

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: P332653-930

Luminaire Tested: **SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332653-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6676.3 lumens
Efficiency: N/A
Efficacy: 110.4 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

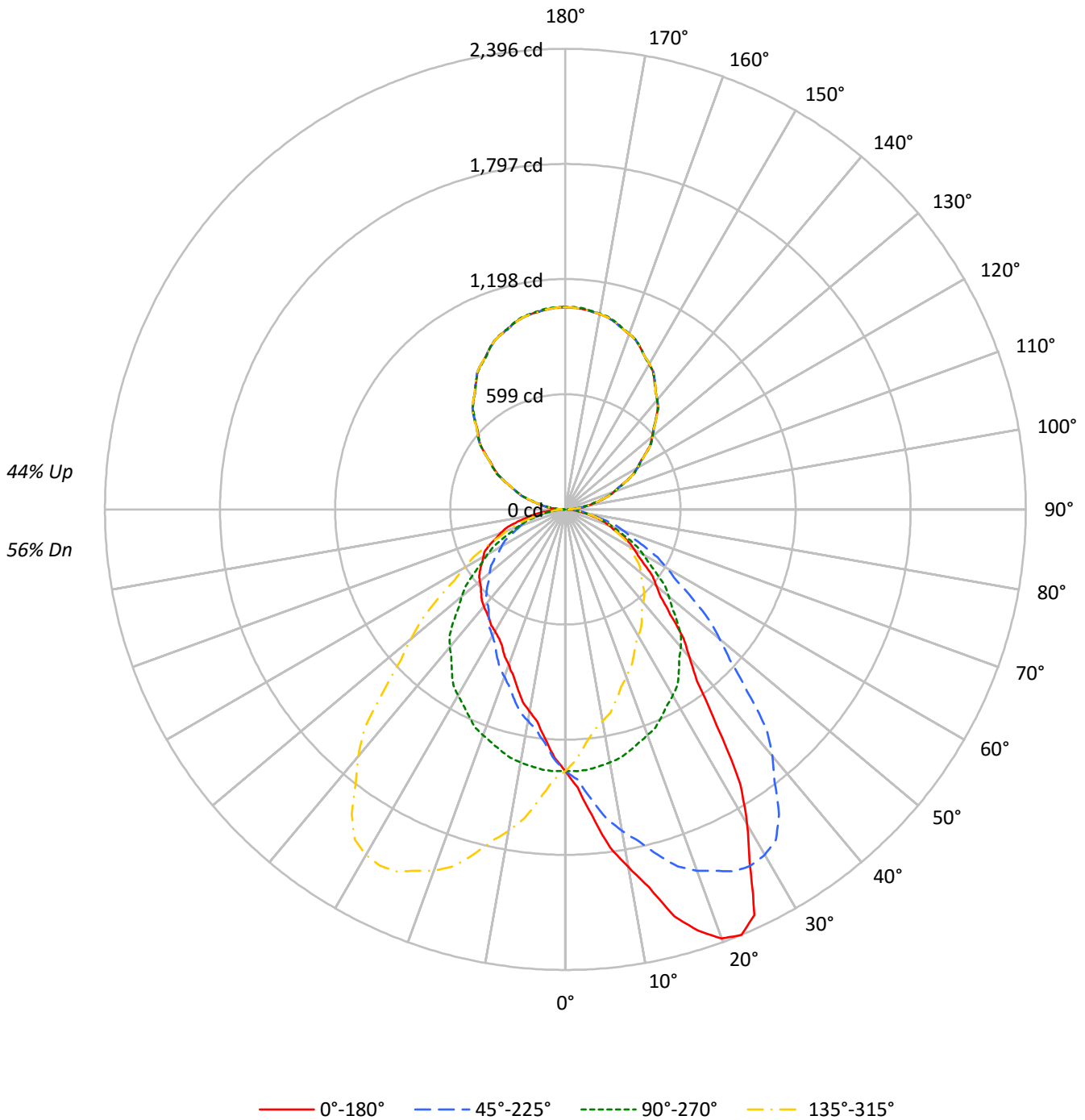
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	77	74	72	65	64	62	55	54	53	48
2	91	83	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	44	43	41	38	35
4	76	65	57	51	70	61	54	49	53	48	43	46	42	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	39	34	55	45	37	32	39	33	29	34	29	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10984	10984	10984	10984
5°	12935	11012	9720	11012
10°	15488	10964	8751	10964
15°	18324	10853	8037	10853
20°	20405	10740	7399	10740
25°	20735	10573	6959	10573
30°	17643	10413	6820	10413
35°	13565	10154	6821	10154
40°	10572	9848	6949	9848
45°	8816	9388	7066	9388
50°	7759	8828	7304	8828
55°	7108	8155	7600	8155
60°	6660	7553	7953	7553
65°	6202	6879	8246	6879
70°	5667	6212	8434	6212
75°	5062	5468	8334	5468
80°	4245	4482	8071	4482
85°	3131	3242	7725	3242



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.5	2.0
10°-20°	408.6	6.1
20°-30°	647.9	9.7
30°-40°	721.0	10.8
40°-50°	656.3	9.8
50°-60°	536.3	8.0
60°-70°	382.9	5.7
70°-80°	210.8	3.2
80°-90°	60.7	0.9
90°-100°	69.4	1.0
100°-110°	205.6	3.1
110°-120°	348.9	5.2
120°-130°	460.1	6.9
130°-140°	516.7	7.7
140°-150°	507.8	7.6
150°-160°	427.1	6.4
160°-170°	284.1	4.3
170°-180°	99.5	1.5
0°-30°	1189.0	17.8
0°-40°	1910.0	28.6
0°-60°	3102.6	46.5
0°-90°	3757.0	56.3
90°-120°	623.9	9.3
90°-150°	2108.6	31.6
90°-180°	2919.0	43.7
0°-180°	6676.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1361	1361	1361	1361	1361	
5°	1596	1359	1199	1359	1596	162
15°	2192	1299	962	1299	2192	619
25°	2328	1187	781	1187	2328	1026
35°	1376	1030	692	1030	1376	874
45°	772	822	619	822	772	608
55°	505	579	540	579	505	456
65°	325	360	432	360	325	321
75°	162	175	267	175	162	173
85°	34	35	83	35	34	42
90°	24	2	24	2	24	14
95°	64	49	64	49	64	67
105°	198	190	198	190	198	209
115°	352	355	352	355	352	348
125°	513	517	513	517	513	457
135°	667	666	667	666	667	515
145°	810	810	810	810	810	507
155°	927	928	927	928	927	427
165°	1008	1010	1008	1010	1008	284
175°	1046	1051	1046	1051	1046	99
180°	1052	1052	1052	1052	1052	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1448.1	1447.6	1443.1	1442.2	1439.0	1435.0	1434.1	1426.9	1412.4	1405.7	1403.9
5°	1596.2	1607.4	1592.8	1590.0	1588.3	1569.7	1560.1	1548.8	1522.9	1507.7	1495.8
7.5°	1772.9	1774.3	1767.9	1762.7	1748.3	1732.1	1707.8	1681.9	1651.0	1618.9	1594.6
10°	1889.3	1893.8	1886.4	1885.3	1856.6	1838.5	1802.5	1772.1	1737.1	1698.2	1662.7
12.5°	2011.9	2005.6	2001.9	1977.8	1972.5	1939.5	1897.6	1866.3	1812.4	1767.7	1720.4
15°	2192.5	2180.1	2172.2	2138.9	2122.6	2077.0	2032.4	1998.1	1927.6	1860.5	1809.8
17.5°	2298.4	2310.9	2292.6	2278.9	2236.7	2204.7	2159.2	2087.0	2031.9	1948.6	1884.6
20°	2375.1	2376.2	2366.1	2352.0	2318.7	2278.2	2228.5	2149.6	2083.7	2000.8	1912.9
22.5°	2395.8	2396.1	2391.8	2378.6	2353.4	2320.5	2270.5	2204.7	2124.8	2034.7	1946.8
25°	2327.8	2325.5	2330.6	2345.2	2335.7	2325.5	2296.8	2247.7	2173.3	2078.0	1983.4
27.5°	2074.8	2090.3	2119.0	2155.1	2189.8	2216.3	2223.7	2213.7	2167.6	2089.2	1990.1
30°	1892.6	1911.8	1933.2	1969.3	2039.1	2079.2	2123.2	2156.4	2137.8	2075.3	1982.8
32.5°	1692.5	1697.2	1729.0	1770.0	1834.0	1911.0	1980.7	2048.2	2070.6	2037.8	1960.7
35°	1376.4	1384.2	1418.6	1459.2	1537.6	1631.7	1736.5	1830.1	1907.3	1938.3	1898.8
37.5°	1123.2	1145.8	1170.1	1213.7	1282.7	1367.4	1476.3	1597.4	1712.5	1789.6	1802.7
40°	1003.2	1017.3	1034.8	1068.0	1126.7	1210.1	1303.7	1442.3	1564.6	1675.1	1711.2
42.5°	908.6	916.8	927.5	957.6	1002.2	1085.2	1170.6	1292.6	1415.4	1547.4	1607.9
45°	772.2	780.6	798.7	816.1	849.9	907.4	986.9	1087.2	1210.6	1338.1	1449.6
47.5°	673.6	679.1	689.7	708.5	737.2	775.1	839.8	923.6	1038.0	1161.6	1280.5
50°	617.8	622.2	630.7	647.6	669.6	703.4	756.4	834.7	924.3	1048.9	1165.6
52.5°	573.6	575.4	581.6	593.0	610.5	639.0	682.4	747.2	830.5	941.6	1057.8
55°	505.0	507.3	512.9	521.4	536.5	554.6	587.8	636.3	709.1	805.4	906.3
57.5°	448.7	450.2	454.9	458.2	470.8	485.4	510.9	545.6	600.7	682.4	772.5
60°	412.5	411.5	417.1	419.9	428.4	440.8	460.5	493.7	541.6	607.6	690.4
62.5°	377.4	375.9	380.6	384.3	389.1	399.7	415.8	441.9	480.8	540.4	612.0
65°	324.7	322.4	325.2	329.7	334.2	339.9	351.7	374.8	405.8	448.7	503.3
67.5°	271.7	274.0	274.5	276.7	279.3	287.0	295.1	311.4	333.3	367.6	413.9
70°	240.1	240.7	243.0	243.0	244.6	251.4	258.1	267.7	289.1	320.7	358.5
72.5°	208.6	210.9	210.0	211.8	213.0	217.5	222.5	231.6	249.9	273.4	305.2
75°	162.3	164.0	164.0	164.6	166.2	168.0	171.9	178.6	191.6	209.1	231.1
