

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: P1213472

Luminaire Tested: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213472
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-LD5-56HL-RW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

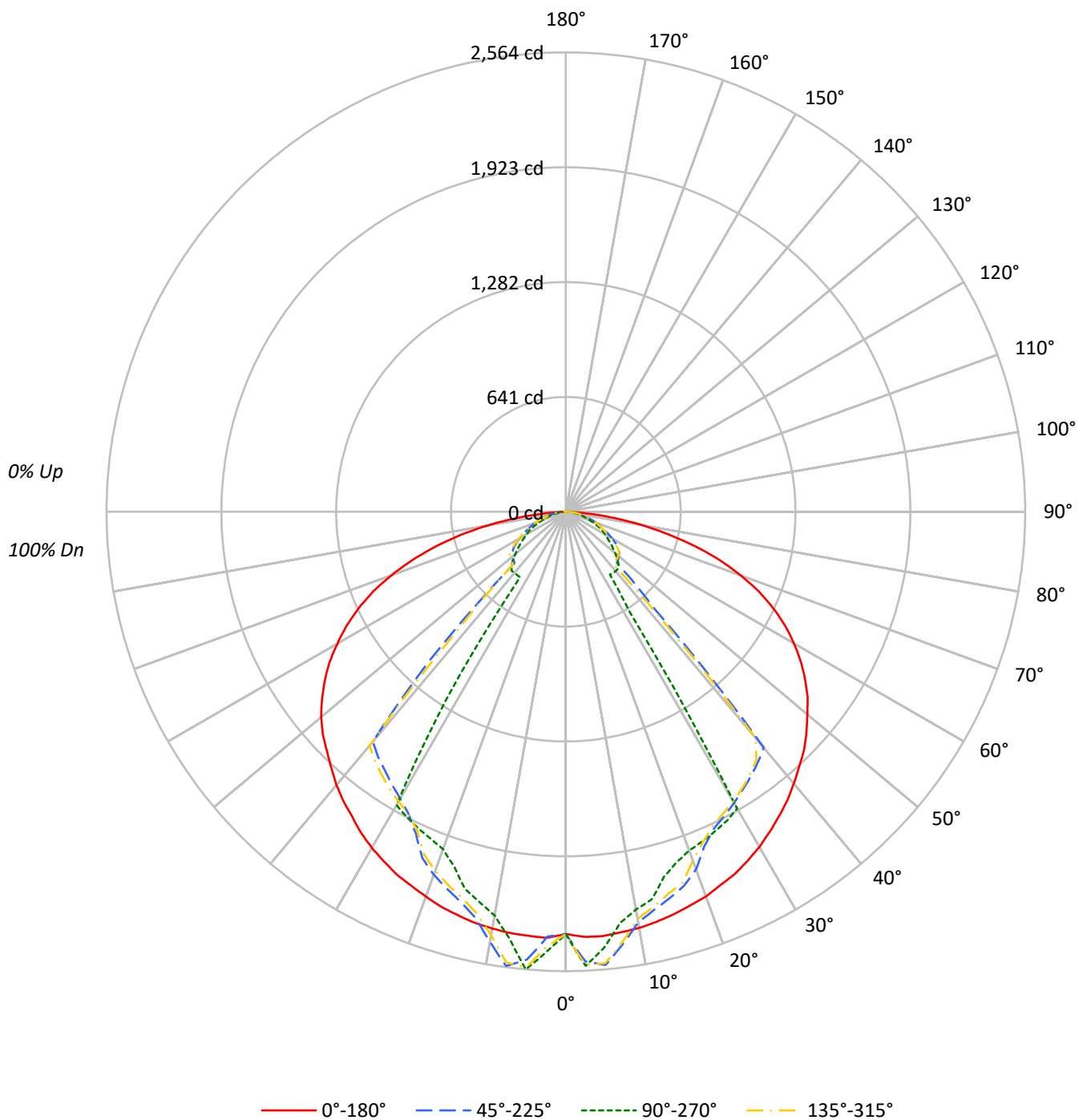
Lumens per Lamp: N/A
Luminaire Lumens: 4719.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 48
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°	19043	19043	19043	19043
5°	19230	19186	19221	20137
10°	19249	17347	19275	17613
15°	19291	16050	19336	16558
20°	19432	15223	19432	15166
25°	19600	14931	19628	14792
30°	19798	14669	19848	14495
35°	20029	3341	20070	3484
40°	20349	3474	20472	3587
45°	20837	3455	20908	3580
50°	21323	3124	21612	3209
55°	21980	2774	22155	2813
60°	22537	2464	22586	2497
65°	22934	2150	22877	2117
70°	22608	1733	22536	1670
75°	20988	1334	21139	1278
80°	17034	947	17718	867
85°	9223	568	9742	435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 23093 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.9	4.9
10°-20°	637.5	13.5
20°-30°	944.2	20.0
30°-40°	951.4	20.2
40°-50°	743.2	15.7
50°-60°	574.1	12.2
60°-70°	385.4	8.2
70°-80°	196.6	4.2
80°-90°	54.7	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°	1813.6	38.4
0°-40°	2765.0	58.6
0°-60°	4082.3	86.5
0°-90°	4719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4719.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2356	2356	2356	2356	2356	
5°	2377	2443	2376	2564	2377	226
15°	2325	2111	2331	2178	2325	658
25°	2230	1968	2233	1949	2230	1029
35°	2075	428	2079	446	2075	1300
45°	1880	416	1887	431	1880	1450
55°	1630	302	1643	307	1630	1456
65°	1280	203	1277	200	1280	1259
75°	751	103	756	98	751	785
85°	135	32	143	25	135	186
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°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2374.9	2383.5	2390.0	2394.3	2396.5	2396.5	2397.6	2398.7	2412.7	2419.2	2423.5
5°	2377.1	2385.7	2398.7	2415.9	2431.1	2444.0	2454.8	2469.9	2485.1	2501.3	2506.7
7.5°	2367.3	2378.1	2404.1	2435.4	2464.5	2485.1	2499.1	2508.8	2516.4	2517.5	2522.9
10°	2358.7	2378.1	2413.8	2454.8	2491.5	2516.4	2516.4	2511.0	2518.5	2489.4	2460.2
12.5°	2343.6	2365.2	2413.8	2467.8	2502.3	2512.1	2507.7	2486.1	2441.9	2406.2	2390.0
15°	2325.2	2354.4	2414.9	2475.3	2504.5	2507.7	2466.7	2411.6	2378.1	2356.5	2329.5
17.5°	2304.7	2343.6	2415.9	2476.4	2487.2	2472.1	2394.3	2359.8	2325.2	2274.5	2237.7
20°	2285.3	2323.1	2407.3	2461.3	2467.8	2399.7	2339.3	2302.5	2244.2	2199.9	2183.7
22.5°	2255.0	2299.3	2399.7	2440.8	2415.9	2337.1	2278.8	2220.5	2167.5	2154.6	2135.1
25°	2230.2	2276.6	2382.5	2415.9	2350.1	2279.9	2211.8	2143.8	2118.9	2100.6	2083.3
27.5°	2196.7	2253.9	2359.8	2370.6	2279.9	2218.3	2118.9	2088.7	2066.0	2045.5	2037.9
30°	2160.0	2230.2	2328.5	2307.9	2221.5	2130.8	2057.4	2029.3	2013.1	1991.5	1982.9
32.5°	2117.9	2194.5	2293.9	2235.6	2158.9	2045.5	1998.0	1976.4	1954.8	1938.6	1884.6
35°	2074.7	2163.2	2252.9	2166.5	2083.3	1980.7	1938.6	1919.1	1898.6	1839.2	1783.1
37.5°	2030.4	2128.7	2203.2	2091.9	1982.9	1913.7	1878.1	1856.5	1810.1	1734.5	1706.4
40°	1979.6	2086.5	2139.5	2015.3	1895.4	1845.7	1812.2	1790.6	1685.9	1652.4	1643.8
42.5°	1928.9	2045.5	2061.7	1940.7	1823.0	1773.4	1745.3	1674.0	1602.7	1585.4	1588.7
45°	1880.3	2001.2	1976.4	1834.9	1747.4	1706.4	1658.9	1560.6	1522.8	1531.4	1533.6
47.5°	1822.0	1948.3	1886.7	1729.1	1669.7	1628.6	1522.8	1463.4	1458.0	1469.9	1476.4
50°	1759.3	1888.9	1791.7	1633.0	1585.4	1536.8	1417.0	1386.7	1393.2	1405.1	1412.6
52.5°	1701.0	1822.0	1693.4	1543.3	1502.3	1391.0	1310.0	1315.4	1326.2	1340.3	1344.6
55°	1629.7	1741.0	1588.7	1452.6	1413.7	1267.9	1231.2	1244.2	1255.0	1266.8	1275.5
57.5°	1555.2	1648.1	1464.5	1351.1	1288.4	1158.8	1162.1	1170.7	1178.3	1192.3	492.5
60°	1469.9	1542.2	1328.4	1257.1	1132.9	1072.4	1075.7	1090.8	1098.4	613.4	339.1
62.5°	1381.3	1419.1	1205.3	1150.2	990.4	986.0	1001.2	1007.6	685.8	324.0	317.5
65°	1279.8	1272.2	1084.3	996.8	893.2	897.5	913.7	881.3	303.5	303.5	301.3
67.5°	1167.5	1122.1	966.6	825.1	799.2	808.9	826.2	288.4	280.8	283.0	275.4
70°	1039.0	975.2	844.6	698.8	707.4	717.1	278.6	261.4	258.1	252.7	237.6
72.5°	902.9	815.4	691.2	607.0	612.4	384.5	244.1	235.4	224.6	213.8	197.6
75°	750.6	637.2	507.6	507.6	515.2	219.2	212.8	198.7	186.8	172.8	163.1
77.5°	588.6	490.3	394.2	409.3	199.8	183.6	171.7	156.6	146.9	138.2	132.8
80°	430.9	342.4	297.0	265.7	155.5	139.3	127.4	118.8	114.5	109.1	102.6
82.5°	283.0	206.3	206.3	125.3	109.1	96.1	92.9	86.4	82.1	78.8	75.6
85°	135.0	119.9	90.7	76.7	68.0	61.6	59.4	56.2	56.2	55.1	54.0
87.5°	49.7	54.0	40.0	38.9	36.7	35.6	36.7	36.7	37.8	36.7	35.6
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°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2434.3	2442.9	2449.4	2460.2	2474.3	2486.1	2496.9	2512.1	2535.8	2542.3	2547.7
