

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: P201409

Luminaire Tested: **8LBLED-LD4-12-ASYMW-UNV-L840-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28228)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8LBLELD4-12-ASYMW-UNV-L840-CD2-U
Description: 8 ft. Low Bay Linear, 8000 lm, Wht Asym lens, 4K
Light Source: (616) 4000K CCT, 80 CRI LEDS
2UT217098A8404C, 2UT217056A8404B
Ballast/Driver: OSRAM
(OT85W01250CC), (OT50W0800CC)

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12302.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 2.07 / 1.2 / 1.84
Luminous Opening: Rectangular w/ Sides (W: 8' x L: 0.17' x H: 0.21')
CIE Type: Semi-Direct

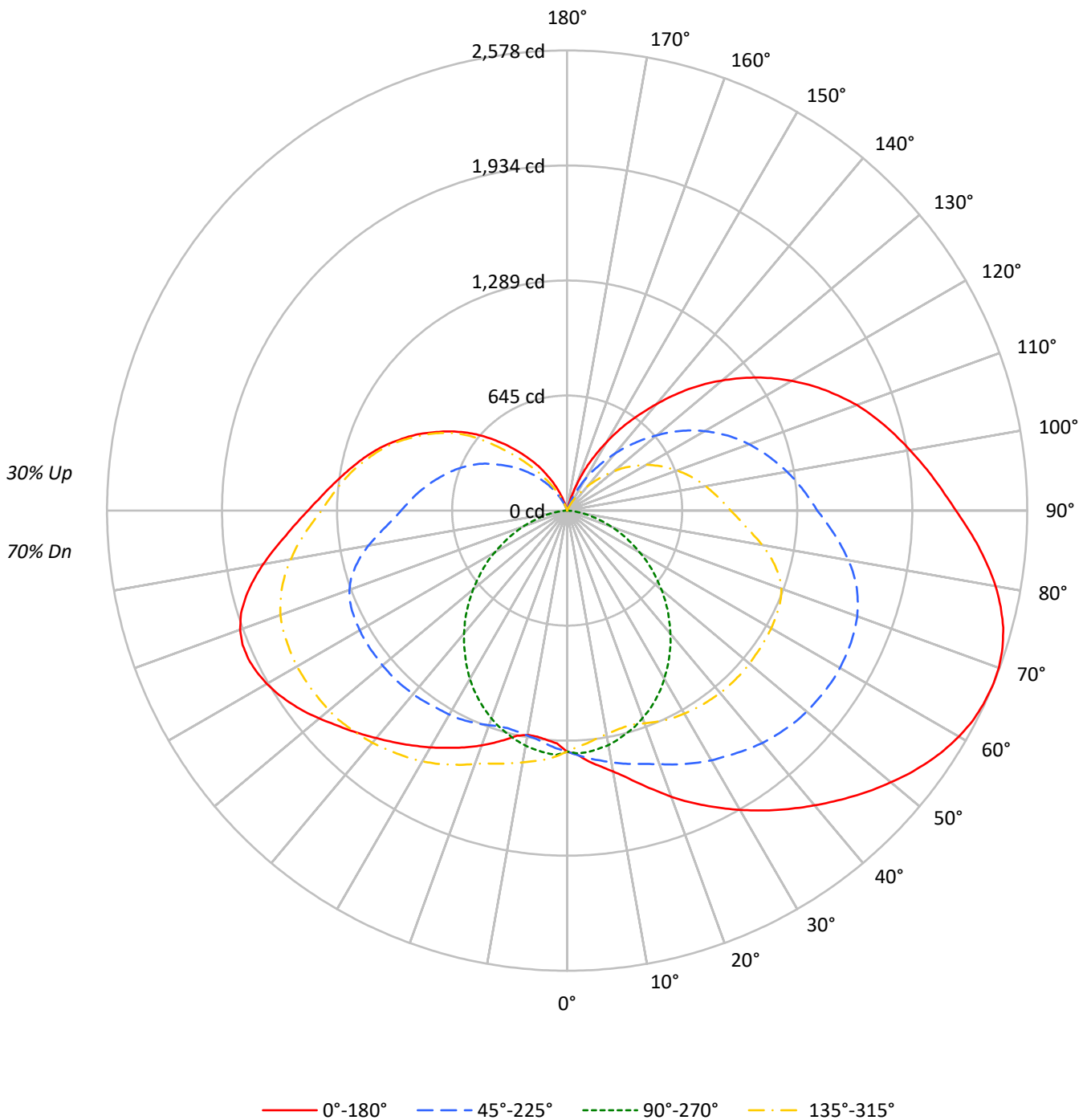
Input Watts (W): 96.83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	97	90	84	79	91	85	80	75	75	71	67	66	63	60	58	55	53	48
2	86	76	68	60	81	72	64	57	63	57	51	55	50	46	48	44	40	36
3	78	65	56	48	72	61	53	46	54	47	41	47	41	36	41	36	32	28
4	70	57	47	39	65	53	44	37	47	39	33	41	35	30	35	30	26	23
5	64	50	40	33	60	47	38	31	41	34	28	36	30	25	31	26	22	19
6	59	44	35	28	55	42	33	26	37	29	24	32	26	21	28	23	19	16
7	54	40	30	24	50	37	29	23	33	26	21	29	23	18	25	20	16	14
8	50	36	27	21	47	34	26	20	30	23	18	27	21	16	23	18	14	12
9	47	33	24	18	44	31	23	18	27	21	16	24	18	14	21	16	13	10
10	44	30	22	16	41	28	21	16	25	19	14	22	17	13	20	15	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10876	10876	10876	10876
5°	10297	10957	9407	11006
10°	9954	10863	8559	10896
15°	9918	10685	8305	10718
20°	10064	10497	8259	10531
25°	10246	10276	8244	10276
30°	10477	9971	8290	9990
35°	10759	9640	8395	9621
40°	11087	9264	8557	9243
45°	11487	8862	8808	8840
50°	11947	8389	9142	8364
55°	12445	7882	9533	7828
60°	12932	7247	9911	7216
65°	13356	6609	10230	6537
70°	13711	5804	10387	5760
75°	13943	4824	10272	4767
80°	14027	3558	9954	3639
85°	14039	1853	9586	2138



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.9	1.0
10°-20°	388.3	3.2
20°-30°	654.0	5.3
30°-40°	908.2	7.4
40°-50°	1136.8	9.2
50°-60°	1322.0	10.7
60°-70°	1432.8	11.6
70°-80°	1411.3	11.5
80°-90°	1250.5	10.2
90°-100°	1078.4	8.8
100°-110°	908.0	7.4
110°-120°	710.7	5.8
120°-130°	498.1	4.0
130°-140°	294.1	2.4
140°-150°	135.5	1.1
150°-160°	40.6	0.3
160°-170°	3.7	0.0
170°-180°	0.0	0.0
0°-30°	1171.2	9.5
0°-40°	2079.4	16.9
0°-60°	4538.3	36.9
0°-90°	8632.9	70.2
90°-120°	2697.1	21.9
90°-150°	3624.7	29.5
90°-180°	3669.0	29.8
0°-180°	12302.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1350	1350	1350	1350	1350	
5°	1412	1358	1290	1364	1412	137
15°	1586	1290	1328	1294	1586	454
25°	1822	1170	1466	1170	1822	847
35°	2048	998	1598	996	2048	1289
45°	2264	798	1736	796	2264	1755
55°	2462	582	1886	578	2462	2207
65°	2572	366	1970	362	2572	2547
75°	2530	170	1864	168	2530	2666
85°	2314	26	1580	30	2314	1915
90°	2178	0	1452	0	2178	1195
95°	2062	0	1346	0	2062	1662
105°	1842	0	1168	0	1842	1948
115°	1596	0	980	0	1596	1584
125°	1300	0	772	2	1300	1167
135°	962	0	548	2	962	747
145°	608	0	338	2	608	387
155°	292	0	146	2	292	140
165°	46	0	8	2	46	18
175°	0	0	0	2	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1369.9	1369.7	1369.5	1369.2	1369.0	1368.8	1368.6	1368.3	1368.1	1367.9	1368.3
5°	1411.9	1410.3	1408.8	1407.2	1405.7	1404.1	1402.6	1401.0	1399.5	1397.9	1397.5
7.5°	1445.9	1443.9	1441.9	1439.9	1437.9	1435.9	1433.9	1431.9	1429.9	1427.9	1426.1
10°	1483.9	1481.0	1478.1	1475.2	1472.3	1469.5	1466.6	1463.7	1460.8	1457.9	1455.0
12.5°	1529.9	1526.1	1522.3	1518.6	1514.8	1511.0	1507.2	1503.5	1499.7	1495.9	1491.0
15°	1585.9	1581.0	1576.1	1571.2	1566.3	1561.5	1556.6	1551.7	1546.8	1541.9	1533.9
17.5°	1643.9	1638.6	1633.2	1627.9	1622.6	1617.2	1611.9	1606.6	1601.2	1595.9	1583.9
20°	1705.9	1699.0	1692.1	1685.2	1678.3	1671.5	1664.6	1657.7	1650.8	1643.9	1629.2
22.5°	1765.9	1757.9	1749.9	1741.9	1733.9	1725.9	1717.9	1709.9	1701.9	1693.9	1676.8
25°	1821.9	1813.2	1804.6	1795.9	1787.2	1778.6	1769.9	1761.2	1752.6	1743.9	1724.1
27.5°	1879.9	1870.1	1860.3	1850.6	1840.8	1831.0	1821.2	1811.5	1801.7	1791.9	1769.7
30°	1935.9	1925.2	1914.6	1903.9	1893.2	1882.6	1871.9	1861.2	1850.6	1839.9	1815.0
32.5°	1991.9	1980.1	1968.3	1956.6	1944.8	1933.0	1921.2	1909.5	1897.7	1885.9	1858.1
35°	2047.9	2035.0	2022.1	2009.2	1996.3	1983.5	1970.6	1957.7	1944.8	1931.9	1901.5
37.5°	2101.9	2087.9	2073.9	2059.9	2045.9	2031.9	2017.9	2003.9	1989.9	1975.9	1943.0
40°	2155.9	2140.8	2125.7	2110.6	2095.5	2080.3	2065.2	2050.1	2035.0	2019.9	1984.3
42.5°	2209.9	2193.7	2177.5	2161.2	2145.0	2128.8	2112.6	2096.3	2080.1	2063.9	2025.2
45°	2263.9	2246.3	2228.8	2211.2	2193.7	2176.1	2158.6	2141.0	2123.5	2105.9	2064.1
47.5°	2317.9	2298.8	2279.7	2260.6	2241.5	2222.3	2203.2	2184.1	2165.0	2145.9	2101.2
50°	2367.9	2347.9	2327.9	2307.9	2287.9	2267.9	2247.9	2227.9	2207.9	2187.9	2139.5
52.5°	2417.9	2396.3	2374.8	2353.2	2331.7	2310.1	2288.6	2267.0	2245.5	2223.9	2172.1
55°	2461.9	2439.7	2417.5	2395.2	2373.0	2350.8	2328.6	2306.3	2284.1	2261.9	2206.3
57.5°	2501.9	2478.8	2455.7	2432.6	2409.5	2386.3	2363.2	2340.1	2317.0	2293.9	2235.2
60°	2533.9	2510.1	2486.3	2462.6	2438.8	2415.0	2391.2	2367.5	2343.7	2319.9	2258.1
62.5°	2557.9	2533.5	2509.0	2484.6	2460.1	2435.7	2411.2	2386.8	2362.3	2337.9	2273.7
65°	2571.9	2547.2	2522.6	2497.9	2473.2	2448.6	2423.9	2399.2	2374.6	2349.9	2283.7
67.5°	2577.9	2553.0	2528.1	2503.2	2478.3	2453.5	2428.6	2403.7	2378.8	2353.9	2286.1
70°	2573.9	2549.0	2524.1	2499.2	2474.3	2449.5	2424.6	2399.7	2374.8	2349.9	2281.0
72.5°	2557.9	2532.8	2507.7	2482.6	2457.5	2432.3	2407.2	2382.1	2357.0	2331.9	2262.6
75°	2529.9	2505.5	2481.0	2456.6	2432.1	2407.7	2383.2	2358.8	2334.3	2309.9	2239.9
77.5°	2487.9	2463.7	2439.5	2415.2	2391.0	2366.8	2342.6	2318.3	2294.1	2269.9	2200.3
80°	2437.9	2413.5	2389.0	2364.6	2340.1	2315.7	2291.2	2266.8	2242.3	2217.9	2149.2
82.5°	2377.9	2354.1	2330.3	2306.6	2282.8	2259.0	2235.2	2211.5	2187.7	2163.9	2095.9
85°	2313.9	2290.3	2266.8	2243.2	2219.7	2196.1	2172.6	2149.0	2125.5	2101.9	2035.2
87.5°	2245.9	2222.8	2199.7	2176.6	2153.5	2130.3	2107.2	2084.1	2061.0	2037.9	1972.6
90°	2177.9	2155.2	2132.6	2109.9	2087.2	2064.6	2041.9	2019.2	1996.6	1973.9	1910.3
92.5°	2117.9	2095.9	2073.9	2051.9	2029.9	2007.9	1985.9	1963.9	1941.9	1919.9	1858.1
95°	2061.9	2040.6	2019.2	1997.9	1976.6	1955.2	1933.9	1912.6	1891.2	1869.9	1809.7
97.5°	2005.9	1985.0	1964.1	1943.2	1922.3	1901.5	1880.6	1859.7	1838.8	1817.9	1759.2
100°	1949.9	1929.5	1909.0	1888.6	1868.1	1847.7	1827.2	1806.8	1786.3	1765.9	1708.8
102.5°	1895.9	1875.9	1855.9	1835.9	1815.9	1795.9	1775.9	1755.9	1735.9	1715.9	1659.7
105°	1841.9	1822.3	1802.8	1783.2	1763.7	1744.1	1724.6	1705.0	1685.5	1665.9	1610.8
107.5°	1785.9	1766.6	1747.2	1727.9	1708.6	1689.2	1669.9	1650.6	1631.2	1611.9	1558.1
110°	1727.9	1708.8	1689.7	1670.6	1651.5	1632.3	1613.2	1594.1	1575.0	1555.9	1503.7



