

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: P858976

Luminaire Tested: **LX4C50D010 EX4C509030 4LBLWWH**

Issue Date: 2/14/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P858976  
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 EX4C509030 4LBLWWH  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LRLWW TRIM WITH H FINISH  
Light Source: -  
Ballast/Driver: -

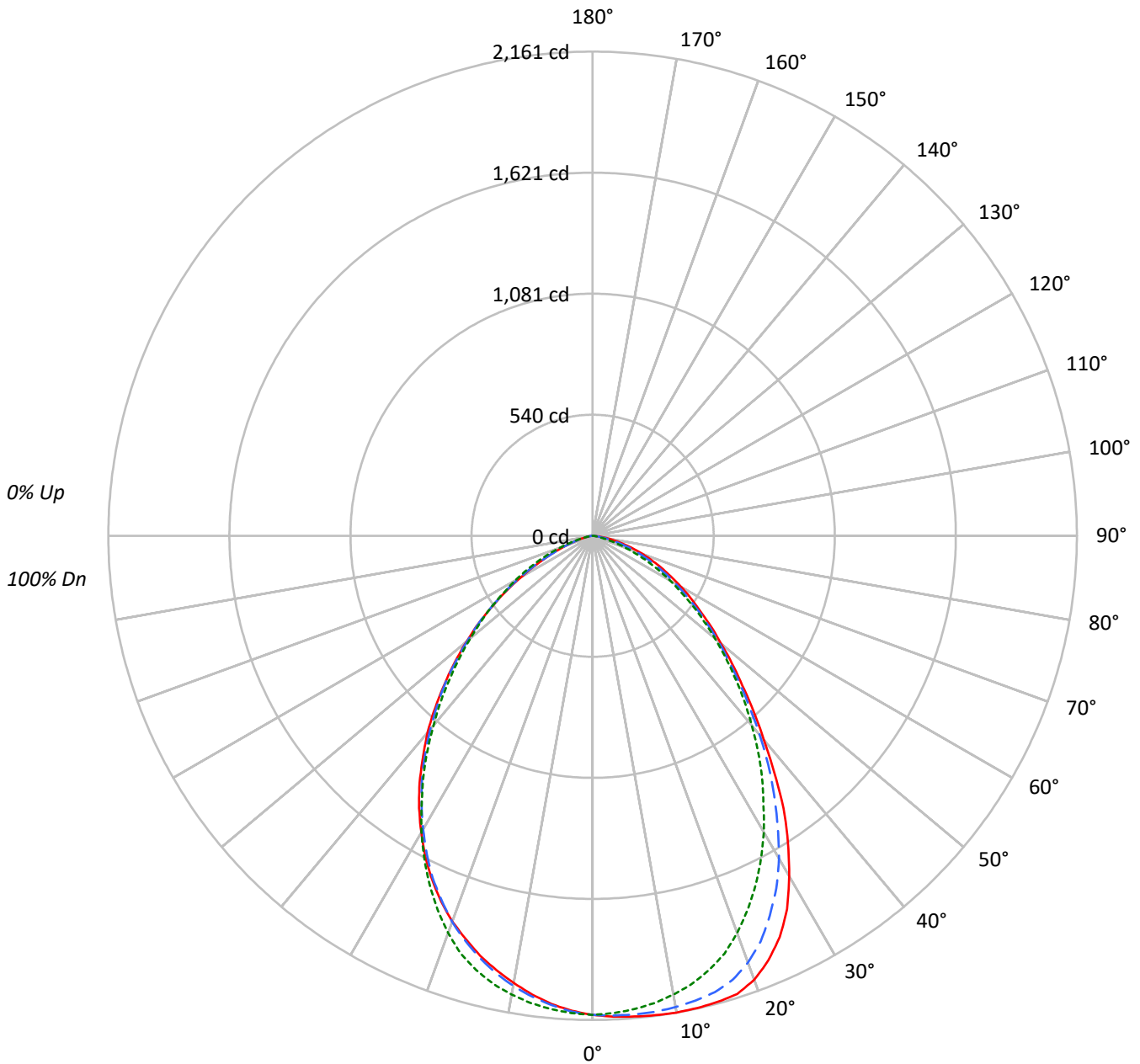
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4030.0 lumens  
Efficiency: N/A  
Efficacy: 69.0 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	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°	262710	262710	262710
5°	265637	261580	258743
10°	269532	259377	252816
15°	273961	255239	246769
20°	275700	246559	239460
25°	267800	233234	229669
30°	248863	216775	216902
35°	222775	197609	201808
40°	190733	177149	183612
45°	164185	156193	162048
50°	142733	135967	140057
55°	125600	116968	115919
60°	111748	97619	89929
65°	98023	78168	65029
70°	84196	55245	44002
75°	68305	31993	25775
80°	48887	13937	12805
85°	18607	5779	5779



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.5	5.0
10°-20°	570.5	14.2
20°-30°	814.6	20.2
30°-40°	852.2	21.1
40°-50°	714.0	17.7
50°-60°	499.7	12.4
60°-70°	272.1	6.8
70°-80°	94.4	2.3
80°-90°	10.9	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°	1586.6	39.4
0°-40°	2438.8	60.5
0°-60°	3652.6	90.6
0°-90°	4030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4030.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2138	2138	2138	2138	2138	
5°	2154	2144	2121	2103	2098	206
15°	2154	2109	2007	1949	1940	608
25°	1976	1870	1721	1687	1694	902
35°	1485	1412	1318	1328	1346	921
45°	945	924	899	929	933	735
55°	586	567	546	546	541	530
65°	337	308	269	226	224	336
75°	144	117	67	54	54	155
85°	13	7	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°	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4
2.5°	2148.3	2145.8	2146.6	2146.6	2146.6	2145.8	2146.6	2145.8	2145.8	2145.0	2143.4
5°	2154.0	2152.4	2152.4	2152.4	2151.6	2150.8	2150.8	2149.9	2148.3	2147.5	2144.2
7.5°	2158.2	2156.5	2156.5	2155.7	2154.9	2154.0	2153.2	2150.8	2148.3	2146.6	2142.5
10°	2160.6	2158.2	2158.2	2156.5	2154.9	2154.0	2152.4	2149.1	2145.8	2141.7	2135.9
12.5°	2159.0	2156.5	2155.7	2154.0	2150.8	2149.1	2147.5	2143.4	2137.6	2131.8	2124.4
15°	2154.0	2152.4	2150.8	2148.3	2144.2	2141.7	2140.1	2133.5	2126.1	2117.9	2108.8