5°	2506.7	2509.9	2517.5	2526.1	2528.3	2533.7	2532.6	2539.1	2542.3	2549.9	2533.7
7.5°	2511.0	2493.7	2473.2	2454.8	2441.9	2430.0	2422.4	2434.3	2440.8	2446.2	2430.0
10°	2420.3	2399.7	2387.9	2377.1	2364.1	2345.7	2320.9	2326.3	2324.1	2324.1	2318.7
12.5°	2363.0	2333.9	2303.6	2276.6	2264.7	2263.7	2264.7	2276.6	2276.6	2275.5	2269.1
15°	2273.4	2245.3	2230.2	2223.7	2223.7	2220.5	2220.5	2233.4	2230.2	2230.2	2226.9
17.5°	2214.0	2194.5	2183.7	2176.2	2172.9	2178.3	2184.8	2190.2	2191.3	2187.0	2169.7
20°	2165.4	2147.0	2134.1	2136.2	2135.1	2138.4	2141.6	2123.3	2100.6	2070.3	2056.3
22.5°	2114.6	2100.6	2090.9	2090.9	2077.9	2057.4	2027.1	2020.7	2017.4	2003.4	1991.5
25°	2066.0	2049.8	2035.8	1992.6	1965.6	1968.8	1963.4	1952.6	1951.5	1950.5	1954.8
27.5°	2017.4	1975.3	1921.3	1914.8	1904.0	1902.9	1909.4	1914.8	1914.8	1919.1	1924.5
30°	1917.0	1868.4	1858.7	1846.8	1851.1	1866.2	1869.5	1877.0	1879.2	1886.7	1891.1
32.5°	1825.2	1803.6	1795.0	1800.4	1814.4	1827.4	1834.9	1838.1	1843.5	1850.0	1855.4
35°	1750.7	1744.2	1751.8	1763.6	1777.7	1788.5	1795.0	1801.4	1806.8	1812.2	1816.6
37.5°	1695.6	1699.9	1710.7	1725.8	1739.9	1748.5	1753.9	1761.5	1769.0	1775.5	1749.6
40°	1643.8	1654.6	1666.4	1682.6	1694.5	1703.2	1708.6	1718.3	1653.5	748.4	410.4
42.5°	1598.4	1610.3	1618.9	1631.9	1644.8	1651.3	1603.8	716.0	405.0	402.8	408.2
45°	1543.3	1553.0	1567.1	1576.8	1588.7	1043.3	398.5	402.8	396.4	400.7	402.8
47.5°	1487.2	1502.3	1509.8	1440.7	428.8	396.4	392.0	396.4	392.0	397.4	394.2
50°	1423.4	1441.8	1026.0	387.7	384.5	382.3	386.6	384.5	387.7	392.0	383.4
52.5°	1358.6	841.3	375.8	373.7	375.8	373.7	381.2	375.8	376.9	372.6	361.8
55°	460.1	364.0	360.7	359.6	366.1	366.1	366.1	357.5	352.1	341.3	333.7
57.5°	352.1	352.1	351.0	352.1	349.9	347.8	338.0	330.5	322.9	307.8	303.5
60°	333.7	333.7	333.7	333.7	324.0	319.7	304.6	298.1	285.1	277.6	273.2
62.5°	318.6	316.4	306.7	303.5	292.7	280.8	272.2	265.7	252.7	248.4	245.2
65°	297.0	289.4	277.6	264.6	259.2	246.2	241.9	232.2	225.7	222.5	220.3
67.5°	261.4	250.6	240.8	232.2	222.5	218.2	212.8	205.2	200.9	198.7	196.6
70°	223.6	216.0	206.3	200.9	194.4	191.2	183.6	181.4	178.2	175.0	171.7
72.5°	186.8	182.5	178.2	170.6	168.5	166.3	158.8	154.4	150.1	145.8	143.6
75°	156.6	153.4	151.2	144.7	141.5	135.0	129.6	126.4	123.1	119.9	117.7
77.5°	128.5	126.4	119.9	115.6	113.4	108.0	105.8	106.9	104.8	100.4	98.3
80°	100.4	98.3	92.9	92.9	90.7	88.6	86.4	84.2	82.1	78.8	76.7
82.5°	76.7	74.5	72.4	70.2	68.0	67.0	65.9	63.7	61.6	59.4	58.3
85°	54.0	52.9	51.8	50.8	49.7	48.6	47.5	45.4	43.2	42.1	41.0
87.5°	36.7	35.6	34.6	33.5	32.4	31.3	30.2	29.2	27.0	25.9	24.8
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°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2547.7	2553.1	2547.7	2535.8	2528.3	2525.0	2531.5	2531.5	2535.8	2541.2	2542.3
5°	2507.7	2494.8	2479.7	2464.5	2457.0	2452.7	2440.8	2442.9	2446.2	2448.3	2450.5
7.5°	2408.4	2391.1	2370.6	2351.1	2343.6	2337.1	2323.1	2323.1	2323.1	2324.1	2330.6
10°	2306.9	2299.3	2290.7	2277.7	2268.0	2264.7	2252.9	2256.1	2253.9	2257.2	2264.7
12.5°	2259.3	2250.7	2243.1	2230.2	2219.4	2215.1	2209.7	2212.9	2211.8	2217.2	2223.7
15°	2216.1	2211.8	2203.2	2193.5	2183.7	2175.1	2155.7	2149.2	2144.9	2139.5	2147.0
17.5°	2144.9	2114.6	2094.1	2079.0	2068.2	2060.6	2055.2	2055.2	2058.5	2061.7	2068.2
20°	2047.7	2039.0	2029.3	2013.1	2002.3	1998.0	1994.7	1994.7	2000.1	2004.5	2016.3
22.5°	1980.7	1979.6	1976.4	1968.8	1963.4	1963.4	1964.5	1966.7	1974.2	1980.7	1992.6
25°	1949.4	1953.7	1951.5	1947.2	1944.0	1945.1	1942.9	1945.1	1952.6	1959.1	1968.8
27.5°	1924.5	1931.0	1928.9	1922.4	1917.0	1919.1	1922.4	1920.2	1926.7	1934.3	1941.8
30°	1891.1	1892.1	1896.5	1888.9	1886.7	1890.0	1891.1	1893.2	1899.7	1905.1	1911.6
32.5°	1853.3	1861.9	1860.8	1853.3	1853.3	1856.5	1857.6	1785.2	1650.2	1421.3	1358.6
35°	1816.6	1826.3	1810.1	1526.0	1056.2	563.8	435.2	420.1	423.4	425.5	427.7
37.5°	1343.5	637.2	406.1	409.3	412.6	415.8	419.0	422.3	425.5	428.8	429.8
40°	403.9	402.8	406.1	410.4	413.6	415.8	420.1	423.4	426.6	429.8	430.9
42.5°	399.6	401.8	405.0	409.3	413.6	418.0	421.2	425.5	427.7	429.8	430.9
45°	397.4	401.8	406.1	409.3	412.6	414.7	416.9	418.0	416.9	416.9	419.0
47.5°	394.2	398.5	399.6	398.5	399.6	398.5	398.5	398.5	395.3	394.2	394.2
50°	382.3	382.3	380.2	375.8	374.8	373.7	371.5	370.4	366.1	365.0	365.0
52.5°	357.5	356.4	353.2	347.8	345.6	343.4	342.4	341.3	337.0	334.8	335.9
55°	328.3	326.2	322.9	316.4	315.4	313.2	312.1	311.0	306.7	308.9	305.6
57.5°	301.3	297.0	292.7	291.6	287.3	286.2	285.1	284.0	280.8	281.9	279.7
60°	268.9	267.8	265.7	261.4	261.4	260.3	260.3	258.1	256.0	254.9	254.9
62.5°	245.2	241.9	239.8	239.8	236.5	236.5	236.5	234.4	232.2	233.3	232.2
65°	219.2	218.2	217.1	214.9	214.9	213.8	213.8	211.7	208.4	209.5	207.4
67.5°	197.6	195.5	193.3	192.2	187.9	185.8	184.7	183.6	179.3	180.4	178.2
