

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: P201394

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28234)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8LBLELD4-12-ASYMF-UNV-L840-CD2-U
Description: 8 ft. Low Bay Linear, 8000 lm, Frst 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: 13013.6 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 2.02 / 1.17 / 1.78
Luminous Opening: Rectangular w/ Sides (W: 8' x L: 0.17' x H: 0.21')
CIE Type: Semi-Direct

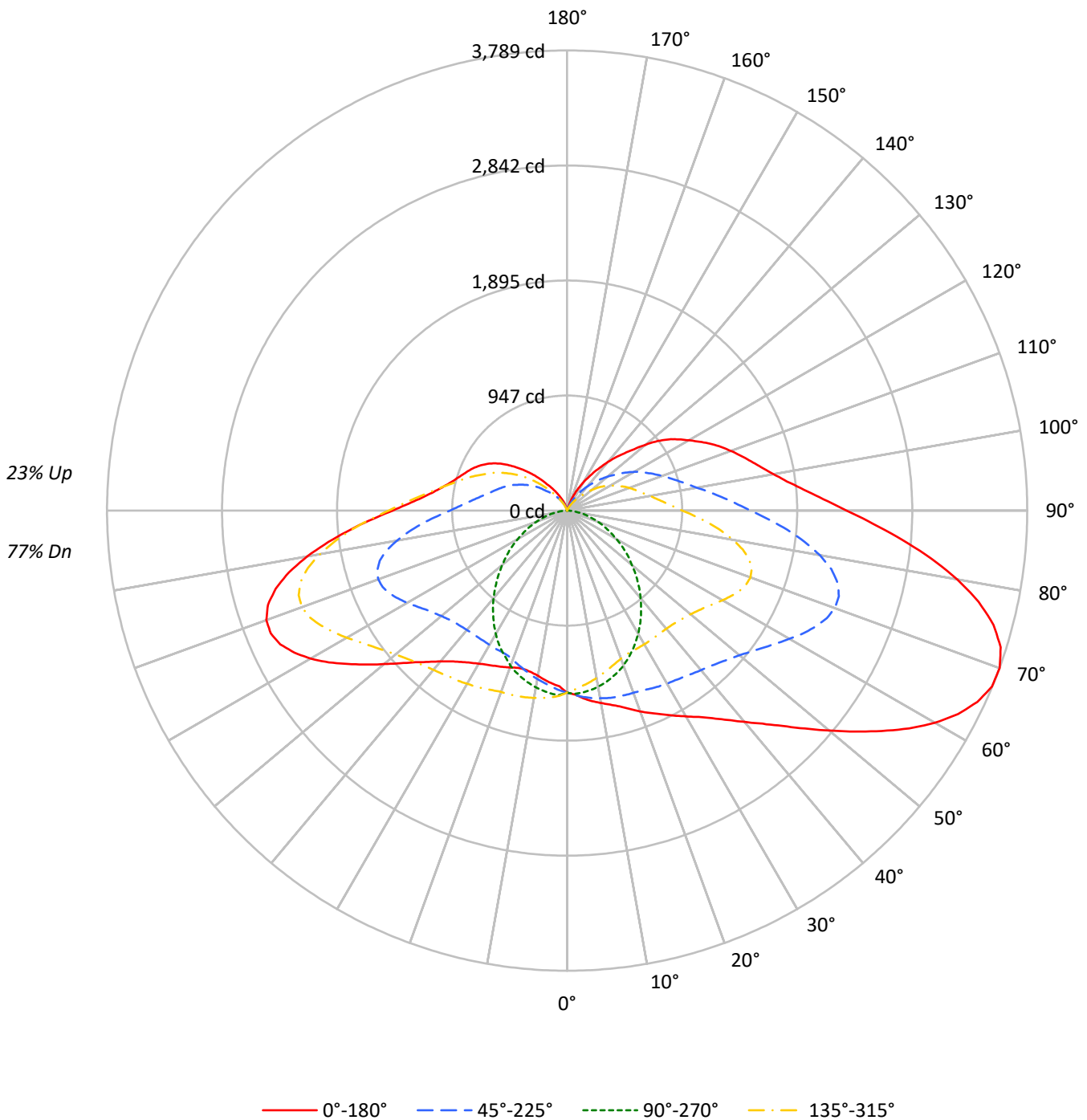
Input Watts (W): 96.83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P201394

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

Luminous Intensity Polar Plot





TEST NUMBER: P201394

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

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	77
1	98	90	84	78	92	86	80	75	77	72	68	69	65	62	62	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	27	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	12	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°	12076	12076	12076	12076
5°	11325	12127	10421	12208
10°	10792	11995	9264	12044
15°	10437	11786	8462	11836
20°	10387	11526	8112	11560
25°	10407	11164	7935	11182
30°	10589	10734	7873	10771
35°	10962	10232	7990	10251
40°	11676	9689	8335	9709
45°	12716	9100	8965	9100
50°	14217	8456	9922	8480
55°	15992	7904	11133	7904
60°	17839	7150	12444	7212
65°	19356	6567	13534	6604
70°	20186	5932	14042	5932
75°	20035	5162	13691	5162
80°	18767	4201	12500	4282
85°	16806	2993	10852	3136



TEST NUMBER: P201394

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	1.1
10°-20°	415.0	3.2
20°-30°	669.4	5.1
30°-40°	908.4	7.0
40°-50°	1168.3	9.0
50°-60°	1498.0	11.5
60°-70°	1831.9	14.1
70°-80°	1867.2	14.3
80°-90°	1456.9	11.2
90°-100°	1014.9	7.8
100°-110°	756.9	5.8
110°-120°	568.2	4.4
120°-130°	385.4	3.0
130°-140°	211.8	1.6
140°-150°	90.1	0.7
150°-160°	26.5	0.2
160°-170°	2.5	0.0
170°-180°	0.0	0.0
0°-30°	1226.6	9.4
0°-40°	2135.1	16.4
0°-60°	4801.4	36.9
0°-90°	9957.4	76.5
90°-120°	2340.0	18.0
90°-150°	3027.2	23.3
90°-180°	3056.0	23.5
0°-180°	13013.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1499	1499	1499	1499	1499	
5°	1553	1503	1429	1513	1553	150
15°	1669	1423	1353	1429	1669	477
25°	1851	1271	1411	1273	1851	861
35°	2086	1059	1521	1061	2086	1321
45°	2506	819	1767	819	2506	1959
55°	3164	584	2202	584	3164	2842
65°	3727	364	2606	366	3727	3671
75°	3635	182	2484	182	3635	3800
85°	2770	42	1789	44	2770	2365
90°	2300	0	1435	0	2300	1266
95°	1957	0	1201	0	1957	1553
105°	1567	0	963	0	1567	1664
115°	1301	0	839	2	1301	1291
125°	1023	0	674	2	1023	912
135°	668	0	442	2	668	525
145°	384	0	236	2	384	247
155°	170	0	108	2	170	82
165°	20	0	18	2	20	9
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1516.9	1516.7	1516.5	1516.2	1516.0	1515.8	1515.6	1515.3	1515.1	1514.9	1515.6
5°	1552.9	1551.6	1550.2	1548.9	1547.6	1546.2	1544.9	1543.6	1542.2	1540.9	1540.9
7.5°	1582.8	1580.8	1578.8	1576.8	1574.8	1572.8	1570.8	1568.8	1566.8	1564.8	1563.9
10°	1608.8	1606.1	1603.5	1600.8	1598.1	1595.5	1592.8	1590.1	1587.5	1584.8	1583.0
12.5°	1636.8	1633.7	1630.6	1627.5	1624.4	1621.2	1618.1	1615.0	1611.9	1608.8	1605.7
15°	1668.8	1665.2	1661.7	1658.1	1654.6	1651.0	1647.5	1643.9	1640.4	1636.8	1631.2
17.5°	1712.7	1707.8	1702.9	1698.1	1693.2	1688.3	1683.4	1678.6	1673.7	1668.8	1660.4
20°	1760.7	1754.3	1747.8	1741.4	1734.9	1728.5	1722.0	1715.6	1709.1	1702.7	1690.9
22.5°	1804.7	1796.9	1789.1	1781.4	1773.6	1765.8	1758.0	1750.3	1742.5	1734.7	1720.0
25°	1850.6	1842.2	1833.7	1825.3	1816.9	1808.4	1800.0	1791.6	1783.1	1774.7	1757.4
27.5°	1902.6	1892.8	1883.1	1873.3	1863.5	1853.8	1844.0	1834.2	1824.5	1814.7	1794.5
30°	1956.6	1945.7	1934.8	1923.9	1913.0	1902.2	1891.3	1880.4	1869.5	1858.6	1834.8
32.5°	2014.5	2001.8	1989.2	1976.5	1963.9	1951.2	1938.6	1925.9	1913.3	1900.6	1873.5
35°	2086.5	2071.6	2056.7	2041.9	2027.0	2012.1	1997.2	1982.4	1967.5	1952.6	1921.5
37.5°	2172.4	2155.1	2137.8	2120.4	2103.1	2085.8	2068.5	2051.1	2033.8	2016.5	1980.5
40°	2270.3	2250.3	2230.3	2210.4	2190.4	2170.4	2150.4	2130.5	2110.5	2090.5	2048.7
42.5°	2380.2	2357.3	2334.5	2311.6	2288.7	2265.9	2243.0	2220.1	2197.3	2174.4	2126.0
45°	2506.1	2480.3	2454.6	2428.8	2403.1	2377.3	2351.6	2325.8	2300.1	2274.3	2218.3
47.5°	2656.0	2626.5	2596.9	2567.4	2537.9	2508.3	2478.8	2449.3	2419.7	2390.2	2325.6
50°	2817.9	2784.6	2751.3	2718.0	2684.7	2651.3	2618.0	2584.7	2551.4	2518.1	2444.2
52.5°	2987.8	2951.6	2915.4	2879.2	2843.0	2806.8	2770.6	2734.4	2698.2	2662.0	2578.1
55°	3163.7	3124.8	3086.0	3047.1	3008.2	2969.4	2930.5	2891.6	2852.8	2813.9	2720.0
57.5°	3337.5	3296.6	3255.8	3214.9	3174.1	3133.2	3092.4	3051.5	3010.7	2969.8	2866.3
60°	3495.4	3454.1	3412.8	3371.5	3330.2	3288.9	3247.6	3206.3	3165.0	3123.7	3011.3
62.5°	3629.3	3588.4	3547.6	3506.7	3465.9	3425.0	3384.2	3343.3	3302.5	3261.6	3142.6
65°	3727.2	3687.9	3648.6	3609.3	3570.0	3530.7	3491.4	3452.1	3412.8	3373.5	3249.6
67.5°	3787.2	3749.2	3711.3	3673.3	3635.3	3597.4	3559.4	3521.4	3483.5	3445.5	3319.8
70°	3789.2	3754.1	3719.0	3683.9	3648.8	3613.8	3578.7	3543.6	3508.5	3473.4	3348.2
72.5°	3743.2	3709.7	3676.2	3642.6	3609.1	3575.6	3542.1	3508.5	3475.0	3441.5	3319.8
75°	3635.3	3603.5	3571.8	3540.0	3508.3	3476.5	3444.8	3413.0	3381.3	3349.5	3233.6
77.5°	3471.4	3441.2	3411.0	3380.8	3350.6	3320.4	3290.2	3260.0	3229.8	3199.6	3091.7
80°	3261.6	3233.2	3204.8	3176.3	3147.9	3119.5	3091.1	3062.6	3034.2	3005.8	2906.5
82.5°	3023.8	2996.9	2970.0	2943.2	2916.3	2889.4	2862.5	2835.7	2808.8	2781.9	2692.0
85°	2770.0	2744.9	2719.8	2694.7	2669.6	2644.5	2619.4	2594.3	2569.2	2544.1	2463.7
87.5°	2524.1	2499.9	2475.7	2451.5	2427.3	2403.1	2378.9	2354.7	2330.5	2306.3	2234.4
90°	2300.3	2277.6	2255.0	2232.3	2209.7	2187.0	2164.4	2141.7	2119.1	2096.4	2031.1
92.5°	2112.4	2091.3	2070.2	2049.1	2028.0	2007.0	1985.9	1964.8	1943.7	1922.6	1862.9
95°	1956.6	1936.6	1916.6	1896.6	1876.6	1856.7	1836.7	1816.7	1796.7	1776.7	1721.0
97.5°	1826.6	1807.3	1788.0	1768.7	1749.4	1730.0	1710.7	1691.4	1672.1	1652.8	1599.9
100°	1724.7	1705.8	1686.9	1668.1	1649.2	1630.3	1611.4	1592.6	1573.7	1554.8	1502.4
102.5°	1638.8	1619.9	1601.0	1582.2	1563.3	1544.4	1525.5	1506.7	1487.8	1468.9	1417.8
105°	1566.8	1547.9	1529.1	1510.2	1491.3	1472.5	1453.6	1434.7	1415.9	1397.0	1346.8
107.5°	1500.9	1482.2	1463.6	1444.9	1426.3	1407.6	1389.0	1370.3	1351.7	1333.0	1283.5
110°	1434.9	1416.5	1398.1	1379.6	1361.2	1342.8	1324.4	1305.9	1287.5	1269.1	1220.7



