

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213145

Luminaire Tested: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213145
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

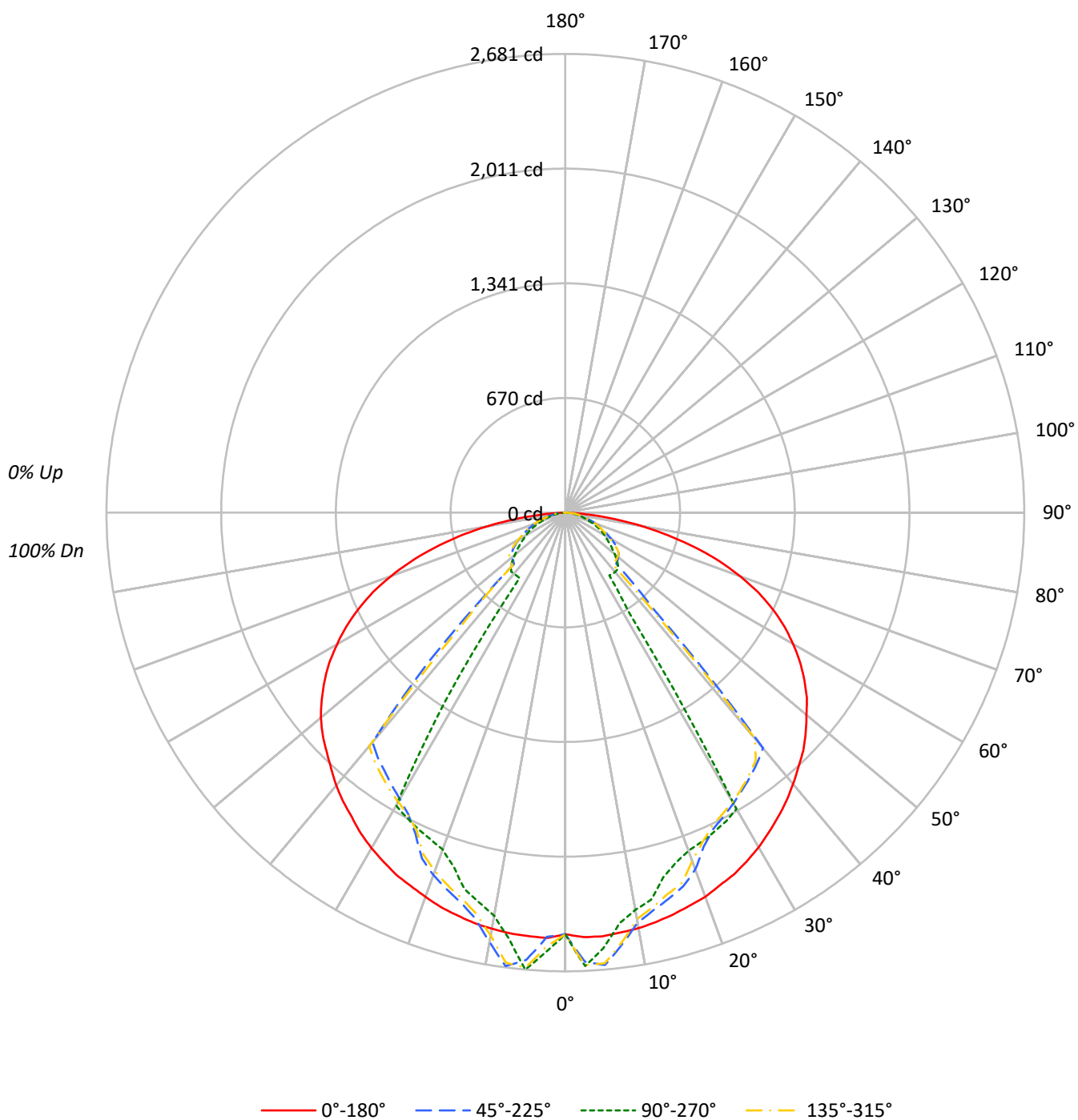
Lumens per Lamp: N/A
Luminaire Lumens: 4934.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 52
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: 24 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87		
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75		
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46		
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41		
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19911	19911	19911	19911
5°	20106	20061	20097	21054
10°	20126	18137	20154	18416
15°	20171	16781	20217	17313
20°	20317	15916	20317	15857
25°	20493	15612	20523	15466
30°	20700	15337	20751	15155
35°	20941	3493	20985	3643
40°	21276	3632	21404	3750
45°	21786	3612	21861	3744
50°	22296	3266	22596	3355
55°	22982	2900	23164	2941
60°	23562	2577	23615	2610
65°	23979	2249	23918	2213
70°	23637	1812	23563	1747
75°	21944	1395	22101	1337
80°	17813	991	18524	907
85°	9640	594	10186	456

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 24144 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.4	4.9
10°-20°	666.5	13.5
20°-30°	987.3	20.0
30°-40°	994.8	20.2
40°-50°	777.1	15.7
50°-60°	600.2	12.2
60°-70°	403.0	8.2
70°-80°	205.6	4.2
80°-90°	57.2	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1896.2	38.4
0°-40°	2891.0	58.6
0°-60°	4268.3	86.5
0°-90°	4934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4934.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2464	2464	2464	2464	2464	
5°	2485	2554	2484	2681	2485	236
15°	2431	2208	2437	2278	2431	688
25°	2332	2057	2335	2038	2332	1076
35°	2169	447	2174	466	2169	1359
45°	1966	435	1973	451	1966	1516
55°	1704	316	1718	321	1704	1522
65°	1338	212	1335	209	1338	1316
75°	785	107	790	103	785	821
85°	141	34	149	26	141	194
90°	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°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2483.1	2492.1	2498.9	2503.4	2505.7	2505.7	2506.8	2508.0	2522.6	2529.4	2533.9
5°	2485.4	2494.4	2508.0	2526.0	2541.8	2555.4	2566.7	2582.5	2598.3	2615.2	2620.9
7.5°	2475.2	2486.5	2513.6	2546.3	2576.8	2598.3	2613.0	2623.1	2631.0	2632.2	2637.8
10°	2466.2	2486.5	2523.8	2566.7	2605.1	2631.0	2631.0	2625.4	2633.3	2602.8	2572.3
12.5°	2450.4	2472.9	2523.8	2580.2	2616.4	2626.5	2622.0	2599.4	2553.1	2515.9	2498.9
15°	2431.2	2461.7	2524.9	2588.1	2618.6	2622.0	2579.1	2521.5	2486.5	2463.9	2435.7
17.5°	2409.7	2450.4	2526.0	2589.3	2600.5	2584.7	2503.4	2467.3	2431.2	2378.1	2339.7
20°	2389.4	2428.9	2517.0	2573.4	2580.2	2509.1	2445.8	2407.5	2346.5	2300.2	2283.2
22.5°	2357.8	2404.1	2509.1	2552.0	2526.0	2443.6	2382.6	2321.6	2266.3	2252.8	2232.4
25°	2331.8	2380.4	2491.0	2526.0	2457.1	2383.7	2312.6	2241.5	2215.5	2196.3	2178.2
27.5°	2296.8	2356.6	2467.3	2478.6	2383.7	2319.4	2215.5	2183.9	2160.2	2138.7	2130.8
30°	2258.4	2331.8	2434.6	2413.1	2322.8	2227.9	2151.1	2121.8	2104.8	2082.2	2073.2
32.5°	2214.4	2294.5	2398.4	2337.4	2257.3	2138.7	2089.0	2066.4	2043.9	2026.9	1970.5
35°	2169.2	2261.8	2355.5	2265.2	2178.2	2071.0	2026.9	2006.6	1985.1	1923.0	1864.3
37.5°	2122.9	2225.7	2303.6	2187.3	2073.2	2000.9	1963.7	1941.1	1892.5	1813.5	1784.1
40°	2069.8	2181.6	2236.9	2107.1	1981.7	1929.8	1894.8	1872.2	1762.7	1727.7	1718.6
42.5°	2016.7	2138.7	2155.6	2029.2	1906.1	1854.1	1824.8	1750.3	1675.7	1657.7	1661.1
45°	1965.9	2092.4	2066.4	1918.5	1827.0	1784.1	1734.4	1631.7	1592.2	1601.2	1603.5
47.5°	1905.0	2037.1	1972.7	1807.8	1745.7	1702.8	1592.2	1530.1	1524.4	1536.8	1543.6
50°	1839.5	1975.0	1873.3	1707.3	1657.7	1606.9	1481.5	1449.9	1456.7	1469.1	1477.0
52.5°	1778.5	1905.0	1770.6	1613.6	1570.7	1454.4	1369.7	1375.4	1386.7	1401.3	1405.9
55°	1704.0	1820.3	1661.1	1518.8	1478.1	1325.7	1287.3	1300.8	1312.1	1324.6	1333.6
57.5°	1626.0	1723.2	1531.2	1412.6	1347.1	1211.6	1215.0	1224.1	1232.0	1246.6	514.9
60°	1536.8	1612.5	1388.9	1314.4	1184.5	1121.3	1124.7	1140.5	1148.4	641.4	354.6
62.5°	1444.2	1483.8	1260.2	1202.6	1035.5	1031.0	1046.8	1053.5	717.0	338.8	332.0
65°	1338.1	1330.2	1133.7	1042.3	933.8	938.4	955.3	921.4	317.3	317.3	315.0
67.5°	1220.7	1173.2	1010.6	862.7	835.6	845.8	863.8	301.5	293.6	295.9	287.9
70°	1086.3	1019.7	883.0	730.6	739.6	749.8	291.3	273.3	269.9	264.2	248.4
72.5°	944.0	852.5	722.7	634.6	640.3	402.0	255.2	246.2	234.9	223.6	206.6
75°	784.8	666.2	530.7	530.7	538.6	229.2	222.5	207.8	195.4	180.7	170.5
77.5°	615.4	512.7	412.2	428.0	208.9	192.0	179.5	163.7	153.6	144.5	138.9
80°	450.6	358.0	310.5	277.8	162.6	145.7	133.2	124.2	119.7	114.0	107.3
82.5°	295.9	215.7	215.7	131.0	114.0	100.5	97.1	90.3	85.8	82.4	79.0
85°	141.1	125.3	94.9	80.2	71.1	64.4	62.1	58.7	58.7	57.6	56.5
