

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: P857941

Luminaire Tested: **LX4C40D010 EX4C409035 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857941
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: LX4C40D010 EX4C409035 4LBSWNH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

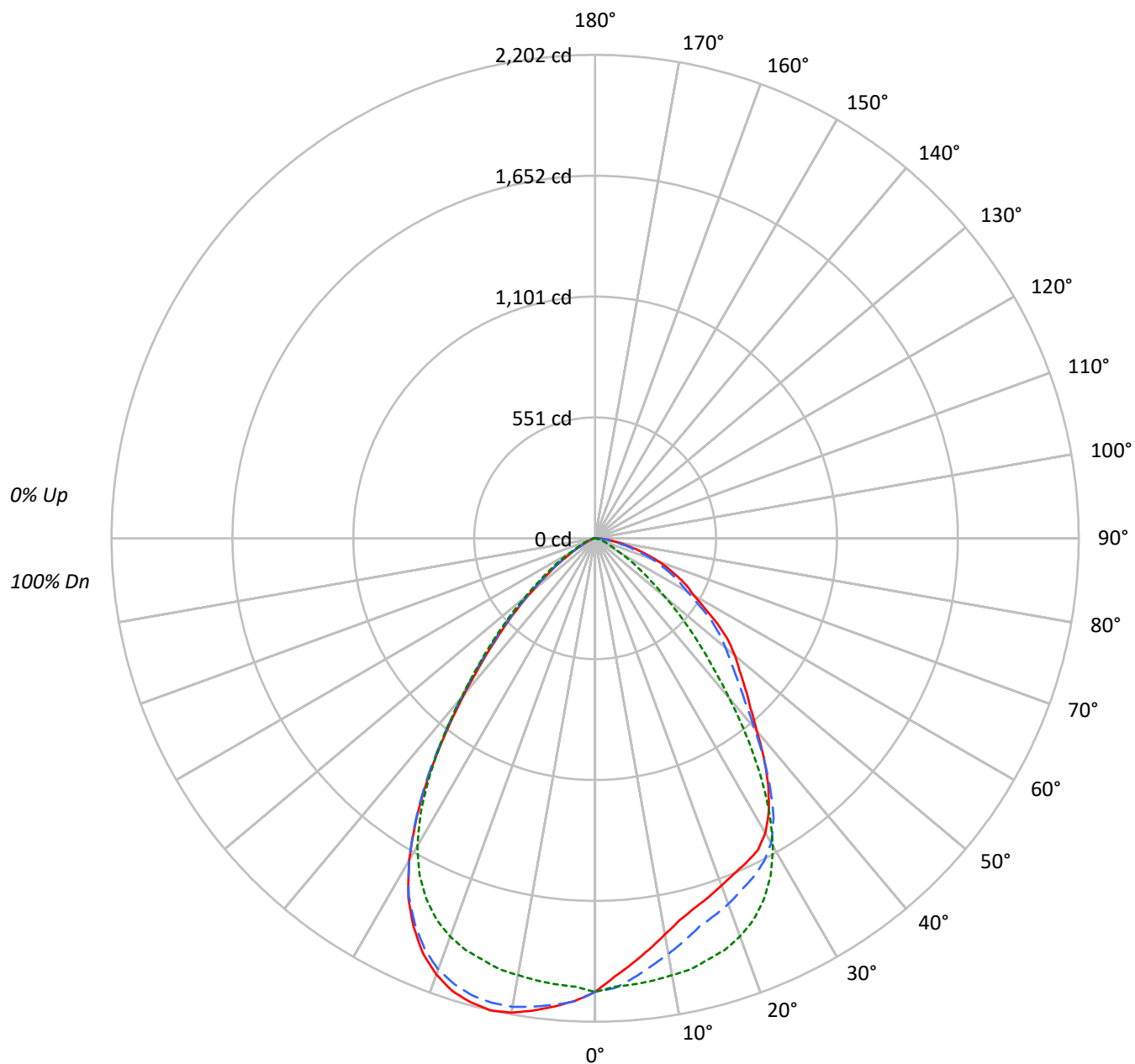
Lumens per Lamp: N/A
Luminaire Lumens: 3622.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47
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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	108	104	101	109	106	103	100		101	99	97		98	96	94		94	93	91
2	104	97	92	87	101	95	90	86		92	88	84		89	85	82		86	83	81
3	96	88	81	76	94	86	80	75		83	78	74		81	76	73		78	75	72
4	90	80	72	67	88	78	72	66		76	70	66		74	69	65		72	68	64
5	83	73	65	60	82	72	65	59		70	63	59		68	62	58		66	61	58
6	78	67	59	53	76	66	59	53		64	58	53		62	57	52		61	56	52
7	73	61	54	48	71	61	53	48		59	53	48		58	52	48		56	51	47
8	68	57	49	44	67	56	49	44		55	48	44		54	48	43		52	47	43
9	64	52	45	40	63	52	45	40		51	44	40		50	44	40		49	44	40
10	61	49	42	37	59	48	42	37		47	41	37		47	41	37		46	40	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	253852	253852	253852
5°	239715	251541	264009
10°	228540	252117	273711
15°	221827	252645	278375
20°	220006	252390	276406
25°	220898	246166	264926
30°	219839	229655	240238
35°	206053	196094	198074
40°	183612	152034	148618
45°	167938	113349	106399
50°	158788	79394	71768
55°	146012	53611	45044
60°	127571	31401	24841
65°	120755	20116	13924
70°	109987	14368	8621
75°	90994	10110	6361
80°	71527	5660	3750
85°	63854	3806	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.2	5.4
10°-20°	560.1	15.5
20°-30°	830.3	22.9
30°-40°	831.4	23.0
40°-50°	581.1	16.0
50°-60°	345.8	9.5
60°-70°	180.4	5.0
70°-80°	80.2	2.2
80°-90°	17.5	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°	1585.6	43.8
0°-40°	2417.0	66.7
0°-60°	3343.8	92.3
0°-90°	3622.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3622.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2066	2066	2066	2066	2066	
5°	1944	2010	2040	2133	2141	182
15°	1744	1832	1986	2157	2189	494
25°	1630	1704	1816	1941	1954	751
35°	1374	1390	1308	1331	1321	852
45°	967	919	652	631	612	750
55°	682	639	250	218	210	605
65°	415	381	69	51	48	411
75°	192	168	21	13	13	207
85°	45	35	3	3	0	51
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°	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3
