

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: P859423

Luminaire Tested: **LX4C65D010 EX4C659727 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859423
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 EX4C659727 4LBLWWH
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 97CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

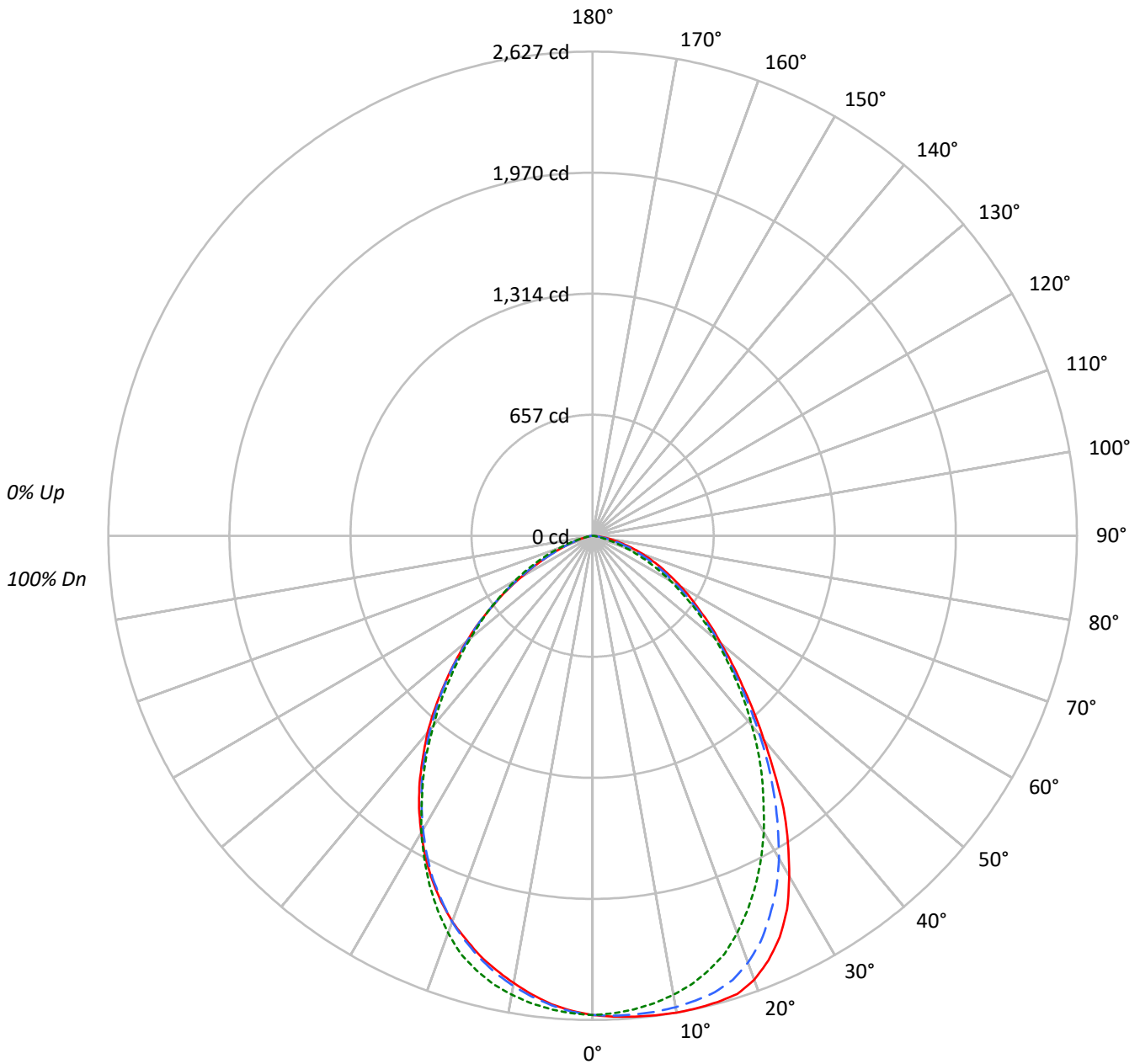
Lumens per Lamp: N/A
Luminaire Lumens: 4899.9 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72.4
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°	319431	319431	319431
5°	322995	318062	314609
10°	327727	315377	307393
15°	333116	310350	300048
20°	335225	299795	291166
25°	325614	283579	279241
30°	302585	263574	263716
35°	270857	240262	245361
40°	231901	215382	223240
45°	199628	189899	197022
50°	173542	165324	170293
55°	152716	142221	140936
60°	135876	118676	109340
65°	119185	95058	79069
70°	102372	67170	53521
75°	83067	38923	31328
80°	59429	16980	15565
85°	22553	7048	7048



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	5.0
10°-20°	693.6	14.2
20°-30°	990.5	20.2
30°-40°	1036.1	21.1
40°-50°	868.2	17.7
50°-60°	607.6	12.4
60°-70°	330.9	6.8
70°-80°	114.8	2.3
80°-90°	13.2	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°	1929.2	39.4
0°-40°	2965.3	60.5
0°-60°	4441.1	90.6
0°-90°	4899.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4899.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2600	2600	2600	2600	2600	
5°	2619	2607	2579	2557	2551	250
15°	2619	2564	2440	2370	2359	740
25°	2402	2274	2092	2051	2060	1097
35°	1806	1717	1602	1614	1636	1120
45°	1149	1123	1093	1129	1134	893
55°	713	689	664	664	658	644
65°	410	374	327	275	272	408
75°	175	142	82	66	66	189
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°	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1
2.5°	2612.1	2609.1	2610.1	2610.1	2610.1	2609.1	2610.1	2609.1	2609.1	2608.1	2606.1
5°	2619.1	2617.1	2617.1	2617.1	2616.1	2615.1	2615.1	2614.1	2612.1	2611.1	2607.1
7.5°	2624.1	2622.1	2622.1	2621.1	2620.1	2619.1	2618.1	2615.1	2612.1	2610.1	2605.1
10°	2627.1	2624.1	2624.1	2622.1	2620.1	2619.1	2617.1	2613.1	2609.1	2604.1	2597.1
12.5°	2625.1	2622.1	2621.1	2619.1	2615.1	2613.1	2611.1	2606.1	2599.1	2592.1	2583.1
15°	2619.1	2617.1	2615.1	2612.1	2607.1	2604.1	2602.1	2594.1	2585.1	2575.1	2564.1
17.5°	2607.1	2604.1	2600.1	2596.1	2589.1	2586.1	2581.1	2571.1	2558.1	2544.1	2527.1