77.5°	118.4	118.6	119.4	121.4	121.4	124.1	127.0	132.5	138.8	150.8	164.2
80°	91.3	92.5	91.9	93.0	93.0	95.2	96.4	103.1	106.0	113.8	124.6
82.5°	66.9	68.1	68.0	69.5	70.4	70.9	72.5	75.2	78.0	85.0	89.4
85°	33.8	35.0	33.8	35.0	36.6	37.2	38.9	39.5	41.7	43.4	47.4
87.5°	14.8	16.1	16.0	16.4	17.2	17.5	17.8	17.1	18.7	18.9	20.5
90°	24.4	24.1	23.7	23.3	23.0	22.3	21.2	20.1	19.0	17.9	16.5
92.5°	36.1	36.0	35.7	35.5	35.3	34.8	34.2	33.5	32.9	32.2	31.2
95°	64.3	64.3	64.3	64.3	64.3	64.0	63.5	62.9	62.4	61.9	60.6
97.5°	100.8	100.8	100.8	100.8	100.8	100.4	99.8	99.1	98.5	97.8	96.4
100°	126.1	126.1	126.1	126.1	126.1	126.0	125.6	125.2	124.9	124.5	122.9
102.5°	154.7	154.7	154.5	154.3	154.2	153.8	153.4	152.9	152.4	151.9	150.3
105°	198.5	198.0	197.5	196.9	196.4	195.8	195.3	194.8	194.2	193.7	193.0
107.5°	241.2	241.2	241.2	241.3	241.3	241.1	240.6	240.1	239.6	239.1	239.0
110°	271.8	271.3	270.7	270.2	269.6	269.5	269.9	270.3	270.6	271.0	271.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	303.0	303.0	302.8	302.7	302.6	302.6	302.6	302.7	302.8	302.9	303.2
115°	351.6	351.7	351.9	352.1	352.3	352.5	352.6	352.8	353.0	353.2	353.5
117.5°	397.8	398.1	398.5	398.8	399.3	399.7	400.3	401.0	401.5	402.2	402.4
120°	432.9	432.6	432.2	431.9	431.5	431.8	432.7	433.6	434.5	435.4	435.9
122.5°	462.2	462.8	463.5	464.1	464.8	465.5	466.1	466.7	467.3	467.9	468.1
125°	512.7	513.1	513.4	513.8	514.1	514.5	514.9	515.2	515.6	515.9	516.1
127.5°	559.4	559.7	559.9	560.3	560.5	560.8	561.3	561.6	562.0	562.3	562.6
130°	590.0	590.7	591.4	592.2	592.9	593.5	593.8	594.2	594.5	594.8	594.8
132.5°	622.6	622.8	623.1	623.4	623.7	624.0	624.4	624.8	625.1	625.5	625.6
135°	667.3	667.8	668.4	669.0	669.4	669.9	670.3	670.7	671.0	671.4	671.4
137.5°	714.4	714.2	714.1	714.0	713.9	714.1	714.5	715.0	715.5	716.0	715.7
140°	743.0	743.1	743.3	743.6	743.7	743.9	744.0	744.3	744.4	744.6	744.6
142.5°	771.6	771.7	771.7	771.8	771.8	771.8	771.8	771.8	771.9	771.9	772.1
145°	810.5	811.1	811.6	812.1	812.7	813.0	813.3	813.4	813.6	813.8	813.6
147.5°	849.9	850.1	850.3	850.4	850.6	850.8	850.9	851.1	851.3	851.4	851.5
150°	874.0	874.2	874.3	874.6	874.7	874.8	874.8	874.8	874.8	874.8	874.8
152.5°	896.1	896.6	897.1	897.6	898.1	898.1	897.6	897.2	896.7	896.3	896.2
155°	926.9	927.6	928.4	929.0	929.8	929.8	929.0	928.4	927.6	926.9	927.1
157.5°	954.4	955.0	955.6	956.3	956.8	956.9	956.3	955.8	955.3	954.7	954.8
160°	970.0	970.9	971.8	972.7	973.6	973.8	973.3	972.7	972.2	971.7	971.8
162.5°	986.3	987.2	988.1	989.0	989.9	989.9	988.9	987.9	986.9	985.9	986.2
165°	1007.5	1008.2	1008.9	1009.7	1010.3	1010.2	1009.1	1008.0	1006.9	1005.8	1006.2
167.5°	1022.6	1023.7	1024.8	1026.0	1027.1	1027.1	1026.1	1024.9	1023.9	1022.8	1022.7
170°	1031.0	1032.3	1033.6	1034.9	1036.1	1036.2	1035.1	1034.0	1033.0	1031.8	1031.7
172.5°	1038.2	1039.5	1040.7	1042.0	1043.3	1043.3	1042.0	1040.8	1039.6	1038.4	1038.4
175°	1045.7	1047.0	1048.2	1049.5	1050.8	1050.8	1049.5	1048.2	1047.0	1045.7	1045.9
177.5°	1049.6	1050.8	1051.9	1053.1	1054.3	1054.3	1053.3	1052.3	1051.2	1050.3	1050.3
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1404.4	1398.0	1393.5	1389.9	1380.0	1374.1	1369.6	1363.3	1356.1	1348.4	1339.0
5°	1484.0	1464.8	1450.7	1429.4	1409.1	1392.1	1374.7	1358.9	1339.7	1318.9	1303.7
7.5°	1567.7	1539.3	1502.8	1471.0	1435.4	1404.4	1376.7	1348.3	1318.7	1290.1	1263.9
10°	1621.0	1584.4	1543.8	1495.8	1450.7	1410.7	1373.5	1337.5	1302.5	1267.5	1237.7
12.5°	1678.2	1632.6	1572.6	1516.6	1466.1	1412.6	1367.7	1323.5	1281.3	1244.6	1209.7
15°	1755.1	1689.1	1619.8	1544.9	1478.4	1415.8	1354.4	1298.6	1251.2	1202.7	1169.0
17.5°	1802.4	1720.8	1641.5	1563.2	1482.6	1403.8	1337.5	1273.1	1213.8	1165.7	1123.1
20°	1833.4	1752.3	1653.7	1575.3	1479.5	1398.3	1321.7	1250.1	1188.1	1136.9	1092.8
22.5°	1860.5	1766.8	1668.1	1565.0	1469.6	1383.5	1299.6	1227.6	1164.2	1110.2	1068.0
25°	1875.2	1767.5	1660.4	1557.9	1449.6	1347.6	1271.5	1187.0	1119.3	1062.4	1017.3
27.5°	1876.7	1761.6	1640.5	1526.5	1414.8	1319.8	1223.8	1148.2	1078.0	1017.8	974.5
30°	1871.8	1751.8	1621.5	1498.1	1385.9	1282.8	1199.4	1117.1	1045.5	985.8	940.7
32.5°	1856.0	1731.0	1597.2	1466.6	1350.3	1249.4	1163.4	1085.1	1015.3	956.4	909.1
35°	1810.4	1686.9	1544.3	1408.5	1289.6	1187.6	1109.8	1030.3	960.4	904.6	859.0
37.5°	1739.0	1627.4	1482.5	1341.9	1225.1	1122.6	1045.5	973.7	910.7	854.0	807.2
40°	1676.7	1578.7	1433.3	1296.3	1170.1	1072.6	1000.5	934.5	872.0	818.4	773.9
42.5°	1605.1	1519.6	1385.5	1240.4	1118.7	1020.8	950.4	891.2	832.3	782.8	738.3
45°	1477.2	1420.9	1294.6	1160.5	1033.7	941.3	874.2	822.3	772.7	724.2	687.1
47.5°	1330.2	1302.3	1196.0	1068.6	948.3	857.1	799.0	751.1	707.6	666.5	633.7
50°	1231.5	1218.0	1126.1	1003.2	888.3	802.6	744.0	702.9	665.6	629.6	598.6
52.5°	1134.1	1133.7	1050.8	938.3	831.9	749.4	691.2	652.8	620.5	591.3	563.4
55°	985.2	1001.0	936.2	835.8	740.6	666.2	613.8	579.4	556.8	532.6	511.8
