

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: P857786

Luminaire Tested: **LX4C35D010 EX4C359040 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857786
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: LX4C35D010 EX4C359040 4LBSWNH
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

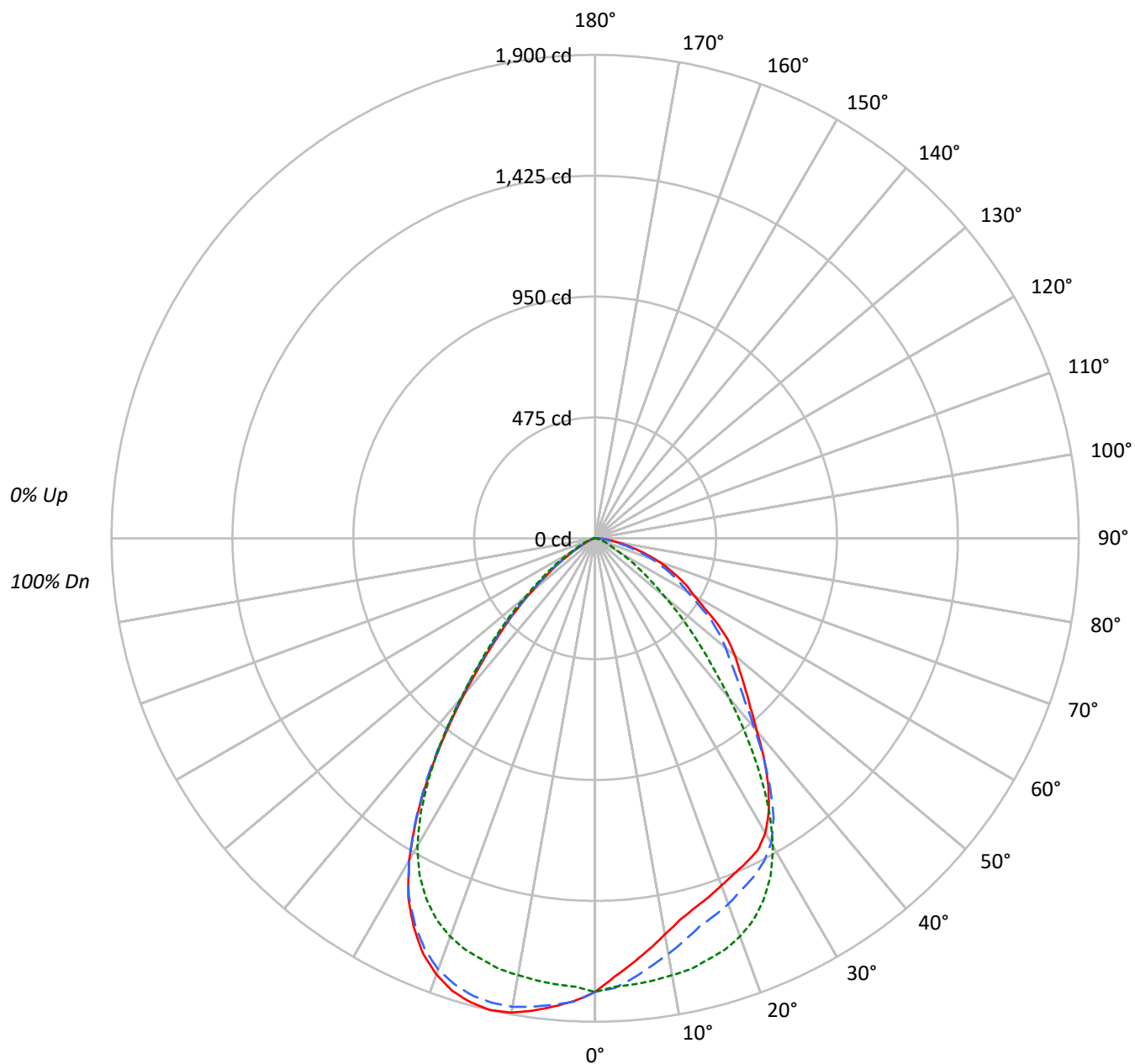
Lumens per Lamp: N/A
Luminaire Lumens: 3125.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	108	104	101	109	106	103	100		101	99	97			98	96	94			94
2	104	97	92	87	101	95	90	86		92	88	84			89	85	82			86
3	96	88	81	76	94	86	80	75		83	78	74			81	76	73			78
4	90	80	72	67	88	78	72	66		76	70	66			74	69	65			72
5	83	73	65	60	82	72	65	59		70	63	59			68	62	58			66
6	78	67	59	53	76	66	59	53		64	58	53			62	57	52			61
7	73	61	54	48	71	61	53	48		59	53	48			58	52	48			56
8	68	57	49	44	67	56	49	44		55	48	44			54	48	43			52
9	64	52	45	40	63	52	45	40		51	44	40			50	44	40			49
10	61	49	42	37	59	48	42	37		47	41	37			47	41	37			46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	219023	219023	219023
5°	206812	217023	227789
10°	197178	217524	236149
15°	191391	217986	240180
20°	189818	217757	238479
25°	190589	212386	228571
30°	189680	198149	207270
35°	177782	169188	170898
40°	158417	131170	128219
45°	144883	97799	91805
50°	136999	68500	61906
55°	125986	46265	38875
60°	110052	27077	21450
65°	104185	17355	12006
70°	94901	12392	7435
75°	78510	8734	5459
80°	61763	4882	3254
85°	55115	3242	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	5.4
10°-20°	483.2	15.5
20°-30°	716.3	22.9
30°-40°	717.3	23.0
40°-50°	501.3	16.0
50°-60°	298.3	9.5
60°-70°	155.7	5.0
70°-80°	69.2	2.2
80°-90°	15.1	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°	1368.0	43.8
0°-40°	2085.3	66.7
0°-60°	2885.0	92.3
0°-90°	3125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3125.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1783	1783	1783	1783	1783	
5°	1677	1734	1760	1840	1847	157
15°	1505	1581	1714	1861	1888	426
25°	1406	1470	1567	1675	1686	648
35°	1185	1199	1128	1149	1140	735
45°	834	793	563	544	528	647
55°	588	551	216	188	182	522
65°	358	328	60	44	41	355
75°	165	145	18	12	12	179
85°	39	30	2	2	0	44
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°	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8
2.5°	1725.3	1746.0	1725.3	1732.2	1759.8	1734.5	1748.3	1748.3	1741.4	1757.5	1769.0
5°	1677.0	1697.8	1677.0	1686.2	1716.1	1690.8	1706.9	1702.3	1704.7	1718.5	1734.5