TEST NUMBER: P201394

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

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
112.5°	1371.0	1352.3	1333.7	1315.0	1296.4	1277.7	1259.1	1240.4	1221.8	1203.1	1156.2
115°	1301.0	1282.6	1264.2	1245.7	1227.3	1208.9	1190.5	1172.0	1153.6	1135.2	1090.3
117.5°	1227.1	1209.8	1192.5	1175.1	1157.8	1140.5	1123.2	1105.8	1088.5	1071.2	1028.8
120°	1157.1	1140.7	1124.3	1107.8	1091.4	1075.0	1058.6	1042.1	1025.7	1009.3	968.0
122.5°	1091.2	1075.2	1059.2	1043.2	1027.2	1011.3	995.3	979.3	963.3	947.3	906.9
125°	1023.2	1007.4	991.7	975.9	960.1	944.4	928.6	912.8	897.1	881.3	842.2
127.5°	941.3	926.2	911.1	896.0	880.9	865.8	850.7	835.6	820.5	805.4	769.2
130°	843.4	830.1	816.8	803.4	790.1	776.8	763.5	750.1	736.8	723.5	691.5
132.5°	749.4	738.1	726.8	715.4	704.1	692.8	681.5	670.1	658.8	647.5	618.9
135°	667.5	658.0	648.4	638.9	629.3	619.8	610.2	600.7	591.1	581.6	555.4
137.5°	595.6	586.7	577.8	568.9	560.0	551.2	542.3	533.4	524.5	515.6	491.8
140°	523.6	514.9	506.3	497.6	489.0	480.3	471.7	463.0	454.4	445.7	425.0
142.5°	447.7	440.8	433.9	427.0	420.1	413.3	406.4	399.5	392.6	385.7	367.5
145°	383.7	377.7	371.7	365.7	359.7	353.8	347.8	341.8	335.8	329.8	313.8
147.5°	323.8	318.5	313.1	307.8	302.5	297.1	291.8	286.5	281.1	275.8	262.0
150°	267.8	263.4	258.9	254.5	250.0	245.6	241.1	236.7	232.2	227.8	215.8
152.5°	217.8	213.8	209.8	205.8	201.8	197.9	193.9	189.9	185.9	181.9	171.7
155°	169.9	166.6	163.2	159.9	156.6	153.2	149.9	146.6	143.2	139.9	131.0
157.5°	123.9	121.2	118.6	115.9	113.2	110.6	107.9	105.2	102.6	99.9	92.8
160°	83.9	81.5	79.0	76.6	74.2	71.7	69.3	66.9	64.4	62.0	57.3
162.5°	46.0	44.7	43.3	42.0	40.7	39.3	38.0	36.7	35.3	34.0	31.1
165°	20.0	19.3	18.7	18.0	17.3	16.7	16.0	15.3	14.7	14.0	12.7
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1516.2	1516.9	1517.6	1518.2	1518.9	1519.6	1520.2	1520.9	1518.5	1516.0	1513.6
5°	1540.9	1540.9	1540.9	1540.9	1540.9	1540.9	1540.9	1540.9	1536.9	1532.9	1528.9
7.5°	1563.0	1562.1	1561.2	1560.4	1559.5	1558.6	1557.7	1556.8	1551.3	1545.7	1540.2
10°	1581.2	1579.5	1577.7	1575.9	1574.1	1572.4	1570.6	1568.8	1561.5	1554.2	1546.8
12.5°	1602.6	1599.5	1596.4	1593.2	1590.1	1587.0	1583.9	1580.8	1571.3	1561.7	1552.2
15°	1625.7	1620.1	1614.6	1609.0	1603.5	1597.9	1592.4	1586.8	1575.5	1564.2	1552.8
17.5°	1651.9	1643.5	1635.0	1626.6	1618.1	1609.7	1601.2	1592.8	1579.3	1565.7	1552.2
20°	1679.2	1667.4	1655.6	1643.9	1632.1	1620.3	1608.6	1596.8	1580.6	1564.4	1548.2
22.5°	1705.4	1690.7	1676.1	1661.4	1646.8	1632.1	1617.5	1602.8	1583.5	1564.2	1544.8
25°	1740.1	1722.7	1705.4	1688.1	1670.8	1653.4	1636.1	1618.8	1594.8	1570.8	1546.9
27.5°	1774.3	1754.1	1733.9	1713.6	1693.4	1673.2	1653.0	1632.8	1604.2	1575.5	1546.9
30°	1811.1	1787.3	1763.6	1739.8	1716.1	1692.3	1668.6	1644.8	1611.3	1577.7	1544.2
32.5°	1846.4	1819.3	1792.2	1765.2	1738.1	1711.0	1683.9	1656.8	1618.6	1580.4	1542.2
35°	1890.4	1859.3	1828.2	1797.2	1766.1	1735.0	1703.9	1672.8	1629.5	1586.2	1542.9
37.5°	1944.5	1908.6	1872.6	1836.6	1800.6	1764.7	1728.7	1692.7	1644.3	1595.9	1547.5
40°	2007.0	1965.2	1923.5	1881.7	1840.0	1798.2	1756.5	1714.7	1661.2	1607.7	1554.2
42.5°	2077.6	2029.2	1980.8	1932.3	1883.9	1835.5	1787.1	1738.7	1679.9	1621.0	1562.2
45°	2162.4	2106.4	2050.5	1994.5	1938.6	1882.6	1826.7	1770.7	1705.6	1640.6	1575.5
47.5°	2261.0	2196.4	2131.8	2067.1	2002.5	1937.9	1873.3	1808.7	1736.7	1664.8	1592.8
50°	2370.2	2296.3	2222.3	2148.4	2074.4	2000.5	1926.5	1852.6	1773.3	1694.1	1614.8
52.5°	2494.1	2410.2	2326.3	2242.3	2158.4	2074.5	1990.5	1906.6	1818.9	1731.2	1643.5
55°	2626.0	2532.1	2438.2	2344.2	2250.3	2156.4	2062.4	1968.5	1871.9	1775.3	1678.7
57.5°	2762.8	2659.4	2555.9	2452.4	2348.9	2245.5	2142.0	2038.5	1932.1	1825.8	1719.4
60°	2899.0	2786.6	2674.2	2561.9	2449.5	2337.1	2224.8	2112.4	1996.3	1880.1	1764.0
62.5°	3023.6	2904.5	2785.5	2666.5	2547.5	2428.4	2309.4	2190.4	2064.0	1937.7	1811.3
65°	3125.7	3001.8	2877.9	2753.9	2630.0	2506.1	2382.2	2258.3	2122.6	1986.9	1851.3
67.5°	3194.1	3068.4	2942.7	2817.1	2691.4	2565.7	2440.0	2314.3	2170.2	2026.1	1881.9
70°	3222.9	3097.7	2972.5	2847.2	2722.0	2596.8	2471.5	2346.3	2196.2	2046.1	1896.0
72.5°	3198.1	3076.4	2954.7	2833.1	2711.4	2589.7	2468.0	2346.3	2192.9	2039.4	1886.0
75°	3117.7	3001.8	2885.9	2769.9	2654.0	2538.1	2422.2	2306.3	2153.5	2000.7	1848.0
77.5°	2983.8	2875.9	2768.0	2660.0	2552.1	2444.2	2336.3	2228.4	2079.8	1931.3	1782.7
80°	2807.3	2708.0	2608.7	2509.5	2410.2	2310.9	2211.7	2112.4	1971.4	1830.4	1689.4
82.5°	2602.0	2512.1	2422.2	2332.2	2242.3	2152.4	2062.4	1972.5	1841.0	1709.6	1578.1
85°	2383.3	2303.0	2222.6	2142.2	2061.8	1981.5	1901.1	1820.7	1699.9	1579.1	1458.3
87.5°	2162.4	2090.5	2018.5	1946.6	1874.6	1802.7	1730.7	1658.8	1549.5	1440.3	1331.0
90°	1965.8	1900.6	1835.3	1770.0	1704.7	1639.5	1574.2	1508.9	1409.6	1310.4	1211.1
92.5°	1803.1	1743.4	1683.7	1623.9	1564.2	1504.5	1444.7	1385.0	1294.6	1204.2	1113.9
95°	1665.2	1609.5	1553.8	1498.0	1442.3	1386.6	1330.8	1275.1	1192.0	1109.0	1025.9
97.5°	1547.1	1494.2	1441.4	1388.5	1335.7	1282.8	1230.0	1177.1	1099.8	1022.5	945.3
100°	1450.0	1397.6	1345.2	1292.8	1240.4	1188.0	1135.6	1083.2	1011.9	940.6	869.4
102.5°	1366.8	1315.7	1264.6	1213.6	1162.5	1111.4	1060.4	1009.3	941.8	874.3	806.8
105°	1296.6	1246.4	1196.2	1146.1	1095.9	1045.7	995.5	945.3	880.9	816.5	752.1
107.5°	1234.0	1184.4	1134.9	1085.4	1035.9	986.3	936.8	887.3	825.6	763.9	702.1
110°	1172.3	1123.9	1075.5	1027.0	978.6	930.2	881.8	833.4	774.1	714.8	655.5



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	1109.4	1062.5	1015.7	968.8	922.0	875.1	828.3	781.4	725.0	668.6	612.2
115°	1045.5	1000.6	955.8	910.9	866.1	821.2	776.4	731.5	677.5	623.6	569.6
117.5°	986.4	944.0	901.6	859.1	816.7	774.3	731.9	689.5	637.8	586.0	534.3
120°	926.7	885.4	844.1	802.7	761.4	720.1	678.8	637.5	589.1	540.7	492.3
122.5°	866.5	826.1	785.7	745.2	704.8	664.4	624.0	583.6	539.0	494.3	449.7
125°	803.1	764.1	725.0	685.9	646.8	607.8	568.7	529.6	488.5	447.4	406.4
127.5°	733.0	696.8	660.6	624.4	588.2	552.0	515.8	479.6	441.9	404.1	366.4
130°	659.5	627.6	595.6	563.6	531.6	499.7	467.7	435.7	400.8	366.0	331.1
132.5°	590.2	561.6	532.9	504.3	475.6	447.0	418.3	389.7	357.7	325.7	293.8
135°	529.2	503.0	476.8	450.5	424.3	398.1	371.9	345.7	316.8	288.0	259.1
137.5°	468.1	444.3	420.6	396.8	373.1	349.3	325.6	301.8	275.8	249.8	223.8
140°	404.4	383.7	363.1	342.4	321.8	301.1	280.5	259.8	236.5	213.2	189.9
142.5°	349.3	331.1	312.9	294.6	276.4	258.2	240.0	221.8	201.2	180.5	159.9
145°	297.8	281.8	265.8	249.9	233.9	217.9	201.9	185.9	167.9	149.9	131.9
147.5°	248.3	234.5	220.7	207.0	193.2	179.4	165.7	151.9	136.6	121.3	105.9
150°	203.8	191.8	179.8	167.9	155.9	143.9	131.9	119.9	107.5	95.0	82.6
152.5°	161.5	151.2	141.0	130.8	120.6	110.3	100.1	89.9	80.4	70.8	61.3
155°	122.1	113.3	104.4	95.5	86.6	77.8	68.9	60.0	53.6	47.1	40.7
157.5°	85.7	78.6	71.5	64.4	57.3	50.2	43.1	36.0	32.0	28.0	24.0
160°	52.7	48.0	43.3	38.7	34.0	29.3	24.7	20.0	17.8	15.6	13.3
162.5°	28.2	25.3	22.4	19.6	16.7	13.8	10.9	8.0	7.1	6.2	5.3
165°	11.3	10.0	8.7	7.3	6.0	4.7	3.3	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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1511.1	1508.7	1506.2	1503.8	1501.3	1498.9	1500.2	1501.6	1502.9	1504.2	1505.6
5°	1524.9	1520.9	1516.9	1512.9	1508.9	1504.9	1504.7	1504.5	1504.2	1504.0	1503.8
7.5°	1534.6	1529.1	1523.5	1518.0	1512.4	1506.9	1505.1	1503.3	1501.6	1499.8	1498.0
10°	1539.5	1532.2	1524.9	1517.5	1510.2	1502.9	1499.6	1496.2	1492.9	1489.6	1486.2
12.5°	1542.6	1533.1	1523.5	1514.0	1504.4	1494.9	1490.0	1485.1	1480.2	1475.3	1470.5
15°	1541.5	1530.2	1518.9	1507.5	1496.2	1484.9	1478.0	1471.1	1464.2	1457.3	1450.5
17.5°	1538.6	1525.1	1511.5	1498.0	1484.4	1470.9	1462.2	1453.6	1444.9	1436.3	1427.6
20°	1532.0	1515.7	1499.5	1483.3	1467.1	1450.9	1440.5	1430.0	1419.6	1409.2	1398.7
22.5°	1525.5	1506.2	1486.9	1467.5	1448.2	1428.9	1416.2	1403.6	1390.9	1378.3	1365.6
25°	1522.9	1498.9	1474.9	1451.0	1427.0	1403.0	1388.3	1373.7	1359.0	1344.4	1329.7
27.5°	1518.2	1489.6	1460.9	1432.3	1403.6	1375.0	1357.9	1340.8	1323.7	1306.6	1289.5
30°	1510.7	1477.1	1443.6	1410.1	1376.5	1343.0	1323.9	1304.8	1285.7	1266.6	1247.5
32.5°	1504.0	1465.8	1427.6	1389.4	1351.2	1313.0	1291.0	1269.0	1247.1	1225.1	1203.1
35°	1499.6	1456.3	1413.0	1369.7	1326.4	1283.1	1258.2	1233.3	1208.5	1183.6	1158.7
37.5°	1499.1	1450.7	1402.3	1353.9	1305.5	1257.1	1228.5	1199.8	1171.2	1142.5	1113.9
40°	1500.7	1447.1	1393.6	1340.1	1286.6	1233.1	1200.7	1168.3	1135.8	1103.4	1071.0
42.5°	1503.3	1444.5	1385.6	1326.8	1267.9	1209.1	1172.7	1136.3	1099.8	1063.4	1027.0
45°	1510.4	1445.4	1380.3	1315.2	1250.2	1185.1	1144.5	1103.8	1063.2	1022.6	981.9
47.5°	1520.9	1448.9	1377.0	1305.0	1233.1	1161.1	1116.5	1071.8	1027.2	982.6	937.9
50°	1535.5	1456.3	1377.0	1297.7	1218.5	1139.2	1089.9	1040.6	991.3	942.0	892.7
52.5°	1555.8	1468.0	1380.3	1292.6	1204.9	1117.2	1064.6	1011.9	959.3	906.7	854.0
55°	1582.1	1485.6	1389.0	1292.4	1195.8	1099.2	1041.9	984.6	927.3	870.0	812.8
57.5°	1613.0	1506.7	1400.3	1293.9	1187.6	1081.2	1019.7	958.2	896.7	835.2	773.6
60°	1647.9	1531.7	1415.6	1299.5	1183.3	1067.2	1000.1	933.1	866.0	799.0	731.9
62.5°	1685.0	1558.6	1432.3	1305.9	1179.6	1053.2	982.4	911.5	840.7	769.9	699.0
65°	1715.6	1579.9	1444.2	1308.6	1172.9	1037.2	962.4	887.5	812.7	737.9	663.0
67.5°	1737.8	1593.7	1449.6	1305.4	1161.3	1017.2	939.3	861.3	783.4	705.5	627.5
70°	1745.9	1595.7	1445.6	1295.5	1145.4	995.3	914.7	834.1	753.5	672.9	592.2
72.5°	1732.5	1579.1	1425.6	1272.2	1118.7	965.3	882.9	800.5	718.1	635.7	553.4
75°	1695.2	1542.4	1389.6	1236.9	1084.1	931.3	848.0	764.8	681.5	598.2	515.0
77.5°	1634.1	1485.6	1337.0	1188.4	1039.9	891.3	808.0	724.8	641.5	558.2	475.0
80°	1548.4	1407.4	1266.4	1125.4	984.4	843.4	761.2	679.1	596.9	514.7	432.6
82.5°	1446.7	1315.2	1183.8	1052.3	920.9	789.4	709.5	629.5	549.6	469.6	389.7
85°	1337.5	1216.7	1095.9	975.1	854.3	733.5	656.7	579.8	503.0	426.2	349.3
87.5°	1221.8	1112.5	1003.3	894.0	784.8	675.5	602.2	528.9	455.7	382.4	309.1
90°	1111.8	1012.6	913.3	814.0	714.8	615.5	547.1	478.7	410.3	341.9	273.6
92.5°	1023.5	933.1	842.7	752.4	662.0	571.6	508.1	444.6	381.1	317.6	254.0
95°	942.9	859.8	776.8	693.7	610.7	527.6	469.0	410.4	351.7	293.1	234.5
97.5°	868.0	790.7	713.4	636.2	558.9	481.6	428.1	374.6	321.1	267.6	214.0
100°	798.1	726.8	655.5	584.3	513.0	441.7	392.6	343.5	294.5	245.4	196.3
102.5°	739.3	671.7	604.2	536.7	469.2	401.7	357.1	312.4	267.8	223.2	178.5
105°	687.7	623.3	558.9	494.5	430.1	365.7	325.1	284.4	243.8	203.2	162.5
107.5°	640.4	578.7	517.0	455.2	393.5	331.8	294.9	258.1	221.2	184.3	147.5
110°	596.2	537.0	477.7	418.4	359.1	299.8	266.5	233.2	199.9	166.6	133.2



