

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: P331412-930

Luminaire Tested: **SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331412-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

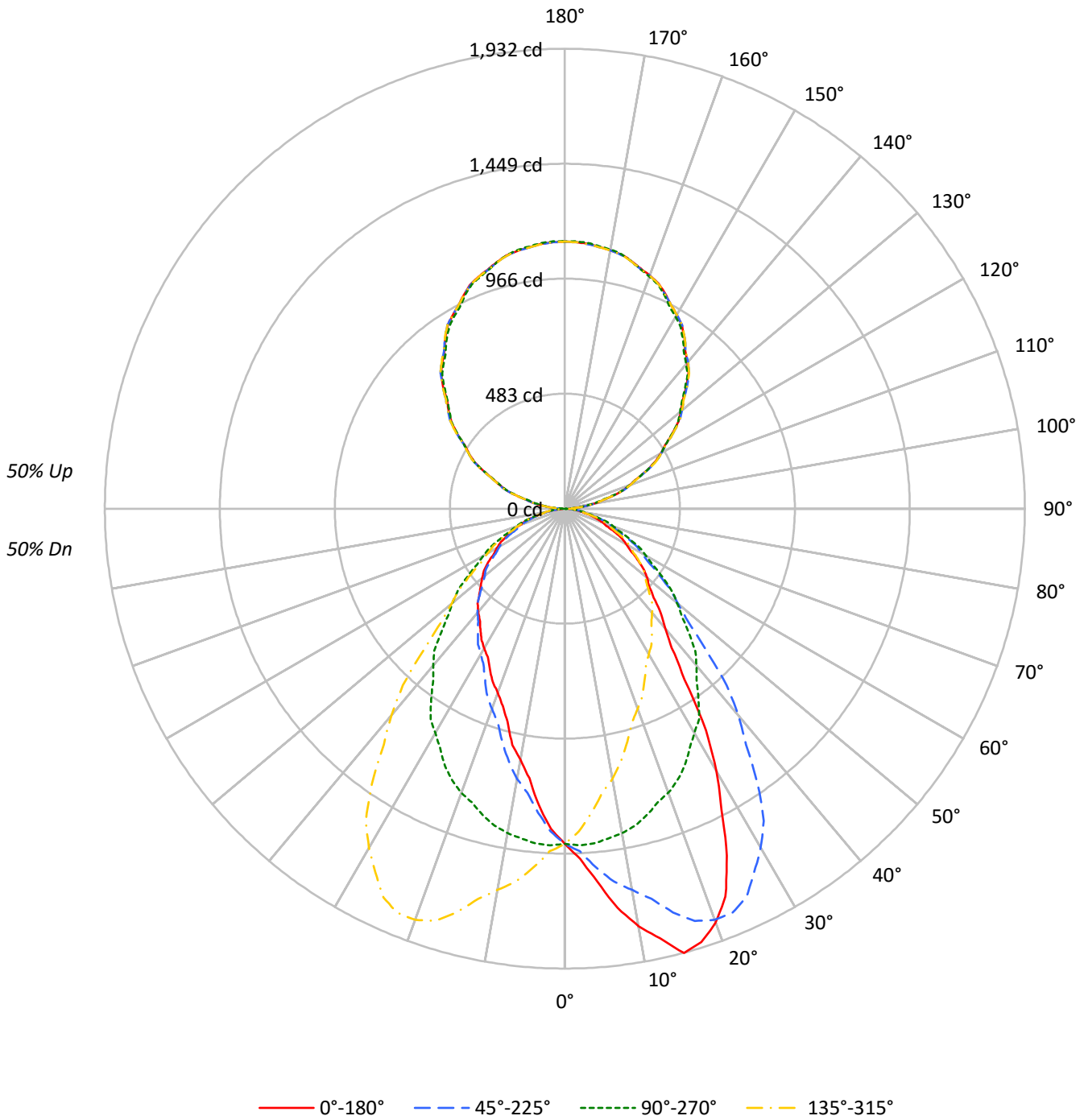
Lumens per Lamp: N/A  
Luminaire Lumens: 6248.0 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 65.4  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43
2	90	83	77	72	83	77	71	67	65	61	58	54	52	49	45	43	41	37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	42	40	38	36	32
4	75	65	57	52	69	60	54	48	52	47	43	44	40	37	36	33	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	24
6	64	52	44	39	59	49	42	37	42	37	33	36	32	28	30	27	24	22
7	59	47	40	34	55	44	37	32	38	33	29	33	28	25	27	24	22	19
8	55	43	36	30	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	51	40	32	27	48	37	30	26	32	27	23	28	24	21	23	20	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	16	14

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

	0°	90°	180°	270°
0°	22727	22727	22727	22727
5°	25480	22875	20272	22875
10°	29198	22689	17544	22689
15°	32301	22272	15499	22272
20°	31809	21825	14129	21825
25°	28682	21232	13261	21232
30°	23702	20282	12629	20282
35°	17274	19291	12177	19291
40°	13797	18120	11927	18120
45°	12056	16762	11586	16762
50°	11333	15450	11359	15450
55°	10446	14117	11054	14117
60°	9571	12700	10585	12700
65°	8722	11427	10128	11427
70°	7917	10192	9451	10192
75°	7018	8808	8372	8808
80°	6034	7290	6741	7290
85°	5409	5409	4001	5409



