

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: P858997

Luminaire Tested: **LX4C50D010 EX4C509035 4LBLWWH**

Issue Date: 2/14/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P858997  
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: LX4C50D010 EX4C509035 4LBLWWH  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LRLWW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

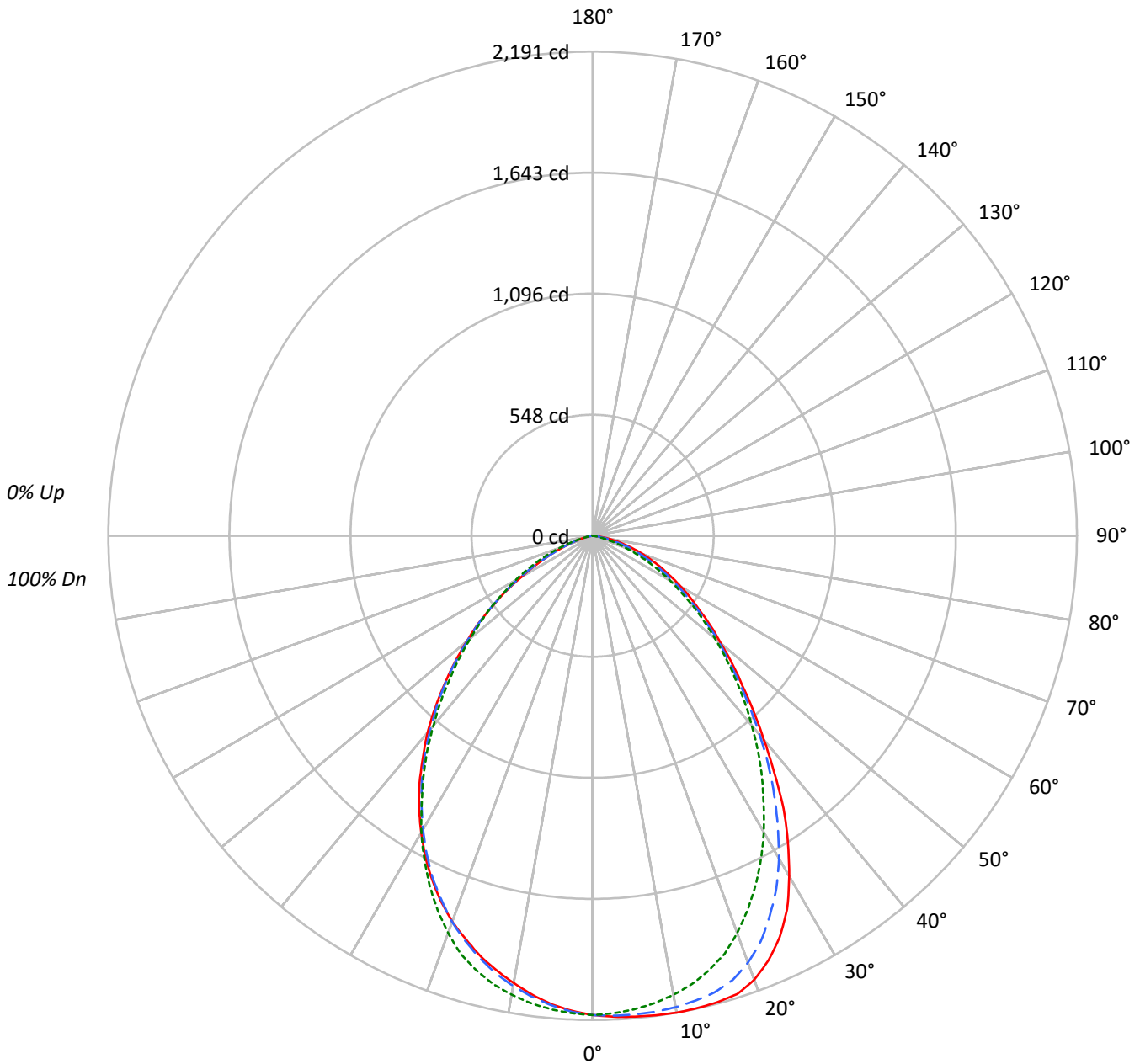
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4087.0 lumens  
Efficiency: N/A  
Efficacy: 70.0 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): 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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### 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°	266432	266432	266432
5°	269399	265280	262406
10°	273349	263045	256384
15°	277841	258852	250254
20°	279596	250049	242846
25°	271582	236528	232909
30°	252381	219853	219967
35°	225924	200398	204658
40°	193427	179651	186210
45°	166513	158400	164342
50°	144759	137897	142045
55°	127378	118618	117547
60°	113345	98995	91206
65°	99418	79302	65959
70°	85382	56035	44649
75°	69302	32467	26154
80°	49595	14150	13018
85°	18747	5920	5920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.4	5.0
10°-20°	578.5	14.2
20°-30°	826.1	20.2
30°-40°	864.2	21.1
40°-50°	724.1	17.7
50°-60°	506.8	12.4
60°-70°	276.0	6.8
70°-80°	95.8	2.3
80°-90°	11.0	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°	1609.1	39.4
0°-40°	2473.3	60.5
0°-60°	3704.3	90.6
0°-90°	4087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2169	2169	2169	2169	2169	
5°	2184	2174	2151	2133	2128	209
15°	2184	2139	2035	1977	1968	617
25°	2004	1897	1745	1711	1718	915
35°	1506	1432	1336	1346	1365	934
45°	958	937	912	942	946	745
55°	595	575	554	554	549	537
65°	342	312	273	229	227	341
75°	146	118	68	55	55	157
85°	13	8	4	4	4	24
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°	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7
2.5°	2178.7	2176.2	2177.0	2177.0	2177.0	2176.2	2177.0	2176.2	2176.2	2175.3	2173.7
5°	2184.5	2182.8	2182.8	2182.8	2182.0	2181.2	2181.2	2180.3	2178.7	2177.8	2174.5
7.5°	2188.7	2187.0	2187.0	2186.2	2185.3	2184.5	2183.7	2181.2	2178.7	2177.0	2172.8
10°	2191.2	2188.7	2188.7	2187.0	2185.3	2184.5	2182.8	2179.5	2176.2	2172.0	2166.2
12.5°	2189.5	2187.0	2186.2	2184.5	2181.2	2179.5	2177.8	2173.7	2167.8	2162.0	2154.5
