

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P332993-940

Luminaire Tested: **SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332993-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6351.2 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

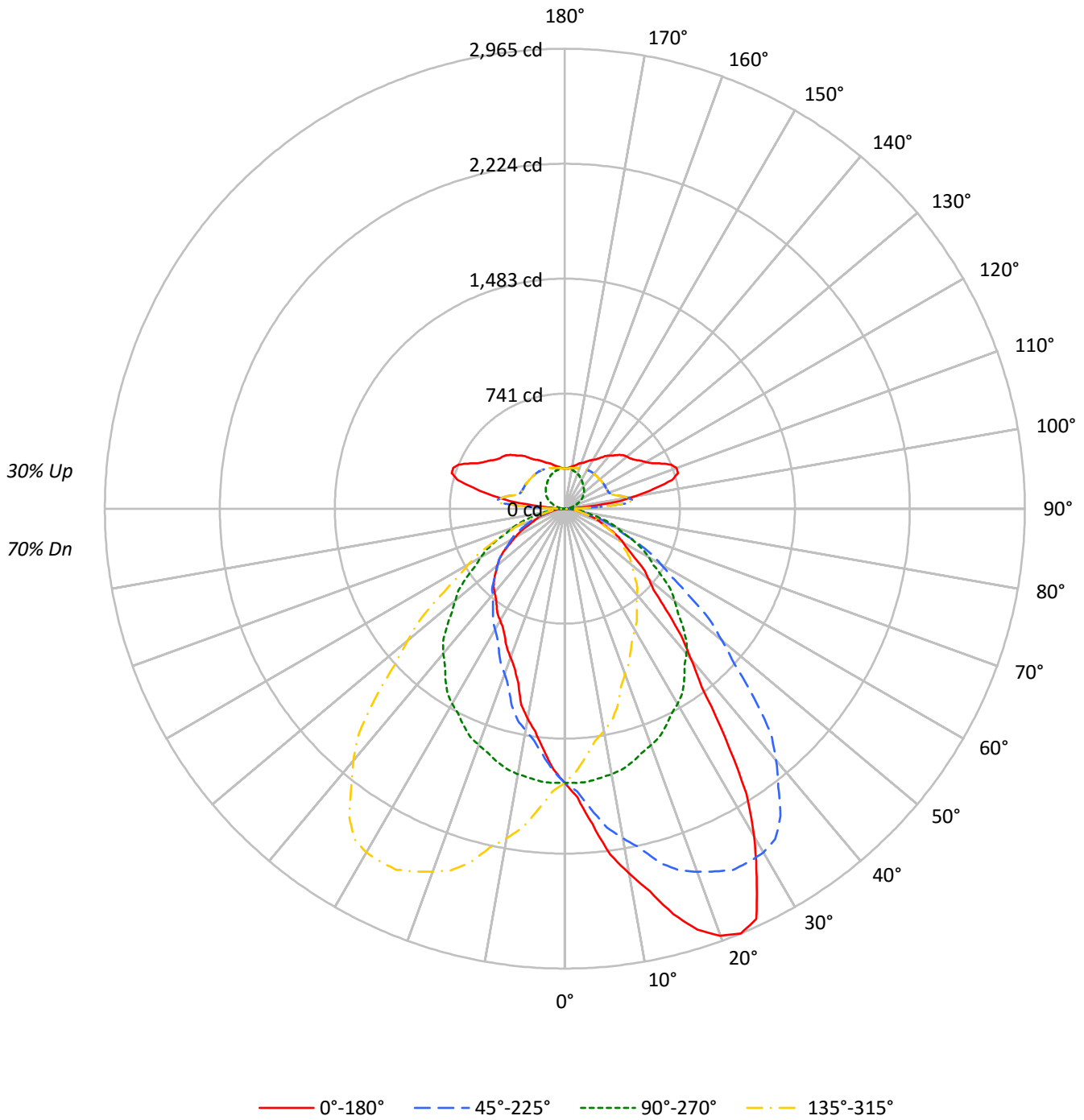
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70				
1	103	99	95	92	97	94	90	87	84	82	79	75	73	72	67	66	65	61				
2	94	87	81	76	89	83	77	73	74	70	67	67	64	61	60	58	55	52				
3	86	77	70	64	82	73	67	62	66	61	57	60	56	52	54	50	48	45				
4	79	69	61	55	75	65	58	53	59	54	49	54	49	45	48	45	42	39				
5	73	62	54	48	69	59	51	46	53	47	43	48	44	40	44	40	37	34				
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30				
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	37	32	29	27				
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24				
9	55	42	35	30	52	40	33	29	37	31	27	34	29	25	31	27	24	22				
10	51	39	32	27	48	37	31	26	34	29	25	32	27	23	29	25	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14266	14266	14266	14266
5°	16546	14309	12647	14309
10°	19575	14246	11287	14246
15°	22612	14114	9699	14114
20°	25175	13933	8771	13933
25°	25989	13755	8143	13755
30°	22750	13539	7764	13539
35°	17710	13219	7535	13219
40°	13281	12853	7413	12853
45°	10485	12265	7348	12265
50°	8852	11588	7135	11588
55°	7716	10842	6753	10842
60°	6943	10070	5977	10070
65°	6120	9234	5140	9234
70°	5511	8368	4638	8368
75°	4619	7417	3952	7417
80°	3905	6323	3705	6323
85°	3298	4946	3298	4946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.7
10°-20°	516.5	8.1
20°-30°	807.8	12.7
30°-40°	898.0	14.1
40°-50°	796.7	12.5
50°-60°	620.8	9.8
60°-70°	406.5	6.4
70°-80°	199.9	3.1
80°-90°	50.8	0.8
90°-100°	187.0	2.9
100°-110°	389.2	6.1
110°-120°	348.6	5.5
120°-130°	293.2	4.6
130°-140°	244.5	3.8
140°-150°	186.8	2.9
150°-160°	131.3	2.1
160°-170°	77.2	1.2
170°-180°	25.1	0.4
0°-30°	1495.5	23.5
0°-40°	2393.5	37.7
0°-60°	3811.0	60.0
0°-90°	4468.1	70.4
90°-120°	924.8	14.6
90°-150°	1649.4	26.0
90°-180°	1883.0	29.6
0°-180°	6351.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1767	1767	1767	1767	1767	
5°	2042	1766	1561	1766	2042	207
15°	2706	1689	1160	1689	2706	769
25°	2918	1544	914	1544	2918	1294
35°	1797	1341	765	1341	1797	1126
45°	918	1074	644	1074	918	727
55°	548	770	480	770	548	499
65°	320	483	269	483	320	322
75°	148	238	127	238	148	163
85°	36	53	36	53	36	40
90°	11	0	11	0	11	10
95°	124	17	124	17	124	193
105°	716	60	716	60	716	708
115°	687	105	687	105	687	682
125°	548	146	548	146	548	498
135°	490	173	490	173	490	379
145°	400	200	400	200	400	254
155°	335	227	335	227	335	156
165°	292	248	292	248	292	84
175°	264	258	264	258	264	26
180°	259	259	259	259	259	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1863.9	1869.0	1863.9	1863.3	1857.6	1855.9	1853.6	1846.2	1832.6	1824.6	1826.3
5°	2041.8	2059.7	2049.7	2048.3	2032.7	2017.0	2007.0	1984.2	1960.0	1943.7	1930.1
7.5°	2247.7	2258.0	2251.7	2241.8	2216.4	2202.1	2179.0	2148.9	2105.5	2072.3	2042.0
10°	2387.9	2396.4	2393.6	2375.1	2356.5	2318.8	2297.5	2255.5	2200.7	2157.2	2116.7
12.5°	2525.7	2534.9	2509.8	2510.6	2475.6	2445.9	2412.0	2359.1	2295.8	2239.8	2189.0
15°	2705.5	2694.0	2694.0	2679.8	2640.6	2599.3	2564.5	2508.9	2429.2	2362.2	2291.8
17.5°	2846.1	2850.1	2844.2	2810.7	2779.9	2737.2	2673.3	2608.4	2534.4	2444.5	2372.5
20°	2930.4	2930.4	2924.0	2901.2	2861.3	2815.8	2746.7	2676.2	2582.2	2491.8	2410.7
22.5°	2964.6	2966.8	2959.3	2940.5	2904.7	2860.2	2801.4	2729.8	2633.0	2531.1	2430.6
25°	2917.6	2931.1	2932.5	2927.6	2916.9	2889.8	2839.3	2765.9	2679.1	2568.8	2460.5
27.5°	2678.6	2695.7	2710.7	2735.3	2768.0	2785.2	2787.4	2750.1	2674.3	2568.1	2459.2
30°	2440.5	2454.8	2501.1	2561.6	2608.6	2651.3	2688.3	2698.3	2655.6	2560.2	2445.5
32.5°	2176.3	2195.7	2241.9	2307.0	2385.3	2457.6	2540.8	2583.2	2582.1	2524.9	2418.8
35°	1797.0	1811.2	1854.0	1922.3	2016.2	2123.8	2255.5	2358.0	2427.8	2422.8	2358.0
37.5°	1449.2	1465.3	1508.5	1565.1	1656.3	1789.4	1916.8	2058.1	2187.1	2259.6	2237.9
40°	1260.2	1260.9	1302.9	1361.3	1446.7	1562.7	1701.6	1858.1	2002.0	2119.5	2142.2
42.5°	1110.9	1111.1	1138.8	1201.8	1263.3	1372.5	1505.0	1660.5	1828.9	1964.5	2024.9
45°	918.4	924.8	947.6	985.3	1033.8	1126.3	1232.3	1376.9	1565.6	1726.4	1826.8
47.5°	777.8	787.1	801.6	832.4	871.0	932.6	1020.4	1150.2	1303.7	1480.7	1623.5
50°	704.8	706.2	724.8	741.8	775.3	824.5	901.3	1009.5	1150.5	1320.6	1479.4
52.5°	642.2	641.9	653.0	674.7	701.9	740.1	802.2	900.7	1025.7	1178.3	1342.2
55°	548.2	551.8	560.3	577.4	598.1	625.1	674.2	748.2	846.5	976.8	1125.6
57.5°	476.7	478.6	485.3	492.5	511.5	531.1	568.0	619.4	702.3	809.0	947.6
60°	430.0	430.7	432.8	443.5	458.5	477.0	501.9	545.4	615.1	712.7	822.3
62.5°	384.4	385.8	389.1	396.8	408.4	421.2	447.3	482.1	539.9	623.2	722.0
65°	320.4	321.1	326.1	329.0	338.1	349.6	368.8	392.3	432.1	501.9	576.7
