

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: P332998-830

Luminaire Tested: **SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332998-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7367.6 lumens
Efficiency: N/A
Efficacy: 121.4 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

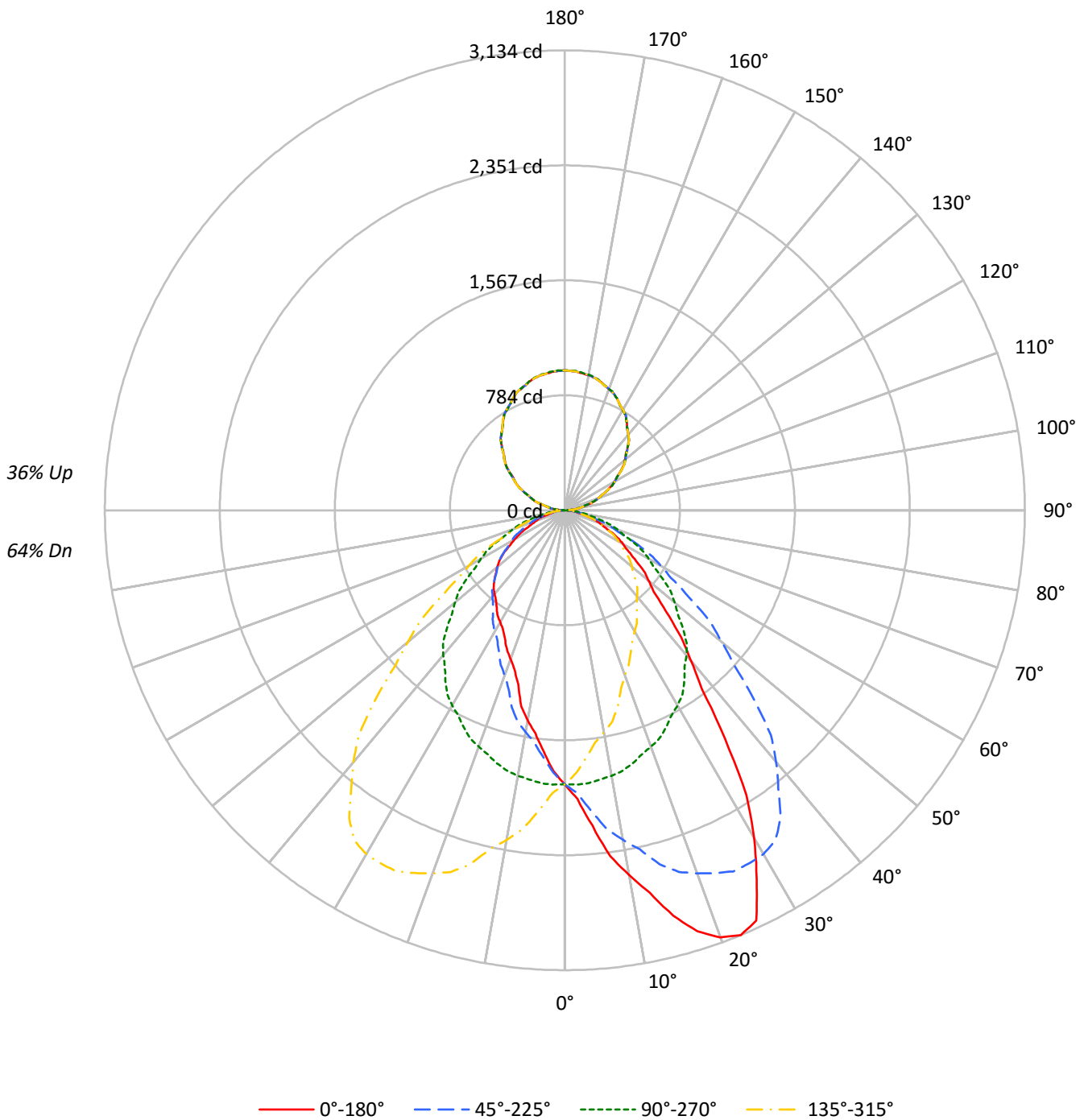
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	102	97	94	90	95	92	88	85	81	78	76	71	69	68	62	61	60	55				
2	93	86	80	75	87	81	76	71	72	68	64	63	60	57	55	53	51	47				
3	85	76	69	63	80	72	65	60	64	59	55	56	52	49	49	47	44	41				
4	78	68	60	54	73	64	57	51	57	51	47	51	46	43	45	41	38	35				
5	72	61	52	47	68	57	50	45	51	45	41	46	41	37	40	37	34	31				
6	67	55	46	41	62	52	44	39	46	40	36	41	37	33	37	33	30	27				
7	62	49	42	36	58	47	40	35	42	36	32	38	33	29	34	30	27	24				
8	57	45	37	32	54	43	36	31	39	33	29	35	30	26	31	27	24	22				
9	54	41	34	29	50	39	32	28	36	30	26	32	27	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	23	30	25	22	27	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15079	15079	15079	15079
5°	17490	15124	13367	15124
10°	20690	15058	11931	15058
15°	23901	14919	10252	14919
20°	26611	14728	9271	14728
25°	27470	14539	8607	14539
30°	24047	14311	8207	14311
35°	18719	13973	7965	13973
40°	14037	13585	7835	13585
45°	11082	12965	7767	12965
50°	9357	12248	7542	12248
55°	8156	11461	7139	11461
60°	7338	10643	6318	10643
65°	6470	9761	5435	9761
70°	5828	8847	4902	8847
75°	4885	7842	4177	7842
80°	4128	6681	3919	6681
85°	3483	5233	3483	5233



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.5
10°-20°	545.9	7.4
20°-30°	853.8	11.6
30°-40°	949.2	12.9
40°-50°	842.2	11.4
50°-60°	656.2	8.9
60°-70°	429.6	5.8
70°-80°	211.3	2.9
80°-90°	55.0	0.7
90°-100°	62.8	0.9
100°-110°	186.2	2.5
110°-120°	316.0	4.3
120°-130°	416.6	5.7
130°-140°	467.9	6.4
140°-150°	459.8	6.2
150°-160°	386.7	5.2
160°-170°	257.3	3.5
170°-180°	90.1	1.2
0°-30°	1580.7	21.5
0°-40°	2529.9	34.3
0°-60°	4028.3	54.7
0°-90°	4724.2	64.1
90°-120°	565.0	7.7
90°-150°	1909.3	25.9
90°-180°	2643.0	35.9
0°-180°	7367.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1868	1868	1868	1868	1868	
5°	2158	1866	1650	1866	2158	218
15°	2860	1785	1227	1785	2860	813
25°	3084	1632	966	1632	3084	1368
35°	1899	1418	808	1418	1899	1191
45°	971	1136	680	1136	971	769
55°	580	814	507	814	580	527
65°	339	511	284	511	339	341
75°	157	251	134	251	157	172
85°	38	56	38	56	38	43
90°	22	2	22	2	22	13
95°	58	44	58	44	58	61
105°	180	172	180	172	180	189
115°	318	321	318	321	318	315
125°	464	468	464	468	464	414
135°	604	604	604	604	604	467
145°	734	733	734	733	734	459
155°	839	840	839	840	839	386
165°	912	914	912	914	912	257
175°	947	951	947	951	947	90
180°	953	953	953	953	953	



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1970.1	1975.6	1970.1	1969.5	1963.5	1961.7	1959.3	1951.4	1937.0	1928.6	1930.4
5°	2158.2	2177.1	2166.5	2165.0	2148.5	2131.9	2121.4	2097.3	2071.7	2054.5	2040.1
7.5°	2375.9	2386.7	2380.1	2369.6	2342.8	2327.6	2303.2	2271.4	2225.5	2190.5	2158.4
10°	2524.0	2533.0	2530.1	2510.5	2490.9	2451.0	2428.5	2384.1	2326.1	2280.2	2237.3
12.5°	2669.7	2679.4	2652.9	2653.7	2616.7	2585.3	2549.5	2493.6	2426.7	2367.5	2313.8
15°	2859.7	2847.6	2847.6	2832.5	2791.2	2747.5	2710.7	2651.9	2567.7	2496.9	2422.4
17.5°	3008.3	3012.6	3006.3	2970.9	2938.4	2893.2	2825.6	2757.1	2678.9	2583.9	2507.7
20°	3097.5	3097.5	3090.7	3066.6	3024.4	2976.3	2903.3	2828.8	2729.4	2633.8	2548.1
22.5°	3133.6	3135.9	3128.0	3108.1	3070.2	3023.2	2961.1	2885.4	2783.0	2675.4	2569.2
25°	3083.9	3098.2	3099.6	3094.5	3083.2	3054.5	3001.1	2923.6	2831.8	2715.2	2600.8
27.5°	2831.3	2849.4	2865.2	2891.2	2925.8	2943.9	2946.3	2906.9	2826.8	2714.5	2599.4
30°	2579.6	2594.7	2643.6	2707.6	2757.3	2802.5	2841.6	2852.1	2807.0	2706.1	2584.9
32.5°	2300.4	2320.8	2369.7	2438.5	2521.3	2597.7	2685.7	2730.5	2729.3	2668.8	2556.6
35°	1899.4	1914.5	1959.6	2031.8	2131.2	2244.9	2384.1	2492.4	2566.2	2560.9	2492.4
37.5°	1531.8	1548.9	1594.5	1654.4	1750.7	1891.4	2026.1	2175.4	2311.8	2388.4	2365.5
40°	1332.0	1332.8	1377.1	1438.9	1529.2	1651.8	1798.6	1964.1	2116.1	2240.3	2264.4
42.5°	1174.2	1174.4	1203.7	1270.3	1335.3	1450.8	1590.8	1755.2	1933.2	2076.5	2140.3
45°	970.7	977.5	1001.6	1041.5	1092.7	1190.5	1302.6	1455.4	1654.8	1824.9	1931.0
47.5°	822.1	832.0	847.3	879.9	920.7	985.8	1078.6	1215.8	1378.0	1565.1	1716.1
50°	745.0	746.5	766.1	784.1	819.5	871.5	952.7	1067.1	1216.1	1395.9	1563.8
52.5°	678.8	678.4	690.2	713.1	741.9	782.3	847.9	952.1	1084.2	1245.5	1418.7
55°	579.5	583.2	592.2	610.3	632.2	660.7	712.7	790.9	894.8	1032.5	1189.8
57.5°	503.9	505.9	512.9	520.6	540.6	561.4	600.4	654.7	742.3	855.1	1001.6
60°	454.5	455.2	457.5	468.8	484.7	504.2	530.6	576.5	650.2	753.3	869.2
62.5°	406.3	407.7	411.2	419.4	431.7	445.2	472.8	509.6	570.7	658.7	763.2
