

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: P1213765

Luminaire Tested: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

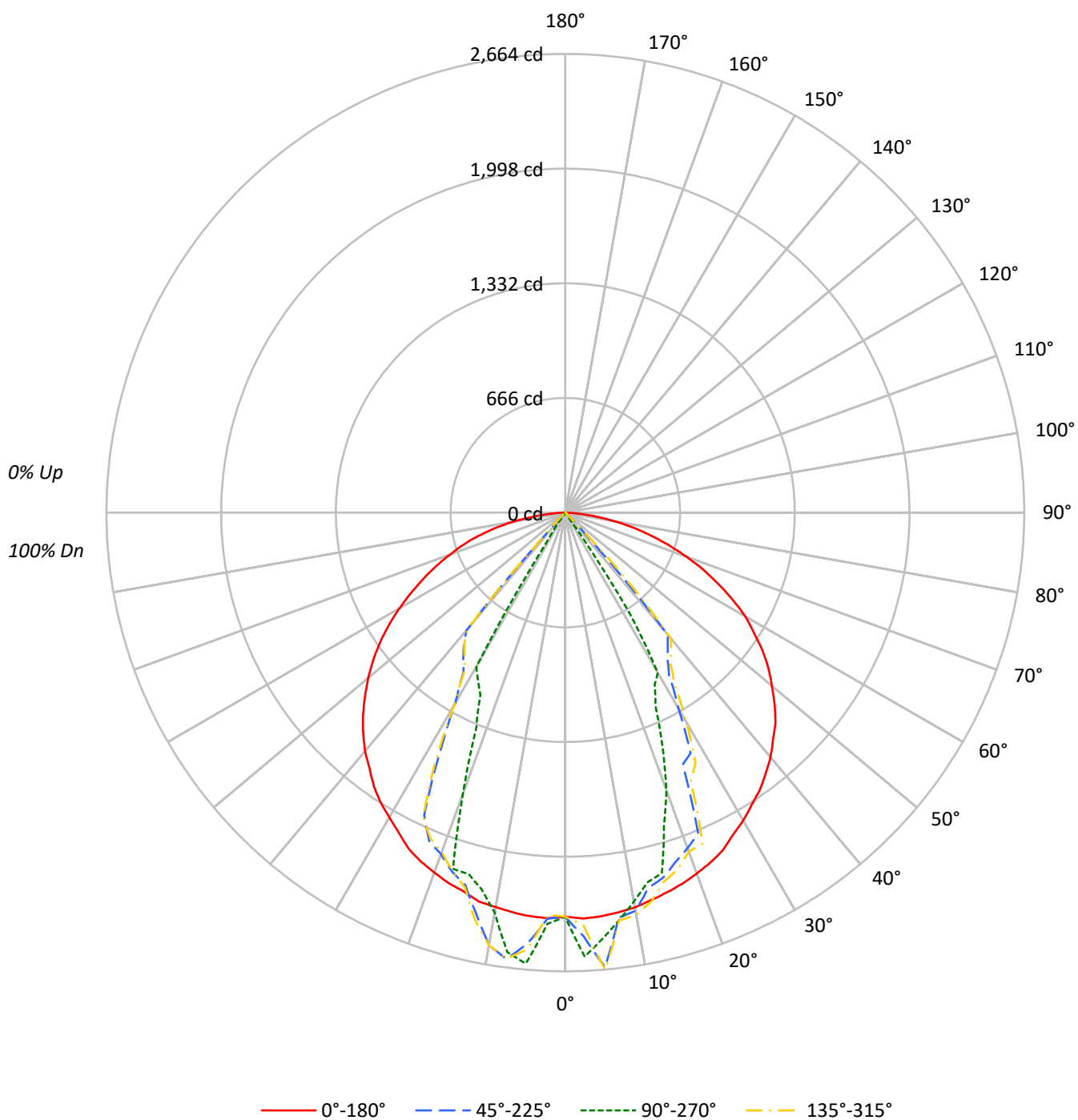
Lumens per Lamp: N/A
Luminaire Lumens: 3336.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 28
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
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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72		
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65		
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59		
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54		
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49		
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45		
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18959	18959	18959	18959
5°	19037	19499	19031	20650
10°	18991	17644	18979	18154
15°	18940	16469	18892	16512
20°	18961	12972	18907	13132
25°	19016	9387	18923	8858
30°	18929	8235	18729	7916
35°	18985	181	18706	220
40°	19050	39	18595	39
45°	19118	23	18399	17
50°	18972	18	18101	18
55°	18860	13	17702	13
60°	18504	14	17057	14
65°	17539	22	16290	15
70°	16271	24	15490	24
75°	14392	27	14630	27
80°	11689	31	12357	31
85°	6880	37	7023	37

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 20642 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.4	7.1
10°-20°	642.0	19.2
20°-30°	817.0	24.5
30°-40°	690.1	20.7
40°-50°	451.2	13.5
50°-60°	284.3	8.5
60°-70°	151.3	4.5
70°-80°	55.2	1.7
80°-90°	9.5	0.3
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°	1694.4	50.8
0°-40°	2384.5	71.5
0°-60°	3120.0	93.5
0°-90°	3336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3336.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2346	2346	2346	2346	2346	
5°	2353	2483	2352	2629	2353	224
15°	2283	2167	2277	2172	2283	645
25°	2164	1237	2153	1167	2164	995
35°	1967	23	1938	28	1967	1230
45°	1725	3	1660	2	1725	1327
55°	1398	1	1312	1	1398	1246
65°	979	2	909	1	979	969
75°	515	2	523	2	515	546
85°	101	2	103	2	101	127
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2359.5	2360.9	2361.6	2363.0	2365.1	2365.8	2367.2	2365.8	2365.8	2365.8	2365.8
5°	2353.2	2356.0	2358.1	2360.9	2365.8	2366.5	2372.2	2372.9	2375.7	2381.3	2385.6
7.5°	2342.6	2345.4	2349.6	2356.7	2363.7	2371.5	2381.3	2391.9	2406.7	2420.8	2438.4
10°	2327.1	2330.6	2335.6	2341.9	2376.4	2381.3	2403.2	2433.4	2441.9	2486.2	2519.3
12.5°	2304.6	2316.6	2329.2	2334.9	2368.0	2420.1	2493.3	2478.5	2462.3	2607.4	2605.2
15°	2282.8	2298.9	2292.6	2338.4	2368.7	2459.5	2428.5	2494.7	2615.8	2586.2	2587.6
17.5°	2259.5	2263.0	2298.2	2336.3	2390.5	2437.0	2475.0	2565.8	2589.7	2591.9	2565.8
20°	2229.9	2246.8	2298.2	2332.7	2424.3	2446.1	2528.5	2575.0	2565.1	2541.2	2496.8
22.5°	2199.7	2251.1	2303.2	2351.8	2415.8	2474.3	2515.1	2536.9	2485.5	2391.2	2340.5
25°	2163.8	2194.0	2262.3	2333.5	2413.7	2447.5	2471.5	2436.3	2369.4	2284.9	2199.7
27.5°	2108.1	2156.7	2244.0	2324.3	2396.8	2437.7	2398.9	2314.4	2206.7	2151.1	2112.4
30°	2065.2	2128.6	2200.4	2277.8	2353.2	2377.1	2278.5	2182.1	2108.1	2052.5	2044.1
32.5°	2013.1	2103.2	2171.5	2245.4	2308.8	2277.1	2181.4	2056.7	1995.5	1974.3	1982.8
35°	1966.6	2034.9	2124.3	2196.9	2242.6	2171.5	2020.1	1942.7	1913.1	1925.1	1909.6
37.5°	1911.0	2001.1	2083.5	2146.2	2130.7	2023.6	1895.5	1846.2	1849.7	1839.9	1810.3
40°	1853.2	1939.1	2025.0	2084.2	2030.0	1866.6	1781.4	1770.9	1773.0	1741.3	1699.0
42.5°	1785.6	1863.8	1949.7	2003.2	1886.3	1758.9	1701.2	1702.6	1684.3	1639.9	1617.4
45°	1725.1	1796.9	1886.3	1891.3	1747.6	1641.3	1624.4	1606.1	1565.3	1550.5	1533.6
47.5°	1647.6	1727.2	1801.1	1774.4	1611.7	1545.5	1532.9	1492.7	1472.3	1461.0	1447.0
50°	1565.3	1645.5	1713.1	1637.1	1483.6	1468.1	1426.5	1394.9	1380.8	1368.8	1356.1
52.5°	1487.1	1553.3	1622.3	1491.3	1385.0	1370.2	1323.0	1304.7	1290.7	1277.3	1274.5
55°	1398.4	1456.8	1504.0	1352.6	1290.7	1256.1	1222.4	1209.7	1196.3	1190.0	1200.5
57.5°	1297.7	1363.9	1356.8	1216.0	1188.6	1138.6	1125.9	1117.4	1107.6	1111.8	1023.8
60°	1206.9	1257.6	1223.1	1116.0	1069.6	1035.8	1024.5	1018.9	1024.5	938.6	825.2
62.5°	1094.9	1151.9	1082.2	999.1	949.9	933.7	923.8	931.5	849.2	754.8	727.4
65°	978.7	1040.7	937.9	873.8	842.8	828.7	828.0	762.6	681.6	645.0	645.0
67.5°	866.8	930.8	798.5	745.0	733.0	734.4	693.6	594.3	571.7	547.1	476.0
70°	747.8	804.1	659.8	627.4	620.3	615.4	516.1	489.4	462.6	397.1	391.5