87.5°	51.9	56.5	41.8	40.7	38.4	37.3	38.4	38.4	39.5	38.4	37.3
90°	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°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2545.2	2554.2	2561.0	2572.3	2587.0	2599.4	2610.7	2626.5	2651.4	2658.1	2663.8
5°	2620.9	2624.3	2632.2	2641.2	2643.5	2649.1	2648.0	2654.7	2658.1	2666.0	2649.1
7.5°	2625.4	2607.3	2585.9	2566.7	2553.1	2540.7	2532.8	2545.2	2552.0	2557.6	2540.7
10°	2530.5	2509.1	2496.7	2485.4	2471.8	2452.6	2426.6	2432.3	2430.0	2430.0	2424.4
12.5°	2470.7	2440.2	2408.6	2380.4	2367.9	2366.8	2367.9	2380.4	2380.4	2379.2	2372.4
15°	2377.0	2347.6	2331.8	2325.0	2325.0	2321.6	2321.6	2335.2	2331.8	2331.8	2328.4
17.5°	2314.9	2294.5	2283.2	2275.3	2271.9	2277.6	2284.4	2290.0	2291.1	2286.6	2268.6
20°	2264.0	2244.8	2231.3	2233.6	2232.4	2235.8	2239.2	2220.0	2196.3	2164.7	2150.0
22.5°	2211.0	2196.3	2186.1	2186.1	2172.6	2151.1	2119.5	2112.7	2109.3	2094.7	2082.2
25°	2160.2	2143.2	2128.5	2083.4	2055.1	2058.5	2052.9	2041.6	2040.5	2039.3	2043.9
27.5°	2109.3	2065.3	2008.8	2002.1	1990.8	1989.6	1996.4	2002.1	2002.1	2006.6	2012.2
30°	2004.3	1953.5	1943.4	1930.9	1935.4	1951.3	1954.6	1962.5	1964.8	1972.7	1977.2
32.5°	1908.3	1885.8	1876.7	1882.4	1897.1	1910.6	1918.5	1921.9	1927.5	1934.3	1940.0
35°	1830.4	1823.7	1831.6	1844.0	1858.7	1870.0	1876.7	1883.5	1889.2	1894.8	1899.3
37.5°	1772.8	1777.4	1788.7	1804.5	1819.1	1828.2	1833.8	1841.7	1849.6	1856.4	1829.3
40°	1718.6	1729.9	1742.4	1759.3	1771.7	1780.7	1786.4	1796.6	1728.8	782.5	429.1
42.5°	1671.2	1683.6	1692.7	1706.2	1719.8	1726.5	1676.9	748.7	423.4	421.2	426.8
45°	1613.6	1623.8	1638.5	1648.6	1661.1	1090.8	416.7	421.2	414.4	418.9	421.2
47.5°	1554.9	1570.7	1578.6	1506.4	448.3	414.4	409.9	414.4	409.9	415.5	412.2
50°	1488.3	1507.5	1072.7	405.4	402.0	399.7	404.3	402.0	405.4	409.9	400.9
52.5°	1420.5	879.6	393.0	390.7	393.0	390.7	398.6	393.0	394.1	389.6	378.3
55°	481.0	380.5	377.2	376.0	382.8	382.8	382.8	373.8	368.1	356.8	348.9
57.5°	368.1	368.1	367.0	368.1	365.9	363.6	353.4	345.5	337.6	321.8	317.3
60°	348.9	348.9	348.9	348.9	338.8	334.2	318.4	311.7	298.1	290.2	285.7
62.5°	333.1	330.9	320.7	317.3	306.0	293.6	284.6	277.8	264.2	259.7	256.3
65°	310.5	302.6	290.2	276.7	271.0	257.5	252.9	242.8	236.0	232.6	230.4
67.5°	273.3	262.0	251.8	242.8	232.6	228.1	222.5	214.5	210.0	207.8	205.5
70°	233.7	225.8	215.7	210.0	203.3	199.9	192.0	189.7	186.3	182.9	179.5
72.5°	195.4	190.8	186.3	178.4	176.2	173.9	166.0	161.5	157.0	152.4	150.2
75°	163.7	160.3	158.1	151.3	147.9	141.1	135.5	132.1	128.7	125.3	123.1
77.5°	134.4	132.1	125.3	120.8	118.6	112.9	110.7	111.8	109.5	105.0	102.8
80°	105.0	102.8	97.1	97.1	94.9	92.6	90.3	88.1	85.8	82.4	80.2
82.5°	80.2	77.9	75.7	73.4	71.1	70.0	68.9	66.6	64.4	62.1	61.0
85°	56.5	55.3	54.2	53.1	51.9	50.8	49.7	47.4	45.2	44.0	42.9
87.5°	38.4	37.3	36.1	35.0	33.9	32.7	31.6	30.5	28.2	27.1	26.0
90°	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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2663.8	2669.4	2663.8	2651.4	2643.5	2640.1	2646.8	2646.8	2651.4	2657.0	2658.1
5°	2622.0	2608.5	2592.6	2576.8	2568.9	2564.4	2552.0	2554.2	2557.6	2559.9	2562.2
7.5°	2518.1	2500.0	2478.6	2458.3	2450.4	2443.6	2428.9	2428.9	2428.9	2430.0	2436.8
10°	2412.0	2404.1	2395.0	2381.5	2371.3	2367.9	2355.5	2358.9	2356.6	2360.0	2367.9
12.5°	2362.3	2353.3	2345.3	2331.8	2320.5	2316.0	2310.3	2313.7	2312.6	2318.2	2325.0
15°	2317.1	2312.6	2303.6	2293.4	2283.2	2274.2	2253.9	2247.1	2242.6	2236.9	2244.8
17.5°	2242.6	2211.0	2189.5	2173.7	2162.4	2154.5	2148.9	2148.9	2152.3	2155.6	2162.4
20°	2141.0	2131.9	2121.8	2104.8	2093.5	2089.0	2085.6	2085.6	2091.3	2095.8	2108.2
22.5°	2071.0	2069.8	2066.4	2058.5	2052.9	2052.9	2054.0	2056.3	2064.2	2071.0	2083.4
25°	2038.2	2042.7	2040.5	2035.9	2032.6	2033.7	2031.4	2033.7	2041.6	2048.4	2058.5
27.5°	2012.2	2019.0	2016.7	2010.0	2004.3	2006.6	2010.0	2007.7	2014.5	2022.4	2030.3
30°	1977.2	1978.4	1982.9	1975.0	1972.7	1976.1	1977.2	1979.5	1986.3	1991.9	1998.7
32.5°	1937.7	1946.7	1945.6	1937.7	1937.7	1941.1	1942.2	1866.6	1725.4	1486.0	1420.5
35°	1899.3	1909.5	1892.5	1595.6	1104.4	589.4	455.1	439.3	442.6	444.9	447.2
37.5°	1404.7	666.2	424.6	428.0	431.4	434.7	438.1	441.5	444.9	448.3	449.4
40°	422.3	421.2	424.6	429.1	432.5	434.7	439.3	442.6	446.0	449.4	450.6
42.5°	417.8	420.1	423.4	428.0	432.5	437.0	440.4	444.9	447.2	449.4	450.6
45°	415.5	420.1	424.6	428.0	431.4	433.6	435.9	437.0	435.9	435.9	438.1
47.5°	412.2	416.7	417.8	416.7	417.8	416.7	416.7	416.7	413.3	412.2	412.2
50°	399.7	399.7	397.5	393.0	391.8	390.7	388.4	387.3	382.8	381.7	381.7
52.5°	373.8	372.6	369.2	363.6	361.3	359.1	358.0	356.8	352.3	350.1	351.2
55°	343.3	341.0	337.6	330.9	329.7	327.5	326.3	325.2	320.7	323.0	319.6
57.5°	315.0	310.5	306.0	304.9	300.4	299.2	298.1	297.0	293.6	294.7	292.5
60°	281.2	280.0	277.8	273.3	273.3	272.1	272.1	269.9	267.6	266.5	266.5