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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°	1661.9	1643.2	1624.6	1605.9	1587.2	1568.6	1549.9	1531.2	1512.6	1493.9	1443.5
115°	1595.9	1577.7	1559.5	1541.2	1523.0	1504.8	1486.6	1468.3	1450.1	1431.9	1383.2
117.5°	1525.9	1508.3	1490.8	1473.2	1455.7	1438.1	1420.6	1403.0	1385.5	1367.9	1320.6
120°	1453.9	1436.8	1419.7	1402.6	1385.5	1368.3	1351.2	1334.1	1317.0	1299.9	1254.4
122.5°	1377.9	1361.5	1345.0	1328.6	1312.1	1295.7	1279.2	1262.8	1246.3	1229.9	1186.1
125°	1299.9	1284.1	1268.3	1252.6	1236.8	1221.0	1205.2	1189.5	1173.7	1157.9	1115.7
127.5°	1217.9	1203.0	1188.1	1173.2	1158.3	1143.5	1128.6	1113.7	1098.8	1083.9	1043.2
130°	1133.9	1119.9	1105.9	1091.9	1077.9	1064.0	1050.0	1036.0	1022.0	1008.0	968.9
132.5°	1050.0	1036.7	1023.3	1010.0	996.7	983.3	970.0	956.7	943.3	930.0	892.9
135°	962.0	949.3	936.7	924.0	911.3	898.7	886.0	873.3	860.7	848.0	813.3
137.5°	870.0	858.2	846.4	834.7	822.9	811.1	799.3	787.6	775.8	764.0	732.0
140°	778.0	767.3	756.7	746.0	735.3	724.7	714.0	703.3	692.7	682.0	652.7
142.5°	690.0	680.7	671.3	662.0	652.7	643.3	634.0	624.7	615.3	606.0	578.4
145°	608.0	599.6	591.1	582.7	574.2	565.8	557.3	548.9	540.4	532.0	506.7
147.5°	528.0	519.8	511.6	503.3	495.1	486.9	478.7	470.4	462.2	454.0	431.8
150°	444.0	437.3	430.7	424.0	417.3	410.7	404.0	397.3	390.7	384.0	363.8
152.5°	366.0	360.2	354.4	348.7	342.9	337.1	331.3	325.6	319.8	314.0	296.4
155°	292.0	286.9	281.8	276.7	271.6	266.4	261.3	256.2	251.1	246.0	230.9
157.5°	220.0	215.8	211.6	207.3	203.1	198.9	194.7	190.4	186.2	182.0	169.6
160°	152.0	148.7	145.3	142.0	138.7	135.3	132.0	128.7	125.3	122.0	112.9
162.5°	92.0	89.8	87.6	85.3	83.1	80.9	78.7	76.4	74.2	72.0	66.0
165°	46.0	44.7	43.3	42.0	40.7	39.3	38.0	36.7	35.3	34.0	30.9
167.5°	14.0	13.6	13.1	12.7	12.2	11.8	11.3	10.9	10.4	10.0	8.9
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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1368.8	1369.2	1369.7	1370.1	1370.6	1371.0	1371.5	1371.9	1369.7	1367.5	1365.2
5°	1397.0	1396.6	1396.1	1395.7	1395.2	1394.8	1394.3	1393.9	1390.1	1386.3	1382.6
7.5°	1424.3	1422.6	1420.8	1419.0	1417.2	1415.5	1413.7	1411.9	1406.6	1401.2	1395.9
10°	1452.1	1449.2	1446.3	1443.5	1440.6	1437.7	1434.8	1431.9	1424.3	1416.8	1409.2
12.5°	1486.1	1481.2	1476.3	1471.5	1466.6	1461.7	1456.8	1451.9	1441.9	1431.9	1421.9
15°	1525.9	1517.9	1509.9	1501.9	1493.9	1485.9	1477.9	1469.9	1457.2	1444.6	1431.9
17.5°	1571.9	1559.9	1547.9	1535.9	1523.9	1511.9	1499.9	1487.9	1472.3	1456.8	1441.2
20°	1614.6	1599.9	1585.2	1570.6	1555.9	1541.2	1526.6	1511.9	1492.3	1472.8	1453.2
22.5°	1659.7	1642.6	1625.5	1608.3	1591.2	1574.1	1557.0	1539.9	1515.7	1491.5	1467.2
25°	1704.3	1684.6	1664.8	1645.0	1625.2	1605.5	1585.7	1565.9	1537.2	1508.6	1479.9
27.5°	1747.5	1725.2	1703.0	1680.8	1658.6	1636.3	1614.1	1591.9	1558.6	1525.2	1491.9
30°	1790.1	1765.2	1740.3	1715.5	1690.6	1665.7	1640.8	1615.9	1577.9	1539.9	1501.9
32.5°	1830.3	1802.6	1774.8	1747.0	1719.2	1691.5	1663.7	1635.9	1594.1	1552.3	1510.6
35°	1871.0	1840.6	1810.1	1779.7	1749.2	1718.8	1688.3	1657.9	1611.9	1565.9	1519.9
37.5°	1910.1	1877.2	1844.3	1811.5	1778.6	1745.7	1712.8	1679.9	1630.1	1580.3	1530.6
40°	1948.8	1913.2	1877.7	1842.1	1806.6	1771.0	1735.5	1699.9	1646.6	1593.2	1539.9
42.5°	1986.6	1947.9	1909.2	1870.6	1831.9	1793.2	1754.6	1715.9	1659.0	1602.1	1545.2
45°	2022.3	1980.6	1938.8	1897.0	1855.2	1813.5	1771.7	1729.9	1669.7	1609.5	1549.2
47.5°	2056.6	2011.9	1967.2	1922.6	1877.9	1833.2	1788.6	1743.9	1680.1	1616.3	1552.6
50°	2091.0	2042.6	1994.1	1945.7	1897.2	1848.8	1800.3	1751.9	1685.0	1618.1	1551.2
52.5°	2120.3	2068.6	2016.8	1965.0	1913.2	1861.5	1809.7	1757.9	1687.9	1617.9	1547.9
55°	2150.8	2095.2	2039.7	1984.1	1928.6	1873.0	1817.5	1761.9	1689.0	1616.1	1543.2
57.5°	2176.6	2117.9	2059.2	2000.6	1941.9	1883.2	1824.6	1765.9	1689.7	1613.5	1537.2
60°	2196.3	2134.6	2072.8	2011.0	1949.2	1887.5	1825.7	1763.9	1685.2	1606.6	1527.9
62.5°	2209.5	2145.2	2081.0	2016.8	1952.6	1888.3	1824.1	1759.9	1678.6	1597.3	1515.9
65°	2217.5	2151.2	2085.0	2018.8	1952.6	1886.3	1820.1	1753.9	1670.1	1586.4	1502.6
67.5°	2218.3	2150.6	2082.8	2015.0	1947.2	1879.5	1811.7	1743.9	1657.7	1571.5	1485.3
70°	2212.1	2143.2	2074.3	2005.5	1936.6	1867.7	1798.8	1729.9	1641.5	1553.0	1464.6
72.5°	2193.2	2123.9	2054.6	1985.2	1915.9	1846.6	1777.2	1707.9	1618.1	1528.4	1438.6
75°	2169.9	2099.9	2029.9	1959.9	1889.9	1819.9	1749.9	1679.9	1589.0	1498.1	1407.3
77.5°	2130.8	2061.2	1991.7	1922.1	1852.6	1783.0	1713.5	1643.9	1552.8	1461.7	1370.6
80°	2080.6	2011.9	1943.2	1874.6	1805.9	1737.2	1668.6	1599.9	1509.5	1419.0	1328.6
82.5°	2027.9	1959.9	1891.9	1823.9	1755.9	1687.9	1619.9	1551.9	1462.4	1372.8	1283.3
85°	1968.6	1901.9	1835.2	1768.6	1701.9	1635.2	1568.6	1501.9	1413.7	1325.5	1237.3
87.5°	1907.2	1841.9	1776.6	1711.2	1645.9	1580.6	1515.2	1449.9	1363.5	1277.0	1190.6
90°	1846.8	1783.2	1719.7	1656.1	1592.6	1529.0	1465.5	1401.9	1317.0	1232.1	1147.3
92.5°	1796.3	1734.6	1672.8	1611.0	1549.2	1487.5	1425.7	1363.9	1280.8	1197.7	1114.6
95°	1749.5	1689.2	1629.0	1568.8	1508.6	1448.3	1388.1	1327.9	1246.1	1164.4	1082.6
97.5°	1700.6	1641.9	1583.2	1524.6	1465.9	1407.2	1348.6	1289.9	1209.7	1129.5	1049.3
100°	1651.7	1594.6	1537.5	1480.3	1423.2	1366.1	1309.0	1251.9	1173.2	1094.6	1015.9
102.5°	1603.5	1547.2	1491.0	1434.8	1378.6	1322.3	1266.1	1209.9	1132.6	1055.3	977.9
105°	1555.7	1500.6	1445.5	1390.3	1335.2	1280.1	1225.0	1169.9	1093.7	1017.5	941.3
107.5°	1504.3	1450.6	1396.8	1343.0	1289.2	1235.5	1181.7	1127.9	1053.2	978.6	903.9
110°	1451.5	1399.2	1347.0	1294.8	1242.6	1190.3	1138.1	1085.9	1012.8	939.7	866.6



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	1393.0	1342.6	1292.2	1241.7	1191.3	1140.9	1090.4	1040.0	968.7	897.3	826.0
115°	1334.6	1285.9	1237.3	1188.6	1140.0	1091.3	1042.7	994.0	924.4	854.9	785.3
117.5°	1273.3	1225.9	1178.6	1131.3	1084.0	1036.6	989.3	942.0	874.7	807.3	740.0
120°	1208.8	1163.3	1117.7	1072.2	1026.6	981.1	935.5	890.0	824.7	759.3	694.0
122.5°	1142.4	1098.6	1054.8	1011.1	967.3	923.5	879.8	836.0	773.3	710.7	648.0
125°	1073.5	1031.3	989.1	946.8	904.6	862.4	820.2	778.0	718.7	659.3	600.0
127.5°	1002.6	961.9	921.3	880.6	840.0	799.3	758.7	718.0	662.0	606.0	550.0
130°	929.8	890.7	851.6	812.4	773.3	734.2	695.1	656.0	603.8	551.6	499.3
132.5°	855.8	818.7	781.6	744.4	707.3	670.2	633.1	596.0	547.3	498.7	450.0
135°	778.7	744.0	709.3	674.7	640.0	605.3	570.7	536.0	491.1	446.2	401.3
137.5°	700.0	668.0	636.0	604.0	572.0	540.0	508.0	476.0	434.9	393.8	352.7
140°	623.3	594.0	564.7	535.3	506.0	476.7	447.3	418.0	380.9	343.8	306.7
142.5°	550.9	523.3	495.8	468.2	440.7	413.1	385.6	358.0	325.1	292.2	259.3
145°	481.3	456.0	430.7	405.3	380.0	354.7	329.3	304.0	275.1	246.2	217.3
147.5°	409.6	387.3	365.1	342.9	320.7	298.4	276.2	254.0	228.9	203.8	178.7
150°	343.6	323.3	303.1	282.9	262.7	242.4	222.2	202.0	181.3	160.7	140.0
152.5°	278.9	261.3	243.8	226.2	208.7	191.1	173.6	156.0	139.6	123.1	106.7
155°	215.8	200.7	185.6	170.4	155.3	140.2	125.1	110.0	98.2	86.4	74.7
157.5°	157.1	144.7	132.2	119.8	107.3	94.9	82.4	70.0	62.2	54.4	46.7
160°	103.8	94.7	85.6	76.4	67.3	58.2	49.1	40.0	35.6	31.1	26.7
162.5°	60.0	54.0	48.0	42.0	36.0	30.0	24.0	18.0	16.0	14.0	12.0
165°	27.8	24.7	21.6	18.4	15.3	12.2	9.1	6.0	5.3	4.7	4.0
167.5°	7.8	6.7	5.6	4.4	3.3	2.2	1.1	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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1363.0	1360.8	1358.6	1356.3	1354.1	1351.9	1353.0	1354.1	1355.2	1356.3	1357.5
5°	1378.8	1375.0	1371.2	1367.5	1363.7	1359.9	1359.7	1359.5	1359.2	1359.0	1358.8
7.5°	1390.6	1385.2	1379.9	1374.6	1369.2	1363.9	1361.9	1359.9	1357.9	1355.9	1353.9
10°	1401.7	1394.1	1386.6	1379.0	1371.5	1363.9	1360.6	1357.2	1353.9	1350.6	1347.2
12.5°	1411.9	1401.9	1391.9	1381.9	1371.9	1361.9	1356.6	1351.2	1345.9	1340.6	1335.2
15°	1419.2	1406.6	1393.9	1381.2	1368.6	1355.9	1348.6	1341.2	1333.9	1326.6	1319.2
17.5°	1425.7	1410.1	1394.6	1379.0	1363.5	1347.9	1339.0	1330.1	1321.2	1312.3	1303.5
20°	1433.7	1414.1	1394.6	1375.0	1355.5	1335.9	1324.8	1313.7	1302.6	1291.5	1280.3
22.5°	1443.0	1418.8	1394.6	1370.3	1346.1	1321.9	1309.0	1296.1	1283.2	1270.3	1257.5
25°	1451.2	1422.6	1393.9	1365.2	1336.6	1307.9	1292.6	1277.2	1261.9	1246.6	1231.2
27.5°	1458.6	1425.2	1391.9	1358.6	1325.2	1291.9	1274.1	1256.3	1238.6	1220.8	1203.0
30°	1463.9	1425.9	1387.9	1349.9	1311.9	1273.9	1253.2	1232.6	1211.9	1191.2	1170.6
32.5°	1468.8	1427.0	1385.2	1343.5	1301.7	1259.9	1235.9	1211.9	1187.9	1163.9	1140.0
35°	1473.9	1427.9	1381.9	1335.9	1289.9	1243.9	1216.6	1189.3	1161.9	1134.6	1107.3
37.5°	1480.8	1431.0	1381.2	1331.5	1281.7	1231.9	1200.6	1169.3	1137.9	1106.6	1075.3
40°	1486.6	1433.2	1379.9	1326.6	1273.2	1219.9	1184.4	1148.8	1113.3	1077.7	1042.2
42.5°	1488.3	1431.5	1374.6	1317.7	1260.8	1203.9	1164.4	1124.8	1085.3	1045.7	1006.2
45°	1489.0	1428.8	1368.6	1308.3	1248.1	1187.9	1144.6	1101.3	1057.9	1014.6	971.3
47.5°	1488.8	1425.0	1361.2	1297.5	1233.7	1169.9	1122.6	1075.3	1027.9	980.6	933.3
50°	1484.3	1417.5	1350.6	1283.7	1216.8	1149.9	1098.8	1047.7	996.6	945.5	894.4
52.5°	1477.9	1407.9	1337.9	1267.9	1197.9	1127.9	1073.0	1018.1	963.3	908.4	853.5
55°	1470.3	1397.5	1324.6	1251.7	1178.8	1105.9	1047.7	989.5	931.3	873.1	814.8
57.5°	1461.0	1384.8	1308.6	1232.3	1156.1	1079.9	1018.6	957.3	895.9	834.6	773.3
60°	1449.3	1370.6	1292.0	1213.3	1134.7	1056.0	990.9	925.8	860.7	795.6	730.4
62.5°	1434.6	1353.3	1272.0	1190.6	1109.3	1028.0	960.0	892.0	824.0	756.0	688.0
65°	1418.8	1335.1	1251.3	1167.5	1083.8	1000.0	929.6	859.1	788.7	718.2	647.8
67.5°	1399.1	1312.8	1226.6	1140.4	1054.2	968.0	895.3	822.7	750.0	677.3	604.7
70°	1376.2	1287.7	1199.3	1110.9	1022.4	934.0	859.6	785.1	710.7	636.2	561.8
72.5°	1348.8	1259.1	1169.3	1079.5	989.8	900.0	824.0	748.0	672.0	596.0	520.0
75°	1316.4	1225.5	1134.6	1043.8	952.9	862.0	785.1	708.2	631.3	554.4	477.6
77.5°	1279.5	1188.4	1097.3	1006.2	915.1	824.0	746.4	668.9	591.3	513.8	436.2
80°	1238.2	1147.7	1057.3	966.9	876.4	786.0	708.4	630.9	553.3	475.8	398.2
82.5°	1193.7	1104.2	1014.6	925.1	835.5	746.0	669.1	592.2	515.3	438.4	361.6
85°	1149.1	1060.8	972.6	884.4	796.2	708.0	632.2	556.4	480.7	404.9	329.1
87.5°	1104.2	1017.7	931.3	844.9	758.4	672.0	598.0	524.0	450.0	376.0	302.0
90°	1062.4	977.5	892.6	807.8	722.9	638.0	567.1	496.2	425.3	354.4	283.6
92.5°	1031.5	948.4	865.3	782.2	699.1	616.0	547.6	479.1	410.7	342.2	273.8
95°	1000.8	919.1	837.3	755.5	673.8	592.0	526.2	460.4	394.7	328.9	263.1
97.5°	969.1	888.8	808.6	728.4	648.2	568.0	504.9	441.8	378.7	315.6	252.4
100°	937.3	858.6	780.0	701.3	622.7	544.0	483.6	423.1	362.7	302.2	241.8
102.5°	900.6	823.3	746.0	668.6	591.3	514.0	456.9	399.8	342.7	285.6	228.4
105°	865.1	788.8	712.6	636.4	560.2	484.0	430.2	376.4	322.7	268.9	215.1
107.5°	829.3	754.6	680.0	605.3	530.7	456.0	405.3	354.7	304.0	253.3	202.7
110°	793.5	720.4	647.3	574.2	501.1	428.0	380.4	332.9	285.3	237.8	190.2



