

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: P858216

Luminaire Tested: **LX4C45D010 EX4C459827 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P858216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C45D010 EX4C459827 4LBSWNH
Description:
Light Source: -
Ballast/Driver: -

Summary

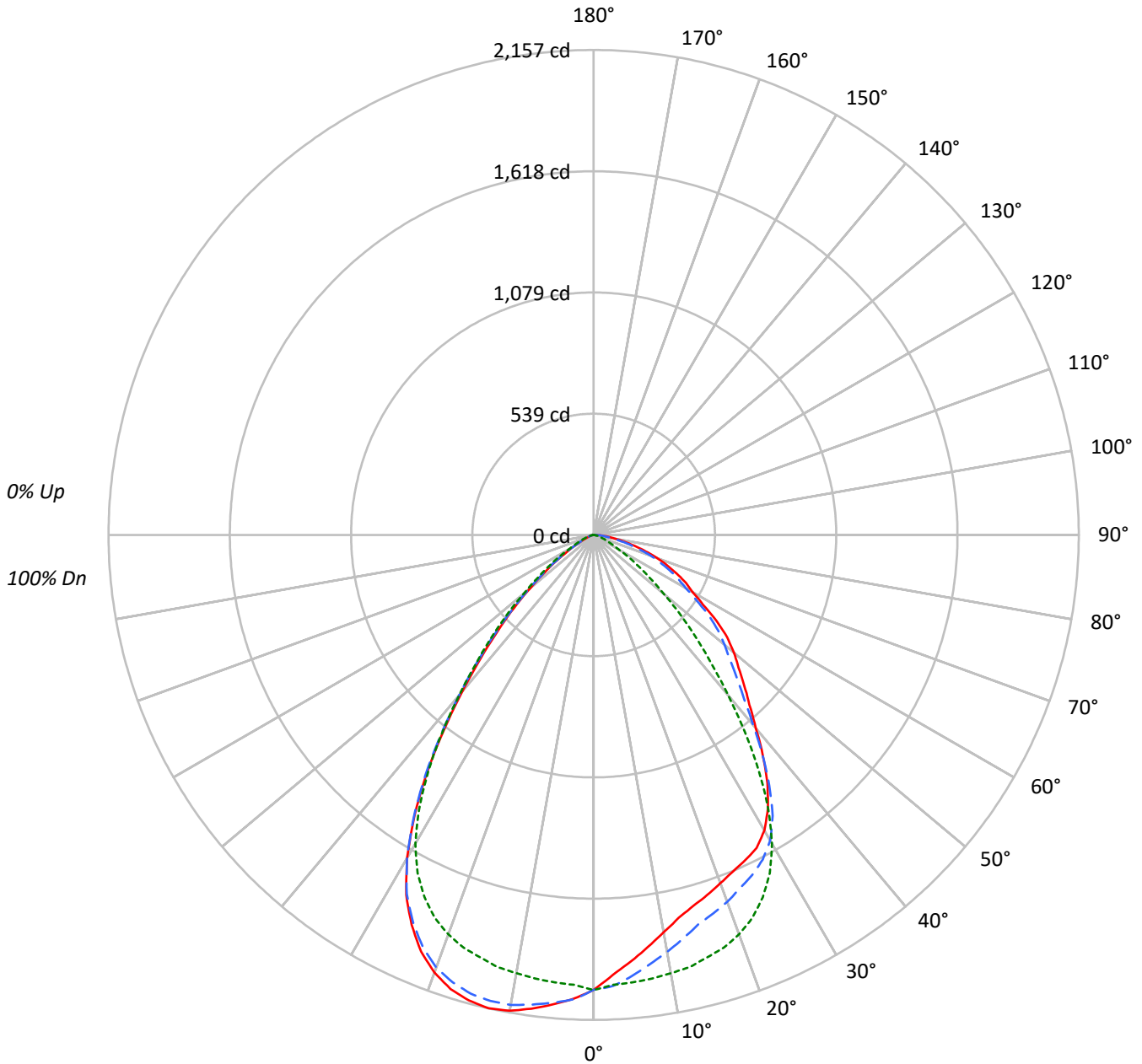
Lumens per Lamp: N/A
Luminaire Lumens: 3547.3 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
Input Voltage (V):
Input Current (Ain): 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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																			
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70																			
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56																			
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50																			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46																			
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42																			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38																			
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	248619	248619	248619
5°	234770	246362	258571
10°	223824	246915	268060
15°	217249	247443	272651
20°	215469	247186	270706
25°	216344	241096	259464
30°	215299	224917	235287
35°	201808	192045	193994
40°	179843	148891	145555
45°	164481	111003	104210
50°	155500	77769	70296
55°	142992	52498	44123
60°	124942	30738	24350
65°	118284	19709	13634
70°	107760	14045	8441
75°	89143	9921	6218
80°	70112	5518	3679
85°	62586	3806	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.2	5.4
10°-20°	548.5	15.5
20°-30°	813.2	22.9
30°-40°	814.3	23.0
40°-50°	569.1	16.0
50°-60°	338.6	9.5
60°-70°	176.7	5.0
70°-80°	78.6	2.2
80°-90°	17.2	0.5
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°	1552.9	43.8
0°-40°	2367.2	66.7
0°-60°	3274.9	92.3
0°-90°	3547.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3547.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2024	2024	2024	2024	2024	
5°	1904	1969	1998	2089	2097	178
15°	1708	1794	1946	2112	2144	484
25°	1596	1669	1779	1901	1914	735
35°	1346	1361	1280	1304	1294	834
45°	947	900	639	618	600	735
55°	668	626	245	214	206	592
65°	407	373	68	50	47	403
75°	188	164	21	13	13	203
85°	44	34	3	3	0	50
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°	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7
2.5°	1958.5	1982.0	1958.5	1966.4	1997.7	1968.9	1984.6	1984.6	1976.8	1995.0	2008.1
5°	1903.7	1927.2	1903.7	1914.1	1948.1	1919.3	1937.7	1932.4	1935.1	1950.7	1968.9
