

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: P859347

Luminaire Tested: **LX4C65D010 EX4C659030 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859347
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 EX4C659030 4LBLWWH
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

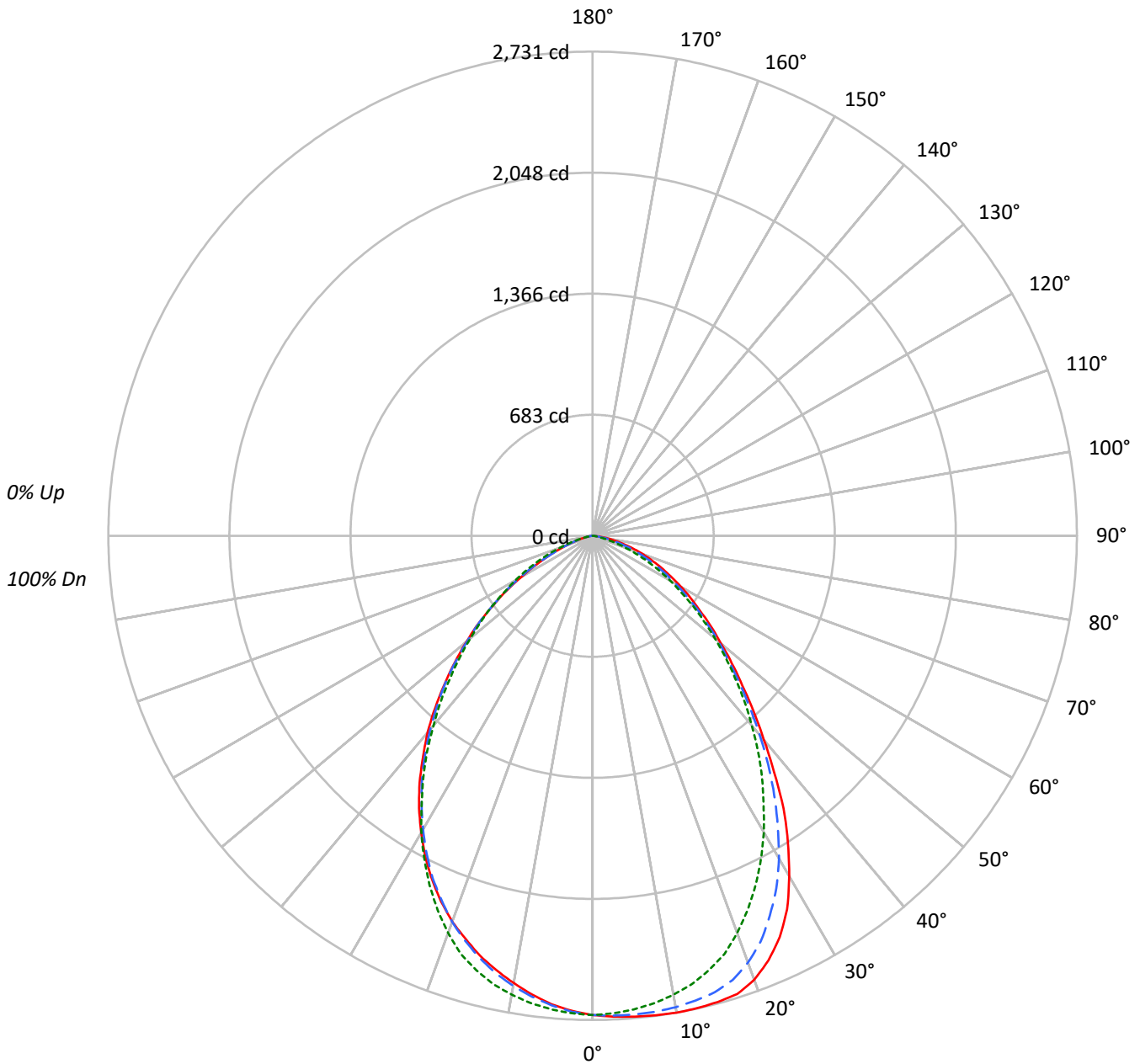
Lumens per Lamp: N/A
Luminaire Lumens: 5094.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	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	49	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°	332073	332073	332073
5°	335783	330653	327064
10°	340701	327852	319556
15°	346306	322636	311927
20°	348495	311653	302684
25°	338505	294816	290302
30°	314572	274015	274157
35°	281581	249786	255080
40°	241090	223914	232077
45°	207534	197422	204823
50°	180423	171880	177040
55°	158757	147854	146526
60°	141257	123369	113664
65°	123895	98837	82209
70°	106431	69828	55640
75°	86342	40442	32562
80°	61763	17687	16201
85°	23399	7330	7330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.7	5.0
10°-20°	721.1	14.2
20°-30°	1029.7	20.2
30°-40°	1077.2	21.1
40°-50°	902.6	17.7
50°-60°	631.7	12.4
60°-70°	344.0	6.8
70°-80°	119.4	2.3
80°-90°	13.7	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°	2005.5	39.4
0°-40°	3082.7	60.5
0°-60°	4616.9	90.6
0°-90°	5094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5094.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2703	2703	2703	2703	2703	
5°	2723	2710	2681	2658	2652	260
15°	2723	2666	2537	2464	2452	769
25°	2497	2364	2175	2132	2142	1140
35°	1878	1785	1666	1678	1701	1164
45°	1194	1168	1136	1174	1179	929
55°	741	716	690	690	684	670
65°	426	389	340	286	283	424
75°	182	148	85	69	69	196
85°	17	9	5	5	5	30
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°	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0
2.5°	2715.5	2712.4	2713.4	2713.4	2713.4	2712.4	2713.4	2712.4	2712.4	2711.3	2709.2
5°	2722.8	2720.7	2720.7	2720.7	2719.6	2718.6	2718.6	2717.6	2715.5	2714.4	2710.3
7.5°	2728.0	2725.9	2725.9	2724.8	2723.8	2722.8	2721.7	2718.6	2715.5	2713.4	2708.2
10°	2731.1	2728.0	2728.0	2725.9	2723.8	2722.8	2720.7	2716.5	2712.4	2707.2	2699.9
12.5°	2729.0	2725.9	2724.8	2722.8	2718.6	2716.5	2714.4	2709.2	2702.0	2694.7	2685.3
15°	2722.8	2720.7	2718.6	2715.5	2710.3	2707.2	2705.1	2696.8	2687.4	2677.0	2665.6
17.5°	2710.3	2707.2	2703.0	2698.8	2691.6	2688.4	2683.2	2672.9	2659.3	2644.8	2627.1
