

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: P858956

Luminaire Tested: **LX4C50D010 EX4C509027 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P858956
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 EX4C509027 4LBLWWH
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

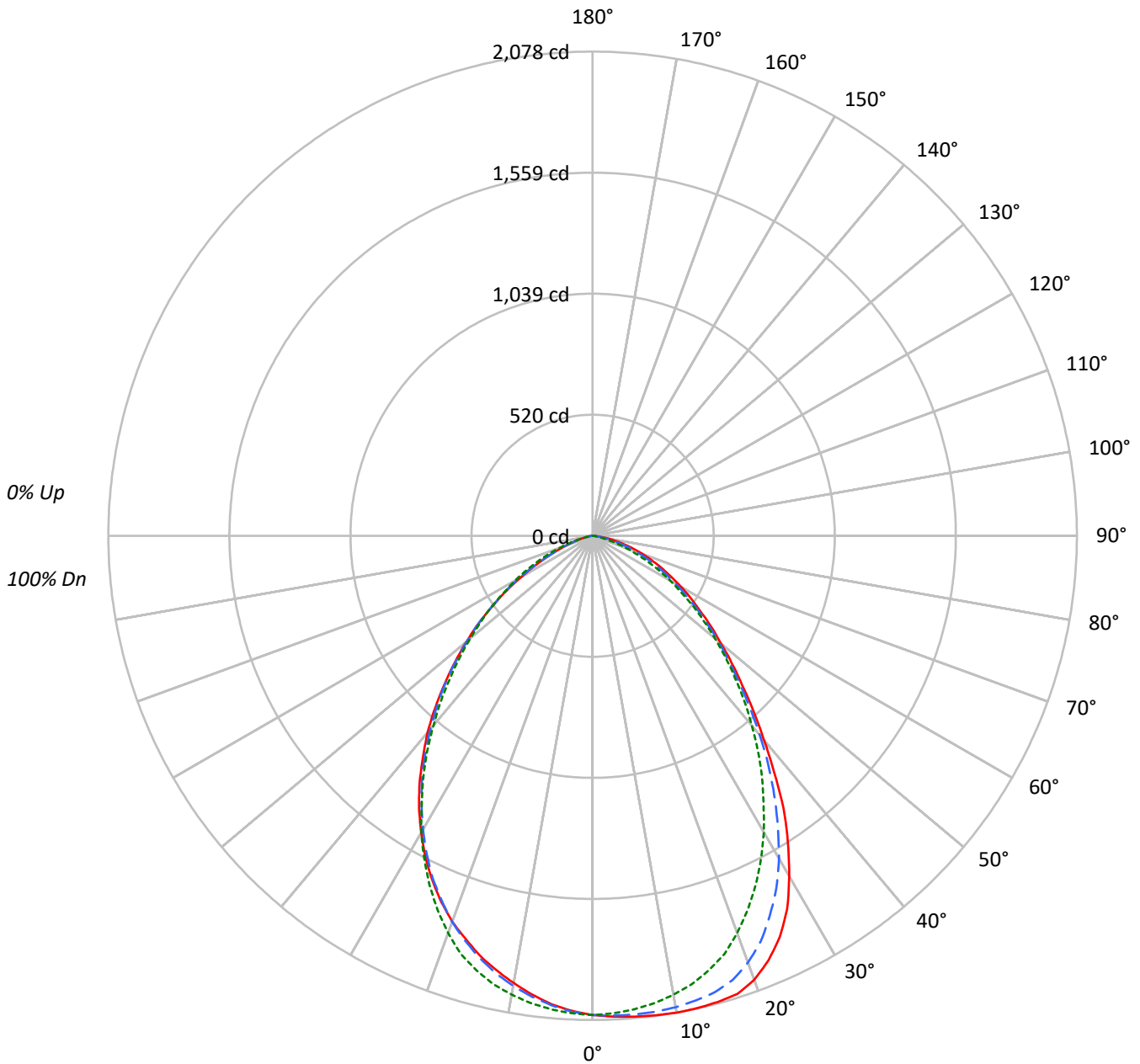
Lumens per Lamp: N/A
Luminaire Lumens: 3876.0 lumens
Efficiency: N/A
Efficacy: 66.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
Input Voltage (V):
Input Current (A_{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