67.5°	267.7	267.7	268.0	271.8	278.2	285.8	297.3	316.1	346.2	389.1	455.0
70°	233.5	233.5	235.0	237.1	240.7	247.0	253.4	267.7	289.8	324.7	375.2
72.5°	201.6	202.2	203.6	204.0	205.9	211.2	215.9	225.0	241.4	267.7	308.5
75°	148.1	150.3	153.8	156.7	160.2	159.4	164.4	170.1	175.1	190.8	214.3
77.5°	110.2	109.1	109.5	111.9	112.4	113.1	116.6	121.0	124.8	132.2	140.5
80°	84.0	84.0	86.1	86.9	86.1	86.9	90.4	92.6	94.0	96.8	104.7
82.5°	63.5	64.6	63.9	64.6	65.1	65.8	68.8	69.2	70.6	71.8	75.1
85°	35.6	36.3	37.0	35.6	35.6	35.6	37.0	37.7	39.1	38.4	39.9
87.5°	14.6	14.1	14.8	14.6	15.2	14.5	15.1	16.1	14.8	15.5	15.3
90°	10.7	10.7	11.1	10.7	10.2	10.2	9.6	9.2	8.6	9.2	8.1
92.5°	39.1	39.1	40.9	43.6	49.7	59.8	75.2	99.9	134.4	161.3	141.2
95°	124.1	130.7	139.9	155.7	180.6	229.9	298.1	376.9	426.2	414.6	312.8
97.5°	331.7	342.3	357.6	388.3	424.7	477.9	527.6	556.9	535.6	436.7	292.8
100°	466.5	470.6	485.8	516.8	561.1	598.7	623.7	613.5	539.2	408.9	265.6
102.5°	583.6	586.9	603.0	625.4	652.6	668.3	661.1	610.6	508.6	374.4	247.2
105°	715.7	718.7	725.9	730.0	729.0	708.1	657.7	569.7	453.3	333.7	231.5
107.5°	764.7	763.4	758.3	746.7	721.6	676.3	605.3	511.7	408.5	310.9	228.6
110°	765.5	761.0	751.8	730.5	694.4	638.4	564.6	476.6	386.1	303.2	229.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	741.5	734.1	721.3	695.4	654.4	598.5	528.8	451.0	373.4	299.5	231.8
115°	687.2	683.1	666.9	636.3	596.2	547.3	487.9	425.3	361.7	297.6	236.6
117.5°	632.2	629.0	612.5	586.9	552.6	511.2	464.4	412.6	356.4	297.0	241.5
120°	601.3	595.7	582.5	560.1	531.0	494.9	454.2	407.0	353.6	297.0	245.2
122.5°	576.8	571.2	560.1	540.9	516.4	484.7	447.7	402.1	350.3	296.7	248.9
125°	548.3	545.3	535.7	520.8	500.5	472.5	437.5	393.7	344.9	296.0	254.3
127.5°	531.6	528.6	520.5	507.4	486.9	460.4	425.3	383.5	337.7	294.9	258.7
130°	521.9	518.9	510.7	498.0	477.2	450.1	415.6	375.4	333.1	294.5	262.0
132.5°	511.0	507.8	500.2	485.8	465.3	438.4	404.6	366.8	329.1	294.1	264.8
135°	490.4	487.3	479.2	464.9	444.6	419.1	388.2	355.1	323.0	293.5	269.1
137.5°	464.9	461.3	454.6	440.5	421.5	398.5	372.4	344.4	317.7	293.4	271.6
140°	446.7	442.6	435.4	424.3	406.4	385.0	362.2	338.2	314.9	293.0	273.7
142.5°	427.0	424.3	417.9	407.5	391.8	373.3	353.7	332.6	312.5	293.0	275.3
145°	400.3	397.8	392.7	384.1	371.3	357.1	341.8	324.5	308.3	291.9	276.3
147.5°	376.7	375.7	371.8	364.4	355.1	343.8	331.6	317.9	304.5	290.2	276.7
150°	363.2	362.7	359.6	353.0	344.9	335.7	325.6	313.9	301.7	288.9	276.7
152.5°	351.0	350.4	348.7	343.2	336.4	328.8	319.4	309.3	298.4	286.9	275.9
155°	335.2	335.2	333.7	329.7	324.5	318.4	310.8	302.6	293.5	283.8	274.6
157.5°	321.4	321.4	320.5	317.4	313.5	308.6	302.3	295.4	288.6	280.7	273.4
160°	312.8	312.8	312.4	309.2	306.2	302.1	296.6	291.0	284.9	278.2	272.2
162.5°	304.7	305.1	304.6	301.6	299.3	295.6	291.2	286.5	281.6	275.8	270.9
165°	292.5	293.0	293.5	291.5	289.4	286.9	283.3	280.3	276.3	272.2	268.6
167.5°	282.9	283.2	283.3	282.0	281.0	279.5	276.6	274.3	271.3	268.5	266.2
170°	276.7	276.7	277.2	276.7	275.7	274.2	272.2	270.6	268.0	266.0	264.5
172.5°	270.6	271.4	272.0	271.4	270.8	269.7	268.5	267.3	265.2	263.6	262.9
175°	263.5	264.5	265.6	264.5	264.5	264.5	263.5	263.0	262.0	260.9	260.9
177.5°	259.3	260.1	260.9	260.6	260.9	260.6	260.6	260.1	259.8	259.3	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1820.6	1812.7	1808.7	1799.6	1788.7	1783.0	1777.9	1770.5	1760.8	1750.5	1743.1
5°	1913.0	1896.0	1874.6	1849.0	1826.1	1804.1	1784.8	1765.7	1743.6	1720.8	1698.0
7.5°	2007.9	1974.2	1938.0	1896.0	1855.0	1817.9	1783.7	1751.0	1714.0	1680.8	1650.6
10°	2073.9	2028.4	1977.8	1924.4	1871.0	1824.7	1779.1	1737.9	1692.3	1651.7	1617.6
12.5°	2127.4	2073.9	2013.1	1946.6	1882.4	1826.4	1774.1	1720.2	1668.4	1624.4	1578.9
15°	2216.3	2143.0	2061.1	1981.4	1898.1	1821.9	1751.4	1688.7	1629.7	1567.7	1524.3
17.5°	2277.4	2190.4	2090.9	1995.0	1896.7	1806.8	1725.5	1650.9	1582.7	1519.5	1467.8
20°	2313.8	2217.7	2107.4	1998.4	1888.1	1792.0	1704.4	1621.8	1551.3	1483.0	1429.6
22.5°	2334.3	2227.9	2107.4	1993.3	1879.0	1774.9	1678.7	1592.8	1516.0	1447.7	1388.6
25°	2340.9	2227.0	2103.8	1972.8	1847.5	1737.1	1637.4	1544.2	1458.7	1390.4	1327.8
27.5°	2331.8	2197.6	2071.5	1937.1	1807.8	1691.5	1586.8	1488.8	1403.3	1329.9	1265.7
30°	2318.1	2174.3	2039.0	1899.5	1768.4	1656.7	1546.3	1452.4	1363.4	1287.2	1222.4
32.5°	2288.5	2145.8	2000.3	1857.3	1724.7	1609.4	1504.8	1410.2	1322.9	1245.1	1176.3
35°	2229.8	2085.3	1927.3	1780.6	1650.3	1530.7	1432.4	1341.3	1258.0	1174.7	1102.1
37.5°	2152.5	2004.8	1847.6	1687.0	1556.6	1443.7	1353.5	1268.0	1186.7	1110.6	1030.2
40°	2079.6	1945.1	1782.7	1623.3	1489.4	1380.5	1297.2	1219.6	1137.7	1062.2	981.8
42.5°	1991.4	1876.7	1712.7	1552.6	1420.5	1315.5	1238.0	1162.1	1087.6	1014.4	930.5
45°	1844.0	1757.1	1603.3	1449.6	1316.4	1212.5	1141.3	1074.3	1008.8	939.1	860.1