65°	338.7	339.4	344.7	347.7	357.4	369.5	389.8	414.6	456.8	530.6	609.5
67.5°	283.0	283.0	283.2	287.3	294.1	302.1	314.2	334.1	365.9	411.2	480.9
70°	246.9	246.9	248.4	250.6	254.4	261.1	267.9	283.0	306.3	343.2	396.6
72.5°	213.1	213.7	215.2	215.7	217.6	223.2	228.2	237.8	255.1	283.0	326.1
75°	156.6	158.8	162.6	165.6	169.3	168.5	173.8	179.8	185.1	201.7	226.5
77.5°	116.5	115.3	115.7	118.3	118.8	119.5	123.3	127.9	131.9	139.7	148.5
80°	88.8	88.8	91.0	91.8	91.0	91.8	95.6	97.8	99.3	102.4	110.7
82.5°	67.1	68.3	67.6	68.3	68.8	69.6	72.7	73.1	74.6	75.9	79.4
85°	37.6	38.4	39.1	37.6	37.6	37.6	39.1	39.9	41.4	40.6	42.1
87.5°	17.6	17.0	17.5	17.4	18.0	17.2	17.7	18.7	17.2	17.7	17.4
90°	22.1	21.8	21.5	21.1	20.8	20.2	19.1	18.2	17.2	16.2	14.9
92.5°	32.7	32.5	32.3	32.1	32.0	31.6	30.9	30.3	29.8	29.2	28.3
95°	58.2	58.2	58.2	58.2	58.2	58.0	57.5	57.0	56.5	56.0	54.9
97.5°	91.2	91.2	91.2	91.2	91.2	91.0	90.3	89.7	89.2	88.6	87.2
100°	114.2	114.2	114.2	114.2	114.2	114.0	113.8	113.4	113.1	112.7	111.2
102.5°	140.2	140.1	139.9	139.8	139.6	139.3	138.8	138.5	138.0	137.5	136.2
105°	179.8	179.3	178.8	178.3	177.9	177.3	176.8	176.3	175.9	175.4	174.7
107.5°	218.4	218.5	218.5	218.5	218.6	218.3	217.8	217.4	217.0	216.5	216.4
110°	246.1	245.6	245.2	244.7	244.1	244.0	244.4	244.7	245.1	245.3	245.5



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	274.4	274.3	274.2	274.1	274.0	274.0	274.1	274.1	274.2	274.3	274.6
115°	318.3	318.5	318.7	318.9	319.0	319.1	319.3	319.4	319.6	319.8	320.1
117.5°	360.1	360.5	360.8	361.2	361.5	361.9	362.5	363.1	363.6	364.2	364.4
120°	392.0	391.7	391.3	391.1	390.7	391.0	391.7	392.6	393.4	394.3	394.7
122.5°	418.6	419.1	419.7	420.3	420.9	421.5	422.1	422.5	423.1	423.7	424.0
125°	464.2	464.6	464.9	465.2	465.5	465.9	466.2	466.6	466.8	467.2	467.3
127.5°	506.5	506.8	507.1	507.3	507.6	507.8	508.2	508.5	508.9	509.2	509.4
130°	534.2	534.9	535.6	536.2	536.9	537.3	537.6	538.0	538.3	538.7	538.7
132.5°	563.7	563.9	564.2	564.5	564.8	565.1	565.3	565.7	566.0	566.4	566.5
135°	604.3	604.7	605.2	605.7	606.1	606.6	606.9	607.3	607.6	607.9	607.9
137.5°	646.9	646.7	646.6	646.5	646.4	646.6	647.1	647.4	647.9	648.3	648.0
140°	672.8	672.9	673.1	673.3	673.4	673.5	673.7	673.9	674.1	674.2	674.2
142.5°	698.7	698.7	698.8	698.8	698.8	698.9	698.9	698.9	699.0	699.0	699.1
145°	734.0	734.4	734.9	735.4	735.8	736.2	736.4	736.5	736.7	736.9	736.7
147.5°	769.6	769.8	769.9	770.1	770.2	770.3	770.5	770.6	770.8	770.9	771.0
150°	791.4	791.5	791.7	791.9	792.0	792.1	792.1	792.1	792.1	792.1	792.1
152.5°	811.4	811.9	812.3	812.8	813.1	813.1	812.8	812.4	812.0	811.6	811.4
155°	839.3	839.9	840.6	841.2	841.9	841.9	841.2	840.6	839.9	839.3	839.4
157.5°	864.2	864.8	865.3	865.9	866.4	866.5	866.0	865.4	865.0	864.5	864.5
160°	878.4	879.2	880.0	880.8	881.7	881.7	881.3	880.8	880.3	879.9	880.0
162.5°	893.1	893.9	894.8	895.5	896.4	896.4	895.4	894.6	893.7	892.8	893.0
165°	912.3	912.9	913.5	914.2	914.8	914.7	913.7	912.8	911.7	910.8	911.1
167.5°	926.0	927.0	927.9	929.0	930.0	930.0	929.1	928.0	927.1	926.0	926.0
170°	933.6	934.7	935.9	937.1	938.2	938.3	937.3	936.3	935.3	934.3	934.2
172.5°	940.1	941.2	942.4	943.6	944.7	944.7	943.6	942.4	941.3	940.3	940.2
175°	946.9	948.0	949.1	950.3	951.5	951.5	950.3	949.1	948.0	946.9	947.1
177.5°	950.4	951.5	952.5	953.6	954.6	954.7	953.8	952.8	951.9	951.0	951.0
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1924.4	1916.0	1911.8	1902.1	1890.6	1884.6	1879.2	1871.4	1861.1	1850.3	1842.5
5°	2022.0	2004.0	1981.4	1954.4	1930.2	1907.0	1886.6	1866.3	1843.0	1818.9	1794.8
7.5°	2122.3	2086.8	2048.4	2004.0	1960.8	1921.6	1885.4	1850.8	1811.7	1776.6	1744.6
10°	2192.2	2144.0	2090.6	2034.1	1977.6	1928.7	1880.6	1836.9	1788.8	1745.9	1709.8
12.5°	2248.7	2192.2	2127.9	2057.6	1989.7	1930.5	1875.2	1818.3	1763.5	1717.0	1668.9
15°	2342.6	2265.1	2178.6	2094.3	2006.3	1925.7	1851.2	1785.0	1722.6	1657.1	1611.2
17.5°	2407.3	2315.3	2210.1	2108.8	2004.8	1909.8	1823.8	1745.0	1672.9	1606.1	1551.4
20°	2445.7	2344.1	2227.5	2112.3	1995.7	1894.1	1801.6	1714.3	1639.7	1567.5	1511.1
22.5°	2467.4	2354.9	2227.5	2107.0	1986.1	1876.0	1774.4	1683.6	1602.4	1530.2	1467.7
25°	2474.4	2353.9	2223.7	2085.3	1952.9	1836.2	1730.8	1632.2	1541.9	1469.7	1403.4
27.5°	2464.7	2322.9	2189.6	2047.5	1910.8	1787.9	1677.3	1573.7	1483.3	1405.7	1337.8
30°	2450.2	2298.2	2155.2	2007.8	1869.3	1751.1	1634.5	1535.2	1441.1	1360.6	1292.1
32.5°	2418.9	2268.1	2114.3	1963.2	1823.0	1701.2	1590.5	1490.6	1398.4	1316.1	1243.3
35°	2356.9	2204.1	2037.1	1882.1	1744.4	1618.0	1514.1	1417.8	1329.7	1241.7	1164.9
37.5°	2275.2	2119.1	1952.9	1783.2	1645.3	1526.0	1430.7	1340.3	1254.3	1173.9	1088.9
40°	2198.2	2056.0	1884.3	1715.8	1574.3	1459.2	1371.1	1289.1	1202.6	1122.8	1037.7
42.5°	2104.9	1983.7	1810.3	1641.2	1501.5	1390.5	1308.5	1228.3	1149.6	1072.2	983.5
45°	1949.1	1857.3	1694.7	1532.2	1391.5	1281.6	1206.4	1135.6	1066.3	992.6	909.1
