2669.4
17.5°	2679.8	2667.3	2659.0	2646.5	2641.3	2639.2	2627.8	2621.6	2614.3	2612.2	2608.0
20°	2606.0	2594.5	2578.9	2567.5	2561.3	2555.0	2545.7	2537.4	2529.0	2529.0	2523.8
22.5°	2513.5	2498.9	2479.1	2464.6	2463.6	2451.1	2442.8	2433.4	2430.3	2424.1	2424.1
25°	2397.0	2384.6	2362.7	2350.3	2344.0	2340.9	2327.4	2314.9	2308.7	2303.5	2307.6
27.5°	2268.1	2249.4	2232.8	2217.2	2212.0	2205.8	2193.3	2188.1	2176.7	2175.6	2174.6
30°	2120.5	2101.8	2085.2	2077.9	2067.5	2062.3	2053.0	2046.7	2042.6	2042.6	2040.5
32.5°	1965.6	1949.0	1940.7	1925.1	1919.9	1912.6	1906.4	1900.2	1902.2	1900.2	1901.2
35°	1798.3	1794.1	1778.5	1769.2	1769.2	1768.1	1757.8	1753.6	1751.5	1752.6	1757.8
37.5°	1639.3	1626.8	1616.4	1610.1	1615.3	1609.1	1608.1	1608.1	1614.3	1610.1	1618.5
40°	1469.8	1468.8	1464.6	1466.7	1467.7	1460.5	1462.5	1463.6	1467.7	1476.1	1477.1
42.5°	1322.2	1321.2	1321.2	1321.2	1319.1	1314.9	1319.1	1326.4	1325.3	1331.6	1336.8
45°	1179.8	1177.7	1181.9	1178.8	1185.0	1187.1	1184.0	1186.0	1192.3	1196.4	1204.8
47.5°	1049.9	1049.9	1050.9	1053.0	1046.8	1051.9	1054.0	1058.2	1061.3	1063.4	1067.5
50°	929.3	929.3	927.2	927.2	927.2	930.3	926.2	931.4	932.4	940.7	945.9
52.5°	818.1	812.9	816.0	813.9	809.8	807.7	809.8	810.8	817.0	819.1	825.3
55°	712.0	712.0	703.7	701.6	704.8	703.7	702.7	702.7	705.8	708.9	714.1
57.5°	618.5	612.3	606.0	605.0	601.9	602.9	602.9	601.9	599.8	600.8	601.9
60°	530.1	526.0	516.6	516.6	515.6	514.5	509.3	508.3	503.1	504.1	500.0
62.5°	449.1	447.0	434.5	430.3	430.3	427.2	422.0	421.0	413.7	413.7	409.6
65°	376.3	370.1	362.8	355.5	355.5	351.3	348.2	338.9	333.7	330.6	324.3
67.5°	309.8	300.4	293.1	286.9	282.7	281.7	274.4	268.2	259.9	254.7	245.3
70°	245.3	238.0	230.8	224.5	220.4	216.2	208.9	199.6	193.3	184.0	177.8
72.5°	185.0	178.8	172.6	164.2	159.0	155.9	148.6	140.3	129.9	123.7	115.4
75°	133.1	125.8	117.5	110.2	107.1	103.9	95.6	89.4	82.1	74.8	66.5
77.5°	86.3	78.0	71.7	63.4	62.4	60.3	52.0	45.7	40.5	36.4	31.2
80°	45.7	41.6	36.4	31.2	29.1	26.0	21.8	18.7	15.6	12.5	10.4
82.5°	19.8	16.6	13.5	11.4	10.4	9.4	7.3	6.2	5.2	5.2	4.2
85°	5.2	4.2	4.2	3.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	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°	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1
2.5°	2768.1	2769.2	2770.2	2770.2	2771.2	2772.3	2772.3	2773.3	2774.4	2775.4	2775.4