17.5°	2144.2	2141.7	2138.4	2135.1	2129.4	2126.9	2122.8	2114.6	2103.9	2092.4	2078.4
20°	2108.8	2107.2	2103.9	2098.1	2089.1	2085.8	2080.0	2069.3	2055.3	2041.4	2026.6
22.5°	2050.4	2047.9	2043.0	2038.1	2029.9	2024.1	2019.2	2004.4	1988.7	1973.9	1959.9
25°	1975.6	1973.1	1966.5	1959.9	1951.7	1941.8	1936.9	1925.4	1909.8	1890.9	1870.3
27.5°	1879.3	1871.1	1868.6	1861.2	1848.9	1845.6	1838.2	1823.4	1808.6	1792.2	1774.9
30°	1754.3	1754.3	1749.4	1746.1	1734.6	1731.3	1723.1	1707.4	1699.2	1676.2	1663.0
32.5°	1621.9	1620.3	1616.1	1613.7	1607.1	1601.3	1593.1	1584.9	1566.8	1555.3	1537.2
35°	1485.4	1475.5	1477.2	1472.2	1468.1	1461.5	1460.7	1451.7	1435.2	1428.6	1412.2
37.5°	1329.9	1325.8	1331.6	1324.2	1320.1	1320.9	1314.3	1308.5	1302.0	1290.5	1287.2
40°	1189.3	1192.6	1191.8	1185.2	1188.5	1184.4	1177.8	1172.0	1168.7	1161.3	1158.9
42.5°	1063.5	1058.5	1056.9	1056.9	1057.7	1057.7	1054.4	1050.3	1050.3	1042.9	1035.5
45°	945.0	945.0	943.4	948.3	940.9	940.9	938.4	937.6	934.3	932.7	923.6
47.5°	843.0	842.2	841.4	840.6	839.7	839.7	834.8	830.7	829.9	824.9	820.0
50°	746.8	751.7	750.1	746.0	744.3	745.2	741.9	739.4	738.6	730.4	731.2
52.5°	666.2	665.4	667.0	664.6	660.4	661.3	658.0	654.7	651.4	647.3	644.0
55°	586.4	590.5	588.9	586.4	585.6	584.0	581.5	577.4	576.5	567.5	566.7
57.5°	519.8	519.0	517.3	513.2	512.4	509.9	509.9	506.6	501.7	496.8	492.7
60°	454.8	454.8	452.4	451.5	448.2	447.4	446.6	443.3	437.6	433.4	426.9
62.5°	392.3	394.0	392.3	389.8	387.4	384.1	382.4	380.0	375.0	370.9	365.2
65°	337.2	336.4	335.6	332.3	331.5	328.2	327.3	322.4	317.5	314.2	307.6
67.5°	284.6	282.1	282.1	280.5	278.8	276.3	274.7	269.8	264.0	260.7	254.1
70°	234.4	232.8	232.8	232.8	228.6	226.2	225.4	222.9	214.7	211.4	204.8
72.5°	188.3	187.5	186.7	184.2	181.8	181.8	178.5	173.5	169.4	165.3	160.4
75°	143.9	145.6	143.9	140.6	139.8	138.2	135.7	131.6	127.5	122.5	116.8
77.5°	105.3	103.6	102.0	102.0	100.3	97.1	96.2	92.9	88.0	84.7	79.0
80°	69.1	68.3	66.6	65.0	64.2	63.3	62.5	59.2	54.3	51.8	46.9
82.5°	37.8	37.0	37.0	36.2	33.7	33.7	32.9	29.6	27.1	25.5	23.0
85°	13.2	13.2	13.2	12.3	12.3	12.3	11.5	10.7	9.9	9.0	7.4
87.5°	1.6	0.8	1.6	0.8	1.6	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°	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4
2.5°	2141.7	2140.1	2139.2	2138.4	2137.6	2136.8	2135.9	2134.3	2133.5	2132.7	2131.0
5°	2141.7	2138.4	2136.8	2134.3	2132.7	2131.0	2128.5	2126.1	2123.6	2121.1	2118.7
