

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: P201399

Luminaire Tested: **8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P201399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28235)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U
Description: 8 ft. Low Bay Linear, 10000 lm, Frst Asym lens, 3.5K
Light Source: (616) 3500K CCT, 80 CRI LEDS
2UT217098A8350C, 2UT217056A8350B
Ballast/Driver: OSRAM
(OT85W01800CC), (OT50W01000CC)

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17091.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 2.01 / 1.17 / 1.78
Luminous Opening: Rectangular w/ Sides (W: 8' x L: 0.17' x H: 0.21')
CIE Type: Semi-Direct

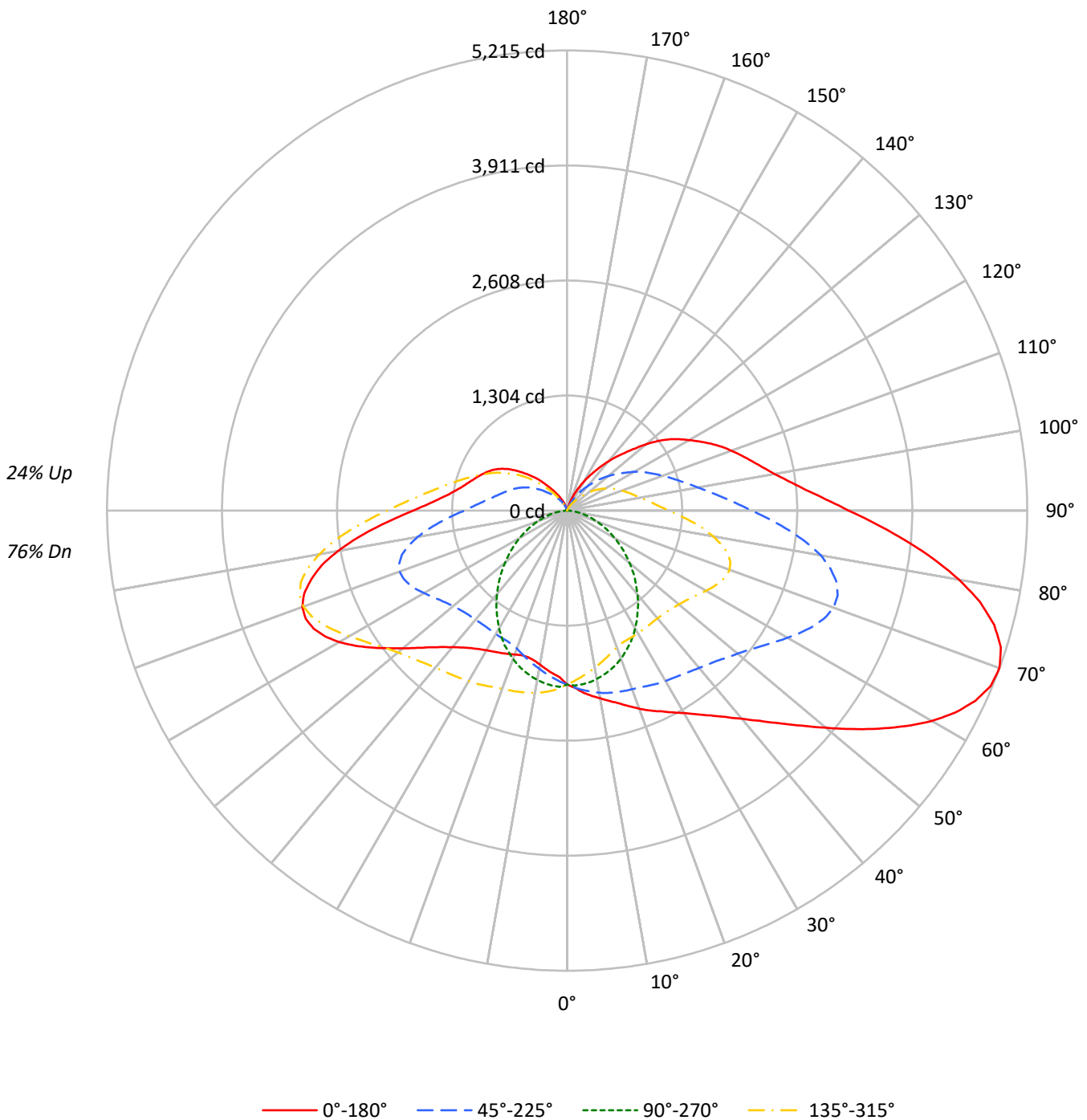
Input Watts (W): 133.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLEDD4-16-ASYMF-UNV-L835-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-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	76
1	98	90	84	78	92	86	80	75	77	72	68	69	65	62	61	59	56	52
2	86	75	66	59	81	71	63	56	64	57	51	57	51	46	50	46	42	38
3	77	64	54	46	72	61	51	44	54	46	40	48	42	36	42	37	33	29
4	70	55	45	37	65	52	43	35	47	39	32	41	35	29	37	31	26	23
5	63	49	38	31	59	46	37	29	41	33	27	37	30	24	32	27	22	19
6	58	43	33	26	54	41	32	25	37	29	23	33	26	21	29	23	19	16
7	54	39	29	22	50	37	28	21	33	25	20	29	23	18	26	20	16	14
8	50	35	26	19	47	33	25	19	30	22	17	27	20	16	24	18	14	12
9	46	32	23	17	43	30	22	16	27	20	15	25	18	14	22	17	13	10
10	43	29	21	15	41	28	20	15	25	18	13	23	17	12	20	15	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15878	15878	15878	15878
5°	15091	15950	13525	16062
10°	14488	15776	11884	15873
15°	14136	15525	10747	15590
20°	14091	15165	10243	15198
25°	14119	14696	10008	14765
30°	14345	14125	9887	14125
35°	14889	13459	9992	13459
40°	15841	12738	10388	12719
45°	17300	12059	11110	11972
50°	19319	11213	12250	11165
55°	21777	10410	13678	10356
60°	24340	9572	15218	9572
65°	26497	8718	16457	8754
70°	27779	7757	17018	7798
75°	27620	6768	16541	6822
80°	25956	5499	15172	5738
85°	23316	3791	13153	4212



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.1	1.1
10°-20°	545.9	3.2
20°-30°	880.6	5.2
30°-40°	1193.7	7.0
40°-50°	1533.7	9.0
50°-60°	1961.6	11.5
60°-70°	2395.9	14.0
70°-80°	2446.2	14.3
80°-90°	1918.3	11.2
90°-100°	1338.8	7.8
100°-110°	997.9	5.8
110°-120°	747.0	4.4
120°-130°	506.6	3.0
130°-140°	279.7	1.6
140°-150°	119.5	0.7
150°-160°	35.2	0.2
160°-170°	3.4	0.0
170°-180°	0.0	0.0
0°-30°	1613.7	9.4
0°-40°	2807.3	16.4
0°-60°	6302.6	36.9
0°-90°	13063.0	76.4
90°-120°	3083.7	18.0
90°-150°	3989.4	23.3
90°-180°	4028.0	23.6
0°-180°	17091.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1971	1971	1971	1971	1971	
5°	2069	1977	1854	1990	2069	200
15°	2260	1874	1718	1882	2260	646
25°	2511	1673	1780	1681	2511	1168
35°	2834	1393	1902	1393	2834	1793
45°	3409	1086	2190	1078	3409	2661
55°	4308	769	2706	765	4308	3871
65°	5102	483	3169	485	5102	5027
75°	5012	238	3001	240	5012	5239
85°	3843	53	2168	59	3843	3277
90°	3191	0	1742	0	3191	1756
95°	2712	0	1462	0	2712	2153
105°	2166	0	1176	2	2166	2300
115°	1795	0	1019	2	1795	1782
125°	1407	0	820	2	1407	1258
135°	928	0	540	2	928	730
145°	540	0	284	2	540	346
155°	238	0	126	4	238	116
165°	34	0	20	4	34	13
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	2010.2	2009.3	2008.4	2007.6	2006.7	2005.8	2004.9	2004.1	2003.2	2002.3	2003.0
5°	2069.3	2067.1	2064.9	2062.7	2060.5	2058.4	2056.2	2054.0	2051.8	2049.6	2048.7
7.5°	2116.6	2114.0	2111.3	2108.7	2106.1	2103.4	2100.8	2098.2	2095.5	2092.9	2090.3
10°	2159.9	2156.0	2152.0	2148.1	2144.2	2140.2	2136.3	2132.4	2128.4	2124.5	2121.4
12.5°	2209.2	2204.2	2199.1	2194.1	2189.1	2184.0	2179.0	2174.0	2168.9	2163.9	2158.6
15°	2260.4	2254.7	2249.0	2243.3	2237.6	2232.0	2226.3	2220.6	2214.9	2209.2	2200.7
17.5°	2323.5	2315.6	2307.7	2299.9	2292.0	2284.1	2276.2	2268.4	2260.5	2252.6	2240.6
20°	2388.5	2378.9	2369.2	2359.6	2350.0	2340.3	2330.7	2321.1	2311.4	2301.8	2285.4
22.5°	2453.6	2442.4	2431.3	2420.1	2408.9	2397.8	2386.6	2375.4	2364.3	2353.1	2332.5
25°	2510.7	2499.3	2487.9	2476.6	2465.2	2453.8	2442.4	2431.1	2419.7	2408.3	2384.0
27.5°	2577.7	2565.0	2552.3	2539.6	2526.9	2514.2	2501.5	2488.8	2476.1	2463.4	2435.4
30°	2650.7	2636.0	2621.3	2606.7	2592.0	2577.3	2562.6	2548.0	2533.3	2518.6	2486.4
32.5°	2737.4	2720.1	2702.8	2685.5	2668.2	2650.9	2633.6	2616.3	2599.0	2581.7	2544.5
35°	2833.9	2813.8	2793.6	2773.5	2753.3	2733.2	2713.0	2692.9	2672.7	2652.6	2609.9
37.5°	2948.2	2925.0	2901.8	2878.6	2855.4	2832.1	2808.9	2785.7	2762.5	2739.3	2690.0
40°	3080.3	3053.4	3026.4	2999.5	2972.6	2945.6	2918.7	2891.8	2864.8	2837.9	2781.2
42.5°	3232.0	3201.3	3170.7	3140.0	3109.4	3078.7	3048.1	3017.4	2986.8	2956.1	2890.2
45°	3409.4	3373.9	3338.4	3303.0	3267.5	3232.0	3196.5	3161.1	3125.6	3090.1	3014.1
47.5°	3608.4	3568.1	3527.8	3487.5	3447.2	3407.0	3366.7	3326.4	3286.1	3245.8	3158.7
50°	3829.2	3784.3	3739.4	3694.5	3649.6	3604.8	3559.9	3515.0	3470.1	3425.2	3324.7
52.5°	4067.6	4017.7	3967.8	3917.8	3867.9	3818.0	3768.1	3718.1	3668.2	3618.3	3504.4
55°	4308.0	4255.0	4202.0	4149.0	4096.0	4043.1	3990.1	3937.1	3884.1	3831.1	3703.4
57.5°	4546.5	4490.9	4435.3	4379.6	4324.0	4268.4	4212.8	4157.1	4101.5	4045.9	3905.1
60°	4769.2	4712.3	4655.3	4598.4	4541.5	4484.5	4427.6	4370.7	4313.7	4256.8	4104.2
62.5°	4958.4	4902.1	4845.8	4789.6	4733.3	4677.0	4620.7	4564.5	4508.2	4451.9	4289.4
65°	5102.3	5049.1	4995.9	4942.7	4889.5	4836.2	4783.0	4729.8	4676.6	4623.4	4452.8
67.5°	5194.9	5143.0	5091.1	5039.2	4987.3	4935.4	4883.5	4831.6	4779.7	4727.8	4554.4
70°	5214.6	5165.5	5116.5	5067.4	5018.4	4969.3	4920.3	4871.2	4822.2	4773.1	4599.9
72.5°	5153.5	5107.1	5060.7	5014.2	4967.8	4921.4	4875.0	4828.5	4782.1	4735.7	4566.7
75°	5011.6	4968.0	4924.4	4880.9	4837.3	4793.7	4750.1	4706.6	4663.0	4619.4	4457.8
77.5°	4792.9	4752.2	4711.4	4670.7	4630.0	4589.2	4548.5	4507.8	4467.0	4426.3	4274.3
80°	4511.0	4472.9	4434.8	4396.7	4358.6	4320.5	4282.4	4244.3	4206.2	4168.1	4029.3
82.5°	4185.9	4149.8	4113.6	4077.5	4041.4	4005.2	3969.1	3933.0	3896.8	3860.7	3734.8
85°	3843.0	3808.8	3774.7	3740.5	3706.3	3672.2	3638.0	3603.8	3569.7	3535.5	3422.3
87.5°	3502.0	3469.4	3436.8	3404.1	3371.5	3338.9	3306.3	3273.6	3241.0	3208.4	3107.2
90°	3190.6	3159.9	3129.3	3098.6	3068.0	3037.3	3006.7	2976.0	2945.4	2914.7	2823.0
92.5°	2930.5	2901.6	2872.7	2843.8	2814.9	2786.0	2757.1	2728.2	2699.3	2670.4	2586.5
95°	2711.7	2684.1	2656.5	2628.9	2601.3	2573.8	2546.2	2518.6	2491.0	2463.4	2385.4
97.5°	2532.4	2505.5	2478.5	2451.6	2424.7	2397.7	2370.8	2343.9	2316.9	2290.0	2216.2
100°	2386.6	2360.1	2333.6	2307.1	2280.6	2254.1	2227.6	2201.1	2174.6	2148.1	2076.5
102.5°	2266.4	2240.3	2214.3	2188.2	2162.1	2136.1	2110.0	2083.9	2057.9	2031.8	1961.7
105°	2165.8	2140.4	2115.0	2089.6	2064.2	2038.8	2013.4	1988.0	1962.6	1937.2	1867.6
107.5°	2073.2	2047.8	2022.4	1997.0	1971.6	1946.2	1920.8	1895.4	1870.0	1844.6	1776.3
110°	1982.6	1957.2	1931.8	1906.4	1881.0	1855.6	1830.2	1804.8	1779.4	1754.0	1687.2