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	754.7	683.3	612.0	540.7	469.3	398.0	353.8	309.6	265.3	221.1	176.9
115°	715.8	646.2	576.7	507.1	437.6	368.0	327.1	286.2	245.3	204.4	163.6
117.5°	672.7	605.3	538.0	470.7	403.3	336.0	298.7	261.3	224.0	186.7	149.3
120°	628.7	563.3	498.0	432.7	367.3	302.0	268.4	234.9	201.3	167.8	134.2
122.5°	585.3	522.7	460.0	397.3	334.7	272.0	241.8	211.6	181.3	151.1	120.9
125°	540.7	481.3	422.0	362.7	303.3	244.0	216.9	189.8	162.7	135.6	108.4
127.5°	494.0	438.0	382.0	326.0	270.0	214.0	190.2	166.4	142.7	118.9	95.1
130°	447.1	394.9	342.7	290.4	238.2	186.0	165.3	144.7	124.0	103.3	82.7
132.5°	401.3	352.7	304.0	255.3	206.7	158.0	140.4	122.9	105.3	87.8	70.2
135°	356.4	311.6	266.7	221.8	176.9	132.0	117.3	102.7	88.0	73.3	58.7
137.5°	311.6	270.4	229.3	188.2	147.1	106.0	94.2	82.4	70.7	58.9	47.1
140°	269.6	232.4	195.3	158.2	121.1	84.0	74.7	65.3	56.0	46.7	37.3
142.5°	226.4	193.6	160.7	127.8	94.9	62.0	55.1	48.2	41.3	34.4	27.6
145°	188.4	159.6	130.7	101.8	72.9	44.0	39.1	34.2	29.3	24.4	19.6
147.5°	153.6	128.4	103.3	78.2	53.1	28.0	24.9	21.8	18.7	15.6	12.4
150°	119.3	98.7	78.0	57.3	36.7	16.0	14.2	12.4	10.7	8.9	7.1
152.5°	90.2	73.8	57.3	40.9	24.4	8.0	7.1	6.2	5.3	4.4	3.6
155°	62.9	51.1	39.3	27.6	15.8	4.0	3.6	3.1	2.7	2.2	1.8
157.5°	38.9	31.1	23.3	15.6	7.8	0.0	0.0	0.0	0.0	0.0	0.0
160°	22.2	17.8	13.3	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	10.0	8.0	6.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	3.3	2.7	2.0	1.3	0.7	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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1358.6	1359.7	1360.8	1361.9	1359.0	1356.1	1353.2	1350.3	1347.5	1344.6	1341.7
5°	1358.6	1358.3	1358.1	1357.9	1353.7	1349.5	1345.2	1341.0	1336.8	1332.6	1328.3
7.5°	1351.9	1349.9	1347.9	1345.9	1341.0	1336.1	1331.2	1326.3	1321.5	1316.6	1311.7
10°	1343.9	1340.6	1337.2	1333.9	1328.1	1322.3	1316.6	1310.8	1305.0	1299.2	1293.5
12.5°	1329.9	1324.6	1319.2	1313.9	1307.9	1301.9	1295.9	1289.9	1283.9	1277.9	1271.9
15°	1311.9	1304.6	1297.2	1289.9	1283.9	1277.9	1271.9	1265.9	1259.9	1253.9	1247.9
17.5°	1294.6	1285.7	1276.8	1267.9	1261.7	1255.5	1249.2	1243.0	1236.8	1230.6	1224.3
20°	1269.2	1258.1	1247.0	1235.9	1230.6	1225.2	1219.9	1214.6	1209.2	1203.9	1198.6
22.5°	1244.6	1231.7	1218.8	1205.9	1201.0	1196.1	1191.2	1186.3	1181.5	1176.6	1171.7
25°	1215.9	1200.6	1185.2	1169.9	1166.3	1162.8	1159.2	1155.7	1152.1	1148.6	1145.0
27.5°	1185.2	1167.5	1149.7	1131.9	1129.9	1127.9	1125.9	1123.9	1121.9	1119.9	1117.9
30°	1149.9	1129.2	1108.6	1087.9	1088.1	1088.3	1088.6	1088.8	1089.0	1089.2	1089.5
32.5°	1116.0	1092.0	1068.0	1044.0	1047.1	1050.2	1053.3	1056.4	1059.5	1062.6	1065.7
35°	1080.0	1052.6	1025.3	998.0	1004.2	1010.4	1016.7	1022.9	1029.1	1035.3	1041.6
37.5°	1044.0	1012.6	981.3	950.0	959.6	969.1	978.7	988.2	997.8	1007.3	1016.9
40°	1006.6	971.1	935.5	900.0	912.7	925.3	938.0	950.7	963.3	976.0	988.7
42.5°	966.6	927.1	887.5	848.0	864.0	880.0	896.0	912.0	928.0	944.0	960.0
45°	928.0	884.6	841.3	798.0	816.9	835.8	854.7	873.6	892.4	911.3	930.2
47.5°	886.0	838.6	791.3	744.0	766.2	788.4	810.7	832.9	855.1	877.3	899.6
50°	843.3	792.2	741.1	690.0	715.6	741.1	766.7	792.2	817.8	843.3	868.9
52.5°	798.6	743.8	688.9	634.0	662.7	691.3	720.0	748.7	777.3	806.0	834.7
55°	756.6	698.4	640.2	582.0	613.6	645.1	676.7	708.2	739.8	771.3	802.9
57.5°	712.0	650.6	589.3	528.0	562.4	596.9	631.3	665.8	700.2	734.7	769.1
60°	665.3	600.2	535.1	470.0	507.8	545.6	583.3	621.1	658.9	696.7	734.4
62.5°	620.0	552.0	484.0	416.0	456.4	496.9	537.3	577.8	618.2	658.7	699.1
65°	577.3	506.9	436.4	366.0	408.7	451.3	494.0	536.7	579.3	622.0	664.7
67.5°	532.0	459.3	386.7	314.0	358.4	402.9	447.3	491.8	536.2	580.7	625.1
70°	487.3	412.9	338.4	264.0	310.2	356.4	402.7	448.9	495.1	541.3	587.6
72.5°	444.0	368.0	292.0	216.0	263.3	310.7	358.0	405.3	452.7	500.0	547.3
75°	400.7	323.8	246.9	170.0	218.2	266.4	314.7	362.9	411.1	459.3	507.6
77.5°	358.7	281.1	203.6	126.0	174.9	223.8	272.7	321.6	370.4	419.3	468.2
80°	320.7	243.1	165.6	88.0	136.9	185.8	234.7	283.6	332.4	381.3	430.2
82.5°	284.7	207.8	130.9	54.0	102.0	150.0	198.0	246.0	294.0	342.0	390.0
85°	253.3	177.6	101.8	26.0	73.1	120.2	167.3	214.4	261.6	308.7	355.8
87.5°	228.0	154.0	80.0	6.0	52.0	98.0	144.0	190.0	236.0	282.0	328.0
90°	212.7	141.8	70.9	0.0	44.0	88.0	132.0	176.0	220.0	264.0	308.0
92.5°	205.3	136.9	68.4	0.0	42.0	84.0	126.0	168.0	210.0	252.0	294.0
95°	197.3	131.6	65.8	0.0	40.0	80.0	120.0	160.0	200.0	240.0	280.0
97.5°	189.3	126.2	63.1	0.0	37.8	75.6	113.3	151.1	188.9	226.7	264.4
100°	181.3	120.9	60.4	0.0	35.6	71.1	106.7	142.2	177.8	213.3	248.9
102.5°	171.3	114.2	57.1	0.0	33.3	66.7	100.0	133.3	166.7	200.0	233.3
105°	161.3	107.6	53.8	0.0	31.1	62.2	93.3	124.4	155.6	186.7	217.8
107.5°	152.0	101.3	50.7	0.0	28.9	57.8	86.7	115.6	144.4	173.3	202.2
110°	142.7	95.1	47.6	0.0	26.4	52.9	79.3	105.8	132.2	158.7	185.1



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	132.7	88.4	44.2	0.0	24.2	48.4	72.7	96.9	121.1	145.3	169.6
115°	122.7	81.8	40.9	0.0	21.8	43.6	65.3	87.1	108.9	130.7	152.4
117.5°	112.0	74.7	37.3	0.0	19.6	39.1	58.7	78.2	97.8	117.3	136.9
120°	100.7	67.1	33.6	0.0	17.3	34.7	52.0	69.3	86.7	104.0	121.3
122.5°	90.7	60.4	30.2	0.0	15.1	30.2	45.3	60.4	75.6	90.7	105.8
125°	81.3	54.2	27.1	0.0	12.9	25.8	38.7	51.6	64.4	77.3	90.2
127.5°	71.3	47.6	23.8	0.0	10.4	20.9	31.3	41.8	52.2	62.7	73.1
130°	62.0	41.3	20.7	0.0	8.2	16.4	24.7	32.9	41.1	49.3	57.6
132.5°	52.7	35.1	17.6	0.0	6.2	12.4	18.7	24.9	31.1	37.3	43.6
135°	44.0	29.3	14.7	0.0	4.4	8.9	13.3	17.8	22.2	26.7	31.1
137.5°	35.3	23.6	11.8	0.0	3.1	6.2	9.3	12.4	15.6	18.7	21.8
140°	28.0	18.7	9.3	0.0	1.8	3.6	5.3	7.1	8.9	10.7	12.4
142.5°	20.7	13.8	6.9	0.0	0.9	1.8	2.7	3.6	4.4	5.3	6.2
145°	14.7	9.8	4.9	0.0	0.4	0.9	1.3	1.8	2.2	2.7	3.1
147.5°	9.3	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	5.3	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.3	0.9	0.4	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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1338.8	1335.9	1334.6	1333.2	1331.9	1330.6	1329.2	1327.9	1326.6	1325.2	1323.9
5°	1324.1	1319.9	1318.6	1317.2	1315.9	1314.6	1313.2	1311.9	1310.6	1309.2	1307.9
7.5°	1306.8	1301.9	1300.1	1298.3	1296.6	1294.8	1293.0	1291.2	1289.5	1287.7	1285.9
10°	1287.7	1281.9	1280.8	1279.7	1278.6	1277.5	1276.3	1275.2	1274.1	1273.0	1271.9
12.5°	1265.9	1259.9	1259.9	1259.9	1259.9	1259.9	1259.9	1259.9	1259.9	1259.9	1259.9
15°	1241.9	1235.9	1237.9	1239.9	1241.9	1243.9	1245.9	1247.9	1249.9	1251.9	1253.9
17.5°	1218.1	1211.9	1216.8	1221.7	1226.6	1231.5	1236.3	1241.2	1246.1	1251.0	1255.9
20°	1193.2	1187.9	1196.8	1205.7	1214.6	1223.5	1232.3	1241.2	1250.1	1259.0	1267.9
22.5°	1166.8	1161.9	1175.2	1188.6	1201.9	1215.2	1228.6	1241.9	1255.2	1268.6	1281.9
25°	1141.5	1137.9	1155.5	1173.0	1190.6	1208.1	1225.7	1243.2	1260.8	1278.3	1295.9
27.5°	1115.9	1113.9	1135.2	1156.6	1177.9	1199.2	1220.6	1241.9	1263.2	1284.6	1305.9
30°	1089.7	1089.9	1114.8	1139.7	1164.6	1189.5	1214.3	1239.2	1264.1	1289.0	1313.9
32.5°	1068.8	1071.9	1099.5	1127.0	1154.6	1182.1	1209.7	1237.2	1264.8	1292.3	1319.9
35°	1047.8	1054.0	1084.2	1114.4	1144.6	1174.8	1205.1	1235.3	1265.5	1295.7	1325.9
37.5°	1026.4	1036.0	1068.7	1101.3	1134.0	1166.6	1199.3	1231.9	1264.6	1297.2	1329.9
40°	1001.3	1014.0	1049.5	1085.1	1120.6	1156.2	1191.7	1227.3	1262.8	1298.4	1333.9
42.5°	976.0	992.0	1030.2	1068.4	1106.6	1144.8	1183.1	1221.3	1259.5	1297.7	1335.9
45°	949.1	968.0	1008.9	1049.8	1090.6	1131.5	1172.4	1213.3	1254.1	1295.0	1335.9
47.5°	921.8	944.0	987.5	1031.1	1074.6	1118.2	1161.7	1205.3	1248.8	1292.4	1335.9
50°	894.4	920.0	966.0	1012.0	1058.0	1104.0	1149.9	1195.9	1241.9	1287.9	1333.9
52.5°	863.3	892.0	940.7	989.3	1038.0	1086.6	1135.3	1183.9	1232.6	1281.2	1329.9
55°	834.4	866.0	917.3	968.6	1020.0	1071.3	1122.6	1173.9	1225.3	1276.6	1327.9
57.5°	803.6	838.0	892.0	946.0	1000.0	1054.0	1107.9	1161.9	1215.9	1269.9	1323.9
60°	772.2	810.0	866.7	923.3	980.0	1036.6	1093.3	1149.9	1206.6	1263.2	1319.9
62.5°	739.6	780.0	839.3	898.6	958.0	1017.3	1076.6	1135.9	1195.3	1254.6	1313.9
65°	707.3	750.0	811.8	873.5	935.3	997.1	1058.8	1120.6	1182.4	1244.1	1305.9
67.5°	669.6	714.0	778.7	843.3	908.0	972.6	1037.3	1101.9	1166.6	1231.2	1295.9
70°	633.8	680.0	746.4	812.9	879.3	945.7	1012.2	1078.6	1145.0	1211.5	1277.9
72.5°	594.7	642.0	709.3	776.6	844.0	911.3	978.6	1045.9	1113.3	1180.6	1247.9
75°	555.8	604.0	671.1	738.2	805.3	872.4	939.5	1006.6	1073.7	1140.8	1207.9
77.5°	517.1	566.0	632.2	698.4	764.6	830.8	897.1	963.3	1029.5	1095.7	1161.9
80°	479.1	528.0	592.7	657.3	722.0	786.6	851.3	915.9	980.6	1045.2	1109.9
82.5°	438.0	486.0	549.1	612.2	675.3	738.4	801.6	864.7	927.8	990.9	1054.0
85°	402.9	450.0	511.3	572.7	634.0	695.3	756.7	818.0	879.3	940.7	1002.0
87.5°	374.0	420.0	479.8	539.6	599.3	659.1	718.9	778.7	838.4	898.2	958.0
90°	352.0	396.0	453.8	511.6	569.3	627.1	684.9	742.7	800.4	858.2	916.0
92.5°	336.0	378.0	434.0	490.0	546.0	602.0	658.0	714.0	770.0	826.0	882.0
95°	320.0	360.0	414.4	468.9	523.3	577.8	632.2	686.7	741.1	795.6	850.0
97.5°	302.2	340.0	393.1	446.2	499.3	552.4	605.6	658.7	711.8	764.9	818.0
100°	284.4	320.0	372.0	424.0	476.0	528.0	580.0	632.0	684.0	736.0	788.0
102.5°	266.7	300.0	350.7	401.3	452.0	502.7	553.3	604.0	654.7	705.3	756.0
105°	248.9	280.0	329.3	378.7	428.0	477.3	526.7	576.0	625.3	674.7	724.0
107.5°	231.1	260.0	307.8	355.6	403.3	451.1	498.9	546.7	594.4	642.2	690.0
110°	211.6	238.0	284.4	330.9	377.3	423.8	470.2	516.7	563.1	609.6	656.0