2.5°	1999.7	2023.7	1999.7	2007.7	2039.7	2010.4	2026.3	2026.3	2018.4	2037.0	2050.3
5°	1943.8	1967.8	1943.8	1954.4	1989.1	1959.7	1978.4	1973.1	1975.8	1991.8	2010.4
7.5°	1887.9	1906.5	1885.2	1898.6	1930.5	1906.5	1922.5	1922.5	1925.2	1949.1	1965.2
10°	1832.0	1847.9	1832.0	1842.6	1877.3	1856.0	1866.6	1869.2	1877.3	1898.6	1922.5
12.5°	1781.3	1794.7	1778.7	1794.7	1823.9	1802.6	1816.0	1818.6	1826.6	1850.6	1877.3
15°	1744.1	1757.4	1741.5	1754.7	1781.3	1765.4	1776.0	1781.3	1786.7	1808.0	1832.0
17.5°	1714.9	1725.5	1712.1	1728.1	1749.4	1730.8	1746.8	1746.8	1754.7	1776.0	1802.6
20°	1682.8	1693.5	1682.8	1696.2	1720.2	1704.2	1717.5	1717.5	1725.5	1749.4	1773.4
22.5°	1653.6	1658.9	1653.6	1664.2	1688.1	1674.9	1682.8	1685.5	1693.5	1714.9	1736.1
25°	1629.6	1640.2	1634.9	1645.5	1661.5	1648.3	1656.2	1658.9	1666.8	1685.5	1704.2
27.5°	1603.0	1608.3	1603.0	1616.3	1629.6	1618.9	1627.0	1624.3	1629.6	1645.5	1661.5
30°	1549.7	1555.0	1555.0	1563.0	1573.7	1568.4	1576.3	1568.4	1573.7	1587.0	1603.0
32.5°	1472.5	1475.2	1477.8	1485.8	1493.8	1485.8	1491.2	1491.2	1491.2	1501.8	1512.5
35°	1373.9	1379.3	1376.7	1382.0	1389.9	1387.3	1387.3	1384.6	1379.3	1384.6	1389.9
37.5°	1262.2	1254.1	1254.1	1262.2	1267.5	1256.8	1262.2	1256.8	1256.8	1259.4	1259.4
40°	1144.9	1137.0	1144.9	1147.7	1150.3	1144.9	1142.3	1137.0	1129.0	1131.7	1126.4
42.5°	1046.5	1041.1	1043.8	1043.8	1046.5	1041.1	1043.8	1033.1	1025.1	1019.8	1011.9
45°	966.6	958.6	966.6	961.2	961.2	958.6	955.9	950.6	939.9	932.0	918.6
47.5°	892.0	892.0	894.6	894.6	894.6	889.3	889.3	878.7	868.0	857.4	838.8
50°	830.8	825.4	836.1	836.1	828.1	825.4	828.1	814.8	806.9	793.5	774.8
52.5°	764.2	764.2	766.9	766.9	764.2	758.8	761.6	750.9	742.9	729.6	710.9
55°	681.7	676.4	684.3	684.3	681.7	679.0	681.7	673.7	665.7	655.1	639.0
57.5°	588.5	585.8	591.1	593.8	588.5	588.5	591.1	583.2	580.5	569.8	553.8
60°	519.2	516.6	521.9	524.6	519.2	519.2	519.2	508.5	503.2	492.6	481.9
62.5°	471.3	468.7	474.0	471.3	468.7	466.0	468.7	458.0	452.7	442.0	431.4
65°	415.4	418.0	420.8	420.8	418.0	415.4	415.4	410.1	404.8	394.1	380.8
67.5°	362.1	362.1	364.8	367.4	364.8	364.8	364.8	356.8	351.4	343.5	327.5
70°	306.2	303.5	311.6	311.6	306.2	308.9	306.2	303.5	298.2	287.6	274.3
72.5°	247.6	247.6	250.3	250.3	247.6	247.6	247.6	245.0	236.9	231.6	218.4
75°	191.7	191.7	194.4	197.1	191.7	191.7	194.4	189.0	183.7	175.8	167.7
77.5°	143.8	141.1	143.8	143.8	141.1	141.1	141.1	138.5	135.8	127.8	119.8
80°	101.1	98.5	101.1	101.1	101.1	98.5	98.5	95.8	95.8	90.5	82.6
