

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: P857962

Luminaire Tested: **LX4C40D010 EX4C409040 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857962
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 EX4C409040 4LBSWNH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

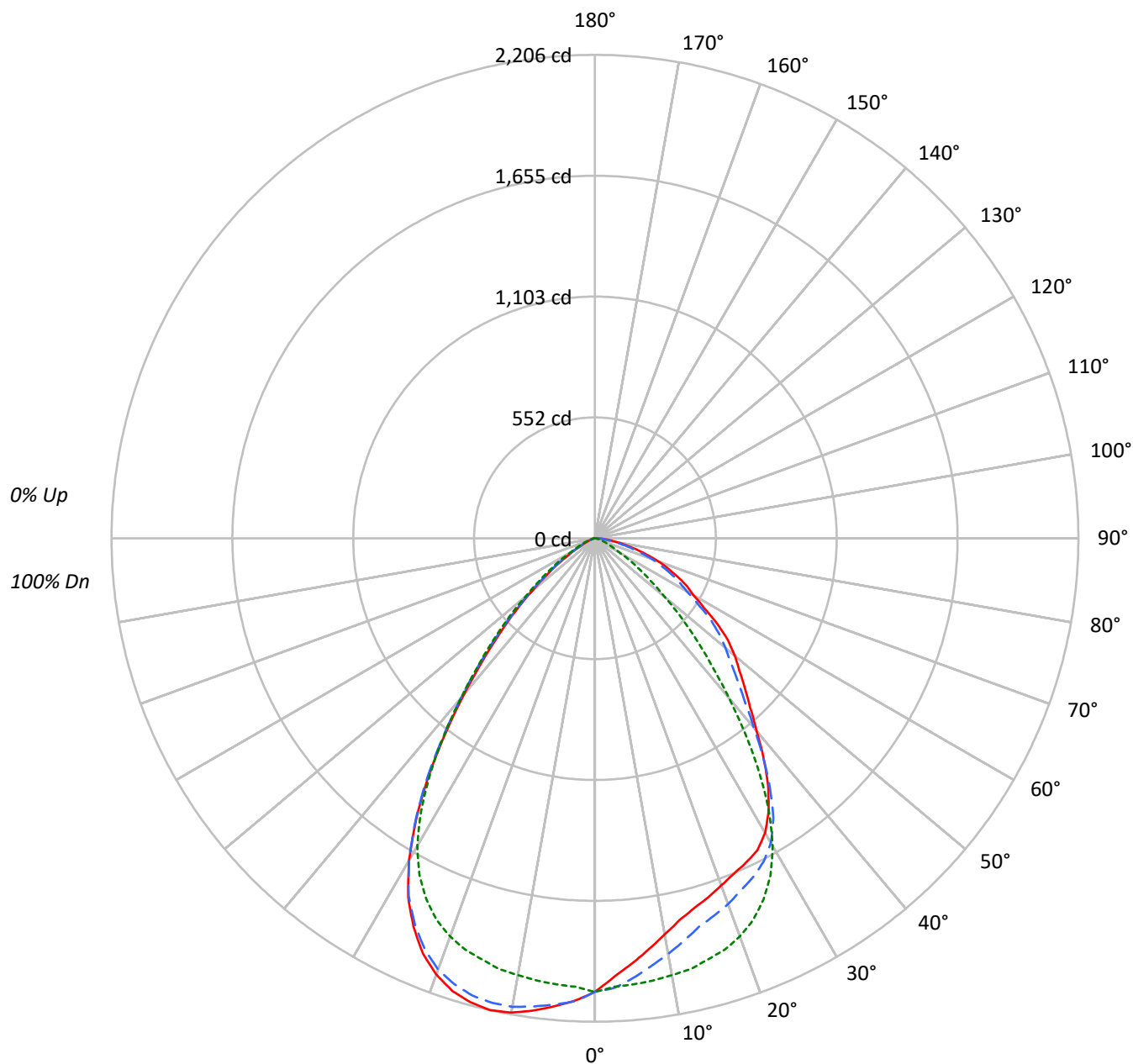
Lumens per Lamp: N/A
Luminaire Lumens: 3628.0 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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°	254270	254270	254270
5°	240109	251961	264453
10°	228914	252529	274160
15°	222196	253065	278845
20°	220372	252808	276864
25°	221264	246572	265360
30°	220208	230039	240635
35°	206398	196409	198404
40°	183917	152275	148859
45°	168216	113540	106573
50°	159036	79528	71883
55°	146248	53697	45130
60°	127768	31450	24890
65°	120959	20145	13953
70°	110202	14368	8621
75°	91184	10110	6361
80°	71668	5731	3750
85°	63995	3806	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	5.4
10°-20°	561.0	15.5
20°-30°	831.6	22.9
30°-40°	832.8	23.0
40°-50°	582.0	16.0
50°-60°	346.3	9.5
60°-70°	180.7	5.0
70°-80°	80.4	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°	1588.2	43.8
0°-40°	2421.0	66.7
0°-60°	3349.3	92.3
0°-90°	3628.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3628.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2070	2070	2070	2070	2070	
5°	1947	2014	2043	2136	2144	183
15°	1747	1835	1990	2160	2192	495
25°	1632	1707	1819	1944	1958	752
35°	1376	1392	1310	1334	1323	853
45°	968	920	654	632	613	752
55°	683	640	251	219	211	606
65°	416	381	69	51	48	412
75°	192	168	21	13	13	208
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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2003.0	2027.1	2003.0	2011.1	2043.1	2013.7	2029.7	2029.7	2021.7	2040.3	2053.7
5°	1947.0	1971.0	1947.0	1957.6	1992.4	1963.0	1981.7	1976.4	1979.1	1995.1	2013.7
7.5°	1891.0	1909.7	1888.3	1901.7	1933.7	1909.7	1925.6	1925.6	1928.4	1952.3	1968.4
10°	1835.0	1851.0	1835.0	1845.7	1880.4	1859.0	1869.7	1872.3	1880.4	1901.7	1925.6
12.5°	1784.3	1797.7	1781.7	1797.7	1826.9	1805.6	1819.0	1821.6	1829.7	1853.7	1880.4
15°	1747.0	1760.3	1744.4	1757.6	1784.3	1768.3	1779.0	1784.3	1789.6	1811.0	1835.0