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	193.8	218.0	262.7	307.3	352.0	396.7	441.3	486.0	530.7	575.3	620.0
115°	174.2	196.0	239.3	282.7	326.0	369.3	412.7	456.0	499.3	542.7	586.0
117.5°	156.4	176.0	217.3	258.7	300.0	341.3	382.7	424.0	465.3	506.7	548.0
120°	138.7	156.0	195.8	235.6	275.3	315.1	354.9	394.7	434.4	474.2	514.0
122.5°	120.9	136.0	173.1	210.2	247.3	284.4	321.6	358.7	395.8	432.9	470.0
125°	103.1	116.0	150.9	185.8	220.7	255.6	290.4	325.3	360.2	395.1	430.0
127.5°	83.6	94.0	126.9	159.8	192.7	225.6	258.4	291.3	324.2	357.1	390.0
130°	65.8	74.0	103.8	133.6	163.3	193.1	222.9	252.7	282.4	312.2	342.0
132.5°	49.8	56.0	82.9	109.8	136.7	163.6	190.4	217.3	244.2	271.1	298.0
135°	35.6	40.0	63.8	87.6	111.3	135.1	158.9	182.7	206.4	230.2	254.0
137.5°	24.9	28.0	48.7	69.3	90.0	110.7	131.3	152.0	172.7	193.3	214.0
140°	14.2	16.0	34.0	52.0	70.0	88.0	106.0	124.0	142.0	160.0	178.0
142.5°	7.1	8.0	23.1	38.2	53.3	68.4	83.6	98.7	113.8	128.9	144.0
145°	3.6	4.0	16.0	28.0	40.0	52.0	64.0	76.0	88.0	100.0	112.0
147.5°	0.0	0.0	9.6	19.1	28.7	38.2	47.8	57.3	66.9	76.4	86.0
150°	0.0	0.0	6.7	13.3	20.0	26.7	33.3	40.0	46.7	53.3	60.0
152.5°	0.0	0.0	4.2	8.4	12.7	16.9	21.1	25.3	29.6	33.8	38.0
155°	0.0	0.0	2.2	4.4	6.7	8.9	11.1	13.3	15.6	17.8	20.0
157.5°	0.0	0.0	0.9	1.8	2.7	3.6	4.4	5.3	6.2	7.1	8.0
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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1323.0	1322.1	1321.2	1320.3	1319.5	1318.6	1317.7	1316.8	1315.9	1314.8	1313.7
5°	1306.3	1304.8	1303.2	1301.7	1300.1	1298.6	1297.0	1295.5	1293.9	1293.5	1293.0
7.5°	1285.2	1284.6	1283.9	1283.2	1282.6	1281.9	1281.2	1280.6	1279.9	1279.7	1279.5
10°	1272.3	1272.8	1273.2	1273.7	1274.1	1274.6	1275.0	1275.5	1275.9	1275.9	1275.9
12.5°	1262.3	1264.8	1267.2	1269.7	1272.1	1274.6	1277.0	1279.5	1281.9	1283.0	1284.1
15°	1259.7	1265.5	1271.2	1277.0	1282.8	1288.6	1294.3	1300.1	1305.9	1308.3	1310.8
17.5°	1265.0	1274.1	1283.2	1292.3	1301.5	1310.6	1319.7	1328.8	1337.9	1340.8	1343.7
20°	1279.0	1290.1	1301.2	1312.3	1323.5	1334.6	1345.7	1356.8	1367.9	1371.5	1375.0
22.5°	1294.3	1306.8	1319.2	1331.7	1344.1	1356.6	1369.0	1381.5	1393.9	1398.3	1402.8
25°	1309.9	1323.9	1337.9	1351.9	1365.9	1379.9	1393.9	1407.9	1421.9	1426.8	1431.7
27.5°	1321.5	1337.0	1352.6	1368.1	1383.7	1399.2	1414.8	1430.3	1445.9	1451.7	1457.5
30°	1331.2	1348.6	1365.9	1383.2	1400.6	1417.9	1435.2	1452.6	1469.9	1476.8	1483.7
32.5°	1339.5	1359.0	1378.6	1398.1	1417.7	1437.2	1456.8	1476.3	1495.9	1503.5	1511.0
35°	1347.5	1369.0	1390.6	1412.1	1433.7	1455.2	1476.8	1498.3	1519.9	1528.6	1537.2
37.5°	1353.2	1376.6	1399.9	1423.2	1446.6	1469.9	1493.2	1516.6	1539.9	1549.9	1559.9
40°	1359.5	1385.0	1410.6	1436.1	1461.7	1487.2	1512.8	1538.3	1563.9	1575.0	1586.1
42.5°	1363.9	1391.9	1419.9	1447.9	1475.9	1503.9	1531.9	1559.9	1587.9	1600.3	1612.8
45°	1366.8	1397.7	1428.6	1459.5	1490.3	1521.2	1552.1	1583.0	1613.9	1627.5	1641.0
47.5°	1369.5	1403.0	1436.6	1470.1	1503.7	1537.2	1570.8	1604.3	1637.9	1652.8	1667.7
50°	1370.6	1407.2	1443.9	1480.6	1517.2	1553.9	1590.6	1627.2	1663.9	1680.3	1696.8
52.5°	1369.9	1409.9	1449.9	1489.9	1529.9	1569.9	1609.9	1649.9	1689.9	1707.9	1725.9
55°	1370.8	1413.7	1456.6	1499.5	1542.3	1585.2	1628.1	1671.0	1713.9	1733.0	1752.1
57.5°	1370.1	1416.3	1462.6	1508.8	1555.0	1601.2	1647.5	1693.7	1739.9	1759.7	1779.5
60°	1368.8	1417.7	1466.6	1515.5	1564.3	1613.2	1662.1	1711.0	1759.9	1780.1	1800.3
62.5°	1365.0	1416.1	1467.2	1518.3	1569.5	1620.6	1671.7	1722.8	1773.9	1794.6	1815.2
65°	1358.8	1411.7	1464.6	1517.5	1570.3	1623.2	1676.1	1729.0	1781.9	1802.8	1823.7
67.5°	1349.7	1403.5	1457.2	1511.0	1564.8	1618.6	1672.3	1726.1	1779.9	1800.8	1821.7
70°	1332.1	1386.3	1440.6	1494.8	1549.0	1603.2	1657.5	1711.7	1765.9	1786.3	1806.8
72.5°	1301.9	1355.9	1409.9	1463.9	1517.9	1571.9	1625.9	1679.9	1733.9	1754.1	1774.3
75°	1261.2	1314.6	1367.9	1421.2	1474.6	1527.9	1581.2	1634.6	1687.9	1707.5	1727.0
77.5°	1213.9	1265.9	1317.9	1369.9	1421.9	1473.9	1525.9	1577.9	1629.9	1648.8	1667.7
80°	1160.1	1210.3	1260.6	1310.8	1361.0	1411.2	1461.5	1511.7	1561.9	1580.6	1599.2
82.5°	1102.4	1150.9	1199.3	1247.7	1296.2	1344.6	1393.0	1441.5	1489.9	1508.1	1526.3
85°	1048.7	1095.3	1142.0	1188.6	1235.3	1281.9	1328.6	1375.2	1421.9	1439.5	1457.0
87.5°	1002.2	1046.4	1090.6	1134.8	1179.1	1223.3	1267.5	1311.7	1355.9	1373.5	1391.0
90°	958.9	1001.8	1044.6	1087.5	1130.4	1173.3	1216.1	1259.0	1301.9	1318.6	1335.2
92.5°	923.3	964.6	1006.0	1047.3	1088.6	1129.9	1171.3	1212.6	1253.9	1269.7	1285.5
95°	889.8	929.5	969.3	1009.1	1048.8	1088.6	1128.4	1168.1	1207.9	1223.2	1238.6
97.5°	856.7	895.3	934.0	972.6	1011.3	1049.9	1088.6	1127.2	1165.9	1180.6	1195.2
100°	825.5	863.1	900.6	938.2	975.7	1013.3	1050.8	1088.4	1125.9	1140.1	1154.3
102.5°	792.7	829.3	866.0	902.6	939.3	975.9	1012.6	1049.2	1085.9	1099.7	1113.5
105°	759.8	795.6	831.3	867.1	902.9	938.7	974.4	1010.2	1046.0	1059.5	1073.1
107.5°	724.9	759.8	794.7	829.6	864.4	899.3	934.2	969.1	1004.0	1017.3	1030.6
110°	689.8	723.6	757.3	791.1	824.9	858.7	892.4	926.2	960.0	973.1	986.2



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	652.7	685.3	718.0	750.7	783.3	816.0	848.7	881.3	914.0	926.7	939.3
115°	617.3	648.7	680.0	711.3	742.7	774.0	805.3	836.7	868.0	880.4	892.9
117.5°	578.4	608.9	639.3	669.8	700.2	730.7	761.1	791.6	822.0	834.0	846.0
120°	543.1	572.2	601.3	630.4	659.6	688.7	717.8	746.9	776.0	786.9	797.8
122.5°	498.4	526.9	555.3	583.8	612.2	640.7	669.1	697.6	726.0	736.9	747.8
125°	457.6	485.1	512.7	540.2	567.8	595.3	622.9	650.4	678.0	688.4	698.9
127.5°	416.2	442.4	468.7	494.9	521.1	547.3	573.6	599.8	626.0	636.2	646.4
130°	368.0	394.0	420.0	446.0	472.0	498.0	524.0	550.0	576.0	585.8	595.6
132.5°	323.1	348.2	373.3	398.4	423.6	448.7	473.8	498.9	524.0	533.1	542.2
135°	277.8	301.6	325.3	349.1	372.9	396.7	420.4	444.2	468.0	476.9	485.8
137.5°	236.2	258.4	280.7	302.9	325.1	347.3	369.6	391.8	414.0	422.9	431.8
140°	198.0	218.0	238.0	258.0	278.0	298.0	318.0	338.0	358.0	366.9	375.8
142.5°	161.6	179.1	196.7	214.2	231.8	249.3	266.9	284.4	302.0	311.1	320.2
145°	127.3	142.7	158.0	173.3	188.7	204.0	219.3	234.7	250.0	259.8	269.6
147.5°	98.9	111.8	124.7	137.6	150.4	163.3	176.2	189.1	202.0	211.6	221.1
150°	70.7	81.3	92.0	102.7	113.3	124.0	134.7	145.3	156.0	165.1	174.2
152.5°	46.7	55.3	64.0	72.7	81.3	90.0	98.7	107.3	116.0	124.4	132.9
155°	26.7	33.3	40.0	46.7	53.3	60.0	66.7	73.3	80.0	87.3	94.7
157.5°	12.7	17.3	22.0	26.7	31.3	36.0	40.7	45.3	50.0	56.0	62.0
160°	2.7	5.3	8.0	10.7	13.3	16.0	18.7	21.3	24.0	28.4	32.9
162.5°	0.7	1.3	2.0	2.7	3.3	4.0	4.7	5.3	6.0	8.7	11.3
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
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: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1312.6	1311.5	1310.3	1309.2	1308.1	1307.0	1305.9	1306.8	1307.7	1308.6	1309.5
5°	1292.6	1292.1	1291.7	1291.2	1290.8	1290.3	1289.9	1290.1	1290.3	1290.6	1290.8
7.5°	1279.2	1279.0	1278.8	1278.6	1278.3	1278.1	1277.9	1277.9	1277.9	1277.9	1277.9
10°	1275.9	1275.9	1275.9	1275.9	1275.9	1275.9	1275.9	1275.2	1274.6	1273.9	1273.2
12.5°	1285.2	1286.3	1287.5	1288.6	1289.7	1290.8	1291.9	1290.1	1288.3	1286.6	1284.8
15°	1313.2	1315.7	1318.1	1320.6	1323.0	1325.5	1327.9	1325.2	1322.6	1319.9	1317.2
17.5°	1346.6	1349.5	1352.3	1355.2	1358.1	1361.0	1363.9	1360.3	1356.8	1353.2	1349.7
20°	1378.6	1382.1	1385.7	1389.2	1392.8	1396.3	1399.9	1395.7	1391.5	1387.2	1383.0
22.5°	1407.2	1411.7	1416.1	1420.6	1425.0	1429.5	1433.9	1428.6	1423.2	1417.9	1412.6
25°	1436.6	1441.5	1446.3	1451.2	1456.1	1461.0	1465.9	1460.1	1454.3	1448.6	1442.8
27.5°	1463.2	1469.0	1474.8	1480.6	1486.3	1492.1	1497.9	1491.5	1485.0	1478.6	1472.1
30°	1490.6	1497.5	1504.3	1511.2	1518.1	1525.0	1531.9	1524.3	1516.8	1509.2	1501.7
32.5°	1518.6	1526.1	1533.7	1541.2	1548.8	1556.3	1563.9	1555.7	1547.5	1539.2	1531.0
35°	1545.9	1554.6	1563.2	1571.9	1580.6	1589.2	1597.9	1588.8	1579.7	1570.6	1561.5
37.5°	1569.9	1579.9	1589.9	1599.9	1609.9	1619.9	1629.9	1619.9	1609.9	1599.9	1589.9
40°	1597.2	1608.3	1619.5	1630.6	1641.7	1652.8	1663.9	1652.8	1641.7	1630.6	1619.5
42.5°	1625.2	1637.7	1650.1	1662.6	1675.0	1687.5	1699.9	1687.9	1675.9	1663.9	1651.9
45°	1654.6	1668.1	1681.7	1695.2	1708.8	1722.3	1735.9	1722.8	1709.7	1696.6	1683.5
47.5°	1682.6	1697.5	1712.3	1727.2	1742.1	1757.0	1771.9	1757.9	1743.9	1729.9	1715.9
50°	1713.2	1729.7	1746.1	1762.6	1779.0	1795.5	1811.9	1796.6	1781.2	1765.9	1750.6
52.5°	1743.9	1761.9	1779.9	1797.9	1815.9	1833.9	1851.9	1835.2	1818.6	1801.9	1785.2
55°	1771.2	1790.3	1809.5	1828.6	1847.7	1866.8	1885.9	1868.8	1851.7	1834.6	1817.5
57.5°	1799.2	1819.0	1838.8	1858.6	1878.3	1898.1	1917.9	1900.1	1882.3	1864.6	1846.8
60°	1820.6	1840.8	1861.0	1881.2	1901.5	1921.7	1941.9	1923.9	1905.9	1887.9	1869.9
62.5°	1835.9	1856.6	1877.2	1897.9	1918.6	1939.2	1959.9	1941.2	1922.6	1903.9	1885.2
65°	1844.6	1865.5	1886.3	1907.2	1928.1	1949.0	1969.9	1951.5	1933.0	1914.6	1896.1
67.5°	1842.6	1863.5	1884.3	1905.2	1926.1	1947.0	1967.9	1949.2	1930.6	1911.9	1893.2
70°	1827.2	1847.7	1868.1	1888.6	1909.0	1929.5	1949.9	1931.5	1913.0	1894.6	1876.1
72.5°	1794.6	1814.8	1835.0	1855.2	1875.5	1895.7	1915.9	1897.7	1879.5	1861.2	1843.0
75°	1746.6	1766.1	1785.7	1805.2	1824.8	1844.3	1863.9	1846.3	1828.8	1811.2	1793.7
77.5°	1686.6	1705.5	1724.3	1743.2	1762.1	1781.0	1799.9	1782.6	1765.2	1747.9	1730.6
80°	1617.9	1636.6	1655.2	1673.9	1692.6	1711.2	1729.9	1713.0	1696.1	1679.2	1662.3
82.5°	1544.6	1562.8	1581.0	1599.2	1617.5	1635.7	1653.9	1637.2	1620.6	1603.9	1587.2
85°	1474.6	1492.1	1509.7	1527.2	1544.8	1562.3	1579.9	1563.7	1547.5	1531.2	1515.0
87.5°	1408.6	1426.1	1443.7	1461.2	1478.8	1496.3	1513.9	1497.7	1481.5	1465.2	1449.0
90°	1351.9	1368.6	1385.2	1401.9	1418.6	1435.2	1451.9	1436.3	1420.8	1405.2	1389.7
92.5°	1301.2	1317.0	1332.8	1348.6	1364.3	1380.1	1395.9	1381.2	1366.6	1351.9	1337.2
95°	1253.9	1269.2	1284.6	1299.9	1315.2	1330.6	1345.9	1331.9	1317.9	1303.9	1289.9
97.5°	1209.9	1224.6	1239.2	1253.9	1268.6	1283.2	1297.9	1284.6	1271.2	1257.9	1244.6
100°	1168.6	1182.8	1197.0	1211.2	1225.5	1239.7	1253.9	1240.8	1227.7	1214.6	1201.5
102.5°	1127.2	1141.0	1154.8	1168.6	1182.3	1196.1	1209.9	1197.0	1184.1	1171.2	1158.3
105°	1086.6	1100.2	1113.7	1127.3	1140.8	1154.4	1167.9	1155.2	1142.6	1129.9	1117.3
107.5°	1044.0	1057.3	1070.6	1083.9	1097.3	1110.6	1123.9	1111.5	1099.0	1086.6	1074.2
110°	999.3	1012.4	1025.5	1038.6	1051.7	1064.8	1077.9	1065.7	1053.5	1041.3	1029.1