72.5°	629.5	656.9	530.2	522.5	521.0	433.0	413.3	367.6	336.6	328.8	325.3
75°	514.7	506.3	419.0	426.0	359.1	328.1	296.4	269.7	265.5	262.6	65.5
77.5°	406.3	364.0	330.2	287.3	257.0	218.3	211.9	207.7	136.6	49.3	40.1
80°	295.7	235.9	219.7	186.6	159.1	152.8	156.3	47.9	38.0	31.7	27.5
82.5°	188.0	150.7	123.2	107.7	104.9	45.8	33.8	27.5	23.9	20.4	16.9
85°	100.7	66.9	62.0	52.1	31.0	21.1	17.6	13.4	11.3	9.2	8.4
87.5°	31.7	26.8	21.8	17.6	10.6	7.0	5.6	4.9	4.2	3.5	3.5
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2364.4	2365.8	2365.1	2367.2	2367.2	2370.1	2372.2	2374.3	2378.5	2380.6	2396.8
5°	2394.7	2398.2	2408.8	2418.6	2430.6	2434.1	2454.6	2459.5	2483.4	2486.2	2565.1
7.5°	2462.3	2475.7	2501.0	2526.4	2551.7	2567.9	2596.1	2613.7	2632.7	2649.6	2712.3
10°	2544.0	2566.5	2591.2	2616.5	2631.3	2662.3	2679.2	2682.0	2677.1	2649.6	2548.2
12.5°	2624.3	2646.8	2636.2	2641.2	2658.8	2603.8	2611.6	2572.1	2599.6	2463.7	2363.0
15°	2613.0	2611.6	2585.5	2501.0	2515.1	2410.2	2368.0	2335.6	2361.6	2347.5	2332.0
17.5°	2579.2	2515.1	2470.0	2368.7	2325.7	2296.1	2296.8	2297.5	2284.9	2298.2	2258.8
20°	2436.3	2364.4	2297.5	2261.6	2249.0	2227.8	2238.4	2227.8	2228.5	2232.8	2172.2
22.5°	2246.1	2224.3	2185.6	2196.9	2192.6	2211.6	2197.6	2175.7	2182.8	2151.1	2105.3
25°	2169.4	2144.0	2142.6	2146.9	2140.5	2132.1	2119.4	2086.3	2084.2	2074.3	2053.2
27.5°	2091.9	2093.3	2097.6	2084.9	2062.4	2045.5	2026.5	2010.3	2016.6	2005.3	1976.5
30°	2038.4	2037.7	2012.4	2001.1	1959.6	1960.3	1955.3	1945.5	1939.1	1939.8	1921.5
32.5°	1962.4	1940.6	1911.7	1897.6	1894.1	1881.4	1871.5	1873.7	1878.6	1861.0	1880.0
35°	1884.2	1839.2	1834.9	1823.0	1811.7	1803.2	1806.8	1792.7	1792.0	1789.9	1635.0
37.5°	1779.3	1757.5	1755.4	1742.7	1734.9	1732.8	1719.5	1721.6	1727.9	1739.2	1394.2
40°	1692.7	1673.0	1668.1	1667.4	1650.5	1649.0	1652.6	1665.9	1675.1	1604.7	1328.7
42.5°	1599.8	1601.2	1585.7	1575.8	1577.9	1584.3	1601.2	1554.7	1347.0	1283.6	1214.6
45°	1520.2	1513.2	1504.7	1501.9	1520.2	1507.5	1321.6	1219.5	1194.9	1192.1	998.4
47.5°	1437.1	1435.0	1431.5	1433.6	1329.4	1185.0	1142.8	1129.4	1133.6	1130.8	857.6
50°	1353.3	1356.1	1356.1	1184.3	1087.2	1063.2	1066.7	1078.7	1004.1	937.2	799.2
52.5°	1280.8	1259.0	1078.7	1016.7	994.9	1005.5	980.1	886.5	818.9	779.5	739.3
55°	1146.3	985.8	945.6	935.8	943.5	849.9	792.1	731.6	714.0	709.8	686.5
57.5°	902.0	869.6	873.1	833.7	744.3	691.4	668.2	659.8	652.0	646.4	56.3
60°	797.8	806.9	738.6	654.1	618.2	611.2	605.5	597.8	596.4	586.5	35.9
62.5°	730.2	642.2	583.0	561.9	553.4	551.3	540.8	537.2	456.3	62.7	26.8
65°	550.6	514.7	503.4	498.5	489.4	489.4	406.3	64.1	52.1	45.1	23.9
67.5°	449.2	446.4	440.8	434.4	295.7	62.0	54.2	47.2	40.8	35.9	21.1
70°	380.2	378.8	345.0	63.4	52.8	46.5	40.8	36.6	33.8	30.3	19.0
72.5°	311.9	63.4	53.5	46.5	40.1	36.6	33.1	29.6	26.8	24.6	15.5
75°	48.6	43.0	38.0	34.5	31.7	28.2	25.3	23.2	22.5	19.7	10.6
77.5°	35.2	30.3	27.5	24.6	21.8	19.7	16.9	14.8	13.4	11.3	7.7
80°	24.6	21.8	19.7	16.2	14.1	12.0	10.6	9.2	8.4	7.0	3.5
82.5°	14.1	12.0	10.6	8.4	7.7	6.3	5.6	4.9	4.9	3.5	3.5
85°	6.3	6.3	4.9	4.2	3.5	3.5	3.5	2.8	2.8	2.1	2.1
87.5°	2.8	2.8	2.8	2.8	2.8	2.1	2.1	2.1	2.1	2.1	1.4
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2419.4	2428.5	2446.1	2464.4	2444.0	2517.2	2511.6	2536.2	2549.6	2556.0	2570.7
5°	2634.8	2675.7	2689.0	2648.9	2625.7	2601.7	2547.5	2506.7	2511.6	2498.2	2449.6
7.5°	2630.6	2543.3	2425.7	2372.2	2368.0	2361.6	2378.5	2388.4	2389.8	2389.1	2387.7
10°	2408.1	2363.0	2355.3	2348.2	2351.1	2325.0	2313.0	2279.2	2297.5	2287.7	2291.2
12.5°	2340.5	2329.9	2288.4	2230.6	2265.2	2239.1	2224.3	2234.2	2222.9	2212.3	2208.8
15°	2300.4	2232.1	2208.8	2194.7	2184.9	2179.2	2184.2	2172.9	2169.4	2167.3	2172.2
17.5°	2217.3	2189.8	2164.5	2127.1	2127.8	2125.7	2139.8	2160.9	2162.3	2053.9	1956.0
20°	2151.8	2129.3	2096.9	2073.6	2105.3	2049.0	1831.4	1727.9	1711.7	1711.7	1714.5
22.5°	2099.7	2049.7	2051.8	2015.2	1718.8	1658.2	1659.6	1665.9	1637.1	1538.5	1527.9
25°	2028.6	2020.8	1866.6	1613.1	1615.2	1568.1	1495.5	1393.5	1282.9	1282.9	1264.6
27.5°	1975.1	1811.0	1585.7	1575.1	1416.7	1316.7	1254.7	1161.1	1148.4	1136.4	1137.9
30°	1929.3	1532.2	1537.8	1316.7	1199.8	1116.7	1111.8	1096.3	1088.6	1086.5	1078.7
32.5°	1525.1	1492.0	1287.1	1121.0	1075.2	1061.8	1055.5	1037.9	1037.2	1023.8	930.8
35°	1430.1	1309.7	1077.3	1032.2	1018.9	1006.2	995.6	668.2	78.9	31.7	27.5