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.1	2.1
10°-20°	389.7	6.2
20°-30°	565.6	9.1
30°-40°	596.9	9.6
40°-50°	528.5	8.5
50°-60°	421.7	6.8
60°-70°	286.7	4.6
70°-80°	147.0	2.4
80°-90°	39.9	0.6
90°-100°	71.1	1.1
100°-110°	220.9	3.5
110°-120°	377.5	6.0
120°-130°	496.5	7.9
130°-140°	557.2	8.9
140°-150°	546.4	8.7
150°-160°	458.3	7.3
160°-170°	304.0	4.9
170°-180°	106.2	1.7
0°-30°	1089.4	17.4
0°-40°	1686.3	27.0
0°-60°	2636.5	42.2
0°-90°	3110.0	49.8
90°-120°	669.5	10.7
90°-150°	2269.5	36.3
90°-180°	3138.0	50.2
0°-180°	6248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1408	1408	1408	1408	1408	
5°	1572	1411	1251	1411	1572	157
15°	1932	1332	927	1332	1932	533
25°	1610	1192	744	1192	1610	728
35°	876	979	618	979	876	570
45°	528	734	507	734	528	415
55°	371	502	393	502	371	333
65°	228	299	265	299	228	227
75°	112	141	134	141	112	120
85°	29	29	22	29	29	33
90°	32	1	32	1	32	15
95°	59	49	59	49	59	65
105°	210	204	210	204	210	221
115°	379	379	379	379	379	374
125°	553	551	553	551	553	493
135°	722	713	722	713	722	555
145°	875	866	875	866	875	546
155°	997	990	997	990	997	459
165°	1078	1077	1078	1077	1078	304
175°	1117	1120	1117	1120	1117	106
180°	1122	1122	1122	1122	1122	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1472.6	1473.0	1473.9	1467.0	1466.1	1466.1	1460.0	1454.8	1448.8	1440.6	1441.4
5°	1572.1	1578.1	1580.2	1573.8	1564.0	1562.9	1553.7	1538.6	1524.5	1513.1	1505.0
7.5°	1690.9	1693.3	1688.0	1679.4	1672.2	1659.2	1642.1	1625.4	1601.9	1580.4	1564.3
10°	1780.9	1784.2	1775.0	1762.5	1752.2	1737.1	1712.2	1686.8	1656.0	1626.2	1602.4
12.5°	1849.3	1857.3	1845.5	1843.9	1826.3	1805.5	1775.9	1763.0	1719.6	1678.1	1652.6
15°	1932.4	1931.9	1933.0	1922.6	1909.7	1906.4	1875.1	1841.0	1779.9	1755.5	1713.4
17.5°	1908.4	1916.6	1920.4	1920.3	1919.9	1917.9	1907.9	1886.4	1855.7	1816.2	1767.5
20°	1851.3	1862.1	1863.7	1876.2	1883.2	1892.4	1896.1	1890.2	1871.3	1838.3	1796.1
22.5°	1763.0	1766.0	1771.1	1790.5	1805.7	1828.8	1840.8	1860.8	1853.5	1837.4	1802.1
25°	1610.0	1604.6	1623.5	1633.2	1668.4	1705.2	1731.7	1760.9	1786.9	1802.5	1792.3
27.5°	1426.3	1418.1	1446.5	1472.3	1500.9	1540.8	1582.1	1630.8	1671.4	1722.2	1739.6
30°	1271.3	1276.2	1303.3	1330.8	1374.1	1430.4	1476.9	1530.5	1588.4	1645.1	1684.7
32.5°	1104.2	1123.0	1140.1	1182.3	1220.5	1283.2	1351.4	1418.4	1490.5	1555.1	1616.2
35°	876.4	898.1	921.9	952.7	1006.2	1068.4	1135.0	1225.3	1323.8	1412.0	1484.5
37.5°	737.7	734.3	747.9	770.1	813.5	863.7	940.4	1029.6	1145.5	1249.1	1351.4
40°	654.6	652.4	662.2	682.7	715.8	752.5	819.6	898.1	1005.7	1132.3	1254.0
42.5°	597.5	598.8	604.1	618.6	641.3	671.6	721.8	788.6	887.1	1006.3	1137.2
45°	528.0	531.8	537.8	544.8	557.7	582.6	610.7	658.4	736.3	835.8	964.6
47.5°	478.0	478.1	484.2	490.3	498.1	512.1	535.0	564.9	619.9	700.9	811.6
50°	451.2	447.4	451.8	456.6	464.7	474.4	489.6	517.7	554.5	620.0	712.5
52.5°	418.3	418.4	422.3	424.1	431.4	441.2	454.9	474.4	507.8	559.0	635.0
55°	371.1	373.8	376.0	379.2	385.7	392.7	403.6	416.5	442.5	480.9	537.2
57.5°	326.8	327.6	329.8	336.0	340.1	346.6	356.9	368.6	385.5	413.9	456.2
60°	296.4	296.4	300.8	303.5	308.9	315.4	323.5	334.8	350.0	373.2	407.4
62.5°	268.8	268.3	270.0	274.5	278.6	284.7	292.8	302.4	316.7	337.4	365.4
65°	228.3	227.2	230.5	231.5	235.9	241.8	248.3	258.6	269.9	285.1	310.0
67.5°	189.3	190.6	192.4	194.4	196.8	203.1	207.4	214.7	224.3	236.8	253.7
70°	167.7	167.7	167.7	169.3	172.6	175.9	180.2	186.1	195.3	206.1	221.3
72.5°	143.5	145.2	146.9	145.9	150.1	152.1	157.2	160.5	169.3	176.3	189.6
75°	112.5	112.5	112.5	115.2	116.8	118.5	121.7	125.0	129.3	137.9	145.0
77.5°	84.0	83.7	84.3	85.0	86.7	88.6	89.6	92.5	96.5	100.5	106.5
80°	64.9	66.0	66.5	67.6	67.6	68.7	69.2	73.1	75.7	78.4	82.3
82.5°	50.2	50.4	50.5	50.7	51.2	51.9	53.2	54.5	55.4	57.6	60.6
85°	29.2	28.7	28.7	29.8	29.2	29.2	30.3	31.4	31.4	31.9	33.5
87.5°	17.7	17.6	18.0	17.5	17.5	18.0	18.1	17.7	18.3	18.8	18.3
90°	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3	32.7	33.2	28.5
92.5°	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2	30.2	30.1	29.0
95°	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6	60.6	60.6	60.2
97.5°	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9	101.9	101.9	101.1
100°	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7	130.7	130.7	130.0
102.5°	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1	161.9	161.8	160.9
105°	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2	208.8	208.3	207.9
107.5°	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0	259.8	259.7	259.7
110°	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6	294.6	294.6	294.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1	329.6	330.1	330.3
115°	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2	382.4	382.6	383.0
117.5°	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5	434.0	434.5	435.7
120°	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8	467.8	467.8	469.5
122.5°	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2	503.7	504.2	505.4
125°	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6	556.2	556.8	557.5
