

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: P858996

Luminaire Tested: **LX4C50D010 EX4C509035 4LBLWW\***

Issue Date: 2/9/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P858996  
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 EX4C509035 4LBLWW\*  
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LRLWW TRIM WITH \* FINISH  
Light Source: -  
Ballast/Driver: -

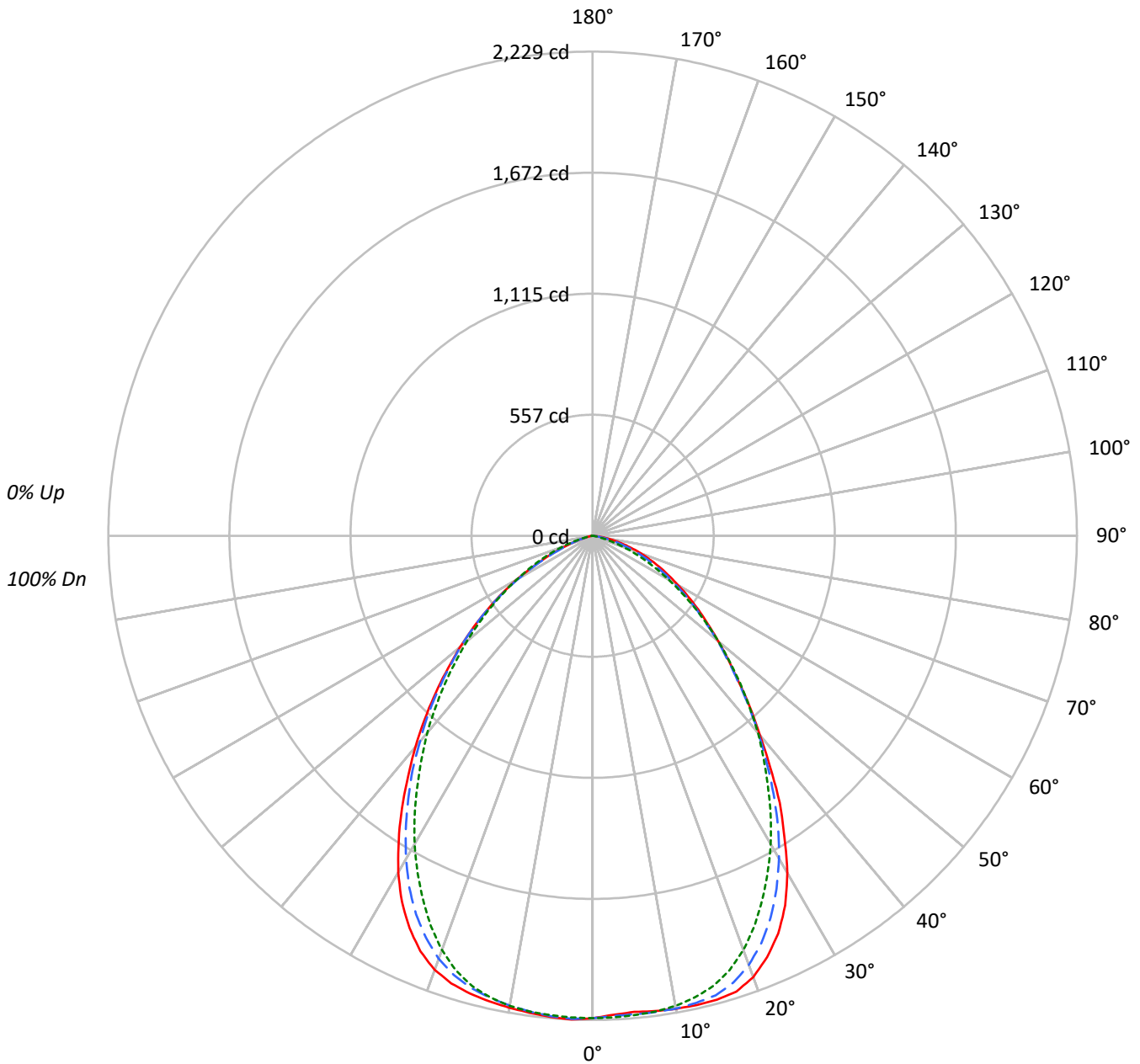
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4258.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				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			100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			89
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78			78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68			68
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60			60
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54			54
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48			48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43			43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39			39
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36			36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33			33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	272858	272858	272858
5°	271322	273172	274208
10°	275819	274148	275196
15°	281211	272931	277497
20°	282629	265280	277936
25°	273927	250531	270199
30°	254254	232478	253772
35°	225145	210882	229404
40°	191935	189931	203434
45°	164898	166774	177216
50°	143937	144262	151907
55°	127185	121830	125943
60°	111477	99388	98971
65°	98662	77093	68604
70°	84196	53018	40733
75°	68068	28480	18607
80°	46623	7075	4740
85°	14096	2396	2396



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.1	5.0
10°-20°	611.0	14.4
20°-30°	882.9	20.7
30°-40°	912.7	21.4
40°-50°	754.2	17.7
50°-60°	520.5	12.2
60°-70°	272.5	6.4
70°-80°	85.8	2.0
80°-90°	7.3	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°	1705.0	40.0
0°-40°	2617.8	61.5
0°-60°	3892.4	91.4
0°-90°	4258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4258.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2221	2221	2221	2221	2221	
5°	2200	2211	2215	2219	2224	211
15°	2211	2190	2146	2156	2182	624
25°	2021	1939	1848	1922	1993	923
35°	1501	1451	1406	1480	1530	932
45°	949	945	960	1004	1020	740
55°	594	576	569	585	588	533
65°	339	308	265	220	236	336
75°	143	113	60	41	39	154
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°	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0