57.5°	848.5	874.7	821.2	732.8	653.4	584.8	539.2	513.3	489.3	474.7	459.5
60°	759.2	784.0	742.3	667.9	593.0	534.3	490.9	467.8	446.9	436.8	426.1
62.5°	679.9	702.0	671.1	602.1	537.0	480.6	444.0	421.8	407.7	396.6	389.6
65°	566.5	585.1	558.6	508.4	452.6	407.5	377.6	360.1	346.7	342.1	334.2
67.5°	457.9	474.8	460.5	417.8	373.1	339.0	315.6	298.8	290.8	286.9	281.3
70°	393.4	410.3	395.1	357.9	323.5	294.8	272.8	263.2	254.8	253.1	245.2
72.5°	338.8	350.3	335.2	306.1	276.6	252.4	235.4	225.3	220.9	217.9	213.6
75°	254.2	264.3	254.2	231.6	210.8	193.9	179.2	175.3	170.2	168.5	165.7
77.5°	179.9	188.7	180.9	166.8	151.2	138.2	130.3	125.2	124.1	121.2	122.5
80°	137.5	143.2	135.8	126.3	113.8	104.8	99.2	96.4	93.0	91.9	94.1
82.5°	98.7	101.3	97.5	91.1	81.9	76.0	72.2	68.9	68.2	68.4	68.4
85°	51.3	50.7	50.1	44.5	41.7	37.7	35.5	35.0	34.4	35.5	36.6
87.5°	20.1	20.3	19.6	17.4	15.7	13.9	13.0	12.2	13.0	13.9	14.8
90°	15.0	13.5	12.1	10.4	8.4	6.4	4.4	2.4	4.4	6.4	8.4
92.5°	30.2	29.2	28.2	26.5	24.2	21.9	19.7	17.4	19.7	21.9	24.2
95°	59.4	58.0	56.7	55.4	53.7	52.1	50.5	48.8	50.5	52.1	53.7
97.5°	94.8	93.4	91.9	90.5	89.2	87.9	86.6	85.3	86.6	87.9	89.2
100°	121.2	119.6	118.0	116.8	116.1	115.4	114.6	113.9	114.6	115.4	116.1
102.5°	148.9	147.4	145.9	145.0	144.7	144.5	144.1	143.9	144.1	144.5	144.7
105°	192.2	191.5	190.8	190.4	190.1	190.0	189.8	189.6	189.8	190.0	190.1
107.5°	238.9	238.8	238.6	238.5	238.3	238.1	237.8	237.7	237.8	238.1	238.3
110°	271.3	271.5	271.7	271.7	271.3	270.9	270.5	270.2	270.5	270.9	271.3



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	303.5	303.9	304.2	304.4	304.3	304.2	304.1	304.0	304.1	304.2	304.3
115°	353.9	354.2	354.7	354.8	354.8	354.8	354.8	354.8	354.8	354.8	354.8
117.5°	402.7	402.9	403.2	403.2	403.1	402.9	402.8	402.7	402.8	402.9	403.1
120°	436.4	437.0	437.6	437.5	436.8	436.0	435.3	434.6	435.3	436.0	436.8
122.5°	468.4	468.7	469.0	468.9	468.6	468.3	468.1	467.7	468.1	468.3	468.6
125°	516.3	516.5	516.7	516.7	516.7	516.7	516.7	516.7	516.7	516.7	516.7
127.5°	562.9	563.2	563.5	563.4	562.8	562.2	561.7	561.2	561.7	562.2	562.8
130°	594.8	594.8	594.8	594.6	594.0	593.5	593.0	592.4	593.0	593.5	594.0
132.5°	625.7	625.9	626.1	625.9	625.5	625.1	624.8	624.4	624.8	625.1	625.5
135°	671.4	671.4	671.4	670.8	669.8	668.6	667.6	666.5	667.6	668.6	669.8
137.5°	715.4	715.1	714.8	714.4	713.9	713.4	712.9	712.4	712.9	713.4	713.9
140°	744.6	744.6	744.6	744.4	744.0	743.7	743.3	743.0	743.3	743.7	744.0
142.5°	772.3	772.4	772.5	772.4	772.1	771.7	771.4	770.9	771.4	771.7	772.1
145°	813.4	813.3	813.0	812.6	811.9	811.1	810.4	809.7	810.4	811.1	811.9
147.5°	851.7	851.8	852.0	851.6	850.8	849.9	849.0	848.2	849.0	849.9	850.8
150°	874.8	874.8	874.8	874.5	873.8	873.0	872.3	871.6	872.3	873.0	873.8
152.5°	896.0	895.9	895.7	895.4	895.0	894.5	894.1	893.7	894.1	894.5	895.0
155°	927.2	927.4	927.6	927.7	927.7	927.7	927.7	927.7	927.7	927.7	927.7
157.5°	954.8	954.8	954.9	955.0	955.4	955.7	956.0	956.3	956.0	955.7	955.4
160°	972.0	972.2	972.4	972.6	972.7	972.9	973.1	973.3	973.1	972.9	972.7
162.5°	986.3	986.5	986.7	987.0	987.5	988.0	988.5	988.9	988.5	988.0	987.5
165°	1006.6	1006.9	1007.3	1007.7	1008.3	1008.9	1009.3	1009.9	1009.3	1008.9	1008.3
167.5°	1022.7	1022.6	1022.6	1023.0	1023.8	1024.5	1025.2	1026.1	1025.2	1024.5	1023.8
170°	1031.5	1031.4	1031.1	1031.5	1032.4	1033.3	1034.2	1035.1	1034.2	1033.3	1032.4
172.5°	1038.3	1038.3	1038.2	1038.6	1039.3	1040.2	1040.9	1041.6	1040.9	1040.2	1039.3
175°	1046.0	1046.3	1046.4	1047.0	1047.9	1048.8	1049.7	1050.6	1049.7	1048.8	1047.9
177.5°	1050.3	1050.3	1050.3	1050.6	1051.3	1052.1	1052.8	1053.5	1052.8	1052.1	1051.3
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1334.4	1330.4	1324.5	1316.4	1309.6	1302.4	1300.6	1297.9	1303.3	1298.8	1297.5
5°	1290.7	1278.9	1263.6	1246.2	1236.0	1221.4	1218.5	1212.9	1207.3	1206.7	1201.1
7.5°	1244.4	1227.0	1207.1	1189.3	1172.8	1156.7	1146.3	1144.0	1135.7	1130.8	1125.2
10°	1214.6	1193.2	1170.1	1153.2	1134.0	1117.1	1105.3	1098.5	1092.8	1086.6	1081.0
12.5°	1179.4	1156.7	1137.6	1119.3	1096.6	1083.7	1064.2	1052.5	1051.4	1051.5	1036.8
15°	1138.5	1116.0	1086.6	1060.7	1048.3	1023.5	1012.8	999.3	990.8	982.4	975.7
17.5°	1091.8	1063.6	1040.8	1011.1	987.3	967.6	953.6	945.4	932.7	920.7	912.1
20°	1062.4	1032.6	1008.3	976.7	950.8	926.6	914.8	903.5	893.9	883.8	874.2
22.5°	1032.7	1001.4	971.8	941.1	917.0	891.4	880.0	864.7	855.6	849.9	840.3
25°	985.8	951.9	918.1	888.8	864.1	841.5	826.3	814.4	804.3	799.8	793.6
27.5°	934.8	901.2	868.5	835.3	807.1	790.8	778.6	769.6	763.9	757.8	755.0
30°	902.4	867.4	832.5	801.4	775.5	759.2	748.0	741.8	737.2	734.4	731.6
32.5°	869.4	834.9	798.2	769.9	746.7	732.1	723.6	717.4	715.1	714.1	713.1
35°	816.7	781.7	748.0	722.6	700.6	695.0	687.6	684.2	683.1	687.1	688.8
37.5°	765.6	733.2	702.1	677.4	663.1	654.8	652.3	652.5	656.5	660.0	664.1
