

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: P858220

Luminaire Tested: **LX4C45D010 EX4C459830 4LBLWWH**

Issue Date: 2/14/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P858220  
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: LX4C45D010 EX4C459830 4LBLWWH  
Description:  
Light Source: -  
Ballast/Driver: -

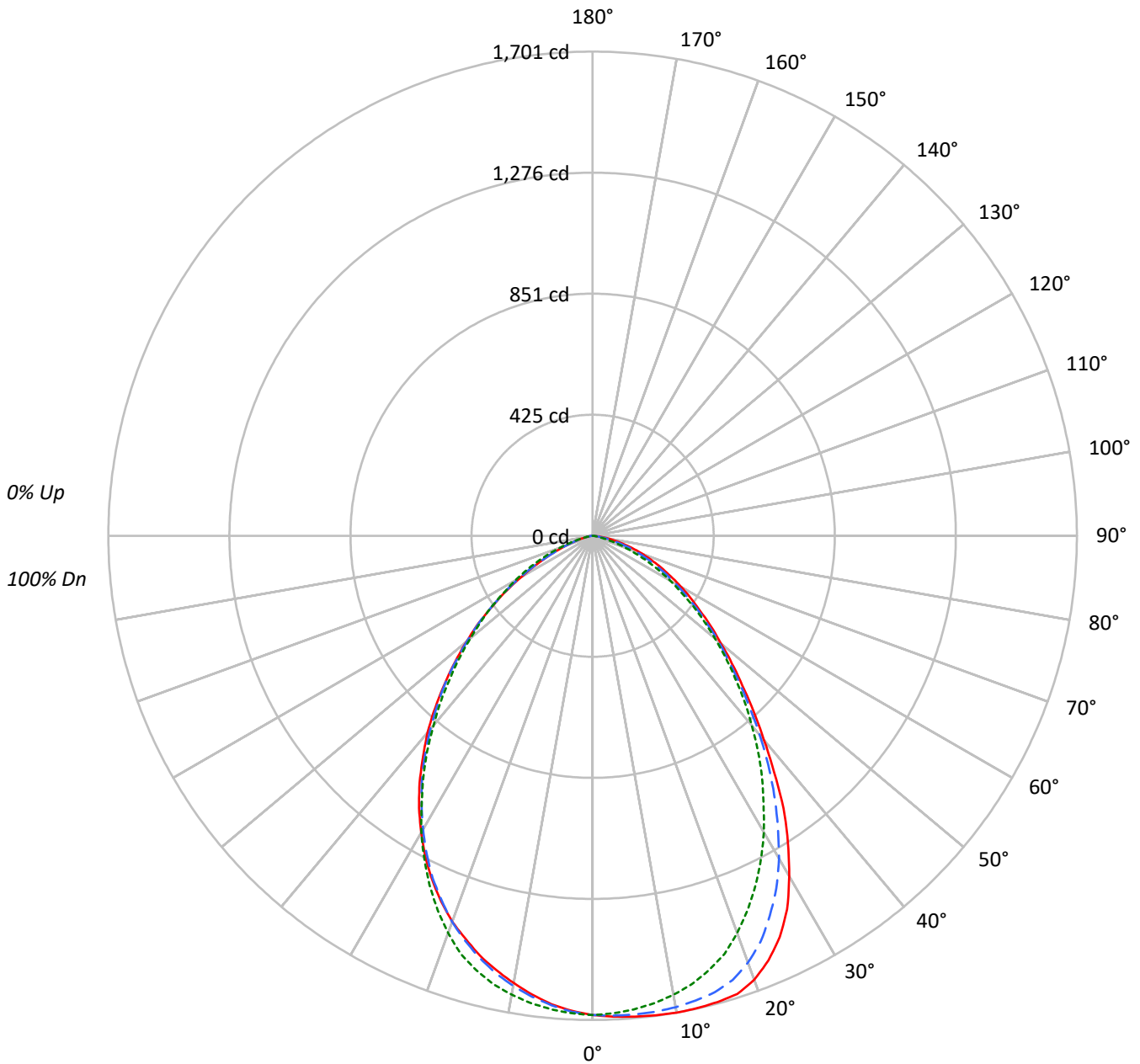
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3172.8 lumens  
Efficiency: N/A  
Efficacy: 64.0 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): 49.6  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68																			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60																			
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39																			
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35																			
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	206836	206836	206836
5°	209143	205949	203717
10°	212210	204214	199037
15°	215697	200956	194291
20°	217051	194120	188524
25°	210840	183621	180815
30°	195936	170671	170770
35°	175382	155586	158885
40°	150158	139461	144561
45°	129263	122974	127578
50°	112363	107050	110280
55°	98891	92101	91266
60°	87988	76833	70788
65°	77180	61540	51192
70°	66272	43499	34663
75°	53780	25205	20268
80°	38487	10966	10117
85°	14519	4511	4511



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.7	5.0
10°-20°	449.1	14.2
20°-30°	641.3	20.2
30°-40°	670.9	21.1
40°-50°	562.2	17.7
50°-60°	393.4	12.4
60°-70°	214.2	6.8
70°-80°	74.4	2.3
80°-90°	8.5	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°	1249.2	39.4
0°-40°	1920.1	60.5
0°-60°	2875.7	90.6
0°-90°	3172.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1684	1684	1684	1684	1684	
5°	1696	1688	1670	1656	1652	162
15°	1696	1660	1580	1535	1528	479
25°	1555	1472	1355	1328	1334	710
35°	1169	1112	1037	1045	1059	725
45°	744	727	708	731	734	579
55°	462	446	430	430	426	417
65°	266	242	212	178	176	264
75°	113	92	53	43	43	122
85°	10	6	3	3	3	19
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°	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6
2.5°	1691.4	1689.4	1690.0	1690.0	1690.0	1689.4	1690.0	1689.4	1689.4	1688.8	1687.4
5°	1695.9	1694.6	1694.6	1694.6	1694.0	1693.3	1693.3	1692.6	1691.4	1690.7	1688.1
7.5°	1699.1	1697.8	1697.8	1697.2	1696.5	1695.9	1695.2	1693.3	1691.4	1690.0	1686.8
10°	1701.1	1699.1	1699.1	1697.8	1696.5	1695.9	1694.6	1692.0	1689.4	1686.2	1681.6