2.5°	2206.8	2207.6	2207.6	2209.3	2209.3	2209.3	2210.1	2210.1	2211.0	2211.8	2212.6
5°	2200.1	2200.1	2201.8	2202.6	2204.3	2205.1	2206.8	2207.6	2209.3	2210.1	2211.0
7.5°	2206.8	2206.8	2207.6	2208.5	2208.5	2209.3	2209.3	2210.1	2211.0	2211.8	2211.8
10°	2211.0	2211.0	2211.0	2211.0	2211.8	2211.8	2211.8	2211.0	2211.0	2211.0	2210.1
12.5°	2212.6	2212.6	2211.8	2211.0	2211.8	2211.0	2211.0	2208.5	2206.8	2205.1	2202.6
15°	2211.0	2211.0	2210.1	2209.3	2208.5	2206.8	2206.0	2201.8	2198.4	2193.4	2190.1
17.5°	2200.1	2198.4	2196.8	2195.1	2191.8	2189.3	2187.6	2180.1	2174.3	2165.9	2156.7
20°	2161.8	2160.1	2157.6	2153.4	2149.2	2145.9	2140.9	2130.1	2124.2	2111.7	2102.5
22.5°	2099.2	2097.5	2098.4	2090.9	2082.5	2077.5	2074.2	2065.0	2055.0	2039.2	2029.1
25°	2020.8	2015.8	2015.8	2004.1	2000.0	1996.6	1992.4	1981.6	1966.6	1952.4	1939.1
27.5°	1919.1	1912.4	1909.0	1907.4	1897.4	1889.9	1884.0	1875.7	1863.2	1850.7	1832.3
30°	1792.3	1791.5	1787.3	1779.8	1772.3	1768.9	1762.3	1748.1	1736.4	1727.2	1715.6
32.5°	1643.0	1642.2	1642.2	1642.2	1637.2	1636.3	1626.3	1618.8	1609.6	1595.5	1588.0
35°	1501.2	1500.4	1501.2	1488.7	1485.4	1482.9	1482.0	1477.0	1464.5	1457.8	1451.2
37.5°	1341.1	1343.6	1341.9	1338.6	1342.8	1335.2	1341.1	1330.2	1325.2	1323.6	1316.1
40°	1196.8	1203.5	1196.8	1197.6	1201.8	1194.3	1194.3	1192.6	1189.3	1187.6	1186.0
42.5°	1073.4	1065.0	1070.0	1065.9	1070.0	1067.5	1063.4	1065.9	1066.7	1063.4	1062.5
45°	949.1	950.8	952.4	949.9	949.9	947.4	954.1	949.9	949.9	950.8	944.9
47.5°	848.2	845.7	847.4	845.7	846.5	844.9	846.5	847.4	845.7	845.7	840.7
50°	753.1	751.4	757.3	752.3	752.3	751.4	752.3	750.6	748.1	748.1	749.8
52.5°	670.5	667.2	666.4	670.5	664.7	664.7	665.5	663.9	660.5	658.9	654.7
55°	593.8	593.0	593.8	590.5	588.8	588.8	584.6	583.0	582.1	578.0	575.5
57.5°	522.1	519.6	520.4	519.6	516.3	515.4	512.1	512.1	508.7	505.4	501.2
60°	453.7	453.7	456.2	452.9	450.4	448.7	447.0	445.4	439.5	433.7	428.7
62.5°	392.8	393.7	392.8	390.3	388.6	387.0	385.3	380.3	375.3	372.0	366.1
65°	339.4	338.6	336.1	334.4	330.3	330.3	326.9	324.4	318.6	313.6	307.7
67.5°	284.4	282.7	282.7	282.7	277.7	276.9	275.2	270.2	265.2	258.5	253.5
70°	234.4	236.0	233.5	231.0	228.5	227.7	225.2	220.2	214.3	207.7	203.5
72.5°	186.8	188.5	186.0	185.2	180.1	178.5	177.6	173.5	166.8	162.6	156.0
75°	143.4	144.3	142.6	140.9	137.6	136.8	132.6	129.3	125.1	118.4	112.6
77.5°	103.4	101.7	101.7	98.4	95.1	95.1	94.2	89.2	83.4	78.4	73.4
80°	65.9	65.1	62.6	60.9	58.4	57.5	56.7	52.5	48.4	45.0	41.7
82.5°	33.4	32.5	31.7	30.9	29.2	27.5	28.4	25.0	23.4	20.0	17.5
