

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: P332708-830

Luminaire Tested: **SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332708-830  
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: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9069.6 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

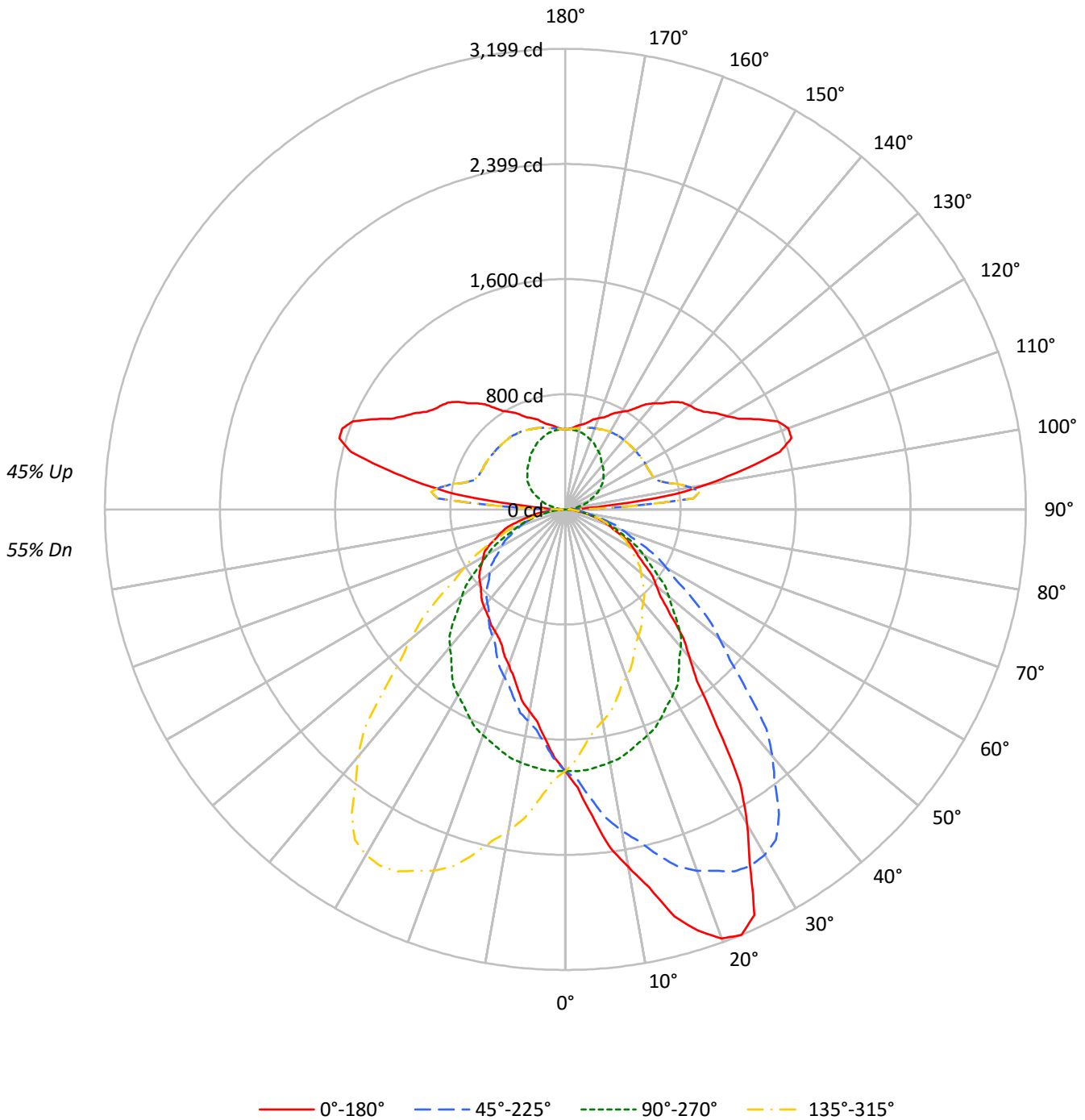
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55				
1	99	95	91	88	92	88	85	82	76	74	71	65	63	61	54	53	52	47				
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44	40				
3	83	73	66	60	77	68	62	57	59	54	50	51	47	44	43	40	38	34				
4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	38	35	33	29				
5	70	58	50	44	65	54	47	42	47	42	37	41	36	33	35	31	29	26				
6	64	52	44	38	60	49	42	36	43	37	33	37	33	29	32	28	25	23				
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23	20				
8	55	43	35	30	51	40	33	29	36	30	26	31	26	23	27	23	20	18				
9	52	39	32	27	48	37	30	26	33	27	23	28	24	21	25	21	18	16				
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	14666	14666	14666	14666
5°	17271	14704	12977	14704
10°	20678	14638	11684	14638
15°	24466	14491	10730	14491
20°	27244	14339	9879	14339
25°	27684	14118	9291	14118
30°	23557	13904	9106	13904
35°	18111	13557	9107	13557
40°	14116	13149	9278	13149
45°	11771	12536	9434	12536
50°	10359	11786	9755	11786
55°	9491	10888	10148	10888
60°	8893	10085	10619	10085
65°	8281	9186	11012	9186
70°	7567	8297	11261	8297
75°	6759	7299	11126	7299
80°	5667	5983	10776	5983
85°	4177	4326	10319	4326



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.0	2.0
10°-20°	545.5	6.0
20°-30°	865.0	9.5
30°-40°	962.7	10.6
40°-50°	876.3	9.7
50°-60°	716.1	7.9
60°-70°	511.2	5.6
70°-80°	281.5	3.1
80°-90°	79.9	0.9
90°-100°	402.7	4.4
100°-110°	838.0	9.2
110°-120°	750.6	8.3
120°-130°	631.4	7.0
130°-140°	526.5	5.8
140°-150°	402.2	4.4
150°-160°	282.7	3.1
160°-170°	166.3	1.8
170°-180°	54.1	0.6
0°-30°	1587.5	17.5
0°-40°	2550.2	28.1
0°-60°	4142.6	45.7
0°-90°	5015.2	55.3
90°-120°	1991.3	22.0
90°-150°	3551.4	39.2
90°-180°	4054.0	44.7
0°-180°	9069.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1817	1817	1817	1817	1817	
5°	2131	1814	1601	1814	2131	217
15°	2927	1734	1284	1734	2927	827
25°	3108	1585	1043	1585	3108	1370
35°	1838	1376	924	1376	1838	1166
45°	1031	1098	826	1098	1031	812
55°	674	774	721	774	674	609
65°	434	481	576	481	434	429
75°	217	234	357	234	217	230
85°	45	47	111	47	45	56
90°	23	1	23	1	23	20
95°	267	36	267	36	267	415
105°	1541	128	1541	128	1541	1524
115°	1480	226	1480	226	1480	1469
125°	1181	314	1181	314	1181	1073
135°	1056	373	1056	373	1056	815
145°	862	430	862	430	862	546
155°	722	490	722	490	722	337
165°	630	533	630	533	630	180
175°	567	556	567	556	567	55
180°	558	558	558	558	558	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1933.4	1932.8	1926.8	1925.6	1921.4	1916.0	1914.8	1905.2	1885.8	1876.8	1874.4
5°	2131.2	2146.3	2126.7	2122.9	2120.6	2095.8	2083.0	2067.9	2033.3	2013.1	1997.2
7.5°	2367.2	2369.0	2360.4	2353.5	2334.4	2312.7	2280.2	2245.6	2204.3	2161.4	2129.1
10°	2522.5	2528.6	2518.8	2517.2	2478.9	2454.8	2406.6	2366.0	2319.3	2267.4	2220.0
12.5°	2686.2	2677.9	2672.9	2640.6	2633.6	2589.6	2533.6	2491.8	2419.9	2360.1	2297.1
15°	2927.3	2910.9	2900.3	2855.9	2834.0	2773.1	2713.7	2667.8	2573.7	2484.2	2416.4
17.5°	3068.8	3085.4	3061.0	3042.8	2986.4	2943.7	2882.9	2786.5	2712.9	2601.7	2516.2
20°	3171.2	3172.7	3159.1	3140.4	3096.0	3041.8	2975.5	2870.1	2782.1	2671.5	2554.1
22.5°	3198.9	3199.2	3193.4	3175.9	3142.2	3098.3	3031.5	2943.7	2837.0	2716.7	2599.2
25°	3107.9	3104.9	3111.7	3131.3	3118.5	3104.9	3066.6	3001.1	2901.8	2774.6	2648.2
27.5°	2770.2	2791.0	2829.2	2877.4	2923.8	2959.1	2969.1	2955.6	2894.1	2789.5	2657.0
30°	2527.1	2552.6	2581.2	2629.3	2722.7	2776.1	2834.8	2879.2	2854.4	2770.9	2647.4
32.5°	2259.7	2266.1	2308.5	2363.2	2448.7	2551.6	2644.6	2734.7	2764.7	2720.8	2617.9
35°	1837.7	1848.2	1894.1	1948.3	2053.0	2178.6	2318.6	2443.4	2546.6	2587.9	2535.3
37.5°	1499.7	1529.9	1562.3	1620.5	1712.6	1825.8	1971.2	2132.9	2286.5	2389.4	2406.9
40°	1339.5	1358.3	1381.7	1426.1	1504.3	1615.7	1740.6	1925.7	2089.1	2236.6	2284.7
42.5°	1213.1	1224.1	1238.4	1278.6	1338.1	1449.0	1563.0	1725.9	1889.8	2066.1	2146.8
45°	1031.0	1042.3	1066.3	1089.7	1134.8	1211.5	1317.7	1451.6	1616.5	1786.5	1935.5
47.5°	899.5	906.6	921.0	945.9	984.3	1034.9	1121.2	1233.1	1385.9	1551.0	1709.8
50°	824.8	830.8	842.1	864.7	894.0	939.1	1009.9	1114.5	1234.2	1400.4	1556.2
52.5°	765.8	768.2	776.5	791.8	815.1	853.1	911.2	997.7	1108.9	1257.2	1412.4
55°	674.3	677.3	684.9	696.1	716.4	740.5	784.9	849.6	946.7	1075.3	1210.0
57.5°	599.0	601.2	607.5	611.8	628.5	648.1	682.2	728.5	802.0	911.2	1031.4
60°	550.8	549.3	556.9	560.6	571.9	588.5	614.8	659.2	723.2	811.2	921.9
62.5°	503.9	501.8	508.1	513.1	519.5	533.7	555.3	590.0	641.9	721.5	817.1
65°	433.5	430.5	434.2	440.3	446.3	453.7	469.6	500.4	541.9	599.0	672.0
67.5°	362.7	365.9	366.5	369.5	373.0	383.2	394.0	415.8	445.1	490.8	552.7
70°	320.6	321.3	324.3	324.3	326.6	335.6	344.7	357.4	386.1	428.2	478.6