82.5°	69.2	66.6	69.2	69.2	69.2	66.6	66.6	66.6	63.9	61.3	55.9
85°	45.3	42.6	42.6	45.3	42.6	42.6	42.6	42.6	40.0	37.3	34.7
87.5°	21.3	21.3	21.3	21.3	21.3	21.3	21.3	18.7	18.7	18.7	16.0
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°	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3
2.5°	2039.7	2034.4	2050.3	2045.0	2047.6	2034.4	2055.7	2045.0	2058.3	2045.0	2071.6
5°	2005.0	1999.7	2023.7	2021.0	2023.7	2013.1	2037.0	2034.4	2050.3	2039.7	2068.9
7.5°	1967.8	1962.4	1989.1	1991.8	1997.1	1986.4	2018.4	2018.4	2034.4	2031.6	2063.6
10°	1925.2	1927.8	1954.4	1959.7	1970.5	1965.2	1994.4	2002.4	2023.7	2021.0	2061.0
12.5°	1885.2	1885.2	1919.9	1930.5	1938.4	1935.8	1970.5	1981.1	2005.0	2010.4	2047.6
15°	1845.3	1847.9	1879.9	1895.8	1906.5	1903.9	1941.1	1954.4	1983.7	1986.4	2031.6
17.5°	1813.3	1810.7	1845.3	1858.6	1874.6	1871.9	1911.8	1927.8	1957.1	1965.2	2007.7
20°	1786.7	1784.1	1816.0	1832.0	1842.6	1840.0	1879.9	1898.6	1925.2	1930.5	1973.1
22.5°	1754.7	1749.4	1781.3	1794.7	1805.3	1802.6	1837.3	1850.6	1877.3	1882.6	1922.5
25°	1717.5	1712.1	1741.5	1749.4	1757.4	1752.1	1781.3	1789.4	1810.7	1816.0	1856.0
27.5°	1674.9	1661.5	1685.5	1685.5	1690.8	1682.8	1704.2	1712.1	1730.8	1730.8	1768.1
30°	1608.3	1589.7	1603.0	1600.3	1603.0	1592.3	1605.7	1608.3	1621.6	1618.9	1645.5
32.5°	1515.1	1488.5	1496.5	1488.5	1480.5	1464.5	1480.5	1475.2	1485.8	1475.2	1499.1
35°	1387.3	1360.7	1358.0	1347.3	1339.4	1326.0	1326.0	1312.8	1315.4	1307.5	1323.4
37.5°	1248.8	1214.2	1208.9	1187.6	1174.3	1158.3	1158.3	1147.7	1134.3	1129.0	1142.3
40°	1113.0	1075.7	1062.5	1027.8	1014.5	998.5	987.8	974.6	969.3	948.0	958.6
42.5°	995.9	955.9	926.7	889.3	876.1	852.1	836.1	820.1	812.2	788.2	798.8
45°	897.4	849.4	817.5	769.5	750.9	724.3	700.3	681.7	663.0	652.4	647.0
47.5°	814.8	764.2	721.6	668.3	639.0	615.1	583.2	564.5	540.6	527.2	519.2
50°	745.6	689.6	641.7	580.5	551.2	524.6	487.2	458.0	436.7	415.4	410.1
52.5°	684.3	625.8	572.5	503.2	468.7	436.7	396.7	364.8	346.1	322.2	319.5
55°	612.4	561.9	503.2	431.4	396.7	364.8	322.2	290.3	266.3	250.3	245.0
57.5°	535.3	487.2	431.4	359.5	324.8	290.3	250.3	221.0	199.7	186.4	183.7
60°	463.3	418.0	364.8	292.9	258.2	229.0	186.4	157.1	138.5	127.8	122.4
62.5°	410.1	367.4	316.9	250.3	218.4	189.0	149.2	122.4	106.5	95.8	90.5
65°	359.5	316.9	271.6	210.3	183.7	157.1	119.8	95.8	79.9	69.2	63.9
67.5°	306.2	269.0	226.3	175.8	149.2	127.8	95.8	74.5	61.3	53.2	47.9
70°	252.9	218.4	183.7	141.1	122.4	101.1	74.5	58.6	45.3	40.0	34.7
72.5°	199.7	173.1	143.8	109.2	93.2	79.9	58.6	42.6	34.7	29.3	24.0
