

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: P858085

Luminaire Tested: **LX4C40D010 EX4C409030 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P858085
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: LX4C40D010 EX4C409030 4LBLWWH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

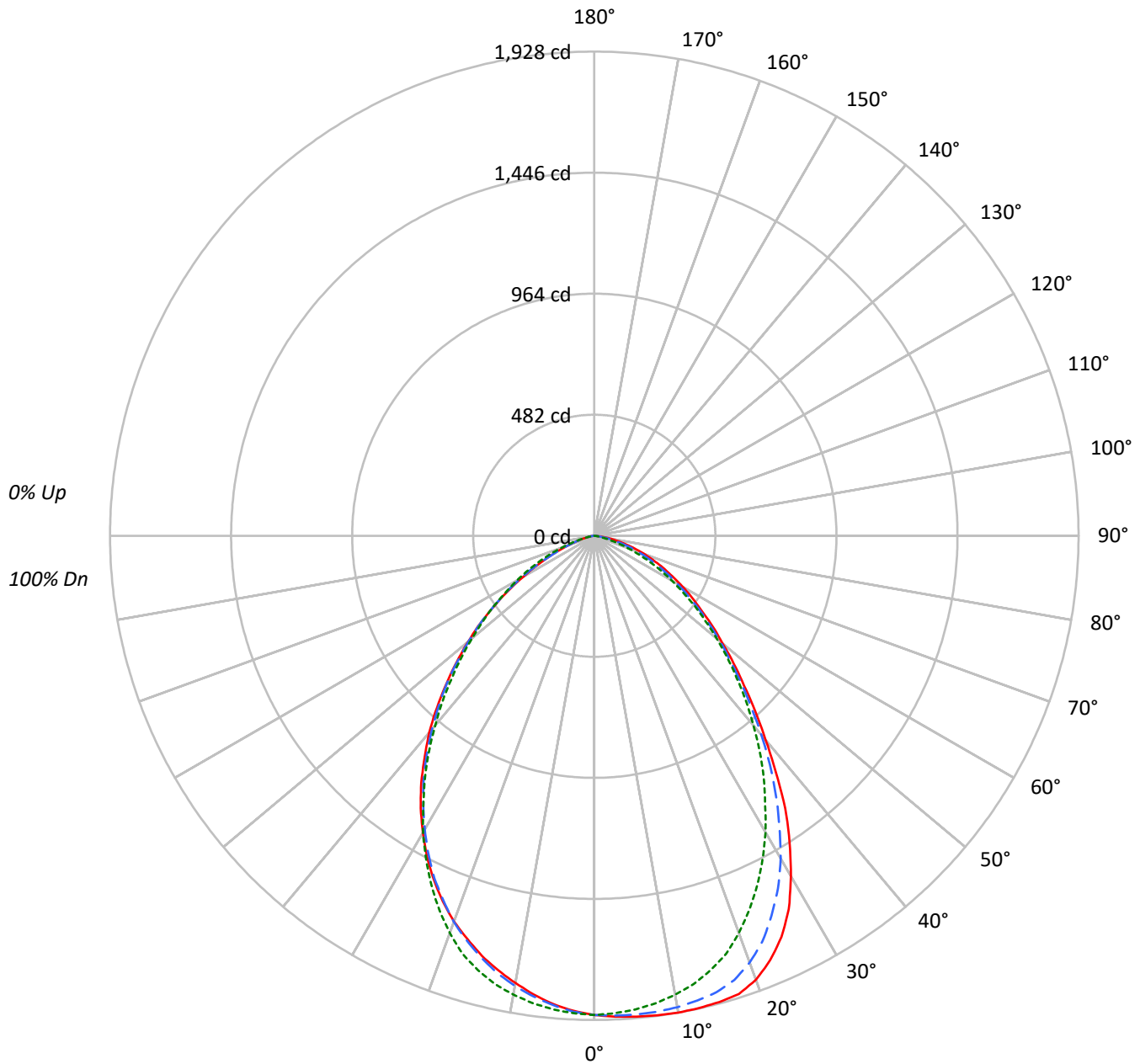
Lumens per Lamp: N/A
Luminaire Lumens: 3595.9 lumens
Efficiency: N/A
Efficacy: 55.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 65
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

TEST NUMBER: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

Luminous Intensity Polar Plot





TEST NUMBER: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	101	108	105	102	99		101	98	96			97	95	93			94
2	103	96	90	86	100	94	89	85		91	86	83			88	84	81			85
3	95	86	79	74	93	85	78	73		82	76	72			79	75	71			77
4	88	78	70	64	86	77	69	64		74	68	63			72	67	62			70
5	82	71	63	57	80	69	62	57		67	61	56			66	60	55			64
6	76	64	56	51	74	63	56	50		62	55	50			60	54	50			59
7	71	59	51	46	69	58	51	45		57	50	45			55	49	45			54
8	67	54	47	41	65	54	46	41		52	46	41			51	45	41			50
9	62	50	43	38	61	50	42	37		49	42	37			47	41	37			47
10	59	47	39	34	58	46	39	34		45	39	34			44	38	34			43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	234417	234417	234417
5°	237039	233413	230885
10°	240503	231446	225583
15°	244467	227754	220187
20°	246010	220006	213665
25°	238941	208116	204944
30°	222066	193425	193538
35°	198764	176327	180077
40°	170189	158064	163838
45°	146498	139375	144587
50°	127347	121327	124977
55°	112063	104374	103432
60°	99708	87079	80248
65°	87470	69767	58023
70°	75109	49282	39261
75°	60995	28528	22974
80°	43581	12522	11461
85°	16492	5215	5215



TEST NUMBER: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	5.0
10°-20°	509.0	14.2
20°-30°	726.9	20.2
30°-40°	760.4	21.1
40°-50°	637.1	17.7
50°-60°	445.9	12.4
60°-70°	242.8	6.8
70°-80°	84.3	2.3
80°-90°	9.7	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°	1415.7	39.4
0°-40°	2176.1	60.5
0°-60°	3259.1	90.6