7.5°	1628.9	1644.9	1626.5	1638.0	1665.6	1644.9	1658.7	1658.7	1661.0	1681.6	1695.5
10°	1580.6	1594.4	1580.6	1589.8	1619.7	1601.3	1610.5	1612.7	1619.7	1638.0	1658.7
12.5°	1536.9	1548.4	1534.7	1548.4	1573.7	1555.3	1566.8	1569.1	1576.0	1596.7	1619.7
15°	1504.8	1516.3	1502.5	1513.9	1536.9	1523.1	1532.3	1536.9	1541.5	1559.9	1580.6
17.5°	1479.5	1488.7	1477.2	1491.0	1509.4	1493.3	1507.1	1507.1	1513.9	1532.3	1555.3
20°	1451.9	1461.1	1451.9	1463.4	1484.1	1470.4	1481.8	1481.8	1488.7	1509.4	1530.1
22.5°	1426.7	1431.3	1426.7	1435.9	1456.5	1445.1	1451.9	1454.2	1461.1	1479.5	1497.9
25°	1406.0	1415.2	1410.6	1419.7	1433.5	1422.1	1428.9	1431.3	1438.1	1454.2	1470.4
27.5°	1383.0	1387.6	1383.0	1394.5	1406.0	1396.8	1403.7	1401.4	1406.0	1419.7	1433.5
30°	1337.1	1341.7	1341.7	1348.5	1357.8	1353.2	1360.0	1353.2	1357.8	1369.2	1383.0
32.5°	1270.4	1272.8	1275.0	1282.0	1288.8	1282.0	1286.6	1286.6	1286.6	1295.7	1304.9
35°	1185.4	1190.0	1187.8	1192.4	1199.2	1196.9	1196.9	1194.6	1190.0	1194.6	1199.2
37.5°	1089.0	1082.0	1082.0	1089.0	1093.6	1084.4	1089.0	1084.4	1084.4	1086.6	1086.6
40°	987.8	981.0	987.8	990.2	992.4	987.8	985.6	981.0	974.1	976.4	971.8
42.5°	902.9	898.2	900.6	900.6	902.9	898.2	900.6	891.4	884.4	879.9	873.0
45°	833.9	827.1	833.9	829.3	829.3	827.1	824.7	820.1	811.0	804.1	792.6
47.5°	769.6	769.6	771.9	771.9	771.9	767.3	767.3	758.1	748.9	739.7	723.7
50°	716.8	712.2	721.4	721.4	714.5	712.2	714.5	703.0	696.1	684.6	668.5
52.5°	659.3	659.3	661.6	661.6	659.3	654.7	657.1	647.9	640.9	629.5	613.4
55°	588.2	583.6	590.4	590.4	588.2	585.8	588.2	581.2	574.4	565.2	551.3
57.5°	507.7	505.4	510.0	512.3	507.7	507.7	510.0	503.1	500.8	491.6	477.8
60°	447.9	445.7	450.3	452.6	447.9	447.9	447.9	438.8	434.2	425.0	415.8
62.5°	406.6	404.4	408.9	406.6	404.4	402.0	404.4	395.2	390.6	381.4	372.2
65°	358.4	360.7	363.0	363.0	360.7	358.4	358.4	353.8	349.2	340.1	328.5
67.5°	312.4	312.4	314.7	317.0	314.7	314.7	314.7	307.8	303.2	296.4	282.6
70°	264.2	261.9	268.8	268.8	264.2	266.5	264.2	261.9	257.3	248.1	236.7
72.5°	213.6	213.6	216.0	216.0	213.6	213.6	213.6	211.4	204.4	199.8	188.4
75°	165.4	165.4	167.7	170.0	165.4	165.4	167.7	163.1	158.5	151.7	144.7
77.5°	124.1	121.8	124.1	124.1	121.8	121.8	121.8	119.5	117.2	110.2	103.4
80°	87.3	85.0	87.3	87.3	87.3	85.0	85.0	82.7	82.7	78.1	71.2
82.5°	59.7	57.5	59.7	59.7	59.7	57.5	57.5	57.5	55.1	52.9	48.3
85°	39.1	36.7	36.7	39.1	36.7	36.7	36.7	36.7	34.5	32.2	29.9