15°	2184.5	2182.8	2181.2	2178.7	2174.5	2172.0	2170.3	2163.7	2156.2	2147.8	2138.6
17.5°	2174.5	2172.0	2168.7	2165.3	2159.5	2157.0	2152.8	2144.5	2133.6	2122.0	2107.8
20°	2138.6	2137.0	2133.6	2127.8	2118.6	2115.3	2109.4	2098.6	2084.4	2070.2	2055.2
22.5°	2079.4	2076.9	2071.9	2066.9	2058.6	2052.7	2047.7	2032.7	2016.9	2001.8	1987.7
25°	2003.5	2001.0	1994.3	1987.7	1979.3	1969.3	1964.3	1952.6	1936.8	1917.6	1896.7
27.5°	1905.9	1897.6	1895.1	1887.6	1875.1	1871.7	1864.2	1849.2	1834.2	1817.5	1800.0
30°	1779.1	1779.1	1774.1	1770.8	1759.1	1755.8	1747.4	1731.6	1723.3	1699.9	1686.6
32.5°	1644.8	1643.2	1639.0	1636.5	1629.8	1624.0	1615.7	1607.3	1589.0	1577.3	1558.9
35°	1506.4	1496.4	1498.0	1493.0	1488.9	1482.2	1481.4	1472.2	1455.5	1448.8	1432.2
37.5°	1348.7	1344.6	1350.4	1342.9	1338.7	1339.6	1332.9	1327.1	1320.4	1308.7	1305.4
40°	1206.1	1209.4	1208.6	1201.9	1205.3	1201.1	1194.4	1188.6	1185.3	1177.8	1175.2
42.5°	1078.5	1073.5	1071.8	1071.8	1072.7	1072.7	1069.3	1065.1	1065.1	1057.6	1050.1
45°	958.4	958.4	956.7	961.7	954.2	954.2	951.7	950.9	947.5	945.9	936.7
47.5°	855.0	854.1	853.3	852.5	851.6	851.6	846.6	842.4	841.6	836.6	831.6
50°	757.4	762.4	760.7	756.5	754.9	755.7	752.4	749.9	749.0	740.7	741.5
52.5°	675.6	674.8	676.5	674.0	669.8	670.6	667.3	663.9	660.6	656.4	653.1
55°	594.7	598.9	597.2	594.7	593.9	592.2	589.7	585.5	584.7	575.5	574.7
57.5°	527.2	526.3	524.6	520.5	519.6	517.1	517.1	513.8	508.8	503.8	499.6
60°	461.3	461.3	458.8	457.9	454.6	453.8	452.9	449.6	443.7	439.6	432.9
62.5°	397.9	399.5	397.9	395.4	392.9	389.5	387.9	385.4	380.3	376.2	370.3
65°	342.0	341.1	340.3	337.0	336.1	332.8	332.0	327.0	322.0	318.6	312.0
67.5°	288.6	286.1	286.1	284.4	282.8	280.3	278.6	273.6	267.7	264.4	257.7
70°	237.7	236.1	236.1	236.1	231.9	229.4	228.5	226.0	217.7	214.4	207.7
72.5°	191.0	190.2	189.3	186.8	184.3	184.3	181.0	176.0	171.8	167.7	162.6
75°	146.0	147.6	146.0	142.6	141.8	140.1	137.6	133.5	129.3	124.3	118.4
77.5°	106.8	105.1	103.4	103.4	101.8	98.4	97.6	94.3	89.2	85.9	80.1
80°	70.1	69.2	67.6	65.9	65.1	64.2	63.4	60.1	55.1	52.5	47.5
82.5°	38.4	37.5	37.5	36.7	34.2	34.2	33.4	30.0	27.5	25.9	23.4
85°	13.3	13.3	13.3	12.5	12.5	12.5	11.7	10.8	10.0	9.2	7.5
87.5°	1.7	0.8	1.7	0.8	1.7	0.8	0.8	0.8	0.8	0.8	0.8
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°	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7
2.5°	2172.0	2170.3	2169.5	2168.7	2167.8	2167.0	2166.2	2164.5	2163.7	2162.8	2161.2
5°	2172.0	2168.7	2167.0	2164.5	2162.8	2161.2	2158.7	2156.2	2153.6	2151.1	2148.6