72.5°	278.4	281.6	280.4	282.8	284.5	290.5	297.1	309.2	333.7	365.0	407.6
75°	216.7	219.0	219.0	219.7	222.0	224.2	229.5	238.6	255.9	279.2	308.5
77.5°	158.1	158.3	159.4	162.1	162.1	165.7	169.7	176.8	185.4	201.4	219.3
80°	121.9	123.4	122.6	124.1	124.1	127.1	128.7	137.7	141.5	152.0	166.3
82.5°	89.4	90.9	90.8	92.8	94.1	94.6	96.8	100.4	104.2	113.5	119.3
85°	45.1	46.7	45.1	46.7	48.9	49.7	51.9	52.7	55.7	58.0	63.2
87.5°	17.8	19.6	19.9	20.3	21.2	21.9	22.2	21.4	23.6	24.4	26.4
90°	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7	18.7	19.7	17.5
92.5°	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1	289.4	347.4	304.1
95°	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5	917.8	892.6	673.5
97.5°	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1	1153.1	940.2	630.4
100°	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9	1160.9	880.5	571.7
102.5°	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8	1095.2	806.1	532.3
105°	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6	975.8	718.5	498.3
107.5°	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5	879.5	669.4	492.2
110°	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2	831.3	652.8	494.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0	804.1	644.9	499.2
115°	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6	778.7	640.7	509.3
117.5°	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4	767.3	639.6	520.0
120°	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2	761.2	639.6	527.9
122.5°	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6	754.2	638.8	535.8
125°	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7	742.5	637.4	547.6
127.5°	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8	727.0	635.0	557.0
130°	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3	717.4	634.1	564.0
132.5°	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9	708.6	633.3	570.1
135°	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5	695.5	632.0	579.4
137.5°	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5	684.1	631.7	584.8
140°	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3	678.0	630.8	589.3
142.5°	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0	672.7	630.8	592.8
145°	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8	663.7	628.7	594.7
147.5°	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6	655.6	624.7	595.8
150°	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8	649.5	622.1	595.8
152.5°	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1	642.4	617.7	594.1
155°	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7	632.0	611.1	591.4
157.5°	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1	621.2	604.4	588.6
160°	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5	613.3	599.1	586.0
162.5°	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8	606.3	593.8	583.3
165°	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5	594.7	586.0	578.2
167.5°	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6	584.2	578.1	573.1
170°	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7	577.2	572.8	569.5
172.5°	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6	571.1	567.5	566.0
175°	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3	564.0	561.8	561.8
177.5°	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1	559.2	558.4	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1875.0	1866.6	1860.6	1855.8	1842.5	1834.7	1828.6	1820.2	1810.6	1800.4	1787.7
5°	1981.4	1955.9	1937.0	1908.5	1881.3	1858.8	1835.4	1814.4	1788.8	1761.0	1740.6
7.5°	2093.3	2055.2	2006.4	1964.2	1916.6	1875.2	1838.1	1800.3	1760.8	1722.6	1687.5
10°	2164.3	2115.3	2061.2	1997.2	1937.0	1883.6	1833.9	1785.7	1739.1	1692.4	1652.6
12.5°	2240.8	2179.8	2099.7	2025.0	1957.5	1886.0	1826.1	1767.1	1710.8	1661.8	1615.2
15°	2343.4	2255.3	2162.8	2062.7	1973.9	1890.4	1808.4	1733.8	1670.7	1605.9	1560.8
17.5°	2406.5	2297.5	2191.7	2087.1	1979.6	1874.2	1785.7	1699.9	1620.7	1556.4	1499.5
20°	2448.0	2339.7	2207.9	2103.4	1975.4	1867.1	1764.7	1669.1	1586.4	1517.9	1459.2
22.5°	2484.2	2358.9	2227.2	2089.5	1962.2	1847.2	1735.2	1639.0	1554.4	1482.3	1426.1
25°	2503.7	2359.9	2217.0	2080.0	1935.5	1799.3	1697.7	1584.9	1494.5	1418.5	1358.3
27.5°	2505.8	2352.1	2190.4	2038.2	1889.0	1762.2	1633.9	1533.0	1439.3	1359.0	1301.2
30°	2499.2	2338.9	2165.0	2000.3	1850.5	1712.8	1601.4	1491.6	1396.0	1316.2	1255.9
32.5°	2478.1	2311.2	2132.5	1958.1	1802.9	1668.2	1553.2	1448.8	1355.7	1277.1	1213.8
35°	2417.2	2252.3	2061.9	1880.6	1721.8	1585.6	1481.8	1375.6	1282.3	1207.9	1146.9
37.5°	2321.9	2172.8	1979.3	1791.7	1635.7	1498.9	1396.0	1300.0	1216.0	1140.3	1077.8
40°	2238.8	2107.9	1913.7	1730.8	1562.3	1432.1	1335.8	1247.7	1164.1	1092.7	1033.2
42.5°	2143.1	2029.0	1849.9	1656.1	1493.6	1362.8	1268.9	1189.9	1111.2	1045.1	985.7
45°	1972.4	1897.1	1728.6	1549.4	1380.2	1256.7	1167.2	1098.0	1031.7	967.0	917.4
47.5°	1776.1	1738.8	1596.9	1426.8	1266.0	1144.4	1066.8	1002.9	944.7	889.9	846.1
50°	1644.3	1626.3	1503.5	1339.5	1186.0	1071.6	993.3	938.4	888.7	840.6	799.2