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	952.0	964.7	977.3	990.0	1002.7	1015.3	1028.0	1016.2	1004.4	992.7	980.9
115°	905.3	917.8	930.2	942.7	955.1	967.6	980.0	968.4	956.9	945.3	933.8
117.5°	858.0	870.0	882.0	894.0	906.0	918.0	930.0	918.9	907.8	896.7	885.6
120°	808.7	819.6	830.4	841.3	852.2	863.1	874.0	863.8	853.6	843.3	833.1
122.5°	758.7	769.6	780.4	791.3	802.2	813.1	824.0	814.2	804.4	794.7	784.9
125°	709.3	719.8	730.2	740.7	751.1	761.6	772.0	762.4	752.9	743.3	733.8
127.5°	656.7	666.9	677.1	687.3	697.6	707.8	718.0	709.1	700.2	691.3	682.4
130°	605.3	615.1	624.9	634.7	644.4	654.2	664.0	655.3	646.7	638.0	629.3
132.5°	551.3	560.4	569.6	578.7	587.8	596.9	606.0	598.0	590.0	582.0	574.0
135°	494.7	503.6	512.4	521.3	530.2	539.1	548.0	540.4	532.9	525.3	517.8
137.5°	440.7	449.6	458.4	467.3	476.2	485.1	494.0	486.9	479.8	472.7	465.6
140°	384.7	393.6	402.4	411.3	420.2	429.1	438.0	432.0	426.0	420.0	414.0
142.5°	329.3	338.4	347.6	356.7	365.8	374.9	384.0	378.7	373.3	368.0	362.7
145°	279.3	289.1	298.9	308.7	318.4	328.2	338.0	332.7	327.3	322.0	316.7
147.5°	230.7	240.2	249.8	259.3	268.9	278.4	288.0	283.1	278.2	273.3	268.4
150°	183.3	192.4	201.6	210.7	219.8	228.9	238.0	234.0	230.0	226.0	222.0
152.5°	141.3	149.8	158.2	166.7	175.1	183.6	192.0	188.2	184.4	180.7	176.9
155°	102.0	109.3	116.7	124.0	131.3	138.7	146.0	142.9	139.8	136.7	133.6
157.5°	68.0	74.0	80.0	86.0	92.0	98.0	104.0	101.3	98.7	96.0	93.3
160°	37.3	41.8	46.2	50.7	55.1	59.6	64.0	62.2	60.4	58.7	56.9
162.5°	14.0	16.7	19.3	22.0	24.7	27.3	30.0	29.1	28.2	27.3	26.4
165°	2.7	3.6	4.4	5.3	6.2	7.1	8.0	8.0	8.0	8.0	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: P201409

CATALOG NUMBER: 8LBLEDD4-12-ASYMW-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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1310.3	1311.2	1312.1	1313.0	1313.9	1316.1	1318.3	1320.6	1322.8	1325.0	1327.2
5°	1291.0	1291.2	1291.5	1291.7	1291.9	1294.3	1296.8	1299.2	1301.7	1304.1	1306.6
7.5°	1277.9	1277.9	1277.9	1277.9	1277.9	1279.5	1281.0	1282.6	1284.1	1285.7	1287.2
10°	1272.6	1271.9	1271.2	1270.6	1269.9	1271.0	1272.1	1273.2	1274.3	1275.5	1276.6
12.5°	1283.0	1281.2	1279.5	1277.7	1275.9	1275.2	1274.6	1273.9	1273.2	1272.6	1271.9
15°	1314.6	1311.9	1309.2	1306.6	1303.9	1299.5	1295.0	1290.6	1286.1	1281.7	1277.2
17.5°	1346.1	1342.6	1339.0	1335.5	1331.9	1324.6	1317.2	1309.9	1302.6	1295.2	1287.9
20°	1378.8	1374.6	1370.3	1366.1	1361.9	1352.8	1343.7	1334.6	1325.5	1316.3	1307.2
22.5°	1407.2	1401.9	1396.6	1391.2	1385.9	1375.5	1365.0	1354.6	1344.1	1333.7	1323.2
25°	1437.0	1431.2	1425.5	1419.7	1413.9	1401.7	1389.5	1377.2	1365.0	1352.8	1340.6
27.5°	1465.7	1459.2	1452.8	1446.3	1439.9	1425.9	1411.9	1397.9	1383.9	1369.9	1355.9
30°	1494.1	1486.6	1479.0	1471.5	1463.9	1447.9	1431.9	1415.9	1399.9	1383.9	1367.9
32.5°	1522.8	1514.6	1506.3	1498.1	1489.9	1471.5	1453.0	1434.6	1416.1	1397.7	1379.2
35°	1552.3	1543.2	1534.1	1525.0	1515.9	1495.2	1474.6	1453.9	1433.2	1412.6	1391.9
37.5°	1579.9	1569.9	1559.9	1549.9	1539.9	1517.5	1495.0	1472.6	1450.1	1427.7	1405.2
40°	1608.3	1597.2	1586.1	1575.0	1563.9	1539.2	1514.6	1489.9	1465.2	1440.6	1415.9
42.5°	1639.9	1627.9	1615.9	1603.9	1591.9	1564.6	1537.2	1509.9	1482.6	1455.2	1427.9
45°	1670.3	1657.2	1644.1	1631.0	1617.9	1588.1	1558.3	1528.6	1498.8	1469.0	1439.2
47.5°	1701.9	1687.9	1673.9	1659.9	1645.9	1613.0	1580.1	1547.2	1514.3	1481.5	1448.6
50°	1735.2	1719.9	1704.6	1689.2	1673.9	1637.9	1601.9	1565.9	1529.9	1493.9	1457.9
52.5°	1768.6	1751.9	1735.2	1718.6	1701.9	1662.6	1623.2	1583.9	1544.6	1505.2	1465.9
55°	1800.3	1783.2	1766.1	1749.0	1731.9	1689.2	1646.6	1603.9	1561.2	1518.6	1475.9
57.5°	1829.0	1811.2	1793.5	1775.7	1757.9	1712.1	1666.3	1620.6	1574.8	1529.0	1483.2
60°	1851.9	1833.9	1815.9	1797.9	1779.9	1731.2	1682.6	1633.9	1585.2	1536.6	1487.9
62.5°	1866.6	1847.9	1829.2	1810.6	1791.9	1741.2	1690.6	1639.9	1589.2	1538.6	1487.9
65°	1877.7	1859.2	1840.8	1822.3	1803.9	1751.2	1698.6	1645.9	1593.2	1540.6	1487.9
67.5°	1874.6	1855.9	1837.2	1818.6	1799.9	1746.3	1692.8	1639.2	1585.7	1532.1	1478.6
70°	1857.7	1839.2	1820.8	1802.3	1783.9	1729.9	1675.9	1621.9	1567.9	1513.9	1459.9
72.5°	1824.8	1806.6	1788.3	1770.1	1751.9	1698.3	1644.8	1591.2	1537.7	1484.1	1430.6
75°	1776.1	1758.6	1741.0	1723.5	1705.9	1653.0	1600.1	1547.2	1494.3	1441.5	1388.6
77.5°	1713.2	1695.9	1678.6	1661.2	1643.9	1592.8	1541.7	1490.6	1439.5	1388.3	1337.2
80°	1645.5	1628.6	1611.7	1594.8	1577.9	1528.1	1478.3	1428.6	1378.8	1329.0	1279.2
82.5°	1570.6	1553.9	1537.2	1520.6	1503.9	1455.9	1407.9	1359.9	1311.9	1263.9	1215.9
85°	1498.8	1482.6	1466.3	1450.1	1433.9	1387.7	1341.5	1295.3	1249.1	1202.8	1156.6
87.5°	1432.8	1416.6	1400.3	1384.1	1367.9	1323.5	1279.0	1234.6	1190.2	1145.7	1101.3
90°	1374.1	1358.6	1343.0	1327.5	1311.9	1269.5	1227.0	1184.6	1142.2	1099.7	1057.3
92.5°	1322.6	1307.9	1293.2	1278.6	1263.9	1223.0	1182.1	1141.3	1100.4	1059.5	1018.6
95°	1275.9	1261.9	1247.9	1233.9	1219.9	1180.4	1140.8	1101.3	1061.7	1022.2	982.6
97.5°	1231.2	1217.9	1204.6	1191.2	1177.9	1139.5	1101.0	1062.6	1024.2	985.7	947.3
100°	1188.3	1175.2	1162.1	1149.0	1135.9	1098.4	1060.8	1023.3	985.7	948.2	910.6
102.5°	1145.5	1132.6	1119.7	1106.8	1093.9	1057.5	1021.0	984.6	948.2	911.7	875.3
105°	1104.6	1092.0	1079.3	1066.7	1054.0	1018.2	982.4	946.7	910.9	875.1	839.3
107.5°	1061.7	1049.3	1036.9	1024.4	1012.0	977.3	942.7	908.0	873.3	838.7	804.0
110°	1016.8	1004.6	992.4	980.2	968.0	934.7	901.3	868.0	834.7	801.3	768.0



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	969.1	957.3	945.6	933.8	922.0	890.0	858.0	826.0	794.0	762.0	730.0
115°	922.2	910.7	899.1	887.6	876.0	845.3	814.7	784.0	753.3	722.7	692.0
117.5°	874.4	863.3	852.2	841.1	830.0	800.4	770.9	741.3	711.8	682.2	652.7
120°	822.9	812.7	802.4	792.2	782.0	753.6	725.1	696.7	668.2	639.8	611.3
122.5°	775.1	765.3	755.6	745.8	736.0	707.8	679.6	651.3	623.1	594.9	566.7
125°	724.2	714.7	705.1	695.6	686.0	659.1	632.2	605.3	578.4	551.6	524.7
127.5°	673.6	664.7	655.8	646.9	638.0	612.2	586.4	560.7	534.9	509.1	483.3
130°	620.7	612.0	603.3	594.7	586.0	562.4	538.9	515.3	491.8	468.2	444.7
132.5°	566.0	558.0	550.0	542.0	534.0	511.8	489.6	467.3	445.1	422.9	400.7
135°	510.2	502.7	495.1	487.6	480.0	459.8	439.6	419.3	399.1	378.9	358.7
137.5°	458.4	451.3	444.2	437.1	430.0	411.6	393.1	374.7	356.2	337.8	319.3
140°	408.0	402.0	396.0	390.0	384.0	366.4	348.9	331.3	313.8	296.2	278.7
142.5°	357.3	352.0	346.7	341.3	336.0	320.2	304.4	288.7	272.9	257.1	241.3
145°	311.3	306.0	300.7	295.3	290.0	275.6	261.1	246.7	232.2	217.8	203.3
147.5°	263.6	258.7	253.8	248.9	244.0	231.1	218.2	205.3	192.4	179.6	166.7
150°	218.0	214.0	210.0	206.0	202.0	190.4	178.9	167.3	155.8	144.2	132.7
152.5°	173.1	169.3	165.6	161.8	158.0	148.2	138.4	128.7	118.9	109.1	99.3
155°	130.4	127.3	124.2	121.1	118.0	109.8	101.6	93.3	85.1	76.9	68.7
157.5°	90.7	88.0	85.3	82.7	80.0	74.0	68.0	62.0	56.0	50.0	44.0
160°	55.1	53.3	51.6	49.8	48.0	44.0	40.0	36.0	32.0	28.0	24.0
162.5°	25.6	24.7	23.8	22.9	22.0	20.2	18.4	16.7	14.9	13.1	11.3
165°	8.0	8.0	8.0	8.0	8.0	7.3	6.7	6.0	5.3	4.7	4.0
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: P201409