37.5°	1321.6	1094.2	996.3	975.9	963.2	711.9	71.1	24.6	17.6	12.7	11.3
40°	1120.3	977.3	946.3	923.8	380.9	24.6	15.5	12.0	7.0	6.3	5.6
42.5°	944.9	921.0	887.9	270.4	28.2	12.0	7.7	5.6	4.9	4.9	4.2
45°	884.4	863.2	357.7	26.8	17.6	5.6	4.9	4.9	4.2	2.8	2.8
47.5°	828.0	728.8	32.4	16.9	11.3	4.9	4.2	2.8	2.8	2.8	2.1
50°	768.2	40.1	22.5	12.7	7.0	2.8	2.8	2.8	2.8	2.1	2.1
52.5°	143.6	28.2	18.3	11.3	3.5	2.8	2.8	2.8	2.1	2.1	2.1
55°	33.8	22.5	16.9	9.9	2.8	2.8	2.8	2.1	2.1	2.1	1.4
57.5°	25.3	16.9	13.4	9.2	2.8	2.1	2.1	2.1	2.1	2.1	1.4
60°	21.1	12.0	10.6	8.4	2.1	2.1	2.1	2.1	2.1	2.1	1.4
62.5°	14.8	9.9	7.7	6.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
65°	12.0	7.7	6.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
67.5°	10.6	6.3	4.2	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
70°	8.4	2.1	2.1	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
72.5°	7.0	2.1	1.4	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	7.0	3.5	1.4	1.4	2.1	2.1	2.8	2.8	2.1	2.1	2.1
77.5°	4.9	3.5	1.4	1.4	2.1	2.1	2.8	2.8	2.1	2.1	2.1
80°	2.8	3.5	1.4	2.1	2.1	4.2	4.9	2.8	2.1	2.1	2.1
82.5°	2.8	3.5	4.2	4.2	2.1	3.5	4.2	3.5	2.8	2.1	2.1
85°	2.8	2.1	2.8	3.5	2.1	3.5	3.5	2.8	2.8	2.1	2.1
87.5°	1.4	2.1	2.1	2.8	2.8	2.8	3.5	2.8	2.8	2.8	2.1
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2577.8	2580.6	2536.2	2520.7	2534.1	2531.3	2519.3	2475.0	2470.0	2440.5	2397.5
5°	2463.7	2482.7	2459.5	2499.6	2480.6	2499.6	2557.4	2584.1	2627.8	2654.5	2664.4
7.5°	2384.1	2388.4	2388.4	2391.9	2395.4	2396.1	2391.9	2389.1	2377.1	2362.3	2389.1
10°	2287.7	2292.6	2301.1	2299.7	2298.9	2313.7	2317.3	2347.5	2346.1	2351.8	2372.2
12.5°	2237.7	2199.7	2234.2	2225.0	2237.7	2218.0	2254.6	2248.3	2250.4	2267.3	2310.9
15°	2154.6	2166.6	2175.0	2175.0	2180.0	2175.7	2171.5	2200.4	2218.0	2218.7	2215.9
17.5°	1994.8	1903.9	1996.9	1972.9	2163.8	2168.7	2152.5	2139.1	2139.1	2149.7	2172.2
20°	1712.4	1714.5	1715.2	1724.4	1735.7	1734.9	1735.7	2013.1	2144.7	2114.5	2094.1
22.5°	1501.2	1475.1	1523.7	1520.2	1580.7	1647.6	1711.7	1705.4	1709.6	1905.3	2081.4
25°	1203.3	1237.1	1209.7	1221.6	1289.9	1369.5	1418.8	1547.7	1687.8	1677.9	1723.7
27.5°	1132.9	1123.8	1136.4	1136.4	1145.6	1156.2	1183.6	1256.1	1380.8	1511.7	1635.7
30°	1066.0	1073.8	1075.2	1087.9	1094.9	1101.9	1106.2	1133.6	1161.8	1252.6	1405.4
32.5°	800.6	702.0	923.8	983.7	1034.4	1046.3	1054.8	1066.0	1086.5	1099.8	1176.6
35°	23.2	23.2	24.6	28.2	35.9	242.2	922.4	1016.7	1030.1	1047.0	1061.1
37.5°	11.3	8.4	9.9	10.6	12.7	17.6	25.3	78.9	878.0	992.8	1008.3
40°	4.9	4.9	4.9	4.9	5.6	7.0	10.6	17.6	26.8	706.2	952.7
42.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.9	6.3	12.7	30.3	499.9
45°	2.8	2.8	2.1	2.8	2.8	3.5	4.2	4.2	5.6	19.0	34.5
47.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	12.7	18.3
50°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	9.9	12.7
52.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.2	11.3
55°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.8	9.9
57.5°	1.4	1.4	1.4	1.4	1.4	2.1	1.4	1.4	2.1	2.1	9.2
60°	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1	2.1	8.4
62.5°	2.1	2.1	1.4	2.1	1.4	1.4	2.1	2.1	2.1	2.1	5.6
65°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	2.1
67.5°	2.1	2.1	2.1	2.1	1.4	2.1	1.4	2.1	2.1	1.4	1.4
70°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	1.4	1.4	1.4
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	3.5	3.5	1.4
80°	2.1	2.1	2.1	2.1	2.1	2.1	3.5	3.5	3.5	3.5	4.9
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.8	3.5
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.1	2.8
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.1	2.1	2.1
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2401.0	2377.1	2369.4	2353.2	2351.8	2353.2	2349.6	2344.7	2347.5	2342.6	2338.4
5°	2670.0	2605.9	2564.4	2508.8	2432.0	2415.1	2410.9	2387.0	2378.5	2375.7	2364.4
7.5°	2452.4	2569.3	2639.7	2663.7	2573.6	2552.4	2527.8	2508.1	2489.1	2453.2	2431.3
10°	2356.0	2361.6	2429.2	2508.1	2636.2	2653.8	2667.2	2624.3	2612.3	2520.7	2501.0
12.5°	2333.5	2334.2	2341.9	2389.8	2490.5	2501.7	2548.9	2574.3	2605.2	2622.8	2608.8
15°	2230.6	2287.7	2329.9	2334.2	2343.3	2363.0	2377.1	2465.1	2502.4	2602.4	2596.8
17.5°	2182.8	2201.1	2262.3	2312.3	2303.9	2296.8	2308.1	2320.1	2356.0	2456.0	2454.6
20°	2103.2	2161.6	2194.7	2246.8	2294.0	2296.1	2283.5	2276.4	2262.3	2278.5	2293.3
22.5°	2069.4	2078.6	2140.5	2177.1	2230.6	2249.7	2252.5	2253.2	2245.4	2237.0	2232.8
