

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: METALUX

Report Number: P201346

Luminaire Tested: **4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201346
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28235)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U
Description: 4 ft. Low Bay Linear, 8000 lm, Frst Asym lens, 4K
Light Source: (308) 4000K CCT, 80 CRI LEDS
2UT217098A8404C, 2UT217056A8404B
Ballast/Driver: OSRAM
OT50W0900CC, OT30W0500CC

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8647.8 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 2.01 / 1.17 / 1.78
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.17' x H: 0.21')
CIE Type: Semi-Direct

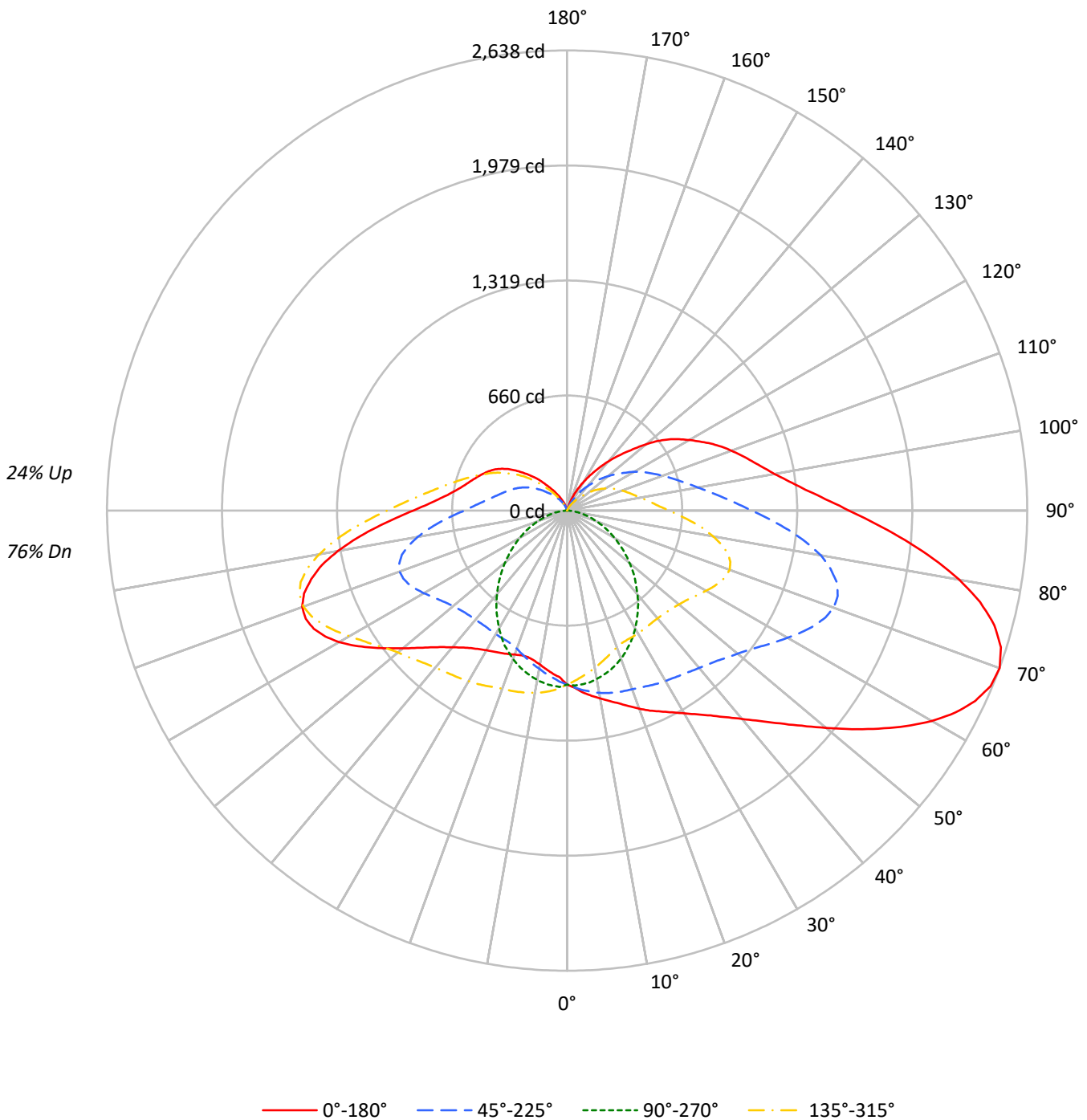
Input Watts (W): 64.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76
1	98	90	84	78	92	86	80	75	77	72	68	69	65	62	61	59	56	52
2	86	75	66	59	81	71	63	56	64	57	51	57	51	46	50	46	42	38
3	77	64	54	46	72	61	51	44	54	46	40	48	42	36	42	37	33	29
4	70	55	45	37	65	52	43	35	47	39	32	41	35	29	37	31	26	23
5	63	49	38	31	59	46	37	29	41	33	27	37	30	24	32	27	22	19
6	58	43	33	26	54	41	32	25	37	29	23	33	26	21	29	23	19	16
7	54	39	29	22	50	37	28	21	33	25	20	29	23	18	26	20	16	14
8	50	35	26	19	47	33	25	19	30	22	17	27	20	16	24	18	14	12
9	46	32	23	17	43	30	22	16	27	20	15	25	18	14	22	17	13	10
10	43	29	21	15	41	28	20	15	25	18	13	23	17	12	20	15	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16069	16069	16069	16069
5°	15271	16105	13686	16216
10°	14662	15893	12027	15990
15°	14306	15602	10876	15668
20°	14260	15204	10365	15237
25°	14288	14696	10127	14765
30°	14516	14086	10005	14086
35°	15067	13381	10111	13381
40°	16031	12621	10513	12601
45°	17507	11901	11243	11816
50°	19550	11017	12396	10969
55°	22038	10170	13842	10118
60°	24631	9286	15400	9286
65°	26814	8380	16653	8414
70°	28111	7358	17222	7400
75°	27951	6293	16740	6345
80°	26267	4930	15354	5145
85°	23595	3119	13310	3467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	1.1
10°-20°	276.2	3.2
20°-30°	445.6	5.2
30°-40°	604.0	7.0
40°-50°	776.1	9.0
50°-60°	992.5	11.5
60°-70°	1212.3	14.0
70°-80°	1237.7	14.3
80°-90°	970.6	11.2
90°-100°	677.4	7.8
100°-110°	504.9	5.8
110°-120°	377.9	4.4
120°-130°	256.3	3.0
130°-140°	141.5	1.6
140°-150°	60.5	0.7
150°-160°	17.8	0.2
160°-170°	1.7	0.0
170°-180°	0.0	0.0
0°-30°	816.5	9.4
0°-40°	1420.5	16.4
0°-60°	3189.0	36.9
0°-90°	6609.7	76.4
90°-120°	1560.3	18.0
90°-150°	2018.6	23.3
90°-180°	2038.0	23.6
0°-180°	8647.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	997	997	997	997	997	
5°	1047	1000	938	1007	1047	101
15°	1144	948	870	952	1144	327
25°	1270	847	900	851	1270	591
35°	1434	705	962	705	1434	907
45°	1725	549	1108	546	1725	1347
55°	2180	389	1369	387	2180	1959
65°	2582	244	1603	245	2582	2544
75°	2536	121	1519	122	2536	2651
85°	1944	27	1097	30	1944	1658
90°	1614	0	882	0	1614	888
95°	1372	0	740	0	1372	1089
105°	1096	0	595	1	1096	1164
115°	908	0	516	1	908	902
125°	712	0	415	1	712	636
135°	470	0	273	1	470	369
145°	273	0	144	1	273	175
155°	121	0	64	2	121	59
165°	17	0	10	2	17	7
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1017.1	1016.7	1016.2	1015.8	1015.3	1014.9	1014.4	1014.0	1013.5	1013.1	1013.4
5°	1047.0	1045.9	1044.8	1043.7	1042.6	1041.5	1040.4	1039.3	1038.2	1037.1	1036.7
7.5°	1071.0	1069.7	1068.3	1067.0	1065.7	1064.3	1063.0	1061.7	1060.3	1059.0	1057.7
10°	1092.9	1090.9	1088.9	1086.9	1084.9	1082.9	1080.9	1078.9	1076.9	1074.9	1073.4
12.5°	1117.8	1115.3	1112.7	1110.2	1107.6	1105.1	1102.5	1100.0	1097.4	1094.9	1092.2
15°	1143.8	1140.9	1138.0	1135.1	1132.2	1129.4	1126.5	1123.6	1120.7	1117.8	1113.5
17.5°	1175.7	1171.7	1167.7	1163.7	1159.7	1155.8	1151.8	1147.8	1143.8	1139.8	1133.7
20°	1208.6	1203.7	1198.8	1194.0	1189.1	1184.2	1179.3	1174.5	1169.6	1164.7	1156.4
22.5°	1241.5	1235.8	1230.2	1224.5	1218.9	1213.2	1207.6	1201.9	1196.3	1190.6	1180.2
25°	1270.4	1264.6	1258.9	1253.1	1247.3	1241.6	1235.8	1230.0	1224.3	1218.5	1206.2
27.5°	1304.3	1297.9	1291.5	1285.0	1278.6	1272.2	1265.8	1259.3	1252.9	1246.5	1232.3
30°	1341.2	1333.8	1326.4	1318.9	1311.5	1304.1	1296.7	1289.2	1281.8	1274.4	1258.1
32.5°	1385.1	1376.3	1367.6	1358.8	1350.1	1341.3	1332.6	1323.8	1315.1	1306.3	1287.5
35°	1433.9	1423.7	1413.5	1403.3	1393.1	1383.0	1372.8	1362.6	1352.4	1342.2	1320.6
37.5°	1491.8	1480.1	1468.3	1456.6	1444.8	1433.1	1421.3	1409.6	1397.8	1386.1	1361.2
40°	1558.6	1545.0	1531.3	1517.7	1504.1	1490.4	1476.8	1463.2	1449.5	1435.9	1407.2
42.5°	1635.4	1619.9	1604.4	1588.9	1573.4	1557.8	1542.3	1526.8	1511.3	1495.8	1462.4
45°	1725.1	1707.2	1689.2	1671.3	1653.3	1635.4	1617.4	1599.5	1581.5	1563.6	1525.1
47.5°	1825.8	1805.4	1785.0	1764.6	1744.2	1723.9	1703.5	1683.1	1662.7	1642.3	1598.2
50°	1937.5	1914.8	1892.1	1869.4	1846.7	1823.9	1801.2	1778.5	1755.8	1733.1	1682.2
52.5°	2058.2	2032.9	2007.7	1982.4	1957.1	1931.9	1906.6	1881.3	1856.1	1830.8	1773.2
55°	2179.8	2153.0	2126.2	2099.4	2072.6	2045.7	2018.9	1992.1	1965.3	1938.5	1873.9
57.5°	2300.5	2272.4	2244.2	2216.1	2187.9	2159.8	2131.6	2103.5	2075.3	2047.2	1976.0
60°	2413.1	2384.3	2355.5	2326.7	2297.9	2269.1	2240.3	2211.5	2182.7	2153.9	2076.7
62.5°	2508.9	2480.4	2451.9	2423.5	2395.0	2366.5	2338.0	2309.6	2281.1	2252.6	2170.4
65°	2581.7	2554.8	2527.9	2500.9	2474.0	2447.1	2420.2	2393.2	2366.3	2339.4	2253.1
67.5°	2628.5	2602.2	2576.0	2549.7	2523.5	2497.2	2471.0	2444.7	2418.5	2392.2	2304.5
70°	2638.5	2613.7	2588.9	2564.0	2539.2	2514.4	2489.6	2464.7	2439.9	2415.1	2327.5
72.5°	2607.6	2584.1	2560.6	2537.1	2513.6	2490.2	2466.7	2443.2	2419.7	2396.2	2310.7
75°	2535.8	2513.8	2491.7	2469.7	2447.6	2425.6	2403.5	2381.5	2359.4	2337.4	2255.6
77.5°	2425.1	2404.5	2383.9	2363.3	2342.7	2322.0	2301.4	2280.8	2260.2	2239.6	2162.7
80°	2282.5	2263.2	2243.9	2224.7	2205.4	2186.1	2166.8	2147.6	2128.3	2109.0	2038.8
82.5°	2118.0	2099.7	2081.4	2063.2	2044.9	2026.6	2008.3	1990.1	1971.8	1953.5	1889.8
85°	1944.5	1927.2	1909.9	1892.6	1875.3	1858.1	1840.8	1823.5	1806.2	1788.9	1731.6
87.5°	1772.0	1755.5	1739.0	1722.5	1706.0	1689.4	1672.9	1656.4	1639.9	1623.4	1572.2
90°	1614.4	1598.9	1583.4	1567.9	1552.4	1536.8	1521.3	1505.8	1490.3	1474.8	1428.4
92.5°	1482.8	1468.2	1453.6	1438.9	1424.3	1409.7	1395.1	1380.4	1365.8	1351.2	1308.8
95°	1372.1	1358.1	1344.2	1330.2	1316.3	1302.3	1288.4	1274.4	1260.5	1246.5	1207.1
97.5°	1281.4	1267.8	1254.1	1240.5	1226.9	1213.2	1199.6	1186.0	1172.3	1158.7	1121.4
100°	1207.6	1194.2	1180.8	1167.4	1154.0	1140.5	1127.1	1113.7	1100.3	1086.9	1050.7
102.5°	1146.7	1133.5	1120.3	1107.2	1094.0	1080.8	1067.6	1054.5	1041.3	1028.1	992.6
105°	1095.9	1083.0	1070.2	1057.3	1044.5	1031.6	1018.8	1005.9	993.1	980.2	945.0
107.5°	1049.0	1036.1	1023.3	1010.4	997.6	984.7	971.9	959.0	946.2	933.3	898.7
110°	1003.2	990.3	977.5	964.6	951.8	938.9	926.1	913.2	900.4	887.5	853.7