17.5°	1717.7	1728.4	1715.0	1731.0	1752.3	1733.7	1749.7	1749.7	1757.6	1779.0	1805.6
20°	1685.6	1696.3	1685.6	1699.0	1723.0	1707.0	1720.3	1720.3	1728.4	1752.3	1776.3
22.5°	1656.3	1661.7	1656.3	1667.0	1690.9	1677.6	1685.6	1688.3	1696.3	1717.7	1739.0
25°	1632.3	1642.9	1637.6	1648.3	1664.3	1651.0	1658.9	1661.7	1669.6	1688.3	1707.0
27.5°	1605.6	1610.9	1605.6	1619.0	1632.3	1621.6	1629.7	1626.9	1632.3	1648.3	1664.3
30°	1552.3	1557.6	1557.6	1565.6	1576.3	1571.0	1579.0	1571.0	1576.3	1589.6	1605.6
32.5°	1474.9	1477.6	1480.3	1488.3	1496.3	1488.3	1493.6	1493.6	1493.6	1504.3	1515.0
35°	1376.2	1381.6	1378.9	1384.3	1392.2	1389.6	1389.6	1386.9	1381.6	1386.9	1392.2
37.5°	1264.2	1256.2	1256.2	1264.2	1269.6	1258.9	1264.2	1258.9	1258.9	1261.5	1261.5
40°	1146.8	1138.9	1146.8	1149.6	1152.2	1146.8	1144.2	1138.9	1130.8	1133.6	1128.2
42.5°	1048.2	1042.8	1045.5	1045.5	1048.2	1042.8	1045.5	1034.9	1026.8	1021.5	1013.5
45°	968.2	960.2	968.2	962.8	962.8	960.2	957.5	952.2	941.5	933.5	920.2
47.5°	893.5	893.5	896.1	896.1	896.1	890.8	890.8	880.1	869.5	858.8	840.2
50°	832.1	826.8	837.5	837.5	829.5	826.8	829.5	816.1	808.2	794.8	776.1
52.5°	765.4	765.4	768.1	768.1	765.4	760.1	762.8	752.2	744.1	730.8	712.1
55°	682.8	677.5	685.4	685.4	682.8	680.1	682.8	674.8	666.8	656.2	640.1
57.5°	589.5	586.7	592.1	594.8	589.5	589.5	592.1	584.1	581.4	570.8	554.8
60°	520.0	517.4	522.8	525.5	520.0	520.0	520.0	509.4	504.0	493.4	482.7
62.5°	472.1	469.4	474.8	472.1	469.4	466.7	469.4	458.8	453.4	442.8	432.1
65°	416.1	418.7	421.5	421.5	418.7	416.1	416.1	410.8	405.5	394.8	381.4
67.5°	362.7	362.7	365.4	368.0	365.4	365.4	365.4	357.4	352.0	344.1	328.1
70°	306.8	304.0	312.1	312.1	306.8	309.4	306.8	304.0	298.7	288.0	274.8
72.5°	248.0	248.0	250.7	250.7	248.0	248.0	248.0	245.4	237.3	232.0	218.7
75°	192.1	192.1	194.7	197.4	192.1	192.1	194.7	189.3	184.0	176.1	168.0
77.5°	144.1	141.4	144.1	144.1	141.4	141.4	141.4	138.7	136.0	128.0	120.0
80°	101.3	98.7	101.3	101.3	101.3	98.7	98.7	96.0	96.0	90.6	82.7
82.5°	69.3	66.7	69.3	69.3	69.3	66.7	66.7	66.7	64.0	61.4	56.0
85°	45.4	42.7	42.7	45.4	42.7	42.7	42.7	42.7	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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2043.1	2037.7	2053.7	2048.4	2051.0	2037.7	2059.1	2048.4	2061.7	2048.4	2075.1