47.5°	1770.6	1708.4	1568.1	1401.7	1271.5	1172.6	1099.9	1042.1	983.5	909.8	836.5
50°	1646.5	1606.7	1471.2	1319.2	1195.0	1104.0	1029.4	975.2	926.3	855.6	790.1
52.5°	1514.1	1492.9	1378.5	1233.1	1113.1	1023.9	960.3	911.4	862.0	803.2	742.0
55°	1312.4	1323.7	1226.6	1101.0	988.1	912.9	854.9	814.3	772.1	722.5	675.0
57.5°	1106.3	1147.5	1082.3	971.9	866.2	796.6	753.0	718.8	683.4	642.2	601.7
60°	982.8	1017.4	980.5	883.4	790.9	726.2	685.6	659.2	623.9	586.3	555.3
62.5°	862.4	899.5	877.6	799.2	713.2	657.6	621.7	597.2	570.9	538.1	506.1
65°	711.1	735.2	724.7	670.5	609.5	562.1	529.0	511.0	486.9	462.8	434.2
67.5°	544.7	591.2	585.0	556.3	503.6	466.6	444.9	429.0	407.0	389.1	369.7
70°	447.8	490.7	489.9	466.6	438.0	403.3	388.3	374.8	355.2	337.9	322.1
72.5°	366.5	405.8	411.6	393.7	374.2	348.0	333.6	324.2	305.2	293.3	280.5
75°	256.7	285.2	292.8	292.8	283.7	270.1	257.4	251.4	237.8	227.2	219.7
77.5°	168.2	186.3	198.0	200.8	202.2	197.7	187.1	182.9	172.5	168.7	161.5
80°	118.9	130.9	144.5	149.0	152.8	151.3	146.8	143.7	133.9	130.2	127.1
82.5°	82.2	88.8	99.9	109.9	108.8	112.7	108.8	106.4	99.1	97.6	94.6
85°	42.9	43.6	45.1	51.9	55.7	57.2	58.0	56.5	54.2	54.2	48.9
87.5°	17.2	16.3	17.2	17.0	17.2	19.2	20.6	20.9	19.5	18.0	16.6
90°	13.6	12.3	10.9	9.4	7.6	5.8	4.1	2.2	4.1	5.8	7.6
92.5°	27.3	26.4	25.5	24.0	22.0	19.9	17.8	15.7	17.8	19.9	22.0
95°	53.7	52.6	51.5	50.1	48.6	47.1	45.7	44.2	45.7	47.1	48.6
97.5°	85.9	84.5	83.2	81.9	80.8	79.6	78.4	77.2	78.4	79.6	80.8
100°	109.8	108.3	106.9	105.8	105.1	104.4	103.8	103.2	103.8	104.4	105.1
102.5°	134.8	133.5	132.1	131.3	131.1	130.8	130.5	130.3	130.5	130.8	131.1
105°	174.1	173.4	172.8	172.4	172.2	172.0	171.8	171.7	171.8	172.0	172.2
107.5°	216.3	216.2	216.1	215.9	215.7	215.6	215.4	215.2	215.4	215.6	215.7
110°	245.7	245.9	246.0	245.9	245.6	245.2	245.0	244.7	245.0	245.2	245.6



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	274.8	275.1	275.4	275.6	275.5	275.4	275.3	275.3	275.3	275.4	275.5
115°	320.5	320.7	321.1	321.3	321.3	321.3	321.3	321.3	321.3	321.3	321.3
117.5°	364.6	364.9	365.0	365.1	365.0	364.9	364.8	364.6	364.8	364.9	365.0
120°	395.2	395.7	396.2	396.2	395.5	394.8	394.2	393.5	394.2	394.8	395.5
122.5°	424.1	424.4	424.6	424.6	424.3	424.0	423.8	423.6	423.8	424.0	424.3
125°	467.5	467.7	467.8	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9
127.5°	509.7	509.9	510.2	510.1	509.6	509.2	508.6	508.1	508.6	509.2	509.6
130°	538.7	538.7	538.7	538.4	537.9	537.4	537.0	536.4	537.0	537.4	537.9
132.5°	566.7	566.8	566.8	566.8	566.4	566.1	565.7	565.3	565.7	566.1	566.4
135°	607.9	607.9	607.9	607.5	606.4	605.5	604.5	603.5	604.5	605.5	606.4
137.5°	647.8	647.5	647.2	646.9	646.4	645.9	645.5	645.1	645.5	645.9	646.4
140°	674.2	674.2	674.2	674.1	673.7	673.4	673.1	672.8	673.1	673.4	673.7
142.5°	699.3	699.4	699.6	699.5	699.1	698.8	698.4	698.1	698.4	698.8	699.1
145°	736.5	736.4	736.2	735.8	735.2	734.5	733.9	733.2	733.9	734.5	735.2
147.5°	771.2	771.3	771.5	771.1	770.3	769.5	768.7	768.0	768.7	769.5	770.3
150°	792.1	792.1	792.1	791.8	791.2	790.5	789.9	789.2	789.9	790.5	791.2
152.5°	811.3	811.2	811.1	810.8	810.4	810.0	809.6	809.3	809.6	810.0	810.4
155°	839.6	839.8	839.9	840.0	840.0	840.0	840.0	840.0	840.0	840.0	840.0
157.5°	864.6	864.6	864.6	864.8	865.1	865.3	865.6	866.0	865.6	865.3	865.1
160°	880.1	880.3	880.4	880.6	880.8	881.0	881.1	881.3	881.1	881.0	880.8
162.5°	893.2	893.2	893.4	893.7	894.2	894.6	895.0	895.4	895.0	894.6	894.2
165°	911.4	911.7	912.1	912.5	912.9	913.5	914.0	914.5	914.0	913.5	912.9
167.5°	926.0	926.0	926.0	926.3	927.0	927.7	928.3	929.1	928.3	927.7	927.0
170°	934.1	933.9	933.7	934.1	934.8	935.7	936.5	937.3	936.5	935.7	934.8
172.5°	940.2	940.2	940.1	940.5	941.1	941.8	942.5	943.2	942.5	941.8	941.1
175°	947.2	947.3	947.5	948.0	948.9	949.6	950.5	951.3	950.5	949.6	948.9
177.5°	951.0	951.0	951.0	951.3	952.0	952.6	953.3	953.9	953.3	952.6	952.0
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1834.1	1828.1	1820.2	1811.2	1800.4	1790.7	1786.5	1790.2	1792.0	1787.2	1786.5
5°	1778.2	1759.4	1744.4	1721.8	1703.7	1688.7	1678.2	1673.7	1675.2	1663.1	1660.1
7.5°	1715.5	1693.2	1668.5	1641.7	1616.7	1594.6	1583.0	1576.7	1564.0	1558.5	1549.4
10°	1675.2	1645.0	1621.0	1589.3	1560.8	1534.5	1521.6	1511.1	1498.3	1492.2	1479.5
12.5°	1633.6	1598.6	1572.2	1539.4	1510.1	1478.5	1466.2	1446.7	1426.6	1414.0	1397.6
15°	1575.1	1533.0	1500.5	1461.4	1426.8	1390.7	1358.3	1322.2	1308.6	1280.1	1263.5
17.5°	1506.6	1463.9	1423.8	1371.3	1317.9	1273.0	1238.5	1203.9	1183.2	1164.9	1156.5
20°	1461.4	1422.3	1366.6	1305.6	1246.2	1196.6	1168.7	1146.1	1123.5	1110.8	1101.7
22.5°	1418.7	1368.7	1304.0	1238.2	1178.7	1139.9	1116.3	1093.2	1074.8	1062.6	1050.6
25°	1347.1	1281.6	1213.1	1137.8	1097.2	1063.4	1037.7	1018.9	1007.7	991.8	985.8
27.5°	1273.5	1194.1	1118.6	1068.0	1025.7	994.7	972.4	958.3	944.0	933.9	926.0