70°	170.6	167.4	165.2	163.1	159.8	157.7	157.7	155.5	152.3	153.4	151.2
72.5°	142.6	140.4	138.2	137.2	133.9	132.8	131.8	130.7	127.4	128.5	127.4
75°	118.8	118.8	117.7	116.6	113.4	110.2	108.0	106.9	104.8	105.8	103.7
77.5°	98.3	96.1	94.0	94.0	90.7	88.6	86.4	86.4	86.4	85.3	84.2
80°	76.7	74.5	74.5	73.4	71.3	69.1	68.0	68.0	67.0	67.0	65.9
82.5°	58.3	56.2	55.1	55.1	52.9	51.8	50.8	49.7	49.7	49.7	48.6
85°	41.0	38.9	37.8	37.8	35.6	34.6	34.6	33.5	33.5	32.4	32.4
87.5°	24.8	23.8	22.7	22.7	20.5	19.4	19.4	19.4	18.4	18.4	17.3
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2542.3	2542.3	2534.7	2536.9	2533.7	2538.0	2532.6	2532.6	2539.1	2539.1	2543.4
5°	2451.6	2446.2	2445.1	2442.9	2432.1	2436.5	2431.1	2425.7	2433.2	2433.2	2442.9
7.5°	2327.4	2317.7	2322.0	2315.5	2309.0	2299.3	2302.5	2298.2	2303.6	2311.2	2320.9
10°	2263.7	2255.0	2260.4	2253.9	2257.2	2243.1	2244.2	2245.3	2250.7	2252.9	2261.5
12.5°	2222.6	2220.5	2218.3	2216.1	2218.3	2210.7	2206.4	2207.5	2209.7	2210.7	2217.2
15°	2136.2	2122.2	2126.5	2111.4	2112.5	2113.5	2104.9	2113.5	2112.5	2126.5	2139.5
17.5°	2066.0	2066.0	2058.5	2052.0	2047.7	2046.6	2040.1	2044.4	2040.1	2048.7	2052.0
20°	2017.4	2016.3	2015.3	2012.0	2001.2	2002.3	2005.5	1995.8	1994.7	1993.7	2000.1
22.5°	1994.7	1995.8	1991.5	1991.5	1981.8	1983.9	1985.0	1974.2	1975.3	1972.1	1975.3
25°	1971.0	1973.1	1967.7	1967.7	1965.6	1964.5	1959.1	1961.3	1954.8	1949.4	1954.8
27.5°	1942.9	1947.2	1942.9	1945.1	1940.7	1938.6	1935.3	1933.2	1926.7	1925.6	1928.9
30°	1917.0	1919.1	1918.1	1912.7	1911.6	1905.1	1908.3	1901.9	1895.4	1896.5	1898.6
32.5°	982.8	938.5	723.6	653.4	646.9	670.7	794.9	967.7	1253.9	1531.4	1731.2
35°	428.8	428.8	428.8	427.7	427.7	426.6	425.5	424.4	423.4	422.3	421.2
37.5°	430.9	430.9	430.9	430.9	429.8	428.8	428.8	426.6	425.5	424.4	423.4
40°	432.0	433.1	433.1	433.1	432.0	432.0	430.9	428.8	427.7	425.5	423.4
42.5°	430.9	432.0	432.0	430.9	430.9	429.8	429.8	428.8	427.7	426.6	425.5
45°	416.9	418.0	415.8	415.8	414.7	414.7	414.7	414.7	414.7	415.8	415.8
47.5°	392.0	392.0	391.0	389.9	389.9	388.8	389.9	388.8	391.0	392.0	394.2
50°	362.9	362.9	360.7	359.6	359.6	359.6	359.6	360.7	361.8	364.0	366.1
52.5°	332.6	332.6	331.6	330.5	329.4	329.4	332.6	331.6	332.6	333.7	337.0
55°	303.5	304.6	302.4	302.4	301.3	301.3	301.3	302.4	303.5	304.6	307.8
57.5°	278.6	278.6	276.5	276.5	276.5	275.4	278.6	276.5	277.6	278.6	280.8
60°	253.8	252.7	252.7	251.6	251.6	251.6	253.8	252.7	252.7	253.8	256.0
62.5°	231.1	231.1	230.0	230.0	229.0	229.0	231.1	230.0	230.0	231.1	232.2
65°	205.2	205.2	204.1	203.0	206.3	203.0	206.3	204.1	206.3	207.4	209.5
67.5°	176.0	176.0	176.0	175.0	175.0	177.1	178.2	176.0	177.1	179.3	180.4
70°	150.1	150.1	149.0	149.0	149.0	151.2	152.3	150.1	151.2	152.3	154.4
72.5°	127.4	125.3	125.3	124.2	126.4	126.4	127.4	126.4	127.4	127.4	129.6
75°	104.8	102.6	102.6	102.6	104.8	103.7	104.8	103.7	104.8	104.8	105.8
77.5°	84.2	83.2	82.1	82.1	84.2	84.2	84.2	83.2	84.2	85.3	86.4
80°	65.9	64.8	63.7	63.7	65.9	65.9	65.9	67.0	65.9	67.0	68.0
82.5°	48.6	47.5	46.4	48.6	48.6	48.6	48.6	49.7	48.6	49.7	50.8
85°	32.4	31.3	30.2	32.4	32.4	32.4	32.4	33.5	32.4	33.5	34.6
87.5°	17.3	16.2	16.2	17.3	17.3	17.3	18.4	18.4	18.4	19.4	19.4
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2549.9	2553.1	2552.0	2545.5	2539.1	2531.5	2526.1	2527.2	2538.0	2541.2	2531.5
5°	2442.9	2463.5	2463.5	2477.5	2469.9	2463.5	2467.8	2491.5	2503.4	2521.8	2528.3
7.5°	2332.8	2342.5	2341.4	2355.5	2353.3	2353.3	2356.5	2387.9	2403.0	2418.1	2422.4
10°	2271.2	2280.9	2279.9	2280.9	2277.7	2270.1	2270.1	2284.2	2297.1	2304.7	2306.9
12.5°	2226.9	2232.3	2231.3	2231.3	2229.1	2222.6	2221.5	2233.4	2247.5	2257.2	2258.3
15°	2161.1	2176.2	2179.4	2193.5	2190.2	2181.6	2183.7	2193.5	2202.1	2210.7	2207.5
17.5°	2062.8	2070.3	2071.4	2076.8	2074.7	2074.7	2087.6	2123.3	2147.0	2167.5	2169.7
20°	2006.6	2012.0	2009.9	2021.7	2016.3	2015.3	2018.5	2033.6	2044.4	2054.1	2071.4
22.5°	1979.6	1983.9	1980.7	1981.8	1972.1	1963.4	1961.3	1973.1	1985.0	1998.0	1998.0
25°	1956.9	1960.2	1959.1	1956.9	1949.4	1937.5	1935.3	1937.5	1941.8	1942.9	1935.3
27.5°	1929.9	1932.1	1932.1	1933.2	1923.5	1912.7	1910.5	1908.3	1912.7	1911.6	1899.7
30°	1901.9	1898.6	1899.7	1900.8	1892.1	1882.4	1878.1	1877.0	1881.3	1880.3	1868.4
32.5°	1834.9	1859.7	1861.9	1864.1	1856.5	1847.9	1843.5	1840.3	1842.5	1841.4	1830.6
35°	420.1	427.7	523.8	1185.8	1610.3	1783.1	1801.4	1797.1	1798.2	1798.2	1789.6
37.5°	421.2	420.1	419.0	415.8	412.6	410.4	709.6	1513.1	1752.8	1753.9	1746.4
40°	421.2	420.1	419.0	416.9	412.6	409.3	403.9	399.6	409.3	900.7	1648.1
42.5°	423.4	421.2	419.0	416.9	412.6	408.2	403.9	398.5	401.8	399.6	394.2
45°	416.9	415.8	415.8	414.7	412.6	408.2	402.8	396.4	393.1	396.4	391.0
47.5°	396.4	397.4	400.7	401.8	401.8	402.8	399.6	395.3	389.9	393.1	386.6
50°	368.3	370.4	371.5	376.9	379.1	383.4	384.5	384.5	383.4	387.7	383.4