TEST NUMBER: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

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°	252673	252673	252673
5°	255488	251591	248853
10°	259240	249460	243148
15°	263494	245484	237344
20°	265163	237146	230308
25°	257566	224328	220885
30°	239359	208490	208604
35°	214256	190050	194084
40°	183436	170381	176588
45°	157913	150217	155846
50°	137286	130768	134706
55°	120802	112492	111485
60°	107472	93885	86489
65°	94273	75203	62558
70°	80964	53126	42350
75°	65694	30806	24778
80°	46977	13442	12310
85°	17902	5638	5638



TEST NUMBER: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.8	5.0
10°-20°	548.7	14.2
20°-30°	783.5	20.2
30°-40°	819.6	21.1
40°-50°	686.8	17.7
50°-60°	480.6	12.4
60°-70°	261.7	6.8
70°-80°	90.8	2.3
80°-90°	10.5	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°	1526.0	39.4
0°-40°	2345.6	60.5
0°-60°	3513.0	90.6
0°-90°	3876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3876.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2057	2057	2057	2057	2057	
5°	2072	2062	2040	2023	2018	198
15°	2072	2028	1930	1875	1866	585
25°	1900	1799	1655	1622	1630	868
35°	1429	1358	1267	1277	1294	886
45°	909	888	865	893	897	707
55°	564	545	525	525	520	510
65°	324	296	259	218	215	323
75°	138	112	65	52	52	149
85°	13	7	4	4	4	23
90°	0	0	0	0	0	



TEST NUMBER: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7
2.5°	2066.2	2063.8	2064.6	2064.6	2064.6	2063.8	2064.6	2063.8	2063.8	2063.0	2061.4
5°	2071.7	2070.1	2070.1	2070.1	2069.4	2068.6	2068.6	2067.8	2066.2	2065.4	2062.2
7.5°	2075.7	2074.1	2074.1	2073.3	2072.5	2071.7	2070.9	2068.6	2066.2	2064.6	2060.7
10°	2078.1	2075.7	2075.7	2074.1	2072.5	2071.7	2070.1	2067.0	2063.8	2059.9	2054.3
12.5°	2076.5	2074.1	2073.3	2071.7	2068.6	2067.0	2065.4	2061.4	2055.9	2050.4	2043.3
15°	2071.7	2070.1	2068.6	2066.2	2062.2	2059.9	2058.3	2052.0	2044.8	2036.9	2028.2
17.5°	2062.2	2059.9	2056.7	2053.5	2048.0	2045.6	2041.7	2033.8	2023.5	2012.4	1999.0
20°	2028.2	2026.6	2023.5	2017.9	2009.2	2006.1	2000.5	1990.3	1976.8	1963.4	1949.1
22.5°	1972.1	1969.7	1964.9	1960.2	1952.3	1946.7	1942.0	1927.8	1912.7	1898.5	1885.0
25°	1900.1	1897.7	1891.4	1885.0	1877.1	1867.6	1862.9	1851.8	1836.8	1818.6	1798.8
27.5°	1807.5	1799.6	1797.2	1790.1	1778.3	1775.1	1768.0	1753.7	1739.5	1723.7	1707.1
30°	1687.3	1687.3	1682.5	1679.4	1668.3	1665.1	1657.2	1642.2	1634.3	1612.1	1599.5
32.5°	1559.9	1558.3	1554.4	1552.0	1545.7	1540.2	1532.2	1524.3	1506.9	1495.9	1478.5
35°	1428.6	1419.1	1420.7	1416.0	1412.0	1405.7	1404.9	1396.2	1380.4	1374.0	1358.2
37.5°	1279.1	1275.2	1280.7	1273.6	1269.6	1270.4	1264.1	1258.5	1252.2	1241.1	1238.0
40°	1143.8	1147.0	1146.2	1139.9	1143.1	1139.1	1132.8	1127.2	1124.1	1116.9	1114.6
42.5°	1022.8	1018.1	1016.5	1016.5	1017.3	1017.3	1014.1	1010.2	1010.2	1003.0	995.9
45°	908.9	908.9	907.3	912.1	904.9	904.9	902.6	901.8	898.6	897.0	888.3
47.5°	810.8	810.0	809.2	808.4	807.7	807.7	802.9	798.9	798.2	793.4	788.7
50°	718.3	723.0	721.4	717.5	715.9	716.7	713.5	711.1	710.4	702.4	703.2
52.5°	640.7	640.0	641.5	639.2	635.2	636.0	632.8	629.7	626.5	622.5	619.4
55°	564.0	568.0	566.4	564.0	563.2	561.6	559.3	555.3	554.5	545.8	545.0
57.5°	499.9	499.1	497.6	493.6	492.8	490.4	490.4	487.3	482.5	477.8	473.8
60°	437.4	437.4	435.1	434.3	431.1	430.3	429.5	426.4	420.8	416.9	410.5
62.5°	377.3	378.9	377.3	375.0	372.6	369.4	367.8	365.5	360.7	356.8	351.2
65°	324.3	323.5	322.7	319.6	318.8	315.6	314.8	310.1	305.3	302.2	295.8
67.5°	273.7	271.3	271.3	269.7	268.2	265.8	264.2	259.5	253.9	250.8	244.4
70°	225.4	223.9	223.9	223.9	219.9	217.5	216.7	214.4	206.5	203.3	197.0
72.5°	181.1	180.4	179.6	177.2	174.8	174.8	171.7	166.9	163.0	159.0	154.3
75°	138.4	140.0	138.4	135.3	134.5	132.9	130.5	126.6	122.6	117.9	112.3
77.5°	101.3	99.7	98.1	98.1	96.5	93.3	92.6	89.4	84.6	81.5	75.9
80°	66.4	65.7	64.1	62.5	61.7	60.9	60.1	57.0	52.2	49.8	45.1
82.5°	36.4	35.6	35.6	34.8	32.4	32.4	31.6	28.5	26.1	24.5	22.1
85°	12.7	12.7	12.7	11.9	11.9	11.9	11.1	10.3	9.5	8.7	7.1
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