87.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	16.1	16.1	16.1	13.8
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°	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8
2.5°	1759.8	1755.2	1769.0	1764.4	1766.6	1755.2	1773.6	1764.4	1775.8	1764.4	1787.4
5°	1729.9	1725.3	1746.0	1743.7	1746.0	1736.8	1757.5	1755.2	1769.0	1759.8	1785.0
7.5°	1697.8	1693.2	1716.1	1718.5	1723.1	1713.9	1741.4	1741.4	1755.2	1752.9	1780.4
10°	1661.0	1663.3	1686.2	1690.8	1700.1	1695.5	1720.7	1727.7	1746.0	1743.7	1778.2
12.5°	1626.5	1626.5	1656.4	1665.6	1672.4	1670.2	1700.1	1709.3	1729.9	1734.5	1766.6
15°	1592.1	1594.4	1621.9	1635.7	1644.9	1642.6	1674.8	1686.2	1711.5	1713.9	1752.9
17.5°	1564.5	1562.2	1592.1	1603.6	1617.3	1615.1	1649.5	1663.3	1688.6	1695.5	1732.2
20°	1541.5	1539.3	1566.8	1580.6	1589.8	1587.5	1621.9	1638.0	1661.0	1665.6	1702.3
22.5°	1513.9	1509.4	1536.9	1548.4	1557.6	1555.3	1585.2	1596.7	1619.7	1624.3	1658.7
25°	1481.8	1477.2	1502.5	1509.4	1516.3	1511.7	1536.9	1543.8	1562.2	1566.8	1601.3
27.5°	1445.1	1433.5	1454.2	1454.2	1458.8	1451.9	1470.4	1477.2	1493.3	1493.3	1525.5
30°	1387.6	1371.6	1383.0	1380.8	1383.0	1373.8	1385.3	1387.6	1399.1	1396.8	1419.7
32.5°	1307.2	1284.2	1291.1	1284.2	1277.4	1263.6	1277.4	1272.8	1282.0	1272.8	1293.4
35°	1196.9	1174.0	1171.6	1162.5	1155.6	1144.1	1144.1	1132.6	1134.9	1128.1	1141.8
37.5°	1077.4	1047.6	1043.0	1024.7	1013.1	999.4	999.4	990.2	978.6	974.1	985.6
40°	960.3	928.1	916.7	886.8	875.3	861.5	852.3	840.9	836.3	817.9	827.1
42.5°	859.2	824.7	799.5	767.3	755.8	735.1	721.4	707.6	700.7	680.0	689.2
45°	774.2	732.9	705.3	663.9	647.9	624.9	604.2	588.2	572.0	562.9	558.3
47.5°	703.0	659.3	622.6	576.6	551.3	530.7	503.1	487.0	466.4	454.9	447.9
50°	643.3	595.0	553.7	500.8	475.6	452.6	420.4	395.2	376.8	358.4	353.8
52.5°	590.4	539.9	494.0	434.2	404.4	376.8	342.3	314.7	298.6	278.0	275.7
55°	528.4	484.8	434.2	372.2	342.3	314.7	278.0	250.4	229.7	216.0	211.4
57.5°	461.8	420.4	372.2	310.2	280.3	250.4	216.0	190.7	172.3	160.8	158.5
60°	399.8	360.7	314.7	252.7	222.8	197.6	160.8	135.5	119.5	110.2	105.6
62.5°	353.8	317.0	273.4	216.0	188.4	163.1	128.7	105.6	91.9	82.7	78.1
65°	310.2	273.4	234.3	181.5	158.5	135.5	103.4	82.7	68.9	59.7	55.1
67.5°	264.2	232.1	195.2	151.7	128.7	110.2	82.7	64.3	52.9	45.9	41.3
70°	218.2	188.4	158.5	121.8	105.6	87.3	64.3	50.5	39.1	34.5	29.9
72.5°	172.3	149.3	124.1	94.2	80.4	68.9	50.5	36.7	29.9	25.3	20.7