75°	149.2	130.5	106.5	82.6	69.2	58.6	42.6	31.9	26.6	21.3	18.7
77.5°	106.5	90.5	74.5	55.9	50.6	42.6	29.3	24.0	18.7	13.4	10.6
80°	71.9	63.9	50.6	40.0	31.9	29.3	21.3	16.0	10.6	8.0	8.0
82.5°	47.9	40.0	31.9	24.0	21.3	18.7	13.4	10.6	8.0	5.3	5.3
85°	29.3	24.0	18.7	13.4	13.4	10.6	8.0	5.3	2.7	2.7	2.7
87.5°	13.4	10.6	8.0	5.3	5.3	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°	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3
2.5°	2092.9	2076.9	2066.3	2079.6	2084.9	2076.9	2084.9	2098.2	2111.6	2114.2	2076.9
5°	2095.6	2079.6	2074.2	2090.2	2092.9	2090.2	2098.2	2116.9	2132.9	2138.2	2101.0
7.5°	2095.6	2084.9	2082.3	2101.0	2103.6	2101.0	2114.2	2135.5	2151.5	2162.1	2124.9
10°	2090.2	2084.9	2087.6	2103.6	2108.9	2108.9	2127.6	2151.5	2167.4	2178.1	2140.8
12.5°	2082.3	2082.3	2082.3	2101.0	2106.3	2108.9	2124.9	2156.8	2167.4	2183.4	2146.1
15°	2068.9	2068.9	2068.9	2087.6	2095.6	2095.6	2114.2	2143.5	2156.8	2172.8	2135.5
17.5°	2045.0	2045.0	2047.6	2063.6	2071.6	2071.6	2090.2	2122.2	2130.2	2148.9	2111.6
20°	2010.4	2010.4	2013.1	2029.0	2037.0	2031.6	2055.7	2082.3	2090.2	2106.3	2068.9
22.5°	1959.7	1959.7	1959.7	1975.8	1981.1	1978.4	2002.4	2026.3	2026.3	2047.6	2007.7
25°	1885.2	1890.5	1885.2	1901.2	1906.5	1903.9	1925.2	1946.5	1941.1	1965.2	1925.2
27.5°	1794.7	1792.0	1792.0	1805.3	1805.3	1802.6	1818.6	1842.6	1837.3	1853.3	1816.0
30°	1669.6	1677.5	1664.2	1682.8	1674.9	1669.6	1680.2	1701.5	1693.5	1706.8	1677.5
32.5°	1525.7	1515.1	1515.1	1515.1	1520.4	1507.1	1517.8	1528.4	1520.4	1533.8	1501.8
35°	1336.7	1339.4	1331.4	1334.1	1336.7	1320.7	1331.4	1342.0	1331.4	1339.4	1310.1
37.5°	1147.7	1150.3	1131.7	1142.3	1131.7	1126.4	1137.0	1142.3	1131.7	1139.6	1107.7
40°	958.6	953.3	950.6	950.6	953.3	939.9	948.0	955.9	948.0	953.3	924.0
42.5°	793.5	790.9	785.6	788.2	780.1	777.5	780.1	788.2	780.1	785.6	764.2
45°	649.7	644.3	636.4	639.0	639.0	625.8	633.7	639.0	631.1	633.7	615.1
47.5°	516.6	508.5	508.5	505.9	505.9	500.6	508.5	505.9	497.9	503.2	484.6
50°	402.1	396.7	396.7	396.7	396.7	388.7	391.4	396.7	388.7	388.7	378.1
52.5°	314.2	306.2	300.9	300.9	300.9	298.2	298.2	300.9	292.9	292.9	290.3
55°	236.9	234.3	226.3	226.3	226.3	218.4	221.0	221.0	218.4	218.4	210.3
57.5°	175.8	167.7	162.4	162.4	157.1	157.1	154.5	157.1	151.8	151.8	146.4
60°	117.1	111.8	109.2	106.5	106.5	103.9	106.5	103.9	103.9	101.1	98.5
62.5°	85.2	79.9	74.5	74.5	74.5	71.9	71.9	71.9	71.9	71.9	69.2
65°	61.3	55.9	55.9	53.2	53.2	50.6	50.6	50.6	50.6	50.6	47.9