TEST NUMBER: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7
2.5°	2059.9	2058.3	2057.5	2056.7	2055.9	2055.1	2054.3	2052.7	2052.0	2051.2	2049.6
5°	2059.9	2056.7	2055.1	2052.7	2051.2	2049.6	2047.2	2044.8	2042.5	2040.1	2037.7
7.5°	2056.7	2052.0	2048.8	2044.0	2042.5	2040.1	2035.3	2032.2	2028.2	2023.5	2017.9
10°	2048.8	2043.3	2036.9	2030.6	2028.2	2024.3	2017.9	2012.4	2006.1	1999.7	1994.2
12.5°	2036.1	2027.4	2019.5	2010.8	2006.1	2002.1	1993.4	1985.5	1977.6	1970.5	1961.0
15°	2017.1	2006.9	1996.6	1984.7	1979.2	1974.4	1961.8	1952.3	1939.6	1930.1	1920.6
17.5°	1986.3	1970.5	1957.8	1942.8	1934.9	1929.3	1918.3	1903.2	1891.4	1881.1	1870.0
20°	1933.3	1918.3	1900.9	1884.3	1875.6	1868.4	1852.6	1836.8	1824.9	1813.9	1802.0
22.5°	1863.7	1844.7	1832.0	1811.5	1804.4	1795.7	1776.7	1762.4	1749.0	1737.9	1726.8
25°	1779.0	1762.4	1745.0	1726.0	1717.3	1707.1	1691.2	1676.2	1667.5	1654.9	1641.4
27.5°	1681.7	1668.3	1646.9	1630.3	1621.6	1613.7	1598.7	1585.2	1572.6	1563.9	1551.2
30°	1578.9	1563.1	1544.1	1526.7	1522.0	1512.5	1499.0	1488.7	1475.3	1469.7	1464.2
32.5°	1465.8	1447.6	1433.4	1422.3	1412.8	1404.9	1397.8	1381.2	1378.8	1364.5	1363.0
35°	1342.4	1334.5	1321.0	1311.5	1303.6	1298.1	1286.2	1278.3	1269.6	1267.2	1261.7
37.5°	1226.1	1216.6	1204.0	1195.3	1189.7	1188.9	1180.2	1175.5	1169.2	1166.0	1159.7
40°	1104.3	1100.3	1089.3	1087.7	1079.0	1078.2	1073.4	1067.9	1062.4	1062.4	1063.2
42.5°	992.0	987.2	982.5	976.9	972.2	972.2	969.8	968.2	966.6	964.3	968.2
45°	886.8	880.4	877.3	871.7	874.1	869.4	867.8	867.8	865.4	864.6	870.1
47.5°	788.7	781.5	778.4	776.8	776.8	777.6	770.5	772.8	772.1	773.6	776.0
50°	699.3	692.9	688.2	688.2	689.0	685.8	682.7	685.0	682.7	684.2	689.8
52.5°	616.2	609.9	607.5	607.5	602.8	602.0	603.6	600.4	601.2	602.0	605.1
55°	539.5	535.5	531.6	527.6	528.4	526.8	523.7	522.9	524.5	525.2	529.2
57.5°	470.7	465.1	459.6	458.0	456.4	456.4	452.5	451.7	453.3	449.3	449.3
60°	405.0	401.8	394.7	392.4	392.4	388.4	385.2	386.8	382.9	382.1	382.9
62.5°	344.1	341.7	337.0	332.2	330.7	329.1	325.1	323.5	322.0	318.8	314.0
65°	291.1	285.6	280.0	276.9	274.5	270.5	268.2	265.0	260.3	258.7	253.9
67.5°	238.1	232.6	227.0	224.7	222.3	219.9	216.0	212.0	206.5	200.1	194.6
70°	191.4	184.3	181.1	174.8	173.2	170.1	164.5	160.6	155.0	147.9	142.4
72.5°	146.3	141.6	136.8	131.3	127.4	125.0	120.2	113.9	107.6	103.6	98.1
75°	105.2	102.8	96.5	90.2	88.6	85.4	79.9	75.9	71.2	64.9	60.1
77.5°	71.2	66.4	62.5	57.0	55.4	52.2	49.0	45.1	41.9	38.0	34.8
80°	41.9	38.0	35.6	31.6	30.1	28.5	26.1	22.9	20.6	19.0	18.2
82.5°	20.6	17.4	16.6	14.2	13.4	12.7	11.1	10.3	8.7	8.7	8.7
85°	7.1	5.5	5.5	4.7	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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