5°	2008.3	2003.0	2027.1	2024.3	2027.1	2016.4	2040.3	2037.7	2053.7	2043.1	2072.3
7.5°	1971.0	1965.7	1992.4	1995.1	2000.4	1989.7	2021.7	2021.7	2037.7	2035.0	2067.0
10°	1928.4	1931.0	1957.6	1963.0	1973.7	1968.4	1997.7	2005.7	2027.1	2024.3	2064.4
12.5°	1888.3	1888.3	1923.0	1933.7	1941.6	1939.0	1973.7	1984.4	2008.3	2013.7	2051.0
15°	1848.4	1851.0	1883.0	1899.0	1909.7	1907.0	1944.4	1957.6	1987.0	1989.7	2035.0
17.5°	1816.3	1813.7	1848.4	1861.7	1877.7	1875.0	1915.0	1931.0	1960.4	1968.4	2011.1
20°	1789.6	1787.0	1819.0	1835.0	1845.7	1843.1	1883.0	1901.7	1928.4	1933.7	1976.4
22.5°	1757.6	1752.3	1784.3	1797.7	1808.3	1805.6	1840.3	1853.7	1880.4	1885.7	1925.6
25°	1720.3	1715.0	1744.4	1752.3	1760.3	1755.0	1784.3	1792.3	1813.7	1819.0	1859.0
27.5°	1677.6	1664.3	1688.3	1688.3	1693.6	1685.6	1707.0	1715.0	1733.7	1733.7	1771.0
30°	1610.9	1592.3	1605.6	1603.0	1605.6	1594.9	1608.3	1610.9	1624.3	1621.6	1648.3
32.5°	1517.6	1490.9	1499.0	1490.9	1483.0	1467.0	1483.0	1477.6	1488.3	1477.6	1501.6
35°	1389.6	1362.9	1360.2	1349.6	1341.6	1328.2	1328.2	1315.0	1317.6	1309.6	1325.6
37.5°	1250.9	1216.3	1210.9	1189.6	1176.2	1160.2	1160.2	1149.6	1136.2	1130.8	1144.2
40°	1114.8	1077.5	1064.2	1029.5	1016.1	1000.1	989.5	976.2	970.9	949.5	960.2
42.5°	997.5	957.5	928.2	890.8	877.5	853.5	837.5	821.5	813.5	789.5	800.1
45°	898.8	850.8	818.9	770.8	752.2	725.5	701.4	682.8	664.1	653.5	648.1
47.5°	816.1	765.4	722.8	669.4	640.1	616.1	584.1	565.4	541.5	528.1	520.0
50°	746.8	690.8	642.8	581.4	552.1	525.5	488.1	458.8	437.4	416.1	410.8
52.5°	685.4	626.8	573.5	504.0	469.4	437.4	397.4	365.4	346.7	322.8	320.0
55°	613.4	562.8	504.0	432.1	397.4	365.4	322.8	290.8	266.7	250.7	245.4
57.5°	536.1	488.1	432.1	360.1	325.4	290.8	250.7	221.3	200.0	186.7	184.0
60°	464.1	418.7	365.4	293.4	258.7	229.4	186.7	157.4	138.7	128.0	122.6
62.5°	410.8	368.0	317.4	250.7	218.7	189.3	149.4	122.6	106.6	96.0	90.6
65°	360.1	317.4	272.0	210.7	184.0	157.4	120.0	96.0	80.0	69.3	64.0
67.5°	306.8	269.4	226.7	176.1	149.4	128.0	96.0	74.7	61.4	53.3	48.0
70°	253.3	218.7	184.0	141.4	122.6	101.3	74.7	58.7	45.4	40.0	34.7
72.5°	200.0	173.3	144.1	109.4	93.4	80.0	58.7	42.7	34.7	29.4	24.0
75°	149.4	130.7	106.6	82.7	69.3	58.7	42.7	32.0	26.7	21.3	18.7