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	555.8	499.4	443.0	386.6	330.2	273.8	243.4	213.0	182.5	152.1	121.7
115°	515.6	461.7	407.7	353.7	299.8	245.8	218.5	191.2	163.9	136.6	109.2
117.5°	482.5	430.8	379.0	327.3	275.5	223.8	198.9	174.1	149.2	124.3	99.5
120°	443.9	395.5	347.1	298.7	250.3	201.9	179.5	157.0	134.6	112.2	89.7
122.5°	405.1	360.4	315.8	271.2	226.5	181.9	161.7	141.5	121.3	101.1	80.8
125°	365.3	324.2	283.1	242.1	201.0	159.9	142.1	124.4	106.6	88.8	71.1
127.5°	328.6	290.9	253.1	215.4	177.6	139.9	124.4	108.8	93.3	77.7	62.2
130°	296.2	261.4	226.5	191.6	156.8	121.9	108.4	94.8	81.3	67.7	54.2
132.5°	261.8	229.8	197.8	165.9	133.9	101.9	90.6	79.3	67.9	56.6	45.3
135°	230.2	201.4	172.5	143.6	114.8	85.9	76.4	66.8	57.3	47.7	38.2
137.5°	197.8	171.9	145.9	119.9	93.9	67.9	60.4	52.8	45.3	37.7	30.2
140°	166.6	143.2	119.9	96.6	73.3	50.0	44.4	38.9	33.3	27.8	22.2
142.5°	139.2	118.6	97.9	77.3	56.6	36.0	32.0	28.0	24.0	20.0	16.0
145°	113.9	96.0	78.0	60.0	42.0	24.0	21.3	18.7	16.0	13.3	10.7
147.5°	90.6	75.3	60.0	44.6	29.3	14.0	12.4	10.9	9.3	7.8	6.2
150°	70.2	57.7	45.3	32.9	20.4	8.0	7.1	6.2	5.3	4.4	3.6
152.5°	51.7	42.2	32.6	23.1	13.5	4.0	3.6	3.1	2.7	2.2	1.8
155°	34.2	27.8	21.3	14.9	8.4	2.0	1.8	1.6	1.3	1.1	0.9
157.5°	20.0	16.0	12.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	11.1	8.9	6.7	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	4.4	3.6	2.7	1.8	0.9	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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1506.9	1508.2	1509.6	1510.9	1507.6	1504.2	1500.9	1497.6	1494.2	1490.9	1487.6
5°	1503.6	1503.3	1503.1	1502.9	1498.7	1494.5	1490.2	1486.0	1481.8	1477.6	1473.3
7.5°	1496.2	1494.5	1492.7	1490.9	1485.6	1480.2	1474.9	1469.6	1464.2	1458.9	1453.6
10°	1482.9	1479.6	1476.2	1472.9	1466.9	1460.9	1454.9	1448.9	1442.9	1436.9	1430.9
12.5°	1465.6	1460.7	1455.8	1450.9	1444.0	1437.1	1430.3	1423.4	1416.5	1409.6	1402.8
15°	1443.6	1436.7	1429.8	1422.9	1415.8	1408.7	1401.6	1394.5	1387.4	1380.3	1373.2
17.5°	1419.0	1410.3	1401.7	1393.0	1385.7	1378.3	1371.0	1363.7	1356.3	1349.0	1341.7
20°	1388.3	1377.9	1367.4	1357.0	1349.4	1341.9	1334.3	1326.8	1319.2	1311.7	1304.1
22.5°	1353.0	1340.3	1327.7	1315.0	1307.9	1300.8	1293.7	1286.6	1279.5	1272.4	1265.3
25°	1315.1	1300.4	1285.8	1271.1	1264.4	1257.8	1251.1	1244.4	1237.8	1231.1	1224.4
27.5°	1272.4	1255.3	1238.2	1221.1	1215.3	1209.5	1203.8	1198.0	1192.2	1186.4	1180.7
30°	1228.4	1209.3	1190.2	1171.1	1165.8	1160.5	1155.1	1149.8	1144.5	1139.2	1133.8
32.5°	1181.1	1159.2	1137.2	1115.2	1111.4	1107.6	1103.9	1100.1	1096.3	1092.5	1088.8
35°	1133.8	1109.0	1084.1	1059.2	1057.2	1055.2	1053.2	1051.2	1049.2	1047.2	1045.2
37.5°	1085.2	1056.6	1027.9	999.3	999.7	1000.2	1000.6	1001.1	1001.5	1002.0	1002.4
40°	1038.6	1006.1	973.7	941.3	944.6	948.0	951.3	954.6	958.0	961.3	964.6
42.5°	990.6	954.1	917.7	881.3	888.2	895.1	902.0	908.9	915.7	922.6	929.5
45°	941.3	900.7	860.0	819.4	830.1	840.7	851.4	862.0	872.7	883.3	894.0
47.5°	893.3	848.7	804.0	759.4	773.6	787.8	802.0	816.2	830.5	844.7	858.9
50°	843.4	794.1	744.8	695.5	713.9	732.4	750.8	769.2	787.7	806.1	824.5
52.5°	801.4	748.8	696.1	643.5	665.3	687.0	708.8	730.6	752.3	774.1	795.9
55°	755.5	698.2	640.9	583.6	609.4	635.1	660.9	686.6	712.4	738.1	763.9
57.5°	712.1	650.6	589.1	527.6	557.6	587.6	617.5	647.5	677.5	707.5	737.4
60°	664.9	597.8	530.8	463.7	498.3	533.0	567.6	602.2	636.9	671.5	706.1
62.5°	628.2	557.4	486.5	415.7	453.4	491.2	528.9	566.7	604.4	642.2	679.9
65°	588.2	513.4	438.5	363.7	404.8	445.9	487.0	528.1	569.1	610.2	651.3
67.5°	549.6	471.7	393.7	315.8	359.8	403.7	447.7	491.7	535.6	579.6	623.6
70°	511.6	431.0	350.4	269.8	316.0	362.2	408.4	454.6	500.7	546.9	593.1
72.5°	471.0	388.6	306.2	223.8	271.5	319.3	367.0	414.8	462.5	510.3	558.0
75°	431.7	348.4	265.2	181.9	230.5	279.1	327.8	376.4	425.0	473.6	522.3
77.5°	391.7	308.4	225.2	141.9	191.0	240.1	289.1	338.2	387.3	436.4	485.4
80°	350.4	268.2	186.1	103.9	152.8	201.6	250.5	299.3	348.2	397.0	445.9
82.5°	309.7	229.8	149.8	69.9	117.9	165.8	213.8	261.8	309.7	357.7	405.7
85°	272.5	195.7	118.8	42.0	87.7	133.5	179.2	225.0	270.7	316.5	362.2
87.5°	235.8	162.6	89.3	16.0	60.2	104.4	148.6	192.8	236.9	281.1	325.3
90°	205.2	136.8	68.4	0.0	41.5	83.0	124.6	166.1	207.6	249.1	290.7
92.5°	190.5	127.0	63.5	0.0	38.6	77.3	115.9	154.5	193.2	231.8	270.4
95°	175.9	117.2	58.6	0.0	36.0	72.0	107.9	143.9	179.9	215.9	251.8
97.5°	160.5	107.0	53.5	0.0	33.1	66.2	99.3	132.4	165.4	198.5	231.6
100°	147.2	98.2	49.1	0.0	30.6	61.3	91.9	122.6	153.2	183.9	214.5
102.5°	133.9	89.3	44.6	0.0	28.2	56.4	84.6	112.8	141.0	169.2	197.4
105°	121.9	81.3	40.6	0.0	25.8	51.5	77.3	103.0	128.8	154.5	180.3
107.5°	110.6	73.7	36.9	0.0	23.5	47.1	70.6	94.1	117.7	141.2	164.7
110°	99.9	66.6	33.3	0.0	21.5	43.1	64.6	86.2	107.7	129.3	150.8



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	91.3	60.8	30.4	0.0	19.5	39.1	58.6	78.2	97.7	117.3	136.8
115°	81.9	54.6	27.3	0.0	17.3	34.6	52.0	69.3	86.6	103.9	121.3
117.5°	74.6	49.7	24.9	0.0	15.5	31.1	46.6	62.2	77.7	93.3	108.8
120°	67.3	44.9	22.4	0.0	14.0	28.0	42.0	56.0	69.9	83.9	97.9
122.5°	60.6	40.4	20.2	0.0	12.4	24.9	37.3	49.7	62.2	74.6	87.0
125°	53.3	35.5	17.8	0.0	11.1	22.2	33.3	44.4	55.5	66.6	77.7
127.5°	46.6	31.1	15.5	0.0	9.5	19.1	28.6	38.2	47.7	57.3	66.8
130°	40.6	27.1	13.5	0.0	8.0	16.0	24.0	32.0	39.9	47.9	55.9
132.5°	34.0	22.6	11.3	0.0	6.7	13.3	20.0	26.7	33.3	40.0	46.7
135°	28.6	19.1	9.5	0.0	5.3	10.7	16.0	21.3	26.7	32.0	37.3
137.5°	22.6	15.1	7.5	0.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0
140°	16.7	11.1	5.6	0.0	2.9	5.8	8.7	11.6	14.4	17.3	20.2
142.5°	12.0	8.0	4.0	0.0	1.8	3.6	5.3	7.1	8.9	10.7	12.4
145°	8.0	5.3	2.7	0.0	1.1	2.2	3.3	4.4	5.6	6.7	7.8
147.5°	4.7	3.1	1.6	0.0	0.9	1.8	2.7	3.6	4.4	5.3	6.2
150°	2.7	1.8	0.9	0.0	0.7	1.3	2.0	2.7	3.3	4.0	4.7
152.5°	1.3	0.9	0.4	0.0	0.4	0.9	1.3	1.8	2.2	2.7	3.1
155°	0.7	0.4	0.2	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1484.2	1480.9	1480.0	1479.1	1478.2	1477.3	1476.5	1475.6	1474.7	1473.8	1472.9
5°	1469.1	1464.9	1463.1	1461.3	1459.6	1457.8	1456.0	1454.2	1452.5	1450.7	1448.9
7.5°	1448.2	1442.9	1440.9	1438.9	1436.9	1434.9	1432.9	1430.9	1428.9	1426.9	1424.9
10°	1424.9	1418.9	1416.7	1414.5	1412.3	1410.1	1407.8	1405.6	1403.4	1401.2	1399.0
12.5°	1395.9	1389.0	1387.0	1385.0	1383.0	1381.0	1379.0	1377.0	1375.0	1373.0	1371.0
15°	1366.1	1359.0	1357.4	1355.9	1354.3	1352.8	1351.2	1349.7	1348.1	1346.6	1345.0
17.5°	1334.3	1327.0	1326.1	1325.2	1324.3	1323.4	1322.6	1321.7	1320.8	1319.9	1319.0
20°	1296.6	1289.0	1289.9	1290.8	1291.7	1292.6	1293.4	1294.3	1295.2	1296.1	1297.0
22.5°	1258.2	1251.1	1254.4	1257.8	1261.1	1264.4	1267.8	1271.1	1274.4	1277.8	1281.1
25°	1217.8	1211.1	1218.0	1224.9	1231.8	1238.7	1245.5	1252.4	1259.3	1266.2	1273.1
27.5°	1174.9	1169.1	1180.7	1192.2	1203.8	1215.3	1226.9	1238.4	1250.0	1261.5	1273.1
30°	1128.5	1123.2	1139.6	1156.1	1172.5	1188.9	1205.4	1221.8	1238.2	1254.7	1271.1
32.5°	1085.0	1081.2	1102.1	1123.0	1143.8	1164.7	1185.6	1206.5	1227.3	1248.2	1269.1
35°	1043.2	1041.2	1066.3	1091.4	1116.5	1141.6	1166.7	1191.8	1216.9	1242.0	1267.1
37.5°	1002.9	1003.3	1032.6	1061.9	1091.2	1120.5	1149.9	1179.2	1208.5	1237.8	1267.1
40°	968.0	971.3	1004.6	1037.9	1071.2	1104.5	1137.9	1171.2	1204.5	1237.8	1271.1
42.5°	936.4	943.3	980.4	1017.5	1054.6	1091.7	1128.7	1165.8	1202.9	1240.0	1277.1
45°	904.6	915.3	956.8	998.3	1039.9	1081.4	1122.9	1164.4	1206.0	1247.5	1289.0
47.5°	873.1	887.3	933.7	980.1	1026.5	1072.9	1119.4	1165.8	1212.2	1258.6	1305.0
50°	843.0	861.4	913.1	964.9	1016.6	1068.3	1120.1	1171.8	1223.5	1275.3	1327.0
52.5°	817.6	839.4	896.7	954.0	1011.3	1068.6	1125.8	1183.1	1240.4	1297.7	1355.0
55°	789.6	815.4	879.1	942.9	1006.6	1070.3	1134.1	1197.8	1261.5	1325.3	1389.0
57.5°	767.4	797.4	867.8	938.2	1008.6	1079.0	1149.3	1219.7	1290.1	1360.5	1430.9
60°	740.8	775.4	853.3	931.3	1009.2	1087.2	1165.1	1243.1	1321.0	1399.0	1476.9
62.5°	717.7	755.4	840.7	926.0	1011.2	1096.5	1181.8	1267.1	1352.3	1437.6	1522.9
65°	692.4	733.5	825.9	918.2	1010.6	1103.0	1195.3	1287.7	1380.1	1472.4	1564.8
67.5°	667.5	711.5	809.6	907.8	1005.9	1104.1	1202.2	1300.4	1398.5	1496.7	1594.8
70°	639.3	685.5	787.9	890.2	992.6	1095.0	1197.3	1299.7	1402.1	1504.4	1606.8
72.5°	605.8	653.5	757.9	862.2	966.6	1071.0	1175.3	1279.7	1384.1	1488.4	1592.8
75°	570.9	619.5	723.0	826.5	930.0	1033.5	1136.9	1240.4	1343.9	1447.4	1550.9
77.5°	534.5	583.6	683.3	783.0	882.7	982.4	1082.1	1181.8	1281.5	1381.2	1480.9
80°	494.7	543.6	637.3	731.0	824.7	918.4	1012.2	1105.9	1199.6	1293.3	1387.0
82.5°	453.6	501.6	588.2	674.8	761.4	848.0	934.7	1021.3	1107.9	1194.5	1281.1
85°	408.0	453.7	533.2	612.7	692.2	771.7	851.1	930.6	1010.1	1089.6	1169.1
87.5°	369.5	413.7	484.8	555.8	626.9	697.9	769.0	840.0	911.1	982.1	1053.2
90°	332.2	373.7	437.4	501.2	564.9	628.6	692.4	756.1	819.8	883.6	947.3
92.5°	309.1	347.7	405.2	462.7	520.3	577.8	635.3	692.8	750.4	807.9	865.4
95°	287.8	323.8	376.6	429.5	482.3	535.2	588.0	640.9	693.7	746.6	799.4
97.5°	264.7	297.8	347.1	396.4	445.7	495.0	544.3	593.6	642.9	692.2	741.5
100°	245.2	275.8	322.0	368.2	414.4	460.6	506.7	552.9	599.1	645.3	691.5
102.5°	225.6	253.8	297.8	341.7	385.7	429.7	473.6	517.6	561.6	605.5	649.5
105°	206.0	231.8	274.0	316.2	358.4	400.6	442.7	484.9	527.1	569.3	611.5
107.5°	188.3	211.8	252.4	293.1	333.7	374.4	415.0	455.7	496.3	537.0	577.6
110°	172.4	193.9	233.0	272.1	311.1	350.2	389.3	428.4	467.4	506.5	545.6