62.5°	256.3	252.9	250.7	250.7	247.3	247.3	247.3	245.0	242.8	243.9	242.8
65°	229.2	228.1	227.0	224.7	224.7	223.6	223.6	221.3	217.9	219.1	216.8
67.5°	206.6	204.4	202.1	201.0	196.5	194.2	193.1	192.0	187.4	188.6	186.3
70°	178.4	175.0	172.8	170.5	167.1	164.9	164.9	162.6	159.2	160.3	158.1
72.5°	149.1	146.8	144.5	143.4	140.0	138.9	137.8	136.6	133.2	134.4	133.2
75°	124.2	124.2	123.1	122.0	118.6	115.2	112.9	111.8	109.5	110.7	108.4
77.5°	102.8	100.5	98.2	98.2	94.9	92.6	90.3	90.3	90.3	89.2	88.1
80°	80.2	77.9	77.9	76.8	74.5	72.3	71.1	71.1	70.0	70.0	68.9
82.5°	61.0	58.7	57.6	57.6	55.3	54.2	53.1	51.9	51.9	51.9	50.8
85°	42.9	40.7	39.5	39.5	37.3	36.1	36.1	35.0	35.0	33.9	33.9
87.5°	26.0	24.8	23.7	23.7	21.5	20.3	20.3	20.3	19.2	19.2	18.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2658.1	2658.1	2650.2	2652.5	2649.1	2653.6	2648.0	2648.0	2654.7	2654.7	2659.3
5°	2563.3	2557.6	2556.5	2554.2	2543.0	2547.5	2541.8	2536.2	2544.1	2544.1	2554.2
7.5°	2433.4	2423.3	2427.8	2421.0	2414.2	2404.1	2407.5	2402.9	2408.6	2416.5	2426.6
10°	2366.8	2357.8	2363.4	2356.6	2360.0	2345.3	2346.5	2347.6	2353.3	2355.5	2364.5
12.5°	2323.9	2321.6	2319.4	2317.1	2319.4	2311.5	2307.0	2308.1	2310.3	2311.5	2318.2
15°	2233.6	2218.9	2223.4	2207.6	2208.7	2209.8	2200.8	2209.8	2208.7	2223.4	2236.9
17.5°	2160.2	2160.2	2152.3	2145.5	2141.0	2139.8	2133.1	2137.6	2133.1	2142.1	2145.5
20°	2109.3	2108.2	2107.1	2103.7	2092.4	2093.5	2096.9	2086.8	2085.6	2084.5	2091.3
22.5°	2085.6	2086.8	2082.2	2082.2	2072.1	2074.3	2075.5	2064.2	2065.3	2061.9	2065.3
25°	2060.8	2063.0	2057.4	2057.4	2055.1	2054.0	2048.4	2050.6	2043.9	2038.2	2043.9
27.5°	2031.4	2035.9	2031.4	2033.7	2029.2	2026.9	2023.5	2021.3	2014.5	2013.4	2016.7
30°	2004.3	2006.6	2005.5	1999.8	1998.7	1991.9	1995.3	1988.5	1981.7	1982.9	1985.1
32.5°	1027.6	981.3	756.6	683.2	676.4	701.2	831.1	1011.8	1311.0	1601.2	1810.1
35°	448.3	448.3	448.3	447.2	447.2	446.0	444.9	443.8	442.6	441.5	440.4
37.5°	450.6	450.6	450.6	450.6	449.4	448.3	448.3	446.0	444.9	443.8	442.6
40°	451.7	452.8	452.8	452.8	451.7	451.7	450.6	448.3	447.2	444.9	442.6
42.5°	450.6	451.7	451.7	450.6	450.6	449.4	449.4	448.3	447.2	446.0	444.9
45°	435.9	437.0	434.7	434.7	433.6	433.6	433.6	433.6	433.6	434.7	434.7
47.5°	409.9	409.9	408.8	407.6	407.6	406.5	407.6	406.5	408.8	409.9	412.2
50°	379.4	379.4	377.2	376.0	376.0	376.0	376.0	377.2	378.3	380.5	382.8
52.5°	347.8	347.8	346.7	345.5	344.4	344.4	347.8	346.7	347.8	348.9	352.3
55°	317.3	318.4	316.2	316.2	315.0	315.0	315.0	316.2	317.3	318.4	321.8
57.5°	291.3	291.3	289.1	289.1	289.1	287.9	291.3	289.1	290.2	291.3	293.6
60°	265.4	264.2	264.2	263.1	263.1	263.1	265.4	264.2	264.2	265.4	267.6
62.5°	241.6	241.6	240.5	240.5	239.4	239.4	241.6	240.5	240.5	241.6	242.8
65°	214.5	214.5	213.4	212.3	215.7	212.3	215.7	213.4	215.7	216.8	219.1
67.5°	184.1	184.1	184.1	182.9	182.9	185.2	186.3	184.1	185.2	187.4	188.6
70°	157.0	157.0	155.8	155.8	155.8	158.1	159.2	157.0	158.1	159.2	161.5
72.5°	133.2	131.0	131.0	129.9	132.1	132.1	133.2	132.1	133.2	133.2	135.5
75°	109.5	107.3	107.3	107.3	109.5	108.4	109.5	108.4	109.5	109.5	110.7
77.5°	88.1	86.9	85.8	85.8	88.1	88.1	88.1	86.9	88.1	89.2	90.3
80°	68.9	67.8	66.6	66.6	68.9	68.9	68.9	70.0	68.9	70.0	71.1
82.5°	50.8	49.7	48.6	50.8	50.8	50.8	50.8	51.9	50.8	51.9	53.1
85°	33.9	32.7	31.6	33.9	33.9	33.9	33.9	35.0	33.9	35.0	36.1
87.5°	18.1	16.9	16.9	18.1	18.1	18.1	19.2	19.2	19.2	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2666.0	2669.4	2668.3	2661.5	2654.7	2646.8	2641.2	2642.3	2653.6	2657.0	2646.8
5°	2554.2	2575.7	2575.7	2590.4	2582.5	2575.7	2580.2	2605.1	2617.5	2636.7	2643.5
7.5°	2439.1	2449.2	2448.1	2462.8	2460.5	2460.5	2463.9	2496.7	2512.5	2528.3	2532.8
10°	2374.7	2384.9	2383.7	2384.9	2381.5	2373.6	2373.6	2388.3	2401.8	2409.7	2412.0
12.5°	2328.4	2334.1	2332.9	2332.9	2330.7	2323.9	2322.8	2335.2	2349.9	2360.0	2361.2
15°	2259.5	2275.3	2278.7	2293.4	2290.0	2281.0	2283.2	2293.4	2302.4	2311.5	2308.1
17.5°	2156.8	2164.7	2165.8	2171.5	2169.2	2169.2	2182.7	2220.0	2244.8	2266.3	2268.6
20°	2098.1	2103.7	2101.4	2113.9	2108.2	2107.1	2110.5	2126.3	2137.6	2147.7	2165.8
22.5°	2069.8	2074.3	2071.0	2072.1	2061.9	2052.9	2050.6	2063.0	2075.5	2089.0	2089.0
25°	2046.1	2049.5	2048.4	2046.1	2038.2	2025.8	2023.5	2025.8	2030.3	2031.4	2023.5
27.5°	2017.9	2020.1	2020.1	2021.3	2011.1	1999.8	1997.6	1995.3	1999.8	1998.7	1986.3
30°	1988.5	1985.1	1986.3	1987.4	1978.4	1968.2	1963.7	1962.5	1967.1	1965.9	1953.5
32.5°	1918.5	1944.5	1946.7	1949.0	1941.1	1932.1	1927.5	1924.2	1926.4	1925.3	1914.0
35°	439.3	447.2	547.7	1239.9	1683.6	1864.3	1883.5	1879.0	1880.1	1880.1	1871.1
37.5°	440.4	439.3	438.1	434.7	431.4	429.1	741.9	1582.0	1832.7	1833.8	1825.9
40°	440.4	439.3	438.1	435.9	431.4	428.0	422.3	417.8	428.0	941.8	1723.2
42.5°	442.6	440.4	438.1	435.9	431.4	426.8	422.3	416.7	420.1	417.8	412.2