85°	10.0	10.8	10.8	10.0	9.2	9.2	9.2	8.3	6.7	5.8	5.0
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°	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0
2.5°	2213.5	2214.3	2215.1	2216.0	2216.0	2216.8	2217.6	2218.5	2219.3	2219.3	2220.1
5°	2211.8	2213.5	2213.5	2214.3	2214.3	2214.3	2215.1	2215.1	2215.1	2215.1	2216.0
7.5°	2212.6	2212.6	2212.6	2211.8	2211.8	2211.0	2211.0	2211.0	2209.3	2209.3	2209.3
10°	2208.5	2207.6	2206.8	2205.1	2204.3	2203.5	2201.8	2200.1	2198.4	2197.6	2195.9
12.5°	2200.1	2196.8	2193.4	2190.1	2188.4	2187.6	2184.3	2181.8	2179.3	2176.8	2175.1
15°	2183.4	2178.4	2172.6	2165.9	2164.3	2162.6	2156.7	2151.7	2148.4	2145.9	2141.7
17.5°	2150.1	2140.1	2133.4	2123.4	2119.2	2117.5	2108.4	2103.4	2097.5	2095.9	2092.5
20°	2090.9	2081.7	2069.2	2060.0	2055.0	2050.0	2042.5	2035.8	2029.1	2029.1	2025.0
22.5°	2016.6	2005.0	1989.1	1977.4	1976.6	1966.6	1959.9	1952.4	1949.9	1944.9	1944.9
25°	1923.2	1913.2	1895.7	1885.7	1880.7	1878.2	1867.3	1857.3	1852.3	1848.2	1851.5
27.5°	1819.8	1804.8	1791.5	1778.9	1774.8	1769.8	1759.8	1755.6	1746.4	1745.6	1744.7
30°	1701.4	1686.4	1673.0	1667.2	1658.8	1654.7	1647.2	1642.2	1638.8	1638.8	1637.2
32.5°	1577.1	1563.8	1557.1	1544.6	1540.4	1534.6	1529.6	1524.6	1526.2	1524.6	1525.4
35°	1442.8	1439.5	1427.0	1419.5	1419.5	1418.6	1410.3	1407.0	1405.3	1406.1	1410.3
37.5°	1315.2	1305.2	1296.9	1291.9	1296.1	1291.0	1290.2	1290.2	1295.2	1291.9	1298.6
40°	1179.3	1178.5	1175.1	1176.8	1177.6	1171.8	1173.5	1174.3	1177.6	1184.3	1185.1
42.5°	1060.9	1060.0	1060.0	1060.0	1058.4	1055.0	1058.4	1064.2	1063.4	1068.4	1072.5
45°	946.6	944.9	948.3	945.8	950.8	952.4	949.9	951.6	956.6	959.9	966.6
47.5°	842.3	842.3	843.2	844.9	839.8	844.0	845.7	849.0	851.5	853.2	856.5
50°	745.6	745.6	743.9	743.9	743.9	746.4	743.1	747.3	748.1	754.8	758.9
52.5°	656.4	652.2	654.7	653.0	649.7	648.0	649.7	650.5	655.5	657.2	662.2
55°	571.3	571.3	564.6	563.0	565.5	564.6	563.8	563.8	566.3	568.8	573.0
57.5°	496.2	491.2	486.2	485.4	482.9	483.7	483.7	482.9	481.2	482.1	482.9
60°	425.3	422.0	414.5	414.5	413.7	412.8	408.7	407.8	403.7	404.5	401.2
62.5°	360.3	358.6	348.6	345.3	345.3	342.8	338.6	337.8	331.9	331.9	328.6
65°	301.9	296.9	291.1	285.2	285.2	281.9	279.4	271.9	267.7	265.2	260.2
67.5°	248.5	241.0	235.2	230.2	226.9	226.0	220.2	215.2	208.5	204.3	196.8
70°	196.8	191.0	185.2	180.1	176.8	173.5	167.6	160.1	155.1	147.6	142.6
72.5°	148.5	143.4	138.4	131.8	127.6	125.1	119.3	112.6	104.3	99.2	92.6
75°	106.8	100.9	94.2	88.4	85.9	83.4	76.7	71.7	65.9	60.0	53.4
77.5°	69.2	62.6	57.5	50.9	50.0	48.4	41.7	36.7	32.5	29.2	25.0
