

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: P859038

Luminaire Tested: **LX4C50D010 EX4C509050 4LBLWW\***

Issue Date: 2/9/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P859038  
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: LX4C50D010 EX4C509050 4LBLWW\*  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LRLWW TRIM WITH \* FINISH  
Light Source: -  
Ballast/Driver: -

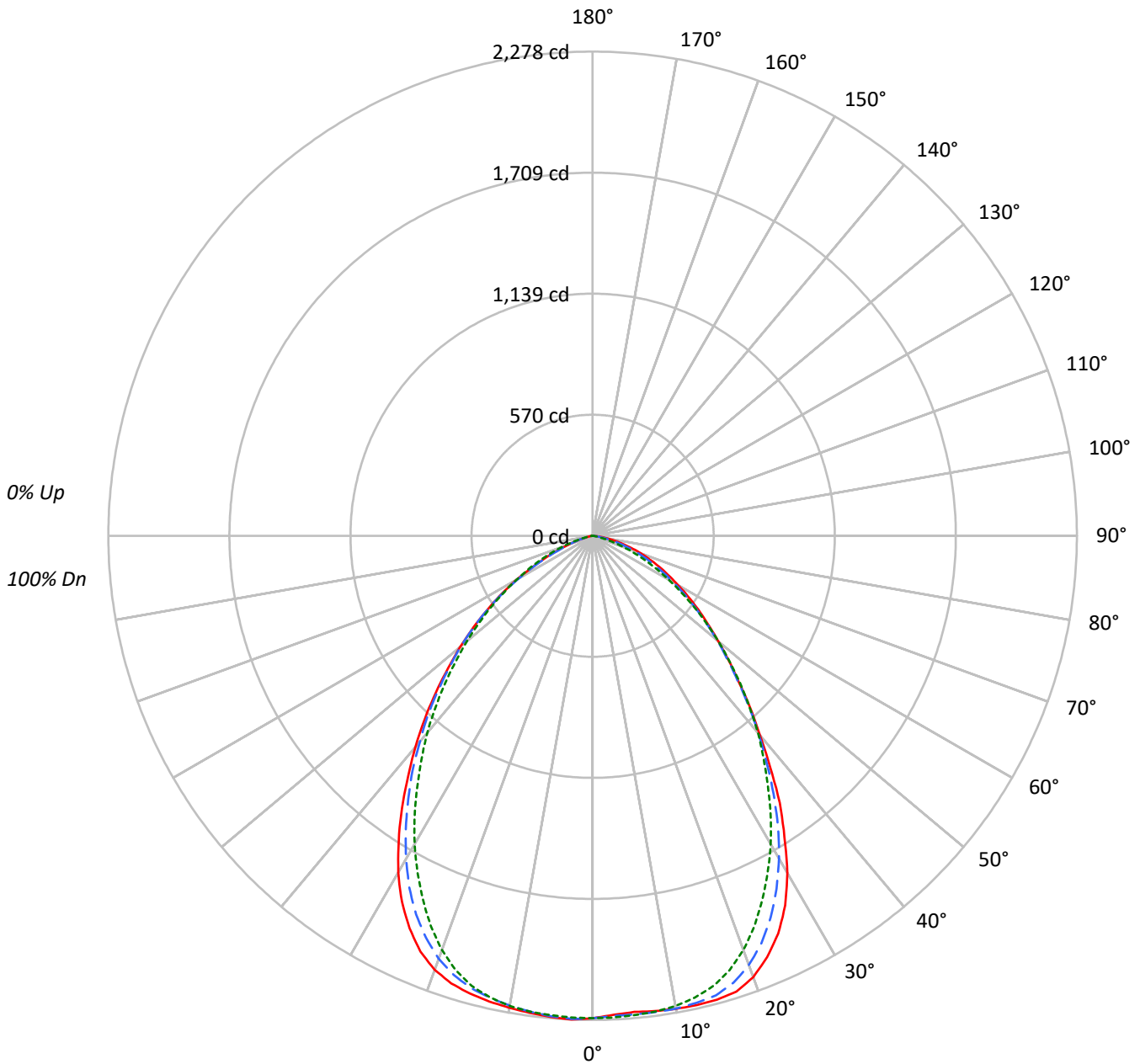
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4352.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 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): 58.4  
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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CATALOG NUMBER: LX4C50D010 EX4C509050 4LBLWW\*

### 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	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°	278877	278877	278877
5°	277316	279203	280263
10°	281907	280198	281271
15°	287418	278960	283615
20°	288865	271137	284067
25°	279973	256061	276164
30°	259871	237614	259375
35°	230124	215546	234458
40°	196169	194116	207925
45°	168546	170457	181125
50°	147110	147435	155271
55°	129991	124529	128727
60°	113934	101575	101158
65°	100842	78808	70116
70°	86028	54203	41631
75°	69587	29145	19034
80°	47614	7216	4811
85°	14378	2396	2396



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.7	5.0
10°-20°	624.5	14.4
20°-30°	902.4	20.7
30°-40°	932.9	21.4
40°-50°	770.8	17.7
50°-60°	532.0	12.2
60°-70°	278.5	6.4
70°-80°	87.7	2.0
80°-90°	7.4	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°	1742.7	40.0
0°-40°	2675.6	61.5
0°-60°	3978.4	91.4
0°-90°	4352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4352.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2270	2270	2270	2270	2270	
5°	2249	2260	2264	2268	2273	215
15°	2260	2238	2193	2204	2230	638
25°	2065	1982	1889	1965	2037	943
35°	1534	1483	1437	1512	1563	952
45°	970	966	981	1026	1042	756
55°	607	588	581	598	601	545
65°	347	314	271	225	241	344
75°	147	115	61	42	40	157
85°	10	5	2	2	2	21
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°	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0
2.5°	2255.5	2256.4	2256.4	2258.1	2258.1	2258.1	2258.9	2258.9	2259.8	2260.6	2261.5
5°	2248.7	2248.7	2250.4	2251.2	2252.9	2253.8	2255.5	2256.4	2258.1	2258.9	2259.8
7.5°	2255.5	2255.5	2256.4	2257.2	2257.2	2258.1	2258.1	2258.9	2259.8	2260.6	2260.6
10°	2259.8	2259.8	2259.8	2259.8	2260.6	2260.6	2260.6	2259.8	2259.8	2259.8	2259.8
