

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: P332993-830

Luminaire Tested: **SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332993-830  
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-C1195D590U830-4F0-1E-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: 6713.3 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

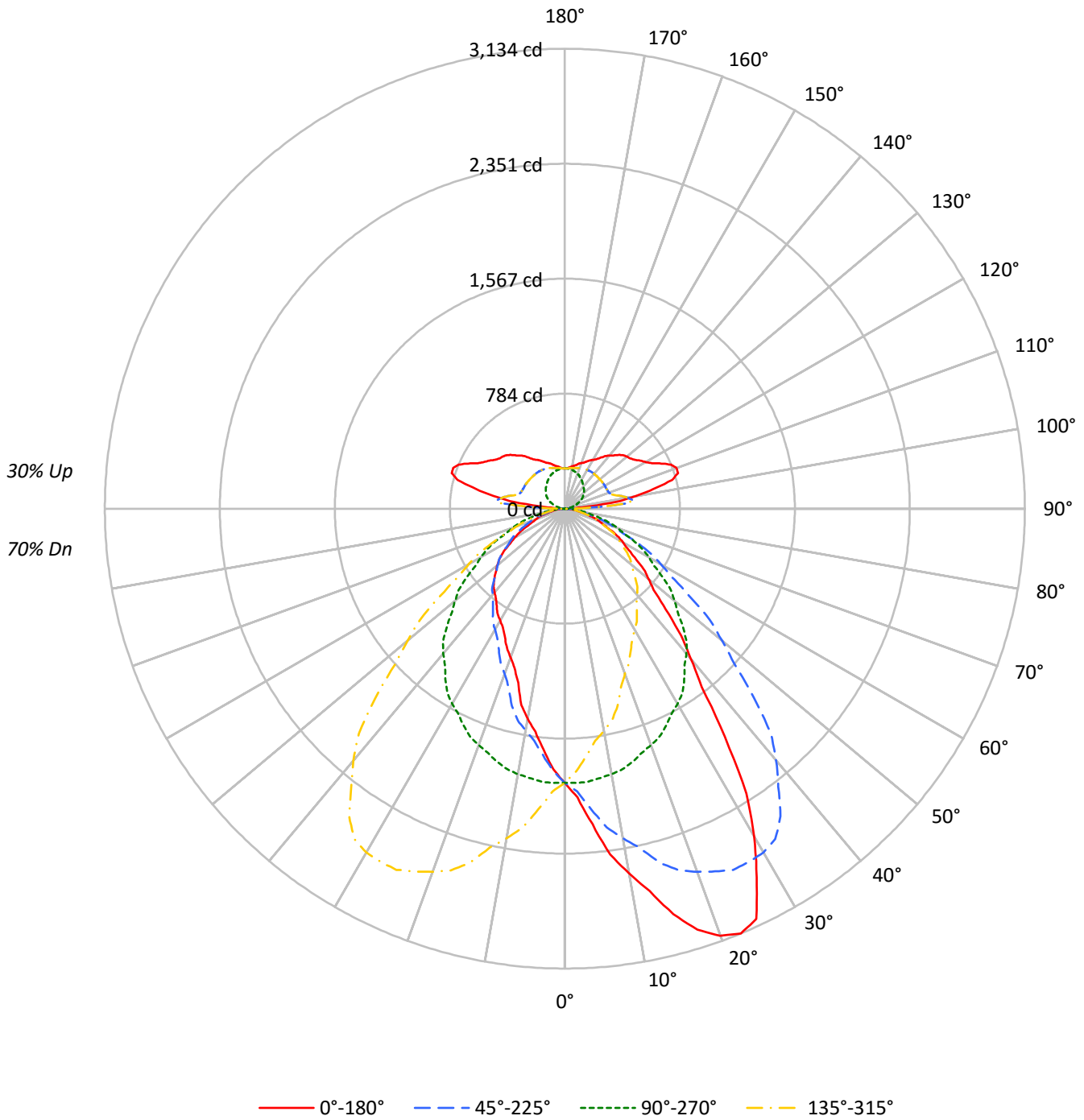
Input Watts (W): 55.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.0	2.7
10°-20°	545.9	8.1
20°-30°	853.8	12.7
30°-40°	949.2	14.1
40°-50°	842.2	12.5
50°-60°	656.2	9.8
60°-70°	429.6	6.4
70°-80°	211.3	3.1
80°-90°	53.6	0.8
90°-100°	197.7	2.9
100°-110°	411.4	6.1
110°-120°	368.5	5.5
120°-130°	310.0	4.6
130°-140°	258.4	3.8
140°-150°	197.4	2.9
150°-160°	138.8	2.1
160°-170°	81.6	1.2
170°-180°	26.6	0.4
0°-30°	1580.7	23.5
0°-40°	2529.9	37.7
0°-60°	4028.3	60.0
0°-90°	4722.8	70.4
90°-120°	977.6	14.6
90°-150°	1743.4	26.0
90°-180°	1990.0	29.6
0°-180°	6713.3	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°	11	1	11	1	11	11
95°	131	18	131	18	131	204
105°	756	63	756	63	756	748
115°	726	111	726	111	726	721
125°	580	154	580	154	580	527
135°	518	183	518	183	518	400
145°	423	211	423	211	423	268
155°	354	240	354	240	354	165
165°	309	262	309	262	309	89
175°	278	273	278	273	278	27
180°	274	274	274	274	274	



