

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: P331490-840

Luminaire Tested: **S122DIW-S290D1440U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331490-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D1440U840-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1440 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6368.6 lumens
Efficiency: N/A
Efficacy: 119.3 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: Semi-Indirect

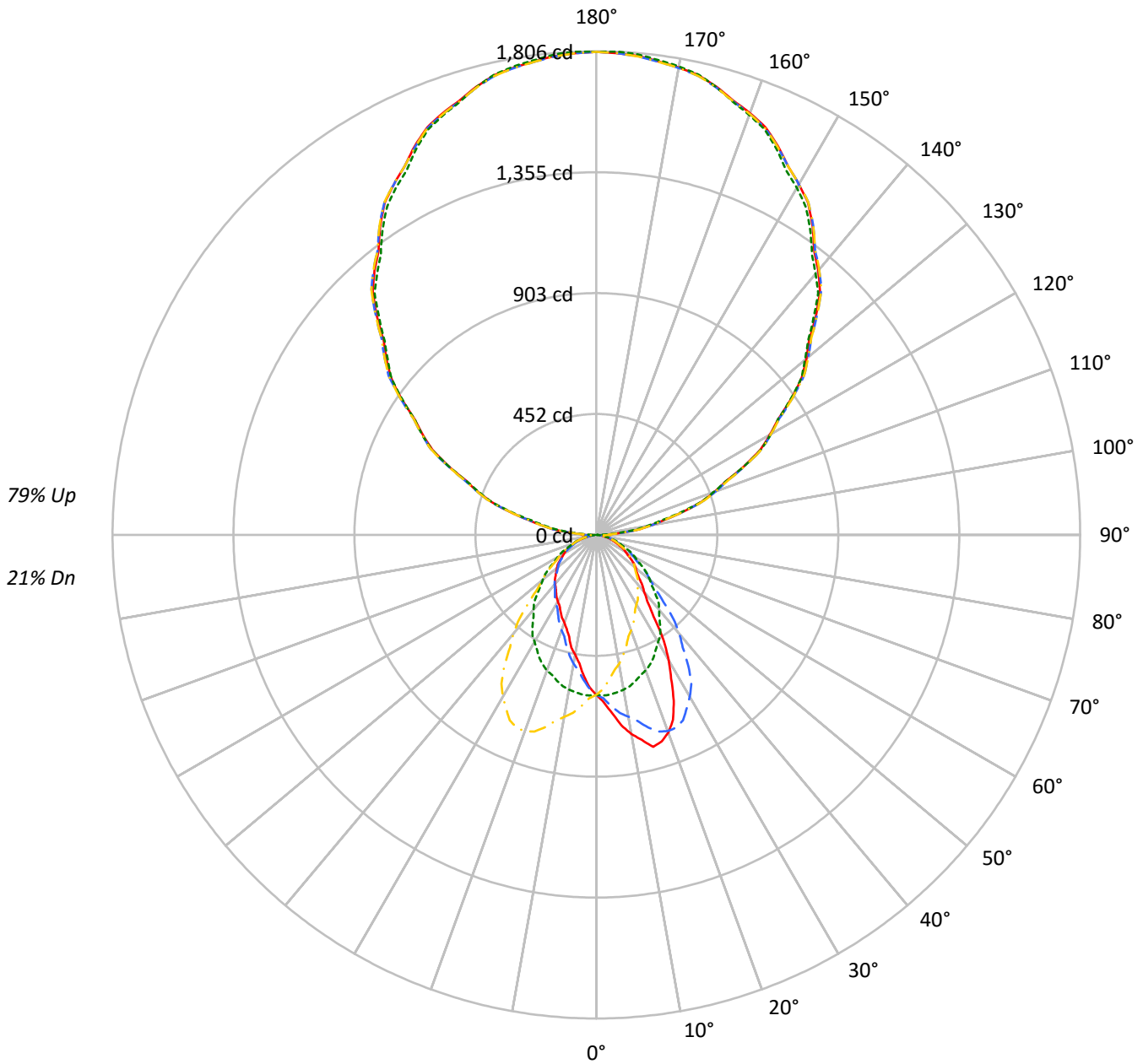
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21				
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18				
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	21	15				
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	19	18	13				
4	70	60	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16	11				
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14	10				
6	59	47	40	34	52	42	36	31	33	28	25	24	21	18	15	14	12	9				
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11	8				
8	50	39	31	26	44	35	28	24	27	22	19	20	17	14	13	11	10	7				
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7				
10	43	32	25	21	38	29	23	19	22	18	15	17	14	12	11	9	8	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9637	9637	9637	9637
5°	10804	9700	8596	9700
10°	12381	9621	7438	9621
15°	13697	9444	6572	9444
20°	13490	9256	5991	9256
25°	12162	9002	5624	9002
30°	10051	8600	5354	8600
35°	7324	8180	5164	8180
40°	5851	7685	5056	7685
45°	5112	7108	4914	7108
50°	4808	6551	4818	6551
55°	4428	5987	4687	5987
60°	4059	5383	4492	5383
65°	3698	4844	4294	4844
70°	3356	4319	4008	4319
75°	2982	3737	3550	3737
80°	2566	3087	2854	3087
85°	2297	2297	1704	2297



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	0.9
10°-20°	165.3	2.6
20°-30°	239.9	3.8
30°-40°	253.1	4.0
40°-50°	224.1	3.5
50°-60°	178.8	2.8
60°-70°	121.6	1.9
70°-80°	62.3	1.0
80°-90°	22.2	0.3
90°-100°	114.3	1.8
100°-110°	355.0	5.6
110°-120°	606.9	9.5
120°-130°	798.1	12.5
130°-140°	895.8	14.1
140°-150°	878.3	13.8
150°-160°	736.7	11.6
160°-170°	488.6	7.7
170°-180°	170.8	2.7
0°-30°	462.0	7.3
0°-40°	715.1	11.2
0°-60°	1118.0	17.6
0°-90°	1324.1	20.8
90°-120°	1076.2	16.9
90°-150°	3648.4	57.3
90°-180°	5045.0	79.2
0°-180°	6368.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	597	597	597	597	597	
5°	667	598	530	598	667	67
15°	819	565	393	565	819	226
25°	683	505	316	505	683	309
35°	372	415	262	415	372	242
45°	224	311	215	311	224	176
55°	157	213	166	213	157	141
