

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: P1213832

Luminaire Tested: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213832
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-LD5-57HL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

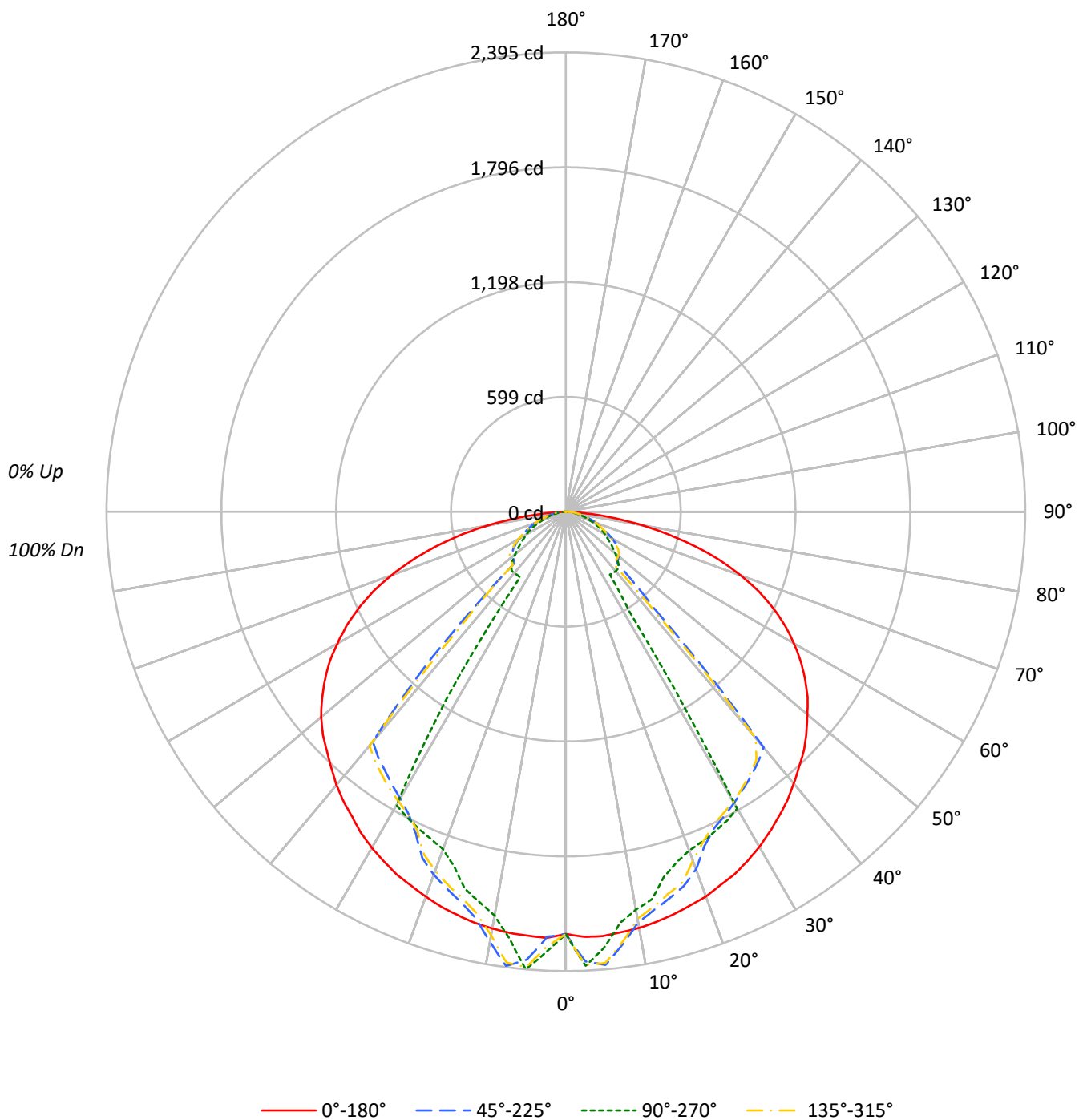
Lumens per Lamp: N/A
Luminaire Lumens: 4408.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17788	17788	17788	17788
5°	17963	17922	17954	18809
10°	17980	16204	18005	16452
15°	18020	14992	18062	15468
20°	18151	14219	18151	14166
25°	18308	13948	18334	13817
30°	18493	13702	18540	13539
35°	18708	3121	18748	3254
40°	19009	3245	19123	3351
45°	19464	3227	19531	3344
50°	19919	2918	20188	2997
55°	20531	2591	20694	2628
60°	21051	2303	21097	2332
65°	21422	2010	21368	1977
70°	21117	1619	21052	1561
75°	19604	1246	19746	1194
80°	15911	885	16552	811
85°	8615	531	9100	407

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 21570 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.6	4.9
10°-20°	595.5	13.5
20°-30°	882.0	20.0
30°-40°	888.7	20.2
40°-50°	694.2	15.7
50°-60°	536.2	12.2
60°-70°	360.0	8.2
70°-80°	183.7	4.2
80°-90°	51.1	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°	1694.1	38.4
0°-40°	2582.8	58.6
0°-60°	3813.2	86.5
0°-90°	4408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4408.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2201	2201	2201	2201	2201	
5°	2220	2282	2219	2395	2220	211
15°	2172	1972	2177	2035	2172	614
25°	2083	1838	2086	1821	2083	961
35°	1938	400	1942	417	1938	1215
45°	1756	388	1762	402	1756	1354
55°	1522	282	1534	286	1522	1360
65°	1195	190	1192	187	1195	1176
75°	701	96	706	92	701	733
85°	126	30	133	23	126	173
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°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2218.4	2226.5	2232.5	2236.6	2238.6	2238.6	2239.6	2240.6	2253.7	2259.8	2263.8
5°	2220.4	2228.5	2240.6	2256.7	2270.9	2283.0	2293.0	2307.2	2321.3	2336.4	2341.5
7.5°	2211.3	2221.4	2245.6	2274.9	2302.1	2321.3	2334.4	2343.5	2350.5	2351.6	2356.6
10°	2203.3	2221.4	2254.7	2293.0	2327.3	2350.5	2350.5	2345.5	2352.6	2325.3	2298.1
12.5°	2189.1	2209.3	2254.7	2305.2	2337.4	2346.5	2342.5	2322.3	2280.9	2247.6	2232.5
15°	2172.0	2199.2	2255.7	2312.2	2339.4	2342.5	2304.1	2252.7	2221.4	2201.2	2176.0
17.5°	2152.8	2189.1	2256.7	2313.2	2323.3	2309.2	2236.6	2204.3	2172.0	2124.6	2090.3
20°	2134.7	2170.0	2248.7	2299.1	2305.2	2241.6	2185.1	2150.8	2096.3	2055.0	2039.8
22.5°	2106.4	2147.8	2241.6	2279.9	2256.7	2183.1	2128.6	2074.1	2024.7	2012.6	1994.4
25°	2083.2	2126.6	2225.5	2256.7	2195.2	2129.6	2066.1	2002.5	1979.3	1962.2	1946.0
27.5°	2051.9	2105.4	2204.3	2214.4	2129.6	2072.1	1979.3	1951.1	1929.9	1910.7	1903.6
30°	2017.6	2083.2	2175.0	2155.8	2075.1	1990.4	1921.8	1895.6	1880.4	1860.3	1852.2
32.5°	1978.3	2049.9	2142.7	2088.3	2016.6	1910.7	1866.3	1846.1	1826.0	1810.8	1760.4
35°	1937.9	2020.7	2104.4	2023.7	1946.0	1850.2	1810.8	1792.7	1773.5	1718.0	1665.6
37.5°	1896.6	1988.4	2058.0	1954.1	1852.2	1787.6	1754.3	1734.2	1690.8	1620.2	1593.9
40°	1849.2	1949.0	1998.5	1882.5	1770.5	1724.1	1692.8	1672.6	1574.8	1543.5	1535.4
42.5°	1801.7	1910.7	1925.8	1812.8	1702.9	1656.5	1630.3	1563.7	1497.1	1480.9	1484.0
45°	1756.4	1869.3	1846.1	1714.0	1632.3	1593.9	1549.5	1457.7	1422.4	1430.5	1432.5
47.5°	1701.9	1819.9	1762.4	1615.1	1559.6	1521.3	1422.4	1366.9	1361.9	1373.0	1379.1
50°	1643.4	1764.4	1673.6	1525.3	1480.9	1435.5	1323.6	1295.3	1301.4	1312.5	1319.5
52.5°	1588.9	1701.9	1581.8	1441.6	1403.3	1299.4	1223.7	1228.7	1238.8	1251.9	1256.0
55°	1522.3	1626.2	1484.0	1356.9	1320.5	1184.4	1150.1	1162.2	1172.2	1183.3	1191.4
57.5°	1452.7	1539.5	1368.0	1262.0	1203.5	1082.5	1085.5	1093.6	1100.6	1113.7	460.0
60°	1373.0	1440.6	1240.8	1174.3	1058.3	1001.8	1004.8	1018.9	1026.0	573.0	316.8
62.5°	1290.3	1325.6	1125.8	1074.4	925.1	921.1	935.2	941.2	640.6	302.6	296.6
65°	1195.4	1188.4	1012.9	931.1	834.3	838.3	853.5	823.2	283.5	283.5	281.5
67.5°	1090.5	1048.2	902.9	770.7	746.5	755.6	771.7	269.4	262.3	264.3	257.2
70°	970.5	911.0	788.9	652.7	660.8	669.9	260.3	244.1	241.1	236.1	221.9
72.5°	843.4	761.7	645.6	567.0	572.0	359.1	228.0	219.9	209.8	199.7	184.6
75°	701.1	595.2	474.1	474.1	481.2	204.8	198.7	185.6	174.5	161.4	152.3
77.5°	549.8	458.0	368.2	382.3	186.6	171.5	160.4	146.3	137.2	129.1	124.1
80°	402.5	319.8	277.4	248.2	145.3	130.1	119.0	111.0	106.9	101.9	95.8
82.5°	264.3	192.7	192.7	117.0	101.9	89.8	86.8	80.7	76.7	73.6	70.6
85°	126.1	112.0	84.7	71.6	63.6	57.5	55.5	52.5	52.5	51.4	50.4
87.5°	46.4	50.4	37.3	36.3	34.3	33.3	34.3	34.3	35.3	34.3	33.3
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°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2273.9	2281.9	2288.0	2298.1	2311.2	2322.3	2332.4	2346.5	2368.7	2374.8	2379.8