80°	36.7	33.4	29.2	25.0	23.4	20.9	17.5	15.0	12.5	10.0	8.3
82.5°	15.8	13.3	10.8	9.2	8.3	7.5	5.8	5.0	4.2	4.2	3.3
85°	4.2	3.3	3.3	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.8	0.8	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°	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0
2.5°	2221.0	2221.8	2222.6	2222.6	2223.5	2224.3	2224.3	2225.1	2226.0	2226.8	2226.8
5°	2216.8	2216.8	2216.8	2217.6	2217.6	2217.6	2217.6	2219.3	2219.3	2220.1	2221.0
7.5°	2208.5	2208.5	2208.5	2208.5	2207.6	2208.5	2207.6	2207.6	2209.3	2210.1	2211.0
10°	2195.1	2194.3	2194.3	2193.4	2193.4	2193.4	2194.3	2195.1	2195.9	2196.8	2199.3
12.5°	2174.3	2173.4	2173.4	2172.6	2172.6	2173.4	2174.3	2175.9	2179.3	2180.9	2184.3
15°	2140.9	2140.1	2140.9	2141.7	2143.4	2145.9	2148.4	2150.9	2155.9	2160.1	2164.3
17.5°	2092.5	2093.4	2094.2	2095.9	2098.4	2101.7	2108.4	2115.0	2120.9	2127.6	2134.2
20°	2025.8	2029.1	2030.0	2035.8	2037.5	2045.0	2052.5	2062.5	2071.7	2080.0	2089.2
22.5°	1945.7	1948.2	1951.6	1958.3	1962.4	1972.4	1981.6	1993.3	2003.3	2014.1	2027.5
25°	1854.8	1855.7	1865.7	1865.7	1875.7	1884.0	1894.9	1907.4	1922.4	1936.6	1945.7
27.5°	1751.4	1755.6	1763.1	1766.4	1773.9	1787.3	1796.5	1811.5	1826.5	1839.0	1849.0
30°	1643.0	1646.3	1658.8	1660.5	1666.4	1678.0	1690.5	1704.7	1716.4	1730.6	1739.7
32.5°	1528.7	1537.9	1545.4	1551.3	1552.9	1570.4	1577.1	1587.1	1600.5	1614.6	1623.8
35°	1417.8	1422.0	1432.8	1436.2	1441.2	1451.2	1464.5	1472.9	1479.5	1488.7	1499.5
37.5°	1300.2	1312.7	1315.2	1325.2	1326.9	1336.1	1342.8	1352.8	1361.1	1369.4	1371.1
40°	1191.0	1195.1	1204.3	1206.8	1208.5	1221.0	1229.3	1231.8	1236.0	1243.5	1253.5
42.5°	1080.0	1084.2	1094.2	1091.7	1099.2	1105.1	1109.2	1119.2	1123.4	1125.9	1125.9
45°	970.8	972.5	979.1	982.5	986.6	990.0	997.5	1002.5	1004.1	1011.7	1014.2
47.5°	866.5	868.2	873.2	879.0	877.4	881.5	889.9	892.4	893.2	898.2	900.7
50°	764.0	768.1	774.8	773.1	778.1	780.6	788.1	789.8	789.8	790.6	791.5
52.5°	668.0	671.4	673.0	674.7	677.2	681.4	684.7	683.1	686.4	689.7	687.2
55°	573.0	575.5	579.6	581.3	581.3	582.1	580.5	588.0	584.6	583.8	584.6
57.5°	486.2	482.9	482.1	486.2	487.9	487.1	484.6	487.9	487.9	486.2	483.7
60°	402.0	399.5	398.7	399.5	396.2	393.7	395.3	393.7	389.5	387.8	388.6
62.5°	325.3	322.8	316.1	316.1	314.4	313.6	306.9	307.7	304.4	299.4	301.1
65°	254.4	247.7	244.4	243.5	237.7	232.7	231.0	225.2	220.2	219.3	220.2
67.5°	191.0	183.5	177.6	175.1	171.8	167.6	161.8	156.8	158.5	157.6	161.0
70°	132.6	127.6	121.8	117.6	119.3	114.3	110.9	110.9	111.8	112.6	114.3
72.5°	88.4	81.7	79.2	76.7	75.1	71.7	73.4	73.4	72.6	73.4	71.7