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
112.5°	957.3	944.4	931.6	918.7	905.9	893.0	880.2	867.3	854.5	841.6	808.9
115°	908.4	895.7	882.9	870.2	857.4	844.7	831.9	819.2	806.4	793.7	762.5
117.5°	856.6	844.5	832.4	820.4	808.3	796.2	784.1	772.1	760.0	747.9	718.1
120°	808.7	797.2	785.7	774.1	762.6	751.1	739.6	728.0	716.5	705.0	676.1
122.5°	761.8	750.8	739.9	728.9	717.9	707.0	696.0	685.0	674.1	663.1	634.5
125°	712.0	701.3	690.5	679.8	669.0	658.3	647.5	636.8	626.0	615.3	587.9
127.5°	655.1	644.8	634.5	624.2	613.9	603.6	593.3	583.0	572.7	562.4	537.5
130°	591.3	581.7	572.0	562.4	552.8	543.1	533.5	523.9	514.2	504.6	482.7
132.5°	526.5	518.3	510.1	501.9	493.7	485.5	477.3	469.1	460.9	452.7	433.1
135°	469.7	462.8	455.9	449.1	442.2	435.3	428.4	421.6	414.7	407.8	389.7
137.5°	418.8	412.5	406.2	399.9	393.6	387.2	380.9	374.6	368.3	362.0	345.4
140°	368.0	362.3	356.7	351.0	345.4	339.7	334.1	328.4	322.8	317.1	302.3
142.5°	319.1	314.2	309.3	304.5	299.6	294.7	289.8	285.0	280.1	275.2	262.0
145°	273.2	268.8	264.3	259.9	255.5	251.0	246.6	242.2	237.7	233.3	222.0
147.5°	229.3	225.8	222.2	218.7	215.1	211.6	208.0	204.5	200.9	197.4	187.5
150°	190.5	187.4	184.3	181.2	178.1	174.9	171.8	168.7	165.6	162.5	154.0
152.5°	154.6	151.9	149.3	146.6	143.9	141.3	138.6	135.9	133.3	130.6	123.3
155°	120.7	118.5	116.3	114.0	111.8	109.6	107.4	105.1	102.9	100.7	94.4
157.5°	89.7	87.9	86.2	84.4	82.6	80.9	79.1	77.3	75.6	73.8	68.6
160°	60.8	59.4	57.9	56.5	55.1	53.6	52.2	50.8	49.3	47.9	44.2
162.5°	34.9	33.9	32.9	31.9	30.9	29.9	28.9	27.9	26.9	25.9	23.8
165°	17.0	16.4	15.9	15.3	14.8	14.2	13.7	13.1	12.6	12.0	10.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1013.8	1014.1	1014.4	1014.8	1015.1	1015.4	1015.8	1016.1	1014.1	1012.1	1010.1
5°	1036.2	1035.8	1035.3	1034.9	1034.4	1034.0	1033.5	1033.1	1030.0	1026.9	1023.8
7.5°	1056.3	1055.0	1053.7	1052.3	1051.0	1049.7	1048.3	1047.0	1042.8	1038.6	1034.4
10°	1071.8	1070.3	1068.7	1067.2	1065.6	1064.1	1062.5	1061.0	1055.2	1049.5	1043.7
12.5°	1089.6	1086.9	1084.3	1081.6	1079.0	1076.3	1073.7	1071.0	1063.8	1056.6	1049.4
15°	1109.2	1104.8	1100.5	1096.2	1091.9	1087.5	1083.2	1078.9	1070.3	1061.6	1053.0
17.5°	1127.6	1121.5	1115.4	1109.3	1103.2	1097.1	1091.0	1084.9	1074.6	1064.3	1054.0
20°	1148.1	1139.8	1131.5	1123.1	1114.8	1106.5	1098.2	1089.9	1077.8	1065.7	1053.7
22.5°	1169.8	1159.4	1149.0	1138.5	1128.1	1117.7	1107.3	1096.9	1082.5	1068.1	1053.7
25°	1193.9	1181.6	1169.3	1157.1	1144.8	1132.5	1120.2	1107.9	1090.6	1073.3	1056.0
27.5°	1218.1	1203.9	1189.7	1175.6	1161.4	1147.2	1133.0	1118.8	1098.3	1077.8	1057.3
30°	1241.8	1225.5	1209.2	1193.0	1176.7	1160.4	1144.1	1127.8	1104.0	1080.2	1056.3
32.5°	1268.6	1249.8	1231.0	1212.1	1193.3	1174.5	1155.6	1136.8	1110.0	1083.2	1056.4
35°	1299.0	1277.4	1255.8	1234.1	1212.5	1190.9	1169.3	1147.7	1117.3	1087.0	1056.6
37.5°	1336.2	1311.3	1286.4	1261.4	1236.5	1211.6	1186.6	1161.7	1127.8	1093.9	1060.0
40°	1378.5	1349.8	1321.1	1292.5	1263.8	1235.1	1206.4	1177.7	1140.4	1103.0	1065.7
42.5°	1429.1	1395.7	1362.4	1329.0	1295.7	1262.3	1229.0	1195.6	1154.5	1113.4	1072.3
45°	1486.7	1448.2	1409.8	1371.3	1332.9	1294.4	1256.0	1217.5	1172.2	1126.9	1081.6
47.5°	1554.1	1510.0	1465.9	1421.9	1377.8	1333.7	1289.6	1245.5	1195.3	1145.1	1094.9
50°	1631.4	1580.5	1529.7	1478.8	1428.0	1377.1	1326.3	1275.4	1220.2	1165.0	1109.9
52.5°	1715.6	1658.0	1600.4	1542.7	1485.1	1427.5	1369.9	1312.3	1251.4	1190.4	1129.5
55°	1809.3	1744.7	1680.1	1615.5	1550.9	1486.3	1421.7	1357.1	1289.9	1222.6	1155.4
57.5°	1904.7	1833.5	1762.2	1691.0	1619.7	1548.5	1477.2	1406.0	1332.1	1258.2	1184.3
60°	1999.5	1922.2	1845.0	1767.8	1690.6	1613.3	1536.1	1458.9	1378.1	1297.3	1216.6
62.5°	2088.2	2006.0	1923.8	1841.5	1759.3	1677.1	1594.9	1512.7	1425.1	1337.4	1249.8
65°	2166.8	2080.5	1994.2	1907.8	1821.5	1735.2	1648.9	1562.6	1468.2	1373.8	1279.4
67.5°	2216.7	2129.0	2041.2	1953.5	1865.7	1778.0	1690.2	1602.5	1502.3	1402.2	1302.0
70°	2239.8	2152.2	2064.6	1976.9	1889.3	1801.7	1714.0	1626.4	1521.9	1417.4	1313.0
72.5°	2225.1	2139.6	2054.1	1968.5	1883.0	1797.5	1711.9	1626.4	1519.9	1413.4	1307.0
75°	2173.9	2092.1	2010.3	1928.6	1846.8	1765.0	1683.3	1601.5	1495.2	1389.0	1282.7
77.5°	2085.8	2008.9	1932.0	1855.2	1778.3	1701.4	1624.5	1547.6	1444.2	1340.8	1237.5
80°	1968.5	1898.3	1828.0	1757.8	1687.5	1617.3	1547.0	1476.8	1377.9	1278.9	1180.0
82.5°	1826.1	1762.4	1698.7	1634.9	1571.2	1507.5	1443.8	1380.1	1287.9	1195.7	1103.5
85°	1674.3	1617.1	1559.8	1502.5	1445.2	1388.0	1330.7	1273.4	1188.7	1104.1	1019.4
87.5°	1521.0	1469.8	1418.6	1367.5	1316.3	1265.1	1213.9	1162.7	1085.9	1009.1	932.4
90°	1382.0	1335.5	1289.1	1242.7	1196.3	1149.8	1103.4	1057.0	987.5	918.1	848.6
92.5°	1266.3	1223.9	1181.4	1139.0	1096.5	1054.1	1011.6	969.2	906.1	842.9	779.8
95°	1167.6	1128.2	1088.7	1049.3	1009.8	970.4	930.9	891.5	833.5	775.6	717.6
97.5°	1084.0	1046.7	1009.4	972.0	934.7	897.4	860.0	822.7	769.1	715.4	661.8
100°	1014.4	978.2	942.0	905.7	869.5	833.3	797.0	760.8	710.9	661.1	611.2
102.5°	957.2	921.7	886.3	850.8	815.4	779.9	744.5	709.0	661.8	614.6	567.4
105°	909.7	874.5	839.3	804.0	768.8	733.6	698.3	663.1	618.1	573.1	528.2
107.5°	864.2	829.6	795.0	760.5	725.9	691.3	656.8	622.2	579.0	535.8	492.6
110°	819.9	786.1	752.3	718.5	684.7	650.9	617.1	583.3	541.9	500.4	459.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
112.5°	776.2	743.5	710.8	678.2	645.5	612.8	580.1	547.4	507.7	468.1	428.4
115°	731.2	700.0	668.7	637.5	606.2	575.0	543.7	512.5	474.7	436.9	399.2
117.5°	688.3	658.5	628.7	598.8	569.0	539.2	509.4	479.6	443.7	407.8	371.9
120°	647.2	618.2	589.3	560.4	531.5	502.5	473.6	444.7	411.0	377.3	343.7
122.5°	605.9	577.3	548.7	520.2	491.6	463.0	434.4	405.8	374.8	343.8	312.7
125°	560.6	533.2	505.8	478.5	451.1	423.7	396.4	369.0	340.5	312.0	283.6
127.5°	512.5	487.6	462.7	437.7	412.8	387.9	362.9	338.0	311.4	284.8	258.2
130°	460.7	438.8	416.8	394.9	372.9	351.0	329.0	307.1	282.5	257.9	233.3
132.5°	413.5	393.9	374.3	354.6	335.0	315.4	295.8	276.2	253.6	231.0	208.4
135°	371.7	353.6	335.6	317.5	299.5	281.4	263.4	245.3	224.8	204.3	183.8
137.5°	328.8	312.1	295.5	278.9	262.3	245.6	229.0	212.4	194.2	176.1	157.9
140°	287.4	272.6	257.7	242.9	228.0	213.2	198.3	183.5	167.1	150.7	134.3
142.5°	248.8	235.7	222.5	209.3	196.1	183.0	169.8	156.6	142.1	127.6	113.0
145°	210.7	199.4	188.1	176.8	165.5	154.2	142.9	131.6	118.9	106.1	93.4
147.5°	177.7	167.8	158.0	148.1	138.3	128.4	118.6	108.7	97.8	87.0	76.1
150°	145.5	136.9	128.4	119.9	111.4	102.8	94.3	85.8	77.0	68.3	59.5
152.5°	116.0	108.7	101.4	94.0	86.7	79.4	72.1	64.8	58.0	51.3	44.5
155°	88.1	81.8	75.5	69.1	62.8	56.5	50.2	43.9	39.1	34.4	29.6
157.5°	63.4	58.2	53.0	47.7	42.5	37.3	32.1	26.9	23.9	20.9	17.9
160°	40.6	36.9	33.3	29.6	26.0	22.3	18.7	15.0	13.3	11.7	10.0
162.5°	21.7	19.6	17.5	15.4	13.3	11.2	9.1	7.0	6.2	5.4	4.7
165°	9.8	8.7	7.6	6.4	5.3	4.2	3.1	2.0	1.8	1.6	1.3
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLEDD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1008.1	1006.2	1004.2	1002.2	1000.2	998.2	998.9	999.5	1000.2	1000.8	1001.5
5°	1020.7	1017.5	1014.4	1011.3	1008.2	1005.1	1004.6	1004.0	1003.5	1002.9	1002.4
7.5°	1030.2	1025.9	1021.7	1017.5	1013.3	1009.1	1007.3	1005.6	1003.8	1002.0	1000.3
10°	1037.9	1032.2	1026.4	1020.6	1014.9	1009.1	1005.9	1002.7	999.5	996.3	993.0
12.5°	1042.2	1034.9	1027.7	1020.5	1013.3	1006.1	1001.6	997.0	992.5	988.0	983.4
15°	1044.4	1035.7	1027.1	1018.5	1009.8	1001.2	995.3	989.4	983.6	977.7	971.8
17.5°	1043.7	1033.4	1023.1	1012.8	1002.5	992.2	985.0	977.8	970.6	963.4	956.2
20°	1041.6	1029.5	1017.4	1005.4	993.3	981.2	972.6	963.9	955.3	946.6	938.0
22.5°	1039.3	1024.9	1010.5	996.1	981.7	967.3	957.1	946.9	936.7	926.5	916.3
25°	1038.7	1021.5	1004.2	986.9	969.6	952.3	940.6	928.8	917.1	905.3	893.6
27.5°	1036.8	1016.3	995.8	975.3	954.8	934.3	921.0	907.7	894.4	881.1	867.9
30°	1032.5	1008.7	984.9	961.0	937.2	913.4	898.6	883.7	868.9	854.0	839.2
32.5°	1029.6	1002.7	975.9	949.1	922.3	895.5	878.7	861.8	845.0	828.1	811.3
35°	1026.3	995.9	965.6	935.2	904.9	874.5	855.7	836.8	818.0	799.2	780.3
37.5°	1026.1	992.2	958.3	924.4	890.5	856.6	835.8	814.9	794.1	773.3	752.4
40°	1028.3	991.0	953.6	916.3	878.9	841.6	817.7	793.7	769.8	745.9	721.9
42.5°	1031.2	990.1	949.0	907.9	866.8	825.7	799.0	772.3	745.6	718.9	692.1
45°	1036.3	990.9	945.6	900.3	855.0	809.7	780.8	751.9	722.9	694.0	665.1
47.5°	1044.7	994.5	944.3	894.1	843.9	793.7	761.9	730.1	698.3	666.5	634.8
50°	1054.7	999.5	944.3	889.2	834.0	778.8	744.1	709.4	674.8	640.1	605.4
52.5°	1068.5	1007.6	946.6	885.7	824.7	763.8	726.5	689.1	651.8	614.5	577.1
55°	1088.1	1020.9	953.6	886.4	819.1	751.9	711.6	671.2	630.9	590.6	550.2
57.5°	1110.4	1036.5	962.6	888.7	814.8	740.9	697.6	654.3	610.9	567.6	524.3
60°	1135.8	1055.0	974.2	893.5	812.7	731.9	685.5	639.1	592.6	546.2	499.8
62.5°	1162.1	1074.5	986.8	899.2	811.5	723.9	674.5	625.1	575.7	526.3	476.8
65°	1185.0	1090.6	996.2	901.8	807.4	713.0	660.9	608.8	556.8	504.7	452.6
67.5°	1201.8	1101.7	1001.5	901.3	801.2	701.0	646.4	591.8	537.1	482.5	427.9
70°	1208.5	1104.0	999.5	895.1	790.6	686.1	629.7	573.3	516.9	460.5	404.1
72.5°	1200.5	1094.0	987.5	881.1	774.6	668.1	610.4	552.7	494.9	437.2	379.5
75°	1176.5	1070.2	964.0	857.7	751.5	645.2	586.9	528.6	470.4	412.1	353.8
77.5°	1134.1	1030.7	927.3	824.0	720.6	617.2	559.0	500.9	442.7	384.5	326.4
80°	1081.0	982.1	883.1	784.2	685.2	586.3	528.8	471.3	413.8	356.3	298.8
82.5°	1011.3	919.2	827.0	734.8	642.6	550.4	494.5	438.5	382.6	326.6	270.7
85°	934.8	850.1	765.5	680.8	596.2	511.5	457.7	403.8	350.0	296.1	242.3
87.5°	855.6	778.8	702.0	625.3	548.5	471.7	420.4	369.1	317.8	266.5	215.2
90°	779.1	709.7	640.2	570.7	501.3	431.8	383.8	335.8	287.9	239.9	191.9
92.5°	716.6	653.5	590.3	527.2	464.0	400.9	356.4	311.8	267.3	222.7	178.2
95°	659.7	601.7	543.8	485.8	427.9	369.9	328.8	287.7	246.6	205.5	164.4
97.5°	608.2	554.5	500.9	447.3	393.6	340.0	302.2	264.4	226.7	188.9	151.1
100°	561.4	511.5	461.7	411.8	362.0	312.1	277.4	242.7	208.1	173.4	138.7
102.5°	520.2	473.0	425.8	378.6	331.4	284.2	252.6	221.0	189.5	157.9	126.3
105°	483.2	438.2	393.2	348.3	303.3	258.3	229.6	200.9	172.2	143.5	114.8
107.5°	449.4	406.1	362.9	319.7	276.5	233.3	207.4	181.5	155.5	129.6	103.7
110°	417.6	376.1	334.7	293.3	251.8	210.4	187.0	163.6	140.3	116.9	93.5



