

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: P859238

Luminaire Tested: **LX4C60D010 EX4C609040 4LBLWWH**

Issue Date: 2/14/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P859238  
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 EX4C609040 4LBLWWH  
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LRLWW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

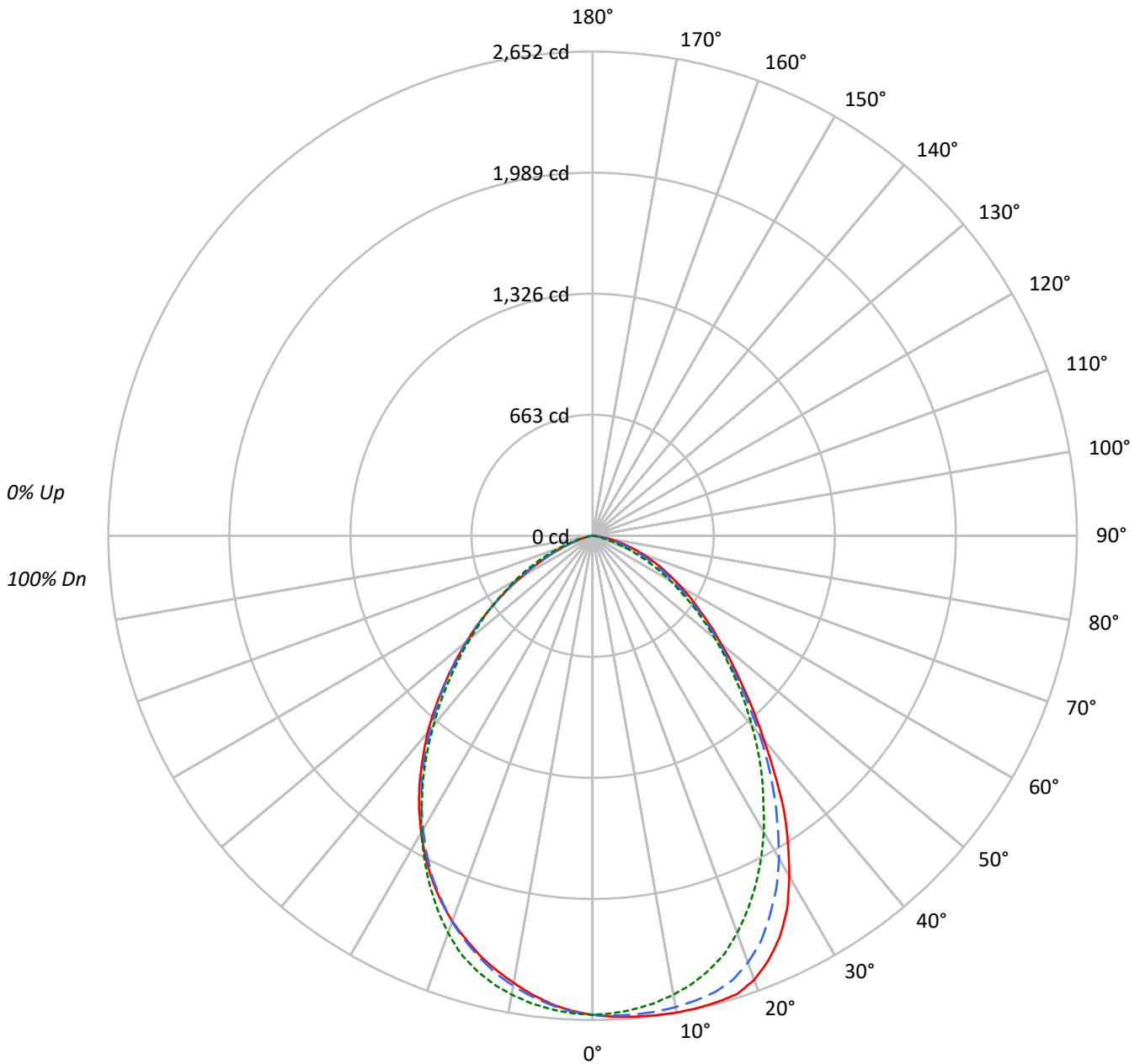
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4946.0 lumens  
Efficiency: N/A  
Efficacy: 68.7 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

TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

### Luminous Intensity Polar Plot





TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**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°	322429	322429	322429
5°	326016	321046	317556
10°	330796	318334	310275
15°	336232	313262	302858
20°	338363	302606	293899
25°	328664	286249	281871
30°	305437	266057	266198
35°	273407	242527	247671
40°	234082	217403	225341
45°	201505	191689	198881
50°	175167	166872	171899
55°	154151	143549	142264
60°	137154	119782	110372
65°	120319	95959	79825
70°	103342	67817	54024
75°	83827	39303	31613
80°	59995	17121	15706
85°	22835	7048	7048



TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.3	5.0
10°-20°	700.1	14.2
20°-30°	999.8	20.2
30°-40°	1045.9	21.1
40°-50°	876.3	17.7
50°-60°	613.3	12.4
60°-70°	334.0	6.8
70°-80°	115.9	2.3
80°-90°	13.3	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°	1947.3	39.4
0°-40°	2993.2	60.5
0°-60°	4482.8	90.6
0°-90°	4946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4946.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2624	2624	2624	2624	2624	
5°	2644	2632	2603	2581	2575	253
15°	2644	2588	2463	2392	2381	747
25°	2425	2295	2112	2070	2079	1107
35°	1823	1733	1617	1629	1651	1130
45°	1160	1134	1103	1140	1145	902
55°	720	696	670	670	664	650
65°	414	378	330	278	275	412
75°	177	143	83	67	67	190
85°	16	9	5	5	5	29
90°	0	0	0	0	0	



TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5
2.5°	2636.6	2633.6	2634.6	2634.6	2634.6	2633.6	2634.6	2633.6	2633.6	2632.5	2630.5
5°	2643.6	2641.6	2641.6	2641.6	2640.6	2639.6	2639.6	2638.6	2636.6	2635.6	2631.5
7.5°	2648.7	2646.7	2646.7	2645.7	2644.7	2643.6	2642.6	2639.6	2636.6	2634.6	2629.5
10°	2651.7	2648.7	2648.7	2646.7	2644.7	2643.6	2641.6	2637.6	2633.6	2628.5	2621.4
12.5°	2649.7	2646.7	2645.7	2643.6	2639.6	2637.6	2635.6	2630.5	2623.5	2616.4	2607.3
15°	2643.6	2641.6	2639.6	2636.6	2631.5	2628.5	2626.5	2618.4	2609.3	2599.2	2588.1
17.5°	2631.5	2628.5	2624.5	2620.4	2613.4	2610.3	2605.3	2595.2	2582.1	2567.9	2550.8
20°	2588.1	2586.1	2582.1	2575.0	2563.9	2559.9	2552.8	2539.7	2522.5	2505.4	2487.2
22.5°	2516.5	2513.4	2507.4	2501.3	2491.2	2484.2	2478.1	2459.9	2440.8	2422.6	2405.4
25°	2424.6	2421.6	2413.5	2405.4	2395.3	2383.2	2377.2	2363.0	2343.9	2320.6	2295.4
27.5°	2306.5	2296.4	2293.4	2284.3	2269.2	2265.1	2256.0	2237.9	2219.7	2199.5	2178.3
30°	2153.1	2153.1	2147.0	2143.0	2128.8	2124.8	2114.7	2095.5	2085.4	2057.2	2041.0
32.5°	1990.6	1988.5	1983.5	1980.5	1972.4	1965.3	1955.2	1945.1	1922.9	1908.8	1886.6
35°	1823.0	1810.9	1812.9	1806.8	1801.8	1793.7	1792.7	1781.6	1761.4	1753.3	1733.2
37.5°	1632.2	1627.2	1634.2	1625.2	1620.1	1621.1	1613.0	1606.0	1597.9	1583.8	1579.7
40°	1459.6	1463.6	1462.6	1454.6	1458.6	1453.6	1445.5	1438.4	1434.4	1425.3	1422.3
42.5°	1305.2	1299.1	1297.1	1297.1	1298.1	1298.1	1294.1	1289.0	1289.0	1279.9	1270.8
45°	1159.8	1159.8	1157.8	1163.9	1154.8	1154.8	1151.7	1150.7	1146.7	1144.7	1133.6
47.5°	1034.6	1033.6	1032.6	1031.6	1030.6	1030.6	1024.6	1019.5	1018.5	1012.4	1006.4
50°	916.5	922.6	920.6	915.5	913.5	914.5	910.5	907.5	906.5	896.4	897.4
52.5°	817.6	816.6	818.6	815.6	810.6	811.6	807.5	803.5	799.5	794.4	790.4
55°	719.7	724.8	722.7	719.7	718.7	716.7	713.7	708.6	707.6	696.5	695.5
57.5°	637.9	636.9	634.9	629.9	628.9	625.8	625.8	621.8	615.7	609.7	604.6
60°	558.2	558.2	555.2	554.2	550.1	549.1	548.1	544.1	537.0	532.0	523.9
62.5°	481.5	483.5	481.5	478.5	475.4	471.4	469.4	466.3	460.3	455.2	448.2
65°	413.9	412.8	411.8	407.8	406.8	402.8	401.7	395.7	389.6	385.6	377.5
67.5°	349.3	346.2	346.2	344.2	342.2	339.2	337.1	331.1	324.0	320.0	311.9
70°	287.7	285.7	285.7	285.7	280.6	277.6	276.6	273.6	263.5	259.4	251.3
72.5°	231.2	230.1	229.1	226.1	223.1	223.1	219.0	213.0	207.9	202.9	196.8
75°	176.6	178.7	176.6	172.6	171.6	169.6	166.6	161.5	156.5	150.4	143.3
77.5°	129.2	127.2	125.2	125.2	123.1	119.1	118.1	114.1	108.0	104.0	96.9
80°	84.8	83.8	81.8	79.7	78.7	77.7	76.7	72.7	66.6	63.6	57.5
82.5°	46.4	45.4	45.4	44.4	41.4	41.4	40.4	36.3	33.3	31.3	28.3
85°	16.2	16.2	16.2	15.1	15.1	15.1	14.1	13.1	12.1	11.1	9.1
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



TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5
2.5°	2628.5	2626.5	2625.5	2624.5	2623.5	2622.4	2621.4	2619.4	2618.4	2617.4	2615.4
5°	2628.5	2624.5	2622.4	2619.4	2617.4	2615.4	2612.4	2609.3	2606.3	2603.3	2600.2
7.5°	2624.5	2618.4	2614.4	2608.3	2606.3	2603.3	2597.2	2593.2	2588.1	2582.1	2575.0
10°	2614.4	2607.3	2599.2	2591.2	2588.1	2583.1	2575.0	2567.9	2559.9	2551.8	2544.7
12.5°	2598.2	2587.1	2577.0	2565.9	2559.9	2554.8	2543.7	2533.6	2523.5	2514.4	2502.3
15°	2574.0	2560.9	2547.8	2532.6	2525.5	2519.5	2503.3	2491.2	2475.1	2463.0	2450.8
17.5°	2534.6	2514.4	2498.3	2479.1	2469.0	2462.0	2447.8	2428.6	2413.5	2400.4	2386.2
20°	2467.0	2447.8	2425.6	2404.4	2393.3	2384.2	2364.0	2343.9	2328.7	2314.6	2299.4
22.5°	2378.2	2353.9	2337.8	2311.6	2302.5	2291.4	2267.1	2249.0	2231.8	2217.7	2203.5
25°	2270.2	2249.0	2226.8	2202.5	2191.4	2178.3	2158.1	2138.9	2127.8	2111.7	2094.5
27.5°	2146.0	2128.8	2101.6	2080.4	2069.3	2059.2	2040.0	2022.9	2006.7	1995.6	1979.5
30°	2014.8	1994.6	1970.4	1948.2	1942.1	1930.0	1912.8	1899.7	1882.6	1875.5	1868.4
32.5°	1870.4	1847.2	1829.1	1814.9	1802.8	1792.7	1783.6	1762.4	1759.4	1741.2	1739.2
35°	1713.0	1702.9	1685.7	1673.6	1663.5	1656.4	1641.3	1631.2	1620.1	1617.1	1610.0
37.5°	1564.6	1552.5	1536.3	1525.2	1518.2	1517.1	1506.0	1500.0	1491.9	1487.9	1479.8
40°	1409.1	1404.1	1390.0	1387.9	1376.8	1375.8	1369.8	1362.7	1355.6	1355.6	1356.6
42.5°	1265.8	1259.7	1253.7	1246.6	1240.6	1240.6	1237.5	1235.5	1233.5	1230.5	1235.5
45°	1131.5	1123.5	1119.4	1112.4	1115.4	1109.3	1107.3	1107.3	1104.3	1103.3	1110.4
47.5°	1006.4	997.3	993.3	991.2	991.2	992.3	983.2	986.2	985.2	987.2	990.2
50°	892.3	884.2	878.2	878.2	879.2	875.2	871.1	874.1	871.1	873.1	880.2
52.5°	786.3	778.3	775.2	775.2	769.2	768.2	770.2	766.1	767.2	768.2	772.2
55°	688.4	683.4	678.3	673.3	674.3	672.3	668.2	667.2	669.2	670.2	675.3
57.5°	600.6	593.5	586.5	584.4	582.4	582.4	577.4	576.4	578.4	573.3	573.3
60°	516.8	512.8	503.7	500.7	500.7	495.6	491.6	493.6	488.6	487.5	488.6
62.5°	439.1	436.1	430.0	424.0	421.9	419.9	414.9	412.8	410.8	406.8	400.7
65°	371.5	364.4	357.3	353.3	350.3	345.2	342.2	338.2	332.1	330.1	324.0
67.5°	303.8	296.8	289.7	286.7	283.6	280.6	275.6	270.5	263.5	255.4	248.3
70°	244.3	235.2	231.2	223.1	221.1	217.0	210.0	204.9	197.8	188.8	181.7
72.5°	186.7	180.7	174.6	167.6	162.5	159.5	153.4	145.4	137.3	132.2	125.2
75°	134.3	131.2	123.1	115.1	113.1	109.0	102.0	96.9	90.8	82.8	76.7
77.5°	90.8	84.8	79.7	72.7	70.7	66.6	62.6	57.5	53.5	48.5	44.4
80°	53.5	48.5	45.4	40.4	38.4	36.3	33.3	29.3	26.2	24.2	23.2
82.5°	26.2	22.2	21.2	18.2	17.2	16.2	14.1	13.1	11.1	11.1	11.1
85°	9.1	7.1	7.1	6.1	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