12.5°	2261.5	2261.5	2260.6	2259.8	2260.6	2259.8	2259.8	2257.2	2255.5	2253.8	2251.2
15°	2259.8	2259.8	2258.9	2258.1	2257.2	2255.5	2254.7	2250.4	2247.0	2241.9	2238.5
17.5°	2248.7	2247.0	2245.3	2243.6	2240.2	2237.6	2235.9	2228.2	2222.3	2213.7	2204.4
20°	2209.5	2207.8	2205.2	2201.0	2196.7	2193.3	2188.2	2177.1	2171.1	2158.3	2149.0
22.5°	2145.5	2143.8	2144.7	2137.0	2128.5	2123.4	2120.0	2110.6	2100.4	2084.2	2073.9
25°	2065.4	2060.3	2060.3	2048.4	2044.1	2040.7	2036.4	2025.4	2010.0	1995.5	1981.9
27.5°	1961.4	1954.6	1951.2	1949.5	1939.3	1931.6	1925.6	1917.1	1904.3	1891.5	1872.8
30°	1831.9	1831.0	1826.7	1819.1	1811.4	1808.0	1801.2	1786.7	1774.7	1765.4	1753.4
32.5°	1679.3	1678.4	1678.4	1678.4	1673.3	1672.4	1662.2	1654.5	1645.2	1630.7	1623.0
35°	1534.4	1533.5	1534.4	1521.6	1518.2	1515.6	1514.8	1509.6	1496.9	1490.0	1483.2
37.5°	1370.7	1373.2	1371.5	1368.1	1372.4	1364.7	1370.7	1359.6	1354.5	1352.8	1345.1
40°	1223.2	1230.0	1223.2	1224.1	1228.3	1220.7	1220.7	1219.0	1215.6	1213.8	1212.1
42.5°	1097.1	1088.5	1093.7	1089.4	1093.7	1091.1	1086.8	1089.4	1090.2	1086.8	1086.0
45°	970.1	971.8	973.5	970.9	970.9	968.3	975.2	970.9	970.9	971.8	965.8
47.5°	866.9	864.4	866.1	864.4	865.2	863.5	865.2	866.1	864.4	864.4	859.2
50°	769.7	768.0	774.0	768.9	768.9	768.0	768.9	767.2	764.6	764.6	766.3
52.5°	685.3	681.9	681.1	685.3	679.4	679.4	680.2	678.5	675.1	673.4	669.2
55°	606.9	606.1	606.9	603.5	601.8	601.8	597.5	595.8	595.0	590.7	588.2
57.5°	533.6	531.1	531.9	531.1	527.6	526.8	523.4	523.4	520.0	516.6	512.3
60°	463.7	463.7	466.3	462.9	460.3	458.6	456.9	455.2	449.2	443.3	438.1
62.5°	401.5	402.3	401.5	398.9	397.2	395.5	393.8	388.7	383.6	380.2	374.2
65°	346.9	346.1	343.5	341.8	337.6	337.6	334.1	331.6	325.6	320.5	314.5
67.5°	290.7	289.0	289.0	289.0	283.9	283.0	281.3	276.2	271.1	264.3	259.1
70°	239.5	241.2	238.7	236.1	233.6	232.7	230.2	225.0	219.1	212.3	208.0
72.5°	190.9	192.6	190.1	189.2	184.1	182.4	181.6	177.3	170.5	166.2	159.4
75°	146.6	147.5	145.8	144.1	140.6	139.8	135.5	132.1	127.9	121.0	115.1
77.5°	105.7	104.0	104.0	100.6	97.2	97.2	96.3	91.2	85.2	80.1	75.0
80°	67.3	66.5	63.9	62.2	59.7	58.8	58.0	53.7	49.4	46.0	42.6
82.5°	34.1	33.2	32.4	31.5	29.8	28.1	29.0	25.6	23.9	20.5	17.9
85°	10.2	11.1	11.1	10.2	9.4	9.4	9.4	8.5	6.8	6.0	5.1
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°	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0
2.5°	2262.3	2263.2	2264.0	2264.9	2264.9	2265.7	2266.6	2267.4	2268.3	2268.3	2269.1