7.5°	2138.4	2133.5	2130.2	2125.3	2123.6	2121.1	2116.2	2112.9	2108.8	2103.9	2098.1
10°	2130.2	2124.4	2117.9	2111.3	2108.8	2104.7	2098.1	2092.4	2085.8	2079.2	2073.4
12.5°	2117.0	2108.0	2099.8	2090.7	2085.8	2081.7	2072.6	2064.4	2056.2	2048.8	2038.9
15°	2097.3	2086.6	2075.9	2063.6	2057.8	2052.9	2039.7	2029.9	2016.7	2006.8	1997.0
17.5°	2065.2	2048.8	2035.6	2020.0	2011.8	2006.0	1994.5	1978.9	1966.5	1955.8	1944.3
20°	2010.1	1994.5	1976.4	1959.1	1950.1	1942.7	1926.2	1909.8	1897.4	1885.9	1873.6
22.5°	1937.7	1918.0	1904.8	1883.5	1876.0	1867.0	1847.3	1832.5	1818.5	1807.0	1795.4
25°	1849.7	1832.5	1814.4	1794.6	1785.6	1774.9	1758.4	1742.8	1733.8	1720.6	1706.6
27.5°	1748.6	1734.6	1712.4	1695.1	1686.1	1677.8	1662.2	1648.2	1635.1	1626.0	1612.9
30°	1641.6	1625.2	1605.5	1587.4	1582.4	1572.6	1558.6	1547.9	1533.9	1528.1	1522.4
32.5°	1524.0	1505.1	1490.3	1478.8	1468.9	1460.7	1453.3	1436.0	1433.6	1418.8	1417.1
35°	1395.7	1387.5	1373.5	1363.7	1355.4	1349.7	1337.3	1329.1	1320.1	1317.6	1311.8
37.5°	1274.8	1265.0	1251.8	1242.7	1237.0	1236.2	1227.1	1222.2	1215.6	1212.3	1205.7
40°	1148.2	1144.1	1132.5	1130.9	1121.8	1121.0	1116.1	1110.3	1104.6	1104.6	1105.4
42.5°	1031.4	1026.4	1021.5	1015.7	1010.8	1010.8	1008.3	1006.7	1005.1	1002.6	1006.7
45°	922.0	915.4	912.1	906.4	908.8	903.9	902.2	902.2	899.8	899.0	904.7
47.5°	820.0	812.6	809.3	807.7	807.7	808.5	801.1	803.6	802.7	804.4	806.8
50°	727.1	720.5	715.5	715.5	716.4	713.1	709.8	712.3	709.8	711.4	717.2
52.5°	640.7	634.1	631.7	631.7	626.7	625.9	627.5	624.3	625.1	625.9	629.2
55°	560.9	556.8	552.7	548.6	549.4	547.8	544.5	543.7	545.3	546.1	550.2
57.5°	489.4	483.6	477.9	476.2	474.6	474.6	470.5	469.6	471.3	467.2	467.2
60°	421.1	417.8	410.4	407.9	407.9	403.8	400.5	402.2	398.1	397.3	398.1
62.5°	357.8	355.3	350.4	345.4	343.8	342.1	338.0	336.4	334.7	331.5	326.5
65°	302.7	296.9	291.2	287.9	285.4	281.3	278.8	275.5	270.6	268.9	264.0
67.5°	247.6	241.8	236.0	233.6	231.1	228.6	224.5	220.4	214.7	208.1	202.3
70°	199.0	191.6	188.3	181.8	180.1	176.8	171.1	167.0	161.2	153.8	148.0
72.5°	152.2	147.2	142.3	136.5	132.4	129.9	125.0	118.4	111.9	107.7	102.0
75°	109.4	106.9	100.3	93.8	92.1	88.8	83.1	79.0	74.0	67.4	62.5
77.5°	74.0	69.1	65.0	59.2	57.6	54.3	51.0	46.9	43.6	39.5	36.2
80°	43.6	39.5	37.0	32.9	31.3	29.6	27.1	23.9	21.4	19.7	18.9
82.5°	21.4	18.1	17.3	14.8	14.0	13.2	11.5	10.7	9.0	9.0	9.0