5°	2341.5	2344.5	2351.6	2359.6	2361.6	2366.7	2365.7	2371.7	2374.8	2381.8	2366.7
7.5°	2345.5	2329.4	2310.2	2293.0	2280.9	2269.8	2262.8	2273.9	2279.9	2285.0	2269.8
10°	2260.8	2241.6	2230.5	2220.4	2208.3	2191.2	2168.0	2173.0	2171.0	2171.0	2165.9
12.5°	2207.3	2180.1	2151.8	2126.6	2115.5	2114.5	2115.5	2126.6	2126.6	2125.6	2119.5
15°	2123.6	2097.3	2083.2	2077.2	2077.2	2074.1	2074.1	2086.2	2083.2	2083.2	2080.2
17.5°	2068.1	2049.9	2039.8	2032.8	2029.7	2034.8	2040.8	2045.9	2046.9	2042.9	2026.7
20°	2022.7	2005.5	1993.4	1995.4	1994.4	1997.5	2000.5	1983.3	1962.2	1933.9	1920.8
22.5°	1975.3	1962.2	1953.1	1953.1	1941.0	1921.8	1893.6	1887.5	1884.5	1871.4	1860.3
25°	1929.9	1914.7	1901.6	1861.3	1836.0	1839.1	1834.0	1823.9	1822.9	1821.9	1826.0
27.5°	1884.5	1845.1	1794.7	1788.6	1778.5	1777.5	1783.6	1788.6	1788.6	1792.7	1797.7
30°	1790.7	1745.3	1736.2	1725.1	1729.1	1743.2	1746.3	1753.3	1755.3	1762.4	1766.4
32.5°	1704.9	1684.7	1676.7	1681.7	1694.8	1706.9	1714.0	1717.0	1722.1	1728.1	1733.2
35°	1635.3	1629.2	1636.3	1647.4	1660.5	1670.6	1676.7	1682.7	1687.8	1692.8	1696.8
37.5°	1583.8	1587.9	1598.0	1612.1	1625.2	1633.3	1638.3	1645.4	1652.4	1658.5	1634.3
40°	1535.4	1545.5	1556.6	1571.7	1582.8	1590.9	1596.0	1605.0	1544.5	699.1	383.4
42.5°	1493.1	1504.1	1512.2	1524.3	1536.4	1542.5	1498.1	668.8	378.3	376.3	381.3
45°	1441.6	1450.7	1463.8	1472.9	1484.0	974.5	372.3	376.3	370.2	374.3	376.3
47.5°	1389.1	1403.3	1410.3	1345.8	400.5	370.2	366.2	370.2	366.2	371.2	368.2
50°	1329.6	1346.8	958.4	362.2	359.1	357.1	361.2	359.1	362.2	366.2	358.1
52.5°	1269.1	785.9	351.1	349.1	351.1	349.1	356.1	351.1	352.1	348.0	338.0
55°	429.8	340.0	336.9	335.9	342.0	342.0	342.0	333.9	328.9	318.8	311.7
57.5°	328.9	328.9	327.9	328.9	326.9	324.8	315.8	308.7	301.6	287.5	283.5
60°	311.7	311.7	311.7	311.7	302.6	298.6	284.5	278.4	266.3	259.3	255.2
62.5°	297.6	295.6	286.5	283.5	273.4	262.3	254.2	248.2	236.1	232.0	229.0
65°	277.4	270.4	259.3	247.2	242.1	230.0	226.0	216.9	210.8	207.8	205.8
67.5°	244.1	234.0	225.0	216.9	207.8	203.8	198.7	191.7	187.6	185.6	183.6
70°	208.8	201.8	192.7	187.6	181.6	178.6	171.5	169.5	166.5	163.4	160.4
72.5°	174.5	170.5	166.5	159.4	157.4	155.4	148.3	144.3	140.2	136.2	134.2
75°	146.3	143.3	141.2	135.2	132.2	126.1	121.1	118.0	115.0	112.0	110.0
77.5°	120.0	118.0	112.0	107.9	105.9	100.9	98.9	99.9	97.9	93.8	91.8
80°	93.8	91.8	86.8	86.8	84.7	82.7	80.7	78.7	76.7	73.6	71.6
82.5°	71.6	69.6	67.6	65.6	63.6	62.5	61.5	59.5	57.5	55.5	54.5
85°	50.4	49.4	48.4	47.4	46.4	45.4	44.4	42.4	40.4	39.3	38.3
87.5°	34.3	33.3	32.3	31.3	30.3	29.3	28.2	27.2	25.2	24.2	23.2
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2379.8	2384.8	2379.8	2368.7	2361.6	2358.6	2364.7	2364.7	2368.7	2373.7	2374.8
5°	2342.5	2330.4	2316.2	2302.1	2295.1	2291.0	2279.9	2281.9	2285.0	2287.0	2289.0
7.5°	2249.7	2233.5	2214.4	2196.2	2189.1	2183.1	2170.0	2170.0	2170.0	2171.0	2177.0
10°	2154.8	2147.8	2139.7	2127.6	2118.5	2115.5	2104.4	2107.4	2105.4	2108.4	2115.5
12.5°	2110.4	2102.4	2095.3	2083.2	2073.1	2069.1	2064.0	2067.1	2066.1	2071.1	2077.2
15°	2070.1	2066.1	2058.0	2048.9	2039.8	2031.8	2013.6	2007.5	2003.5	1998.5	2005.5
17.5°	2003.5	1975.3	1956.1	1942.0	1931.9	1924.8	1919.8	1919.8	1922.8	1925.8	1931.9
20°	1912.7	1904.6	1895.6	1880.4	1870.3	1866.3	1863.3	1863.3	1868.3	1872.4	1883.5
22.5°	1850.2	1849.2	1846.1	1839.1	1834.0	1834.0	1835.0	1837.1	1844.1	1850.2	1861.3
25°	1820.9	1825.0	1822.9	1818.9	1815.9	1816.9	1814.9	1816.9	1823.9	1830.0	1839.1
27.5°	1797.7	1803.8	1801.7	1795.7	1790.7	1792.7	1795.7	1793.7	1799.7	1806.8	1813.9
30°	1766.4	1767.4	1771.5	1764.4	1762.4	1765.4	1766.4	1768.5	1774.5	1779.6	1785.6
32.5°	1731.1	1739.2	1738.2	1731.1	1731.1	1734.2	1735.2	1667.6	1541.5	1327.6	1269.1
35°	1696.8	1705.9	1690.8	1425.5	986.6	526.6	406.6	392.4	395.5	397.5	399.5
37.5°	1255.0	595.2	379.3	382.3	385.4	388.4	391.4	394.4	397.5	400.5	401.5
40°	377.3	376.3	379.3	383.4	386.4	388.4	392.4	395.5	398.5	401.5	402.5
42.5°	373.3	375.3	378.3	382.3	386.4	390.4	393.4	397.5	399.5	401.5	402.5
45°	371.2	375.3	379.3	382.3	385.4	387.4	389.4	390.4	389.4	389.4	391.4
47.5°	368.2	372.3	373.3	372.3	373.3	372.3	372.3	372.3	369.2	368.2	368.2
50°	357.1	357.1	355.1	351.1	350.1	349.1	347.0	346.0	342.0	341.0	341.0
52.5°	333.9	332.9	329.9	324.8	322.8	320.8	319.8	318.8	314.8	312.7	313.7
55°	306.7	304.7	301.6	295.6	294.6	292.6	291.5	290.5	286.5	288.5	285.5
57.5°	281.5	277.4	273.4	272.4	268.3	267.3	266.3	265.3	262.3	263.3	261.3
60°	251.2	250.2	248.2	244.1	244.1	243.1	243.1	241.1	239.1	238.1	238.1
62.5°	229.0	226.0	224.0	224.0	220.9	220.9	220.9	218.9	216.9	217.9	216.9
65°	204.8	203.8	202.8	200.8	200.8	199.7	199.7	197.7	194.7	195.7	193.7
67.5°	184.6	182.6	180.6	179.6	175.5	173.5	172.5	171.5	167.5	168.5	166.5
70°	159.4	156.4	154.3	152.3	149.3	147.3	147.3	145.3	142.2	143.3	141.2