20°	2665.6	2663.5	2659.3	2652.1	2640.6	2636.5	2629.2	2615.7	2598.0	2580.3	2561.6
22.5°	2591.8	2588.6	2582.4	2576.2	2565.8	2558.5	2552.3	2533.5	2513.8	2495.1	2477.4
25°	2497.2	2494.0	2485.7	2477.4	2467.0	2454.5	2448.3	2433.7	2414.0	2390.1	2364.1
27.5°	2375.5	2365.1	2362.0	2352.7	2337.1	2332.9	2323.5	2304.8	2286.1	2265.3	2243.5
30°	2217.5	2217.5	2211.3	2207.1	2192.5	2188.4	2178.0	2158.2	2147.8	2118.7	2102.1
32.5°	2050.1	2048.0	2042.8	2039.7	2031.4	2024.1	2013.7	2003.3	1980.5	1965.9	1943.0
35°	1877.5	1865.1	1867.1	1860.9	1855.7	1847.4	1846.4	1834.9	1814.1	1805.8	1785.0
37.5°	1681.1	1675.9	1683.1	1673.8	1668.6	1669.6	1661.3	1654.0	1645.7	1631.2	1627.0
40°	1503.3	1507.4	1506.4	1498.1	1502.2	1497.0	1488.7	1481.5	1477.3	1467.9	1464.8
42.5°	1344.2	1338.0	1335.9	1335.9	1336.9	1336.9	1332.8	1327.6	1327.6	1318.2	1308.9
45°	1194.5	1194.5	1192.4	1198.7	1189.3	1189.3	1186.2	1185.2	1181.0	1178.9	1167.5
47.5°	1065.6	1064.6	1063.5	1062.5	1061.4	1061.4	1055.2	1050.0	1049.0	1042.7	1036.5
50°	944.0	950.2	948.1	942.9	940.9	941.9	937.7	934.6	933.6	923.2	924.2
52.5°	842.1	841.0	843.1	840.0	834.8	835.9	831.7	827.5	823.4	818.2	814.0
55°	741.2	746.4	744.4	741.2	740.2	738.1	735.0	729.8	728.8	717.3	716.3
57.5°	657.0	656.0	653.9	648.7	647.7	644.6	644.6	640.4	634.2	627.9	622.7
60°	574.9	574.9	571.8	570.7	566.6	565.6	564.5	560.4	553.1	547.9	539.6
62.5°	495.9	498.0	495.9	492.8	489.7	485.5	483.4	480.3	474.1	468.9	461.6
65°	426.2	425.2	424.2	420.0	419.0	414.8	413.8	407.5	401.3	397.1	388.8
67.5°	359.7	356.6	356.6	354.5	352.4	349.3	347.2	341.0	333.7	329.6	321.2
70°	296.3	294.2	294.2	294.2	289.0	285.9	284.9	281.7	271.3	267.2	258.9
72.5°	238.1	237.0	236.0	232.9	229.8	229.8	225.6	219.4	214.2	209.0	202.7
75°	181.9	184.0	181.9	177.8	176.7	174.7	171.5	166.3	161.1	154.9	147.6
77.5°	133.1	131.0	128.9	128.9	126.8	122.7	121.6	117.5	111.2	107.1	99.8
80°	87.3	86.3	84.2	82.1	81.1	80.1	79.0	74.9	68.6	65.5	59.3
82.5°	47.8	46.8	46.8	45.7	42.6	42.6	41.6	37.4	34.3	32.2	29.1
85°	16.6	16.6	16.6	15.6	15.6	15.6	14.6	13.5	12.5	11.4	9.4
87.5°	2.1	1.0	2.1	1.0	2.1	1.0	1.0	1.0	1.0	1.0	1.0
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°	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0
2.5°	2707.2	2705.1	2704.0	2703.0	2702.0	2700.9	2699.9	2697.8	2696.8	2695.7	2693.6
5°	2707.2	2703.0	2700.9	2697.8	2695.7	2693.6	2690.5	2687.4	2684.3	2681.2	2678.0
7.5°	2703.0	2696.8	2692.6	2686.4	2684.3	2681.2	2674.9	2670.8	2665.6	2659.3	2652.1