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**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°	15.5	14.9	15.6	15.5	16.0	15.4	15.9	17.0	15.6	16.4	16.2
90°	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7	9.1	9.7	8.6
92.5°	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6	142.0	170.5	149.3
95°	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4	450.5	438.2	330.6
97.5°	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6	566.1	461.6	309.5
100°	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5	570.0	432.3	280.7
102.5°	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5	537.6	395.8	261.3
105°	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2	479.1	352.7	244.7
107.5°	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8	431.8	328.7	241.7
110°	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8	408.1	320.5	242.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7	394.7	316.6	245.1
115°	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5	382.3	314.5	250.1
117.5°	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1	376.7	314.0	255.2
120°	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2	373.7	314.0	259.2
122.5°	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0	370.2	313.6	263.1
125°	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1	364.6	312.9	268.8
127.5°	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4	356.9	311.7	273.4
130°	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8	352.1	311.3	276.9
132.5°	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8	347.9	310.9	279.9
135°	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3	341.4	310.2	284.5
137.5°	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0	335.8	310.1	287.1
140°	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5	332.8	309.7	289.3
142.5°	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6	330.3	309.7	291.0
145°	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0	325.8	308.6	292.0
147.5°	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0	321.9	306.7	292.5
150°	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8	318.9	305.4	292.5
152.5°	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0	315.4	303.2	291.6
155°	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9	310.2	300.0	290.3
157.5°	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3	305.0	296.7	289.0
160°	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6	301.1	294.1	287.7
162.5°	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8	297.7	291.5	286.3
165°	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2	292.0	287.7	283.9
167.5°	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9	286.8	283.8	281.3
170°	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1	283.3	281.2	279.6
172.5°	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6	280.3	278.6	277.9
175°	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0	276.9	275.8	275.8
177.5°	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9	274.6	274.1	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



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**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°	15.9	15.4	15.9	15.9	16.4	18.7	20.2	20.5	18.9	17.5	15.8
90°	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6	1.6	3.2	3.8
92.5°	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1	9.0	13.9	20.5
95°	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7	19.3	24.7	31.8
97.5°	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9	31.9	36.5	42.9
100°	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9	40.9	44.6	51.1
102.5°	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5	50.3	53.6	59.7
105°	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9	64.6	67.2	73.7
107.5°	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8	78.8	81.5	88.4
110°	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7	88.7	91.4	97.8





TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1	98.2	101.3	107.4
115°	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7	112.4	116.1	121.5
117.5°	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0	126.5	129.8	135.7
120°	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4	135.5	139.2	145.2
122.5°	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0	144.1	147.9	153.4
125°	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3	156.5	159.7	165.6
127.5°	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3	166.1	169.9	176.6
130°	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9	172.0	176.3	184.5
132.5°	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5	177.2	182.9	190.5
135°	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3	185.5	190.9	200.0
137.5°	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2	193.2	199.2	207.8
140°	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8	198.4	204.3	213.5
142.5°	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8	204.4	209.9	218.6
145°	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3	212.9	218.3	225.8
147.5°	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8	221.4	226.1	233.8
150°	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9	227.4	231.8	238.2
152.5°	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5	232.6	236.9	242.9
155°	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3	240.9	244.1	249.5
157.5°	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0	248.0	251.0	255.1
160°	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7	252.7	254.9	258.6
162.5°	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0	256.6	258.3	261.6
165°	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8	261.8	262.9	265.6
167.5°	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6	266.2	266.6	268.7
170°	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8	268.3	268.8	270.4
172.5°	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0	270.4	270.5	271.7
175°	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1	272.6	272.6	273.1
177.5°	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1	273.7	273.2	273.7
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**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°	15.9	15.3	15.9	14.7	15.6	15.7	15.1	15.2	15.9	14.8	14.8
90°	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7	10.2	10.7	10.7
92.5°	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6	79.5	63.2	52.5
95°	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4	315.1	243.0	190.9
97.5°	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6	557.7	505.1	448.9
100°	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5	659.2	632.8	593.0
102.5°	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5	698.8	706.4	689.8
105°	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2	695.2	748.5	770.5
107.5°	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8	639.8	714.8	762.7
110°	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8	596.8	674.8	734.0