72.5°	133.2	131.1	129.1	128.1	125.1	124.1	123.1	122.1	119.0	120.0	119.0
75°	111.0	111.0	110.0	109.0	105.9	102.9	100.9	99.9	97.9	98.9	96.8
77.5°	91.8	89.8	87.8	87.8	84.7	82.7	80.7	80.7	80.7	79.7	78.7
80°	71.6	69.6	69.6	68.6	66.6	64.6	63.6	63.6	62.5	62.5	61.5
82.5°	54.5	52.5	51.4	51.4	49.4	48.4	47.4	46.4	46.4	46.4	45.4
85°	38.3	36.3	35.3	35.3	33.3	32.3	32.3	31.3	31.3	30.3	30.3
87.5°	23.2	22.2	21.2	21.2	19.2	18.2	18.2	18.2	17.1	17.1	16.1
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2374.8	2374.8	2367.7	2369.7	2366.7	2370.7	2365.7	2365.7	2371.7	2371.7	2375.8
5°	2290.0	2285.0	2284.0	2281.9	2271.9	2275.9	2270.9	2265.8	2272.9	2272.9	2281.9
7.5°	2174.0	2164.9	2169.0	2162.9	2156.9	2147.8	2150.8	2146.8	2151.8	2158.9	2168.0
10°	2114.5	2106.4	2111.5	2105.4	2108.4	2095.3	2096.3	2097.3	2102.4	2104.4	2112.5
12.5°	2076.1	2074.1	2072.1	2070.1	2072.1	2065.1	2061.0	2062.0	2064.0	2065.1	2071.1
15°	1995.4	1982.3	1986.4	1972.2	1973.2	1974.3	1966.2	1974.3	1973.2	1986.4	1998.5
17.5°	1929.9	1929.9	1922.8	1916.8	1912.7	1911.7	1905.7	1909.7	1905.7	1913.7	1916.8
20°	1884.5	1883.5	1882.5	1879.4	1869.3	1870.3	1873.4	1864.3	1863.3	1862.3	1868.3
22.5°	1863.3	1864.3	1860.3	1860.3	1851.2	1853.2	1854.2	1844.1	1845.1	1842.1	1845.1
25°	1841.1	1843.1	1838.1	1838.1	1836.0	1835.0	1830.0	1832.0	1826.0	1820.9	1826.0
27.5°	1814.9	1818.9	1814.9	1816.9	1812.8	1810.8	1807.8	1805.8	1799.7	1798.7	1801.7
30°	1790.7	1792.7	1791.7	1786.6	1785.6	1779.6	1782.6	1776.5	1770.5	1771.5	1773.5
32.5°	918.0	876.7	675.9	610.3	604.3	626.5	742.5	903.9	1171.2	1430.5	1617.1
35°	400.5	400.5	400.5	399.5	399.5	398.5	397.5	396.5	395.5	394.4	393.4
37.5°	402.5	402.5	402.5	402.5	401.5	400.5	400.5	398.5	397.5	396.5	395.5
40°	403.5	404.5	404.5	404.5	403.5	403.5	402.5	400.5	399.5	397.5	395.5
42.5°	402.5	403.5	403.5	402.5	402.5	401.5	401.5	400.5	399.5	398.5	397.5
45°	389.4	390.4	388.4	388.4	387.4	387.4	387.4	387.4	387.4	388.4	388.4
47.5°	366.2	366.2	365.2	364.2	364.2	363.2	364.2	363.2	365.2	366.2	368.2
50°	339.0	339.0	336.9	335.9	335.9	335.9	335.9	336.9	338.0	340.0	342.0
52.5°	310.7	310.7	309.7	308.7	307.7	307.7	310.7	309.7	310.7	311.7	314.8
55°	283.5	284.5	282.5	282.5	281.5	281.5	281.5	282.5	283.5	284.5	287.5
57.5°	260.3	260.3	258.3	258.3	258.3	257.2	260.3	258.3	259.3	260.3	262.3
60°	237.1	236.1	236.1	235.1	235.1	235.1	237.1	236.1	236.1	237.1	239.1
62.5°	215.9	215.9	214.9	214.9	213.9	213.9	215.9	214.9	214.9	215.9	216.9
65°	191.7	191.7	190.7	189.7	192.7	189.7	192.7	190.7	192.7	193.7	195.7
67.5°	164.4	164.4	164.4	163.4	163.4	165.4	166.5	164.4	165.4	167.5	168.5
70°	140.2	140.2	139.2	139.2	139.2	141.2	142.2	140.2	141.2	142.2	144.3
72.5°	119.0	117.0	117.0	116.0	118.0	118.0	119.0	118.0	119.0	119.0	121.1
75°	97.9	95.8	95.8	95.8	97.9	96.8	97.9	96.8	97.9	97.9	98.9
77.5°	78.7	77.7	76.7	76.7	78.7	78.7	78.7	77.7	78.7	79.7	80.7
80°	61.5	60.5	59.5	59.5	61.5	61.5	61.5	62.5	61.5	62.5	63.6
82.5°	45.4	44.4	43.4	45.4	45.4	45.4	45.4	46.4	45.4	46.4	47.4
85°	30.3	29.3	28.2	30.3	30.3	30.3	30.3	31.3	30.3	31.3	32.3
87.5°	16.1	15.1	15.1	16.1	16.1	16.1	17.1	17.1	17.1	18.2	18.2
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2381.8	2384.8	2383.8	2377.8	2371.7	2364.7	2359.6	2360.6	2370.7	2373.7	2364.7
5°	2281.9	2301.1	2301.1	2314.2	2307.2	2301.1	2305.2	2327.3	2338.4	2355.6	2361.6
7.5°	2179.0	2188.1	2187.1	2200.2	2198.2	2198.2	2201.2	2230.5	2244.6	2258.7	2262.8
10°	2121.5	2130.6	2129.6	2130.6	2127.6	2120.5	2120.5	2133.7	2145.8	2152.8	2154.8
12.5°	2080.2	2085.2	2084.2	2084.2	2082.2	2076.1	2075.1	2086.2	2099.4	2108.4	2109.4
15°	2018.6	2032.8	2035.8	2048.9	2045.9	2037.8	2039.8	2048.9	2057.0	2065.1	2062.0
17.5°	1926.8	1933.9	1934.9	1940.0	1937.9	1937.9	1950.0	1983.3	2005.5	2024.7	2026.7
20°	1874.4	1879.4	1877.4	1888.5	1883.5	1882.5	1885.5	1899.6	1909.7	1918.8	1934.9
22.5°	1849.2	1853.2	1850.2	1851.2	1842.1	1834.0	1832.0	1843.1	1854.2	1866.3	1866.3
25°	1828.0	1831.0	1830.0	1828.0	1820.9	1809.8	1807.8	1809.8	1813.9	1814.9	1807.8
27.5°	1802.8	1804.8	1804.8	1805.8	1796.7	1786.6	1784.6	1782.6	1786.6	1785.6	1774.5
30°	1776.5	1773.5	1774.5	1775.5	1767.4	1758.4	1754.3	1753.3	1757.4	1756.4	1745.3
32.5°	1714.0	1737.2	1739.2	1741.2	1734.2	1726.1	1722.1	1719.0	1721.0	1720.0	1709.9
35°	392.4	399.5	489.3	1107.7	1504.1	1665.6	1682.7	1678.7	1679.7	1679.7	1671.6
37.5°	393.4	392.4	391.4	388.4	385.4	383.4	662.8	1413.4	1637.3	1638.3	1631.3
40°	393.4	392.4	391.4	389.4	385.4	382.3	377.3	373.3	382.3	841.4	1539.5
42.5°	395.5	393.4	391.4	389.4	385.4	381.3	377.3	372.3	375.3	373.3	368.2
45°	389.4	388.4	388.4	387.4	385.4	381.3	376.3	370.2	367.2	370.2	365.2
47.5°	370.2	371.2	374.3	375.3	375.3	376.3	373.3	369.2	364.2	367.2	361.2
50°	344.0	346.0	347.0	352.1	354.1	358.1	359.1	359.1	358.1	362.2	358.1
