

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: P857723

Luminaire Tested: **LX4C35D010 EX4C359027 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857723
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 EX4C359027 4LBSWNH
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

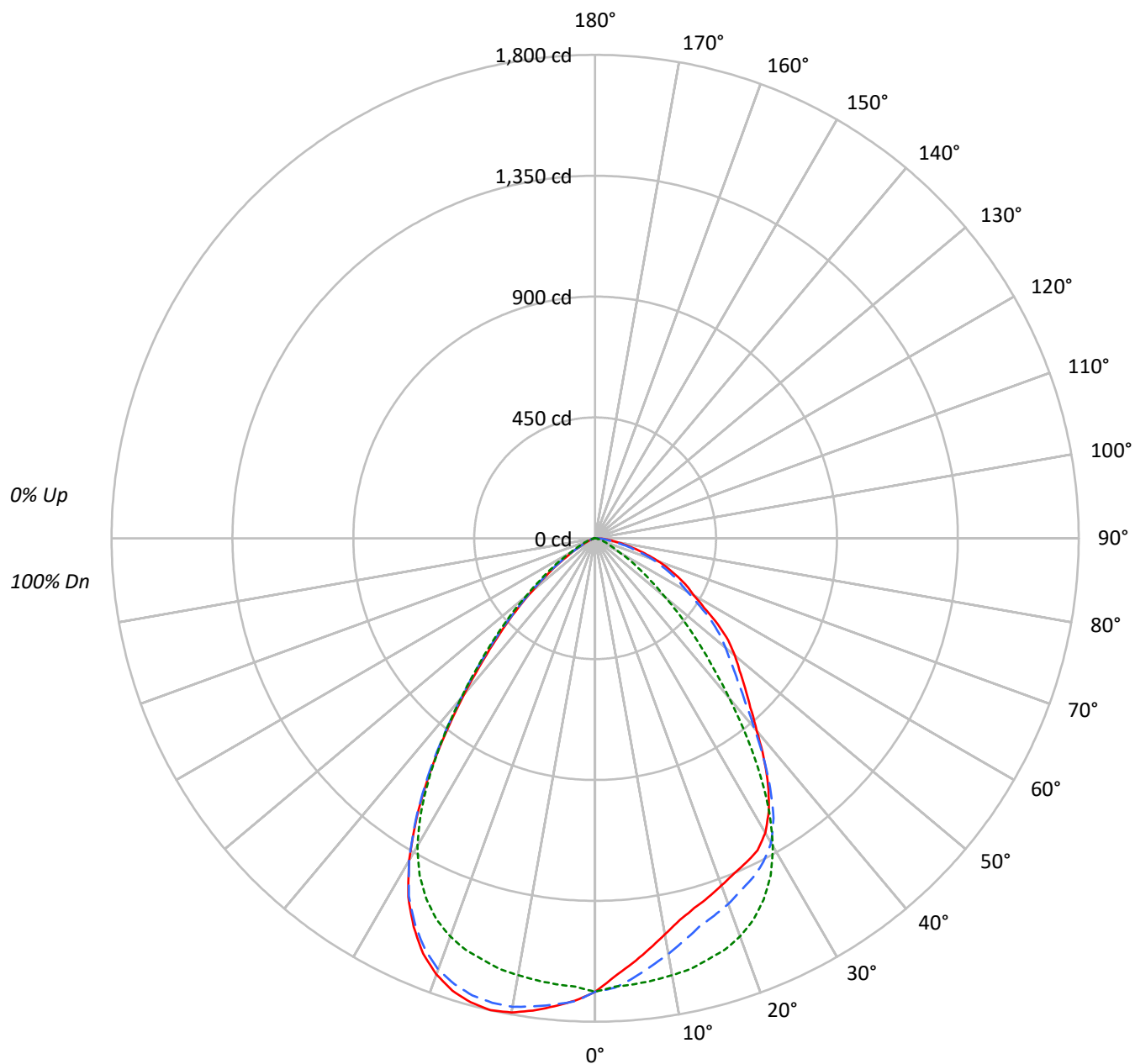
Lumens per Lamp: N/A
Luminaire Lumens: 2960.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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°	207450	207450	207450
5°	195898	205567	215753
10°	186761	206035	223674
15°	181280	206476	227500
20°	179791	206265	225889
25°	180517	201175	216507
30°	179664	187679	196319
35°	168394	160250	161870
40°	150062	124242	121451
45°	137238	92621	86957
50°	129755	64887	58637
55°	119324	43823	36819
60°	104253	25652	20320
65°	98691	16453	11395
70°	89908	11746	7040
75°	74381	8259	5174
80°	58509	4669	3113
85°	52155	3101	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	5.4
10°-20°	457.7	15.5
20°-30°	678.5	22.9
30°-40°	679.4	23.0
40°-50°	474.9	16.0
50°-60°	282.6	9.5
60°-70°	147.5	5.0
70°-80°	65.6	2.2
80°-90°	14.3	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°	1295.8	43.8
0°-40°	1975.2	66.7
0°-60°	2732.7	92.3
0°-90°	2960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2960.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1689	1689	1689	1689	1689	
5°	1588	1643	1667	1743	1750	149
15°	1425	1497	1623	1763	1789	404
25°	1332	1393	1484	1586	1597	614
35°	1123	1136	1068	1088	1079	696
45°	790	751	533	516	500	613
55°	557	522	205	178	172	494
65°	340	311	57	41	39	336
75°	157	137	17	11	11	169
85°	37	28	2	2	0	41
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°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1634.2	1653.8	1634.2	1640.8	1666.9	1642.9	1656.0	1656.0	1649.5	1664.7	1675.6
5°	1588.5	1608.1	1588.5	1597.2	1625.5	1601.5	1616.8	1612.5	1614.7	1627.7	1642.9
7.5°	1542.9	1558.0	1540.6	1551.6	1577.7	1558.0	1571.1	1571.1	1573.3	1592.8	1606.0
10°	1497.1	1510.2	1497.1	1505.8	1534.2	1516.8	1525.5	1527.6	1534.2	1551.6	1571.1
12.5°	1455.8	1466.7	1453.6	1466.7	1490.6	1473.2	1484.1	1486.2	1492.8	1512.4	1534.2
15°	1425.3	1436.2	1423.2	1434.0	1455.8	1442.7	1451.4	1455.8	1460.1	1477.5	1497.1
17.5°	1401.4	1410.1	1399.2	1412.3	1429.7	1414.5	1427.5	1427.5	1434.0	1451.4	1473.2