TEST NUMBER: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5
2.5°	2614.4	2613.4	2612.4	2611.3	2611.3	2610.3	2610.3	2609.3	2609.3	2608.3	2608.3
5°	2596.2	2593.2	2591.2	2589.1	2589.1	2586.1	2584.1	2582.1	2581.1	2581.1	2579.0
7.5°	2571.0	2566.9	2562.9	2559.9	2558.9	2553.8	2549.8	2549.8	2545.7	2543.7	2541.7
10°	2537.7	2530.6	2524.5	2521.5	2517.5	2514.4	2509.4	2506.4	2503.3	2498.3	2497.3
12.5°	2492.2	2487.2	2478.1	2474.1	2472.0	2466.0	2457.9	2453.9	2452.9	2448.8	2445.8
15°	2440.8	2429.7	2421.6	2416.5	2416.5	2406.4	2402.4	2396.3	2392.3	2389.3	2388.3
17.5°	2374.1	2363.0	2355.0	2347.9	2345.9	2337.8	2331.7	2329.7	2324.7	2326.7	2321.6
20°	2288.3	2279.2	2273.2	2264.1	2264.1	2259.1	2257.0	2252.0	2250.0	2248.0	2250.0
22.5°	2196.5	2185.4	2175.3	2174.3	2174.3	2167.2	2166.2	2165.2	2161.1	2164.2	2163.2
25°	2088.5	2080.4	2074.3	2073.3	2073.3	2069.3	2065.3	2067.3	2070.3	2069.3	2072.3
27.5°	1976.4	1968.4	1966.3	1965.3	1963.3	1962.3	1964.3	1964.3	1967.3	1971.4	1975.4
30°	1855.3	1853.3	1850.3	1849.2	1847.2	1852.3	1854.3	1857.3	1856.3	1862.4	1866.4
32.5°	1734.2	1730.1	1729.1	1731.1	1734.2	1733.2	1739.2	1741.2	1743.3	1750.3	1753.3
35°	1612.0	1611.0	1609.0	1609.0	1610.0	1618.1	1618.1	1625.2	1629.2	1631.2	1639.3
37.5°	1480.8	1484.8	1486.9	1489.9	1490.9	1493.9	1495.9	1503.0	1507.1	1511.1	1515.1
40°	1360.7	1358.7	1367.8	1361.7	1363.7	1372.8	1376.8	1375.8	1381.9	1387.9	1392.0
42.5°	1232.5	1235.5	1237.5	1239.6	1244.6	1245.6	1250.7	1257.7	1259.7	1266.8	1268.8
45°	1108.3	1109.3	1113.4	1117.4	1120.4	1128.5	1130.5	1133.6	1139.6	1139.6	1142.7
47.5°	991.2	995.3	995.3	1001.3	1006.4	1005.4	1012.4	1014.5	1013.4	1018.5	1020.5
50°	879.2	885.3	884.2	888.3	890.3	891.3	897.4	899.4	895.3	900.4	901.4
52.5°	772.2	775.2	779.3	780.3	778.3	783.3	781.3	785.3	784.3	788.3	784.3
55°	674.3	673.3	673.3	675.3	673.3	675.3	677.3	673.3	670.2	674.3	673.3
57.5°	576.4	576.4	574.4	577.4	574.4	571.3	570.3	567.3	564.3	564.3	563.3
60°	484.5	482.5	478.5	477.5	477.5	472.4	470.4	466.3	466.3	462.3	458.3
62.5°	398.7	393.7	390.6	390.6	388.6	383.6	374.5	368.4	366.4	360.4	359.4
65°	318.0	312.9	309.9	303.8	298.8	296.8	287.7	280.6	277.6	271.5	272.5
67.5°	244.3	236.2	227.1	223.1	220.1	213.0	210.0	204.9	201.9	201.9	201.9
70°	175.6	168.6	159.5	156.5	154.4	148.4	145.4	144.3	147.4	146.4	147.4
72.5°	118.1	111.0	107.0	105.0	103.0	99.9	102.0	103.0	100.9	102.0	103.0
75°	71.7	69.6	66.6	65.6	65.6	66.6	65.6	65.6	66.6	66.6	67.6
77.5°	41.4	39.4	39.4	38.4	40.4	39.4	39.4	39.4	40.4	40.4	40.4
80°	22.2	22.2	22.2	22.2	23.2	22.2	23.2	23.2	23.2	23.2	23.2
82.5°	11.1	11.1	11.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	11.1
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: P859238

