

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: P859051

Luminaire Tested: **LX4C50D010 EX4C509727 4LBLWW***

Issue Date: 2/9/2022

Test Information

Test Method: LM-79-08
Report Number: P859051
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 EX4C509727 4LBLWW*
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 97CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

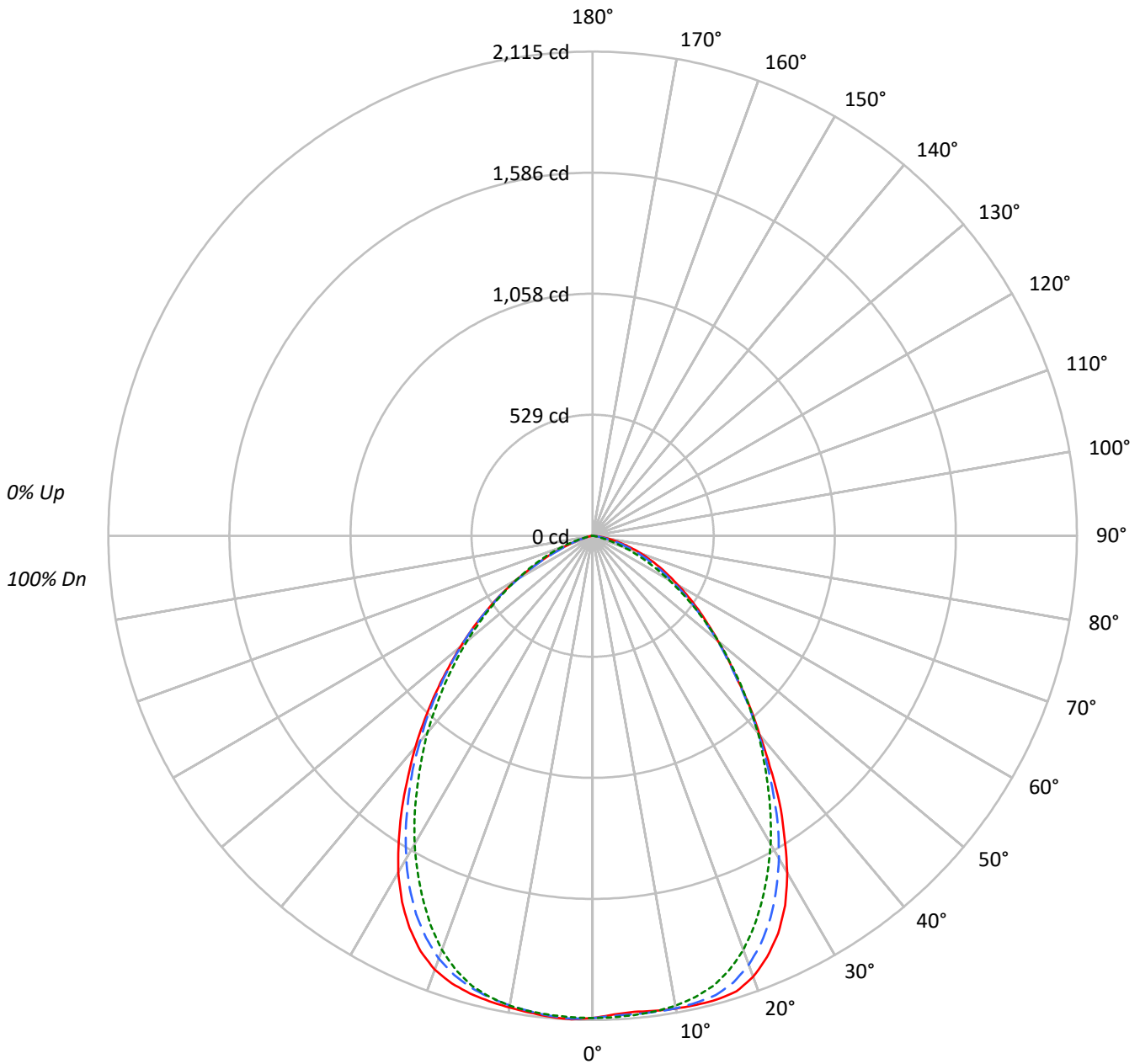
Lumens per Lamp: N/A
Luminaire Lumens: 4039.0 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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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°	258815	258815	258815
5°	257375	259126	260100
10°	261623	260051	261037
15°	266737	258890	263227
20°	268091	251644	263633
25°	259843	237639	256305
30°	241174	220520	240720
35°	213566	200039	217601
40°	182056	180164	192978
45°	156419	158209	168094
50°	136540	136846	144090
55°	120652	115555	119453
60°	105752	94278	93885
65°	93604	73139	65087
70°	79850	50288	38650
75°	64603	27056	17658
80°	44218	6721	4457
85°	13391	2255	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.2	5.0
10°-20°	579.6	14.4
20°-30°	837.5	20.7
30°-40°	865.8	21.4
40°-50°	715.4	17.7
50°-60°	493.7	12.2
60°-70°	258.5	6.4
70°-80°	81.4	2.0
80°-90°	6.9	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°	1617.3	40.0
0°-40°	2483.1	61.5
0°-60°	3692.3	91.4
0°-90°	4039.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4039.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2107	2107	2107	2107	2107	
5°	2087	2097	2101	2105	2109	200
15°	2097	2078	2036	2045	2070	592
25°	1917	1839	1753	1824	1891	875
35°	1424	1376	1334	1403	1451	884
45°	900	896	911	952	968	702
55°	563	546	540	555	558	506
65°	322	292	252	209	224	319
75°	136	107	57	39	37	146
85°	10	5	2	2	2	20
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°	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7
2.5°	2093.3	2094.1	2094.1	2095.7	2095.7	2095.7	2096.5	2096.5	2097.2	2098.0	2098.8
5°	2087.0	2087.0	2088.5	2089.3	2090.9	2091.7	2093.3	2094.1	2095.7	2096.5	2097.2
7.5°	2093.3	2093.3	2094.1	2094.9	2094.9	2095.7	2095.7	2096.5	2097.2	2098.0	2098.0
10°	2097.2	2097.2	2097.2	2097.2	2098.0	2098.0	2098.0	2097.2	2097.2	2097.2	2096.5
12.5°	2098.8	2098.8	2098.0	2097.2	2098.0	2097.2	2097.2	2094.9	2093.3	2091.7	2089.3
15°	2097.2	2097.2	2096.5	2095.7	2094.9	2093.3	2092.5	2088.5	2085.4	2080.6	2077.5