65°	97	127	112	127	97	96
75°	48	60	57	60	48	51
85°	12	12	9	12	12	15
90°	52	2	52	2	52	23
95°	94	79	94	79	94	105
105°	338	327	338	327	338	355
115°	609	609	609	609	609	601
125°	889	886	889	886	889	793
135°	1160	1146	1160	1146	1160	893
145°	1407	1392	1407	1392	1407	878
155°	1603	1591	1603	1591	1603	738
165°	1732	1731	1732	1731	1732	489
175°	1795	1801	1795	1801	1795	171
180°	1804	1804	1804	1804	1804	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	624.4	624.6	625.0	622.1	621.7	621.7	619.1	616.9	614.3	610.9	611.3
5°	666.6	669.1	670.0	667.3	663.2	662.8	658.8	652.5	646.4	641.7	638.2
7.5°	717.0	718.0	715.8	712.2	709.1	703.6	696.3	689.2	679.2	670.1	663.4
10°	755.2	756.6	752.7	747.4	743.1	736.6	726.1	715.3	702.3	689.6	679.5
12.5°	784.2	787.6	782.5	781.9	774.5	765.6	753.1	747.6	729.2	711.7	700.7
15°	819.4	819.2	819.7	815.3	809.8	808.4	795.2	780.6	754.8	744.4	726.5
17.5°	809.2	812.7	814.4	814.3	814.2	813.2	809.0	799.9	786.9	770.1	749.5
20°	785.1	789.6	790.3	795.6	798.6	802.4	804.1	801.5	793.6	779.5	761.6
22.5°	747.6	748.9	751.0	759.2	765.7	775.5	780.5	789.1	786.0	779.1	764.2
25°	682.7	680.4	688.4	692.6	707.5	723.1	734.4	746.7	757.7	764.4	760.0
27.5°	604.8	601.4	613.4	624.4	636.4	653.4	670.9	691.6	708.7	730.3	737.7
30°	539.1	541.2	552.6	564.3	582.7	606.5	626.3	648.9	673.6	697.6	714.4
32.5°	468.3	476.2	483.4	501.4	517.6	544.1	573.1	601.5	632.1	659.4	685.4
35°	371.6	380.8	390.9	403.9	426.7	453.0	481.3	519.6	561.4	598.7	629.4
37.5°	312.9	311.3	317.1	326.6	345.0	366.3	398.8	436.6	485.7	529.7	573.1
40°	277.6	276.7	280.7	289.5	303.5	319.1	347.6	380.8	426.5	480.2	531.8
42.5°	253.4	253.9	256.2	262.4	272.0	284.8	306.1	334.4	376.2	426.8	482.2
45°	223.9	225.5	228.0	231.1	236.5	247.1	259.0	279.2	312.3	354.5	409.0
47.5°	202.7	202.8	205.3	207.9	211.2	217.1	226.9	239.5	262.9	297.2	344.2
50°	191.4	189.8	191.6	193.6	197.0	201.2	207.6	219.5	235.1	262.9	302.2
52.5°	177.3	177.4	179.0	179.9	182.9	187.0	192.9	201.2	215.3	237.0	269.2
55°	157.3	158.5	159.5	160.8	163.6	166.5	171.2	176.6	187.6	203.9	227.8
57.5°	138.6	139.0	139.9	142.5	144.2	146.9	151.3	156.3	163.5	175.5	193.5
60°	125.7	125.7	127.5	128.7	131.0	133.7	137.1	142.0	148.5	158.2	172.8
62.5°	114.0	113.8	114.5	116.4	118.2	120.7	124.1	128.3	134.3	143.1	154.9
65°	96.8	96.3	97.8	98.2	100.0	102.5	105.3	109.7	114.5	120.9	131.5
67.5°	80.3	80.9	81.6	82.4	83.4	86.1	88.0	91.0	95.1	100.5	107.6
70°	71.1	71.1	71.1	71.8	73.2	74.5	76.3	78.9	82.8	87.4	93.8
72.5°	60.8	61.6	62.3	61.9	63.6	64.4	66.7	68.1	71.8	74.7	80.4