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
112.5°	388.8	349.1	309.5	269.8	230.2	190.5	169.3	148.2	127.0	105.8	84.7
115°	361.4	323.6	285.8	248.1	210.3	172.5	153.3	134.2	115.0	95.8	76.7
117.5°	336.0	300.2	264.3	228.4	192.5	156.6	139.2	121.8	104.4	87.0	69.6
120°	310.0	276.3	242.6	209.0	175.3	141.6	125.9	110.1	94.4	78.7	62.9
122.5°	281.7	250.7	219.7	188.6	157.6	126.6	112.5	98.5	84.4	70.3	56.3
125°	255.1	226.6	198.1	169.7	141.2	112.7	100.2	87.7	75.1	62.6	50.1
127.5°	231.6	205.1	178.5	151.9	125.3	98.7	87.7	76.8	65.8	54.8	43.9
130°	208.7	184.2	159.6	135.0	110.4	85.8	76.3	66.7	57.2	47.7	38.1
132.5°	185.8	163.2	140.6	118.0	95.4	72.8	64.7	56.6	48.5	40.4	32.4
135°	163.3	142.8	122.3	101.8	81.3	60.8	54.0	47.3	40.5	33.8	27.0
137.5°	139.7	121.6	103.4	85.2	67.1	48.9	43.5	38.0	32.6	27.2	21.7
140°	117.9	101.5	85.1	68.7	52.3	35.9	31.9	27.9	23.9	19.9	16.0
142.5°	98.5	84.0	69.5	54.9	40.4	25.9	23.0	20.1	17.3	14.4	11.5
145°	80.7	67.9	55.2	42.5	29.7	17.0	15.1	13.2	11.3	9.4	7.6
147.5°	65.3	54.4	43.6	32.7	21.9	11.0	9.8	8.6	7.3	6.1	4.9
150°	50.8	42.0	33.3	24.5	15.8	7.0	6.2	5.4	4.7	3.9	3.1
152.5°	37.8	31.0	24.3	17.5	10.8	4.0	3.6	3.1	2.7	2.2	1.8
155°	24.8	20.1	15.3	10.5	5.8	1.0	0.9	0.8	0.7	0.6	0.4
157.5°	14.9	12.0	9.0	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	8.3	6.7	5.0	3.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	3.9	3.1	2.3	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.1	0.9	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1002.1	1002.8	1003.4	1004.1	1001.7	999.2	996.8	994.4	991.9	989.5	987.1
5°	1001.8	1001.3	1000.7	1000.2	996.8	993.3	989.9	986.4	983.0	979.5	976.1
7.5°	998.5	996.7	995.0	993.2	988.7	984.1	979.6	975.0	970.5	965.9	961.4
10°	989.8	986.6	983.4	980.2	975.1	970.0	964.9	959.8	954.7	949.6	944.5
12.5°	978.9	974.4	969.8	965.3	959.6	954.0	948.3	942.7	937.0	931.4	925.7
15°	965.9	960.1	954.2	948.3	942.0	935.7	929.4	923.1	916.7	910.4	904.1
17.5°	949.0	941.8	934.6	927.4	920.7	914.1	907.4	900.8	894.1	887.5	880.8
20°	929.3	920.7	912.0	903.4	896.5	889.7	882.8	875.9	869.1	862.2	855.3
22.5°	906.1	895.9	885.7	875.5	868.7	862.0	855.2	848.5	841.7	835.0	828.2
25°	881.8	870.1	858.3	846.6	839.8	833.1	826.3	819.6	812.8	806.1	799.3
27.5°	854.6	841.3	828.0	814.7	808.3	801.9	795.4	789.0	782.6	776.2	769.7
30°	824.3	809.5	794.6	779.8	773.9	768.0	762.2	756.3	750.4	744.5	738.7
32.5°	794.4	777.6	760.7	743.9	738.7	733.5	728.3	723.1	717.8	712.6	707.4
35°	761.5	742.7	723.8	705.0	701.0	697.0	693.0	689.0	685.1	681.1	677.1
37.5°	731.6	710.8	689.9	669.1	666.7	664.2	661.8	659.4	656.9	654.5	652.1
40°	698.0	674.1	650.1	626.2	626.1	626.0	625.9	625.8	625.6	625.5	625.4
42.5°	665.4	638.7	612.0	585.3	587.6	590.0	592.3	594.6	597.0	599.3	601.6
45°	636.2	607.2	578.3	549.4	553.6	557.8	562.0	566.2	570.5	574.7	578.9
47.5°	603.0	571.2	539.4	507.6	514.5	521.3	528.2	535.1	541.9	548.8	555.7
50°	570.7	536.1	501.4	466.7	476.2	485.7	495.3	504.8	514.3	523.8	533.4
52.5°	539.8	502.5	465.1	427.8	439.8	451.7	463.7	475.7	487.6	499.6	511.6
55°	509.9	469.6	429.2	388.9	403.4	417.9	432.4	446.9	461.5	476.0	490.5
57.5°	481.0	437.6	394.3	351.0	368.1	385.1	402.2	419.3	436.3	453.4	470.5
60°	453.4	406.9	360.5	314.1	333.7	353.3	372.9	392.5	412.2	431.8	451.4
62.5°	427.4	378.0	328.6	279.2	301.0	322.8	344.7	366.5	388.3	410.1	432.0
65°	400.5	348.5	296.4	244.3	268.3	292.4	316.4	340.5	364.5	388.6	412.6
67.5°	373.3	318.6	264.0	209.4	235.5	261.7	287.8	314.0	340.1	366.3	392.4
70°	347.7	291.3	234.9	178.5	206.1	233.7	261.3	288.9	316.4	344.0	371.6
72.5°	321.8	264.0	206.3	148.6	177.3	206.0	234.7	263.4	292.0	320.7	349.4
75°	295.5	237.3	179.0	120.7	150.1	179.4	208.8	238.1	267.5	296.8	326.2
77.5°	268.2	210.0	151.9	93.7	123.4	153.1	182.8	212.5	242.2	271.9	301.6
80°	241.3	183.8	126.3	68.8	98.4	128.0	157.5	187.1	216.7	246.3	275.8
82.5°	214.7	158.8	102.8	46.9	75.9	104.9	134.0	163.0	192.0	221.0	250.1
85°	188.4	134.6	80.7	26.9	55.3	83.6	112.0	140.4	168.7	197.1	225.5
87.5°	163.9	112.6	61.3	10.0	37.0	64.1	91.1	118.1	145.2	172.2	199.2
90°	143.9	96.0	48.0	0.0	25.4	50.8	76.1	101.5	126.9	152.3	177.6
92.5°	133.6	89.1	44.5	0.0	23.5	47.0	70.5	94.0	117.4	140.9	164.4
95°	123.3	82.2	41.1	0.0	21.7	43.4	65.1	86.8	108.6	130.3	152.0
97.5°	113.3	75.6	37.8	0.0	20.2	40.3	60.5	80.7	100.8	121.0	141.2
100°	104.0	69.4	34.7	0.0	18.5	37.0	55.5	74.0	92.5	111.0	129.5
102.5°	94.7	63.2	31.6	0.0	17.1	34.1	51.2	68.3	85.3	102.4	119.5
105°	86.1	57.4	28.7	0.0	15.6	31.2	46.9	62.5	78.1	93.7	109.4
107.5°	77.8	51.8	25.9	0.0	14.3	28.6	42.9	57.2	71.4	85.7	100.0
110°	70.1	46.8	23.4	0.0	13.0	25.9	38.9	51.9	64.8	77.8	90.8