127.5°	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5	607.2	608.0	608.8
130°	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2	641.6	642.1	642.5
132.5°	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1	676.0	676.9	676.9
135°	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0	725.2	725.5	725.0
137.5°	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8	773.0	773.1	772.6
140°	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9	804.9	804.9	804.0
142.5°	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1	834.0	833.8	833.1
145°	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3	878.1	877.9	876.6
147.5°	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1	916.6	916.2	915.3
150°	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7	941.0	940.4	939.6
152.5°	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3	965.5	964.7	963.7
155°	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4	996.4	995.3	994.7
157.5°	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2	1024.8	1023.4	1023.0
160°	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3	1042.0	1040.8	1040.6
162.5°	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8	1057.4	1056.0	1055.7
165°	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8	1077.3	1075.9	1075.9
167.5°	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3	1093.8	1092.3	1092.3
170°	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3	1102.9	1101.4	1101.6
172.5°	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2	1109.7	1108.2	1108.4
175°	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6	1117.1	1115.6	1116.1
177.5°	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0	1120.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1444.5	1441.0	1438.8	1431.0	1424.1	1417.2	1415.0	1415.8	1406.4	1397.3	1393.3
5°	1500.7	1489.9	1479.6	1465.0	1447.7	1428.7	1419.0	1411.4	1392.5	1372.0	1360.1
7.5°	1551.1	1535.6	1515.9	1488.4	1463.1	1433.4	1414.5	1397.7	1370.0	1341.0	1323.2
10°	1581.8	1560.7	1535.3	1501.8	1471.0	1434.7	1409.2	1383.9	1351.4	1316.8	1295.1
12.5°	1608.3	1579.8	1554.8	1511.7	1475.3	1430.0	1399.8	1363.9	1329.8	1288.7	1267.5
15°	1671.1	1618.6	1571.0	1522.3	1477.4	1414.1	1380.6	1332.4	1287.5	1236.7	1212.4
17.5°	1719.7	1660.8	1585.8	1523.9	1471.5	1401.4	1352.2	1294.5	1241.4	1183.2	1150.1
20°	1747.4	1679.8	1599.1	1525.6	1462.8	1382.7	1329.2	1270.2	1208.0	1142.6	1106.9
22.5°	1763.8	1692.7	1613.0	1519.1	1445.5	1367.6	1300.2	1235.6	1172.6	1101.9	1064.5
25°	1769.0	1704.1	1619.8	1513.7	1423.9	1335.7	1254.6	1191.8	1115.5	1049.5	994.9
27.5°	1743.3	1696.7	1615.6	1503.5	1398.9	1295.8	1205.3	1134.2	1053.8	982.1	927.2
30°	1711.7	1684.7	1605.7	1493.1	1379.0	1268.1	1168.6	1087.9	1007.9	935.4	879.1
32.5°	1662.8	1656.9	1587.5	1478.4	1357.8	1233.1	1130.0	1048.6	959.9	888.6	834.9
35°	1566.7	1592.7	1548.8	1445.5	1317.8	1183.2	1071.7	978.7	886.7	818.5	768.2
37.5°	1437.9	1502.4	1490.9	1397.3	1264.0	1128.9	1005.8	908.6	820.9	752.1	702.7
40°	1349.2	1431.4	1443.3	1360.6	1225.9	1086.9	956.5	859.7	774.1	711.4	661.6
42.5°	1254.0	1350.1	1382.7	1316.5	1184.3	1042.7	912.3	812.0	727.4	666.4	622.2
45°	1094.5	1221.6	1280.5	1242.7	1115.0	970.0	835.8	734.1	657.3	600.0	565.9
47.5°	945.2	1084.1	1163.4	1150.1	1037.8	894.2	761.6	664.0	589.2	543.5	513.0
50°	839.6	982.4	1078.2	1082.6	982.4	840.2	707.1	615.1	546.4	503.7	478.7
52.5°	747.9	884.2	988.6	1011.5	920.6	783.9	658.2	566.6	506.1	466.8	444.6
55°	628.1	743.3	859.1	901.3	828.3	698.4	582.1	501.5	444.7	417.7	398.2
57.5°	522.2	618.2	725.1	771.8	726.8	615.6	506.5	436.6	390.4	366.8	351.9
60°	466.4	542.1	637.3	693.0	654.0	555.1	459.8	393.3	355.5	334.4	320.2
62.5°	414.4	481.5	562.0	612.9	591.7	498.4	413.1	354.3	321.6	301.9	291.7
65°	341.9	394.9	457.1	504.2	490.2	419.2	349.5	299.1	273.2	257.5	249.4
67.5°	281.5	319.8	363.0	404.2	392.9	342.7	286.6	247.4	228.1	214.6	209.7
70°	243.4	272.6	311.0	344.1	334.8	293.8	249.4	215.9	199.1	187.8	182.9
72.5°	207.1	231.1	260.4	287.4	281.2	247.0	210.0	184.7	171.8	161.3	157.4
75°	156.4	174.7	192.6	210.4	208.8	182.3	160.7	141.2	130.9	122.8	121.2
77.5°	115.4	125.7	137.9	148.5	145.5	130.4	113.4	102.2	94.7	89.3	88.4
80°	88.2	94.2	102.8	110.4	106.6	100.1	86.6	78.4	73.1	67.6	65.5
82.5°	63.9	69.9	75.1	79.2	76.3	70.2	61.9	56.3	53.2	49.4	48.6
85°	33.5	36.8	39.0	40.0	39.0	35.1	31.4	29.2	26.5	24.9	24.4
87.5°	17.8	16.8	15.9	16.1	14.3	13.8	11.5	9.7	9.8	9.9	9.5
90°	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0	3.5	6.0	8.6
92.5°	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9	18.7	20.5	22.4
95°	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2	51.4	53.5	55.5
97.5°	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0	91.8	93.7	95.6
100°	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3	122.0	123.7	125.3
102.5°	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1	153.4	154.8	156.1
105°	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6	204.2	204.9	205.5
107.5°	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5	256.4	257.4	258.3
110°	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9	290.1	291.4	292.6