85°	7.4	5.8	5.8	4.9	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	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°	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4
2.5°	2130.2	2129.4	2128.5	2127.7	2127.7	2126.9	2126.9	2126.1	2126.1	2125.3	2125.3
5°	2115.4	2112.9	2111.3	2109.6	2109.6	2107.2	2105.5	2103.9	2103.1	2103.1	2101.4
7.5°	2094.8	2091.5	2088.2	2085.8	2085.0	2080.8	2077.6	2077.6	2074.3	2072.6	2071.0
10°	2067.7	2061.9	2057.0	2054.5	2051.2	2048.8	2044.7	2042.2	2039.7	2035.6	2034.8
12.5°	2030.7	2026.6	2019.2	2015.9	2014.2	2009.3	2002.7	1999.4	1998.6	1995.3	1992.8
15°	1988.7	1979.7	1973.1	1969.0	1969.0	1960.8	1957.5	1952.5	1949.2	1946.8	1946.0
17.5°	1934.4	1925.4	1918.8	1913.1	1911.4	1904.8	1899.9	1898.3	1894.1	1895.8	1891.7
20°	1864.5	1857.1	1852.2	1844.8	1844.8	1840.7	1839.0	1834.9	1833.3	1831.6	1833.3
22.5°	1789.7	1780.6	1772.4	1771.6	1771.6	1765.8	1765.0	1764.2	1760.9	1763.4	1762.5
25°	1701.7	1695.1	1690.2	1689.3	1689.3	1686.1	1682.8	1684.4	1686.9	1686.1	1688.5
27.5°	1610.4	1603.8	1602.2	1601.3	1599.7	1598.9	1600.5	1600.5	1603.0	1606.3	1609.6
30°	1511.7	1510.1	1507.6	1506.8	1505.1	1509.2	1510.9	1513.3	1512.5	1517.5	1520.7
32.5°	1413.0	1409.7	1408.9	1410.5	1413.0	1412.2	1417.1	1418.8	1420.4	1426.2	1428.6
35°	1313.5	1312.7	1311.0	1311.0	1311.8	1318.4	1318.4	1324.2	1327.5	1329.1	1335.7
37.5°	1206.6	1209.9	1211.5	1214.0	1214.8	1217.3	1218.9	1224.7	1227.9	1231.2	1234.5
40°	1108.7	1107.0	1114.4	1109.5	1111.2	1118.6	1121.8	1121.0	1126.0	1130.9	1134.2
42.5°	1004.2	1006.7	1008.3	1010.0	1014.1	1014.9	1019.0	1024.8	1026.4	1032.2	1033.8
45°	903.1	903.9	907.2	910.5	912.9	919.5	921.2	923.6	928.6	928.6	931.0
47.5°	807.7	811.0	811.0	815.9	820.0	819.2	824.9	826.6	825.8	829.9	831.5
50°	716.4	721.3	720.5	723.8	725.4	726.2	731.2	732.8	729.5	733.6	734.5
52.5°	629.2	631.7	634.9	635.8	634.1	638.2	636.6	639.9	639.1	642.3	639.1
55°	549.4	548.6	548.6	550.2	548.6	550.2	551.9	548.6	546.1	549.4	548.6
57.5°	469.6	469.6	468.0	470.5	468.0	465.5	464.7	462.2	459.8	459.8	458.9
60°	394.8	393.1	389.8	389.0	389.0	384.9	383.3	380.0	380.0	376.7	373.4
62.5°	324.9	320.8	318.3	318.3	316.7	312.5	305.1	300.2	298.6	293.6	292.8
65°	259.1	255.0	252.5	247.6	243.5	241.8	234.4	228.6	226.2	221.2	222.1
67.5°	199.0	192.5	185.1	181.8	179.3	173.5	171.1	167.0	164.5	164.5	164.5
70°	143.1	137.4	129.9	127.5	125.8	120.9	118.4	117.6	120.1	119.3	120.1
72.5°	96.2	90.5	87.2	85.5	83.9	81.4	83.1	83.9	82.2	83.1	83.9
75°	58.4	56.8	54.3	53.5	53.5	54.3	53.5	53.5	54.3	54.3	55.1