52.5°	1514.3	1513.6	1403.1	1252.8	1110.8	1000.6	922.9	871.6	828.6	789.4	752.2
55°	1315.4	1336.5	1250.0	1116.0	988.8	889.5	819.5	773.6	743.5	711.1	683.3
57.5°	1132.8	1167.8	1096.5	978.5	872.3	780.8	719.9	685.4	653.4	633.8	613.5
60°	1013.7	1046.8	991.1	891.7	791.6	713.4	655.4	624.6	596.7	583.2	568.9
62.5°	907.7	937.2	896.0	803.9	717.0	641.8	592.9	563.2	544.4	529.6	520.2
65°	756.3	781.2	745.7	678.8	604.3	544.1	504.2	480.9	462.8	456.8	446.3
67.5°	611.3	634.0	614.8	557.9	498.1	452.6	421.4	399.0	388.3	383.0	375.5
70°	525.3	547.8	527.5	477.9	432.0	393.6	364.2	351.5	340.2	337.9	327.3
72.5°	452.4	467.8	447.4	408.6	369.4	337.0	314.2	300.9	295.0	291.0	285.2
75°	339.4	353.0	339.4	309.2	281.4	258.9	239.3	234.0	227.2	225.0	221.2
77.5°	240.3	251.9	241.6	222.7	202.0	184.5	174.0	167.2	165.7	161.8	163.6
80°	183.6	191.1	181.3	168.5	152.0	140.0	132.4	128.7	124.1	122.6	125.6
82.5°	131.9	135.2	130.2	121.6	109.2	101.4	96.3	92.0	91.0	91.3	91.3
85°	68.5	67.8	67.0	59.5	55.7	50.4	47.4	46.7	45.9	47.4	48.9
87.5°	25.9	26.6	24.6	22.2	20.2	18.2	16.9	15.8	16.9	18.2	18.9
90°	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1	3.3	6.6	7.6
92.5°	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4	18.2	28.5	41.8
95°	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1	39.4	50.4	64.7
97.5°	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8	64.8	74.3	87.4
100°	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2	83.2	90.9	104.1
102.5°	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8	102.5	109.3	121.6
105°	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2	131.4	137.0	150.1
107.5°	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3	160.5	166.1	180.0
110°	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5	180.7	186.2	199.3





TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8	200.0	206.3	218.6
115°	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6	228.9	236.6	247.5
117.5°	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5	257.6	264.4	276.4
120°	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8	276.0	283.7	295.7
122.5°	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3	293.5	301.2	312.4
125°	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3	318.7	325.3	337.3
127.5°	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7	338.2	346.1	359.9
130°	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1	350.4	359.2	375.7
132.5°	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5	361.0	372.4	388.0
135°	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4	377.9	388.8	407.5
137.5°	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5	393.6	405.7	423.4
140°	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9	404.2	416.2	434.8
142.5°	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1	416.4	427.5	445.4
145°	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5	433.8	444.7	460.0
147.5°	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9	451.0	460.6	476.5
150°	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2	463.3	472.0	485.2
152.5°	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5	473.8	482.6	494.8
155°	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6	490.7	497.2	508.2
157.5°	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1	505.1	511.2	519.8
160°	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7	514.7	519.2	526.8
162.5°	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5	522.6	526.1	532.9
165°	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4	533.4	535.6	541.0
167.5°	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3	542.2	543.3	547.4
170°	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6	546.5	547.6	550.9
172.5°	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0	550.9	551.1	553.6
175°	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4	555.3	555.3	556.4
177.5°	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4	557.5	556.6	557.5
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1781.7	1776.3	1768.5	1757.7	1748.6	1739.0	1736.5	1733.0	1740.1	1734.2	1732.3
5°	1723.3	1707.5	1687.2	1663.9	1650.3	1630.8	1627.0	1619.5	1611.9	1611.2	1603.6
7.5°	1661.4	1638.2	1611.7	1587.8	1565.8	1544.5	1530.5	1527.5	1516.4	1509.9	1502.3
10°	1621.7	1593.1	1562.3	1539.7	1514.1	1491.6	1475.7	1466.7	1459.2	1450.9	1443.4
12.5°	1574.8	1544.4	1518.9	1494.5	1464.1	1447.0	1421.0	1405.3	1403.8	1403.9	1384.4
15°	1520.1	1490.1	1450.9	1416.3	1399.7	1366.6	1352.3	1334.3	1323.0	1311.6	1302.7
17.5°	1457.6	1420.2	1389.6	1349.9	1318.3	1291.9	1273.2	1262.3	1245.3	1229.4	1217.8
20°	1418.5	1378.7	1346.3	1304.1	1269.5	1237.2	1221.3	1206.4	1193.5	1180.0	1167.2
22.5°	1378.8	1337.1	1297.5	1256.6	1224.4	1190.2	1175.0	1154.5	1142.4	1134.8	1122.0
25°	1316.2	1271.0	1225.9	1186.8	1153.7	1123.5	1103.2	1087.4	1073.8	1067.8	1059.6
27.5°	1248.1	1203.3	1159.7	1115.2	1077.6	1055.8	1039.5	1027.7	1019.8	1011.8	1008.1
30°	1204.9	1158.2	1111.5	1070.1	1035.5	1013.7	998.6	990.3	984.3	980.5	976.8
32.5°	1160.8	1114.8	1065.7	1027.9	996.9	977.5	966.1	957.8	954.8	953.5	952.2