30°	1216.8	1136.3	1068.6	1020.4	977.5	952.0	933.9	917.4	906.1	897.8	891.7
32.5°	1160.8	1080.3	1023.4	971.7	937.8	912.9	893.5	881.2	872.3	861.7	858.0
35°	1079.9	1008.4	958.8	912.1	877.4	854.9	839.8	827.1	819.5	816.5	814.3
37.5°	1002.1	943.5	890.1	851.9	821.0	803.2	785.5	779.2	774.0	768.6	771.1
40°	952.7	897.8	850.4	809.7	784.9	765.3	754.8	747.2	742.7	742.7	742.7
42.5°	909.9	856.2	810.0	773.6	748.8	732.3	720.5	714.2	712.7	712.1	715.7
45°	843.6	793.9	747.2	717.2	696.1	679.6	672.8	667.5	667.5	670.5	671.3
47.5°	777.8	731.3	693.8	660.2	640.8	630.5	624.6	621.9	622.2	625.2	628.7
50°	737.4	691.5	654.7	624.6	606.5	596.7	591.4	590.0	591.4	591.4	596.7
52.5°	693.5	652.4	616.1	590.9	570.4	561.3	558.4	556.3	557.1	559.6	561.8
55°	629.1	592.2	557.6	533.6	518.5	512.5	505.7	506.4	504.9	506.4	506.4
57.5°	564.6	531.4	499.3	480.1	466.8	458.2	450.7	452.9	450.6	450.3	449.1
60°	523.0	486.9	461.3	444.0	429.0	421.4	414.6	416.1	413.9	412.4	409.3
62.5°	477.9	447.8	423.4	406.7	394.6	385.9	379.1	377.6	372.4	367.2	360.6
65°	412.4	387.6	365.7	350.0	338.7	331.9	326.6	322.1	310.8	298.8	292.8
67.5°	348.7	330.8	310.5	297.1	287.9	279.1	269.0	261.3	250.7	244.1	240.3
70°	307.7	290.5	273.1	260.3	250.6	242.3	231.0	225.7	218.2	215.2	211.5
72.5°	268.6	252.5	236.5	224.9	214.4	208.0	199.2	193.9	190.6	189.4	185.6
75°	209.2	196.4	184.4	173.8	165.6	161.1	157.3	153.5	152.0	145.2	141.5
77.5°	152.6	144.2	136.7	129.1	123.3	120.3	113.0	108.7	106.1	102.9	102.2
80°	118.9	112.9	105.4	100.9	92.6	89.5	86.5	85.8	85.0	84.3	83.5
82.5°	89.4	83.4	75.9	73.1	70.9	69.1	67.3	66.5	65.8	66.3	66.1
85°	45.1	42.1	42.1	41.4	40.6	39.9	39.1	39.1	38.4	39.1	38.4
87.5°	17.0	16.7	16.9	15.9	16.9	17.1	16.7	16.9	17.7	16.7	16.8
90°	9.4	10.9	12.3	13.6	14.9	16.2	17.2	18.2	19.1	20.2	20.8
92.5°	24.0	25.5	26.4	27.3	28.3	29.2	29.8	30.3	30.9	31.6	32.0
95°	50.1	51.5	52.6	53.7	54.9	56.0	56.5	57.0	57.5	58.0	58.2
97.5°	81.9	83.2	84.5	85.9	87.2	88.6	89.2	89.7	90.3	91.0	91.2
100°	105.8	106.9	108.3	109.8	111.2	112.7	113.1	113.4	113.8	114.0	114.2
102.5°	131.3	132.1	133.5	134.8	136.2	137.5	138.0	138.5	138.8	139.3	139.6
105°	172.4	172.8	173.4	174.1	174.7	175.4	175.9	176.3	176.8	177.3	177.9
107.5°	215.9	216.1	216.2	216.3	216.4	216.5	217.0	217.4	217.8	218.3	218.6
110°	245.9	246.0	245.9	245.7	245.5	245.3	245.1	244.7	244.4	244.0	244.1



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	275.6	275.4	275.1	274.8	274.6	274.3	274.2	274.1	274.1	274.0	274.0
115°	321.3	321.1	320.7	320.5	320.1	319.8	319.6	319.4	319.3	319.1	319.0
117.5°	365.1	365.0	364.9	364.6	364.4	364.2	363.6	363.1	362.5	361.9	361.5
120°	396.2	396.2	395.7	395.2	394.7	394.3	393.4	392.6	391.7	391.0	390.7
122.5°	424.6	424.6	424.4	424.1	424.0	423.7	423.1	422.5	422.1	421.5	420.9
125°	467.9	467.8	467.7	467.5	467.3	467.2	466.8	466.6	466.2	465.9	465.5
127.5°	510.1	510.2	509.9	509.7	509.4	509.2	508.9	508.5	508.2	507.8	507.6
130°	538.4	538.7	538.7	538.7	538.7	538.7	538.3	538.0	537.6	537.3	536.9
132.5°	566.8	566.8	566.8	566.7	566.5	566.4	566.0	565.7	565.3	565.1	564.8
135°	607.5	607.9	607.9	607.9	607.9	607.9	607.6	607.3	606.9	606.6	606.1
137.5°	646.9	647.2	647.5	647.8	648.0	648.3	647.9	647.4	647.1	646.6	646.4
140°	674.1	674.2	674.2	674.2	674.2	674.2	674.1	673.9	673.7	673.5	673.4
142.5°	699.5	699.6	699.4	699.3	699.1	699.0	699.0	698.9	698.9	698.9	698.8
145°	735.8	736.2	736.4	736.5	736.7	736.9	736.7	736.5	736.4	736.2	735.8
147.5°	771.1	771.5	771.3	771.2	771.0	770.9	770.8	770.6	770.5	770.3	770.2
150°	791.8	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.0
152.5°	810.8	811.1	811.2	811.3	811.4	811.6	812.0	812.4	812.8	813.1	813.1
155°	840.0	839.9	839.8	839.6	839.4	839.3	839.9	840.6	841.2	841.9	841.9
157.5°	864.8	864.6	864.6	864.6	864.5	864.5	865.0	865.4	866.0	866.5	866.4
160°	880.6	880.4	880.3	880.1	880.0	879.9	880.3	880.8	881.3	881.7	881.7
162.5°	893.7	893.4	893.2	893.2	893.0	892.8	893.7	894.6	895.4	896.4	896.4
165°	912.5	912.1	911.7	911.4	911.1	910.8	911.7	912.8	913.7	914.7	914.8
167.5°	926.3	926.0	926.0	926.0	926.0	926.0	927.1	928.0	929.1	930.0	930.0
170°	934.1	933.7	933.9	934.1	934.2	934.3	935.3	936.3	937.3	938.3	938.2
172.5°	940.5	940.1	940.2	940.2	940.2	940.3	941.3	942.4	943.6	944.7	944.7
175°	948.0	947.5	947.3	947.2	947.1	946.9	948.0	949.1	950.3	951.5	951.5
177.5°	951.3	951.0	951.0	951.0	951.0	951.0	951.9	952.8	953.8	954.7	954.6
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1782.9	1784.1	1779.9	1778.7	1779.9	1784.1	1782.9	1786.5	1787.2	1792.0	1790.2
5°	1654.1	1652.6	1648.8	1649.5	1648.8	1652.6	1654.1	1660.1	1663.1	1675.2	1673.7
7.5°	1543.9	1538.0	1539.6	1533.7	1539.6	1538.0	1543.9	1549.4	1558.5	1564.0	1576.7
10°	1476.5	1468.2	1461.4	1455.4	1461.4	1468.2	1476.5	1479.5	1492.2	1498.3	1511.1
12.5°	1384.4	1377.2	1368.1	1369.9	1368.1	1377.2	1384.4	1397.6	1414.0	1426.6	1446.7