17.5°	2087.0	2085.4	2083.8	2082.2	2079.0	2076.7	2075.1	2068.0	2062.4	2054.5	2045.8
20°	2050.6	2049.0	2046.6	2042.7	2038.7	2035.5	2030.8	2020.5	2015.0	2003.1	1994.4
22.5°	1991.2	1989.7	1990.4	1983.3	1975.4	1970.7	1967.5	1958.8	1949.3	1934.3	1924.8
25°	1916.9	1912.1	1912.1	1901.0	1897.1	1893.9	1890.0	1879.7	1865.4	1852.0	1839.3
27.5°	1820.4	1814.0	1810.9	1809.3	1799.8	1792.7	1787.1	1779.2	1767.3	1755.5	1738.1
30°	1700.1	1699.3	1695.4	1688.2	1681.1	1678.0	1671.6	1658.2	1647.1	1638.4	1627.3
32.5°	1558.5	1557.7	1557.7	1557.7	1553.0	1552.2	1542.7	1535.6	1526.8	1513.4	1506.3
35°	1424.0	1423.2	1424.0	1412.1	1409.0	1406.6	1405.8	1401.1	1389.2	1382.9	1376.5
37.5°	1272.1	1274.5	1272.9	1269.7	1273.7	1266.6	1272.1	1261.8	1257.1	1255.5	1248.4
40°	1135.2	1141.6	1135.2	1136.0	1140.0	1132.9	1132.9	1131.3	1128.1	1126.5	1125.0
42.5°	1018.2	1010.3	1015.0	1011.0	1015.0	1012.6	1008.7	1011.0	1011.8	1008.7	1007.9
45°	900.3	901.9	903.5	901.1	901.1	898.7	905.0	901.1	901.1	901.9	896.3
47.5°	804.6	802.2	803.8	802.2	803.0	801.4	803.0	803.8	802.2	802.2	797.4
50°	714.4	712.8	718.3	713.6	713.6	712.8	713.6	712.0	709.6	709.6	711.2
52.5°	636.1	632.9	632.1	636.1	630.5	630.5	631.3	629.7	626.6	625.0	621.0
55°	563.3	562.5	563.3	560.1	558.5	558.5	554.6	553.0	552.2	548.2	545.9
57.5°	495.2	492.9	493.7	492.9	489.7	488.9	485.7	485.7	482.6	479.4	475.5
60°	430.4	430.4	432.7	429.6	427.2	425.6	424.0	422.5	416.9	411.4	406.6
62.5°	372.6	373.4	372.6	370.2	368.7	367.1	365.5	360.7	356.0	352.8	347.3
65°	322.0	321.2	318.8	317.2	313.3	313.3	310.1	307.7	302.2	297.5	291.9
67.5°	269.8	268.2	268.2	268.2	263.4	262.6	261.1	256.3	251.6	245.2	240.5
70°	222.3	223.9	221.5	219.1	216.8	216.0	213.6	208.9	203.3	197.0	193.0
72.5°	177.2	178.8	176.4	175.6	170.9	169.3	168.5	164.6	158.2	154.3	147.9
75°	136.1	136.9	135.3	133.7	130.5	129.7	125.8	122.6	118.7	112.3	106.8
77.5°	98.1	96.5	96.5	93.4	90.2	90.2	89.4	84.6	79.1	74.4	69.6
80°	62.5	61.7	59.3	57.8	55.4	54.6	53.8	49.8	45.9	42.7	39.6
82.5°	31.6	30.9	30.1	29.3	27.7	26.1	26.9	23.7	22.2	19.0	16.6
85°	9.5	10.3	10.3	9.5	8.7	8.7	8.7	7.9	6.3	5.5	4.7
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°	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7
2.5°	2099.6	2100.4	2101.2	2102.0	2102.0	2102.8	2103.6	2104.4	2105.2	2105.2	2105.9
5°	2098.0	2099.6	2099.6	2100.4	2100.4	2100.4	2101.2	2101.2	2101.2	2101.2	2102.0