52.5°	338.0	340.2	345.6	347.8	349.9	356.4	358.6	361.8	364.0	370.4	374.8
55°	308.9	310.0	312.1	316.4	319.7	325.1	328.3	331.6	337.0	340.2	353.2
57.5°	281.9	283.0	287.3	288.4	290.5	294.8	298.1	302.4	306.7	308.9	324.0
60°	256.0	257.0	260.3	261.4	262.4	266.8	270.0	273.2	276.5	278.6	289.4
62.5°	233.3	233.3	236.5	236.5	237.6	240.8	243.0	245.2	248.4	249.5	254.9
65°	210.6	211.7	213.8	213.8	214.9	217.1	218.2	219.2	222.5	222.5	226.8
67.5°	182.5	183.6	186.8	189.0	190.1	194.4	195.5	196.6	198.7	199.8	202.0
70°	155.5	156.6	159.8	160.9	162.0	165.2	167.4	170.6	173.9	177.1	179.3
72.5°	130.7	131.8	135.0	135.0	138.2	139.3	141.5	142.6	145.8	148.0	151.2
75°	106.9	108.0	111.2	111.2	114.5	115.6	116.6	117.7	119.9	122.0	124.2
77.5°	87.5	87.5	91.8	94.0	96.1	96.1	97.2	97.2	97.2	98.3	100.4
80°	69.1	69.1	72.4	74.5	76.7	76.7	77.8	78.8	79.9	79.9	81.0
82.5°	51.8	51.8	55.1	56.2	58.3	58.3	58.3	59.4	60.5	59.4	61.6
85°	35.6	35.6	37.8	38.9	41.0	41.0	41.0	42.1	43.2	42.1	43.2
87.5°	20.5	21.6	22.7	23.8	24.8	25.9	25.9	25.9	27.0	27.0	28.1
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2520.7	2507.7	2506.7	2491.5	2487.2	2488.3	2476.4	2472.1	2452.7	2448.3	2427.8
5°	2530.4	2536.9	2533.7	2532.6	2535.8	2533.7	2525.0	2520.7	2517.5	2508.8	2491.5
7.5°	2423.5	2427.8	2431.1	2445.1	2457.0	2477.5	2499.1	2513.1	2523.9	2526.1	2512.1
10°	2314.4	2334.9	2349.0	2370.6	2387.9	2399.7	2412.7	2424.6	2455.9	2487.2	2505.6
12.5°	2258.3	2263.7	2262.6	2274.5	2286.3	2317.7	2347.9	2365.2	2388.9	2403.0	2436.5
15°	2210.7	2211.8	2215.1	2223.7	2230.2	2241.0	2255.0	2280.9	2328.5	2350.1	2368.4
17.5°	2167.5	2167.5	2169.7	2177.3	2185.9	2195.6	2204.3	2215.1	2238.8	2274.5	2319.8
20°	2098.4	2128.7	2131.9	2130.8	2135.1	2153.5	2155.7	2175.1	2187.0	2201.0	2245.3
22.5°	1995.8	2014.2	2040.1	2080.1	2095.2	2103.8	2110.3	2118.9	2137.3	2153.5	2171.9
25°	1939.7	1951.5	1959.1	1971.0	2002.3	2053.1	2062.8	2072.5	2084.4	2096.3	2118.9
27.5°	1890.0	1888.9	1894.3	1905.1	1913.7	1940.7	1988.3	2026.1	2028.2	2045.5	2064.9
30°	1854.3	1847.9	1840.3	1838.1	1850.0	1864.1	1878.1	1937.5	1978.5	1987.2	2007.7
32.5°	1820.9	1810.1	1799.3	1790.6	1783.1	1795.0	1803.6	1829.5	1882.4	1932.1	1942.9
35°	1779.8	1769.0	1756.1	1746.4	1734.5	1733.4	1732.3	1757.2	1774.4	1833.8	1885.7
37.5°	1737.7	1725.8	1715.0	1704.2	1692.4	1683.7	1678.3	1684.8	1701.0	1726.9	1813.3
40°	1693.4	1679.4	1668.6	1660.0	1643.8	1637.3	1626.5	1622.2	1623.2	1645.9	1691.3
42.5°	1012.0	1613.5	1618.9	1609.2	1595.2	1586.5	1574.6	1569.2	1558.4	1569.2	1595.2
45°	389.9	394.2	1180.4	1559.5	1542.2	1531.4	1520.6	1515.2	1503.4	1494.7	1518.5
47.5°	382.3	386.6	378.0	535.7	1472.0	1475.3	1462.3	1456.9	1445.0	1438.6	1432.1
50°	376.9	380.2	373.7	375.8	368.3	1348.9	1402.9	1396.4	1383.5	1375.9	1363.0
52.5°	371.5	371.5	367.2	361.8	359.6	360.7	1135.1	1334.9	1319.8	1312.2	1294.9
55°	354.2	356.4	360.7	352.1	349.9	348.8	345.6	1081.1	1249.6	1240.9	1225.8
57.5°	328.3	332.6	344.5	342.4	342.4	333.7	331.6	331.6	1003.3	1168.6	1153.4
60°	298.1	302.4	315.4	319.7	322.9	320.8	318.6	317.5	313.2	1057.3	1076.8
62.5°	266.8	271.1	275.4	289.4	293.8	299.2	305.6	302.4	298.1	298.1	995.8
65°	233.3	239.8	241.9	254.9	260.3	270.0	275.4	283.0	280.8	279.7	285.1
67.5°	204.1	211.7	212.8	218.2	227.9	232.2	238.7	252.7	259.2	261.4	263.5
70°	179.3	183.6	186.8	189.0	195.5	196.6	208.4	218.2	227.9	238.7	241.9
72.5°	154.4	157.7	164.2	162.0	164.2	168.5	175.0	181.4	191.2	206.3	216.0
75°	126.4	128.5	132.8	135.0	139.3	142.6	146.9	152.3	160.9	168.5	181.4
77.5°	101.5	102.6	105.8	106.9	111.2	114.5	122.0	125.3	130.7	136.1	143.6
80°	82.1	82.1	83.2	83.2	86.4	89.6	95.0	98.3	104.8	109.1	109.1
82.5°	62.6	62.6	65.9	65.9	68.0	68.0	71.3	71.3	74.5	76.7	78.8
85°	44.3	45.4	47.5	46.4	48.6	47.5	49.7	51.8	52.9	51.8	50.8
87.5°	29.2	29.2	31.3	30.2	31.3	31.3	33.5	33.5	34.6	34.6	33.5
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2420.3	2404.1	2394.3	2382.5	2379.2	2376.0	2380.3	2380.3	2373.8	2368.4	2358.7
5°	2476.4	2459.1	2440.8	2421.3	2403.0	2383.5	2376.0	2374.9	2363.0	2356.5	2353.3
7.5°	2505.6	2496.9	2476.4	2449.4	2421.3	2386.8	2371.7	2363.0	2351.1	2349.0	2349.0
10°	2508.8	2499.1	2488.3	2468.9	2436.5	2391.1	2361.9	2344.7	2333.9	2341.4	2355.5
12.5°	2477.5	2495.9	2486.1	2473.2	2447.3	2392.2	2350.1	2324.1	2320.9	2340.3	2377.1
15°	2397.6	2451.6	2478.6	2465.6	2445.1	2390.0	2330.6	2300.4	2300.4	2340.3	2387.9
17.5°	2337.1	2379.2	2445.1	2455.9	2432.1	2385.7	2312.3	2276.6	2286.3	2344.7	2395.4
20°	2287.4	2313.3	2377.1	2437.5	2414.9	2376.0	2285.3	2248.5	2268.0	2338.2	2406.2
22.5°	2209.7	2261.5	2300.4	2390.0	2397.6	2357.6	2258.3	2214.0	2252.9	2338.2	2400.8
25°	2134.1	2196.7	2237.7	2325.2	2371.7	2334.9	2233.4	2177.3	2236.7	2334.9	2396.5
27.5°	2081.1	2110.3	2184.8	2247.5	2332.8	2304.7	2199.9	2137.3	2216.1	2317.7	2371.7
30°	2025.0	2044.4	2117.9	2177.3	2280.9	2270.1	2165.4	2093.0	2190.2	2301.5	2306.9