10°	2692.6	2685.3	2677.0	2668.7	2665.6	2660.4	2652.1	2644.8	2636.5	2628.1	2620.9
12.5°	2676.0	2664.5	2654.1	2642.7	2636.5	2631.3	2619.8	2609.4	2599.0	2589.7	2577.2
15°	2651.0	2637.5	2624.0	2608.4	2601.1	2594.9	2578.2	2565.8	2549.1	2536.7	2524.2
17.5°	2610.5	2589.7	2573.0	2553.3	2542.9	2535.6	2521.1	2501.3	2485.7	2472.2	2457.7
20°	2540.8	2521.1	2498.2	2476.4	2464.9	2455.6	2434.8	2414.0	2398.4	2383.8	2368.2
22.5°	2449.3	2424.4	2407.7	2380.7	2371.4	2359.9	2335.0	2316.3	2298.6	2284.0	2269.5
25°	2338.1	2316.3	2293.4	2268.4	2257.0	2243.5	2222.7	2202.9	2191.5	2174.9	2157.2
27.5°	2210.2	2192.5	2164.5	2142.6	2131.2	2120.8	2101.1	2083.4	2066.8	2055.3	2038.7
30°	2075.1	2054.3	2029.3	2006.5	2000.2	1987.7	1970.1	1956.6	1938.9	1931.6	1924.3
32.5°	1926.4	1902.5	1883.8	1869.2	1856.8	1846.4	1837.0	1815.2	1812.0	1793.3	1791.3
35°	1764.2	1753.8	1736.2	1723.7	1713.3	1706.0	1690.4	1680.0	1668.6	1665.5	1658.2
37.5°	1611.4	1598.9	1582.3	1570.9	1563.6	1562.5	1551.1	1544.9	1536.6	1532.4	1524.1
40°	1451.3	1446.1	1431.6	1429.5	1418.0	1417.0	1410.8	1403.5	1396.2	1396.2	1397.2
42.5°	1303.7	1297.4	1291.2	1283.9	1277.7	1277.7	1274.6	1272.5	1270.4	1267.3	1272.5
45°	1165.4	1157.1	1152.9	1145.7	1148.8	1142.5	1140.5	1140.5	1137.3	1136.3	1143.6
47.5°	1036.5	1027.1	1023.0	1020.9	1020.9	1021.9	1012.6	1015.7	1014.7	1016.7	1019.9
50°	919.0	910.7	904.5	904.5	905.5	901.3	897.2	900.3	897.2	899.3	906.5
52.5°	809.9	801.5	798.4	798.4	792.2	791.1	793.2	789.1	790.1	791.1	795.3
55°	709.0	703.8	698.6	693.4	694.5	692.4	688.2	687.2	689.3	690.3	695.5
57.5°	618.6	611.3	604.0	601.9	599.9	599.9	594.7	593.6	595.7	590.5	590.5
60°	532.3	528.1	518.8	515.6	515.6	510.5	506.3	508.4	503.2	502.1	503.2
62.5°	452.2	449.1	442.9	436.6	434.6	432.5	427.3	425.2	423.1	419.0	412.7
65°	382.6	375.3	368.0	363.9	360.7	355.5	352.4	348.3	342.0	340.0	333.7
67.5°	312.9	305.6	298.4	295.3	292.1	289.0	283.8	278.6	271.3	263.0	255.7
70°	251.6	242.2	238.1	229.8	227.7	223.5	216.2	211.0	203.8	194.4	187.1
72.5°	192.3	186.1	179.9	172.6	167.4	164.3	158.0	149.7	141.4	136.2	128.9
75°	138.3	135.2	126.8	118.5	116.4	112.3	105.0	99.8	93.6	85.2	79.0
77.5°	93.6	87.3	82.1	74.9	72.8	68.6	64.5	59.3	55.1	49.9	45.7
80°	55.1	49.9	46.8	41.6	39.5	37.4	34.3	30.1	27.0	25.0	23.9
82.5°	27.0	22.9	21.8	18.7	17.7	16.6	14.6	13.5	11.4	11.4	11.4
85°	9.4	7.3	7.3	6.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	1.0