52.5°	315.8	317.8	322.8	324.8	326.9	332.9	334.9	338.0	340.0	346.0	350.1
55°	288.5	289.5	291.5	295.6	298.6	303.7	306.7	309.7	314.8	317.8	329.9
57.5°	263.3	264.3	268.3	269.4	271.4	275.4	278.4	282.5	286.5	288.5	302.6
60°	239.1	240.1	243.1	244.1	245.1	249.2	252.2	255.2	258.3	260.3	270.4
62.5°	217.9	217.9	220.9	220.9	221.9	225.0	227.0	229.0	232.0	233.0	238.1
65°	196.7	197.7	199.7	199.7	200.8	202.8	203.8	204.8	207.8	207.8	211.9
67.5°	170.5	171.5	174.5	176.5	177.6	181.6	182.6	183.6	185.6	186.6	188.6
70°	145.3	146.3	149.3	150.3	151.3	154.3	156.4	159.4	162.4	165.4	167.5
72.5°	122.1	123.1	126.1	126.1	129.1	130.1	132.2	133.2	136.2	138.2	141.2
75°	99.9	100.9	103.9	103.9	106.9	107.9	109.0	110.0	112.0	114.0	116.0
77.5°	81.7	81.7	85.7	87.8	89.8	89.8	90.8	90.8	90.8	91.8	93.8
80°	64.6	64.6	67.6	69.6	71.6	71.6	72.6	73.6	74.7	74.7	75.7
82.5°	48.4	48.4	51.4	52.5	54.5	54.5	54.5	55.5	56.5	55.5	57.5
85°	33.3	33.3	35.3	36.3	38.3	38.3	38.3	39.3	40.4	39.3	40.4
87.5°	19.2	20.2	21.2	22.2	23.2	24.2	24.2	24.2	25.2	25.2	26.2
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2354.6	2342.5	2341.5	2327.3	2323.3	2324.3	2313.2	2309.2	2291.0	2287.0	2267.8
5°	2363.7	2369.7	2366.7	2365.7	2368.7	2366.7	2358.6	2354.6	2351.6	2343.5	2327.3
7.5°	2263.8	2267.8	2270.9	2284.0	2295.1	2314.2	2334.4	2347.5	2357.6	2359.6	2346.5
10°	2161.9	2181.1	2194.2	2214.4	2230.5	2241.6	2253.7	2264.8	2294.1	2323.3	2340.5
12.5°	2109.4	2114.5	2113.5	2124.6	2135.7	2164.9	2193.2	2209.3	2231.5	2244.6	2275.9
15°	2065.1	2066.1	2069.1	2077.2	2083.2	2093.3	2106.4	2130.6	2175.0	2195.2	2212.3
17.5°	2024.7	2024.7	2026.7	2033.8	2041.8	2050.9	2059.0	2069.1	2091.3	2124.6	2166.9
20°	1960.1	1988.4	1991.4	1990.4	1994.4	2011.6	2013.6	2031.8	2042.9	2056.0	2097.3
22.5°	1864.3	1881.4	1905.7	1943.0	1957.1	1965.2	1971.2	1979.3	1996.5	2011.6	2028.7
25°	1811.8	1822.9	1830.0	1841.1	1870.3	1917.8	1926.8	1935.9	1947.0	1958.1	1979.3
27.5°	1765.4	1764.4	1769.5	1779.6	1787.6	1812.8	1857.2	1892.5	1894.6	1910.7	1928.9
30°	1732.1	1726.1	1719.0	1717.0	1728.1	1741.2	1754.3	1809.8	1848.2	1856.2	1875.4
32.5°	1700.9	1690.8	1680.7	1672.6	1665.6	1676.7	1684.7	1708.9	1758.4	1804.8	1814.9
35°	1662.5	1652.4	1640.3	1631.3	1620.2	1619.2	1618.1	1641.3	1657.5	1713.0	1761.4
37.5°	1623.2	1612.1	1602.0	1591.9	1580.8	1572.7	1567.7	1573.8	1588.9	1613.1	1693.8
40°	1581.8	1568.7	1558.6	1550.6	1535.4	1529.4	1519.3	1515.2	1516.3	1537.4	1579.8
42.5°	945.3	1507.2	1512.2	1503.1	1490.0	1482.0	1470.9	1465.8	1455.7	1465.8	1490.0
45°	364.2	368.2	1102.6	1456.7	1440.6	1430.5	1420.4	1415.4	1404.3	1396.2	1418.4
47.5°	357.1	361.2	353.1	500.4	1375.0	1378.0	1365.9	1360.9	1349.8	1343.7	1337.7
50°	352.1	355.1	349.1	351.1	344.0	1260.0	1310.5	1304.4	1292.3	1285.2	1273.1
52.5°	347.0	347.0	343.0	338.0	335.9	336.9	1060.3	1246.9	1232.8	1225.7	1209.6
55°	330.9	332.9	336.9	328.9	326.9	325.8	322.8	1009.8	1167.2	1159.1	1145.0
57.5°	306.7	310.7	321.8	319.8	319.8	311.7	309.7	309.7	937.2	1091.5	1077.4
60°	278.4	282.5	294.6	298.6	301.6	299.6	297.6	296.6	292.6	987.6	1005.8
62.5°	249.2	253.2	257.2	270.4	274.4	279.4	285.5	282.5	278.4	278.4	930.1
65°	217.9	224.0	226.0	238.1	243.1	252.2	257.2	264.3	262.3	261.3	266.3
67.5°	190.7	197.7	198.7	203.8	212.9	216.9	222.9	236.1	242.1	244.1	246.2
70°	167.5	171.5	174.5	176.5	182.6	183.6	194.7	203.8	212.9	222.9	226.0
72.5°	144.3	147.3	153.3	151.3	153.3	157.4	163.4	169.5	178.6	192.7	201.8
75°	118.0	120.0	124.1	126.1	130.1	133.2	137.2	142.2	150.3	157.4	169.5
77.5°	94.8	95.8	98.9	99.9	103.9	106.9	114.0	117.0	122.1	127.1	134.2
80°	76.7	76.7	77.7	77.7	80.7	83.7	88.8	91.8	97.9	101.9	101.9
82.5°	58.5	58.5	61.5	61.5	63.6	63.6	66.6	66.6	69.6	71.6	73.6
85°	41.4	42.4	44.4	43.4	45.4	44.4	46.4	48.4	49.4	48.4	47.4
87.5°	27.2	27.2	29.3	28.2	29.3	29.3	31.3	31.3	32.3	32.3	31.3
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2260.8	2245.6	2236.6	2225.5	2222.4	2219.4	2223.4	2223.4	2217.4	2212.3	2203.3
5°	2313.2	2297.1	2279.9	2261.8	2244.6	2226.5	2219.4	2218.4	2207.3	2201.2	2198.2
7.5°	2340.5	2332.4	2313.2	2288.0	2261.8	2229.5	2215.4	2207.3	2196.2	2194.2	2194.2
10°	2343.5	2334.4	2324.3	2306.2	2275.9	2233.5	2206.3	2190.1	2180.1	2187.1	2200.2
12.5°	2314.2	2331.4	2322.3	2310.2	2286.0	2234.5	2195.2	2171.0	2168.0	2186.1	2220.4
15°	2239.6	2290.0	2315.2	2303.1	2284.0	2232.5	2177.0	2148.8	2148.8	2186.1	2230.5
17.5°	2183.1	2222.4	2284.0	2294.1	2271.9	2228.5	2159.9	2126.6	2135.7	2190.1	2237.6
20°	2136.7	2160.9	2220.4	2276.9	2255.7	2219.4	2134.7	2100.4	2118.5	2184.1	2247.6
22.5°	2064.0	2112.5	2148.8	2232.5	2239.6	2202.3	2109.4	2068.1	2104.4	2184.1	2242.6
25°	1993.4	2051.9	2090.3	2172.0	2215.4	2181.1	2086.2	2033.8	2089.3	2181.1	2238.6
27.5°	1944.0	1971.2	2040.8	2099.4	2179.0	2152.8	2055.0	1996.5	2070.1	2164.9	2215.4
30°	1891.5	1909.7	1978.3	2033.8	2130.6	2120.5	2022.7	1955.1	2045.9	2149.8	2154.8
