

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: P859196

Luminaire Tested: **LX4C60D010 EX4C609030 4LBLWWH**

Issue Date: 2/14/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P859196  
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: LX4C60D010 EX4C609030 4LBLWWH  
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LRLWW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

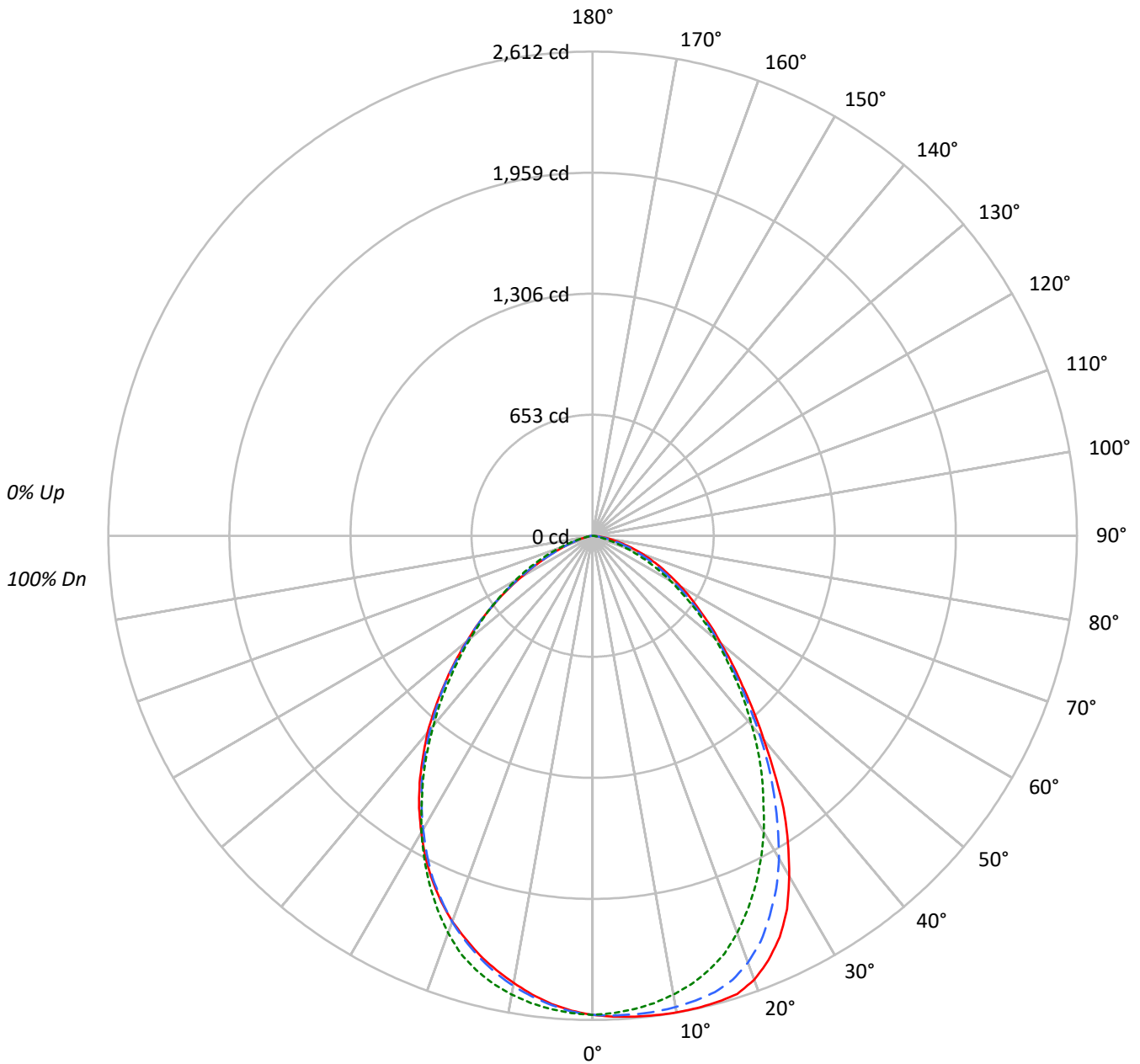
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4871.0 lumens  
Efficiency: N/A  
Efficacy: 67.7 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  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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	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°	317539	317539	317539
5°	321083	316175	312747
10°	325781	313506	305572
15°	331145	308505	298267
20°	333238	298017	289441
25°	323675	281911	277601
30°	300798	262014	262155
35°	269268	238852	243922
40°	230537	214115	221925
45°	198447	188787	195858
50°	172510	164349	169280
55°	151817	141386	140101
60°	135065	117988	108701
65°	118488	94505	78604
70°	101761	66775	53197
75°	82592	38686	31138
80°	59075	16909	15494
85°	22412	7048	7048



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.6	5.0
10°-20°	689.5	14.2
20°-30°	984.6	20.2
30°-40°	1030.0	21.1
40°-50°	863.0	17.7
50°-60°	604.0	12.4
60°-70°	328.9	6.8
70°-80°	114.2	2.3
80°-90°	13.1	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°	1917.7	39.4
0°-40°	2947.8	60.5
0°-60°	4414.8	90.6
0°-90°	4871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4871.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2585	2585	2585	2585	2585	
5°	2604	2592	2564	2542	2536	249
15°	2604	2549	2426	2356	2345	735
25°	2388	2261	2080	2039	2048	1090
35°	1795	1707	1593	1604	1626	1113
45°	1142	1116	1087	1122	1127	888
55°	709	685	660	660	654	640
65°	408	372	325	273	270	406
75°	174	141	82	66	66	188
85°	16	9	5	5	5	29
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°	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7
2.5°	2596.6	2593.6	2594.6	2594.6	2594.6	2593.6	2594.6	2593.6	2593.6	2592.6	2590.6
5°	2603.6	2601.6	2601.6	2601.6	2600.6	2599.6	2599.6	2598.6	2596.6	2595.6	2591.6
7.5°	2608.5	2606.5	2606.5	2605.5	2604.6	2603.6	2602.6	2599.6	2596.6	2594.6	2589.6
10°	2611.5	2608.5	2608.5	2606.5	2604.6	2603.6	2601.6	2597.6	2593.6	2588.6	2581.7
12.5°	2609.5	2606.5	2605.5	2603.6	2599.6	2597.6	2595.6	2590.6	2583.7	2576.7	2567.8