75°	128.7	112.6	91.9	71.2	59.7	50.5	36.7	27.6	23.0	18.4	16.1
77.5°	91.9	78.1	64.3	48.3	43.7	36.7	25.3	20.7	16.1	11.5	9.2
80°	62.0	55.1	43.7	34.5	27.6	25.3	18.4	13.8	9.2	6.9	6.9
82.5°	41.3	34.5	27.6	20.7	18.4	16.1	11.5	9.2	6.9	4.6	4.6
85°	25.3	20.7	16.1	11.5	11.5	9.2	6.9	4.6	2.3	2.3	2.3
87.5°	11.5	9.2	6.9	4.6	4.6	2.3	2.3	2.3	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°	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8
2.5°	1805.7	1792.0	1782.8	1794.2	1798.8	1792.0	1798.8	1810.3	1821.9	1824.1	1792.0
5°	1808.1	1794.2	1789.6	1803.4	1805.7	1803.4	1810.3	1826.4	1840.2	1844.8	1812.7
7.5°	1808.1	1798.8	1796.5	1812.7	1814.9	1812.7	1824.1	1842.5	1856.3	1865.4	1833.3
10°	1803.4	1798.8	1801.1	1814.9	1819.5	1819.5	1835.6	1856.3	1870.0	1879.2	1847.1
12.5°	1796.5	1796.5	1796.5	1812.7	1817.3	1819.5	1833.3	1860.8	1870.0	1883.8	1851.7
15°	1785.0	1785.0	1785.0	1801.1	1808.1	1808.1	1824.1	1849.4	1860.8	1874.6	1842.5
17.5°	1764.4	1764.4	1766.6	1780.4	1787.4	1787.4	1803.4	1831.0	1837.9	1854.0	1821.9
20°	1734.5	1734.5	1736.8	1750.6	1757.5	1752.9	1773.6	1796.5	1803.4	1817.3	1785.0
22.5°	1690.8	1690.8	1690.8	1704.7	1709.3	1706.9	1727.7	1748.3	1748.3	1766.6	1732.2
25°	1626.5	1631.1	1626.5	1640.3	1644.9	1642.6	1661.0	1679.4	1674.8	1695.5	1661.0
27.5°	1548.4	1546.1	1546.1	1557.6	1557.6	1555.3	1569.1	1589.8	1585.2	1599.0	1566.8
30°	1440.5	1447.3	1435.9	1451.9	1445.1	1440.5	1449.6	1468.0	1461.1	1472.6	1447.3
32.5°	1316.4	1307.2	1307.2	1307.2	1311.8	1300.3	1309.5	1318.7	1311.8	1323.3	1295.7
35°	1153.3	1155.6	1148.7	1151.0	1153.3	1139.5	1148.7	1157.9	1148.7	1155.6	1130.3
37.5°	990.2	992.4	976.4	985.6	976.4	971.8	981.0	985.6	976.4	983.2	955.7
40°	827.1	822.5	820.1	820.1	822.5	811.0	817.9	824.7	817.9	822.5	797.2
42.5°	684.6	682.4	677.8	680.0	673.1	670.8	673.1	680.0	673.1	677.8	659.3
45°	560.5	555.9	549.1	551.3	551.3	539.9	546.7	551.3	544.5	546.7	530.7
47.5°	445.7	438.8	438.8	436.5	436.5	431.9	438.8	436.5	429.6	434.2	418.1
50°	346.9	342.3	342.3	342.3	342.3	335.4	337.7	342.3	335.4	335.4	326.2
52.5°	271.1	264.2	259.6	259.6	259.6	257.3	257.3	259.6	252.7	252.7	250.4
55°	204.4	202.2	195.2	195.2	195.2	188.4	190.7	190.7	188.4	188.4	181.5
57.5°	151.7	144.7	140.1	140.1	135.5	135.5	133.3	135.5	130.9	130.9	126.3
60°	101.0	96.5	94.2	91.9	91.9	89.6	91.9	89.6	89.6	87.3	85.0
62.5°	73.5	68.9	64.3	64.3	64.3	62.0	62.0	62.0	62.0	62.0	59.7
65°	52.9	48.3	48.3	45.9	45.9	43.7	43.7	43.7	43.7	43.7	41.3