15°	1253.7	1242.5	1224.4	1226.6	1224.4	1242.5	1253.7	1263.5	1280.1	1308.6	1322.2
17.5°	1143.1	1143.2	1135.0	1136.9	1135.0	1143.2	1143.1	1156.5	1164.9	1183.2	1203.9
20°	1085.9	1080.6	1081.4	1079.1	1081.4	1080.6	1085.9	1101.7	1110.8	1123.5	1146.1
22.5°	1046.1	1039.7	1034.4	1029.7	1034.4	1039.7	1046.1	1050.6	1062.6	1074.8	1093.2
25°	979.0	974.5	967.8	966.3	967.8	974.5	979.0	985.8	991.8	1007.7	1018.9
27.5°	920.0	919.2	916.4	912.9	916.4	919.2	920.0	926.0	933.9	944.0	958.3
30°	885.7	884.2	882.7	880.4	882.7	884.2	885.7	891.7	897.8	906.1	917.4
32.5°	855.1	854.1	852.6	852.8	852.6	854.1	855.1	858.0	861.7	872.3	881.2
35°	811.2	810.5	809.0	808.2	809.0	810.5	811.2	814.3	816.5	819.5	827.1
37.5°	770.3	772.2	771.4	771.2	771.4	772.2	770.3	771.1	768.6	774.0	779.2
40°	742.0	742.7	744.2	743.5	744.2	742.7	742.0	742.7	742.7	742.7	747.2
42.5°	718.5	718.7	720.8	718.2	720.8	718.7	718.5	715.7	712.1	712.7	714.2
45°	676.6	681.1	680.3	680.3	680.3	681.1	676.6	671.3	670.5	667.5	667.5
47.5°	630.7	634.5	635.6	635.5	635.6	634.5	630.7	628.7	625.2	622.2	621.9
50°	600.5	599.0	601.2	600.5	601.2	599.0	600.5	596.7	591.4	591.4	590.0
52.5°	563.8	564.1	563.9	563.2	563.9	564.1	563.8	561.8	559.6	557.1	556.3
55°	507.2	507.9	506.4	507.2	506.4	507.9	507.2	506.4	506.4	504.9	506.4
57.5°	445.8	442.1	443.7	441.9	443.7	442.1	445.8	449.1	450.3	450.6	452.9
60°	401.9	395.9	394.4	391.3	394.4	395.9	401.9	409.3	412.4	413.9	416.1
62.5°	352.5	348.3	343.2	345.5	343.2	348.3	352.5	360.6	367.2	372.4	377.6
65°	286.7	283.7	281.4	284.5	281.4	283.7	286.7	292.8	298.8	310.8	322.1
67.5°	237.3	235.7	235.7	234.2	235.7	235.7	237.3	240.3	244.1	250.7	261.3
70°	211.5	209.2	209.2	207.7	209.2	209.2	211.5	211.5	215.2	218.2	225.7
72.5°	184.9	182.8	183.3	182.4	183.3	182.8	184.9	185.6	189.4	190.6	193.9
75°	137.0	133.2	133.2	133.9	133.2	133.2	137.0	141.5	145.2	152.0	153.5
77.5°	102.2	101.4	102.5	101.1	102.5	101.4	102.2	102.2	102.9	106.1	108.7
80°	83.5	82.8	82.0	84.3	82.0	82.8	83.5	83.5	84.3	85.0	85.8
82.5°	64.8	64.8	64.6	67.4	64.6	64.8	64.8	66.1	66.3	65.8	66.5
85°	39.1	37.6	39.1	37.6	39.1	37.6	39.1	38.4	39.1	38.4	39.1
87.5°	18.1	17.5	17.0	17.6	17.0	17.5	18.1	16.8	16.7	17.7	16.9
90°	21.1	21.5	21.8	22.1	21.8	21.5	21.1	20.8	20.2	19.1	18.2
92.5°	32.1	32.3	32.5	32.7	32.5	32.3	32.1	32.0	31.6	30.9	30.3
95°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.0	57.5	57.0
97.5°	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.0	90.3	89.7
100°	114.2	114.2	114.2	114.2	114.2	114.2	114.2	114.2	114.0	113.8	113.4
102.5°	139.8	139.9	140.1	140.2	140.1	139.9	139.8	139.6	139.3	138.8	138.5
105°	178.3	178.8	179.3	179.8	179.3	178.8	178.3	177.9	177.3	176.8	176.3
107.5°	218.5	218.5	218.5	218.4	218.5	218.5	218.5	218.6	218.3	217.8	217.4
110°	244.7	245.2	245.6	246.1	245.6	245.2	244.7	244.1	244.0	244.4	244.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	274.1	274.2	274.3	274.4	274.3	274.2	274.1	274.0	274.0	274.1	274.1
115°	318.9	318.7	318.5	318.3	318.5	318.7	318.9	319.0	319.1	319.3	319.4
117.5°	361.2	360.8	360.5	360.1	360.5	360.8	361.2	361.5	361.9	362.5	363.1
120°	391.1	391.3	391.7	392.0	391.7	391.3	391.1	390.7	391.0	391.7	392.6
122.5°	420.3	419.7	419.1	418.6	419.1	419.7	420.3	420.9	421.5	422.1	422.5
125°	465.2	464.9	464.6	464.2	464.6	464.9	465.2	465.5	465.9	466.2	466.6
127.5°	507.3	507.1	506.8	506.5	506.8	507.1	507.3	507.6	507.8	508.2	508.5
130°	536.2	535.6	534.9	534.2	534.9	535.6	536.2	536.9	537.3	537.6	538.0
132.5°	564.5	564.2	563.9	563.7	563.9	564.2	564.5	564.8	565.1	565.3	565.7
135°	605.7	605.2	604.7	604.3	604.7	605.2	605.7	606.1	606.6	606.9	607.3
137.5°	646.5	646.6	646.7	646.9	646.7	646.6	646.5	646.4	646.6	647.1	647.4
140°	673.3	673.1	672.9	672.8	672.9	673.1	673.3	673.4	673.5	673.7	673.9
142.5°	698.8	698.8	698.7	698.7	698.7	698.8	698.8	698.8	698.9	698.9	698.9
145°	735.4	734.9	734.4	734.0	734.4	734.9	735.4	735.8	736.2	736.4	736.5
147.5°	770.1	769.9	769.8	769.6	769.8	769.9	770.1	770.2	770.3	770.5	770.6
150°	791.9	791.7	791.5	791.4	791.5	791.7	791.9	792.0	792.1	792.1	792.1
152.5°	812.8	812.3	811.9	811.4	811.9	812.3	812.8	813.1	813.1	812.8	812.4
155°	841.2	840.6	839.9	839.3	839.9	840.6	841.2	841.9	841.9	841.2	840.6
157.5°	865.9	865.3	864.8	864.2	864.8	865.3	865.9	866.4	866.5	866.0	865.4
160°	880.8	880.0	879.2	878.4	879.2	880.0	880.8	881.7	881.7	881.3	880.8
162.5°	895.5	894.8	893.9	893.1	893.9	894.8	895.5	896.4	896.4	895.4	894.6
165°	914.2	913.5	912.9	912.3	912.9	913.5	914.2	914.8	914.7	913.7	912.8
167.5°	929.0	927.9	927.0	926.0	927.0	927.9	929.0	930.0	930.0	929.1	928.0
170°	937.1	935.9	934.7	933.6	934.7	935.9	937.1	938.2	938.3	937.3	936.3
172.5°	943.6	942.4	941.2	940.1	941.2	942.4	943.6	944.7	944.7	943.6	942.4
175°	950.3	949.1	948.0	946.9	948.0	949.1	950.3	951.5	951.5	950.3	949.1
177.5°	953.6	952.5	951.5	950.4	951.5	952.5	953.6	954.6	954.7	953.8	952.8