12.5°	1699.7	1697.8	1697.2	1695.9	1693.3	1692.0	1690.7	1687.4	1682.9	1678.4	1672.6
15°	1695.9	1694.6	1693.3	1691.4	1688.1	1686.2	1684.9	1679.7	1673.9	1667.4	1660.2
17.5°	1688.1	1686.2	1683.6	1681.0	1676.5	1674.5	1671.3	1664.8	1656.4	1647.3	1636.3
20°	1660.2	1659.0	1656.4	1651.9	1644.7	1642.1	1637.6	1629.2	1618.2	1607.2	1595.5
22.5°	1614.3	1612.4	1608.4	1604.6	1598.1	1593.5	1589.7	1578.0	1565.7	1554.0	1543.1
25°	1555.4	1553.4	1548.2	1543.1	1536.6	1528.8	1525.0	1515.9	1503.6	1488.7	1472.4
27.5°	1479.6	1473.2	1471.2	1465.4	1455.7	1453.1	1447.2	1435.6	1423.9	1411.0	1397.4
30°	1381.2	1381.2	1377.3	1374.7	1365.6	1363.0	1356.6	1344.3	1337.8	1319.7	1309.3
32.5°	1276.9	1275.6	1272.4	1270.5	1265.3	1260.7	1254.2	1247.8	1233.5	1224.5	1210.3
35°	1169.4	1161.7	1162.9	1159.1	1155.9	1150.6	1150.0	1142.9	1129.9	1124.8	1111.8
37.5°	1047.1	1043.8	1048.3	1042.5	1039.3	1039.9	1034.8	1030.2	1025.1	1016.0	1013.4
40°	936.3	938.9	938.3	933.1	935.7	932.4	927.2	922.7	920.1	914.3	912.3
42.5°	837.3	833.3	832.1	832.1	832.7	832.7	830.1	826.9	826.9	821.0	815.2
45°	744.0	744.0	742.7	746.6	740.8	740.8	738.8	738.2	735.6	734.3	727.2
47.5°	663.7	663.1	662.4	661.8	661.1	661.1	657.2	654.0	653.4	649.5	645.6
50°	587.9	591.8	590.5	587.3	586.1	586.7	584.1	582.1	581.5	575.0	575.6
52.5°	524.5	523.8	525.1	523.2	520.0	520.6	518.0	515.4	512.8	509.6	507.0
55°	461.7	465.0	463.6	461.7	461.0	459.8	457.8	454.5	453.9	446.8	446.1
57.5°	409.2	408.6	407.3	404.0	403.4	401.5	401.5	398.9	395.0	391.1	387.9
60°	358.1	358.1	356.2	355.5	352.9	352.2	351.6	349.0	344.5	341.3	336.1
62.5°	308.9	310.1	308.9	306.9	305.0	302.4	301.1	299.2	295.3	292.0	287.5
65°	265.5	264.8	264.2	261.6	260.9	258.3	257.7	253.8	250.0	247.4	242.2
67.5°	224.0	222.1	222.1	220.8	219.5	217.6	216.2	212.4	207.9	205.3	200.1
70°	184.5	183.3	183.3	183.3	180.0	178.1	177.5	175.5	169.0	166.4	161.2
72.5°	148.3	147.7	147.0	145.1	143.1	143.1	140.5	136.6	133.4	130.2	126.3
75°	113.3	114.6	113.3	110.8	110.0	108.8	106.8	103.6	100.4	96.5	91.9
77.5°	82.8	81.6	80.3	80.3	79.0	76.4	75.8	73.2	69.3	66.7	62.2
80°	54.4	53.8	52.4	51.2	50.5	49.8	49.2	46.6	42.7	40.8	36.9
82.5°	29.8	29.2	29.2	28.5	26.6	26.6	25.9	23.3	21.4	20.1	18.1
85°	10.3	10.3	10.3	9.7	9.7	9.7	9.1	8.4	7.8	7.1	5.8
87.5°	1.3	0.6	1.3	0.6	1.3	0.6	0.6	0.6	0.6	0.6	0.6
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°	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6