35°	1090.4	1043.8	998.6	964.8	935.4	927.8	918.1	913.6	912.1	917.4	919.6
37.5°	1022.3	978.9	937.4	904.6	885.3	874.3	871.0	871.1	876.6	881.2	886.6
40°	978.3	936.1	897.0	868.5	850.4	843.6	842.1	845.8	851.9	857.1	863.2
42.5°	935.6	894.0	858.5	831.7	819.1	812.8	813.8	817.6	826.0	832.5	841.5
45°	869.2	834.5	799.9	778.2	767.6	769.1	769.1	775.9	784.1	793.9	803.7
47.5°	806.7	771.8	743.4	725.0	719.5	718.2	722.5	731.3	743.2	755.3	768.9
50°	764.6	731.5	706.6	690.0	684.1	686.4	692.3	700.6	714.9	730.0	744.2
52.5°	721.8	691.7	668.7	653.4	649.1	653.2	659.2	672.3	684.9	701.1	718.4
55°	655.4	629.9	611.8	600.5	599.0	601.2	608.0	622.4	640.4	660.7	677.3
57.5°	589.4	568.0	551.5	543.7	544.4	546.5	557.6	574.7	593.9	615.6	637.0
60°	544.8	525.3	511.7	505.7	506.4	511.0	524.5	540.4	564.4	585.5	608.0
62.5°	502.7	485.5	472.6	467.2	466.1	476.1	489.0	505.4	529.5	553.0	577.3
65°	435.0	421.4	410.9	407.8	410.1	417.6	434.2	456.0	476.4	501.1	526.8
67.5°	368.7	357.6	350.3	351.8	354.5	365.6	379.5	398.2	421.3	447.0	472.3
70°	326.6	316.0	310.0	310.8	315.3	328.9	340.9	359.7	384.6	410.9	432.0
72.5°	283.2	276.4	270.9	274.1	278.6	287.9	302.9	321.8	343.7	368.2	390.4
75°	217.4	217.4	214.4	216.7	223.5	232.5	243.8	263.3	285.2	304.8	322.8
77.5°	161.4	159.7	161.6	164.4	168.2	179.0	191.9	205.9	222.3	241.9	256.7
80°	123.4	124.1	127.9	132.4	133.9	142.2	155.8	168.5	181.3	197.9	212.3
82.5°	92.7	93.5	95.4	101.1	102.6	111.5	120.3	133.1	144.7	155.8	167.7
85°	50.4	50.4	54.2	56.5	60.2	66.3	71.4	79.0	89.5	97.1	108.4
87.5°	21.0	21.0	24.7	25.9	28.2	31.7	32.6	39.5	42.1	45.3	50.7
90°	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7	20.8	21.9	21.9
92.5°	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1	161.8	128.8	106.9
95°	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5	641.8	495.0	388.8
97.5°	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1	1136.0	1028.9	914.5
100°	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9	1342.7	1289.1	1208.1
102.5°	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8	1423.3	1438.9	1405.1
105°	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6	1416.2	1524.6	1569.4
107.5°	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5	1303.3	1456.0	1553.7
110°	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2	1215.7	1374.5	1495.0



TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0	1138.6	1288.6	1409.1
115°	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6	1050.4	1178.5	1283.6
117.5°	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4	999.9	1100.7	1189.9
120°	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2	978.1	1065.6	1143.4
122.5°	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6	964.0	1043.8	1111.9
125°	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7	941.9	1017.5	1077.7
127.5°	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8	915.9	991.2	1048.4
130°	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3	894.8	969.3	1027.4
132.5°	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9	871.2	943.9	1001.9
135°	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5	835.7	902.5	957.2
137.5°	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5	801.7	858.0	907.5
140°	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3	779.8	829.1	875.1
142.5°	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0	761.4	803.7	843.6
145°	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8	736.0	768.8	799.6
147.5°	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6	714.1	740.4	764.5
150°	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8	701.0	722.8	742.5
152.5°	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1	687.8	707.9	724.2
155°	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7	669.2	685.6	698.8
157.5°	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1	650.8	664.6	675.1
160°	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5	638.5	650.5	659.3
162.5°	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8	627.2	636.6	644.4
165°	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5	610.0	617.7	623.2
167.5°	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6	595.6	601.7	605.0
170°	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7	586.0	590.3	593.6
172.5°	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6	578.1	580.7	583.1
175°	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3	567.3	569.5	569.5
177.5°	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1	561.0	561.0	561.8
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1731.2	1729.9	1725.7	1725.1	1725.7	1729.9	1731.2	1732.3	1734.2	1740.1	1733.0
5°	1599.1	1595.3	1593.1	1601.4	1593.1	1595.3	1599.1	1603.6	1611.2	1611.9	1619.5
7.5°	1499.7	1496.7	1490.1	1487.9	1490.1	1496.7	1499.7	1502.3	1509.9	1516.4	1527.5
10°	1435.9	1432.9	1426.8	1425.3	1426.8	1432.9	1435.9	1443.4	1450.9	1459.2	1466.7
12.5°	1374.4	1368.4	1367.3	1368.8	1367.3	1368.4	1374.4	1384.4	1403.9	1403.8	1405.3
15°	1292.9	1289.9	1281.6	1283.8	1281.6	1289.9	1292.9	1302.7	1311.6	1323.0	1334.3
17.5°	1212.5	1208.9	1198.8	1207.7	1198.8	1208.9	1212.5	1217.8	1229.4	1245.3	1262.3