47.5°	1675.1	1616.2	1483.5	1326.1	1202.9	1109.4	1040.6	985.9	930.5	860.8	791.4
50°	1557.7	1520.0	1391.9	1248.0	1130.6	1044.5	973.9	922.7	876.4	809.5	747.5
52.5°	1432.4	1412.4	1304.1	1166.6	1053.1	968.7	908.5	862.3	815.5	759.9	702.0
55°	1241.6	1252.3	1160.5	1041.6	934.8	863.6	808.8	770.3	730.5	683.5	638.6
57.5°	1046.6	1085.6	1024.0	919.5	819.5	753.7	712.4	680.0	646.6	607.6	569.3
60°	929.8	962.5	927.6	835.8	748.2	687.1	648.6	623.7	590.2	554.6	525.4
62.5°	815.9	851.0	830.3	756.1	674.8	622.1	588.2	565.0	540.1	509.1	478.8
65°	672.8	695.5	685.6	634.4	576.7	531.8	500.5	483.4	460.7	437.8	410.8
67.5°	515.3	559.3	553.5	526.3	476.4	441.4	420.9	405.8	385.0	368.1	349.7
70°	423.7	464.2	463.5	441.4	414.4	381.6	367.4	354.5	336.0	319.7	304.7
72.5°	346.7	383.9	389.4	372.5	354.0	329.2	315.6	306.7	288.7	277.5	265.4
75°	242.8	269.8	277.0	277.0	268.4	255.6	243.5	237.8	225.0	215.0	207.9
77.5°	159.2	176.3	187.3	189.9	191.3	187.0	177.0	173.0	163.2	159.6	152.8
80°	112.4	123.9	136.7	141.0	144.5	143.1	138.8	136.0	126.7	123.1	120.3
82.5°	77.8	84.0	94.5	104.0	102.9	106.6	102.9	100.7	93.7	92.4	89.5
85°	40.6	41.3	42.7	49.1	52.7	54.1	54.8	53.4	51.3	51.3	46.3
87.5°	15.1	14.5	15.1	15.1	15.5	17.7	19.1	19.4	17.9	16.6	15.0
90°	7.1	7.1	4.1	4.1	3.6	3.0	1.5	0.5	1.5	3.0	3.6
92.5°	102.7	63.3	37.5	26.8	19.4	13.2	8.5	5.8	8.5	13.2	19.4
95°	191.3	107.8	63.6	42.2	30.1	23.4	18.3	16.8	18.3	23.4	30.1
97.5°	171.9	103.1	69.0	51.1	40.6	34.5	30.1	30.1	30.1	34.5	40.6
100°	161.8	104.2	74.3	58.0	48.3	42.2	38.7	38.7	38.7	42.2	48.3
102.5°	158.9	108.3	81.1	65.7	56.4	50.7	47.6	46.8	47.6	50.7	56.4
105°	160.2	118.0	93.6	78.8	69.7	63.6	61.1	59.5	61.1	63.6	69.7
107.5°	167.7	129.3	106.9	92.4	83.6	77.1	74.5	73.6	74.5	77.1	83.6
110°	173.4	137.9	115.5	101.7	92.6	86.5	83.9	82.9	83.9	86.5	92.6



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	179.6	146.0	124.4	110.7	101.6	95.9	92.9	91.8	92.9	95.9	101.6
115°	189.2	158.7	138.4	124.7	114.9	109.9	106.3	104.8	106.3	109.9	114.9
117.5°	199.1	171.0	151.7	137.4	128.4	122.8	119.7	118.2	119.7	122.8	128.4
120°	206.0	179.6	160.2	146.0	137.3	131.7	128.2	127.2	128.2	131.7	137.3
122.5°	212.5	187.7	168.4	154.5	145.1	139.9	136.3	135.3	136.3	139.9	145.1
125°	222.3	198.9	180.6	166.3	156.7	151.1	148.0	146.0	148.0	151.1	156.7
127.5°	230.8	209.3	191.5	177.2	167.1	160.8	157.1	155.4	157.1	160.8	167.1
130°	236.0	216.2	198.9	184.1	174.5	166.8	162.7	160.8	162.7	166.8	174.5
132.5°	241.3	221.9	204.6	190.6	180.2	173.0	167.6	166.0	167.6	173.0	180.2
135°	248.3	229.9	213.1	199.9	189.2	180.6	175.5	173.4	175.5	180.6	189.2
137.5°	253.2	236.0	220.3	207.8	196.6	188.4	182.8	180.9	182.8	188.4	196.6
140°	256.4	240.1	224.8	212.6	202.0	193.3	187.7	186.2	187.7	193.3	202.0
142.5°	258.8	243.8	228.9	217.1	206.8	198.6	193.4	191.9	193.4	198.6	206.8
145°	261.4	247.7	234.5	223.3	213.7	206.5	201.4	199.9	201.4	206.5	213.7
147.5°	263.8	251.8	239.4	229.3	221.2	213.9	209.5	208.9	209.5	213.9	221.2
150°	265.0	253.9	242.6	233.0	225.3	219.3	215.2	214.6	215.2	219.3	225.3
152.5°	265.8	255.5	245.5	236.7	229.8	224.1	220.1	220.0	220.1	224.1	229.8
155°	266.5	257.9	249.2	241.7	236.0	231.0	227.9	227.4	227.9	231.0	236.0
157.5°	266.5	259.7	252.3	246.3	241.4	237.5	234.6	234.6	234.6	237.5	241.4
160°	266.5	260.5	254.3	248.7	244.7	241.1	239.1	239.1	239.1	241.1	244.7
162.5°	266.5	261.3	255.6	251.2	247.5	244.3	242.7	243.2	242.7	244.3	247.5
165°	265.6	261.4	256.9	253.9	251.3	248.7	247.7	247.7	247.7	248.7	251.3
167.5°	264.3	261.4	258.0	255.7	254.2	252.3	251.8	252.3	251.8	252.3	254.2
170°	263.5	260.9	258.4	256.9	255.8	254.3	253.9	254.3	253.9	254.3	255.8
172.5°	262.7	260.6	258.8	257.7	257.1	255.9	255.8	256.4	255.8	255.9	257.1
175°	261.4	259.9	259.0	259.0	258.4	257.9	257.9	258.4	257.9	257.9	258.4
177.5°	260.1	259.3	259.0	259.0	259.0	258.5	259.0	259.3	259.0	258.5	259.0
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1735.2	1729.5	1722.1	1713.5	1703.3	1694.2	1690.1	1693.6	1695.3	1690.8	1690.1
5°	1682.3	1664.6	1650.3	1629.0	1611.9	1597.6	1587.7	1583.4	1584.8	1573.4	1570.6
7.5°	1623.0	1601.9	1578.5	1553.2	1529.6	1508.6	1497.6	1491.7	1479.6	1474.4	1465.8
10°	1584.8	1556.3	1533.6	1503.6	1476.6	1451.7	1439.6	1429.6	1417.5	1411.8	1399.7
12.5°	1545.5	1512.4	1487.4	1456.3	1428.7	1398.7	1387.1	1368.7	1349.7	1337.7	1322.2
15°	1490.1	1450.3	1419.6	1382.6	1349.9	1315.7	1285.0	1250.9	1238.1	1211.0	1195.3
17.5°	1425.3	1384.9	1347.0	1297.4	1246.8	1204.3	1171.7	1139.0	1119.4	1102.1	1094.1
20°	1382.6	1345.6	1292.9	1235.2	1179.0	1132.0	1105.6	1084.3	1062.9	1050.9	1042.3
22.5°	1342.2	1294.9	1233.7	1171.4	1115.2	1078.4	1056.1	1034.2	1016.8	1005.3	993.9
25°	1274.4	1212.5	1147.6	1076.5	1038.0	1006.0	981.8	963.9	953.3	938.3	932.6
27.5°	1204.8	1129.7	1058.3	1010.4	970.4	941.0	920.0	906.6	893.0	883.5	876.1
30°	1151.2	1075.0	1010.9	965.4	924.8	900.6	883.5	867.9	857.2	849.4	843.6