77.5°	33.7	32.1	32.1	31.3	32.9	32.1	32.1	32.1	32.9	32.9	32.9
80°	18.1	18.1	18.1	18.1	18.9	18.1	18.9	18.9	18.9	18.9	18.9
82.5°	9.0	9.0	9.0	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.0
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	0.8	1.6	1.6	1.6	1.6	1.6	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: P858976

CATALOG NUMBER: LX4C50D010 EX4C509030 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4	2138.4
2.5°	2123.6	2123.6	2123.6	2122.0	2122.8	2122.8	2122.0	2122.0
5°	2100.6	2099.8	2098.1	2098.1	2096.5	2098.1	2097.3	2098.1
7.5°	2069.3	2069.3	2066.9	2066.9	2066.0	2065.2	2064.4	2065.2
10°	2032.3	2032.3	2030.7	2029.9	2030.7	2027.4	2027.4	2026.6
12.5°	1991.2	1989.5	1987.9	1988.7	1987.9	1985.4	1984.6	1985.4
15°	1943.5	1941.0	1941.8	1939.4	1939.4	1938.6	1940.2	1940.2
17.5°	1890.9	1889.2	1887.6	1888.4	1886.7	1887.6	1886.7	1885.9
20°	1832.5	1831.6	1831.6	1828.3	1829.2	1828.3	1829.2	1831.6
22.5°	1765.0	1764.2	1765.0	1762.5	1764.2	1764.2	1766.7	1766.7
25°	1691.0	1690.2	1691.8	1692.6	1693.5	1695.9	1693.5	1694.3
27.5°	1608.7	1611.2	1613.7	1614.5	1617.8	1615.3	1613.7	1616.1
30°	1525.7	1525.7	1524.9	1528.1	1530.6	1533.1	1529.0	1529.0
32.5°	1430.3	1434.4	1434.4	1435.2	1437.7	1437.7	1437.7	1441.0
35°	1339.0	1341.4	1342.3	1339.0	1340.6	1339.8	1345.6	1345.6
37.5°	1237.0	1237.0	1237.8	1243.6	1243.6	1241.1	1242.7	1242.7
40°	1139.9	1140.8	1137.5	1139.1	1143.2	1141.6	1143.2	1144.9
42.5°	1033.8	1039.6	1036.3	1038.0	1037.1	1038.0	1038.8	1038.8
45°	932.7	934.3	934.3	935.1	936.8	938.4	933.5	932.7
47.5°	834.0	834.8	837.3	833.2	838.1	833.2	838.1	832.3
50°	734.5	737.8	735.3	736.9	734.5	734.5	733.6	732.8
52.5°	639.9	639.1	639.1	638.2	638.2	639.9	638.2	640.7
55°	545.3	546.1	544.5	543.7	542.8	545.3	542.8	541.2
57.5°	455.6	457.3	454.0	455.6	449.9	452.4	453.2	454.0
60°	372.6	370.1	370.1	366.8	366.8	369.3	366.0	366.0
62.5°	288.7	290.3	287.9	291.2	291.2	294.4	292.8	294.4
65°	221.2	222.1	222.9	222.9	222.9	227.8	226.2	223.7
67.5°	167.0	167.8	168.6	167.8	170.3	168.6	168.6	169.4
70°	120.9	121.7	122.5	122.5	121.7	122.5	122.5	122.5
72.5°	83.9	84.7	83.9	84.7	85.5	84.7	84.7	85.5
75°	55.1	55.1	54.3	54.3	54.3	54.3	55.1	54.3
77.5°	32.1	32.9	32.1	32.9	32.9	32.9	32.9	32.9
80°	18.9	18.9	18.9	18.1	18.9	18.9	18.9	18.1
82.5°	9.9	9.9	9.0	9.0	9.9	9.9	9.9	9.9
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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)