

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: P201415

Luminaire Tested: **8LBLED-LD4-16-ASYMW-UNV-L840-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28229)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8LBLELD4-16-ASYMW-UNV-L840-CD2-U
Description: 8 ft. Low Bay Linear, 10000 lm, Wht Asym lens, 4K
Light Source: (616) 4000K CCT, 80 CRI LEDS
2UT217098A8404C, 2UT217056A8404B
Ballast/Driver: OSRAM
(OT85W01800CC), (OT50W01000CC)

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16350.2 lumens
Efficiency: N/A
Efficacy: 122.4 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

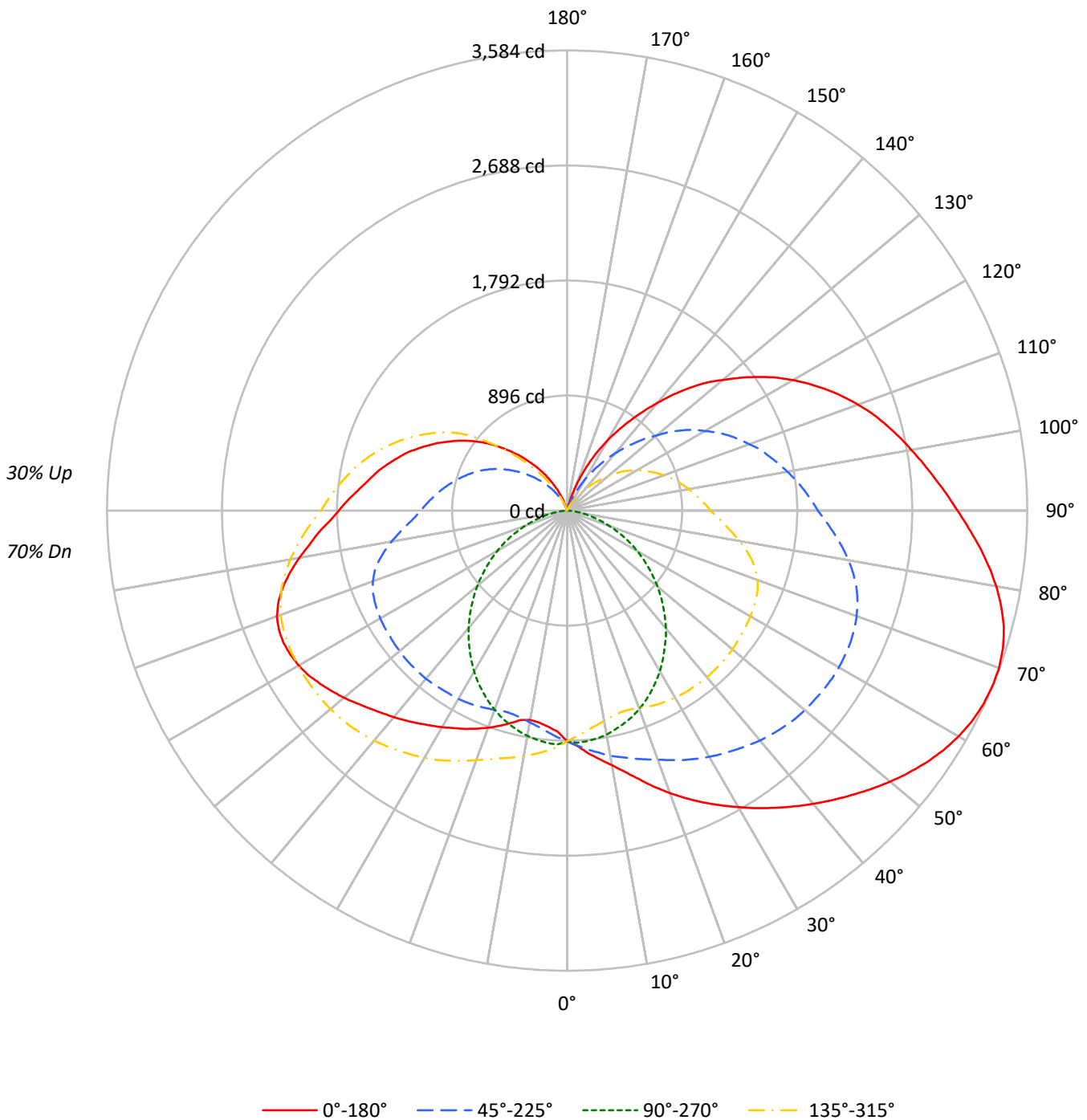
Input Watts (W): 133.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	14470	14470	14470	14470
5°	13842	14541	12325	14654
10°	13510	14431	11108	14512
15°	13546	14214	10719	14297
20°	13817	13963	10619	14014
25°	14104	13632	10550	13667
30°	14428	13235	10542	13272
35°	14846	12751	10623	12789
40°	15335	12310	10800	12290
45°	15902	11749	11052	11705
50°	16568	11161	11443	11112
55°	17277	10483	11879	10402
60°	17964	9714	12320	9683
65°	18570	8812	12661	8812
70°	19071	7695	12817	7651
75°	19410	6356	12621	6356
80°	19528	4610	12187	4771
85°	19560	2280	11783	2708



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.5	1.0
10°-20°	517.0	3.2
20°-30°	870.5	5.3
30°-40°	1208.1	7.4
40°-50°	1511.2	9.2
50°-60°	1755.5	10.7
60°-70°	1899.8	11.6
70°-80°	1869.2	11.4
80°-90°	1658.9	10.1
90°-100°	1433.2	8.8
100°-110°	1208.7	7.4
110°-120°	947.0	5.8
120°-130°	665.2	4.1
130°-140°	393.4	2.4
140°-150°	181.3	1.1
150°-160°	54.4	0.3
160°-170°	5.0	0.0
170°-180°	0.0	0.0
0°-30°	1559.1	9.5
0°-40°	2767.2	16.9
0°-60°	6033.9	36.9
0°-90°	11461.8	70.1
90°-120°	3589.0	22.0
90°-150°	4828.9	29.5
90°-180°	4888.0	29.9
0°-180°	16350.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1796	1796	1796	1796	1796	
5°	1898	1802	1690	1816	1898	185
15°	2166	1716	1714	1726	2166	620
25°	2508	1552	1876	1556	2508	1165
35°	2826	1320	2022	1324	2826	1779
45°	3134	1058	2178	1054	3134	2430
55°	3418	774	2350	768	3418	3063
65°	3576	488	2438	488	3576	3540
75°	3522	224	2290	224	3522	3711
85°	3224	32	1942	38	3224	2668
90°	3040	0	1778	2	3040	1667
95°	2876	0	1650	2	2876	2319
105°	2574	0	1432	2	2574	2722
115°	2230	0	1198	2	2230	2213
125°	1814	0	948	2	1814	1629
135°	1352	0	674	2	1352	1049
145°	856	0	410	2	856	545
155°	414	0	174	2	414	200
165°	66	0	8	4	66	26
175°	0	0	0	4	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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1834.0	1833.3	1832.7	1832.0	1831.3	1830.7	1830.0	1829.3	1828.7	1828.0	1828.4
5°	1898.0	1895.8	1893.6	1891.3	1889.1	1886.9	1884.7	1882.4	1880.2	1878.0	1876.9
7.5°	1954.0	1951.1	1948.2	1945.3	1942.4	1939.6	1936.7	1933.8	1930.9	1928.0	1925.1
10°	2014.0	2010.0	2006.0	2002.0	1998.0	1994.0	1990.0	1986.0	1982.0	1978.0	1973.8
12.5°	2084.0	2078.7	2073.3	2068.0	2062.7	2057.3	2052.0	2046.7	2041.3	2036.0	2028.4
15°	2166.0	2159.3	2152.7	2146.0	2139.3	2132.7	2126.0	2119.3	2112.7	2106.0	2094.2
17.5°	2256.0	2247.6	2239.1	2230.7	2222.2	2213.8	2205.3	2196.9	2188.4	2180.0	2163.6
20°	2342.0	2331.8	2321.6	2311.3	2301.1	2290.9	2280.7	2270.4	2260.2	2250.0	2229.3
22.5°	2426.0	2414.2	2402.4	2390.7	2378.9	2367.1	2355.3	2343.6	2331.8	2320.0	2296.0
25°	2508.0	2495.1	2482.2	2469.3	2456.4	2443.6	2430.7	2417.8	2404.9	2392.0	2364.4
27.5°	2588.0	2574.0	2560.0	2546.0	2532.0	2518.0	2504.0	2490.0	2476.0	2462.0	2430.7
30°	2666.0	2650.7	2635.3	2620.0	2604.7	2589.3	2574.0	2558.7	2543.3	2528.0	2493.1
32.5°	2747.9	2730.8	2713.7	2696.6	2679.5	2662.4	2645.3	2628.2	2611.1	2594.0	2555.3
35°	2825.9	2807.2	2788.6	2769.9	2751.3	2732.6	2714.0	2695.3	2676.7	2658.0	2615.6
37.5°	2903.9	2883.7	2863.5	2843.3	2823.1	2802.8	2782.6	2762.4	2742.2	2722.0	2676.0
40°	2981.9	2960.1	2938.3	2916.6	2894.8	2873.0	2851.2	2829.5	2807.7	2785.9	2736.1
42.5°	3057.9	3034.6	3011.2	2987.9	2964.6	2941.2	2917.9	2894.6	2871.2	2847.9	2793.9
45°	3133.9	3108.8	3083.7	3058.6	3033.5	3008.3	2983.2	2958.1	2933.0	2907.9	2849.7
47.5°	3209.9	3183.0	3156.1	3129.2	3102.3	3075.5	3048.6	3021.7	2994.8	2967.9	2905.2
50°	3283.9	3255.2	3226.6	3197.9	3169.2	3140.6	3111.9	3083.2	3054.6	3025.9	2958.4
52.5°	3353.9	3323.5	3293.0	3262.6	3232.1	3201.7	3171.2	3140.8	3110.3	3079.9	3007.2
55°	3417.9	3385.9	3353.9	3321.9	3289.9	3257.9	3225.9	3193.9	3161.9	3129.9	3052.8
57.5°	3473.9	3440.8	3407.7	3374.6	3341.5	3308.3	3275.2	3242.1	3209.0	3175.9	3094.4
60°	3519.9	3486.1	3452.3	3418.6	3384.8	3351.0	3317.2	3283.5	3249.7	3215.9	3130.1
62.5°	3553.9	3519.5	3485.0	3450.6	3416.1	3381.7	3347.2	3312.8	3278.3	3243.9	3154.6
65°	3575.9	3541.2	3506.6	3471.9	3437.2	3402.6	3367.9	3333.2	3298.6	3263.9	3171.7
67.5°	3583.9	3549.2	3514.6	3479.9	3445.2	3410.6	3375.9	3341.2	3306.6	3271.9	3177.2
70°	3579.9	3545.2	3510.6	3475.9	3441.2	3406.6	3371.9	3337.2	3302.6	3267.9	3171.5
72.5°	3559.9	3525.0	3490.1	3455.2	3420.3	3385.5	3350.6	3315.7	3280.8	3245.9	3148.8
75°	3521.9	3487.5	3453.0	3418.6	3384.1	3349.7	3315.2	3280.8	3246.3	3211.9	3114.4
77.5°	3463.9	3430.1	3396.3	3362.6	3328.8	3295.0	3261.2	3227.5	3193.7	3159.9	3062.6
80°	3393.9	3360.6	3327.2	3293.9	3260.6	3227.2	3193.9	3160.6	3127.2	3093.9	2997.5
82.5°	3311.9	3279.0	3246.1	3213.2	3180.3	3147.5	3114.6	3081.7	3048.8	3015.9	2920.8
85°	3223.9	3191.5	3159.0	3126.6	3094.1	3061.7	3029.2	2996.8	2964.3	2931.9	2838.4
87.5°	3129.9	3097.9	3065.9	3033.9	3001.9	2969.9	2937.9	2905.9	2873.9	2841.9	2750.6
90°	3039.9	3007.9	2975.9	2943.9	2911.9	2879.9	2847.9	2815.9	2783.9	2751.9	2663.0
92.5°	2957.9	2927.0	2896.1	2865.3	2834.4	2803.5	2772.6	2741.8	2710.9	2680.0	2593.6
95°	2875.9	2846.1	2816.4	2786.6	2756.8	2727.1	2697.3	2667.5	2637.8	2608.0	2524.0
97.5°	2797.9	2768.8	2739.7	2710.6	2681.5	2652.4	2623.3	2594.2	2565.1	2536.0	2454.0
100°	2722.0	2693.3	2664.7	2636.0	2607.3	2578.7	2550.0	2521.3	2492.7	2464.0	2383.8
102.5°	2650.0	2621.8	2593.6	2565.3	2537.1	2508.9	2480.7	2452.4	2424.2	2396.0	2317.3
105°	2574.0	2546.2	2518.4	2490.7	2462.9	2435.1	2407.3	2379.6	2351.8	2324.0	2246.9
107.5°	2498.0	2470.2	2442.4	2414.7	2386.9	2359.1	2331.3	2303.6	2275.8	2248.0	2173.6
110°	2412.0	2384.7	2357.3	2330.0	2302.7	2275.3	2248.0	2220.7	2193.3	2166.0	2093.3