CATALOG NUMBER: 8LBLEDD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1329.5	1331.7	1333.9	1334.3	1334.8	1335.2	1335.7	1336.1	1336.6	1337.0	1337.5
5°	1309.0	1311.5	1313.9	1314.8	1315.7	1316.6	1317.5	1318.3	1319.2	1320.1	1321.0
7.5°	1288.8	1290.3	1291.9	1293.0	1294.1	1295.2	1296.3	1297.5	1298.6	1299.7	1300.8
10°	1277.7	1278.8	1279.9	1280.1	1280.3	1280.6	1280.8	1281.0	1281.2	1281.5	1281.7
12.5°	1271.2	1270.6	1269.9	1268.8	1267.7	1266.6	1265.5	1264.3	1263.2	1262.1	1261.0
15°	1272.8	1268.3	1263.9	1260.8	1257.7	1254.6	1251.5	1248.3	1245.2	1242.1	1239.0
17.5°	1280.6	1273.2	1265.9	1259.7	1253.5	1247.2	1241.0	1234.8	1228.6	1222.3	1216.1
20°	1298.1	1289.0	1279.9	1269.5	1259.0	1248.6	1238.1	1227.7	1217.2	1206.8	1196.3
22.5°	1312.8	1302.3	1291.9	1277.2	1262.6	1247.9	1233.2	1218.6	1203.9	1189.2	1174.6
25°	1328.3	1316.1	1303.9	1285.2	1266.6	1247.9	1229.2	1210.6	1191.9	1173.2	1154.6
27.5°	1341.9	1327.9	1313.9	1291.5	1269.0	1246.6	1224.1	1201.7	1179.2	1156.8	1134.3
30°	1351.9	1335.9	1319.9	1294.3	1268.8	1243.2	1217.7	1192.1	1166.6	1141.0	1115.5
32.5°	1360.8	1342.3	1323.9	1295.9	1267.9	1239.9	1211.9	1183.9	1155.9	1127.9	1099.9
35°	1371.2	1350.6	1329.9	1299.5	1269.0	1238.6	1208.2	1177.7	1147.3	1116.9	1086.4
37.5°	1382.8	1360.3	1337.9	1304.6	1271.3	1237.9	1204.6	1171.3	1138.0	1104.6	1071.3
40°	1391.2	1366.6	1341.9	1306.1	1270.4	1234.6	1198.8	1163.1	1127.3	1091.5	1055.8
42.5°	1400.6	1373.2	1345.9	1307.5	1269.0	1230.6	1192.2	1153.7	1115.3	1076.9	1038.4
45°	1409.5	1379.7	1349.9	1308.6	1267.3	1225.9	1184.6	1143.3	1102.0	1060.6	1019.3
47.5°	1415.7	1382.8	1349.9	1306.1	1262.4	1218.6	1174.8	1131.1	1087.3	1043.5	999.8
50°	1421.9	1385.9	1349.9	1303.2	1256.6	1209.9	1163.3	1116.6	1070.0	1023.3	976.7
52.5°	1426.6	1387.2	1347.9	1298.8	1249.7	1200.6	1151.5	1102.4	1053.3	1004.2	955.1
55°	1433.2	1390.6	1347.9	1295.9	1243.9	1191.9	1139.9	1088.0	1036.0	984.0	932.0
57.5°	1437.5	1391.7	1345.9	1291.2	1236.6	1181.9	1127.3	1072.6	1018.0	963.3	908.7
60°	1439.2	1390.6	1341.9	1284.8	1227.7	1170.6	1113.5	1056.4	999.3	942.2	885.1
62.5°	1437.2	1386.6	1335.9	1276.1	1216.4	1156.6	1096.8	1037.1	977.3	917.5	857.8
65°	1435.2	1382.6	1329.9	1267.2	1204.6	1141.9	1079.3	1016.6	954.0	891.3	828.7
67.5°	1425.0	1371.5	1317.9	1253.0	1188.1	1123.3	1058.4	993.5	928.6	863.8	798.9
70°	1405.9	1351.9	1297.9	1231.5	1165.0	1098.6	1032.2	965.7	899.3	832.9	766.4
72.5°	1377.0	1323.5	1269.9	1202.4	1134.8	1067.3	999.7	932.2	864.6	797.1	729.5
75°	1335.7	1282.8	1229.9	1162.6	1095.3	1027.9	960.6	893.3	826.0	758.6	691.3
77.5°	1286.1	1235.0	1183.9	1117.5	1051.0	984.6	918.2	851.7	785.3	718.9	652.4
80°	1229.5	1179.7	1129.9	1065.0	1000.1	935.3	870.4	805.5	740.6	675.8	610.9
82.5°	1167.9	1119.9	1071.9	1009.5	947.0	884.6	822.2	759.7	697.3	634.9	572.4
85°	1110.4	1064.2	1018.0	957.1	896.2	835.3	774.4	713.6	652.7	591.8	530.9
87.5°	1056.9	1012.4	968.0	909.3	850.7	792.0	733.3	674.7	616.0	557.3	498.7
90°	1014.9	972.4	930.0	872.9	815.8	758.7	701.6	644.4	587.3	530.2	473.1
92.5°	977.8	936.9	896.0	840.7	785.3	730.0	674.7	619.3	564.0	508.7	453.3
95°	943.1	903.5	864.0	810.2	756.4	702.7	648.9	595.1	541.3	487.6	433.8
97.5°	908.9	870.4	832.0	779.6	727.1	674.7	622.2	569.8	517.3	464.9	412.4
100°	873.1	835.5	798.0	747.1	696.2	645.3	594.4	543.6	492.7	441.8	390.9
102.5°	838.9	802.4	766.0	716.2	666.4	616.7	566.9	517.1	467.3	417.6	367.8
105°	803.6	767.8	732.0	683.8	635.6	587.3	539.1	490.9	442.7	394.4	346.2
107.5°	769.3	734.7	700.0	652.9	605.8	558.7	511.6	464.4	417.3	370.2	323.1
110°	734.7	701.3	668.0	622.2	576.4	530.7	484.9	439.1	393.3	347.6	301.8



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	698.0	666.0	634.0	589.6	545.1	500.7	456.2	411.8	367.3	322.9	278.4
115°	661.3	630.7	600.0	557.1	514.2	471.3	428.4	385.6	342.7	299.8	256.9
117.5°	623.1	593.6	564.0	522.9	481.8	440.7	399.6	358.4	317.3	276.2	235.1
120°	582.9	554.4	526.0	486.9	447.8	408.7	369.6	330.4	291.3	252.2	213.1
122.5°	538.4	510.2	482.0	445.6	409.1	372.7	336.2	299.8	263.3	226.9	190.4
125°	497.8	470.9	444.0	409.6	375.1	340.7	306.2	271.8	237.3	202.9	168.4
127.5°	457.6	431.8	406.0	373.8	341.6	309.3	277.1	244.9	212.7	180.4	148.2
130°	421.1	397.6	374.0	343.3	312.7	282.0	251.3	220.7	190.0	159.3	128.7
132.5°	378.4	356.2	334.0	305.8	277.6	249.3	221.1	192.9	164.7	136.4	108.2
135°	338.4	318.2	298.0	272.0	246.0	220.0	194.0	168.0	142.0	116.0	90.0
137.5°	300.9	282.4	264.0	240.0	216.0	192.0	168.0	144.0	120.0	96.0	72.0
140°	261.1	243.6	226.0	204.7	183.3	162.0	140.7	119.3	98.0	76.7	55.3
142.5°	225.6	209.8	194.0	175.1	156.2	137.3	118.4	99.6	80.7	61.8	42.9
145°	188.9	174.4	160.0	144.0	128.0	112.0	96.0	80.0	64.0	48.0	32.0
147.5°	153.8	140.9	128.0	115.1	102.2	89.3	76.4	63.6	50.7	37.8	24.9
150°	121.1	109.6	98.0	88.0	78.0	68.0	58.0	48.0	38.0	28.0	18.0
152.5°	89.6	79.8	70.0	62.9	55.8	48.7	41.6	34.4	27.3	20.2	13.1
155°	60.4	52.2	44.0	39.6	35.1	30.7	26.2	21.8	17.3	12.9	8.4
157.5°	38.0	32.0	26.0	23.3	20.7	18.0	15.3	12.7	10.0	7.3	4.7
160°	20.0	16.0	12.0	10.9	9.8	8.7	7.6	6.4	5.3	4.2	3.1
162.5°	9.6	7.8	6.0	5.3	4.7	4.0	3.3	2.7	2.0	1.3	0.7
165°	3.3	2.7	2.0	1.8	1.6	1.3	1.1	0.9	0.7	0.4	0.2
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	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8
175°	0.0	0.0	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8
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: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1337.9	1341.5	1345.0	1348.6	1352.1	1355.7	1359.2	1362.8	1366.3	1369.9	1369.7
5°	1321.9	1326.6	1331.2	1335.9	1340.6	1345.2	1349.9	1354.6	1359.2	1363.9	1365.5
7.5°	1301.9	1307.5	1313.0	1318.6	1324.1	1329.7	1335.2	1340.8	1346.3	1351.9	1355.0
10°	1281.9	1288.1	1294.3	1300.6	1306.8	1313.0	1319.2	1325.5	1331.7	1337.9	1342.6
12.5°	1259.9	1266.3	1272.8	1279.2	1285.7	1292.1	1298.6	1305.0	1311.5	1317.9	1324.3
15°	1235.9	1242.3	1248.8	1255.2	1261.7	1268.1	1274.6	1281.0	1287.5	1293.9	1302.3
17.5°	1209.9	1216.6	1223.2	1229.9	1236.6	1243.2	1249.9	1256.6	1263.2	1269.9	1279.9
20°	1185.9	1191.9	1197.9	1203.9	1209.9	1215.9	1221.9	1227.9	1233.9	1239.9	1252.1
22.5°	1159.9	1165.0	1170.1	1175.2	1180.3	1185.5	1190.6	1195.7	1200.8	1205.9	1220.3
25°	1135.9	1139.7	1143.5	1147.2	1151.0	1154.8	1158.6	1162.3	1166.1	1169.9	1186.3
27.5°	1111.9	1114.1	1116.3	1118.6	1120.8	1123.0	1125.2	1127.5	1129.7	1131.9	1150.8
30°	1089.9	1089.9	1089.9	1089.9	1089.9	1089.9	1089.9	1089.9	1089.9	1089.9	1111.7
32.5°	1071.9	1068.8	1065.7	1062.6	1059.5	1056.4	1053.3	1050.2	1047.1	1044.0	1068.9
35°	1056.0	1049.3	1042.7	1036.0	1029.3	1022.7	1016.0	1009.3	1002.7	996.0	1024.4
37.5°	1038.0	1028.0	1018.0	1008.0	998.0	988.0	978.0	968.0	958.0	948.0	980.0
40°	1020.0	1006.4	992.9	979.3	965.8	952.2	938.7	925.1	911.6	898.0	933.8
42.5°	1000.0	983.1	966.2	949.3	932.4	915.6	898.7	881.8	864.9	848.0	887.5
45°	978.0	957.8	937.6	917.3	897.1	876.9	856.7	836.4	816.2	796.0	839.3
47.5°	956.0	932.0	908.0	884.0	860.0	836.0	812.0	788.0	764.0	740.0	787.3
50°	930.0	903.1	876.2	849.3	822.4	795.6	768.7	741.8	714.9	688.0	738.7
52.5°	906.0	875.6	845.1	814.7	784.2	753.8	723.3	692.9	662.4	632.0	686.4
55°	880.0	846.4	812.9	779.3	745.8	712.2	678.7	645.1	611.6	578.0	635.8
57.5°	854.0	817.6	781.1	744.7	708.2	671.8	635.3	598.9	562.4	526.0	586.7
60°	828.0	788.0	748.0	708.0	668.0	628.0	588.0	548.0	508.0	468.0	532.2
62.5°	798.0	755.3	712.7	670.0	627.3	584.7	542.0	499.3	456.7	414.0	480.7
65°	766.0	721.1	676.2	631.3	586.4	541.6	496.7	451.8	406.9	362.0	431.1
67.5°	734.0	687.1	640.2	593.3	546.4	499.6	452.7	405.8	358.9	312.0	383.1
70°	700.0	651.3	602.7	554.0	505.3	456.7	408.0	359.3	310.7	262.0	334.9
72.5°	662.0	612.2	562.4	512.7	462.9	413.1	363.3	313.6	263.8	214.0	288.2
75°	624.0	573.3	522.7	472.0	421.3	370.7	320.0	269.3	218.7	168.0	243.1
77.5°	586.0	534.9	483.8	432.7	381.6	330.4	279.3	228.2	177.1	126.0	201.6
80°	546.0	495.3	444.7	394.0	343.3	292.7	242.0	191.3	140.7	90.0	165.6
82.5°	510.0	459.6	409.1	358.7	308.2	257.8	207.3	156.9	106.4	56.0	130.7
85°	470.0	421.1	372.2	323.3	274.4	225.6	176.7	127.8	78.9	30.0	103.3
87.5°	440.0	392.2	344.4	296.7	248.9	201.1	153.3	105.6	57.8	10.0	81.6
90°	416.0	369.8	323.6	277.3	231.1	184.9	138.7	92.4	46.2	0.0	69.1
92.5°	398.0	353.8	309.6	265.3	221.1	176.9	132.7	88.4	44.2	0.0	66.2
95°	380.0	337.8	295.6	253.3	211.1	168.9	126.7	84.4	42.2	0.0	63.8
97.5°	360.0	320.0	280.0	240.0	200.0	160.0	120.0	80.0	40.0	0.0	60.9
100°	340.0	302.2	264.4	226.7	188.9	151.1	113.3	75.6	37.8	0.0	58.2
102.5°	318.0	282.7	247.3	212.0	176.7	141.3	106.0	70.7	35.3	0.0	54.7
105°	298.0	264.9	231.8	198.7	165.6	132.4	99.3	66.2	33.1	0.0	51.8
107.5°	276.0	245.3	214.7	184.0	153.3	122.7	92.0	61.3	30.7	0.0	48.9
110°	256.0	227.6	199.1	170.7	142.2	113.8	85.3	56.9	28.4	0.0	45.8