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1786.5	1790.7	1800.4	1811.2	1820.2	1828.1	1834.1	1842.5	1850.3	1861.1	1871.4
5°	1678.2	1688.7	1703.7	1721.8	1744.4	1759.4	1778.2	1794.8	1818.9	1843.0	1866.3
7.5°	1583.0	1594.6	1616.7	1641.7	1668.5	1693.2	1715.5	1744.6	1776.6	1811.7	1850.8
10°	1521.6	1534.5	1560.8	1589.3	1621.0	1645.0	1675.2	1709.8	1745.9	1788.8	1836.9
12.5°	1466.2	1478.5	1510.1	1539.4	1572.2	1598.6	1633.6	1668.9	1717.0	1763.5	1818.3
15°	1358.3	1390.7	1426.8	1461.4	1500.5	1533.0	1575.1	1611.2	1657.1	1722.6	1785.0
17.5°	1238.5	1273.0	1317.9	1371.3	1423.8	1463.9	1506.6	1551.4	1606.1	1672.9	1745.0
20°	1168.7	1196.6	1246.2	1305.6	1366.6	1422.3	1461.4	1511.1	1567.5	1639.7	1714.3
22.5°	1116.3	1139.9	1178.7	1238.2	1304.0	1368.7	1418.7	1467.7	1530.2	1602.4	1683.6
25°	1037.7	1063.4	1097.2	1137.8	1213.1	1281.6	1347.1	1403.4	1469.7	1541.9	1632.2
27.5°	972.4	994.7	1025.7	1068.0	1118.6	1194.1	1273.5	1337.8	1405.7	1483.3	1573.7
30°	933.9	952.0	977.5	1020.4	1068.6	1136.3	1216.8	1292.1	1360.6	1441.1	1535.2
32.5°	893.5	912.9	937.8	971.7	1023.4	1080.3	1160.8	1243.3	1316.1	1398.4	1490.6
35°	839.8	854.9	877.4	912.1	958.8	1008.4	1079.9	1164.9	1241.7	1329.7	1417.8
37.5°	785.5	803.2	821.0	851.9	890.1	943.5	1002.1	1088.9	1173.9	1254.3	1340.3
40°	754.8	765.3	784.9	809.7	850.4	897.8	952.7	1037.7	1122.8	1202.6	1289.1
42.5°	720.5	732.3	748.8	773.6	810.0	856.2	909.9	983.5	1072.2	1149.6	1228.3
45°	672.8	679.6	696.1	717.2	747.2	793.9	843.6	909.1	992.6	1066.3	1135.6
47.5°	624.6	630.5	640.8	660.2	693.8	731.3	777.8	836.5	909.8	983.5	1042.1
50°	591.4	596.7	606.5	624.6	654.7	691.5	737.4	790.1	855.6	926.3	975.2
52.5°	558.4	561.3	570.4	590.9	616.1	652.4	693.5	742.0	803.2	862.0	911.4
55°	505.7	512.5	518.5	533.6	557.6	592.2	629.1	675.0	722.5	772.1	814.3
57.5°	450.7	458.2	466.8	480.1	499.3	531.4	564.6	601.7	642.2	683.4	718.8
60°	414.6	421.4	429.0	444.0	461.3	486.9	523.0	555.3	586.3	623.9	659.2
62.5°	379.1	385.9	394.6	406.7	423.4	447.8	477.9	506.1	538.1	570.9	597.2
65°	326.6	331.9	338.7	350.0	365.7	387.6	412.4	434.2	462.8	486.9	511.0
67.5°	269.0	279.1	287.9	297.1	310.5	330.8	348.7	369.7	389.1	407.0	429.0
70°	231.0	242.3	250.6	260.3	273.1	290.5	307.7	322.1	337.9	355.2	374.8
72.5°	199.2	208.0	214.4	224.9	236.5	252.5	268.6	280.5	293.3	305.2	324.2
75°	157.3	161.1	165.6	173.8	184.4	196.4	209.2	219.7	227.2	237.8	251.4
77.5°	113.0	120.3	123.3	129.1	136.7	144.2	152.6	161.5	168.7	172.5	182.9
80°	86.5	89.5	92.6	100.9	105.4	112.9	118.9	127.1	130.2	133.9	143.7
82.5°	67.3	69.1	70.9	73.1	75.9	83.4	89.4	94.6	97.6	99.1	106.4
85°	39.1	39.9	40.6	41.4	42.1	42.1	45.1	48.9	54.2	54.2	56.5
87.5°	16.7	17.1	16.9	15.9	16.9	16.7	17.0	16.6	18.0	19.5	20.9
90°	17.2	16.2	14.9	13.6	12.3	10.9	9.4	7.6	5.8	4.1	2.2
92.5°	29.8	29.2	28.3	27.3	26.4	25.5	24.0	22.0	19.9	17.8	15.7
95°	56.5	56.0	54.9	53.7	52.6	51.5	50.1	48.6	47.1	45.7	44.2
97.5°	89.2	88.6	87.2	85.9	84.5	83.2	81.9	80.8	79.6	78.4	77.2
100°	113.1	112.7	111.2	109.8	108.3	106.9	105.8	105.1	104.4	103.8	103.2
102.5°	138.0	137.5	136.2	134.8	133.5	132.1	131.3	131.1	130.8	130.5	130.3
105°	175.9	175.4	174.7	174.1	173.4	172.8	172.4	172.2	172.0	171.8	171.7
107.5°	217.0	216.5	216.4	216.3	216.2	216.1	215.9	215.7	215.6	215.4	215.2
110°	245.1	245.3	245.5	245.7	245.9	246.0	245.9	245.6	245.2	245.0	244.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	274.2	274.3	274.6	274.8	275.1	275.4	275.6	275.5	275.4	275.3	275.3
115°	319.6	319.8	320.1	320.5	320.7	321.1	321.3	321.3	321.3	321.3	321.3
117.5°	363.6	364.2	364.4	364.6	364.9	365.0	365.1	365.0	364.9	364.8	364.6
120°	393.4	394.3	394.7	395.2	395.7	396.2	396.2	395.5	394.8	394.2	393.5
122.5°	423.1	423.7	424.0	424.1	424.4	424.6	424.6	424.3	424.0	423.8	423.6
125°	466.8	467.2	467.3	467.5	467.7	467.8	467.9	467.9	467.9	467.9	467.9
127.5°	508.9	509.2	509.4	509.7	509.9	510.2	510.1	509.6	509.2	508.6	508.1
130°	538.3	538.7	538.7	538.7	538.7	538.7	538.4	537.9	537.4	537.0	536.4
132.5°	566.0	566.4	566.5	566.7	566.8	566.8	566.8	566.4	566.1	565.7	565.3
135°	607.6	607.9	607.9	607.9	607.9	607.9	607.5	606.4	605.5	604.5	603.5
137.5°	647.9	648.3	648.0	647.8	647.5	647.2	646.9	646.4	645.9	645.5	645.1
140°	674.1	674.2	674.2	674.2	674.2	674.2	674.1	673.7	673.4	673.1	672.8
142.5°	699.0	699.0	699.1	699.3	699.4	699.6	699.5	699.1	698.8	698.4	698.1
145°	736.7	736.9	736.7	736.5	736.4	736.2	735.8	735.2	734.5	733.9	733.2
147.5°	770.8	770.9	771.0	771.2	771.3	771.5	771.1	770.3	769.5	768.7	768.0
150°	792.1	792.1	792.1	792.1	792.1	792.1	791.8	791.2	790.5	789.9	789.2
152.5°	812.0	811.6	811.4	811.3	811.2	811.1	810.8	810.4	810.0	809.6	809.3
155°	839.9	839.3	839.4	839.6	839.8	839.9	840.0	840.0	840.0	840.0	840.0
157.5°	865.0	864.5	864.5	864.6	864.6	864.6	864.8	865.1	865.3	865.6	866.0
160°	880.3	879.9	880.0	880.1	880.3	880.4	880.6	880.8	881.0	881.1	881.3