32.5°	1834.0	1854.2	1889.5	1970.2	2063.0	2090.3	1986.4	1913.7	2019.7	2126.6	2084.2
35°	1775.5	1790.7	1818.9	1905.7	1984.3	2044.9	1942.0	1866.3	2001.5	2091.3	2016.6
37.5°	1717.0	1733.2	1757.4	1830.0	1901.6	2002.5	1903.6	1818.9	1968.2	2028.7	1946.0
40°	1661.5	1670.6	1695.8	1741.2	1833.0	1959.1	1860.3	1769.5	1933.9	1949.0	1850.2
42.5°	1559.6	1605.0	1628.2	1664.6	1755.3	1899.6	1809.8	1717.0	1895.6	1869.3	1754.3
45°	1449.7	1548.5	1558.6	1594.9	1686.7	1836.0	1762.4	1665.6	1859.3	1800.7	1663.5
47.5°	1359.9	1431.5	1490.0	1520.3	1605.0	1761.4	1718.0	1622.2	1804.8	1714.0	1574.8
50°	1280.2	1318.5	1424.5	1446.6	1507.2	1671.6	1665.6	1571.7	1729.1	1605.0	1488.0
52.5°	1202.5	1229.7	1325.6	1373.0	1422.4	1574.8	1603.0	1522.3	1646.4	1496.1	1400.2
55°	1134.9	1144.0	1196.5	1296.3	1340.7	1476.9	1534.4	1464.8	1541.5	1392.2	1315.5
57.5°	1065.3	1057.2	1095.6	1223.7	1256.0	1377.0	1461.8	1406.3	1456.7	1286.2	1227.7
60°	992.7	981.6	997.7	1082.5	1166.2	1278.2	1376.0	1341.7	1353.8	1181.3	1129.9
62.5°	917.0	905.9	900.9	954.3	1078.4	1176.3	1289.3	1270.1	1227.7	1085.5	1008.8
65°	838.3	827.2	819.2	840.3	981.6	1044.1	1192.4	1187.4	1089.5	984.6	849.4
67.5°	255.2	752.6	735.4	734.4	827.2	924.1	1087.5	1079.4	950.3	876.7	731.4
70°	230.0	610.3	648.7	639.6	679.9	802.0	967.5	961.4	815.1	703.1	646.7
72.5°	210.8	215.9	573.0	562.9	572.0	682.0	842.4	826.2	691.0	554.9	558.9
75°	180.6	189.7	197.7	475.2	463.0	564.9	706.2	681.0	570.0	458.0	467.1
77.5°	147.3	158.4	164.4	346.0	374.3	402.5	563.9	530.6	392.4	366.2	174.5
80°	110.0	119.0	129.1	138.2	284.5	281.5	418.7	385.4	273.4	228.0	136.2
82.5°	80.7	83.7	89.8	99.9	113.0	188.6	269.4	237.1	189.7	103.9	93.8
85°	50.4	54.5	57.5	60.5	68.6	113.0	133.2	105.9	79.7	63.6	59.5
87.5°	32.3	32.3	31.3	32.3	33.3	40.4	45.4	43.4	34.3	32.3	32.3
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2193.2	2179.0	2179.0	2175.0	2178.0	2178.0	2177.0	2178.0	2185.1	2189.1	2196.2
5°	2192.2	2188.1	2197.2	2208.3	2221.4	2237.6	2241.6	2255.7	2268.8	2286.0	2304.1
7.5°	2205.3	2219.4	2236.6	2254.7	2280.9	2300.1	2317.3	2334.4	2346.5	2362.7	2372.7
10°	2224.4	2252.7	2281.9	2305.2	2333.4	2349.5	2360.6	2362.7	2345.5	2318.3	2296.1
12.5°	2251.7	2285.0	2312.2	2334.4	2347.5	2341.5	2309.2	2275.9	2256.7	2228.5	2189.1
15°	2274.9	2305.2	2333.4	2324.3	2289.0	2255.7	2230.5	2191.2	2152.8	2126.6	2109.4
17.5°	2285.0	2314.2	2304.1	2256.7	2223.4	2185.1	2133.7	2103.4	2078.2	2058.0	2047.9
20°	2291.0	2286.0	2231.5	2197.2	2132.6	2097.3	2064.0	2035.8	2016.6	2006.5	2004.5
22.5°	2274.9	2213.3	2166.9	2105.4	2058.0	2028.7	2002.5	1979.3	1966.2	1958.1	1953.1
25°	2221.4	2149.8	2081.2	2032.8	1992.4	1967.2	1947.0	1927.9	1911.7	1907.7	1897.6
27.5°	2146.8	2088.3	1997.5	1960.1	1924.8	1912.7	1890.5	1871.4	1857.2	1845.1	1812.8
30°	2085.2	1992.4	1926.8	1892.5	1871.4	1857.2	1832.0	1811.8	1787.6	1743.2	1725.1
32.5°	2009.6	1917.8	1855.2	1836.0	1809.8	1797.7	1769.5	1725.1	1687.8	1669.6	1668.6
35°	1911.7	1836.0	1790.7	1773.5	1752.3	1732.1	1673.6	1633.3	1615.1	1617.1	1632.3
37.5°	1830.0	1762.4	1733.2	1708.9	1684.7	1633.3	1583.8	1564.7	1569.7	1579.8	1586.9
40°	1747.3	1695.8	1662.5	1643.4	1588.9	1538.4	1512.2	1519.3	1528.4	1535.4	1544.5
42.5°	1666.6	1630.3	1597.0	1559.6	1485.0	1457.7	1463.8	1472.9	1480.9	1491.0	1500.1
45°	1589.9	1557.6	1519.3	1434.5	1397.2	1404.3	1413.4	1420.4	1432.5	1439.6	1448.7
47.5°	1517.3	1483.0	1415.4	1340.7	1336.7	1350.8	1358.9	1368.0	1377.0	1358.9	749.6
50°	1435.5	1400.2	1297.3	1269.1	1278.2	1291.3	1301.4	1310.5	1167.2	464.1	357.1
52.5°	1354.8	1265.1	1199.5	1207.6	1216.6	1231.8	1238.8	920.0	366.2	349.1	350.1
55°	1265.1	1150.1	1130.9	1141.0	1149.0	1164.2	771.7	338.0	335.9	334.9	343.0
57.5°	1123.8	1054.2	1062.3	1072.4	1080.4	762.7	328.9	326.9	327.9	328.9	329.9
60°	997.7	982.6	991.7	1000.7	708.2	317.8	311.7	312.7	316.8	313.7	305.7
62.5°	897.8	910.0	919.0	805.0	301.6	298.6	301.6	298.6	291.5	286.5	276.4
65°	821.2	833.3	840.3	283.5	282.5	286.5	283.5	273.4	262.3	248.2	245.1
67.5°	740.5	752.6	269.4	262.3	266.3	261.3	249.2	237.1	229.0	216.9	211.9
70°	656.7	281.5	244.1	243.1	236.1	228.0	214.9	202.8	192.7	187.6	182.6
72.5°	474.1	222.9	219.9	211.9	199.7	188.6	177.6	170.5	165.4	162.4	159.4
75°	197.7	193.7	184.6	170.5	158.4	153.3	145.3	140.2	138.2	132.2	130.1
77.5°	165.4	157.4	144.3	134.2	127.1	124.1	118.0	112.0	109.0	107.9	103.9
80°	127.1	116.0	110.0	104.9	102.9	95.8	88.8	85.7	83.7	82.7	79.7
82.5°	86.8	82.7	78.7	71.6	71.6	68.6	65.6	63.6	61.5	61.5	59.5
85°	56.5	53.5	52.5	49.4	49.4	47.4	46.4	45.4	44.4	43.4	42.4
87.5°	32.3	32.3	33.3	32.3	32.3	31.3	30.3	29.3	28.2	28.2	26.2
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2205.3	2215.4	2217.4	2251.7	2270.9	2269.8	2263.8	2281.9	2270.9	2264.8	2270.9
5°	2322.3	2334.4	2344.5	2381.8	2394.9	2401.0	2400.0	2410.1	2402.0	2394.9	2394.9