45°	435.9	434.7	434.7	433.6	431.4	426.8	421.2	414.4	411.0	414.4	408.8
47.5°	414.4	415.5	418.9	420.1	420.1	421.2	417.8	413.3	407.6	411.0	404.3
50°	385.1	387.3	388.4	394.1	396.3	400.9	402.0	402.0	400.9	405.4	400.9
52.5°	353.4	355.7	361.3	363.6	365.9	372.6	374.9	378.3	380.5	387.3	391.8
55°	323.0	324.1	326.3	330.9	334.2	339.9	343.3	346.7	352.3	355.7	369.2
57.5°	294.7	295.9	300.4	301.5	303.8	308.3	311.7	316.2	320.7	323.0	338.8
60°	267.6	268.7	272.1	273.3	274.4	278.9	282.3	285.7	289.1	291.3	302.6
62.5°	243.9	243.9	247.3	247.3	248.4	251.8	254.1	256.3	259.7	260.8	266.5
65°	220.2	221.3	223.6	223.6	224.7	227.0	228.1	229.2	232.6	232.6	237.1
67.5°	190.8	192.0	195.4	197.6	198.7	203.3	204.4	205.5	207.8	208.9	211.2
70°	162.6	163.7	167.1	168.3	169.4	172.8	175.0	178.4	181.8	185.2	187.4
72.5°	136.6	137.8	141.1	141.1	144.5	145.7	147.9	149.1	152.4	154.7	158.1
75°	111.8	112.9	116.3	116.3	119.7	120.8	122.0	123.1	125.3	127.6	129.9
77.5°	91.5	91.5	96.0	98.2	100.5	100.5	101.6	101.6	101.6	102.8	105.0
80°	72.3	72.3	75.7	77.9	80.2	80.2	81.3	82.4	83.6	83.6	84.7
82.5°	54.2	54.2	57.6	58.7	61.0	61.0	61.0	62.1	63.2	62.1	64.4
85°	37.3	37.3	39.5	40.7	42.9	42.9	42.9	44.0	45.2	44.0	45.2
87.5°	21.5	22.6	23.7	24.8	26.0	27.1	27.1	27.1	28.2	28.2	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2635.6	2622.0	2620.9	2605.1	2600.5	2601.7	2589.3	2584.7	2564.4	2559.9	2538.4
5°	2645.7	2652.5	2649.1	2648.0	2651.4	2649.1	2640.1	2635.6	2632.2	2623.1	2605.1
7.5°	2533.9	2538.4	2541.8	2556.5	2568.9	2590.4	2613.0	2627.6	2638.9	2641.2	2626.5
10°	2419.9	2441.3	2456.0	2478.6	2496.7	2509.1	2522.6	2535.1	2567.8	2600.5	2619.7
12.5°	2361.2	2366.8	2365.7	2378.1	2390.5	2423.3	2454.9	2472.9	2497.8	2512.5	2547.5
15°	2311.5	2312.6	2316.0	2325.0	2331.8	2343.1	2357.8	2384.9	2434.6	2457.1	2476.3
17.5°	2266.3	2266.3	2268.6	2276.5	2285.5	2295.7	2304.7	2316.0	2340.8	2378.1	2425.5
20°	2194.0	2225.7	2229.0	2227.9	2232.4	2251.6	2253.9	2274.2	2286.6	2301.3	2347.6
22.5°	2086.8	2106.0	2133.1	2174.8	2190.6	2199.7	2206.5	2215.5	2234.7	2251.6	2270.8
25°	2028.0	2040.5	2048.4	2060.8	2093.5	2146.6	2156.8	2166.9	2179.4	2191.8	2215.5
27.5°	1976.1	1975.0	1980.6	1991.9	2000.9	2029.2	2078.9	2118.4	2120.6	2138.7	2159.0
30°	1938.8	1932.1	1924.2	1921.9	1934.3	1949.0	1963.7	2025.8	2068.7	2077.7	2099.2
32.5°	1903.8	1892.5	1881.2	1872.2	1864.3	1876.7	1885.8	1912.9	1968.2	2020.1	2031.4
35°	1860.9	1849.6	1836.1	1825.9	1813.5	1812.4	1811.2	1837.2	1855.3	1917.4	1971.6
37.5°	1816.9	1804.5	1793.2	1781.9	1769.5	1760.4	1754.8	1761.6	1778.5	1805.6	1895.9
40°	1770.6	1755.9	1744.6	1735.6	1718.6	1711.9	1700.6	1696.1	1697.2	1720.9	1768.3
42.5°	1058.1	1687.0	1692.7	1682.5	1667.8	1658.8	1646.4	1640.7	1629.4	1640.7	1667.8
45°	407.6	412.2	1234.2	1630.6	1612.5	1601.2	1589.9	1584.3	1571.8	1562.8	1587.7
47.5°	399.7	404.3	395.2	560.1	1539.1	1542.5	1528.9	1523.3	1510.9	1504.1	1497.3
50°	394.1	397.5	390.7	393.0	385.1	1410.4	1466.8	1460.1	1446.5	1438.6	1425.0
52.5°	388.4	388.4	383.9	378.3	376.0	377.2	1186.8	1395.7	1379.9	1372.0	1353.9
55°	370.4	372.6	377.2	368.1	365.9	364.7	361.3	1130.3	1306.5	1297.4	1281.6
57.5°	343.3	347.8	360.2	358.0	358.0	348.9	346.7	346.7	1049.0	1221.8	1206.0
60°	311.7	316.2	329.7	334.2	337.6	335.4	333.1	332.0	327.5	1105.5	1125.8
62.5°	278.9	283.4	287.9	302.6	307.1	312.8	319.6	316.2	311.7	311.7	1041.1
65°	243.9	250.7	252.9	266.5	272.1	282.3	287.9	295.9	293.6	292.5	298.1
67.5°	213.4	221.3	222.5	228.1	238.3	242.8	249.6	264.2	271.0	273.3	275.5
70°	187.4	192.0	195.4	197.6	204.4	205.5	217.9	228.1	238.3	249.6	252.9
72.5°	161.5	164.9	171.6	169.4	171.6	176.2	182.9	189.7	199.9	215.7	225.8
75°	132.1	134.4	138.9	141.1	145.7	149.1	153.6	159.2	168.3	176.2	189.7
77.5°	106.1	107.3	110.7	111.8	116.3	119.7	127.6	131.0	136.6	142.3	150.2
80°	85.8	85.8	86.9	86.9	90.3	93.7	99.4	102.8	109.5	114.0	114.0
82.5°	65.5	65.5	68.9	68.9	71.1	71.1	74.5	74.5	77.9	80.2	82.4
85°	46.3	47.4	49.7	48.6	50.8	49.7	51.9	54.2	55.3	54.2	53.1
87.5°	30.5	30.5	32.7	31.6	32.7	32.7	35.0	35.0	36.1	36.1	35.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2530.5	2513.6	2503.4	2491.0	2487.6	2484.2	2488.8	2488.8	2482.0	2476.3	2466.2
5°	2589.3	2571.2	2552.0	2531.7	2512.5	2492.1	2484.2	2483.1	2470.7	2463.9	2460.5
7.5°	2619.7	2610.7	2589.3	2561.0	2531.7	2495.5	2479.7	2470.7	2458.3	2456.0	2456.0
10°	2623.1	2613.0	2601.7	2581.3	2547.5	2500.0	2469.6	2451.5	2440.2	2448.1	2462.8
12.5°	2590.4	2609.6	2599.4	2585.9	2558.8	2501.2	2457.1	2430.0	2426.6	2447.0	2485.4
15°	2506.8	2563.3	2591.5	2578.0	2556.5	2498.9	2436.8	2405.2	2405.2	2447.0	2496.7
17.5°	2443.6	2487.6	2556.5	2567.8	2543.0	2494.4	2417.6	2380.4	2390.5	2451.5	2504.6
20°	2391.6	2418.7	2485.4	2548.6	2524.9	2484.2	2389.4	2351.0	2371.3	2444.7	2515.9
22.5°	2310.3	2364.5	2405.2	2498.9	2506.8	2465.0	2361.2	2314.9	2355.5	2444.7	2510.2
25°	2231.3	2296.8	2339.7	2431.2	2479.7	2441.3	2335.2	2276.5	2338.6	2441.3	2505.7