32.5°	1963.4	1985.0	2022.8	2109.2	2208.6	2237.7	2126.5	2048.7	2162.1	2276.6	2231.3
35°	1900.8	1917.0	1947.2	2040.1	2124.3	2189.1	2079.0	1998.0	2142.7	2238.8	2158.9
37.5°	1838.1	1855.4	1881.3	1959.1	2035.8	2143.8	2037.9	1947.2	2107.1	2171.9	2083.3
40°	1778.8	1788.5	1815.5	1864.1	1962.3	2097.3	1991.5	1894.3	2070.3	2086.5	1980.7
42.5°	1669.7	1718.3	1743.1	1782.0	1879.2	2033.6	1937.5	1838.1	2029.3	2001.2	1878.1
45°	1552.0	1657.8	1668.6	1707.5	1805.8	1965.6	1886.7	1783.1	1990.4	1927.8	1780.9
47.5°	1455.8	1532.5	1595.2	1627.6	1718.3	1885.7	1839.2	1736.6	1932.1	1834.9	1685.9
50°	1370.5	1411.6	1525.0	1548.7	1613.5	1789.6	1783.1	1682.6	1851.1	1718.3	1593.0
52.5°	1287.4	1316.5	1419.1	1469.9	1522.8	1685.9	1716.1	1629.7	1762.6	1601.6	1499.0
55°	1215.0	1224.7	1280.9	1387.8	1435.3	1581.1	1642.7	1568.2	1650.2	1490.4	1408.3
57.5°	1140.5	1131.8	1172.9	1310.0	1344.6	1474.2	1564.9	1505.5	1559.5	1377.0	1314.4
60°	1062.7	1050.8	1068.1	1158.8	1248.5	1368.4	1473.1	1436.4	1449.4	1264.7	1209.6
62.5°	981.7	969.8	964.4	1021.7	1154.5	1259.3	1380.2	1359.7	1314.4	1162.1	1080.0
65°	897.5	885.6	877.0	899.6	1050.8	1117.8	1276.6	1271.2	1166.4	1054.1	909.4
67.5°	273.2	805.7	787.3	786.2	885.6	989.3	1164.2	1155.6	1017.4	938.5	783.0
70°	246.2	653.4	694.4	684.7	727.9	858.6	1035.7	1029.2	872.6	752.8	692.3
72.5°	225.7	231.1	613.4	602.6	612.4	730.1	901.8	884.5	739.8	594.0	598.3
75°	193.3	203.0	211.7	508.7	495.7	604.8	756.0	729.0	610.2	490.3	500.0
77.5°	157.7	169.6	176.0	370.4	400.7	430.9	603.7	568.1	420.1	392.0	186.8
80°	117.7	127.4	138.2	148.0	304.6	301.3	448.2	412.6	292.7	244.1	145.8
82.5°	86.4	89.6	96.1	106.9	121.0	202.0	288.4	253.8	203.0	111.2	100.4
85°	54.0	58.3	61.6	64.8	73.4	121.0	142.6	113.4	85.3	68.0	63.7
87.5°	34.6	34.6	33.5	34.6	35.6	43.2	48.6	46.4	36.7	34.6	34.6
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2347.9	2332.8	2332.8	2328.5	2331.7	2331.7	2330.6	2331.7	2339.3	2343.6	2351.1
5°	2346.8	2342.5	2352.2	2364.1	2378.1	2395.4	2399.7	2414.9	2428.9	2447.3	2466.7
7.5°	2360.9	2376.0	2394.3	2413.8	2441.9	2462.4	2480.7	2499.1	2512.1	2529.3	2540.1
10°	2381.4	2411.6	2442.9	2467.8	2498.0	2515.3	2527.2	2529.3	2511.0	2481.8	2458.1
12.5°	2410.5	2446.2	2475.3	2499.1	2513.1	2506.7	2472.1	2436.5	2415.9	2385.7	2343.6
15°	2435.4	2467.8	2498.0	2488.3	2450.5	2414.9	2387.9	2345.7	2304.7	2276.6	2258.3
17.5°	2446.2	2477.5	2466.7	2415.9	2380.3	2339.3	2284.2	2251.8	2224.8	2203.2	2192.4
20°	2452.7	2447.3	2388.9	2352.2	2283.1	2245.3	2209.7	2179.4	2158.9	2148.1	2145.9
22.5°	2435.4	2369.5	2319.8	2253.9	2203.2	2171.9	2143.8	2118.9	2104.9	2096.3	2090.9
25°	2378.1	2301.5	2228.0	2176.2	2133.0	2106.0	2084.4	2063.9	2046.6	2042.3	2031.5
27.5°	2298.2	2235.6	2138.4	2098.4	2060.6	2047.7	2023.9	2003.4	1988.3	1975.3	1940.7
30°	2232.3	2133.0	2062.8	2026.1	2003.4	1988.3	1961.3	1939.7	1913.7	1866.2	1846.8
32.5°	2151.3	2053.1	1986.1	1965.6	1937.5	1924.5	1894.3	1846.8	1806.8	1787.4	1786.3
35°	2046.6	1965.6	1917.0	1898.6	1875.9	1854.3	1791.7	1748.5	1729.1	1731.2	1747.4
37.5°	1959.1	1886.7	1855.4	1829.5	1803.6	1748.5	1695.6	1675.1	1680.5	1691.3	1698.8
40°	1870.5	1815.5	1779.8	1759.3	1701.0	1647.0	1618.9	1626.5	1636.2	1643.8	1653.5
42.5°	1784.2	1745.3	1709.6	1669.7	1589.8	1560.6	1567.1	1576.8	1585.4	1596.2	1606.0
45°	1702.1	1667.5	1626.5	1535.8	1495.8	1503.4	1513.1	1520.6	1533.6	1541.2	1550.9
47.5°	1624.3	1587.6	1515.2	1435.3	1431.0	1446.1	1454.8	1464.5	1474.2	1454.8	802.4
50°	1536.8	1499.0	1388.9	1358.6	1368.4	1382.4	1393.2	1402.9	1249.6	496.8	382.3
52.5°	1450.4	1354.3	1284.1	1292.8	1302.5	1318.7	1326.2	985.0	392.0	373.7	374.8
55°	1354.3	1231.2	1210.7	1221.5	1230.1	1246.3	826.2	361.8	359.6	358.6	367.2
57.5°	1203.1	1128.6	1137.2	1148.0	1156.7	816.5	352.1	349.9	351.0	352.1	353.2
60°	1068.1	1051.9	1061.6	1071.4	758.2	340.2	333.7	334.8	339.1	335.9	327.2
62.5°	961.2	974.2	983.9	861.8	322.9	319.7	322.9	319.7	312.1	306.7	295.9
65°	879.1	892.1	899.6	303.5	302.4	306.7	303.5	292.7	280.8	265.7	262.4
67.5°	792.7	805.7	288.4	280.8	285.1	279.7	266.8	253.8	245.2	232.2	226.8
70°	703.1	301.3	261.4	260.3	252.7	244.1	230.0	217.1	206.3	200.9	195.5
72.5°	507.6	238.7	235.4	226.8	213.8	202.0	190.1	182.5	177.1	173.9	170.6
75°	211.7	207.4	197.6	182.5	169.6	164.2	155.5	150.1	148.0	141.5	139.3
77.5°	177.1	168.5	154.4	143.6	136.1	132.8	126.4	119.9	116.6	115.6	111.2
80°	136.1	124.2	117.7	112.3	110.2	102.6	95.0	91.8	89.6	88.6	85.3
82.5°	92.9	88.6	84.2	76.7	76.7	73.4	70.2	68.0	65.9	65.9	63.7
85°	60.5	57.2	56.2	52.9	52.9	50.8	49.7	48.6	47.5	46.4	45.4
87.5°	34.6	34.6	35.6	34.6	34.6	33.5	32.4	31.3	30.2	30.2	28.1
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2360.9	2371.7	2373.8	2410.5	2431.1	2430.0	2423.5	2442.9	2431.1	2424.6	2431.1
5°	2486.1	2499.1	2509.9	2549.9	2563.9	2570.4	2569.3	2580.1	2571.5	2563.9	2563.9