0°-90°	3595.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3595.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1908	1908	1908	1908	1908	
5°	1922	1913	1893	1876	1872	184
15°	1922	1882	1791	1739	1731	543
25°	1763	1669	1535	1505	1512	805
35°	1325	1260	1176	1184	1201	822
45°	843	824	802	828	832	656
55°	523	506	487	487	483	473
65°	301	274	240	202	200	300
75°	128	104	60	48	48	139
85°	12	6	4	4	4	21
90°	0	0	0	0	0	



TEST NUMBER: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1
2.5°	1916.9	1914.7	1915.4	1915.4	1915.4	1914.7	1915.4	1914.7	1914.7	1914.0	1912.4
5°	1922.1	1920.6	1920.6	1920.6	1919.9	1919.0	1919.0	1918.3	1916.9	1916.1	1913.1
7.5°	1925.7	1924.1	1924.1	1923.4	1922.8	1922.1	1921.3	1919.0	1916.9	1915.4	1911.7
10°	1927.9	1925.7	1925.7	1924.1	1922.8	1922.1	1920.6	1917.6	1914.7	1910.9	1905.9
12.5°	1926.4	1924.1	1923.4	1922.1	1919.0	1917.6	1916.1	1912.4	1907.4	1902.2	1895.7
15°	1922.1	1920.6	1919.0	1916.9	1913.1	1910.9	1909.6	1903.7	1897.1	1889.8	1881.7
17.5°	1913.1	1910.9	1908.1	1905.1	1899.9	1897.9	1894.1	1886.7	1877.2	1867.0	1854.5
20°	1881.7	1880.2	1877.2	1872.2	1864.0	1861.1	1856.0	1846.4	1834.0	1821.5	1808.3
22.5°	1829.5	1827.3	1823.0	1818.6	1811.1	1806.0	1801.7	1788.4	1774.6	1761.4	1748.8
25°	1762.7	1760.5	1754.7	1748.8	1741.4	1732.7	1728.2	1718.1	1704.0	1687.1	1668.8
27.5°	1676.9	1669.5	1667.4	1660.8	1649.7	1646.8	1640.2	1627.0	1613.8	1599.0	1583.7
30°	1565.4	1565.4	1561.0	1558.0	1547.8	1544.8	1537.4	1523.6	1516.1	1495.7	1483.9
32.5°	1447.3	1445.7	1442.1	1439.8	1434.0	1428.9	1421.5	1414.1	1398.0	1387.7	1371.6
35°	1325.3	1316.6	1318.0	1313.6	1310.0	1304.1	1303.3	1295.3	1280.6	1274.8	1260.1
37.5°	1186.7	1183.0	1188.2	1181.6	1177.8	1178.5	1172.7	1167.5	1161.7	1151.4	1148.5
40°	1061.2	1064.2	1063.4	1057.5	1060.4	1056.8	1051.0	1045.8	1042.8	1036.2	1034.1
42.5°	948.9	944.5	943.0	943.0	943.8	943.8	940.8	937.1	937.1	930.5	923.9
45°	843.2	843.2	841.7	846.1	839.6	839.6	837.4	836.6	833.7	832.2	824.1
47.5°	752.1	751.5	750.8	750.1	749.3	749.3	744.9	741.1	740.4	736.0	731.7
50°	666.3	670.7	669.3	665.6	664.2	664.9	662.0	659.8	659.0	651.7	652.4
52.5°	594.5	593.6	595.2	592.9	589.4	590.1	587.1	584.2	581.2	577.6	574.6