27.5°	2176.0	2206.5	2284.4	2349.9	2439.1	2409.7	2300.2	2234.7	2317.1	2423.3	2479.7
30°	2117.2	2137.6	2214.4	2276.5	2384.9	2373.6	2264.0	2188.4	2290.0	2406.3	2412.0
32.5°	2052.9	2075.5	2115.0	2205.3	2309.2	2339.7	2223.4	2142.1	2260.7	2380.4	2332.9
35°	1987.4	2004.3	2035.9	2133.1	2221.1	2288.9	2173.7	2089.0	2240.3	2340.8	2257.3
37.5°	1921.9	1940.0	1967.1	2048.4	2128.5	2241.5	2130.8	2035.9	2203.1	2270.8	2178.2
40°	1859.8	1870.0	1898.2	1949.0	2051.8	2192.9	2082.2	1980.6	2164.7	2181.6	2071.0
42.5°	1745.7	1796.6	1822.5	1863.2	1964.8	2126.3	2025.8	1921.9	2121.8	2092.4	1963.7
45°	1622.7	1733.3	1744.6	1785.3	1888.0	2055.1	1972.7	1864.3	2081.1	2015.6	1862.0
47.5°	1522.2	1602.3	1667.8	1701.7	1796.6	1971.6	1923.0	1815.8	2020.1	1918.5	1762.7
50°	1433.0	1475.9	1594.4	1619.3	1687.0	1871.1	1864.3	1759.3	1935.4	1796.6	1665.6
52.5°	1346.0	1376.5	1483.8	1536.8	1592.2	1762.7	1794.3	1704.0	1842.9	1674.6	1567.3
55°	1270.3	1280.5	1339.2	1451.0	1500.7	1653.1	1717.5	1639.6	1725.4	1558.3	1472.5
57.5°	1192.4	1183.4	1226.3	1369.7	1405.9	1541.4	1636.2	1574.1	1630.6	1439.7	1374.2
60°	1111.1	1098.7	1116.8	1211.6	1305.4	1430.7	1540.2	1501.8	1515.4	1322.3	1264.7
62.5°	1026.4	1014.0	1008.4	1068.2	1207.1	1316.6	1443.1	1421.7	1374.2	1215.0	1129.2
65°	938.4	925.9	916.9	940.6	1098.7	1168.7	1334.7	1329.1	1219.5	1102.1	950.8
67.5°	285.7	842.4	823.2	822.1	925.9	1034.3	1217.3	1208.2	1063.7	981.3	818.7
70°	257.5	683.2	726.1	715.9	761.1	897.7	1082.9	1076.1	912.4	787.1	723.8
72.5°	236.0	241.6	641.4	630.1	640.3	763.3	942.9	924.8	773.5	621.1	625.6
75°	202.1	212.3	221.3	531.9	518.3	632.4	790.4	762.2	638.0	512.7	522.8
77.5°	164.9	177.3	184.1	387.3	418.9	450.6	631.2	594.0	439.3	409.9	195.4
80°	123.1	133.2	144.5	154.7	318.4	315.0	468.6	431.4	306.0	255.2	152.4
82.5°	90.3	93.7	100.5	111.8	126.5	211.2	301.5	265.4	212.3	116.3	105.0
85°	56.5	61.0	64.4	67.8	76.8	126.5	149.1	118.6	89.2	71.1	66.6
87.5°	36.1	36.1	35.0	36.1	37.3	45.2	50.8	48.6	38.4	36.1	36.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2454.9	2439.1	2439.1	2434.6	2437.9	2437.9	2436.8	2437.9	2445.8	2450.4	2458.3
5°	2453.7	2449.2	2459.4	2471.8	2486.5	2504.6	2509.1	2524.9	2539.6	2558.8	2579.1
7.5°	2468.4	2484.2	2503.4	2523.8	2553.1	2574.6	2593.8	2613.0	2626.5	2644.6	2655.9
10°	2489.9	2521.5	2554.2	2580.2	2611.8	2629.9	2642.3	2644.6	2625.4	2594.9	2570.1
12.5°	2520.4	2557.6	2588.1	2613.0	2627.6	2620.9	2584.7	2547.5	2526.0	2494.4	2450.4
15°	2546.3	2580.2	2611.8	2601.7	2562.2	2524.9	2496.7	2452.6	2409.7	2380.4	2361.2
17.5°	2557.6	2590.4	2579.1	2526.0	2488.8	2445.8	2388.3	2354.4	2326.2	2303.6	2292.3
20°	2564.4	2558.8	2497.8	2459.4	2387.1	2347.6	2310.3	2278.7	2257.3	2246.0	2243.7
22.5°	2546.3	2477.5	2425.5	2356.6	2303.6	2270.8	2241.5	2215.5	2200.8	2191.8	2186.1
25°	2486.5	2406.3	2329.5	2275.3	2230.2	2201.9	2179.4	2157.9	2139.8	2135.3	2124.0
27.5°	2402.9	2337.4	2235.8	2194.0	2154.5	2141.0	2116.1	2094.7	2078.9	2065.3	2029.2
30°	2334.1	2230.2	2156.8	2118.4	2094.7	2078.9	2050.6	2028.0	2000.9	1951.3	1930.9
32.5°	2249.4	2146.6	2076.6	2055.1	2025.8	2012.2	1980.6	1930.9	1889.2	1868.8	1867.7
35°	2139.8	2055.1	2004.3	1985.1	1961.4	1938.8	1873.3	1828.2	1807.8	1810.1	1827.0
37.5°	2048.4	1972.7	1940.0	1912.9	1885.8	1828.2	1772.8	1751.4	1757.0	1768.3	1776.2
40°	1955.8	1898.2	1860.9	1839.5	1778.5	1722.0	1692.7	1700.6	1710.7	1718.6	1728.8
42.5°	1865.4	1824.8	1787.5	1745.7	1662.2	1631.7	1638.5	1648.6	1657.7	1669.0	1679.1
45°	1779.6	1743.5	1700.6	1605.7	1563.9	1571.8	1582.0	1589.9	1603.5	1611.4	1621.5
47.5°	1698.3	1659.9	1584.3	1500.7	1496.2	1512.0	1521.0	1531.2	1541.4	1521.0	839.0
50°	1606.9	1567.3	1452.2	1420.5	1430.7	1445.4	1456.7	1466.8	1306.5	519.4	399.7
52.5°	1516.5	1416.0	1342.6	1351.7	1361.8	1378.8	1386.7	1029.8	409.9	390.7	391.8
55°	1416.0	1287.3	1265.8	1277.1	1286.2	1303.1	863.8	378.3	376.0	374.9	383.9
57.5°	1257.9	1180.0	1189.0	1200.3	1209.4	853.7	368.1	365.9	367.0	368.1	369.2
60°	1116.8	1099.8	1110.0	1120.2	792.7	355.7	348.9	350.1	354.6	351.2	342.1
62.5°	1005.0	1018.5	1028.7	901.1	337.6	334.2	337.6	334.2	326.3	320.7	309.4
65°	919.2	932.7	940.6	317.3	316.2	320.7	317.3	306.0	293.6	277.8	274.4
67.5°	828.8	842.4	301.5	293.6	298.1	292.5	278.9	265.4	256.3	242.8	237.1
70°	735.1	315.0	273.3	272.1	264.2	255.2	240.5	227.0	215.7	210.0	204.4
72.5°	530.7	249.6	246.2	237.1	223.6	211.2	198.7	190.8	185.2	181.8	178.4
75°	221.3	216.8	206.6	190.8	177.3	171.6	162.6	157.0	154.7	147.9	145.7
77.5°	185.2	176.2	161.5	150.2	142.3	138.9	132.1	125.3	122.0	120.8	116.3
80°	142.3	129.9	123.1	117.4	115.2	107.3	99.4	96.0	93.7	92.6	89.2
82.5°	97.1	92.6	88.1	80.2	80.2	76.8	73.4	71.1	68.9	68.9	66.6
85°	63.2	59.8	58.7	55.3	55.3	53.1	51.9	50.8	49.7	48.6	47.4
87.5°	36.1	36.1	37.3	36.1	36.1	35.0	33.9	32.7	31.6	31.6	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2468.4	2479.7	2482.0	2520.4	2541.8	2540.7	2533.9	2554.2	2541.8	2535.1	2541.8