20°	1375.2	1383.9	1375.2	1386.2	1405.8	1392.7	1403.6	1403.6	1410.1	1429.7	1449.3
22.5°	1351.4	1355.7	1351.4	1360.1	1379.6	1368.8	1375.2	1377.5	1383.9	1401.4	1418.8
25°	1331.7	1340.4	1336.1	1344.8	1357.8	1347.0	1353.5	1355.7	1362.2	1377.5	1392.7
27.5°	1310.0	1314.3	1310.0	1320.9	1331.7	1323.0	1329.6	1327.4	1331.7	1344.8	1357.8
30°	1266.5	1270.8	1270.8	1277.3	1286.1	1281.7	1288.2	1281.7	1286.1	1296.9	1310.0
32.5°	1203.4	1205.6	1207.7	1214.3	1220.8	1214.3	1218.6	1218.6	1218.6	1227.3	1236.0
35°	1122.8	1127.2	1125.0	1129.4	1135.9	1133.7	1133.7	1131.5	1127.2	1131.5	1135.9
37.5°	1031.5	1024.9	1024.9	1031.5	1035.8	1027.1	1031.5	1027.1	1027.1	1029.3	1029.3
40°	935.7	929.2	935.7	937.9	940.0	935.7	933.5	929.2	922.6	924.8	920.5
42.5°	855.2	850.8	853.0	853.0	855.2	850.8	853.0	844.3	837.7	833.4	826.9
45°	789.9	783.4	789.9	785.5	785.5	783.4	781.2	776.8	768.1	761.7	750.7
47.5°	729.0	729.0	731.1	731.1	731.1	726.8	726.8	718.1	709.4	700.7	685.5
50°	678.9	674.6	683.3	683.3	676.8	674.6	676.8	665.9	659.4	648.5	633.2
52.5°	624.5	624.5	626.7	626.7	624.5	620.1	622.4	613.7	607.1	596.3	581.0
55°	557.1	552.8	559.2	559.2	557.1	554.9	557.1	550.5	544.1	535.4	522.2
57.5°	480.9	478.7	483.1	485.3	480.9	480.9	483.1	476.6	474.4	465.7	452.6
60°	424.3	422.2	426.5	428.7	424.3	424.3	424.3	415.6	411.2	402.5	393.8
62.5°	385.1	383.0	387.4	385.1	383.0	380.8	383.0	374.3	370.0	361.3	352.6
65°	339.5	341.6	343.9	343.9	341.6	339.5	339.5	335.2	330.8	322.1	311.2
67.5°	295.9	295.9	298.1	300.3	298.1	298.1	298.1	291.6	287.2	280.7	267.7
70°	250.3	248.1	254.6	254.6	250.3	252.4	250.3	248.1	243.7	235.0	224.2
72.5°	202.3	202.3	204.6	204.6	202.3	202.3	202.3	200.2	193.6	189.3	178.5
75°	156.7	156.7	158.8	161.0	156.7	156.7	158.8	154.5	150.1	143.6	137.1
77.5°	117.5	115.3	117.5	117.5	115.3	115.3	115.3	113.2	111.0	104.4	97.9
80°	82.7	80.5	82.7	82.7	82.7	80.5	80.5	78.3	78.3	74.0	67.5
82.5°	56.6	54.4	56.6	56.6	56.6	54.4	54.4	54.4	52.2	50.1	45.7
85°	37.0	34.8	34.8	37.0	34.8	34.8	34.8	34.8	32.7	30.5	28.3
87.5°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	15.3	15.3	15.3	13.1
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°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1666.9	1662.5	1675.6	1671.2	1673.4	1662.5	1679.9	1671.2	1682.1	1671.2	1693.0
5°	1638.6	1634.2	1653.8	1651.6	1653.8	1645.1	1664.7	1662.5	1675.6	1666.9	1690.8