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°	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0
2.5°	2692.6	2691.6	2690.5	2689.5	2689.5	2688.4	2688.4	2687.4	2687.4	2686.4	2686.4
5°	2673.9	2670.8	2668.7	2666.6	2666.6	2663.5	2661.4	2659.3	2658.3	2658.3	2656.2
7.5°	2647.9	2643.7	2639.6	2636.5	2635.4	2630.2	2626.1	2626.1	2621.9	2619.8	2617.8
10°	2613.6	2606.3	2600.1	2597.0	2592.8	2589.7	2584.5	2581.4	2578.2	2573.0	2572.0
12.5°	2566.8	2561.6	2552.3	2548.1	2546.0	2539.8	2531.5	2527.3	2526.3	2522.1	2519.0
15°	2513.8	2502.4	2494.0	2488.8	2488.8	2478.4	2474.3	2468.0	2463.9	2460.8	2459.7
17.5°	2445.2	2433.7	2425.4	2418.1	2416.1	2407.7	2401.5	2399.4	2394.2	2396.3	2391.1
20°	2356.8	2347.5	2341.2	2331.9	2331.9	2326.7	2324.6	2319.4	2317.3	2315.2	2317.3
22.5°	2262.2	2250.8	2240.4	2239.3	2239.3	2232.1	2231.0	2230.0	2225.8	2228.9	2227.9
25°	2151.0	2142.6	2136.4	2135.4	2135.4	2131.2	2127.1	2129.1	2132.3	2131.2	2134.3
27.5°	2035.6	2027.3	2025.2	2024.1	2022.1	2021.0	2023.1	2023.1	2026.2	2030.4	2034.5
30°	1910.8	1908.7	1905.6	1904.6	1902.5	1907.7	1909.8	1912.9	1911.9	1918.1	1922.2
32.5°	1786.1	1781.9	1780.9	1782.9	1786.1	1785.0	1791.3	1793.3	1795.4	1802.7	1805.8
35°	1660.3	1659.2	1657.1	1657.1	1658.2	1666.5	1666.5	1673.8	1677.9	1680.0	1688.3
37.5°	1525.1	1529.3	1531.4	1534.5	1535.5	1538.6	1540.7	1548.0	1552.1	1556.3	1560.5
40°	1401.4	1399.3	1408.7	1402.4	1404.5	1413.9	1418.0	1417.0	1423.2	1429.5	1433.6
42.5°	1269.4	1272.5	1274.6	1276.6	1281.8	1282.9	1288.1	1295.4	1297.4	1304.7	1306.8
45°	1141.5	1142.5	1146.7	1150.9	1154.0	1162.3	1164.4	1167.5	1173.7	1173.7	1176.8
47.5°	1020.9	1025.1	1025.1	1031.3	1036.5	1035.5	1042.7	1044.8	1043.8	1049.0	1051.1
50°	905.5	911.7	910.7	914.9	916.9	918.0	924.2	926.3	922.1	927.3	928.4
52.5°	795.3	798.4	802.6	803.6	801.5	806.7	804.7	808.8	807.8	811.9	807.8
55°	694.5	693.4	693.4	695.5	693.4	695.5	697.6	693.4	690.3	694.5	693.4
57.5°	593.6	593.6	591.5	594.7	591.5	588.4	587.4	584.3	581.1	581.1	580.1
60°	499.0	496.9	492.8	491.7	491.7	486.5	484.5	480.3	480.3	476.1	472.0
62.5°	410.6	405.5	402.3	402.3	400.3	395.1	385.7	379.5	377.4	371.1	370.1
65°	327.5	322.3	319.2	312.9	307.7	305.6	296.3	289.0	285.9	279.7	280.7
67.5°	251.6	243.3	233.9	229.8	226.6	219.4	216.2	211.0	207.9	207.9	207.9
70°	180.9	173.6	164.3	161.1	159.1	152.8	149.7	148.7	151.8	150.7	151.8
72.5°	121.6	114.4	110.2	108.1	106.0	102.9	105.0	106.0	104.0	105.0	106.0
75°	73.8	71.7	68.6	67.6	67.6	68.6	67.6	67.6	68.6	68.6	69.7