2.5°	1686.2	1684.9	1684.2	1683.6	1682.9	1682.3	1681.6	1680.3	1679.7	1679.1	1677.7
5°	1686.2	1683.6	1682.3	1680.3	1679.1	1677.7	1675.8	1673.9	1671.9	1670.0	1668.0
7.5°	1683.6	1679.7	1677.1	1673.2	1671.9	1670.0	1666.1	1663.5	1660.2	1656.4	1651.9
10°	1677.1	1672.6	1667.4	1662.2	1660.2	1657.0	1651.9	1647.3	1642.1	1637.0	1632.4
12.5°	1666.8	1659.6	1653.1	1646.0	1642.1	1638.9	1631.8	1625.3	1618.8	1613.0	1605.2
15°	1651.2	1642.8	1634.4	1624.7	1620.1	1616.2	1605.8	1598.1	1587.7	1580.0	1572.2
17.5°	1625.9	1613.0	1602.6	1590.3	1583.8	1579.4	1570.3	1558.0	1548.2	1539.9	1530.8
20°	1582.6	1570.3	1556.0	1542.4	1535.3	1529.4	1516.5	1503.6	1493.8	1484.8	1475.0
22.5°	1525.6	1510.1	1499.6	1482.9	1477.0	1469.9	1454.3	1442.7	1431.7	1422.6	1413.6
25°	1456.3	1442.7	1428.5	1412.9	1405.7	1397.4	1384.4	1372.1	1365.0	1354.6	1343.6
27.5°	1376.7	1365.6	1348.1	1334.6	1327.4	1320.9	1308.6	1297.7	1287.3	1280.2	1269.8
30°	1292.5	1279.6	1264.0	1249.7	1245.9	1238.1	1227.0	1218.7	1207.6	1203.1	1198.6
32.5°	1199.8	1184.9	1173.4	1164.3	1156.5	1150.0	1144.2	1130.6	1128.7	1117.0	1115.7
35°	1098.9	1092.4	1081.4	1073.6	1067.1	1062.6	1052.9	1046.4	1039.3	1037.4	1032.8
37.5°	1003.7	995.9	985.6	978.4	973.9	973.2	966.1	962.2	957.0	954.4	949.3
40°	904.0	900.7	891.7	890.3	883.3	882.6	878.7	874.2	869.6	869.6	870.3
42.5°	812.0	808.1	804.3	799.7	795.8	795.8	793.8	792.6	791.2	789.4	792.6
45°	725.9	720.7	718.1	713.6	715.5	711.6	710.4	710.4	708.4	707.8	712.3
47.5°	645.6	639.7	637.1	635.9	635.9	636.5	630.7	632.6	632.0	633.3	635.2
50°	572.4	567.2	563.3	563.3	564.0	561.4	558.9	560.7	558.9	560.1	564.7
52.5°	504.5	499.3	497.3	497.3	493.4	492.8	494.0	491.4	492.2	492.8	495.4
55°	441.6	438.4	435.2	431.9	432.6	431.2	428.7	428.0	429.3	430.0	433.2
57.5°	385.3	380.8	376.2	374.9	373.6	373.6	370.4	369.7	371.1	367.8	367.8
60°	331.5	329.0	323.1	321.2	321.2	317.9	315.3	316.7	313.4	312.7	313.4
62.5°	281.7	279.7	275.8	272.0	270.6	269.4	266.1	264.8	263.5	260.9	257.1
65°	238.3	233.7	229.3	226.6	224.7	221.4	219.5	217.0	213.0	211.7	207.9
67.5°	194.9	190.4	185.8	183.9	181.9	180.0	176.7	173.5	169.0	163.8	159.3
70°	156.7	150.9	148.3	143.1	141.8	139.2	134.7	131.4	126.9	121.1	116.6
72.5°	119.8	115.9	112.0	107.5	104.2	102.3	98.4	93.3	88.1	84.8	80.3
75°	86.1	84.2	79.0	73.8	72.5	69.9	65.4	62.2	58.3	53.1	49.2
77.5°	58.3	54.4	51.2	46.6	45.3	42.7	40.1	36.9	34.3	31.1	28.5
80°	34.3	31.1	29.2	25.9	24.6	23.3	21.4	18.8	16.9	15.5	14.9
82.5°	16.9	14.3	13.6	11.7	11.0	10.3	9.1	8.4	7.1	7.1	7.1