5°	2260.6	2262.3	2262.3	2263.2	2263.2	2263.2	2264.0	2264.0	2264.0	2264.0	2264.9
7.5°	2261.5	2261.5	2261.5	2260.6	2260.6	2259.8	2259.8	2259.8	2258.1	2258.1	2258.1
10°	2257.2	2256.4	2255.5	2253.8	2252.9	2252.1	2250.4	2248.7	2247.0	2246.1	2244.4
12.5°	2248.7	2245.3	2241.9	2238.5	2236.8	2235.9	2232.5	2229.9	2227.4	2224.8	2223.1
15°	2231.6	2226.5	2220.6	2213.7	2212.0	2210.3	2204.4	2199.2	2195.8	2193.3	2189.0
17.5°	2197.5	2187.3	2180.5	2170.3	2166.0	2164.3	2154.9	2149.8	2143.8	2142.1	2138.7
20°	2137.0	2127.6	2114.9	2105.5	2100.4	2095.3	2087.6	2080.8	2073.9	2073.9	2069.7
22.5°	2061.2	2049.2	2033.0	2021.1	2020.2	2010.0	2003.2	1995.5	1993.0	1987.8	1987.8
25°	1965.7	1955.5	1937.6	1927.3	1922.2	1919.7	1908.6	1898.3	1893.2	1889.0	1892.4
27.5°	1860.0	1844.6	1831.0	1818.2	1814.0	1808.8	1798.6	1794.3	1785.0	1784.1	1783.3
30°	1738.9	1723.6	1710.0	1704.0	1695.5	1691.2	1683.5	1678.4	1675.0	1675.0	1673.3
32.5°	1611.9	1598.3	1591.5	1578.7	1574.4	1568.5	1563.3	1558.2	1559.9	1558.2	1559.1
35°	1474.7	1471.3	1458.5	1450.8	1450.8	1450.0	1441.4	1438.0	1436.3	1437.2	1441.4
37.5°	1344.3	1334.0	1325.5	1320.4	1324.7	1319.5	1318.7	1318.7	1323.8	1320.4	1327.2
40°	1205.3	1204.5	1201.1	1202.8	1203.6	1197.7	1199.4	1200.2	1203.6	1210.4	1211.3
42.5°	1084.3	1083.4	1083.4	1083.4	1081.7	1078.3	1081.7	1087.7	1086.8	1092.0	1096.2
45°	967.5	965.8	969.2	966.6	971.8	973.5	970.9	972.6	977.7	981.1	988.0
47.5°	860.9	860.9	861.8	863.5	858.4	862.6	864.4	867.8	870.3	872.0	875.4
50°	762.1	762.1	760.4	760.4	760.4	762.9	759.5	763.8	764.6	771.4	775.7
52.5°	670.9	666.6	669.2	667.4	664.0	662.3	664.0	664.9	670.0	671.7	676.8
55°	583.9	583.9	577.1	575.4	577.9	577.1	576.2	576.2	578.8	581.4	585.6
57.5°	507.2	502.1	497.0	496.1	493.6	494.4	494.4	493.6	491.8	492.7	493.6
60°	434.7	431.3	423.7	423.7	422.8	421.9	417.7	416.8	412.6	413.4	410.0
62.5°	368.2	366.5	356.3	352.9	352.9	350.3	346.1	345.2	339.3	339.3	335.9
65°	308.6	303.5	297.5	291.5	291.5	288.1	285.6	277.9	273.6	271.1	266.0
67.5°	254.0	246.3	240.4	235.3	231.9	231.0	225.0	219.9	213.1	208.8	201.2
70°	201.2	195.2	189.2	184.1	180.7	177.3	171.3	163.7	158.6	150.9	145.8
72.5°	151.7	146.6	141.5	134.7	130.4	127.9	121.9	115.1	106.6	101.4	94.6
75°	109.1	103.1	96.3	90.4	87.8	85.2	78.4	73.3	67.3	61.4	54.6
77.5°	70.8	63.9	58.8	52.0	51.1	49.4	42.6	37.5	33.2	29.8	25.6
80°	37.5	34.1	29.8	25.6	23.9	21.3	17.9	15.3	12.8	10.2	8.5
82.5°	16.2	13.6	11.1	9.4	8.5	7.7	6.0	5.1	4.3	4.3	3.4