20°	2564.1	2562.1	2558.1	2551.1	2540.1	2536.1	2529.1	2516.1	2499.1	2482.1	2464.1
22.5°	2493.1	2490.1	2484.1	2478.1	2468.1	2461.1	2455.1	2437.1	2418.1	2400.1	2383.1
25°	2402.1	2399.1	2391.1	2383.1	2373.1	2361.1	2355.1	2341.1	2322.1	2299.1	2274.1
27.5°	2285.1	2275.1	2272.1	2263.1	2248.1	2244.1	2235.1	2217.1	2199.1	2179.0	2158.0
30°	2133.0	2133.0	2127.0	2123.0	2109.0	2105.0	2095.0	2076.0	2066.0	2038.0	2022.0
32.5°	1972.0	1970.0	1965.0	1962.0	1954.0	1947.0	1937.0	1927.0	1905.0	1891.0	1869.0
35°	1806.0	1794.0	1796.0	1790.0	1785.0	1777.0	1776.0	1765.0	1745.0	1737.0	1717.0
37.5°	1617.0	1612.0	1619.0	1610.0	1605.0	1606.0	1598.0	1591.0	1583.0	1569.0	1565.0
40°	1446.0	1450.0	1449.0	1441.0	1445.0	1440.0	1432.0	1425.0	1421.0	1412.0	1409.0
42.5°	1293.0	1287.0	1285.0	1285.0	1286.0	1286.0	1282.0	1277.0	1277.0	1268.0	1259.0
45°	1149.0	1149.0	1147.0	1153.0	1144.0	1144.0	1141.0	1140.0	1136.0	1134.0	1123.0
47.5°	1025.0	1024.0	1023.0	1022.0	1021.0	1021.0	1015.0	1010.0	1009.0	1003.0	997.0
50°	908.0	914.0	912.0	907.0	905.0	906.0	902.0	899.0	898.0	888.0	889.0
52.5°	810.0	809.0	811.0	808.0	803.0	804.0	800.0	796.0	792.0	787.0	783.0
55°	713.0	718.0	716.0	713.0	712.0	710.0	707.0	702.0	701.0	690.0	689.0
57.5°	632.0	631.0	629.0	624.0	623.0	620.0	620.0	616.0	610.0	604.0	599.0
60°	553.0	553.0	550.0	549.0	545.0	544.0	543.0	539.0	532.0	527.0	519.0
62.5°	477.0	479.0	477.0	474.0	471.0	467.0	465.0	462.0	456.0	451.0	444.0
65°	410.0	409.0	408.0	404.0	403.0	399.0	398.0	392.0	386.0	382.0	374.0
67.5°	346.0	343.0	343.0	341.0	339.0	336.0	334.0	328.0	321.0	317.0	309.0
70°	285.0	283.0	283.0	283.0	278.0	275.0	274.0	271.0	261.0	257.0	249.0
72.5°	229.0	228.0	227.0	224.0	221.0	221.0	217.0	211.0	206.0	201.0	195.0
75°	175.0	177.0	175.0	171.0	170.0	168.0	165.0	160.0	155.0	149.0	142.0
77.5°	128.0	126.0	124.0	124.0	122.0	118.0	117.0	113.0	107.0	103.0	96.0
80°	84.0	83.0	81.0	79.0	78.0	77.0	76.0	72.0	66.0	63.0	57.0
82.5°	46.0	45.0	45.0	44.0	41.0	41.0	40.0	36.0	33.0	31.0	28.0
85°	16.0	16.0	16.0	15.0	15.0	15.0	14.0	13.0	12.0	11.0	9.0
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°	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1
2.5°	2604.1	2602.1	2601.1	2600.1	2599.1	2598.1	2597.1	2595.1	2594.1	2593.1	2591.1
5°	2604.1	2600.1	2598.1	2595.1	2593.1	2591.1	2588.1	2585.1	2582.1	2579.1	2576.1