TEST NUMBER: P331412-930

CATALOG NUMBER: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2	326.4	327.8	329.0
115°	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8	380.1	381.3	382.6
117.5°	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2	433.9	435.6	437.2
120°	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	469.5	471.2	472.9
122.5°	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4	502.5	504.4	506.5
125°	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1	553.1	555.0	556.8
127.5°	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6	603.0	605.4	607.8
130°	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7	634.4	637.2	639.8
132.5°	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5	668.8	671.0	673.2
135°	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1	715.4	717.8	720.1
137.5°	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1	764.1	766.0	767.8
140°	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7	793.6	795.5	797.4
142.5°	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1	823.9	825.8	827.7
145°	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6	867.1	868.5	870.0
147.5°	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4	906.2	907.9	909.7
150°	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9	932.2	933.4	934.7
152.5°	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4	955.7	956.9	958.2
155°	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7	990.3	990.9	991.6
157.5°	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8	1020.2	1020.6	1021.0
160°	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0	1038.4	1038.8	1039.2
162.5°	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6	1054.7	1054.8	1054.8
165°	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8	1076.6	1076.4	1076.1
167.5°	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4	1094.7	1094.1	1093.5
170°	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2	1104.6	1103.9	1103.3
172.5°	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0	1111.4	1110.8	1110.1
175°	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4	1119.7	1119.1	1118.4
177.5°	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7	1123.2	1122.7	1122.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331412-930