7.5°	2379.8	2383.8	2387.9	2378.8	2372.7	2362.7	2347.5	2325.3	2314.2	2302.1	2287.0
10°	2285.0	2271.9	2276.9	2258.7	2243.6	2232.5	2218.4	2200.2	2185.1	2174.0	2156.9
12.5°	2169.0	2168.0	2170.0	2173.0	2157.9	2148.8	2137.7	2124.6	2113.5	2101.4	2087.2
15°	2098.3	2099.4	2107.4	2104.4	2099.4	2094.3	2082.2	2078.2	2068.1	2055.0	2046.9
17.5°	2047.9	2052.9	2061.0	2057.0	2048.9	2043.9	2034.8	2025.7	2016.6	2006.5	1994.4
20°	2003.5	2008.6	2013.6	2008.6	1993.4	1986.4	1974.3	1946.0	1925.8	1905.7	1887.5
22.5°	1955.1	1958.1	1954.1	1937.9	1899.6	1881.4	1867.3	1859.3	1842.1	1831.0	1819.9
25°	1894.6	1877.4	1851.2	1833.0	1817.9	1809.8	1803.8	1802.8	1800.7	1798.7	1793.7
27.5°	1795.7	1789.6	1775.5	1768.5	1769.5	1772.5	1773.5	1776.5	1773.5	1769.5	1765.4
30°	1722.1	1725.1	1726.1	1728.1	1733.2	1736.2	1737.2	1741.2	1739.2	1736.2	1734.2
32.5°	1675.6	1682.7	1686.7	1692.8	1695.8	1700.9	1700.9	1706.9	1700.9	1699.9	1697.8
35°	1637.3	1643.4	1645.4	1654.5	1657.5	1662.5	1662.5	1667.6	1662.5	1611.1	1272.1
37.5°	1599.0	1605.0	1609.1	1617.1	1618.1	1621.2	1496.1	1094.6	706.2	546.8	417.7
40°	1553.6	1560.6	1564.7	1567.7	1101.6	699.1	481.2	391.4	391.4	394.4	397.5
42.5°	1505.2	1510.2	1052.2	612.4	381.3	380.3	383.4	386.4	389.4	393.4	397.5
45°	1183.3	597.2	379.3	370.2	373.3	377.3	381.3	385.4	390.4	394.4	396.5
47.5°	388.4	364.2	369.2	365.2	370.2	375.3	379.3	383.4	384.4	385.4	384.4
50°	359.1	359.1	362.2	362.2	366.2	368.2	368.2	368.2	364.2	363.2	360.1
52.5°	347.0	355.1	351.1	353.1	351.1	348.0	345.0	342.0	335.9	333.9	329.9
55°	341.0	344.0	333.9	330.9	326.9	318.8	314.8	310.7	305.7	303.7	298.6
57.5°	326.9	319.8	308.7	303.7	296.6	288.5	284.5	281.5	276.4	274.4	271.4
60°	300.6	286.5	279.4	273.4	265.3	258.3	255.2	253.2	249.2	248.2	245.1
62.5°	268.3	256.2	250.2	242.1	236.1	232.0	229.0	228.0	224.0	224.0	221.9
65°	233.0	227.0	221.9	213.9	210.8	206.8	205.8	204.8	202.8	201.8	199.7
67.5°	204.8	200.8	193.7	189.7	187.6	184.6	182.6	180.6	176.5	174.5	171.5
70°	179.6	176.5	169.5	166.5	162.4	157.4	154.3	152.3	149.3	147.3	144.3
72.5°	155.4	146.3	141.2	138.2	135.2	130.1	129.1	127.1	124.1	123.1	120.0
75°	125.1	118.0	115.0	113.0	110.0	106.9	106.9	106.9	103.9	102.9	101.9
77.5°	99.9	95.8	93.8	91.8	90.8	88.8	85.7	84.7	81.7	81.7	80.7
80°	76.7	74.7	72.6	71.6	70.6	68.6	66.6	65.6	62.5	62.5	61.5
82.5°	56.5	55.5	54.5	53.5	52.5	51.4	48.4	47.4	45.4	45.4	44.4
85°	40.4	39.3	37.3	36.3	36.3	35.3	32.3	31.3	29.3	29.3	29.3
87.5°	25.2	24.2	23.2	22.2	21.2	20.2	18.2	17.1	17.1	15.1	14.1
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2258.7	2275.9	2273.9	2286.0	2289.0	2295.1	2297.1	2298.1	2283.0	2295.1	2296.1
5°	2391.9	2394.9	2397.0	2402.0	2407.0	2408.0	2403.0	2397.0	2399.0	2394.9	2384.8
7.5°	2285.0	2269.8	2266.8	2262.8	2260.8	2258.7	2249.7	2257.7	2248.7	2244.6	2230.5
10°	2153.8	2139.7	2138.7	2138.7	2141.7	2140.7	2138.7	2134.7	2142.7	2137.7	2134.7
12.5°	2085.2	2080.2	2083.2	2081.2	2089.3	2091.3	2089.3	2089.3	2087.2	2083.2	2085.2
15°	2043.9	2039.8	2042.9	2039.8	2045.9	2046.9	2041.8	2044.9	2039.8	2034.8	2032.8
17.5°	1989.4	1980.3	1973.2	1963.2	1964.2	1962.2	1956.1	1956.1	1951.1	1937.9	1938.9
20°	1884.5	1875.4	1871.4	1871.4	1876.4	1878.4	1877.4	1879.4	1874.4	1872.4	1864.3
22.5°	1818.9	1817.9	1819.9	1825.0	1833.0	1844.1	1845.1	1845.1	1845.1	1844.1	1834.0
25°	1795.7	1795.7	1797.7	1804.8	1810.8	1818.9	1820.9	1822.9	1820.9	1820.9	1811.8
27.5°	1769.5	1767.4	1771.5	1778.5	1785.6	1791.7	1796.7	1797.7	1794.7	1794.7	1797.7
30°	1737.2	1736.2	1741.2	1748.3	1754.3	1760.4	1765.4	1769.5	1765.4	1765.4	1762.4
32.5°	1703.9	1703.9	1705.9	1663.5	1542.5	1389.1	1392.2	1303.4	1241.9	1164.2	1267.1
35°	1063.3	773.8	664.8	562.9	491.3	444.9	443.9	428.7	421.7	416.6	415.6
37.5°	401.5	403.5	407.6	409.6	412.6	414.6	415.6	415.6	415.6	415.6	414.6
40°	400.5	404.5	407.6	410.6	413.6	415.6	415.6	416.6	417.7	417.7	417.7
42.5°	401.5	405.5	409.6	412.6	414.6	415.6	416.6	417.7	417.7	417.7	417.7
45°	400.5	402.5	402.5	403.5	403.5	403.5	404.5	404.5	403.5	402.5	404.5
47.5°	385.4	385.4	382.3	381.3	380.3	378.3	379.3	378.3	377.3	376.3	378.3
50°	359.1	355.1	353.1	351.1	350.1	348.0	349.1	348.0	347.0	345.0	348.0
52.5°	327.9	326.9	322.8	320.8	319.8	320.8	318.8	317.8	316.8	315.8	316.8
55°	297.6	293.6	292.6	290.5	289.5	290.5	289.5	288.5	287.5	286.5	287.5
57.5°	270.4	267.3	266.3	264.3	264.3	264.3	264.3	263.3	262.3	261.3	262.3
60°	244.1	242.1	241.1	241.1	240.1	240.1	240.1	239.1	238.1	238.1	239.1
62.5°	221.9	221.9	218.9	217.9	217.9	218.9	217.9	216.9	215.9	214.9	216.9
65°	198.7	194.7	193.7	191.7	189.7	190.7	189.7	188.6	187.6	186.6	188.6
67.5°	170.5	169.5	165.4	163.4	162.4	163.4	162.4	161.4	160.4	159.4	161.4
70°	143.3	143.3	139.2	138.2	137.2	137.2	136.2	136.2	135.2	134.2	136.2
72.5°	119.0	119.0	118.0	116.0	115.0	114.0	113.0	112.0	112.0	113.0	113.0