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	156.4	175.9	213.4	250.9	288.5	326.0	363.5	401.0	438.6	476.1	513.6
115°	138.6	155.9	191.4	226.9	262.5	298.0	333.5	369.0	404.6	440.1	475.6
117.5°	124.4	139.9	173.7	207.4	241.2	274.9	308.7	342.4	376.2	409.9	443.7
120°	111.9	125.9	157.4	189.0	220.5	252.0	283.6	315.1	346.6	378.2	409.7
122.5°	99.5	111.9	141.2	170.5	199.8	229.1	258.5	287.8	317.1	346.4	375.7
125°	88.8	99.9	126.8	153.6	180.5	207.4	234.2	261.1	288.0	314.8	341.7
127.5°	76.4	85.9	110.1	134.3	158.5	182.7	207.0	231.2	255.4	279.6	303.8
130°	63.9	71.9	93.0	114.1	135.2	156.3	177.4	198.5	219.6	240.7	261.8
132.5°	53.3	60.0	77.8	95.5	113.3	131.0	148.8	166.5	184.3	202.0	219.8
135°	42.7	48.0	63.5	79.1	94.6	110.2	125.7	141.3	156.8	172.4	187.9
137.5°	32.0	36.0	49.5	63.1	76.6	90.2	103.7	117.3	130.8	144.4	157.9
140°	23.1	26.0	37.8	49.5	61.3	73.1	84.8	96.6	108.4	120.1	131.9
142.5°	14.2	16.0	26.2	36.4	46.6	56.8	67.1	77.3	87.5	97.7	107.9
145°	8.9	10.0	18.4	26.9	35.3	43.7	52.2	60.6	69.0	77.5	85.9
147.5°	7.1	8.0	14.7	21.3	28.0	34.6	41.3	47.9	54.6	61.2	67.9
150°	5.3	6.0	11.1	16.2	21.3	26.4	31.6	36.7	41.8	46.9	52.0
152.5°	3.6	4.0	7.8	11.6	15.3	19.1	22.9	26.7	30.4	34.2	38.0
155°	1.8	2.0	4.4	6.9	9.3	11.8	14.2	16.7	19.1	21.6	24.0
157.5°	0.0	0.0	1.3	2.7	4.0	5.3	6.7	8.0	9.3	10.7	12.0
160°	0.0	0.0	0.4	0.9	1.3	1.8	2.2	2.7	3.1	3.6	4.0
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: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1471.8	1470.7	1469.6	1468.5	1467.3	1466.2	1465.1	1464.0	1462.9	1461.3	1459.8
5°	1447.3	1445.8	1444.2	1442.7	1441.1	1439.6	1438.0	1436.5	1434.9	1434.2	1433.6
7.5°	1423.1	1421.4	1419.6	1417.8	1416.1	1414.3	1412.5	1410.8	1409.0	1408.8	1408.6
10°	1397.7	1396.3	1395.0	1393.7	1392.3	1391.0	1389.7	1388.3	1387.0	1386.3	1385.7
12.5°	1370.3	1369.7	1369.0	1368.3	1367.7	1367.0	1366.3	1365.7	1365.0	1364.8	1364.6
15°	1345.2	1345.4	1345.7	1345.9	1346.1	1346.3	1346.6	1346.8	1347.0	1347.7	1348.3
17.5°	1321.4	1323.9	1326.3	1328.8	1331.2	1333.7	1336.1	1338.6	1341.0	1342.8	1344.6
20°	1302.6	1308.1	1313.7	1319.2	1324.8	1330.3	1335.9	1341.4	1347.0	1350.1	1353.2
22.5°	1290.0	1298.9	1307.7	1316.6	1325.5	1334.4	1343.2	1352.1	1361.0	1364.6	1368.1
25°	1284.4	1295.7	1307.1	1318.4	1329.7	1341.0	1352.4	1363.7	1375.0	1379.0	1383.0
27.5°	1286.0	1298.9	1311.7	1324.6	1337.5	1350.4	1363.2	1376.1	1389.0	1393.7	1398.3
30°	1285.8	1300.4	1315.1	1329.7	1344.4	1359.0	1373.7	1388.3	1403.0	1408.8	1414.5
32.5°	1286.0	1302.8	1319.7	1336.6	1353.4	1370.3	1387.2	1404.0	1420.9	1428.0	1435.1
35°	1286.6	1306.2	1325.7	1345.2	1364.8	1384.3	1403.8	1423.4	1442.9	1451.6	1460.2
37.5°	1290.0	1312.8	1335.7	1358.6	1381.4	1404.3	1427.2	1450.0	1472.9	1483.1	1493.3
40°	1297.5	1323.9	1350.4	1376.8	1403.2	1429.6	1456.1	1482.5	1508.9	1521.3	1533.8
42.5°	1308.0	1338.8	1369.7	1400.5	1431.4	1462.2	1493.1	1523.9	1554.8	1569.7	1584.6
45°	1324.8	1360.5	1396.3	1432.0	1467.8	1503.5	1539.3	1575.0	1610.8	1628.1	1645.4
47.5°	1346.5	1388.1	1429.6	1471.1	1512.7	1554.2	1595.7	1637.3	1678.8	1698.8	1718.8
50°	1375.2	1423.4	1471.6	1519.8	1567.9	1616.1	1664.3	1712.5	1760.7	1783.6	1806.4
52.5°	1410.1	1465.1	1520.2	1575.3	1630.3	1685.4	1740.5	1795.5	1850.6	1876.1	1901.7
55°	1451.6	1514.2	1576.9	1639.5	1702.1	1764.7	1827.4	1890.0	1952.6	1980.4	2008.1
57.5°	1500.4	1569.9	1639.4	1708.9	1778.5	1848.0	1917.5	1987.0	2056.5	2086.5	2116.5
60°	1552.8	1628.8	1704.7	1780.7	1856.6	1932.6	2008.5	2084.5	2160.4	2191.3	2222.1
62.5°	1604.4	1685.9	1767.4	1848.9	1930.3	2011.8	2093.3	2174.8	2256.3	2286.9	2317.6
65°	1650.3	1735.8	1821.3	1906.8	1992.3	2077.8	2163.3	2248.8	2334.3	2364.5	2394.7
67.5°	1682.3	1769.8	1857.3	1944.8	2032.2	2119.7	2207.2	2294.7	2382.2	2411.1	2439.9
70°	1694.1	1781.3	1868.6	1955.9	2043.1	2130.4	2217.7	2304.9	2392.2	2419.3	2446.4
72.5°	1678.1	1763.4	1848.6	1933.9	2019.2	2104.5	2189.7	2275.0	2360.3	2385.2	2410.0
75°	1631.9	1713.0	1794.0	1875.1	1956.1	2037.2	2118.2	2199.3	2280.3	2303.0	2325.6
77.5°	1556.2	1631.5	1706.7	1782.0	1857.3	1932.6	2007.8	2083.1	2158.4	2179.3	2200.2
80°	1455.4	1523.8	1592.2	1660.6	1728.9	1797.3	1865.7	1934.1	2002.5	2021.4	2040.3
82.5°	1342.2	1403.2	1464.3	1525.3	1586.4	1647.4	1708.5	1769.5	1830.6	1847.5	1864.4
85°	1223.1	1277.0	1331.0	1385.0	1438.9	1492.9	1546.9	1600.8	1654.8	1669.7	1684.6
87.5°	1100.5	1147.8	1195.1	1242.4	1289.7	1337.0	1384.3	1431.6	1478.9	1492.4	1506.0
90°	989.0	1030.8	1072.5	1114.3	1156.0	1197.8	1239.5	1281.3	1323.0	1335.4	1347.9
92.5°	902.9	940.4	978.0	1015.5	1053.0	1090.5	1128.1	1165.6	1203.1	1214.4	1225.7
95°	833.6	867.8	902.0	936.2	970.4	1004.6	1038.8	1073.0	1107.2	1117.6	1128.1
97.5°	773.7	805.9	838.1	870.3	902.4	934.6	966.8	999.0	1031.2	1041.2	1051.2
100°	722.4	753.2	784.1	815.0	845.8	876.7	907.6	938.4	969.3	979.1	988.8
102.5°	679.5	709.5	739.4	769.4	799.4	829.4	859.3	889.3	919.3	928.9	938.4
105°	641.0	670.6	700.1	729.7	759.2	788.8	818.3	847.9	877.4	886.9	896.5
107.5°	607.1	636.7	666.2	695.7	725.3	754.8	784.3	813.9	843.4	852.9	862.5
110°	574.7	603.8	632.9	662.0	691.0	720.1	749.2	778.3	807.4	817.4	827.4



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	542.9	572.2	601.5	630.8	660.2	689.5	718.8	748.1	777.4	787.6	797.8
115°	505.4	535.1	564.9	594.6	624.4	654.1	683.9	713.6	743.4	754.1	764.7
117.5°	473.0	502.3	531.6	560.9	590.3	619.6	648.9	678.2	707.5	718.4	729.3
120°	438.3	467.0	495.6	524.3	552.9	581.6	610.2	638.9	667.5	678.6	689.7
122.5°	403.0	430.3	457.6	484.9	512.3	539.6	566.9	594.2	621.5	632.8	644.2
125°	367.5	393.2	419.0	444.8	470.5	496.3	522.1	547.8	573.6	584.7	595.8
127.5°	328.2	352.6	377.1	401.5	425.9	450.3	474.8	499.2	523.6	534.0	544.5
130°	284.7	307.6	330.4	353.3	376.2	399.1	421.9	444.8	467.7	477.9	488.1
132.5°	242.0	264.2	286.4	308.6	330.9	353.1	375.3	397.5	419.7	428.8	437.9
135°	208.1	228.3	248.5	268.7	288.9	309.1	329.3	349.5	369.7	377.7	385.7
137.5°	175.2	192.5	209.9	227.2	244.5	261.8	279.2	296.5	313.8	322.0	330.2
140°	145.7	159.4	173.2	187.0	200.7	214.5	228.3	242.0	255.8	264.2	272.7
142.5°	119.7	131.4	143.2	155.0	166.7	178.5	190.3	202.0	213.8	220.7	227.6
145°	95.9	105.9	115.9	125.9	135.9	145.9	155.9	165.9	175.9	182.6	189.2
147.5°	76.1	84.3	92.6	100.8	109.0	117.2	125.5	133.7	141.9	148.1	154.3
150°	58.7	65.3	72.0	78.6	85.3	91.9	98.6	105.2	111.9	117.9	123.9
152.5°	43.1	48.2	53.3	58.4	63.5	68.6	73.7	78.8	83.9	89.5	95.0
155°	28.2	32.4	36.7	40.9	45.1	49.3	53.6	57.8	62.0	67.1	72.2
157.5°	15.3	18.7	22.0	25.3	28.7	32.0	35.3	38.7	42.0	46.4	50.9
160°	6.4	8.9	11.3	13.8	16.2	18.7	21.1	23.6	26.0	29.8	33.6
162.5°	1.1	2.2	3.3	4.4	5.6	6.7	7.8	8.9	10.0	12.9	15.8
165°	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0	3.8	5.6
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1458.2	1456.7	1455.1	1453.6	1452.0	1450.5	1448.9	1450.2	1451.6	1452.9	1454.2
5°	1432.9	1432.2	1431.6	1430.9	1430.2	1429.6	1428.9	1429.6	1430.2	1430.9	1431.6
7.5°	1408.3	1408.1	1407.9	1407.7	1407.4	1407.2	1407.0	1407.2	1407.4	1407.7	1407.9
10°	1385.0	1384.3	1383.7	1383.0	1382.3	1381.7	1381.0	1381.2	1381.4	1381.7	1381.9
12.5°	1364.3	1364.1	1363.9	1363.7	1363.4	1363.2	1363.0	1362.8	1362.6	1362.3	1362.1
15°	1349.0	1349.7	1350.3	1351.0	1351.7	1352.3	1353.0	1352.3	1351.7	1351.0	1350.3
17.5°	1346.3	1348.1	1349.9	1351.7	1353.4	1355.2	1357.0	1355.2	1353.4	1351.7	1349.9
20°	1356.3	1359.4	1362.6	1365.7	1368.8	1371.9	1375.0	1371.4	1367.9	1364.3	1360.8
22.5°	1371.7	1375.2	1378.8	1382.3	1385.9	1389.4	1393.0	1388.6	1384.1	1379.7	1375.2
25°	1387.0	1391.0	1395.0	1399.0	1403.0	1407.0	1411.0	1406.3	1401.7	1397.0	1392.3
27.5°	1403.0	1407.6	1412.3	1416.9	1421.6	1426.2	1430.9	1425.6	1420.3	1414.9	1409.6
30°	1420.3	1426.1	1431.8	1437.6	1443.4	1449.1	1454.9	1448.7	1442.5	1436.3	1430.1
32.5°	1442.2	1449.3	1456.5	1463.6	1470.7	1477.8	1484.9	1477.6	1470.2	1462.9	1455.6
35°	1468.9	1477.6	1486.2	1494.9	1503.6	1512.2	1520.9	1512.2	1503.6	1494.9	1486.2
37.5°	1503.5	1513.7	1524.0	1534.2	1544.4	1554.6	1564.8	1554.6	1544.4	1534.2	1524.0
40°	1546.2	1558.6	1571.1	1583.5	1595.9	1608.4	1620.8	1608.8	1596.8	1584.8	1572.8
42.5°	1599.5	1614.4	1629.2	1644.1	1659.0	1673.9	1688.8	1674.6	1660.4	1646.1	1631.9
45°	1662.8	1680.1	1697.4	1714.7	1732.1	1749.4	1766.7	1750.9	1735.2	1719.4	1703.6
47.5°	1738.7	1758.7	1778.7	1798.7	1818.6	1838.6	1858.6	1840.4	1822.2	1804.0	1785.8
50°	1829.3	1852.2	1875.0	1897.9	1920.8	1943.6	1966.5	1945.4	1924.3	1903.2	1882.1
52.5°	1927.2	1952.8	1978.3	2003.9	2029.4	2055.0	2080.5	2057.4	2034.3	2011.2	1988.1
55°	2035.9	2063.6	2091.4	2119.1	2146.9	2174.6	2202.4	2177.5	2152.6	2127.8	2102.9
57.5°	2146.4	2176.4	2206.4	2236.4	2266.3	2296.3	2326.3	2299.7	2273.0	2246.4	2219.7
60°	2253.0	2283.9	2314.7	2345.6	2376.5	2407.3	2438.2	2410.9	2383.6	2356.3	2329.0
62.5°	2348.2	2378.9	2409.5	2440.2	2470.8	2501.5	2532.1	2505.2	2478.4	2451.5	2424.6
65°	2424.9	2455.1	2485.3	2515.5	2545.7	2575.9	2606.1	2579.9	2553.7	2527.5	2501.3
67.5°	2468.8	2497.7	2526.5	2555.4	2584.3	2613.1	2642.0	2616.9	2591.8	2566.7	2541.6
70°	2473.5	2500.6	2527.6	2554.7	2581.8	2608.9	2636.0	2612.5	2588.9	2565.4	2541.9
72.5°	2434.9	2459.8	2484.6	2509.5	2534.4	2559.2	2584.1	2561.9	2539.7	2517.5	2495.3
75°	2348.3	2370.9	2393.6	2416.2	2438.9	2461.5	2484.2	2463.5	2442.9	2422.2	2401.6
77.5°	2221.0	2241.9	2262.8	2283.7	2304.5	2325.4	2346.3	2327.0	2307.7	2288.3	2269.0
80°	2059.1	2078.0	2096.9	2115.8	2134.6	2153.5	2172.4	2154.2	2136.0	2117.8	2099.6
82.5°	1881.2	1898.1	1915.0	1931.9	1948.7	1965.6	1982.5	1965.2	1947.9	1930.5	1913.2
85°	1699.4	1714.3	1729.2	1744.1	1758.9	1773.8	1788.7	1772.7	1756.7	1740.7	1724.7
87.5°	1519.5	1533.1	1546.6	1560.2	1573.7	1587.3	1600.8	1587.9	1575.0	1562.2	1549.3
90°	1360.3	1372.7	1385.2	1397.6	1410.0	1422.5	1434.9	1422.9	1410.9	1398.9	1386.9
92.5°	1237.1	1248.4	1259.7	1271.0	1282.4	1293.7	1305.0	1293.7	1282.4	1271.0	1259.7
95°	1138.5	1148.9	1159.4	1169.8	1180.2	1190.7	1201.1	1190.9	1180.7	1170.5	1160.3
97.5°	1061.2	1071.2	1081.2	1091.2	1101.2	1111.2	1121.2	1111.4	1101.6	1091.9	1082.1
100°	998.6	1008.4	1018.1	1027.9	1037.7	1047.4	1057.2	1047.9	1038.6	1029.2	1019.9
102.5°	948.0	957.5	967.1	976.6	986.2	995.7	1005.3	996.0	986.6	977.3	968.0
105°	906.0	915.6	925.1	934.7	944.2	953.8	963.3	954.4	945.5	936.6	927.7
107.5°	872.0	881.6	891.1	900.7	910.2	919.8	929.3	920.2	911.1	902.0	892.9
110°	837.4	847.4	857.3	867.3	877.3	887.3	897.3	888.0	878.7	869.3	860.0