15°	2603.6	2601.6	2599.6	2596.6	2591.6	2588.6	2586.7	2578.7	2569.8	2559.8	2548.9
17.5°	2591.6	2588.6	2584.7	2580.7	2573.7	2570.8	2565.8	2555.8	2542.9	2529.0	2512.1
20°	2548.9	2546.9	2542.9	2536.0	2525.0	2521.0	2514.1	2501.2	2484.3	2467.4	2449.5
22.5°	2478.3	2475.3	2469.4	2463.4	2453.4	2446.5	2440.5	2422.6	2403.7	2385.9	2369.0
25°	2387.8	2384.9	2376.9	2369.0	2359.0	2347.1	2341.1	2327.2	2308.3	2285.4	2260.6
27.5°	2271.5	2261.6	2258.6	2249.7	2234.7	2230.8	2221.8	2203.9	2186.0	2166.2	2145.3
30°	2120.4	2120.4	2114.5	2110.5	2096.6	2092.6	2082.6	2063.8	2053.8	2026.0	2010.1
32.5°	1960.4	1958.4	1953.4	1950.4	1942.5	1935.5	1925.6	1915.6	1893.8	1879.9	1858.0
35°	1795.4	1783.4	1785.4	1779.4	1774.5	1766.5	1765.5	1754.6	1734.7	1726.8	1706.9
37.5°	1607.5	1602.5	1609.5	1600.5	1595.5	1596.5	1588.6	1581.6	1573.7	1559.7	1555.8
40°	1437.5	1441.5	1440.5	1432.5	1436.5	1431.5	1423.6	1416.6	1412.6	1403.7	1400.7
42.5°	1285.4	1279.4	1277.4	1277.4	1278.4	1278.4	1274.4	1269.5	1269.5	1260.5	1251.6
45°	1142.2	1142.2	1140.2	1146.2	1137.3	1137.3	1134.3	1133.3	1129.3	1127.3	1116.4
47.5°	1019.0	1018.0	1017.0	1016.0	1015.0	1015.0	1009.0	1004.0	1003.1	997.1	991.1
50°	902.6	908.6	906.6	901.7	899.7	900.7	896.7	893.7	892.7	882.8	883.8
52.5°	805.2	804.2	806.2	803.2	798.3	799.3	795.3	791.3	787.3	782.4	778.4
55°	708.8	713.8	711.8	708.8	707.8	705.8	702.8	697.9	696.9	685.9	684.9
57.5°	628.3	627.3	625.3	620.3	619.3	616.3	616.3	612.4	606.4	600.4	595.5
60°	549.7	549.7	546.8	545.8	541.8	540.8	539.8	535.8	528.9	523.9	515.9
62.5°	474.2	476.2	474.2	471.2	468.2	464.2	462.3	459.3	453.3	448.3	441.4
65°	407.6	406.6	405.6	401.6	400.6	396.6	395.7	389.7	383.7	379.7	371.8
67.5°	344.0	341.0	341.0	339.0	337.0	334.0	332.0	326.1	319.1	315.1	307.2
70°	283.3	281.3	281.3	281.3	276.4	273.4	272.4	269.4	259.5	255.5	247.5
72.5°	227.6	226.7	225.7	222.7	219.7	219.7	215.7	209.8	204.8	199.8	193.9
75°	174.0	176.0	174.0	170.0	169.0	167.0	164.0	159.1	154.1	148.1	141.2
77.5°	127.2	125.3	123.3	123.3	121.3	117.3	116.3	112.3	106.4	102.4	95.4
80°	83.5	82.5	80.5	78.5	77.5	76.5	75.6	71.6	65.6	62.6	56.7
82.5°	45.7	44.7	44.7	43.7	40.8	40.8	39.8	35.8	32.8	30.8	27.8
85°	15.9	15.9	15.9	14.9	14.9	14.9	13.9	12.9	11.9	10.9	8.9
87.5°	2.0	1.0	2.0	1.0	2.0	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	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°	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7
2.5°	2588.6	2586.7	2585.7	2584.7	2583.7	2582.7	2581.7	2579.7	2578.7	2577.7	2575.7