CATALOG NUMBER: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1389.0	1386.4	1377.4	1372.6	1364.8	1357.5	1352.7	1354.9	1356.6	1355.7	1354.5
5°	1349.2	1339.0	1323.2	1309.7	1300.0	1282.1	1274.6	1270.8	1267.5	1263.7	1260.0
7.5°	1301.9	1285.6	1263.1	1243.8	1225.6	1203.5	1190.8	1183.2	1175.5	1166.9	1159.4
10°	1268.1	1245.4	1221.6	1194.5	1172.9	1152.8	1135.0	1123.1	1112.3	1102.0	1094.5
12.5°	1232.6	1206.4	1177.0	1140.0	1116.1	1087.5	1084.8	1063.8	1046.9	1040.6	1031.7
15°	1176.2	1139.3	1102.0	1058.2	1039.3	1013.3	997.0	980.8	966.2	955.9	953.2
17.5°	1112.0	1064.4	1027.2	995.7	964.7	938.1	923.2	910.2	898.1	884.4	882.6
20°	1063.1	1021.9	981.4	953.7	921.9	894.8	876.4	863.4	853.1	845.1	838.0
22.5°	1016.8	971.8	934.6	904.4	872.9	851.1	836.6	824.0	815.5	806.5	799.9
25°	942.4	907.3	866.7	832.6	806.6	792.6	780.6	769.8	764.4	758.5	750.9
27.5°	877.3	838.3	800.4	774.0	751.1	738.7	730.3	722.8	717.8	714.3	710.0
30°	831.5	792.0	762.2	736.3	717.4	704.9	699.5	695.2	689.3	687.1	684.9
32.5°	787.3	751.8	726.4	703.8	685.7	677.7	672.7	668.8	664.1	661.9	657.6
35°	725.0	695.2	670.3	657.9	643.3	636.2	632.4	627.0	622.6	620.5	620.0
37.5°	666.2	640.3	623.9	608.0	601.8	597.5	592.3	588.6	587.3	586.9	586.4
40°	628.1	607.0	592.4	579.4	576.7	570.2	565.9	562.6	562.6	563.2	562.6
42.5°	593.5	574.5	561.7	550.4	547.2	543.4	539.1	538.8	539.7	541.5	539.7
45°	541.0	527.5	518.3	512.8	506.9	503.1	502.6	504.2	504.8	505.3	506.9
47.5°	492.8	483.7	475.4	469.4	466.8	466.2	465.5	468.4	471.0	472.0	474.4
50°	464.1	453.9	446.9	443.0	440.9	439.9	440.9	444.2	446.3	449.0	450.6
52.5°	432.1	424.9	420.0	417.1	416.2	416.9	417.1	420.8	424.3	425.2	426.0
55°	387.9	382.5	381.4	376.5	378.7	378.1	380.8	383.0	386.3	389.6	390.0
57.5°	343.7	339.4	336.5	337.0	337.6	340.0	342.3	346.0	349.5	352.9	353.3
60°	314.3	312.2	310.5	310.5	311.6	314.9	317.6	321.3	323.5	325.7	327.3
62.5°	287.5	285.4	283.7	284.5	287.4	289.3	292.4	294.5	296.7	298.8	299.6
65°	245.1	244.0	245.6	246.7	247.2	250.0	253.7	255.4	257.5	258.6	262.4
67.5°	206.0	206.2	206.0	207.5	210.7	211.3	214.9	218.7	219.1	221.2	223.6
70°	179.6	180.7	181.8	182.9	185.6	186.6	189.3	190.9	193.1	194.8	196.4
72.5°	155.4	155.6	156.7	156.5	158.7	161.1	163.4	165.0	167.1	169.3	170.8
75°	119.5	119.5	120.7	121.2	123.9	126.6	126.0	127.1	129.3	131.4	132.6
77.5°	87.3	86.1	87.3	87.9	88.7	91.0	91.4	92.9	95.4	94.7	95.9
80°	66.5	64.9	66.5	67.1	67.1	69.8	69.8	70.8	72.5	70.8	72.5
82.5°	47.5	46.7	47.9	48.0	48.9	49.0	49.9	50.1	51.7	51.0	51.7
85°	23.8	23.2	23.8	23.2	23.8	24.4	24.4	23.8	23.8	24.9	23.2
87.5°	9.5	9.9	10.4	11.3	11.7	12.2	11.7	11.7	11.6	10.6	10.6
90°	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3	31.9	31.5	31.4
92.5°	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2	30.3	30.5	30.5
95°	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6	60.6	60.6	60.4
97.5°	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9	101.9	101.9	101.9
100°	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7	130.7	130.7	130.6
102.5°	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1	162.2	162.4	162.4
105°	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2	209.6	210.0	210.3
107.5°	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0	260.2	260.3	259.9
110°	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.2



TEST NUMBER: P331412-930  
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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1	328.6	328.2	327.7
115°	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2	382.0	381.7	381.3
117.5°	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5	433.0	432.5	431.9
120°	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8	467.8	467.8	467.5
122.5°	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2	502.7	502.1	501.7
125°	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6	555.0	554.3	553.9
127.5°	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5	605.7	605.0	604.2
130°	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2	640.8	640.4	639.8
132.5°	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1	674.2	673.3	672.5
135°	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0	724.8	724.6	724.1
137.5°	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8	772.7	772.5	772.0
140°	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9	804.9	804.9	804.5
142.5°	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1	834.3	834.5	834.1
145°	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3	878.6	878.7	878.4
147.5°	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1	917.5	918.0	917.9
150°	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7	942.3	943.0	943.0
152.5°	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3	967.0	967.8	967.8
155°	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4	998.5	999.6	999.7
157.5°	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2	1027.7	1029.1	1029.3
160°	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3	1044.6	1045.9	1046.0
162.5°	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8	1060.2	1061.7	1061.8
165°	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8	1080.3	1081.7	1081.9
167.5°	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3	1096.7	1098.2	1098.4
170°	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3	1105.8	1107.3	1107.4
172.5°	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2	1112.6	1114.1	1114.2
175°	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6	1120.1	1121.5	1121.6
177.5°	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331412-930