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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°	2324.0	2298.2	2272.4	2246.7	2220.9	2195.1	2169.3	2143.6	2117.8	2092.0	2020.4
115°	2230.0	2204.9	2179.8	2154.7	2129.6	2104.4	2079.3	2054.2	2029.1	2004.0	1935.3
117.5°	2132.0	2107.6	2083.1	2058.7	2034.2	2009.8	1985.3	1960.9	1936.4	1912.0	1845.8
120°	2032.0	2008.2	1984.4	1960.7	1936.9	1913.1	1889.3	1865.6	1841.8	1818.0	1753.6
122.5°	1928.0	1905.1	1882.2	1859.3	1836.4	1813.6	1790.7	1767.8	1744.9	1722.0	1660.7
125°	1814.0	1792.7	1771.3	1750.0	1728.7	1707.3	1686.0	1664.7	1643.3	1622.0	1562.9
127.5°	1698.0	1678.0	1658.0	1638.0	1618.0	1598.0	1578.0	1558.0	1538.0	1518.0	1461.1
130°	1582.0	1563.1	1544.2	1525.3	1506.4	1487.6	1468.7	1449.8	1430.9	1412.0	1356.0
132.5°	1476.0	1456.7	1437.3	1418.0	1398.7	1379.3	1360.0	1340.7	1321.3	1302.0	1249.8
135°	1352.0	1333.8	1315.6	1297.3	1279.1	1260.9	1242.7	1224.4	1206.2	1188.0	1138.7
137.5°	1226.0	1208.4	1190.9	1173.3	1155.8	1138.2	1120.7	1103.1	1085.6	1068.0	1022.9
140°	1096.0	1080.4	1064.9	1049.3	1033.8	1018.2	1002.7	987.1	971.6	956.0	914.4
142.5°	972.0	958.2	944.4	930.7	916.9	903.1	889.3	875.6	861.8	848.0	810.0
145°	856.0	843.8	831.6	819.3	807.1	794.9	782.7	770.4	758.2	746.0	710.4
147.5°	742.0	730.9	719.8	708.7	697.6	686.4	675.3	664.2	653.1	642.0	610.0
150°	632.0	622.2	612.4	602.7	592.9	583.1	573.3	563.6	553.8	544.0	515.1
152.5°	524.0	514.4	504.9	495.3	485.8	476.2	466.7	457.1	447.6	438.0	413.3
155°	414.0	406.2	398.4	390.7	382.9	375.1	367.3	359.6	351.8	344.0	322.7
157.5°	314.0	307.6	301.1	294.7	288.2	281.8	275.3	268.9	262.4	256.0	238.0
160°	220.0	214.7	209.3	204.0	198.7	193.3	188.0	182.7	177.3	172.0	158.7
162.5°	130.0	126.4	122.9	119.3	115.8	112.2	108.7	105.1	101.6	98.0	89.8
165°	66.0	63.8	61.6	59.3	57.1	54.9	52.7	50.4	48.2	46.0	41.8
167.5°	22.0	21.1	20.2	19.3	18.4	17.6	16.7	15.8	14.9	14.0	12.4
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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1828.9	1829.3	1829.8	1830.2	1830.7	1831.1	1831.6	1832.0	1828.7	1825.3	1822.0
5°	1875.8	1874.7	1873.6	1872.4	1871.3	1870.2	1869.1	1868.0	1862.4	1856.9	1851.3
7.5°	1922.2	1919.3	1916.4	1913.6	1910.7	1907.8	1904.9	1902.0	1893.6	1885.1	1876.7
10°	1969.6	1965.3	1961.1	1956.9	1952.7	1948.4	1944.2	1940.0	1927.8	1915.6	1903.3
12.5°	2020.9	2013.3	2005.8	1998.2	1990.7	1983.1	1975.6	1968.0	1952.7	1937.3	1922.0
15°	2082.4	2070.7	2058.9	2047.1	2035.3	2023.6	2011.8	2000.0	1980.9	1961.8	1942.7
17.5°	2147.1	2130.7	2114.2	2097.8	2081.3	2064.9	2048.4	2032.0	2008.4	1984.9	1961.3
20°	2208.7	2188.0	2167.3	2146.7	2126.0	2105.3	2084.7	2064.0	2035.6	2007.1	1978.7
22.5°	2272.0	2248.0	2224.0	2200.0	2176.0	2152.0	2128.0	2104.0	2069.6	2035.1	2000.7
25°	2336.9	2309.3	2281.8	2254.2	2226.7	2199.1	2171.6	2144.0	2103.1	2062.2	2021.3
27.5°	2399.3	2368.0	2336.7	2305.3	2274.0	2242.7	2211.3	2180.0	2133.1	2086.2	2039.3
30°	2458.2	2423.3	2388.4	2353.6	2318.7	2283.8	2248.9	2214.0	2161.3	2108.7	2056.0
32.5°	2516.7	2478.0	2439.3	2400.7	2362.0	2323.3	2284.7	2246.0	2187.3	2128.7	2070.0
35°	2573.1	2530.7	2488.2	2445.8	2403.3	2360.9	2318.4	2276.0	2212.2	2148.4	2084.7
37.5°	2630.0	2584.0	2538.0	2492.0	2446.0	2400.0	2354.0	2308.0	2238.9	2169.8	2100.7
40°	2686.4	2636.6	2586.8	2537.1	2487.3	2437.5	2387.8	2338.0	2263.8	2189.6	2115.3
42.5°	2739.9	2685.9	2631.9	2578.0	2524.0	2470.0	2416.0	2362.0	2282.9	2203.8	2124.7
45°	2791.5	2733.3	2675.1	2616.8	2558.6	2500.4	2442.2	2384.0	2300.0	2216.0	2132.0
47.5°	2842.6	2779.9	2717.3	2654.6	2592.0	2529.3	2466.7	2404.0	2315.3	2226.7	2138.0
50°	2890.8	2823.3	2755.7	2688.2	2620.6	2553.1	2485.5	2418.0	2324.9	2231.8	2138.7
52.5°	2934.6	2861.9	2789.3	2716.6	2644.0	2571.3	2498.7	2426.0	2328.9	2231.8	2134.7
55°	2975.7	2898.6	2821.5	2744.4	2667.3	2590.2	2513.1	2436.0	2334.4	2232.9	2131.3
57.5°	3012.8	2931.3	2849.7	2768.2	2686.6	2605.1	2523.5	2442.0	2336.0	2230.0	2124.0
60°	3044.4	2958.6	2872.8	2787.1	2701.3	2615.5	2529.8	2444.0	2334.2	2224.4	2114.7
62.5°	3065.3	2975.9	2886.6	2797.3	2708.0	2618.6	2529.3	2440.0	2326.7	2213.3	2100.0
65°	3079.5	2987.3	2895.1	2802.8	2710.6	2618.4	2526.2	2434.0	2316.9	2199.8	2082.7
67.5°	3082.6	2987.9	2893.3	2798.6	2704.0	2609.3	2514.7	2420.0	2299.8	2179.6	2059.3
70°	3075.0	2978.6	2882.2	2785.7	2689.3	2592.9	2496.4	2400.0	2277.1	2154.2	2031.3
72.5°	3051.7	2954.6	2857.5	2760.4	2663.3	2566.2	2469.1	2372.0	2247.1	2122.2	1997.3
75°	3016.8	2919.3	2821.7	2724.2	2626.6	2529.1	2431.5	2334.0	2207.8	2081.6	1955.3
77.5°	2965.3	2867.9	2770.6	2673.3	2576.0	2478.6	2381.3	2284.0	2157.3	2030.7	1904.0
80°	2901.0	2804.6	2708.2	2611.7	2515.3	2418.9	2322.4	2226.0	2100.2	1974.4	1848.7
82.5°	2825.7	2730.6	2635.5	2540.4	2445.3	2350.2	2255.1	2160.0	2035.6	1911.1	1786.7
85°	2744.8	2651.3	2557.7	2464.2	2370.6	2277.1	2183.5	2090.0	1967.3	1844.7	1722.0
87.5°	2659.3	2567.9	2476.6	2385.3	2294.0	2202.6	2111.3	2020.0	1899.8	1779.6	1659.3
90°	2574.1	2485.3	2396.4	2307.5	2218.6	2129.8	2040.9	1952.0	1834.2	1716.4	1598.7
92.5°	2507.1	2420.7	2334.2	2247.8	2161.3	2074.9	1988.4	1902.0	1786.4	1670.9	1555.3
95°	2440.0	2356.0	2272.0	2188.0	2104.0	2020.0	1936.0	1852.0	1738.2	1624.4	1510.7
97.5°	2372.0	2290.0	2208.0	2126.0	2044.0	1962.0	1880.0	1798.0	1686.4	1574.9	1463.3
100°	2303.6	2223.3	2143.1	2062.9	1982.7	1902.4	1822.2	1742.0	1632.7	1523.3	1414.0
102.5°	2238.7	2160.0	2081.3	2002.7	1924.0	1845.3	1766.7	1688.0	1580.7	1473.3	1366.0
105°	2169.8	2092.7	2015.6	1938.4	1861.3	1784.2	1707.1	1630.0	1524.7	1419.3	1314.0
107.5°	2099.1	2024.7	1950.2	1875.8	1801.3	1726.9	1652.4	1578.0	1474.0	1370.0	1266.0
110°	2020.7	1948.0	1875.3	1802.7	1730.0	1657.3	1584.7	1512.0	1410.9	1309.8	1208.7



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1948.9	1877.3	1805.8	1734.2	1662.7	1591.1	1519.6	1448.0	1349.3	1250.7	1152.0
115°	1866.7	1798.0	1729.3	1660.7	1592.0	1523.3	1454.7	1386.0	1289.6	1193.1	1096.7
117.5°	1779.6	1713.3	1647.1	1580.9	1514.7	1448.4	1382.2	1316.0	1221.8	1127.6	1033.3
120°	1689.1	1624.7	1560.2	1495.8	1431.3	1366.9	1302.4	1238.0	1147.8	1057.6	967.3
122.5°	1599.3	1538.0	1476.7	1415.3	1354.0	1292.7	1231.3	1170.0	1082.7	995.3	908.0
125°	1503.8	1444.7	1385.6	1326.4	1267.3	1208.2	1149.1	1090.0	1006.9	923.8	840.7
127.5°	1404.2	1347.3	1290.4	1233.6	1176.7	1119.8	1062.9	1006.0	927.8	849.6	771.3
130°	1300.0	1244.0	1188.0	1132.0	1076.0	1020.0	964.0	908.0	836.2	764.4	692.7
132.5°	1197.6	1145.3	1093.1	1040.9	988.7	936.4	884.2	832.0	764.4	696.9	629.3
135°	1089.3	1040.0	990.7	941.3	892.0	842.7	793.3	744.0	682.0	620.0	558.0
137.5°	977.8	932.7	887.6	842.4	797.3	752.2	707.1	662.0	605.1	548.2	491.3
140°	872.9	831.3	789.8	748.2	706.7	665.1	623.6	582.0	530.0	478.0	426.0
142.5°	772.0	734.0	696.0	658.0	620.0	582.0	544.0	506.0	458.2	410.4	362.7
145°	674.9	639.3	603.8	568.2	532.7	497.1	461.6	426.0	384.4	342.9	301.3
147.5°	578.0	546.0	514.0	482.0	450.0	418.0	386.0	354.0	318.4	282.9	247.3
150°	486.2	457.3	428.4	399.6	370.7	341.8	312.9	284.0	255.1	226.2	197.3
152.5°	388.7	364.0	339.3	314.7	290.0	265.3	240.7	216.0	193.6	171.1	148.7
155°	301.3	280.0	258.7	237.3	216.0	194.7	173.3	152.0	135.8	119.6	103.3
157.5°	220.0	202.0	184.0	166.0	148.0	130.0	112.0	94.0	83.6	73.1	62.7
160°	145.3	132.0	118.7	105.3	92.0	78.7	65.3	52.0	46.2	40.4	34.7
162.5°	81.6	73.3	65.1	56.9	48.7	40.4	32.2	24.0	21.3	18.7	16.0
165°	37.6	33.3	29.1	24.9	20.7	16.4	12.2	8.0	7.1	6.2	5.3
167.5°	10.9	9.3	7.8	6.2	4.7	3.1	1.6	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: P201415

CATALOG NUMBER: 8LBLELD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1818.7	1815.3	1812.0	1808.7	1805.3	1802.0	1802.9	1803.8	1804.7	1805.6	1806.4
5°	1845.8	1840.2	1834.7	1829.1	1823.6	1818.0	1816.2	1814.4	1812.7	1810.9	1809.1
7.5°	1868.2	1859.8	1851.3	1842.9	1834.4	1826.0	1822.0	1818.0	1814.0	1810.0	1806.0
10°	1891.1	1878.9	1866.7	1854.4	1842.2	1830.0	1823.6	1817.1	1810.7	1804.2	1797.8
12.5°	1906.7	1891.3	1876.0	1860.7	1845.3	1830.0	1820.4	1810.9	1801.3	1791.8	1782.2
15°	1923.6	1904.4	1885.3	1866.2	1847.1	1828.0	1815.6	1803.1	1790.7	1778.2	1765.8
17.5°	1937.8	1914.2	1890.7	1867.1	1843.6	1820.0	1804.9	1789.8	1774.7	1759.6	1744.4
20°	1950.2	1921.8	1893.3	1864.9	1836.4	1808.0	1789.8	1771.6	1753.3	1735.1	1716.9
22.5°	1966.2	1931.8	1897.3	1862.9	1828.4	1794.0	1772.4	1750.9	1729.3	1707.8	1686.2
25°	1980.4	1939.6	1898.7	1857.8	1816.9	1776.0	1751.1	1726.2	1701.3	1676.4	1651.6
27.5°	1992.4	1945.6	1898.7	1851.8	1804.9	1758.0	1729.1	1700.2	1671.3	1642.4	1613.6
30°	2003.3	1950.7	1898.0	1845.3	1792.7	1740.0	1707.1	1674.2	1641.3	1608.4	1575.6
32.5°	2011.3	1952.7	1894.0	1835.3	1776.7	1718.0	1680.9	1643.8	1606.7	1569.6	1532.4
35°	2020.9	1957.1	1893.3	1829.6	1765.8	1702.0	1659.6	1617.1	1574.7	1532.2	1489.8
37.5°	2031.6	1962.4	1893.3	1824.2	1755.1	1686.0	1638.9	1591.8	1544.7	1497.6	1450.4
40°	2041.1	1966.9	1892.7	1818.4	1744.2	1670.0	1617.3	1564.7	1512.0	1459.3	1406.7
42.5°	2045.6	1966.4	1887.3	1808.2	1729.1	1650.0	1592.0	1534.0	1476.0	1418.0	1360.0
45°	2048.0	1964.0	1880.0	1796.0	1712.0	1628.0	1564.7	1501.3	1438.0	1374.7	1311.3
47.5°	2049.3	1960.7	1872.0	1783.3	1694.7	1606.0	1537.3	1468.7	1400.0	1331.3	1262.7
50°	2045.6	1952.4	1859.3	1766.2	1673.1	1580.0	1506.4	1432.9	1359.3	1285.8	1212.2
52.5°	2037.6	1940.4	1843.3	1746.2	1649.1	1552.0	1473.3	1394.7	1316.0	1237.3	1158.7
55°	2029.8	1928.2	1826.7	1725.1	1623.6	1522.0	1438.9	1355.8	1272.7	1189.6	1106.4
57.5°	2018.0	1912.0	1806.0	1700.0	1594.0	1488.0	1400.7	1313.3	1226.0	1138.7	1051.3
60°	2004.9	1895.1	1785.3	1675.6	1565.8	1456.0	1364.2	1272.4	1180.7	1088.9	997.1
62.5°	1986.7	1873.3	1760.0	1646.7	1533.3	1420.0	1324.4	1228.9	1133.3	1037.8	942.2
65°	1965.6	1848.4	1731.3	1614.2	1497.1	1380.0	1280.9	1181.8	1082.7	983.6	884.4
67.5°	1939.1	1818.9	1698.7	1578.4	1458.2	1338.0	1235.6	1133.1	1030.7	928.2	825.8
70°	1908.4	1785.6	1662.7	1539.8	1416.9	1294.0	1189.1	1084.2	979.3	874.4	769.6
72.5°	1872.4	1747.6	1622.7	1497.8	1372.9	1248.0	1141.1	1034.2	927.3	820.4	713.6
75°	1829.1	1702.9	1576.7	1450.4	1324.2	1198.0	1089.8	981.6	873.3	765.1	656.9
77.5°	1777.3	1650.7	1524.0	1397.3	1270.7	1144.0	1035.3	926.7	818.0	709.3	600.7
80°	1722.9	1597.1	1471.3	1345.6	1219.8	1094.0	985.1	876.2	767.3	658.4	549.6
82.5°	1662.2	1537.8	1413.3	1288.9	1164.4	1040.0	932.0	824.0	716.0	608.0	500.0
85°	1599.3	1476.7	1354.0	1231.3	1108.7	986.0	880.0	774.0	668.0	562.0	456.0
87.5°	1539.1	1418.9	1298.7	1178.4	1058.2	938.0	834.2	730.4	626.7	522.9	419.1
90°	1480.9	1363.1	1245.3	1127.6	1009.8	892.0	792.9	693.8	594.7	495.6	396.4
92.5°	1439.8	1324.2	1208.7	1093.1	977.6	862.0	766.2	670.4	574.7	478.9	383.1
95°	1396.9	1283.1	1169.3	1055.6	941.8	828.0	736.0	644.0	552.0	460.0	368.0
97.5°	1351.8	1240.2	1128.7	1017.1	905.6	794.0	705.8	617.6	529.3	441.1	352.9
100°	1304.7	1195.3	1086.0	976.7	867.3	758.0	673.8	589.6	505.3	421.1	336.9
102.5°	1258.7	1151.3	1044.0	936.7	829.3	722.0	641.8	561.6	481.3	401.1	320.9
105°	1208.7	1103.3	998.0	892.7	787.3	682.0	606.2	530.4	454.7	378.9	303.1
107.5°	1162.0	1058.0	954.0	850.0	746.0	642.0	570.7	499.3	428.0	356.7	285.3
110°	1107.6	1006.4	905.3	804.2	703.1	602.0	535.1	468.2	401.3	334.4	267.6