7.5°	2168.7	2163.7	2160.3	2155.3	2153.6	2151.1	2146.1	2142.8	2138.6	2133.6	2127.8
10°	2160.3	2154.5	2147.8	2141.1	2138.6	2134.5	2127.8	2122.0	2115.3	2108.6	2102.8
12.5°	2147.0	2137.8	2129.5	2120.3	2115.3	2111.1	2101.9	2093.6	2085.3	2077.7	2067.7
15°	2127.0	2116.1	2105.3	2092.8	2086.9	2081.9	2068.6	2058.6	2045.2	2035.2	2025.2
17.5°	2094.4	2077.7	2064.4	2048.6	2040.2	2034.4	2022.7	2006.8	1994.3	1983.5	1971.8
20°	2038.5	2022.7	2004.3	1986.8	1977.7	1970.1	1953.5	1936.8	1924.3	1912.6	1900.1
22.5°	1965.1	1945.1	1931.8	1910.1	1902.6	1893.4	1873.4	1858.4	1844.2	1832.5	1820.8
25°	1875.9	1858.4	1840.0	1820.0	1810.8	1800.0	1783.3	1767.5	1758.3	1744.9	1730.8
27.5°	1773.3	1759.1	1736.6	1719.1	1709.9	1701.6	1685.7	1671.5	1658.2	1649.0	1635.7
30°	1664.9	1648.2	1628.2	1609.8	1604.8	1594.8	1580.6	1569.8	1555.6	1549.8	1543.9
32.5°	1545.6	1526.4	1511.4	1499.7	1489.7	1481.4	1473.9	1456.3	1453.8	1438.8	1437.2
35°	1415.5	1407.1	1392.9	1382.9	1374.6	1368.8	1356.2	1347.9	1338.7	1336.2	1330.4
37.5°	1292.9	1282.8	1269.5	1260.3	1254.5	1253.7	1244.5	1239.5	1232.8	1229.5	1222.8
40°	1164.4	1160.2	1148.6	1146.9	1137.7	1136.9	1131.9	1126.0	1120.2	1120.2	1121.0
42.5°	1046.0	1041.0	1036.0	1030.1	1025.1	1025.1	1022.6	1020.9	1019.3	1016.8	1020.9
45°	935.0	928.4	925.0	919.2	921.7	916.7	915.0	915.0	912.5	911.7	917.5
47.5°	831.6	824.1	820.8	819.1	819.1	819.9	812.4	814.9	814.1	815.8	818.3
50°	737.3	730.7	725.7	725.7	726.5	723.2	719.8	722.3	719.8	721.5	727.3
52.5°	649.8	643.1	640.6	640.6	635.6	634.8	636.4	633.1	633.9	634.8	638.1
55°	568.9	564.7	560.5	556.3	557.2	555.5	552.2	551.3	553.0	553.8	558.0
57.5°	496.3	490.5	484.6	482.9	481.3	481.3	477.1	476.3	477.9	473.8	473.8
60°	427.1	423.7	416.2	413.7	413.7	409.5	406.2	407.9	403.7	402.9	403.7
62.5°	362.8	360.3	355.3	350.3	348.7	347.0	342.8	341.1	339.5	336.1	331.1
65°	306.9	301.1	295.3	291.9	289.4	285.3	282.8	279.4	274.4	272.8	267.7
67.5°	251.1	245.2	239.4	236.9	234.4	231.9	227.7	223.5	217.7	211.0	205.2
70°	201.9	194.3	191.0	184.3	182.7	179.3	173.5	169.3	163.5	156.0	150.1
72.5°	154.3	149.3	144.3	138.5	134.3	131.8	126.8	120.1	113.4	109.3	103.4
75°	110.9	108.4	101.8	95.1	93.4	90.1	84.2	80.1	75.1	68.4	63.4
77.5°	75.1	70.1	65.9	60.1	58.4	55.1	51.7	47.5	44.2	40.0	36.7
80°	44.2	40.0	37.5	33.4	31.7	30.0	27.5	24.2	21.7	20.0	19.2
82.5°	21.7	18.4	17.5	15.0	14.2	13.3	11.7	10.8	9.2	9.2	9.2
85°	7.5	5.8	5.8	5.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7	0.8