32.5°	1098.2	1022.1	968.2	919.3	887.3	863.6	845.3	833.7	825.3	815.2	811.7
35°	1021.6	954.0	907.0	862.9	830.1	808.8	794.5	782.5	775.3	772.5	770.3
37.5°	948.1	892.6	842.1	805.9	776.8	759.9	743.2	737.2	732.3	727.2	729.5
40°	901.3	849.4	804.5	766.1	742.5	724.1	714.1	706.9	702.7	702.7	702.7
42.5°	860.9	810.0	766.3	731.9	708.4	692.8	681.6	675.6	674.2	673.7	677.1
45°	798.1	751.1	706.9	678.5	658.5	642.9	636.5	631.5	631.5	634.4	635.1
47.5°	735.8	691.9	656.4	624.6	606.3	596.5	590.9	588.4	588.6	591.5	594.8
50°	697.7	654.2	619.4	590.9	573.8	564.5	559.5	558.2	559.5	559.5	564.5
52.5°	656.1	617.2	582.9	559.0	539.7	531.0	528.2	526.3	527.1	529.4	531.5
55°	595.2	560.3	527.5	504.8	490.5	484.8	478.4	479.1	477.7	479.1	479.1
57.5°	534.1	502.7	472.3	454.2	441.7	433.5	426.4	428.5	426.3	426.1	424.9
60°	494.8	460.7	436.4	420.1	405.8	398.7	392.3	393.7	391.6	390.1	387.3
62.5°	452.1	423.7	400.6	384.8	373.4	365.1	358.6	357.2	352.3	347.4	341.2
65°	390.1	366.7	346.0	331.1	320.4	314.0	309.0	304.7	294.0	282.7	277.0
67.5°	329.9	313.0	293.7	281.1	272.4	264.0	254.5	247.2	237.2	231.0	227.4
70°	291.1	274.8	258.4	246.3	237.1	229.3	218.6	213.6	206.4	203.6	200.1
72.5°	254.1	238.9	223.7	212.8	202.9	196.8	188.4	183.4	180.3	179.1	175.6
75°	198.0	185.8	174.4	164.4	156.7	152.4	148.8	145.3	143.8	137.4	133.8
77.5°	144.4	136.4	129.3	122.2	116.6	113.8	106.9	102.8	100.4	97.4	96.7
80°	112.4	106.8	99.7	95.4	87.6	84.7	81.9	81.1	80.4	79.7	79.0
82.5°	84.6	78.9	71.8	69.2	67.1	65.4	63.7	63.0	62.2	62.7	62.5
85°	42.7	39.9	39.9	39.1	38.4	37.7	37.0	37.0	36.3	37.0	36.3
87.5°	15.1	14.4	15.1	13.9	14.7	14.9	14.3	14.4	15.1	14.0	14.0
90°	4.1	4.1	7.1	7.1	8.1	9.2	8.6	9.2	9.6	10.2	10.2
92.5°	26.8	37.5	63.3	102.7	141.2	161.3	134.4	99.9	75.2	59.8	49.7
95°	42.2	63.6	107.8	191.3	312.8	414.6	426.2	376.9	298.1	229.9	180.6
97.5°	51.1	69.0	103.1	171.9	292.8	436.7	535.6	556.9	527.6	477.9	424.7
100°	58.0	74.3	104.2	161.8	265.6	408.9	539.2	613.5	623.7	598.7	561.1
102.5°	65.7	81.1	108.3	158.9	247.2	374.4	508.6	610.6	661.1	668.3	652.6
105°	78.8	93.6	118.0	160.2	231.5	333.7	453.3	569.7	657.7	708.1	729.0
107.5°	92.4	106.9	129.3	167.7	228.6	310.9	408.5	511.7	605.3	676.3	721.6
110°	101.7	115.5	137.9	173.4	229.4	303.2	386.1	476.6	564.6	638.4	694.4



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	110.7	124.4	146.0	179.6	231.8	299.5	373.4	451.0	528.8	598.5	654.4
115°	124.7	138.4	158.7	189.2	236.6	297.6	361.7	425.3	487.9	547.3	596.2
117.5°	137.4	151.7	171.0	199.1	241.5	297.0	356.4	412.6	464.4	511.2	552.6
120°	146.0	160.2	179.6	206.0	245.2	297.0	353.6	407.0	454.2	494.9	531.0
122.5°	154.5	168.4	187.7	212.5	248.9	296.7	350.3	402.1	447.7	484.7	516.4
125°	166.3	180.6	198.9	222.3	254.3	296.0	344.9	393.7	437.5	472.5	500.5
127.5°	177.2	191.5	209.3	230.8	258.7	294.9	337.7	383.5	425.3	460.4	486.9
130°	184.1	198.9	216.2	236.0	262.0	294.5	333.1	375.4	415.6	450.1	477.2
132.5°	190.6	204.6	221.9	241.3	264.8	294.1	329.1	366.8	404.6	438.4	465.3
135°	199.9	213.1	229.9	248.3	269.1	293.5	323.0	355.1	388.2	419.1	444.6
137.5°	207.8	220.3	236.0	253.2	271.6	293.4	317.7	344.4	372.4	398.5	421.5
140°	212.6	224.8	240.1	256.4	273.7	293.0	314.9	338.2	362.2	385.0	406.4
142.5°	217.1	228.9	243.8	258.8	275.3	293.0	312.5	332.6	353.7	373.3	391.8
145°	223.3	234.5	247.7	261.4	276.3	291.9	308.3	324.5	341.8	357.1	371.3
147.5°	229.3	239.4	251.8	263.8	276.7	290.2	304.5	317.9	331.6	343.8	355.1
150°	233.0	242.6	253.9	265.0	276.7	288.9	301.7	313.9	325.6	335.7	344.9
152.5°	236.7	245.5	255.5	265.8	275.9	286.9	298.4	309.3	319.4	328.8	336.4
155°	241.7	249.2	257.9	266.5	274.6	283.8	293.5	302.6	310.8	318.4	324.5
157.5°	246.3	252.3	259.7	266.5	273.4	280.7	288.6	295.4	302.3	308.6	313.5
160°	248.7	254.3	260.5	266.5	272.2	278.2	284.9	291.0	296.6	302.1	306.2
162.5°	251.2	255.6	261.3	266.5	270.9	275.8	281.6	286.5	291.2	295.6	299.3
165°	253.9	256.9	261.4	265.6	268.6	272.2	276.3	280.3	283.3	286.9	289.4
167.5°	255.7	258.0	261.4	264.3	266.2	268.5	271.3	274.3	276.6	279.5	281.0
170°	256.9	258.4	260.9	263.5	264.5	266.0	268.0	270.6	272.2	274.2	275.7
172.5°	257.7	258.8	260.6	262.7	262.9	263.6	265.2	267.3	268.5	269.7	270.8
175°	259.0	259.0	259.9	261.4	260.9	260.9	262.0	263.0	263.5	264.5	264.5
177.5°	259.0	259.0	259.3	260.1	259.3	259.3	259.8	260.1	260.6	260.6	260.9
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1686.8	1687.9	1683.9	1682.7	1683.9	1687.9	1686.8	1690.1	1690.8	1695.3	1693.6
5°	1564.9	1563.4	1559.9	1560.6	1559.9	1563.4	1564.9	1570.6	1573.4	1584.8	1583.4
7.5°	1460.6	1455.1	1456.6	1451.0	1456.6	1455.1	1460.6	1465.8	1474.4	1479.6	1491.7
10°	1396.9	1389.0	1382.6	1376.9	1382.6	1389.0	1396.9	1399.7	1411.8	1417.5	1429.6
12.5°	1309.7	1303.0	1294.3	1296.0	1294.3	1303.0	1309.7	1322.2	1337.7	1349.7	1368.7
15°	1186.1	1175.5	1158.3	1160.5	1158.3	1175.5	1186.1	1195.3	1211.0	1238.1	1250.9