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
112.5°	1891.9	1866.5	1841.1	1815.7	1790.3	1764.9	1739.5	1714.1	1688.7	1663.3	1598.7
115°	1795.3	1770.1	1744.9	1719.8	1694.6	1669.4	1644.2	1619.1	1593.9	1568.7	1507.0
117.5°	1692.9	1669.0	1645.2	1621.3	1597.4	1573.6	1549.7	1525.8	1502.0	1478.1	1419.2
120°	1598.3	1575.5	1552.7	1530.0	1507.2	1484.4	1461.6	1438.9	1416.1	1393.3	1336.2
122.5°	1505.6	1483.9	1462.2	1440.6	1418.9	1397.2	1375.5	1353.9	1332.2	1310.5	1254.0
125°	1407.1	1385.9	1364.6	1343.4	1322.1	1300.9	1279.6	1258.4	1237.1	1215.9	1161.8
127.5°	1294.8	1274.4	1254.1	1233.7	1213.3	1193.0	1172.6	1152.2	1131.9	1111.5	1062.2
130°	1168.7	1149.6	1130.6	1111.5	1092.5	1073.4	1054.4	1035.3	1016.3	997.2	953.8
132.5°	1040.6	1024.4	1008.2	992.0	975.8	959.5	943.3	927.1	910.9	894.7	855.9
135°	928.2	914.6	901.0	887.5	873.9	860.3	846.7	833.2	819.6	806.0	770.3
137.5°	827.7	815.2	802.7	790.3	777.8	765.3	752.8	740.4	727.9	715.4	682.6
140°	727.2	716.0	704.9	693.7	682.5	671.4	660.2	649.0	637.9	626.7	597.4
142.5°	630.6	621.0	611.3	601.7	592.1	582.4	572.8	563.2	553.5	543.9	517.8
145°	540.0	531.2	522.5	513.7	505.0	496.2	487.5	478.7	470.0	461.2	438.9
147.5°	453.3	446.3	439.3	432.3	425.3	418.2	411.2	404.2	397.2	390.2	370.7
150°	376.4	370.3	364.1	358.0	351.9	345.7	339.6	333.5	327.3	321.2	304.3
152.5°	305.5	300.2	295.0	289.7	284.5	279.2	274.0	268.7	263.5	258.2	243.7
155°	238.5	234.1	229.7	225.3	220.9	216.6	212.2	207.8	203.4	199.0	186.5
157.5°	177.4	173.9	170.4	166.9	163.4	159.8	156.3	152.8	149.3	145.8	135.5
160°	120.2	117.4	114.5	111.7	108.8	106.0	103.1	100.3	97.4	94.6	87.4
162.5°	69.0	67.0	65.0	63.1	61.1	59.1	57.1	55.2	53.2	51.2	47.0
165°	33.5	32.4	31.3	30.2	29.1	28.0	26.9	25.8	24.7	23.6	21.4
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	2003.6	2004.3	2004.9	2005.6	2006.2	2006.9	2007.5	2008.2	2004.3	2000.3	1996.4
5°	2047.8	2047.0	2046.1	2045.2	2044.3	2043.5	2042.6	2041.7	2035.6	2029.4	2023.3
7.5°	2087.7	2085.0	2082.4	2079.8	2077.2	2074.5	2071.9	2069.3	2061.0	2052.7	2044.3
10°	2118.4	2115.3	2112.2	2109.2	2106.1	2103.0	2100.0	2096.9	2085.5	2074.1	2062.7
12.5°	2153.4	2148.1	2142.9	2137.6	2132.4	2127.1	2121.9	2116.6	2102.4	2088.1	2073.9
15°	2192.1	2183.6	2175.0	2166.5	2157.9	2149.4	2140.8	2132.3	2115.2	2098.1	2081.1
17.5°	2228.5	2216.5	2204.4	2192.4	2180.3	2168.3	2156.2	2144.2	2123.8	2103.5	2083.1
20°	2269.0	2252.5	2236.1	2219.7	2203.3	2186.8	2170.4	2154.0	2130.1	2106.3	2082.4
22.5°	2311.9	2291.3	2270.7	2250.2	2229.6	2209.0	2188.4	2167.8	2139.3	2110.9	2082.4
25°	2359.7	2335.4	2311.1	2286.7	2262.4	2238.1	2213.8	2189.5	2155.3	2121.2	2087.0
27.5°	2407.4	2379.3	2351.3	2323.3	2295.3	2267.2	2239.2	2211.2	2170.7	2130.2	2089.7
30°	2454.2	2422.0	2389.8	2357.7	2325.5	2293.3	2261.1	2228.9	2181.8	2134.7	2087.7
32.5°	2507.2	2470.0	2432.8	2395.5	2358.3	2321.1	2283.8	2246.6	2193.6	2140.6	2087.6
35°	2567.2	2524.5	2481.8	2439.1	2396.4	2353.7	2311.0	2268.3	2208.3	2148.3	2088.3
37.5°	2640.8	2591.5	2542.2	2493.0	2443.7	2394.4	2345.2	2295.9	2228.9	2161.9	2094.9
40°	2724.5	2667.8	2611.1	2554.3	2497.6	2440.9	2384.2	2327.5	2253.7	2179.9	2106.1
42.5°	2824.3	2758.4	2692.5	2626.5	2560.6	2494.7	2428.8	2362.9	2281.7	2200.4	2119.2
45°	2938.1	2862.2	2786.2	2710.2	2634.2	2558.3	2482.3	2406.3	2316.7	2227.2	2137.6
47.5°	3071.5	2984.4	2897.2	2810.1	2722.9	2635.8	2548.6	2461.5	2362.3	2263.1	2163.9
50°	3224.2	3123.7	3023.2	2922.6	2822.1	2721.6	2621.1	2520.6	2411.6	2302.5	2193.5
52.5°	3390.6	3276.7	3162.8	3049.0	2935.1	2821.2	2707.4	2593.5	2473.1	2352.6	2232.2
55°	3575.8	3448.1	3320.5	3192.8	3065.2	2937.5	2809.9	2682.2	2549.3	2416.4	2283.4
57.5°	3764.3	3623.5	3482.7	3342.0	3201.2	3060.4	2919.6	2778.8	2632.7	2486.7	2340.6
60°	3951.6	3798.9	3646.3	3493.7	3341.1	3188.4	3035.8	2883.2	2723.6	2563.9	2404.3
62.5°	4126.9	3964.5	3802.0	3639.5	3477.0	3314.6	3152.1	2989.6	2816.4	2643.2	2470.0
65°	4282.2	4111.7	3941.1	3770.5	3599.9	3429.4	3258.8	3088.2	2901.6	2715.1	2528.5
67.5°	4381.0	4207.5	4034.1	3860.7	3687.3	3513.8	3340.4	3167.0	2969.0	2771.1	2573.1
70°	4426.7	4253.5	4080.3	3907.1	3733.9	3560.7	3387.5	3214.3	3007.8	2801.3	2594.8
72.5°	4397.6	4228.6	4059.5	3890.5	3721.4	3552.4	3383.3	3214.3	3003.9	2793.4	2583.0
75°	4296.2	4134.6	3973.0	3811.4	3649.8	3488.2	3326.6	3165.0	2955.0	2745.0	2535.0
77.5°	4122.4	3970.4	3818.4	3666.5	3514.5	3362.5	3210.6	3058.6	2854.3	2650.0	2445.7
80°	3890.5	3751.6	3612.8	3474.0	3335.2	3196.3	3057.5	2918.7	2723.2	2527.6	2332.1
82.5°	3608.9	3483.0	3357.1	3231.1	3105.2	2979.3	2853.4	2727.5	2545.3	2363.1	2181.0
85°	3309.1	3195.9	3082.7	2969.4	2856.2	2743.0	2629.8	2516.6	2349.3	2182.0	2014.7
87.5°	3006.1	2904.9	2803.7	2702.6	2601.4	2500.2	2399.1	2297.9	2146.2	1994.4	1842.7
90°	2731.2	2639.5	2547.7	2456.0	2364.2	2272.5	2180.7	2089.0	1951.7	1814.4	1677.1
92.5°	2502.7	2418.8	2334.9	2251.1	2167.2	2083.3	1999.5	1915.6	1790.8	1666.0	1541.1
95°	2307.5	2229.5	2151.6	2073.6	1995.7	1917.7	1839.8	1761.8	1647.3	1532.8	1418.2
97.5°	2142.4	2068.6	1994.8	1921.1	1847.3	1773.5	1699.7	1625.9	1519.9	1413.9	1307.9
100°	2004.9	1933.3	1861.7	1790.1	1718.5	1646.9	1575.3	1503.7	1405.2	1306.6	1208.1
102.5°	1891.7	1821.6	1751.5	1681.5	1611.4	1541.3	1471.3	1401.2	1307.9	1214.6	1121.4
105°	1797.9	1728.3	1658.7	1589.0	1519.4	1449.8	1380.1	1310.5	1221.6	1132.7	1043.8
107.5°	1708.0	1639.6	1571.3	1503.0	1434.7	1366.3	1298.0	1229.7	1144.3	1058.9	973.5
110°	1620.4	1553.6	1486.8	1420.1	1353.3	1286.5	1219.7	1152.9	1071.0	989.1	907.2



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
112.5°	1534.1	1469.5	1404.9	1340.3	1275.7	1211.1	1146.5	1081.9	1003.5	925.1	846.7
115°	1445.2	1383.5	1321.7	1260.0	1198.2	1136.5	1074.7	1013.0	938.3	863.6	789.0
117.5°	1360.3	1301.4	1242.5	1183.5	1124.6	1065.7	1006.8	947.9	877.0	806.0	735.1
120°	1279.0	1221.9	1164.7	1107.6	1050.4	993.3	936.1	879.0	812.4	745.8	679.3
122.5°	1197.5	1141.0	1084.5	1028.1	971.6	915.1	858.6	802.1	740.8	679.5	618.2
125°	1107.7	1053.7	999.6	945.5	891.4	837.4	783.3	729.2	672.9	616.6	560.4
127.5°	1013.0	963.7	914.4	865.2	815.9	766.6	717.4	668.1	615.5	563.0	510.4
130°	910.5	867.1	823.8	780.4	737.1	693.7	650.4	607.0	558.4	509.8	461.2
132.5°	817.2	778.4	739.7	700.9	662.2	623.4	584.7	545.9	501.2	456.6	411.9
135°	734.6	698.9	663.2	627.6	591.9	556.2	520.5	484.8	444.3	403.8	363.3
137.5°	649.7	616.9	584.0	551.2	518.3	485.5	452.6	419.8	383.9	348.0	312.1
140°	568.0	538.7	509.3	480.0	450.6	421.3	391.9	362.6	330.2	297.8	265.4
142.5°	491.8	465.7	439.7	413.6	387.6	361.5	335.5	309.4	280.7	252.0	223.3
145°	416.5	394.2	371.8	349.5	327.1	304.8	282.4	260.1	234.9	209.7	184.6
147.5°	351.2	331.7	312.2	292.8	273.3	253.8	234.3	214.8	193.3	171.9	150.4
150°	287.5	270.6	253.8	236.9	220.1	203.2	186.4	169.5	152.2	134.9	117.6
152.5°	229.3	214.8	200.4	185.9	171.5	157.0	142.6	128.1	114.7	101.4	88.0
155°	174.0	161.6	149.1	136.6	124.1	111.7	99.2	86.7	77.3	67.9	58.5
157.5°	125.2	114.9	104.6	94.4	84.1	73.8	63.5	53.2	47.3	41.4	35.5
160°	80.2	72.9	65.7	58.5	51.3	44.0	36.8	29.6	26.3	23.0	19.7
162.5°	42.9	38.7	34.6	30.4	26.3	22.1	18.0	13.8	12.3	10.7	9.2
165°	19.2	17.0	14.8	12.7	10.5	8.3	6.1	3.9	3.5	3.0	2.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1992.4	1988.5	1984.5	1980.6	1976.6	1972.7	1974.0	1975.3	1976.6	1977.9	1979.3
5°	2017.2	2011.0	2004.9	1998.8	1992.6	1986.5	1985.4	1984.3	1983.2	1982.1	1981.1
7.5°	2036.0	2027.7	2019.4	2011.0	2002.7	1994.4	1990.9	1987.4	1983.9	1980.4	1976.9
10°	2051.3	2040.0	2028.6	2017.2	2005.8	1994.4	1988.0	1981.7	1975.3	1969.0	1962.6
12.5°	2059.7	2045.4	2031.2	2017.0	2002.7	1988.5	1979.5	1970.5	1961.6	1952.6	1943.6
15°	2064.0	2046.9	2029.8	2012.8	1995.7	1978.6	1967.0	1955.4	1943.8	1932.2	1920.6
17.5°	2062.7	2042.4	2022.0	2001.6	1981.3	1960.9	1946.7	1932.4	1918.2	1904.0	1889.7
20°	2058.5	2034.7	2010.8	1986.9	1963.1	1939.2	1922.1	1905.0	1888.0	1870.9	1853.8
22.5°	2053.9	2025.5	1997.0	1968.5	1940.1	1911.6	1891.5	1871.3	1851.2	1831.0	1810.9
25°	2052.9	2018.7	1984.6	1950.4	1916.3	1882.1	1858.9	1835.7	1812.5	1789.3	1766.0
27.5°	2049.2	2008.6	1968.1	1927.6	1887.1	1846.6	1820.3	1794.0	1767.8	1741.5	1715.2
30°	2040.6	1993.5	1946.4	1899.4	1852.3	1805.2	1775.9	1746.5	1717.2	1687.8	1658.5
32.5°	2034.6	1981.7	1928.7	1875.7	1822.7	1769.7	1736.4	1703.1	1669.9	1636.6	1603.3
35°	2028.3	1968.3	1908.3	1848.3	1788.3	1728.3	1691.1	1653.9	1616.6	1579.4	1542.2
37.5°	2027.9	1960.9	1893.9	1826.9	1759.9	1692.9	1651.7	1610.6	1569.4	1528.2	1487.1
40°	2032.3	1958.5	1884.7	1810.9	1737.1	1663.3	1616.0	1568.7	1521.4	1474.1	1426.8
42.5°	2038.0	1956.7	1875.5	1794.3	1713.0	1631.8	1579.0	1526.2	1473.5	1420.7	1367.9
45°	2048.0	1958.5	1868.9	1779.3	1689.8	1600.2	1543.1	1485.9	1428.8	1371.6	1314.5
47.5°	2064.7	1965.5	1866.3	1767.1	1667.9	1568.7	1505.9	1443.0	1380.2	1317.3	1254.5
50°	2084.4	1975.4	1866.3	1757.3	1648.2	1539.2	1470.7	1402.1	1333.6	1265.0	1196.5
52.5°	2111.8	1991.3	1870.9	1750.5	1630.0	1509.6	1435.8	1362.0	1288.2	1214.4	1140.6
55°	2150.5	2017.6	1884.7	1751.7	1618.8	1485.9	1406.2	1326.5	1246.8	1167.1	1087.4
57.5°	2194.6	2048.5	1902.5	1756.4	1610.4	1464.3	1378.7	1293.1	1207.4	1121.8	1036.2
60°	2244.7	2085.0	1925.4	1765.8	1606.1	1446.5	1354.8	1263.0	1171.3	1079.5	987.8
62.5°	2296.8	2123.6	1950.4	1777.2	1604.0	1430.8	1333.1	1235.5	1137.8	1040.1	942.5
65°	2341.9	2155.4	1968.8	1782.2	1595.7	1409.1	1306.2	1203.3	1100.3	997.4	894.5
67.5°	2375.2	2177.2	1979.3	1781.3	1583.4	1385.4	1277.5	1169.5	1061.6	953.6	845.7
70°	2388.3	2181.9	1975.4	1768.9	1562.4	1355.9	1244.4	1133.0	1021.5	910.1	798.6
72.5°	2372.6	2162.1	1951.7	1741.3	1530.8	1320.4	1206.3	1092.2	978.1	864.0	750.0
75°	2325.0	2115.1	1905.1	1695.1	1485.1	1275.1	1159.9	1044.7	929.6	814.4	699.2
77.5°	2241.4	2037.1	1832.8	1628.5	1424.2	1219.9	1104.9	990.0	875.0	760.1	645.1
80°	2136.5	1941.0	1745.4	1549.9	1354.3	1158.8	1045.2	931.5	817.9	704.2	590.6
82.5°	1998.8	1816.6	1634.4	1452.3	1270.1	1087.9	977.3	866.7	756.1	645.5	535.0
85°	1847.4	1680.2	1512.9	1345.6	1178.3	1011.0	904.6	798.2	691.7	585.3	478.9
87.5°	1690.9	1539.2	1387.4	1235.7	1083.9	932.2	830.8	729.4	628.0	526.6	425.3
90°	1539.8	1402.5	1265.2	1127.9	990.6	853.3	758.5	663.7	568.9	474.1	379.2
92.5°	1416.3	1291.5	1166.7	1041.8	917.0	792.2	704.2	616.2	528.1	440.1	352.1
95°	1303.7	1189.2	1074.7	960.1	845.6	731.1	649.9	568.6	487.4	406.2	324.9
97.5°	1201.9	1096.0	990.0	884.0	778.0	672.0	597.3	522.7	448.0	373.3	298.7
100°	1109.5	1011.0	912.4	813.9	715.3	616.8	548.3	479.7	411.2	342.7	274.1
102.5°	1028.1	934.8	841.5	748.3	655.0	561.7	499.3	436.9	374.5	312.1	249.6
105°	954.9	866.0	777.1	688.2	599.3	510.4	453.7	397.0	340.3	283.6	226.8
107.5°	888.1	802.8	717.4	632.0	546.6	461.2	410.0	358.7	307.5	256.2	205.0
110°	825.3	743.4	661.5	579.6	497.7	415.8	369.6	323.4	277.2	231.0	184.8