75°	98.9	96.8	92.8	93.8	92.8	91.8	91.8	90.8	89.8	91.8	90.8
77.5°	77.7	76.7	73.6	74.7	73.6	72.6	72.6	71.6	70.6	71.6	71.6
80°	58.5	58.5	57.5	56.5	56.5	55.5	54.5	54.5	53.5	54.5	54.5
82.5°	42.4	42.4	41.4	40.4	39.3	39.3	38.3	38.3	38.3	38.3	38.3
85°	27.2	26.2	26.2	24.2	24.2	24.2	23.2	23.2	23.2	23.2	23.2
87.5°	13.1	13.1	12.1	12.1	11.1	10.1	10.1	9.1	9.1	10.1	10.1
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: P1213832

CATALOG NUMBER: 4SNLED-LD5-57HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2277.9	2291.0	2279.9	2285.0	2286.0	2303.1	2302.1	2306.2	2299.1	2291.0	2279.9
5°	2393.9	2387.9	2379.8	2399.0	2388.9	2401.0	2405.0	2413.1	2413.1	2412.1	2403.0
7.5°	2245.6	2232.5	2242.6	2249.7	2252.7	2244.6	2260.8	2278.9	2294.1	2303.1	2304.1
10°	2129.6	2133.7	2132.6	2135.7	2142.7	2141.7	2151.8	2161.9	2165.9	2172.0	2174.0
12.5°	2075.1	2074.1	2076.1	2083.2	2087.2	2086.2	2096.3	2102.4	2104.4	2105.4	2104.4
15°	2031.8	2024.7	2029.7	2030.8	2033.8	2033.8	2045.9	2055.0	2059.0	2061.0	2059.0
17.5°	1950.0	1932.9	1949.0	1949.0	1960.1	1958.1	1977.3	1992.4	2000.5	2006.5	2006.5
20°	1869.3	1861.3	1867.3	1865.3	1873.4	1872.4	1884.5	1894.6	1901.6	1906.7	1912.7
22.5°	1837.1	1839.1	1830.0	1831.0	1831.0	1830.0	1836.0	1841.1	1843.1	1846.1	1844.1
25°	1815.9	1817.9	1814.9	1809.8	1807.8	1809.8	1812.8	1818.9	1819.9	1817.9	1810.8
27.5°	1794.7	1788.6	1793.7	1784.6	1782.6	1786.6	1790.7	1791.7	1792.7	1792.7	1786.6
30°	1762.4	1757.4	1762.4	1758.4	1754.3	1758.4	1761.4	1761.4	1763.4	1764.4	1757.4
32.5°	1231.8	1241.9	1405.3	1504.1	1643.4	1714.0	1727.1	1727.1	1729.1	1729.1	1723.1
35°	419.7	420.7	455.0	493.3	575.0	675.9	808.1	876.7	1108.7	1386.1	1654.5
37.5°	414.6	413.6	412.6	411.6	410.6	409.6	407.6	406.6	412.6	489.3	663.8
40°	416.6	415.6	413.6	412.6	411.6	409.6	408.6	406.6	404.5	402.5	400.5
42.5°	416.6	415.6	414.6	413.6	412.6	411.6	409.6	407.6	405.5	402.5	399.5
45°	402.5	402.5	403.5	403.5	404.5	404.5	404.5	403.5	403.5	402.5	398.5
47.5°	376.3	376.3	379.3	379.3	381.3	383.4	383.4	385.4	388.4	390.4	391.4
50°	346.0	346.0	349.1	350.1	352.1	355.1	358.1	359.1	362.2	366.2	370.2
52.5°	315.8	315.8	318.8	318.8	320.8	323.8	326.9	327.9	331.9	335.9	341.0
55°	287.5	287.5	289.5	290.5	291.5	293.6	296.6	296.6	300.6	303.7	308.7
57.5°	262.3	264.3	264.3	264.3	265.3	267.3	269.4	269.4	272.4	275.4	279.4
60°	238.1	240.1	240.1	240.1	241.1	242.1	244.1	244.1	246.2	248.2	252.2
62.5°	215.9	217.9	217.9	218.9	218.9	219.9	221.9	220.9	222.9	224.0	227.0
65°	187.6	189.7	190.7	191.7	192.7	194.7	197.7	196.7	199.7	201.8	204.8
67.5°	160.4	162.4	162.4	163.4	164.4	166.5	168.5	168.5	171.5	173.5	177.6
70°	135.2	137.2	137.2	138.2	139.2	141.2	143.3	142.2	145.3	147.3	150.3
72.5°	112.0	114.0	114.0	115.0	115.0	117.0	119.0	121.1	121.1	123.1	125.1
75°	90.8	91.8	92.8	92.8	93.8	94.8	96.8	98.9	99.9	100.9	102.9
77.5°	71.6	72.6	73.6	73.6	74.7	75.7	76.7	80.7	82.7	83.7	83.7
80°	54.5	55.5	55.5	55.5	56.5	57.5	59.5	59.5	63.6	63.6	64.6
82.5°	38.3	39.3	39.3	39.3	40.4	42.4	43.4	44.4	46.4	47.4	47.4
85°	23.2	24.2	24.2	24.2	25.2	26.2	28.2	29.3	30.3	30.3	31.3
87.5°	9.1	10.1	11.1	11.1	12.1	13.1	14.1	15.1	16.1	16.1	17.1
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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CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2267.8	2274.9	2267.8	2271.9	2276.9	2267.8	2246.6	2238.6	2235.5	2223.4	2215.4
5°	2393.9	2393.9	2390.9	2399.0	2398.0	2383.8	2361.6	2351.6	2341.5	2328.4	2318.3
7.5°	2304.1	2312.2	2317.3	2348.5	2368.7	2370.7	2384.8	2387.9	2391.9	2387.9	2381.8
10°	2175.0	2172.0	2186.1	2215.4	2232.5	2241.6	2268.8	2281.9	2293.0	2315.2	2338.4
12.5°	2102.4	2106.4	2112.5	2133.7	2149.8	2145.8	2156.9	2165.9	2179.0	2201.2	2234.5
15°	2054.0	2058.0	2064.0	2080.2	2090.3	2085.2	2091.3	2097.3	2106.4	2117.5	2137.7
17.5°	2001.5	2008.6	2015.6	2032.8	2041.8	2040.8	2045.9	2047.9	2050.9	2058.0	2072.1
20°	1919.8	1942.0	1956.1	1979.3	1992.4	1990.4	1999.5	2002.5	2006.5	2013.6	2019.7
22.5°	1845.1	1851.2	1858.2	1883.5	1905.7	1932.9	1938.9	1947.0	1957.1	1964.2	1970.2
25°	1802.8	1798.7	1801.7	1818.9	1831.0	1833.0	1842.1	1868.3	1895.6	1907.7	1921.8
27.5°	1777.5	1773.5	1772.5	1780.6	1782.6	1777.5	1775.5	1783.6	1803.8	1823.9	1866.3
30°	1750.3	1745.3	1741.2	1748.3	1751.3	1744.2	1731.1	1724.1	1736.2	1741.2	1758.4
32.5°	1718.0	1713.0	1711.0	1715.0	1717.0	1711.0	1696.8	1688.8	1686.7	1682.7	1686.7
35°	1681.7	1676.7	1673.6	1674.6	1678.7	1673.6	1661.5	1651.4	1646.4	1635.3	1627.2
37.5°	866.6	1227.7	1593.9	1632.3	1636.3	1635.3	1623.2	1612.1	1607.0	1593.9	1589.9
40°	396.5	442.9	664.8	868.6	1253.0	1591.9	1580.8	1569.7	1560.6	1556.6	1541.5
42.5°	395.5	396.5	397.5	392.4	486.3	828.2	1222.7	1526.3	1520.3	1510.2	1499.1
45°	395.5	390.4	394.4	388.4	390.4	389.4	485.2	782.8	1393.2	1455.7	1450.7