5°	2762.9	2762.9	2762.9	2764.0	2764.0	2764.0	2764.0	2766.0	2766.0	2767.1	2768.1
7.5°	2752.5	2752.5	2752.5	2752.5	2751.5	2752.5	2751.5	2751.5	2753.6	2754.6	2755.6
10°	2735.9	2734.9	2734.9	2733.8	2733.8	2733.8	2734.9	2735.9	2736.9	2738.0	2741.1
12.5°	2709.9	2708.9	2708.9	2707.8	2707.8	2708.9	2709.9	2712.0	2716.1	2718.2	2722.4
15°	2668.3	2667.3	2668.3	2669.4	2671.5	2674.6	2677.7	2680.8	2687.0	2692.2	2697.4
17.5°	2608.0	2609.1	2610.1	2612.2	2615.3	2619.5	2627.8	2636.1	2643.4	2651.7	2660.0
20°	2524.9	2529.0	2530.1	2537.4	2539.4	2548.8	2558.1	2570.6	2582.1	2592.5	2603.9
22.5°	2425.1	2428.2	2432.4	2440.7	2445.9	2458.4	2469.8	2484.3	2496.8	2510.3	2527.0
25°	2311.8	2312.8	2325.3	2325.3	2337.8	2348.2	2361.7	2377.3	2396.0	2413.7	2425.1
27.5°	2182.9	2188.1	2197.5	2201.6	2211.0	2227.6	2239.0	2257.7	2276.5	2292.0	2304.5
30°	2047.8	2051.9	2067.5	2069.6	2076.9	2091.4	2107.0	2124.7	2139.2	2156.9	2168.3
32.5°	1905.4	1916.8	1926.1	1933.4	1935.5	1957.3	1965.6	1978.1	1994.8	2012.4	2023.9
35°	1767.1	1772.3	1785.8	1790.0	1796.2	1808.7	1825.3	1835.7	1844.0	1855.5	1869.0
37.5°	1620.5	1636.1	1639.3	1651.7	1653.8	1665.2	1673.6	1686.0	1696.4	1706.8	1708.9
40°	1484.4	1489.6	1501.0	1504.1	1506.2	1521.8	1532.2	1535.3	1540.5	1549.9	1562.3
42.5°	1346.1	1351.3	1363.8	1360.7	1370.0	1377.3	1382.5	1395.0	1400.2	1403.3	1403.3
45°	1209.9	1212.0	1220.3	1224.5	1229.7	1233.9	1243.2	1249.4	1251.5	1260.9	1264.0
47.5°	1080.0	1082.1	1088.3	1095.6	1093.5	1098.7	1109.1	1112.2	1113.3	1119.5	1122.6
50°	952.2	957.4	965.7	963.6	969.8	972.9	982.3	984.4	984.4	985.4	986.5
52.5°	832.6	836.8	838.9	840.9	844.1	849.3	853.4	851.3	855.5	859.6	856.5
55°	714.1	717.2	722.4	724.5	724.5	725.6	723.5	732.8	728.7	727.6	728.7
57.5°	606.0	601.9	600.8	606.0	608.1	607.1	603.9	608.1	608.1	606.0	602.9
60°	501.0	497.9	496.9	497.9	493.8	490.6	492.7	490.6	485.4	483.4	484.4
62.5°	405.4	402.3	394.0	394.0	391.9	390.8	382.5	383.6	379.4	373.2	375.3
65°	317.0	308.7	304.6	303.5	296.3	290.0	287.9	280.7	274.4	273.4	274.4
67.5°	238.0	228.7	221.4	218.3	214.1	208.9	201.7	195.4	197.5	196.5	200.6
70°	165.3	159.0	151.8	146.6	148.6	142.4	138.3	138.3	139.3	140.3	142.4
72.5°	110.2	101.9	98.8	95.6	93.6	89.4	91.5	91.5	90.4	91.5	89.4
75°	62.4	58.2	55.1	54.1	52.0	52.0	52.0	52.0	50.9	49.9	49.9
77.5°	28.1	26.0	24.9	23.9	23.9	23.9	22.9	21.8	21.8	21.8	20.8