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	234.0	208.0	182.0	156.0	130.0	104.0	78.0	52.0	26.0	0.0	42.7
115°	214.0	190.2	166.4	142.7	118.9	95.1	71.3	47.6	23.8	0.0	39.1
117.5°	194.0	172.7	151.3	130.0	108.7	87.3	66.0	44.7	23.3	2.0	37.6
120°	174.0	154.9	135.8	116.7	97.6	78.4	59.3	40.2	21.1	2.0	34.2
122.5°	154.0	136.9	119.8	102.7	85.6	68.4	51.3	34.2	17.1	0.0	29.1
125°	134.0	119.3	104.7	90.0	75.3	60.7	46.0	31.3	16.7	2.0	27.3
127.5°	116.0	103.3	90.7	78.0	65.3	52.7	40.0	27.3	14.7	2.0	23.3
130°	98.0	87.3	76.7	66.0	55.3	44.7	34.0	23.3	12.7	2.0	19.3
132.5°	80.0	71.3	62.7	54.0	45.3	36.7	28.0	19.3	10.7	2.0	16.0
135°	64.0	57.1	50.2	43.3	36.4	29.6	22.7	15.8	8.9	2.0	12.9
137.5°	48.0	42.9	37.8	32.7	27.6	22.4	17.3	12.2	7.1	2.0	10.2
140°	34.0	30.4	26.9	23.3	19.8	16.2	12.7	9.1	5.6	2.0	7.8
142.5°	24.0	21.6	19.1	16.7	14.2	11.8	9.3	6.9	4.4	2.0	6.0
145°	16.0	14.4	12.9	11.3	9.8	8.2	6.7	5.1	3.6	2.0	4.9
147.5°	12.0	10.9	9.8	8.7	7.6	6.4	5.3	4.2	3.1	2.0	3.8
150°	8.0	7.3	6.7	6.0	5.3	4.7	4.0	3.3	2.7	2.0	3.3
152.5°	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4	2.0	2.9
155°	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	2.4
157.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
160°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
162.5°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0	2.0
165°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0	1.8
167.5°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0	1.8
170°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0	1.8
172.5°	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	3.6
175°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8
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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1369.5	1369.2	1369.0	1368.8	1368.6	1368.3	1368.1	1367.9	1369.0	1370.1	1371.2
5°	1367.0	1368.6	1370.1	1371.7	1373.2	1374.8	1376.3	1377.9	1380.3	1382.8	1385.2
7.5°	1358.1	1361.2	1364.3	1367.5	1370.6	1373.7	1376.8	1379.9	1383.9	1387.9	1391.9
10°	1347.2	1351.9	1356.6	1361.2	1365.9	1370.6	1375.2	1379.9	1385.7	1391.5	1397.2
12.5°	1330.8	1337.2	1343.7	1350.1	1356.6	1363.0	1369.5	1375.9	1384.1	1392.3	1400.6
15°	1310.8	1319.2	1327.7	1336.1	1344.6	1353.0	1361.5	1369.9	1380.8	1391.7	1402.6
17.5°	1289.9	1299.9	1309.9	1319.9	1329.9	1339.9	1349.9	1359.9	1373.9	1387.9	1401.9
20°	1264.3	1276.6	1288.8	1301.0	1313.2	1325.5	1337.7	1349.9	1367.7	1385.5	1403.2
22.5°	1234.8	1249.2	1263.7	1278.1	1292.6	1307.0	1321.5	1335.9	1358.8	1381.7	1404.6
25°	1202.8	1219.2	1235.7	1252.1	1268.6	1285.0	1301.5	1317.9	1345.9	1373.9	1401.9
27.5°	1169.7	1188.6	1207.5	1226.3	1245.2	1264.1	1283.0	1301.9	1334.8	1367.7	1400.6
30°	1133.5	1155.2	1177.0	1198.8	1220.6	1242.3	1264.1	1285.9	1323.2	1360.6	1397.9
32.5°	1093.8	1118.6	1143.5	1168.4	1193.3	1218.1	1243.0	1267.9	1309.7	1351.5	1393.2
35°	1052.9	1081.3	1109.7	1138.2	1166.6	1195.0	1223.5	1251.9	1297.5	1343.0	1388.6
37.5°	1012.0	1044.0	1076.0	1107.9	1139.9	1171.9	1203.9	1235.9	1285.2	1334.6	1383.9
40°	969.5	1005.3	1041.1	1076.8	1112.6	1148.4	1184.1	1219.9	1273.0	1326.1	1379.2
42.5°	927.1	966.6	1006.2	1045.7	1085.3	1124.8	1164.4	1203.9	1260.3	1316.8	1373.2
45°	882.6	926.0	969.3	1012.6	1055.9	1099.3	1142.6	1185.9	1245.7	1305.5	1365.2
47.5°	834.6	882.0	929.3	976.6	1023.9	1071.3	1118.6	1165.9	1229.2	1292.6	1355.9
50°	789.3	840.0	890.6	941.3	991.9	1042.6	1093.2	1143.9	1210.3	1276.8	1343.2
52.5°	740.9	795.3	849.7	904.2	958.6	1013.0	1067.5	1121.9	1191.0	1260.1	1329.2
55°	693.5	751.3	809.1	866.8	924.6	982.4	1040.1	1097.9	1170.1	1242.3	1314.6
57.5°	647.3	708.0	768.6	829.3	889.9	950.6	1011.2	1071.9	1147.0	1222.1	1297.2
60°	596.4	660.7	724.9	789.1	853.3	917.6	981.8	1046.0	1124.0	1202.0	1280.0
62.5°	547.3	614.0	680.7	747.3	814.0	880.7	947.3	1014.0	1094.9	1175.8	1256.6
65°	500.2	569.3	638.4	707.6	776.7	845.8	914.9	984.0	1067.3	1150.6	1234.0
67.5°	454.2	525.3	596.4	667.6	738.7	809.8	880.9	952.0	1038.0	1124.0	1210.0
70°	407.8	480.7	553.6	626.4	699.3	772.2	845.1	918.0	1006.0	1094.0	1182.0
72.5°	362.4	436.7	510.9	585.1	659.3	733.6	807.8	882.0	971.1	1060.2	1149.3
75°	318.2	393.3	468.4	543.6	618.7	693.8	768.9	844.0	934.0	1024.0	1114.0
77.5°	277.1	352.7	428.2	503.8	579.3	654.9	730.4	806.0	896.0	986.0	1076.0
80°	241.1	316.7	392.2	467.8	543.3	618.9	694.4	770.0	859.1	948.2	1037.3
82.5°	205.3	280.0	354.7	429.3	504.0	578.7	653.3	728.0	816.7	905.3	994.0
85°	176.7	250.0	323.3	396.7	470.0	543.3	616.7	690.0	777.3	864.6	952.0
87.5°	153.1	224.7	296.2	367.8	439.3	510.9	582.4	654.0	739.5	825.1	910.6
90°	138.2	207.3	276.4	345.6	414.7	483.8	552.9	622.0	705.8	789.5	873.3
92.5°	132.4	198.7	264.9	331.1	397.3	463.6	529.8	596.0	678.4	760.9	843.3
95°	127.6	191.3	255.1	318.9	382.7	446.4	510.2	574.0	654.9	735.8	816.6
97.5°	121.8	182.7	243.6	304.4	365.3	426.2	487.1	548.0	627.8	707.5	787.3
100°	116.4	174.7	232.9	291.1	349.3	407.6	465.8	524.0	602.4	680.9	759.3
102.5°	109.3	164.0	218.7	273.3	328.0	382.7	437.3	492.0	569.5	647.1	724.6
105°	103.6	155.3	207.1	258.9	310.7	362.4	414.2	466.0	541.8	617.5	693.3
107.5°	97.8	146.7	195.6	244.4	293.3	342.2	391.1	440.0	514.2	588.4	662.6
110°	91.6	137.3	183.1	228.9	274.7	320.4	366.2	412.0	484.4	556.9	629.3



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	85.3	128.0	170.7	213.3	256.0	298.7	341.3	384.0	454.2	524.4	594.7
115°	78.2	117.3	156.4	195.6	234.7	273.8	312.9	352.0	420.0	488.0	556.0
117.5°	73.1	108.7	144.2	179.8	215.3	250.9	286.4	322.0	387.8	453.6	519.3
120°	66.4	98.7	130.9	163.1	195.3	227.6	259.8	292.0	355.6	419.1	482.7
122.5°	58.2	87.3	116.4	145.6	174.7	203.8	232.9	262.0	322.9	383.8	444.7
125°	52.7	78.0	103.3	128.7	154.0	179.3	204.7	230.0	288.2	346.4	404.7
127.5°	44.7	66.0	87.3	108.7	130.0	151.3	172.7	194.0	248.9	303.8	358.7
130°	36.7	54.0	71.3	88.7	106.0	123.3	140.7	158.0	208.0	258.0	308.0
132.5°	30.0	44.0	58.0	72.0	86.0	100.0	114.0	128.0	172.9	217.8	262.7
135°	23.8	34.7	45.6	56.4	67.3	78.2	89.1	100.0	139.8	179.6	219.3
137.5°	18.4	26.7	34.9	43.1	51.3	59.6	67.8	76.0	111.3	146.7	182.0
140°	13.6	19.3	25.1	30.9	36.7	42.4	48.2	54.0	85.1	116.2	147.3
142.5°	10.0	14.0	18.0	22.0	26.0	30.0	34.0	38.0	64.7	91.3	118.0
145°	7.8	10.7	13.6	16.4	19.3	22.2	25.1	28.0	50.0	72.0	94.0
147.5°	5.6	7.3	9.1	10.9	12.7	14.4	16.2	18.0	36.2	54.4	72.7
150°	4.7	6.0	7.3	8.7	10.0	11.3	12.7	14.0	27.8	41.6	55.3
152.5°	3.8	4.7	5.6	6.4	7.3	8.2	9.1	10.0	20.0	30.0	40.0
155°	2.9	3.3	3.8	4.2	4.7	5.1	5.6	6.0	12.7	19.3	26.0
157.5°	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	8.0	12.0	16.0
160°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.2	6.4	8.7
162.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7	3.3	4.0
165°	1.6	1.3	1.1	0.9	0.7	0.4	0.2	0.0	0.2	0.4	0.7
167.5°	1.6	1.3	1.1	0.9	0.7	0.4	0.2	0.0	0.0	0.0	0.0
170°	1.6	1.3	1.1	0.9	0.7	0.4	0.2	0.0	0.0	0.0	0.0
172.5°	3.1	2.7	2.2	1.8	1.3	0.9	0.4	0.0	0.0	0.0	0.0
175°	1.6	1.3	1.1	0.9	0.7	0.4	0.2	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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-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°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1372.3	1373.5	1374.6	1375.7	1376.8	1377.9	1378.1	1378.3	1378.6	1378.8	1379.0
5°	1387.7	1390.1	1392.6	1395.0	1397.5	1399.9	1401.0	1402.1	1403.2	1404.3	1405.5
7.5°	1395.9	1399.9	1403.9	1407.9	1411.9	1415.9	1419.0	1422.1	1425.2	1428.3	1431.5
10°	1403.0	1408.8	1414.6	1420.3	1426.1	1431.9	1437.0	1442.1	1447.2	1452.3	1457.5
12.5°	1408.8	1417.0	1425.2	1433.5	1441.7	1449.9	1457.0	1464.1	1471.2	1478.3	1485.5
15°	1413.5	1424.3	1435.2	1446.1	1457.0	1467.9	1477.2	1486.6	1495.9	1505.2	1514.6
17.5°	1415.9	1429.9	1443.9	1457.9	1471.9	1485.9	1499.2	1512.6	1525.9	1539.2	1552.6
20°	1421.0	1438.8	1456.6	1474.3	1492.1	1509.9	1526.3	1542.8	1559.2	1575.7	1592.1
22.5°	1427.5	1450.3	1473.2	1496.1	1519.0	1541.9	1560.6	1579.2	1597.9	1616.6	1635.2
25°	1429.9	1457.9	1485.9	1513.9	1541.9	1569.9	1591.0	1612.1	1633.2	1654.3	1675.5
27.5°	1433.5	1466.3	1499.2	1532.1	1565.0	1597.9	1621.2	1644.6	1667.9	1691.2	1714.6
30°	1435.2	1472.6	1509.9	1547.2	1584.6	1621.9	1647.5	1673.0	1698.6	1724.1	1749.7
32.5°	1435.0	1476.8	1518.6	1560.3	1602.1	1643.9	1672.1	1700.3	1728.6	1756.8	1785.0
35°	1434.1	1479.7	1525.2	1570.8	1616.3	1661.9	1693.0	1724.1	1755.2	1786.3	1817.5
37.5°	1433.2	1482.6	1531.9	1581.2	1630.6	1679.9	1713.7	1747.5	1781.2	1815.0	1848.8
40°	1432.3	1485.5	1538.6	1591.7	1644.8	1697.9	1734.1	1770.3	1806.6	1842.8	1879.0
42.5°	1429.7	1486.1	1542.6	1599.0	1655.5	1711.9	1751.2	1790.6	1829.9	1869.2	1908.6
45°	1425.0	1484.8	1544.6	1604.3	1664.1	1723.9	1766.1	1808.3	1850.6	1892.8	1935.0
47.5°	1419.2	1482.6	1545.9	1609.2	1672.6	1735.9	1781.5	1827.0	1872.6	1918.1	1963.7
50°	1409.7	1476.1	1542.6	1609.0	1675.5	1741.9	1790.8	1839.7	1888.6	1937.5	1986.3
52.5°	1398.3	1467.5	1536.6	1605.7	1674.8	1743.9	1796.6	1849.2	1901.9	1954.6	2007.2
55°	1386.8	1459.0	1531.2	1603.5	1675.7	1747.9	1803.9	1859.9	1915.9	1971.9	2027.9
57.5°	1372.3	1447.5	1522.6	1597.7	1672.8	1747.9	1807.0	1866.1	1925.2	1984.3	2043.5
60°	1358.0	1435.9	1513.9	1591.9	1669.9	1747.9	1809.7	1871.5	1933.2	1995.0	2056.8
62.5°	1337.5	1418.4	1499.3	1580.1	1661.0	1741.9	1806.1	1870.3	1934.6	1998.8	2063.0
65°	1317.3	1400.6	1483.9	1567.3	1650.6	1733.9	1800.3	1866.8	1933.2	1999.7	2066.1
67.5°	1296.0	1381.9	1467.9	1553.9	1639.9	1725.9	1793.7	1861.5	1929.2	1997.0	2064.8
70°	1270.0	1357.9	1445.9	1533.9	1621.9	1709.9	1778.8	1847.7	1916.6	1985.5	2054.3
72.5°	1238.4	1327.5	1416.6	1505.7	1594.8	1683.9	1753.9	1823.9	1893.9	1963.9	2033.9
75°	1204.0	1293.9	1383.9	1473.9	1563.9	1653.9	1724.3	1794.8	1865.2	1935.7	2006.1
77.5°	1166.0	1255.9	1345.9	1435.9	1525.9	1615.9	1686.1	1756.3	1826.6	1896.8	1967.0
80°	1126.4	1215.5	1304.6	1393.7	1482.8	1571.9	1641.7	1711.5	1781.2	1851.0	1920.8
82.5°	1082.6	1171.3	1259.9	1348.6	1437.2	1525.9	1594.3	1662.8	1731.2	1799.7	1868.1
85°	1039.3	1126.6	1213.9	1301.3	1388.6	1475.9	1543.5	1611.0	1678.6	1746.1	1813.7
87.5°	996.2	1081.7	1167.3	1252.8	1338.4	1423.9	1489.9	1555.9	1621.9	1687.9	1753.9
90°	957.1	1040.8	1124.6	1208.4	1292.1	1375.9	1440.1	1504.3	1568.6	1632.8	1697.0
92.5°	925.7	1008.2	1090.6	1173.0	1255.5	1337.9	1400.6	1463.2	1525.9	1588.6	1651.2
95°	897.5	978.4	1059.3	1140.1	1221.0	1301.9	1363.7	1425.5	1487.2	1549.0	1610.8
97.5°	867.1	946.8	1026.6	1106.4	1186.1	1265.9	1325.5	1385.0	1444.6	1504.1	1563.7
100°	837.7	916.2	994.6	1073.0	1151.5	1229.9	1288.1	1346.3	1404.6	1462.8	1521.0
102.5°	802.2	879.7	957.3	1034.8	1112.4	1189.9	1247.2	1304.6	1361.9	1419.2	1476.6
105°	769.1	844.8	920.6	996.4	1072.1	1147.9	1204.3	1260.8	1317.2	1373.7	1430.1
107.5°	736.8	811.1	885.3	959.5	1033.7	1107.9	1162.8	1217.7	1272.6	1327.5	1382.3
110°	701.7	774.2	846.6	919.0	991.5	1063.9	1117.7	1171.5	1225.2	1279.0	1332.8