75°	50.0	46.7	44.2	43.4	41.7	41.7	41.7	41.7	40.9	40.0	40.0
77.5°	22.5	20.9	20.0	19.2	19.2	19.2	18.3	17.5	17.5	17.5	16.7
80°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
82.5°	3.3	3.3	4.2	4.2	4.2	3.3	4.2	4.2	3.3	3.3	4.2
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°	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.0	0.8	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: P858996

CATALOG NUMBER: LX4C50D010 EX4C509035 4LBLWW\*

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0	2221.0
2.5°	2227.6	2228.5	2228.5	2228.5	2229.3	2229.3	2229.3	2229.3
5°	2221.8	2222.6	2222.6	2222.6	2223.5	2223.5	2223.5	2223.5
7.5°	2211.8	2212.6	2212.6	2213.5	2213.5	2214.3	2214.3	2215.1
10°	2200.1	2201.8	2202.6	2203.5	2204.3	2205.1	2205.1	2206.0
12.5°	2187.6	2189.3	2190.1	2191.8	2193.4	2194.3	2195.1	2195.9
15°	2169.3	2172.6	2174.3	2175.1	2178.4	2180.1	2180.9	2181.8
17.5°	2140.1	2146.7	2149.2	2150.9	2154.2	2157.6	2160.1	2160.9
20°	2098.4	2105.9	2109.2	2113.4	2118.4	2122.6	2124.2	2125.9
22.5°	2040.0	2048.3	2053.3	2058.3	2062.5	2066.7	2073.3	2070.8
25°	1956.6	1970.8	1976.6	1979.1	1988.3	1993.3	1996.6	1993.3
27.5°	1863.2	1871.5	1876.5	1882.4	1889.0	1894.0	1895.7	1900.7
30°	1750.6	1764.8	1763.9	1769.8	1778.1	1783.1	1784.8	1788.9
32.5°	1633.8	1640.5	1645.5	1644.7	1648.0	1657.2	1653.8	1661.3
35°	1509.6	1510.4	1518.7	1517.9	1524.6	1524.6	1524.6	1529.6
37.5°	1376.9	1387.0	1382.8	1392.8	1389.5	1392.0	1392.0	1393.6
40°	1256.0	1259.4	1259.4	1262.7	1265.2	1262.7	1264.4	1268.5
42.5°	1130.9	1134.3	1135.1	1133.4	1135.9	1143.4	1137.6	1142.6
45°	1014.2	1016.7	1020.0	1017.5	1021.7	1019.2	1021.7	1020.0
47.5°	904.1	903.2	902.4	909.1	903.2	904.1	907.4	901.6
50°	791.5	796.5	793.1	795.6	797.3	797.3	794.8	794.8
52.5°	691.4	690.6	688.1	690.6	688.9	689.7	691.4	689.7
55°	588.0	591.3	589.6	588.8	589.6	589.6	594.6	588.0
57.5°	486.2	484.6	487.1	492.9	487.1	491.2	493.7	494.6
60°	389.5	389.5	394.5	392.0	397.0	401.2	404.5	402.8
62.5°	296.9	301.1	302.7	303.6	308.6	311.9	311.9	311.1
65°	220.2	226.0	226.0	229.4	231.0	231.0	232.7	236.0
67.5°	162.6	162.6	163.5	165.1	164.3	164.3	166.0	166.8
70°	113.4	111.8	114.3	113.4	113.4	112.6	113.4	113.4
72.5°	71.7	71.7	72.6	71.7	70.1	70.9	70.9	72.6
75°	38.4	40.0	38.4	38.4	39.2	37.5	38.4	39.2
77.5°	15.8	15.8	15.8	15.8	15.8	15.0	15.0	15.0
80°	7.5	7.5	7.5	7.5	7.5	7.5	6.7	6.7
82.5°	3.3	4.2	3.3	4.2	3.3	3.3	3.3	3.3
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.0	0.8	0.0	0.8	0.0	0.0	0.0	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)