

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: P857920

Luminaire Tested: **LX4C40D010 EX4C409030 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857920
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 EX4C409030 4LBSWNH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

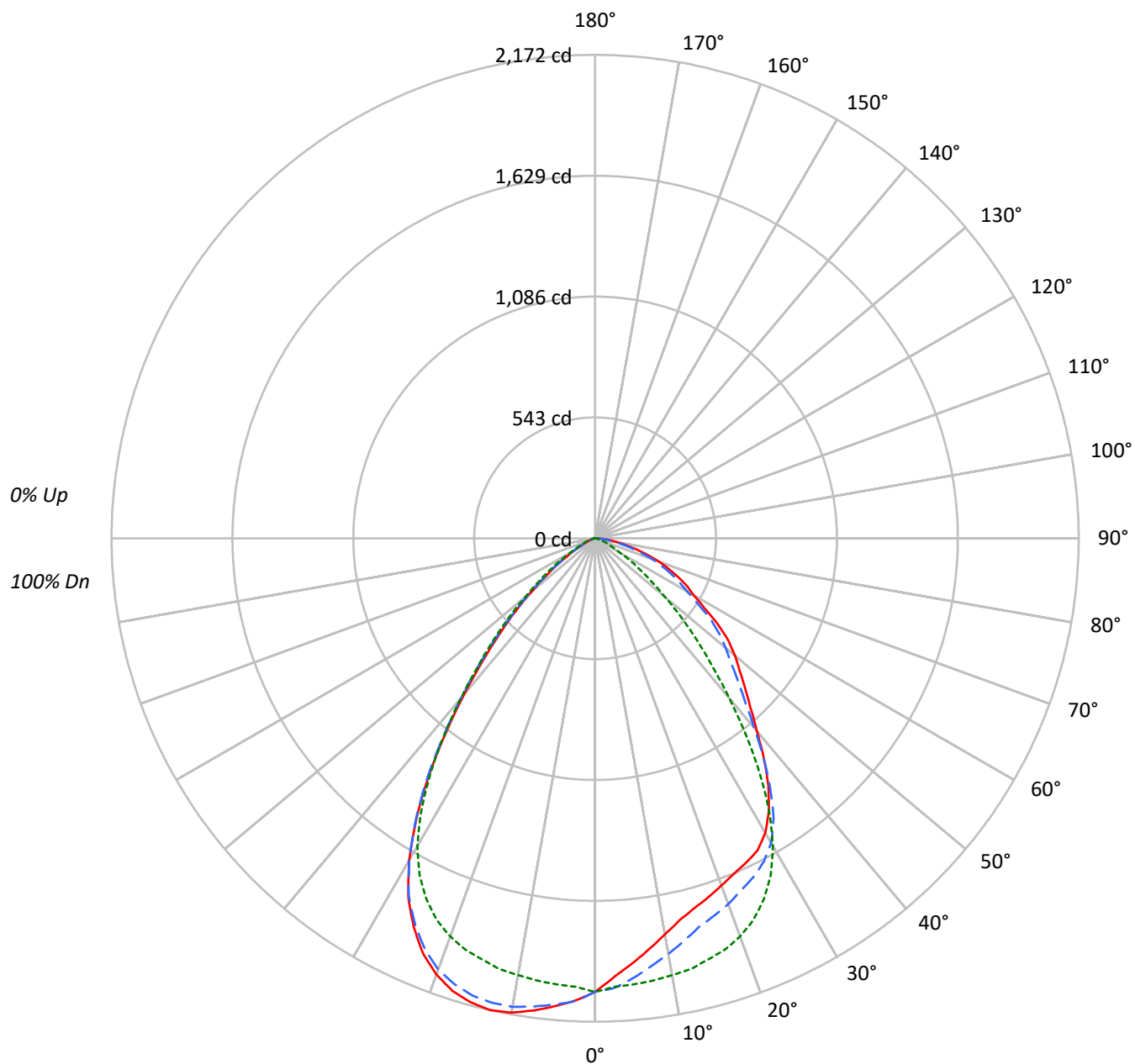
Lumens per Lamp: N/A
Luminaire Lumens: 3572.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