7.5°	2547.7	2552.0	2556.3	2546.6	2540.1	2529.3	2513.1	2489.4	2477.5	2464.5	2448.3
10°	2446.2	2432.1	2437.5	2418.1	2401.9	2390.0	2374.9	2355.5	2339.3	2327.4	2309.0
12.5°	2322.0	2320.9	2323.1	2326.3	2310.1	2300.4	2288.5	2274.5	2262.6	2249.6	2234.5
15°	2246.4	2247.5	2256.1	2252.9	2247.5	2242.1	2229.1	2224.8	2214.0	2199.9	2191.3
17.5°	2192.4	2197.8	2206.4	2202.1	2193.5	2188.1	2178.3	2168.6	2158.9	2148.1	2135.1
20°	2144.9	2150.3	2155.7	2150.3	2134.1	2126.5	2113.5	2083.3	2061.7	2040.1	2020.7
22.5°	2093.0	2096.3	2091.9	2074.7	2033.6	2014.2	1999.1	1990.4	1972.1	1960.2	1948.3
25°	2028.2	2009.9	1981.8	1962.3	1946.1	1937.5	1931.0	1929.9	1927.8	1925.6	1920.2
27.5°	1922.4	1915.9	1900.8	1893.2	1894.3	1897.5	1898.6	1901.9	1898.6	1894.3	1890.0
30°	1843.5	1846.8	1847.9	1850.0	1855.4	1858.7	1859.7	1864.1	1861.9	1858.7	1856.5
32.5°	1793.9	1801.4	1805.8	1812.2	1815.5	1820.9	1820.9	1827.4	1820.9	1819.8	1817.6
35°	1752.8	1759.3	1761.5	1771.2	1774.4	1779.8	1779.8	1785.2	1779.8	1724.8	1361.9
37.5°	1711.8	1718.3	1722.6	1731.2	1732.3	1735.6	1601.6	1171.8	756.0	585.4	447.1
40°	1663.2	1670.8	1675.1	1678.3	1179.4	748.4	515.2	419.0	419.0	422.3	425.5
42.5°	1611.4	1616.8	1126.4	655.6	408.2	407.2	410.4	413.6	416.9	421.2	425.5
45°	1266.8	639.4	406.1	396.4	399.6	403.9	408.2	412.6	418.0	422.3	424.4
47.5°	415.8	389.9	395.3	391.0	396.4	401.8	406.1	410.4	411.5	412.6	411.5
50°	384.5	384.5	387.7	387.7	392.0	394.2	394.2	394.2	389.9	388.8	385.6
52.5°	371.5	380.2	375.8	378.0	375.8	372.6	369.4	366.1	359.6	357.5	353.2
55°	365.0	368.3	357.5	354.2	349.9	341.3	337.0	332.6	327.2	325.1	319.7
57.5°	349.9	342.4	330.5	325.1	317.5	308.9	304.6	301.3	295.9	293.8	290.5
60°	321.8	306.7	299.2	292.7	284.0	276.5	273.2	271.1	266.8	265.7	262.4
62.5°	287.3	274.3	267.8	259.2	252.7	248.4	245.2	244.1	239.8	239.8	237.6
65°	249.5	243.0	237.6	229.0	225.7	221.4	220.3	219.2	217.1	216.0	213.8
67.5°	219.2	214.9	207.4	203.0	200.9	197.6	195.5	193.3	189.0	186.8	183.6
70°	192.2	189.0	181.4	178.2	173.9	168.5	165.2	163.1	159.8	157.7	154.4
72.5°	166.3	156.6	151.2	148.0	144.7	139.3	138.2	136.1	132.8	131.8	128.5
75°	133.9	126.4	123.1	121.0	117.7	114.5	114.5	114.5	111.2	110.2	109.1
77.5°	106.9	102.6	100.4	98.3	97.2	95.0	91.8	90.7	87.5	87.5	86.4
80°	82.1	79.9	77.8	76.7	75.6	73.4	71.3	70.2	67.0	67.0	65.9
82.5°	60.5	59.4	58.3	57.2	56.2	55.1	51.8	50.8	48.6	48.6	47.5
85°	43.2	42.1	40.0	38.9	38.9	37.8	34.6	33.5	31.3	31.3	31.3
87.5°	27.0	25.9	24.8	23.8	22.7	21.6	19.4	18.4	18.4	16.2	15.1
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2418.1	2436.5	2434.3	2447.3	2450.5	2457.0	2459.1	2460.2	2444.0	2457.0	2458.1
5°	2560.7	2563.9	2566.1	2571.5	2576.9	2577.9	2572.5	2566.1	2568.2	2563.9	2553.1
7.5°	2446.2	2430.0	2426.7	2422.4	2420.3	2418.1	2408.4	2417.0	2407.3	2403.0	2387.9
10°	2305.8	2290.7	2289.6	2289.6	2292.8	2291.7	2289.6	2285.3	2293.9	2288.5	2285.3
12.5°	2232.3	2226.9	2230.2	2228.0	2236.7	2238.8	2236.7	2236.7	2234.5	2230.2	2232.3
15°	2188.1	2183.7	2187.0	2183.7	2190.2	2191.3	2185.9	2189.1	2183.7	2178.3	2176.2
17.5°	2129.7	2120.0	2112.5	2101.7	2102.7	2100.6	2094.1	2094.1	2088.7	2074.7	2075.7
20°	2017.4	2007.7	2003.4	2003.4	2008.8	2010.9	2009.9	2012.0	2006.6	2004.5	1995.8
22.5°	1947.2	1946.1	1948.3	1953.7	1962.3	1974.2	1975.3	1975.3	1975.3	1974.2	1963.4
25°	1922.4	1922.4	1924.5	1932.1	1938.6	1947.2	1949.4	1951.5	1949.4	1949.4	1939.7
27.5°	1894.3	1892.1	1896.5	1904.0	1911.6	1918.1	1923.5	1924.5	1921.3	1921.3	1924.5
30°	1859.7	1858.7	1864.1	1871.6	1878.1	1884.6	1890.0	1894.3	1890.0	1890.0	1886.7
32.5°	1824.1	1824.1	1826.3	1780.9	1651.3	1487.2	1490.4	1395.4	1329.5	1246.3	1356.5
35°	1138.3	828.4	711.7	602.6	526.0	476.3	475.2	459.0	451.4	446.0	445.0
37.5°	429.8	432.0	436.3	438.5	441.7	443.9	445.0	445.0	445.0	445.0	443.9
40°	428.8	433.1	436.3	439.6	442.8	445.0	445.0	446.0	447.1	447.1	447.1
42.5°	429.8	434.2	438.5	441.7	443.9	445.0	446.0	447.1	447.1	447.1	447.1
45°	428.8	430.9	430.9	432.0	432.0	432.0	433.1	433.1	432.0	430.9	433.1
47.5°	412.6	412.6	409.3	408.2	407.2	405.0	406.1	405.0	403.9	402.8	405.0
50°	384.5	380.2	378.0	375.8	374.8	372.6	373.7	372.6	371.5	369.4	372.6
52.5°	351.0	349.9	345.6	343.4	342.4	343.4	341.3	340.2	339.1	338.0	339.1
55°	318.6	314.3	313.2	311.0	310.0	311.0	310.0	308.9	307.8	306.7	307.8
57.5°	289.4	286.2	285.1	283.0	283.0	283.0	283.0	281.9	280.8	279.7	280.8
60°	261.4	259.2	258.1	258.1	257.0	257.0	257.0	256.0	254.9	254.9	256.0
62.5°	237.6	237.6	234.4	233.3	233.3	234.4	233.3	232.2	231.1	230.0	232.2
65°	212.8	208.4	207.4	205.2	203.0	204.1	203.0	202.0	200.9	199.8	202.0
67.5°	182.5	181.4	177.1	175.0	173.9	175.0	173.9	172.8	171.7	170.6	172.8
70°	153.4	153.4	149.0	148.0	146.9	146.9	145.8	145.8	144.7	143.6	145.8
72.5°	127.4	127.4	126.4	124.2	123.1	122.0	121.0	119.9	119.9	121.0	121.0
75°	105.8	103.7	99.4	100.4	99.4	98.3	98.3	97.2	96.1	98.3	97.2