162.5°	893.7	892.8	893.0	893.2	893.2	893.4	893.7	894.2	894.6	895.0	895.4
165°	911.7	910.8	911.1	911.4	911.7	912.1	912.5	912.9	913.5	914.0	914.5
167.5°	927.1	926.0	926.0	926.0	926.0	926.0	926.3	927.0	927.7	928.3	929.1
170°	935.3	934.3	934.2	934.1	933.9	933.7	934.1	934.8	935.7	936.5	937.3
172.5°	941.3	940.3	940.2	940.2	940.2	940.1	940.5	941.1	941.8	942.5	943.2
175°	948.0	946.9	947.1	947.2	947.3	947.5	948.0	948.9	949.6	950.5	951.3
177.5°	951.9	951.0	951.0	951.0	951.0	951.0	951.3	952.0	952.6	953.3	953.9
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1879.2	1884.6	1890.6	1902.1	1911.8	1916.0	1924.4	1930.4	1928.6	1937.0	1951.4
5°	1886.6	1907.0	1930.2	1954.4	1981.4	2004.0	2022.0	2040.1	2054.5	2071.7	2097.3
7.5°	1885.4	1921.6	1960.8	2004.0	2048.4	2086.8	2122.3	2158.4	2190.5	2225.5	2271.4
10°	1880.6	1928.7	1977.6	2034.1	2090.6	2144.0	2192.2	2237.3	2280.2	2326.1	2384.1
12.5°	1875.2	1930.5	1989.7	2057.6	2127.9	2192.2	2248.7	2313.8	2367.5	2426.7	2493.6
15°	1851.2	1925.7	2006.3	2094.3	2178.6	2265.1	2342.6	2422.4	2496.9	2567.7	2651.9
17.5°	1823.8	1909.8	2004.8	2108.8	2210.1	2315.3	2407.3	2507.7	2583.9	2678.9	2757.1
20°	1801.6	1894.1	1995.7	2112.3	2227.5	2344.1	2445.7	2548.1	2633.8	2729.4	2828.8
22.5°	1774.4	1876.0	1986.1	2107.0	2227.5	2354.9	2467.4	2569.2	2675.4	2783.0	2885.4
25°	1730.8	1836.2	1952.9	2085.3	2223.7	2353.9	2474.4	2600.8	2715.2	2831.8	2923.6
27.5°	1677.3	1787.9	1910.8	2047.5	2189.6	2322.9	2464.7	2599.4	2714.5	2826.8	2906.9
30°	1634.5	1751.1	1869.3	2007.8	2155.2	2298.2	2450.2	2584.9	2706.1	2807.0	2852.1
32.5°	1590.5	1701.2	1823.0	1963.2	2114.3	2268.1	2418.9	2556.6	2668.8	2729.3	2730.5
35°	1514.1	1618.0	1744.4	1882.1	2037.1	2204.1	2356.9	2492.4	2560.9	2566.2	2492.4
37.5°	1430.7	1526.0	1645.3	1783.2	1952.9	2119.1	2275.2	2365.5	2388.4	2311.8	2175.4
40°	1371.1	1459.2	1574.3	1715.8	1884.3	2056.0	2198.2	2264.4	2240.3	2116.1	1964.1
42.5°	1308.5	1390.5	1501.5	1641.2	1810.3	1983.7	2104.9	2140.3	2076.5	1933.2	1755.2
45°	1206.4	1281.6	1391.5	1532.2	1694.7	1857.3	1949.1	1931.0	1824.9	1654.8	1455.4
47.5°	1099.9	1172.6	1271.5	1401.7	1568.1	1708.4	1770.6	1716.1	1565.1	1378.0	1215.8
50°	1029.4	1104.0	1195.0	1319.2	1471.2	1606.7	1646.5	1563.8	1395.9	1216.1	1067.1
52.5°	960.3	1023.9	1113.1	1233.1	1378.5	1492.9	1514.1	1418.7	1245.5	1084.2	952.1
55°	854.9	912.9	988.1	1101.0	1226.6	1323.7	1312.4	1189.8	1032.5	894.8	790.9
57.5°	753.0	796.6	866.2	971.9	1082.3	1147.5	1106.3	1001.6	855.1	742.3	654.7
60°	685.6	726.2	790.9	883.4	980.5	1017.4	982.8	869.2	753.3	650.2	576.5
62.5°	621.7	657.6	713.2	799.2	877.6	899.5	862.4	763.2	658.7	570.7	509.6
65°	529.0	562.1	609.5	670.5	724.7	735.2	711.1	609.5	530.6	456.8	414.6
67.5°	444.9	466.6	503.6	556.3	585.0	591.2	544.7	480.9	411.2	365.9	334.1
70°	388.3	403.3	438.0	466.6	489.9	490.7	447.8	396.6	343.2	306.3	283.0
72.5°	333.6	348.0	374.2	393.7	411.6	405.8	366.5	326.1	283.0	255.1	237.8
75°	257.4	270.1	283.7	292.8	292.8	285.2	256.7	226.5	201.7	185.1	179.8
77.5°	187.1	197.7	202.2	200.8	198.0	186.3	168.2	148.5	139.7	131.9	127.9
80°	146.8	151.3	152.8	149.0	144.5	130.9	118.9	110.7	102.4	99.3	97.8
82.5°	108.8	112.7	108.8	109.9	99.9	88.8	82.2	79.4	75.9	74.6	73.1
85°	58.0	57.2	55.7	51.9	45.1	43.6	42.9	42.1	40.6	41.4	39.9
87.5°	20.6	19.2	17.2	17.0	17.2	16.3	17.2	17.4	17.7	17.2	18.7
90°	4.1	5.8	7.6	9.4	10.9	12.3	13.6	14.9	16.2	17.2	18.2
92.5°	17.8	19.9	22.0	24.0	25.5	26.4	27.3	28.3	29.2	29.8	30.3
95°	45.7	47.1	48.6	50.1	51.5	52.6	53.7	54.9	56.0	56.5	57.0
97.5°	78.4	79.6	80.8	81.9	83.2	84.5	85.9	87.2	88.6	89.2	89.7
100°	103.8	104.4	105.1	105.8	106.9	108.3	109.8	111.2	112.7	113.1	113.4
102.5°	130.5	130.8	131.1	131.3	132.1	133.5	134.8	136.2	137.5	138.0	138.5
105°	171.8	172.0	172.2	172.4	172.8	173.4	174.1	174.7	175.4	175.9	176.3
107.5°	215.4	215.6	215.7	215.9	216.1	216.2	216.3	216.4	216.5	217.0	217.4
110°	245.0	245.2	245.6	245.9	246.0	245.9	245.7	245.5	245.3	245.1	244.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	275.3	275.4	275.5	275.6	275.4	275.1	274.8	274.6	274.3	274.2	274.1
115°	321.3	321.3	321.3	321.3	321.1	320.7	320.5	320.1	319.8	319.6	319.4
117.5°	364.8	364.9	365.0	365.1	365.0	364.9	364.6	364.4	364.2	363.6	363.1
120°	394.2	394.8	395.5	396.2	396.2	395.7	395.2	394.7	394.3	393.4	392.6
122.5°	423.8	424.0	424.3	424.6	424.6	424.4	424.1	424.0	423.7	423.1	422.5
125°	467.9	467.9	467.9	467.9	467.8	467.7	467.5	467.3	467.2	466.8	466.6
127.5°	508.6	509.2	509.6	510.1	510.2	509.9	509.7	509.4	509.2	508.9	508.5
130°	537.0	537.4	537.9	538.4	538.7	538.7	538.7	538.7	538.7	538.3	538.0
132.5°	565.7	566.1	566.4	566.8	566.8	566.8	566.7	566.5	566.4	566.0	565.7
135°	604.5	605.5	606.4	607.5	607.9	607.9	607.9	607.9	607.9	607.6	607.3
137.5°	645.5	645.9	646.4	646.9	647.2	647.5	647.8	648.0	648.3	647.9	647.4
140°	673.1	673.4	673.7	674.1	674.2	674.2	674.2	674.2	674.2	674.1	673.9