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1053.3	954.7	856.0	757.3	658.7	560.0	497.8	435.6	373.3	311.1	248.9
115°	1000.2	903.8	807.3	710.9	614.4	518.0	460.4	402.9	345.3	287.8	230.2
117.5°	939.1	844.9	750.7	656.4	562.2	468.0	416.0	364.0	312.0	260.0	208.0
120°	877.1	786.9	696.7	606.4	516.2	426.0	378.7	331.3	284.0	236.7	189.3
122.5°	820.7	733.3	646.0	558.7	471.3	384.0	341.3	298.7	256.0	213.3	170.7
125°	757.6	674.4	591.3	508.2	425.1	342.0	304.0	266.0	228.0	190.0	152.0
127.5°	693.1	614.9	536.7	458.4	380.2	302.0	268.4	234.9	201.3	167.8	134.2
130°	620.9	549.1	477.3	405.6	333.8	262.0	232.9	203.8	174.7	145.6	116.4
132.5°	561.8	494.2	426.7	359.1	291.6	224.0	199.1	174.2	149.3	124.4	99.6
135°	496.0	434.0	372.0	310.0	248.0	186.0	165.3	144.7	124.0	103.3	82.7
137.5°	434.4	377.6	320.7	263.8	206.9	150.0	133.3	116.7	100.0	83.3	66.7
140°	374.0	322.0	270.0	218.0	166.0	114.0	101.3	88.7	76.0	63.3	50.7
142.5°	314.9	267.1	219.3	171.6	123.8	76.0	67.6	59.1	50.7	42.2	33.8
145°	259.8	218.2	176.7	135.1	93.6	52.0	46.2	40.4	34.7	28.9	23.1
147.5°	211.8	176.2	140.7	105.1	69.6	34.0	30.2	26.4	22.7	18.9	15.1
150°	168.4	139.6	110.7	81.8	52.9	24.0	21.3	18.7	16.0	13.3	10.7
152.5°	126.2	103.8	81.3	58.9	36.4	14.0	12.4	10.9	9.3	7.8	6.2
155°	87.1	70.9	54.7	38.4	22.2	6.0	5.3	4.7	4.0	3.3	2.7
157.5°	52.2	41.8	31.3	20.9	10.4	0.0	0.0	0.0	0.0	0.0	0.0
160°	28.9	23.1	17.3	11.6	5.8	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	13.3	10.7	8.0	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
165°	4.4	3.6	2.7	1.8	0.9	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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1807.3	1808.2	1809.1	1810.0	1805.6	1801.1	1796.7	1792.2	1787.8	1783.3	1778.9
5°	1807.3	1805.6	1803.8	1802.0	1795.6	1789.1	1782.7	1776.2	1769.8	1763.3	1756.9
7.5°	1802.0	1798.0	1794.0	1790.0	1781.8	1773.6	1765.3	1757.1	1748.9	1740.7	1732.4
10°	1791.3	1784.9	1778.4	1772.0	1762.4	1752.9	1743.3	1733.8	1724.2	1714.7	1705.1
12.5°	1772.7	1763.1	1753.6	1744.0	1734.0	1724.0	1714.0	1704.0	1694.0	1684.0	1674.0
15°	1753.3	1740.9	1728.4	1716.0	1705.1	1694.2	1683.3	1672.4	1661.6	1650.7	1639.8
17.5°	1729.3	1714.2	1699.1	1684.0	1672.7	1661.3	1650.0	1638.7	1627.3	1616.0	1604.7
20°	1698.7	1680.4	1662.2	1644.0	1633.3	1622.7	1612.0	1601.3	1590.7	1580.0	1569.3
22.5°	1664.7	1643.1	1621.6	1600.0	1590.0	1580.0	1570.0	1560.0	1550.0	1540.0	1530.0
25°	1626.7	1601.8	1576.9	1552.0	1543.3	1534.7	1526.0	1517.3	1508.7	1500.0	1491.3
27.5°	1584.7	1555.8	1526.9	1498.0	1491.6	1485.1	1478.7	1472.2	1465.8	1459.3	1452.9
30°	1542.7	1509.8	1476.9	1444.0	1440.2	1436.4	1432.7	1428.9	1425.1	1421.3	1417.6
32.5°	1495.3	1458.2	1421.1	1384.0	1384.0	1384.0	1384.0	1384.0	1384.0	1384.0	1384.0
35°	1447.3	1404.9	1362.4	1320.0	1324.2	1328.4	1332.7	1336.9	1341.1	1345.3	1349.6
37.5°	1403.3	1356.2	1309.1	1262.0	1270.0	1278.0	1286.0	1294.0	1302.0	1310.0	1318.0
40°	1354.0	1301.3	1248.7	1196.0	1208.0	1220.0	1232.0	1244.0	1256.0	1268.0	1280.0
42.5°	1302.0	1244.0	1186.0	1128.0	1144.2	1160.4	1176.7	1192.9	1209.1	1225.3	1241.6
45°	1248.0	1184.7	1121.3	1058.0	1078.4	1098.9	1119.3	1139.8	1160.2	1180.7	1201.1
47.5°	1194.0	1125.3	1056.7	988.0	1012.7	1037.3	1062.0	1086.7	1111.3	1136.0	1160.7
50°	1138.7	1065.1	991.6	918.0	946.7	975.3	1004.0	1032.7	1061.3	1090.0	1118.7
52.5°	1080.0	1001.3	922.7	844.0	876.9	909.8	942.7	975.6	1008.4	1041.3	1074.2
55°	1023.3	940.2	857.1	774.0	810.7	847.3	884.0	920.7	957.3	994.0	1030.7
57.5°	964.0	876.7	789.3	702.0	742.7	783.3	824.0	864.7	905.3	946.0	986.7
60°	905.3	813.6	721.8	630.0	674.0	718.0	762.0	806.0	850.0	894.0	938.0
62.5°	846.7	751.1	655.6	560.0	607.3	654.7	702.0	749.3	796.7	844.0	891.3
65°	785.3	686.2	587.1	488.0	538.7	589.3	640.0	690.7	741.3	792.0	842.7
67.5°	723.3	620.9	518.4	416.0	469.8	523.6	577.3	631.1	684.9	738.7	792.4
70°	664.7	559.8	454.9	350.0	406.0	462.0	518.0	574.0	630.0	686.0	742.0
72.5°	606.7	499.8	392.9	286.0	343.8	401.6	459.3	517.1	574.9	632.7	690.4
75°	548.7	440.4	332.2	224.0	283.3	342.7	402.0	461.3	520.7	580.0	639.3
77.5°	492.0	383.3	274.7	166.0	225.8	285.6	345.3	405.1	464.9	524.7	584.4
80°	440.7	331.8	222.9	114.0	174.2	234.4	294.7	354.9	415.1	475.3	535.6
82.5°	392.0	284.0	176.0	68.0	127.8	187.6	247.3	307.1	366.9	426.7	486.4
85°	350.0	244.0	138.0	32.0	90.9	149.8	208.7	267.6	326.4	385.3	444.2
87.5°	315.3	211.6	107.8	4.0	61.6	119.1	176.7	234.2	291.8	349.3	406.9
90°	297.3	198.2	99.1	0.0	54.7	109.3	164.0	218.7	273.3	328.0	382.7
92.5°	287.3	191.6	95.8	0.0	51.6	103.1	154.7	206.2	257.8	309.3	360.9
95°	276.0	184.0	92.0	0.0	48.9	97.8	146.7	195.6	244.4	293.3	342.2
97.5°	264.7	176.4	88.2	0.0	46.0	92.0	138.0	184.0	230.0	276.0	322.0
100°	252.7	168.4	84.2	0.0	43.3	86.7	130.0	173.3	216.7	260.0	303.3
102.5°	240.7	160.4	80.2	0.0	40.7	81.3	122.0	162.7	203.3	244.0	284.7
105°	227.3	151.6	75.8	0.0	37.8	75.6	113.3	151.1	188.9	226.7	264.4
107.5°	214.0	142.7	71.3	0.0	34.9	69.8	104.7	139.6	174.4	209.3	244.2
110°	200.7	133.8	66.9	0.0	32.2	64.4	96.7	128.9	161.1	193.3	225.6



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	186.7	124.4	62.2	0.0	29.3	58.7	88.0	117.3	146.7	176.0	205.3
115°	172.7	115.1	57.6	0.0	26.4	52.9	79.3	105.8	132.2	158.7	185.1
117.5°	156.0	104.0	52.0	0.0	23.6	47.1	70.7	94.2	117.8	141.3	164.9
120°	142.0	94.7	47.3	0.0	20.7	41.3	62.0	82.7	103.3	124.0	144.7
122.5°	128.0	85.3	42.7	0.0	18.2	36.4	54.7	72.9	91.1	109.3	127.6
125°	114.0	76.0	38.0	0.0	15.3	30.7	46.0	61.3	76.7	92.0	107.3
127.5°	100.7	67.1	33.6	0.0	12.4	24.9	37.3	49.8	62.2	74.7	87.1
130°	87.3	58.2	29.1	0.0	9.8	19.6	29.3	39.1	48.9	58.7	68.4
132.5°	74.7	49.8	24.9	0.0	7.3	14.7	22.0	29.3	36.7	44.0	51.3
135°	62.0	41.3	20.7	0.0	5.1	10.2	15.3	20.4	25.6	30.7	35.8
137.5°	50.0	33.3	16.7	0.0	3.3	6.7	10.0	13.3	16.7	20.0	23.3
140°	38.0	25.3	12.7	0.0	1.8	3.6	5.3	7.1	8.9	10.7	12.4
142.5°	25.3	16.9	8.4	0.0	0.9	1.8	2.7	3.6	4.4	5.3	6.2
145°	17.3	11.6	5.8	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6
147.5°	11.3	7.6	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	8.0	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	4.7	3.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.0	1.3	0.7	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: P201415

CATALOG NUMBER: 8LBLELD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1774.4	1770.0	1768.7	1767.3	1766.0	1764.7	1763.3	1762.0	1760.7	1759.3	1758.0
5°	1750.4	1744.0	1741.6	1739.1	1736.7	1734.2	1731.8	1729.3	1726.9	1724.4	1722.0
7.5°	1724.2	1716.0	1713.1	1710.2	1707.3	1704.4	1701.6	1698.7	1695.8	1692.9	1690.0
10°	1695.6	1686.0	1683.3	1680.7	1678.0	1675.3	1672.7	1670.0	1667.3	1664.7	1662.0
12.5°	1664.0	1654.0	1652.4	1650.9	1649.3	1647.8	1646.2	1644.7	1643.1	1641.6	1640.0
15°	1628.9	1618.0	1618.7	1619.3	1620.0	1620.7	1621.3	1622.0	1622.7	1623.3	1624.0
17.5°	1593.3	1582.0	1586.7	1591.3	1596.0	1600.7	1605.3	1610.0	1614.7	1619.3	1624.0
20°	1558.7	1548.0	1558.0	1568.0	1578.0	1588.0	1598.0	1608.0	1618.0	1628.0	1638.0
22.5°	1520.0	1510.0	1525.8	1541.6	1557.3	1573.1	1588.9	1604.7	1620.4	1636.2	1652.0
25°	1482.7	1474.0	1495.3	1516.7	1538.0	1559.3	1580.7	1602.0	1623.3	1644.7	1666.0
27.5°	1446.4	1440.0	1466.0	1492.0	1518.0	1544.0	1570.0	1596.0	1622.0	1648.0	1674.0
30°	1413.8	1410.0	1440.2	1470.4	1500.7	1530.9	1561.1	1591.3	1621.6	1651.8	1682.0
32.5°	1384.0	1384.0	1417.8	1451.6	1485.3	1519.1	1552.9	1586.7	1620.4	1654.2	1688.0
35°	1353.8	1358.0	1394.9	1431.8	1468.7	1505.6	1542.4	1579.3	1616.2	1653.1	1690.0
37.5°	1326.0	1334.0	1373.8	1413.6	1453.3	1493.1	1532.9	1572.7	1612.4	1652.2	1692.0
40°	1292.0	1304.0	1347.3	1390.7	1434.0	1477.3	1520.7	1564.0	1607.3	1650.7	1694.0
42.5°	1257.8	1274.0	1320.4	1366.9	1413.3	1459.8	1506.2	1552.7	1599.1	1645.6	1692.0
45°	1221.6	1242.0	1291.8	1341.6	1391.3	1441.1	1490.9	1540.7	1590.4	1640.2	1690.0
47.5°	1185.3	1210.0	1262.9	1315.8	1368.7	1421.6	1474.4	1527.3	1580.2	1633.1	1686.0
50°	1147.3	1176.0	1232.2	1288.4	1344.7	1400.9	1457.1	1513.3	1569.6	1625.8	1682.0
52.5°	1107.1	1140.0	1199.1	1258.2	1317.3	1376.4	1435.6	1494.7	1553.8	1612.9	1672.0
55°	1067.3	1104.0	1166.2	1228.4	1290.7	1352.9	1415.1	1477.3	1539.6	1601.8	1664.0
57.5°	1027.3	1068.0	1133.6	1199.1	1264.7	1330.2	1395.8	1461.3	1526.9	1592.4	1658.0
60°	982.0	1026.0	1095.1	1164.2	1233.3	1302.4	1371.6	1440.7	1509.8	1578.9	1648.0
62.5°	938.7	986.0	1058.4	1130.9	1203.3	1275.8	1348.2	1420.7	1493.1	1565.6	1638.0
65°	893.3	944.0	1019.6	1095.1	1170.7	1246.2	1321.8	1397.3	1472.9	1548.4	1624.0
67.5°	846.2	900.0	978.4	1056.9	1135.3	1213.8	1292.2	1370.7	1449.1	1527.6	1606.0
70°	798.0	854.0	934.7	1015.3	1096.0	1176.7	1257.3	1338.0	1418.7	1499.3	1580.0
72.5°	748.2	806.0	887.6	969.1	1050.7	1132.2	1213.8	1295.3	1376.9	1458.4	1540.0
75°	698.7	758.0	839.3	920.7	1002.0	1083.3	1164.7	1246.0	1327.3	1408.7	1490.0
77.5°	644.2	704.0	784.7	865.3	946.0	1026.7	1107.3	1188.0	1268.7	1349.3	1430.0
80°	595.8	656.0	734.7	813.3	892.0	970.7	1049.3	1128.0	1206.7	1285.3	1364.0
82.5°	546.2	606.0	682.4	758.9	835.3	911.8	988.2	1064.7	1141.1	1217.6	1294.0
85°	503.1	562.0	636.0	710.0	784.0	858.0	932.0	1006.0	1080.0	1154.0	1228.0
87.5°	464.4	522.0	594.0	666.0	738.0	810.0	882.0	954.0	1026.0	1098.0	1170.0
90°	437.3	492.0	561.6	631.1	700.7	770.2	839.8	909.3	978.9	1048.4	1118.0
92.5°	412.4	464.0	532.2	600.4	668.7	736.9	805.1	873.3	941.6	1009.8	1078.0
95°	391.1	440.0	506.4	572.9	639.3	705.8	772.2	838.7	905.1	971.6	1038.0
97.5°	368.0	414.0	479.1	544.2	609.3	674.4	739.6	804.7	869.8	934.9	1000.0
100°	346.7	390.0	453.6	517.1	580.7	644.2	707.8	771.3	834.9	898.4	962.0
102.5°	325.3	366.0	428.0	490.0	552.0	614.0	676.0	738.0	800.0	862.0	924.0
105°	302.2	340.0	400.9	461.8	522.7	583.6	644.4	705.3	766.2	827.1	888.0
107.5°	279.1	314.0	373.1	432.2	491.3	550.4	609.6	668.7	727.8	786.9	846.0
110°	257.8	290.0	346.9	403.8	460.7	517.6	574.4	631.3	688.2	745.1	802.0