TEST NUMBER: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7
2.5°	2048.8	2048.0	2047.2	2046.4	2046.4	2045.6	2045.6	2044.8	2044.8	2044.0	2044.0
5°	2034.6	2032.2	2030.6	2029.0	2029.0	2026.6	2025.1	2023.5	2022.7	2022.7	2021.1
7.5°	2014.8	2011.6	2008.4	2006.1	2005.3	2001.3	1998.2	1998.2	1995.0	1993.4	1991.8
10°	1988.7	1983.1	1978.4	1976.0	1972.8	1970.5	1966.5	1964.1	1961.8	1957.8	1957.0
12.5°	1953.1	1949.1	1942.0	1938.8	1937.3	1932.5	1926.2	1923.0	1922.2	1919.1	1916.7
15°	1912.7	1904.0	1897.7	1893.7	1893.7	1885.8	1882.7	1877.9	1874.8	1872.4	1871.6
17.5°	1860.5	1851.8	1845.5	1840.0	1838.4	1832.0	1827.3	1825.7	1821.8	1823.3	1819.4
20°	1793.3	1786.2	1781.4	1774.3	1774.3	1770.3	1768.8	1764.8	1763.2	1761.6	1763.2
22.5°	1721.3	1712.6	1704.7	1703.9	1703.9	1698.4	1697.6	1696.8	1693.6	1696.0	1695.2
25°	1636.7	1630.3	1625.6	1624.8	1624.8	1621.6	1618.5	1620.0	1622.4	1621.6	1624.0
27.5°	1548.9	1542.5	1540.9	1540.2	1538.6	1537.8	1539.4	1539.4	1541.7	1544.9	1548.1
30°	1453.9	1452.3	1450.0	1449.2	1447.6	1451.6	1453.1	1455.5	1454.7	1459.5	1462.6
32.5°	1359.0	1355.8	1355.0	1356.6	1359.0	1358.2	1363.0	1364.5	1366.1	1371.7	1374.0
35°	1263.3	1262.5	1260.9	1260.9	1261.7	1268.0	1268.0	1273.6	1276.7	1278.3	1284.6
37.5°	1160.5	1163.6	1165.2	1167.6	1168.4	1170.7	1172.3	1177.9	1181.0	1184.2	1187.3
40°	1066.3	1064.7	1071.9	1067.1	1068.7	1075.8	1079.0	1078.2	1082.9	1087.7	1090.8
42.5°	965.9	968.2	969.8	971.4	975.4	976.1	980.1	985.6	987.2	992.8	994.3
45°	868.6	869.4	872.5	875.7	878.1	884.4	886.0	888.3	893.1	893.1	895.5
47.5°	776.8	780.0	780.0	784.7	788.7	787.9	793.4	795.0	794.2	798.2	799.7
50°	689.0	693.7	692.9	696.1	697.7	698.5	703.2	704.8	701.7	705.6	706.4
52.5°	605.1	607.5	610.7	611.5	609.9	613.8	612.3	615.4	614.6	617.8	614.6
55°	528.4	527.6	527.6	529.2	527.6	529.2	530.8	527.6	525.2	528.4	527.6
57.5°	451.7	451.7	450.1	452.5	450.1	447.7	446.9	444.6	442.2	442.2	441.4
60°	379.7	378.1	375.0	374.2	374.2	370.2	368.6	365.5	365.5	362.3	359.1
62.5°	312.5	308.5	306.1	306.1	304.5	300.6	293.5	288.7	287.1	282.4	281.6
65°	249.2	245.2	242.8	238.1	234.1	232.6	225.4	219.9	217.5	212.8	213.6
67.5°	191.4	185.1	178.0	174.8	172.4	166.9	164.5	160.6	158.2	158.2	158.2
70°	137.6	132.1	125.0	122.6	121.0	116.3	113.9	113.1	115.5	114.7	115.5
72.5°	92.6	87.0	83.9	82.3	80.7	78.3	79.9	80.7	79.1	79.9	80.7
75°	56.2	54.6	52.2	51.4	51.4	52.2	51.4	51.4	52.2	52.2	53.0
77.5°	32.4	30.9	30.9	30.1	31.6	30.9	30.9	30.9	31.6	31.6	31.6
80°	17.4	17.4	17.4	17.4	18.2	17.4	18.2	18.2	18.2	18.2	18.2
82.5°	8.7	8.7	8.7	9.5	9.5	9.5	9.5	9.5	9.5	9.5	8.7
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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: P858956