142.5°	698.4	698.8	699.1	699.5	699.6	699.4	699.3	699.1	699.0	699.0	698.9
145°	733.9	734.5	735.2	735.8	736.2	736.4	736.5	736.7	736.9	736.7	736.5
147.5°	768.7	769.5	770.3	771.1	771.5	771.3	771.2	771.0	770.9	770.8	770.6
150°	789.9	790.5	791.2	791.8	792.1	792.1	792.1	792.1	792.1	792.1	792.1
152.5°	809.6	810.0	810.4	810.8	811.1	811.2	811.3	811.4	811.6	812.0	812.4
155°	840.0	840.0	840.0	840.0	839.9	839.8	839.6	839.4	839.3	839.9	840.6
157.5°	865.6	865.3	865.1	864.8	864.6	864.6	864.6	864.5	864.5	865.0	865.4
160°	881.1	881.0	880.8	880.6	880.4	880.3	880.1	880.0	879.9	880.3	880.8
162.5°	895.0	894.6	894.2	893.7	893.4	893.2	893.2	893.0	892.8	893.7	894.6
165°	914.0	913.5	912.9	912.5	912.1	911.7	911.4	911.1	910.8	911.7	912.8
167.5°	928.3	927.7	927.0	926.3	926.0	926.0	926.0	926.0	926.0	927.1	928.0
170°	936.5	935.7	934.8	934.1	933.7	933.9	934.1	934.2	934.3	935.3	936.3
172.5°	942.5	941.8	941.1	940.5	940.1	940.2	940.2	940.2	940.3	941.3	942.4
175°	950.5	949.6	948.9	948.0	947.5	947.3	947.2	947.1	946.9	948.0	949.1
177.5°	953.3	952.6	952.0	951.3	951.0	951.0	951.0	951.0	951.0	951.9	952.8
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1959.3	1961.7	1963.5	1969.5	1970.1	1975.6	1970.1
5°	2121.4	2131.9	2148.5	2165.0	2166.5	2177.1	2158.2
7.5°	2303.2	2327.6	2342.8	2369.6	2380.1	2386.7	2375.9
10°	2428.5	2451.0	2490.9	2510.5	2530.1	2533.0	2524.0
12.5°	2549.5	2585.3	2616.7	2653.7	2652.9	2679.4	2669.7
15°	2710.7	2747.5	2791.2	2832.5	2847.6	2847.6	2859.7
17.5°	2825.6	2893.2	2938.4	2970.9	3006.3	3012.6	3008.3
20°	2903.3	2976.3	3024.4	3066.6	3090.7	3097.5	3097.5
22.5°	2961.1	3023.2	3070.2	3108.1	3128.0	3135.9	3133.6
25°	3001.1	3054.5	3083.2	3094.5	3099.6	3098.2	3083.9
27.5°	2946.3	2943.9	2925.8	2891.2	2865.2	2849.4	2831.3
30°	2841.6	2802.5	2757.3	2707.6	2643.6	2594.7	2579.6
32.5°	2685.7	2597.7	2521.3	2438.5	2369.7	2320.8	2300.4
35°	2384.1	2244.9	2131.2	2031.8	1959.6	1914.5	1899.4
37.5°	2026.1	1891.4	1750.7	1654.4	1594.5	1548.9	1531.8
40°	1798.6	1651.8	1529.2	1438.9	1377.1	1332.8	1332.0
42.5°	1590.8	1450.8	1335.3	1270.3	1203.7	1174.4	1174.2
45°	1302.6	1190.5	1092.7	1041.5	1001.6	977.5	970.7
47.5°	1078.6	985.8	920.7	879.9	847.3	832.0	822.1
50°	952.7	871.5	819.5	784.1	766.1	746.5	745.0
52.5°	847.9	782.3	741.9	713.1	690.2	678.4	678.8
55°	712.7	660.7	632.2	610.3	592.2	583.2	579.5
57.5°	600.4	561.4	540.6	520.6	512.9	505.9	503.9
60°	530.6	504.2	484.7	468.8	457.5	455.2	454.5
62.5°	472.8	445.2	431.7	419.4	411.2	407.7	406.3
65°	389.8	369.5	357.4	347.7	344.7	339.4	338.7
67.5°	314.2	302.1	294.1	287.3	283.2	283.0	283.0
70°	267.9	261.1	254.4	250.6	248.4	246.9	246.9
72.5°	228.2	223.2	217.6	215.7	215.2	213.7	213.1
75°	173.8	168.5	169.3	165.6	162.6	158.8	156.6
77.5°	123.3	119.5	118.8	118.3	115.7	115.3	116.5
80°	95.6	91.8	91.0	91.8	91.0	88.8	88.8
82.5°	72.7	69.6	68.8	68.3	67.6	68.3	67.1
85°	39.1	37.6	37.6	37.6	39.1	38.4	37.6
87.5°	17.7	17.2	18.0	17.4	17.5	17.0	17.6
90°	19.1	20.2	20.8	21.1	21.5	21.8	22.1
92.5°	30.9	31.6	32.0	32.1	32.3	32.5	32.7
95°	57.5	58.0	58.2	58.2	58.2	58.2	58.2
97.5°	90.3	91.0	91.2	91.2	91.2	91.2	91.2
100°	113.8	114.0	114.2	114.2	114.2	114.2	114.2
102.5°	138.8	139.3	139.6	139.8	139.9	140.1	140.2
105°	176.8	177.3	177.9	178.3	178.8	179.3	179.8
107.5°	217.8	218.3	218.6	218.5	218.5	218.5	218.4
110°	244.4	244.0	244.1	244.7	245.2	245.6	246.1



TEST NUMBER: P332998-830

CATALOG NUMBER: SA4XXRDIP-C1195D810U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	274.1	274.0	274.0	274.1	274.2	274.3	274.4
115°	319.3	319.1	319.0	318.9	318.7	318.5	318.3
117.5°	362.5	361.9	361.5	361.2	360.8	360.5	360.1
120°	391.7	391.0	390.7	391.1	391.3	391.7	392.0
122.5°	422.1	421.5	420.9	420.3	419.7	419.1	418.6
125°	466.2	465.9	465.5	465.2	464.9	464.6	464.2
127.5°	508.2	507.8	507.6	507.3	507.1	506.8	506.5
130°	537.6	537.3	536.9	536.2	535.6	534.9	534.2
132.5°	565.3	565.1	564.8	564.5	564.2	563.9	563.7
135°	606.9	606.6	606.1	605.7	605.2	604.7	604.3
137.5°	647.1	646.6	646.4	646.5	646.6	646.7	646.9
140°	673.7	673.5	673.4	673.3	673.1	672.9	672.8
142.5°	698.9	698.9	698.8	698.8	698.8	698.7	698.7
145°	736.4	736.2	735.8	735.4	734.9	734.4	734.0
147.5°	770.5	770.3	770.2	770.1	769.9	769.8	769.6
150°	792.1	792.1	792.0	791.9	791.7	791.5	791.4
152.5°	812.8	813.1	813.1	812.8	812.3	811.9	811.4
155°	841.2	841.9	841.9	841.2	840.6	839.9	839.3
157.5°	866.0	866.5	866.4	865.9	865.3	864.8	864.2
160°	881.3	881.7	881.7	880.8	880.0	879.2	878.4
162.5°	895.4	896.4	896.4	895.5	894.8	893.9	893.1
165°	913.7	914.7	914.8	914.2	913.5	912.9	912.3
167.5°	929.1	930.0	930.0	929.0	927.9	927.0	926.0
170°	937.3	938.3	938.2	937.1	935.9	934.7	933.6
172.5°	943.6	944.7	944.7	943.6	942.4	941.2	940.1
175°	950.3	951.5	951.5	950.3	949.1	948.0	946.9
177.5°	953.8	954.7	954.6	953.6	952.5	951.5	950.4
180°	952.7	952.7	952.7	952.7	952.7	952.7	952.7

(END OF REPORT)