75°	47.8	47.8	47.8	48.9	49.6	50.2	51.6	53.0	54.8	58.5	61.5
77.5°	35.6	35.5	35.7	36.1	36.8	37.6	38.0	39.2	40.9	42.6	45.1
80°	27.6	28.0	28.2	28.7	28.7	29.1	29.4	31.0	32.1	33.2	34.8
82.5°	21.3	21.4	21.4	21.5	21.7	22.0	22.6	23.1	23.5	24.4	25.7
85°	12.4	12.1	12.1	12.6	12.4	12.4	12.8	13.3	13.3	13.5	14.2
87.5°	15.1	15.0	15.1	14.9	14.8	15.0	15.2	15.1	15.5	15.8	14.4
90°	51.8	51.4	51.1	50.8	50.4	50.6	51.3	51.9	52.6	53.3	45.8
92.5°	49.3	49.3	49.2	49.1	49.1	49.0	48.8	48.7	48.6	48.4	46.7
95°	94.4	95.0	95.7	96.4	97.0	97.5	97.5	97.5	97.5	97.5	96.7
97.5°	163.5	163.6	163.6	163.7	163.8	163.8	163.8	163.8	163.8	163.8	162.5
100°	208.5	208.9	209.2	209.5	210.0	210.1	210.1	210.1	210.1	210.1	209.0
102.5°	259.7	260.0	260.4	260.7	261.1	261.2	260.8	260.5	260.3	260.0	258.7
105°	338.0	338.0	338.0	338.0	338.0	337.6	337.0	336.3	335.6	335.0	334.3
107.5°	411.6	413.2	414.8	416.4	417.9	418.5	418.3	418.0	417.7	417.5	417.5
110°	468.9	469.9	470.9	471.9	472.9	473.5	473.5	473.5	473.5	473.5	473.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	523.7	524.4	525.2	525.9	526.6	527.5	528.3	529.1	529.9	530.7	531.0
115°	608.9	610.0	611.0	612.0	613.0	613.7	614.0	614.4	614.7	615.1	615.7
117.5°	690.2	691.3	692.3	693.3	694.3	695.3	696.1	696.9	697.7	698.5	700.3
120°	747.5	748.5	749.5	750.5	751.5	752.0	752.0	752.0	752.0	752.0	754.8
122.5°	803.5	804.3	805.1	805.8	806.5	807.3	808.1	808.9	809.7	810.5	812.4
125°	889.1	889.5	889.8	890.1	890.5	891.1	892.1	893.1	894.1	895.1	896.3
127.5°	967.0	968.2	969.2	970.3	971.4	972.5	973.7	974.9	976.1	977.4	978.7
130°	1023.1	1024.4	1025.8	1027.1	1028.4	1029.5	1030.2	1030.9	1031.6	1032.2	1032.9
132.5°	1076.6	1077.7	1078.8	1079.9	1081.0	1082.3	1083.8	1085.3	1086.7	1088.2	1088.1
135°	1160.1	1161.1	1162.2	1163.2	1164.2	1164.9	1165.2	1165.5	1165.9	1166.2	1165.5
137.5°	1235.6	1237.0	1238.3	1239.7	1241.0	1241.8	1242.1	1242.3	1242.6	1242.9	1242.0
140°	1288.0	1289.3	1290.7	1292.0	1293.4	1294.0	1294.0	1294.0	1294.0	1294.0	1292.4
142.5°	1335.4	1336.9	1338.2	1339.6	1340.9	1341.4	1341.2	1340.9	1340.6	1340.4	1339.2
145°	1406.7	1408.1	1409.5	1410.8	1412.1	1412.6	1412.3	1412.0	1411.6	1411.3	1409.3
147.5°	1470.4	1471.7	1472.9	1474.2	1475.5	1475.8	1475.0	1474.3	1473.6	1472.8	1471.5
150°	1511.8	1512.8	1513.8	1514.8	1515.8	1515.8	1514.8	1513.8	1512.8	1511.8	1510.5
152.5°	1550.7	1552.1	1553.3	1554.6	1555.9	1555.9	1554.6	1553.3	1552.1	1550.7	1549.1
155°	1603.2	1604.2	1605.2	1606.2	1607.2	1606.8	1605.2	1603.5	1601.7	1600.0	1599.0