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7	2056.7
2.5°	2042.5	2042.5	2042.5	2040.9	2041.7	2041.7	2040.9	2040.9
5°	2020.3	2019.5	2017.9	2017.9	2016.4	2017.9	2017.1	2017.9
7.5°	1990.3	1990.3	1987.9	1987.9	1987.1	1986.3	1985.5	1986.3
10°	1954.7	1954.7	1953.1	1952.3	1953.1	1949.9	1949.9	1949.1
12.5°	1915.1	1913.5	1911.9	1912.7	1911.9	1909.6	1908.8	1909.6
15°	1869.2	1866.9	1867.6	1865.3	1865.3	1864.5	1866.1	1866.1
17.5°	1818.6	1817.0	1815.4	1816.2	1814.6	1815.4	1814.6	1813.9
20°	1762.4	1761.6	1761.6	1758.5	1759.3	1758.5	1759.3	1761.6
22.5°	1697.6	1696.8	1697.6	1695.2	1696.8	1696.8	1699.2	1699.2
25°	1626.4	1625.6	1627.2	1628.0	1628.7	1631.1	1628.7	1629.5
27.5°	1547.3	1549.6	1552.0	1552.8	1556.0	1553.6	1552.0	1554.4
30°	1467.4	1467.4	1466.6	1469.7	1472.1	1474.5	1470.5	1470.5
32.5°	1375.6	1379.6	1379.6	1380.4	1382.7	1382.7	1382.7	1385.9
35°	1287.8	1290.2	1291.0	1287.8	1289.4	1288.6	1294.1	1294.1
37.5°	1189.7	1189.7	1190.5	1196.1	1196.1	1193.7	1195.3	1195.3
40°	1096.4	1097.2	1094.0	1095.6	1099.5	1098.0	1099.5	1101.1
42.5°	994.3	999.9	996.7	998.3	997.5	998.3	999.1	999.1
45°	897.0	898.6	898.6	899.4	901.0	902.6	897.8	897.0
47.5°	802.1	802.9	805.3	801.3	806.1	801.3	806.1	800.5
50°	706.4	709.6	707.2	708.8	706.4	706.4	705.6	704.8
52.5°	615.4	614.6	614.6	613.8	613.8	615.4	613.8	616.2
55°	524.5	525.2	523.7	522.9	522.1	524.5	522.1	520.5
57.5°	438.2	439.8	436.7	438.2	432.7	435.1	435.9	436.7
60°	358.3	356.0	356.0	352.8	352.8	355.2	352.0	352.0
62.5°	277.7	279.2	276.9	280.0	280.0	283.2	281.6	283.2
65°	212.8	213.6	214.4	214.4	214.4	219.1	217.5	215.2
67.5°	160.6	161.4	162.2	161.4	163.7	162.2	162.2	163.0
70°	116.3	117.1	117.9	117.9	117.1	117.9	117.9	117.9
72.5°	80.7	81.5	80.7	81.5	82.3	81.5	81.5	82.3
75°	53.0	53.0	52.2	52.2	52.2	52.2	53.0	52.2
77.5°	30.9	31.6	30.9	31.6	31.6	31.6	31.6	31.6
80°	18.2	18.2	18.2	17.4	18.2	18.2	18.2	17.4
82.5°	9.5	9.5	8.7	8.7	9.5	9.5	9.5	9.5
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)