20°	1161.9	1155.9	1150.7	1149.9	1150.7	1155.9	1161.9	1167.2	1180.0	1193.5	1206.4
22.5°	1113.7	1108.3	1107.9	1103.0	1107.9	1108.3	1113.7	1122.0	1134.8	1142.4	1154.5
25°	1053.6	1048.3	1046.8	1043.0	1046.8	1048.3	1053.6	1059.6	1067.8	1073.8	1087.4
27.5°	1007.4	1004.8	1002.1	1003.2	1002.1	1004.8	1007.4	1008.1	1011.8	1019.8	1027.7
30°	979.0	978.3	976.8	976.8	976.8	978.3	979.0	976.8	980.5	984.3	990.3
32.5°	955.5	955.5	956.3	956.3	956.3	955.5	955.5	952.2	953.5	954.8	957.8
35°	922.7	924.8	926.3	924.1	926.3	924.8	922.7	919.6	917.4	912.1	913.6
37.5°	892.8	895.0	897.2	899.8	897.2	895.0	892.8	886.6	881.2	876.6	871.1
40°	870.0	875.2	876.7	880.4	876.7	875.2	870.0	863.2	857.1	851.9	845.8
42.5°	848.3	854.1	858.0	858.8	858.0	854.1	848.3	841.5	832.5	826.0	817.6
45°	815.0	821.0	826.3	826.3	826.3	821.0	815.0	803.7	793.9	784.1	775.9
47.5°	780.5	789.3	794.6	795.9	794.6	789.3	780.5	768.9	755.3	743.2	731.3
50°	757.1	767.6	772.9	776.7	772.9	767.6	757.1	744.2	730.0	714.9	700.6
52.5°	734.1	744.7	751.8	753.8	751.8	744.7	734.1	718.4	701.1	684.9	672.3
55°	694.6	709.6	717.9	721.0	717.9	709.6	694.6	677.3	660.7	640.4	622.4
57.5°	657.2	671.1	680.7	683.0	680.7	671.1	657.2	637.0	615.6	593.9	574.7
60°	628.4	643.4	655.4	657.7	655.4	643.4	628.4	608.0	585.5	564.4	540.4
62.5°	598.9	614.5	625.4	631.2	625.4	614.5	598.9	577.3	553.0	529.5	505.4
65°	547.8	563.6	574.2	576.5	574.2	563.6	547.8	526.8	501.1	476.4	456.0
67.5°	492.2	507.9	514.9	519.2	514.9	507.9	492.2	472.3	447.0	421.3	398.2
70°	453.0	465.8	473.3	477.1	473.3	465.8	453.0	432.0	410.9	384.6	359.7
72.5°	408.5	421.9	430.6	431.3	430.6	421.9	408.5	390.4	368.2	343.7	321.8
75°	340.2	352.2	356.7	356.7	356.7	352.2	340.2	322.8	304.8	285.2	263.3
77.5°	269.3	275.4	281.2	282.4	281.2	275.4	269.3	256.7	241.9	222.3	205.9
80°	223.5	227.2	231.8	231.8	231.8	227.2	223.5	212.3	197.9	181.3	168.5
82.5°	176.5	179.7	184.3	183.6	184.3	179.7	176.5	167.7	155.8	144.7	133.1
85°	106.9	113.7	112.9	111.4	112.9	113.7	106.9	108.4	97.1	89.5	79.0
87.5°	52.8	53.5	55.1	56.4	55.1	53.5	52.8	50.7	45.3	42.1	39.5
90°	23.0	24.1	23.0	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7
92.5°	94.0	88.0	84.4	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1
95°	335.2	301.2	281.4	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5
97.5°	835.8	770.0	737.1	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1
100°	1112.8	1045.9	1013.1	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9
102.5°	1346.7	1298.3	1263.7	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8
105°	1571.7	1562.9	1547.6	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6
107.5°	1607.8	1632.8	1643.7	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5
110°	1572.7	1618.7	1638.5	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2



TEST NUMBER: P332708-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1497.4	1553.0	1580.6	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0
115°	1370.2	1435.9	1470.9	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6
117.5°	1263.7	1318.9	1354.3	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4
120°	1205.9	1254.1	1282.5	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2
122.5°	1164.7	1205.9	1229.9	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6
125°	1121.5	1153.3	1174.1	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7
127.5°	1092.4	1120.7	1138.2	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8
130°	1072.2	1099.6	1117.1	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3
132.5°	1045.9	1076.9	1093.4	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9
135°	1001.1	1031.7	1049.2	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5
137.5°	948.5	978.7	993.2	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5
140°	913.4	937.5	952.8	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3
142.5°	877.5	899.8	913.4	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0
145°	826.9	845.6	856.5	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8
147.5°	784.7	800.6	809.0	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6
150°	760.1	774.3	780.9	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8
152.5°	739.0	750.6	754.6	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1
155°	709.7	718.5	721.8	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7
157.5°	683.4	690.0	692.0	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1
160°	665.9	672.5	673.5	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5
162.5°	649.2	655.8	657.0	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8
165°	627.5	632.0	630.8	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5
167.5°	607.2	610.0	609.8	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6
170°	595.8	596.9	595.8	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7
172.5°	584.4	585.5	584.4	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6
175°	569.5	571.7	569.5	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3