40°	732.7	701.2	671.8	650.4	636.9	631.9	630.7	633.5	638.1	642.0	646.5
42.5°	700.7	669.6	642.9	622.9	613.4	608.8	609.5	612.3	618.6	623.5	630.2
45°	651.0	625.1	599.2	582.8	574.9	576.0	576.0	581.1	587.3	594.6	601.9
47.5°	604.2	578.0	556.8	543.0	538.9	537.9	541.1	547.7	556.6	565.7	575.9
50°	572.7	547.8	529.2	516.8	512.3	514.0	518.5	524.7	535.4	546.7	557.4
52.5°	540.6	518.0	500.8	489.3	486.2	489.3	493.7	503.5	512.9	525.1	538.0
55°	490.9	471.7	458.2	449.8	448.7	450.4	455.4	466.1	479.6	494.9	507.3
57.5°	441.4	425.4	413.0	407.2	407.7	409.3	417.7	430.4	444.8	461.1	477.0
60°	408.1	393.4	383.3	378.8	379.3	382.7	392.8	404.7	422.7	438.5	455.4
62.5°	376.5	363.6	353.9	349.9	349.1	356.5	366.2	378.5	396.6	414.2	432.4
65°	325.8	315.6	307.8	305.5	307.2	312.8	325.2	341.5	356.8	375.4	394.5
67.5°	276.1	267.8	262.4	263.4	265.5	273.8	284.2	298.2	315.5	334.8	353.8
70°	244.6	236.7	232.2	232.8	236.2	246.3	255.4	269.4	288.0	307.8	323.5
72.5°	212.1	206.9	202.9	205.3	208.6	215.6	226.9	241.0	257.4	275.7	292.4
75°	162.9	162.9	160.6	162.3	167.4	174.1	182.6	197.3	213.6	228.3	241.8
77.5°	120.8	119.6	121.1	123.1	126.0	134.0	143.7	154.2	166.5	181.2	192.3
80°	92.5	93.0	95.8	99.2	100.4	106.6	116.7	126.3	135.8	148.2	158.9
82.5°	69.5	70.0	71.5	75.7	76.9	83.6	90.1	99.6	108.4	116.7	125.6
85°	37.7	37.7	40.6	42.2	45.1	49.6	53.6	59.2	67.1	72.7	81.1
87.5°	16.5	16.9	18.9	20.1	21.8	24.3	25.4	30.7	32.6	35.1	39.3
90°	10.4	12.1	13.5	15.0	16.5	17.9	19.0	20.1	21.2	22.3	23.0
92.5°	26.5	28.2	29.2	30.2	31.2	32.2	32.9	33.5	34.2	34.8	35.3
95°	55.4	56.7	58.0	59.4	60.6	61.9	62.4	62.9	63.5	64.0	64.3
97.5°	90.5	91.9	93.4	94.8	96.4	97.8	98.5	99.1	99.8	100.4	100.8
100°	116.8	118.0	119.6	121.2	122.9	124.5	124.9	125.2	125.6	126.0	126.1
102.5°	145.0	145.9	147.4	148.9	150.3	151.9	152.4	152.9	153.4	153.8	154.2
105°	190.4	190.8	191.5	192.2	193.0	193.7	194.2	194.8	195.3	195.8	196.4
107.5°	238.5	238.6	238.8	238.9	239.0	239.1	239.6	240.1	240.6	241.1	241.3
110°	271.7	271.7	271.5	271.3	271.2	271.0	270.6	270.3	269.9	269.5	269.6



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	304.4	304.2	303.9	303.5	303.2	302.9	302.8	302.7	302.6	302.6	302.6
115°	354.8	354.7	354.2	353.9	353.5	353.2	353.0	352.8	352.6	352.5	352.3
117.5°	403.2	403.2	402.9	402.7	402.4	402.2	401.5	401.0	400.3	399.7	399.3
120°	437.5	437.6	437.0	436.4	435.9	435.4	434.5	433.6	432.7	431.8	431.5
122.5°	468.9	469.0	468.7	468.4	468.1	467.9	467.3	466.7	466.1	465.5	464.8
125°	516.7	516.7	516.5	516.3	516.1	515.9	515.6	515.2	514.9	514.5	514.1
127.5°	563.4	563.5	563.2	562.9	562.6	562.3	562.0	561.6	561.3	560.8	560.5
130°	594.6	594.8	594.8	594.8	594.8	594.8	594.5	594.2	593.8	593.5	592.9
132.5°	625.9	626.1	625.9	625.7	625.6	625.5	625.1	624.8	624.4	624.0	623.7
135°	670.8	671.4	671.4	671.4	671.4	671.4	671.0	670.7	670.3	669.9	669.4
137.5°	714.4	714.8	715.1	715.4	715.7	716.0	715.5	715.0	714.5	714.1	713.9
140°	744.4	744.6	744.6	744.6	744.6	744.6	744.4	744.3	744.0	743.9	743.7
142.5°	772.4	772.5	772.4	772.3	772.1	771.9	771.9	771.8	771.8	771.8	771.8
145°	812.6	813.0	813.3	813.4	813.6	813.8	813.6	813.4	813.3	813.0	812.7
147.5°	851.6	852.0	851.8	851.7	851.5	851.4	851.3	851.1	850.9	850.8	850.6
150°	874.5	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.8	874.7
152.5°	895.4	895.7	895.9	896.0	896.2	896.3	896.7	897.2	897.6	898.1	898.1
155°	927.7	927.6	927.4	927.2	927.1	926.9	927.6	928.4	929.0	929.8	929.8
157.5°	955.0	954.9	954.8	954.8	954.8	954.7	955.3	955.8	956.3	956.9	956.8
160°	972.6	972.4	972.2	972.0	971.8	971.7	972.2	972.7	973.3	973.8	973.6
162.5°	987.0	986.7	986.5	986.3	986.2	985.9	986.9	987.9	988.9	989.9	989.9
165°	1007.7	1007.3	1006.9	1006.6	1006.2	1005.8	1006.9	1008.0	1009.1	1010.2	1010.3
167.5°	1023.0	1022.6	1022.6	1022.7	1022.7	1022.8	1023.9	1024.9	1026.1	1027.1	1027.1
170°	1031.5	1031.1	1031.4	1031.5	1031.7	1031.8	1033.0	1034.0	1035.1	1036.2	1036.1
172.5°	1038.6	1038.2	1038.3	1038.3	1038.4	1038.4	1039.6	1040.8	1042.0	1043.3	1043.3
175°	1047.0	1046.4	1046.3	1046.0	1045.9	1045.7	1047.0	1048.2	1049.5	1050.8	1050.8
177.5°	1050.6	1050.3	1050.3	1050.3	1050.3	1050.3	1051.2	1052.3	1053.3	1054.3	1054.3
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1296.6	1295.7	1292.5	1292.1	1292.5	1295.7	1296.6	1297.5	1298.8	1303.3	1297.9
5°	1197.7	1194.9	1193.2	1199.4	1193.2	1194.9	1197.7	1201.1	1206.7	1207.3	1212.9
7.5°	1123.2	1121.0	1116.0	1114.4	1116.0	1121.0	1123.2	1125.2	1130.8	1135.7	1144.0
10°	1075.4	1073.1	1068.6	1067.5	1068.6	1073.1	1075.4	1081.0	1086.6	1092.8	1098.5
12.5°	1029.4	1024.9	1024.0	1025.1	1024.0	1024.9	1029.4	1036.8	1051.5	1051.4	1052.5
15°	968.3	966.0	959.9	961.6	959.9	966.0	968.3	975.7	982.4	990.8	999.3
17.5°	908.1	905.4	897.9	904.5	897.9	905.4	908.1	912.1	920.7	932.7	945.4
20°	870.3	865.7	861.8	861.2	861.8	865.7	870.3	874.2	883.8	893.9	903.5