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
112.5°	63.5	42.3	21.2	0.0	11.7	23.5	35.2	47.0	58.7	70.5	82.2
115°	57.5	38.3	19.2	0.0	10.4	20.8	31.2	41.6	52.1	62.5	72.9
117.5°	52.2	34.8	17.4	0.0	9.3	18.6	27.9	37.2	46.6	55.9	65.2
120°	47.2	31.5	15.7	0.0	8.3	16.6	24.9	33.2	41.6	49.9	58.2
122.5°	42.2	28.1	14.1	0.0	7.4	14.8	22.3	29.7	37.1	44.5	52.0
125°	37.6	25.0	12.5	0.0	6.5	13.1	19.6	26.1	32.7	39.2	45.7
127.5°	32.9	21.9	11.0	0.0	5.5	11.1	16.6	22.2	27.7	33.3	38.8
130°	28.6	19.1	9.5	0.0	4.7	9.3	14.0	18.6	23.3	27.9	32.6
132.5°	24.3	16.2	8.1	0.0	3.8	7.5	11.3	15.1	18.8	22.6	26.4
135°	20.3	13.5	6.8	0.0	3.0	6.0	9.0	12.0	14.9	17.9	20.9
137.5°	16.3	10.9	5.4	0.0	2.2	4.4	6.6	8.8	11.1	13.3	15.5
140°	12.0	8.0	4.0	0.0	1.6	3.1	4.7	6.2	7.8	9.3	10.9
142.5°	8.6	5.8	2.9	0.0	0.9	1.8	2.7	3.6	4.4	5.3	6.2
145°	5.7	3.8	1.9	0.0	0.6	1.1	1.7	2.2	2.8	3.3	3.9
147.5°	3.7	2.4	1.2	0.0	0.3	0.7	1.0	1.3	1.7	2.0	2.3
150°	2.3	1.6	0.8	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.8
152.5°	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	984.6	982.2	981.6	981.1	980.5	980.0	979.4	978.9	978.3	977.8	977.2
5°	972.6	969.2	967.8	966.3	964.9	963.5	962.0	960.6	959.2	957.7	956.3
7.5°	956.8	952.3	950.5	948.7	947.0	945.2	943.4	941.6	939.9	938.1	936.3
10°	939.4	934.3	932.1	929.9	927.7	925.5	923.2	921.0	918.8	916.6	914.4
12.5°	920.1	914.4	912.1	909.8	907.4	905.1	902.8	900.5	898.1	895.8	893.5
15°	897.8	891.5	889.4	887.3	885.2	883.1	880.9	878.8	876.7	874.6	872.5
17.5°	874.2	867.5	865.7	864.0	862.2	860.4	858.7	856.9	855.1	853.4	851.6
20°	848.5	841.6	840.7	839.8	838.9	838.0	837.2	836.3	835.4	834.5	833.6
22.5°	821.5	814.7	815.5	816.3	817.0	817.8	818.6	819.4	820.1	820.9	821.7
25°	792.6	785.8	789.2	792.7	796.1	799.5	803.0	806.4	809.8	813.3	816.7
27.5°	763.3	756.9	763.3	769.7	776.2	782.6	789.0	795.4	801.9	808.3	814.7
30°	732.8	726.9	736.4	746.0	755.5	765.0	774.6	784.1	793.6	803.2	812.7
32.5°	702.2	697.0	709.5	722.0	734.6	747.1	759.6	772.1	784.7	797.2	809.7
35°	673.1	669.1	684.5	699.9	715.3	730.7	746.1	761.5	776.9	792.3	807.7
37.5°	649.6	647.2	664.8	682.4	700.0	717.6	735.3	752.9	770.5	788.1	805.7
40°	625.3	625.2	645.4	665.5	685.7	705.9	726.0	746.2	766.4	786.5	806.7
42.5°	604.0	606.3	628.9	651.5	674.1	696.7	719.3	741.9	764.5	787.1	809.7
45°	583.1	587.3	612.7	638.1	663.4	688.8	714.2	739.6	764.9	790.3	815.7
47.5°	562.5	569.4	597.8	626.1	654.5	682.9	711.2	739.6	768.0	796.3	824.7
50°	542.9	552.4	584.0	615.6	647.1	678.7	710.3	741.9	773.4	805.0	836.6
52.5°	523.5	535.5	570.6	605.7	640.9	676.0	711.1	746.2	781.4	816.5	851.6
55°	505.0	519.5	558.5	597.5	636.5	675.5	714.5	753.5	792.5	831.5	870.5
57.5°	487.5	504.6	547.9	591.2	634.6	677.9	721.2	764.5	807.9	851.2	894.5
60°	471.0	490.6	538.2	585.9	633.5	681.2	728.8	776.5	824.1	871.8	919.4
62.5°	453.8	475.6	527.8	580.0	632.2	684.4	736.5	788.7	840.9	893.1	945.3
65°	436.7	460.7	517.1	573.5	629.9	686.3	742.7	799.1	855.5	911.9	968.3
67.5°	418.6	444.7	504.9	565.0	625.2	685.4	745.5	805.7	865.9	926.0	986.2
70°	399.2	426.8	489.5	552.2	614.9	677.6	740.4	803.1	865.8	928.5	991.2
72.5°	378.1	406.8	470.6	534.4	598.3	662.1	725.9	789.7	853.6	917.4	981.2
75°	355.5	384.9	448.3	511.7	575.0	638.4	701.8	765.2	828.5	891.9	955.3
77.5°	331.3	361.0	421.7	482.4	543.1	603.8	664.6	725.3	786.0	846.7	907.4
80°	305.4	335.0	392.1	449.1	506.2	563.3	620.3	677.4	734.5	791.5	848.6
82.5°	279.1	308.1	361.5	414.9	468.3	521.7	575.2	628.6	682.0	735.4	788.8
85°	253.8	282.2	330.2	378.2	426.1	474.1	522.1	570.1	618.0	666.0	714.0
87.5°	226.3	253.3	296.6	339.9	383.3	426.6	469.9	513.2	556.6	599.9	643.2
90°	203.0	228.4	267.9	307.5	347.0	386.6	426.1	465.7	505.2	544.8	584.3
92.5°	187.9	211.4	246.9	282.3	317.8	353.2	388.7	424.1	459.6	495.0	530.5
95°	173.7	195.4	228.4	261.4	294.5	327.5	360.5	393.5	426.6	459.6	492.6
97.5°	161.3	181.5	212.1	242.7	273.2	303.8	334.4	365.0	395.5	426.1	456.7
100°	148.0	166.5	195.3	224.1	252.9	281.7	310.6	339.4	368.2	397.0	425.8
102.5°	136.5	153.6	181.0	208.3	235.7	263.1	290.4	317.8	345.2	372.5	399.9
105°	125.0	140.6	166.9	193.1	219.4	245.6	271.9	298.1	324.4	350.6	376.9
107.5°	114.3	128.6	153.8	178.9	204.1	229.2	254.4	279.5	304.7	329.8	355.0
110°	103.7	116.7	141.0	165.2	189.5	213.7	238.0	262.2	286.5	310.7	335.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
112.5°	94.0	105.7	129.0	152.2	175.5	198.8	222.0	245.3	268.6	291.8	315.1
115°	83.3	93.7	116.1	138.5	160.9	183.3	205.6	228.0	250.4	272.8	295.2
117.5°	74.5	83.8	105.0	126.1	147.3	168.4	189.6	210.7	231.9	253.0	274.2
120°	66.5	74.8	94.6	114.5	134.3	154.1	174.0	193.8	213.6	233.5	253.3
122.5°	59.4	66.8	85.0	103.1	121.3	139.5	157.6	175.8	194.0	212.1	230.3
125°	52.3	58.8	75.4	92.0	108.7	125.3	141.9	158.5	175.2	191.8	208.4
127.5°	44.4	49.9	65.0	80.0	95.1	110.2	125.2	140.3	155.4	170.4	185.5
130°	37.2	41.9	54.9	67.8	80.8	93.7	106.7	119.6	132.6	145.5	158.5
132.5°	30.1	33.9	45.0	56.1	67.1	78.2	89.3	100.4	111.4	122.5	133.6
135°	23.9	26.9	36.5	46.2	55.8	65.5	75.1	84.8	94.4	104.1	113.7
137.5°	17.7	19.9	28.3	36.7	45.2	53.6	62.0	70.4	78.9	87.3	95.7
140°	12.4	14.0	21.3	28.6	35.9	43.2	50.6	57.9	65.2	72.5	79.8
142.5°	7.1	8.0	14.3	20.6	26.9	33.2	39.6	45.9	52.2	58.5	64.8
145°	4.4	5.0	10.2	15.4	20.6	25.8	31.1	36.3	41.5	46.7	51.9
147.5°	2.7	3.0	7.1	11.2	15.3	19.4	23.5	27.6	31.7	35.8	39.9
150°	0.9	1.0	4.2	7.4	10.6	13.8	17.1	20.3	23.5	26.7	29.9
152.5°	0.0	0.0	2.3	4.6	7.0	9.3	11.6	13.9	16.3	18.6	20.9
155°	0.0	0.0	1.4	2.9	4.3	5.8	7.2	8.7	10.1	11.6	13.0
157.5°	0.0	0.0	0.6	1.1	1.7	2.2	2.8	3.3	3.9	4.4	5.0
160°	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.8	0.9	1.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	976.0	974.8	973.6	972.4	971.1	969.9	968.7	967.5	966.3	965.3	964.3
5°	954.9	953.4	952.0	950.5	949.1	947.6	946.2	944.7	943.3	942.7	942.2
7.5°	934.8	933.2	931.7	930.1	928.6	927.0	925.5	923.9	922.4	921.8	921.3
10°	913.1	911.7	910.4	909.1	907.7	906.4	905.1	903.7	902.4	901.7	901.1
12.5°	892.4	891.3	890.2	889.1	887.9	886.8	885.7	884.6	883.5	883.1	882.6
15°	871.9	871.4	870.8	870.3	869.7	869.2	868.6	868.1	867.5	867.7	867.9
17.5°	852.5	853.4	854.3	855.2	856.0	856.9	857.8	858.7	859.6	860.7	861.8
20°	836.8	840.0	843.3	846.5	849.7	852.9	856.2	859.4	862.6	864.4	866.1
22.5°	827.0	832.3	837.6	842.9	848.3	853.6	858.9	864.2	869.5	871.7	873.9
25°	823.5	830.2	837.0	843.7	850.5	857.2	864.0	870.7	877.5	880.0	882.6
27.5°	822.5	830.2	838.0	845.7	853.5	861.2	869.0	876.7	884.5	887.5	890.5
30°	821.6	830.4	839.3	848.2	857.0	865.9	874.8	883.6	892.5	896.0	899.6
32.5°	820.0	830.3	840.6	850.9	861.2	871.5	881.8	892.1	902.4	906.7	911.0
35°	819.7	831.6	843.6	855.6	867.5	879.5	891.5	903.4	915.4	920.6	925.8
37.5°	819.8	833.9	847.9	862.0	876.1	890.2	904.2	918.3	932.4	938.7	945.0
40°	823.1	839.5	855.9	872.3	888.7	905.1	921.5	937.9	954.3	961.8	969.4
42.5°	828.8	847.8	866.9	885.9	905.0	924.0	943.1	962.1	981.2	990.1	998.9
45°	837.9	860.0	882.2	904.3	926.5	948.6	970.8	992.9	1015.1	1025.4	1035.7
47.5°	850.2	875.7	901.1	926.6	952.1	977.6	1003.0	1028.5	1054.0	1066.3	1078.6
50°	866.4	896.2	926.0	955.8	985.7	1015.5	1045.3	1075.1	1104.9	1118.6	1132.4
52.5°	885.8	920.1	954.3	988.5	1022.8	1057.0	1091.2	1125.5	1159.7	1174.9	1190.1
55°	908.7	947.0	985.2	1023.4	1061.7	1099.9	1138.1	1176.4	1214.6	1231.8	1248.9
57.5°	936.9	979.4	1021.8	1064.2	1106.7	1149.1	1191.5	1234.0	1276.4	1294.8	1313.2
60°	966.3	1013.1	1060.0	1106.9	1153.7	1200.6	1247.5	1294.3	1341.2	1359.8	1378.4
62.5°	995.5	1045.7	1095.9	1146.1	1196.2	1246.4	1296.6	1346.8	1397.0	1415.5	1434.0
65°	1020.3	1072.2	1124.2	1176.1	1228.1	1280.0	1332.0	1383.9	1435.9	1454.5	1473.1
67.5°	1039.3	1092.3	1145.4	1198.5	1251.5	1304.6	1357.7	1410.7	1463.8	1481.4	1499.0
70°	1044.3	1097.3	1150.4	1203.5	1256.5	1309.6	1362.7	1415.7	1468.8	1485.2	1501.6
72.5°	1032.8	1084.5	1136.1	1187.7	1239.4	1291.0	1342.6	1394.3	1445.9	1461.0	1476.0
75°	1004.3	1053.2	1102.2	1151.2	1200.1	1249.1	1298.1	1347.0	1396.0	1409.6	1423.3
77.5°	953.3	999.2	1045.0	1090.9	1136.8	1182.7	1228.5	1274.4	1320.3	1333.6	1346.9
80°	890.3	931.9	973.6	1015.2	1056.9	1098.5	1140.2	1181.8	1223.5	1235.8	1248.1
82.5°	825.1	861.5	897.8	934.1	970.5	1006.8	1043.1	1079.5	1115.8	1127.1	1138.4
85°	746.6	779.1	811.7	844.3	876.8	909.4	942.0	974.5	1007.1	1017.1	1027.1
87.5°	671.7	700.1	728.6	757.1	785.5	814.0	842.5	870.9	899.4	908.6	917.8
90°	608.7	633.1	657.4	681.8	706.2	730.6	754.9	779.3	803.7	812.3	821.0
92.5°	553.0	575.5	598.0	620.5	642.9	665.4	687.9	710.4	732.9	740.5	748.2
95°	512.9	533.2	553.4	573.7	594.0	614.3	634.5	654.8	675.1	682.3	689.5
97.5°	475.9	495.0	514.2	533.4	552.5	571.7	590.9	610.0	629.2	636.0	642.7
100°	444.4	463.0	481.6	500.2	518.9	537.5	556.1	574.7	593.3	599.7	606.2
102.5°	418.0	436.0	454.1	472.1	490.2	508.2	526.3	544.3	562.4	568.8	575.2
105°	394.9	412.8	430.8	448.7	466.7	484.6	502.6	520.5	538.5	544.8	551.1
107.5°	373.1	391.1	409.2	427.2	445.3	463.3	481.4	499.4	517.5	523.7	529.9
110°	353.0	370.9	388.9	406.8	424.8	442.7	460.7	478.6	496.6	502.9	509.2



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
112.5°	333.0	351.0	368.9	386.9	404.8	422.8	440.7	458.7	476.6	483.0	489.5
115°	313.1	331.1	349.0	367.0	384.9	402.9	420.8	438.8	456.7	463.2	469.8
117.5°	292.0	309.9	327.7	345.6	363.4	381.3	399.1	417.0	434.8	441.6	448.3
120°	270.7	288.1	305.5	322.9	340.2	357.6	375.0	392.4	409.8	416.8	423.8
122.5°	247.1	264.0	280.8	297.7	314.5	331.4	348.2	365.1	381.9	389.0	396.1
125°	224.2	240.1	255.9	271.8	287.6	303.5	319.3	335.2	351.0	358.1	365.2
127.5°	200.5	215.4	230.4	245.3	260.3	275.2	290.2	305.1	320.1	326.9	333.6
130°	173.0	187.5	202.1	216.6	231.1	245.6	260.2	274.7	289.2	295.1	300.9
132.5°	147.5	161.3	175.2	189.0	202.9	216.7	230.6	244.4	258.3	263.7	269.1
135°	126.2	138.7	151.3	163.8	176.3	188.8	201.4	213.9	226.4	231.6	236.8
137.5°	106.2	116.8	127.3	137.8	148.4	158.9	169.4	180.0	190.5	195.9	201.3
140°	88.3	96.9	105.4	113.9	122.5	131.0	139.5	148.1	156.6	161.6	166.6
142.5°	72.0	79.2	86.4	93.6	100.8	108.0	115.2	122.4	129.6	133.9	138.2
145°	58.0	64.1	70.2	76.3	82.3	88.4	94.5	100.6	106.7	110.8	114.9
147.5°	45.0	50.1	55.2	60.3	65.4	70.5	75.6	80.7	85.8	89.7	93.6
150°	34.0	38.1	42.2	46.3	50.4	54.5	58.6	62.7	66.8	70.6	74.3
152.5°	24.1	27.3	30.6	33.8	37.0	40.2	43.5	46.7	49.9	53.4	57.0
155°	15.5	18.1	20.6	23.2	25.7	28.3	30.8	33.4	35.9	39.0	42.1
157.5°	7.1	9.2	11.3	13.4	15.5	17.6	19.7	21.8	23.9	26.7	29.5
160°	2.4	3.9	5.3	6.8	8.2	9.7	11.1	12.6	14.0	16.2	18.4
162.5°	0.4	0.9	1.3	1.8	2.2	2.7	3.1	3.6	4.0	5.8	7.5
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	963.3	962.3	961.3	960.3	959.3	958.3	957.3	958.4	959.5	960.6	961.7
5°	941.6	941.1	940.5	940.0	939.4	938.9	938.3	939.0	939.6	940.3	941.0
7.5°	920.7	920.2	919.6	919.1	918.5	918.0	917.4	917.8	918.3	918.7	919.2
10°	900.4	899.8	899.1	898.5	897.8	897.2	896.5	896.8	897.1	897.5	897.8
12.5°	882.2	881.7	881.3	880.8	880.4	879.9	879.5	879.6	879.7	879.8	879.9
15°	868.2	868.4	868.6	868.8	869.1	869.3	869.5	869.3	869.1	868.8	868.6
17.5°	862.9	864.0	865.1	866.2	867.3	868.4	869.5	868.5	867.5	866.5	865.5
20°	867.9	869.7	871.4	873.2	875.0	876.7	878.5	876.6	874.7	872.9	871.0
22.5°	876.2	878.4	880.6	882.8	885.1	887.3	889.5	886.9	884.4	881.8	879.3
25°	885.1	887.7	890.2	892.8	895.3	897.9	900.4	897.6	894.9	892.1	889.3
27.5°	893.5	896.5	899.4	902.4	905.4	908.4	911.4	908.2	905.0	901.8	898.6
30°	903.1	906.7	910.2	913.8	917.3	920.9	924.4	920.6	916.9	913.1	909.3
32.5°	915.4	919.7	924.0	928.3	932.7	937.0	941.3	937.0	932.7	928.3	924.0
35°	931.0	936.2	941.5	946.7	951.9	957.1	962.3	957.2	952.1	947.0	941.9
37.5°	951.3	957.6	964.0	970.3	976.6	982.9	989.2	982.9	976.6	970.3	964.0
40°	976.9	984.4	992.0	999.5	1007.0	1014.6	1022.1	1014.9	1007.7	1000.5	993.3
42.5°	1007.8	1016.7	1025.5	1034.4	1043.3	1052.1	1061.0	1052.9	1044.8	1036.7	1028.6
45°	1046.0	1056.3	1066.7	1077.0	1087.3	1097.6	1107.9	1098.3	1088.6	1079.0	1069.3
47.5°	1090.9	1103.2	1115.5	1127.8	1140.1	1152.4	1164.7	1153.3	1141.9	1130.5	1119.1
50°	1146.1	1159.8	1173.6	1187.3	1201.0	1214.8	1228.5	1215.5	1202.6	1189.6	1176.6
52.5°	1205.2	1220.4	1235.6	1250.8	1265.9	1281.1	1296.3	1282.1	1267.9	1253.8	1239.6
55°	1266.1	1283.3	1300.4	1317.6	1334.8	1351.9	1369.1	1353.6	1338.1	1322.6	1307.1
57.5°	1331.6	1350.0	1368.3	1386.7	1405.1	1423.5	1441.9	1425.5	1409.1	1392.7	1376.3
60°	1397.0	1415.6	1434.3	1452.9	1471.5	1490.1	1508.7	1492.0	1475.2	1458.5	1441.8
62.5°	1452.5	1471.0	1489.6	1508.1	1526.6	1545.1	1563.6	1547.1	1530.6	1514.1	1497.6
65°	1491.7	1510.3	1529.0	1547.6	1566.2	1584.8	1603.4	1587.3	1571.3	1555.2	1539.2
67.5°	1516.7	1534.3	1551.9	1569.5	1587.2	1604.8	1622.4	1607.2	1592.0	1576.9	1561.7
70°	1518.0	1534.4	1550.8	1567.2	1583.6	1600.0	1616.4	1602.3	1588.3	1574.2	1560.1
72.5°	1491.1	1506.2	1521.2	1536.3	1551.4	1566.4	1581.5	1568.4	1555.3	1542.3	1529.2
75°	1436.9	1450.5	1464.2	1477.8	1491.4	1505.1	1518.7	1506.7	1494.8	1482.8	1470.8
77.5°	1360.2	1373.5	1386.7	1400.0	1413.3	1426.6	1439.9	1427.7	1415.5	1403.3	1391.1
80°	1260.4	1272.7	1285.0	1297.3	1309.6	1321.9	1334.2	1322.9	1311.6	1300.3	1289.0
82.5°	1149.7	1161.0	1172.3	1183.6	1194.9	1206.2	1217.5	1207.0	1196.5	1185.9	1175.4
85°	1037.0	1047.0	1057.0	1067.0	1076.9	1086.9	1096.9	1087.3	1077.6	1068.0	1058.3
87.5°	927.0	936.2	945.4	954.6	963.8	973.0	982.2	973.2	964.2	955.3	946.3
90°	829.6	838.3	846.9	855.6	864.2	872.9	881.5	873.3	865.1	856.9	848.7
92.5°	755.8	763.5	771.1	778.8	786.4	794.1	801.7	794.4	787.1	779.8	772.5
95°	696.7	703.9	711.1	718.3	725.5	732.7	739.9	733.3	726.6	720.0	713.3
97.5°	649.5	656.2	663.0	669.7	676.5	683.2	690.0	683.7	677.4	671.1	664.8
100°	612.6	619.0	625.5	631.9	638.3	644.8	651.2	645.1	639.0	632.9	626.8
102.5°	581.7	588.1	594.5	600.9	607.4	613.8	620.2	614.3	608.5	602.6	596.7
105°	557.4	563.7	570.1	576.4	582.7	589.0	595.3	589.4	583.6	577.7	571.8
107.5°	536.1	542.3	548.6	554.8	561.0	567.2	573.4	567.6	561.9	556.1	550.3
110°	515.5	521.8	528.2	534.5	540.8	547.1	553.4	547.6	541.9	536.1	530.4