17.5°	1081.5	1081.6	1073.8	1075.6	1073.8	1081.6	1081.5	1094.1	1102.1	1119.4	1139.0
20°	1027.3	1022.3	1023.1	1020.9	1023.1	1022.3	1027.3	1042.3	1050.9	1062.9	1084.3
22.5°	989.7	983.6	978.7	974.2	978.7	983.6	989.7	993.9	1005.3	1016.8	1034.2
25°	926.2	921.9	915.6	914.2	915.6	921.9	926.2	932.6	938.3	953.3	963.9
27.5°	870.4	869.6	867.0	863.7	867.0	869.6	870.4	876.1	883.5	893.0	906.6
30°	837.9	836.5	835.1	832.9	835.1	836.5	837.9	843.6	849.4	857.2	867.9
32.5°	809.0	808.1	806.6	806.8	806.6	808.1	809.0	811.7	815.2	825.3	833.7
35°	767.5	766.8	765.4	764.6	765.4	766.8	767.5	770.3	772.5	775.3	782.5
37.5°	728.8	730.6	729.8	729.6	729.8	730.6	728.8	729.5	727.2	732.3	737.2
40°	702.0	702.7	704.1	703.4	704.1	702.7	702.0	702.7	702.7	702.7	706.9
42.5°	679.8	679.9	681.9	679.5	681.9	679.9	679.8	677.1	673.7	674.2	675.6
45°	640.1	644.4	643.6	643.6	643.6	644.4	640.1	635.1	634.4	631.5	631.5
47.5°	596.6	600.3	601.3	601.2	601.3	600.3	596.6	594.8	591.5	588.6	588.4
50°	568.1	566.7	568.8	568.1	568.8	566.7	568.1	564.5	559.5	559.5	558.2
52.5°	533.4	533.7	533.5	532.8	533.5	533.7	533.4	531.5	529.4	527.1	526.3
55°	479.8	480.5	479.1	479.8	479.1	480.5	479.8	479.1	479.1	477.7	479.1
57.5°	421.8	418.3	419.7	418.0	419.7	418.3	421.8	424.9	426.1	426.3	428.5
60°	380.2	374.5	373.1	370.2	373.1	374.5	380.2	387.3	390.1	391.6	393.7
62.5°	333.5	329.5	324.7	326.9	324.7	329.5	333.5	341.2	347.4	352.3	357.2
65°	271.3	268.4	266.3	269.1	266.3	268.4	271.3	277.0	282.7	294.0	304.7
67.5°	224.5	223.0	223.0	221.6	223.0	223.0	224.5	227.4	231.0	237.2	247.2
70°	200.1	198.0	198.0	196.5	198.0	198.0	200.1	200.1	203.6	206.4	213.6
72.5°	175.0	172.9	173.4	172.5	173.4	172.9	175.0	175.6	179.1	180.3	183.4
75°	129.6	126.0	126.0	126.7	126.0	126.0	129.6	133.8	137.4	143.8	145.3
77.5°	96.7	95.9	96.9	95.7	96.9	95.9	96.7	96.7	97.4	100.4	102.8
80°	79.0	78.3	77.6	79.7	77.6	78.3	79.0	79.0	79.7	80.4	81.1
82.5°	61.3	61.3	61.1	63.8	61.1	61.3	61.3	62.5	62.7	62.2	63.0
85°	37.0	35.6	37.0	35.6	37.0	35.6	37.0	36.3	37.0	36.3	37.0
87.5°	15.2	14.8	14.1	14.6	14.1	14.8	15.2	14.0	14.0	15.1	14.4
90°	10.7	11.1	10.7	10.7	10.7	11.1	10.7	10.2	10.2	9.6	9.2
92.5°	43.6	40.9	39.1	39.1	39.1	40.9	43.6	49.7	59.8	75.2	99.9
95°	155.7	139.9	130.7	124.1	130.7	139.9	155.7	180.6	229.9	298.1	376.9
97.5°	388.3	357.6	342.3	331.7	342.3	357.6	388.3	424.7	477.9	527.6	556.9
100°	516.8	485.8	470.6	466.5	470.6	485.8	516.8	561.1	598.7	623.7	613.5
102.5°	625.4	603.0	586.9	583.6	586.9	603.0	625.4	652.6	668.3	661.1	610.6
105°	730.0	725.9	718.7	715.7	718.7	725.9	730.0	729.0	708.1	657.7	569.7
107.5°	746.7	758.3	763.4	764.7	763.4	758.3	746.7	721.6	676.3	605.3	511.7
110°	730.5	751.8	761.0	765.5	761.0	751.8	730.5	694.4	638.4	564.6	476.6



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	695.4	721.3	734.1	741.5	734.1	721.3	695.4	654.4	598.5	528.8	451.0
115°	636.3	666.9	683.1	687.2	683.1	666.9	636.3	596.2	547.3	487.9	425.3
117.5°	586.9	612.5	629.0	632.2	629.0	612.5	586.9	552.6	511.2	464.4	412.6
120°	560.1	582.5	595.7	601.3	595.7	582.5	560.1	531.0	494.9	454.2	407.0
122.5°	540.9	560.1	571.2	576.8	571.2	560.1	540.9	516.4	484.7	447.7	402.1
125°	520.8	535.7	545.3	548.3	545.3	535.7	520.8	500.5	472.5	437.5	393.7
127.5°	507.4	520.5	528.6	531.6	528.6	520.5	507.4	486.9	460.4	425.3	383.5
130°	498.0	510.7	518.9	521.9	518.9	510.7	498.0	477.2	450.1	415.6	375.4
132.5°	485.8	500.2	507.8	511.0	507.8	500.2	485.8	465.3	438.4	404.6	366.8
135°	464.9	479.2	487.3	490.4	487.3	479.2	464.9	444.6	419.1	388.2	355.1
137.5°	440.5	454.6	461.3	464.9	461.3	454.6	440.5	421.5	398.5	372.4	344.4
140°	424.3	435.4	442.6	446.7	442.6	435.4	424.3	406.4	385.0	362.2	338.2
142.5°	407.5	417.9	424.3	427.0	424.3	417.9	407.5	391.8	373.3	353.7	332.6
145°	384.1	392.7	397.8	400.3	397.8	392.7	384.1	371.3	357.1	341.8	324.5
147.5°	364.4	371.8	375.7	376.7	375.7	371.8	364.4	355.1	343.8	331.6	317.9
150°	353.0	359.6	362.7	363.2	362.7	359.6	353.0	344.9	335.7	325.6	313.9
152.5°	343.2	348.7	350.4	351.0	350.4	348.7	343.2	336.4	328.8	319.4	309.3
155°	329.7	333.7	335.2	335.2	335.2	333.7	329.7	324.5	318.4	310.8	302.6
157.5°	317.4	320.5	321.4	321.4	321.4	320.5	317.4	313.5	308.6	302.3	295.4
160°	309.2	312.4	312.8	312.8	312.8	312.4	309.2	306.2	302.1	296.6	291.0
162.5°	301.6	304.6	305.1	304.7	305.1	304.6	301.6	299.3	295.6	291.2	286.5
165°	291.5	293.5	293.0	292.5	293.0	293.5	291.5	289.4	286.9	283.3	280.3
167.5°	282.0	283.3	283.2	282.9	283.2	283.3	282.0	281.0	279.5	276.6	274.3
170°	276.7	277.2	276.7	276.7	276.7	277.2	276.7	275.7	274.2	272.2	270.6
172.5°	271.4	272.0	271.4	270.6	271.4	272.0	271.4	270.8	269.7	268.5	267.3
175°	264.5	265.6	264.5	263.5	264.5	265.6	264.5	264.5	264.5	263.5	263.0
177.5°	260.6	260.9	260.1	259.3	260.1	260.9	260.6	260.9	260.6	260.6	260.1
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1690.1	1694.2	1703.3	1713.5	1722.1	1729.5	1735.2	1743.1	1750.5	1760.8	1770.5