85°	4.3	3.4	3.4	2.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.0	0.9	0.9	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°	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0
2.5°	2270.0	2270.8	2271.7	2271.7	2272.6	2273.4	2273.4	2274.3	2275.1	2276.0	2276.0
5°	2265.7	2265.7	2265.7	2266.6	2266.6	2266.6	2266.6	2268.3	2268.3	2269.1	2270.0
7.5°	2257.2	2257.2	2257.2	2257.2	2256.4	2257.2	2256.4	2256.4	2258.1	2258.9	2259.8
10°	2243.6	2242.7	2242.7	2241.9	2241.9	2241.9	2242.7	2243.6	2244.4	2245.3	2247.8
12.5°	2222.3	2221.4	2221.4	2220.6	2220.6	2221.4	2222.3	2224.0	2227.4	2229.1	2232.5
15°	2188.2	2187.3	2188.2	2189.0	2190.7	2193.3	2195.8	2198.4	2203.5	2207.8	2212.0
17.5°	2138.7	2139.6	2140.4	2142.1	2144.7	2148.1	2154.9	2161.7	2167.7	2174.5	2181.3
20°	2070.5	2073.9	2074.8	2080.8	2082.5	2090.1	2097.8	2108.0	2117.4	2125.9	2135.3
22.5°	1988.7	1991.3	1994.7	2001.5	2005.7	2016.0	2025.4	2037.3	2047.5	2058.6	2072.2
25°	1895.8	1896.6	1906.9	1906.9	1917.1	1925.6	1936.7	1949.5	1964.8	1979.3	1988.7
27.5°	1790.1	1794.3	1802.0	1805.4	1813.1	1826.7	1836.1	1851.5	1866.8	1879.6	1889.8
30°	1679.3	1682.7	1695.5	1697.2	1703.1	1715.1	1727.9	1742.3	1754.3	1768.8	1778.1
32.5°	1562.5	1571.9	1579.5	1585.5	1587.2	1605.1	1611.9	1622.2	1635.8	1650.3	1659.7
35°	1449.1	1453.4	1464.5	1467.9	1473.0	1483.2	1496.9	1505.4	1512.2	1521.6	1532.7
37.5°	1328.9	1341.7	1344.3	1354.5	1356.2	1365.6	1372.4	1382.6	1391.2	1399.7	1401.4
40°	1217.3	1221.5	1230.9	1233.5	1235.2	1247.9	1256.5	1259.0	1263.3	1271.0	1281.2
42.5°	1103.9	1108.1	1118.4	1115.8	1123.5	1129.5	1133.7	1143.9	1148.2	1150.8	1150.8
45°	992.2	993.9	1000.7	1004.2	1008.4	1011.8	1019.5	1024.6	1026.3	1034.0	1036.5
47.5°	885.7	887.4	892.5	898.5	896.7	901.0	909.5	912.1	912.9	918.1	920.6
50°	780.8	785.1	791.9	790.2	795.3	797.9	805.5	807.2	807.2	808.1	808.9
52.5°	682.8	686.2	687.9	689.6	692.2	696.4	699.8	698.1	701.5	705.0	702.4
55°	585.6	588.2	592.4	594.1	594.1	595.0	593.3	601.0	597.5	596.7	597.5
57.5°	497.0	493.6	492.7	497.0	498.7	497.8	495.3	498.7	498.7	497.0	494.4
60°	410.9	408.3	407.5	408.3	404.9	402.3	404.0	402.3	398.1	396.4	397.2
62.5°	332.4	329.9	323.1	323.1	321.4	320.5	313.7	314.5	311.1	306.0	307.7
65°	260.0	253.2	249.8	248.9	242.9	237.8	236.1	230.2	225.0	224.2	225.0
67.5°	195.2	187.5	181.6	179.0	175.6	171.3	165.4	160.3	162.0	161.1	164.5
70°	135.5	130.4	124.5	120.2	121.9	116.8	113.4	113.4	114.2	115.1	116.8
72.5°	90.4	83.5	81.0	78.4	76.7	73.3	75.0	75.0	74.2	75.0	73.3