7.5°	1849.0	1867.2	1846.4	1859.5	1890.7	1867.2	1882.8	1882.8	1885.5	1909.0	1924.6
10°	1794.2	1809.9	1794.2	1804.6	1838.6	1817.7	1828.2	1830.7	1838.6	1859.5	1882.8
12.5°	1744.6	1757.7	1742.1	1757.7	1786.3	1765.5	1778.6	1781.2	1789.0	1812.5	1838.6
15°	1708.1	1721.2	1705.5	1718.6	1744.6	1729.0	1739.4	1744.6	1749.9	1770.7	1794.2
17.5°	1679.5	1689.9	1676.8	1692.5	1713.3	1695.1	1710.8	1710.8	1718.6	1739.4	1765.5
20°	1648.1	1658.6	1648.1	1661.2	1684.7	1669.1	1682.1	1682.1	1689.9	1713.3	1736.8
22.5°	1619.5	1624.8	1619.5	1629.9	1653.4	1640.4	1648.1	1650.8	1658.6	1679.5	1700.4
25°	1596.0	1606.4	1601.2	1611.6	1627.3	1614.3	1622.1	1624.8	1632.5	1650.8	1669.1
27.5°	1569.9	1575.2	1569.9	1583.0	1596.0	1585.5	1593.5	1590.8	1596.0	1611.6	1627.3
30°	1517.7	1523.0	1523.0	1530.8	1541.3	1536.1	1543.9	1536.1	1541.3	1554.3	1569.9
32.5°	1442.1	1444.8	1447.4	1455.2	1463.0	1455.2	1460.4	1460.4	1460.4	1470.8	1481.3
35°	1345.6	1350.8	1348.3	1353.5	1361.2	1358.7	1358.7	1356.1	1350.8	1356.1	1361.2
37.5°	1236.1	1228.3	1228.3	1236.1	1241.4	1231.0	1236.1	1231.0	1231.0	1233.5	1233.5
40°	1121.4	1113.6	1121.4	1124.0	1126.5	1121.4	1118.8	1113.6	1105.7	1108.3	1103.2
42.5°	1025.0	1019.6	1022.3	1022.3	1025.0	1019.6	1022.3	1011.9	1004.0	998.8	991.0
45°	946.7	938.8	946.7	941.4	941.4	938.8	936.2	931.0	920.5	912.8	899.7
47.5°	873.6	873.6	876.2	876.2	876.2	871.0	871.0	860.5	850.1	839.7	821.5
50°	813.6	808.5	818.9	818.9	811.0	808.5	811.0	798.0	790.3	777.2	758.9
52.5°	748.4	748.4	751.1	751.1	748.4	743.2	745.9	735.4	727.6	714.6	696.3
55°	667.6	662.5	670.2	670.2	667.6	665.0	667.6	659.8	652.0	641.6	625.8
57.5°	576.3	573.7	578.9	581.6	576.3	576.3	578.9	571.2	568.5	558.1	542.4
60°	508.5	505.9	511.1	513.8	508.5	508.5	508.5	498.0	492.9	482.4	472.0
62.5°	461.6	459.0	464.2	461.6	459.0	456.3	459.0	448.5	443.4	432.9	422.5
65°	406.9	409.4	412.1	412.1	409.4	406.9	406.9	401.6	396.5	386.0	372.9
67.5°	354.6	354.6	357.3	359.8	357.3	357.3	357.3	349.4	344.2	336.5	320.8
70°	300.0	297.3	305.2	305.2	300.0	302.5	300.0	297.3	292.0	281.6	268.7
72.5°	242.5	242.5	245.1	245.1	242.5	242.5	242.5	240.0	232.0	226.9	213.8
75°	187.8	187.8	190.4	193.0	187.8	187.8	190.4	185.1	180.0	172.2	164.3
77.5°	140.9	138.2	140.9	140.9	138.2	138.2	138.2	135.6	133.0	125.1	117.4
80°	99.1	96.5	99.1	99.1	99.1	96.5	96.5	93.8	93.8	88.6	80.9
82.5°	67.8	65.2	67.8	67.8	67.8	65.2	65.2	65.2	62.6	60.0	54.8
85°	44.4	41.7	41.7	44.4	41.7	41.7	41.7	41.7	39.1	36.5	34.0
87.5°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	18.3	18.3	18.3	15.6
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°	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7