5°	2588.6	2584.7	2582.7	2579.7	2577.7	2575.7	2572.7	2569.8	2566.8	2563.8	2560.8
7.5°	2584.7	2578.7	2574.7	2568.8	2566.8	2563.8	2557.8	2553.9	2548.9	2542.9	2536.0
10°	2574.7	2567.8	2559.8	2551.9	2548.9	2543.9	2536.0	2529.0	2521.0	2513.1	2506.1
12.5°	2558.8	2547.9	2537.9	2527.0	2521.0	2516.1	2505.1	2495.2	2485.3	2476.3	2464.4
15°	2535.0	2522.0	2509.1	2494.2	2487.2	2481.3	2465.4	2453.4	2437.5	2425.6	2413.7
17.5°	2496.2	2476.3	2460.4	2441.5	2431.6	2424.6	2410.7	2391.8	2376.9	2364.0	2350.1
20°	2429.6	2410.7	2388.8	2368.0	2357.0	2348.1	2328.2	2308.3	2293.4	2279.5	2264.6
22.5°	2342.1	2318.3	2302.3	2276.5	2267.6	2256.6	2232.8	2214.9	2198.0	2184.0	2170.1
25°	2235.7	2214.9	2193.0	2169.1	2158.2	2145.3	2125.4	2106.5	2095.6	2079.7	2062.8
27.5°	2113.5	2096.6	2069.7	2048.8	2037.9	2028.0	2009.1	1992.2	1976.3	1965.3	1949.4
30°	1984.2	1964.4	1940.5	1918.6	1912.7	1900.7	1883.8	1870.9	1854.0	1847.0	1840.1
32.5°	1842.1	1819.2	1801.3	1787.4	1775.5	1765.5	1756.6	1735.7	1732.7	1714.8	1712.8
35°	1687.0	1677.1	1660.2	1648.2	1638.3	1631.3	1616.4	1606.5	1595.5	1592.6	1585.6
37.5°	1540.9	1528.9	1513.0	1502.1	1495.1	1494.1	1483.2	1477.2	1469.3	1465.3	1457.4
40°	1387.8	1382.8	1368.9	1366.9	1356.0	1355.0	1349.0	1342.0	1335.1	1335.1	1336.1
42.5°	1246.6	1240.6	1234.7	1227.7	1221.8	1221.8	1218.8	1216.8	1214.8	1211.8	1216.8
45°	1114.4	1106.4	1102.5	1095.5	1098.5	1092.5	1090.5	1090.5	1087.6	1086.6	1093.5
47.5°	991.1	982.2	978.2	976.2	976.2	977.2	968.3	971.2	970.2	972.2	975.2
50°	878.8	870.8	864.9	864.9	865.9	861.9	857.9	860.9	857.9	859.9	866.9
52.5°	774.4	766.5	763.5	763.5	757.5	756.5	758.5	754.5	755.5	756.5	760.5
55°	678.0	673.0	668.0	663.1	664.1	662.1	658.1	657.1	659.1	660.1	665.1
57.5°	591.5	584.5	577.6	575.6	573.6	573.6	568.6	567.6	569.6	564.7	564.7
60°	509.0	505.0	496.1	493.1	493.1	488.1	484.1	486.1	481.1	480.2	481.1
62.5°	432.4	429.5	423.5	417.5	415.5	413.5	408.6	406.6	404.6	400.6	394.7
65°	365.8	358.9	351.9	347.9	345.0	340.0	337.0	333.0	327.1	325.1	319.1
67.5°	299.2	292.3	285.3	282.3	279.3	276.4	271.4	266.4	259.5	251.5	244.5
70°	240.6	231.6	227.6	219.7	217.7	213.7	206.8	201.8	194.8	185.9	178.9
72.5°	183.9	177.9	172.0	165.0	160.1	157.1	151.1	143.2	135.2	130.2	123.3
75°	132.2	129.2	121.3	113.3	111.3	107.4	100.4	95.4	89.5	81.5	75.6
77.5°	89.5	83.5	78.5	71.6	69.6	65.6	61.6	56.7	52.7	47.7	43.7
80°	52.7	47.7	44.7	39.8	37.8	35.8	32.8	28.8	25.8	23.9	22.9
82.5°	25.8	21.9	20.9	17.9	16.9	15.9	13.9	12.9	10.9	10.9	10.9