22.5°	834.1	830.1	829.7	826.1	829.7	830.1	834.1	840.3	849.9	855.6	864.7
25°	789.0	785.1	784.0	781.2	784.0	785.1	789.0	793.6	799.8	804.3	814.4
27.5°	754.5	752.5	750.5	751.4	750.5	752.5	754.5	755.0	757.8	763.9	769.6
30°	733.3	732.7	731.6	731.6	731.6	732.7	733.3	731.6	734.4	737.2	741.8
32.5°	715.7	715.6	716.2	716.2	716.2	715.6	715.7	713.1	714.1	715.1	717.4
35°	691.0	692.7	693.8	692.1	693.8	692.7	691.0	688.8	687.1	683.1	684.2
37.5°	668.7	670.3	672.0	673.8	672.0	670.3	668.7	664.1	660.0	656.5	652.5
40°	651.5	655.5	656.6	659.4	656.6	655.5	651.5	646.5	642.0	638.1	633.5
42.5°	635.3	639.7	642.6	643.2	642.6	639.7	635.3	630.2	623.5	618.6	612.3
45°	610.4	614.9	618.9	618.9	618.9	614.9	610.4	601.9	594.6	587.3	581.1
47.5°	584.6	591.1	595.1	596.1	595.1	591.1	584.6	575.9	565.7	556.6	547.7
50°	567.0	574.9	578.9	581.6	578.9	574.9	567.0	557.4	546.7	535.4	524.7
52.5°	549.8	557.7	563.0	564.5	563.0	557.7	549.8	538.0	525.1	512.9	503.5
55°	520.2	531.5	537.7	540.0	537.7	531.5	520.2	507.3	494.9	479.6	466.1
57.5°	492.3	502.6	509.9	511.5	509.9	502.6	492.3	477.0	461.1	444.8	430.4
60°	470.6	481.9	490.9	492.6	490.9	481.9	470.6	455.4	438.5	422.7	404.7
62.5°	448.5	460.2	468.4	472.8	468.4	460.2	448.5	432.4	414.2	396.6	378.5
65°	410.3	422.2	430.1	431.7	430.1	422.2	410.3	394.5	375.4	356.8	341.5
67.5°	368.6	380.4	385.6	388.9	385.6	380.4	368.6	353.8	334.8	315.5	298.2
70°	339.3	348.9	354.5	357.3	354.5	348.9	339.3	323.5	307.8	288.0	269.4
72.5°	305.9	315.9	322.5	323.1	322.5	315.9	305.9	292.4	275.7	257.4	241.0
75°	254.8	263.7	267.2	267.2	267.2	263.7	254.8	241.8	228.3	213.6	197.3
77.5°	201.6	206.3	210.6	211.5	210.6	206.3	201.6	192.3	181.2	166.5	154.2
80°	167.4	170.2	173.6	173.6	173.6	170.2	167.4	158.9	148.2	135.8	126.3
82.5°	132.2	134.6	137.9	137.5	137.9	134.6	132.2	125.6	116.7	108.4	99.6
85°	80.1	85.1	84.5	83.4	84.5	85.1	80.1	81.1	72.7	67.1	59.2
87.5°	40.8	41.3	42.7	43.7	42.7	41.3	40.8	39.3	35.1	32.6	30.7
90°	23.3	23.7	24.1	24.4	24.1	23.7	23.3	23.0	22.3	21.2	20.1
92.5°	35.5	35.7	36.0	36.1	36.0	35.7	35.5	35.3	34.8	34.2	33.5
95°	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.0	63.5	62.9
97.5°	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.4	99.8	99.1
100°	126.1	126.1	126.1	126.1	126.1	126.1	126.1	126.1	126.0	125.6	125.2
102.5°	154.3	154.5	154.7	154.7	154.7	154.5	154.3	154.2	153.8	153.4	152.9
105°	196.9	197.5	198.0	198.5	198.0	197.5	196.9	196.4	195.8	195.3	194.8
107.5°	241.3	241.2	241.2	241.2	241.2	241.2	241.3	241.3	241.1	240.6	240.1
110°	270.2	270.7	271.3	271.8	271.3	270.7	270.2	269.6	269.5	269.9	270.3



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	302.7	302.8	303.0	303.0	303.0	302.8	302.7	302.6	302.6	302.6	302.7
115°	352.1	351.9	351.7	351.6	351.7	351.9	352.1	352.3	352.5	352.6	352.8
117.5°	398.8	398.5	398.1	397.8	398.1	398.5	398.8	399.3	399.7	400.3	401.0
120°	431.9	432.2	432.6	432.9	432.6	432.2	431.9	431.5	431.8	432.7	433.6
122.5°	464.1	463.5	462.8	462.2	462.8	463.5	464.1	464.8	465.5	466.1	466.7
125°	513.8	513.4	513.1	512.7	513.1	513.4	513.8	514.1	514.5	514.9	515.2
127.5°	560.3	559.9	559.7	559.4	559.7	559.9	560.3	560.5	560.8	561.3	561.6
130°	592.2	591.4	590.7	590.0	590.7	591.4	592.2	592.9	593.5	593.8	594.2
132.5°	623.4	623.1	622.8	622.6	622.8	623.1	623.4	623.7	624.0	624.4	624.8
135°	669.0	668.4	667.8	667.3	667.8	668.4	669.0	669.4	669.9	670.3	670.7
137.5°	714.0	714.1	714.2	714.4	714.2	714.1	714.0	713.9	714.1	714.5	715.0
140°	743.6	743.3	743.1	743.0	743.1	743.3	743.6	743.7	743.9	744.0	744.3
142.5°	771.8	771.7	771.7	771.6	771.7	771.7	771.8	771.8	771.8	771.8	771.8
145°	812.1	811.6	811.1	810.5	811.1	811.6	812.1	812.7	813.0	813.3	813.4
147.5°	850.4	850.3	850.1	849.9	850.1	850.3	850.4	850.6	850.8	850.9	851.1
150°	874.6	874.3	874.2	874.0	874.2	874.3	874.6	874.7	874.8	874.8	874.8
152.5°	897.6	897.1	896.6	896.1	896.6	897.1	897.6	898.1	898.1	897.6	897.2
155°	929.0	928.4	927.6	926.9	927.6	928.4	929.0	929.8	929.8	929.0	928.4
157.5°	956.3	955.6	955.0	954.4	955.0	955.6	956.3	956.8	956.9	956.3	955.8
160°	972.7	971.8	970.9	970.0	970.9	971.8	972.7	973.6	973.8	973.3	972.7
162.5°	989.0	988.1	987.2	986.3	987.2	988.1	989.0	989.9	989.9	988.9	987.9
165°	1009.7	1008.9	1008.2	1007.5	1008.2	1008.9	1009.7	1010.3	1010.2	1009.1	1008.0
167.5°	1026.0	1024.8	1023.7	1022.6	1023.7	1024.8	1026.0	1027.1	1027.1	1026.1	1024.9
170°	1034.9	1033.6	1032.3	1031.0	1032.3	1033.6	1034.9	1036.1	1036.2	1035.1	1034.0
172.5°	1042.0	1040.7	1039.5	1038.2	1039.5	1040.7	1042.0	1043.3	1043.3	1042.0	1040.8
175°	1049.5	1048.2	1047.0	1045.7	1047.0	1048.2	1049.5	1050.8	1050.8	1049.5	1048.2
177.5°	1053.1	1051.9	1050.8	1049.6	1050.8	1051.9	1053.1	1054.3	1054.3	1053.3	1052.3
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1300.6	1302.4	1309.6	1316.4	1324.5	1330.4	1334.4	1339.0	1348.4	1356.1	1363.3
5°	1218.5	1221.4	1236.0	1246.2	1263.6	1278.9	1290.7	1303.7	1318.9	1339.7	1358.9