CATALOG NUMBER: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1350.1	1349.2	1349.2	1345.3	1349.2	1349.2	1350.1	1354.5	1355.7	1356.6	1354.9
5°	1252.4	1250.8	1248.1	1250.8	1248.1	1250.8	1252.4	1260.0	1263.7	1267.5	1270.8
7.5°	1155.8	1149.2	1148.3	1141.9	1148.3	1149.2	1155.8	1159.4	1166.9	1175.5	1183.2
10°	1085.2	1080.9	1080.4	1070.1	1080.4	1080.9	1085.2	1094.5	1102.0	1112.3	1123.1
12.5°	1031.6	1021.2	1023.2	1017.2	1023.2	1021.2	1031.6	1031.7	1040.6	1046.9	1063.8
15°	938.7	938.7	936.5	927.2	936.5	938.7	938.7	953.2	955.9	966.2	980.8
17.5°	871.9	870.7	865.6	868.2	865.6	870.7	871.9	882.6	884.4	898.1	910.2
20°	832.0	828.8	822.3	822.3	822.3	828.8	832.0	838.0	845.1	853.1	863.4
22.5°	794.4	794.2	787.3	789.4	787.3	794.2	794.4	799.9	806.5	815.5	824.0
25°	750.3	746.0	742.8	744.4	742.8	746.0	750.3	750.9	758.5	764.4	769.8
27.5°	708.6	706.2	706.0	701.6	706.0	706.2	708.6	710.0	714.3	717.8	722.8
30°	684.4	679.0	680.0	677.4	680.0	679.0	684.4	684.9	687.1	689.3	695.2
32.5°	656.6	654.7	653.6	651.3	653.6	654.7	656.6	657.6	661.9	664.1	668.8
35°	618.9	619.5	616.7	617.8	616.7	619.5	618.9	620.0	620.5	622.6	627.0
37.5°	585.9	587.6	586.4	586.7	586.4	587.6	585.9	586.4	586.9	587.3	588.6
40°	564.3	564.3	564.3	565.9	564.3	564.3	564.3	562.6	563.2	562.6	562.6
42.5°	543.5	542.6	541.8	541.6	541.8	542.6	543.5	539.7	541.5	539.7	538.8
45°	508.0	509.6	510.1	507.4	510.1	509.6	508.0	506.9	505.3	504.8	504.2
47.5°	475.9	476.1	475.9	478.3	475.9	476.1	475.9	474.4	472.0	471.0	468.4
50°	453.4	452.2	453.4	452.2	453.4	452.2	453.4	450.6	449.0	446.3	444.2
52.5°	429.6	429.7	429.1	428.9	429.1	429.7	429.6	426.0	425.2	424.3	420.8
55°	392.2	393.3	392.7	392.7	392.7	393.3	392.2	390.0	389.6	386.3	383.0
57.5°	353.6	354.6	355.3	352.9	355.3	354.6	353.6	353.3	352.9	349.5	346.0
60°	326.8	329.5	328.9	327.8	328.9	329.5	326.8	327.3	325.7	323.5	321.3
62.5°	302.1	303.0	303.0	302.7	303.0	303.0	302.1	299.6	298.8	296.7	294.5
65°	264.0	265.1	263.4	265.1	263.4	265.1	264.0	262.4	258.6	257.5	255.4
67.5°	223.0	223.3	224.5	225.3	224.5	223.3	223.0	223.6	221.2	219.1	218.7
70°	197.5	196.9	198.5	200.2	198.5	196.9	197.5	196.4	194.8	193.1	190.9
72.5°	170.6	171.8	171.3	172.4	171.3	171.8	170.6	170.8	169.3	167.1	165.0
75°	131.4	133.1	132.6	134.2	132.6	133.1	131.4	132.6	131.4	129.3	127.1
77.5°	95.0	95.2	95.0	95.9	95.0	95.2	95.0	95.9	94.7	95.4	92.9
80°	72.5	71.4	70.4	72.5	70.4	71.4	72.5	72.5	70.8	72.5	70.8
82.5°	50.4	51.0	50.0	50.0	50.0	51.0	50.4	51.7	51.0	51.7	50.1
85°	23.2	22.7	21.6	21.6	21.6	22.7	23.2	23.2	24.9	23.8	23.8
87.5°	10.7	10.3	10.3	9.9	10.3	10.3	10.7	10.6	10.6	11.6	11.7
90°	31.6	31.8	32.0	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3
92.5°	30.6	30.6	30.7	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2
95°	60.0	59.6	59.1	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6
97.5°	101.8	101.8	101.7	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9
100°	130.4	130.2	130.0	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7
102.5°	162.2	162.0	161.8	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1
105°	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2
107.5°	259.0	258.0	257.1	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0
110°	293.6	292.9	292.3	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6



TEST NUMBER: P331412-930  
 CATALOG NUMBER: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	327.2	326.7	326.3	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1
115°	380.7	380.1	379.4	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2
117.5°	431.3	430.6	430.0	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5
120°	466.9	466.3	465.6	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8
122.5°	501.2	500.8	500.3	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2
125°	553.7	553.5	553.3	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6
127.5°	603.6	602.9	602.3	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5
130°	639.0	638.1	637.2	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2
132.5°	671.8	671.1	670.4	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1
135°	723.5	722.9	722.3	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0
137.5°	771.1	770.3	769.5	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8
140°	803.7	802.9	802.0	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9
142.5°	833.2	832.4	831.6	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1
145°	877.6	876.8	875.9	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3
147.5°	917.0	916.2	915.4	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1
150°	942.3	941.7	941.0	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7
152.5°	967.0	966.3	965.5	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3
155°	999.1	998.5	997.8	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4
157.5°	1028.3	1027.3	1026.3	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2
160°	1045.2	1044.4	1043.5	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3
162.5°	1060.9	1059.9	1058.8	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8
165°	1080.9	1079.9	1078.8	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8
167.5°	1097.3	1096.2	1095.1	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3
170°	1106.1	1104.9	1103.6	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3
172.5°	1113.0	1111.7	1110.4	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2
175°	1120.4	1119.1	1117.9	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6
177.5°	1123.0	1122.0	1121.0	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331412-930