67.5°	42.6	40.0	37.3	37.3	37.3	37.3	37.3	37.3	34.7	34.7	34.7
70°	31.9	29.3	26.6	26.6	26.6	26.6	26.6	24.0	26.6	26.6	24.0
72.5°	21.3	21.3	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
75°	16.0	16.0	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
77.5°	10.6	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
80°	8.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
82.5°	5.3	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: P857941

CATALOG NUMBER: LX4C40D010 EX4C409035 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3	2066.3
2.5°	2116.9	2114.2	2108.9	2116.9	2095.6	2087.6	2084.9	2108.9
5°	2146.1	2140.8	2140.8	2148.9	2124.9	2119.5	2114.2	2140.8
7.5°	2172.8	2167.4	2167.4	2175.5	2154.2	2148.9	2143.5	2170.2
10°	2188.7	2188.7	2188.7	2194.1	2175.5	2170.2	2167.4	2194.1
12.5°	2196.8	2196.8	2194.1	2204.7	2180.8	2180.8	2175.5	2202.1
15°	2186.1	2186.1	2186.1	2194.1	2172.8	2167.4	2167.4	2188.7
17.5°	2159.5	2159.5	2156.8	2164.8	2140.8	2140.8	2138.2	2162.1
20°	2119.5	2119.5	2114.2	2124.9	2101.0	2092.9	2090.2	2114.2
22.5°	2055.7	2052.9	2050.3	2055.7	2034.4	2029.0	2026.3	2047.6
25°	1973.1	1970.5	1965.2	1970.5	1946.5	1938.4	1938.4	1954.4
27.5°	1856.0	1856.0	1847.9	1856.0	1829.3	1826.6	1823.9	1842.6
30°	1712.1	1701.5	1696.2	1706.8	1680.2	1680.2	1674.9	1693.5
32.5°	1533.8	1523.1	1520.4	1525.7	1501.8	1493.8	1504.4	1515.1
35°	1328.8	1331.4	1320.7	1320.7	1299.4	1302.0	1304.7	1320.7
37.5°	1131.7	1126.4	1123.6	1126.4	1110.4	1105.1	1099.7	1115.7
40°	948.0	934.6	932.0	932.0	918.6	916.0	918.6	926.7
42.5°	774.8	772.2	761.6	766.9	753.5	758.8	756.2	756.2
45°	625.8	628.4	617.7	625.8	615.1	607.1	607.1	612.4
47.5°	495.3	495.3	492.6	492.6	484.6	487.2	481.9	490.0
50°	383.4	383.4	378.1	380.8	375.5	375.5	372.7	375.5
52.5°	292.9	290.3	290.3	287.6	282.2	285.0	287.6	282.2
55°	213.0	215.6	210.3	213.0	207.7	210.3	207.7	210.3
57.5°	146.4	149.2	143.8	149.2	143.8	146.4	143.8	143.8
60°	101.1	101.1	98.5	101.1	98.5	98.5	95.8	101.1
62.5°	69.2	69.2	69.2	69.2	69.2	66.6	69.2	69.2
65°	50.6	47.9	47.9	47.9	47.9	47.9	47.9	47.9
67.5°	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
70°	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
72.5°	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7
75°	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
77.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
80°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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)