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
112.5°	768.3	690.0	611.6	533.2	454.8	376.4	334.6	292.8	250.9	209.1	167.3
115°	714.3	639.6	564.9	490.3	415.6	340.9	303.0	265.1	227.3	189.4	151.5
117.5°	664.1	593.2	522.2	451.3	380.3	309.4	275.0	240.6	206.3	171.9	137.5
120°	612.7	546.1	479.5	413.0	346.4	279.8	248.7	217.6	186.5	155.4	124.4
122.5°	556.9	495.5	434.2	372.9	311.6	250.3	222.5	194.7	166.9	139.1	111.2
125°	504.1	447.8	391.5	335.3	279.0	222.7	198.0	173.2	148.5	123.7	99.0
127.5°	457.9	405.3	352.8	300.2	247.7	195.1	173.4	151.7	130.1	108.4	86.7
130°	412.6	363.9	315.3	266.7	218.1	169.5	150.7	131.8	113.0	94.2	75.3
132.5°	367.2	322.6	277.9	233.2	188.6	143.9	127.9	111.9	95.9	79.9	64.0
135°	322.8	282.2	241.7	201.2	160.7	120.2	106.8	93.5	80.1	66.8	53.4
137.5°	276.2	240.2	204.3	168.4	132.5	96.6	85.9	75.1	64.4	53.7	42.9
140°	233.0	200.5	168.1	135.7	103.3	70.9	63.0	55.1	47.3	39.4	31.5
142.5°	194.6	166.0	137.3	108.6	79.9	51.2	45.5	39.8	34.1	28.4	22.8
145°	159.4	134.2	109.0	83.9	58.7	33.5	29.8	26.1	22.3	18.6	14.9
147.5°	129.0	107.5	86.1	64.6	43.2	21.7	19.3	16.9	14.5	12.1	9.6
150°	100.3	83.0	65.7	48.4	31.1	13.8	12.3	10.7	9.2	7.7	6.1
152.5°	74.7	61.3	48.0	34.6	21.3	7.9	7.0	6.1	5.3	4.4	3.5
155°	49.1	39.6	30.2	20.8	11.4	2.0	1.8	1.6	1.3	1.1	0.9
157.5°	29.6	23.6	17.7	11.8	5.9	0.0	0.0	0.0	0.0	0.0	0.0
160°	16.4	13.2	9.9	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	7.7	6.1	4.6	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.2	1.7	1.3	0.9	0.4	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: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1980.6	1981.9	1983.2	1984.5	1979.7	1974.9	1970.1	1965.3	1960.4	1955.6	1950.8
5°	1980.0	1978.9	1977.8	1976.7	1969.9	1963.1	1956.3	1949.5	1942.8	1936.0	1929.2
7.5°	1973.4	1969.9	1966.4	1962.9	1953.9	1944.9	1936.0	1927.0	1918.0	1909.0	1900.1
10°	1956.3	1949.9	1943.6	1937.2	1927.1	1917.1	1907.0	1896.9	1886.9	1876.8	1866.7
12.5°	1934.6	1925.7	1916.7	1907.7	1896.5	1885.4	1874.2	1863.0	1851.9	1840.7	1829.5
15°	1909.0	1897.4	1885.8	1874.2	1861.7	1849.2	1836.7	1824.2	1811.8	1799.3	1786.8
17.5°	1875.5	1861.3	1847.0	1832.8	1819.7	1806.5	1793.4	1780.2	1767.1	1753.9	1740.8
20°	1836.7	1819.7	1802.6	1785.5	1771.9	1758.3	1744.8	1731.2	1717.6	1704.0	1690.5
22.5°	1790.7	1770.6	1750.4	1730.3	1716.9	1703.6	1690.2	1676.9	1663.5	1650.2	1636.8
25°	1742.8	1719.6	1696.4	1673.2	1659.8	1646.5	1633.1	1619.7	1606.4	1593.0	1579.6
27.5°	1688.9	1662.7	1636.4	1610.1	1597.4	1584.7	1572.0	1559.3	1546.6	1533.9	1521.2
30°	1629.1	1599.8	1570.4	1541.1	1529.5	1517.9	1506.3	1494.7	1483.1	1471.5	1459.9
32.5°	1570.0	1536.8	1503.5	1470.2	1459.9	1449.6	1439.3	1429.0	1418.8	1408.5	1398.2
35°	1505.0	1467.7	1430.5	1393.3	1385.4	1377.5	1369.7	1361.8	1353.9	1346.0	1338.2
37.5°	1445.9	1404.7	1363.6	1322.4	1317.6	1312.8	1307.9	1303.1	1298.3	1293.5	1288.6
40°	1379.5	1332.2	1284.9	1237.6	1237.4	1237.2	1237.0	1236.8	1236.5	1236.3	1236.1
42.5°	1315.1	1262.4	1209.6	1156.8	1161.4	1166.0	1170.6	1175.2	1179.8	1184.4	1189.0
45°	1257.3	1200.2	1143.0	1085.9	1094.2	1102.5	1110.9	1119.2	1127.5	1135.8	1144.2
47.5°	1191.6	1128.8	1065.9	1003.1	1016.7	1030.3	1043.8	1057.4	1071.0	1084.6	1098.1
50°	1127.9	1059.4	990.8	922.3	941.1	960.0	978.8	997.6	1016.5	1035.3	1054.1
52.5°	1066.8	993.0	919.2	845.4	869.1	892.7	916.4	940.0	963.7	987.3	1011.0
55°	1007.7	928.0	848.3	768.6	797.3	826.0	854.7	883.4	912.0	940.7	969.4
57.5°	950.6	864.9	779.3	693.7	727.4	761.1	794.9	828.6	862.3	896.0	929.8
60°	896.0	804.3	712.5	620.8	659.6	698.3	737.1	775.8	814.6	853.3	892.1
62.5°	844.8	747.1	649.5	551.8	594.9	638.1	681.2	724.3	767.5	810.6	853.7
65°	791.6	688.6	585.7	482.8	530.3	577.8	625.4	672.9	720.4	767.9	815.5
67.5°	737.7	629.8	521.8	413.9	465.6	517.3	568.9	620.6	672.3	724.0	775.6
70°	687.2	575.7	464.3	352.8	407.3	461.8	516.4	570.9	625.4	679.9	734.5
72.5°	635.9	521.8	407.7	293.6	350.3	407.0	463.8	520.5	577.2	633.9	690.7
75°	584.0	468.9	353.7	238.5	296.5	354.5	412.6	470.6	528.6	586.6	644.7
77.5°	530.2	415.2	300.3	185.3	244.0	302.7	361.3	420.0	478.7	537.4	596.0
80°	476.9	363.3	249.6	136.0	194.5	252.9	311.4	369.9	428.3	486.8	545.3
82.5°	424.4	313.8	203.2	92.6	150.0	207.4	264.7	322.1	379.5	436.9	494.2
85°	372.5	266.0	159.6	53.2	109.3	165.3	221.4	277.4	333.5	389.5	445.6
87.5°	323.9	222.5	121.1	19.7	73.1	126.6	180.0	233.4	286.9	340.3	393.7
90°	284.4	189.6	94.8	0.0	50.1	100.3	150.4	200.6	250.7	300.9	351.0
92.5°	264.1	176.0	88.0	0.0	46.4	92.8	139.3	185.7	232.1	278.5	325.0
95°	243.7	162.5	81.2	0.0	42.9	85.8	128.8	171.7	214.6	257.5	300.5
97.5°	224.0	149.3	74.7	0.0	39.9	79.7	119.6	159.4	199.3	239.1	279.0
100°	205.6	137.1	68.5	0.0	36.6	73.1	109.7	146.3	182.8	219.4	256.0
102.5°	187.2	124.8	62.4	0.0	33.7	67.4	101.2	134.9	168.6	202.3	236.1
105°	170.1	113.4	56.7	0.0	30.9	61.8	92.6	123.5	154.4	185.3	216.1
107.5°	153.7	102.5	51.2	0.0	28.2	56.5	84.7	113.0	141.2	169.5	197.7
110°	138.6	92.4	46.2	0.0	25.6	51.2	76.9	102.5	128.1	153.7	179.4



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
112.5°	125.5	83.6	41.8	0.0	23.2	46.4	69.6	92.8	116.1	139.3	162.5
115°	113.6	75.8	37.9	0.0	20.6	41.2	61.8	82.4	102.9	123.5	144.1
117.5°	103.1	68.8	34.4	0.0	18.4	36.8	55.2	73.6	91.9	110.3	128.7
120°	93.3	62.2	31.1	0.0	16.4	32.8	49.3	65.7	82.1	98.5	115.0
122.5°	83.4	55.6	27.8	0.0	14.7	29.3	44.0	58.7	73.3	88.0	102.7
125°	74.2	49.5	24.7	0.0	12.9	25.8	38.8	51.7	64.6	77.5	90.5
127.5°	65.0	43.4	21.7	0.0	10.9	21.9	32.8	43.8	54.7	65.7	76.6
130°	56.5	37.7	18.8	0.0	9.2	18.4	27.6	36.8	46.0	55.2	64.4
132.5°	48.0	32.0	16.0	0.0	7.4	14.9	22.3	29.8	37.2	44.7	52.1
135°	40.1	26.7	13.4	0.0	5.9	11.8	17.7	23.6	29.6	35.5	41.4
137.5°	32.2	21.5	10.7	0.0	4.4	8.8	13.1	17.5	21.9	26.3	30.6
140°	23.6	15.8	7.9	0.0	3.1	6.1	9.2	12.3	15.3	18.4	21.5
142.5°	17.1	11.4	5.7	0.0	1.8	3.5	5.3	7.0	8.8	10.5	12.3
145°	11.2	7.4	3.7	0.0	1.1	2.2	3.3	4.4	5.5	6.6	7.7
147.5°	7.2	4.8	2.4	0.0	0.7	1.3	2.0	2.6	3.3	3.9	4.6
150°	4.6	3.1	1.5	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6
152.5°	2.6	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.7	0.4	0.2	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: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1946.0	1941.2	1940.1	1939.0	1937.9	1936.8	1935.7	1934.6	1933.5	1932.4	1931.3
5°	1922.4	1915.6	1912.7	1909.9	1907.0	1904.2	1901.3	1898.5	1895.6	1892.8	1889.9
7.5°	1891.1	1882.1	1878.6	1875.1	1871.6	1868.1	1864.5	1861.0	1857.5	1854.0	1850.5
10°	1856.7	1846.6	1842.2	1837.8	1833.5	1829.1	1824.7	1820.3	1816.0	1811.6	1807.2
12.5°	1818.4	1807.2	1802.6	1798.0	1793.4	1788.8	1784.2	1779.6	1775.0	1770.4	1765.8
15°	1774.3	1761.8	1757.6	1753.5	1749.3	1745.2	1741.0	1736.9	1732.7	1728.6	1724.4
17.5°	1727.6	1714.5	1711.0	1707.5	1704.0	1700.5	1697.0	1693.5	1690.0	1686.5	1683.0
20°	1676.9	1663.3	1661.5	1659.8	1658.0	1656.3	1654.5	1652.8	1651.0	1649.3	1647.5
22.5°	1623.5	1610.1	1611.6	1613.2	1614.7	1616.2	1617.8	1619.3	1620.8	1622.4	1623.9
25°	1566.3	1552.9	1559.7	1566.5	1573.3	1580.1	1586.8	1593.6	1600.4	1607.2	1614.0
27.5°	1508.5	1495.8	1508.5	1521.2	1533.9	1546.6	1559.3	1572.0	1584.7	1597.4	1610.1
30°	1448.3	1436.7	1455.5	1474.4	1493.2	1512.0	1530.9	1549.7	1568.5	1587.4	1606.2
32.5°	1387.9	1377.6	1402.3	1427.1	1451.8	1476.5	1501.3	1526.0	1550.7	1575.5	1600.2
35°	1330.3	1322.4	1352.8	1383.3	1413.7	1444.1	1474.6	1505.0	1535.4	1565.9	1596.3
37.5°	1283.8	1279.0	1313.8	1348.6	1383.5	1418.3	1453.1	1487.9	1522.8	1557.6	1592.4
40°	1235.9	1235.7	1275.5	1315.4	1355.2	1395.1	1434.9	1474.8	1514.6	1554.5	1594.3
42.5°	1193.6	1198.2	1242.9	1287.5	1332.2	1376.9	1421.5	1466.2	1510.9	1555.5	1600.2
45°	1152.5	1160.8	1210.9	1261.1	1311.2	1361.4	1411.5	1461.7	1511.8	1562.0	1612.1
47.5°	1111.7	1125.3	1181.4	1237.4	1293.5	1349.5	1405.6	1461.6	1517.7	1573.7	1629.8
50°	1073.0	1091.8	1154.2	1216.6	1279.0	1341.4	1403.9	1466.3	1528.7	1591.1	1653.5
52.5°	1034.6	1058.3	1127.7	1197.1	1266.5	1335.9	1405.4	1474.8	1544.2	1613.6	1683.0
55°	998.1	1026.8	1103.9	1181.0	1258.0	1335.1	1412.2	1489.3	1566.3	1643.4	1720.5
57.5°	963.5	997.2	1082.8	1168.4	1254.1	1339.7	1425.3	1510.9	1596.6	1682.2	1767.8
60°	930.8	969.6	1063.8	1157.9	1252.1	1346.2	1440.4	1534.5	1628.7	1722.8	1817.0
62.5°	896.9	940.0	1043.1	1146.3	1249.4	1352.6	1455.7	1558.9	1662.0	1765.2	1868.3
65°	863.0	910.5	1022.0	1133.4	1244.9	1356.3	1467.8	1579.2	1690.7	1802.1	1913.6
67.5°	827.3	879.0	997.9	1116.8	1235.7	1354.6	1473.5	1592.4	1711.3	1830.2	1949.1
70°	789.0	843.5	967.4	1091.4	1215.3	1339.2	1463.2	1587.1	1711.0	1835.0	1958.9
72.5°	747.4	804.1	930.2	1056.3	1182.5	1308.6	1434.7	1560.8	1687.0	1813.1	1939.2
75°	702.7	760.7	886.0	1011.2	1136.5	1261.7	1387.0	1512.2	1637.5	1762.7	1888.0
77.5°	654.7	713.4	833.4	953.4	1073.4	1193.4	1313.4	1433.4	1553.4	1673.4	1793.4
80°	603.7	662.2	775.0	887.7	1000.5	1113.3	1226.0	1338.8	1451.6	1564.3	1677.1
82.5°	551.6	609.0	714.5	820.1	925.6	1031.2	1136.7	1242.3	1347.8	1453.4	1558.9
85°	501.6	557.7	652.5	747.3	842.2	937.0	1031.8	1126.6	1221.5	1316.3	1411.1
87.5°	447.2	500.6	586.2	671.8	757.4	843.0	928.7	1014.3	1099.9	1185.5	1271.1
90°	401.2	451.3	529.5	607.7	685.8	764.0	842.2	920.4	998.5	1076.7	1154.9
92.5°	371.4	417.8	487.9	557.9	628.0	698.1	768.1	838.2	908.3	978.3	1048.4
95°	343.4	386.3	451.5	516.8	582.0	647.3	712.5	777.8	843.0	908.3	973.5
97.5°	318.8	358.7	419.1	479.6	540.0	600.4	660.9	721.3	781.7	842.2	902.6
100°	292.5	329.1	386.0	443.0	499.9	556.8	613.8	670.7	727.6	784.6	841.5
102.5°	269.8	303.5	357.6	411.7	465.8	519.9	573.9	628.0	682.1	736.2	790.3
105°	247.0	277.9	329.8	381.7	433.6	485.5	537.3	589.2	641.1	693.0	744.9
107.5°	226.0	254.2	303.9	353.6	403.3	453.0	502.8	552.5	602.2	651.9	701.6
110°	205.0	230.6	278.6	326.5	374.5	422.4	470.4	518.3	566.3	614.2	662.2