77.5°	106.6	90.6	74.7	56.0	50.7	42.7	29.4	24.0	18.7	13.4	10.7
80°	72.0	64.0	50.7	40.0	32.0	29.4	21.3	16.0	10.7	8.1	8.1
82.5°	48.0	40.0	32.0	24.0	21.3	18.7	13.4	10.7	8.1	5.3	5.3
85°	29.4	24.0	18.7	13.4	13.4	10.7	8.1	5.3	2.7	2.7	2.7
87.5°	13.4	10.7	8.1	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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2096.4	2080.4	2069.7	2083.0	2088.3	2080.4	2088.3	2101.7	2115.1	2117.7	2080.4
5°	2099.1	2083.0	2077.7	2093.7	2096.4	2093.7	2101.7	2120.4	2136.4	2141.8	2104.4
7.5°	2099.1	2088.3	2085.7	2104.4	2107.0	2104.4	2117.7	2139.0	2155.0	2165.7	2128.4
10°	2093.7	2088.3	2091.0	2107.0	2112.4	2112.4	2131.1	2155.0	2171.0	2181.7	2144.4
12.5°	2085.7	2085.7	2085.7	2104.4	2109.8	2112.4	2128.4	2160.4	2171.0	2187.0	2149.7
15°	2072.3	2072.3	2072.3	2091.0	2099.1	2099.1	2117.7	2147.1	2160.4	2176.4	2139.0
17.5°	2048.4	2048.4	2051.0	2067.0	2075.1	2075.1	2093.7	2125.8	2133.7	2152.4	2115.1
20°	2013.7	2013.7	2016.4	2032.4	2040.3	2035.0	2059.1	2085.7	2093.7	2109.8	2072.3
22.5°	1963.0	1963.0	1963.0	1979.1	1984.4	1981.7	2005.7	2029.7	2029.7	2051.0	2011.1
25°	1888.3	1893.7	1888.3	1904.3	1909.7	1907.0	1928.4	1949.7	1944.4	1968.4	1928.4
27.5°	1797.7	1795.0	1795.0	1808.3	1808.3	1805.6	1821.6	1845.7	1840.3	1856.3	1819.0
30°	1672.3	1680.3	1667.0	1685.6	1677.6	1672.3	1683.0	1704.3	1696.3	1709.6	1680.3
32.5°	1528.2	1517.6	1517.6	1517.6	1522.9	1509.6	1520.3	1531.0	1522.9	1536.3	1504.3
35°	1338.9	1341.6	1333.6	1336.3	1338.9	1322.9	1333.6	1344.2	1333.6	1341.6	1312.2
37.5°	1149.6	1152.2	1133.6	1144.2	1133.6	1128.2	1138.9	1144.2	1133.6	1141.5	1109.5
40°	960.2	954.9	952.2	952.2	954.9	941.5	949.5	957.5	949.5	954.9	925.5
42.5°	794.8	792.2	786.9	789.5	781.4	778.8	781.4	789.5	781.4	786.9	765.4
45°	650.7	645.4	637.5	640.1	640.1	626.8	634.7	640.1	632.1	634.7	616.1
47.5°	517.4	509.4	509.4	506.8	506.8	501.4	509.4	506.8	498.7	504.0	485.4
50°	402.7	397.4	397.4	397.4	397.4	389.4	392.1	397.4	389.4	389.4	378.7
52.5°	314.7	306.8	301.4	301.4	301.4	298.7	298.7	301.4	293.4	293.4	290.8
55°	237.3	234.7	226.7	226.7	226.7	218.7	221.3	221.3	218.7	218.7	210.7
57.5°	176.1	168.0	162.7	162.7	157.4	157.4	154.7	157.4	152.0	152.0	146.7