85°	8.9	7.0	7.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7
2.5°	2574.7	2573.7	2572.7	2571.7	2571.7	2570.8	2570.8	2569.8	2569.8	2568.8	2568.8
5°	2556.8	2553.9	2551.9	2549.9	2549.9	2546.9	2544.9	2542.9	2541.9	2541.9	2539.9
7.5°	2532.0	2528.0	2524.0	2521.0	2520.1	2515.1	2511.1	2511.1	2507.1	2505.1	2503.2
10°	2499.2	2492.2	2486.3	2483.3	2479.3	2476.3	2471.3	2468.4	2465.4	2460.4	2459.4
12.5°	2454.4	2449.5	2440.5	2436.5	2434.6	2428.6	2420.6	2416.7	2415.7	2411.7	2408.7
15°	2403.7	2392.8	2384.9	2379.9	2379.9	2369.9	2366.0	2360.0	2356.0	2353.0	2352.1
17.5°	2338.1	2327.2	2319.2	2312.3	2310.3	2302.3	2296.4	2294.4	2289.4	2291.4	2286.4
20°	2253.6	2244.7	2238.7	2229.8	2229.8	2224.8	2222.8	2217.8	2215.9	2213.9	2215.9
22.5°	2163.2	2152.2	2142.3	2141.3	2141.3	2134.3	2133.3	2132.4	2128.4	2131.4	2130.4
25°	2056.8	2048.8	2042.9	2041.9	2041.9	2037.9	2033.9	2035.9	2038.9	2037.9	2040.9
27.5°	1946.5	1938.5	1936.5	1935.5	1933.5	1932.5	1934.5	1934.5	1937.5	1941.5	1945.5
30°	1827.2	1825.2	1822.2	1821.2	1819.2	1824.2	1826.2	1829.2	1828.2	1834.1	1838.1
32.5°	1707.9	1703.9	1702.9	1704.9	1707.9	1706.9	1712.8	1714.8	1716.8	1723.8	1726.8
35°	1587.6	1586.6	1584.6	1584.6	1585.6	1593.5	1593.5	1600.5	1604.5	1606.5	1614.4
37.5°	1458.4	1462.3	1464.3	1467.3	1468.3	1471.3	1473.3	1480.2	1484.2	1488.2	1492.2
40°	1340.1	1338.1	1347.0	1341.0	1343.0	1352.0	1356.0	1355.0	1360.9	1366.9	1370.9
42.5°	1213.8	1216.8	1218.8	1220.8	1225.7	1226.7	1231.7	1238.7	1240.6	1247.6	1249.6
45°	1091.5	1092.5	1096.5	1100.5	1103.5	1111.4	1113.4	1116.4	1122.3	1122.3	1125.3
47.5°	976.2	980.2	980.2	986.2	991.1	990.1	997.1	999.1	998.1	1003.1	1005.0
50°	865.9	871.8	870.8	874.8	876.8	877.8	883.8	885.7	881.8	886.7	887.7
52.5°	760.5	763.5	767.4	768.4	766.5	771.4	769.4	773.4	772.4	776.4	772.4
55°	664.1	663.1	663.1	665.1	663.1	665.1	667.0	663.1	660.1	664.1	663.1
57.5°	567.6	567.6	565.6	568.6	565.6	562.7	561.7	558.7	555.7	555.7	554.7
60°	477.2	475.2	471.2	470.2	470.2	465.2	463.3	459.3	459.3	455.3	451.3
62.5°	392.7	387.7	384.7	384.7	382.7	377.8	368.8	362.8	360.9	354.9	353.9
65°	313.1	308.2	305.2	299.2	294.3	292.3	283.3	276.4	273.4	267.4	268.4
67.5°	240.6	232.6	223.7	219.7	216.7	209.8	206.8	201.8	198.8	198.8	198.8
70°	173.0	166.0	157.1	154.1	152.1	146.1	143.2	142.2	145.1	144.1	145.1
72.5°	116.3	109.4	105.4	103.4	101.4	98.4	100.4	101.4	99.4	100.4	101.4
75°	70.6	68.6	65.6	64.6	64.6	65.6	64.6	64.6	65.6	65.6	66.6