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
112.5°	185.7	208.9	254.9	300.9	346.9	392.9	438.8	484.8	530.8	576.8	622.8
115°	164.7	185.3	229.5	273.7	318.0	362.2	406.4	450.6	494.9	539.1	583.3
117.5°	147.1	165.5	207.3	249.2	291.0	332.8	374.7	416.5	458.3	500.2	542.0
120°	131.4	147.8	187.0	226.2	265.4	304.6	343.8	383.0	422.2	461.4	500.6
122.5°	117.3	132.0	167.9	203.8	239.7	275.6	311.6	347.5	383.4	419.3	455.2
125°	103.4	116.3	149.1	182.0	214.8	247.7	280.5	313.4	346.2	379.1	411.9
127.5°	87.6	98.5	128.3	158.1	187.9	217.7	247.4	277.2	307.0	336.8	366.6
130°	73.6	82.8	108.4	134.0	159.6	185.2	210.9	236.5	262.1	287.7	313.3
132.5°	59.6	67.0	88.9	110.8	132.7	154.6	176.5	198.4	220.3	242.2	264.1
135°	47.3	53.2	72.3	91.3	110.4	129.4	148.5	167.5	186.6	205.6	224.7
137.5°	35.0	39.4	56.0	72.7	89.3	106.0	122.6	139.3	155.9	172.6	189.2
140°	24.5	27.6	42.1	56.5	71.0	85.4	99.9	114.3	128.8	143.2	157.7
142.5°	14.0	15.8	28.3	40.8	53.2	65.7	78.2	90.7	103.1	115.6	128.1
145°	8.8	9.9	20.2	30.5	40.8	51.1	61.3	71.6	81.9	92.2	102.5
147.5°	5.2	5.9	14.0	22.1	30.2	38.3	46.4	54.5	62.6	70.7	78.8
150°	1.8	2.0	8.3	14.7	21.0	27.4	33.7	40.1	46.4	52.8	59.1
152.5°	0.0	0.0	4.6	9.2	13.8	18.4	23.0	27.6	32.2	36.8	41.4
155°	0.0	0.0	2.8	5.7	8.5	11.4	14.2	17.1	19.9	22.8	25.6
157.5°	0.0	0.0	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8	9.9
160°	0.0	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.6	1.8	2.0
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1928.9	1926.5	1924.1	1921.7	1919.3	1916.9	1914.5	1912.1	1909.7	1907.7	1905.7
5°	1887.1	1884.2	1881.4	1878.5	1875.7	1872.8	1870.0	1867.1	1864.3	1863.2	1862.1
7.5°	1847.4	1844.4	1841.3	1838.2	1835.2	1832.1	1829.0	1826.0	1822.9	1821.8	1820.7
10°	1804.6	1801.9	1799.3	1796.7	1794.0	1791.4	1788.8	1786.1	1783.5	1782.2	1780.9
12.5°	1763.6	1761.4	1759.2	1757.0	1754.9	1752.7	1750.5	1748.3	1746.1	1745.2	1744.3
15°	1723.3	1722.2	1721.1	1720.0	1718.9	1717.8	1716.7	1715.6	1714.5	1714.9	1715.4
17.5°	1684.8	1686.5	1688.3	1690.0	1691.8	1693.5	1695.3	1697.0	1698.8	1701.0	1703.2
20°	1653.9	1660.2	1666.6	1672.9	1679.3	1685.6	1692.0	1698.3	1704.7	1708.2	1711.7
22.5°	1634.4	1644.9	1655.4	1665.9	1676.5	1687.0	1697.5	1708.0	1718.5	1722.9	1727.3
25°	1627.4	1640.7	1654.1	1667.5	1680.8	1694.2	1707.6	1720.9	1734.3	1739.3	1744.4
27.5°	1625.4	1640.8	1656.1	1671.4	1686.8	1702.1	1717.4	1732.8	1748.1	1754.0	1759.9
30°	1623.7	1641.2	1658.7	1676.2	1693.8	1711.3	1728.8	1746.3	1763.8	1770.8	1777.8
32.5°	1620.6	1640.9	1661.3	1681.7	1702.0	1722.4	1742.8	1763.1	1783.5	1792.0	1800.6
35°	1619.9	1643.6	1667.2	1690.9	1714.5	1738.2	1761.8	1785.5	1809.1	1819.4	1829.7
37.5°	1620.2	1648.0	1675.8	1703.6	1731.4	1759.2	1787.0	1814.8	1842.6	1855.1	1867.6
40°	1626.7	1659.1	1691.5	1723.9	1756.4	1788.8	1821.2	1853.6	1886.0	1900.9	1915.8
42.5°	1637.9	1675.5	1713.2	1750.9	1788.5	1826.2	1863.9	1901.5	1939.2	1956.7	1974.2
45°	1655.9	1699.7	1743.5	1787.3	1831.0	1874.8	1918.6	1962.4	2006.2	2026.6	2046.9
47.5°	1680.2	1730.5	1780.9	1831.3	1881.6	1932.0	1982.4	2032.7	2083.1	2107.4	2131.7
50°	1712.4	1771.3	1830.2	1889.1	1948.0	2006.9	2065.8	2124.7	2183.6	2210.8	2237.9
52.5°	1750.7	1818.3	1886.0	1953.7	2021.3	2089.0	2156.7	2224.3	2292.0	2322.0	2352.0
55°	1796.0	1871.6	1947.1	2022.7	2098.2	2173.8	2249.3	2324.9	2400.4	2434.3	2468.3
57.5°	1851.7	1935.5	2019.4	2103.3	2187.1	2271.0	2354.9	2438.7	2522.6	2558.9	2595.3
60°	1909.6	2002.3	2094.9	2187.5	2280.2	2372.8	2465.4	2558.1	2650.7	2687.5	2724.3
62.5°	1967.5	2066.7	2165.9	2265.1	2364.2	2463.4	2562.6	2661.8	2761.0	2797.6	2834.1
65°	2016.3	2119.0	2221.7	2324.4	2427.1	2529.8	2632.5	2735.2	2837.9	2874.7	2911.5
67.5°	2054.0	2158.9	2263.8	2368.7	2473.5	2578.4	2683.3	2788.2	2893.1	2927.9	2962.7
70°	2063.8	2168.7	2273.6	2378.5	2483.3	2588.2	2693.1	2798.0	2902.9	2935.3	2967.7
72.5°	2041.2	2143.3	2245.3	2347.4	2449.4	2551.5	2653.5	2755.6	2857.6	2887.4	2917.2
75°	1984.8	2081.6	2178.3	2275.1	2371.9	2468.7	2565.4	2662.2	2759.0	2785.9	2812.9
77.5°	1884.1	1974.7	2065.4	2156.0	2246.7	2337.3	2428.0	2518.6	2609.3	2635.6	2661.9
80°	1759.4	1841.8	1924.1	2006.4	2088.8	2171.1	2253.4	2335.8	2418.1	2442.4	2466.7
82.5°	1630.7	1702.5	1774.4	1846.2	1918.0	1989.8	2061.7	2133.5	2205.3	2227.6	2250.0
85°	1475.5	1539.9	1604.2	1668.6	1733.0	1797.4	1861.7	1926.1	1990.5	2010.2	2029.9
87.5°	1327.4	1383.7	1439.9	1496.2	1552.5	1608.8	1665.0	1721.3	1777.6	1795.8	1814.0
90°	1203.1	1251.2	1299.4	1347.6	1395.7	1443.9	1492.1	1540.2	1588.4	1605.5	1622.6
92.5°	1092.9	1137.3	1181.8	1226.2	1270.7	1315.1	1359.6	1404.0	1448.5	1463.6	1478.7
95°	1013.6	1053.7	1093.7	1133.8	1173.9	1214.0	1254.0	1294.1	1334.2	1348.4	1362.7
97.5°	940.5	978.4	1016.2	1054.1	1092.0	1129.9	1167.7	1205.6	1243.5	1256.9	1270.2
100°	878.3	915.1	951.9	988.7	1025.4	1062.2	1099.0	1135.8	1172.6	1185.3	1198.0
102.5°	826.0	861.7	897.4	933.1	968.7	1004.4	1040.1	1075.8	1111.5	1124.2	1136.9
105°	780.4	815.9	851.3	886.8	922.3	957.8	993.2	1028.7	1064.2	1076.7	1089.2
107.5°	737.3	773.0	808.7	844.4	880.0	915.7	951.4	987.1	1022.8	1035.1	1047.3
110°	697.7	733.1	768.6	804.1	839.5	875.0	910.5	945.9	981.4	993.9	1006.4



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
112.5°	658.3	693.7	729.2	764.7	800.1	835.6	871.1	906.5	942.0	954.7	967.4
115°	618.8	654.3	689.7	725.2	760.7	796.2	831.6	867.1	902.6	915.5	928.4
117.5°	577.2	612.5	647.7	683.0	718.2	753.5	788.7	824.0	859.2	872.6	885.9
120°	535.0	569.4	603.7	638.1	672.5	706.9	741.2	775.6	810.0	823.8	837.6
122.5°	488.5	521.8	555.1	588.4	621.6	654.9	688.2	721.5	754.8	768.8	782.8
125°	443.2	474.5	505.8	537.1	568.5	599.8	631.1	662.4	693.7	707.7	721.7
127.5°	396.2	425.7	455.3	484.8	514.4	543.9	573.5	603.0	632.6	646.0	659.3
130°	342.0	370.7	399.4	428.1	456.7	485.4	514.1	542.8	571.5	583.1	594.7
132.5°	291.5	318.8	346.2	373.6	400.9	428.3	455.7	483.0	510.4	521.1	531.9
135°	249.4	274.2	298.9	323.7	348.4	373.2	397.9	422.7	447.4	457.7	468.0
137.5°	210.0	230.8	251.6	272.4	293.2	314.0	334.8	355.6	376.4	387.1	397.9
140°	174.6	191.4	208.3	225.1	242.0	258.8	275.7	292.5	309.4	319.3	329.1
142.5°	142.3	156.6	170.8	185.0	199.3	213.5	227.7	242.0	256.2	264.7	273.3
145°	114.5	126.6	138.6	150.7	162.7	174.8	186.8	198.9	210.9	219.0	227.1
147.5°	88.9	99.0	109.0	119.1	129.2	139.3	149.3	159.4	169.5	177.2	184.8
150°	67.2	75.3	83.4	91.5	99.6	107.7	115.8	123.9	132.0	139.4	146.9
152.5°	47.7	54.1	60.4	66.8	73.1	79.5	85.8	92.2	98.5	105.5	112.5
155°	30.6	35.7	40.7	45.7	50.8	55.8	60.8	65.9	70.9	77.0	83.2
157.5°	14.1	18.2	22.4	26.5	30.7	34.8	39.0	43.1	47.3	52.8	58.3
160°	4.8	7.7	10.5	13.4	16.2	19.1	21.9	24.8	27.6	32.0	36.4
162.5°	0.9	1.8	2.6	3.5	4.4	5.3	6.1	7.0	7.9	11.4	14.9
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.4
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1903.8	1901.8	1899.8	1897.8	1895.9	1893.9	1891.9	1894.1	1896.3	1898.5	1900.7
5°	1861.0	1859.9	1858.9	1857.8	1856.7	1855.6	1854.5	1855.8	1857.1	1858.4	1859.7
7.5°	1819.6	1818.5	1817.5	1816.4	1815.3	1814.2	1813.1	1814.0	1814.9	1815.7	1816.6
10°	1779.6	1778.3	1776.9	1775.6	1774.3	1773.0	1771.7	1772.4	1773.0	1773.7	1774.3
12.5°	1743.5	1742.6	1741.7	1740.8	1740.0	1739.1	1738.2	1738.4	1738.6	1738.9	1739.1
15°	1715.8	1716.3	1716.7	1717.2	1717.6	1718.1	1718.5	1718.1	1717.6	1717.2	1716.7
17.5°	1705.4	1707.6	1709.7	1711.9	1714.1	1716.3	1718.5	1716.5	1714.6	1712.6	1710.6
20°	1715.2	1718.7	1722.2	1725.7	1729.2	1732.7	1736.2	1732.5	1728.8	1725.0	1721.3
22.5°	1731.6	1736.0	1740.4	1744.8	1749.1	1753.5	1757.9	1752.9	1747.8	1742.8	1737.8
25°	1749.4	1754.4	1759.5	1764.5	1769.5	1774.6	1779.6	1774.1	1768.6	1763.2	1757.7
27.5°	1765.8	1771.7	1777.7	1783.6	1789.5	1795.4	1801.3	1794.9	1788.6	1782.2	1775.9
30°	1784.8	1791.8	1798.9	1805.9	1812.9	1819.9	1826.9	1819.5	1812.0	1804.6	1797.1
32.5°	1809.1	1817.7	1826.2	1834.8	1843.3	1851.9	1860.4	1851.9	1843.3	1834.8	1826.2
35°	1840.0	1850.3	1860.6	1870.9	1881.2	1891.5	1901.8	1891.7	1881.6	1871.6	1861.5
37.5°	1880.1	1892.6	1905.0	1917.5	1930.0	1942.5	1955.0	1942.5	1930.0	1917.5	1905.0
40°	1930.7	1945.6	1960.4	1975.3	1990.2	2005.1	2020.0	2005.8	1991.5	1977.3	1963.1
42.5°	1991.8	2009.3	2026.8	2044.3	2061.9	2079.4	2096.9	2080.9	2064.9	2048.9	2032.9
45°	2067.3	2087.7	2108.0	2128.4	2148.8	2169.1	2189.5	2170.4	2151.4	2132.3	2113.3
47.5°	2156.0	2180.3	2204.6	2228.9	2253.2	2277.5	2301.8	2279.2	2256.7	2234.1	2211.6
50°	2265.1	2292.2	2319.4	2346.5	2373.7	2400.8	2428.0	2402.4	2376.8	2351.1	2325.5
52.5°	2382.0	2412.0	2442.0	2472.0	2502.0	2532.0	2562.0	2534.0	2505.9	2477.9	2449.9
55°	2502.2	2536.1	2570.1	2604.0	2637.9	2671.9	2705.8	2675.1	2644.5	2613.8	2583.2
57.5°	2631.6	2668.0	2704.3	2740.7	2777.0	2813.4	2849.7	2817.3	2784.9	2752.5	2720.1
60°	2761.0	2797.8	2834.6	2871.4	2908.1	2944.9	2981.7	2948.6	2915.6	2882.5	2849.5
62.5°	2870.7	2907.3	2943.8	2980.4	3017.0	3053.5	3090.1	3057.5	3024.9	2992.2	2959.6
65°	2948.3	2985.1	3021.8	3058.6	3095.4	3132.2	3169.0	3137.2	3105.5	3073.7	3042.0
67.5°	2997.5	3032.3	3067.2	3102.0	3136.8	3171.6	3206.4	3176.4	3146.4	3116.4	3086.4
70°	3000.1	3032.5	3065.0	3097.4	3129.8	3162.2	3194.6	3166.8	3139.0	3111.2	3083.4
72.5°	2946.9	2976.7	3006.5	3036.3	3066.0	3095.8	3125.6	3099.8	3073.9	3048.1	3022.3
75°	2839.8	2866.7	2893.7	2920.6	2947.5	2974.5	3001.4	2977.8	2954.1	2930.5	2906.8
77.5°	2688.1	2714.4	2740.7	2767.0	2793.2	2819.5	2845.8	2821.7	2797.6	2773.5	2749.4
80°	2491.0	2515.3	2539.7	2564.0	2588.3	2612.6	2636.9	2614.6	2592.2	2569.9	2547.5
82.5°	2272.3	2294.6	2317.0	2339.3	2361.6	2384.0	2406.3	2385.5	2364.7	2343.9	2323.1
85°	2049.6	2069.3	2089.0	2108.7	2128.4	2148.1	2167.8	2148.8	2129.7	2110.7	2091.6
87.5°	1832.1	1850.3	1868.5	1886.7	1904.8	1923.0	1941.2	1923.5	1905.7	1888.0	1870.3
90°	1639.6	1656.7	1673.8	1690.9	1707.9	1725.0	1742.1	1725.9	1709.7	1693.5	1677.3
92.5°	1493.8	1508.9	1524.1	1539.2	1554.3	1569.4	1584.5	1570.0	1555.6	1541.1	1526.7
95°	1376.9	1391.1	1405.4	1419.6	1433.8	1448.1	1462.3	1449.2	1436.0	1422.9	1409.7
97.5°	1283.6	1297.0	1310.3	1323.7	1337.1	1350.4	1363.8	1351.3	1338.8	1326.3	1313.8
100°	1210.7	1223.4	1236.1	1248.8	1261.5	1274.2	1286.9	1274.9	1262.8	1250.8	1238.7
102.5°	1149.6	1162.3	1175.0	1187.7	1200.4	1213.1	1225.8	1214.2	1202.6	1191.0	1179.4
105°	1101.6	1114.1	1126.6	1139.1	1151.5	1164.0	1176.5	1164.9	1153.3	1141.7	1130.1
107.5°	1059.6	1071.9	1084.1	1096.4	1108.7	1120.9	1133.2	1121.8	1110.4	1099.0	1087.6
110°	1018.9	1031.4	1043.8	1056.3	1068.8	1081.3	1093.8	1082.4	1071.0	1059.6	1048.2