77.5°	83.2	82.1	78.8	79.9	78.8	77.8	77.8	76.7	75.6	76.7	76.7
80°	62.6	62.6	61.6	60.5	60.5	59.4	58.3	58.3	57.2	58.3	58.3
82.5°	45.4	45.4	44.3	43.2	42.1	42.1	41.0	41.0	41.0	41.0	41.0
85°	29.2	28.1	28.1	25.9	25.9	25.9	24.8	24.8	24.8	24.8	24.8
87.5°	14.0	14.0	13.0	13.0	11.9	10.8	10.8	9.7	9.7	10.8	10.8
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: P1213472

CATALOG NUMBER: 4SNLED-LD5-56HL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2438.6	2452.7	2440.8	2446.2	2447.3	2465.6	2464.5	2468.9	2461.3	2452.7	2440.8
5°	2562.8	2556.3	2547.7	2568.2	2557.4	2570.4	2574.7	2583.3	2583.3	2582.3	2572.5
7.5°	2404.1	2390.0	2400.8	2408.4	2411.6	2403.0	2420.3	2439.7	2455.9	2465.6	2466.7
10°	2279.9	2284.2	2283.1	2286.3	2293.9	2292.8	2303.6	2314.4	2318.7	2325.2	2327.4
12.5°	2221.5	2220.5	2222.6	2230.2	2234.5	2233.4	2244.2	2250.7	2252.9	2253.9	2252.9
15°	2175.1	2167.5	2172.9	2174.0	2177.3	2177.3	2190.2	2199.9	2204.3	2206.4	2204.3
17.5°	2087.6	2069.3	2086.5	2086.5	2098.4	2096.3	2116.8	2133.0	2141.6	2148.1	2148.1
20°	2001.2	1992.6	1999.1	1996.9	2005.5	2004.5	2017.4	2028.2	2035.8	2041.2	2047.7
22.5°	1966.7	1968.8	1959.1	1960.2	1960.2	1959.1	1965.6	1971.0	1973.1	1976.4	1974.2
25°	1944.0	1946.1	1942.9	1937.5	1935.3	1937.5	1940.7	1947.2	1948.3	1946.1	1938.6
27.5°	1921.3	1914.8	1920.2	1910.5	1908.3	1912.7	1917.0	1918.1	1919.1	1919.1	1912.7
30°	1886.7	1881.3	1886.7	1882.4	1878.1	1882.4	1885.7	1885.7	1887.8	1888.9	1881.3
32.5°	1318.7	1329.5	1504.4	1610.3	1759.3	1834.9	1848.9	1848.9	1851.1	1851.1	1844.6
35°	449.3	450.4	487.1	528.1	615.6	723.6	865.1	938.5	1186.9	1483.9	1771.2
37.5°	443.9	442.8	441.7	440.6	439.6	438.5	436.3	435.2	441.7	523.8	710.6
40°	446.0	445.0	442.8	441.7	440.6	438.5	437.4	435.2	433.1	430.9	428.8
42.5°	446.0	445.0	443.9	442.8	441.7	440.6	438.5	436.3	434.2	430.9	427.7
45°	430.9	430.9	432.0	432.0	433.1	433.1	433.1	432.0	432.0	430.9	426.6
47.5°	402.8	402.8	406.1	406.1	408.2	410.4	410.4	412.6	415.8	418.0	419.0
50°	370.4	370.4	373.7	374.8	376.9	380.2	383.4	384.5	387.7	392.0	396.4
52.5°	338.0	338.0	341.3	341.3	343.4	346.7	349.9	351.0	355.3	359.6	365.0
55°	307.8	307.8	310.0	311.0	312.1	314.3	317.5	317.5	321.8	325.1	330.5
57.5°	280.8	283.0	283.0	283.0	284.0	286.2	288.4	288.4	291.6	294.8	299.2
60°	254.9	257.0	257.0	257.0	258.1	259.2	261.4	261.4	263.5	265.7	270.0
62.5°	231.1	233.3	233.3	234.4	234.4	235.4	237.6	236.5	238.7	239.8	243.0
65°	200.9	203.0	204.1	205.2	206.3	208.4	211.7	210.6	213.8	216.0	219.2
67.5°	171.7	173.9	173.9	175.0	176.0	178.2	180.4	180.4	183.6	185.8	190.1
70°	144.7	146.9	146.9	148.0	149.0	151.2	153.4	152.3	155.5	157.7	160.9
72.5°	119.9	122.0	122.0	123.1	123.1	125.3	127.4	129.6	129.6	131.8	133.9
75°	97.2	98.3	99.4	99.4	100.4	101.5	103.7	105.8	106.9	108.0	110.2
77.5°	76.7	77.8	78.8	78.8	79.9	81.0	82.1	86.4	88.6	89.6	89.6
80°	58.3	59.4	59.4	59.4	60.5	61.6	63.7	63.7	68.0	68.0	69.1
82.5°	41.0	42.1	42.1	42.1	43.2	45.4	46.4	47.5	49.7	50.8	50.8
85°	24.8	25.9	25.9	25.9	27.0	28.1	30.2	31.3	32.4	32.4	33.5
87.5°	9.7	10.8	11.9	11.9	13.0	14.0	15.1	16.2	17.3	17.3	18.4
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):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2427.8	2435.4	2427.8	2432.1	2437.5	2427.8	2405.1	2396.5	2393.3	2380.3	2371.7
5°	2562.8	2562.8	2559.6	2568.2	2567.1	2552.0	2528.3	2517.5	2506.7	2492.6	2481.8
7.5°	2466.7	2475.3	2480.7	2514.2	2535.8	2538.0	2553.1	2556.3	2560.7	2556.3	2549.9
10°	2328.5	2325.2	2340.3	2371.7	2390.0	2399.7	2428.9	2442.9	2454.8	2478.6	2503.4
12.5°	2250.7	2255.0	2261.5	2284.2	2301.5	2297.1	2309.0	2318.7	2332.8	2356.5	2392.2
15°	2198.9	2203.2	2209.7	2226.9	2237.7	2232.3	2238.8	2245.3	2255.0	2266.9	2288.5
17.5°	2142.7	2150.3	2157.8	2176.2	2185.9	2184.8	2190.2	2192.4	2195.6	2203.2	2218.3
20°	2055.2	2079.0	2094.1	2118.9	2133.0	2130.8	2140.5	2143.8	2148.1	2155.7	2162.1
22.5°	1975.3	1981.8	1989.3	2016.3	2040.1	2069.3	2075.7	2084.4	2095.2	2102.7	2109.2
25°	1929.9	1925.6	1928.9	1947.2	1960.2	1962.3	1972.1	2000.1	2029.3	2042.3	2057.4
27.5°	1902.9	1898.6	1897.5	1906.2	1908.3	1902.9	1900.8	1909.4	1931.0	1952.6	1998.0
30°	1873.8	1868.4	1864.1	1871.6	1874.9	1867.3	1853.3	1845.7	1858.7	1864.1	1882.4
32.5°	1839.2	1833.8	1831.7	1836.0	1838.1	1831.7	1816.6	1807.9	1805.8	1801.4	1805.8
35°	1800.4	1795.0	1791.7	1792.8	1797.1	1791.7	1778.8	1768.0	1762.6	1750.7	1742.0
37.5°	927.7	1314.4	1706.4	1747.4	1751.8	1750.7	1737.7	1725.8	1720.4	1706.4	1702.1
40°	424.4	474.1	711.7	929.9	1341.4	1704.2	1692.4	1680.5	1670.8	1666.4	1650.2
42.5°	423.4	424.4	425.5	420.1	520.6	886.7	1309.0	1634.0	1627.6	1616.8	1604.9
45°	423.4	418.0	422.3	415.8	418.0	416.9	519.5	838.1	1491.5	1558.4	1553.0
47.5°	419.0	415.8	420.1	414.7	408.2	411.5	407.2	412.6	643.7	1091.9	1495.8
50°	399.6	401.8	409.3	408.2	402.8	407.2	399.6	406.1	400.7	439.6	846.7