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	234.7	264.0	319.1	374.2	429.3	484.4	539.6	594.7	649.8	704.9	760.0
115°	211.6	238.0	291.1	344.2	397.3	450.4	503.6	556.7	609.8	662.9	716.0
117.5°	188.4	212.0	263.1	314.2	365.3	416.4	467.6	518.7	569.8	620.9	672.0
120°	165.3	186.0	234.9	283.8	332.7	381.6	430.4	479.3	528.2	577.1	626.0
122.5°	145.8	164.0	210.2	256.4	302.7	348.9	395.1	441.3	487.6	533.8	580.0
125°	122.7	138.0	181.8	225.6	269.3	313.1	356.9	400.7	444.4	488.2	532.0
127.5°	99.6	112.0	152.2	192.4	232.7	272.9	313.1	353.3	393.6	433.8	474.0
130°	78.2	88.0	124.7	161.3	198.0	234.7	271.3	308.0	344.7	381.3	418.0
132.5°	58.7	66.0	98.7	131.3	164.0	196.7	229.3	262.0	294.7	327.3	360.0
135°	40.9	46.0	75.1	104.2	133.3	162.4	191.6	220.7	249.8	278.9	308.0
137.5°	26.7	30.0	55.3	80.7	106.0	131.3	156.7	182.0	207.3	232.7	258.0
140°	14.2	16.0	38.0	60.0	82.0	104.0	126.0	148.0	170.0	192.0	214.0
142.5°	7.1	8.0	26.2	44.4	62.7	80.9	99.1	117.3	135.6	153.8	172.0
145°	1.8	2.0	16.7	31.3	46.0	60.7	75.3	90.0	104.7	119.3	134.0
147.5°	0.0	0.0	11.1	22.2	33.3	44.4	55.6	66.7	77.8	88.9	100.0
150°	0.0	0.0	7.8	15.6	23.3	31.1	38.9	46.7	54.4	62.2	70.0
152.5°	0.0	0.0	4.7	9.3	14.0	18.7	23.3	28.0	32.7	37.3	42.0
155°	0.0	0.0	2.4	4.9	7.3	9.8	12.2	14.7	17.1	19.6	22.0
157.5°	0.0	0.0	0.7	1.3	2.0	2.7	3.3	4.0	4.7	5.3	6.0
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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1756.0	1754.0	1752.0	1750.0	1748.0	1746.0	1744.0	1742.0	1740.0	1738.0	1736.0
5°	1719.8	1717.6	1715.3	1713.1	1710.9	1708.7	1706.4	1704.2	1702.0	1700.7	1699.3
7.5°	1688.0	1686.0	1684.0	1682.0	1680.0	1678.0	1676.0	1674.0	1672.0	1671.3	1670.7
10°	1661.8	1661.6	1661.3	1661.1	1660.9	1660.7	1660.4	1660.2	1660.0	1659.6	1659.1
12.5°	1642.0	1644.0	1646.0	1648.0	1650.0	1652.0	1654.0	1656.0	1658.0	1659.3	1660.7
15°	1630.4	1636.9	1643.3	1649.8	1656.2	1662.7	1669.1	1675.6	1682.0	1685.6	1689.1
17.5°	1634.7	1645.3	1656.0	1666.7	1677.3	1688.0	1698.7	1709.3	1720.0	1724.2	1728.4
20°	1650.9	1663.8	1676.7	1689.6	1702.4	1715.3	1728.2	1741.1	1754.0	1759.1	1764.2
22.5°	1667.1	1682.2	1697.3	1712.4	1727.6	1742.7	1757.8	1772.9	1788.0	1793.6	1799.1
25°	1682.9	1699.8	1716.7	1733.6	1750.4	1767.3	1784.2	1801.1	1818.0	1824.4	1830.9
27.5°	1693.3	1712.7	1732.0	1751.3	1770.7	1790.0	1809.3	1828.7	1848.0	1854.9	1861.8
30°	1703.3	1724.7	1746.0	1767.3	1788.7	1810.0	1831.3	1852.7	1874.0	1882.2	1890.4
32.5°	1711.6	1735.1	1758.7	1782.2	1805.8	1829.3	1852.9	1876.4	1900.0	1909.3	1918.7
35°	1716.2	1742.4	1768.7	1794.9	1821.1	1847.3	1873.6	1899.8	1926.0	1936.7	1947.3
37.5°	1720.9	1749.8	1778.7	1807.6	1836.4	1865.3	1894.2	1923.1	1952.0	1964.2	1976.4
40°	1725.6	1757.1	1788.7	1820.2	1851.8	1883.3	1914.9	1946.4	1978.0	1991.6	2005.1
42.5°	1726.4	1760.9	1795.3	1829.8	1864.2	1898.7	1933.1	1967.6	2002.0	2017.1	2032.2
45°	1727.8	1765.6	1803.3	1841.1	1878.9	1916.7	1954.4	1992.2	2030.0	2046.4	2062.9
47.5°	1727.6	1769.1	1810.7	1852.2	1893.8	1935.3	1976.9	2018.4	2060.0	2078.0	2096.0
50°	1727.1	1772.2	1817.3	1862.4	1907.6	1952.7	1997.8	2042.9	2088.0	2108.0	2128.0
52.5°	1721.1	1770.2	1819.3	1868.4	1917.6	1966.7	2015.8	2064.9	2114.0	2135.8	2157.6
55°	1717.3	1770.7	1824.0	1877.3	1930.7	1984.0	2037.3	2090.7	2144.0	2166.9	2189.8
57.5°	1714.7	1771.3	1828.0	1884.7	1941.3	1998.0	2054.7	2111.3	2168.0	2192.4	2216.9
60°	1708.0	1768.0	1828.0	1888.0	1948.0	2008.0	2068.0	2128.0	2188.0	2213.1	2238.2
62.5°	1700.7	1763.3	1826.0	1888.7	1951.3	2014.0	2076.7	2139.3	2202.0	2227.3	2252.7
65°	1688.9	1753.8	1818.7	1883.6	1948.4	2013.3	2078.2	2143.1	2208.0	2233.6	2259.1
67.5°	1672.0	1738.0	1804.0	1870.0	1936.0	2002.0	2068.0	2134.0	2200.0	2225.6	2251.1
70°	1646.7	1713.3	1780.0	1846.7	1913.3	1980.0	2046.7	2113.3	2180.0	2205.1	2230.2
72.5°	1606.7	1673.3	1740.0	1806.7	1873.3	1940.0	2006.7	2073.3	2140.0	2164.2	2188.4
75°	1555.6	1621.1	1686.7	1752.2	1817.8	1883.3	1948.9	2014.4	2080.0	2103.3	2126.7
77.5°	1493.6	1557.1	1620.7	1684.2	1747.8	1811.3	1874.9	1938.4	2002.0	2024.9	2047.8
80°	1425.6	1487.1	1548.7	1610.2	1671.8	1733.3	1794.9	1856.4	1918.0	1940.2	1962.4
82.5°	1353.3	1412.7	1472.0	1531.3	1590.7	1650.0	1709.3	1768.7	1828.0	1849.8	1871.6
85°	1286.2	1344.4	1402.7	1460.9	1519.1	1577.3	1635.6	1693.8	1752.0	1773.1	1794.2
87.5°	1224.9	1279.8	1334.7	1389.6	1444.4	1499.3	1554.2	1609.1	1664.0	1684.7	1705.3
90°	1171.8	1225.6	1279.3	1333.1	1386.9	1440.7	1494.4	1548.2	1602.0	1621.6	1641.1
92.5°	1130.0	1182.0	1234.0	1286.0	1338.0	1390.0	1442.0	1494.0	1546.0	1564.9	1583.8
95°	1088.0	1138.0	1188.0	1238.0	1288.0	1338.0	1388.0	1438.0	1488.0	1506.0	1524.0
97.5°	1048.4	1096.9	1145.3	1193.8	1242.2	1290.7	1339.1	1387.6	1436.0	1453.1	1470.2
100°	1009.3	1056.7	1104.0	1151.3	1198.7	1246.0	1293.3	1340.7	1388.0	1404.7	1421.3
102.5°	970.2	1016.4	1062.7	1108.9	1155.1	1201.3	1247.6	1293.8	1340.0	1356.7	1373.3
105°	932.7	977.3	1022.0	1066.7	1111.3	1156.0	1200.7	1245.3	1290.0	1305.8	1321.6
107.5°	889.6	933.1	976.7	1020.2	1063.8	1107.3	1150.9	1194.4	1238.0	1253.3	1268.7
110°	844.4	886.9	929.3	971.8	1014.2	1056.7	1099.1	1141.6	1184.0	1199.6	1215.1



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	800.9	841.8	882.7	923.6	964.4	1005.3	1046.2	1087.1	1128.0	1142.7	1157.3
115°	755.6	795.1	834.7	874.2	913.8	953.3	992.9	1032.4	1072.0	1086.0	1100.0
117.5°	710.0	748.0	786.0	824.0	862.0	900.0	938.0	976.0	1014.0	1027.8	1041.6
120°	662.7	699.3	736.0	772.7	809.3	846.0	882.7	919.3	956.0	969.1	982.2
122.5°	615.1	650.2	685.3	720.4	755.6	790.7	825.8	860.9	896.0	908.9	921.8
125°	565.8	599.6	633.3	667.1	700.9	734.7	768.4	802.2	836.0	848.4	860.9
127.5°	507.3	540.7	574.0	607.3	640.7	674.0	707.3	740.7	774.0	786.0	798.0
130°	450.4	482.9	515.3	547.8	580.2	612.7	645.1	677.6	710.0	721.6	733.1
132.5°	391.6	423.1	454.7	486.2	517.8	549.3	580.9	612.4	644.0	655.1	666.2
135°	338.4	368.9	399.3	429.8	460.2	490.7	521.1	551.6	582.0	592.2	602.4
137.5°	286.4	314.9	343.3	371.8	400.2	428.7	457.1	485.6	514.0	524.2	534.4
140°	239.1	264.2	289.3	314.4	339.6	364.7	389.8	414.9	440.0	451.6	463.1
142.5°	194.2	216.4	238.7	260.9	283.1	305.3	327.6	349.8	372.0	383.3	394.7
145°	153.1	172.2	191.3	210.4	229.6	248.7	267.8	286.9	306.0	317.6	329.1
147.5°	116.2	132.4	148.7	164.9	181.1	197.3	213.6	229.8	246.0	257.6	269.1
150°	83.6	97.1	110.7	124.2	137.8	151.3	164.9	178.4	192.0	202.7	213.3
152.5°	53.1	64.2	75.3	86.4	97.6	108.7	119.8	130.9	142.0	151.8	161.6
155°	30.2	38.4	46.7	54.9	63.1	71.3	79.6	87.8	96.0	104.7	113.3
157.5°	11.6	17.1	22.7	28.2	33.8	39.3	44.9	50.4	56.0	63.3	70.7
160°	2.9	5.8	8.7	11.6	14.4	17.3	20.2	23.1	26.0	31.3	36.7
162.5°	0.4	0.9	1.3	1.8	2.2	2.7	3.1	3.6	4.0	7.3	10.7
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: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1734.0	1732.0	1730.0	1728.0	1726.0	1724.0	1722.0	1723.8	1725.6	1727.3	1729.1
5°	1698.0	1696.7	1695.3	1694.0	1692.7	1691.3	1690.0	1691.1	1692.2	1693.3	1694.4
7.5°	1670.0	1669.3	1668.7	1668.0	1667.3	1666.7	1666.0	1666.7	1667.3	1668.0	1668.7
10°	1658.7	1658.2	1657.8	1657.3	1656.9	1656.4	1656.0	1655.8	1655.6	1655.3	1655.1
12.5°	1662.0	1663.3	1664.7	1666.0	1667.3	1668.7	1670.0	1667.8	1665.6	1663.3	1661.1
15°	1692.7	1696.2	1699.8	1703.3	1706.9	1710.4	1714.0	1710.2	1706.4	1702.7	1698.9
17.5°	1732.7	1736.9	1741.1	1745.3	1749.6	1753.8	1758.0	1754.0	1750.0	1746.0	1742.0
20°	1769.3	1774.4	1779.6	1784.7	1789.8	1794.9	1800.0	1794.4	1788.9	1783.3	1777.8
22.5°	1804.7	1810.2	1815.8	1821.3	1826.9	1832.4	1838.0	1831.6	1825.1	1818.7	1812.2
25°	1837.3	1843.8	1850.2	1856.7	1863.1	1869.6	1876.0	1868.9	1861.8	1854.7	1847.6
27.5°	1868.7	1875.6	1882.4	1889.3	1896.2	1903.1	1910.0	1902.4	1894.9	1887.3	1879.8
30°	1898.7	1906.9	1915.1	1923.3	1931.6	1939.8	1948.0	1939.3	1930.7	1922.0	1913.3
32.5°	1928.0	1937.3	1946.7	1956.0	1965.3	1974.7	1984.0	1974.2	1964.4	1954.7	1944.9
35°	1958.0	1968.7	1979.3	1990.0	2000.7	2011.3	2022.0	2011.1	2000.2	1989.3	1978.4
37.5°	1988.7	2000.9	2013.1	2025.3	2037.6	2049.8	2062.0	2050.0	2038.0	2026.0	2014.0
40°	2018.7	2032.2	2045.8	2059.3	2072.9	2086.4	2100.0	2086.9	2073.8	2060.7	2047.6
42.5°	2047.3	2062.4	2077.6	2092.7	2107.8	2122.9	2138.0	2123.8	2109.6	2095.3	2081.1
45°	2079.3	2095.8	2112.2	2128.7	2145.1	2161.6	2178.0	2162.7	2147.3	2132.0	2116.7
47.5°	2114.0	2132.0	2150.0	2168.0	2186.0	2204.0	2222.0	2205.3	2188.7	2172.0	2155.3
50°	2148.0	2168.0	2188.0	2208.0	2228.0	2248.0	2268.0	2249.8	2231.6	2213.3	2195.1
52.5°	2179.3	2201.1	2222.9	2244.7	2266.4	2288.2	2310.0	2290.4	2270.9	2251.3	2231.8
55°	2212.7	2235.6	2258.4	2281.3	2304.2	2327.1	2350.0	2329.3	2308.7	2288.0	2267.3
57.5°	2241.3	2265.8	2290.2	2314.7	2339.1	2363.6	2388.0	2366.2	2344.4	2322.7	2300.9
60°	2263.3	2288.4	2313.6	2338.7	2363.8	2388.9	2414.0	2392.0	2370.0	2348.0	2326.0
62.5°	2278.0	2303.3	2328.7	2354.0	2379.3	2404.7	2430.0	2407.8	2385.6	2363.3	2341.1
65°	2284.7	2310.2	2335.8	2361.3	2386.9	2412.4	2438.0	2415.3	2392.7	2370.0	2347.3
67.5°	2276.7	2302.2	2327.8	2353.3	2378.9	2404.4	2430.0	2407.8	2385.6	2363.3	2341.1
70°	2255.3	2280.4	2305.6	2330.7	2355.8	2380.9	2406.0	2383.6	2361.1	2338.7	2316.2
72.5°	2212.7	2236.9	2261.1	2285.3	2309.6	2333.8	2358.0	2336.2	2314.4	2292.7	2270.9
75°	2150.0	2173.3	2196.7	2220.0	2243.3	2266.7	2290.0	2268.9	2247.8	2226.7	2205.6
77.5°	2070.7	2093.6	2116.4	2139.3	2162.2	2185.1	2208.0	2187.1	2166.2	2145.3	2124.4
80°	1984.7	2006.9	2029.1	2051.3	2073.6	2095.8	2118.0	2097.6	2077.1	2056.7	2036.2
82.5°	1893.3	1915.1	1936.9	1958.7	1980.4	2002.2	2024.0	2005.1	1986.2	1967.3	1948.4
85°	1815.3	1836.4	1857.6	1878.7	1899.8	1920.9	1942.0	1922.4	1902.9	1883.3	1863.8
87.5°	1726.0	1746.7	1767.3	1788.0	1808.7	1829.3	1850.0	1831.3	1812.7	1794.0	1775.3
90°	1660.7	1680.2	1699.8	1719.3	1738.9	1758.4	1778.0	1759.8	1741.6	1723.3	1705.1
92.5°	1602.7	1621.6	1640.4	1659.3	1678.2	1697.1	1716.0	1698.2	1680.4	1662.7	1644.9
95°	1542.0	1560.0	1578.0	1596.0	1614.0	1632.0	1650.0	1633.3	1616.7	1600.0	1583.3
97.5°	1487.3	1504.4	1521.6	1538.7	1555.8	1572.9	1590.0	1574.2	1558.4	1542.7	1526.9
100°	1438.0	1454.7	1471.3	1488.0	1504.7	1521.3	1538.0	1521.8	1505.6	1489.3	1473.1
102.5°	1390.0	1406.7	1423.3	1440.0	1456.7	1473.3	1490.0	1473.6	1457.1	1440.7	1424.2
105°	1337.3	1353.1	1368.9	1384.7	1400.4	1416.2	1432.0	1416.4	1400.9	1385.3	1369.8
107.5°	1284.0	1299.3	1314.7	1330.0	1345.3	1360.7	1376.0	1360.9	1345.8	1330.7	1315.6
110°	1230.7	1246.2	1261.8	1277.3	1292.9	1308.4	1324.0	1308.7	1293.3	1278.0	1262.7