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	808.1	818.3	828.5	838.7	849.0	859.2	869.4	859.8	850.3	840.7	831.2
115°	775.4	786.1	796.7	807.4	818.1	828.7	839.4	829.4	819.4	809.4	799.4
117.5°	740.1	751.0	761.9	772.8	783.6	794.5	805.4	795.2	785.0	774.8	764.6
120°	700.8	711.9	723.0	734.1	745.2	756.3	767.4	757.2	747.0	736.8	726.6
122.5°	655.5	666.8	678.2	689.5	700.8	712.2	723.5	713.3	703.1	692.8	682.6
125°	606.9	618.0	629.1	640.2	651.3	662.4	673.5	663.5	653.5	643.5	633.5
127.5°	554.9	565.3	575.8	586.2	596.6	607.1	617.5	608.2	598.9	589.5	580.2
130°	498.3	508.5	518.8	529.0	539.2	549.4	559.6	550.5	541.4	532.3	523.2
132.5°	447.0	456.1	465.2	474.3	483.4	492.5	501.6	493.4	485.2	477.0	468.8
135°	393.7	401.7	409.7	417.7	425.7	433.7	441.7	435.0	428.4	421.7	415.0
137.5°	338.4	346.6	354.9	363.1	371.3	379.5	387.7	381.3	374.8	368.4	362.0
140°	281.1	289.6	298.0	306.5	314.9	323.4	331.8	325.8	319.8	313.8	307.8
142.5°	234.5	241.4	248.2	255.1	262.0	268.9	275.8	271.8	267.8	263.8	259.8
145°	195.9	202.5	209.2	215.8	222.5	229.1	235.8	232.5	229.1	225.8	222.5
147.5°	160.6	166.8	173.0	179.2	185.5	191.7	197.9	195.2	192.6	189.9	187.2
150°	129.9	135.9	141.9	147.9	153.9	159.9	165.9	163.7	161.5	159.2	157.0
152.5°	100.6	106.1	111.7	117.2	122.8	128.3	133.9	132.1	130.3	128.6	126.8
155°	77.3	82.4	87.5	92.6	97.7	102.8	107.9	106.3	104.8	103.2	101.7
157.5°	55.3	59.7	64.2	68.6	73.0	77.5	81.9	80.8	79.7	78.6	77.5
160°	37.3	41.1	44.9	48.7	52.4	56.2	60.0	58.9	57.8	56.7	55.6
162.5°	18.7	21.6	24.4	27.3	30.2	33.1	36.0	35.3	34.7	34.0	33.3
165°	7.3	9.1	10.9	12.7	14.4	16.2	18.0	18.0	18.0	18.0	18.0
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1455.6	1456.9	1458.2	1459.6	1460.9	1463.1	1465.3	1467.6	1469.8	1472.0	1474.2
5°	1432.2	1432.9	1433.6	1434.2	1434.9	1437.3	1439.8	1442.2	1444.7	1447.1	1449.6
7.5°	1408.1	1408.3	1408.6	1408.8	1409.0	1411.4	1413.9	1416.3	1418.7	1421.2	1423.6
10°	1382.1	1382.3	1382.6	1382.8	1383.0	1385.9	1388.8	1391.7	1394.6	1397.4	1400.3
12.5°	1361.9	1361.7	1361.4	1361.2	1361.0	1363.7	1366.3	1369.0	1371.7	1374.3	1377.0
15°	1349.7	1349.0	1348.3	1347.7	1347.0	1348.1	1349.2	1350.3	1351.4	1352.6	1353.7
17.5°	1348.1	1346.3	1344.6	1342.8	1341.0	1340.1	1339.2	1338.3	1337.4	1336.6	1335.7
20°	1357.2	1353.7	1350.1	1346.6	1343.0	1339.0	1335.0	1331.0	1327.0	1323.0	1319.0
22.5°	1370.8	1366.3	1361.9	1357.4	1353.0	1345.9	1338.8	1331.7	1324.6	1317.4	1310.3
25°	1387.7	1383.0	1378.3	1373.7	1369.0	1359.2	1349.5	1339.7	1329.9	1320.2	1310.4
27.5°	1404.3	1399.0	1393.6	1388.3	1383.0	1371.7	1360.4	1349.0	1337.7	1326.4	1315.1
30°	1423.8	1417.6	1411.4	1405.2	1399.0	1385.5	1371.9	1358.4	1344.8	1331.3	1317.7
32.5°	1448.2	1440.9	1433.6	1426.2	1418.9	1402.9	1386.9	1371.0	1355.0	1339.0	1323.0
35°	1477.6	1468.9	1460.2	1451.6	1442.9	1424.3	1405.6	1387.0	1368.3	1349.7	1331.0
37.5°	1513.7	1503.5	1493.3	1483.1	1472.9	1451.1	1429.4	1407.6	1385.9	1364.1	1342.4
40°	1560.9	1548.9	1536.9	1524.9	1512.9	1487.4	1461.8	1436.3	1410.8	1385.2	1359.7
42.5°	1617.7	1603.5	1589.2	1575.0	1560.8	1531.0	1501.3	1471.5	1441.8	1412.0	1382.3
45°	1687.9	1672.1	1656.3	1640.6	1624.8	1589.3	1553.7	1518.2	1482.7	1447.1	1411.6
47.5°	1767.5	1749.3	1731.1	1712.9	1694.7	1653.6	1612.5	1571.5	1530.4	1489.3	1448.2
50°	1861.1	1840.0	1818.9	1797.8	1776.7	1729.4	1682.1	1634.8	1587.5	1540.2	1492.9
52.5°	1965.0	1941.9	1918.8	1895.7	1872.6	1818.2	1763.8	1709.4	1655.0	1600.6	1546.2
55°	2078.0	2053.1	2028.3	2003.4	1978.5	1916.5	1854.6	1792.6	1730.7	1668.7	1606.8
57.5°	2193.1	2166.4	2139.8	2113.1	2086.5	2017.9	1949.3	1880.6	1812.0	1743.4	1674.8
60°	2301.6	2274.3	2247.0	2219.7	2192.4	2117.6	2042.7	1967.9	1893.1	1818.2	1743.4
62.5°	2397.8	2370.9	2344.0	2317.2	2290.3	2210.1	2130.0	2049.8	1969.6	1889.5	1809.3
65°	2475.0	2448.8	2422.6	2396.4	2370.2	2286.0	2201.9	2117.7	2033.6	1949.4	1865.3
67.5°	2516.6	2491.5	2466.4	2441.3	2416.2	2330.5	2244.8	2159.1	2073.4	1987.6	1901.9
70°	2518.3	2494.8	2471.3	2447.7	2424.2	2338.7	2253.2	2167.7	2082.2	1996.8	1911.3
72.5°	2473.0	2450.8	2428.6	2406.4	2384.2	2301.6	2219.0	2136.4	2053.8	1971.2	1888.6
75°	2380.9	2360.3	2339.6	2319.0	2298.3	2220.4	2142.4	2064.5	1986.5	1908.6	1830.6
77.5°	2249.7	2230.4	2211.0	2191.7	2172.4	2100.5	2028.5	1956.6	1884.6	1812.7	1740.7
80°	2081.3	2063.1	2044.9	2026.7	2008.5	1943.4	1878.4	1813.3	1748.2	1683.2	1618.1
82.5°	1895.9	1878.6	1861.2	1843.9	1826.6	1769.3	1712.0	1654.7	1597.4	1540.2	1482.9
85°	1708.8	1692.8	1676.8	1660.8	1644.8	1594.4	1544.0	1493.6	1443.2	1392.7	1342.3
87.5°	1536.4	1523.5	1510.7	1497.8	1484.9	1438.9	1393.0	1347.0	1301.0	1255.1	1209.1
90°	1375.0	1363.0	1351.0	1339.0	1327.0	1286.6	1246.2	1205.8	1165.4	1124.9	1084.5
92.5°	1248.4	1237.1	1225.7	1214.4	1203.1	1167.3	1131.6	1095.8	1060.1	1024.3	988.6
95°	1150.0	1139.8	1129.6	1119.4	1109.2	1076.3	1043.5	1010.6	977.7	944.9	912.0
97.5°	1072.3	1062.5	1052.8	1043.0	1033.2	1002.3	971.5	940.6	909.7	878.9	848.0
100°	1010.6	1001.3	991.9	982.6	973.3	943.5	913.8	884.0	854.3	824.5	794.8
102.5°	958.6	949.3	940.0	930.6	921.3	892.4	863.6	834.7	805.8	777.0	748.1
105°	918.9	910.0	901.1	892.2	883.3	854.7	826.0	797.4	768.7	740.1	711.4
107.5°	883.8	874.7	865.6	856.5	847.4	819.2	791.0	762.8	734.6	706.4	678.2
110°	850.7	841.4	832.0	822.7	813.4	785.4	757.4	729.5	701.5	673.5	645.5