CATALOG NUMBER: SA2XXDIP-C865D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1352.7	1357.5	1364.8	1372.6	1377.4	1386.4	1389.0	1393.3	1397.3	1406.4	1415.8
5°	1274.6	1282.1	1300.0	1309.7	1323.2	1339.0	1349.2	1360.1	1372.0	1392.5	1411.4
7.5°	1190.8	1203.5	1225.6	1243.8	1263.1	1285.6	1301.9	1323.2	1341.0	1370.0	1397.7
10°	1135.0	1152.8	1172.9	1194.5	1221.6	1245.4	1268.1	1295.1	1316.8	1351.4	1383.9
12.5°	1084.8	1087.5	1116.1	1140.0	1177.0	1206.4	1232.6	1267.5	1288.7	1329.8	1363.9
15°	997.0	1013.3	1039.3	1058.2	1102.0	1139.3	1176.2	1212.4	1236.7	1287.5	1332.4
17.5°	923.2	938.1	964.7	995.7	1027.2	1064.4	1112.0	1150.1	1183.2	1241.4	1294.5
20°	876.4	894.8	921.9	953.7	981.4	1021.9	1063.1	1106.9	1142.6	1208.0	1270.2
22.5°	836.6	851.1	872.9	904.4	934.6	971.8	1016.8	1064.5	1101.9	1172.6	1235.6
25°	780.6	792.6	806.6	832.6	866.7	907.3	942.4	994.9	1049.5	1115.5	1191.8
27.5°	730.3	738.7	751.1	774.0	800.4	838.3	877.3	927.2	982.1	1053.8	1134.2
30°	699.5	704.9	717.4	736.3	762.2	792.0	831.5	879.1	935.4	1007.9	1087.9
32.5°	672.7	677.7	685.7	703.8	726.4	751.8	787.3	834.9	888.6	959.9	1048.6
35°	632.4	636.2	643.3	657.9	670.3	695.2	725.0	768.2	818.5	886.7	978.7
37.5°	592.3	597.5	601.8	608.0	623.9	640.3	666.2	702.7	752.1	820.9	908.6
40°	565.9	570.2	576.7	579.4	592.4	607.0	628.1	661.6	711.4	774.1	859.7
42.5°	539.1	543.4	547.2	550.4	561.7	574.5	593.5	622.2	666.4	727.4	812.0
45°	502.6	503.1	506.9	512.8	518.3	527.5	541.0	565.9	600.0	657.3	734.1
47.5°	465.5	466.2	466.8	469.4	475.4	483.7	492.8	513.0	543.5	589.2	664.0
50°	440.9	439.9	440.9	443.0	446.9	453.9	464.1	478.7	503.7	546.4	615.1
52.5°	417.1	416.9	416.2	417.1	420.0	424.9	432.1	444.6	466.8	506.1	566.6
55°	380.8	378.1	378.7	376.5	381.4	382.5	387.9	398.2	417.7	444.7	501.5
57.5°	342.3	340.0	337.6	337.0	336.5	339.4	343.7	351.9	366.8	390.4	436.6
60°	317.6	314.9	311.6	310.5	310.5	312.2	314.3	320.2	334.4	355.5	393.3
62.5°	292.4	289.3	287.4	284.5	283.7	285.4	287.5	291.7	301.9	321.6	354.3
65°	253.7	250.0	247.2	246.7	245.6	244.0	245.1	249.4	257.5	273.2	299.1
67.5°	214.9	211.3	210.7	207.5	206.0	206.2	206.0	209.7	214.6	228.1	247.4
70°	189.3	186.6	185.6	182.9	181.8	180.7	179.6	182.9	187.8	199.1	215.9
72.5°	163.4	161.1	158.7	156.5	156.7	155.6	155.4	157.4	161.3	171.8	184.7
75°	126.0	126.6	123.9	121.2	120.7	119.5	119.5	121.2	122.8	130.9	141.2
77.5°	91.4	91.0	88.7	87.9	87.3	86.1	87.3	88.4	89.3	94.7	102.2
80°	69.8	69.8	67.1	67.1	66.5	64.9	66.5	65.5	67.6	73.1	78.4
82.5°	49.9	49.0	48.9	48.0	47.9	46.7	47.5	48.6	49.4	53.2	56.3
85°	24.4	24.4	23.8	23.2	23.8	23.2	23.8	24.4	24.9	26.5	29.2
87.5°	11.7	12.2	11.7	11.3	10.4	9.9	9.5	9.5	9.9	9.8	9.7
90°	32.7	33.2	28.5	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0
92.5°	30.2	30.1	29.0	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9
95°	60.6	60.6	60.2	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2
97.5°	101.9	101.9	101.1	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0
100°	130.7	130.7	130.0	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3
102.5°	161.9	161.8	160.9	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1
105°	208.8	208.3	207.9	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6
107.5°	259.8	259.7	259.7	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5
110°	294.6	294.6	294.6	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9



TEST NUMBER: P331412-930

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	329.6	330.1	330.3	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2
115°	382.4	382.6	383.0	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8
117.5°	434.0	434.5	435.7	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2
120°	467.8	467.8	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8
122.5°	503.7	504.2	505.4	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4
125°	556.2	556.8	557.5	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1
127.5°	607.2	608.0	608.8	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6
130°	641.6	642.1	642.5	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7
132.5°	676.0	676.9	676.9	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5
135°	725.2	725.5	725.0	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1
137.5°	773.0	773.1	772.6	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1
140°	804.9	804.9	804.0	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7
142.5°	834.0	833.8	833.1	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1
145°	878.1	877.9	876.6	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6
147.5°	916.6	916.2	915.3	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4
150°	941.0	940.4	939.6	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9
152.5°	965.5	964.7	963.7	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4
155°	996.4	995.3	994.7	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7
157.5°	1024.8	1023.4	1023.0	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8
160°	1042.0	1040.8	1040.6	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0
162.5°	1057.4	1056.0	1055.7	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6
165°	1077.3	1075.9	1075.9	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8
167.5°	1093.8	1092.3	1092.3	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4
170°	1102.9	1101.4	1101.6	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2
172.5°	1109.7	1108.2	1108.4	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0
175°	1117.1	1115.6	1116.1	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4
177.5°	1121.0	1120.0	1120.3	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331412-930