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
112.5°	495.9	502.3	508.8	515.2	521.6	528.1	534.5	528.6	522.7	516.9	511.0
115°	476.3	482.8	489.4	495.9	502.4	509.0	515.5	509.5	503.5	497.6	491.6
117.5°	455.1	461.8	468.6	475.3	482.1	488.8	495.6	489.5	483.4	477.3	471.2
120°	430.8	437.8	444.7	451.7	458.7	465.7	472.7	466.5	460.3	454.1	447.9
122.5°	403.2	410.3	417.3	424.4	431.5	438.6	445.7	439.4	433.1	426.8	420.5
125°	372.3	379.4	386.4	393.5	400.6	407.7	414.8	408.8	402.8	396.9	390.9
127.5°	340.4	347.1	353.9	360.6	367.4	374.1	380.9	375.1	369.4	363.6	357.9
130°	306.8	312.7	318.5	324.4	330.3	336.1	342.0	336.8	331.6	326.4	321.2
132.5°	274.6	280.0	285.4	290.8	296.3	301.7	307.1	302.7	298.2	293.8	289.4
135°	242.0	247.2	252.4	257.6	262.8	268.0	273.2	269.2	265.2	261.2	257.2
137.5°	206.8	212.2	217.6	223.0	228.5	233.9	239.3	235.3	231.3	227.3	223.3
140°	171.5	176.5	181.5	186.5	191.4	196.4	201.4	198.1	194.8	191.4	188.1
142.5°	142.6	146.9	151.2	155.5	159.9	164.2	168.5	166.2	163.9	161.5	159.2
145°	119.0	123.1	127.2	131.3	135.4	139.5	143.6	141.7	139.8	137.9	136.0
147.5°	97.4	101.3	105.2	109.1	112.9	116.8	120.7	119.1	117.6	116.0	114.5
150°	78.1	81.9	85.6	89.4	93.2	96.9	100.7	99.4	98.0	96.7	95.4
152.5°	60.5	64.1	67.6	71.2	74.7	78.3	81.8	80.7	79.6	78.5	77.4
155°	45.2	48.3	51.4	54.5	57.6	60.7	63.8	63.0	62.2	61.5	60.7
157.5°	32.2	35.0	37.8	40.6	43.3	46.1	48.9	48.2	47.6	46.9	46.2
160°	20.6	22.8	25.1	27.3	29.5	31.7	33.9	33.5	33.0	32.6	32.1
162.5°	9.3	11.1	12.8	14.6	16.4	18.1	19.9	19.7	19.5	19.2	19.0
165°	3.3	4.4	5.6	6.7	7.8	8.9	10.0	10.0	10.0	10.0	10.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLEDD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	962.9	964.0	965.1	966.2	967.3	968.8	970.4	971.9	973.5	975.0	976.6
5°	941.6	942.3	943.0	943.6	944.3	946.2	948.1	950.0	951.9	953.7	955.6
7.5°	919.6	920.1	920.5	921.0	921.4	923.7	926.0	928.4	930.7	933.0	935.3
10°	898.1	898.4	898.8	899.1	899.4	901.7	904.1	906.4	908.7	911.1	913.4
12.5°	880.1	880.2	880.3	880.4	880.5	882.9	885.4	887.8	890.2	892.7	895.1
15°	868.4	868.2	867.9	867.7	867.5	869.1	870.6	872.2	873.7	875.3	876.8
17.5°	864.6	863.6	862.6	861.6	860.6	860.7	860.8	860.9	861.0	861.2	861.3
20°	869.1	867.2	865.4	863.5	861.6	859.5	857.4	855.3	853.2	851.0	848.9
22.5°	876.7	874.2	871.6	869.1	866.5	862.4	858.3	854.2	850.1	846.0	841.9
25°	886.6	883.8	881.0	878.3	875.5	869.6	863.8	857.9	852.0	846.2	840.3
27.5°	895.3	892.1	888.9	885.7	882.5	875.6	868.8	861.9	855.0	848.2	841.3
30°	905.6	901.8	898.0	894.3	890.5	882.4	874.3	866.2	858.1	850.1	842.0
32.5°	919.7	915.4	911.0	906.7	902.4	892.7	882.9	873.2	863.4	853.7	843.9
35°	936.8	931.7	926.6	921.5	916.4	904.9	893.4	881.8	870.3	858.8	847.3
37.5°	957.6	951.3	945.0	938.7	932.4	919.2	906.0	892.8	879.6	866.5	853.3
40°	986.1	978.9	971.7	964.5	957.3	941.7	926.1	910.4	894.8	879.2	863.6
42.5°	1020.6	1012.5	1004.4	996.3	988.2	969.6	951.0	932.4	913.8	895.1	876.5
45°	1059.7	1050.0	1040.4	1030.7	1021.1	999.6	978.1	956.6	935.1	913.7	892.2
47.5°	1107.6	1096.2	1084.8	1073.4	1062.0	1037.2	1012.4	987.5	962.7	937.9	913.1
50°	1163.7	1150.7	1137.7	1124.8	1111.8	1083.0	1054.2	1025.4	996.6	967.8	939.0
52.5°	1225.4	1211.2	1197.1	1182.9	1168.7	1135.6	1102.4	1069.3	1036.2	1003.0	969.9
55°	1291.5	1276.0	1260.5	1245.0	1229.5	1192.1	1154.6	1117.2	1079.7	1042.3	1004.8
57.5°	1359.9	1343.5	1327.1	1310.7	1294.3	1252.5	1210.8	1169.0	1127.2	1085.5	1043.7
60°	1425.0	1408.3	1391.6	1374.8	1358.1	1312.5	1266.8	1221.2	1175.5	1129.9	1084.2
62.5°	1481.0	1464.5	1448.0	1431.5	1415.0	1366.1	1317.3	1268.4	1219.5	1170.7	1121.8
65°	1523.1	1507.1	1491.0	1475.0	1458.9	1407.9	1357.0	1306.0	1255.0	1204.1	1153.1
67.5°	1546.5	1531.3	1516.2	1501.0	1485.8	1433.7	1381.6	1329.6	1277.5	1225.4	1173.3
70°	1546.1	1532.0	1517.9	1503.9	1489.8	1437.8	1385.9	1333.9	1281.9	1230.0	1178.0
72.5°	1516.1	1503.0	1490.0	1476.9	1463.8	1413.3	1362.8	1312.2	1261.7	1211.2	1160.7
75°	1458.9	1446.9	1434.9	1423.0	1411.0	1363.2	1315.5	1267.7	1220.0	1172.2	1124.5
77.5°	1379.0	1366.8	1354.6	1342.4	1330.2	1286.0	1241.8	1197.6	1153.4	1109.2	1065.0
80°	1277.7	1266.4	1255.1	1243.8	1232.5	1192.2	1151.8	1111.5	1071.2	1030.8	990.5
82.5°	1164.9	1154.4	1143.8	1133.3	1122.8	1086.9	1051.0	1015.1	979.2	943.3	907.4
85°	1048.7	1039.0	1029.4	1019.7	1010.1	978.5	946.9	915.4	883.8	852.2	820.6
87.5°	937.3	928.3	919.4	910.4	901.4	873.9	846.4	819.0	791.5	764.0	736.5
90°	840.5	832.3	824.1	815.9	807.7	783.3	758.9	734.6	710.2	685.8	661.4
92.5°	765.1	757.8	750.5	743.2	735.9	714.2	692.5	670.8	649.1	627.3	605.6
95°	706.7	700.0	693.4	686.7	680.1	660.0	640.0	619.9	599.9	579.8	559.8
97.5°	658.4	652.1	645.8	639.5	633.2	614.4	595.5	576.7	557.9	539.0	520.2
100°	620.7	614.6	608.5	602.4	596.3	578.2	560.2	542.1	524.1	506.0	488.0
102.5°	590.9	585.0	579.1	573.3	567.4	549.7	531.9	514.2	496.5	478.7	461.0
105°	566.0	560.1	554.2	548.4	542.5	525.1	507.7	490.3	472.9	455.5	438.1
107.5°	544.6	538.8	533.0	527.3	521.5	504.2	486.9	469.7	452.4	435.1	417.8
110°	524.6	518.9	513.1	507.4	501.6	484.3	467.0	449.7	432.4	415.2	397.9