5°	1587.7	1597.6	1611.9	1629.0	1650.3	1664.6	1682.3	1698.0	1720.8	1743.6	1765.7
7.5°	1497.6	1508.6	1529.6	1553.2	1578.5	1601.9	1623.0	1650.6	1680.8	1714.0	1751.0
10°	1439.6	1451.7	1476.6	1503.6	1533.6	1556.3	1584.8	1617.6	1651.7	1692.3	1737.9
12.5°	1387.1	1398.7	1428.7	1456.3	1487.4	1512.4	1545.5	1578.9	1624.4	1668.4	1720.2
15°	1285.0	1315.7	1349.9	1382.6	1419.6	1450.3	1490.1	1524.3	1567.7	1629.7	1688.7
17.5°	1171.7	1204.3	1246.8	1297.4	1347.0	1384.9	1425.3	1467.8	1519.5	1582.7	1650.9
20°	1105.6	1132.0	1179.0	1235.2	1292.9	1345.6	1382.6	1429.6	1483.0	1551.3	1621.8
22.5°	1056.1	1078.4	1115.2	1171.4	1233.7	1294.9	1342.2	1388.6	1447.7	1516.0	1592.8
25°	981.8	1006.0	1038.0	1076.5	1147.6	1212.5	1274.4	1327.8	1390.4	1458.7	1544.2
27.5°	920.0	941.0	970.4	1010.4	1058.3	1129.7	1204.8	1265.7	1329.9	1403.3	1488.8
30°	883.5	900.6	924.8	965.4	1010.9	1075.0	1151.2	1222.4	1287.2	1363.4	1452.4
32.5°	845.3	863.6	887.3	919.3	968.2	1022.1	1098.2	1176.3	1245.1	1322.9	1410.2
35°	794.5	808.8	830.1	862.9	907.0	954.0	1021.6	1102.1	1174.7	1258.0	1341.3
37.5°	743.2	759.9	776.8	805.9	842.1	892.6	948.1	1030.2	1110.6	1186.7	1268.0
40°	714.1	724.1	742.5	766.1	804.5	849.4	901.3	981.8	1062.2	1137.7	1219.6
42.5°	681.6	692.8	708.4	731.9	766.3	810.0	860.9	930.5	1014.4	1087.6	1162.1
45°	636.5	642.9	658.5	678.5	706.9	751.1	798.1	860.1	939.1	1008.8	1074.3
47.5°	590.9	596.5	606.3	624.6	656.4	691.9	735.8	791.4	860.8	930.5	985.9
50°	559.5	564.5	573.8	590.9	619.4	654.2	697.7	747.5	809.5	876.4	922.7
52.5°	528.2	531.0	539.7	559.0	582.9	617.2	656.1	702.0	759.9	815.5	862.3
55°	478.4	484.8	490.5	504.8	527.5	560.3	595.2	638.6	683.5	730.5	770.3
57.5°	426.4	433.5	441.7	454.2	472.3	502.7	534.1	569.3	607.6	646.6	680.0
60°	392.3	398.7	405.8	420.1	436.4	460.7	494.8	525.4	554.6	590.2	623.7
62.5°	358.6	365.1	373.4	384.8	400.6	423.7	452.1	478.8	509.1	540.1	565.0
65°	309.0	314.0	320.4	331.1	346.0	366.7	390.1	410.8	437.8	460.7	483.4
67.5°	254.5	264.0	272.4	281.1	293.7	313.0	329.9	349.7	368.1	385.0	405.8
70°	218.6	229.3	237.1	246.3	258.4	274.8	291.1	304.7	319.7	336.0	354.5
72.5°	188.4	196.8	202.9	212.8	223.7	238.9	254.1	265.4	277.5	288.7	306.7
75°	148.8	152.4	156.7	164.4	174.4	185.8	198.0	207.9	215.0	225.0	237.8
77.5°	106.9	113.8	116.6	122.2	129.3	136.4	144.4	152.8	159.6	163.2	173.0
80°	81.9	84.7	87.6	95.4	99.7	106.8	112.4	120.3	123.1	126.7	136.0
82.5°	63.7	65.4	67.1	69.2	71.8	78.9	84.6	89.5	92.4	93.7	100.7
85°	37.0	37.7	38.4	39.1	39.9	39.9	42.7	46.3	51.3	51.3	53.4
87.5°	14.3	14.9	14.7	13.9	15.1	14.4	15.1	15.0	16.6	17.9	19.4
90°	8.6	9.2	8.1	7.1	7.1	4.1	4.1	3.6	3.0	1.5	0.5
92.5°	134.4	161.3	141.2	102.7	63.3	37.5	26.8	19.4	13.2	8.5	5.8
95°	426.2	414.6	312.8	191.3	107.8	63.6	42.2	30.1	23.4	18.3	16.8
97.5°	535.6	436.7	292.8	171.9	103.1	69.0	51.1	40.6	34.5	30.1	30.1
100°	539.2	408.9	265.6	161.8	104.2	74.3	58.0	48.3	42.2	38.7	38.7
102.5°	508.6	374.4	247.2	158.9	108.3	81.1	65.7	56.4	50.7	47.6	46.8
105°	453.3	333.7	231.5	160.2	118.0	93.6	78.8	69.7	63.6	61.1	59.5
107.5°	408.5	310.9	228.6	167.7	129.3	106.9	92.4	83.6	77.1	74.5	73.6
110°	386.1	303.2	229.4	173.4	137.9	115.5	101.7	92.6	86.5	83.9	82.9



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	373.4	299.5	231.8	179.6	146.0	124.4	110.7	101.6	95.9	92.9	91.8
115°	361.7	297.6	236.6	189.2	158.7	138.4	124.7	114.9	109.9	106.3	104.8
117.5°	356.4	297.0	241.5	199.1	171.0	151.7	137.4	128.4	122.8	119.7	118.2
120°	353.6	297.0	245.2	206.0	179.6	160.2	146.0	137.3	131.7	128.2	127.2
122.5°	350.3	296.7	248.9	212.5	187.7	168.4	154.5	145.1	139.9	136.3	135.3
125°	344.9	296.0	254.3	222.3	198.9	180.6	166.3	156.7	151.1	148.0	146.0
127.5°	337.7	294.9	258.7	230.8	209.3	191.5	177.2	167.1	160.8	157.1	155.4
130°	333.1	294.5	262.0	236.0	216.2	198.9	184.1	174.5	166.8	162.7	160.8
132.5°	329.1	294.1	264.8	241.3	221.9	204.6	190.6	180.2	173.0	167.6	166.0
135°	323.0	293.5	269.1	248.3	229.9	213.1	199.9	189.2	180.6	175.5	173.4
137.5°	317.7	293.4	271.6	253.2	236.0	220.3	207.8	196.6	188.4	182.8	180.9
140°	314.9	293.0	273.7	256.4	240.1	224.8	212.6	202.0	193.3	187.7	186.2
142.5°	312.5	293.0	275.3	258.8	243.8	228.9	217.1	206.8	198.6	193.4	191.9
145°	308.3	291.9	276.3	261.4	247.7	234.5	223.3	213.7	206.5	201.4	199.9
147.5°	304.5	290.2	276.7	263.8	251.8	239.4	229.3	221.2	213.9	209.5	208.9
150°	301.7	288.9	276.7	265.0	253.9	242.6	233.0	225.3	219.3	215.2	214.6
152.5°	298.4	286.9	275.9	265.8	255.5	245.5	236.7	229.8	224.1	220.1	220.0
155°	293.5	283.8	274.6	266.5	257.9	249.2	241.7	236.0	231.0	227.9	227.4
157.5°	288.6	280.7	273.4	266.5	259.7	252.3	246.3	241.4	237.5	234.6	234.6
160°	284.9	278.2	272.2	266.5	260.5	254.3	248.7	244.7	241.1	239.1	239.1
162.5°	281.6	275.8	270.9	266.5	261.3	255.6	251.2	247.5	244.3	242.7	243.2
165°	276.3	272.2	268.6	265.6	261.4	256.9	253.9	251.3	248.7	247.7	247.7