25°	2065.9	2037.0	2068.7	2114.5	2153.9	2174.3	2197.6	2205.3	2202.5	2202.5	2198.3
27.5°	1690.6	2027.9	2011.0	2041.2	2089.1	2103.2	2115.2	2139.1	2153.9	2164.5	2169.4
30°	1610.3	1670.9	1965.9	1970.1	2018.7	2017.3	2030.7	2050.4	2069.4	2094.1	2100.4
32.5°	1424.4	1573.0	1799.7	1899.0	1949.7	1954.6	1961.7	1967.3	1984.9	2012.4	2036.3
35°	1141.4	1432.9	1542.0	1865.2	1874.4	1884.2	1888.4	1901.8	1907.5	1918.7	1939.8
37.5°	1032.9	1184.3	1479.4	1613.1	1787.8	1796.2	1818.7	1824.4	1833.5	1842.7	1858.9
40°	970.3	1011.8	1231.5	1440.6	1718.1	1723.7	1731.4	1745.5	1746.2	1756.8	1771.6
42.5°	920.3	947.0	1011.1	1375.8	1668.8	1668.1	1649.8	1658.9	1663.1	1674.4	1694.8
45°	735.1	888.6	929.4	1123.8	1328.7	1424.4	1608.2	1577.9	1577.2	1581.5	1603.3
47.5°	37.3	835.8	864.7	927.3	1254.7	1258.3	1282.2	1483.6	1514.6	1504.7	1506.8
50°	25.3	57.7	805.5	834.4	1081.5	1168.8	1186.4	1195.6	1311.8	1441.3	1420.2
52.5°	19.7	33.1	493.6	774.5	878.7	942.8	1056.2	1121.0	1128.0	1180.1	1356.8
55°	17.6	25.3	53.5	714.7	747.1	761.2	827.3	940.7	1032.2	1059.7	1061.8
57.5°	15.5	23.2	36.6	323.2	679.5	682.3	693.6	733.0	815.4	890.7	975.9
60°	14.1	20.4	28.9	55.6	617.5	624.6	626.7	637.2	647.1	698.5	796.4
62.5°	8.4	16.2	25.3	40.1	488.7	561.2	560.5	567.5	576.7	582.3	602.0
65°	7.0	12.7	21.8	33.8	59.9	74.6	453.5	504.1	509.8	517.5	521.0
67.5°	6.3	11.3	16.2	26.8	45.1	51.4	59.1	73.2	399.9	450.6	457.7
70°	5.6	7.7	13.4	22.5	36.6	39.4	44.4	50.7	59.9	73.9	361.9
72.5°	3.5	5.6	9.2	16.2	28.2	31.7	34.5	38.7	43.0	51.4	59.1
75°	1.4	4.2	7.7	12.0	21.8	23.9	26.1	28.9	32.4	38.0	42.2
77.5°	1.4	3.5	6.3	8.4	14.1	16.2	19.0	21.1	23.9	26.8	31.0
80°	4.9	2.8	4.2	6.3	9.9	10.6	12.0	13.4	15.5	17.6	20.4
82.5°	3.5	4.2	4.9	4.2	4.9	6.3	7.0	8.4	9.2	10.6	11.3
85°	2.8	2.8	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.9	6.3
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2338.4	2337.0	2332.7	2332.7	2332.0	2334.9	2337.0	2339.1	2338.4	2342.6	2338.4
5°	2356.0	2352.5	2346.1	2340.5	2338.4	2339.8	2337.7	2339.8	2337.0	2340.5	2334.2
7.5°	2404.6	2392.6	2368.0	2358.1	2345.4	2344.7	2338.4	2337.0	2332.7	2332.7	2325.0
10°	2490.5	2432.7	2425.7	2396.1	2385.6	2334.2	2345.4	2326.4	2324.3	2315.1	2311.6
12.5°	2560.9	2515.8	2502.4	2476.4	2446.8	2342.6	2365.8	2325.0	2322.9	2304.6	2285.6
15°	2562.3	2588.3	2551.7	2479.9	2473.6	2401.8	2354.6	2340.5	2322.2	2267.3	2276.4
17.5°	2479.9	2539.8	2557.4	2541.9	2496.8	2448.2	2382.0	2353.9	2298.9	2274.3	2257.4
20°	2346.1	2406.7	2482.0	2486.9	2515.1	2480.6	2394.0	2348.2	2282.0	2239.1	2225.0
22.5°	2239.8	2284.2	2370.8	2410.9	2445.4	2457.4	2402.5	2334.9	2252.5	2210.9	2202.5
25°	2183.5	2193.3	2219.4	2266.6	2342.6	2397.5	2405.3	2333.5	2290.5	2199.7	2151.8
27.5°	2163.1	2154.6	2144.0	2168.0	2225.0	2291.9	2336.3	2348.2	2241.2	2154.6	2106.7
30°	2110.9	2115.9	2099.7	2091.2	2128.6	2197.6	2276.4	2296.1	2213.8	2124.3	2069.4
32.5°	2046.9	2055.3	2058.1	2043.4	2035.6	2083.5	2168.7	2215.9	2211.6	2081.4	2020.1
35°	1966.6	1990.5	1996.9	1997.6	1984.9	1977.2	2026.5	2124.3	2161.6	2061.7	1972.9
37.5°	1882.1	1889.2	1923.7	1932.8	1932.8	1909.6	1946.2	2024.3	2076.4	2017.3	1915.2
40°	1776.5	1799.0	1831.4	1847.6	1863.8	1865.9	1845.5	1900.4	1986.3	1971.5	1861.0
42.5°	1699.7	1714.5	1734.2	1756.1	1789.2	1797.6	1776.5	1786.4	1875.8	1914.5	1790.6
45°	1610.3	1630.0	1635.7	1659.6	1694.1	1718.8	1718.1	1697.6	1769.5	1817.3	1739.2
47.5°	1518.8	1537.8	1547.7	1559.6	1585.0	1616.7	1634.3	1625.1	1639.2	1732.8	1670.9
50°	1424.4	1435.0	1454.7	1468.1	1485.0	1503.3	1545.5	1554.0	1534.3	1608.9	1595.5
52.5°	1335.0	1338.5	1351.9	1365.3	1387.8	1401.2	1435.0	1460.3	1458.9	1480.8	1511.7
55°	1265.3	1249.8	1252.6	1263.2	1278.0	1298.4	1317.4	1356.8	1370.2	1374.4	1423.7
57.5°	988.6	1147.7	1161.8	1161.1	1178.7	1187.8	1205.5	1231.5	1279.4	1268.8	1323.7
60°	898.5	916.1	1049.1	1064.6	1071.0	1079.4	1100.5	1124.5	1159.7	1182.2	1206.2
62.5°	685.1	792.1	832.3	949.9	968.2	973.1	987.2	998.4	1035.1	1086.5	1076.6
65°	530.2	576.0	698.5	746.4	846.4	859.0	878.7	890.7	901.3	960.4	963.2
67.5°	458.4	465.4	498.5	590.8	654.1	752.0	764.0	774.5	790.7	833.0	859.0
70°	391.5	399.9	409.1	416.8	499.2	564.0	654.8	658.4	668.9	697.1	756.2
72.5°	73.9	334.5	340.1	345.0	354.2	397.1	483.7	554.1	558.4	571.7	626.0
75°	50.0	58.4	80.3	276.0	285.2	288.0	302.8	390.8	455.6	458.4	482.3
77.5°	35.9	40.1	48.6	57.7	147.2	221.1	224.6	240.8	307.7	356.3	360.5