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLEDD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
112.5°	505.1	499.2	493.4	487.5	481.6	464.4	447.3	430.1	412.9	395.8	378.6
115°	485.6	479.6	473.7	467.7	461.7	444.5	427.3	410.2	393.0	375.8	358.6
117.5°	465.1	459.0	452.9	446.8	440.7	423.5	406.4	389.2	372.0	354.9	337.7
120°	441.6	435.4	429.2	423.0	416.8	400.0	383.1	366.3	349.4	332.6	315.7
122.5°	414.1	407.8	401.5	395.2	388.9	372.7	356.5	340.4	324.2	308.0	291.8
125°	384.9	378.9	373.0	367.0	361.0	345.3	329.5	313.8	298.1	282.3	266.6
127.5°	352.1	346.4	340.6	334.9	329.1	314.5	299.8	285.2	270.6	255.9	241.3
130°	316.0	310.8	305.6	300.4	295.2	281.9	268.6	255.3	242.0	228.7	215.4
132.5°	284.9	280.5	276.1	271.6	267.2	254.5	241.7	229.0	216.3	203.5	190.8
135°	253.3	249.3	245.3	241.3	237.3	225.9	214.5	203.1	191.7	180.2	168.8
137.5°	219.4	215.4	211.4	207.4	203.4	194.1	184.8	175.5	166.2	156.9	147.6
140°	184.8	181.5	178.1	174.8	171.5	164.0	156.4	148.9	141.4	133.8	126.3
142.5°	156.9	154.6	152.2	149.9	147.6	141.2	134.7	128.3	121.9	115.4	109.0
145°	134.2	132.3	130.4	128.5	126.6	121.1	115.5	110.0	104.5	98.9	93.4
147.5°	112.9	111.4	109.8	108.3	106.7	102.0	97.4	92.7	88.1	83.4	78.8
150°	94.0	92.7	91.4	90.0	88.7	84.7	80.7	76.7	72.7	68.8	64.8
152.5°	76.2	75.1	74.0	72.9	71.8	68.5	65.2	61.8	58.5	55.2	51.9
155°	59.9	59.1	58.4	57.6	56.8	54.0	51.3	48.5	45.7	43.0	40.2
157.5°	45.6	44.9	44.2	43.6	42.9	40.6	38.2	35.9	33.6	31.2	28.9
160°	31.7	31.2	30.8	30.3	29.9	28.1	26.4	24.6	22.8	21.1	19.3
162.5°	18.8	18.6	18.3	18.1	17.9	17.0	16.1	15.3	14.4	13.5	12.6
165°	10.0	10.0	10.0	10.0	10.0	9.7	9.3	9.0	8.7	8.3	8.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	978.1	979.7	981.2	981.6	982.1	982.5	983.0	983.4	983.9	984.3	984.8
5°	957.5	959.4	961.3	962.4	963.5	964.6	965.7	966.8	967.9	969.0	970.1
7.5°	937.7	940.0	942.3	943.7	945.2	946.6	948.1	949.5	951.0	952.4	953.9
10°	915.7	918.1	920.4	922.2	923.9	925.7	927.5	929.2	931.0	932.8	934.5
12.5°	897.5	900.0	902.4	903.7	905.1	906.4	907.7	909.1	910.4	911.7	913.1
15°	878.4	879.9	881.5	882.7	883.9	885.2	886.4	887.6	888.8	890.1	891.3
17.5°	861.4	861.5	861.6	862.3	862.9	863.6	864.2	864.9	865.5	866.2	866.8
20°	846.8	844.7	842.6	842.5	842.4	842.3	842.2	842.0	841.9	841.8	841.7
22.5°	837.8	833.7	829.6	827.9	826.3	824.6	823.0	821.3	819.7	818.0	816.4
25°	834.4	828.6	822.7	818.7	814.7	810.7	806.7	802.8	798.8	794.8	790.8
27.5°	834.4	827.6	820.7	813.6	806.5	799.4	792.3	785.3	778.2	771.1	764.0
30°	833.9	825.8	817.7	807.6	797.5	787.4	777.3	767.3	757.2	747.1	737.0
32.5°	834.2	824.4	814.7	801.8	789.0	776.1	763.3	750.4	737.6	724.7	711.9
35°	835.7	824.2	812.7	797.0	781.2	765.5	749.8	734.0	718.3	702.6	686.8
37.5°	840.1	826.9	813.7	795.2	776.7	758.2	739.7	721.2	702.7	684.2	665.7
40°	847.9	832.3	816.7	795.6	774.6	753.5	732.5	711.4	690.4	669.3	648.3
42.5°	857.9	839.3	820.7	797.3	773.9	750.6	727.2	703.8	680.4	657.1	633.7
45°	870.7	849.2	827.7	801.7	775.6	749.6	723.5	697.5	671.4	645.4	619.3
47.5°	888.2	863.4	838.6	809.6	780.6	751.5	722.5	693.5	664.5	635.4	606.4
50°	910.2	881.4	852.6	820.1	787.7	755.2	722.7	690.3	657.8	625.3	592.9
52.5°	936.8	903.6	870.5	834.4	798.3	762.2	726.1	689.9	653.8	617.7	581.6
55°	967.4	929.9	892.5	852.3	812.1	771.8	731.6	691.4	651.2	610.9	570.7
57.5°	1001.9	960.2	918.4	873.9	829.3	784.8	740.2	695.7	651.1	606.6	562.0
60°	1038.6	992.9	947.3	898.2	849.1	800.1	751.0	701.9	652.8	603.8	554.7
62.5°	1072.9	1024.1	975.2	921.7	868.2	814.7	761.2	707.6	654.1	600.6	547.1
65°	1102.1	1051.2	1000.2	942.4	884.5	826.7	768.8	711.0	653.1	595.3	537.4
67.5°	1121.3	1069.2	1017.1	955.6	894.1	832.6	771.1	709.7	648.2	586.7	525.2
70°	1126.0	1074.1	1022.1	958.2	894.2	830.3	766.4	702.4	638.5	574.6	510.6
72.5°	1110.1	1059.6	1009.1	944.6	880.1	815.7	751.2	686.7	622.2	557.8	493.3
75°	1076.7	1029.0	981.2	917.3	853.3	789.4	725.5	661.5	597.6	533.7	469.7
77.5°	1020.8	976.6	932.4	870.9	809.4	747.9	686.4	624.9	563.4	501.9	440.4
80°	950.2	909.8	869.5	812.0	754.5	697.0	639.5	582.0	524.5	467.0	409.5
82.5°	871.5	835.6	799.7	747.2	694.7	642.2	589.7	537.1	484.6	432.1	379.6
85°	789.1	757.5	725.9	678.0	630.2	582.3	534.5	486.6	438.8	390.9	343.1
87.5°	709.1	681.6	654.1	611.6	569.0	526.5	483.9	441.4	398.8	356.3	313.7
90°	637.1	612.7	588.3	550.2	512.1	474.0	435.9	397.7	359.6	321.5	283.4
92.5°	583.9	562.2	540.5	505.6	470.7	435.8	400.9	366.0	331.1	296.2	261.3
95°	539.7	519.7	499.6	467.4	435.1	402.9	370.6	338.4	306.1	273.9	241.6
97.5°	501.4	482.5	463.7	433.8	403.9	373.9	344.0	314.1	284.2	254.2	224.3
100°	469.9	451.9	433.8	405.5	377.3	349.0	320.8	292.5	264.3	236.0	207.8
102.5°	443.3	425.5	407.8	380.9	354.0	327.0	300.1	273.2	246.3	219.3	192.4
105°	420.7	403.3	385.9	359.9	333.8	307.8	281.8	255.7	229.7	203.7	177.6
107.5°	400.6	383.3	366.0	340.7	315.5	290.2	264.9	239.7	214.4	189.1	163.9
110°	380.6	363.3	346.0	321.7	297.5	273.2	248.9	224.7	200.4	176.1	151.9



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
112.5°	361.4	344.3	327.1	303.6	280.1	256.6	233.1	209.7	186.2	162.7	139.2
115°	341.5	324.3	307.1	284.6	262.1	239.6	217.1	194.7	172.2	149.7	127.2
117.5°	320.5	303.4	286.2	264.8	243.4	222.0	200.6	179.3	157.9	136.5	115.1
120°	298.9	282.0	265.2	245.3	225.3	205.4	185.5	165.5	145.6	125.7	105.7
122.5°	275.7	259.5	243.3	224.9	206.5	188.1	169.7	151.4	133.0	114.6	96.2
125°	250.9	235.1	219.4	202.8	186.2	169.5	152.9	136.3	119.7	103.0	86.4
127.5°	226.7	212.0	197.4	182.3	167.3	152.2	137.1	122.1	107.0	91.9	76.9
130°	202.1	188.8	175.5	162.1	148.7	135.3	121.9	108.4	95.0	81.6	68.2
132.5°	178.1	165.3	152.6	141.0	129.3	117.7	106.1	94.4	82.8	71.2	59.5
135°	157.4	146.0	134.6	124.3	114.0	103.7	93.4	83.1	72.8	62.5	52.2
137.5°	138.3	129.0	119.7	110.3	100.9	91.4	82.0	72.6	63.2	53.7	44.3
140°	118.8	111.2	103.7	95.3	86.9	78.4	70.0	61.6	53.2	44.7	36.3
142.5°	102.6	96.1	89.7	82.2	74.6	67.1	59.6	52.0	44.5	37.0	29.4
145°	87.9	82.3	76.8	70.2	63.5	56.9	50.2	43.6	36.9	30.3	23.6
147.5°	74.1	69.5	64.8	59.0	53.3	47.5	41.8	36.0	30.3	24.5	18.8
150°	60.8	56.8	52.8	48.2	43.5	38.9	34.2	29.6	24.9	20.3	15.6
152.5°	48.5	45.2	41.9	38.2	34.6	30.9	27.3	23.6	20.0	16.3	12.7
155°	37.4	34.7	31.9	29.1	26.4	23.6	20.8	18.1	15.3	12.5	9.8
157.5°	26.6	24.2	21.9	20.1	18.4	16.6	14.8	13.1	11.3	9.5	7.8
160°	17.5	15.8	14.0	12.9	11.8	10.7	9.6	8.4	7.3	6.2	5.1
162.5°	11.8	10.9	10.0	9.2	8.4	7.7	6.9	6.1	5.3	4.6	3.8
165°	7.7	7.3	7.0	6.4	5.9	5.3	4.8	4.2	3.7	3.1	2.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	985.2	988.2	991.2	994.2	997.2	1000.1	1003.1	1006.1	1009.1	1012.1	1012.1
5°	971.2	975.2	979.2	983.2	987.2	991.1	995.1	999.1	1003.1	1007.1	1008.3
7.5°	955.3	960.1	964.8	969.6	974.4	979.1	983.9	988.7	993.4	998.2	1000.9
10°	936.3	941.8	947.4	952.9	958.5	964.0	969.6	975.1	980.7	986.2	990.1
12.5°	914.4	920.6	926.8	933.0	939.2	945.4	951.6	957.8	964.0	970.2	975.4
15°	892.5	899.1	905.8	912.4	919.1	925.7	932.4	939.0	945.7	952.3	958.7
17.5°	867.5	874.6	881.7	888.8	895.9	903.0	910.1	917.2	924.3	931.4	939.2
20°	841.6	848.7	855.8	862.9	870.0	877.0	884.1	891.2	898.3	905.4	914.7
22.5°	814.7	821.7	828.7	835.6	842.6	849.6	856.6	863.5	870.5	877.5	888.2
25°	786.8	793.9	801.0	808.1	815.2	822.2	829.3	836.4	843.5	850.6	862.6
27.5°	756.9	763.4	770.0	776.5	783.0	789.6	796.1	802.6	809.2	815.7	829.5
30°	726.9	732.8	738.7	744.5	750.4	756.3	762.2	768.0	773.9	779.8	795.4
32.5°	699.0	703.9	708.8	713.6	718.5	723.4	728.3	733.1	738.0	742.9	760.2
35°	671.1	674.9	678.6	682.4	686.2	689.9	693.7	697.5	701.2	705.0	724.1
37.5°	647.2	649.3	651.4	653.5	655.6	657.7	659.8	661.9	664.0	666.1	687.4
40°	627.2	627.0	626.8	626.5	626.3	626.1	625.9	625.6	625.4	625.2	649.1
42.5°	610.3	607.5	604.7	602.0	599.2	596.4	593.6	590.9	588.1	585.3	611.8
45°	593.3	588.0	582.7	577.4	572.1	566.7	561.4	556.1	550.8	545.5	574.5
47.5°	577.4	569.3	561.2	553.1	545.0	537.0	528.9	520.8	512.7	504.6	536.3
50°	560.4	549.8	539.1	528.5	517.9	507.2	496.6	486.0	475.3	464.7	499.0
52.5°	545.5	532.1	518.7	505.3	491.9	478.4	465.0	451.6	438.2	424.8	462.0
55°	530.5	514.5	498.6	482.6	466.7	450.7	434.8	418.8	402.9	386.9	426.9
57.5°	517.5	498.9	480.3	461.7	443.1	424.4	405.8	387.2	368.6	350.0	392.8
60°	505.6	484.3	463.0	441.8	420.5	399.2	377.9	356.7	335.4	314.1	359.7
62.5°	493.6	469.8	446.0	422.1	398.3	374.5	350.7	326.8	303.0	279.2	327.6
65°	479.6	453.6	427.5	401.5	375.5	349.4	323.4	297.4	271.3	245.3	296.3
67.5°	463.7	435.6	407.4	379.3	351.1	323.0	294.8	266.7	238.5	210.4	263.9
70°	446.7	417.0	387.3	357.6	327.9	298.3	268.6	238.9	209.2	179.5	234.8
72.5°	428.8	397.8	366.8	335.7	304.7	273.7	242.7	211.6	180.6	149.6	206.0
75°	405.8	374.2	342.7	311.1	279.5	248.0	216.4	184.8	153.3	121.7	178.6
77.5°	378.9	347.4	316.0	284.5	253.0	221.6	190.1	158.6	127.2	95.7	152.3
80°	352.0	320.9	289.7	258.6	227.5	196.3	165.2	134.1	102.9	71.8	127.8
82.5°	327.1	296.2	265.3	234.4	203.5	172.5	141.6	110.7	79.8	48.9	103.4
85°	295.2	265.7	236.2	206.8	177.3	147.8	118.3	88.9	59.4	29.9	82.2
87.5°	271.2	242.4	213.6	184.8	156.0	127.2	98.4	69.6	40.8	12.0	61.7
90°	245.3	218.0	190.8	163.5	136.3	109.0	81.8	54.5	27.3	0.0	46.5
92.5°	226.4	201.2	176.1	150.9	125.8	100.6	75.5	50.3	25.2	0.0	43.1
95°	209.4	186.1	162.9	139.6	116.3	93.1	69.8	46.5	23.3	0.0	39.7
97.5°	194.4	172.8	151.2	129.6	108.0	86.4	64.8	43.2	21.6	0.0	36.3
100°	179.5	159.6	139.6	119.7	99.7	79.8	59.8	39.9	19.9	0.0	33.2
102.5°	165.5	147.2	128.9	110.7	92.4	74.1	55.8	37.6	19.3	1.0	31.2
105°	151.6	134.9	118.1	101.4	84.7	67.9	51.2	34.5	17.7	1.0	28.6
107.5°	138.6	123.2	107.8	92.4	77.0	61.6	46.2	30.8	15.4	0.0	24.9
110°	127.6	113.4	99.2	85.1	70.9	56.7	42.5	28.4	14.2	0.0	22.5