7.5°	2098.8	2098.8	2098.8	2098.0	2098.0	2097.2	2097.2	2097.2	2095.7	2095.7	2095.7
10°	2094.9	2094.1	2093.3	2091.7	2090.9	2090.1	2088.5	2087.0	2085.4	2084.6	2083.0
12.5°	2087.0	2083.8	2080.6	2077.5	2075.9	2075.1	2071.9	2069.6	2067.2	2064.8	2063.2
15°	2071.1	2066.4	2060.9	2054.5	2052.9	2051.4	2045.8	2041.1	2037.9	2035.5	2031.6
17.5°	2039.5	2030.0	2023.7	2014.2	2010.2	2008.6	1999.9	1995.2	1989.7	1988.1	1984.9
20°	1983.3	1974.6	1962.8	1954.1	1949.3	1944.6	1937.4	1931.1	1924.8	1924.8	1920.8
22.5°	1912.9	1901.8	1886.8	1875.7	1874.9	1865.4	1859.1	1852.0	1849.6	1844.9	1844.9
25°	1824.3	1814.8	1798.2	1788.7	1784.0	1781.6	1771.3	1761.8	1757.1	1753.1	1756.3
27.5°	1726.2	1712.0	1699.3	1687.4	1683.5	1678.7	1669.3	1665.3	1656.6	1655.8	1655.0
30°	1613.9	1599.6	1587.0	1581.4	1573.5	1569.6	1562.4	1557.7	1554.5	1554.5	1553.0
32.5°	1496.0	1483.3	1477.0	1465.1	1461.2	1455.6	1450.9	1446.2	1447.7	1446.2	1446.9
35°	1368.6	1365.5	1353.6	1346.5	1346.5	1345.7	1337.8	1334.6	1333.0	1333.8	1337.8
37.5°	1247.6	1238.1	1230.2	1225.4	1229.4	1224.6	1223.9	1223.9	1228.6	1225.4	1231.8
40°	1118.6	1117.8	1114.7	1116.3	1117.1	1111.5	1113.1	1113.9	1117.1	1123.4	1124.2
42.5°	1006.3	1005.5	1005.5	1005.5	1003.9	1000.8	1003.9	1009.5	1008.7	1013.4	1017.4
45°	897.9	896.3	899.5	897.1	901.9	903.5	901.1	902.7	907.4	910.6	916.9
47.5°	799.0	799.0	799.8	801.4	796.7	800.6	802.2	805.4	807.7	809.3	812.5
50°	707.3	707.3	705.7	705.7	705.7	708.0	704.9	708.8	709.6	716.0	719.9
52.5°	622.6	618.7	621.0	619.4	616.3	614.7	616.3	617.1	621.8	623.4	628.1
55°	541.9	541.9	535.6	534.0	536.4	535.6	534.8	534.8	537.2	539.5	543.5
57.5°	470.7	466.0	461.2	460.4	458.1	458.8	458.8	458.1	456.5	457.3	458.1
60°	403.5	400.3	393.2	393.2	392.4	391.6	387.6	386.9	382.9	383.7	380.5
62.5°	341.8	340.2	330.7	327.5	327.5	325.1	321.2	320.4	314.9	314.9	311.7
65°	286.4	281.6	276.1	270.6	270.6	267.4	265.0	257.9	253.9	251.6	246.8
67.5°	235.8	228.6	223.1	218.3	215.2	214.4	208.9	204.1	197.8	193.8	186.7
70°	186.7	181.2	175.6	170.9	167.7	164.6	159.0	151.9	147.1	140.0	135.3
72.5°	140.8	136.1	131.3	125.0	121.0	118.7	113.1	106.8	98.9	94.1	87.8
75°	101.3	95.7	89.4	83.9	81.5	79.1	72.8	68.0	62.5	57.0	50.6
77.5°	65.7	59.3	54.6	48.3	47.5	45.9	39.6	34.8	30.9	27.7	23.7
80°	34.8	31.6	27.7	23.7	22.2	19.8	16.6	14.2	11.9	9.5	7.9
82.5°	15.0	12.7	10.3	8.7	7.9	7.1	5.5	4.7	4.0	4.0	3.2