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1172.0	1186.7	1201.3	1216.0	1230.7	1245.3	1260.0	1245.6	1231.1	1216.7	1202.2
115°	1114.0	1128.0	1142.0	1156.0	1170.0	1184.0	1198.0	1184.2	1170.4	1156.7	1142.9
117.5°	1055.3	1069.1	1082.9	1096.7	1110.4	1124.2	1138.0	1124.7	1111.3	1098.0	1084.7
120°	995.3	1008.4	1021.6	1034.7	1047.8	1060.9	1074.0	1061.3	1048.7	1036.0	1023.3
122.5°	934.7	947.6	960.4	973.3	986.2	999.1	1012.0	1000.0	988.0	976.0	964.0
125°	873.3	885.8	898.2	910.7	923.1	935.6	948.0	936.4	924.9	913.3	901.8
127.5°	810.0	822.0	834.0	846.0	858.0	870.0	882.0	871.1	860.2	849.3	838.4
130°	744.7	756.2	767.8	779.3	790.9	802.4	814.0	803.6	793.1	782.7	772.2
132.5°	677.3	688.4	699.6	710.7	721.8	732.9	744.0	734.2	724.4	714.7	704.9
135°	612.7	622.9	633.1	643.3	653.6	663.8	674.0	665.1	656.2	647.3	638.4
137.5°	544.7	554.9	565.1	575.3	585.6	595.8	606.0	597.8	589.6	581.3	573.1
140°	474.7	486.2	497.8	509.3	520.9	532.4	544.0	535.8	527.6	519.3	511.1
142.5°	406.0	417.3	428.7	440.0	451.3	462.7	474.0	467.1	460.2	453.3	446.4
145°	340.7	352.2	363.8	375.3	386.9	398.4	410.0	403.8	397.6	391.3	385.1
147.5°	280.7	292.2	303.8	315.3	326.9	338.4	350.0	344.2	338.4	332.7	326.9
150°	224.0	234.7	245.3	256.0	266.7	277.3	288.0	283.1	278.2	273.3	268.4
152.5°	171.3	181.1	190.9	200.7	210.4	220.2	230.0	225.8	221.6	217.3	213.1
155°	122.0	130.7	139.3	148.0	156.7	165.3	174.0	170.9	167.8	164.7	161.6
157.5°	78.0	85.3	92.7	100.0	107.3	114.7	122.0	119.6	117.1	114.7	112.2
160°	42.0	47.3	52.7	58.0	63.3	68.7	74.0	72.2	70.4	68.7	66.9
162.5°	14.0	17.3	20.7	24.0	27.3	30.7	34.0	33.1	32.2	31.3	30.4
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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1730.9	1732.7	1734.4	1736.2	1738.0	1741.1	1744.2	1747.3	1750.4	1753.6	1756.7
5°	1695.6	1696.7	1697.8	1698.9	1700.0	1703.6	1707.1	1710.7	1714.2	1717.8	1721.3
7.5°	1669.3	1670.0	1670.7	1671.3	1672.0	1675.1	1678.2	1681.3	1684.4	1687.6	1690.7
10°	1654.9	1654.7	1654.4	1654.2	1654.0	1656.2	1658.4	1660.7	1662.9	1665.1	1667.3
12.5°	1658.9	1656.7	1654.4	1652.2	1650.0	1650.4	1650.9	1651.3	1651.8	1652.2	1652.7
15°	1695.1	1691.3	1687.6	1683.8	1680.0	1675.6	1671.1	1666.7	1662.2	1657.8	1653.3
17.5°	1738.0	1734.0	1730.0	1726.0	1722.0	1712.7	1703.3	1694.0	1684.7	1675.3	1666.0
20°	1772.2	1766.7	1761.1	1755.6	1750.0	1739.1	1728.2	1717.3	1706.4	1695.6	1684.7
22.5°	1805.8	1799.3	1792.9	1786.4	1780.0	1767.1	1754.2	1741.3	1728.4	1715.6	1702.7
25°	1840.4	1833.3	1826.2	1819.1	1812.0	1796.9	1781.8	1766.7	1751.6	1736.4	1721.3
27.5°	1872.2	1864.7	1857.1	1849.6	1842.0	1824.7	1807.3	1790.0	1772.7	1755.3	1738.0
30°	1904.7	1896.0	1887.3	1878.7	1870.0	1850.4	1830.9	1811.3	1791.8	1772.2	1752.7
32.5°	1935.1	1925.3	1915.6	1905.8	1896.0	1873.8	1851.6	1829.3	1807.1	1784.9	1762.7
35°	1967.6	1956.7	1945.8	1934.9	1924.0	1899.1	1874.2	1849.3	1824.4	1799.6	1774.7
37.5°	2002.0	1990.0	1978.0	1966.0	1954.0	1926.4	1898.9	1871.3	1843.8	1816.2	1788.7
40°	2034.4	2021.3	2008.2	1995.1	1982.0	1951.8	1921.6	1891.3	1861.1	1830.9	1800.7
42.5°	2066.9	2052.7	2038.4	2024.2	2010.0	1976.7	1943.3	1910.0	1876.7	1843.3	1810.0
45°	2101.3	2086.0	2070.7	2055.3	2040.0	2003.3	1966.7	1930.0	1893.3	1856.7	1820.0
47.5°	2138.7	2122.0	2105.3	2088.7	2072.0	2031.6	1991.1	1950.7	1910.2	1869.8	1829.3
50°	2176.9	2158.7	2140.4	2122.2	2104.0	2059.6	2015.1	1970.7	1926.2	1881.8	1837.3
52.5°	2212.2	2192.7	2173.1	2153.6	2134.0	2085.6	2037.1	1988.7	1940.2	1891.8	1843.3
55°	2246.7	2226.0	2205.3	2184.7	2164.0	2111.6	2059.1	2006.7	1954.2	1901.8	1849.3
57.5°	2279.1	2257.3	2235.6	2213.8	2192.0	2136.0	2080.0	2024.0	1968.0	1912.0	1856.0
60°	2304.0	2282.0	2260.0	2238.0	2216.0	2156.4	2096.9	2037.3	1977.8	1918.2	1858.7
62.5°	2318.9	2296.7	2274.4	2252.2	2230.0	2167.8	2105.6	2043.3	1981.1	1918.9	1856.7
65°	2324.7	2302.0	2279.3	2256.7	2234.0	2169.8	2105.6	2041.3	1977.1	1912.9	1848.7
67.5°	2318.9	2296.7	2274.4	2252.2	2230.0	2164.2	2098.4	2032.7	1966.9	1901.1	1835.3
70°	2293.8	2271.3	2248.9	2226.4	2204.0	2138.0	2072.0	2006.0	1940.0	1874.0	1808.0
72.5°	2249.1	2227.3	2205.6	2183.8	2162.0	2096.4	2030.9	1965.3	1899.8	1834.2	1768.7
75°	2184.4	2163.3	2142.2	2121.1	2100.0	2035.6	1971.1	1906.7	1842.2	1777.8	1713.3
77.5°	2103.6	2082.7	2061.8	2040.9	2020.0	1957.3	1894.7	1832.0	1769.3	1706.7	1644.0
80°	2015.8	1995.3	1974.9	1954.4	1934.0	1873.3	1812.7	1752.0	1691.3	1630.7	1570.0
82.5°	1929.6	1910.7	1891.8	1872.9	1854.0	1794.2	1734.4	1674.7	1614.9	1555.1	1495.3
85°	1844.2	1824.7	1805.1	1785.6	1766.0	1708.4	1650.9	1593.3	1535.8	1478.2	1420.7
87.5°	1756.7	1738.0	1719.3	1700.7	1682.0	1626.9	1571.8	1516.7	1461.6	1406.4	1351.3
90°	1686.9	1668.7	1650.4	1632.2	1614.0	1561.3	1508.7	1456.0	1403.3	1350.7	1298.0
92.5°	1627.1	1609.3	1591.6	1573.8	1556.0	1505.3	1454.7	1404.0	1353.3	1302.7	1252.0
95°	1566.7	1550.0	1533.3	1516.7	1500.0	1451.1	1402.2	1353.3	1304.4	1255.6	1206.7
97.5°	1511.1	1495.3	1479.6	1463.8	1448.0	1400.7	1353.3	1306.0	1258.7	1211.3	1164.0
100°	1456.9	1440.7	1424.4	1408.2	1392.0	1346.4	1300.9	1255.3	1209.8	1164.2	1118.7
102.5°	1407.8	1391.3	1374.9	1358.4	1342.0	1297.6	1253.1	1208.7	1164.2	1119.8	1075.3
105°	1354.2	1338.7	1323.1	1307.6	1292.0	1248.4	1204.9	1161.3	1117.8	1074.2	1030.7
107.5°	1300.4	1285.3	1270.2	1255.1	1240.0	1198.0	1156.0	1114.0	1072.0	1030.0	988.0
110°	1247.3	1232.0	1216.7	1201.3	1186.0	1145.6	1105.1	1064.7	1024.2	983.8	943.3