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7	558.9	632.6	691.7
115°	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5	515.7	578.5	630.2
117.5°	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1	490.9	540.4	584.1
120°	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2	480.1	523.1	561.3
122.5°	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0	473.3	512.4	545.8
125°	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1	462.4	499.5	529.0
127.5°	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4	449.6	486.6	514.6
130°	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8	439.3	475.8	504.4
132.5°	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8	427.6	463.4	491.8
135°	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3	410.3	443.0	470.0
137.5°	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0	393.6	421.2	445.5
140°	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5	382.9	407.0	429.6
142.5°	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6	373.8	394.5	414.2
145°	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0	361.3	377.5	392.5
147.5°	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0	350.5	363.4	375.3
150°	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8	344.1	354.9	364.6
152.5°	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0	337.6	347.5	355.5
155°	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9	328.5	336.6	343.0
157.5°	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3	319.5	326.2	331.4
160°	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6	313.5	319.3	323.7
162.5°	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8	307.8	312.5	316.4
165°	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2	299.4	303.2	305.9
167.5°	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9	292.4	295.4	297.0
170°	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1	287.7	289.8	291.4
172.5°	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6	283.8	285.1	286.3
175°	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0	278.5	279.6	279.6
177.5°	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9	275.4	275.4	275.8
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**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°	16.1	15.6	14.9	15.5	14.9	15.6	16.1	14.8	14.8	15.9	15.2
90°	11.3	11.8	11.3	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7
92.5°	46.1	43.3	41.4	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6
95°	164.6	147.9	138.2	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4
97.5°	410.4	378.0	361.8	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6
100°	546.3	513.5	497.4	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5
102.5°	661.1	637.3	620.4	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5
105°	771.6	767.2	759.7	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2
107.5°	789.3	801.5	806.9	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8
110°	772.1	794.7	804.4	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	735.1	762.4	776.0	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7
115°	672.6	704.9	722.1	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5
117.5°	620.4	647.4	664.9	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1
120°	592.0	615.7	629.6	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2
122.5°	571.7	592.0	603.8	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0
125°	550.5	566.2	576.4	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1
127.5°	536.3	550.2	558.7	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4
130°	526.4	539.8	548.5	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8
132.5°	513.5	528.7	536.8	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8
135°	491.4	506.5	515.1	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3
137.5°	465.6	480.5	487.6	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0
140°	448.5	460.2	467.8	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5
142.5°	430.7	441.8	448.5	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6
145°	406.0	415.1	420.5	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0
147.5°	385.2	393.0	397.1	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0
150°	373.2	380.1	383.3	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8
152.5°	362.8	368.5	370.4	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0
155°	348.5	352.7	354.3	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9
157.5°	335.5	338.7	339.7	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3
160°	326.9	330.2	330.6	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6
162.5°	318.8	322.0	322.5	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8
165°	308.1	310.2	309.7	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2
167.5°	298.1	299.4	299.4	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9
170°	292.5	293.0	292.5	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1
172.5°	286.9	287.5	286.9	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6
175°	279.6	280.7	279.6	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0
177.5°	275.4	275.8	274.9	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**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°	15.1	15.7	15.6	14.7	15.9	15.3	15.9	15.8	17.5	18.9	20.5
90°	9.1	9.7	8.6	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6
92.5°	142.0	170.5	149.3	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1
95°	450.5	438.2	330.6	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7
97.5°	566.1	461.6	309.5	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9
100°	570.0	432.3	280.7	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9
102.5°	537.6	395.8	261.3	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5
105°	479.1	352.7	244.7	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9
107.5°	431.8	328.7	241.7	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8
110°	408.1	320.5	242.5	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	394.7	316.6	245.1	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1
115°	382.3	314.5	250.1	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7
117.5°	376.7	314.0	255.2	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0
120°	373.7	314.0	259.2	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4
122.5°	370.2	313.6	263.1	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0
125°	364.6	312.9	268.8	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3
127.5°	356.9	311.7	273.4	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3
130°	352.1	311.3	276.9	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9
132.5°	347.9	310.9	279.9	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5
135°	341.4	310.2	284.5	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3
137.5°	335.8	310.1	287.1	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2
140°	332.8	309.7	289.3	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8
142.5°	330.3	309.7	291.0	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8
145°	325.8	308.6	292.0	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3
147.5°	321.9	306.7	292.5	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8
150°	318.9	305.4	292.5	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9
152.5°	315.4	303.2	291.6	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5
155°	310.2	300.0	290.3	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3
157.5°	305.0	296.7	289.0	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0
160°	301.1	294.1	287.7	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7
162.5°	297.7	291.5	286.3	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0
165°	292.0	287.7	283.9	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8
167.5°	286.8	283.8	281.3	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6
170°	283.3	281.2	279.6	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8
172.5°	280.3	278.6	277.9	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0
175°	276.9	275.8	275.8	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1
177.5°	274.6	274.1	274.1	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**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°	20.2	18.7	16.4	15.9	15.9	15.4	15.9	16.2	16.4	15.6	17.0
90°	1.6	3.2	3.8	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7
92.5°	9.0	13.9	20.5	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6
95°	19.3	24.7	31.8	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4
97.5°	31.9	36.5	42.9	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6
100°	40.9	44.6	51.1	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5
102.5°	50.3	53.6	59.7	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5
105°	64.6	67.2	73.7	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2
107.5°	78.8	81.5	88.4	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8
110°	88.7	91.4	97.8	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	98.2	101.3	107.4	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7
115°	112.4	116.1	121.5	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5
117.5°	126.5	129.8	135.7	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1
120°	135.5	139.2	145.2	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2
122.5°	144.1	147.9	153.4	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0
125°	156.5	159.7	165.6	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1
127.5°	166.1	169.9	176.6	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4
130°	172.0	176.3	184.5	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8
132.5°	177.2	182.9	190.5	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8
135°	185.5	190.9	200.0	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3
137.5°	193.2	199.2	207.8	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0
140°	198.4	204.3	213.5	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5
142.5°	204.4	209.9	218.6	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6
145°	212.9	218.3	225.8	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0
147.5°	221.4	226.1	233.8	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0
150°	227.4	231.8	238.2	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8
152.5°	232.6	236.9	242.9	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0
155°	240.9	244.1	249.5	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9
157.5°	248.0	251.0	255.1	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3
160°	252.7	254.9	258.6	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6
162.5°	256.6	258.3	261.6	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8
165°	261.8	262.9	265.6	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2
167.5°	266.2	266.6	268.7	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9
170°	268.3	268.8	270.4	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1
172.5°	270.4	270.5	271.7	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6
175°	272.6	272.6	273.1	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0
177.5°	273.7	273.2	273.7	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332993-830