7.5°	2600.1	2594.1	2590.1	2584.1	2582.1	2579.1	2573.1	2569.1	2564.1	2558.1	2551.1
10°	2590.1	2583.1	2575.1	2567.1	2564.1	2559.1	2551.1	2544.1	2536.1	2528.1	2521.1
12.5°	2574.1	2563.1	2553.1	2542.1	2536.1	2531.1	2520.1	2510.1	2500.1	2491.1	2479.1
15°	2550.1	2537.1	2524.1	2509.1	2502.1	2496.1	2480.1	2468.1	2452.1	2440.1	2428.1
17.5°	2511.1	2491.1	2475.1	2456.1	2446.1	2439.1	2425.1	2406.1	2391.1	2378.1	2364.1
20°	2444.1	2425.1	2403.1	2382.1	2371.1	2362.1	2342.1	2322.1	2307.1	2293.1	2278.1
22.5°	2356.1	2332.1	2316.1	2290.1	2281.1	2270.1	2246.1	2228.1	2211.1	2197.1	2183.0
25°	2249.1	2228.1	2206.1	2182.0	2171.0	2158.0	2138.0	2119.0	2108.0	2092.0	2075.0
27.5°	2126.0	2109.0	2082.0	2061.0	2050.0	2040.0	2021.0	2004.0	1988.0	1977.0	1961.0
30°	1996.0	1976.0	1952.0	1930.0	1924.0	1912.0	1895.0	1882.0	1865.0	1858.0	1851.0
32.5°	1853.0	1830.0	1812.0	1798.0	1786.0	1776.0	1767.0	1746.0	1743.0	1725.0	1723.0
35°	1697.0	1687.0	1670.0	1658.0	1648.0	1641.0	1626.0	1616.0	1605.0	1602.0	1595.0
37.5°	1550.0	1538.0	1522.0	1511.0	1504.0	1503.0	1492.0	1486.0	1478.0	1474.0	1466.0
40°	1396.0	1391.0	1377.0	1375.0	1364.0	1363.0	1357.0	1350.0	1343.0	1343.0	1344.0
42.5°	1254.0	1248.0	1242.0	1235.0	1229.0	1229.0	1226.0	1224.0	1222.0	1219.0	1224.0
45°	1121.0	1113.0	1109.0	1102.0	1105.0	1099.0	1097.0	1097.0	1094.0	1093.0	1100.0
47.5°	997.0	988.0	984.0	982.0	982.0	983.0	974.0	977.0	976.0	978.0	981.0
50°	884.0	876.0	870.0	870.0	871.0	867.0	863.0	866.0	863.0	865.0	872.0
52.5°	779.0	771.0	768.0	768.0	762.0	761.0	763.0	759.0	760.0	761.0	765.0
55°	682.0	677.0	672.0	667.0	668.0	666.0	662.0	661.0	663.0	664.0	669.0
57.5°	595.0	588.0	581.0	579.0	577.0	577.0	572.0	571.0	573.0	568.0	568.0
60°	512.0	508.0	499.0	496.0	496.0	491.0	487.0	489.0	484.0	483.0	484.0
62.5°	435.0	432.0	426.0	420.0	418.0	416.0	411.0	409.0	407.0	403.0	397.0
65°	368.0	361.0	354.0	350.0	347.0	342.0	339.0	335.0	329.0	327.0	321.0
67.5°	301.0	294.0	287.0	284.0	281.0	278.0	273.0	268.0	261.0	253.0	246.0
70°	242.0	233.0	229.0	221.0	219.0	215.0	208.0	203.0	196.0	187.0	180.0
72.5°	185.0	179.0	173.0	166.0	161.0	158.0	152.0	144.0	136.0	131.0	124.0
75°	133.0	130.0	122.0	114.0	112.0	108.0	101.0	96.0	90.0	82.0	76.0
77.5°	90.0	84.0	79.0	72.0	70.0	66.0	62.0	57.0	53.0	48.0	44.0
80°	53.0	48.0	45.0	40.0	38.0	36.0	33.0	29.0	26.0	24.0	23.0
82.5°	26.0	22.0	21.0	18.0	17.0	16.0	14.0	13.0	11.0	11.0	11.0