55°	523.2	526.9	525.5	523.2	522.5	521.0	518.8	515.2	514.5	506.4	505.7
57.5°	463.8	463.1	461.6	457.9	457.1	455.1	455.1	452.1	447.7	443.2	439.6
60°	405.8	405.8	403.5	402.9	400.0	399.3	398.5	395.5	390.5	386.7	380.8
62.5°	350.1	351.5	350.1	347.9	345.6	342.8	341.3	339.0	334.7	330.9	325.8
65°	300.9	300.2	299.5	296.5	295.7	292.8	292.1	287.7	283.3	280.4	274.4
67.5°	254.0	251.8	251.8	250.2	248.8	246.6	245.0	240.8	235.6	232.6	226.8
70°	209.1	207.6	207.6	207.6	204.1	201.8	201.1	198.9	191.5	188.6	182.7
72.5°	168.1	167.2	166.6	164.4	162.1	162.1	159.2	154.9	151.2	147.5	143.0
75°	128.5	129.8	128.5	125.5	124.8	123.3	121.0	117.5	113.7	109.3	104.3
77.5°	93.9	92.4	91.0	91.0	89.5	86.6	85.9	82.9	78.5	75.6	70.4
80°	61.6	60.9	59.4	58.0	57.2	56.5	55.8	52.9	48.4	46.2	41.9
82.5°	33.8	33.0	33.0	32.2	30.1	30.1	29.4	26.4	24.2	22.7	20.5
85°	11.7	11.7	11.7	11.0	11.0	11.0	10.3	9.6	8.7	8.0	6.5
87.5°	1.5	0.7	1.5	0.7	1.5	0.7	0.7	0.7	0.7	0.7	0.7
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: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1
2.5°	1910.9	1909.6	1908.9	1908.1	1907.4	1906.6	1905.9	1904.4	1903.7	1902.9	1901.5
5°	1910.9	1908.1	1906.6	1904.4	1902.9	1901.5	1899.2	1897.1	1894.8	1892.7	1890.5
7.5°	1908.1	1903.7	1900.7	1896.4	1894.8	1892.7	1888.2	1885.4	1881.7	1877.2	1872.2
10°	1900.7	1895.7	1889.8	1883.9	1881.7	1878.0	1872.2	1867.0	1861.1	1855.3	1850.1
12.5°	1888.9	1880.9	1873.7	1865.5	1861.1	1857.5	1849.5	1842.0	1834.7	1828.1	1819.3
15°	1871.4	1861.8	1852.3	1841.2	1836.2	1831.8	1820.1	1811.1	1799.4	1790.7	1781.8
17.5°	1842.8	1828.1	1816.3	1802.4	1795.1	1789.9	1779.7	1765.7	1754.7	1745.2	1734.9
20°	1793.6	1779.7	1763.4	1748.2	1740.0	1733.4	1718.8	1704.0	1693.0	1682.8	1671.8
22.5°	1729.0	1711.3	1699.7	1680.6	1673.9	1665.9	1648.4	1635.1	1622.6	1612.3	1602.0
25°	1650.4	1635.1	1619.0	1601.3	1593.2	1583.7	1569.0	1555.1	1547.1	1535.3	1522.9
27.5°	1560.3	1547.8	1527.9	1512.5	1504.4	1497.1	1483.2	1470.7	1459.0	1450.8	1439.1
30°	1464.8	1450.2	1432.5	1416.3	1411.9	1403.1	1390.6	1381.2	1368.6	1363.5	1358.4