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
112.5°	115.7	103.0	90.2	77.5	64.7	52.0	39.2	26.5	13.7	1.0	21.4
115°	104.7	93.2	81.7	70.1	58.6	47.1	35.6	24.0	12.5	1.0	19.5
117.5°	93.7	83.4	73.1	62.8	52.5	42.2	31.9	21.6	11.3	1.0	17.7
120°	85.8	76.4	67.0	57.5	48.1	38.7	29.3	19.8	10.4	1.0	16.2
122.5°	77.8	69.3	60.7	52.2	43.7	35.1	26.6	18.1	9.5	1.0	14.5
125°	69.8	62.2	54.5	46.9	39.2	31.6	23.9	16.3	8.6	1.0	12.9
127.5°	61.8	55.0	48.3	41.5	34.8	28.0	21.3	14.5	7.8	1.0	11.0
130°	54.8	48.8	42.8	36.9	30.9	24.9	18.9	13.0	7.0	1.0	9.2
132.5°	47.9	42.7	37.5	32.3	27.1	21.8	16.6	11.4	6.2	1.0	7.5
135°	41.9	37.4	32.8	28.3	23.7	19.2	14.6	10.1	5.5	1.0	6.1
137.5°	34.9	31.1	27.4	23.6	19.8	16.1	12.3	8.5	4.8	1.0	4.7
140°	27.9	24.9	21.9	18.9	15.9	13.0	10.0	7.0	4.0	1.0	3.5
142.5°	21.9	19.6	17.3	14.9	12.6	10.3	8.0	5.6	3.3	1.0	2.7
145°	17.0	15.2	13.4	11.7	9.9	8.1	6.3	4.6	2.8	1.0	2.1
147.5°	13.0	11.7	10.3	9.0	7.7	6.3	5.0	3.7	2.3	1.0	1.9
150°	11.0	9.9	8.8	7.7	6.6	5.4	4.3	3.2	2.1	1.0	1.6
152.5°	9.0	8.2	7.4	6.7	5.9	5.1	4.3	3.6	2.8	2.0	2.3
155°	7.0	6.4	5.9	5.3	4.8	4.2	3.7	3.1	2.6	2.0	2.2
157.5°	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4	2.0	2.1
160°	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	2.0
162.5°	3.0	2.8	2.6	2.3	2.1	1.9	1.7	1.4	1.2	1.0	1.0
165°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1012.1	1012.1	1012.1	1012.1	1012.1	1012.1	1012.1	1012.1	1013.1	1014.1	1015.1
5°	1009.5	1010.8	1012.0	1013.2	1014.4	1015.7	1016.9	1018.1	1020.2	1022.3	1024.4
7.5°	1003.5	1006.2	1008.8	1011.5	1014.1	1016.8	1019.4	1022.1	1025.3	1028.5	1031.7
10°	994.0	997.8	1001.7	1005.6	1009.5	1013.3	1017.2	1021.1	1025.5	1030.0	1034.4
12.5°	980.6	985.8	991.0	996.3	1001.5	1006.7	1011.9	1017.1	1022.9	1028.6	1034.4
15°	965.1	971.6	978.0	984.4	990.8	997.3	1003.7	1010.1	1017.4	1024.7	1032.0
17.5°	946.9	954.7	962.4	970.2	977.9	985.7	993.4	1001.2	1010.2	1019.1	1028.1
20°	924.0	933.3	942.6	952.0	961.3	970.6	979.9	989.2	1000.1	1010.9	1021.8
22.5°	899.0	909.7	920.5	931.2	942.0	952.7	963.5	974.2	987.7	1001.2	1014.8
25°	874.5	886.5	898.5	910.4	922.4	934.4	946.3	958.3	974.9	991.5	1008.2
27.5°	843.4	857.2	871.1	884.9	898.8	912.6	926.5	940.3	960.2	980.2	1000.1
30°	811.0	826.7	842.3	857.9	873.5	889.2	904.8	920.4	943.6	966.7	989.9
32.5°	777.5	794.7	812.0	829.3	846.6	863.8	881.1	898.4	925.2	952.0	978.9
35°	743.1	762.2	781.2	800.3	819.3	838.4	857.4	876.5	906.9	937.2	967.6
37.5°	708.7	729.9	751.2	772.5	793.8	815.0	836.3	857.6	891.3	925.0	958.6
40°	673.1	697.0	720.9	744.9	768.8	792.7	816.7	840.6	877.7	914.8	952.0
42.5°	638.3	664.8	691.3	717.7	744.2	770.7	797.2	823.7	864.7	905.7	946.7
45°	603.5	632.6	661.6	690.6	719.6	748.7	777.7	806.7	852.0	897.3	942.7
47.5°	568.0	599.7	631.4	663.0	694.7	726.4	758.1	789.8	839.8	889.7	939.7
50°	533.4	567.7	602.1	636.4	670.8	705.1	739.5	773.8	828.4	883.0	937.7
52.5°	499.2	536.5	573.7	610.9	648.1	685.4	722.6	759.8	819.7	879.7	939.6
55°	466.9	506.9	546.9	586.9	626.9	666.9	706.9	746.9	813.3	879.6	946.0
57.5°	435.5	478.3	521.1	563.8	606.6	649.4	692.1	734.9	807.6	880.3	953.0
60°	405.4	451.0	496.7	542.3	588.0	633.6	679.3	724.9	804.5	884.0	963.6
62.5°	376.0	424.5	472.9	521.3	569.7	618.2	666.6	715.0	801.6	888.3	974.9
65°	347.2	398.2	449.2	500.1	551.1	602.1	653.0	704.0	797.4	890.8	984.2
67.5°	317.4	370.9	424.4	478.0	531.5	585.0	638.5	692.0	791.3	890.6	989.8
70°	290.1	345.4	400.7	455.9	511.2	566.5	621.8	677.1	780.7	884.3	987.9
72.5°	262.4	318.8	375.2	431.5	487.9	544.3	600.7	657.1	762.8	868.5	974.2
75°	235.6	292.5	349.5	406.4	463.4	520.3	577.3	634.2	739.5	844.7	950.0
77.5°	208.9	265.6	322.2	378.8	435.4	492.1	548.7	605.3	707.3	809.4	911.4
80°	183.7	239.7	295.6	351.6	407.5	463.5	519.4	575.4	671.8	768.2	864.6
82.5°	157.9	212.4	266.9	321.5	376.0	430.5	485.0	539.5	629.5	719.4	809.4
85°	134.5	186.8	239.1	291.4	343.7	396.0	448.3	500.6	583.0	665.5	747.9
87.5°	111.5	161.2	211.0	260.7	310.5	360.2	410.0	459.7	534.5	609.3	684.1
90°	93.1	139.6	186.1	232.7	279.2	325.7	372.3	418.8	486.8	554.9	622.9
92.5°	86.2	129.3	172.4	215.5	258.6	301.7	344.8	387.9	449.7	511.5	573.4
95°	79.3	119.0	158.7	198.3	238.0	277.7	317.3	357.0	413.9	470.9	527.8
97.5°	72.7	109.0	145.4	181.7	218.1	254.4	290.8	327.1	379.9	432.8	485.6
100°	66.5	99.7	133.0	166.2	199.5	232.7	266.0	299.2	348.8	398.5	448.1
102.5°	61.5	91.7	122.0	152.2	182.5	212.7	243.0	273.2	320.3	367.4	414.5
105°	56.2	83.8	111.4	138.9	166.5	194.1	221.7	249.3	294.1	338.8	383.6
107.5°	49.9	74.8	99.7	124.7	149.6	174.5	199.5	224.4	267.4	310.4	353.4
110°	45.0	67.5	90.0	112.4	134.9	157.4	179.9	202.4	243.4	284.4	325.4



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
112.5°	41.8	62.2	82.6	102.9	123.3	143.7	164.1	184.5	223.5	262.5	301.5
115°	38.0	56.5	75.0	93.5	112.0	130.5	149.0	167.5	204.7	242.0	279.2
117.5°	34.5	51.2	67.9	84.7	101.4	118.1	134.9	151.6	186.9	222.3	257.6
120°	31.4	46.5	61.7	76.9	92.1	107.2	122.4	137.6	170.5	203.4	236.3
122.5°	28.0	41.6	55.1	68.6	82.1	95.7	109.2	122.7	153.1	183.4	213.8
125°	24.7	36.6	48.4	60.3	72.1	84.0	95.8	107.7	135.8	164.0	192.1
127.5°	20.9	30.9	40.9	50.8	60.8	70.8	80.7	90.7	117.0	143.2	169.5
130°	17.4	25.6	33.8	42.0	50.2	58.4	66.6	74.8	98.5	122.2	145.9
132.5°	14.1	20.6	27.1	33.7	40.2	46.7	53.3	59.8	80.9	101.9	123.0
135°	11.2	16.3	21.4	26.5	31.6	36.7	41.8	46.9	65.1	83.2	101.4
137.5°	8.3	12.0	15.6	19.3	22.9	26.6	30.2	33.9	49.7	65.6	81.4
140°	6.1	8.6	11.2	13.7	16.3	18.8	21.4	23.9	37.6	51.4	65.1
142.5°	4.3	6.0	7.7	9.3	11.0	12.7	14.3	16.0	27.6	39.3	50.9
145°	3.2	4.3	5.4	6.6	7.7	8.8	9.9	11.0	20.4	29.8	39.2
147.5°	2.8	3.7	4.6	5.4	6.3	7.2	8.1	9.0	16.3	23.6	30.9
150°	2.1	2.7	3.2	3.8	4.3	4.9	5.4	6.0	11.5	17.1	22.6
152.5°	2.7	3.0	3.3	3.7	4.0	4.3	4.7	5.0	8.8	12.5	16.3
155°	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	6.2	8.4	10.6
157.5°	2.2	2.3	2.4	2.6	2.7	2.8	2.9	3.0	4.2	5.4	6.7
160°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.1	3.7
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.4	1.7
165°	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1016.1	1017.1	1018.1	1019.1	1020.1	1021.1	1021.7	1022.2	1022.8	1023.3	1023.9
5°	1026.5	1028.7	1030.8	1032.9	1035.0	1037.1	1038.2	1039.3	1040.4	1041.5	1042.6
7.5°	1034.9	1038.2	1041.4	1044.6	1047.8	1051.0	1053.0	1055.0	1057.0	1059.0	1061.0
10°	1038.8	1043.3	1047.7	1052.1	1056.6	1061.0	1064.2	1067.4	1070.6	1073.8	1077.1
12.5°	1040.2	1045.9	1051.7	1057.5	1063.2	1069.0	1073.3	1077.6	1082.0	1086.3	1090.6
15°	1039.3	1046.7	1054.0	1061.3	1068.6	1075.9	1081.4	1087.0	1092.5	1098.1	1103.6
17.5°	1037.1	1046.0	1055.0	1064.0	1072.9	1081.9	1089.5	1097.2	1104.8	1112.5	1120.1
20°	1032.6	1043.5	1054.3	1065.2	1076.0	1086.9	1097.1	1107.3	1117.5	1127.7	1137.9
22.5°	1028.3	1041.8	1055.3	1068.9	1082.4	1095.9	1107.9	1119.8	1131.8	1143.8	1155.7
25°	1024.8	1041.4	1058.0	1074.7	1091.3	1107.9	1121.5	1135.1	1148.8	1162.4	1176.0
27.5°	1020.1	1040.0	1060.0	1079.9	1099.9	1119.8	1135.0	1150.2	1165.3	1180.5	1195.7
30°	1013.0	1036.2	1059.3	1082.5	1105.6	1128.8	1146.1	1163.4	1180.7	1198.0	1215.2
32.5°	1005.7	1032.5	1059.3	1086.2	1113.0	1139.8	1159.4	1179.0	1198.6	1218.2	1237.9
35°	997.9	1028.3	1058.6	1089.0	1119.3	1149.7	1172.1	1194.5	1216.9	1239.3	1261.6
37.5°	992.3	1026.0	1059.7	1093.3	1127.0	1160.7	1186.5	1212.3	1238.1	1263.9	1289.8
40°	989.1	1026.2	1063.3	1100.5	1137.6	1174.7	1204.3	1233.9	1263.4	1293.0	1322.6
42.5°	987.7	1028.6	1069.6	1110.6	1151.6	1192.6	1226.6	1260.6	1294.6	1328.6	1362.7
45°	988.0	1033.3	1078.6	1124.0	1169.3	1214.6	1253.7	1292.8	1331.9	1371.0	1410.2
47.5°	989.7	1039.6	1089.6	1139.6	1189.5	1239.5	1284.6	1329.7	1374.8	1419.9	1464.9
50°	992.3	1046.9	1101.5	1156.2	1210.8	1265.4	1317.4	1369.3	1421.3	1473.3	1525.2
52.5°	999.6	1059.5	1119.5	1179.4	1239.4	1299.3	1358.4	1417.4	1476.5	1535.5	1594.6
55°	1012.4	1078.7	1145.1	1211.5	1277.8	1344.2	1409.9	1475.6	1541.3	1607.0	1672.7
57.5°	1025.7	1098.3	1171.0	1243.7	1316.4	1389.1	1461.6	1534.0	1606.5	1678.9	1751.4
60°	1043.1	1122.7	1202.2	1281.8	1361.3	1440.9	1519.2	1597.6	1675.9	1754.2	1832.6
62.5°	1061.6	1148.2	1234.9	1321.5	1408.2	1494.8	1577.9	1661.0	1744.1	1827.2	1910.2
65°	1077.6	1171.0	1264.4	1357.8	1451.2	1544.6	1630.9	1717.2	1803.5	1889.8	1976.2
67.5°	1089.1	1188.4	1287.7	1386.9	1486.2	1585.5	1673.1	1760.8	1848.4	1936.1	2023.7
70°	1091.5	1195.0	1298.6	1402.2	1505.8	1609.4	1696.6	1783.8	1871.0	1958.2	2045.4
72.5°	1079.9	1185.6	1291.3	1397.0	1502.7	1608.4	1693.5	1778.6	1863.7	1948.8	2033.9
75°	1055.2	1160.5	1265.7	1371.0	1476.2	1581.5	1662.8	1744.1	1825.5	1906.8	1988.1
77.5°	1013.5	1115.5	1217.6	1319.6	1421.7	1523.7	1601.4	1679.0	1756.7	1834.4	1912.0
80°	961.0	1057.3	1153.7	1250.1	1346.5	1442.9	1514.9	1586.9	1659.0	1731.0	1803.0
82.5°	899.4	989.3	1079.3	1169.3	1259.2	1349.2	1414.7	1480.2	1545.6	1611.1	1676.6
85°	830.3	912.8	995.2	1077.6	1160.1	1242.5	1302.0	1361.5	1421.0	1480.5	1540.0
87.5°	758.9	833.6	908.4	983.2	1058.0	1132.8	1186.3	1239.8	1293.3	1346.8	1400.4
90°	690.9	759.0	827.0	895.0	963.1	1031.1	1079.3	1127.5	1175.7	1223.9	1272.0
92.5°	635.2	697.0	758.8	820.7	882.5	944.3	988.4	1032.5	1076.6	1120.7	1164.8
95°	584.8	641.7	698.7	755.6	812.6	869.5	911.2	952.8	994.5	1036.2	1077.8
97.5°	538.5	591.3	644.2	697.0	749.9	802.7	841.7	880.7	919.7	958.7	997.7
100°	497.7	547.4	597.0	646.6	696.3	745.9	783.5	821.0	858.6	896.1	933.7
102.5°	461.6	508.6	555.7	602.8	649.9	697.0	733.5	769.9	806.4	842.8	879.3
105°	428.3	473.1	517.8	562.6	607.3	652.1	687.4	722.8	758.1	793.5	828.8
107.5°	396.4	439.3	482.3	525.3	568.3	611.3	646.2	681.1	716.0	750.9	785.8
110°	366.4	407.4	448.4	489.4	530.4	571.4	605.7	640.1	674.4	708.8	743.1