Luminous Intensity Polar Plot





TEST NUMBER: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

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	50	30	10
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°	250351	250351	250351
5°	236397	248064	260371
10°	225383	248637	269931
15°	218762	249160	274534
20°	216973	248912	272589
25°	217849	242763	261266
30°	216803	226492	236919
35°	203218	193380	195344
40°	181078	149933	146566
45°	165610	111785	104922
50°	156590	78304	70774
55°	143999	52862	44423
60°	125802	30959	24497
65°	119098	19825	13721
70°	108478	14152	8513
75°	89760	9968	6266
80°	70536	5589	3679
85°	63008	3806	0



TEST NUMBER: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	5.4
10°-20°	552.4	15.5
20°-30°	818.8	22.9
30°-40°	819.9	23.0
40°-50°	573.0	16.0
50°-60°	341.0	9.5
60°-70°	177.9	5.0
70°-80°	79.1	2.2
80°-90°	17.3	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°	1563.7	43.8
0°-40°	2383.6	66.7
0°-60°	3297.6	92.3
0°-90°	3572.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3572.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2038	2038	2038	2038	2038	
5°	1917	1983	2012	2103	2111	180
15°	1720	1807	1959	2127	2158	487
25°	1607	1681	1791	1914	1927	740
35°	1355	1371	1289	1313	1302	840
45°	953	906	643	622	604	740
55°	672	630	247	215	207	597
65°	410	376	68	50	47	405
75°	189	165	21	13	13	204
85°	45	34	3	3	0	50
90°	0	0	0	0	0	