177.5°	561.0	561.8	560.1	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1736.5	1739.0	1748.6	1757.7	1768.5	1776.3	1781.7	1787.7	1800.4	1810.6	1820.2
5°	1627.0	1630.8	1650.3	1663.9	1687.2	1707.5	1723.3	1740.6	1761.0	1788.8	1814.4
7.5°	1530.5	1544.5	1565.8	1587.8	1611.7	1638.2	1661.4	1687.5	1722.6	1760.8	1800.3
10°	1475.7	1491.6	1514.1	1539.7	1562.3	1593.1	1621.7	1652.6	1692.4	1739.1	1785.7
12.5°	1421.0	1447.0	1464.1	1494.5	1518.9	1544.4	1574.8	1615.2	1661.8	1710.8	1767.1
15°	1352.3	1366.6	1399.7	1416.3	1450.9	1490.1	1520.1	1560.8	1605.9	1670.7	1733.8
17.5°	1273.2	1291.9	1318.3	1349.9	1389.6	1420.2	1457.6	1499.5	1556.4	1620.7	1699.9
20°	1221.3	1237.2	1269.5	1304.1	1346.3	1378.7	1418.5	1459.2	1517.9	1586.4	1669.1
22.5°	1175.0	1190.2	1224.4	1256.6	1297.5	1337.1	1378.8	1426.1	1482.3	1554.4	1639.0
25°	1103.2	1123.5	1153.7	1186.8	1225.9	1271.0	1316.2	1358.3	1418.5	1494.5	1584.9
27.5°	1039.5	1055.8	1077.6	1115.2	1159.7	1203.3	1248.1	1301.2	1359.0	1439.3	1533.0
30°	998.6	1013.7	1035.5	1070.1	1111.5	1158.2	1204.9	1255.9	1316.2	1396.0	1491.6
32.5°	966.1	977.5	996.9	1027.9	1065.7	1114.8	1160.8	1213.8	1277.1	1355.7	1448.8
35°	918.1	927.8	935.4	964.8	998.6	1043.8	1090.4	1146.9	1207.9	1282.3	1375.6
37.5°	871.0	874.3	885.3	904.6	937.4	978.9	1022.3	1077.8	1140.3	1216.0	1300.0
40°	842.1	843.6	850.4	868.5	897.0	936.1	978.3	1033.2	1092.7	1164.1	1247.7
42.5°	813.8	812.8	819.1	831.7	858.5	894.0	935.6	985.7	1045.1	1111.2	1189.9
45°	769.1	769.1	767.6	778.2	799.9	834.5	869.2	917.4	967.0	1031.7	1098.0
47.5°	722.5	718.2	719.5	725.0	743.4	771.8	806.7	846.1	889.9	944.7	1002.9
50°	692.3	686.4	684.1	690.0	706.6	731.5	764.6	799.2	840.6	888.7	938.4
52.5°	659.2	653.2	649.1	653.4	668.7	691.7	721.8	752.2	789.4	828.6	871.6
55°	608.0	601.2	599.0	600.5	611.8	629.9	655.4	683.3	711.1	743.5	773.6
57.5°	557.6	546.5	544.4	543.7	551.5	568.0	589.4	613.5	633.8	653.4	685.4
60°	524.5	511.0	506.4	505.7	511.7	525.3	544.8	568.9	583.2	596.7	624.6
62.5°	489.0	476.1	466.1	467.2	472.6	485.5	502.7	520.2	529.6	544.4	563.2
65°	434.2	417.6	410.1	407.8	410.9	421.4	435.0	446.3	456.8	462.8	480.9
67.5°	379.5	365.6	354.5	351.8	350.3	357.6	368.7	375.5	383.0	388.3	399.0
70°	340.9	328.9	315.3	310.8	310.0	316.0	326.6	327.3	337.9	340.2	351.5
72.5°	302.9	287.9	278.6	274.1	270.9	276.4	283.2	285.2	291.0	295.0	300.9
75°	243.8	232.5	223.5	216.7	214.4	217.4	217.4	221.2	225.0	227.2	234.0
77.5°	191.9	179.0	168.2	164.4	161.6	159.7	161.4	163.6	161.8	165.7	167.2
80°	155.8	142.2	133.9	132.4	127.9	124.1	123.4	125.6	122.6	124.1	128.7
82.5°	120.3	111.5	102.6	101.1	95.4	93.5	92.7	91.3	91.3	91.0	92.0
85°	71.4	66.3	60.2	56.5	54.2	50.4	50.4	48.9	47.4	45.9	46.7
87.5°	32.6	31.7	28.2	25.9	24.7	21.0	21.0	18.9	18.2	16.9	15.8
90°	18.7	19.7	17.5	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1
92.5°	289.4	347.4	304.1	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4
95°	917.8	892.6	673.5	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1
97.5°	1153.1	940.2	630.4	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8
100°	1160.9	880.5	571.7	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2
102.5°	1095.2	806.1	532.3	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8
105°	975.8	718.5	498.3	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2
107.5°	879.5	669.4	492.2	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3
110°	831.3	652.8	494.0	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5



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CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	804.1	644.9	499.2	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8
115°	778.7	640.7	509.3	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6
117.5°	767.3	639.6	520.0	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5
120°	761.2	639.6	527.9	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8
122.5°	754.2	638.8	535.8	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3
125°	742.5	637.4	547.6	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3
127.5°	727.0	635.0	557.0	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7
130°	717.4	634.1	564.0	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1
132.5°	708.6	633.3	570.1	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5
135°	695.5	632.0	579.4	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4
137.5°	684.1	631.7	584.8	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5
140°	678.0	630.8	589.3	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9
142.5°	672.7	630.8	592.8	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1
145°	663.7	628.7	594.7	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5
147.5°	655.6	624.7	595.8	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9
150°	649.5	622.1	595.8	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2
152.5°	642.4	617.7	594.1	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5
155°	632.0	611.1	591.4	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6
157.5°	621.2	604.4	588.6	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1