85°	5.8	4.5	4.5	3.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3	0.6
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°	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6
2.5°	1677.1	1676.5	1675.8	1675.1	1675.1	1674.5	1674.5	1673.9	1673.9	1673.2	1673.2
5°	1665.4	1663.5	1662.2	1660.9	1660.9	1659.0	1657.7	1656.4	1655.7	1655.7	1654.4
7.5°	1649.3	1646.7	1644.1	1642.1	1641.5	1638.2	1635.6	1635.6	1633.0	1631.8	1630.5
10°	1627.9	1623.3	1619.5	1617.5	1614.9	1613.0	1609.8	1607.8	1605.8	1602.6	1602.0
12.5°	1598.7	1595.5	1589.7	1587.1	1585.8	1582.0	1576.7	1574.1	1573.5	1570.9	1568.9
15°	1565.7	1558.6	1553.4	1550.2	1550.2	1543.7	1541.1	1537.3	1534.6	1532.7	1532.0
17.5°	1523.0	1515.9	1510.7	1506.2	1504.8	1499.6	1495.8	1494.5	1491.3	1492.6	1489.3
20°	1468.0	1462.1	1458.3	1452.4	1452.4	1449.2	1447.8	1444.6	1443.4	1442.0	1443.4
22.5°	1409.0	1401.9	1395.4	1394.8	1394.8	1390.2	1389.6	1389.0	1386.4	1388.3	1387.6
25°	1339.8	1334.6	1330.7	1330.0	1330.0	1327.4	1324.9	1326.1	1328.1	1327.4	1329.4
27.5°	1267.9	1262.7	1261.4	1260.7	1259.4	1258.8	1260.1	1260.1	1262.0	1264.6	1267.3
30°	1190.1	1188.9	1186.9	1186.3	1184.9	1188.2	1189.5	1191.5	1190.8	1194.7	1197.3
32.5°	1112.4	1109.9	1109.2	1110.5	1112.4	1111.8	1115.7	1117.0	1118.2	1122.8	1124.8
35°	1034.1	1033.4	1032.2	1032.2	1032.8	1038.0	1038.0	1042.5	1045.1	1046.4	1051.5
37.5°	949.9	952.6	953.8	955.8	956.4	958.4	959.6	964.2	966.7	969.3	971.9
40°	872.8	871.6	877.4	873.6	874.8	880.6	883.3	882.6	886.5	890.3	892.9
42.5°	790.6	792.6	793.8	795.2	798.4	799.1	802.3	806.8	808.1	812.6	814.0
45°	711.0	711.6	714.2	716.8	718.7	723.9	725.3	727.2	731.0	731.0	733.0
47.5°	635.9	638.5	638.5	642.3	645.6	644.9	649.5	650.8	650.1	653.4	654.6
50°	564.0	567.9	567.2	569.8	571.2	571.8	575.6	577.0	574.4	577.6	578.2
52.5°	495.4	497.3	499.9	500.5	499.3	502.5	501.2	503.7	503.1	505.7	503.1
55°	432.6	431.9	431.9	433.2	431.9	433.2	434.5	431.9	430.0	432.6	431.9
57.5°	369.7	369.7	368.5	370.4	368.5	366.5	365.9	363.9	362.0	362.0	361.3
60°	310.8	309.5	306.9	306.3	306.3	303.0	301.8	299.2	299.2	296.6	294.0
62.5°	255.8	252.5	250.6	250.6	249.3	246.0	240.2	236.3	235.1	231.1	230.5
65°	203.9	200.7	198.8	194.9	191.6	190.4	184.5	180.0	178.1	174.2	174.9
67.5°	156.7	151.5	145.7	143.1	141.2	136.6	134.7	131.4	129.5	129.5	129.5
70°	112.6	108.2	102.3	100.4	99.1	95.1	93.3	92.6	94.5	93.9	94.5
72.5°	75.8	71.3	68.7	67.3	66.1	64.1	65.4	66.1	64.7	65.4	66.1