75°	51.1	47.7	45.2	44.3	42.6	42.6	42.6	42.6	41.8	40.9	40.9
77.5°	23.0	21.3	20.5	19.6	19.6	19.6	18.8	17.9	17.9	17.9	17.0
80°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
82.5°	3.4	3.4	4.3	4.3	4.3	3.4	4.3	4.3	3.4	3.4	4.3
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.0	0.9	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: P859038

CATALOG NUMBER: LX4C50D010 EX4C509050 4LBLWW\*

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0	2270.0
2.5°	2276.8	2277.7	2277.7	2277.7	2278.5	2278.5	2278.5	2278.5
5°	2270.8	2271.7	2271.7	2271.7	2272.6	2272.6	2272.6	2272.6
7.5°	2260.6	2261.5	2261.5	2262.3	2262.3	2263.2	2263.2	2264.0
10°	2248.7	2250.4	2251.2	2252.1	2252.9	2253.8	2253.8	2254.7
12.5°	2235.9	2237.6	2238.5	2240.2	2241.9	2242.7	2243.6	2244.4
15°	2217.1	2220.6	2222.3	2223.1	2226.5	2228.2	2229.1	2229.9
17.5°	2187.3	2194.1	2196.7	2198.4	2201.8	2205.2	2207.8	2208.6
20°	2144.7	2152.4	2155.8	2160.0	2165.1	2169.4	2171.1	2172.8
22.5°	2085.0	2093.5	2098.7	2103.8	2108.0	2112.3	2119.1	2116.6
25°	1999.8	2014.3	2020.2	2022.8	2032.2	2037.3	2040.7	2037.3
27.5°	1904.3	1912.8	1917.9	1923.9	1930.7	1935.8	1937.6	1942.7
30°	1789.2	1803.7	1802.9	1808.8	1817.4	1822.5	1824.2	1828.4
32.5°	1669.9	1676.7	1681.8	1681.0	1684.4	1693.8	1690.4	1698.0
35°	1542.9	1543.7	1552.3	1551.4	1558.2	1558.2	1558.2	1563.3
37.5°	1407.3	1417.6	1413.3	1423.5	1420.1	1422.7	1422.7	1424.4
40°	1283.7	1287.2	1287.2	1290.6	1293.1	1290.6	1292.3	1296.5
42.5°	1155.9	1159.3	1160.1	1158.4	1161.0	1168.7	1162.7	1167.8
45°	1036.5	1039.1	1042.5	1040.0	1044.2	1041.7	1044.2	1042.5
47.5°	924.0	923.2	922.3	929.1	923.2	924.0	927.4	921.5
50°	808.9	814.1	810.7	813.2	814.9	814.9	812.4	812.4
52.5°	706.7	705.8	703.2	705.8	704.1	705.0	706.7	705.0
55°	601.0	604.4	602.7	601.8	602.7	602.7	607.8	601.0
57.5°	497.0	495.3	497.8	503.8	497.8	502.1	504.6	505.5
60°	398.1	398.1	403.2	400.6	405.8	410.0	413.4	411.7
62.5°	303.5	307.7	309.4	310.3	315.4	318.8	318.8	318.0
65°	225.0	231.0	231.0	234.4	236.1	236.1	237.8	241.2
67.5°	166.2	166.2	167.1	168.8	167.9	167.9	169.6	170.5
70°	115.9	114.2	116.8	115.9	115.9	115.1	115.9	115.9
72.5°	73.3	73.3	74.2	73.3	71.6	72.5	72.5	74.2
75°	39.2	40.9	39.2	39.2	40.1	38.4	39.2	40.1
77.5°	16.2	16.2	16.2	16.2	16.2	15.3	15.3	15.3
80°	7.7	7.7	7.7	7.7	7.7	7.7	6.8	6.8
82.5°	3.4	4.3	3.4	4.3	3.4	3.4	3.4	3.4
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.0	0.9	0.0	0.9	0.0	0.0	0.0	0.9
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)