85°	4.0	3.2	3.2	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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°	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7
2.5°	2106.7	2107.5	2108.3	2108.3	2109.1	2109.9	2109.9	2110.7	2111.5	2112.3	2112.3
5°	2102.8	2102.8	2102.8	2103.6	2103.6	2103.6	2103.6	2105.2	2105.2	2105.9	2106.7
7.5°	2094.9	2094.9	2094.9	2094.9	2094.1	2094.9	2094.1	2094.1	2095.7	2096.5	2097.2
10°	2082.2	2081.4	2081.4	2080.6	2080.6	2080.6	2081.4	2082.2	2083.0	2083.8	2086.2
12.5°	2062.4	2061.6	2061.6	2060.9	2060.9	2061.6	2062.4	2064.0	2067.2	2068.8	2071.9
15°	2030.8	2030.0	2030.8	2031.6	2033.2	2035.5	2037.9	2040.3	2045.0	2049.0	2052.9
17.5°	1984.9	1985.7	1986.5	1988.1	1990.4	1993.6	1999.9	2006.3	2011.8	2018.1	2024.5
20°	1921.6	1924.8	1925.6	1931.1	1932.7	1939.8	1946.9	1956.4	1965.1	1973.0	1981.7
22.5°	1845.7	1848.0	1851.2	1857.5	1861.5	1871.0	1879.7	1890.8	1900.3	1910.5	1923.2
25°	1759.4	1760.2	1769.7	1769.7	1779.2	1787.1	1797.4	1809.3	1823.5	1837.0	1845.7
27.5°	1661.3	1665.3	1672.4	1675.6	1682.7	1695.4	1704.1	1718.3	1732.5	1744.4	1753.9
30°	1558.5	1561.7	1573.5	1575.1	1580.6	1591.7	1603.6	1617.0	1628.1	1641.6	1650.3
32.5°	1450.1	1458.8	1465.9	1471.5	1473.1	1489.7	1496.0	1505.5	1518.1	1531.6	1540.3
35°	1344.9	1348.8	1359.1	1362.3	1367.0	1376.5	1389.2	1397.1	1403.4	1412.1	1422.4
37.5°	1233.3	1245.2	1247.6	1257.1	1258.7	1267.4	1273.7	1283.2	1291.1	1299.0	1300.6
40°	1129.7	1133.7	1142.4	1144.7	1146.3	1158.2	1166.1	1168.5	1172.4	1179.6	1189.0
42.5°	1024.5	1028.4	1037.9	1035.6	1042.7	1048.2	1052.2	1061.7	1065.6	1068.0	1068.0
45°	920.9	922.4	928.8	931.9	935.9	939.1	946.2	950.9	952.5	959.6	962.0
47.5°	822.0	823.5	828.3	833.8	832.3	836.2	844.1	846.5	847.3	852.0	854.4
50°	724.7	728.6	734.9	733.4	738.1	740.5	747.6	749.2	749.2	750.0	750.8
52.5°	633.7	636.8	638.4	640.0	642.4	646.3	649.5	647.9	651.1	654.3	651.9
55°	543.5	545.9	549.8	551.4	551.4	552.2	550.6	557.7	554.6	553.8	554.6
57.5°	461.2	458.1	457.3	461.2	462.8	462.0	459.6	462.8	462.8	461.2	458.8
60°	381.3	378.9	378.2	378.9	375.8	373.4	375.0	373.4	369.5	367.9	368.7
62.5°	308.5	306.2	299.8	299.8	298.2	297.5	291.1	291.9	288.8	284.0	285.6
65°	241.3	235.0	231.8	231.0	225.5	220.7	219.1	213.6	208.9	208.1	208.9
67.5°	181.2	174.0	168.5	166.1	163.0	159.0	153.5	148.7	150.3	149.5	152.7
70°	125.8	121.0	115.5	111.5	113.1	108.4	105.2	105.2	106.0	106.8	108.4