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1187.8	1173.3	1158.9	1144.4	1130.0	1091.1	1052.2	1013.3	974.4	935.6	896.7
115°	1129.1	1115.3	1101.6	1087.8	1074.0	1036.7	999.3	962.0	924.7	887.3	850.0
117.5°	1071.3	1058.0	1044.7	1031.3	1018.0	982.0	946.0	910.0	874.0	838.0	802.0
120°	1010.7	998.0	985.3	972.7	960.0	925.3	890.7	856.0	821.3	786.7	752.0
122.5°	952.0	940.0	928.0	916.0	904.0	870.2	836.4	802.7	768.9	735.1	701.3
125°	890.2	878.7	867.1	855.6	844.0	811.3	778.7	746.0	713.3	680.7	648.0
127.5°	827.6	816.7	805.8	794.9	784.0	752.9	721.8	690.7	659.6	628.4	597.3
130°	761.8	751.3	740.9	730.4	720.0	690.4	660.9	631.3	601.8	572.2	542.7
132.5°	695.1	685.3	675.6	665.8	656.0	628.4	600.9	573.3	545.8	518.2	490.7
135°	629.6	620.7	611.8	602.9	594.0	568.4	542.9	517.3	491.8	466.2	440.7
137.5°	564.9	556.7	548.4	540.2	532.0	508.4	484.9	461.3	437.8	414.2	390.7
140°	502.9	494.7	486.4	478.2	470.0	448.9	427.8	406.7	385.6	364.4	343.3
142.5°	439.6	432.7	425.8	418.9	412.0	392.7	373.3	354.0	334.7	315.3	296.0
145°	378.9	372.7	366.4	360.2	354.0	336.7	319.3	302.0	284.7	267.3	250.0
147.5°	321.1	315.3	309.6	303.8	298.0	282.4	266.9	251.3	235.8	220.2	204.7
150°	263.6	258.7	253.8	248.9	244.0	230.4	216.9	203.3	189.8	176.2	162.7
152.5°	208.9	204.7	200.4	196.2	192.0	180.2	168.4	156.7	144.9	133.1	121.3
155°	158.4	155.3	152.2	149.1	146.0	136.0	126.0	116.0	106.0	96.0	86.0
157.5°	109.8	107.3	104.9	102.4	100.0	92.2	84.4	76.7	68.9	61.1	53.3
160°	65.1	63.3	61.6	59.8	58.0	53.3	48.7	44.0	39.3	34.7	30.0
162.5°	29.6	28.7	27.8	26.9	26.0	23.8	21.6	19.3	17.1	14.9	12.7
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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1759.8	1762.9	1766.0	1766.9	1767.8	1768.7	1769.6	1770.4	1771.3	1772.2	1773.1
5°	1724.9	1728.4	1732.0	1734.0	1736.0	1738.0	1740.0	1742.0	1744.0	1746.0	1748.0
7.5°	1693.8	1696.9	1700.0	1702.2	1704.4	1706.7	1708.9	1711.1	1713.3	1715.6	1717.8
10°	1669.6	1671.8	1674.0	1675.6	1677.1	1678.7	1680.2	1681.8	1683.3	1684.9	1686.4
12.5°	1653.1	1653.6	1654.0	1654.2	1654.4	1654.7	1654.9	1655.1	1655.3	1655.6	1655.8
15°	1648.9	1644.4	1640.0	1637.8	1635.6	1633.3	1631.1	1628.9	1626.7	1624.4	1622.2
17.5°	1656.7	1647.3	1638.0	1632.2	1626.4	1620.7	1614.9	1609.1	1603.3	1597.6	1591.8
20°	1673.8	1662.9	1652.0	1640.7	1629.3	1618.0	1606.7	1595.3	1584.0	1572.7	1561.3
22.5°	1689.8	1676.9	1664.0	1647.3	1630.7	1614.0	1597.3	1580.7	1564.0	1547.3	1530.7
25°	1706.2	1691.1	1676.0	1653.8	1631.6	1609.3	1587.1	1564.9	1542.7	1520.4	1498.2
27.5°	1720.7	1703.3	1686.0	1658.7	1631.3	1604.0	1576.7	1549.3	1522.0	1494.7	1467.3
30°	1733.1	1713.6	1694.0	1662.4	1630.9	1599.3	1567.8	1536.2	1504.7	1473.1	1441.6
32.5°	1740.4	1718.2	1696.0	1661.6	1627.1	1592.7	1558.2	1523.8	1489.3	1454.9	1420.4
35°	1749.8	1724.9	1700.0	1662.7	1625.3	1588.0	1550.7	1513.3	1476.0	1438.7	1401.3
37.5°	1761.1	1733.6	1706.0	1665.1	1624.2	1583.3	1542.4	1501.6	1460.7	1419.8	1378.9
40°	1770.4	1740.2	1710.0	1666.0	1622.0	1578.0	1534.0	1490.0	1446.0	1402.0	1358.0
42.5°	1776.7	1743.3	1710.0	1662.9	1615.8	1568.7	1521.6	1474.4	1427.3	1380.2	1333.1
45°	1783.3	1746.7	1710.0	1659.6	1609.1	1558.7	1508.2	1457.8	1407.3	1356.9	1306.4
47.5°	1788.9	1748.4	1708.0	1654.4	1600.9	1547.3	1493.8	1440.2	1386.7	1333.1	1279.6
50°	1792.9	1748.4	1704.0	1647.1	1590.2	1533.3	1476.4	1419.6	1362.7	1305.8	1248.9
52.5°	1794.9	1746.4	1698.0	1638.0	1578.0	1518.0	1458.0	1398.0	1338.0	1278.0	1218.0
55°	1796.9	1744.4	1692.0	1628.9	1565.8	1502.7	1439.6	1376.4	1313.3	1250.2	1187.1
57.5°	1800.0	1744.0	1688.0	1621.3	1554.7	1488.0	1421.3	1354.7	1288.0	1221.3	1154.7
60°	1799.1	1739.6	1680.0	1610.0	1540.0	1470.0	1400.0	1330.0	1260.0	1190.0	1120.0
62.5°	1794.4	1732.2	1670.0	1596.9	1523.8	1450.7	1377.6	1304.4	1231.3	1158.2	1085.1
65°	1784.4	1720.2	1656.0	1579.3	1502.7	1426.0	1349.3	1272.7	1196.0	1119.3	1042.7
67.5°	1769.6	1703.8	1638.0	1558.7	1479.3	1400.0	1320.7	1241.3	1162.0	1082.7	1003.3
70°	1742.0	1676.0	1610.0	1528.9	1447.8	1366.7	1285.6	1204.4	1123.3	1042.2	961.1
72.5°	1703.1	1637.6	1572.0	1489.8	1407.6	1325.3	1243.1	1160.9	1078.7	996.4	914.2
75°	1648.9	1584.4	1520.0	1437.8	1355.6	1273.3	1191.1	1108.9	1026.7	944.4	862.2
77.5°	1581.3	1518.7	1456.0	1375.3	1294.7	1214.0	1133.3	1052.7	972.0	891.3	810.7
80°	1509.3	1448.7	1388.0	1309.3	1230.7	1152.0	1073.3	994.7	916.0	837.3	758.7
82.5°	1435.6	1375.8	1316.0	1239.8	1163.6	1087.3	1011.1	934.9	858.7	782.4	706.2
85°	1363.1	1305.6	1248.0	1174.2	1100.4	1026.7	952.9	879.1	805.3	731.6	657.8
87.5°	1296.2	1241.1	1186.0	1114.7	1043.3	972.0	900.7	829.3	758.0	686.7	615.3
90°	1245.3	1192.7	1140.0	1070.7	1001.3	932.0	862.7	793.3	724.0	654.7	585.3
92.5°	1201.3	1150.7	1100.0	1032.7	965.3	898.0	830.7	763.3	696.0	628.7	561.3
95°	1157.8	1108.9	1060.0	994.0	928.0	862.0	796.0	730.0	664.0	598.0	532.0
97.5°	1116.7	1069.3	1022.0	957.6	893.1	828.7	764.2	699.8	635.3	570.9	506.4
100°	1073.1	1027.6	982.0	919.1	856.2	793.3	730.4	667.6	604.7	541.8	478.9
102.5°	1030.9	986.4	942.0	880.7	819.3	758.0	696.7	635.3	574.0	512.7	451.3
105°	987.1	943.6	900.0	840.4	780.9	721.3	661.8	602.2	542.7	483.1	423.6
107.5°	946.0	904.0	862.0	803.8	745.6	687.3	629.1	570.9	512.7	454.4	396.2
110°	902.9	862.4	822.0	765.3	708.7	652.0	595.3	538.7	482.0	425.3	368.7



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	857.8	818.9	780.0	725.1	670.2	615.3	560.4	505.6	450.7	395.8	340.9
115°	812.7	775.3	738.0	684.9	631.8	578.7	525.6	472.4	419.3	366.2	313.1
117.5°	766.0	730.0	694.0	642.9	591.8	540.7	489.6	438.4	387.3	336.2	285.1
120°	717.3	682.7	648.0	599.3	550.7	502.0	453.3	404.7	356.0	307.3	258.7
122.5°	667.6	633.8	600.0	554.0	508.0	462.0	416.0	370.0	324.0	278.0	232.0
125°	615.3	582.7	550.0	506.9	463.8	420.7	377.6	334.4	291.3	248.2	205.1
127.5°	566.2	535.1	504.0	463.3	422.7	382.0	341.3	300.7	260.0	219.3	178.7
130°	513.1	483.6	454.0	416.4	378.9	341.3	303.8	266.2	228.7	191.1	153.6
132.5°	463.1	435.6	408.0	373.3	338.7	304.0	269.3	234.7	200.0	165.3	130.7
135°	415.1	389.6	364.0	332.0	300.0	268.0	236.0	204.0	172.0	140.0	108.0
137.5°	367.1	343.6	320.0	291.1	262.2	233.3	204.4	175.6	146.7	117.8	88.9
140°	322.2	301.1	280.0	253.6	227.1	200.7	174.2	147.8	121.3	94.9	68.4
142.5°	276.7	257.3	238.0	214.7	191.3	168.0	144.7	121.3	98.0	74.7	51.3
145°	232.7	215.3	198.0	178.0	158.0	138.0	118.0	98.0	78.0	58.0	38.0
147.5°	189.1	173.6	158.0	142.0	126.0	110.0	94.0	78.0	62.0	46.0	30.0
150°	149.1	135.6	122.0	109.6	97.1	84.7	72.2	59.8	47.3	34.9	22.4
152.5°	109.6	97.8	86.0	77.1	68.2	59.3	50.4	41.6	32.7	23.8	14.9
155°	76.0	66.0	56.0	50.2	44.4	38.7	32.9	27.1	21.3	15.6	9.8
157.5°	45.6	37.8	30.0	26.9	23.8	20.7	17.6	14.4	11.3	8.2	5.1
160°	25.3	20.7	16.0	14.4	12.9	11.3	9.8	8.2	6.7	5.1	3.6
162.5°	10.4	8.2	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4
165°	3.3	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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	0.2	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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1774.0	1779.6	1785.1	1790.7	1796.2	1801.8	1807.3	1812.9	1818.4	1824.0	1824.4
5°	1750.0	1757.3	1764.7	1772.0	1779.3	1786.7	1794.0	1801.3	1808.7	1816.0	1818.9
7.5°	1720.0	1728.9	1737.8	1746.7	1755.6	1764.4	1773.3	1782.2	1791.1	1800.0	1805.6
10°	1688.0	1698.4	1708.9	1719.3	1729.8	1740.2	1750.7	1761.1	1771.6	1782.0	1790.2
12.5°	1656.0	1667.1	1678.2	1689.3	1700.4	1711.6	1722.7	1733.8	1744.9	1756.0	1766.7
15°	1620.0	1631.8	1643.6	1655.3	1667.1	1678.9	1690.7	1702.4	1714.2	1726.0	1739.6
17.5°	1586.0	1597.8	1609.6	1621.3	1633.1	1644.9	1656.7	1668.4	1680.2	1692.0	1708.4
20°	1550.0	1561.1	1572.2	1583.3	1594.4	1605.6	1616.7	1627.8	1638.9	1650.0	1669.6
22.5°	1514.0	1524.2	1534.4	1544.7	1554.9	1565.1	1575.3	1585.6	1595.8	1606.0	1629.1
25°	1476.0	1484.9	1493.8	1502.7	1511.6	1520.4	1529.3	1538.2	1547.1	1556.0	1582.4
27.5°	1440.0	1447.1	1454.2	1461.3	1468.4	1475.6	1482.7	1489.8	1496.9	1504.0	1534.0
30°	1410.0	1414.2	1418.4	1422.7	1426.9	1431.1	1435.3	1439.6	1443.8	1448.0	1482.0
32.5°	1386.0	1386.2	1386.4	1386.7	1386.9	1387.1	1387.3	1387.6	1387.8	1388.0	1426.0
35°	1364.0	1359.6	1355.1	1350.7	1346.2	1341.8	1337.3	1332.9	1328.4	1324.0	1366.9
37.5°	1338.0	1329.3	1320.7	1312.0	1303.3	1294.7	1286.0	1277.3	1268.7	1260.0	1307.8
40°	1314.0	1300.7	1287.3	1274.0	1260.7	1247.3	1234.0	1220.7	1207.3	1194.0	1246.9
42.5°	1286.0	1268.0	1250.0	1232.0	1214.0	1196.0	1178.0	1160.0	1142.0	1124.0	1182.2
45°	1256.0	1233.6	1211.1	1188.7	1166.2	1143.8	1121.3	1098.9	1076.4	1054.0	1116.9
47.5°	1226.0	1199.1	1172.2	1145.3	1118.4	1091.6	1064.7	1037.8	1010.9	984.0	1052.0
50°	1192.0	1161.1	1130.2	1099.3	1068.4	1037.6	1006.7	975.8	944.9	914.0	986.9
52.5°	1158.0	1122.7	1087.3	1052.0	1016.7	981.3	946.0	910.7	875.3	840.0	918.0
55°	1124.0	1084.4	1044.9	1005.3	965.8	926.2	886.7	847.1	807.6	768.0	850.4
57.5°	1088.0	1044.7	1001.3	958.0	914.7	871.3	828.0	784.7	741.3	698.0	784.4
60°	1050.0	1003.1	956.2	909.3	862.4	815.6	768.7	721.8	674.9	628.0	718.2
62.5°	1012.0	961.6	911.1	860.7	810.2	759.8	709.3	658.9	608.4	558.0	651.8
65°	966.0	912.9	859.8	806.7	753.6	700.4	647.3	594.2	541.1	488.0	584.9
67.5°	924.0	867.3	810.7	754.0	697.3	640.7	584.0	527.3	470.7	414.0	514.2
70°	880.0	820.9	761.8	702.7	643.6	584.4	525.3	466.2	407.1	348.0	450.4
72.5°	832.0	771.1	710.2	649.3	588.4	527.6	466.7	405.8	344.9	284.0	388.2
75°	780.0	718.2	656.4	594.7	532.9	471.1	409.3	347.6	285.8	224.0	329.1
77.5°	730.0	667.6	605.1	542.7	480.2	417.8	355.3	292.9	230.4	168.0	273.6
80°	680.0	617.6	555.1	492.7	430.2	367.8	305.3	242.9	180.4	118.0	223.1
82.5°	630.0	568.2	506.4	444.7	382.9	321.1	259.3	197.6	135.8	74.0	178.0
85°	584.0	523.3	462.7	402.0	341.3	280.7	220.0	159.3	98.7	38.0	140.0
87.5°	544.0	484.9	425.8	366.7	307.6	248.4	189.3	130.2	71.1	12.0	111.3
90°	516.0	458.9	401.8	344.7	287.6	230.4	173.3	116.2	59.1	2.0	97.6
92.5°	494.0	439.1	384.2	329.3	274.4	219.6	164.7	109.8	54.9	0.0	92.2
95°	466.0	414.4	362.9	311.3	259.8	208.2	156.7	105.1	53.6	2.0	90.2
97.5°	442.0	392.9	343.8	294.7	245.6	196.4	147.3	98.2	49.1	0.0	84.4
100°	416.0	370.0	324.0	278.0	232.0	186.0	140.0	94.0	48.0	2.0	82.2
102.5°	390.0	346.9	303.8	260.7	217.6	174.4	131.3	88.2	45.1	2.0	78.9
105°	364.0	323.8	283.6	243.3	203.1	162.9	122.7	82.4	42.2	2.0	74.2
107.5°	338.0	300.7	263.3	226.0	188.7	151.3	114.0	76.7	39.3	2.0	70.4
110°	312.0	277.6	243.1	208.7	174.2	139.8	105.3	70.9	36.4	2.0	66.0