TEST NUMBER: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8
2.5°	1972.1	1995.8	1972.1	1980.0	2011.5	1982.6	1998.3	1998.3	1990.5	2008.8	2022.0
5°	1916.9	1940.6	1916.9	1927.4	1961.6	1932.7	1951.1	1945.8	1948.5	1964.3	1982.6
7.5°	1861.9	1880.2	1859.2	1872.4	1903.9	1880.2	1895.9	1895.9	1898.6	1922.2	1938.0
10°	1806.7	1822.4	1806.7	1817.2	1851.4	1830.4	1840.9	1843.4	1851.4	1872.4	1895.9
12.5°	1756.8	1769.9	1754.2	1769.9	1798.7	1777.8	1790.9	1793.5	1801.4	1825.1	1851.4
15°	1720.0	1733.2	1717.4	1730.5	1756.8	1741.0	1751.5	1756.8	1762.0	1783.0	1806.7
17.5°	1691.2	1701.7	1688.5	1704.3	1725.3	1706.9	1722.7	1722.7	1730.5	1751.5	1777.8
20°	1659.6	1670.1	1659.6	1672.8	1696.4	1680.7	1693.8	1693.8	1701.7	1725.3	1748.9
22.5°	1630.8	1636.0	1630.8	1641.3	1664.8	1651.8	1659.6	1662.3	1670.1	1691.2	1712.2
25°	1607.1	1617.6	1612.3	1622.8	1638.6	1625.5	1633.3	1636.0	1643.8	1662.3	1680.7
27.5°	1580.8	1586.1	1580.8	1594.0	1607.1	1596.6	1604.5	1601.8	1607.1	1622.8	1638.6
30°	1528.3	1533.6	1533.6	1541.4	1552.0	1546.8	1554.6	1546.8	1552.0	1565.1	1580.8
32.5°	1452.2	1454.8	1457.4	1465.3	1473.2	1465.3	1470.6	1470.6	1470.6	1481.1	1491.6
35°	1355.0	1360.2	1357.7	1362.9	1370.7	1368.2	1368.2	1365.5	1360.2	1365.5	1370.7
37.5°	1244.7	1236.8	1236.8	1244.7	1250.0	1239.5	1244.7	1239.5	1239.5	1242.1	1242.1
40°	1129.1	1121.3	1129.1	1131.8	1134.4	1129.1	1126.6	1121.3	1113.4	1116.1	1110.8
42.5°	1032.1	1026.7	1029.4	1029.4	1032.1	1026.7	1029.4	1018.9	1011.0	1005.7	997.9
45°	953.2	945.4	953.2	948.0	948.0	945.4	942.7	937.5	927.0	919.1	906.0
47.5°	879.7	879.7	882.3	882.3	882.3	877.0	877.0	866.5	856.0	845.5	827.2
50°	819.3	814.0	824.5	824.5	816.7	814.0	816.7	803.5	795.7	782.5	764.1
52.5°	753.6	753.6	756.3	756.3	753.6	748.4	751.0	740.5	732.6	719.5	701.1
55°	672.3	667.0	674.9	674.9	672.3	669.6	672.3	664.4	656.5	646.0	630.2
57.5°	580.4	577.7	582.9	585.6	580.4	580.4	582.9	575.1	572.4	561.9	546.2
60°	512.0	509.4	514.7	517.4	512.0	512.0	512.0	501.5	496.3	485.8	475.3
62.5°	464.8	462.2	467.4	464.8	462.2	459.5	462.2	451.7	446.4	435.9	425.4
65°	409.7	412.3	414.9	414.9	412.3	409.7	409.7	404.4	399.2	388.7	375.5
67.5°	357.1	357.1	359.8	362.3	359.8	359.8	359.8	351.8	346.6	338.8	323.0
70°	302.0	299.3	307.3	307.3	302.0	304.6	302.0	299.3	294.1	283.6	270.5
72.5°	244.2	244.2	246.8	246.8	244.2	244.2	244.2	241.6	233.7	228.4	215.3
75°	189.1	189.1	191.7	194.3	189.1	189.1	191.7	186.4	181.2	173.3	165.4
77.5°	141.8	139.2	141.8	141.8	139.2	139.2	139.2	136.6	133.9	126.0	118.2
80°	99.7	97.2	99.7	99.7	99.7	97.2	97.2	94.5	94.5	89.2	81.4
82.5°	68.2	65.7	68.2	68.2	68.2	65.7	65.7	65.7	63.0	60.4	55.2
85°	44.7	42.0	42.0	44.7	42.0	42.0	42.0	42.0	39.4	36.7	34.2
87.5°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	18.4	18.4	18.4	15.7
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: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8
2.5°	2011.5	2006.3	2022.0	2016.8	2019.3	2006.3	2027.3	2016.8	2029.8	2016.8	2043.0
5°	1977.3	1972.1	1995.8	1993.1	1995.8	1985.3	2008.8	2006.3	2022.0	2011.5	2040.3
7.5°	1940.6	1935.3	1961.6	1964.3	1969.5	1959.0	1990.5	1990.5	2006.3	2003.6	2035.1
10°	1898.6	1901.2	1927.4	1932.7	1943.3	1938.0	1966.8	1974.8	1995.8	1993.1	2032.5
12.5°	1859.2	1859.2	1893.4	1903.9	1911.7	1909.1	1943.3	1953.8	1977.3	1982.6	2019.3
15°	1819.9	1822.4	1853.9	1869.7	1880.2	1877.6	1914.3	1927.4	1956.3	1959.0	2003.6
17.5°	1788.3	1785.7	1819.9	1832.9	1848.7	1846.1	1885.4	1901.2	1930.1	1938.0	1980.0
20°	1762.0	1759.4	1790.9	1806.7	1817.2	1814.6	1853.9	1872.4	1898.6	1903.9	1945.8
22.5°	1730.5	1725.3	1756.8	1769.9	1780.4	1777.8	1811.9	1825.1	1851.4	1856.6	1895.9
25°	1693.8	1688.5	1717.4	1725.3	1733.2	1727.9	1756.8	1764.7	1785.7	1790.9	1830.4
27.5°	1651.8	1638.6	1662.3	1662.3	1667.5	1659.6	1680.7	1688.5	1706.9	1706.9	1743.7
30°	1586.1	1567.8	1580.8	1578.3	1580.8	1570.3	1583.5	1586.1	1599.3	1596.6	1622.8
32.5°	1494.2	1467.9	1475.8	1467.9	1460.1	1444.3	1460.1	1454.8	1465.3	1454.8	1478.4
35°	1368.2	1341.9	1339.2	1328.7	1320.9	1307.7	1307.7	1294.7	1297.2	1289.4	1305.2
37.5°	1231.6	1197.5	1192.2	1171.2	1158.1	1142.3	1142.3	1131.8	1118.6	1113.4	1126.6
40°	1097.6	1060.9	1047.8	1013.6	1000.5	984.7	974.2	961.1	955.9	934.9	945.4
42.5°	982.1	942.7	913.9	877.0	864.0	840.3	824.5	808.8	801.0	777.3	787.8
45°	885.0	837.7	806.2	758.9	740.5	714.3	690.6	672.3	653.9	643.4	638.1
47.5°	803.5	753.6	711.6	659.1	630.2	606.6	575.1	556.7	533.1	519.9	512.0
50°	735.3	680.1	632.9	572.4	543.6	517.4	480.5	451.7	430.7	409.7	404.4
52.5°	674.9	617.1	564.6	496.3	462.2	430.7	391.3	359.8	341.3	317.8	315.1
55°	603.9	554.1	496.3	425.4	391.3	359.8	317.8	286.3	262.6	246.8	241.6
57.5°	527.9	480.5	425.4	354.5	320.3	286.3	246.8	217.9	196.9	183.8	181.2
60°	456.9	412.3	359.8	288.8	254.7	225.8	183.8	154.9	136.6	126.0	120.7
62.5°	404.4	362.3	312.5	246.8	215.3	186.4	147.1	120.7	105.0	94.5	89.2
65°	354.5	312.5	267.8	207.4	181.2	154.9	118.2	94.5	78.7	68.2	63.0
67.5°	302.0	265.3	223.2	173.3	147.1	126.0	94.5	73.5	60.4	52.5	47.2
70°	249.4	215.3	181.2	139.2	120.7	99.7	73.5	57.7	44.7	39.4	34.2
72.5°	196.9	170.7	141.8	107.7	91.9	78.7	57.7	42.0	34.2	28.9	23.7
75°	147.1	128.7	105.0	81.4	68.2	57.7	42.0	31.5	26.2	21.0	18.4
77.5°	105.0	89.2	73.5	55.2	49.9	42.0	28.9	23.7	18.4	13.2	10.5
80°	70.9	63.0	49.9	39.4	31.5	28.9	21.0	15.7	10.5	7.9	7.9
82.5°	47.2	39.4	31.5	23.7	21.0	18.4	13.2	10.5	7.9	5.2	5.2
85°	28.9	23.7	18.4	13.2	13.2	10.5	7.9	5.2	2.7	2.7	2.7
87.5°	13.2	10.5	7.9	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