72.5°	83.9	77.5	75.2	72.8	71.2	68.0	69.6	69.6	68.8	69.6	68.0
75°	47.5	44.3	41.9	41.1	39.6	39.6	39.6	39.6	38.8	38.0	38.0
77.5°	21.4	19.8	19.0	18.2	18.2	18.2	17.4	16.6	16.6	16.6	15.8
80°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
82.5°	3.2	3.2	4.0	4.0	4.0	3.2	4.0	4.0	3.2	3.2	4.0
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P859051

CATALOG NUMBER: LX4C50D010 EX4C509727 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7	2106.7
2.5°	2113.1	2113.9	2113.9	2113.9	2114.6	2114.6	2114.6	2114.6
5°	2107.5	2108.3	2108.3	2108.3	2109.1	2109.1	2109.1	2109.1
7.5°	2098.0	2098.8	2098.8	2099.6	2099.6	2100.4	2100.4	2101.2
10°	2087.0	2088.5	2089.3	2090.1	2090.9	2091.7	2091.7	2092.5
12.5°	2075.1	2076.7	2077.5	2079.0	2080.6	2081.4	2082.2	2083.0
15°	2057.7	2060.9	2062.4	2063.2	2066.4	2068.0	2068.8	2069.6
17.5°	2030.0	2036.3	2038.7	2040.3	2043.4	2046.6	2049.0	2049.8
20°	1990.4	1997.6	2000.7	2004.7	2009.4	2013.4	2015.0	2016.5
22.5°	1935.1	1943.0	1947.7	1952.5	1956.4	1960.4	1966.7	1964.3
25°	1856.0	1869.4	1874.9	1877.3	1886.0	1890.8	1893.9	1890.8
27.5°	1767.3	1775.3	1780.0	1785.5	1791.9	1796.6	1798.2	1802.9
30°	1660.5	1674.0	1673.2	1678.7	1686.7	1691.4	1693.0	1696.9
32.5°	1549.8	1556.1	1560.9	1560.1	1563.2	1571.9	1568.8	1575.9
35°	1431.9	1432.7	1440.6	1439.8	1446.2	1446.2	1446.2	1450.9
37.5°	1306.1	1315.6	1311.7	1321.2	1318.0	1320.4	1320.4	1322.0
40°	1191.4	1194.6	1194.6	1197.7	1200.1	1197.7	1199.3	1203.3
42.5°	1072.8	1075.9	1076.7	1075.1	1077.5	1084.6	1079.1	1083.8
45°	962.0	964.4	967.5	965.2	969.1	966.7	969.1	967.5
47.5°	857.6	856.8	856.0	862.3	856.8	857.6	860.7	855.2
50°	750.8	755.5	752.3	754.7	756.3	756.3	753.9	753.9
52.5°	655.8	655.0	652.7	655.0	653.5	654.3	655.8	654.3
55°	557.7	560.9	559.3	558.5	559.3	559.3	564.1	557.7
57.5°	461.2	459.6	462.0	467.5	462.0	466.0	468.3	469.1
60°	369.5	369.5	374.2	371.8	376.6	380.5	383.7	382.1
62.5°	281.6	285.6	287.2	288.0	292.7	295.9	295.9	295.1
65°	208.9	214.4	214.4	217.6	219.1	219.1	220.7	223.9
67.5°	154.3	154.3	155.1	156.6	155.8	155.8	157.4	158.2
70°	107.6	106.0	108.4	107.6	107.6	106.8	107.6	107.6
72.5°	68.0	68.0	68.8	68.0	66.5	67.2	67.2	68.8
75°	36.4	38.0	36.4	36.4	37.2	35.6	36.4	37.2
77.5°	15.0	15.0	15.0	15.0	15.0	14.2	14.2	14.2
80°	7.1	7.1	7.1	7.1	7.1	7.1	6.3	6.3
82.5°	3.2	4.0	3.2	4.0	3.2	3.2	3.2	3.2
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)