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5	2624.5
2.5°	2606.3	2606.3	2606.3	2604.3	2605.3	2605.3	2604.3	2604.3
5°	2578.0	2577.0	2575.0	2575.0	2573.0	2575.0	2574.0	2575.0
7.5°	2539.7	2539.7	2536.6	2536.6	2535.6	2534.6	2533.6	2534.6
10°	2494.3	2494.3	2492.2	2491.2	2492.2	2488.2	2488.2	2487.2
12.5°	2443.8	2441.8	2439.7	2440.8	2439.7	2436.7	2435.7	2436.7
15°	2385.2	2382.2	2383.2	2380.2	2380.2	2379.2	2381.2	2381.2
17.5°	2320.6	2318.6	2316.6	2317.6	2315.6	2316.6	2315.6	2314.6
20°	2249.0	2248.0	2248.0	2243.9	2244.9	2243.9	2244.9	2248.0
22.5°	2166.2	2165.2	2166.2	2163.2	2165.2	2165.2	2168.2	2168.2
25°	2075.3	2074.3	2076.4	2077.4	2078.4	2081.4	2078.4	2079.4
27.5°	1974.4	1977.4	1980.5	1981.5	1985.5	1982.5	1980.5	1983.5
30°	1872.5	1872.5	1871.4	1875.5	1878.5	1881.5	1876.5	1876.5
32.5°	1755.4	1760.4	1760.4	1761.4	1764.5	1764.5	1764.5	1768.5
35°	1643.3	1646.3	1647.4	1643.3	1645.3	1644.3	1651.4	1651.4
37.5°	1518.2	1518.2	1519.2	1526.2	1526.2	1523.2	1525.2	1525.2
40°	1399.0	1400.1	1396.0	1398.0	1403.1	1401.1	1403.1	1405.1
42.5°	1268.8	1275.9	1271.9	1273.9	1272.9	1273.9	1274.9	1274.9
45°	1144.7	1146.7	1146.7	1147.7	1149.7	1151.7	1145.7	1144.7
47.5°	1023.5	1024.6	1027.6	1022.5	1028.6	1022.5	1028.6	1021.5
50°	901.4	905.4	902.4	904.4	901.4	901.4	900.4	899.4
52.5°	785.3	784.3	784.3	783.3	783.3	785.3	783.3	786.3
55°	669.2	670.2	668.2	667.2	666.2	669.2	666.2	664.2
57.5°	559.2	561.2	557.2	559.2	552.1	555.2	556.2	557.2
60°	457.3	454.2	454.2	450.2	450.2	453.2	449.2	449.2
62.5°	354.3	356.3	353.3	357.3	357.3	361.4	359.4	361.4
65°	271.5	272.5	273.6	273.6	273.6	279.6	277.6	274.6
67.5°	204.9	205.9	206.9	205.9	208.9	206.9	206.9	207.9
70°	148.4	149.4	150.4	150.4	149.4	150.4	150.4	150.4
72.5°	103.0	104.0	103.0	104.0	105.0	104.0	104.0	105.0
75°	67.6	67.6	66.6	66.6	66.6	66.6	67.6	66.6
77.5°	39.4	40.4	39.4	40.4	40.4	40.4	40.4	40.4
80°	23.2	23.2	23.2	22.2	23.2	23.2	23.2	22.2
82.5°	12.1	12.1	11.1	11.1	12.1	12.1	12.1	12.1
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



Report Generated By 670246072 / DESKTOP-50001EG





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















(END OF REPORT)