TEST NUMBER: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8
2.5°	2064.0	2048.3	2037.8	2050.8	2056.1	2048.3	2056.1	2069.3	2082.4	2085.0	2048.3
5°	2066.7	2050.8	2045.6	2061.3	2064.0	2061.3	2069.3	2087.7	2103.4	2108.7	2071.9
7.5°	2066.7	2056.1	2053.5	2071.9	2074.5	2071.9	2085.0	2106.0	2121.8	2132.3	2095.5
10°	2061.3	2056.1	2058.8	2074.5	2079.8	2079.8	2098.2	2121.8	2137.5	2148.0	2111.3
12.5°	2053.5	2053.5	2053.5	2071.9	2077.2	2079.8	2095.5	2127.0	2137.5	2153.3	2116.5
15°	2040.3	2040.3	2040.3	2058.8	2066.7	2066.7	2085.0	2113.9	2127.0	2142.8	2106.0
17.5°	2016.8	2016.8	2019.3	2035.1	2043.0	2043.0	2061.3	2092.9	2100.8	2119.2	2082.4
20°	1982.6	1982.6	1985.3	2001.0	2008.8	2003.6	2027.3	2053.5	2061.3	2077.2	2040.3
22.5°	1932.7	1932.7	1932.7	1948.5	1953.8	1951.1	1974.8	1998.3	1998.3	2019.3	1980.0
25°	1859.2	1864.4	1859.2	1874.9	1880.2	1877.6	1898.6	1919.6	1914.3	1938.0	1898.6
27.5°	1769.9	1767.3	1767.3	1780.4	1780.4	1777.8	1793.5	1817.2	1811.9	1827.7	1790.9
30°	1646.5	1654.3	1641.3	1659.6	1651.8	1646.5	1657.0	1678.0	1670.1	1683.3	1654.3
32.5°	1504.7	1494.2	1494.2	1494.2	1499.4	1486.3	1496.8	1507.3	1499.4	1512.6	1481.1
35°	1318.2	1320.9	1313.0	1315.7	1318.2	1302.5	1313.0	1323.5	1313.0	1320.9	1292.0
37.5°	1131.8	1134.4	1116.1	1126.6	1116.1	1110.8	1121.3	1126.6	1116.1	1123.9	1092.4
40°	945.4	940.1	937.5	937.5	940.1	927.0	934.9	942.7	934.9	940.1	911.2
42.5°	782.5	780.0	774.7	777.3	769.4	766.8	769.4	777.3	769.4	774.7	753.6
45°	640.7	635.4	627.6	630.2	630.2	617.1	624.9	630.2	622.4	624.9	606.6
47.5°	509.4	501.5	501.5	498.9	498.9	493.7	501.5	498.9	491.0	496.3	477.9
50°	396.5	391.3	391.3	391.3	391.3	383.3	386.0	391.3	383.3	383.3	372.8
52.5°	309.8	302.0	296.8	296.8	296.8	294.1	294.1	296.8	288.8	288.8	286.3
55°	233.7	231.1	223.2	223.2	223.2	215.3	217.9	217.9	215.3	215.3	207.4
57.5°	173.3	165.4	160.2	160.2	154.9	154.9	152.3	154.9	149.7	149.7	144.4
60°	115.5	110.2	107.7	105.0	105.0	102.4	105.0	102.4	102.4	99.7	97.2
62.5°	84.0	78.7	73.5	73.5	73.5	70.9	70.9	70.9	70.9	70.9	68.2
65°	60.4	55.2	55.2	52.5	52.5	49.9	49.9	49.9	49.9	49.9	47.2
67.5°	42.0	39.4	36.7	36.7	36.7	36.7	36.7	36.7	34.2	34.2	34.2
70°	31.5	28.9	26.2	26.2	26.2	26.2	26.2	23.7	26.2	26.2	23.7
72.5°	21.0	21.0	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
75°	15.7	15.7	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
77.5°	10.5	10.5	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
80°	7.9	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: P857920