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1415.0	1417.2	1424.1	1431.0	1438.8	1441.0	1444.5	1441.4	1440.6	1448.8	1454.8
5°	1419.0	1428.7	1447.7	1465.0	1479.6	1489.9	1500.7	1505.0	1513.1	1524.5	1538.6
7.5°	1414.5	1433.4	1463.1	1488.4	1515.9	1535.6	1551.1	1564.3	1580.4	1601.9	1625.4
10°	1409.2	1434.7	1471.0	1501.8	1535.3	1560.7	1581.8	1602.4	1626.2	1656.0	1686.8
12.5°	1399.8	1430.0	1475.3	1511.7	1554.8	1579.8	1608.3	1652.6	1678.1	1719.6	1763.0
15°	1380.6	1414.1	1477.4	1522.3	1571.0	1618.6	1671.1	1713.4	1755.5	1779.9	1841.0
17.5°	1352.2	1401.4	1471.5	1523.9	1585.8	1660.8	1719.7	1767.5	1816.2	1855.7	1886.4
20°	1329.2	1382.7	1462.8	1525.6	1599.1	1679.8	1747.4	1796.1	1838.3	1871.3	1890.2
22.5°	1300.2	1367.6	1445.5	1519.1	1613.0	1692.7	1763.8	1802.1	1837.4	1853.5	1860.8
25°	1254.6	1335.7	1423.9	1513.7	1619.8	1704.1	1769.0	1792.3	1802.5	1786.9	1760.9
27.5°	1205.3	1295.8	1398.9	1503.5	1615.6	1696.7	1743.3	1739.6	1722.2	1671.4	1630.8
30°	1168.6	1268.1	1379.0	1493.1	1605.7	1684.7	1711.7	1684.7	1645.1	1588.4	1530.5
32.5°	1130.0	1233.1	1357.8	1478.4	1587.5	1656.9	1662.8	1616.2	1555.1	1490.5	1418.4
35°	1071.7	1183.2	1317.8	1445.5	1548.8	1592.7	1566.7	1484.5	1412.0	1323.8	1225.3
37.5°	1005.8	1128.9	1264.0	1397.3	1490.9	1502.4	1437.9	1351.4	1249.1	1145.5	1029.6
40°	956.5	1086.9	1225.9	1360.6	1443.3	1431.4	1349.2	1254.0	1132.3	1005.7	898.1
42.5°	912.3	1042.7	1184.3	1316.5	1382.7	1350.1	1254.0	1137.2	1006.3	887.1	788.6
45°	835.8	970.0	1115.0	1242.7	1280.5	1221.6	1094.5	964.6	835.8	736.3	658.4
47.5°	761.6	894.2	1037.8	1150.1	1163.4	1084.1	945.2	811.6	700.9	619.9	564.9
50°	707.1	840.2	982.4	1082.6	1078.2	982.4	839.6	712.5	620.0	554.5	517.7
52.5°	658.2	783.9	920.6	1011.5	988.6	884.2	747.9	635.0	559.0	507.8	474.4
55°	582.1	698.4	828.3	901.3	859.1	743.3	628.1	537.2	480.9	442.5	416.5
57.5°	506.5	615.6	726.8	771.8	725.1	618.2	522.2	456.2	413.9	385.5	368.6
60°	459.8	555.1	654.0	693.0	637.3	542.1	466.4	407.4	373.2	350.0	334.8
62.5°	413.1	498.4	591.7	612.9	562.0	481.5	414.4	365.4	337.4	316.7	302.4
65°	349.5	419.2	490.2	504.2	457.1	394.9	341.9	310.0	285.1	269.9	258.6
67.5°	286.6	342.7	392.9	404.2	363.0	319.8	281.5	253.7	236.8	224.3	214.7
70°	249.4	293.8	334.8	344.1	311.0	272.6	243.4	221.3	206.1	195.3	186.1
72.5°	210.0	247.0	281.2	287.4	260.4	231.1	207.1	189.6	176.3	169.3	160.5
75°	160.7	182.3	208.8	210.4	192.6	174.7	156.4	145.0	137.9	129.3	125.0
77.5°	113.4	130.4	145.5	148.5	137.9	125.7	115.4	106.5	100.5	96.5	92.5
80°	86.6	100.1	106.6	110.4	102.8	94.2	88.2	82.3	78.4	75.7	73.1
82.5°	61.9	70.2	76.3	79.2	75.1	69.9	63.9	60.6	57.6	55.4	54.5
85°	31.4	35.1	39.0	40.0	39.0	36.8	33.5	33.5	31.9	31.4	31.4
87.5°	11.5	13.8	14.3	16.1	15.9	16.8	17.8	18.3	18.8	18.3	17.7
90°	3.5	6.0	8.6	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3
92.5°	18.7	20.5	22.4	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2
95°	51.4	53.5	55.5	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6
97.5°	91.8	93.7	95.6	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9
100°	122.0	123.7	125.3	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7
102.5°	153.4	154.8	156.1	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1
105°	204.2	204.9	205.5	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2
107.5°	256.4	257.4	258.3	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0
110°	290.1	291.4	292.6	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	326.4	327.8	329.0	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1
115°	380.1	381.3	382.6	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2
117.5°	433.9	435.6	437.2	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5
120°	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8
122.5°	502.5	504.4	506.5	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2
125°	553.1	555.0	556.8	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6
127.5°	603.0	605.4	607.8	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5
130°	634.4	637.2	639.8	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2
132.5°	668.8	671.0	673.2	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1
135°	715.4	717.8	720.1	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0
137.5°	764.1	766.0	767.8	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8
140°	793.6	795.5	797.4	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9
142.5°	823.9	825.8	827.7	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1
145°	867.1	868.5	870.0	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3
147.5°	906.2	907.9	909.7	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1
150°	932.2	933.4	934.7	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7
152.5°	955.7	956.9	958.2	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3
155°	990.3	990.9	991.6	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4
157.5°	1020.2	1020.6	1021.0	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2
160°	1038.4	1038.8	1039.2	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3
162.5°	1054.7	1054.8	1054.8	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8
165°	1076.6	1076.4	1076.1	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8
167.5°	1094.7	1094.1	1093.5	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3
170°	1104.6	1103.9	1103.3	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3
172.5°	1111.4	1110.8	1110.1	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2
175°	1119.7	1119.1	1118.4	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6
177.5°	1123.2	1122.7	1122.3	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6	1407.6
2.5°	1460.0	1466.1	1466.1	1467.0	1473.9	1473.0	1472.6
5°	1553.7	1562.9	1564.0	1573.8	1580.2	1578.1	1572.1
7.5°	1642.1	1659.2	1672.2	1679.4	1688.0	1693.3	1690.9
10°	1712.2	1737.1	1752.2	1762.5	1775.0	1784.2	1780.9
12.5°	1775.9	1805.5	1826.3	1843.9	1845.5	1857.3	1849.3
15°	1875.1	1906.4	1909.7	1922.6	1933.0	1931.9	1932.4
17.5°	1907.9	1917.9	1919.9	1920.3	1920.4	1916.6	1908.4
20°	1896.1	1892.4	1883.2	1876.2	1863.7	1862.1	1851.3
22.5°	1840.8	1828.8	1805.7	1790.5	1771.1	1766.0	1763.0
25°	1731.7	1705.2	1668.4	1633.2	1623.5	1604.6	1610.0
27.5°	1582.1	1540.8	1500.9	1472.3	1446.5	1418.1	1426.3
30°	1476.9	1430.4	1374.1	1330.8	1303.3	1276.2	1271.3
32.5°	1351.4	1283.2	1220.5	1182.3	1140.1	1123.0	1104.2
35°	1135.0	1068.4	1006.2	952.7	921.9	898.1	876.4
37.5°	940.4	863.7	813.5	770.1	747.9	734.3	737.7
40°	819.6	752.5	715.8	682.7	662.2	652.4	654.6
42.5°	721.8	671.6	641.3	618.6	604.1	598.8	597.5
45°	610.7	582.6	557.7	544.8	537.8	531.8	528.0
47.5°	535.0	512.1	498.1	490.3	484.2	478.1	478.0
50°	489.6	474.4	464.7	456.6	451.8	447.4	451.2
52.5°	454.9	441.2	431.4	424.1	422.3	418.4	418.3
55°	403.6	392.7	385.7	379.2	376.0	373.8	371.1
57.5°	356.9	346.6	340.1	336.0	329.8	327.6	326.8
60°	323.5	315.4	308.9	303.5	300.8	296.4	296.4
62.5°	292.8	284.7	278.6	274.5	270.0	268.3	268.8
65°	248.3	241.8	235.9	231.5	230.5	227.2	228.3
67.5°	207.4	203.1	196.8	194.4	192.4	190.6	189.3
70°	180.2	175.9	172.6	169.3	167.7	167.7	167.7
72.5°	157.2	152.1	150.1	145.9	146.9	145.2	143.5
75°	121.7	118.5	116.8	115.2	112.5	112.5	112.5
77.5°	89.6	88.6	86.7	85.0	84.3	83.7	84.0
80°	69.2	68.7	67.6	67.6	66.5	66.0	64.9
82.5°	53.2	51.9	51.2	50.7	50.5	50.4	50.2
85°	30.3	29.2	29.2	29.8	28.7	28.7	29.2
87.5°	18.1	18.0	17.5	17.5	18.0	17.6	17.7
90°	31.9	31.5	31.4	31.6	31.8	32.0	32.2
92.5°	30.3	30.5	30.5	30.6	30.6	30.7	30.7
95°	60.6	60.6	60.4	60.0	59.6	59.1	58.7
97.5°	101.9	101.9	101.9	101.8	101.8	101.7	101.7
100°	130.7	130.7	130.6	130.4	130.2	130.0	129.7
102.5°	162.2	162.4	162.4	162.2	162.0	161.8	161.6
105°	209.6	210.0	210.3	210.3	210.3	210.3	210.3
107.5°	260.2	260.3	259.9	259.0	258.0	257.1	256.1
110°	294.6	294.6	294.2	293.6	292.9	292.3	291.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	328.6	328.2	327.7	327.2	326.7	326.3	325.8
115°	382.0	381.7	381.3	380.7	380.1	379.4	378.8
117.5°	433.0	432.5	431.9	431.3	430.6	430.0	429.4
120°	467.8	467.8	467.5	466.9	466.3	465.6	465.0
122.5°	502.7	502.1	501.7	501.2	500.8	500.3	499.9
125°	555.0	554.3	553.9	553.7	553.5	553.3	553.1
127.5°	605.7	605.0	604.2	603.6	602.9	602.3	601.5
130°	640.8	640.4	639.8	639.0	638.1	637.2	636.4
132.5°	674.2	673.3	672.5	671.8	671.1	670.4	669.8
135°	724.8	724.6	724.1	723.5	722.9	722.3	721.6
137.5°	772.7	772.5	772.0	771.1	770.3	769.5	768.6
140°	804.9	804.9	804.5	803.7	802.9	802.0	801.2
142.5°	834.3	834.5	834.1	833.2	832.4	831.6	830.7
145°	878.6	878.7	878.4	877.6	876.8	875.9	875.1
147.5°	917.5	918.0	917.9	917.0	916.2	915.4	914.7
150°	942.3	943.0	943.0	942.3	941.7	941.0	940.4
152.5°	967.0	967.8	967.8	967.0	966.3	965.5	964.7
155°	998.5	999.6	999.7	999.1	998.5	997.8	997.2
157.5°	1027.7	1029.1	1029.3	1028.3	1027.3	1026.3	1025.2
160°	1044.6	1045.9	1046.0	1045.2	1044.4	1043.5	1042.7
162.5°	1060.2	1061.7	1061.8	1060.9	1059.9	1058.8	1057.9
165°	1080.3	1081.7	1081.9	1080.9	1079.9	1078.8	1077.7
167.5°	1096.7	1098.2	1098.4	1097.3	1096.2	1095.1	1094.1
170°	1105.8	1107.3	1107.4	1106.1	1104.9	1103.6	1102.4
172.5°	1112.6	1114.1	1114.2	1113.0	1111.7	1110.4	1109.1
175°	1120.1	1121.5	1121.6	1120.4	1119.1	1117.9	1116.6
177.5°	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3

(END OF REPORT)