7.5°	1146.3	1156.7	1172.8	1189.3	1207.1	1227.0	1244.4	1263.9	1290.1	1318.7	1348.3
10°	1105.3	1117.1	1134.0	1153.2	1170.1	1193.2	1214.6	1237.7	1267.5	1302.5	1337.5
12.5°	1064.2	1083.7	1096.6	1119.3	1137.6	1156.7	1179.4	1209.7	1244.6	1281.3	1323.5
15°	1012.8	1023.5	1048.3	1060.7	1086.6	1116.0	1138.5	1169.0	1202.7	1251.2	1298.6
17.5°	953.6	967.6	987.3	1011.1	1040.8	1063.6	1091.8	1123.1	1165.7	1213.8	1273.1
20°	914.8	926.6	950.8	976.7	1008.3	1032.6	1062.4	1092.8	1136.9	1188.1	1250.1
22.5°	880.0	891.4	917.0	941.1	971.8	1001.4	1032.7	1068.0	1110.2	1164.2	1227.6
25°	826.3	841.5	864.1	888.8	918.1	951.9	985.8	1017.3	1062.4	1119.3	1187.0
27.5°	778.6	790.8	807.1	835.3	868.5	901.2	934.8	974.5	1017.8	1078.0	1148.2
30°	748.0	759.2	775.5	801.4	832.5	867.4	902.4	940.7	985.8	1045.5	1117.1
32.5°	723.6	732.1	746.7	769.9	798.2	834.9	869.4	909.1	956.4	1015.3	1085.1
35°	687.6	695.0	700.6	722.6	748.0	781.7	816.7	859.0	904.6	960.4	1030.3
37.5°	652.3	654.8	663.1	677.4	702.1	733.2	765.6	807.2	854.0	910.7	973.7
40°	630.7	631.9	636.9	650.4	671.8	701.2	732.7	773.9	818.4	872.0	934.5
42.5°	609.5	608.8	613.4	622.9	642.9	669.6	700.7	738.3	782.8	832.3	891.2
45°	576.0	576.0	574.9	582.8	599.2	625.1	651.0	687.1	724.2	772.7	822.3
47.5°	541.1	537.9	538.9	543.0	556.8	578.0	604.2	633.7	666.5	707.6	751.1
50°	518.5	514.0	512.3	516.8	529.2	547.8	572.7	598.6	629.6	665.6	702.9
52.5°	493.7	489.3	486.2	489.3	500.8	518.0	540.6	563.4	591.3	620.5	652.8
55°	455.4	450.4	448.7	449.8	458.2	471.7	490.9	511.8	532.6	556.8	579.4
57.5°	417.7	409.3	407.7	407.2	413.0	425.4	441.4	459.5	474.7	489.3	513.3
60°	392.8	382.7	379.3	378.8	383.3	393.4	408.1	426.1	436.8	446.9	467.8
62.5°	366.2	356.5	349.1	349.9	353.9	363.6	376.5	389.6	396.6	407.7	421.8
65°	325.2	312.8	307.2	305.5	307.8	315.6	325.8	334.2	342.1	346.7	360.1
67.5°	284.2	273.8	265.5	263.4	262.4	267.8	276.1	281.3	286.9	290.8	298.8
70°	255.4	246.3	236.2	232.8	232.2	236.7	244.6	245.2	253.1	254.8	263.2
72.5°	226.9	215.6	208.6	205.3	202.9	206.9	212.1	213.6	217.9	220.9	225.3
75°	182.6	174.1	167.4	162.3	160.6	162.9	162.9	165.7	168.5	170.2	175.3
77.5°	143.7	134.0	126.0	123.1	121.1	119.6	120.8	122.5	121.2	124.1	125.2
80°	116.7	106.6	100.4	99.2	95.8	93.0	92.5	94.1	91.9	93.0	96.4
82.5°	90.1	83.6	76.9	75.7	71.5	70.0	69.5	68.4	68.4	68.2	68.9
85°	53.6	49.6	45.1	42.2	40.6	37.7	37.7	36.6	35.5	34.4	35.0
87.5°	25.4	24.3	21.8	20.1	18.9	16.9	16.5	14.8	13.9	13.0	12.2
90°	19.0	17.9	16.5	15.0	13.5	12.1	10.4	8.4	6.4	4.4	2.4
92.5°	32.9	32.2	31.2	30.2	29.2	28.2	26.5	24.2	21.9	19.7	17.4
95°	62.4	61.9	60.6	59.4	58.0	56.7	55.4	53.7	52.1	50.5	48.8
97.5°	98.5	97.8	96.4	94.8	93.4	91.9	90.5	89.2	87.9	86.6	85.3
100°	124.9	124.5	122.9	121.2	119.6	118.0	116.8	116.1	115.4	114.6	113.9
102.5°	152.4	151.9	150.3	148.9	147.4	145.9	145.0	144.7	144.5	144.1	143.9
105°	194.2	193.7	193.0	192.2	191.5	190.8	190.4	190.1	190.0	189.8	189.6
107.5°	239.6	239.1	239.0	238.9	238.8	238.6	238.5	238.3	238.1	237.8	237.7
110°	270.6	271.0	271.2	271.3	271.5	271.7	271.7	271.3	270.9	270.5	270.2



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	302.8	302.9	303.2	303.5	303.9	304.2	304.4	304.3	304.2	304.1	304.0
115°	353.0	353.2	353.5	353.9	354.2	354.7	354.8	354.8	354.8	354.8	354.8
117.5°	401.5	402.2	402.4	402.7	402.9	403.2	403.2	403.1	402.9	402.8	402.7
120°	434.5	435.4	435.9	436.4	437.0	437.6	437.5	436.8	436.0	435.3	434.6
122.5°	467.3	467.9	468.1	468.4	468.7	469.0	468.9	468.6	468.3	468.1	467.7
125°	515.6	515.9	516.1	516.3	516.5	516.7	516.7	516.7	516.7	516.7	516.7
127.5°	562.0	562.3	562.6	562.9	563.2	563.5	563.4	562.8	562.2	561.7	561.2
130°	594.5	594.8	594.8	594.8	594.8	594.8	594.6	594.0	593.5	593.0	592.4
132.5°	625.1	625.5	625.6	625.7	625.9	626.1	625.9	625.5	625.1	624.8	624.4
135°	671.0	671.4	671.4	671.4	671.4	671.4	670.8	669.8	668.6	667.6	666.5
137.5°	715.5	716.0	715.7	715.4	715.1	714.8	714.4	713.9	713.4	712.9	712.4
140°	744.4	744.6	744.6	744.6	744.6	744.6	744.4	744.0	743.7	743.3	743.0
142.5°	771.9	771.9	772.1	772.3	772.4	772.5	772.4	772.1	771.7	771.4	770.9
145°	813.6	813.8	813.6	813.4	813.3	813.0	812.6	811.9	811.1	810.4	809.7
147.5°	851.3	851.4	851.5	851.7	851.8	852.0	851.6	850.8	849.9	849.0	848.2
150°	874.8	874.8	874.8	874.8	874.8	874.8	874.5	873.8	873.0	872.3	871.6
152.5°	896.7	896.3	896.2	896.0	895.9	895.7	895.4	895.0	894.5	894.1	893.7
155°	927.6	926.9	927.1	927.2	927.4	927.6	927.7	927.7	927.7	927.7	927.7
157.5°	955.3	954.7	954.8	954.8	954.8	954.9	955.0	955.4	955.7	956.0	956.3
160°	972.2	971.7	971.8	972.0	972.2	972.4	972.6	972.7	972.9	973.1	973.3
162.5°	986.9	985.9	986.2	986.3	986.5	986.7	987.0	987.5	988.0	988.5	988.9
165°	1006.9	1005.8	1006.2	1006.6	1006.9	1007.3	1007.7	1008.3	1008.9	1009.3	1009.9
167.5°	1023.9	1022.8	1022.7	1022.7	1022.6	1022.6	1023.0	1023.8	1024.5	1025.2	1026.1