160°	613.3	599.1	586.0	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7
162.5°	606.3	593.8	583.3	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5
165°	594.7	586.0	578.2	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4
167.5°	584.2	578.1	573.1	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3
170°	577.2	572.8	569.5	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6
172.5°	571.1	567.5	566.0	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0
175°	564.0	561.8	561.8	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4
177.5°	559.2	558.4	558.4	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332708-830

CATALOG NUMBER: SA4XXDIP-C1195D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1828.6	1834.7	1842.5	1855.8	1860.6	1866.6	1875.0	1874.4	1876.8	1885.8	1905.2
5°	1835.4	1858.8	1881.3	1908.5	1937.0	1955.9	1981.4	1997.2	2013.1	2033.3	2067.9
7.5°	1838.1	1875.2	1916.6	1964.2	2006.4	2055.2	2093.3	2129.1	2161.4	2204.3	2245.6
10°	1833.9	1883.6	1937.0	1997.2	2061.2	2115.3	2164.3	2220.0	2267.4	2319.3	2366.0
12.5°	1826.1	1886.0	1957.5	2025.0	2099.7	2179.8	2240.8	2297.1	2360.1	2419.9	2491.8
15°	1808.4	1890.4	1973.9	2062.7	2162.8	2255.3	2343.4	2416.4	2484.2	2573.7	2667.8
17.5°	1785.7	1874.2	1979.6	2087.1	2191.7	2297.5	2406.5	2516.2	2601.7	2712.9	2786.5
20°	1764.7	1867.1	1975.4	2103.4	2207.9	2339.7	2448.0	2554.1	2671.5	2782.1	2870.1
22.5°	1735.2	1847.2	1962.2	2089.5	2227.2	2358.9	2484.2	2599.2	2716.7	2837.0	2943.7
25°	1697.7	1799.3	1935.5	2080.0	2217.0	2359.9	2503.7	2648.2	2774.6	2901.8	3001.1
27.5°	1633.9	1762.2	1889.0	2038.2	2190.4	2352.1	2505.8	2657.0	2789.5	2894.1	2955.6
30°	1601.4	1712.8	1850.5	2000.3	2165.0	2338.9	2499.2	2647.4	2770.9	2854.4	2879.2
32.5°	1553.2	1668.2	1802.9	1958.1	2132.5	2311.2	2478.1	2617.9	2720.8	2764.7	2734.7
35°	1481.8	1585.6	1721.8	1880.6	2061.9	2252.3	2417.2	2535.3	2587.9	2546.6	2443.4
37.5°	1396.0	1498.9	1635.7	1791.7	1979.3	2172.8	2321.9	2406.9	2389.4	2286.5	2132.9
40°	1335.8	1432.1	1562.3	1730.8	1913.7	2107.9	2238.8	2284.7	2236.6	2089.1	1925.7
42.5°	1268.9	1362.8	1493.6	1656.1	1849.9	2029.0	2143.1	2146.8	2066.1	1889.8	1725.9
45°	1167.2	1256.7	1380.2	1549.4	1728.6	1897.1	1972.4	1935.5	1786.5	1616.5	1451.6
47.5°	1066.8	1144.4	1266.0	1426.8	1596.9	1738.8	1776.1	1709.8	1551.0	1385.9	1233.1
50°	993.3	1071.6	1186.0	1339.5	1503.5	1626.3	1644.3	1556.2	1400.4	1234.2	1114.5
52.5°	922.9	1000.6	1110.8	1252.8	1403.1	1513.6	1514.3	1412.4	1257.2	1108.9	997.7
55°	819.5	889.5	988.8	1116.0	1250.0	1336.5	1315.4	1210.0	1075.3	946.7	849.6
57.5°	719.9	780.8	872.3	978.5	1096.5	1167.8	1132.8	1031.4	911.2	802.0	728.5
60°	655.4	713.4	791.6	891.7	991.1	1046.8	1013.7	921.9	811.2	723.2	659.2
62.5°	592.9	641.8	717.0	803.9	896.0	937.2	907.7	817.1	721.5	641.9	590.0
65°	504.2	544.1	604.3	678.8	745.7	781.2	756.3	672.0	599.0	541.9	500.4
67.5°	421.4	452.6	498.1	557.9	614.8	634.0	611.3	552.7	490.8	445.1	415.8
70°	364.2	393.6	432.0	477.9	527.5	547.8	525.3	478.6	428.2	386.1	357.4
72.5°	314.2	337.0	369.4	408.6	447.4	467.8	452.4	407.6	365.0	333.7	309.2
75°	239.3	258.9	281.4	309.2	339.4	353.0	339.4	308.5	279.2	255.9	238.6
77.5°	174.0	184.5	202.0	222.7	241.6	251.9	240.3	219.3	201.4	185.4	176.8
80°	132.4	140.0	152.0	168.5	181.3	191.1	183.6	166.3	152.0	141.5	137.7
82.5°	96.3	101.4	109.2	121.6	130.2	135.2	131.9	119.3	113.5	104.2	100.4
85°	47.4	50.4	55.7	59.5	67.0	67.8	68.5	63.2	58.0	55.7	52.7
87.5°	16.9	18.2	20.2	22.2	24.6	26.6	25.9	26.4	24.4	23.6	21.4
90°	3.3	6.6	7.6	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7
92.5°	18.2	28.5	41.8	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1
95°	39.4	50.4	64.7	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5
97.5°	64.8	74.3	87.4	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1
100°	83.2	90.9	104.1	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9
102.5°	102.5	109.3	121.6	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8
105°	131.4	137.0	150.1	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6
107.5°	160.5	166.1	180.0	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5
110°	180.7	186.2	199.3	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	206.3	218.6	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0
115°	228.9	236.6	247.5	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6
117.5°	257.6	264.4	276.4	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4
120°	276.0	283.7	295.7	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2
122.5°	293.5	301.2	312.4	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6
125°	318.7	325.3	337.3	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7
127.5°	338.2	346.1	359.9	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8
130°	350.4	359.2	375.7	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3
132.5°	361.0	372.4	388.0	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9
135°	377.9	388.8	407.5	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5
137.5°	393.6	405.7	423.4	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5