7.5°	1608.1	1603.8	1625.5	1627.7	1632.1	1623.4	1649.5	1649.5	1662.5	1660.3	1686.4
10°	1573.3	1575.4	1597.2	1601.5	1610.3	1606.0	1629.9	1636.4	1653.8	1651.6	1684.3
12.5°	1540.6	1540.6	1569.0	1577.7	1584.1	1582.0	1610.3	1619.0	1638.6	1642.9	1673.4
15°	1508.1	1510.2	1536.3	1549.3	1558.0	1555.9	1586.4	1597.2	1621.2	1623.4	1660.3
17.5°	1481.9	1479.7	1508.1	1518.9	1531.9	1529.8	1562.4	1575.4	1599.4	1606.0	1640.8
20°	1460.1	1458.0	1484.1	1497.1	1505.8	1503.7	1536.3	1551.6	1573.3	1577.7	1612.5
22.5°	1434.0	1429.7	1455.8	1466.7	1475.4	1473.2	1501.5	1512.4	1534.2	1538.5	1571.1
25°	1403.6	1399.2	1423.2	1429.7	1436.2	1431.9	1455.8	1462.3	1479.7	1484.1	1516.8
27.5°	1368.8	1357.8	1377.5	1377.5	1381.8	1375.2	1392.7	1399.2	1414.5	1414.5	1444.9
30°	1314.3	1299.1	1310.0	1307.8	1310.0	1301.3	1312.2	1314.3	1325.3	1323.0	1344.8
32.5°	1238.2	1216.4	1223.0	1216.4	1209.9	1196.9	1209.9	1205.6	1214.3	1205.6	1225.1
35°	1133.7	1112.0	1109.8	1101.1	1094.6	1083.7	1083.7	1072.8	1075.0	1068.5	1081.5
37.5°	1020.6	992.3	988.0	970.6	959.6	946.6	946.6	937.9	927.0	922.6	933.5
40°	909.6	879.1	868.3	840.0	829.0	816.0	807.3	796.5	792.1	774.7	783.4
42.5°	813.9	781.2	757.3	726.8	715.9	696.3	683.3	670.2	663.7	644.1	652.8
45°	733.3	694.2	668.1	628.8	613.7	591.9	572.3	557.1	541.8	533.1	528.8
47.5°	665.9	624.5	589.7	546.2	522.2	502.7	476.6	461.3	441.8	430.9	424.3
50°	609.3	563.6	524.4	474.4	450.5	428.7	398.2	374.3	356.9	339.5	335.2
52.5°	559.2	511.4	467.9	411.2	383.0	356.9	324.2	298.1	282.9	263.3	261.1
55°	500.5	459.2	411.2	352.6	324.2	298.1	263.3	237.2	217.6	204.6	200.2
57.5°	437.4	398.2	352.6	293.8	265.5	237.2	204.6	180.6	163.2	152.3	150.1
60°	378.7	341.6	298.1	239.4	211.0	187.2	152.3	128.4	113.2	104.4	100.1
62.5°	335.2	300.3	259.0	204.6	178.5	154.5	121.9	100.1	87.0	78.3	74.0
65°	293.8	259.0	222.0	171.9	150.1	128.4	97.9	78.3	65.3	56.6	52.2
67.5°	250.3	219.8	184.9	143.6	121.9	104.4	78.3	60.9	50.1	43.5	39.2
70°	206.7	178.5	150.1	115.3	100.1	82.7	60.9	47.9	37.0	32.7	28.3
72.5°	163.2	141.4	117.5	89.2	76.2	65.3	47.9	34.8	28.3	24.0	19.6
75°	121.9	106.6	87.0	67.5	56.6	47.9	34.8	26.1	21.8	17.4	15.3
77.5°	87.0	74.0	60.9	45.7	41.4	34.8	24.0	19.6	15.3	10.9	8.7
80°	58.8	52.2	41.4	32.7	26.1	24.0	17.4	13.1	8.7	6.6	6.6
82.5°	39.2	32.7	26.1	19.6	17.4	15.3	10.9	8.7	6.6	4.4	4.4
85°	24.0	19.6	15.3	10.9	10.9	8.7	6.6	4.4	2.2	2.2	2.2