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
112.5°	980.1	992.8	1005.5	1018.2	1030.9	1043.6	1056.3	1044.7	1033.1	1021.5	1009.9
115°	941.4	954.3	967.2	980.1	993.1	1006.0	1018.9	1007.1	995.3	983.4	971.6
117.5°	899.3	912.7	926.0	939.4	952.8	966.1	979.5	967.5	955.4	943.4	931.3
120°	851.4	865.2	878.9	892.7	906.5	920.3	934.1	921.8	909.6	897.3	885.1
122.5°	796.8	810.8	824.9	838.9	852.9	866.9	880.9	868.4	855.9	843.5	831.0
125°	735.7	749.7	763.8	777.8	791.8	805.8	819.8	808.0	796.2	784.3	772.5
127.5°	672.7	686.0	699.4	712.7	726.1	739.4	752.8	741.4	730.0	718.6	707.2
130°	606.3	617.9	629.6	641.2	652.8	664.4	676.0	665.7	655.4	645.1	634.8
132.5°	542.6	553.3	564.1	574.8	585.5	596.3	607.0	598.2	589.5	580.7	572.0
135°	478.3	488.6	498.8	509.1	519.4	529.7	540.0	532.1	524.2	516.3	508.4
137.5°	408.6	419.3	430.1	440.8	451.5	462.3	473.0	465.1	457.2	449.3	441.4
140°	339.0	348.8	358.7	368.5	378.4	388.2	398.1	391.5	385.0	378.4	371.8
142.5°	281.8	290.4	298.9	307.5	316.0	324.6	333.1	328.5	323.9	319.3	314.7
145°	235.2	243.3	251.4	259.5	267.6	275.7	283.8	280.1	276.4	272.6	268.9
147.5°	192.5	200.2	207.8	215.5	223.2	230.8	238.5	235.4	232.4	229.3	226.2
150°	154.3	161.8	169.2	176.7	184.1	191.6	199.0	196.4	193.8	191.1	188.5
152.5°	119.5	126.5	133.6	140.6	147.6	154.6	161.6	159.4	157.2	155.0	152.8
155°	89.3	95.4	101.6	107.7	113.8	120.0	126.1	124.6	123.0	121.5	120.0
157.5°	63.7	69.2	74.7	80.2	85.6	91.1	96.6	95.3	94.0	92.6	91.3
160°	40.7	45.1	49.5	53.9	58.2	62.6	67.0	66.1	65.2	64.4	63.5
162.5°	18.4	21.9	25.4	28.9	32.4	35.9	39.4	39.0	38.5	38.1	37.7
165°	6.6	8.8	10.9	13.1	15.3	17.5	19.7	19.7	19.7	19.7	19.7
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1902.8	1905.0	1907.2	1909.4	1911.6	1914.7	1917.7	1920.8	1923.9	1926.9	1930.0
5°	1861.1	1862.4	1863.7	1865.0	1866.3	1870.0	1873.7	1877.5	1881.2	1884.9	1888.6
7.5°	1817.5	1818.4	1819.2	1820.1	1821.0	1825.6	1830.2	1834.8	1839.4	1844.0	1848.6
10°	1775.0	1775.6	1776.3	1776.9	1777.6	1782.2	1786.8	1791.4	1796.0	1800.6	1805.2
12.5°	1739.3	1739.5	1739.8	1740.0	1740.2	1745.0	1749.8	1754.6	1759.4	1764.3	1769.1
15°	1716.3	1715.8	1715.4	1714.9	1714.5	1717.6	1720.6	1723.7	1726.8	1729.8	1732.9
17.5°	1708.7	1706.7	1704.7	1702.8	1700.8	1701.0	1701.2	1701.4	1701.6	1701.9	1702.1
20°	1717.6	1713.9	1710.1	1706.4	1702.7	1698.5	1694.4	1690.2	1686.1	1681.9	1677.8
22.5°	1732.7	1727.7	1722.7	1717.6	1712.6	1704.5	1696.4	1688.3	1680.2	1672.1	1664.0
25°	1752.2	1746.7	1741.3	1735.8	1730.3	1718.7	1707.1	1695.5	1683.9	1672.3	1660.7
27.5°	1769.5	1763.2	1756.8	1750.5	1744.1	1730.5	1716.9	1703.4	1689.8	1676.2	1662.6
30°	1789.7	1782.2	1774.8	1767.3	1759.9	1743.9	1727.9	1711.9	1695.9	1680.0	1664.0
32.5°	1817.7	1809.1	1800.6	1792.0	1783.5	1764.2	1745.0	1725.7	1706.4	1687.2	1667.9
35°	1851.4	1841.3	1831.3	1821.2	1811.1	1788.3	1765.6	1742.8	1720.0	1697.3	1674.5
37.5°	1892.6	1880.1	1867.6	1855.1	1842.6	1816.5	1790.5	1764.4	1738.4	1712.3	1686.3
40°	1948.8	1934.6	1920.4	1906.1	1891.9	1861.0	1830.1	1799.3	1768.4	1737.5	1706.6
42.5°	2017.0	2001.0	1985.0	1969.0	1953.0	1916.2	1879.4	1842.6	1805.8	1769.1	1732.3
45°	2094.2	2075.2	2056.1	2037.1	2018.0	1975.5	1933.0	1890.6	1848.1	1805.6	1763.1
47.5°	2189.0	2166.5	2143.9	2121.4	2098.8	2049.8	2000.7	1951.7	1902.6	1853.6	1804.5
50°	2299.9	2274.3	2248.6	2223.0	2197.4	2140.5	2083.5	2026.6	1969.7	1912.7	1855.8
52.5°	2421.8	2393.8	2365.8	2337.7	2309.7	2244.2	2178.8	2113.3	2047.8	1982.4	1916.9
55°	2552.5	2521.9	2491.2	2460.6	2429.9	2355.9	2281.9	2207.9	2133.9	2059.8	1985.8
57.5°	2687.6	2655.2	2622.8	2590.4	2558.0	2475.5	2392.9	2310.4	2227.8	2145.3	2062.7
60°	2816.4	2783.4	2750.3	2717.3	2684.2	2594.0	2503.8	2413.5	2323.3	2233.1	2142.9
62.5°	2927.0	2894.4	2861.7	2829.1	2796.5	2699.9	2603.4	2506.8	2410.2	2313.7	2217.1
65°	3010.2	2978.5	2946.7	2915.0	2883.2	2782.5	2681.8	2581.0	2480.3	2379.6	2278.9
67.5°	3056.4	3026.4	2996.4	2966.4	2936.4	2833.5	2730.6	2627.7	2524.8	2421.8	2318.9
70°	3055.5	3027.7	2999.9	2972.1	2944.3	2841.6	2738.9	2636.2	2533.5	2430.8	2328.1
72.5°	2996.4	2970.6	2944.8	2918.9	2893.1	2793.2	2693.4	2593.5	2493.7	2393.8	2294.0
75°	2883.2	2859.5	2835.9	2812.2	2788.6	2694.2	2599.8	2505.5	2411.1	2316.7	2222.3
77.5°	2725.4	2701.3	2677.2	2653.1	2629.0	2541.6	2454.2	2366.9	2279.5	2192.1	2104.7
80°	2525.2	2502.8	2480.5	2458.1	2435.8	2356.1	2276.4	2196.7	2117.0	2037.3	1957.6
82.5°	2302.3	2281.5	2260.7	2239.9	2219.1	2148.1	2077.2	2006.2	1935.3	1864.3	1793.4
85°	2072.6	2053.5	2034.5	2015.4	1996.4	1934.0	1871.6	1809.2	1746.8	1684.3	1621.9
87.5°	1852.5	1834.8	1817.1	1799.3	1781.6	1727.3	1673.0	1618.7	1564.4	1510.0	1455.7
90°	1661.1	1644.9	1628.7	1612.5	1596.3	1548.1	1499.9	1451.8	1403.6	1355.4	1307.2
92.5°	1512.2	1497.8	1483.3	1468.9	1454.4	1411.5	1368.6	1325.6	1282.7	1239.8	1196.9
95°	1396.6	1383.4	1370.3	1357.1	1344.0	1304.4	1264.7	1225.1	1185.5	1145.8	1106.2
97.5°	1301.4	1288.9	1276.4	1263.9	1251.4	1214.2	1177.0	1139.7	1102.5	1065.3	1028.1
100°	1226.7	1214.6	1202.6	1190.5	1178.5	1142.8	1107.1	1071.4	1035.7	1000.1	964.4
102.5°	1167.8	1156.2	1144.6	1133.0	1121.4	1086.4	1051.3	1016.3	981.2	946.2	911.1
105°	1118.5	1106.9	1095.3	1083.7	1072.1	1037.7	1003.3	969.0	934.6	900.2	865.8
107.5°	1076.3	1064.9	1053.5	1042.1	1030.7	996.5	962.4	928.2	894.1	859.9	825.8
110°	1036.9	1025.5	1014.1	1002.7	991.3	957.1	923.0	888.8	854.6	820.5	786.3