60°	117.3	112.0	109.4	106.6	106.6	104.0	106.6	104.0	104.0	101.3	98.7
62.5°	85.3	80.0	74.7	74.7	74.7	72.0	72.0	72.0	72.0	72.0	69.3
65°	61.4	56.0	56.0	53.3	53.3	50.7	50.7	50.7	50.7	50.7	48.0
67.5°	42.7	40.0	37.3	37.3	37.3	37.3	37.3	37.3	34.7	34.7	34.7
70°	32.0	29.4	26.7	26.7	26.7	26.7	26.7	24.0	26.7	26.7	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°	10.7	10.7	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
80°	8.1	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: P857962

CATALOG NUMBER: LX4C40D010 EX4C409040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2120.4	2117.7	2112.4	2120.4	2099.1	2091.0	2088.3	2112.4
5°	2149.7	2144.4	2144.4	2152.4	2128.4	2123.0	2117.7	2144.4
7.5°	2176.4	2171.0	2171.0	2179.1	2157.8	2152.4	2147.1	2173.8
10°	2192.4	2192.4	2192.4	2197.7	2179.1	2173.8	2171.0	2197.7
12.5°	2200.4	2200.4	2197.7	2208.4	2184.4	2184.4	2179.1	2205.7
15°	2189.7	2189.7	2189.7	2197.7	2176.4	2171.0	2171.0	2192.4
17.5°	2163.1	2163.1	2160.4	2168.4	2144.4	2144.4	2141.8	2165.7
20°	2123.0	2123.0	2117.7	2128.4	2104.4	2096.4	2093.7	2117.7
22.5°	2059.1	2056.3	2053.7	2059.1	2037.7	2032.4	2029.7	2051.0
25°	1976.4	1973.7	1968.4	1973.7	1949.7	1941.6	1941.6	1957.6
27.5°	1859.0	1859.0	1851.0	1859.0	1832.3	1829.7	1826.9	1845.7
30°	1715.0	1704.3	1699.0	1709.6	1683.0	1683.0	1677.6	1696.3
32.5°	1536.3	1525.6	1522.9	1528.2	1504.3	1496.3	1506.9	1517.6
35°	1331.0	1333.6	1322.9	1322.9	1301.6	1304.2	1306.9	1322.9
37.5°	1133.6	1128.2	1125.5	1128.2	1112.2	1106.9	1101.6	1117.6
40°	949.5	936.2	933.5	933.5	920.2	917.6	920.2	928.2
42.5°	776.1	773.5	762.8	768.1	754.8	760.1	757.5	757.5
45°	626.8	629.4	618.7	626.8	616.1	608.1	608.1	613.4
47.5°	496.1	496.1	493.4	493.4	485.4	488.1	482.7	490.8
50°	384.0	384.0	378.7	381.4	376.1	376.1	373.4	376.1
52.5°	293.4	290.8	290.8	288.0	282.7	285.4	288.0	282.7
55°	213.4	216.0	210.7	213.4	208.1	210.7	208.1	210.7
57.5°	146.7	149.4	144.1	149.4	144.1	146.7	144.1	144.1
60°	101.3	101.3	98.7	101.3	98.7	98.7	96.0	101.3
62.5°	69.3	69.3	69.3	69.3	69.3	66.7	69.3	69.3
65°	50.7	48.0	48.0	48.0	48.0	48.0	48.0	48.0
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°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
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)