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8	2037.8
2.5°	2087.7	2085.0	2079.8	2087.7	2066.7	2058.8	2056.1	2079.8
5°	2116.5	2111.3	2111.3	2119.2	2095.5	2090.3	2085.0	2111.3
7.5°	2142.8	2137.5	2137.5	2145.4	2124.4	2119.2	2113.9	2140.2
10°	2158.5	2158.5	2158.5	2163.8	2145.4	2140.2	2137.5	2163.8
12.5°	2166.4	2166.4	2163.8	2174.3	2150.7	2150.7	2145.4	2171.7
15°	2155.9	2155.9	2155.9	2163.8	2142.8	2137.5	2137.5	2158.5
17.5°	2129.7	2129.7	2127.0	2134.9	2111.3	2111.3	2108.7	2132.3
20°	2090.3	2090.3	2085.0	2095.5	2071.9	2064.0	2061.3	2085.0
22.5°	2027.3	2024.6	2022.0	2027.3	2006.3	2001.0	1998.3	2019.3
25°	1945.8	1943.3	1938.0	1943.3	1919.6	1911.7	1911.7	1927.4
27.5°	1830.4	1830.4	1822.4	1830.4	1804.0	1801.4	1798.7	1817.2
30°	1688.5	1678.0	1672.8	1683.3	1657.0	1657.0	1651.8	1670.1
32.5°	1512.6	1502.1	1499.4	1504.7	1481.1	1473.2	1483.7	1494.2
35°	1310.4	1313.0	1302.5	1302.5	1281.5	1284.1	1286.7	1302.5
37.5°	1116.1	1110.8	1108.1	1110.8	1095.1	1089.8	1084.6	1100.3
40°	934.9	921.7	919.1	919.1	906.0	903.4	906.0	913.9
42.5°	764.1	761.5	751.0	756.3	743.1	748.4	745.8	745.8
45°	617.1	619.7	609.2	617.1	606.6	598.7	598.7	603.9
47.5°	488.4	488.4	485.8	485.8	477.9	480.5	475.3	483.2
50°	378.1	378.1	372.8	375.5	370.3	370.3	367.6	370.3
52.5°	288.8	286.3	286.3	283.6	278.3	281.0	283.6	278.3
55°	210.1	212.7	207.4	210.1	204.8	207.4	204.8	207.4
57.5°	144.4	147.1	141.8	147.1	141.8	144.4	141.8	141.8
60°	99.7	99.7	97.2	99.7	97.2	97.2	94.5	99.7
62.5°	68.2	68.2	68.2	68.2	68.2	65.7	68.2	68.2
65°	49.9	47.2	47.2	47.2	47.2	47.2	47.2	47.2
67.5°	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
70°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
72.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
75°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
77.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
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)