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
112.5°	998.3	986.7	975.1	963.5	951.9	918.0	884.0	850.1	816.1	782.2	748.2
115°	959.8	948.0	936.1	924.3	912.5	878.6	844.6	810.7	776.7	742.8	708.8
117.5°	919.3	907.2	895.2	883.1	871.1	837.2	803.2	769.3	735.3	701.4	667.4
120°	872.8	860.6	848.3	836.1	823.8	790.5	757.2	723.9	690.6	657.4	624.1
122.5°	818.5	806.0	793.6	781.1	768.6	736.6	704.7	672.7	640.7	608.8	576.8
125°	760.7	748.9	737.0	725.2	713.4	682.3	651.2	620.1	589.0	558.0	526.9
127.5°	695.9	684.5	673.1	661.7	650.3	621.4	592.5	563.6	534.7	505.8	476.9
130°	624.5	614.2	603.9	593.6	583.3	557.0	530.8	504.5	478.2	452.0	425.7
132.5°	563.2	554.5	545.7	537.0	528.2	503.0	477.8	452.6	427.4	402.3	377.1
135°	500.6	492.7	484.8	476.9	469.0	446.5	423.9	401.4	378.8	356.3	333.7
137.5°	433.6	425.7	417.8	409.9	402.0	383.6	365.2	346.8	328.4	310.1	291.7
140°	365.3	358.7	352.1	345.6	339.0	324.1	309.2	294.3	279.4	264.6	249.7
142.5°	310.1	305.5	300.9	296.3	291.7	279.0	266.3	253.6	240.9	228.2	215.5
145°	265.2	261.5	257.7	254.0	250.3	239.3	228.4	217.4	206.5	195.5	184.6
147.5°	223.2	220.1	217.0	214.0	210.9	201.7	192.5	183.3	174.1	164.9	155.7
150°	185.9	183.3	180.6	178.0	175.4	167.5	159.6	151.7	143.8	136.0	128.1
152.5°	150.7	148.5	146.3	144.1	141.9	135.3	128.8	122.2	115.6	109.1	102.5
155°	118.4	116.9	115.4	113.8	112.3	106.8	101.4	95.9	90.4	85.0	79.5
157.5°	90.0	88.7	87.3	86.0	84.7	80.1	75.5	70.9	66.3	61.8	57.2
160°	62.6	61.7	60.9	60.0	59.1	55.6	52.1	48.6	45.1	41.6	38.1
162.5°	37.2	36.8	36.4	35.9	35.5	33.7	32.0	30.2	28.5	26.7	25.0
165°	19.7	19.7	19.7	19.7	19.7	19.0	18.4	17.7	17.1	16.4	15.8
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1933.1	1936.1	1939.2	1940.1	1941.0	1941.8	1942.7	1943.6	1944.5	1945.3	1946.2
5°	1892.4	1896.1	1899.8	1902.0	1904.2	1906.4	1908.6	1910.7	1912.9	1915.1	1917.3
7.5°	1853.2	1857.8	1862.4	1865.2	1868.1	1870.9	1873.8	1876.6	1879.5	1882.3	1885.2
10°	1809.8	1814.4	1819.0	1822.5	1826.0	1829.5	1833.0	1836.5	1840.0	1843.5	1847.0
12.5°	1773.9	1778.7	1783.5	1786.1	1788.8	1791.4	1794.0	1796.7	1799.3	1801.9	1804.6
15°	1736.0	1739.0	1742.1	1744.5	1746.9	1749.3	1751.7	1754.2	1756.6	1759.0	1761.4
17.5°	1702.3	1702.5	1702.7	1704.0	1705.3	1706.6	1707.9	1709.3	1710.6	1711.9	1713.2
20°	1673.6	1669.5	1665.3	1665.1	1664.9	1664.6	1664.4	1664.2	1664.0	1663.7	1663.5
22.5°	1655.9	1647.8	1639.7	1636.4	1633.1	1629.8	1626.5	1623.3	1620.0	1616.7	1613.4
25°	1649.1	1637.5	1625.9	1618.0	1610.1	1602.2	1594.3	1586.5	1578.6	1570.7	1562.8
27.5°	1649.1	1635.5	1621.9	1607.9	1593.9	1579.9	1565.9	1551.8	1537.8	1523.8	1509.8
30°	1648.0	1632.0	1616.0	1596.1	1576.2	1556.2	1536.3	1516.4	1496.5	1476.5	1456.6
32.5°	1648.6	1629.4	1610.1	1584.7	1559.3	1533.9	1508.5	1483.1	1457.7	1432.3	1406.9
35°	1651.7	1629.0	1606.2	1575.1	1544.0	1512.9	1481.8	1450.7	1419.6	1388.5	1357.4
37.5°	1660.2	1634.2	1608.1	1571.5	1535.0	1498.4	1461.8	1425.3	1388.7	1352.1	1315.6
40°	1675.8	1644.9	1614.0	1572.4	1530.8	1489.2	1447.6	1406.0	1364.4	1322.8	1281.2
42.5°	1695.5	1658.7	1621.9	1575.7	1529.5	1483.3	1437.1	1390.9	1344.7	1298.5	1252.3
45°	1720.7	1678.2	1635.7	1584.2	1532.8	1481.3	1429.9	1378.4	1327.0	1275.5	1224.1
47.5°	1755.5	1706.4	1657.4	1600.0	1542.7	1485.3	1427.9	1370.6	1313.2	1255.8	1198.5
50°	1798.9	1741.9	1685.0	1620.8	1556.7	1492.5	1428.4	1364.2	1300.1	1235.9	1171.8
52.5°	1851.4	1786.0	1720.5	1649.1	1577.7	1506.3	1434.9	1363.6	1292.2	1220.8	1149.4
55°	1911.8	1837.8	1763.8	1684.3	1604.8	1525.3	1445.8	1366.4	1286.9	1207.4	1127.9
57.5°	1980.2	1897.6	1815.1	1727.1	1639.0	1551.0	1463.0	1374.9	1286.9	1198.9	1110.8
60°	2052.6	1962.4	1872.2	1775.2	1678.2	1581.2	1484.2	1387.2	1290.2	1193.2	1096.2
62.5°	2120.5	2024.0	1927.4	1821.6	1715.9	1610.1	1504.3	1398.6	1292.8	1187.0	1081.3
65°	2178.1	2077.4	1976.7	1862.4	1748.1	1633.8	1519.5	1405.1	1290.8	1176.5	1062.2
67.5°	2216.0	2113.1	2010.2	1888.7	1767.1	1645.6	1524.1	1402.5	1281.0	1159.5	1037.9
70°	2225.4	2122.7	2020.0	1893.7	1767.3	1641.0	1514.6	1388.3	1261.9	1135.6	1009.2
72.5°	2194.1	2094.3	1994.4	1867.0	1739.5	1612.1	1484.6	1357.2	1229.7	1102.3	974.8
75°	2128.0	2033.6	1939.2	1812.9	1686.5	1560.2	1433.8	1307.5	1181.1	1054.8	928.4
77.5°	2017.4	1930.0	1842.6	1721.1	1599.6	1478.0	1356.5	1235.0	1113.5	991.9	870.4
80°	1877.9	1798.2	1718.5	1604.9	1491.2	1377.6	1263.9	1150.3	1036.6	923.0	809.3
82.5°	1722.4	1651.5	1580.5	1476.7	1372.9	1269.1	1165.3	1061.6	957.8	854.0	750.2
85°	1559.5	1497.1	1434.7	1340.1	1245.5	1150.9	1056.3	961.7	867.1	772.5	677.9
87.5°	1401.4	1347.1	1292.8	1208.7	1124.6	1040.5	956.4	872.4	788.3	704.2	620.1
90°	1259.1	1210.9	1162.7	1087.4	1012.1	936.7	861.4	786.1	710.8	635.4	560.1
92.5°	1153.9	1111.0	1068.1	999.1	930.2	861.2	792.2	723.3	654.3	585.3	516.4
95°	1066.6	1026.9	987.3	923.6	859.9	796.2	732.5	668.7	605.0	541.3	477.6
97.5°	990.8	953.6	916.4	857.3	798.2	739.0	679.9	620.8	561.7	502.5	443.4
100°	928.7	893.0	857.3	801.5	745.6	689.8	633.9	578.1	522.2	466.4	410.5
102.5°	876.1	841.0	806.0	752.8	699.6	646.4	593.2	539.9	486.7	433.5	380.3
105°	831.5	797.1	762.7	711.2	659.8	608.3	556.9	505.4	454.0	402.5	351.1
107.5°	791.6	757.5	723.3	673.4	623.4	573.5	523.6	473.6	423.7	373.8	323.8
110°	752.1	718.0	683.8	635.9	587.9	540.0	492.0	444.1	396.1	348.2	300.2



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
112.5°	714.3	680.3	646.4	600.0	553.6	507.1	460.7	414.3	367.9	321.4	275.0
115°	674.9	640.9	607.0	562.5	518.1	473.6	429.2	384.7	340.3	295.8	251.4
117.5°	633.5	599.5	565.6	523.3	481.1	438.8	396.6	354.3	312.1	269.8	227.6
120°	590.8	557.5	524.2	484.8	445.4	406.0	366.6	327.1	287.7	248.3	208.9
122.5°	544.8	512.9	480.9	444.5	408.2	371.8	335.5	299.1	262.8	226.4	190.1
125°	495.8	464.7	433.6	400.8	367.9	335.1	302.2	269.4	236.5	203.7	170.8
127.5°	448.0	419.1	390.2	360.4	330.6	300.9	271.1	241.3	211.5	181.8	152.0
130°	399.4	373.2	346.9	320.4	293.9	267.4	240.9	214.4	187.9	161.4	134.9
132.5°	351.9	326.7	301.5	278.5	255.5	232.5	209.5	186.6	163.6	140.6	117.6
135°	311.2	288.6	266.1	245.7	225.4	205.0	184.6	164.3	143.9	123.5	103.2
137.5°	273.3	254.9	236.5	217.9	199.3	180.7	162.1	143.4	124.8	106.2	87.6
140°	234.8	219.9	205.0	188.4	171.7	155.1	138.4	121.8	105.1	88.5	71.8
142.5°	202.8	190.1	177.4	162.5	147.6	132.7	117.8	103.0	88.1	73.2	58.3
145°	173.6	162.7	151.7	138.6	125.4	112.3	99.2	86.0	72.9	59.8	46.6
147.5°	146.5	137.3	128.1	116.7	105.3	93.9	82.5	71.2	59.8	48.4	37.0
150°	120.2	112.3	104.4	95.2	86.0	76.8	67.6	58.5	49.3	40.1	30.9
152.5°	95.9	89.4	82.8	75.6	68.3	61.1	53.9	46.6	39.4	32.2	24.9
155°	74.0	68.6	63.1	57.6	52.1	46.7	41.2	35.7	30.2	24.8	19.3
157.5°	52.6	48.0	43.4	39.9	36.4	32.9	29.4	25.8	22.3	18.8	15.3
160°	34.6	31.1	27.6	25.4	23.2	21.0	18.8	16.7	14.5	12.3	10.1
162.5°	23.2	21.5	19.7	18.2	16.6	15.1	13.6	12.0	10.5	9.0	7.4
165°	15.1	14.5	13.8	12.7	11.6	10.5	9.4	8.3	7.2	6.1	5.0
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: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1947.1	1953.0	1958.9	1964.8	1970.7	1976.7	1982.6	1988.5	1994.4	2000.3	2000.3
5°	1919.5	1927.4	1935.3	1943.2	1951.1	1958.9	1966.8	1974.7	1982.6	1990.5	1992.9
7.5°	1888.0	1897.4	1906.8	1916.2	1925.6	1935.1	1944.5	1953.9	1963.3	1972.7	1978.0
10°	1850.5	1861.5	1872.4	1883.4	1894.3	1905.3	1916.2	1927.2	1938.1	1949.1	1956.8
12.5°	1807.2	1819.5	1831.7	1844.0	1856.2	1868.5	1880.7	1893.0	1905.2	1917.5	1927.8
15°	1763.8	1776.9	1790.1	1803.2	1816.4	1829.5	1842.7	1855.8	1869.0	1882.1	1894.8
17.5°	1714.5	1728.5	1742.5	1756.6	1770.6	1784.6	1798.6	1812.7	1826.7	1840.7	1856.0
20°	1663.3	1677.3	1691.3	1705.3	1719.3	1733.4	1747.4	1761.4	1775.4	1789.4	1807.8
22.5°	1610.1	1623.9	1637.7	1651.5	1665.3	1679.1	1692.9	1706.7	1720.5	1734.3	1755.5
25°	1554.9	1568.9	1582.9	1596.9	1610.9	1625.0	1639.0	1653.0	1667.0	1681.0	1704.7
27.5°	1495.8	1508.7	1521.6	1534.6	1547.5	1560.4	1573.3	1586.3	1599.2	1612.1	1639.5
30°	1436.7	1448.3	1459.9	1471.5	1483.1	1494.7	1506.3	1517.9	1529.5	1541.1	1572.0
32.5°	1381.5	1391.1	1400.8	1410.4	1420.0	1429.7	1439.3	1448.9	1458.6	1468.2	1502.4
35°	1326.3	1333.7	1341.2	1348.6	1356.1	1363.5	1371.0	1378.4	1385.9	1393.3	1431.0
37.5°	1279.0	1283.2	1287.3	1291.5	1295.7	1299.8	1304.0	1308.2	1312.3	1316.5	1358.5
40°	1239.6	1239.2	1238.7	1238.3	1237.9	1237.4	1237.0	1236.6	1236.1	1235.7	1283.0
42.5°	1206.1	1200.6	1195.1	1189.7	1184.2	1178.7	1173.2	1167.8	1162.3	1156.8	1209.1
45°	1172.6	1162.1	1151.6	1141.1	1130.6	1120.0	1109.5	1099.0	1088.5	1078.0	1135.4
47.5°	1141.1	1125.1	1109.1	1093.1	1077.1	1061.2	1045.2	1029.2	1013.2	997.2	1059.8
50°	1107.6	1086.6	1065.6	1044.5	1023.5	1002.5	981.5	960.4	939.4	918.4	986.3
52.5°	1078.0	1051.5	1025.0	998.5	972.0	945.5	919.0	892.5	866.0	839.5	913.1
55°	1048.4	1016.9	985.3	953.8	922.3	890.7	859.2	827.7	796.1	764.6	843.7
57.5°	1022.8	986.0	949.2	912.4	875.6	838.9	802.1	765.3	728.5	691.7	776.2
60°	999.2	957.2	915.1	873.1	831.0	789.0	746.9	704.9	662.8	620.8	711.0
62.5°	975.5	928.4	881.3	834.3	787.2	740.1	693.0	646.0	598.9	551.8	647.5
65°	947.9	896.4	845.0	793.5	742.1	690.6	639.2	587.7	536.3	484.8	585.5
67.5°	916.4	860.8	805.2	749.5	693.9	638.3	582.7	527.0	471.4	415.8	521.6
70°	882.9	824.2	765.5	706.8	648.1	589.5	530.8	472.1	413.4	354.7	464.0
72.5°	847.4	786.1	724.8	663.5	602.2	540.8	479.5	418.2	356.9	295.6	407.1
75°	802.1	739.7	677.3	614.9	552.5	490.0	427.6	365.2	302.8	240.4	353.0
77.5°	748.9	686.7	624.5	562.3	500.1	438.0	375.8	313.6	251.4	189.2	301.1
80°	695.7	634.2	572.6	511.1	449.6	388.0	326.5	265.0	203.4	141.9	252.5
82.5°	646.4	585.3	524.2	463.1	402.0	341.0	279.9	218.8	157.7	96.6	204.3
85°	583.3	525.1	466.8	408.6	350.3	292.1	233.8	175.6	117.3	59.1	162.5
87.5°	536.0	479.1	422.1	365.2	308.3	251.3	194.4	137.5	80.5	23.6	121.9
90°	484.8	430.9	377.1	323.2	269.3	215.5	161.6	107.7	53.9	0.0	92.0
92.5°	447.4	397.7	348.0	298.3	248.6	198.8	149.1	99.4	49.7	0.0	85.2
95°	413.9	367.9	321.9	275.9	229.9	184.0	138.0	92.0	46.0	0.0	78.4
97.5°	384.3	341.6	298.9	256.2	213.5	170.8	128.1	85.4	42.7	0.0	71.8
100°	354.7	315.3	275.9	236.5	197.1	157.6	118.2	78.8	39.4	0.0	65.7
102.5°	327.1	291.0	254.9	218.7	182.6	146.5	110.4	74.2	38.1	2.0	61.8
105°	299.6	266.5	233.5	200.4	167.3	134.3	101.2	68.1	35.1	2.0	56.5
107.5°	273.9	243.5	213.0	182.6	152.2	121.7	91.3	60.9	30.4	0.0	49.3
110°	252.3	224.3	196.2	168.2	140.2	112.1	84.1	56.1	28.0	0.0	44.5