5°	2599.4	2613.0	2624.3	2666.0	2680.7	2687.5	2686.4	2697.7	2688.6	2680.7	2680.7
7.5°	2663.8	2668.3	2672.8	2662.7	2655.9	2644.6	2627.6	2602.8	2590.4	2576.8	2559.9
10°	2557.6	2543.0	2548.6	2528.3	2511.3	2498.9	2483.1	2462.8	2445.8	2433.4	2414.2
12.5°	2427.8	2426.6	2428.9	2432.3	2415.4	2405.2	2392.8	2378.1	2365.7	2352.1	2336.3
15°	2348.7	2349.9	2358.9	2355.5	2349.9	2344.2	2330.7	2326.2	2314.9	2300.2	2291.1
17.5°	2292.3	2297.9	2307.0	2302.4	2293.4	2287.8	2277.6	2267.4	2257.3	2246.0	2232.4
20°	2242.6	2248.2	2253.9	2248.2	2231.3	2223.4	2209.8	2178.2	2155.6	2133.1	2112.7
22.5°	2188.4	2191.8	2187.3	2169.2	2126.3	2106.0	2090.1	2081.1	2061.9	2049.5	2037.1
25°	2120.6	2101.4	2072.1	2051.8	2034.8	2025.8	2019.0	2017.9	2015.6	2013.4	2007.7
27.5°	2010.0	2003.2	1987.4	1979.5	1980.6	1984.0	1985.1	1988.5	1985.1	1980.6	1976.1
30°	1927.5	1930.9	1932.1	1934.3	1940.0	1943.4	1944.5	1949.0	1946.7	1943.4	1941.1
32.5°	1875.6	1883.5	1888.0	1894.8	1898.2	1903.8	1903.8	1910.6	1903.8	1902.7	1900.4
35°	1832.7	1839.5	1841.7	1851.9	1855.3	1860.9	1860.9	1866.6	1860.9	1803.3	1423.9
37.5°	1789.8	1796.6	1801.1	1810.1	1811.2	1814.6	1674.6	1225.2	790.4	612.0	467.5
40°	1739.0	1746.9	1751.4	1754.8	1233.1	782.5	538.6	438.1	438.1	441.5	444.9
42.5°	1684.8	1690.4	1177.8	685.4	426.8	425.7	429.1	432.5	435.9	440.4	444.9
45°	1324.6	668.5	424.6	414.4	417.8	422.3	426.8	431.4	437.0	441.5	443.8
47.5°	434.7	407.6	413.3	408.8	414.4	420.1	424.6	429.1	430.2	431.4	430.2
50°	402.0	402.0	405.4	405.4	409.9	412.2	412.2	412.2	407.6	406.5	403.1
52.5°	388.4	397.5	393.0	395.2	393.0	389.6	386.2	382.8	376.0	373.8	369.2
55°	381.7	385.1	373.8	370.4	365.9	356.8	352.3	347.8	342.1	339.9	334.2
57.5°	365.9	358.0	345.5	339.9	332.0	323.0	318.4	315.0	309.4	307.1	303.8
60°	336.5	320.7	312.8	306.0	297.0	289.1	285.7	283.4	278.9	277.8	274.4
62.5°	300.4	286.8	280.0	271.0	264.2	259.7	256.3	255.2	250.7	250.7	248.4
65°	260.8	254.1	248.4	239.4	236.0	231.5	230.4	229.2	227.0	225.8	223.6
67.5°	229.2	224.7	216.8	212.3	210.0	206.6	204.4	202.1	197.6	195.4	192.0
70°	201.0	197.6	189.7	186.3	181.8	176.2	172.8	170.5	167.1	164.9	161.5
72.5°	173.9	163.7	158.1	154.7	151.3	145.7	144.5	142.3	138.9	137.8	134.4
75°	140.0	132.1	128.7	126.5	123.1	119.7	119.7	119.7	116.3	115.2	114.0
77.5°	111.8	107.3	105.0	102.8	101.6	99.4	96.0	94.9	91.5	91.5	90.3
80°	85.8	83.6	81.3	80.2	79.0	76.8	74.5	73.4	70.0	70.0	68.9
82.5°	63.2	62.1	61.0	59.8	58.7	57.6	54.2	53.1	50.8	50.8	49.7
85°	45.2	44.0	41.8	40.7	40.7	39.5	36.1	35.0	32.7	32.7	32.7
87.5°	28.2	27.1	26.0	24.8	23.7	22.6	20.3	19.2	19.2	16.9	15.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2528.3	2547.5	2545.2	2558.8	2562.2	2568.9	2571.2	2572.3	2555.4	2568.9	2570.1
5°	2677.3	2680.7	2683.0	2688.6	2694.3	2695.4	2689.8	2683.0	2685.2	2680.7	2669.4
7.5°	2557.6	2540.7	2537.3	2532.8	2530.5	2528.3	2518.1	2527.1	2517.0	2512.5	2496.7
10°	2410.8	2395.0	2393.9	2393.9	2397.3	2396.2	2393.9	2389.4	2398.4	2392.8	2389.4
12.5°	2334.1	2328.4	2331.8	2329.5	2338.6	2340.8	2338.6	2338.6	2336.3	2331.8	2334.1
15°	2287.8	2283.2	2286.6	2283.2	2290.0	2291.1	2285.5	2288.9	2283.2	2277.6	2275.3
17.5°	2226.8	2216.6	2208.7	2197.4	2198.6	2196.3	2189.5	2189.5	2183.9	2169.2	2170.3
20°	2109.3	2099.2	2094.7	2094.7	2100.3	2102.6	2101.4	2103.7	2098.1	2095.8	2086.8
22.5°	2035.9	2034.8	2037.1	2042.7	2051.8	2064.2	2065.3	2065.3	2065.3	2064.2	2052.9
25°	2010.0	2010.0	2012.2	2020.1	2026.9	2035.9	2038.2	2040.5	2038.2	2038.2	2028.0
27.5°	1980.6	1978.4	1982.9	1990.8	1998.7	2005.5	2011.1	2012.2	2008.8	2008.8	2012.2
30°	1944.5	1943.4	1949.0	1956.9	1963.7	1970.5	1976.1	1980.6	1976.1	1976.1	1972.7
32.5°	1907.2	1907.2	1909.5	1862.0	1726.5	1554.9	1558.3	1458.9	1390.0	1303.1	1418.3
35°	1190.2	866.1	744.1	630.1	549.9	498.0	496.8	479.9	472.0	466.4	465.2
37.5°	449.4	451.7	456.2	458.5	461.8	464.1	465.2	465.2	465.2	465.2	464.1
40°	448.3	452.8	456.2	459.6	463.0	465.2	465.2	466.4	467.5	467.5	467.5
42.5°	449.4	453.9	458.5	461.8	464.1	465.2	466.4	467.5	467.5	467.5	467.5
45°	448.3	450.6	450.6	451.7	451.7	451.7	452.8	452.8	451.7	450.6	452.8
47.5°	431.4	431.4	428.0	426.8	425.7	423.4	424.6	423.4	422.3	421.2	423.4
50°	402.0	397.5	395.2	393.0	391.8	389.6	390.7	389.6	388.4	386.2	389.6
52.5°	367.0	365.9	361.3	359.1	358.0	359.1	356.8	355.7	354.6	353.4	354.6
55°	333.1	328.6	327.5	325.2	324.1	325.2	324.1	323.0	321.8	320.7	321.8
57.5°	302.6	299.2	298.1	295.9	295.9	295.9	295.9	294.7	293.6	292.5	293.6
60°	273.3	271.0	269.9	269.9	268.7	268.7	268.7	267.6	266.5	266.5	267.6
62.5°	248.4	248.4	245.0	243.9	243.9	245.0	243.9	242.8	241.6	240.5	242.8
65°	222.5	217.9	216.8	214.5	212.3	213.4	212.3	211.2	210.0	208.9	211.2
67.5°	190.8	189.7	185.2	182.9	181.8	182.9	181.8	180.7	179.5	178.4	180.7
70°	160.3	160.3	155.8	154.7	153.6	153.6	152.4	152.4	151.3	150.2	152.4