77.5°	40.8	38.8	38.8	37.8	39.8	38.8	38.8	38.8	39.8	39.8	39.8
80°	21.9	21.9	21.9	21.9	22.9	21.9	22.9	22.9	22.9	22.9	22.9
82.5°	10.9	10.9	10.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	10.9
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
87.5°	1.0	2.0	2.0	2.0	2.0	2.0	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





TEST NUMBER: P859196

CATALOG NUMBER: LX4C60D010 EX4C609030 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7	2584.7
2.5°	2566.8	2566.8	2566.8	2564.8	2565.8	2565.8	2564.8	2564.8
5°	2538.9	2537.9	2536.0	2536.0	2534.0	2536.0	2535.0	2536.0
7.5°	2501.2	2501.2	2498.2	2498.2	2497.2	2496.2	2495.2	2496.2
10°	2456.4	2456.4	2454.4	2453.4	2454.4	2450.5	2450.5	2449.5
12.5°	2406.7	2404.7	2402.8	2403.7	2402.8	2399.8	2398.8	2399.8
15°	2349.1	2346.1	2347.1	2344.1	2344.1	2343.1	2345.1	2345.1
17.5°	2285.4	2283.5	2281.5	2282.5	2280.5	2281.5	2280.5	2279.5
20°	2214.9	2213.9	2213.9	2209.9	2210.9	2209.9	2210.9	2213.9
22.5°	2133.3	2132.4	2133.3	2130.4	2132.4	2132.4	2135.3	2135.3
25°	2043.9	2042.9	2044.9	2045.9	2046.9	2049.8	2046.9	2047.9
27.5°	1944.5	1947.5	1950.4	1951.4	1955.4	1952.4	1950.4	1953.4
30°	1844.1	1844.1	1843.1	1847.0	1850.0	1853.0	1848.0	1848.0
32.5°	1728.7	1733.7	1733.7	1734.7	1737.7	1737.7	1737.7	1741.7
35°	1618.4	1621.4	1622.4	1618.4	1620.4	1619.4	1626.4	1626.4
37.5°	1495.1	1495.1	1496.1	1503.1	1503.1	1500.1	1502.1	1502.1
40°	1377.8	1378.8	1374.8	1376.8	1381.8	1379.8	1381.8	1383.8
42.5°	1249.6	1256.5	1252.6	1254.6	1253.6	1254.6	1255.6	1255.6
45°	1127.3	1129.3	1129.3	1130.3	1132.3	1134.3	1128.3	1127.3
47.5°	1008.0	1009.0	1012.0	1007.0	1013.0	1007.0	1013.0	1006.0
50°	887.7	891.7	888.7	890.7	887.7	887.7	886.7	885.7
52.5°	773.4	772.4	772.4	771.4	771.4	773.4	771.4	774.4
55°	659.1	660.1	658.1	657.1	656.1	659.1	656.1	654.1
57.5°	550.7	552.7	548.7	550.7	543.8	546.8	547.8	548.7
60°	450.3	447.3	447.3	443.4	443.4	446.4	442.4	442.4
62.5°	348.9	350.9	347.9	351.9	351.9	355.9	353.9	355.9
65°	267.4	268.4	269.4	269.4	269.4	275.4	273.4	270.4
67.5°	201.8	202.8	203.8	202.8	205.8	203.8	203.8	204.8
70°	146.1	147.1	148.1	148.1	147.1	148.1	148.1	148.1
72.5°	101.4	102.4	101.4	102.4	103.4	102.4	102.4	103.4
75°	66.6	66.6	65.6	65.6	65.6	65.6	66.6	65.6
77.5°	38.8	39.8	38.8	39.8	39.8	39.8	39.8	39.8
80°	22.9	22.9	22.9	21.9	22.9	22.9	22.9	21.9
82.5°	11.9	11.9	10.9	10.9	11.9	11.9	11.9	11.9
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
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)