80°	24.6	27.5	32.4	36.6	45.1	59.1	163.4	168.3	176.7	243.6	256.3
82.5°	14.1	16.2	19.0	23.2	26.8	33.8	43.7	56.3	114.8	122.5	162.7
85°	7.0	7.7	9.2	11.3	13.4	16.2	21.8	26.8	36.6	66.2	68.3
87.5°	3.5	3.5	3.5	3.5	5.6	6.3	7.7	9.9	12.7	19.0	24.6
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2339.1	2348.9	2357.4	2359.5	2359.5	2360.9	2363.0	2364.4	2365.8	2367.2	2365.8
5°	2334.9	2345.4	2352.5	2354.6	2354.6	2358.8	2362.3	2366.5	2368.7	2368.7	2367.2
7.5°	2324.3	2332.0	2341.2	2346.8	2347.5	2354.6	2360.9	2360.2	2363.0	2364.4	2368.0
10°	2310.2	2310.2	2325.7	2329.9	2333.5	2341.2	2343.3	2347.5	2357.4	2358.8	2368.0
12.5°	2303.2	2296.1	2314.4	2316.6	2328.5	2318.7	2331.3	2335.6	2325.7	2339.1	2321.5
15°	2271.5	2279.9	2277.1	2283.5	2304.6	2293.3	2327.8	2316.6	2341.9	2311.6	2365.1
17.5°	2245.4	2244.0	2255.3	2260.9	2265.2	2289.1	2298.2	2310.9	2320.8	2312.3	2333.5
20°	2226.4	2215.2	2223.6	2229.9	2244.7	2263.0	2268.7	2249.7	2282.8	2339.1	2352.5
22.5°	2190.5	2182.8	2192.6	2192.6	2215.2	2212.3	2233.5	2221.5	2252.5	2318.0	2386.3
25°	2141.9	2142.6	2153.2	2165.9	2170.1	2201.8	2213.0	2228.5	2267.3	2345.4	2387.0
27.5°	2092.6	2088.4	2094.8	2120.8	2142.6	2165.9	2169.4	2222.2	2275.0	2328.5	2365.1
30°	2043.4	2039.1	2043.4	2062.4	2088.4	2103.9	2142.6	2213.0	2262.3	2298.9	2333.5
32.5°	1990.5	1986.3	1996.2	2010.3	2056.0	2058.1	2134.9	2201.1	2239.8	2266.6	2260.2
35°	1934.2	1928.6	1937.7	1959.6	2001.8	2017.3	2097.6	2146.9	2190.5	2203.2	2173.6
37.5°	1866.6	1856.8	1868.0	1898.3	1942.7	1987.7	2054.6	2111.7	2134.9	2101.1	2065.9
40°	1796.2	1789.2	1808.9	1824.4	1876.5	1939.1	2015.9	2056.0	2041.2	2002.5	1963.8
42.5°	1733.5	1718.8	1736.4	1765.9	1825.1	1896.2	1958.2	1980.7	1945.5	1888.4	1843.4
45°	1656.8	1639.2	1660.3	1699.7	1763.1	1844.1	1892.7	1884.9	1825.1	1775.8	1713.8
47.5°	1576.5	1555.4	1576.5	1623.7	1694.8	1780.7	1815.9	1780.7	1705.4	1643.4	1593.4
50°	1497.7	1473.0	1493.4	1564.6	1634.3	1700.4	1699.7	1631.4	1586.4	1518.8	1475.1
52.5°	1419.5	1384.3	1404.7	1482.2	1551.9	1627.2	1571.6	1508.2	1454.0	1394.9	1380.8
55°	1323.0	1285.0	1312.5	1425.1	1478.7	1523.0	1434.3	1378.7	1325.2	1295.6	1278.0
57.5°	1231.5	1190.0	1213.9	1347.0	1386.4	1397.7	1316.0	1237.1	1205.5	1195.6	1170.2
60°	1137.2	1090.0	1112.5	1266.0	1293.5	1247.7	1167.4	1106.2	1099.8	1080.1	1060.4
62.5°	1047.0	994.9	1009.0	1165.3	1178.0	1094.9	1021.0	1004.8	989.3	969.6	959.0
65°	943.5	889.3	909.0	1058.3	1046.3	939.3	897.8	894.2	873.8	857.6	873.1
67.5°	848.5	784.4	811.8	941.4	887.2	799.9	783.0	774.5	758.3	767.5	604.8
70°	744.3	674.5	711.9	815.4	735.1	677.4	671.0	658.4	659.1	523.9	441.5
72.5°	628.1	567.5	621.7	677.4	581.6	564.7	555.5	554.1	447.1	363.3	342.9
75°	526.0	464.7	523.2	544.3	463.3	452.0	451.3	373.2	293.6	280.2	273.9
77.5°	410.5	363.3	419.0	387.3	355.6	342.9	307.7	231.0	221.1	211.9	79.6
80°	276.7	280.2	312.6	266.9	253.5	216.2	170.4	163.4	140.8	56.3	44.4
82.5°	168.3	211.2	199.3	166.9	163.4	117.6	107.7	54.9	40.8	32.4	28.2
85°	87.3	107.0	102.8	90.8	67.6	60.6	33.8	26.1	21.1	16.2	13.4
87.5°	29.6	39.4	38.0	30.3	23.2	18.3	12.0	9.9	7.0	5.6	4.9
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2364.4	2364.4	2363.0	2364.4	2365.1	2363.7	2363.7	2365.1	2365.8	2366.5	2370.1
5°	2368.0	2369.4	2371.5	2375.7	2376.4	2384.9	2388.4	2390.5	2392.6	2393.3	2388.4
7.5°	2375.7	2380.6	2384.9	2384.1	2379.2	2365.8	2361.6	2358.1	2364.4	2380.6	2399.6
10°	2382.7	2360.2	2318.0	2375.7	2358.1	2374.3	2422.2	2432.7	2465.1	2510.9	2524.3
12.5°	2334.2	2396.1	2409.5	2344.7	2464.4	2420.1	2472.9	2519.3	2532.7	2579.2	2551.0
15°	2386.3	2416.5	2437.0	2501.7	2494.7	2532.7	2547.5	2538.3	2540.5	2552.4	2584.1
17.5°	2385.6	2446.1	2459.5	2503.1	2532.7	2533.4	2529.2	2525.0	2536.2	2545.4	2526.4
20°	2426.4	2446.1	2472.2	2489.8	2495.4	2502.4	2515.8	2505.3	2484.1	2463.7	2455.3
22.5°	2406.0	2450.3	2472.9	2475.7	2472.2	2450.3	2430.6	2401.0	2391.2	2380.6	2384.1
25°	2410.2	2430.6	2427.8	2416.5	2401.8	2360.9	2351.1	2338.4	2319.4	2273.6	2232.1
27.5°	2379.9	2369.4	2356.7	2329.2	2302.5	2280.6	2256.0	2215.2	2181.4	2132.1	2113.8
30°	2329.2	2287.0	2256.0	2239.8	2213.8	2177.1	2139.8	2089.8	2046.9	2037.0	2027.9
32.5°	2232.1	2190.5	2165.2	2125.7	2081.4	2037.7	1994.8	1975.1	1965.9	1967.3	1958.9
35°	2132.8	2096.2	2058.1	1999.0	1965.9	1922.2	1906.8	1902.5	1894.1	1884.9	1875.1
37.5°	2027.2	1984.2	1927.2	1892.0	1858.9	1841.3	1833.5	1827.2	1812.4	1796.2	1784.9