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
112.5°	228.6	203.4	178.2	153.1	127.9	102.7	77.5	52.4	27.2	2.0	42.3
115°	206.9	184.1	161.4	138.6	115.8	93.1	70.3	47.5	24.8	2.0	38.6
117.5°	185.3	164.9	144.6	124.2	103.8	83.5	63.1	42.7	22.4	2.0	35.1
120°	169.5	150.9	132.3	113.7	95.1	76.4	57.8	39.2	20.6	2.0	32.0
122.5°	153.7	136.8	120.0	103.1	86.3	69.4	52.6	35.7	18.9	2.0	28.7
125°	138.0	122.9	107.8	92.7	77.6	62.4	47.3	32.2	17.1	2.0	25.4
127.5°	122.2	108.8	95.5	82.1	68.8	55.4	42.1	28.7	15.4	2.0	21.7
130°	108.4	96.6	84.8	72.9	61.1	49.3	37.5	25.6	13.8	2.0	18.2
132.5°	94.6	84.3	74.0	63.7	53.4	43.2	32.9	22.6	12.3	2.0	14.9
135°	82.8	73.8	64.8	55.9	46.9	37.9	28.9	20.0	11.0	2.0	12.1
137.5°	69.0	61.6	54.1	46.7	39.2	31.8	24.3	16.9	9.4	2.0	9.2
140°	55.2	49.3	43.4	37.5	31.6	25.6	19.7	13.8	7.9	2.0	7.0
142.5°	43.4	38.8	34.2	29.6	25.0	20.4	15.8	11.2	6.6	2.0	5.3
145°	33.5	30.0	26.5	23.0	19.5	16.0	12.5	9.0	5.5	2.0	4.2
147.5°	25.6	23.0	20.4	17.7	15.1	12.5	9.9	7.2	4.6	2.0	3.7
150°	21.7	19.5	17.3	15.1	12.9	10.8	8.6	6.4	4.2	2.0	3.1
152.5°	17.7	16.2	14.6	13.1	11.6	10.0	8.5	7.0	5.4	3.9	4.6
155°	13.8	12.7	11.6	10.5	9.4	8.3	7.2	6.1	5.0	3.9	4.3
157.5°	11.8	10.9	10.0	9.2	8.3	7.4	6.5	5.7	4.8	3.9	4.1
160°	7.9	7.5	7.0	6.6	6.1	5.7	5.2	4.8	4.3	3.9	3.9
162.5°	5.9	5.5	5.0	4.6	4.2	3.7	3.3	2.9	2.4	2.0	2.0
165°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.7
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: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	2000.3	2000.3	2000.3	2000.3	2000.3	2000.3	2000.3	2000.3	2002.3	2004.2	2006.2
5°	1995.3	1997.7	2000.1	2002.5	2004.9	2007.3	2009.7	2012.1	2016.3	2020.4	2024.6
7.5°	1983.2	1988.5	1993.7	1999.0	2004.2	2009.5	2014.7	2020.0	2026.4	2032.7	2039.1
10°	1964.4	1972.1	1979.7	1987.4	1995.0	2002.7	2010.3	2018.0	2026.8	2035.5	2044.3
12.5°	1938.1	1948.4	1958.7	1969.0	1979.3	1989.6	1999.9	2010.2	2021.6	2033.0	2044.3
15°	1907.5	1920.2	1932.9	1945.6	1958.3	1971.0	1983.7	1996.4	2010.8	2025.3	2039.7
17.5°	1871.3	1886.7	1902.0	1917.3	1932.6	1948.0	1963.3	1978.6	1996.3	2014.1	2031.8
20°	1826.2	1844.6	1863.0	1881.4	1899.8	1918.2	1936.6	1955.0	1976.5	1997.9	2019.4
22.5°	1776.8	1798.0	1819.2	1840.5	1861.7	1882.9	1904.2	1925.4	1952.1	1978.8	2005.5
25°	1728.3	1752.0	1775.6	1799.3	1822.9	1846.6	1870.2	1893.9	1926.7	1959.6	1992.4
27.5°	1666.8	1694.2	1721.6	1748.9	1776.3	1803.7	1831.0	1858.4	1897.8	1937.2	1976.6
30°	1602.9	1633.7	1664.6	1695.5	1726.4	1757.2	1788.1	1819.0	1864.8	1910.5	1956.3
32.5°	1536.5	1570.7	1604.8	1639.0	1673.1	1707.3	1741.4	1775.6	1828.6	1881.6	1934.6
35°	1468.6	1506.3	1544.0	1581.6	1619.3	1657.0	1694.6	1732.3	1792.3	1852.3	1912.3
37.5°	1400.6	1442.6	1484.6	1526.7	1568.7	1610.7	1652.8	1694.8	1761.4	1827.9	1894.5
40°	1330.3	1377.6	1424.9	1472.1	1519.4	1566.7	1614.0	1661.3	1734.7	1808.0	1881.4
42.5°	1261.5	1313.8	1366.1	1418.5	1470.8	1523.1	1575.5	1627.8	1708.8	1789.8	1870.9
45°	1192.7	1250.1	1307.5	1364.8	1422.2	1479.6	1536.9	1594.3	1683.9	1773.4	1863.0
47.5°	1122.4	1185.1	1247.7	1310.3	1372.9	1435.6	1498.2	1560.8	1659.6	1758.3	1857.1
50°	1054.2	1122.0	1189.9	1257.8	1325.7	1393.5	1461.4	1529.3	1637.3	1745.2	1853.2
52.5°	986.7	1060.2	1133.8	1207.4	1281.0	1354.5	1428.1	1501.7	1620.2	1738.6	1857.1
55°	922.7	1001.8	1080.8	1159.9	1238.9	1318.0	1397.0	1476.1	1607.3	1738.4	1869.6
57.5°	860.7	945.3	1029.8	1114.3	1198.8	1283.4	1367.9	1452.4	1596.0	1739.7	1883.3
60°	801.2	891.4	981.6	1071.9	1162.1	1252.3	1342.5	1432.7	1589.9	1747.1	1904.4
62.5°	743.2	838.9	934.6	1030.2	1125.9	1221.6	1317.3	1413.0	1584.2	1755.5	1926.7
65°	686.2	787.0	887.7	988.4	1089.1	1189.9	1290.6	1391.3	1575.9	1760.5	1945.1
67.5°	627.3	733.1	838.9	944.6	1050.4	1156.2	1261.9	1367.7	1563.9	1760.1	1956.3
70°	573.2	682.5	791.8	901.0	1010.3	1119.6	1228.8	1338.1	1542.8	1747.6	1952.3
72.5°	518.5	630.0	741.4	852.9	964.3	1075.8	1187.2	1298.7	1507.6	1716.5	1925.4
75°	465.5	578.1	690.6	803.2	915.7	1028.3	1140.8	1253.4	1461.4	1669.4	1877.5
77.5°	413.0	524.9	636.8	748.6	860.5	972.4	1084.3	1196.2	1397.9	1599.6	1801.2
80°	363.1	473.6	584.2	694.8	805.4	915.9	1026.5	1137.1	1327.6	1518.1	1708.6
82.5°	312.1	419.8	527.5	635.3	743.0	850.7	958.5	1066.2	1244.0	1421.8	1599.6
85°	265.8	369.2	472.5	575.9	679.2	782.6	885.9	989.3	1152.2	1315.1	1478.0
87.5°	220.2	318.6	416.9	515.2	613.5	711.9	810.2	908.5	1056.3	1204.1	1351.9
90°	183.9	275.9	367.9	459.8	551.8	643.8	735.7	827.7	962.2	1096.6	1231.1
92.5°	170.4	255.5	340.7	425.9	511.1	596.2	681.4	766.6	888.8	1011.0	1133.2
95°	156.8	235.2	313.6	391.9	470.3	548.7	627.1	705.5	818.1	930.6	1043.2
97.5°	143.6	215.5	287.3	359.1	430.9	502.8	574.6	646.4	750.8	855.3	959.7
100°	131.4	197.1	262.8	328.4	394.1	459.8	525.5	591.2	689.3	787.4	885.5
102.5°	121.6	181.3	241.1	300.9	360.7	420.4	480.2	540.0	633.1	726.1	819.2
105°	111.0	165.6	220.1	274.6	329.1	383.7	438.2	492.7	581.2	669.6	758.1
107.5°	98.5	147.8	197.1	246.3	295.6	344.9	394.1	443.4	528.4	613.3	698.3
110°	88.9	133.4	177.8	222.3	266.7	311.2	355.6	400.1	481.1	562.1	643.1



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
112.5°	82.6	122.9	163.2	203.4	243.7	284.0	324.3	364.6	441.7	518.8	595.8
115°	75.1	111.7	148.3	184.8	221.4	258.0	294.5	331.1	404.7	478.3	551.8
117.5°	68.1	101.2	134.3	167.3	200.4	233.5	266.5	299.6	369.4	439.3	509.1
120°	62.0	92.0	122.0	152.0	182.0	212.0	242.0	272.0	337.0	402.1	467.1
122.5°	55.4	82.1	108.8	135.6	162.3	189.0	215.7	242.4	302.4	362.4	422.4
125°	48.8	72.3	95.7	119.1	142.5	166.0	189.4	212.8	268.4	324.0	379.7
127.5°	41.4	61.1	80.8	100.5	120.2	139.9	159.6	179.3	231.2	283.1	335.0
130°	34.4	50.6	66.8	83.0	99.2	115.4	131.6	147.8	194.7	241.5	288.4
132.5°	27.8	40.7	53.6	66.6	79.5	92.4	105.3	118.2	159.8	201.4	243.0
135°	22.1	32.2	42.3	52.3	62.4	72.5	82.5	92.6	128.5	164.4	200.3
137.5°	16.4	23.7	30.9	38.1	45.3	52.6	59.8	67.0	98.3	129.6	160.9
140°	12.1	17.1	22.1	27.2	32.2	37.2	42.3	47.3	74.5	101.6	128.8
142.5°	8.6	11.8	15.1	18.4	21.7	24.9	28.2	31.5	54.5	77.5	100.5
145°	6.4	8.6	10.8	12.9	15.1	17.3	19.5	21.7	40.3	58.9	77.5
147.5°	5.5	7.2	9.0	10.7	12.5	14.2	16.0	17.7	32.2	46.6	61.1
150°	4.2	5.3	6.4	7.4	8.5	9.6	10.7	11.8	22.8	33.7	44.7
152.5°	5.2	5.9	6.6	7.2	7.9	8.6	9.2	9.9	17.3	24.8	32.2
155°	4.8	5.2	5.7	6.1	6.6	7.0	7.5	7.9	12.3	16.7	21.0
157.5°	4.3	4.6	4.8	5.0	5.2	5.5	5.7	5.9	8.3	10.7	13.1
160°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.0	6.1	7.2
162.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.9	3.3
165°	3.5	3.3	3.1	2.8	2.6	2.4	2.2	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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	2008.2	2010.1	2012.1	2014.1	2016.0	2018.0	2019.1	2020.2	2021.3	2022.4	2023.5
5°	2028.8	2032.9	2037.1	2041.3	2045.4	2049.6	2051.8	2054.0	2056.2	2058.4	2060.5
7.5°	2045.4	2051.8	2058.1	2064.5	2070.8	2077.2	2081.1	2085.1	2089.0	2092.9	2096.9
10°	2053.1	2061.8	2070.6	2079.4	2088.1	2096.9	2103.2	2109.6	2115.9	2122.3	2128.6
12.5°	2055.7	2067.1	2078.5	2089.8	2101.2	2112.6	2121.1	2129.7	2138.2	2146.8	2155.3
15°	2054.2	2068.6	2083.1	2097.5	2112.0	2126.4	2137.4	2148.3	2159.3	2170.2	2181.2
17.5°	2049.6	2067.3	2085.1	2102.8	2120.6	2138.3	2153.4	2168.5	2183.6	2198.7	2213.8
20°	2040.8	2062.3	2083.7	2105.2	2126.6	2148.1	2168.2	2188.4	2208.5	2228.7	2248.8
22.5°	2032.2	2059.0	2085.7	2112.4	2139.1	2165.8	2189.5	2213.1	2236.8	2260.4	2284.1
25°	2025.3	2058.1	2091.0	2123.8	2156.7	2189.5	2216.4	2243.4	2270.3	2297.2	2324.2
27.5°	2016.0	2055.5	2094.9	2134.3	2173.7	2213.1	2243.1	2273.1	2303.1	2333.1	2363.1
30°	2002.1	2047.8	2093.6	2139.4	2185.1	2230.9	2265.1	2299.2	2333.4	2367.5	2401.7
32.5°	1987.6	2040.6	2093.6	2146.6	2199.6	2252.6	2291.4	2330.1	2368.9	2407.6	2446.4
35°	1972.3	2032.3	2092.3	2152.3	2212.3	2272.3	2316.5	2360.8	2405.0	2449.2	2493.5
37.5°	1961.1	2027.6	2094.2	2160.8	2227.3	2293.9	2344.9	2395.9	2447.0	2498.0	2549.0
40°	1954.7	2028.1	2101.4	2174.8	2248.1	2321.5	2380.0	2438.4	2496.9	2555.4	2613.8
42.5°	1951.9	2032.9	2113.9	2195.0	2276.0	2357.0	2424.2	2491.4	2558.7	2625.9	2693.1
45°	1952.6	2042.1	2131.7	2221.3	2310.8	2400.4	2477.7	2555.0	2632.3	2709.6	2786.8
47.5°	1955.8	2054.6	2153.3	2252.1	2350.8	2449.6	2538.7	2627.8	2717.0	2806.1	2895.2
50°	1961.1	2069.1	2177.0	2285.0	2392.9	2500.9	2603.6	2706.3	2809.0	2911.7	3014.4
52.5°	1975.6	2094.0	2212.5	2331.0	2449.4	2567.9	2684.6	2801.3	2918.0	3034.7	3151.5
55°	2000.8	2131.9	2263.1	2394.3	2525.4	2656.6	2786.4	2916.3	3046.1	3176.0	3305.8
57.5°	2027.0	2170.6	2314.3	2457.9	2601.6	2745.2	2888.4	3031.6	3174.8	3318.0	3461.3
60°	2061.6	2218.8	2376.0	2533.3	2690.5	2847.7	3002.5	3157.3	3312.1	3466.9	3621.8
62.5°	2097.9	2269.2	2440.4	2611.6	2782.9	2954.1	3118.3	3282.6	3446.8	3611.0	3775.3
65°	2129.7	2314.3	2498.9	2683.5	2868.1	3052.7	3223.3	3393.9	3564.4	3735.0	3905.6
67.5°	2152.5	2348.7	2544.9	2741.1	2937.3	3133.5	3306.7	3479.9	3653.1	3826.3	3999.5
70°	2157.1	2361.8	2566.6	2771.3	2976.1	3180.8	3353.1	3525.5	3697.8	3870.1	4042.5
72.5°	2134.3	2343.2	2552.1	2761.0	2969.9	3178.8	3347.0	3515.1	3683.3	3851.5	4019.6
75°	2085.5	2293.5	2501.5	2709.6	2917.6	3125.6	3286.3	3447.0	3607.8	3768.5	3929.2
77.5°	2002.9	2204.6	2406.3	2607.9	2809.6	3011.3	3164.8	3318.3	3471.8	3625.3	3778.8
80°	1899.1	2089.7	2280.2	2470.7	2661.2	2851.7	2994.0	3136.4	3278.7	3421.0	3563.4
82.5°	1777.4	1955.2	2133.0	2310.8	2488.6	2666.4	2795.8	2925.2	3054.6	3184.0	3313.5
85°	1640.9	1803.9	1966.8	2129.7	2292.6	2455.5	2573.1	2690.7	2808.3	2925.9	3043.4
87.5°	1499.7	1647.6	1795.4	1943.2	2091.0	2238.8	2344.6	2450.3	2556.1	2661.8	2767.6
90°	1365.5	1500.0	1634.4	1768.9	1903.3	2037.8	2133.0	2228.3	2323.5	2418.8	2514.0
92.5°	1255.4	1377.5	1499.7	1621.9	1744.1	1866.3	1953.5	2040.6	2127.8	2214.9	2302.1
95°	1155.7	1268.3	1380.8	1493.4	1605.9	1718.5	1800.8	1883.2	1965.5	2047.8	2130.2
97.5°	1064.2	1168.6	1273.1	1377.5	1482.0	1586.4	1663.5	1740.6	1817.7	1894.8	1971.8
100°	983.6	1081.7	1179.8	1277.9	1376.0	1474.1	1548.3	1622.6	1696.8	1771.0	1845.3
102.5°	912.3	1005.3	1098.4	1191.5	1284.5	1377.6	1449.6	1521.7	1593.7	1665.7	1737.8
105°	846.6	935.0	1023.5	1112.0	1200.4	1288.9	1358.7	1428.6	1498.4	1568.3	1638.1
107.5°	783.3	868.2	953.2	1038.2	1123.1	1208.1	1277.1	1346.1	1415.0	1484.0	1553.0
110°	724.1	805.2	886.2	967.2	1048.2	1129.2	1197.1	1265.0	1332.9	1400.8	1468.6