85°	9.0	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°	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1
2.5°	2590.1	2589.1	2588.1	2587.1	2587.1	2586.1	2586.1	2585.1	2585.1	2584.1	2584.1
5°	2572.1	2569.1	2567.1	2565.1	2565.1	2562.1	2560.1	2558.1	2557.1	2557.1	2555.1
7.5°	2547.1	2543.1	2539.1	2536.1	2535.1	2530.1	2526.1	2526.1	2522.1	2520.1	2518.1
10°	2514.1	2507.1	2501.1	2498.1	2494.1	2491.1	2486.1	2483.1	2480.1	2475.1	2474.1
12.5°	2469.1	2464.1	2455.1	2451.1	2449.1	2443.1	2435.1	2431.1	2430.1	2426.1	2423.1
15°	2418.1	2407.1	2399.1	2394.1	2394.1	2384.1	2380.1	2374.1	2370.1	2367.1	2366.1
17.5°	2352.1	2341.1	2333.1	2326.1	2324.1	2316.1	2310.1	2308.1	2303.1	2305.1	2300.1
20°	2267.1	2258.1	2252.1	2243.1	2243.1	2238.1	2236.1	2231.1	2229.1	2227.1	2229.1
22.5°	2176.0	2165.0	2155.0	2154.0	2154.0	2147.0	2146.0	2145.0	2141.0	2144.0	2143.0
25°	2069.0	2061.0	2055.0	2054.0	2054.0	2050.0	2046.0	2048.0	2051.0	2050.0	2053.0
27.5°	1958.0	1950.0	1948.0	1947.0	1945.0	1944.0	1946.0	1946.0	1949.0	1953.0	1957.0
30°	1838.0	1836.0	1833.0	1832.0	1830.0	1835.0	1837.0	1840.0	1839.0	1845.0	1849.0
32.5°	1718.0	1714.0	1713.0	1715.0	1718.0	1717.0	1723.0	1725.0	1727.0	1734.0	1737.0
35°	1597.0	1596.0	1594.0	1594.0	1595.0	1603.0	1603.0	1610.0	1614.0	1616.0	1624.0
37.5°	1467.0	1471.0	1473.0	1476.0	1477.0	1480.0	1482.0	1489.0	1493.0	1497.0	1501.0
40°	1348.0	1346.0	1355.0	1349.0	1351.0	1360.0	1364.0	1363.0	1369.0	1375.0	1379.0
42.5°	1221.0	1224.0	1226.0	1228.0	1233.0	1234.0	1239.0	1246.0	1248.0	1255.0	1257.0
45°	1098.0	1099.0	1103.0	1107.0	1110.0	1118.0	1120.0	1123.0	1129.0	1129.0	1132.0
47.5°	982.0	986.0	986.0	992.0	997.0	996.0	1003.0	1005.0	1004.0	1009.0	1011.0
50°	871.0	877.0	876.0	880.0	882.0	883.0	889.0	891.0	887.0	892.0	893.0
52.5°	765.0	768.0	772.0	773.0	771.0	776.0	774.0	778.0	777.0	781.0	777.0
55°	668.0	667.0	667.0	669.0	667.0	669.0	671.0	667.0	664.0	668.0	667.0
57.5°	571.0	571.0	569.0	572.0	569.0	566.0	565.0	562.0	559.0	559.0	558.0
60°	480.0	478.0	474.0	473.0	473.0	468.0	466.0	462.0	462.0	458.0	454.0
62.5°	395.0	390.0	387.0	387.0	385.0	380.0	371.0	365.0	363.0	357.0	356.0
65°	315.0	310.0	307.0	301.0	296.0	294.0	285.0	278.0	275.0	269.0	270.0
67.5°	242.0	234.0	225.0	221.0	218.0	211.0	208.0	203.0	200.0	200.0	200.0
70°	174.0	167.0	158.0	155.0	153.0	147.0	144.0	143.0	146.0	145.0	146.0
72.5°	117.0	110.0	106.0	104.0	102.0	99.0	101.0	102.0	100.0	101.0	102.0