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CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	664.9	735.1	805.3	875.6	945.8	1016.0	1068.4	1120.9	1173.3	1225.7	1278.2
115°	624.0	692.0	760.0	828.0	896.0	964.0	1015.5	1067.1	1118.6	1170.2	1221.7
117.5°	585.1	650.9	716.7	782.4	848.2	914.0	963.8	1013.5	1063.3	1113.1	1162.8
120°	546.2	609.8	673.3	736.9	800.4	864.0	911.8	959.5	1007.3	1055.1	1102.8
122.5°	505.6	566.4	627.3	688.2	749.1	810.0	856.0	902.0	948.0	994.0	1039.9
125°	462.9	521.1	579.3	637.6	695.8	754.0	798.0	842.0	886.0	930.0	973.9
127.5°	413.6	468.4	523.3	578.2	633.1	688.0	730.9	773.8	816.6	859.5	902.4
130°	358.0	408.0	458.0	508.0	558.0	608.0	651.3	694.7	738.0	781.3	824.7
132.5°	307.6	352.4	397.3	442.2	487.1	532.0	574.9	617.8	660.7	703.6	746.4
135°	259.1	298.9	338.7	378.4	418.2	458.0	500.0	542.0	584.0	626.0	668.0
137.5°	217.3	252.7	288.0	323.3	358.7	394.0	433.1	472.2	511.3	550.4	589.6
140°	178.4	209.6	240.7	271.8	302.9	334.0	368.9	403.8	438.7	473.6	508.4
142.5°	144.7	171.3	198.0	224.7	251.3	278.0	308.7	339.3	370.0	400.7	431.3
145°	116.0	138.0	160.0	182.0	204.0	226.0	252.4	278.9	305.3	331.8	358.2
147.5°	90.9	109.1	127.3	145.6	163.8	182.0	204.2	226.4	248.7	270.9	293.1
150°	69.1	82.9	96.7	110.4	124.2	138.0	156.9	175.8	194.7	213.6	232.4
152.5°	50.0	60.0	70.0	80.0	90.0	100.0	115.6	131.1	146.7	162.2	177.8
155°	32.7	39.3	46.0	52.7	59.3	66.0	78.2	90.4	102.7	114.9	127.1
157.5°	20.0	24.0	28.0	32.0	36.0	40.0	49.1	58.2	67.3	76.4	85.6
160°	10.9	13.1	15.3	17.6	19.8	22.0	27.8	33.6	39.3	45.1	50.9
162.5°	4.7	5.3	6.0	6.7	7.3	8.0	11.3	14.7	18.0	21.3	24.7
165°	0.9	1.1	1.3	1.6	1.8	2.0	3.3	4.7	6.0	7.3	8.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.9	1.1
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: P201409

CATALOG NUMBER: 8LBLELD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9
2.5°	1379.2	1379.5	1379.7	1379.9	1378.8	1377.7	1376.6	1375.5	1374.3	1373.2	1372.1
5°	1406.6	1407.7	1408.8	1409.9	1410.1	1410.3	1410.6	1410.8	1411.0	1411.2	1411.5
7.5°	1434.6	1437.7	1440.8	1443.9	1444.1	1444.3	1444.6	1444.8	1445.0	1445.2	1445.5
10°	1462.6	1467.7	1472.8	1477.9	1478.6	1479.2	1479.9	1480.6	1481.2	1481.9	1482.6
12.5°	1492.6	1499.7	1506.8	1513.9	1515.7	1517.5	1519.2	1521.0	1522.8	1524.6	1526.3
15°	1523.9	1533.2	1542.6	1551.9	1555.7	1559.5	1563.2	1567.0	1570.8	1574.6	1578.3
17.5°	1565.9	1579.2	1592.6	1605.9	1610.1	1614.3	1618.6	1622.8	1627.0	1631.2	1635.5
20°	1608.6	1625.0	1641.5	1657.9	1663.2	1668.6	1673.9	1679.2	1684.6	1689.9	1695.2
22.5°	1653.9	1672.6	1691.2	1709.9	1716.1	1722.3	1728.6	1734.8	1741.0	1747.2	1753.5
25°	1696.6	1717.7	1738.8	1759.9	1766.8	1773.7	1780.6	1787.5	1794.3	1801.2	1808.1
27.5°	1737.9	1761.2	1784.6	1807.9	1815.9	1823.9	1831.9	1839.9	1847.9	1855.9	1863.9
30°	1775.2	1800.8	1826.3	1851.9	1861.2	1870.6	1879.9	1889.2	1898.6	1907.9	1917.2
32.5°	1813.2	1841.5	1869.7	1897.9	1908.3	1918.8	1929.2	1939.7	1950.1	1960.6	1971.0
35°	1848.6	1879.7	1910.8	1941.9	1953.7	1965.5	1977.2	1989.0	2000.8	2012.6	2024.3
37.5°	1882.6	1916.3	1950.1	1983.9	1997.0	2010.1	2023.2	2036.3	2049.5	2062.6	2075.7
40°	1915.2	1951.5	1987.7	2023.9	2038.6	2053.2	2067.9	2082.6	2097.2	2111.9	2126.6
42.5°	1947.9	1987.2	2026.6	2065.9	2081.9	2097.9	2113.9	2129.9	2145.9	2161.9	2177.9
45°	1977.2	2019.5	2061.7	2103.9	2121.7	2139.5	2157.2	2175.0	2192.8	2210.6	2228.3
47.5°	2009.2	2054.8	2100.3	2145.9	2165.0	2184.1	2203.2	2222.3	2241.5	2260.6	2279.7
50°	2035.2	2084.1	2133.0	2181.9	2202.6	2223.2	2243.9	2264.6	2285.2	2305.9	2326.6
52.5°	2059.9	2112.6	2165.2	2217.9	2240.1	2262.3	2284.6	2306.8	2329.0	2351.2	2373.5
55°	2083.9	2139.9	2195.9	2251.9	2275.2	2298.6	2321.9	2345.2	2368.6	2391.9	2415.2
57.5°	2102.6	2161.7	2220.8	2279.9	2304.6	2329.2	2353.9	2378.6	2403.2	2427.9	2452.6
60°	2118.6	2180.3	2242.1	2303.9	2329.5	2355.0	2380.6	2406.1	2431.7	2457.2	2482.8
62.5°	2127.2	2191.5	2255.7	2319.9	2346.3	2372.8	2399.2	2425.7	2452.1	2478.6	2505.0
65°	2132.6	2199.0	2265.5	2331.9	2358.6	2385.2	2411.9	2438.6	2465.2	2491.9	2518.6
67.5°	2132.6	2200.3	2268.1	2335.9	2362.8	2389.7	2416.6	2443.5	2470.3	2497.2	2524.1
70°	2123.2	2192.1	2261.0	2329.9	2357.0	2384.1	2411.2	2438.3	2465.5	2492.6	2519.7
72.5°	2103.9	2173.9	2243.9	2313.9	2341.0	2368.1	2395.2	2422.3	2449.5	2476.6	2503.7
75°	2076.6	2147.0	2217.5	2287.9	2314.8	2341.7	2368.6	2395.5	2422.3	2449.2	2476.1
77.5°	2037.2	2107.5	2177.7	2247.9	2274.6	2301.2	2327.9	2354.6	2381.2	2407.9	2434.6
80°	1990.6	2060.3	2130.1	2199.9	2226.3	2252.8	2279.2	2305.7	2332.1	2358.6	2385.0
82.5°	1936.6	2005.0	2073.5	2141.9	2168.1	2194.3	2220.6	2246.8	2273.0	2299.2	2325.5
85°	1881.2	1948.8	2016.3	2083.9	2109.5	2135.0	2160.6	2186.1	2211.7	2237.2	2262.8
87.5°	1819.9	1885.9	1951.9	2017.9	2043.2	2068.6	2093.9	2119.2	2144.6	2169.9	2195.2
90°	1761.2	1825.5	1889.7	1953.9	1978.8	2003.7	2028.6	2053.5	2078.3	2103.2	2128.1
92.5°	1713.9	1776.6	1839.2	1901.9	1925.9	1949.9	1973.9	1997.9	2021.9	2045.9	2069.9
95°	1672.6	1734.3	1796.1	1857.9	1880.6	1903.2	1925.9	1948.6	1971.2	1993.9	2016.6
97.5°	1623.2	1682.8	1742.3	1801.9	1824.6	1847.2	1869.9	1892.6	1915.2	1937.9	1960.6
100°	1579.2	1637.5	1695.7	1753.9	1775.7	1797.5	1819.2	1841.0	1862.8	1884.6	1906.3
102.5°	1533.9	1591.2	1648.6	1705.9	1727.0	1748.1	1769.2	1790.3	1811.5	1832.6	1853.7
105°	1486.6	1543.0	1599.5	1655.9	1676.6	1697.2	1717.9	1738.6	1759.2	1779.9	1800.6
107.5°	1437.2	1492.1	1547.0	1601.9	1622.3	1642.8	1663.2	1683.7	1704.1	1724.6	1745.0
110°	1386.6	1440.3	1494.1	1547.9	1567.9	1587.9	1607.9	1627.9	1647.9	1667.9	1687.9



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CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-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°	1330.6	1383.0	1435.5	1487.9	1507.2	1526.6	1545.9	1565.2	1584.6	1603.9	1623.2
115°	1273.3	1324.8	1376.4	1427.9	1446.6	1465.2	1483.9	1502.6	1521.2	1539.9	1558.6
117.5°	1212.6	1262.4	1312.1	1361.9	1380.1	1398.3	1416.6	1434.8	1453.0	1471.2	1489.5
120°	1150.6	1198.4	1246.1	1293.9	1311.7	1329.5	1347.2	1365.0	1382.8	1400.6	1418.3
122.5°	1085.9	1131.9	1177.9	1223.9	1241.0	1258.1	1275.2	1292.3	1309.5	1326.6	1343.7
125°	1017.9	1061.9	1105.9	1149.9	1166.6	1183.2	1199.9	1216.6	1233.2	1249.9	1266.6
127.5°	945.3	988.1	1031.0	1073.9	1089.9	1105.9	1121.9	1137.9	1153.9	1169.9	1185.9
130°	868.0	911.3	954.7	998.0	1013.1	1028.2	1043.3	1058.4	1073.5	1088.6	1103.7
132.5°	789.3	832.2	875.1	918.0	932.7	947.3	962.0	976.7	991.3	1006.0	1020.7
135°	710.0	752.0	794.0	836.0	850.0	864.0	878.0	892.0	906.0	920.0	934.0
137.5°	628.7	667.8	706.9	746.0	759.8	773.6	787.3	801.1	814.9	828.7	842.4
140°	543.3	578.2	613.1	648.0	662.4	676.9	691.3	705.8	720.2	734.7	749.1
142.5°	462.0	492.7	523.3	554.0	569.1	584.2	599.3	614.4	629.6	644.7	659.8
145°	384.7	411.1	437.6	464.0	480.0	496.0	512.0	528.0	544.0	560.0	576.0
147.5°	315.3	337.6	359.8	382.0	398.2	414.4	430.7	446.9	463.1	479.3	495.6
150°	251.3	270.2	289.1	308.0	323.1	338.2	353.3	368.4	383.6	398.7	413.8
152.5°	193.3	208.9	224.4	240.0	254.0	268.0	282.0	296.0	310.0	324.0	338.0
155°	139.3	151.6	163.8	176.0	188.9	201.8	214.7	227.6	240.4	253.3	266.2
157.5°	94.7	103.8	112.9	122.0	132.9	143.8	154.7	165.6	176.4	187.3	198.2
160°	56.7	62.4	68.2	74.0	82.7	91.3	100.0	108.7	117.3	126.0	134.7
162.5°	28.0	31.3	34.7	38.0	44.0	50.0	56.0	62.0	68.0	74.0	80.0
165°	10.0	11.3	12.7	14.0	17.6	21.1	24.7	28.2	31.8	35.3	38.9
167.5°	1.3	1.6	1.8	2.0	3.3	4.7	6.0	7.3	8.7	10.0	11.3
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: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	1349.9	1349.9
2.5°	1371.0	1369.9
5°	1411.7	1411.9
7.5°	1445.7	1445.9
10°	1483.2	1483.9
12.5°	1528.1	1529.9
15°	1582.1	1585.9
17.5°	1639.7	1643.9
20°	1700.6	1705.9
22.5°	1759.7	1765.9
25°	1815.0	1821.9
27.5°	1871.9	1879.9
30°	1926.6	1935.9
32.5°	1981.5	1991.9
35°	2036.1	2047.9
37.5°	2088.8	2101.9
40°	2141.2	2155.9
42.5°	2193.9	2209.9
45°	2246.1	2263.9
47.5°	2298.8	2317.9
50°	2347.2	2367.9
52.5°	2395.7	2417.9
55°	2438.6	2461.9
57.5°	2477.2	2501.9
60°	2508.3	2533.9
62.5°	2531.5	2557.9
65°	2545.2	2571.9
67.5°	2551.0	2577.9
70°	2546.8	2573.9
72.5°	2530.8	2557.9
75°	2503.0	2529.9
77.5°	2461.2	2487.9
80°	2411.5	2437.9
82.5°	2351.7	2377.9
85°	2288.3	2313.9
87.5°	2220.6	2245.9
90°	2153.0	2177.9
92.5°	2093.9	2117.9
95°	2039.2	2061.9
97.5°	1983.2	2005.9
100°	1928.1	1949.9
102.5°	1874.8	1895.9
105°	1821.2	1841.9
107.5°	1765.5	1785.9
110°	1707.9	1727.9



TEST NUMBER: P201409

CATALOG NUMBER: 8LBLED-LD4-12-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	1642.6	1661.9
115°	1577.2	1595.9
117.5°	1507.7	1525.9
120°	1436.1	1453.9
122.5°	1360.8	1377.9
125°	1283.2	1299.9
127.5°	1201.9	1217.9
130°	1118.8	1133.9
132.5°	1035.3	1050.0
135°	948.0	962.0
137.5°	856.2	870.0
140°	763.6	778.0
142.5°	674.9	690.0
145°	592.0	608.0
147.5°	511.8	528.0
150°	428.9	444.0
152.5°	352.0	366.0
155°	279.1	292.0
157.5°	209.1	220.0
160°	143.3	152.0
162.5°	86.0	92.0
165°	42.4	46.0
167.5°	12.7	14.0
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)