170°	1033.0	1031.8	1031.7	1031.5	1031.4	1031.1	1031.5	1032.4	1033.3	1034.2	1035.1
172.5°	1039.6	1038.4	1038.4	1038.3	1038.3	1038.2	1038.6	1039.3	1040.2	1040.9	1041.6
175°	1047.0	1045.7	1045.9	1046.0	1046.3	1046.4	1047.0	1047.9	1048.8	1049.7	1050.6
177.5°	1051.2	1050.3	1050.3	1050.3	1050.3	1050.3	1050.6	1051.3	1052.1	1052.8	1053.5
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



TEST NUMBER: P332653-930

CATALOG NUMBER: SA4XXDIP-C1020D1035U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1369.6	1374.1	1380.0	1389.9	1393.5	1398.0	1404.4	1403.9	1405.7	1412.4	1426.9
5°	1374.7	1392.1	1409.1	1429.4	1450.7	1464.8	1484.0	1495.8	1507.7	1522.9	1548.8
7.5°	1376.7	1404.4	1435.4	1471.0	1502.8	1539.3	1567.7	1594.6	1618.9	1651.0	1681.9
10°	1373.5	1410.7	1450.7	1495.8	1543.8	1584.4	1621.0	1662.7	1698.2	1737.1	1772.1
12.5°	1367.7	1412.6	1466.1	1516.6	1572.6	1632.6	1678.2	1720.4	1767.7	1812.4	1866.3
15°	1354.4	1415.8	1478.4	1544.9	1619.8	1689.1	1755.1	1809.8	1860.5	1927.6	1998.1
17.5°	1337.5	1403.8	1482.6	1563.2	1641.5	1720.8	1802.4	1884.6	1948.6	2031.9	2087.0
20°	1321.7	1398.3	1479.5	1575.3	1653.7	1752.3	1833.4	1912.9	2000.8	2083.7	2149.6
22.5°	1299.6	1383.5	1469.6	1565.0	1668.1	1766.8	1860.5	1946.8	2034.7	2124.8	2204.7
25°	1271.5	1347.6	1449.6	1557.9	1660.4	1767.5	1875.2	1983.4	2078.0	2173.3	2247.7
27.5°	1223.8	1319.8	1414.8	1526.5	1640.5	1761.6	1876.7	1990.1	2089.2	2167.6	2213.7
30°	1199.4	1282.8	1385.9	1498.1	1621.5	1751.8	1871.8	1982.8	2075.3	2137.8	2156.4
32.5°	1163.4	1249.4	1350.3	1466.6	1597.2	1731.0	1856.0	1960.7	2037.8	2070.6	2048.2
35°	1109.8	1187.6	1289.6	1408.5	1544.3	1686.9	1810.4	1898.8	1938.3	1907.3	1830.1
37.5°	1045.5	1122.6	1225.1	1341.9	1482.5	1627.4	1739.0	1802.7	1789.6	1712.5	1597.4
40°	1000.5	1072.6	1170.1	1296.3	1433.3	1578.7	1676.7	1711.2	1675.1	1564.6	1442.3
42.5°	950.4	1020.8	1118.7	1240.4	1385.5	1519.6	1605.1	1607.9	1547.4	1415.4	1292.6
45°	874.2	941.3	1033.7	1160.5	1294.6	1420.9	1477.2	1449.6	1338.1	1210.6	1087.2
47.5°	799.0	857.1	948.3	1068.6	1196.0	1302.3	1330.2	1280.5	1161.6	1038.0	923.6
50°	744.0	802.6	888.3	1003.2	1126.1	1218.0	1231.5	1165.6	1048.9	924.3	834.7
52.5°	691.2	749.4	831.9	938.3	1050.8	1133.7	1134.1	1057.8	941.6	830.5	747.2
55°	613.8	666.2	740.6	835.8	936.2	1001.0	985.2	906.3	805.4	709.1	636.3
57.5°	539.2	584.8	653.4	732.8	821.2	874.7	848.5	772.5	682.4	600.7	545.6
60°	490.9	534.3	593.0	667.9	742.3	784.0	759.2	690.4	607.6	541.6	493.7
62.5°	444.0	480.6	537.0	602.1	671.1	702.0	679.9	612.0	540.4	480.8	441.9
65°	377.6	407.5	452.6	508.4	558.6	585.1	566.5	503.3	448.7	405.8	374.8
67.5°	315.6	339.0	373.1	417.8	460.5	474.8	457.9	413.9	367.6	333.3	311.4
70°	272.8	294.8	323.5	357.9	395.1	410.3	393.4	358.5	320.7	289.1	267.7
72.5°	235.4	252.4	276.6	306.1	335.2	350.3	338.8	305.2	273.4	249.9	231.6
75°	179.2	193.9	210.8	231.6	254.2	264.3	254.2	231.1	209.1	191.6	178.6
77.5°	130.3	138.2	151.2	166.8	180.9	188.7	179.9	164.2	150.8	138.8	132.5
80°	99.2	104.8	113.8	126.3	135.8	143.2	137.5	124.6	113.8	106.0	103.1
82.5°	72.2	76.0	81.9	91.1	97.5	101.3	98.7	89.4	85.0	78.0	75.2
85°	35.5	37.7	41.7	44.5	50.1	50.7	51.3	47.4	43.4	41.7	39.5
87.5°	13.0	13.9	15.7	17.4	19.6	20.3	20.1	20.5	18.9	18.7	17.1
90°	4.4	6.4	8.4	10.4	12.1	13.5	15.0	16.5	17.9	19.0	20.1
92.5°	19.7	21.9	24.2	26.5	28.2	29.2	30.2	31.2	32.2	32.9	33.5
95°	50.5	52.1	53.7	55.4	56.7	58.0	59.4	60.6	61.9	62.4	62.9
97.5°	86.6	87.9	89.2	90.5	91.9	93.4	94.8	96.4	97.8	98.5	99.1
100°	114.6	115.4	116.1	116.8	118.0	119.6	121.2	122.9	124.5	124.9	125.2
102.5°	144.1	144.5	144.7	145.0	145.9	147.4	148.9	150.3	151.9	152.4	152.9
105°	189.8	190.0	190.1	190.4	190.8	191.5	192.2	193.0	193.7	194.2	194.8
107.5°	237.8	238.1	238.3	238.5	238.6	238.8	238.9	239.0	239.1	239.6	240.1
110°	270.5	270.9	271.3	271.7	271.7	271.5	271.3	271.2	271.0	270.6	270.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	304.1	304.2	304.3	304.4	304.2	303.9	303.5	303.2	302.9	302.8	302.7
115°	354.8	354.8	354.8	354.8	354.7	354.2	353.9	353.5	353.2	353.0	352.8
117.5°	402.8	402.9	403.1	403.2	403.2	402.9	402.7	402.4	402.2	401.5	401.0
120°	435.3	436.0	436.8	437.5	437.6	437.0	436.4	435.9	435.4	434.5	433.6
122.5°	468.1	468.3	468.6	468.9	469.0	468.7	468.4	468.1	467.9	467.3	466.7
125°	516.7	516.7	516.7	516.7	516.7	516.5	516.3	516.1	515.9	515.6	515.2
127.5°	561.7	562.2	562.8	563.4	563.5	563.2	562.9	562.6	562.3	562.0	561.6
130°	593.0	593.5	594.0	594.6	594.8	594.8	594.8	594.8	594.8	594.5	594.2
132.5°	624.8	625.1	625.5	625.9	626.1	625.9	625.7	625.6	625.5	625.1	624.8
135°	667.6	668.6	669.8	670.8	671.4	671.4	671.4	671.4	671.4	671.0	670.7
137.5°	712.9	713.4	713.9	714.4	714.8	715.1	715.4	715.7	716.0	715.5	715.0
140°	743.3	743.7	744.0	744.4	744.6	744.6	744.6	744.6	744.6	744.4	744.3
142.5°	771.4	771.7	772.1	772.4	772.5	772.4	772.3	772.1	771.9	771.9	771.8