77.5°	42.6	40.5	40.5	39.5	41.6	40.5	40.5	40.5	41.6	41.6	41.6
80°	22.9	22.9	22.9	22.9	23.9	22.9	23.9	23.9	23.9	23.9	23.9
82.5°	11.4	11.4	11.4	12.5	12.5	12.5	12.5	12.5	12.5	12.5	11.4
85°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
87.5°	1.0	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0
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: P859347

CATALOG NUMBER: LX4C65D010 EX4C659030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0	2703.0
2.5°	2684.3	2684.3	2684.3	2682.2	2683.2	2683.2	2682.2	2682.2
5°	2655.2	2654.1	2652.1	2652.1	2650.0	2652.1	2651.0	2652.1
7.5°	2615.7	2615.7	2612.6	2612.6	2611.5	2610.5	2609.4	2610.5
10°	2568.9	2568.9	2566.8	2565.8	2566.8	2562.7	2562.7	2561.6
12.5°	2516.9	2514.8	2512.8	2513.8	2512.8	2509.6	2508.6	2509.6
15°	2456.6	2453.5	2454.5	2451.4	2451.4	2450.4	2452.5	2452.5
17.5°	2390.1	2388.0	2385.9	2387.0	2384.9	2385.9	2384.9	2383.8
20°	2316.3	2315.2	2315.2	2311.1	2312.1	2311.1	2312.1	2315.2
22.5°	2231.0	2230.0	2231.0	2227.9	2230.0	2230.0	2233.1	2233.1
25°	2137.4	2136.4	2138.5	2139.5	2140.6	2143.7	2140.6	2141.6
27.5°	2033.5	2036.6	2039.7	2040.8	2044.9	2041.8	2039.7	2042.8
30°	1928.5	1928.5	1927.4	1931.6	1934.7	1937.8	1932.6	1932.6
32.5°	1807.9	1813.1	1813.1	1814.1	1817.2	1817.2	1817.2	1821.4
35°	1692.5	1695.6	1696.7	1692.5	1694.6	1693.5	1700.8	1700.8
37.5°	1563.6	1563.6	1564.6	1571.9	1571.9	1568.8	1570.9	1570.9
40°	1440.9	1441.9	1437.8	1439.9	1445.1	1443.0	1445.1	1447.1
42.5°	1306.8	1314.1	1309.9	1312.0	1311.0	1312.0	1313.0	1313.0
45°	1178.9	1181.0	1181.0	1182.0	1184.1	1186.2	1180.0	1178.9
47.5°	1054.2	1055.2	1058.3	1053.1	1059.4	1053.1	1059.4	1052.1
50°	928.4	932.5	929.4	931.5	928.4	928.4	927.3	926.3
52.5°	808.8	807.8	807.8	806.7	806.7	808.8	806.7	809.9
55°	689.3	690.3	688.2	687.2	686.1	689.3	686.1	684.1
57.5°	575.9	578.0	573.9	575.9	568.7	571.8	572.8	573.9
60°	470.9	467.8	467.8	463.7	463.7	466.8	462.6	462.6
62.5°	364.9	367.0	363.9	368.0	368.0	372.2	370.1	372.2
65°	279.7	280.7	281.7	281.7	281.7	288.0	285.9	282.8
67.5°	211.0	212.1	213.1	212.1	215.2	213.1	213.1	214.2
70°	152.8	153.9	154.9	154.9	153.9	154.9	154.9	154.9
72.5°	106.0	107.1	106.0	107.1	108.1	107.1	107.1	108.1
75°	69.7	69.7	68.6	68.6	68.6	68.6	69.7	68.6
77.5°	40.5	41.6	40.5	41.6	41.6	41.6	41.6	41.6
80°	23.9	23.9	23.9	22.9	23.9	23.9	23.9	22.9
82.5°	12.5	12.5	11.4	11.4	12.5	12.5	12.5	12.5
85°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)