87.5°	10.9	8.7	6.6	4.4	4.4	2.2	2.2	2.2	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°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1710.4	1697.3	1688.6	1699.5	1703.8	1697.3	1703.8	1714.7	1725.7	1727.8	1697.3
5°	1712.6	1699.5	1695.1	1708.2	1710.4	1708.2	1714.7	1730.0	1743.1	1747.4	1717.0
7.5°	1712.6	1703.8	1701.7	1717.0	1719.1	1717.0	1727.8	1745.2	1758.2	1766.9	1736.5
10°	1708.2	1703.8	1706.0	1719.1	1723.4	1723.4	1738.7	1758.2	1771.3	1780.0	1749.5
12.5°	1701.7	1701.7	1701.7	1717.0	1721.3	1723.4	1736.5	1762.6	1771.3	1784.3	1753.9
15°	1690.8	1690.8	1690.8	1706.0	1712.6	1712.6	1727.8	1751.8	1762.6	1775.6	1745.2
17.5°	1671.2	1671.2	1673.4	1686.4	1693.0	1693.0	1708.2	1734.4	1740.8	1756.1	1725.7
20°	1642.9	1642.9	1645.1	1658.2	1664.7	1660.3	1679.9	1701.7	1708.2	1721.3	1690.8
22.5°	1601.5	1601.5	1601.5	1614.7	1619.0	1616.8	1636.4	1656.0	1656.0	1673.4	1640.8
25°	1540.6	1545.0	1540.6	1553.7	1558.0	1555.9	1573.3	1590.7	1586.4	1606.0	1573.3
27.5°	1466.7	1464.5	1464.5	1475.4	1475.4	1473.2	1486.2	1505.8	1501.5	1514.5	1484.1
30°	1364.4	1370.9	1360.1	1375.2	1368.8	1364.4	1373.1	1390.5	1383.9	1394.9	1370.9
32.5°	1246.9	1238.2	1238.2	1238.2	1242.5	1231.7	1240.4	1249.1	1242.5	1253.4	1227.3
35°	1092.4	1094.6	1088.0	1090.2	1092.4	1079.3	1088.0	1096.7	1088.0	1094.6	1070.6
37.5°	937.9	940.0	924.8	933.5	924.8	920.5	929.2	933.5	924.8	931.3	905.2
40°	783.4	779.1	776.8	776.8	779.1	768.1	774.7	781.2	774.7	779.1	755.1
42.5°	648.5	646.3	642.0	644.1	637.5	635.4	637.5	644.1	637.5	642.0	624.5
45°	530.9	526.6	520.1	522.2	522.2	511.4	517.9	522.2	515.7	517.9	502.7
47.5°	422.2	415.6	415.6	413.5	413.5	409.1	415.6	413.5	406.9	411.2	396.1
50°	328.6	324.2	324.2	324.2	324.2	317.7	319.9	324.2	317.7	317.7	309.0
52.5°	256.8	250.3	245.9	245.9	245.9	243.7	243.7	245.9	239.4	239.4	237.2
55°	193.6	191.5	184.9	184.9	184.9	178.5	180.6	180.6	178.5	178.5	171.9
57.5°	143.6	137.1	132.7	132.7	128.4	128.4	126.2	128.4	124.0	124.0	119.7
60°	95.7	91.4	89.2	87.0	87.0	84.9	87.0	84.9	84.9	82.7	80.5
62.5°	69.6	65.3	60.9	60.9	60.9	58.8	58.8	58.8	58.8	58.8	56.6
65°	50.1	45.7	45.7	43.5	43.5	41.4	41.4	41.4	41.4	41.4	39.2
67.5°	34.8	32.7	30.5	30.5	30.5	30.5	30.5	30.5	28.3	28.3	28.3
70°	26.1	24.0	21.8	21.8	21.8	21.8	21.8	19.6	21.8	21.8	19.6
72.5°	17.4	17.4	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