80°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
82.5°	4.2	4.2	5.2	5.2	5.2	4.2	5.2	5.2	4.2	4.2	5.2
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	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: P859346

CATALOG NUMBER: LX4C65D010 EX4C659030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1	2768.1
2.5°	2776.4	2777.5	2777.5	2777.5	2778.5	2778.5	2778.5	2778.5
5°	2769.2	2770.2	2770.2	2770.2	2771.2	2771.2	2771.2	2771.2
7.5°	2756.7	2757.7	2757.7	2758.8	2758.8	2759.8	2759.8	2760.8
10°	2742.1	2744.2	2745.3	2746.3	2747.3	2748.4	2748.4	2749.4
12.5°	2726.5	2728.6	2729.7	2731.7	2733.8	2734.9	2735.9	2736.9
15°	2703.7	2707.8	2709.9	2711.0	2715.1	2717.2	2718.2	2719.3
17.5°	2667.3	2675.6	2678.7	2680.8	2685.0	2689.1	2692.2	2693.3
20°	2615.3	2624.7	2628.8	2634.0	2640.3	2645.5	2647.5	2649.6
22.5°	2542.6	2553.0	2559.2	2565.4	2570.6	2575.8	2584.1	2581.0
25°	2438.6	2456.3	2463.6	2466.7	2478.1	2484.3	2488.5	2484.3
27.5°	2322.2	2332.6	2338.8	2346.1	2354.4	2360.6	2362.7	2369.0
30°	2181.9	2199.5	2198.5	2205.8	2216.2	2222.4	2224.5	2229.7
32.5°	2036.3	2044.6	2050.9	2049.8	2054.0	2065.4	2061.3	2070.6
35°	1881.5	1882.5	1892.9	1891.8	1900.2	1900.2	1900.2	1906.4
37.5°	1716.2	1728.6	1723.5	1735.9	1731.8	1734.9	1734.9	1737.0
40°	1565.4	1569.6	1569.6	1573.8	1576.9	1573.8	1575.8	1581.0
42.5°	1409.5	1413.7	1414.7	1412.6	1415.8	1425.1	1417.8	1424.1
45°	1264.0	1267.1	1271.3	1268.2	1273.4	1270.2	1273.4	1271.3
47.5°	1126.8	1125.8	1124.7	1133.0	1125.8	1126.8	1130.9	1123.7
50°	986.5	992.7	988.5	991.7	993.7	993.7	990.6	990.6
52.5°	861.7	860.7	857.6	860.7	858.6	859.6	861.7	859.6
55°	732.8	737.0	734.9	733.9	734.9	734.9	741.1	732.8
57.5°	606.0	603.9	607.1	614.3	607.1	612.3	615.4	616.4
60°	485.4	485.4	491.7	488.6	494.8	500.0	504.1	502.1
62.5°	370.1	375.3	377.3	378.4	384.6	388.8	388.8	387.7
65°	274.4	281.7	281.7	285.9	287.9	287.9	290.0	294.2
67.5°	202.7	202.7	203.7	205.8	204.8	204.8	206.9	207.9
70°	141.4	139.3	142.4	141.4	141.4	140.3	141.4	141.4
72.5°	89.4	89.4	90.4	89.4	87.3	88.4	88.4	90.4
75°	47.8	49.9	47.8	47.8	48.9	46.8	47.8	48.9
77.5°	19.8	19.8	19.8	19.8	19.8	18.7	18.7	18.7
80°	9.4	9.4	9.4	9.4	9.4	9.4	8.3	8.3
82.5°	4.2	5.2	4.2	5.2	4.2	4.2	4.2	4.2
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0
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)