145°	810.4	811.1	811.9	812.6	813.0	813.3	813.4	813.6	813.8	813.6	813.4
147.5°	849.0	849.9	850.8	851.6	852.0	851.8	851.7	851.5	851.4	851.3	851.1
150°	872.3	873.0	873.8	874.5	874.8	874.8	874.8	874.8	874.8	874.8	874.8
152.5°	894.1	894.5	895.0	895.4	895.7	895.9	896.0	896.2	896.3	896.7	897.2
155°	927.7	927.7	927.7	927.7	927.6	927.4	927.2	927.1	926.9	927.6	928.4
157.5°	956.0	955.7	955.4	955.0	954.9	954.8	954.8	954.8	954.7	955.3	955.8
160°	973.1	972.9	972.7	972.6	972.4	972.2	972.0	971.8	971.7	972.2	972.7
162.5°	988.5	988.0	987.5	987.0	986.7	986.5	986.3	986.2	985.9	986.9	987.9
165°	1009.3	1008.9	1008.3	1007.7	1007.3	1006.9	1006.6	1006.2	1005.8	1006.9	1008.0
167.5°	1025.2	1024.5	1023.8	1023.0	1022.6	1022.6	1022.7	1022.7	1022.8	1023.9	1024.9
170°	1034.2	1033.3	1032.4	1031.5	1031.1	1031.4	1031.5	1031.7	1031.8	1033.0	1034.0
172.5°	1040.9	1040.2	1039.3	1038.6	1038.2	1038.3	1038.3	1038.4	1038.4	1039.6	1040.8
175°	1049.7	1048.8	1047.9	1047.0	1046.4	1046.3	1046.0	1045.9	1045.7	1047.0	1048.2
177.5°	1052.8	1052.1	1051.3	1050.6	1050.3	1050.3	1050.3	1050.3	1050.3	1051.2	1052.3
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1434.1	1435.0	1439.0	1442.2	1443.1	1447.6	1448.1
5°	1560.1	1569.7	1588.3	1590.0	1592.8	1607.4	1596.2
7.5°	1707.8	1732.1	1748.3	1762.7	1767.9	1774.3	1772.9
10°	1802.5	1838.5	1856.6	1885.3	1886.4	1893.8	1889.3
12.5°	1897.6	1939.5	1972.5	1977.8	2001.9	2005.6	2011.9
15°	2032.4	2077.0	2122.6	2138.9	2172.2	2180.1	2192.5
17.5°	2159.2	2204.7	2236.7	2278.9	2292.6	2310.9	2298.4
20°	2228.5	2278.2	2318.7	2352.0	2366.1	2376.2	2375.1
22.5°	2270.5	2320.5	2353.4	2378.6	2391.8	2396.1	2395.8
25°	2296.8	2325.5	2335.7	2345.2	2330.6	2325.5	2327.8
27.5°	2223.7	2216.3	2189.8	2155.1	2119.0	2090.3	2074.8
30°	2123.2	2079.2	2039.1	1969.3	1933.2	1911.8	1892.6
32.5°	1980.7	1911.0	1834.0	1770.0	1729.0	1697.2	1692.5
35°	1736.5	1631.7	1537.6	1459.2	1418.6	1384.2	1376.4
37.5°	1476.3	1367.4	1282.7	1213.7	1170.1	1145.8	1123.2
40°	1303.7	1210.1	1126.7	1068.0	1034.8	1017.3	1003.2
42.5°	1170.6	1085.2	1002.2	957.6	927.5	916.8	908.6
45°	986.9	907.4	849.9	816.1	798.7	780.6	772.2
47.5°	839.8	775.1	737.2	708.5	689.7	679.1	673.6
50°	756.4	703.4	669.6	647.6	630.7	622.2	617.8
52.5°	682.4	639.0	610.5	593.0	581.6	575.4	573.6
55°	587.8	554.6	536.5	521.4	512.9	507.3	505.0
57.5°	510.9	485.4	470.8	458.2	454.9	450.2	448.7
60°	460.5	440.8	428.4	419.9	417.1	411.5	412.5
62.5°	415.8	399.7	389.1	384.3	380.6	375.9	377.4
65°	351.7	339.9	334.2	329.7	325.2	322.4	324.7
67.5°	295.1	287.0	279.3	276.7	274.5	274.0	271.7
70°	258.1	251.4	244.6	243.0	243.0	240.7	240.1
72.5°	222.5	217.5	213.0	211.8	210.0	210.9	208.6
75°	171.9	168.0	166.2	164.6	164.0	164.0	162.3
77.5°	127.0	124.1	121.4	121.4	119.4	118.6	118.4
80°	96.4	95.2	93.0	93.0	91.9	92.5	91.3
82.5°	72.5	70.9	70.4	69.5	68.0	68.1	66.9
85°	38.9	37.2	36.6	35.0	33.8	35.0	33.8
87.5°	17.8	17.5	17.2	16.4	16.0	16.1	14.8
90°	21.2	22.3	23.0	23.3	23.7	24.1	24.4
92.5°	34.2	34.8	35.3	35.5	35.7	36.0	36.1
95°	63.5	64.0	64.3	64.3	64.3	64.3	64.3
97.5°	99.8	100.4	100.8	100.8	100.8	100.8	100.8
100°	125.6	126.0	126.1	126.1	126.1	126.1	126.1
102.5°	153.4	153.8	154.2	154.3	154.5	154.7	154.7
105°	195.3	195.8	196.4	196.9	197.5	198.0	198.5
107.5°	240.6	241.1	241.3	241.3	241.2	241.2	241.2
110°	269.9	269.5	269.6	270.2	270.7	271.3	271.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	302.6	302.6	302.6	302.7	302.8	303.0	303.0
115°	352.6	352.5	352.3	352.1	351.9	351.7	351.6
117.5°	400.3	399.7	399.3	398.8	398.5	398.1	397.8
120°	432.7	431.8	431.5	431.9	432.2	432.6	432.9
122.5°	466.1	465.5	464.8	464.1	463.5	462.8	462.2
125°	514.9	514.5	514.1	513.8	513.4	513.1	512.7
127.5°	561.3	560.8	560.5	560.3	559.9	559.7	559.4
130°	593.8	593.5	592.9	592.2	591.4	590.7	590.0
132.5°	624.4	624.0	623.7	623.4	623.1	622.8	622.6
135°	670.3	669.9	669.4	669.0	668.4	667.8	667.3
137.5°	714.5	714.1	713.9	714.0	714.1	714.2	714.4
140°	744.0	743.9	743.7	743.6	743.3	743.1	743.0
142.5°	771.8	771.8	771.8	771.8	771.7	771.7	771.6
145°	813.3	813.0	812.7	812.1	811.6	811.1	810.5
147.5°	850.9	850.8	850.6	850.4	850.3	850.1	849.9
150°	874.8	874.8	874.7	874.6	874.3	874.2	874.0
152.5°	897.6	898.1	898.1	897.6	897.1	896.6	896.1
155°	929.0	929.8	929.8	929.0	928.4	927.6	926.9
157.5°	956.3	956.9	956.8	956.3	955.6	955.0	954.4
160°	973.3	973.8	973.6	972.7	971.8	970.9	970.0
162.5°	988.9	989.9	989.9	989.0	988.1	987.2	986.3
165°	1009.1	1010.2	1010.3	1009.7	1008.9	1008.2	1007.5
167.5°	1026.1	1027.1	1027.1	1026.0	1024.8	1023.7	1022.6
170°	1035.1	1036.2	1036.1	1034.9	1033.6	1032.3	1031.0
172.5°	1042.0	1043.3	1043.3	1042.0	1040.7	1039.5	1038.2
175°	1049.5	1050.8	1050.8	1049.5	1048.2	1047.0	1045.7
177.5°	1053.3	1054.3	1054.3	1053.1	1051.9	1050.8	1049.6
180°	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2	1052.2

(END OF REPORT)