75°	71.0	69.0	66.0	65.0	65.0	66.0	65.0	65.0	66.0	66.0	67.0
77.5°	41.0	39.0	39.0	38.0	40.0	39.0	39.0	39.0	40.0	40.0	40.0
80°	22.0	22.0	22.0	22.0	23.0	22.0	23.0	23.0	23.0	23.0	23.0
82.5°	11.0	11.0	11.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0
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: P859423

CATALOG NUMBER: LX4C65D010 EX4C659727 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1	2600.1
2.5°	2582.1	2582.1	2582.1	2580.1	2581.1	2581.1	2580.1	2580.1
5°	2554.1	2553.1	2551.1	2551.1	2549.1	2551.1	2550.1	2551.1
7.5°	2516.1	2516.1	2513.1	2513.1	2512.1	2511.1	2510.1	2511.1
10°	2471.1	2471.1	2469.1	2468.1	2469.1	2465.1	2465.1	2464.1
12.5°	2421.1	2419.1	2417.1	2418.1	2417.1	2414.1	2413.1	2414.1
15°	2363.1	2360.1	2361.1	2358.1	2358.1	2357.1	2359.1	2359.1
17.5°	2299.1	2297.1	2295.1	2296.1	2294.1	2295.1	2294.1	2293.1
20°	2228.1	2227.1	2227.1	2223.1	2224.1	2223.1	2224.1	2227.1
22.5°	2146.0	2145.0	2146.0	2143.0	2145.0	2145.0	2148.0	2148.0
25°	2056.0	2055.0	2057.0	2058.0	2059.0	2062.0	2059.0	2060.0
27.5°	1956.0	1959.0	1962.0	1963.0	1967.0	1964.0	1962.0	1965.0
30°	1855.0	1855.0	1854.0	1858.0	1861.0	1864.0	1859.0	1859.0
32.5°	1739.0	1744.0	1744.0	1745.0	1748.0	1748.0	1748.0	1752.0
35°	1628.0	1631.0	1632.0	1628.0	1630.0	1629.0	1636.0	1636.0
37.5°	1504.0	1504.0	1505.0	1512.0	1512.0	1509.0	1511.0	1511.0
40°	1386.0	1387.0	1383.0	1385.0	1390.0	1388.0	1390.0	1392.0
42.5°	1257.0	1264.0	1260.0	1262.0	1261.0	1262.0	1263.0	1263.0
45°	1134.0	1136.0	1136.0	1137.0	1139.0	1141.0	1135.0	1134.0
47.5°	1014.0	1015.0	1018.0	1013.0	1019.0	1013.0	1019.0	1012.0
50°	893.0	897.0	894.0	896.0	893.0	893.0	892.0	891.0
52.5°	778.0	777.0	777.0	776.0	776.0	778.0	776.0	779.0
55°	663.0	664.0	662.0	661.0	660.0	663.0	660.0	658.0
57.5°	554.0	556.0	552.0	554.0	547.0	550.0	551.0	552.0
60°	453.0	450.0	450.0	446.0	446.0	449.0	445.0	445.0
62.5°	351.0	353.0	350.0	354.0	354.0	358.0	356.0	358.0
65°	269.0	270.0	271.0	271.0	271.0	277.0	275.0	272.0
67.5°	203.0	204.0	205.0	204.0	207.0	205.0	205.0	206.0
70°	147.0	148.0	149.0	149.0	148.0	149.0	149.0	149.0
72.5°	102.0	103.0	102.0	103.0	104.0	103.0	103.0	104.0
75°	67.0	67.0	66.0	66.0	66.0	66.0	67.0	66.0
77.5°	39.0	40.0	39.0	40.0	40.0	40.0	40.0	40.0
80°	23.0	23.0	23.0	22.0	23.0	23.0	23.0	22.0
82.5°	12.0	12.0	11.0	11.0	12.0	12.0	12.0	12.0
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)