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
112.5°	672.9	750.0	827.1	904.1	981.2	1058.3	1124.2	1190.1	1256.0	1321.9	1387.9
115°	625.4	699.0	772.6	846.1	919.7	993.3	1056.1	1119.0	1181.8	1244.7	1307.5
117.5°	579.0	648.8	718.7	788.5	858.4	928.2	988.4	1048.6	1108.9	1169.1	1229.3
120°	532.1	597.2	662.2	727.2	792.3	857.3	916.2	975.1	1034.0	1092.9	1151.8
122.5°	482.4	542.4	602.4	662.4	722.4	782.4	840.0	897.6	955.2	1012.8	1070.3
125°	435.3	490.9	546.5	602.2	657.8	713.4	767.9	822.4	877.0	931.5	986.0
127.5°	386.9	438.8	490.7	542.6	594.5	646.4	696.3	746.2	796.2	846.1	896.0
130°	335.2	382.1	428.9	475.8	522.6	569.5	615.3	661.0	706.8	752.6	798.3
132.5°	284.6	326.3	367.9	409.5	451.1	492.7	535.8	579.0	622.1	665.2	708.4
135°	236.2	272.2	308.1	344.0	379.9	415.8	457.6	499.4	541.3	583.1	624.9
137.5°	192.2	223.6	254.9	286.2	317.5	348.8	387.3	425.9	464.4	503.0	541.5
140°	155.9	183.1	210.2	237.4	264.5	291.7	324.5	357.4	390.2	423.1	455.9
142.5°	123.5	146.5	169.5	192.5	215.5	238.5	266.5	294.5	322.6	350.6	378.6
145°	96.1	114.8	133.4	152.0	170.6	189.2	212.4	235.6	258.8	282.0	305.3
147.5°	75.5	90.0	104.4	118.9	133.3	147.8	166.9	185.9	205.0	224.0	243.1
150°	55.6	66.6	77.5	88.5	99.4	110.4	126.6	142.8	159.0	175.2	191.4
152.5°	39.7	47.1	54.6	62.0	69.5	76.9	89.8	102.7	115.6	128.5	141.5
155°	25.4	29.8	34.2	38.5	42.9	47.3	57.4	67.5	77.5	87.6	97.7
157.5°	15.5	18.0	20.4	22.8	25.2	27.6	34.8	42.0	49.3	56.5	63.7
160°	8.3	9.4	10.5	11.6	12.7	13.8	18.0	22.1	26.3	30.4	34.6
162.5°	3.7	4.2	4.6	5.0	5.5	5.9	7.9	9.8	11.8	13.8	15.7
165°	1.1	0.9	0.7	0.4	0.2	0.0	0.7	1.3	2.0	2.6	3.3
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: P201399

CATALOG NUMBER: 8LBLELD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	2024.6	2025.7	2026.8	2027.9	2025.9	2024.0	2022.0	2020.0	2018.1	2016.1	2014.1
5°	2062.7	2064.9	2067.1	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
7.5°	2100.8	2104.7	2108.7	2112.6	2113.0	2113.5	2113.9	2114.4	2114.8	2115.3	2115.7
10°	2135.0	2141.3	2147.7	2154.0	2154.7	2155.3	2156.0	2156.6	2157.3	2157.9	2158.6
12.5°	2163.9	2172.4	2181.0	2189.5	2191.7	2193.9	2196.1	2198.3	2200.4	2202.6	2204.8
15°	2192.1	2203.1	2214.0	2225.0	2228.9	2232.9	2236.8	2240.7	2244.7	2248.6	2252.5
17.5°	2228.9	2244.0	2259.1	2274.2	2279.7	2285.2	2290.6	2296.1	2301.6	2307.1	2312.5
20°	2269.0	2289.1	2309.3	2329.4	2336.0	2342.5	2349.1	2355.7	2362.2	2368.8	2375.4
22.5°	2307.7	2331.4	2355.0	2378.7	2387.0	2395.3	2403.7	2412.0	2420.3	2428.6	2437.0
25°	2351.1	2378.0	2405.0	2431.9	2440.7	2449.4	2458.2	2466.9	2475.7	2484.4	2493.2
27.5°	2393.1	2423.1	2453.1	2483.1	2493.6	2504.1	2514.6	2525.1	2535.7	2546.2	2556.7
30°	2435.8	2470.0	2504.1	2538.3	2550.8	2563.3	2575.8	2588.3	2600.7	2613.2	2625.7
32.5°	2485.1	2523.9	2562.6	2601.4	2616.5	2631.6	2646.7	2661.8	2677.0	2692.1	2707.2
35°	2537.7	2581.9	2626.2	2670.4	2688.6	2706.7	2724.9	2743.1	2761.2	2779.4	2797.6
37.5°	2600.0	2651.1	2702.1	2753.1	2774.8	2796.5	2818.1	2839.8	2861.5	2883.2	2904.8
40°	2672.3	2730.8	2789.2	2847.7	2873.5	2899.4	2925.2	2951.1	2976.9	3002.8	3028.6
42.5°	2760.3	2827.6	2894.8	2962.0	2992.0	3022.0	3052.0	3082.0	3112.0	3142.0	3172.0
45°	2864.1	2941.4	3018.7	3096.0	3130.8	3165.6	3200.5	3235.3	3270.1	3304.9	3339.8
47.5°	2984.3	3073.5	3162.6	3251.7	3291.3	3331.0	3370.6	3410.2	3449.9	3489.5	3529.1
50°	3117.1	3219.8	3322.5	3425.2	3470.1	3515.0	3559.9	3604.8	3649.6	3694.5	3739.4
52.5°	3268.2	3384.9	3501.6	3618.3	3668.2	3718.1	3768.1	3818.0	3867.9	3917.8	3967.8
55°	3435.7	3565.5	3695.4	3825.2	3878.8	3932.5	3986.1	4039.8	4093.4	4147.1	4200.7
57.5°	3604.5	3747.7	3890.9	4034.1	4091.0	4148.0	4204.9	4261.8	4318.8	4375.7	4432.6
60°	3776.6	3931.4	4086.2	4241.0	4299.7	4358.4	4417.1	4475.8	4534.4	4593.1	4651.8
62.5°	3939.5	4103.7	4268.0	4432.2	4490.7	4549.1	4607.6	4666.1	4724.5	4783.0	4841.5
65°	4076.2	4246.7	4417.3	4587.9	4645.1	4702.2	4759.4	4816.5	4873.7	4930.8	4988.0
67.5°	4172.7	4345.9	4519.1	4692.3	4748.1	4804.0	4859.8	4915.7	4971.5	5027.4	5083.2
70°	4214.8	4387.1	4559.5	4731.8	4785.4	4839.1	4892.7	4946.4	5000.0	5053.7	5107.3
72.5°	4187.8	4356.0	4524.1	4692.3	4743.5	4794.8	4846.0	4897.3	4948.5	4999.8	5051.0
75°	4089.9	4250.7	4411.4	4572.1	4620.9	4669.8	4718.6	4767.4	4816.3	4865.1	4913.9
77.5°	3932.3	4085.8	4239.3	4392.8	4437.3	4481.7	4526.2	4570.6	4615.1	4659.5	4704.0
80°	3705.7	3848.0	3990.4	4132.7	4174.7	4216.8	4258.8	4300.8	4342.9	4384.9	4426.9
82.5°	3442.9	3572.3	3701.7	3831.1	3870.5	3909.9	3949.4	3988.8	4028.2	4067.6	4107.1
85°	3161.0	3278.6	3396.2	3513.8	3550.4	3587.0	3623.5	3660.1	3696.7	3733.3	3769.8
87.5°	2873.3	2979.1	3084.8	3190.6	3225.2	3259.8	3294.4	3329.0	3363.6	3398.2	3432.8
90°	2609.3	2704.5	2799.8	2895.0	2927.8	2960.7	2993.5	3026.4	3059.2	3092.1	3124.9
92.5°	2389.2	2476.4	2563.5	2650.7	2681.8	2712.9	2744.0	2775.1	2806.1	2837.2	2868.3
95°	2212.5	2294.8	2377.2	2459.5	2487.5	2515.5	2543.6	2571.6	2599.6	2627.6	2655.7
97.5°	2048.9	2126.0	2203.1	2280.2	2308.2	2336.2	2364.3	2392.3	2420.3	2448.3	2476.4
100°	1919.5	1993.7	2068.0	2142.2	2169.4	2196.5	2223.7	2250.8	2278.0	2305.1	2332.3
102.5°	1809.8	1881.8	1953.9	2025.9	2052.6	2079.3	2106.1	2132.8	2159.5	2186.2	2213.0
105°	1708.0	1777.8	1847.7	1917.5	1945.1	1972.7	2000.3	2027.9	2055.4	2083.0	2110.6
107.5°	1622.0	1690.9	1759.9	1828.9	1856.0	1883.2	1910.3	1937.5	1964.6	1991.8	2018.9
110°	1536.5	1604.4	1672.3	1740.2	1767.1	1794.1	1821.0	1847.9	1874.9	1901.8	1928.7



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
112.5°	1453.8	1519.7	1585.6	1651.5	1678.2	1704.9	1731.6	1758.3	1785.1	1811.8	1838.5
115°	1370.4	1433.2	1496.1	1558.9	1585.2	1611.4	1637.7	1664.0	1690.2	1716.5	1742.8
117.5°	1289.5	1349.8	1410.0	1470.2	1494.9	1519.7	1544.4	1569.2	1593.9	1618.7	1643.4
120°	1210.7	1269.6	1328.5	1387.4	1410.8	1434.3	1457.7	1481.1	1504.6	1528.0	1551.4
122.5°	1127.9	1185.5	1243.1	1300.7	1323.5	1346.2	1369.0	1391.8	1414.5	1437.3	1460.1
125°	1040.5	1095.1	1149.6	1204.1	1226.7	1249.2	1271.8	1294.3	1316.9	1339.4	1362.0
127.5°	945.9	995.9	1045.8	1095.7	1117.8	1139.9	1162.1	1184.2	1206.3	1228.4	1250.6
130°	844.1	889.9	935.6	981.4	1002.2	1023.0	1043.8	1064.6	1085.5	1106.3	1127.1
132.5°	751.5	794.6	837.8	880.9	898.6	916.4	934.1	951.9	969.6	987.4	1005.1
135°	666.7	708.6	750.4	792.2	807.3	822.4	837.5	852.6	867.8	882.9	898.0
137.5°	580.1	618.6	657.2	695.7	710.4	725.0	739.7	754.4	769.0	783.7	798.4
140°	488.8	521.6	554.5	587.3	602.8	618.4	633.9	649.5	665.0	680.6	696.1
142.5°	406.6	434.7	462.7	490.7	506.2	521.8	537.3	552.9	568.4	584.0	599.5
145°	328.5	351.7	374.9	398.1	413.9	429.6	445.4	461.2	476.9	492.7	508.5
147.5°	262.1	281.2	300.2	319.3	334.2	349.1	364.0	378.9	393.7	408.6	423.5
150°	207.6	223.8	240.0	256.2	269.6	282.9	296.3	309.6	323.0	336.3	349.7
152.5°	154.4	167.3	180.2	193.1	205.6	218.1	230.6	243.1	255.5	268.0	280.5
155°	107.8	117.8	127.9	138.0	149.2	160.3	171.5	182.7	193.8	205.0	216.2
157.5°	70.9	78.2	85.4	92.6	102.0	111.4	120.9	130.3	139.7	149.1	158.6
160°	38.7	42.9	47.0	51.2	58.9	66.5	74.2	81.9	89.5	97.2	104.9
162.5°	17.7	19.7	21.6	23.6	28.6	33.7	38.7	43.8	48.8	53.9	58.9
165°	3.9	4.6	5.2	5.9	9.0	12.0	15.1	18.2	21.2	24.3	27.4
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: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	1970.7	1970.7
2.5°	2012.2	2010.2
5°	2069.3	2069.3
7.5°	2116.2	2116.6
10°	2159.2	2159.9
12.5°	2207.0	2209.2
15°	2256.5	2260.4
17.5°	2318.0	2323.5
20°	2381.9	2388.5
22.5°	2445.3	2453.6
25°	2501.9	2510.7
27.5°	2567.2	2577.7
30°	2638.2	2650.7
32.5°	2722.3	2737.4
35°	2815.7	2833.9
37.5°	2926.5	2948.2
40°	3054.5	3080.3
42.5°	3202.0	3232.0
45°	3374.6	3409.4
47.5°	3568.8	3608.4
50°	3784.3	3829.2
52.5°	4017.7	4067.6
55°	4254.4	4308.0
57.5°	4489.6	4546.5
60°	4710.5	4769.2
62.5°	4899.9	4958.4
65°	5045.1	5102.3
67.5°	5139.1	5194.9
70°	5161.0	5214.6
72.5°	5102.3	5153.5
75°	4962.8	5011.6
77.5°	4748.4	4792.9
80°	4469.0	4511.0
82.5°	4146.5	4185.9
85°	3806.4	3843.0
87.5°	3467.4	3502.0
90°	3157.8	3190.6
92.5°	2899.4	2930.5
95°	2683.7	2711.7
97.5°	2504.4	2532.4
100°	2359.4	2386.6
102.5°	2239.7	2266.4
105°	2138.2	2165.8
107.5°	2046.1	2073.2
110°	1955.7	1982.6



TEST NUMBER: P201399

CATALOG NUMBER: 8LBLED-LD4-16-ASYMF-UNV-L835-CD2-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
112.5°	1865.2	1891.9
115°	1769.0	1795.3
117.5°	1668.2	1692.9
120°	1574.9	1598.3
122.5°	1482.8	1505.6
125°	1384.5	1407.1
127.5°	1272.7	1294.8
130°	1147.9	1168.7
132.5°	1022.9	1040.6
135°	913.1	928.2
137.5°	813.0	827.7
140°	711.7	727.2
142.5°	615.1	630.6
145°	524.2	540.0
147.5°	438.4	453.3
150°	363.0	376.4
152.5°	293.0	305.5
155°	227.3	238.5
157.5°	168.0	177.4
160°	112.5	120.2
162.5°	64.0	69.0
165°	30.4	33.5
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)