2.5°	1997.7	1992.4	2008.1	2002.9	2005.4	1992.4	2013.3	2002.9	2015.9	2002.9	2028.9
5°	1963.7	1958.5	1982.0	1979.3	1982.0	1971.6	1995.0	1992.4	2008.1	1997.7	2026.3
7.5°	1927.2	1922.0	1948.1	1950.7	1955.9	1945.5	1976.8	1976.8	1992.4	1989.7	2021.0
10°	1885.5	1888.1	1914.1	1919.3	1929.9	1924.6	1953.3	1961.1	1982.0	1979.3	2018.5
12.5°	1846.4	1846.4	1880.3	1890.7	1898.5	1895.9	1929.9	1940.3	1963.7	1968.9	2005.4
15°	1807.3	1809.9	1841.1	1856.8	1867.2	1864.6	1901.1	1914.1	1942.8	1945.5	1989.7
17.5°	1775.9	1773.3	1807.3	1820.3	1835.9	1833.3	1872.4	1888.1	1916.8	1924.6	1966.4
20°	1749.9	1747.3	1778.6	1794.2	1804.6	1802.1	1841.1	1859.5	1885.5	1890.7	1932.4
22.5°	1718.6	1713.3	1744.6	1757.7	1768.1	1765.5	1799.4	1812.5	1838.6	1843.8	1882.8
25°	1682.1	1676.8	1705.5	1713.3	1721.2	1716.0	1744.6	1752.5	1773.3	1778.6	1817.7
27.5°	1640.4	1627.3	1650.8	1650.8	1656.0	1648.1	1669.1	1676.8	1695.1	1695.1	1731.7
30°	1575.2	1556.9	1569.9	1567.3	1569.9	1559.5	1572.6	1575.2	1588.2	1585.5	1611.6
32.5°	1483.9	1457.7	1465.7	1457.7	1450.0	1434.4	1450.0	1444.8	1455.2	1444.8	1468.2
35°	1358.7	1332.6	1330.0	1319.6	1311.8	1298.7	1298.7	1285.7	1288.3	1280.5	1296.1
37.5°	1223.0	1189.2	1184.0	1163.2	1150.1	1134.4	1134.4	1124.0	1110.9	1105.7	1118.8
40°	1090.1	1053.6	1040.6	1006.6	993.6	977.9	967.5	954.5	949.3	928.4	938.8
42.5°	975.4	936.2	907.6	871.0	858.0	834.5	818.9	803.2	795.4	771.9	782.3
45°	878.9	831.9	800.7	753.6	735.4	709.4	685.8	667.6	649.4	638.9	633.7
47.5°	798.0	748.4	706.7	654.5	625.8	602.5	571.2	552.9	529.4	516.3	508.5
50°	730.2	675.4	628.5	568.5	539.9	513.8	477.2	448.5	427.7	406.9	401.6
52.5°	670.2	612.9	560.7	492.9	459.0	427.7	388.5	357.3	339.0	315.6	312.9
55°	599.8	550.3	492.9	422.5	388.5	357.3	315.6	284.3	260.7	245.1	240.0
57.5°	524.3	477.2	422.5	352.1	318.2	284.3	245.1	216.4	195.6	182.5	180.0
60°	453.8	409.4	357.3	286.9	252.9	224.3	182.5	153.8	135.6	125.1	119.9
62.5°	401.6	359.8	310.3	245.1	213.8	185.1	146.1	119.9	104.2	93.8	88.6
65°	352.1	310.3	266.0	206.0	180.0	153.8	117.4	93.8	78.2	67.8	62.6
67.5°	300.0	263.4	221.6	172.2	146.1	125.1	93.8	73.0	60.0	52.2	46.9
70°	247.7	213.8	180.0	138.2	119.9	99.1	73.0	57.3	44.4	39.1	34.0
72.5°	195.6	169.5	140.9	106.9	91.3	78.2	57.3	41.7	34.0	28.7	23.5
75°	146.1	127.8	104.2	80.9	67.8	57.3	41.7	31.3	26.0	20.9	18.3
77.5°	104.2	88.6	73.0	54.8	49.6	41.7	28.7	23.5	18.3	13.1	10.4
80°	70.4	62.6	49.6	39.1	31.3	28.7	20.9	15.6	10.4	7.8	7.8
82.5°	46.9	39.1	31.3	23.5	20.9	18.3	13.1	10.4	7.8	5.2	5.2
85°	28.7	23.5	18.3	13.1	13.1	10.4	7.8	5.2	2.7	2.7	2.7