75°	13.1	13.1	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
77.5°	8.7	8.7	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	6.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
82.5°	4.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	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: P857723

CATALOG NUMBER: LX4C35D010 EX4C359027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1730.0	1727.8	1723.4	1730.0	1712.6	1706.0	1703.8	1723.4
5°	1753.9	1749.5	1749.5	1756.1	1736.5	1732.1	1727.8	1749.5
7.5°	1775.6	1771.3	1771.3	1777.9	1760.5	1756.1	1751.8	1773.5
10°	1788.7	1788.7	1788.7	1793.0	1777.9	1773.5	1771.3	1793.0
12.5°	1795.3	1795.3	1793.0	1801.7	1782.2	1782.2	1777.9	1799.6
15°	1786.6	1786.6	1786.6	1793.0	1775.6	1771.3	1771.3	1788.7
17.5°	1764.8	1764.8	1762.6	1769.2	1749.5	1749.5	1747.4	1766.9
20°	1732.1	1732.1	1727.8	1736.5	1717.0	1710.4	1708.2	1727.8
22.5°	1679.9	1677.7	1675.6	1679.9	1662.5	1658.2	1656.0	1673.4
25°	1612.5	1610.3	1606.0	1610.3	1590.7	1584.1	1584.1	1597.2
27.5°	1516.8	1516.8	1510.2	1516.8	1494.9	1492.8	1490.6	1505.8
30°	1399.2	1390.5	1386.2	1394.9	1373.1	1373.1	1368.8	1383.9
32.5°	1253.4	1244.7	1242.5	1246.9	1227.3	1220.8	1229.5	1238.2
35°	1085.9	1088.0	1079.3	1079.3	1061.9	1064.1	1066.3	1079.3
37.5°	924.8	920.5	918.3	920.5	907.4	903.1	898.7	911.8
40°	774.7	763.8	761.7	761.7	750.7	748.6	750.7	757.3
42.5°	633.2	631.1	622.4	626.7	615.8	620.1	618.0	618.0
45°	511.4	513.5	504.8	511.4	502.7	496.1	496.1	500.5
47.5°	404.8	404.8	402.5	402.5	396.1	398.2	393.8	400.4
50°	313.3	313.3	309.0	311.2	306.8	306.8	304.6	306.8
52.5°	239.4	237.2	237.2	235.0	230.7	232.9	235.0	230.7
55°	174.1	176.2	171.9	174.1	169.8	171.9	169.8	171.9
57.5°	119.7	121.9	117.5	121.9	117.5	119.7	117.5	117.5
60°	82.7	82.7	80.5	82.7	80.5	80.5	78.3	82.7
62.5°	56.6	56.6	56.6	56.6	56.6	54.4	56.6	56.6
65°	41.4	39.2	39.2	39.2	39.2	39.2	39.2	39.2
67.5°	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3
70°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
72.5°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
75°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
77.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
82.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	0.0	2.2	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)