52.5°	370.4	374.8	382.3	388.8	391.0	396.4	394.2	396.4	392.0	393.1	394.2
55°	335.9	341.3	347.8	357.5	361.8	370.4	376.9	380.2	385.6	384.5	375.8
57.5°	303.5	308.9	314.3	324.0	333.7	338.0	349.9	356.4	370.4	367.2	365.0
60°	273.2	277.6	283.0	285.1	297.0	304.6	315.4	321.8	340.2	344.5	351.0
62.5°	246.2	248.4	252.7	256.0	263.5	271.1	276.5	287.3	297.0	311.0	320.8
65°	221.4	223.6	226.8	229.0	230.0	240.8	244.1	256.0	259.2	274.3	283.0
67.5°	193.3	197.6	202.0	204.1	206.3	212.8	214.9	220.3	227.9	234.4	245.2
70°	164.2	167.4	171.7	175.0	179.3	183.6	190.1	193.3	198.7	203.0	211.7
72.5°	137.2	140.4	142.6	145.8	149.0	152.3	157.7	165.2	169.6	177.1	179.3
75°	111.2	114.5	116.6	118.8	122.0	124.2	126.4	133.9	138.2	144.7	151.2
77.5°	91.8	91.8	94.0	100.4	99.4	99.4	101.5	105.8	109.1	113.4	119.9
80°	71.3	72.4	73.4	78.8	79.9	81.0	79.9	83.2	86.4	87.5	91.8
82.5°	52.9	54.0	54.0	57.2	60.5	60.5	60.5	61.6	64.8	65.9	68.0
85°	35.6	36.7	37.8	38.9	41.0	42.1	43.2	43.2	45.4	46.4	47.5
87.5°	19.4	21.6	22.7	23.8	24.8	25.9	27.0	28.1	29.2	30.2	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

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CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5	2356.5
2.5°	2368.4	2363.0	2359.8	2351.1	2349.0	2334.9	2337.1	2334.9	2334.9	2338.2	2349.0
5°	2469.9	2444.0	2437.5	2419.2	2404.1	2378.1	2361.9	2353.3	2340.3	2334.9	2342.5
7.5°	2539.1	2519.6	2503.4	2487.2	2465.6	2435.4	2412.7	2386.8	2365.2	2344.7	2339.3
10°	2527.2	2548.8	2548.8	2539.1	2518.5	2488.3	2461.3	2428.9	2391.1	2358.7	2339.3
12.5°	2426.7	2464.5	2494.8	2517.5	2538.0	2517.5	2490.5	2464.5	2422.4	2374.9	2339.3
15°	2316.6	2355.5	2393.3	2440.8	2490.5	2511.0	2509.9	2479.7	2441.9	2392.2	2342.5
17.5°	2238.8	2265.8	2286.3	2338.2	2398.7	2451.6	2487.2	2489.4	2452.7	2408.4	2343.6
20°	2180.5	2199.9	2217.2	2246.4	2299.3	2364.1	2430.0	2466.7	2460.2	2411.6	2346.8
22.5°	2127.6	2141.6	2155.7	2177.3	2219.4	2261.5	2338.2	2413.8	2446.2	2406.2	2343.6
25°	2074.7	2089.8	2100.6	2115.7	2149.2	2183.7	2237.7	2331.7	2404.1	2401.9	2337.1
27.5°	2012.0	2032.5	2045.5	2066.0	2088.7	2114.6	2151.3	2239.9	2343.6	2380.3	2319.8
30°	1936.4	1966.7	1986.1	2008.8	2028.2	2050.9	2080.1	2134.1	2262.6	2338.2	2301.5
32.5°	1827.4	1881.3	1924.5	1946.1	1967.7	1987.2	2013.1	2058.5	2163.2	2280.9	2280.9
35°	1749.6	1774.4	1813.3	1875.9	1902.9	1922.4	1946.1	1981.8	2048.7	2212.9	2247.5
37.5°	1689.1	1698.8	1718.3	1779.8	1830.6	1861.9	1885.7	1908.3	1974.2	2120.0	2204.3
40°	1643.8	1640.5	1638.4	1667.5	1739.9	1789.6	1816.6	1839.2	1890.0	2008.8	2147.0
42.5°	1590.8	1587.6	1576.8	1584.4	1620.0	1703.2	1744.2	1769.0	1811.2	1892.1	2084.4
45°	1535.8	1530.4	1526.0	1518.5	1531.4	1577.9	1662.1	1698.8	1722.6	1795.0	2005.5
47.5°	1479.6	1472.0	1466.6	1460.2	1452.6	1474.2	1554.1	1620.0	1661.0	1706.4	1910.5
50°	1399.7	1409.4	1402.9	1395.4	1388.9	1384.6	1418.0	1526.0	1576.8	1613.5	1795.0
52.5°	659.9	1283.0	1337.0	1329.5	1320.8	1313.3	1320.8	1402.9	1494.7	1523.9	1655.6
55°	375.8	571.3	1189.1	1257.1	1249.6	1238.8	1232.3	1260.4	1397.5	1436.4	1528.2
57.5°	361.8	362.9	524.9	1132.9	1175.0	1165.3	1157.8	1164.2	1280.9	1346.8	1417.0
60°	349.9	349.9	349.9	501.1	1083.2	1086.5	1076.8	1066.0	1116.7	1246.3	1304.6
62.5°	324.0	330.5	333.7	333.7	494.6	1003.3	993.6	990.4	992.5	1125.4	1192.3
65°	290.5	305.6	312.1	316.4	316.4	519.5	908.3	902.9	895.3	946.1	1078.9
67.5°	253.8	268.9	283.0	291.6	292.7	302.4	542.2	813.2	802.4	803.5	958.0
70°	216.0	229.0	244.1	257.0	268.9	274.3	283.0	675.0	710.6	695.5	820.8
72.5°	186.8	192.2	203.0	216.0	230.0	243.0	250.6	268.9	616.7	600.5	624.2
75°	155.5	159.8	167.4	176.0	186.8	202.0	214.9	227.9	327.2	503.3	500.0
77.5°	121.0	128.5	137.2	142.6	148.0	158.8	176.0	189.0	202.0	340.2	400.7
80°	92.9	98.3	102.6	108.0	114.5	122.0	128.5	143.6	158.8	170.6	306.7
82.5°	69.1	72.4	75.6	77.8	79.9	84.2	96.1	101.5	111.2	122.0	144.7
85°	48.6	50.8	52.9	54.0	55.1	56.2	60.5	61.6	71.3	73.4	87.5
87.5°	31.3	32.4	34.6	35.6	35.6	36.7	37.8	37.8	37.8	35.6	43.2
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: P1213472

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CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2356.5	2356.5
2.5°	2357.6	2374.9
5°	2354.4	2377.1
7.5°	2345.7	2367.3
10°	2332.8	2358.7
12.5°	2318.7	2343.6
15°	2306.9	2325.2
17.5°	2293.9	2304.7
20°	2276.6	2285.3
22.5°	2259.3	2255.0
25°	2239.9	2230.2
27.5°	2215.1	2196.7
30°	2192.4	2160.0
32.5°	2170.8	2117.9
35°	2141.6	2074.7
37.5°	2111.4	2030.4
40°	2075.7	1979.6
42.5°	2037.9	1928.9
45°	1990.4	1880.3
47.5°	1948.3	1822.0
50°	1890.0	1759.3
52.5°	1818.7	1701.0
55°	1734.5	1629.7
57.5°	1643.8	1555.2
60°	1546.6	1469.9
62.5°	1428.8	1381.3
65°	1290.6	1279.8
67.5°	1110.2	1167.5
70°	910.4	1039.0
72.5°	761.4	902.9
75°	624.2	750.6
77.5°	494.6	588.6
80°	308.9	430.9
82.5°	207.4	283.0
85°	125.3	135.0
87.5°	48.6	49.7
90°	0.0	0.0

(END OF REPORT)