87.5°	13.1	10.4	7.8	5.2	5.2	2.7	2.7	2.7	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7
2.5°	2049.8	2034.2	2023.7	2036.6	2041.9	2034.2	2041.9	2055.0	2068.0	2070.6	2034.2
5°	2052.4	2036.6	2031.5	2047.1	2049.8	2047.1	2055.0	2073.3	2088.9	2094.2	2057.7
7.5°	2052.4	2041.9	2039.3	2057.7	2060.2	2057.7	2070.6	2091.5	2107.1	2117.5	2081.1
10°	2047.1	2041.9	2044.6	2060.2	2065.5	2065.5	2083.7	2107.1	2122.8	2133.2	2096.7
12.5°	2039.3	2039.3	2039.3	2057.7	2062.9	2065.5	2081.1	2112.4	2122.8	2138.4	2101.9
15°	2026.3	2026.3	2026.3	2044.6	2052.4	2052.4	2070.6	2099.3	2112.4	2128.0	2091.5
17.5°	2002.9	2002.9	2005.4	2021.0	2028.9	2028.9	2047.1	2078.5	2086.2	2104.6	2068.0
20°	1968.9	1968.9	1971.6	1987.2	1995.0	1989.7	2013.3	2039.3	2047.1	2062.9	2026.3
22.5°	1919.3	1919.3	1919.3	1935.1	1940.3	1937.7	1961.1	1984.6	1984.6	2005.4	1966.4
25°	1846.4	1851.5	1846.4	1862.0	1867.2	1864.6	1885.5	1906.4	1901.1	1924.6	1885.5
27.5°	1757.7	1755.0	1755.0	1768.1	1768.1	1765.5	1781.2	1804.6	1799.4	1815.1	1778.6
30°	1635.1	1642.9	1629.9	1648.1	1640.4	1635.1	1645.5	1666.4	1658.6	1671.7	1642.9
32.5°	1494.3	1483.9	1483.9	1483.9	1489.0	1476.1	1486.5	1497.0	1489.0	1502.1	1470.8
35°	1309.2	1311.8	1303.9	1306.6	1309.2	1293.5	1303.9	1314.3	1303.9	1311.8	1283.0
37.5°	1124.0	1126.5	1108.3	1118.8	1108.3	1103.2	1113.6	1118.8	1108.3	1116.1	1084.8
40°	938.8	933.7	931.0	931.0	933.7	920.5	928.4	936.2	928.4	933.7	904.9
42.5°	777.2	774.6	769.4	771.9	764.0	761.5	764.0	771.9	764.0	769.4	748.4
45°	636.3	631.1	623.3	625.8	625.8	612.9	620.7	625.8	618.1	620.7	602.5
47.5°	505.9	498.0	498.0	495.5	495.5	490.3	498.0	495.5	487.6	492.9	474.7
50°	393.8	388.5	388.5	388.5	388.5	380.7	383.4	388.5	380.7	380.7	370.3
52.5°	307.7	300.0	294.7	294.7	294.7	292.0	292.0	294.7	286.9	286.9	284.3
55°	232.0	229.5	221.6	221.6	221.6	213.8	216.4	216.4	213.8	213.8	206.0
57.5°	172.2	164.3	159.1	159.1	153.8	153.8	151.3	153.8	148.7	148.7	143.4
60°	114.7	109.5	106.9	104.2	104.2	101.7	104.2	101.7	101.7	99.1	96.5
62.5°	83.4	78.2	73.0	73.0	73.0	70.4	70.4	70.4	70.4	70.4	67.8
65°	60.0	54.8	54.8	52.2	52.2	49.6	49.6	49.6	49.6	49.6	46.9
67.5°	41.7	39.1	36.5	36.5	36.5	36.5	36.5	36.5	34.0	34.0	34.0
70°	31.3	28.7	26.0	26.0	26.0	26.0	26.0	23.5	26.0	26.0	23.5
72.5°	20.9	20.9	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
75°	15.6	15.6	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
77.5°	10.4	10.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
80°	7.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
82.5°	5.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.0
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