67.5°	36.7	34.5	32.2	32.2	32.2	32.2	32.2	32.2	29.9	29.9	29.9
70°	27.6	25.3	23.0	23.0	23.0	23.0	23.0	20.7	23.0	23.0	20.7
72.5°	18.4	18.4	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
75°	13.8	13.8	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
77.5°	9.2	9.2	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
80°	6.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	4.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	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: P857786

CATALOG NUMBER: LX4C35D010 EX4C359040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8	1782.8
2.5°	1826.4	1824.1	1819.5	1826.4	1808.1	1801.1	1798.8	1819.5
5°	1851.7	1847.1	1847.1	1854.0	1833.3	1828.7	1824.1	1847.1
7.5°	1874.6	1870.0	1870.0	1877.0	1858.6	1854.0	1849.4	1872.4
10°	1888.4	1888.4	1888.4	1893.0	1877.0	1872.4	1870.0	1893.0
12.5°	1895.3	1895.3	1893.0	1902.2	1881.6	1881.6	1877.0	1899.9
15°	1886.2	1886.2	1886.2	1893.0	1874.6	1870.0	1870.0	1888.4
17.5°	1863.2	1863.2	1860.8	1867.8	1847.1	1847.1	1844.8	1865.4
20°	1828.7	1828.7	1824.1	1833.3	1812.7	1805.7	1803.4	1824.1
22.5°	1773.6	1771.2	1769.0	1773.6	1755.2	1750.6	1748.3	1766.6
25°	1702.3	1700.1	1695.5	1700.1	1679.4	1672.4	1672.4	1686.2
27.5°	1601.3	1601.3	1594.4	1601.3	1578.2	1576.0	1573.7	1589.8
30°	1477.2	1468.0	1463.4	1472.6	1449.6	1449.6	1445.1	1461.1
32.5°	1323.3	1314.1	1311.8	1316.4	1295.7	1288.8	1298.0	1307.2
35°	1146.4	1148.7	1139.5	1139.5	1121.1	1123.4	1125.7	1139.5
37.5°	976.4	971.8	969.5	971.8	958.0	953.4	948.8	962.6
40°	817.9	806.4	804.1	804.1	792.6	790.3	792.6	799.5
42.5°	668.5	666.2	657.1	661.6	650.1	654.7	652.5	652.5
45°	539.9	542.1	533.0	539.9	530.7	523.8	523.8	528.4
47.5°	427.3	427.3	425.0	425.0	418.1	420.4	415.8	422.7
50°	330.8	330.8	326.2	328.5	323.9	323.9	321.6	323.9
52.5°	252.7	250.4	250.4	248.1	243.5	245.9	248.1	243.5
55°	183.8	186.1	181.5	183.8	179.2	181.5	179.2	181.5
57.5°	126.3	128.7	124.1	128.7	124.1	126.3	124.1	124.1
60°	87.3	87.3	85.0	87.3	85.0	85.0	82.7	87.3
62.5°	59.7	59.7	59.7	59.7	59.7	57.5	59.7	59.7
65°	43.7	41.3	41.3	41.3	41.3	41.3	41.3	41.3
67.5°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
70°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
72.5°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
75°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
77.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	2.3	2.3	2.3	0.0	2.3	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)