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	286.0	254.4	222.9	191.3	159.8	128.2	96.7	65.1	33.6	2.0	61.3
115°	260.0	231.3	202.7	174.0	145.3	116.7	88.0	59.3	30.7	2.0	56.4
117.5°	234.0	208.2	182.4	156.7	130.9	105.1	79.3	53.6	27.8	2.0	51.6
120°	210.0	186.9	163.8	140.7	117.6	94.4	71.3	48.2	25.1	2.0	46.9
122.5°	186.0	165.6	145.1	124.7	104.2	83.8	63.3	42.9	22.4	2.0	42.2
125°	162.0	144.2	126.4	108.7	90.9	73.1	55.3	37.6	19.8	2.0	37.3
127.5°	138.0	122.9	107.8	92.7	77.6	62.4	47.3	32.2	17.1	2.0	31.8
130°	116.0	103.3	90.7	78.0	65.3	52.7	40.0	27.3	14.7	2.0	26.7
132.5°	96.0	85.6	75.1	64.7	54.2	43.8	33.3	22.9	12.4	2.0	21.8
135°	76.0	67.8	59.6	51.3	43.1	34.9	26.7	18.4	10.2	2.0	17.3
137.5°	60.0	53.6	47.1	40.7	34.2	27.8	21.3	14.9	8.4	2.0	13.8
140°	42.0	37.6	33.1	28.7	24.2	19.8	15.3	10.9	6.4	2.0	10.2
142.5°	28.0	25.1	22.2	19.3	16.4	13.6	10.7	7.8	4.9	2.0	8.0
145°	18.0	16.2	14.4	12.7	10.9	9.1	7.3	5.6	3.8	2.0	5.8
147.5°	14.0	12.7	11.3	10.0	8.7	7.3	6.0	4.7	3.3	2.0	4.7
150°	10.0	9.1	8.2	7.3	6.4	5.6	4.7	3.8	2.9	2.0	3.8
152.5°	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4	2.0	3.3
155°	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	2.9
157.5°	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	4.2
160°	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	4.0
162.5°	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	3.8
165°	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	3.6
167.5°	0.0	0.4	0.9	1.3	1.8	2.2	2.7	3.1	3.6	4.0	3.6
170°	0.0	0.4	0.9	1.3	1.8	2.2	2.7	3.1	3.6	4.0	3.6
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	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0	3.6
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: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1824.9	1825.3	1825.8	1826.2	1826.7	1827.1	1827.6	1828.0	1829.8	1831.6	1833.3
5°	1821.8	1824.7	1827.6	1830.4	1833.3	1836.2	1839.1	1842.0	1846.2	1850.4	1854.7
7.5°	1811.1	1816.7	1822.2	1827.8	1833.3	1838.9	1844.4	1850.0	1856.9	1863.8	1870.7
10°	1798.4	1806.7	1814.9	1823.1	1831.3	1839.6	1847.8	1856.0	1865.6	1875.1	1884.7
12.5°	1777.3	1788.0	1798.7	1809.3	1820.0	1830.7	1841.3	1852.0	1865.1	1878.2	1891.3
15°	1753.1	1766.7	1780.2	1793.8	1807.3	1820.9	1834.4	1848.0	1864.7	1881.3	1898.0
17.5°	1724.9	1741.3	1757.8	1774.2	1790.7	1807.1	1823.6	1840.0	1861.3	1882.7	1904.0
20°	1689.1	1708.7	1728.2	1747.8	1767.3	1786.9	1806.4	1826.0	1852.9	1879.8	1906.7
22.5°	1652.2	1675.3	1698.4	1721.6	1744.7	1767.8	1790.9	1814.0	1846.9	1879.8	1912.7
25°	1608.9	1635.3	1661.8	1688.2	1714.7	1741.1	1767.6	1794.0	1833.6	1873.1	1912.7
27.5°	1564.0	1594.0	1624.0	1654.0	1684.0	1714.0	1744.0	1774.0	1820.2	1866.4	1912.7
30°	1516.0	1550.0	1584.0	1618.0	1652.0	1686.0	1720.0	1754.0	1806.2	1858.4	1910.7
32.5°	1464.0	1502.0	1540.0	1578.0	1616.0	1654.0	1692.0	1730.0	1788.2	1846.4	1904.7
35°	1409.8	1452.7	1495.6	1538.4	1581.3	1624.2	1667.1	1710.0	1773.8	1837.6	1901.3
37.5°	1355.6	1403.3	1451.1	1498.9	1546.7	1594.4	1642.2	1690.0	1759.1	1828.2	1897.3
40°	1299.8	1352.7	1405.6	1458.4	1511.3	1564.2	1617.1	1670.0	1744.2	1818.4	1892.7
42.5°	1240.4	1298.7	1356.9	1415.1	1473.3	1531.6	1589.8	1648.0	1727.1	1806.2	1885.3
45°	1179.8	1242.7	1305.6	1368.4	1431.3	1494.2	1557.1	1620.0	1704.4	1788.9	1873.3
47.5°	1120.0	1188.0	1256.0	1324.0	1392.0	1460.0	1528.0	1596.0	1684.7	1773.3	1862.0
50°	1059.8	1132.7	1205.6	1278.4	1351.3	1424.2	1497.1	1570.0	1662.9	1755.8	1848.7
52.5°	996.0	1074.0	1152.0	1230.0	1308.0	1386.0	1464.0	1542.0	1638.7	1735.3	1832.0
55°	932.9	1015.3	1097.8	1180.2	1262.7	1345.1	1427.6	1510.0	1610.7	1711.3	1812.0
57.5°	870.9	957.3	1043.8	1130.2	1216.7	1303.1	1389.6	1476.0	1580.9	1685.8	1790.7
60°	808.4	898.7	988.9	1079.1	1169.3	1259.6	1349.8	1440.0	1548.7	1657.3	1766.0
62.5°	745.6	839.3	933.1	1026.9	1120.7	1214.4	1308.2	1402.0	1514.4	1626.9	1739.3
65°	681.8	778.7	875.6	972.4	1069.3	1166.2	1263.1	1360.0	1476.2	1592.4	1708.7
67.5°	614.4	714.7	814.9	915.1	1015.3	1115.6	1215.8	1316.0	1435.8	1555.6	1675.3
70°	552.9	655.3	757.8	860.2	962.7	1065.1	1167.6	1270.0	1392.7	1515.3	1638.0
72.5°	492.4	596.7	700.9	805.1	909.3	1013.6	1117.8	1222.0	1346.2	1470.4	1594.7
75°	434.2	539.3	644.4	749.6	854.7	959.8	1064.9	1170.0	1295.6	1421.1	1546.7
77.5°	379.1	484.7	590.2	695.8	801.3	906.9	1012.4	1118.0	1243.6	1369.1	1494.7
80°	328.2	433.3	538.4	643.6	748.7	853.8	958.9	1064.0	1188.9	1313.8	1438.7
82.5°	282.0	386.0	490.0	594.0	698.0	802.0	906.0	1010.0	1133.8	1257.6	1381.3
85°	242.0	344.0	446.0	548.0	650.0	752.0	854.0	956.0	1078.2	1200.4	1322.7
87.5°	210.7	310.0	409.3	508.7	608.0	707.3	806.7	906.0	1026.0	1146.0	1266.0
90°	193.1	288.7	384.2	479.8	575.3	670.9	766.4	862.0	979.3	1096.7	1214.0
92.5°	184.4	276.7	368.9	461.1	553.3	645.6	737.8	830.0	945.1	1060.2	1175.3
95°	178.4	266.7	354.9	443.1	531.3	619.6	707.8	796.0	909.3	1022.7	1136.0
97.5°	168.9	253.3	337.8	422.2	506.7	591.1	675.6	760.0	871.8	983.6	1095.3
100°	162.4	242.7	322.9	403.1	483.3	563.6	643.8	724.0	834.0	944.0	1054.0
102.5°	155.8	232.7	309.6	386.4	463.3	540.2	617.1	694.0	801.6	909.1	1016.7
105°	146.4	218.7	290.9	363.1	435.3	507.6	579.8	652.0	757.8	863.6	969.3
107.5°	138.9	207.3	275.8	344.2	412.7	481.1	549.6	618.0	720.9	823.8	926.7
110°	130.0	194.0	258.0	322.0	386.0	450.0	514.0	578.0	678.2	778.4	878.7



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	120.7	180.0	239.3	298.7	358.0	417.3	476.7	536.0	633.8	731.6	829.3
115°	110.9	165.3	219.8	274.2	328.7	383.1	437.6	492.0	587.3	682.7	778.0
117.5°	101.1	150.7	200.2	249.8	299.3	348.9	398.4	448.0	540.2	632.4	724.7
120°	91.8	136.7	181.6	226.4	271.3	316.2	361.1	406.0	495.1	584.2	673.3
122.5°	82.4	122.7	162.9	203.1	243.3	283.6	323.8	364.0	449.6	535.1	620.7
125°	72.7	108.0	143.3	178.7	214.0	249.3	284.7	320.0	401.6	483.1	564.7
127.5°	61.6	91.3	121.1	150.9	180.7	210.4	240.2	270.0	346.9	423.8	500.7
130°	51.3	76.0	100.7	125.3	150.0	174.7	199.3	224.0	293.8	363.6	433.3
132.5°	41.6	61.3	81.1	100.9	120.7	140.4	160.2	180.0	242.9	305.8	368.7
135°	32.7	48.0	63.3	78.7	94.0	109.3	124.7	140.0	196.4	252.9	309.3
137.5°	25.6	37.3	49.1	60.9	72.7	84.4	96.2	108.0	158.0	208.0	258.0
140°	18.4	26.7	34.9	43.1	51.3	59.6	67.8	76.0	119.8	163.6	207.3
142.5°	14.0	20.0	26.0	32.0	38.0	44.0	50.0	56.0	93.3	130.7	168.0
145°	9.6	13.3	17.1	20.9	24.7	28.4	32.2	36.0	67.6	99.1	130.7
147.5°	7.3	10.0	12.7	15.3	18.0	20.7	23.3	26.0	51.3	76.7	102.0
150°	5.6	7.3	9.1	10.9	12.7	14.4	16.2	18.0	37.3	56.7	76.0
152.5°	4.7	6.0	7.3	8.7	10.0	11.3	12.7	14.0	28.0	42.0	56.0
155°	3.8	4.7	5.6	6.4	7.3	8.2	9.1	10.0	18.9	27.8	36.7
157.5°	4.4	4.7	4.9	5.1	5.3	5.6	5.8	6.0	11.1	16.2	21.3
160°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.7	9.3	12.0
162.5°	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	3.3	4.7	6.0
165°	3.1	2.7	2.2	1.8	1.3	0.9	0.4	0.0	0.4	0.9	1.3
167.5°	3.1	2.7	2.2	1.8	1.3	0.9	0.4	0.0	0.0	0.0	0.0
170°	3.1	2.7	2.2	1.8	1.3	0.9	0.4	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°	3.1	2.7	2.2	1.8	1.3	0.9	0.4	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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1835.1	1836.9	1838.7	1840.4	1842.2	1844.0	1844.9	1845.8	1846.7	1847.6	1848.4
5°	1858.9	1863.1	1867.3	1871.6	1875.8	1880.0	1882.2	1884.4	1886.7	1888.9	1891.1
7.5°	1877.6	1884.4	1891.3	1898.2	1905.1	1912.0	1916.2	1920.4	1924.7	1928.9	1933.1
10°	1894.2	1903.8	1913.3	1922.9	1932.4	1942.0	1949.1	1956.2	1963.3	1970.4	1977.6
12.5°	1904.4	1917.6	1930.7	1943.8	1956.9	1970.0	1980.0	1990.0	2000.0	2010.0	2020.0
15°	1914.7	1931.3	1948.0	1964.7	1981.3	1998.0	2011.8	2025.6	2039.3	2053.1	2066.9
17.5°	1925.3	1946.7	1968.0	1989.3	2010.7	2032.0	2050.9	2069.8	2088.7	2107.6	2126.4
20°	1933.6	1960.4	1987.3	2014.2	2041.1	2068.0	2091.1	2114.2	2137.3	2160.4	2183.6
22.5°	1945.6	1978.4	2011.3	2044.2	2077.1	2110.0	2136.2	2162.4	2188.7	2214.9	2241.1
25°	1952.2	1991.8	2031.3	2070.9	2110.4	2150.0	2179.8	2209.6	2239.3	2269.1	2298.9
27.5°	1958.9	2005.1	2051.3	2097.6	2143.8	2190.0	2222.7	2255.3	2288.0	2320.7	2353.3
30°	1962.9	2015.1	2067.3	2119.6	2171.8	2224.0	2260.0	2296.0	2332.0	2368.0	2404.0
32.5°	1962.9	2021.1	2079.3	2137.6	2195.8	2254.0	2293.6	2333.1	2372.7	2412.2	2451.8
35°	1965.1	2028.9	2092.7	2156.4	2220.2	2284.0	2327.3	2370.7	2414.0	2457.3	2500.7
37.5°	1966.4	2035.6	2104.7	2173.8	2242.9	2312.0	2359.1	2406.2	2453.3	2500.4	2547.5
40°	1966.9	2041.1	2115.3	2189.6	2263.8	2338.0	2388.9	2439.8	2490.6	2541.5	2592.4
42.5°	1964.4	2043.6	2122.7	2201.8	2280.9	2360.0	2414.7	2469.3	2524.0	2578.6	2633.3
45°	1957.8	2042.2	2126.7	2211.1	2295.6	2380.0	2438.9	2497.8	2556.6	2615.5	2674.4
47.5°	1950.7	2039.3	2128.0	2216.7	2305.3	2394.0	2457.8	2521.5	2585.3	2649.1	2712.8
50°	1941.6	2034.4	2127.3	2220.2	2313.1	2406.0	2474.4	2542.9	2611.3	2679.7	2748.2
52.5°	1928.7	2025.3	2122.0	2218.7	2315.3	2412.0	2485.8	2559.5	2633.3	2707.1	2780.8
55°	1912.7	2013.3	2114.0	2214.7	2315.3	2416.0	2494.2	2572.4	2650.6	2728.8	2807.1
57.5°	1895.6	2000.4	2105.3	2210.2	2315.1	2420.0	2502.7	2585.3	2668.0	2750.6	2833.3
60°	1874.7	1983.3	2092.0	2200.7	2309.3	2418.0	2504.7	2591.3	2678.0	2764.6	2851.3
62.5°	1851.8	1964.2	2076.7	2189.1	2301.6	2414.0	2504.0	2594.0	2684.0	2774.0	2863.9
65°	1824.9	1941.1	2057.3	2173.6	2289.8	2406.0	2498.7	2591.3	2684.0	2776.6	2869.3
67.5°	1795.1	1914.9	2034.7	2154.4	2274.2	2394.0	2488.7	2583.3	2678.0	2772.6	2867.3
70°	1760.7	1883.3	2006.0	2128.7	2251.3	2374.0	2470.4	2566.9	2663.3	2759.7	2856.2
72.5°	1718.9	1843.1	1967.3	2091.6	2215.8	2340.0	2437.8	2535.5	2633.3	2731.1	2828.8
75°	1672.2	1797.8	1923.3	2048.9	2174.4	2300.0	2398.4	2496.9	2595.3	2693.7	2792.2
77.5°	1620.2	1745.8	1871.3	1996.9	2122.4	2248.0	2346.0	2444.0	2542.0	2640.0	2737.9
80°	1563.6	1688.4	1813.3	1938.2	2063.1	2188.0	2285.1	2382.2	2479.3	2576.4	2673.5
82.5°	1505.1	1628.9	1752.7	1876.4	2000.2	2124.0	2220.4	2316.9	2413.3	2509.7	2606.2
85°	1444.9	1567.1	1689.3	1811.6	1933.8	2056.0	2150.0	2244.0	2338.0	2432.0	2525.9
87.5°	1386.0	1506.0	1626.0	1746.0	1866.0	1986.0	2078.7	2171.3	2264.0	2356.6	2449.3
90°	1331.3	1448.7	1566.0	1683.3	1800.7	1918.0	2007.8	2097.6	2187.3	2277.1	2366.9
92.5°	1290.4	1405.6	1520.7	1635.8	1750.9	1866.0	1953.3	2040.7	2128.0	2215.3	2302.7
95°	1249.3	1362.7	1476.0	1589.3	1702.7	1816.0	1902.0	1988.0	2074.0	2160.0	2246.0
97.5°	1207.1	1318.9	1430.7	1542.4	1654.2	1766.0	1849.8	1933.6	2017.3	2101.1	2184.9
100°	1164.0	1274.0	1384.0	1494.0	1604.0	1714.0	1795.1	1876.2	1957.3	2038.4	2119.6
102.5°	1124.2	1231.8	1339.3	1446.9	1554.4	1662.0	1741.6	1821.1	1900.7	1980.2	2059.8
105°	1075.1	1180.9	1286.7	1392.4	1498.2	1604.0	1682.2	1760.4	1838.7	1916.9	1995.1
107.5°	1029.6	1132.4	1235.3	1338.2	1441.1	1544.0	1620.9	1697.8	1774.7	1851.6	1928.4
110°	978.9	1079.1	1179.3	1279.6	1379.8	1480.0	1555.1	1630.2	1705.3	1780.4	1855.6