72.5°	133.2	133.2	132.1	129.9	128.7	127.6	126.5	125.3	125.3	126.5	126.5
75°	110.7	108.4	103.9	105.0	103.9	102.8	102.8	101.6	100.5	102.8	101.6
77.5°	86.9	85.8	82.4	83.6	82.4	81.3	81.3	80.2	79.0	80.2	80.2
80°	65.5	65.5	64.4	63.2	63.2	62.1	61.0	61.0	59.8	61.0	61.0
82.5°	47.4	47.4	46.3	45.2	44.0	44.0	42.9	42.9	42.9	42.9	42.9
85°	30.5	29.4	29.4	27.1	27.1	27.1	26.0	26.0	26.0	26.0	26.0
87.5°	14.7	14.7	13.6	13.6	12.4	11.3	11.3	10.2	10.2	11.3	11.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213145

CATALOG NUMBER: 4SNLED-LD5-62SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2549.7	2564.4	2552.0	2557.6	2558.8	2578.0	2576.8	2581.3	2573.4	2564.4	2552.0
5°	2679.6	2672.8	2663.8	2685.2	2673.9	2687.5	2692.0	2701.0	2701.0	2699.9	2689.8
7.5°	2513.6	2498.9	2510.2	2518.1	2521.5	2512.5	2530.5	2550.9	2567.8	2578.0	2579.1
10°	2383.7	2388.3	2387.1	2390.5	2398.4	2397.3	2408.6	2419.9	2424.4	2431.2	2433.4
12.5°	2322.8	2321.6	2323.9	2331.8	2336.3	2335.2	2346.5	2353.3	2355.5	2356.6	2355.5
15°	2274.2	2266.3	2271.9	2273.1	2276.5	2276.5	2290.0	2300.2	2304.7	2307.0	2304.7
17.5°	2182.7	2163.5	2181.6	2181.6	2194.0	2191.8	2213.2	2230.2	2239.2	2246.0	2246.0
20°	2092.4	2083.4	2090.1	2087.9	2096.9	2095.8	2109.3	2120.6	2128.5	2134.2	2141.0
22.5°	2056.3	2058.5	2048.4	2049.5	2049.5	2048.4	2055.1	2060.8	2063.0	2066.4	2064.2
25°	2032.6	2034.8	2031.4	2025.8	2023.5	2025.8	2029.2	2035.9	2037.1	2034.8	2026.9
27.5°	2008.8	2002.1	2007.7	1997.6	1995.3	1999.8	2004.3	2005.5	2006.6	2006.6	1999.8
30°	1972.7	1967.1	1972.7	1968.2	1963.7	1968.2	1971.6	1971.6	1973.8	1975.0	1967.1
32.5°	1378.8	1390.0	1573.0	1683.6	1839.5	1918.5	1933.2	1933.2	1935.4	1935.4	1928.7
35°	469.7	470.9	509.3	552.2	643.6	756.6	904.5	981.3	1241.0	1551.5	1851.9
37.5°	464.1	463.0	461.8	460.7	459.6	458.5	456.2	455.1	461.8	547.7	743.0
40°	466.4	465.2	463.0	461.8	460.7	458.5	457.3	455.1	452.8	450.6	448.3
42.5°	466.4	465.2	464.1	463.0	461.8	460.7	458.5	456.2	453.9	450.6	447.2
45°	450.6	450.6	451.7	451.7	452.8	452.8	452.8	451.7	451.7	450.6	446.0
47.5°	421.2	421.2	424.6	424.6	426.8	429.1	429.1	431.4	434.7	437.0	438.1
50°	387.3	387.3	390.7	391.8	394.1	397.5	400.9	402.0	405.4	409.9	414.4
52.5°	353.4	353.4	356.8	356.8	359.1	362.5	365.9	367.0	371.5	376.0	381.7
55°	321.8	321.8	324.1	325.2	326.3	328.6	332.0	332.0	336.5	339.9	345.5
57.5°	293.6	295.9	295.9	295.9	297.0	299.2	301.5	301.5	304.9	308.3	312.8
60°	266.5	268.7	268.7	268.7	269.9	271.0	273.3	273.3	275.5	277.8	282.3
62.5°	241.6	243.9	243.9	245.0	245.0	246.2	248.4	247.3	249.6	250.7	254.1
65°	210.0	212.3	213.4	214.5	215.7	217.9	221.3	220.2	223.6	225.8	229.2
67.5°	179.5	181.8	181.8	182.9	184.1	186.3	188.6	188.6	192.0	194.2	198.7
70°	151.3	153.6	153.6	154.7	155.8	158.1	160.3	159.2	162.6	164.9	168.3
72.5°	125.3	127.6	127.6	128.7	128.7	131.0	133.2	135.5	135.5	137.8	140.0
75°	101.6	102.8	103.9	103.9	105.0	106.1	108.4	110.7	111.8	112.9	115.2
77.5°	80.2	81.3	82.4	82.4	83.6	84.7	85.8	90.3	92.6	93.7	93.7
80°	61.0	62.1	62.1	62.1	63.2	64.4	66.6	66.6	71.1	71.1	72.3
82.5°	42.9	44.0	44.0	44.0	45.2	47.4	48.6	49.7	51.9	53.1	53.1
85°	26.0	27.1	27.1	27.1	28.2	29.4	31.6	32.7	33.9	33.9	35.0
87.5°	10.2	11.3	12.4	12.4	13.6	14.7	15.8	16.9	18.1	18.1	19.2
90°	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):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2538.4	2546.3	2538.4	2543.0	2548.6	2538.4	2514.7	2505.7	2502.3	2488.8	2479.7
5°	2679.6	2679.6	2676.2	2685.2	2684.1	2668.3	2643.5	2632.2	2620.9	2606.2	2594.9
7.5°	2579.1	2588.1	2593.8	2628.8	2651.4	2653.6	2669.4	2672.8	2677.3	2672.8	2666.0
10°	2434.6	2431.2	2447.0	2479.7	2498.9	2509.1	2539.6	2554.2	2566.7	2591.5	2617.5
12.5°	2353.3	2357.8	2364.5	2388.3	2406.3	2401.8	2414.2	2424.4	2439.1	2463.9	2501.2
15°	2299.0	2303.6	2310.3	2328.4	2339.7	2334.1	2340.8	2347.6	2357.8	2370.2	2392.8
17.5°	2240.3	2248.2	2256.1	2275.3	2285.5	2284.4	2290.0	2292.3	2295.7	2303.6	2319.4
20°	2148.9	2173.7	2189.5	2215.5	2230.2	2227.9	2238.1	2241.5	2246.0	2253.9	2260.7
22.5°	2065.3	2072.1	2080.0	2108.2	2133.1	2163.5	2170.3	2179.4	2190.6	2198.6	2205.3
25°	2017.9	2013.4	2016.7	2035.9	2049.5	2051.8	2061.9	2091.3	2121.8	2135.3	2151.1
27.5°	1989.6	1985.1	1984.0	1993.0	1995.3	1989.6	1987.4	1996.4	2019.0	2041.6	2089.0
30°	1959.2	1953.5	1949.0	1956.9	1960.3	1952.4	1937.7	1929.8	1943.4	1949.0	1968.2
32.5°	1923.0	1917.4	1915.1	1919.6	1921.9	1915.1	1899.3	1890.3	1888.0	1883.5	1888.0
35°	1882.4	1876.7	1873.3	1874.5	1879.0	1873.3	1859.8	1848.5	1842.9	1830.4	1821.4
37.5°	970.0	1374.2	1784.1	1827.0	1831.6	1830.4	1816.9	1804.5	1798.8	1784.1	1779.6
40°	443.8	495.7	744.1	972.2	1402.5	1781.9	1769.5	1757.0	1746.9	1742.4	1725.4
42.5°	442.6	443.8	444.9	439.3	544.3	927.1	1368.6	1708.5	1701.7	1690.4	1678.0
45°	442.6	437.0	441.5	434.7	437.0	435.9	543.1	876.3	1559.4	1629.4	1623.8