47.5°	391.4	388.4	392.4	387.4	381.3	384.4	380.3	385.4	601.3	1019.9	1397.2
50°	373.3	375.3	382.3	381.3	376.3	380.3	373.3	379.3	374.3	410.6	790.9
52.5°	346.0	350.1	357.1	363.2	365.2	370.2	368.2	370.2	366.2	367.2	368.2
55°	313.7	318.8	324.8	333.9	338.0	346.0	352.1	355.1	360.1	359.1	351.1
57.5°	283.5	288.5	293.6	302.6	311.7	315.8	326.9	332.9	346.0	343.0	341.0
60°	255.2	259.3	264.3	266.3	277.4	284.5	294.6	300.6	317.8	321.8	327.9
62.5°	230.0	232.0	236.1	239.1	246.2	253.2	258.3	268.3	277.4	290.5	299.6
65°	206.8	208.8	211.9	213.9	214.9	225.0	228.0	239.1	242.1	256.2	264.3
67.5°	180.6	184.6	188.6	190.7	192.7	198.7	200.8	205.8	212.9	218.9	229.0
70°	153.3	156.4	160.4	163.4	167.5	171.5	177.6	180.6	185.6	189.7	197.7
72.5°	128.1	131.1	133.2	136.2	139.2	142.2	147.3	154.3	158.4	165.4	167.5
75°	103.9	106.9	109.0	111.0	114.0	116.0	118.0	125.1	129.1	135.2	141.2
77.5°	85.7	85.7	87.8	93.8	92.8	92.8	94.8	98.9	101.9	105.9	112.0
80°	66.6	67.6	68.6	73.6	74.7	75.7	74.7	77.7	80.7	81.7	85.7
82.5°	49.4	50.4	50.4	53.5	56.5	56.5	56.5	57.5	60.5	61.5	63.6
85°	33.3	34.3	35.3	36.3	38.3	39.3	40.4	40.4	42.4	43.4	44.4
87.5°	18.2	20.2	21.2	22.2	23.2	24.2	25.2	26.2	27.2	28.2	29.3
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2	2201.2
2.5°	2212.3	2207.3	2204.3	2196.2	2194.2	2181.1	2183.1	2181.1	2181.1	2184.1	2194.2
5°	2307.2	2283.0	2276.9	2259.8	2245.6	2221.4	2206.3	2198.2	2186.1	2181.1	2188.1
7.5°	2371.7	2353.6	2338.4	2323.3	2303.1	2274.9	2253.7	2229.5	2209.3	2190.1	2185.1
10°	2360.6	2380.8	2380.8	2371.7	2352.6	2324.3	2299.1	2268.8	2233.5	2203.3	2185.1
12.5°	2266.8	2302.1	2330.4	2351.6	2370.7	2351.6	2326.3	2302.1	2262.8	2218.4	2185.1
15°	2163.9	2200.2	2235.5	2279.9	2326.3	2345.5	2344.5	2316.2	2280.9	2234.5	2188.1
17.5°	2091.3	2116.5	2135.7	2184.1	2240.6	2290.0	2323.3	2325.3	2291.0	2249.7	2189.1
20°	2036.8	2055.0	2071.1	2098.3	2147.8	2208.3	2269.8	2304.1	2298.1	2252.7	2192.2
22.5°	1987.4	2000.5	2013.6	2033.8	2073.1	2112.5	2184.1	2254.7	2285.0	2247.6	2189.1
25°	1937.9	1952.1	1962.2	1976.3	2007.5	2039.8	2090.3	2178.0	2245.6	2243.6	2183.1
27.5°	1879.4	1898.6	1910.7	1929.9	1951.1	1975.3	2009.6	2092.3	2189.1	2223.4	2166.9
30°	1808.8	1837.1	1855.2	1876.4	1894.6	1915.7	1943.0	1993.4	2113.5	2184.1	2149.8
32.5°	1706.9	1757.4	1797.7	1817.9	1838.1	1856.2	1880.4	1922.8	2020.7	2130.6	2130.6
35°	1634.3	1657.5	1693.8	1752.3	1777.5	1795.7	1817.9	1851.2	1913.7	2067.1	2099.4
37.5°	1577.8	1586.9	1605.0	1662.5	1709.9	1739.2	1761.4	1782.6	1844.1	1980.3	2059.0
40°	1535.4	1532.4	1530.4	1557.6	1625.2	1671.6	1696.8	1718.0	1765.4	1876.4	2005.5
42.5°	1486.0	1483.0	1472.9	1479.9	1513.2	1590.9	1629.2	1652.4	1691.8	1767.4	1947.0
45°	1434.5	1429.5	1425.5	1418.4	1430.5	1473.9	1552.6	1586.9	1609.1	1676.7	1873.4
47.5°	1382.1	1375.0	1370.0	1363.9	1356.9	1377.0	1451.7	1513.2	1551.6	1593.9	1784.6
50°	1307.4	1316.5	1310.5	1303.4	1297.3	1293.3	1324.6	1425.5	1472.9	1507.2	1676.7
52.5°	616.4	1198.5	1248.9	1241.9	1233.8	1226.7	1233.8	1310.5	1396.2	1423.4	1546.5
55°	351.1	533.7	1110.7	1174.3	1167.2	1157.1	1151.1	1177.3	1305.4	1341.7	1427.5
57.5°	338.0	339.0	490.3	1058.3	1097.6	1088.5	1081.5	1087.5	1196.5	1258.0	1323.6
60°	326.9	326.9	326.9	468.1	1011.8	1014.9	1005.8	995.7	1043.1	1164.2	1218.7
62.5°	302.6	308.7	311.7	311.7	462.0	937.2	928.1	925.1	927.1	1051.2	1113.7
65°	271.4	285.5	291.5	295.6	295.6	485.2	848.4	843.4	836.3	883.7	1007.8
67.5°	237.1	251.2	264.3	272.4	273.4	282.5	506.4	759.6	749.6	750.6	894.8
70°	201.8	213.9	228.0	240.1	251.2	256.2	264.3	630.5	663.8	649.7	766.7
72.5°	174.5	179.6	189.7	201.8	214.9	227.0	234.0	251.2	576.0	560.9	583.1
75°	145.3	149.3	156.4	164.4	174.5	188.6	200.8	212.9	305.7	470.1	467.1
77.5°	113.0	120.0	128.1	133.2	138.2	148.3	164.4	176.5	188.6	317.8	374.3
80°	86.8	91.8	95.8	100.9	106.9	114.0	120.0	134.2	148.3	159.4	286.5
82.5°	64.6	67.6	70.6	72.6	74.7	78.7	89.8	94.8	103.9	114.0	135.2
85°	45.4	47.4	49.4	50.4	51.4	52.5	56.5	57.5	66.6	68.6	81.7
87.5°	29.3	30.3	32.3	33.3	33.3	34.3	35.3	35.3	35.3	33.3	40.4
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):

	357.5°	360°
0°	2201.2	2201.2
2.5°	2202.3	2218.4
5°	2199.2	2220.4
7.5°	2191.2	2211.3
10°	2179.0	2203.3
12.5°	2165.9	2189.1
15°	2154.8	2172.0
17.5°	2142.7	2152.8
20°	2126.6	2134.7
22.5°	2110.4	2106.4
25°	2092.3	2083.2
27.5°	2069.1	2051.9
30°	2047.9	2017.6
32.5°	2027.7	1978.3
35°	2000.5	1937.9
37.5°	1972.2	1896.6
40°	1938.9	1849.2
42.5°	1903.6	1801.7
45°	1859.3	1756.4
47.5°	1819.9	1701.9
50°	1765.4	1643.4
52.5°	1698.9	1588.9
55°	1620.2	1522.3
57.5°	1535.4	1452.7
60°	1444.6	1373.0
62.5°	1334.7	1290.3
65°	1205.5	1195.4
67.5°	1037.1	1090.5
70°	850.4	970.5
72.5°	711.2	843.4
75°	583.1	701.1
77.5°	462.0	549.8
80°	288.5	402.5
82.5°	193.7	264.3
85°	117.0	126.1
87.5°	45.4	46.4
90°	0.0	0.0

(END OF REPORT)