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°	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7
2.5°	2160.3	2159.5	2158.7	2157.8	2157.8	2157.0	2157.0	2156.2	2156.2	2155.3	2155.3
5°	2145.3	2142.8	2141.1	2139.5	2139.5	2137.0	2135.3	2133.6	2132.8	2132.8	2131.1
7.5°	2124.5	2121.1	2117.8	2115.3	2114.4	2110.3	2106.9	2106.9	2103.6	2101.9	2100.3
10°	2096.9	2091.1	2086.1	2083.6	2080.2	2077.7	2073.6	2071.1	2068.6	2064.4	2063.6
12.5°	2059.4	2055.2	2047.7	2044.4	2042.7	2037.7	2031.0	2027.7	2026.9	2023.5	2021.0
15°	2016.9	2007.7	2001.0	1996.8	1996.8	1988.5	1985.2	1980.2	1976.8	1974.3	1973.5
17.5°	1961.8	1952.6	1946.0	1940.1	1938.5	1931.8	1926.8	1925.1	1920.9	1922.6	1918.4
20°	1890.9	1883.4	1878.4	1870.9	1870.9	1866.7	1865.0	1860.9	1859.2	1857.5	1859.2
22.5°	1815.0	1805.8	1797.5	1796.7	1796.7	1790.8	1790.0	1789.1	1785.8	1788.3	1787.5
25°	1725.8	1719.1	1714.1	1713.2	1713.2	1709.9	1706.6	1708.2	1710.7	1709.9	1712.4
27.5°	1633.2	1626.5	1624.8	1624.0	1622.3	1621.5	1623.2	1623.2	1625.7	1629.0	1632.3
30°	1533.1	1531.4	1528.9	1528.1	1526.4	1530.6	1532.2	1534.7	1533.9	1538.9	1542.3
32.5°	1433.0	1429.6	1428.8	1430.5	1433.0	1432.2	1437.2	1438.8	1440.5	1446.3	1448.8
35°	1332.1	1331.2	1329.6	1329.6	1330.4	1337.1	1337.1	1342.9	1346.2	1347.9	1354.6
37.5°	1223.6	1227.0	1228.6	1231.1	1232.0	1234.5	1236.1	1242.0	1245.3	1248.6	1252.0
40°	1124.4	1122.7	1130.2	1125.2	1126.9	1134.4	1137.7	1136.9	1141.9	1146.9	1150.2
42.5°	1018.4	1020.9	1022.6	1024.3	1028.4	1029.3	1033.5	1039.3	1041.0	1046.8	1048.5
45°	915.8	916.7	920.0	923.3	925.9	932.5	934.2	936.7	941.7	941.7	944.2
47.5°	819.1	822.4	822.4	827.4	831.6	830.8	836.6	838.3	837.4	841.6	843.3
50°	726.5	731.5	730.7	734.0	735.7	736.5	741.5	743.2	739.8	744.0	744.9
52.5°	638.1	640.6	643.9	644.8	643.1	647.3	645.6	648.9	648.1	651.4	648.1
55°	557.2	556.3	556.3	558.0	556.3	558.0	559.7	556.3	553.8	557.2	556.3
57.5°	476.3	476.3	474.6	477.1	474.6	472.1	471.3	468.8	466.3	466.3	465.4
60°	400.4	398.7	395.4	394.5	394.5	390.4	388.7	385.4	385.4	382.0	378.7
62.5°	329.5	325.3	322.8	322.8	321.1	317.0	309.5	304.4	302.8	297.8	296.9
65°	262.7	258.6	256.1	251.1	246.9	245.2	237.7	231.9	229.4	224.4	225.2
67.5°	201.9	195.2	187.7	184.3	181.8	176.0	173.5	169.3	166.8	166.8	166.8
70°	145.1	139.3	131.8	129.3	127.6	122.6	120.1	119.3	121.8	120.9	121.8
72.5°	97.6	91.8	88.4	86.7	85.1	82.6	84.2	85.1	83.4	84.2	85.1