40°	1925.1	1847.6	1815.9	1781.4	1771.6	1763.8	1752.6	1737.1	1716.6	1713.8	1708.9
42.5°	1788.5	1732.8	1705.4	1698.3	1686.4	1673.0	1663.1	1646.2	1637.8	1643.4	1647.6
45°	1658.9	1630.7	1621.6	1613.1	1590.6	1571.6	1565.3	1559.6	1566.7	1597.6	1523.7
47.5°	1554.0	1542.7	1531.5	1517.4	1496.3	1482.2	1488.5	1494.1	1500.5	1273.0	1161.8
50°	1463.2	1447.7	1430.1	1414.6	1401.9	1400.5	1433.6	1334.3	1117.4	1111.8	999.1
52.5°	1363.9	1340.6	1330.1	1320.9	1326.6	1347.7	1115.3	1035.1	992.8	862.5	804.8
55°	1256.9	1236.4	1236.4	1244.9	1214.6	984.4	972.4	840.7	761.2	738.6	729.5
57.5°	1149.8	1147.7	1159.7	1060.4	893.5	856.9	720.3	691.4	678.8	676.0	661.2
60°	1052.0	1071.7	897.0	825.2	717.5	647.1	627.4	623.8	610.5	605.5	592.2
62.5°	973.8	807.6	752.0	614.0	578.1	568.9	558.4	553.4	541.5	478.1	140.1
65°	703.4	664.7	539.4	516.1	513.3	499.9	495.7	445.7	104.9	70.4	59.9
67.5°	530.9	471.1	454.9	450.6	437.3	410.5	121.8	69.7	59.9	52.1	45.8
70°	407.7	397.1	385.2	375.3	110.5	69.0	59.9	50.7	43.7	38.7	35.2
72.5°	333.8	326.7	190.1	72.5	59.1	50.0	44.4	38.7	33.8	31.0	28.2
75°	261.2	72.5	59.9	50.0	43.0	36.6	32.4	28.9	26.1	23.9	21.8
77.5°	59.1	47.9	40.8	34.5	31.0	27.5	24.6	21.1	19.0	16.9	14.1
80°	36.6	31.7	26.8	24.6	21.1	17.6	15.5	14.1	11.3	10.6	9.2
82.5°	23.9	19.0	16.9	14.1	11.3	10.6	9.2	7.0	6.3	5.6	4.9
85°	10.6	9.2	7.7	6.3	4.9	4.2	3.5	2.8	2.8	2.8	2.8
87.5°	3.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2371.5	2384.1	2396.1	2392.6	2379.9	2360.2	2354.6	2346.8	2352.5	2364.4	2369.4
5°	2388.4	2381.3	2406.7	2444.0	2504.6	2510.2	2552.4	2562.3	2596.1	2617.2	2616.5
7.5°	2412.3	2512.3	2553.8	2598.9	2619.3	2614.4	2620.7	2615.8	2608.1	2604.5	2600.3
10°	2534.1	2610.2	2625.7	2625.7	2594.0	2551.0	2532.7	2501.0	2437.7	2439.1	2428.5
12.5°	2605.2	2632.0	2595.4	2564.4	2437.0	2387.7	2334.2	2308.8	2294.0	2271.5	2279.9
15°	2567.9	2529.9	2508.1	2408.1	2329.9	2241.2	2242.6	2227.1	2210.9	2212.3	2201.8
17.5°	2513.0	2482.7	2327.8	2258.8	2220.8	2186.3	2180.0	2159.5	2149.0	2145.5	2144.7
20°	2437.7	2328.5	2213.0	2196.1	2150.4	2110.9	2104.6	2110.9	2143.3	2085.6	1889.9
22.5°	2349.6	2192.6	2158.8	2110.9	2080.0	2064.5	2103.2	1927.2	1661.0	1693.4	1658.9
25°	2200.4	2132.1	2074.3	2037.7	2034.2	1939.1	1616.0	1582.2	1411.1	1319.5	1216.7
27.5°	2091.2	2061.7	2001.1	1994.8	1949.0	1585.7	1417.4	1231.5	1163.2	1152.6	1130.1
30°	2025.0	1982.8	1946.2	1786.4	1555.4	1276.6	1137.2	1111.1	1099.1	1086.5	1066.7
32.5°	1945.5	1905.3	1922.9	1501.9	1240.0	1099.1	1071.0	1052.0	1030.1	1021.7	950.6
35°	1864.5	1846.2	1502.6	1262.5	1066.0	1032.2	1011.1	991.4	788.6	190.8	64.8
37.5°	1777.9	1773.7	1350.5	1047.7	998.4	966.8	906.9	187.3	44.4	30.3	22.5
40°	1710.3	1351.2	1067.4	982.2	942.1	892.1	125.3	31.0	19.7	12.0	7.7
42.5°	1665.2	1215.3	955.5	921.7	834.4	92.2	31.7	13.4	7.7	6.3	4.9
45°	1283.6	959.7	892.8	857.6	105.6	31.7	18.3	6.3	4.9	4.2	2.8
47.5°	1184.3	871.7	832.3	187.3	35.2	16.9	12.7	4.2	2.8	2.8	2.8
50°	897.0	805.5	662.6	45.8	22.5	12.0	9.2	2.8	2.8	2.8	2.1
52.5°	786.5	743.5	71.1	30.3	17.6	9.2	5.6	2.1	2.1	2.1	2.1
55°	718.9	471.8	42.2	23.2	14.8	8.4	3.5	2.1	2.1	2.1	1.4
57.5°	657.6	63.4	31.0	19.7	13.4	7.7	2.1	2.1	2.1	2.1	1.4
60°	557.7	45.8	25.3	17.6	12.7	7.0	2.1	2.1	2.1	2.1	2.1
62.5°	72.5	35.9	21.8	15.5	9.2	5.6	1.4	2.1	2.1	2.1	2.1
65°	52.8	28.2	19.7	10.6	5.6	2.1	1.4	2.1	2.1	2.1	2.1
67.5°	40.8	23.2	14.8	9.2	4.9	1.4	1.4	2.1	2.1	2.1	2.1
70°	32.4	19.7	12.0	7.7	4.2	1.4	1.4	2.1	2.1	2.1	2.1
72.5°	25.3	14.1	8.4	4.2	2.8	1.4	1.4	2.1	2.1	2.1	2.1
75°	19.0	11.3	6.3	3.5	1.4	1.4	1.4	2.1	2.1	2.1	2.1
77.5°	12.7	7.0	4.9	2.8	2.8	2.8	3.5	3.5	2.1	2.1	2.1
80°	8.4	4.9	3.5	3.5	3.5	2.8	3.5	3.5	2.1	3.5	2.1
82.5°	4.2	3.5	3.5	2.8	2.8	2.1	2.8	2.8	2.8	2.8	2.1
85°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.1
87.5°	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1	2.8	2.8	2.1
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2363.0	2365.1	2359.5	2389.8	2374.3	2375.7	2382.0	2365.8	2369.4	2358.1	2350.3
5°	2619.3	2623.5	2627.8	2629.2	2632.0	2635.5	2631.3	2629.2	2625.0	2610.9	2596.1
7.5°	2579.2	2574.3	2572.1	2575.0	2579.9	2582.0	2578.5	2583.4	2601.7	2609.5	2614.4
10°	2368.0	2345.4	2360.9	2358.8	2341.2	2400.3	2384.1	2393.3	2399.6	2464.4	2503.8
12.5°	2267.3	2281.3	2254.6	2241.2	2258.8	2270.8	2282.8	2257.4	2292.6	2276.4	2328.5
15°	2182.8	2174.3	2171.5	2172.2	2168.7	2185.6	2189.8	2195.4	2200.4	2222.2	2230.6