32.5°	1359.9	1343.0	1329.8	1319.5	1310.8	1303.3	1296.7	1281.4	1279.1	1265.9	1264.4
35°	1245.4	1238.1	1225.6	1216.8	1209.5	1204.3	1193.3	1186.0	1177.8	1175.7	1170.5
37.5°	1137.5	1128.7	1116.9	1108.8	1103.8	1102.9	1094.9	1090.5	1084.6	1081.7	1075.9
40°	1024.5	1020.9	1010.6	1009.1	1001.0	1000.3	995.8	990.7	985.6	985.6	986.4
42.5°	920.3	915.8	911.5	906.3	901.8	901.8	899.7	898.3	896.8	894.6	898.3
45°	822.7	816.8	813.9	808.8	810.9	806.5	805.0	805.0	802.8	802.2	807.2
47.5°	731.7	725.1	722.1	720.7	720.7	721.4	714.7	716.9	716.2	717.7	719.9
50°	648.8	642.9	638.5	638.5	639.2	636.3	633.3	635.5	633.3	634.8	640.0
52.5°	571.7	565.9	563.6	563.6	559.2	558.4	560.0	557.0	557.7	558.4	561.4
55°	500.6	496.8	493.1	489.5	490.3	488.8	485.8	485.1	486.5	487.3	491.0
57.5°	436.7	431.5	426.4	424.9	423.5	423.5	419.8	419.0	420.5	416.7	416.7
60°	375.8	372.8	366.3	364.1	364.1	360.3	357.3	358.9	355.1	354.4	355.1
62.5°	319.2	317.0	312.7	308.2	306.7	305.4	301.6	300.2	298.6	295.7	291.4
65°	270.1	265.0	259.8	256.8	254.7	251.0	248.8	245.9	241.5	240.0	235.6
67.5°	220.8	215.7	210.7	208.4	206.2	204.1	200.4	196.6	191.5	185.6	180.5
70°	177.6	171.0	168.1	162.1	160.7	157.8	152.7	149.0	143.8	137.2	132.0
72.5°	135.8	131.3	126.9	121.8	118.2	116.0	111.6	105.6	99.8	96.1	91.0
75°	97.5	95.4	89.5	83.6	82.2	79.3	74.2	70.4	66.1	60.1	55.8
77.5°	66.1	61.6	58.0	52.9	51.4	48.4	45.5	41.9	39.0	35.2	32.2
80°	39.0	35.2	33.0	29.4	27.9	26.4	24.2	21.3	19.0	17.7	16.9
82.5°	19.0	16.2	15.5	13.2	12.5	11.7	10.3	9.6	8.0	8.0	8.0
85°	6.5	5.2	5.2	4.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	0.7
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: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1
2.5°	1900.7	1899.9	1899.2	1898.5	1898.5	1897.9	1897.9	1897.1	1897.1	1896.4	1896.4
5°	1887.5	1885.4	1883.9	1882.4	1882.4	1880.2	1878.7	1877.2	1876.5	1876.5	1875.0
7.5°	1869.2	1866.3	1863.3	1861.1	1860.5	1856.7	1853.7	1853.7	1850.8	1849.5	1847.9
10°	1845.0	1839.8	1835.4	1833.2	1830.2	1828.1	1824.3	1822.2	1820.1	1816.3	1815.6
12.5°	1812.0	1808.3	1801.7	1798.8	1797.3	1792.8	1786.9	1784.1	1783.4	1780.4	1778.2