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	821.6	812.1	802.5	793.0	783.4	755.4	727.4	699.5	671.5	643.5	615.5
115°	789.4	779.4	769.4	759.4	749.4	721.4	693.4	665.5	637.5	609.5	581.5
117.5°	754.3	744.1	733.9	723.7	713.5	685.3	657.1	628.9	600.7	572.5	544.3
120°	716.3	706.1	695.9	685.7	675.5	647.7	620.0	592.2	564.5	536.7	509.0
122.5°	672.4	662.2	651.9	641.7	631.5	604.9	578.2	551.6	524.9	498.3	471.6
125°	623.6	613.6	603.6	593.6	583.6	558.3	533.0	507.6	482.3	457.0	431.7
127.5°	570.9	561.6	552.2	542.9	533.6	510.1	486.5	463.0	439.5	415.9	392.4
130°	514.0	504.9	495.8	486.7	477.6	456.5	435.4	414.3	393.2	372.2	351.1
132.5°	460.5	452.3	444.1	435.9	427.7	407.5	387.3	367.1	346.9	326.6	306.4
135°	408.4	401.7	395.0	388.4	381.7	363.5	345.3	327.1	308.9	290.6	272.4
137.5°	355.5	349.1	342.7	336.2	329.8	314.5	299.2	283.8	268.5	253.2	237.9
140°	301.8	295.8	289.8	283.8	277.8	265.6	253.4	241.2	229.0	216.7	204.5
142.5°	255.8	251.8	247.8	243.8	239.8	229.1	218.5	207.8	197.2	186.5	175.9
145°	219.1	215.8	212.5	209.1	205.8	196.7	187.6	178.5	169.4	160.3	151.2
147.5°	184.6	181.9	179.2	176.6	173.9	166.1	158.3	150.6	142.8	135.0	127.2
150°	154.8	152.6	150.3	148.1	145.9	139.0	132.1	125.2	118.3	111.5	104.6
152.5°	125.0	123.2	121.5	119.7	117.9	112.3	106.8	101.2	95.7	90.1	84.6
155°	100.1	98.6	97.0	95.5	93.9	89.2	84.6	79.9	75.3	70.6	66.0
157.5°	76.3	75.2	74.1	73.0	71.9	67.7	63.5	59.3	55.1	50.8	46.6
160°	54.4	53.3	52.2	51.1	50.0	46.9	43.8	40.7	37.6	34.4	31.3
162.5°	32.7	32.0	31.3	30.7	30.0	28.4	26.9	25.3	23.8	22.2	20.7
165°	18.0	18.0	18.0	18.0	18.0	17.1	16.2	15.3	14.4	13.6	12.7
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: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1476.5	1478.7	1480.9	1481.1	1481.3	1481.6	1481.8	1482.0	1482.2	1482.5	1482.7
5°	1452.0	1454.5	1456.9	1457.8	1458.7	1459.6	1460.5	1461.3	1462.2	1463.1	1464.0
7.5°	1426.0	1428.5	1430.9	1432.2	1433.6	1434.9	1436.2	1437.6	1438.9	1440.2	1441.6
10°	1403.2	1406.1	1409.0	1409.7	1410.3	1411.0	1411.7	1412.3	1413.0	1413.7	1414.3
12.5°	1379.7	1382.3	1385.0	1385.2	1385.4	1385.7	1385.9	1386.1	1386.3	1386.6	1386.8
15°	1354.8	1355.9	1357.0	1357.2	1357.4	1357.7	1357.9	1358.1	1358.3	1358.6	1358.8
17.5°	1334.8	1333.9	1333.0	1332.1	1331.2	1330.3	1329.4	1328.6	1327.7	1326.8	1325.9
20°	1315.0	1311.0	1307.0	1305.0	1303.0	1301.0	1299.0	1297.0	1295.0	1293.0	1291.0
22.5°	1303.2	1296.1	1289.0	1284.3	1279.7	1275.0	1270.4	1265.7	1261.1	1256.4	1251.8
25°	1300.6	1290.9	1281.1	1272.9	1264.7	1256.4	1248.2	1240.0	1231.8	1223.5	1215.3
27.5°	1303.7	1292.4	1281.1	1268.0	1254.9	1241.8	1228.7	1215.5	1202.4	1189.3	1176.2
30°	1304.2	1290.6	1277.1	1259.8	1242.5	1225.1	1207.8	1190.5	1173.2	1155.8	1138.5
32.5°	1307.1	1291.1	1275.1	1253.6	1232.0	1210.5	1188.9	1167.4	1145.8	1124.3	1102.7
35°	1312.4	1293.7	1275.1	1248.9	1222.7	1196.5	1170.3	1144.0	1117.8	1091.6	1065.4
37.5°	1320.6	1298.9	1277.1	1246.7	1216.3	1185.8	1155.4	1125.0	1094.6	1064.1	1033.7
40°	1334.2	1308.6	1283.1	1248.9	1214.7	1180.5	1146.3	1112.1	1077.9	1043.7	1009.5
42.5°	1352.5	1322.8	1293.0	1254.6	1216.2	1177.8	1139.4	1100.9	1062.5	1024.1	985.7
45°	1376.1	1340.5	1305.0	1262.4	1219.7	1177.1	1134.5	1091.8	1049.2	1006.6	963.9
47.5°	1407.2	1366.1	1325.0	1277.7	1230.4	1183.1	1135.8	1088.5	1041.2	993.9	946.6
50°	1445.6	1398.3	1351.0	1298.2	1245.3	1192.5	1139.6	1086.8	1033.9	981.1	928.2
52.5°	1491.8	1437.4	1383.0	1324.2	1265.3	1206.5	1147.6	1088.8	1029.9	971.1	912.2
55°	1544.8	1482.9	1420.9	1355.8	1290.8	1225.7	1160.7	1095.6	1030.6	965.5	900.5
57.5°	1606.1	1537.5	1468.9	1396.3	1323.7	1251.1	1178.5	1105.8	1033.2	960.6	888.0
60°	1668.6	1593.7	1518.9	1438.7	1358.6	1278.4	1198.2	1118.1	1037.9	957.7	877.6
62.5°	1729.1	1649.0	1568.8	1481.3	1393.8	1306.3	1218.8	1131.4	1043.9	956.4	868.9
65°	1781.1	1697.0	1612.8	1518.4	1424.0	1329.7	1235.3	1140.9	1046.5	952.2	857.8
67.5°	1816.2	1730.5	1644.8	1544.4	1444.1	1343.7	1243.3	1143.0	1042.6	942.2	841.9
70°	1825.8	1740.3	1654.8	1550.4	1446.1	1341.7	1237.3	1133.0	1028.6	924.2	819.9
72.5°	1806.0	1723.4	1640.8	1534.7	1428.5	1322.4	1216.2	1110.1	1003.9	897.8	791.6
75°	1752.7	1674.7	1596.8	1491.8	1386.7	1281.7	1176.7	1071.6	966.6	861.6	756.5
77.5°	1668.8	1596.8	1524.9	1423.6	1322.4	1221.1	1119.8	1018.6	917.3	816.0	714.8
80°	1553.0	1488.0	1422.9	1328.3	1233.7	1139.1	1044.5	950.0	855.4	760.8	666.2
82.5°	1425.6	1368.3	1311.0	1224.0	1136.9	1049.9	962.8	875.8	788.7	701.7	614.6
85°	1291.9	1241.5	1191.1	1112.0	1033.0	953.9	874.9	795.8	716.8	637.7	558.7
87.5°	1163.1	1117.2	1071.2	1000.6	930.0	859.4	788.8	718.1	647.5	576.9	506.3
90°	1044.1	1003.7	963.3	900.0	836.7	773.4	710.1	646.9	583.6	520.3	457.0
92.5°	952.8	917.1	881.3	824.2	767.2	710.1	653.0	596.0	538.9	481.8	424.8
95°	879.1	846.3	813.4	760.8	708.1	655.5	602.9	550.2	497.6	445.0	392.3
97.5°	817.1	786.3	755.4	706.6	657.7	608.9	560.0	511.2	462.3	413.5	364.6
100°	765.0	735.3	705.5	659.5	613.6	567.6	521.6	475.7	429.7	383.7	337.8
102.5°	719.2	690.4	661.5	617.8	574.0	530.3	486.5	442.8	399.0	355.3	311.5
105°	682.8	654.1	625.5	583.3	541.1	498.9	456.7	414.6	372.4	330.2	288.0
107.5°	650.0	621.8	593.6	552.7	511.9	471.0	430.1	389.3	348.4	307.5	266.7
110°	617.6	589.6	561.6	522.3	483.0	443.7	404.4	365.0	325.7	286.4	247.1



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	587.6	559.6	531.6	493.4	455.2	417.0	378.8	340.7	302.5	264.3	226.1
115°	553.6	525.6	497.6	461.2	424.8	388.4	352.0	315.5	279.1	242.7	206.3
117.5°	516.1	487.9	459.7	425.7	391.7	357.8	323.8	289.8	255.8	221.9	187.9
120°	481.2	453.5	425.7	393.7	361.7	329.8	297.8	265.8	233.8	201.9	169.9
122.5°	445.0	418.3	391.7	362.2	332.6	303.1	273.6	244.0	214.5	185.0	155.4
125°	406.3	381.0	355.7	328.6	301.5	274.4	247.3	220.3	193.2	166.1	139.0
127.5°	368.9	345.3	321.8	297.1	272.5	247.8	223.2	198.5	173.9	149.2	124.6
130°	330.0	308.9	287.8	265.8	243.8	221.8	199.8	177.9	155.9	133.9	111.9
132.5°	286.2	266.0	245.8	227.1	208.5	189.8	171.2	152.5	133.9	115.2	96.6
135°	254.2	236.0	217.8	201.1	184.5	167.8	151.2	134.5	117.9	101.2	84.6
137.5°	222.5	207.2	191.9	176.8	161.7	146.6	131.5	116.4	101.3	86.2	71.1
140°	192.3	180.1	167.9	154.4	140.8	127.3	113.7	100.2	86.6	73.1	59.5
142.5°	165.2	154.6	143.9	131.9	119.9	107.9	95.9	84.0	72.0	60.0	48.0
145°	142.1	133.0	123.9	113.2	102.6	91.9	81.3	70.6	60.0	49.3	38.7
147.5°	119.5	111.7	103.9	94.8	85.7	76.6	67.5	58.4	49.3	40.2	31.1
150°	97.7	90.8	83.9	76.6	69.3	61.9	54.6	47.3	40.0	32.6	25.3
152.5°	79.0	73.5	67.9	62.1	56.4	50.6	44.8	39.1	33.3	27.5	21.8
155°	61.3	56.7	52.0	47.6	43.1	38.7	34.2	29.8	25.3	20.9	16.4
157.5°	42.4	38.2	34.0	31.1	28.2	25.3	22.4	19.6	16.7	13.8	10.9
160°	28.2	25.1	22.0	20.2	18.4	16.7	14.9	13.1	11.3	9.6	7.8
162.5°	19.1	17.6	16.0	14.7	13.3	12.0	10.7	9.3	8.0	6.7	5.3
165°	11.8	10.9	10.0	9.3	8.7	8.0	7.3	6.7	6.0	5.3	4.7
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1482.9	1487.1	1491.3	1495.6	1499.8	1504.0	1508.2	1512.5	1516.7	1520.9	1520.5
5°	1464.9	1470.2	1475.6	1480.9	1486.2	1491.6	1496.9	1502.2	1507.6	1512.9	1514.0
7.5°	1442.9	1448.9	1454.9	1460.9	1466.9	1472.9	1478.9	1484.9	1490.9	1496.9	1499.8
10°	1415.0	1422.1	1429.2	1436.3	1443.4	1450.5	1457.6	1464.7	1471.8	1478.9	1483.1
12.5°	1387.0	1394.5	1402.1	1409.6	1417.2	1424.7	1432.3	1439.8	1447.4	1454.9	1460.9
15°	1359.0	1366.8	1374.5	1382.3	1390.1	1397.8	1405.6	1413.4	1421.1	1428.9	1436.7
17.5°	1325.0	1333.0	1341.0	1349.0	1357.0	1365.0	1373.0	1381.0	1389.0	1397.0	1406.5
20°	1289.0	1297.0	1305.0	1313.0	1321.0	1329.0	1337.0	1345.0	1353.0	1361.0	1372.1
22.5°	1247.1	1254.6	1262.2	1269.7	1277.3	1284.8	1292.4	1299.9	1307.5	1315.0	1328.8
25°	1207.1	1214.4	1221.8	1229.1	1236.4	1243.8	1251.1	1258.4	1265.8	1273.1	1288.4
27.5°	1163.1	1170.2	1177.3	1184.4	1191.5	1198.7	1205.8	1212.9	1220.0	1227.1	1244.4
30°	1121.2	1127.2	1133.2	1139.2	1145.2	1151.1	1157.1	1163.1	1169.1	1175.1	1194.6
32.5°	1081.2	1085.4	1089.6	1093.9	1098.1	1102.3	1106.5	1110.8	1115.0	1119.2	1141.4
35°	1039.2	1041.6	1044.1	1046.5	1049.0	1051.4	1053.9	1056.3	1058.8	1061.2	1086.3
37.5°	1003.3	1003.3	1003.3	1003.3	1003.3	1003.3	1003.3	1003.3	1003.3	1003.3	1031.7
40°	975.3	971.7	968.2	964.6	961.1	957.5	954.0	950.4	946.9	943.3	975.3
42.5°	947.3	939.7	932.2	924.6	917.1	909.5	902.0	894.4	886.9	879.3	915.5
45°	921.3	910.0	898.7	887.3	876.0	864.7	853.4	842.0	830.7	819.4	859.6
47.5°	899.3	883.5	867.8	852.0	836.2	820.5	804.7	788.9	773.2	757.4	801.6
50°	875.4	855.6	835.9	816.1	796.3	776.6	756.8	737.0	717.3	697.5	745.9
52.5°	853.4	829.6	805.9	782.1	758.3	734.6	710.8	687.0	663.3	639.5	691.9
55°	835.4	807.4	779.4	751.5	723.5	695.5	667.5	639.6	611.6	583.6	640.0
57.5°	815.4	783.4	751.4	719.5	687.5	655.5	623.5	591.6	559.6	527.6	588.2
60°	797.4	760.8	724.1	687.5	650.9	614.2	577.6	541.0	504.3	467.7	533.2
62.5°	781.4	740.8	700.1	659.5	618.9	578.2	537.6	497.0	456.3	415.7	485.4
65°	763.4	719.2	675.0	630.8	586.6	542.5	498.3	454.1	409.9	365.7	439.2
67.5°	741.5	694.2	646.9	599.6	552.3	505.0	457.7	410.4	363.1	315.8	392.6
70°	715.5	666.0	616.5	566.9	517.4	467.9	418.4	368.8	319.3	269.8	349.1
72.5°	685.5	634.2	582.9	531.6	480.3	429.0	377.7	326.4	275.1	223.8	304.9
75°	651.5	599.3	547.1	495.0	442.8	390.6	338.4	286.3	234.1	181.9	263.8
77.5°	613.5	561.3	509.1	457.0	404.8	352.6	300.4	248.3	196.1	143.9	225.4
80°	571.6	519.9	468.1	416.4	364.6	312.9	261.1	209.4	157.6	105.9	186.1
82.5°	527.6	477.2	426.8	376.4	326.0	275.5	225.1	174.7	124.3	73.9	151.6
85°	479.6	431.2	382.8	334.4	286.0	237.6	189.2	140.8	92.4	44.0	118.8
87.5°	435.7	389.3	342.9	296.5	250.1	203.6	157.2	110.8	64.4	18.0	89.1
90°	393.7	350.0	306.2	262.5	218.7	175.0	131.2	87.5	43.7	0.0	66.6
92.5°	367.7	326.8	286.0	245.1	204.3	163.4	122.6	81.7	40.9	0.0	61.7
95°	339.7	302.0	264.2	226.5	188.7	151.0	113.2	75.5	37.7	0.0	56.8
97.5°	315.8	280.7	245.6	210.5	175.4	140.4	105.3	70.2	35.1	0.0	51.7
100°	291.8	259.4	227.0	194.5	162.1	129.7	97.3	64.8	32.4	0.0	47.3
102.5°	267.8	238.0	208.3	178.5	148.8	119.0	89.3	59.5	29.8	0.0	43.1
105°	245.8	218.5	191.2	163.9	136.6	109.2	81.9	54.6	27.3	0.0	39.3
107.5°	225.8	200.7	175.6	150.5	125.4	100.4	75.3	50.2	25.1	0.0	35.8
110°	207.8	184.7	161.6	138.5	115.4	92.4	69.3	46.2	23.1	0.0	32.2