140°	404.2	416.2	434.8	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3
142.5°	416.4	427.5	445.4	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0
145°	433.8	444.7	460.0	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8
147.5°	451.0	460.6	476.5	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6
150°	463.3	472.0	485.2	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8
152.5°	473.8	482.6	494.8	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1
155°	490.7	497.2	508.2	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7
157.5°	505.1	511.2	519.8	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1
160°	514.7	519.2	526.8	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5
162.5°	522.6	526.1	532.9	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8
165°	533.4	535.6	541.0	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5
167.5°	542.2	543.3	547.4	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6
170°	546.5	547.6	550.9	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7
172.5°	550.9	551.1	553.6	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6
175°	555.3	555.3	556.4	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3
177.5°	557.5	556.6	557.5	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1914.8	1916.0	1921.4	1925.6	1926.8	1932.8	1933.4
5°	2083.0	2095.8	2120.6	2122.9	2126.7	2146.3	2131.2
7.5°	2280.2	2312.7	2334.4	2353.5	2360.4	2369.0	2367.2
10°	2406.6	2454.8	2478.9	2517.2	2518.8	2528.6	2522.5
12.5°	2533.6	2589.6	2633.6	2640.6	2672.9	2677.9	2686.2
15°	2713.7	2773.1	2834.0	2855.9	2900.3	2910.9	2927.3
17.5°	2882.9	2943.7	2986.4	3042.8	3061.0	3085.4	3068.8
20°	2975.5	3041.8	3096.0	3140.4	3159.1	3172.7	3171.2
22.5°	3031.5	3098.3	3142.2	3175.9	3193.4	3199.2	3198.9
25°	3066.6	3104.9	3118.5	3131.3	3111.7	3104.9	3107.9
27.5°	2969.1	2959.1	2923.8	2877.4	2829.2	2791.0	2770.2
30°	2834.8	2776.1	2722.7	2629.3	2581.2	2552.6	2527.1
32.5°	2644.6	2551.6	2448.7	2363.2	2308.5	2266.1	2259.7
35°	2318.6	2178.6	2053.0	1948.3	1894.1	1848.2	1837.7
37.5°	1971.2	1825.8	1712.6	1620.5	1562.3	1529.9	1499.7
40°	1740.6	1615.7	1504.3	1426.1	1381.7	1358.3	1339.5
42.5°	1563.0	1449.0	1338.1	1278.6	1238.4	1224.1	1213.1
45°	1317.7	1211.5	1134.8	1089.7	1066.3	1042.3	1031.0
47.5°	1121.2	1034.9	984.3	945.9	921.0	906.6	899.5
50°	1009.9	939.1	894.0	864.7	842.1	830.8	824.8
52.5°	911.2	853.1	815.1	791.8	776.5	768.2	765.8
55°	784.9	740.5	716.4	696.1	684.9	677.3	674.3
57.5°	682.2	648.1	628.5	611.8	607.5	601.2	599.0
60°	614.8	588.5	571.9	560.6	556.9	549.3	550.8
62.5°	555.3	533.7	519.5	513.1	508.1	501.8	503.9
65°	469.6	453.7	446.3	440.3	434.2	430.5	433.5
67.5°	394.0	383.2	373.0	369.5	366.5	365.9	362.7
70°	344.7	335.6	326.6	324.3	324.3	321.3	320.6
72.5°	297.1	290.5	284.5	282.8	280.4	281.6	278.4
75°	229.5	224.2	222.0	219.7	219.0	219.0	216.7
77.5°	169.7	165.7	162.1	162.1	159.4	158.3	158.1
80°	128.7	127.1	124.1	124.1	122.6	123.4	121.9
82.5°	96.8	94.6	94.1	92.8	90.8	90.9	89.4
85°	51.9	49.7	48.9	46.7	45.1	46.7	45.1
87.5°	22.2	21.9	21.2	20.3	19.9	19.6	17.8
90°	20.8	21.9	21.9	23.0	24.1	23.0	23.0
92.5°	161.8	128.8	106.9	94.0	88.0	84.4	84.4
95°	641.8	495.0	388.8	335.2	301.2	281.4	267.2
97.5°	1136.0	1028.9	914.5	835.8	770.0	737.1	714.4
100°	1342.7	1289.1	1208.1	1112.8	1045.9	1013.1	1004.4
102.5°	1423.3	1438.9	1405.1	1346.7	1298.3	1263.7	1256.7
105°	1416.2	1524.6	1569.4	1571.7	1562.9	1547.6	1541.0
107.5°	1303.3	1456.0	1553.7	1607.8	1632.8	1643.7	1646.6
110°	1215.7	1374.5	1495.0	1572.7	1618.7	1638.5	1648.3



TEST NUMBER: P332708-830

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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1138.6	1288.6	1409.1	1497.4	1553.0	1580.6	1596.7
115°	1050.4	1178.5	1283.6	1370.2	1435.9	1470.9	1479.7
117.5°	999.9	1100.7	1189.9	1263.7	1318.9	1354.3	1361.1
120°	978.1	1065.6	1143.4	1205.9	1254.1	1282.5	1294.6
122.5°	964.0	1043.8	1111.9	1164.7	1205.9	1229.9	1242.0
125°	941.9	1017.5	1077.7	1121.5	1153.3	1174.1	1180.6
127.5°	915.9	991.2	1048.4	1092.4	1120.7	1138.2	1144.7
130°	894.8	969.3	1027.4	1072.2	1099.6	1117.1	1123.7
132.5°	871.2	943.9	1001.9	1045.9	1076.9	1093.4	1100.0
135°	835.7	902.5	957.2	1001.1	1031.7	1049.2	1055.8
137.5°	801.7	858.0	907.5	948.5	978.7	993.2	1001.1
140°	779.8	829.1	875.1	913.4	937.5	952.8	961.6
142.5°	761.4	803.7	843.6	877.5	899.8	913.4	919.5
145°	736.0	768.8	799.6	826.9	845.6	856.5	862.0
147.5°	714.1	740.4	764.5	784.7	800.6	809.0	810.9
150°	701.0	722.8	742.5	760.1	774.3	780.9	782.0
152.5°	687.8	707.9	724.2	739.0	750.6	754.6	755.7
155°	669.2	685.6	698.8	709.7	718.5	721.8	721.8
157.5°	650.8	664.6	675.1	683.4	690.0	692.0	692.0
160°	638.5	650.5	659.3	665.9	672.5	673.5	673.5
162.5°	627.2	636.6	644.4	649.2	655.8	657.0	656.0
165°	610.0	617.7	623.2	627.5	632.0	630.8	629.8
167.5°	595.6	601.7	605.0	607.2	610.0	609.8	609.0
170°	586.0	590.3	593.6	595.8	596.9	595.8	595.8
172.5°	578.1	580.7	583.1	584.4	585.5	584.4	582.7
175°	567.3	569.5	569.5	569.5	571.7	569.5	567.3
177.5°	561.0	561.0	561.8	561.0	561.8	560.1	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5

(END OF REPORT)