15°	1774.6	1766.5	1760.5	1756.9	1756.9	1749.5	1746.6	1742.3	1739.2	1737.1	1736.3
17.5°	1726.1	1718.1	1712.0	1707.0	1705.5	1699.7	1695.3	1693.7	1690.1	1691.6	1687.8
20°	1663.6	1657.1	1652.6	1646.1	1646.1	1642.4	1640.9	1637.2	1635.9	1634.3	1635.9
22.5°	1596.9	1588.8	1581.5	1580.7	1580.7	1575.5	1574.8	1574.2	1571.3	1573.5	1572.7
25°	1518.4	1512.5	1508.1	1507.4	1507.4	1504.4	1501.5	1502.9	1505.2	1504.4	1506.7
27.5°	1437.0	1431.1	1429.6	1428.9	1427.3	1426.6	1428.0	1428.0	1430.3	1433.2	1436.2
30°	1348.9	1347.4	1345.2	1344.4	1343.0	1346.7	1348.2	1350.2	1349.6	1354.0	1356.9
32.5°	1260.8	1257.9	1257.2	1258.6	1260.8	1260.1	1264.4	1265.9	1267.4	1272.5	1274.8
35°	1172.0	1171.3	1169.8	1169.8	1170.5	1176.5	1176.5	1181.6	1184.5	1186.0	1191.8
37.5°	1076.5	1079.5	1081.0	1083.2	1083.9	1086.2	1087.6	1092.7	1095.7	1098.7	1101.6
40°	989.3	987.8	994.4	989.9	991.5	998.1	1001.0	1000.3	1004.7	1009.1	1012.0
42.5°	896.1	898.3	899.7	901.2	904.8	905.6	909.3	914.5	915.8	921.0	922.5
45°	805.7	806.5	809.5	812.4	814.7	820.5	821.9	824.1	828.5	828.5	830.7
47.5°	720.7	723.6	723.6	727.9	731.7	731.0	736.0	737.6	736.9	740.4	741.9
50°	639.2	643.6	642.9	645.8	647.2	648.1	652.4	653.9	651.0	654.6	655.3
52.5°	561.4	563.6	566.5	567.4	565.9	569.4	568.0	571.0	570.2	573.2	570.2
55°	490.3	489.5	489.5	491.0	489.5	491.0	492.5	489.5	487.3	490.3	489.5
57.5°	419.0	419.0	417.7	419.8	417.7	415.4	414.7	412.5	410.2	410.2	409.5
60°	352.3	350.8	347.9	347.1	347.1	343.4	342.1	339.0	339.0	336.1	333.1
62.5°	289.9	286.2	284.0	284.0	282.5	278.9	272.3	267.8	266.4	262.0	261.2
65°	231.1	227.5	225.3	220.8	217.3	215.7	209.1	204.1	201.8	197.4	198.2
67.5°	177.6	171.7	165.2	162.1	160.0	154.9	152.7	149.0	146.8	146.8	146.8
70°	127.8	122.6	116.0	113.7	112.3	107.8	105.6	105.0	107.1	106.4	107.1
72.5°	85.9	80.8	77.8	76.3	74.9	72.6	74.2	74.9	73.3	74.2	74.9
75°	52.1	50.7	48.4	47.7	47.7	48.4	47.7	47.7	48.4	48.4	49.1
77.5°	30.1	28.7	28.7	27.9	29.4	28.7	28.7	28.7	29.4	29.4	29.4
80°	16.2	16.2	16.2	16.2	16.9	16.2	16.9	16.9	16.9	16.9	16.9
82.5°	8.0	8.0	8.0	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.0
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