75°	46.0	44.7	42.7	42.1	42.1	42.7	42.1	42.1	42.7	42.7	43.4
77.5°	26.6	25.2	25.2	24.6	25.9	25.2	25.2	25.2	25.9	25.9	25.9
80°	14.3	14.3	14.3	14.3	14.9	14.3	14.9	14.9	14.9	14.9	14.9
82.5°	7.1	7.1	7.1	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.1
85°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
87.5°	0.6	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6
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: P858220

CATALOG NUMBER: LX4C45D010 EX4C459830 4LBLWWH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6	1683.6
2.5°	1671.9	1671.9	1671.9	1670.6	1671.3	1671.3	1670.6	1670.6
5°	1653.8	1653.1	1651.9	1651.9	1650.5	1651.9	1651.2	1651.9
7.5°	1629.2	1629.2	1627.3	1627.3	1626.6	1625.9	1625.3	1625.9
10°	1600.1	1600.1	1598.7	1598.1	1598.7	1596.1	1596.1	1595.5
12.5°	1567.7	1566.3	1565.1	1565.7	1565.1	1563.1	1562.5	1563.1
15°	1530.1	1528.2	1528.8	1526.8	1526.8	1526.2	1527.6	1527.6
17.5°	1488.7	1487.3	1486.1	1486.7	1485.5	1486.1	1485.5	1484.8
20°	1442.7	1442.0	1442.0	1439.4	1440.1	1439.4	1440.1	1442.0
22.5°	1389.6	1389.0	1389.6	1387.6	1389.0	1389.0	1390.8	1390.8
25°	1331.3	1330.7	1332.0	1332.6	1333.2	1335.2	1333.2	1333.9
27.5°	1266.5	1268.5	1270.5	1271.1	1273.7	1271.7	1270.5	1272.4
30°	1201.2	1201.2	1200.6	1203.1	1205.0	1207.0	1203.8	1203.8
32.5°	1126.1	1129.3	1129.3	1129.9	1131.9	1131.9	1131.9	1134.5
35°	1054.2	1056.1	1056.8	1054.2	1055.5	1054.8	1059.4	1059.4
37.5°	973.9	973.9	974.5	979.0	979.0	977.1	978.4	978.4
40°	897.4	898.2	895.6	896.8	900.0	898.8	900.0	901.4
42.5°	814.0	818.4	815.9	817.2	816.6	817.2	817.8	817.8
45°	734.3	735.6	735.6	736.2	737.6	738.8	735.0	734.3
47.5°	656.6	657.2	659.2	656.0	659.8	656.0	659.8	655.3
50°	578.2	580.8	578.9	580.2	578.2	578.2	577.6	577.0
52.5°	503.7	503.1	503.1	502.5	502.5	503.7	502.5	504.5
55°	429.3	430.0	428.7	428.0	427.4	429.3	427.4	426.1
57.5°	358.7	360.0	357.4	358.7	354.2	356.2	356.8	357.4
60°	293.3	291.4	291.4	288.8	288.8	290.7	288.1	288.1
62.5°	227.3	228.6	226.6	229.3	229.3	231.9	230.5	231.9
65°	174.2	174.9	175.5	175.5	175.5	179.3	178.1	176.1
67.5°	131.4	132.1	132.8	132.1	134.0	132.8	132.8	133.4
70°	95.1	95.9	96.5	96.5	95.9	96.5	96.5	96.5
72.5°	66.1	66.7	66.1	66.7	67.3	66.7	66.7	67.3
75°	43.4	43.4	42.7	42.7	42.7	42.7	43.4	42.7
77.5°	25.2	25.9	25.2	25.9	25.9	25.9	25.9	25.9
80°	14.9	14.9	14.9	14.3	14.9	14.9	14.9	14.3
82.5°	7.8	7.8	7.1	7.1	7.8	7.8	7.8	7.8
85°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)