47.5°	438.1	434.7	439.3	433.6	426.8	430.2	425.7	431.4	673.0	1141.6	1563.9
50°	417.8	420.1	428.0	426.8	421.2	425.7	417.8	424.6	418.9	459.6	885.3
52.5°	387.3	391.8	399.7	406.5	408.8	414.4	412.2	414.4	409.9	411.0	412.2
55°	351.2	356.8	363.6	373.8	378.3	387.3	394.1	397.5	403.1	402.0	393.0
57.5°	317.3	323.0	328.6	338.8	348.9	353.4	365.9	372.6	387.3	383.9	381.7
60°	285.7	290.2	295.9	298.1	310.5	318.4	329.7	336.5	355.7	360.2	367.0
62.5°	257.5	259.7	264.2	267.6	275.5	283.4	289.1	300.4	310.5	325.2	335.4
65°	231.5	233.7	237.1	239.4	240.5	251.8	255.2	267.6	271.0	286.8	295.9
67.5°	202.1	206.6	211.2	213.4	215.7	222.5	224.7	230.4	238.3	245.0	256.3
70°	171.6	175.0	179.5	182.9	187.4	192.0	198.7	202.1	207.8	212.3	221.3
72.5°	143.4	146.8	149.1	152.4	155.8	159.2	164.9	172.8	177.3	185.2	187.4
75°	116.3	119.7	122.0	124.2	127.6	129.9	132.1	140.0	144.5	151.3	158.1
77.5°	96.0	96.0	98.2	105.0	103.9	103.9	106.1	110.7	114.0	118.6	125.3
80°	74.5	75.7	76.8	82.4	83.6	84.7	83.6	86.9	90.3	91.5	96.0
82.5°	55.3	56.5	56.5	59.8	63.2	63.2	63.2	64.4	67.8	68.9	71.1
85°	37.3	38.4	39.5	40.7	42.9	44.0	45.2	45.2	47.4	48.6	49.7
87.5°	20.3	22.6	23.7	24.8	26.0	27.1	28.2	29.4	30.5	31.6	32.7
90°	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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9	2463.9
2.5°	2476.3	2470.7	2467.3	2458.3	2456.0	2441.3	2443.6	2441.3	2441.3	2444.7	2456.0
5°	2582.5	2555.4	2548.6	2529.4	2513.6	2486.5	2469.6	2460.5	2447.0	2441.3	2449.2
7.5°	2654.7	2634.4	2617.5	2600.5	2578.0	2546.3	2522.6	2495.5	2472.9	2451.5	2445.8
10°	2642.3	2664.9	2664.9	2654.7	2633.3	2601.7	2573.4	2539.6	2500.0	2466.2	2445.8
12.5°	2537.3	2576.8	2608.5	2632.2	2653.6	2632.2	2603.9	2576.8	2532.8	2483.1	2445.8
15°	2422.1	2462.8	2502.3	2552.0	2603.9	2625.4	2624.3	2592.6	2553.1	2501.2	2449.2
17.5°	2340.8	2369.1	2390.5	2444.7	2508.0	2563.3	2600.5	2602.8	2564.4	2518.1	2450.4
20°	2279.9	2300.2	2318.2	2348.7	2404.1	2471.8	2540.7	2579.1	2572.3	2521.5	2453.7
22.5°	2224.5	2239.2	2253.9	2276.5	2320.5	2364.5	2444.7	2523.8	2557.6	2515.9	2450.4
25°	2169.2	2185.0	2196.3	2212.1	2247.1	2283.2	2339.7	2437.9	2513.6	2511.3	2443.6
27.5°	2103.7	2125.2	2138.7	2160.2	2183.9	2211.0	2249.4	2342.0	2450.4	2488.8	2425.5
30°	2024.7	2056.3	2076.6	2100.3	2120.6	2144.3	2174.8	2231.3	2365.7	2444.7	2406.3
32.5°	1910.6	1967.1	2012.2	2034.8	2057.4	2077.7	2104.8	2152.3	2261.8	2384.9	2384.9
35°	1829.3	1855.3	1895.9	1961.4	1989.6	2010.0	2034.8	2072.1	2142.1	2313.7	2349.9
37.5°	1766.1	1776.2	1796.6	1860.9	1914.0	1946.7	1971.6	1995.3	2064.2	2216.6	2304.7
40°	1718.6	1715.3	1713.0	1743.5	1819.1	1871.1	1899.3	1923.0	1976.1	2100.3	2244.8
42.5°	1663.3	1659.9	1648.6	1656.5	1693.8	1780.7	1823.7	1849.6	1893.7	1978.4	2179.4
45°	1605.7	1600.1	1595.6	1587.7	1601.2	1649.8	1737.8	1776.2	1801.1	1876.7	2096.9
47.5°	1547.0	1539.1	1533.5	1526.7	1518.8	1541.4	1624.9	1693.8	1736.7	1784.1	1997.6
50°	1463.4	1473.6	1466.8	1458.9	1452.2	1447.6	1482.6	1595.6	1648.6	1687.0	1876.7
52.5°	689.9	1341.5	1397.9	1390.0	1381.0	1373.1	1381.0	1466.8	1562.8	1593.3	1731.1
55°	393.0	597.3	1243.2	1314.4	1306.5	1295.2	1288.4	1317.8	1461.2	1501.8	1597.8
57.5°	378.3	379.4	548.8	1184.5	1228.6	1218.4	1210.5	1217.3	1339.2	1408.1	1481.5
60°	365.9	365.9	365.9	523.9	1132.6	1136.0	1125.8	1114.5	1167.6	1303.1	1364.1
62.5°	338.8	345.5	348.9	348.9	517.2	1049.0	1038.9	1035.5	1037.7	1176.6	1246.6
65°	303.8	319.6	326.3	330.9	330.9	543.1	949.7	944.0	936.1	989.2	1128.1
67.5°	265.4	281.2	295.9	304.9	306.0	316.2	566.9	850.3	839.0	840.1	1001.6
70°	225.8	239.4	255.2	268.7	281.2	286.8	295.9	705.7	743.0	727.2	858.2
72.5°	195.4	201.0	212.3	225.8	240.5	254.1	262.0	281.2	644.8	627.8	652.7
75°	162.6	167.1	175.0	184.1	195.4	211.2	224.7	238.3	342.1	526.2	522.8
77.5°	126.5	134.4	143.4	149.1	154.7	166.0	184.1	197.6	211.2	355.7	418.9
80°	97.1	102.8	107.3	112.9	119.7	127.6	134.4	150.2	166.0	178.4	320.7
82.5°	72.3	75.7	79.0	81.3	83.6	88.1	100.5	106.1	116.3	127.6	151.3
85°	50.8	53.1	55.3	56.5	57.6	58.7	63.2	64.4	74.5	76.8	91.5
87.5°	32.7	33.9	36.1	37.3	37.3	38.4	39.5	39.5	39.5	37.3	45.2
90°	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):

	357.5°	360°
0°	2463.9	2463.9
2.5°	2465.0	2483.1
5°	2461.7	2485.4
7.5°	2452.6	2475.2
10°	2439.1	2466.2
12.5°	2424.4	2450.4
15°	2412.0	2431.2
17.5°	2398.4	2409.7
20°	2380.4	2389.4
22.5°	2362.3	2357.8
25°	2342.0	2331.8
27.5°	2316.0	2296.8
30°	2292.3	2258.4
32.5°	2269.7	2214.4
35°	2239.2	2169.2
37.5°	2207.6	2122.9
40°	2170.3	2069.8
42.5°	2130.8	2016.7
45°	2081.1	1965.9
47.5°	2037.1	1905.0
50°	1976.1	1839.5
52.5°	1901.6	1778.5
55°	1813.5	1704.0
57.5°	1718.6	1626.0
60°	1617.0	1536.8
62.5°	1493.9	1444.2
65°	1349.4	1338.1
67.5°	1160.8	1220.7
70°	951.9	1086.3
72.5°	796.1	944.0
75°	652.7	784.8
77.5°	517.2	615.4
80°	323.0	450.6
82.5°	216.8	295.9
85°	131.0	141.1
87.5°	50.8	51.9
90°	0.0	0.0

(END OF REPORT)