87.5°	0.7	1.5	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7
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: P858085

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1	1908.1
2.5°	1894.8	1894.8	1894.8	1893.4	1894.1	1894.1	1893.4	1893.4
5°	1874.3	1873.7	1872.2	1872.2	1870.6	1872.2	1871.4	1872.2
7.5°	1846.4	1846.4	1844.3	1844.3	1843.5	1842.8	1842.0	1842.8
10°	1813.4	1813.4	1812.0	1811.1	1812.0	1809.0	1809.0	1808.3
12.5°	1776.6	1775.2	1773.7	1774.6	1773.7	1771.7	1770.8	1771.7
15°	1734.2	1732.0	1732.7	1730.5	1730.5	1729.7	1731.2	1731.2
17.5°	1687.1	1685.7	1684.3	1685.0	1683.6	1684.3	1683.6	1682.8
20°	1635.1	1634.3	1634.3	1631.4	1632.2	1631.4	1632.2	1634.3
22.5°	1574.8	1574.2	1574.8	1572.7	1574.2	1574.2	1576.4	1576.4
25°	1508.9	1508.1	1509.6	1510.3	1511.1	1513.2	1511.1	1511.9
27.5°	1435.5	1437.7	1439.8	1440.6	1443.5	1441.3	1439.8	1442.1
30°	1361.4	1361.4	1360.6	1363.5	1365.7	1367.9	1364.3	1364.3
32.5°	1276.2	1279.8	1279.8	1280.6	1282.8	1282.8	1282.8	1285.7
35°	1194.7	1196.9	1197.8	1194.7	1196.2	1195.5	1200.7	1200.7
37.5°	1103.8	1103.8	1104.5	1109.7	1109.7	1107.4	1108.8	1108.8
40°	1017.1	1017.9	1014.9	1016.4	1020.0	1018.6	1020.0	1021.6
42.5°	922.5	927.7	924.7	926.2	925.4	926.2	927.0	927.0
45°	832.2	833.7	833.7	834.4	835.9	837.4	833.0	832.2
47.5°	744.1	744.9	747.1	743.4	747.8	743.4	747.8	742.7
50°	655.3	658.2	656.1	657.5	655.3	655.3	654.6	653.9
52.5°	571.0	570.2	570.2	569.4	569.4	571.0	569.4	571.7
55°	486.5	487.3	485.8	485.1	484.4	486.5	484.4	482.9
57.5°	406.6	408.0	405.0	406.6	401.5	403.5	404.4	405.0
60°	332.4	330.2	330.2	327.3	327.3	329.6	326.6	326.6
62.5°	257.6	259.1	256.8	259.8	259.8	262.7	261.2	262.7
65°	197.4	198.2	198.9	198.9	198.9	203.3	201.8	199.6
67.5°	149.0	149.7	150.4	149.7	152.0	150.4	150.4	151.2
70°	107.8	108.5	109.3	109.3	108.5	109.3	109.3	109.3
72.5°	74.9	75.6	74.9	75.6	76.3	75.6	75.6	76.3
75°	49.1	49.1	48.4	48.4	48.4	48.4	49.1	48.4
77.5°	28.7	29.4	28.7	29.4	29.4	29.4	29.4	29.4
80°	16.9	16.9	16.9	16.2	16.9	16.9	16.9	16.2
82.5°	8.7	8.7	8.0	8.0	8.7	8.7	8.7	8.7
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)