CATALOG NUMBER: SA4XXRDIP-C1195D590U830-4F0-1E-UDD-A4

**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°	15.9	15.4	16.0	15.5	15.6	14.9	15.5
90°	10.2	10.7	10.7	11.3	11.8	11.3	11.3
92.5°	79.5	63.2	52.5	46.1	43.3	41.4	41.4
95°	315.1	243.0	190.9	164.6	147.9	138.2	131.2
97.5°	557.7	505.1	448.9	410.4	378.0	361.8	350.6
100°	659.2	632.8	593.0	546.3	513.5	497.4	493.0
102.5°	698.8	706.4	689.8	661.1	637.3	620.4	616.9
105°	695.2	748.5	770.5	771.6	767.2	759.7	756.5
107.5°	639.8	714.8	762.7	789.3	801.5	806.9	808.3
110°	596.8	674.8	734.0	772.1	794.7	804.4	809.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	558.9	632.6	691.7	735.1	762.4	776.0	783.8
115°	515.7	578.5	630.2	672.6	704.9	722.1	726.4
117.5°	490.9	540.4	584.1	620.4	647.4	664.9	668.3
120°	480.1	523.1	561.3	592.0	615.7	629.6	635.6
122.5°	473.3	512.4	545.8	571.7	592.0	603.8	609.7
125°	462.4	499.5	529.0	550.5	566.2	576.4	579.6
127.5°	449.6	486.6	514.6	536.3	550.2	558.7	561.9
130°	439.3	475.8	504.4	526.4	539.8	548.5	551.7
132.5°	427.6	463.4	491.8	513.5	528.7	536.8	540.1
135°	410.3	443.0	470.0	491.4	506.5	515.1	518.3
137.5°	393.6	421.2	445.5	465.6	480.5	487.6	491.4
140°	382.9	407.0	429.6	448.5	460.2	467.8	472.1
142.5°	373.8	394.5	414.2	430.7	441.8	448.5	451.4
145°	361.3	377.5	392.5	406.0	415.1	420.5	423.1
147.5°	350.5	363.4	375.3	385.2	393.0	397.1	398.1
150°	344.1	354.9	364.6	373.2	380.1	383.3	383.9
152.5°	337.6	347.5	355.5	362.8	368.5	370.4	371.0
155°	328.5	336.6	343.0	348.5	352.7	354.3	354.3
157.5°	319.5	326.2	331.4	335.5	338.7	339.7	339.7
160°	313.5	319.3	323.7	326.9	330.2	330.6	330.6
162.5°	307.8	312.5	316.4	318.8	322.0	322.5	322.1
165°	299.4	303.2	305.9	308.1	310.2	309.7	309.2
167.5°	292.4	295.4	297.0	298.1	299.4	299.4	299.0
170°	287.7	289.8	291.4	292.5	293.0	292.5	292.5
172.5°	283.8	285.1	286.3	286.9	287.5	286.9	286.1
175°	278.5	279.6	279.6	279.6	280.7	279.6	278.5
177.5°	275.4	275.4	275.8	275.4	275.8	274.9	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7

(END OF REPORT)