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	187.9	167.0	146.1	125.3	104.4	83.5	62.6	41.8	20.9	0.0	29.3
115°	169.9	151.2	132.6	113.9	95.3	76.6	58.0	39.3	20.7	2.0	28.4
117.5°	153.9	137.0	120.1	103.3	86.4	69.5	52.6	35.8	18.9	2.0	25.8
120°	137.9	122.8	107.7	92.6	77.5	62.4	47.3	32.2	17.1	2.0	23.5
122.5°	125.9	112.1	98.4	84.6	70.8	57.1	43.3	29.5	15.8	2.0	21.1
125°	111.9	99.7	87.5	75.3	63.1	50.8	38.6	26.4	14.2	2.0	18.7
127.5°	99.9	89.0	78.1	67.3	56.4	45.5	34.6	23.8	12.9	2.0	16.0
130°	89.9	80.1	70.4	60.6	50.8	41.1	31.3	21.5	11.8	2.0	13.3
132.5°	77.9	69.5	61.0	52.6	44.2	35.7	27.3	18.9	10.4	2.0	11.1
135°	67.9	60.6	53.3	45.9	38.6	31.3	24.0	16.6	9.3	2.0	8.9
137.5°	56.0	50.0	44.0	38.0	32.0	26.0	20.0	14.0	8.0	2.0	6.9
140°	46.0	41.1	36.2	31.3	26.4	21.6	16.7	11.8	6.9	2.0	5.3
142.5°	36.0	32.2	28.4	24.7	20.9	17.1	13.3	9.6	5.8	2.0	4.2
145°	28.0	25.1	22.2	19.3	16.4	13.6	10.7	7.8	4.9	2.0	3.3
147.5°	22.0	19.8	17.6	15.3	13.1	10.9	8.7	6.4	4.2	2.0	2.9
150°	18.0	16.2	14.4	12.7	10.9	9.1	7.3	5.6	3.8	2.0	2.7
152.5°	16.0	14.4	12.9	11.3	9.8	8.2	6.7	5.1	3.6	2.0	2.4
155°	12.0	10.9	9.8	8.7	7.6	6.4	5.3	4.2	3.1	2.0	2.2
157.5°	8.0	7.3	6.7	6.0	5.3	4.7	4.0	3.3	2.7	2.0	2.0
160°	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4	2.0	2.0
162.5°	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	2.0
165°	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	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: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1520.0	1519.6	1519.1	1518.7	1518.2	1517.8	1517.3	1516.9	1518.0	1519.1	1520.2
5°	1515.1	1516.2	1517.3	1518.5	1519.6	1520.7	1521.8	1522.9	1525.3	1527.8	1530.2
7.5°	1502.7	1505.6	1508.5	1511.3	1514.2	1517.1	1520.0	1522.9	1526.7	1530.4	1534.2
10°	1487.3	1491.6	1495.8	1500.0	1504.2	1508.5	1512.7	1516.9	1522.4	1528.0	1533.5
12.5°	1466.9	1472.9	1478.9	1484.9	1490.9	1496.9	1502.9	1508.9	1516.2	1523.5	1530.9
15°	1444.5	1452.2	1460.0	1467.8	1475.6	1483.3	1491.1	1498.9	1508.0	1517.1	1526.2
17.5°	1416.1	1425.6	1435.2	1444.7	1454.3	1463.8	1473.4	1482.9	1494.4	1506.0	1517.5
20°	1383.2	1394.3	1405.4	1416.5	1427.6	1438.7	1449.8	1460.9	1475.1	1489.3	1503.5
22.5°	1342.5	1356.3	1370.1	1383.8	1397.6	1411.4	1425.1	1438.9	1456.9	1474.9	1492.9
25°	1303.7	1319.1	1334.4	1349.7	1365.0	1380.4	1395.7	1411.0	1433.9	1456.7	1479.6
27.5°	1261.7	1279.1	1296.4	1313.7	1331.0	1348.4	1365.7	1383.0	1410.8	1438.5	1466.3
30°	1214.2	1233.7	1253.3	1272.8	1292.4	1311.9	1331.5	1351.0	1383.9	1416.7	1449.6
32.5°	1163.6	1185.8	1208.0	1230.2	1252.4	1274.6	1296.8	1319.0	1357.2	1395.4	1433.6
35°	1111.4	1136.5	1161.6	1186.6	1211.7	1236.8	1261.9	1287.0	1330.1	1373.2	1416.3
37.5°	1060.1	1088.6	1117.0	1145.4	1173.8	1202.3	1230.7	1259.1	1307.3	1355.5	1403.6
40°	1007.3	1039.2	1071.2	1103.2	1135.2	1167.1	1199.1	1231.1	1284.6	1338.1	1391.6
42.5°	951.7	987.9	1024.1	1060.3	1096.5	1132.7	1168.9	1205.1	1263.9	1322.8	1381.6
45°	899.8	940.0	980.2	1020.3	1060.5	1100.7	1140.9	1181.1	1245.9	1310.8	1375.6
47.5°	845.8	890.0	934.2	978.3	1022.5	1066.7	1110.9	1155.1	1226.8	1298.6	1370.3
50°	794.3	842.7	891.1	939.6	988.0	1036.4	1084.8	1133.2	1212.0	1290.8	1369.7
52.5°	744.3	796.7	849.1	901.6	954.0	1006.4	1058.8	1111.2	1198.0	1284.8	1371.7
55°	696.4	752.8	809.2	865.6	922.0	978.4	1034.8	1091.2	1186.9	1282.6	1378.3
57.5°	648.8	709.5	770.1	830.7	891.3	952.0	1012.6	1073.2	1178.2	1283.3	1388.3
60°	598.7	664.2	729.7	795.2	860.7	926.2	991.7	1057.2	1172.5	1287.7	1403.0
62.5°	555.1	624.9	694.6	764.3	834.0	903.8	973.5	1043.2	1168.2	1293.2	1418.3
65°	512.7	586.2	659.7	733.2	806.7	880.2	953.7	1027.2	1161.5	1295.9	1430.2
67.5°	469.5	546.3	623.1	700.0	776.8	853.6	930.5	1007.3	1150.5	1293.7	1437.0
70°	428.4	507.6	586.9	666.2	745.5	824.7	904.0	983.3	1132.3	1281.3	1430.3
72.5°	385.9	467.0	548.0	629.1	710.1	791.2	872.2	953.3	1105.0	1256.6	1408.3
75°	345.8	427.7	509.6	591.6	673.5	755.4	837.4	919.3	1069.6	1220.0	1370.3
77.5°	306.9	388.4	469.9	551.4	632.9	714.4	795.9	877.4	1023.1	1168.7	1314.4
80°	266.2	346.4	426.6	506.7	586.9	667.1	747.2	827.4	965.3	1103.2	1241.1
82.5°	229.3	307.1	384.8	462.5	540.2	618.0	695.7	773.4	901.8	1030.1	1158.5
85°	193.7	268.5	343.3	418.2	493.0	567.8	642.7	717.5	835.2	952.9	1070.6
87.5°	160.1	231.2	302.2	373.3	444.3	515.4	586.4	657.5	764.1	870.7	977.3
90°	133.2	199.9	266.5	333.1	399.7	466.4	533.0	599.6	696.2	792.8	889.4
92.5°	123.5	185.2	246.9	308.7	370.4	432.1	493.9	555.6	643.3	731.0	818.7
95°	113.7	170.5	227.4	284.2	341.1	397.9	454.8	511.6	592.4	673.3	754.1
97.5°	103.5	155.2	207.0	258.7	310.5	362.2	414.0	465.7	541.2	616.7	692.2
100°	94.6	141.9	189.2	236.5	283.8	331.1	378.4	425.7	496.8	567.8	638.9
102.5°	86.2	129.2	172.3	215.4	258.5	301.5	344.6	387.7	455.0	522.3	589.6
105°	78.6	117.9	157.2	196.5	235.8	275.1	314.4	353.7	417.7	481.6	545.6
107.5°	71.5	107.3	143.0	178.8	214.5	250.3	286.0	321.8	383.7	445.7	507.6
110°	64.4	96.6	128.8	161.0	193.2	225.4	257.6	289.8	349.1	408.4	467.7



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	58.6	87.9	117.2	146.6	175.9	205.2	234.5	263.8	320.0	376.2	432.3
115°	54.8	81.3	107.7	134.1	160.5	187.0	213.4	239.8	293.3	346.8	400.4
117.5°	49.5	73.3	97.0	120.8	144.5	168.3	192.0	215.8	266.9	318.0	369.0
120°	45.1	66.6	88.2	109.7	131.3	152.8	174.4	195.9	243.4	290.9	338.4
122.5°	40.2	59.3	78.4	97.5	116.6	135.7	154.8	173.9	217.6	261.4	305.1
125°	35.3	52.0	68.6	85.3	101.9	118.6	135.2	151.9	192.5	233.2	273.8
127.5°	30.0	44.0	58.0	71.9	85.9	99.9	113.9	127.9	165.4	203.0	240.5
130°	24.6	36.0	47.3	58.6	69.9	81.3	92.6	103.9	137.7	171.4	205.2
132.5°	20.2	29.3	38.4	47.5	56.6	65.7	74.8	83.9	113.7	143.4	173.2
135°	15.8	22.7	29.6	36.4	43.3	50.2	57.1	64.0	90.2	116.4	142.6
137.5°	11.8	16.7	21.6	26.4	31.3	36.2	41.1	46.0	68.9	91.7	114.6
140°	8.7	12.0	15.3	18.7	22.0	25.3	28.7	32.0	51.5	71.1	90.6
142.5°	6.4	8.7	10.9	13.1	15.3	17.6	19.8	22.0	38.4	54.9	71.3
145°	4.7	6.0	7.3	8.7	10.0	11.3	12.7	14.0	27.3	40.6	54.0
147.5°	3.8	4.7	5.6	6.4	7.3	8.2	9.1	10.0	20.4	30.9	41.3
150°	3.3	4.0	4.7	5.3	6.0	6.7	7.3	8.0	15.5	23.1	30.6
152.5°	2.9	3.3	3.8	4.2	4.7	5.1	5.6	6.0	11.3	16.7	22.0
155°	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	7.1	10.2	13.3
157.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.8	5.6	7.3
160°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7	3.3	4.0
162.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
165°	1.6	1.3	1.1	0.9	0.7	0.4	0.2	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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1521.3	1522.5	1523.6	1524.7	1525.8	1526.9	1527.3	1527.8	1528.2	1528.7	1529.1
5°	1532.7	1535.1	1537.6	1540.0	1542.5	1544.9	1546.2	1547.5	1548.9	1550.2	1551.5
7.5°	1538.0	1541.7	1545.5	1549.3	1553.0	1556.8	1559.5	1562.1	1564.8	1567.5	1570.1
10°	1539.1	1544.6	1550.2	1555.7	1561.3	1566.8	1571.0	1575.2	1579.5	1583.7	1587.9
12.5°	1538.2	1545.5	1552.8	1560.2	1567.5	1574.8	1580.6	1586.4	1592.1	1597.9	1603.7
15°	1535.3	1544.4	1553.5	1562.6	1571.7	1580.8	1588.4	1595.9	1603.5	1611.0	1618.6
17.5°	1529.1	1540.6	1552.2	1563.7	1575.3	1586.8	1597.0	1607.2	1617.5	1627.7	1637.9
20°	1517.7	1532.0	1546.2	1560.4	1574.6	1588.8	1603.2	1617.7	1632.1	1646.5	1661.0
22.5°	1510.9	1528.8	1546.8	1564.8	1582.8	1600.8	1618.1	1635.4	1652.8	1670.1	1687.4
25°	1502.5	1525.3	1548.2	1571.1	1593.9	1616.8	1636.6	1656.3	1676.1	1695.9	1715.6
27.5°	1494.0	1521.8	1549.5	1577.3	1605.0	1632.8	1655.0	1677.2	1699.4	1721.6	1743.8
30°	1482.5	1515.3	1548.2	1581.1	1613.9	1646.8	1671.9	1697.0	1722.1	1747.2	1772.2
32.5°	1471.8	1510.0	1548.2	1586.4	1624.6	1662.8	1691.0	1719.2	1747.4	1775.6	1803.8
35°	1459.4	1502.4	1545.5	1588.6	1631.7	1674.8	1707.4	1740.1	1772.7	1805.3	1838.0
37.5°	1451.8	1500.0	1548.2	1596.3	1644.5	1692.7	1729.8	1766.9	1804.0	1841.1	1878.1
40°	1445.1	1498.7	1552.2	1605.7	1659.2	1712.7	1755.3	1798.0	1840.6	1883.2	1925.9
42.5°	1440.5	1499.3	1558.2	1617.0	1675.9	1734.7	1784.2	1833.7	1883.3	1932.8	1982.3
45°	1440.5	1505.3	1570.2	1635.0	1699.9	1764.7	1821.5	1878.4	1935.2	1992.1	2048.9
47.5°	1442.0	1513.8	1585.5	1657.2	1729.0	1800.7	1865.5	1930.4	1995.2	2060.0	2124.9
50°	1448.5	1527.3	1606.1	1685.0	1763.8	1842.6	1917.9	1993.2	2068.4	2143.7	2219.0
52.5°	1458.5	1545.3	1632.1	1719.0	1805.8	1892.6	1976.5	2060.5	2144.4	2228.3	2312.3
55°	1474.0	1569.8	1665.5	1761.2	1856.9	1952.6	2046.5	2140.4	2234.4	2328.3	2422.2
57.5°	1493.3	1598.4	1703.4	1808.4	1913.5	2018.5	2121.8	2225.0	2328.3	2431.5	2534.8
60°	1518.2	1633.5	1748.7	1864.0	1979.2	2094.5	2207.1	2319.7	2432.2	2544.8	2657.4
62.5°	1543.3	1668.3	1793.3	1918.4	2043.4	2168.4	2286.5	2404.7	2522.8	2640.9	2759.1
65°	1564.6	1698.9	1833.3	1967.6	2102.0	2236.3	2359.5	2482.8	2606.0	2729.3	2852.5
67.5°	1580.2	1723.4	1866.6	2009.9	2153.1	2296.3	2421.1	2545.9	2670.7	2795.5	2920.3
70°	1579.3	1728.3	1877.3	2026.3	2175.3	2324.3	2448.9	2573.5	2698.0	2822.6	2947.2
72.5°	1560.0	1711.6	1863.3	2015.0	2166.6	2318.3	2440.0	2561.7	2683.4	2805.1	2926.7
75°	1520.6	1671.0	1821.3	1971.6	2122.0	2272.3	2389.1	2505.9	2622.7	2739.5	2856.3
77.5°	1460.1	1605.7	1751.4	1897.1	2042.7	2188.4	2298.1	2407.8	2517.5	2627.2	2736.8
80°	1379.0	1516.9	1654.8	1792.7	1930.6	2068.5	2169.5	2270.6	2371.6	2472.6	2573.7
82.5°	1286.8	1415.2	1543.5	1671.9	1800.2	1928.6	2020.3	2112.0	2203.7	2295.4	2387.2
85°	1188.3	1305.9	1423.6	1541.3	1659.0	1776.7	1859.7	1942.8	2025.8	2108.9	2191.9
87.5°	1083.9	1190.4	1297.0	1403.6	1510.2	1616.8	1691.0	1765.1	1839.3	1913.5	1987.6
90°	986.0	1082.5	1179.1	1275.7	1372.3	1468.9	1536.0	1603.0	1670.1	1737.2	1804.2
92.5°	906.4	994.2	1081.9	1169.6	1257.3	1345.0	1407.0	1468.9	1530.9	1592.8	1654.8
95°	834.9	915.8	996.6	1077.4	1158.3	1239.1	1297.5	1355.9	1414.3	1472.7	1531.1
97.5°	767.7	843.2	918.7	994.2	1069.7	1145.2	1200.0	1254.9	1309.7	1364.6	1419.4
100°	709.9	781.0	852.0	923.1	994.1	1065.2	1118.3	1171.4	1224.4	1277.5	1330.6
102.5°	656.9	724.1	791.4	858.7	926.0	993.3	1045.3	1097.2	1149.2	1201.1	1253.1
105°	609.5	673.5	737.4	801.4	865.3	929.3	980.4	1031.5	1082.5	1133.6	1184.7
107.5°	569.6	631.5	693.5	755.4	817.4	879.3	928.8	978.3	1027.9	1077.4	1126.9
110°	527.0	586.2	645.5	704.8	764.1	823.4	872.3	921.1	970.0	1018.8	1067.7