TEST NUMBER: P858216

CATALOG NUMBER: LX4C45D010 EX4C459827 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7	2023.7
2.5°	2073.3	2070.6	2065.5	2073.3	2052.4	2044.6	2041.9	2065.5
5°	2101.9	2096.7	2096.7	2104.6	2081.1	2075.9	2070.6	2096.7
7.5°	2128.0	2122.8	2122.8	2130.6	2109.8	2104.6	2099.3	2125.5
10°	2143.7	2143.7	2143.7	2148.8	2130.6	2125.5	2122.8	2148.8
12.5°	2151.5	2151.5	2148.8	2159.3	2135.8	2135.8	2130.6	2156.7
15°	2141.1	2141.1	2141.1	2148.8	2128.0	2122.8	2122.8	2143.7
17.5°	2115.0	2115.0	2112.4	2120.2	2096.7	2096.7	2094.2	2117.5
20°	2075.9	2075.9	2070.6	2081.1	2057.7	2049.8	2047.1	2070.6
22.5°	2013.3	2010.6	2008.1	2013.3	1992.4	1987.2	1984.6	2005.4
25°	1932.4	1929.9	1924.6	1929.9	1906.4	1898.5	1898.5	1914.1
27.5°	1817.7	1817.7	1809.9	1817.7	1791.5	1789.0	1786.3	1804.6
30°	1676.8	1666.4	1661.2	1671.7	1645.5	1645.5	1640.4	1658.6
32.5°	1502.1	1491.7	1489.0	1494.3	1470.8	1463.0	1473.4	1483.9
35°	1301.4	1303.9	1293.5	1293.5	1272.6	1275.2	1277.9	1293.5
37.5°	1108.3	1103.2	1100.5	1103.2	1087.5	1082.3	1077.0	1092.7
40°	928.4	915.4	912.8	912.8	899.7	897.2	899.7	907.6
42.5°	758.9	756.3	745.9	751.1	738.0	743.2	740.7	740.7
45°	612.9	615.4	605.0	612.9	602.5	594.5	594.5	599.8
47.5°	485.1	485.1	482.4	482.4	474.7	477.2	472.0	479.8
50°	375.5	375.5	370.3	372.9	367.8	367.8	365.1	367.8
52.5°	286.9	284.3	284.3	281.6	276.4	279.1	281.6	276.4
55°	208.7	211.2	206.0	208.7	203.4	206.0	203.4	206.0
57.5°	143.4	146.1	140.9	146.1	140.9	143.4	140.9	140.9
60°	99.1	99.1	96.5	99.1	96.5	96.5	93.8	99.1
62.5°	67.8	67.8	67.8	67.8	67.8	65.2	67.8	67.8
65°	49.6	46.9	46.9	46.9	46.9	46.9	46.9	46.9
67.5°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
70°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
72.5°	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
75°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
77.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
80°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	2.7	2.7	2.7	0.0	2.7	0.0	0.0	0.0
87.5°	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



Report Generated By 670246072 / DESKTOP-50001EG





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













(END OF REPORT)