17.5°	2144.7	2158.8	2164.5	2168.7	2161.6	2153.9	2146.2	2134.9	2138.4	2132.8	2149.0
20°	1758.2	1711.0	1708.2	1735.7	1705.4	1722.3	1763.1	2036.3	2027.2	2133.5	2097.6
22.5°	1467.4	1423.0	1385.0	1351.9	1399.1	1418.8	1494.8	1580.7	1720.2	1698.3	1849.7
25°	1198.4	1182.2	1172.4	1167.4	1171.0	1169.5	1186.4	1226.6	1289.9	1439.2	1632.1
27.5°	1121.0	1113.2	1109.7	1098.4	1106.9	1104.1	1117.4	1125.9	1144.9	1159.7	1222.4
30°	1059.7	1050.5	1044.2	1032.2	1040.7	1041.4	1045.6	1067.4	1075.2	1087.9	1107.6
32.5°	387.3	228.1	214.1	203.5	222.5	290.1	509.1	890.0	1015.3	1025.2	1047.7
35°	38.0	31.7	28.2	28.2	28.9	31.7	42.2	111.3	203.5	786.5	984.4
37.5°	14.8	12.7	10.6	9.9	10.6	12.0	16.2	21.1	28.9	59.9	266.9
40°	6.3	5.6	4.9	4.9	4.9	4.9	5.6	7.0	10.6	19.7	31.0
42.5°	4.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.9	6.3	12.7
45°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	3.5	5.6
47.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8
50°	2.1	2.1	2.1	2.1	1.4	2.1	1.4	2.1	2.1	2.1	2.1
52.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1
55°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1
57.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
60°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	1.4
65°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	1.4
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
70°	2.1	2.1	1.4	2.1	1.4	1.4	2.1	2.1	2.1	1.4	1.4
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.2	4.2	2.8
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	3.5
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	3.5	3.5
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P1213765

CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2337.0	2336.3	2351.1	2362.3	2358.1	2362.3	2367.2	2368.0	2369.4	2363.7	2361.6
5°	2567.9	2546.1	2503.8	2473.6	2438.4	2374.3	2342.6	2346.1	2346.8	2344.7	2347.5
7.5°	2612.3	2610.2	2595.4	2589.0	2565.1	2519.3	2446.1	2433.4	2402.5	2382.7	2366.5
10°	2501.0	2551.7	2565.1	2587.6	2601.7	2593.3	2531.3	2522.2	2502.4	2479.9	2484.8
12.5°	2380.6	2422.2	2424.3	2546.8	2574.3	2577.1	2553.1	2565.8	2568.6	2517.9	2488.4
15°	2232.8	2252.5	2294.0	2408.1	2491.2	2543.3	2558.8	2565.8	2531.3	2529.2	2517.2
17.5°	2168.0	2180.7	2199.7	2263.7	2389.8	2466.5	2532.0	2527.1	2540.5	2530.6	2500.3
20°	2086.3	2096.9	2130.7	2163.1	2225.0	2327.1	2449.6	2458.8	2476.4	2474.3	2482.7
22.5°	2084.9	2047.6	2053.2	2078.6	2143.3	2234.9	2365.1	2395.4	2406.7	2414.4	2423.6
25°	1654.0	1950.4	2004.6	2020.8	2063.1	2116.6	2270.1	2281.3	2302.5	2337.0	2362.3
27.5°	1432.9	1634.3	1851.1	1963.8	1990.5	2034.9	2126.4	2143.3	2215.2	2223.6	2263.0
30°	1130.8	1286.4	1610.3	1881.4	1925.8	1956.7	2021.5	2055.3	2086.3	2120.1	2161.6
32.5°	1063.9	1088.6	1268.1	1556.8	1901.8	1878.6	1926.5	1946.9	1980.7	2010.3	2040.5
35°	1002.7	1019.6	1057.6	1275.2	1549.1	1814.5	1846.9	1860.3	1879.3	1901.8	1923.7
37.5°	938.6	963.9	990.0	1048.4	1432.9	1763.8	1763.1	1778.6	1789.9	1808.9	1827.2
40°	170.4	885.1	927.3	965.3	1111.1	1406.8	1684.3	1691.3	1699.0	1711.0	1730.0
42.5°	27.5	147.9	868.9	905.5	947.0	1259.7	1648.3	1619.5	1614.5	1623.0	1639.9
45°	14.1	35.9	174.6	845.6	883.0	1004.8	1347.7	1569.5	1564.6	1548.4	1551.9
47.5°	10.6	22.5	43.0	292.2	826.6	862.5	1243.5	1230.1	1323.7	1503.3	1475.8
50°	9.2	15.5	25.3	59.9	730.2	794.2	957.6	1118.8	1168.1	1174.5	1389.9
52.5°	8.4	10.6	18.3	38.7	153.5	734.4	778.8	835.1	918.2	1096.3	1092.1
55°	7.7	9.9	15.5	26.1	53.5	661.9	707.6	718.2	735.8	821.0	933.7
57.5°	4.2	9.2	14.8	22.5	40.1	121.1	642.2	650.6	664.7	668.2	708.3
60°	2.1	8.4	13.4	19.7	29.6	56.3	577.4	587.2	595.7	597.1	609.8
62.5°	1.4	7.7	11.3	18.3	24.6	40.1	136.6	278.8	530.2	530.2	545.0
65°	1.4	5.6	7.0	12.0	22.5	33.1	57.7	66.9	130.3	320.4	478.1
67.5°	1.4	2.1	6.3	9.9	16.9	25.3	42.2	49.3	59.1	67.6	125.3
70°	1.4	1.4	5.6	6.3	10.6	19.0	30.3	34.5	40.1	45.8	52.8
72.5°	1.4	1.4	4.9	4.9	7.0	12.7	23.2	25.3	28.9	32.4	37.3
75°	3.5	2.8	4.2	4.2	4.9	9.9	17.6	19.7	21.1	23.9	27.5
77.5°	3.5	3.5	3.5	3.5	3.5	6.3	11.3	12.7	14.8	16.2	19.0
80°	2.8	2.8	2.8	3.5	3.5	4.2	7.0	7.7	8.4	10.6	11.3
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.9	6.3
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.8
87.5°	2.1	2.1	2.1	1.4	1.4	2.1	2.1	2.1	2.1	2.1	2.1
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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CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2360.9	2356.7	2353.2	2355.3	2348.9	2346.1	2348.2	2348.9	2350.3	2353.9	2354.6