167.5°	271.3	268.5	266.2	264.3	261.4	258.0	255.7	254.2	252.3	251.8	252.3
170°	268.0	266.0	264.5	263.5	260.9	258.4	256.9	255.8	254.3	253.9	254.3
172.5°	265.2	263.6	262.9	262.7	260.6	258.8	257.7	257.1	255.9	255.8	256.4
175°	262.0	260.9	260.9	261.4	259.9	259.0	259.0	258.4	257.9	257.9	258.4
177.5°	259.8	259.3	259.3	260.1	259.3	259.0	259.0	259.0	258.5	259.0	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



TEST NUMBER: P332993-940

CATALOG NUMBER: SA4XXRDIP-C1195D590U940-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1777.9	1783.0	1788.7	1799.6	1808.7	1812.7	1820.6	1826.3	1824.6	1832.6	1846.2
5°	1784.8	1804.1	1826.1	1849.0	1874.6	1896.0	1913.0	1930.1	1943.7	1960.0	1984.2
7.5°	1783.7	1817.9	1855.0	1896.0	1938.0	1974.2	2007.9	2042.0	2072.3	2105.5	2148.9
10°	1779.1	1824.7	1871.0	1924.4	1977.8	2028.4	2073.9	2116.7	2157.2	2200.7	2255.5
12.5°	1774.1	1826.4	1882.4	1946.6	2013.1	2073.9	2127.4	2189.0	2239.8	2295.8	2359.1
15°	1751.4	1821.9	1898.1	1981.4	2061.1	2143.0	2216.3	2291.8	2362.2	2429.2	2508.9
17.5°	1725.5	1806.8	1896.7	1995.0	2090.9	2190.4	2277.4	2372.5	2444.5	2534.4	2608.4
20°	1704.4	1792.0	1888.1	1998.4	2107.4	2217.7	2313.8	2410.7	2491.8	2582.2	2676.2
22.5°	1678.7	1774.9	1879.0	1993.3	2107.4	2227.9	2334.3	2430.6	2531.1	2633.0	2729.8
25°	1637.4	1737.1	1847.5	1972.8	2103.8	2227.0	2340.9	2460.5	2568.8	2679.1	2765.9
27.5°	1586.8	1691.5	1807.8	1937.1	2071.5	2197.6	2331.8	2459.2	2568.1	2674.3	2750.1
30°	1546.3	1656.7	1768.4	1899.5	2039.0	2174.3	2318.1	2445.5	2560.2	2655.6	2698.3
32.5°	1504.8	1609.4	1724.7	1857.3	2000.3	2145.8	2288.5	2418.8	2524.9	2582.1	2583.2
35°	1432.4	1530.7	1650.3	1780.6	1927.3	2085.3	2229.8	2358.0	2422.8	2427.8	2358.0
37.5°	1353.5	1443.7	1556.6	1687.0	1847.6	2004.8	2152.5	2237.9	2259.6	2187.1	2058.1
40°	1297.2	1380.5	1489.4	1623.3	1782.7	1945.1	2079.6	2142.2	2119.5	2002.0	1858.1
42.5°	1238.0	1315.5	1420.5	1552.6	1712.7	1876.7	1991.4	2024.9	1964.5	1828.9	1660.5
45°	1141.3	1212.5	1316.4	1449.6	1603.3	1757.1	1844.0	1826.8	1726.4	1565.6	1376.9
47.5°	1040.6	1109.4	1202.9	1326.1	1483.5	1616.2	1675.1	1623.5	1480.7	1303.7	1150.2
50°	973.9	1044.5	1130.6	1248.0	1391.9	1520.0	1557.7	1479.4	1320.6	1150.5	1009.5
52.5°	908.5	968.7	1053.1	1166.6	1304.1	1412.4	1432.4	1342.2	1178.3	1025.7	900.7
55°	808.8	863.6	934.8	1041.6	1160.5	1252.3	1241.6	1125.6	976.8	846.5	748.2
57.5°	712.4	753.7	819.5	919.5	1024.0	1085.6	1046.6	947.6	809.0	702.3	619.4
60°	648.6	687.1	748.2	835.8	927.6	962.5	929.8	822.3	712.7	615.1	545.4
62.5°	588.2	622.1	674.8	756.1	830.3	851.0	815.9	722.0	623.2	539.9	482.1
65°	500.5	531.8	576.7	634.4	685.6	695.5	672.8	576.7	501.9	432.1	392.3
67.5°	420.9	441.4	476.4	526.3	553.5	559.3	515.3	455.0	389.1	346.2	316.1
70°	367.4	381.6	414.4	441.4	463.5	464.2	423.7	375.2	324.7	289.8	267.7
72.5°	315.6	329.2	354.0	372.5	389.4	383.9	346.7	308.5	267.7	241.4	225.0
75°	243.5	255.6	268.4	277.0	277.0	269.8	242.8	214.3	190.8	175.1	170.1
77.5°	177.0	187.0	191.3	189.9	187.3	176.3	159.2	140.5	132.2	124.8	121.0
80°	138.8	143.1	144.5	141.0	136.7	123.9	112.4	104.7	96.8	94.0	92.6
82.5°	102.9	106.6	102.9	104.0	94.5	84.0	77.8	75.1	71.8	70.6	69.2
85°	54.8	54.1	52.7	49.1	42.7	41.3	40.6	39.9	38.4	39.1	37.7
87.5°	19.1	17.7	15.5	15.1	15.1	14.5	15.1	15.3	15.5	14.8	16.1
90°	1.5	3.0	3.6	4.1	4.1	7.1	7.1	8.1	9.2	8.6	9.2
92.5°	8.5	13.2	19.4	26.8	37.5	63.3	102.7	141.2	161.3	134.4	99.9
95°	18.3	23.4	30.1	42.2	63.6	107.8	191.3	312.8	414.6	426.2	376.9
97.5°	30.1	34.5	40.6	51.1	69.0	103.1	171.9	292.8	436.7	535.6	556.9
100°	38.7	42.2	48.3	58.0	74.3	104.2	161.8	265.6	408.9	539.2	613.5
102.5°	47.6	50.7	56.4	65.7	81.1	108.3	158.9	247.2	374.4	508.6	610.6
105°	61.1	63.6	69.7	78.8	93.6	118.0	160.2	231.5	333.7	453.3	569.7
107.5°	74.5	77.1	83.6	92.4	106.9	129.3	167.7	228.6	310.9	408.5	511.7
110°	83.9	86.5	92.6	101.7	115.5	137.9	173.4	229.4	303.2	386.1	476.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	92.9	95.9	101.6	110.7	124.4	146.0	179.6	231.8	299.5	373.4	451.0
115°	106.3	109.9	114.9	124.7	138.4	158.7	189.2	236.6	297.6	361.7	425.3
117.5°	119.7	122.8	128.4	137.4	151.7	171.0	199.1	241.5	297.0	356.4	412.6
120°	128.2	131.7	137.3	146.0	160.2	179.6	206.0	245.2	297.0	353.6	407.0
122.5°	136.3	139.9	145.1	154.5	168.4	187.7	212.5	248.9	296.7	350.3	402.1
125°	148.0	151.1	156.7	166.3	180.6	198.9	222.3	254.3	296.0	344.9	393.7
127.5°	157.1	160.8	167.1	177.2	191.5	209.3	230.8	258.7	294.9	337.7	383.5
130°	162.7	166.8	174.5	184.1	198.9	216.2	236.0	262.0	294.5	333.1	375.4
132.5°	167.6	173.0	180.2	190.6	204.6	221.9	241.3	264.8	294.1	329.1	366.8
135°	175.5	180.6	189.2	199.9	213.1	229.9	248.3	269.1	293.5	323.0	355.1
137.5°	182.8	188.4	196.6	207.8	220.3	236.0	253.2	271.6	293.4	317.7	344.4
140°	187.7	193.3	202.0	212.6	224.8	240.1	256.4	273.7	293.0	314.9	338.2