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
112.5°	340.5	379.5	418.5	457.5	496.5	535.5	568.8	602.2	635.5	668.9	702.2
115°	316.4	353.7	390.9	428.1	465.4	502.6	534.4	566.2	598.0	629.8	661.6
117.5°	293.0	328.3	363.7	399.0	434.4	469.7	500.2	530.6	561.1	591.6	622.0
120°	269.2	302.2	335.1	368.0	400.9	433.8	463.6	493.4	523.2	553.0	582.8
122.5°	244.1	274.5	304.8	335.2	365.5	395.9	425.0	454.2	483.3	512.4	541.6
125°	220.3	248.4	276.6	304.7	332.9	361.0	388.6	416.2	443.8	471.4	498.9
127.5°	195.8	222.0	248.3	274.6	300.8	327.1	352.4	377.6	402.9	428.1	453.4
130°	169.6	193.4	217.1	240.8	264.5	288.2	311.4	334.5	357.7	380.8	404.0
132.5°	144.0	165.1	186.1	207.2	228.2	249.3	271.1	292.9	314.8	336.6	358.4
135°	119.6	137.7	155.9	174.1	192.2	210.4	231.6	252.7	273.9	295.1	316.2
137.5°	97.3	113.1	129.0	144.8	160.7	176.5	196.0	215.5	235.0	254.5	274.0
140°	78.9	92.6	106.4	120.1	133.9	147.6	164.2	180.8	197.5	214.1	230.7
142.5°	62.5	74.2	85.8	97.4	109.1	120.7	134.9	149.1	163.2	177.4	191.6
145°	48.6	58.1	67.5	76.9	86.3	95.7	107.4	119.2	130.9	142.7	154.4
147.5°	38.2	45.6	52.9	60.2	67.5	74.8	84.4	94.1	103.7	113.3	123.0
150°	28.1	33.7	39.2	44.7	50.3	55.8	64.0	72.2	80.4	88.6	96.8
152.5°	20.1	23.8	27.6	31.4	35.1	38.9	45.4	52.0	58.5	65.0	71.6
155°	12.8	15.1	17.3	19.5	21.7	23.9	29.0	34.1	39.2	44.3	49.4
157.5°	7.9	9.1	10.3	11.6	12.8	14.0	17.7	21.3	25.0	28.6	32.3
160°	4.2	4.8	5.3	5.9	6.4	7.0	9.1	11.2	13.3	15.4	17.5
162.5°	1.9	2.1	2.3	2.6	2.8	3.0	4.0	5.0	6.0	7.0	8.0
165°	0.6	0.4	0.3	0.2	0.1	0.0	0.3	0.7	1.0	1.3	1.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLELD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2	997.2
2.5°	1024.4	1025.0	1025.5	1026.1	1025.1	1024.1	1023.1	1022.1	1021.1	1020.1	1019.1
5°	1043.7	1044.8	1045.9	1047.0	1047.0	1047.0	1047.0	1047.0	1047.0	1047.0	1047.0
7.5°	1063.0	1065.0	1067.0	1069.0	1069.2	1069.4	1069.7	1069.9	1070.1	1070.3	1070.6
10°	1080.3	1083.5	1086.7	1089.9	1090.2	1090.6	1090.9	1091.2	1091.6	1091.9	1092.2
12.5°	1094.9	1099.3	1103.6	1107.9	1109.0	1110.1	1111.2	1112.3	1113.4	1114.5	1115.6
15°	1109.2	1114.7	1120.3	1125.8	1127.8	1129.8	1131.8	1133.8	1135.8	1137.8	1139.8
17.5°	1127.8	1135.4	1143.1	1150.7	1153.5	1156.3	1159.0	1161.8	1164.6	1167.4	1170.1
20°	1148.1	1158.3	1168.5	1178.7	1182.0	1185.3	1188.7	1192.0	1195.3	1198.6	1202.0
22.5°	1167.7	1179.7	1191.6	1203.6	1207.8	1212.0	1216.2	1220.4	1224.7	1228.9	1233.1
25°	1189.6	1203.3	1216.9	1230.5	1234.9	1239.4	1243.8	1248.2	1252.7	1257.1	1261.5
27.5°	1210.9	1226.0	1241.2	1256.4	1261.7	1267.0	1272.4	1277.7	1283.0	1288.3	1293.7
30°	1232.5	1249.8	1267.1	1284.4	1290.7	1297.0	1303.3	1309.6	1316.0	1322.3	1328.6
32.5°	1257.5	1277.1	1296.7	1316.3	1323.9	1331.6	1339.2	1346.9	1354.5	1362.2	1369.8
35°	1284.0	1306.4	1328.8	1351.2	1360.4	1369.6	1378.8	1388.0	1397.1	1406.3	1415.5
37.5°	1315.6	1341.4	1367.2	1393.0	1404.0	1415.0	1425.9	1436.9	1447.9	1458.9	1469.8
40°	1352.2	1381.7	1411.3	1440.9	1454.0	1467.1	1480.1	1493.2	1506.3	1519.4	1532.4
42.5°	1396.7	1430.7	1464.7	1498.7	1513.9	1529.1	1544.3	1559.5	1574.6	1589.8	1605.0
45°	1449.3	1488.4	1527.5	1566.6	1584.2	1601.8	1619.4	1637.0	1654.7	1672.3	1689.9
47.5°	1510.0	1555.1	1600.2	1645.3	1665.4	1685.4	1705.5	1725.5	1745.6	1765.6	1785.7
50°	1577.2	1629.2	1681.1	1733.1	1755.8	1778.5	1801.2	1823.9	1846.7	1869.4	1892.1
52.5°	1653.6	1712.7	1771.7	1830.8	1856.1	1881.3	1906.6	1931.9	1957.1	1982.4	2007.7
55°	1738.4	1804.1	1869.8	1935.5	1962.6	1989.8	2016.9	2044.1	2071.2	2098.4	2125.5
57.5°	1823.8	1896.3	1968.7	2041.2	2070.0	2098.8	2127.6	2156.4	2185.3	2214.1	2242.9
60°	1910.9	1989.2	2067.6	2145.9	2175.6	2205.3	2235.0	2264.7	2294.3	2324.0	2353.7
62.5°	1993.3	2076.4	2159.5	2242.6	2272.2	2301.8	2331.4	2361.0	2390.5	2420.1	2449.7
65°	2062.5	2148.8	2235.1	2321.4	2350.3	2379.2	2408.2	2437.1	2466.0	2494.9	2523.9
67.5°	2111.4	2199.0	2286.7	2374.3	2402.5	2430.8	2459.0	2487.3	2515.5	2543.8	2572.0
70°	2132.6	2219.8	2307.0	2394.2	2421.3	2448.5	2475.6	2502.8	2529.9	2557.1	2584.2
72.5°	2119.0	2204.1	2289.2	2374.3	2400.2	2426.1	2452.1	2478.0	2503.9	2529.8	2555.8
75°	2069.4	2150.8	2232.1	2313.4	2338.1	2362.8	2387.5	2412.2	2437.0	2461.7	2486.4
77.5°	1989.7	2067.4	2145.0	2222.7	2245.2	2267.7	2290.2	2312.7	2335.1	2357.6	2380.1
80°	1875.0	1947.1	2019.1	2091.1	2112.4	2133.6	2154.9	2176.2	2197.4	2218.7	2240.0
82.5°	1742.1	1807.5	1873.0	1938.5	1958.4	1978.4	1998.3	2018.3	2038.2	2058.2	2078.1
85°	1599.5	1659.0	1718.5	1778.0	1796.5	1815.0	1833.5	1852.0	1870.5	1889.0	1907.5
87.5°	1453.9	1507.4	1560.9	1614.4	1631.9	1649.4	1666.9	1684.4	1702.0	1719.5	1737.0
90°	1320.2	1368.4	1416.6	1464.8	1481.4	1498.0	1514.7	1531.3	1547.9	1564.5	1581.2
92.5°	1208.9	1253.0	1297.1	1341.2	1356.9	1372.7	1388.4	1404.1	1419.9	1435.6	1451.3
95°	1119.5	1161.2	1202.8	1244.5	1258.7	1272.9	1287.0	1301.2	1315.4	1329.6	1343.7
97.5°	1036.7	1075.7	1114.7	1153.7	1167.9	1182.1	1196.3	1210.5	1224.6	1238.8	1253.0
100°	971.2	1008.8	1046.3	1083.9	1097.6	1111.4	1125.1	1138.9	1152.6	1166.4	1180.1
102.5°	915.7	952.2	988.6	1025.1	1038.6	1052.1	1065.6	1079.1	1092.7	1106.2	1119.7
105°	864.2	899.5	934.9	970.2	984.2	998.1	1012.1	1026.1	1040.0	1054.0	1068.0
107.5°	820.7	855.6	890.5	925.4	939.1	952.9	966.6	980.3	994.1	1007.8	1021.5
110°	777.5	811.8	846.2	880.5	894.1	907.8	921.4	935.0	948.7	962.3	975.9



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
112.5°	735.6	768.9	802.3	835.6	849.1	862.6	876.2	889.7	903.2	916.7	930.3
115°	693.4	725.2	757.0	788.8	802.1	815.4	828.7	842.0	855.2	868.5	881.8
117.5°	652.5	683.0	713.4	743.9	756.4	768.9	781.5	794.0	806.5	819.0	831.6
120°	612.6	642.4	672.2	702.0	713.9	725.7	737.6	749.4	761.3	773.1	785.0
122.5°	570.7	599.8	629.0	658.1	669.6	681.1	692.7	704.2	715.7	727.2	738.8
125°	526.5	554.1	581.7	609.3	620.7	632.1	643.5	654.9	666.4	677.8	689.2
127.5°	478.6	503.9	529.1	554.4	565.6	576.8	588.0	599.2	610.3	621.5	632.7
130°	427.1	450.3	473.4	496.6	507.1	517.6	528.2	538.7	549.2	559.7	570.3
132.5°	380.2	402.1	423.9	445.7	454.7	463.7	472.6	481.6	490.6	499.6	508.5
135°	337.4	358.6	379.7	400.9	408.5	416.2	423.8	431.5	439.1	446.8	454.4
137.5°	293.5	313.0	332.5	352.0	359.4	366.8	374.3	381.7	389.1	396.5	404.0
140°	247.3	264.0	280.6	297.2	305.1	312.9	320.8	328.7	336.5	344.4	352.3
142.5°	205.8	219.9	234.1	248.3	256.2	264.0	271.9	279.8	287.6	295.5	303.4
145°	166.2	177.9	189.7	201.4	209.4	217.4	225.3	233.3	241.3	249.3	257.2
147.5°	132.6	142.2	151.9	161.5	169.0	176.6	184.1	191.6	199.2	206.7	214.2
150°	105.0	113.2	121.4	129.6	136.4	143.1	149.9	156.7	163.4	170.2	177.0
152.5°	78.1	84.6	91.2	97.7	104.0	110.3	116.7	123.0	129.3	135.6	142.0
155°	54.5	59.6	64.7	69.8	75.5	81.1	86.8	92.4	98.1	103.7	109.4
157.5°	35.9	39.6	43.2	46.9	51.7	56.4	61.2	65.9	70.7	75.4	80.2
160°	19.6	21.7	23.8	25.9	29.8	33.7	37.5	41.4	45.3	49.2	53.0
162.5°	9.0	10.0	11.0	12.0	14.5	17.1	19.6	22.2	24.7	27.3	29.8
165°	2.0	2.3	2.7	3.0	4.6	6.1	7.7	9.2	10.8	12.3	13.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	997.2	997.2
2.5°	1018.1	1017.1
5°	1047.0	1047.0
7.5°	1070.8	1071.0
10°	1092.6	1092.9
12.5°	1116.7	1117.8
15°	1141.8	1143.8
17.5°	1172.9	1175.7
20°	1205.3	1208.6
22.5°	1237.3	1241.5
25°	1266.0	1270.4
27.5°	1299.0	1304.3
30°	1334.9	1341.2
32.5°	1377.5	1385.1
35°	1424.7	1433.9
37.5°	1480.8	1491.8
40°	1545.5	1558.6
42.5°	1620.2	1635.4
45°	1707.5	1725.1
47.5°	1805.7	1825.8
50°	1914.8	1937.5
52.5°	2032.9	2058.2
55°	2152.7	2179.8
57.5°	2271.7	2300.5
60°	2383.4	2413.1
62.5°	2479.3	2508.9
65°	2552.8	2581.7
67.5°	2600.3	2628.5
70°	2611.4	2638.5
72.5°	2581.7	2607.6
75°	2511.1	2535.8
77.5°	2402.6	2425.1
80°	2261.2	2282.5
82.5°	2098.1	2118.0
85°	1926.0	1944.5
87.5°	1754.5	1772.0
90°	1597.8	1614.4
92.5°	1467.1	1482.8
95°	1357.9	1372.1
97.5°	1267.2	1281.4
100°	1193.9	1207.6
102.5°	1133.2	1146.7
105°	1081.9	1095.9
107.5°	1035.3	1049.0
110°	989.6	1003.2



TEST NUMBER: P201346

CATALOG NUMBER: 4LBLED-LD4-8-ASYMF-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	943.8	957.3
115°	895.1	908.4
117.5°	844.1	856.6
120°	796.8	808.7
122.5°	750.3	761.8
125°	700.6	712.0
127.5°	643.9	655.1
130°	580.8	591.3
132.5°	517.5	526.5
135°	462.1	469.7
137.5°	411.4	418.8
140°	360.1	368.0
142.5°	311.2	319.1
145°	265.2	273.2
147.5°	221.8	229.3
150°	183.7	190.5
152.5°	148.3	154.6
155°	115.0	120.7
157.5°	84.9	89.7
160°	56.9	60.8
162.5°	32.4	34.9
165°	15.4	17.0
167.5°	0.0	0.0
170°	0.0	0.0
172.5°	0.0	0.0
175°	0.0	0.0
177.5°	0.0	0.0
180°	0.0	0.0

(END OF REPORT)