75°	59.2	57.6	55.1	54.2	54.2	55.1	54.2	54.2	55.1	55.1	55.9
77.5°	34.2	32.5	32.5	31.7	33.4	32.5	32.5	32.5	33.4	33.4	33.4
80°	18.4	18.4	18.4	18.4	19.2	18.4	19.2	19.2	19.2	19.2	19.2
82.5°	9.2	9.2	9.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.2
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	0.8	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8
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: P858997

CATALOG NUMBER: LX4C50D010 EX4C509035 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7	2168.7
2.5°	2153.6	2153.6	2153.6	2152.0	2152.8	2152.8	2152.0	2152.0
5°	2130.3	2129.5	2127.8	2127.8	2126.1	2127.8	2127.0	2127.8
7.5°	2098.6	2098.6	2096.1	2096.1	2095.3	2094.4	2093.6	2094.4
10°	2061.1	2061.1	2059.4	2058.6	2059.4	2056.1	2056.1	2055.2
12.5°	2019.4	2017.7	2016.0	2016.9	2016.0	2013.5	2012.7	2013.5
15°	1971.0	1968.5	1969.3	1966.8	1966.8	1966.0	1967.6	1967.6
17.5°	1917.6	1915.9	1914.3	1915.1	1913.4	1914.3	1913.4	1912.6
20°	1858.4	1857.5	1857.5	1854.2	1855.0	1854.2	1855.0	1857.5
22.5°	1790.0	1789.1	1790.0	1787.5	1789.1	1789.1	1791.6	1791.6
25°	1714.9	1714.1	1715.7	1716.6	1717.4	1719.9	1717.4	1718.2
27.5°	1631.5	1634.0	1636.5	1637.3	1640.7	1638.2	1636.5	1639.0
30°	1547.3	1547.3	1546.4	1549.8	1552.3	1554.8	1550.6	1550.6
32.5°	1450.5	1454.7	1454.7	1455.5	1458.0	1458.0	1458.0	1461.3
35°	1357.9	1360.4	1361.3	1357.9	1359.6	1358.8	1364.6	1364.6
37.5°	1254.5	1254.5	1255.3	1261.2	1261.2	1258.7	1260.3	1260.3
40°	1156.1	1156.9	1153.6	1155.2	1159.4	1157.7	1159.4	1161.1
42.5°	1048.5	1054.3	1051.0	1052.6	1051.8	1052.6	1053.5	1053.5
45°	945.9	947.5	947.5	948.4	950.0	951.7	946.7	945.9
47.5°	845.8	846.6	849.1	844.9	849.9	844.9	849.9	844.1
50°	744.9	748.2	745.7	747.4	744.9	744.9	744.0	743.2
52.5°	648.9	648.1	648.1	647.3	647.3	648.9	647.3	649.8
55°	553.0	553.8	552.2	551.3	550.5	553.0	550.5	548.8
57.5°	462.1	463.8	460.4	462.1	456.3	458.8	459.6	460.4
60°	377.8	375.3	375.3	372.0	372.0	374.5	371.2	371.2
62.5°	292.8	294.4	291.9	295.3	295.3	298.6	296.9	298.6
65°	224.4	225.2	226.0	226.0	226.0	231.0	229.4	226.9
67.5°	169.3	170.2	171.0	170.2	172.7	171.0	171.0	171.8
70°	122.6	123.4	124.3	124.3	123.4	124.3	124.3	124.3
72.5°	85.1	85.9	85.1	85.9	86.7	85.9	85.9	86.7
75°	55.9	55.9	55.1	55.1	55.1	55.1	55.9	55.1
77.5°	32.5	33.4	32.5	33.4	33.4	33.4	33.4	33.4
80°	19.2	19.2	19.2	18.4	19.2	19.2	19.2	18.4
82.5°	10.0	10.0	9.2	9.2	10.0	10.0	10.0	10.0
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)