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	488.5	544.7	600.9	657.0	713.2	769.4	817.1	864.9	912.6	960.4	1008.1
115°	453.9	507.4	560.9	614.5	668.0	721.5	767.0	812.5	858.1	903.6	949.1
117.5°	420.1	471.2	522.3	573.3	624.4	675.5	719.0	762.5	806.1	849.6	893.1
120°	385.9	433.5	481.0	528.5	576.0	623.5	665.9	708.3	750.8	793.2	835.6
122.5°	348.9	392.6	436.4	480.1	523.9	567.6	609.3	651.1	692.8	734.6	776.3
125°	314.4	355.1	395.7	436.3	477.0	517.6	557.1	596.7	636.2	675.7	715.3
127.5°	278.0	315.6	353.1	390.6	428.2	465.7	502.1	538.5	574.9	611.3	647.8
130°	238.9	272.7	306.4	340.2	373.9	407.7	441.2	474.8	508.3	541.8	575.4
132.5°	202.9	232.7	262.4	292.2	321.9	351.7	383.5	415.2	447.0	478.7	510.5
135°	168.8	195.0	221.2	247.4	273.6	299.8	330.0	360.2	390.4	420.6	450.8
137.5°	137.5	160.3	183.2	206.1	228.9	251.8	279.6	307.3	335.1	362.8	390.6
140°	110.1	129.7	149.2	168.7	188.3	207.8	231.3	254.9	278.4	302.0	325.5
142.5°	87.7	104.2	120.6	137.0	153.5	169.9	189.9	209.9	229.8	249.8	269.8
145°	67.3	80.6	93.9	107.3	120.6	133.9	150.8	167.7	184.5	201.4	218.3
147.5°	51.7	62.2	72.6	83.0	93.5	103.9	117.9	131.9	145.9	159.9	173.8
150°	38.2	45.7	53.3	60.8	68.4	75.9	87.5	99.0	110.6	122.1	133.7
152.5°	27.3	32.7	38.0	43.3	48.7	54.0	62.9	71.8	80.6	89.5	98.4
155°	16.4	19.6	22.7	25.8	28.9	32.0	39.1	46.2	53.3	60.4	67.5
157.5°	9.1	10.9	12.7	14.4	16.2	18.0	22.9	27.8	32.7	37.6	42.4
160°	4.7	5.3	6.0	6.7	7.3	8.0	10.9	13.8	16.7	19.6	22.4
162.5°	2.0	2.0	2.0	2.0	2.0	2.0	3.3	4.7	6.0	7.3	8.7
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.9	1.1
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: P201394

CATALOG NUMBER: 8LBLELD4-12-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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1529.6	1530.0	1530.5	1530.9	1529.3	1527.8	1526.2	1524.7	1523.1	1521.6	1520.0
5°	1552.8	1554.2	1555.5	1556.8	1556.4	1555.9	1555.5	1555.1	1554.6	1554.2	1553.8
7.5°	1572.8	1575.5	1578.1	1580.8	1581.0	1581.2	1581.5	1581.7	1581.9	1582.1	1582.4
10°	1592.1	1596.4	1600.6	1604.8	1605.2	1605.7	1606.1	1606.6	1607.0	1607.5	1607.9
12.5°	1609.5	1615.2	1621.0	1626.8	1627.9	1629.0	1630.1	1631.2	1632.4	1633.5	1634.6
15°	1626.1	1633.7	1641.2	1648.8	1651.0	1653.2	1655.5	1657.7	1659.9	1662.1	1664.4
17.5°	1648.1	1658.4	1668.6	1678.8	1682.6	1686.3	1690.1	1693.9	1697.6	1701.4	1705.2
20°	1675.4	1689.8	1704.3	1718.7	1723.4	1728.0	1732.7	1737.4	1742.0	1746.7	1751.4
22.5°	1704.7	1722.1	1739.4	1756.7	1762.0	1767.4	1772.7	1778.0	1783.4	1788.7	1794.0
25°	1735.4	1755.2	1774.9	1794.7	1800.9	1807.1	1813.3	1819.5	1825.8	1832.0	1838.2
27.5°	1766.0	1788.2	1810.4	1832.6	1840.4	1848.2	1855.9	1863.7	1871.5	1879.3	1887.0
30°	1797.3	1822.4	1847.5	1872.6	1881.9	1891.3	1900.6	1909.9	1919.3	1928.6	1937.9
32.5°	1832.0	1860.2	1888.4	1916.6	1927.5	1938.4	1949.2	1960.1	1971.0	1981.9	1992.7
35°	1870.6	1903.2	1935.9	1968.5	1981.6	1994.7	2007.8	2020.9	2034.1	2047.2	2060.3
37.5°	1915.2	1952.3	1989.4	2026.5	2042.7	2058.9	2075.1	2091.3	2107.6	2123.8	2140.0
40°	1968.5	2011.1	2053.8	2096.4	2115.7	2135.0	2154.4	2173.7	2193.0	2212.3	2231.7
42.5°	2031.8	2081.4	2130.9	2180.4	2202.6	2224.8	2247.0	2269.2	2291.4	2313.6	2335.8
45°	2105.8	2162.6	2219.5	2276.3	2301.8	2327.4	2352.9	2378.4	2404.0	2429.5	2455.0
47.5°	2189.7	2254.5	2319.4	2384.2	2414.4	2444.6	2474.8	2505.0	2535.2	2565.4	2595.6
50°	2294.3	2369.5	2444.8	2520.1	2553.2	2586.3	2619.4	2652.5	2685.5	2718.6	2751.7
52.5°	2396.2	2480.1	2564.1	2648.0	2685.8	2723.5	2761.3	2799.0	2836.8	2874.5	2912.3
55°	2516.1	2610.1	2704.0	2797.9	2838.5	2879.2	2919.8	2960.5	3001.1	3041.8	3082.4
57.5°	2638.0	2741.3	2844.5	2947.8	2991.1	3034.4	3077.7	3121.0	3164.3	3207.6	3250.9
60°	2770.0	2882.5	2995.1	3107.7	3150.8	3193.9	3236.9	3280.0	3323.1	3366.2	3409.2
62.5°	2877.2	2995.3	3113.5	3231.6	3275.8	3320.0	3364.2	3408.4	3452.5	3496.7	3540.9
65°	2975.8	3099.0	3222.3	3345.5	3387.9	3430.3	3472.7	3515.1	3557.6	3600.0	3642.4
67.5°	3045.1	3169.9	3294.7	3419.5	3460.4	3501.2	3542.1	3582.9	3623.8	3664.6	3705.5
70°	3071.8	3196.3	3320.9	3445.5	3483.7	3521.9	3560.1	3598.3	3636.4	3674.6	3712.8
72.5°	3048.4	3170.1	3291.8	3413.5	3450.1	3486.8	3523.4	3560.0	3596.7	3633.3	3669.9
75°	2973.1	3089.9	3206.7	3323.5	3358.1	3392.8	3427.4	3462.1	3496.7	3531.4	3566.0
77.5°	2846.5	2956.2	3065.9	3175.6	3208.5	3241.3	3274.2	3307.1	3339.9	3372.8	3405.7
80°	2674.7	2775.7	2876.8	2977.8	3009.3	3040.9	3072.4	3103.9	3135.5	3167.0	3198.5
82.5°	2478.9	2570.6	2662.3	2754.0	2784.0	2814.0	2843.9	2873.9	2903.9	2933.9	2963.8
85°	2275.0	2358.0	2441.1	2524.1	2551.4	2578.7	2606.1	2633.4	2660.7	2688.0	2715.4
87.5°	2061.8	2136.0	2210.1	2284.3	2310.9	2337.6	2364.2	2390.9	2417.5	2444.2	2470.8
90°	1871.3	1938.4	2005.4	2072.5	2097.8	2123.1	2148.4	2173.7	2199.1	2224.4	2249.7
92.5°	1716.7	1778.7	1840.6	1902.6	1925.9	1949.2	1972.5	1995.8	2019.2	2042.5	2065.8
95°	1589.5	1647.9	1706.3	1764.7	1786.0	1807.3	1828.7	1850.0	1871.3	1892.6	1914.0
97.5°	1474.3	1529.1	1584.0	1638.8	1659.7	1680.5	1701.4	1722.3	1743.1	1764.0	1784.9
100°	1383.7	1436.7	1489.8	1542.9	1563.1	1583.3	1603.5	1623.7	1643.9	1664.1	1684.3
102.5°	1305.0	1357.0	1408.9	1460.9	1480.7	1500.4	1520.2	1540.0	1559.7	1579.5	1599.3
105°	1235.8	1286.8	1337.9	1389.0	1408.8	1428.5	1448.3	1468.0	1487.8	1507.5	1527.3
107.5°	1176.4	1226.0	1275.5	1325.0	1344.5	1364.1	1383.6	1403.2	1422.7	1442.3	1461.8
110°	1116.5	1165.4	1214.2	1263.1	1282.2	1301.3	1320.4	1339.5	1358.5	1377.6	1396.7



TEST NUMBER: P201394

CATALOG NUMBER: 8LBLED-LD4-12-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°	1055.9	1103.6	1151.4	1199.1	1218.2	1237.3	1256.4	1275.5	1294.6	1313.7	1332.8
115°	994.6	1040.2	1085.7	1131.2	1150.1	1168.9	1187.8	1206.7	1225.5	1244.4	1263.3
117.5°	936.6	980.2	1023.7	1067.2	1085.0	1102.7	1120.5	1138.3	1156.0	1173.8	1191.6
120°	878.0	920.5	962.9	1005.3	1022.2	1039.0	1055.9	1072.8	1089.6	1106.5	1123.4
122.5°	818.1	859.8	901.6	943.3	959.7	976.2	992.6	1009.0	1025.5	1041.9	1058.3
125°	754.8	794.3	833.9	873.4	890.0	906.7	923.3	940.0	956.6	973.3	989.9
127.5°	684.2	720.6	757.0	793.4	809.8	826.3	842.7	859.1	875.6	892.0	908.4
130°	608.9	642.4	676.0	709.5	724.4	739.3	754.1	769.0	783.9	798.8	813.6
132.5°	542.2	574.0	605.7	637.5	649.9	662.4	674.8	687.2	699.7	712.1	724.5
135°	481.0	511.2	541.4	571.6	582.3	592.9	603.6	614.2	624.9	635.5	646.2
137.5°	418.3	446.1	473.8	501.6	512.0	522.5	532.9	543.4	553.8	564.3	574.7
140°	349.1	372.6	396.2	419.7	431.2	442.8	454.3	465.9	477.4	489.0	500.5
142.5°	289.8	309.7	329.7	349.7	360.6	371.5	382.4	393.3	404.1	415.0	425.9
145°	235.2	252.0	268.9	285.8	296.7	307.6	318.4	329.3	340.2	351.1	361.9
147.5°	187.8	201.8	215.8	229.8	240.2	250.7	261.1	271.6	282.0	292.5	302.9
150°	145.2	156.8	168.3	179.9	189.7	199.4	209.2	219.0	228.7	238.5	248.3
152.5°	107.3	116.1	125.0	133.9	143.2	152.5	161.9	171.2	180.5	189.8	199.2
155°	74.6	81.7	88.8	95.9	104.1	112.3	120.6	128.8	137.0	145.2	153.5
157.5°	47.3	52.2	57.1	62.0	68.9	75.8	82.6	89.5	96.4	103.3	110.1
160°	25.3	28.2	31.1	34.0	39.5	45.1	50.6	56.2	61.7	67.3	72.8
162.5°	10.0	11.3	12.7	14.0	17.6	21.1	24.7	28.2	31.8	35.3	38.9
165°	1.3	1.6	1.8	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
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: P201394

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

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	1498.9	1498.9
2.5°	1518.5	1516.9
5°	1553.3	1552.9
7.5°	1582.6	1582.8
10°	1608.4	1608.8
12.5°	1635.7	1636.8
15°	1666.6	1668.8
17.5°	1708.9	1712.7
20°	1756.0	1760.7
22.5°	1799.4	1804.7
25°	1844.4	1850.6
27.5°	1894.8	1902.6
30°	1947.3	1956.6
32.5°	2003.6	2014.5
35°	2073.4	2086.5
37.5°	2156.2	2172.4
40°	2251.0	2270.3
42.5°	2358.0	2380.2
45°	2480.6	2506.1
47.5°	2625.8	2656.0
50°	2784.8	2817.9
52.5°	2950.0	2987.8
55°	3123.1	3163.7
57.5°	3294.2	3337.5
60°	3452.3	3495.4
62.5°	3585.1	3629.3
65°	3684.8	3727.2
67.5°	3746.3	3787.2
70°	3751.0	3789.2
72.5°	3706.6	3743.2
75°	3600.7	3635.3
77.5°	3438.5	3471.4
80°	3230.1	3261.6
82.5°	2993.8	3023.8
85°	2742.7	2770.0
87.5°	2497.5	2524.1
90°	2275.0	2300.3
92.5°	2089.1	2112.4
95°	1935.3	1956.6
97.5°	1805.7	1826.6
100°	1704.5	1724.7
102.5°	1619.0	1638.8
105°	1547.0	1566.8
107.5°	1481.4	1500.9
110°	1415.8	1434.9



TEST NUMBER: P201394

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

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	1351.9	1371.0
115°	1282.1	1301.0
117.5°	1209.3	1227.1
120°	1140.2	1157.1
122.5°	1074.8	1091.2
125°	1006.6	1023.2
127.5°	924.9	941.3
130°	828.5	843.4
132.5°	737.0	749.4
135°	656.8	667.5
137.5°	585.2	595.6
140°	512.1	523.6
142.5°	436.8	447.7
145°	372.8	383.7
147.5°	313.4	323.8
150°	258.0	267.8
152.5°	208.5	217.8
155°	161.7	169.9
157.5°	117.0	123.9
160°	78.4	83.9
162.5°	42.4	46.0
165°	18.0	20.0
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)