142.5°	193.4	198.6	206.8	217.1	228.9	243.8	258.8	275.3	293.0	312.5	332.6
145°	201.4	206.5	213.7	223.3	234.5	247.7	261.4	276.3	291.9	308.3	324.5
147.5°	209.5	213.9	221.2	229.3	239.4	251.8	263.8	276.7	290.2	304.5	317.9
150°	215.2	219.3	225.3	233.0	242.6	253.9	265.0	276.7	288.9	301.7	313.9
152.5°	220.1	224.1	229.8	236.7	245.5	255.5	265.8	275.9	286.9	298.4	309.3
155°	227.9	231.0	236.0	241.7	249.2	257.9	266.5	274.6	283.8	293.5	302.6
157.5°	234.6	237.5	241.4	246.3	252.3	259.7	266.5	273.4	280.7	288.6	295.4
160°	239.1	241.1	244.7	248.7	254.3	260.5	266.5	272.2	278.2	284.9	291.0
162.5°	242.7	244.3	247.5	251.2	255.6	261.3	266.5	270.9	275.8	281.6	286.5
165°	247.7	248.7	251.3	253.9	256.9	261.4	265.6	268.6	272.2	276.3	280.3
167.5°	251.8	252.3	254.2	255.7	258.0	261.4	264.3	266.2	268.5	271.3	274.3
170°	253.9	254.3	255.8	256.9	258.4	260.9	263.5	264.5	266.0	268.0	270.6
172.5°	255.8	255.9	257.1	257.7	258.8	260.6	262.7	262.9	263.6	265.2	267.3
175°	257.9	257.9	258.4	259.0	259.0	259.0	261.4	260.9	260.9	262.0	263.0
177.5°	259.0	258.5	259.0	259.0	259.0	259.3	260.1	259.3	259.3	259.8	260.1
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0	259.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1	1767.1
2.5°	1853.6	1855.9	1857.6	1863.3	1863.9	1869.0	1863.9
5°	2007.0	2017.0	2032.7	2048.3	2049.7	2059.7	2041.8
7.5°	2179.0	2202.1	2216.4	2241.8	2251.7	2258.0	2247.7
10°	2297.5	2318.8	2356.5	2375.1	2393.6	2396.4	2387.9
12.5°	2412.0	2445.9	2475.6	2510.6	2509.8	2534.9	2525.7
15°	2564.5	2599.3	2640.6	2679.8	2694.0	2694.0	2705.5
17.5°	2673.3	2737.2	2779.9	2810.7	2844.2	2850.1	2846.1
20°	2746.7	2815.8	2861.3	2901.2	2924.0	2930.4	2930.4
22.5°	2801.4	2860.2	2904.7	2940.5	2959.3	2966.8	2964.6
25°	2839.3	2889.8	2916.9	2927.6	2932.5	2931.1	2917.6
27.5°	2787.4	2785.2	2768.0	2735.3	2710.7	2695.7	2678.6
30°	2688.3	2651.3	2608.6	2561.6	2501.1	2454.8	2440.5
32.5°	2540.8	2457.6	2385.3	2307.0	2241.9	2195.7	2176.3
35°	2255.5	2123.8	2016.2	1922.3	1854.0	1811.2	1797.0
37.5°	1916.8	1789.4	1656.3	1565.1	1508.5	1465.3	1449.2
40°	1701.6	1562.7	1446.7	1361.3	1302.9	1260.9	1260.2
42.5°	1505.0	1372.5	1263.3	1201.8	1138.8	1111.1	1110.9
45°	1232.3	1126.3	1033.8	985.3	947.6	924.8	918.4
47.5°	1020.4	932.6	871.0	832.4	801.6	787.1	777.8
50°	901.3	824.5	775.3	741.8	724.8	706.2	704.8
52.5°	802.2	740.1	701.9	674.7	653.0	641.9	642.2
55°	674.2	625.1	598.1	577.4	560.3	551.8	548.2
57.5°	568.0	531.1	511.5	492.5	485.3	478.6	476.7
60°	501.9	477.0	458.5	443.5	432.8	430.7	430.0
62.5°	447.3	421.2	408.4	396.8	389.1	385.8	384.4
65°	368.8	349.6	338.1	329.0	326.1	321.1	320.4
67.5°	297.3	285.8	278.2	271.8	268.0	267.7	267.7
70°	253.4	247.0	240.7	237.1	235.0	233.5	233.5
72.5°	215.9	211.2	205.9	204.0	203.6	202.2	201.6
75°	164.4	159.4	160.2	156.7	153.8	150.3	148.1
77.5°	116.6	113.1	112.4	111.9	109.5	109.1	110.2
80°	90.4	86.9	86.1	86.9	86.1	84.0	84.0
82.5°	68.8	65.8	65.1	64.6	63.9	64.6	63.5
85°	37.0	35.6	35.6	35.6	37.0	36.3	35.6
87.5°	15.1	14.5	15.2	14.6	14.8	14.1	14.6
90°	9.6	10.2	10.2	10.7	11.1	10.7	10.7
92.5°	75.2	59.8	49.7	43.6	40.9	39.1	39.1
95°	298.1	229.9	180.6	155.7	139.9	130.7	124.1
97.5°	527.6	477.9	424.7	388.3	357.6	342.3	331.7
100°	623.7	598.7	561.1	516.8	485.8	470.6	466.5
102.5°	661.1	668.3	652.6	625.4	603.0	586.9	583.6
105°	657.7	708.1	729.0	730.0	725.9	718.7	715.7
107.5°	605.3	676.3	721.6	746.7	758.3	763.4	764.7
110°	564.6	638.4	694.4	730.5	751.8	761.0	765.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	528.8	598.5	654.4	695.4	721.3	734.1	741.5
115°	487.9	547.3	596.2	636.3	666.9	683.1	687.2
117.5°	464.4	511.2	552.6	586.9	612.5	629.0	632.2
120°	454.2	494.9	531.0	560.1	582.5	595.7	601.3
122.5°	447.7	484.7	516.4	540.9	560.1	571.2	576.8
125°	437.5	472.5	500.5	520.8	535.7	545.3	548.3
127.5°	425.3	460.4	486.9	507.4	520.5	528.6	531.6
130°	415.6	450.1	477.2	498.0	510.7	518.9	521.9
132.5°	404.6	438.4	465.3	485.8	500.2	507.8	511.0
135°	388.2	419.1	444.6	464.9	479.2	487.3	490.4
137.5°	372.4	398.5	421.5	440.5	454.6	461.3	464.9
140°	362.2	385.0	406.4	424.3	435.4	442.6	446.7
142.5°	353.7	373.3	391.8	407.5	417.9	424.3	427.0
145°	341.8	357.1	371.3	384.1	392.7	397.8	400.3
147.5°	331.6	343.8	355.1	364.4	371.8	375.7	376.7
150°	325.6	335.7	344.9	353.0	359.6	362.7	363.2
152.5°	319.4	328.8	336.4	343.2	348.7	350.4	351.0
155°	310.8	318.4	324.5	329.7	333.7	335.2	335.2
157.5°	302.3	308.6	313.5	317.4	320.5	321.4	321.4
160°	296.6	302.1	306.2	309.2	312.4	312.8	312.8
162.5°	291.2	295.6	299.3	301.6	304.6	305.1	304.7
165°	283.3	286.9	289.4	291.5	293.5	293.0	292.5
167.5°	276.6	279.5	281.0	282.0	283.3	283.2	282.9
170°	272.2	274.2	275.7	276.7	277.2	276.7	276.7
172.5°	268.5	269.7	270.8	271.4	272.0	271.4	270.6
175°	263.5	264.5	264.5	264.5	265.6	264.5	263.5
177.5°	260.6	260.6	260.9	260.6	260.9	260.1	259.3
180°	259.0	259.0	259.0	259.0	259.0	259.0	259.0

(END OF REPORT)