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	927.1	1024.9	1122.7	1220.4	1318.2	1416.0	1489.1	1562.2	1635.3	1708.4	1781.6
115°	873.3	968.7	1064.0	1159.3	1254.7	1350.0	1421.1	1492.2	1563.3	1634.4	1705.6
117.5°	816.9	909.1	1001.3	1093.6	1185.8	1278.0	1347.1	1416.2	1485.3	1554.4	1623.6
120°	762.4	851.6	940.7	1029.8	1118.9	1208.0	1274.2	1340.4	1406.7	1472.9	1539.1
122.5°	706.2	791.8	877.3	962.9	1048.4	1134.0	1197.8	1261.6	1325.3	1389.1	1452.9
125°	646.2	727.8	809.3	890.9	972.4	1054.0	1115.1	1176.2	1237.3	1298.4	1359.6
127.5°	577.6	654.4	731.3	808.2	885.1	962.0	1021.8	1081.6	1141.3	1201.1	1260.9
130°	503.1	572.9	642.7	712.4	782.2	852.0	912.2	972.4	1032.7	1092.9	1153.1
132.5°	431.6	494.4	557.3	620.2	683.1	746.0	805.8	865.6	925.3	985.1	1044.9
135°	365.8	422.2	478.7	535.1	591.6	648.0	705.8	763.6	821.3	879.1	936.9
137.5°	308.0	358.0	408.0	458.0	508.0	558.0	611.6	665.1	718.7	772.2	825.8
140°	251.1	294.9	338.7	382.4	426.2	470.0	518.2	566.4	614.7	662.9	711.1
142.5°	205.3	242.7	280.0	317.3	354.7	392.0	434.7	477.3	520.0	562.7	605.3
145°	162.2	193.8	225.3	256.9	288.4	320.0	356.9	393.8	430.7	467.6	504.4
147.5°	127.3	152.7	178.0	203.3	228.7	254.0	285.6	317.1	348.7	380.2	411.8
150°	95.3	114.7	134.0	153.3	172.7	192.0	218.2	244.4	270.7	296.9	323.1
152.5°	70.0	84.0	98.0	112.0	126.0	140.0	161.3	182.7	204.0	225.3	246.7
155°	45.6	54.4	63.3	72.2	81.1	90.0	107.1	124.2	141.3	158.4	175.6
157.5°	26.4	31.6	36.7	41.8	46.9	52.0	64.9	77.8	90.7	103.6	116.4
160°	14.7	17.3	20.0	22.7	25.3	28.0	36.2	44.4	52.7	60.9	69.1
162.5°	7.3	8.7	10.0	11.3	12.7	14.0	18.0	22.0	26.0	30.0	34.0
165°	1.8	2.2	2.7	3.1	3.6	4.0	5.6	7.1	8.7	10.2	11.8
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	1.3	1.8	2.2
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: P201415

CATALOG NUMBER: 8LBLEDD4-16-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°	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0	1796.0
2.5°	1849.3	1850.2	1851.1	1852.0	1850.0	1848.0	1846.0	1844.0	1842.0	1840.0	1838.0
5°	1893.3	1895.6	1897.8	1900.0	1899.8	1899.6	1899.3	1899.1	1898.9	1898.7	1898.4
7.5°	1937.3	1941.6	1945.8	1950.0	1950.4	1950.9	1951.3	1951.8	1952.2	1952.7	1953.1
10°	1984.7	1991.8	1998.9	2006.0	2006.9	2007.8	2008.7	2009.6	2010.4	2011.3	2012.2
12.5°	2030.0	2040.0	2050.0	2060.0	2062.7	2065.3	2068.0	2070.7	2073.3	2076.0	2078.7
15°	2080.7	2094.4	2108.2	2122.0	2126.9	2131.8	2136.7	2141.6	2146.4	2151.3	2156.2
17.5°	2145.3	2164.2	2183.1	2202.0	2208.0	2214.0	2220.0	2226.0	2232.0	2238.0	2244.0
20°	2206.7	2229.8	2252.9	2276.0	2283.3	2290.7	2298.0	2305.3	2312.7	2320.0	2327.3
22.5°	2267.3	2293.6	2319.8	2346.0	2354.9	2363.8	2372.7	2381.6	2390.4	2399.3	2408.2
25°	2328.7	2358.4	2388.2	2418.0	2428.0	2438.0	2448.0	2458.0	2468.0	2478.0	2488.0
27.5°	2386.0	2418.7	2451.3	2484.0	2495.6	2507.1	2518.7	2530.2	2541.8	2553.3	2564.9
30°	2440.0	2476.0	2512.0	2548.0	2561.1	2574.2	2587.3	2600.4	2613.6	2626.7	2639.8
32.5°	2491.3	2530.9	2570.4	2610.0	2625.3	2640.6	2656.0	2671.3	2686.6	2701.9	2717.3
35°	2544.0	2587.3	2630.7	2674.0	2690.9	2707.8	2724.6	2741.5	2758.4	2775.3	2792.1
37.5°	2594.6	2641.7	2688.8	2735.9	2754.6	2773.2	2791.9	2810.6	2829.2	2847.9	2866.6
40°	2643.3	2694.1	2745.0	2795.9	2816.6	2837.2	2857.9	2878.6	2899.2	2919.9	2940.6
42.5°	2687.9	2742.6	2797.2	2851.9	2874.8	2897.7	2920.6	2943.5	2966.3	2989.2	3012.1
45°	2733.3	2792.1	2851.0	2909.9	2934.8	2959.7	2984.6	3009.5	3034.3	3059.2	3084.1
47.5°	2776.6	2840.4	2904.1	2967.9	2994.8	3021.7	3048.6	3075.5	3102.3	3129.2	3156.1
50°	2816.6	2885.0	2953.5	3021.9	3051.0	3080.1	3109.2	3138.3	3167.5	3196.6	3225.7
52.5°	2854.6	2928.4	3002.1	3075.9	3106.8	3137.7	3168.6	3199.5	3230.3	3261.2	3292.1
55°	2885.3	2963.5	3041.7	3119.9	3153.0	3186.1	3219.2	3252.3	3285.5	3318.6	3351.7
57.5°	2915.9	2998.6	3081.2	3163.9	3198.3	3232.8	3267.2	3301.7	3336.1	3370.6	3405.0
60°	2937.9	3024.6	3111.2	3197.9	3233.7	3269.5	3305.2	3341.0	3376.8	3412.6	3448.3
62.5°	2953.9	3043.9	3133.9	3223.9	3260.6	3297.2	3333.9	3370.6	3407.2	3443.9	3480.6
65°	2961.9	3054.6	3147.2	3239.9	3277.2	3314.6	3351.9	3389.2	3426.6	3463.9	3501.2
67.5°	2961.9	3056.6	3151.2	3245.9	3283.5	3321.0	3358.6	3396.1	3433.7	3471.2	3508.8
70°	2952.6	3049.0	3145.5	3241.9	3279.5	3317.0	3354.6	3392.1	3429.7	3467.2	3504.8
72.5°	2926.6	3024.4	3122.1	3219.9	3257.7	3295.5	3333.2	3371.0	3408.8	3446.6	3484.3
75°	2890.6	2989.0	3087.5	3185.9	3223.2	3260.6	3297.9	3335.2	3372.6	3409.9	3447.2
77.5°	2835.9	2933.9	3031.9	3129.9	3167.0	3204.1	3241.2	3278.3	3315.5	3352.6	3389.7
80°	2770.6	2867.7	2964.8	3061.9	3098.8	3135.7	3172.6	3209.5	3246.3	3283.2	3320.1
82.5°	2702.6	2799.0	2895.5	2991.9	3027.5	3063.0	3098.6	3134.1	3169.7	3205.2	3240.8
85°	2619.9	2713.9	2807.9	2901.9	2937.7	2973.5	3009.2	3045.0	3080.8	3116.6	3152.3
87.5°	2541.9	2634.6	2727.2	2819.9	2854.3	2888.8	2923.2	2957.7	2992.1	3026.6	3061.0
90°	2456.7	2546.4	2636.2	2726.0	2760.9	2795.8	2830.6	2865.5	2900.4	2935.3	2970.1
92.5°	2390.0	2477.3	2564.7	2652.0	2686.0	2720.0	2754.0	2788.0	2821.9	2855.9	2889.9
95°	2332.0	2418.0	2504.0	2590.0	2621.8	2653.5	2685.3	2717.1	2748.8	2780.6	2812.4
97.5°	2268.7	2352.4	2436.2	2520.0	2550.9	2581.8	2612.6	2643.5	2674.4	2705.3	2736.1
100°	2200.7	2281.8	2362.9	2444.0	2474.9	2505.8	2536.7	2567.6	2598.4	2629.3	2660.2
102.5°	2139.3	2218.9	2298.4	2378.0	2408.2	2438.4	2468.7	2498.9	2529.1	2559.3	2589.6
105°	2073.3	2151.6	2229.8	2308.0	2337.6	2367.1	2396.7	2426.2	2455.8	2485.3	2514.9
107.5°	2005.3	2082.2	2159.1	2236.0	2265.1	2294.2	2323.3	2352.4	2381.6	2410.7	2439.8
110°	1930.7	2005.8	2080.9	2156.0	2184.4	2212.9	2241.3	2269.8	2298.2	2326.7	2355.1



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-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°	1854.7	1927.8	2000.9	2074.0	2101.8	2129.6	2157.3	2185.1	2212.9	2240.7	2268.4
115°	1776.7	1847.8	1918.9	1990.0	2016.7	2043.3	2070.0	2096.7	2123.3	2150.0	2176.7
117.5°	1692.7	1761.8	1830.9	1900.0	1925.8	1951.6	1977.3	2003.1	2028.9	2054.7	2080.4
120°	1605.3	1671.6	1737.8	1804.0	1829.3	1854.7	1880.0	1905.3	1930.7	1956.0	1981.3
122.5°	1516.7	1580.4	1644.2	1708.0	1732.4	1756.9	1781.3	1805.8	1830.2	1854.7	1879.1
125°	1420.7	1481.8	1542.9	1604.0	1627.3	1650.7	1674.0	1697.3	1720.7	1744.0	1767.3
127.5°	1320.7	1380.4	1440.2	1500.0	1522.0	1544.0	1566.0	1588.0	1610.0	1632.0	1654.0
130°	1213.3	1273.6	1333.8	1394.0	1414.9	1435.8	1456.7	1477.6	1498.4	1519.3	1540.2
132.5°	1104.7	1164.4	1224.2	1284.0	1305.3	1326.7	1348.0	1369.3	1390.7	1412.0	1433.3
135°	994.7	1052.4	1110.2	1168.0	1188.4	1208.9	1229.3	1249.8	1270.2	1290.7	1311.1
137.5°	879.3	932.9	986.4	1040.0	1060.7	1081.3	1102.0	1122.7	1143.3	1164.0	1184.7
140°	759.3	807.6	855.8	904.0	925.3	946.7	968.0	989.3	1010.7	1032.0	1053.3
142.5°	648.0	690.7	733.3	776.0	797.8	819.6	841.3	863.1	884.9	906.7	928.4
145°	541.3	578.2	615.1	652.0	674.7	697.3	720.0	742.7	765.3	788.0	810.7
147.5°	443.3	474.9	506.4	538.0	560.7	583.3	606.0	628.7	651.3	674.0	696.7
150°	349.3	375.6	401.8	428.0	450.7	473.3	496.0	518.7	541.3	564.0	586.7
152.5°	268.0	289.3	310.7	332.0	353.3	374.7	396.0	417.3	438.7	460.0	481.3
155°	192.7	209.8	226.9	244.0	262.9	281.8	300.7	319.6	338.4	357.3	376.2
157.5°	129.3	142.2	155.1	168.0	184.2	200.4	216.7	232.9	249.1	265.3	281.6
160°	77.3	85.6	93.8	102.0	115.1	128.2	141.3	154.4	167.6	180.7	193.8
162.5°	38.0	42.0	46.0	50.0	58.9	67.8	76.7	85.6	94.4	103.3	112.2
165°	13.3	14.9	16.4	18.0	23.3	28.7	34.0	39.3	44.7	50.0	55.3
167.5°	2.7	3.1	3.6	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0
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: P201415

CATALOG NUMBER: 8LBLED-LD4-16-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	1796.0	1796.0
2.5°	1836.0	1834.0
5°	1898.2	1898.0
7.5°	1953.6	1954.0
10°	2013.1	2014.0
12.5°	2081.3	2084.0
15°	2161.1	2166.0
17.5°	2250.0	2256.0
20°	2334.7	2342.0
22.5°	2417.1	2426.0
25°	2498.0	2508.0
27.5°	2576.4	2588.0
30°	2652.9	2666.0
32.5°	2732.6	2747.9
35°	2809.0	2825.9
37.5°	2885.2	2903.9
40°	2961.2	2981.9
42.5°	3035.0	3057.9
45°	3109.0	3133.9
47.5°	3183.0	3209.9
50°	3254.8	3283.9
52.5°	3323.0	3353.9
55°	3384.8	3417.9
57.5°	3439.5	3473.9
60°	3484.1	3519.9
62.5°	3517.2	3553.9
65°	3538.6	3575.9
67.5°	3546.3	3583.9
70°	3542.3	3579.9
72.5°	3522.1	3559.9
75°	3484.6	3521.9
77.5°	3426.8	3463.9
80°	3357.0	3393.9
82.5°	3276.3	3311.9
85°	3188.1	3223.9
87.5°	3095.5	3129.9
90°	3005.0	3039.9
92.5°	2923.9	2957.9
95°	2844.1	2875.9
97.5°	2767.0	2797.9
100°	2691.1	2722.0
102.5°	2619.8	2650.0
105°	2544.4	2574.0
107.5°	2468.9	2498.0
110°	2383.6	2412.0



TEST NUMBER: P201415

CATALOG NUMBER: 8LBLED-LD4-16-ASYMW-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	2296.2	2324.0
115°	2203.3	2230.0
117.5°	2106.2	2132.0
120°	2006.7	2032.0
122.5°	1903.6	1928.0
125°	1790.7	1814.0
127.5°	1676.0	1698.0
130°	1561.1	1582.0
132.5°	1454.7	1476.0
135°	1331.6	1352.0
137.5°	1205.3	1226.0
140°	1074.7	1096.0
142.5°	950.2	972.0
145°	833.3	856.0
147.5°	719.3	742.0
150°	609.3	632.0
152.5°	502.7	524.0
155°	395.1	414.0
157.5°	297.8	314.0
160°	206.9	220.0
162.5°	121.1	130.0
165°	60.7	66.0
167.5°	20.0	22.0
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)