5°	2354.6	2353.2	2359.5	2363.0	2361.6	2363.0	2363.0	2360.2	2356.0	2358.8	2352.5
7.5°	2350.3	2341.2	2334.2	2335.6	2328.5	2337.0	2344.7	2356.0	2359.5	2359.5	2352.5
10°	2422.9	2413.0	2373.6	2346.8	2329.2	2313.7	2350.3	2313.0	2330.6	2263.7	2340.5
12.5°	2482.7	2496.1	2478.5	2405.3	2392.6	2346.1	2372.9	2327.1	2313.7	2237.0	2261.6
15°	2506.7	2481.3	2475.7	2455.3	2427.8	2414.4	2342.6	2334.9	2313.0	2321.5	2289.1
17.5°	2485.5	2498.2	2481.3	2467.9	2439.8	2408.1	2365.1	2327.1	2296.8	2229.2	2286.3
20°	2465.1	2482.0	2431.3	2439.8	2442.6	2406.0	2383.4	2351.8	2313.7	2250.4	2201.1
22.5°	2431.3	2419.4	2423.6	2410.9	2400.3	2405.3	2374.3	2352.5	2288.4	2259.5	2192.6
25°	2376.4	2372.2	2383.4	2382.0	2356.7	2348.2	2332.7	2309.5	2284.2	2237.7	2182.8
27.5°	2287.0	2308.8	2328.5	2337.7	2324.3	2301.8	2293.3	2279.9	2262.3	2215.2	2174.3
30°	2192.6	2217.3	2239.8	2259.5	2271.5	2261.6	2253.9	2246.1	2219.4	2188.4	2142.6
32.5°	2084.9	2117.3	2148.3	2172.2	2198.3	2206.0	2200.4	2194.0	2171.5	2143.3	2106.7
35°	1960.3	2004.6	2049.7	2092.6	2103.9	2122.2	2140.5	2130.0	2118.0	2089.8	2056.0
37.5°	1854.6	1886.3	1918.7	1972.9	2012.4	2035.6	2068.0	2072.2	2051.8	2038.4	1994.1
40°	1745.5	1774.4	1821.6	1853.2	1907.5	1934.2	1968.7	1984.2	1979.3	1971.5	1932.8
42.5°	1659.6	1673.7	1704.7	1732.8	1786.4	1841.3	1871.5	1888.4	1906.1	1899.7	1880.0
45°	1568.1	1580.7	1591.3	1616.0	1668.1	1716.6	1754.0	1779.3	1811.0	1825.8	1801.8
47.5°	1477.2	1480.8	1493.4	1513.9	1544.8	1582.2	1644.8	1682.8	1712.4	1741.3	1725.8
50°	1407.5	1394.9	1397.0	1409.6	1435.0	1471.6	1516.7	1570.2	1604.0	1639.2	1642.7
52.5°	1230.1	1332.9	1308.3	1315.3	1328.7	1346.3	1393.5	1446.3	1487.8	1518.1	1548.4
55°	1032.2	1052.7	1250.5	1222.4	1230.8	1246.3	1268.1	1320.9	1361.1	1403.3	1445.6
57.5°	800.6	952.7	960.4	1143.5	1139.3	1140.7	1159.0	1189.3	1229.4	1282.2	1318.1
60°	622.4	686.5	811.1	874.5	1035.1	1040.7	1051.2	1068.9	1103.4	1153.3	1210.4
62.5°	549.2	557.7	602.0	697.1	801.3	927.3	949.9	952.7	968.2	1018.2	1084.3
65°	482.3	488.0	501.3	511.2	598.5	720.3	828.7	846.4	856.2	885.8	942.1
67.5°	332.3	420.4	432.3	439.4	447.8	504.1	638.6	728.1	739.3	765.4	814.7
70°	64.1	133.1	364.0	371.8	376.0	388.7	410.5	552.7	627.4	652.0	674.5
72.5°	43.7	51.4	62.0	146.5	309.8	316.9	321.8	340.1	466.1	537.9	549.9
75°	31.7	35.2	41.5	51.4	63.4	206.3	255.6	264.7	273.9	378.1	438.7
77.5°	22.5	25.3	28.2	33.1	38.7	50.0	71.8	197.9	207.0	211.9	299.3
80°	12.7	15.5	19.0	21.8	24.6	28.2	36.6	45.8	102.1	149.3	157.0
82.5°	7.0	8.4	9.9	12.0	13.4	16.9	20.4	24.6	32.4	47.9	101.4
85°	3.5	3.5	3.5	4.9	5.6	7.7	9.2	10.6	14.8	20.4	28.2
87.5°	2.1	2.1	2.8	2.8	2.8	3.5	3.5	3.5	4.2	6.3	9.2
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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CATALOG NUMBER: 4SNLED-LD5-39SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	2346.1	2346.1	2346.1	2346.1	2346.1
2.5°	2355.3	2353.2	2353.2	2361.6	2359.5
5°	2351.1	2348.9	2348.2	2357.4	2353.2
7.5°	2347.5	2339.8	2337.7	2346.1	2342.6
10°	2333.5	2327.8	2331.3	2328.5	2327.1
12.5°	2309.5	2306.0	2291.2	2292.6	2304.6
15°	2266.6	2280.6	2255.3	2277.8	2282.8
17.5°	2187.7	2219.4	2244.0	2257.4	2259.5
20°	2222.9	2233.5	2220.8	2221.5	2229.9
22.5°	2177.1	2182.1	2185.6	2181.4	2199.7
25°	2103.9	2084.9	2125.7	2134.2	2163.8
27.5°	2081.4	2065.9	2084.9	2083.5	2108.1
30°	2063.1	2013.1	2021.5	2034.9	2065.2
32.5°	2037.0	1958.2	1949.7	1979.3	2013.1
35°	1991.2	1916.6	1896.9	1915.9	1966.6
37.5°	1952.5	1858.9	1819.4	1844.8	1911.0
40°	1894.8	1813.8	1752.6	1775.1	1853.2
42.5°	1825.8	1775.1	1680.7	1696.2	1785.6
45°	1756.1	1711.0	1611.0	1618.8	1725.1
47.5°	1685.0	1643.4	1538.5	1539.9	1647.6
50°	1615.2	1560.3	1473.7	1449.1	1565.3
52.5°	1524.4	1473.7	1408.2	1368.1	1487.1
55°	1438.5	1381.5	1333.6	1271.6	1398.4
57.5°	1354.7	1291.4	1259.0	1179.4	1297.7
60°	1240.0	1209.7	1161.8	1085.8	1206.9
62.5°	1122.4	1112.5	1063.9	985.1	1094.9
65°	985.1	1008.3	958.3	890.7	978.7
67.5°	855.5	897.0	842.1	800.6	866.8
70°	717.5	765.4	734.4	719.6	747.8
72.5°	581.6	628.1	630.9	620.3	629.5
75°	449.2	500.6	528.8	512.6	514.7
77.5°	340.8	365.4	396.4	409.1	406.3
80°	210.5	253.5	278.8	304.9	295.7
82.5°	106.3	142.2	173.2	201.4	188.0
85°	44.4	57.0	79.6	104.9	100.7
87.5°	13.4	22.5	23.9	33.8	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)