157.5°	1648.2	1649.8	1651.4	1653.0	1654.7	1654.4	1652.0	1649.7	1647.4	1645.2	1644.6
160°	1676.2	1677.6	1678.9	1680.2	1681.6	1681.2	1679.2	1677.2	1675.2	1673.1	1672.8
162.5°	1700.5	1702.2	1703.8	1705.5	1707.1	1706.7	1704.5	1702.1	1699.8	1697.5	1697.2
165°	1732.5	1734.2	1736.0	1737.6	1739.3	1739.0	1736.6	1734.2	1731.8	1729.5	1729.5
167.5°	1758.7	1760.5	1762.2	1764.0	1765.7	1765.4	1763.1	1760.7	1758.4	1756.0	1756.1
170°	1772.1	1774.1	1776.2	1778.2	1780.2	1780.1	1777.7	1775.3	1772.9	1770.6	1770.9
172.5°	1783.1	1785.1	1787.2	1789.2	1791.2	1791.0	1788.7	1786.2	1783.9	1781.5	1781.9
175°	1794.9	1797.0	1799.0	1801.0	1803.1	1802.9	1800.5	1798.2	1795.8	1793.4	1794.1
177.5°	1800.4	1802.0	1803.7	1805.3	1807.0	1807.0	1805.3	1803.7	1802.0	1800.4	1801.0
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	612.5	611.1	610.2	606.8	603.9	601.0	600.1	600.4	596.3	592.5	590.9
5°	636.4	631.8	627.4	621.3	613.9	605.8	601.8	598.5	590.5	581.8	576.7
7.5°	657.7	651.2	642.8	631.2	620.5	607.8	599.8	592.7	581.0	568.7	561.1
10°	670.8	661.9	651.1	636.8	623.8	608.3	597.6	586.8	573.1	558.4	549.2
12.5°	682.0	669.9	659.3	641.1	625.6	606.3	593.6	578.3	563.9	546.4	537.5
15°	708.6	686.4	666.2	645.5	626.5	599.7	585.4	565.0	546.0	524.4	514.1
17.5°	729.2	704.2	672.5	646.2	624.0	594.2	573.4	549.0	526.4	501.8	487.8
20°	740.9	712.3	678.1	646.9	620.4	586.3	563.6	538.7	512.3	484.5	469.4
22.5°	747.9	717.8	684.0	644.2	613.0	580.0	551.4	523.9	497.3	467.3	451.4
25°	750.1	722.7	686.8	641.9	603.8	566.4	532.0	505.3	473.0	445.0	421.9
27.5°	739.2	719.5	685.1	637.5	593.2	549.5	511.1	481.0	446.9	416.5	393.1
30°	725.8	714.4	680.9	633.2	584.7	537.8	495.5	461.3	427.4	396.7	372.7
32.5°	705.1	702.7	673.2	626.9	575.7	522.9	479.2	444.6	407.0	376.8	354.1
35°	664.4	675.4	656.8	613.0	558.9	501.7	454.4	415.0	376.0	347.1	325.8
37.5°	609.8	637.1	632.3	592.6	535.9	478.7	426.5	385.3	348.1	318.9	298.0
40°	572.1	607.0	612.1	576.9	519.9	460.9	405.6	364.6	328.3	301.6	280.5
42.5°	531.8	572.5	586.3	558.3	502.2	442.1	386.9	344.4	308.4	282.6	263.9
45°	464.1	518.0	543.0	526.9	472.8	411.3	354.5	311.3	278.7	254.4	239.9
47.5°	400.8	459.7	493.3	487.7	440.1	379.2	323.0	281.6	249.8	230.5	217.5
50°	356.1	416.6	457.2	459.1	416.6	356.3	299.8	260.8	231.7	213.6	203.0
52.5°	317.1	375.0	419.2	429.0	390.3	332.4	279.1	240.2	214.6	197.9	188.5
55°	266.3	315.2	364.3	382.2	351.2	296.2	246.8	212.7	188.5	177.1	168.8
57.5°	221.5	262.2	307.5	327.3	308.2	261.1	214.8	185.1	165.6	155.5	149.2
60°	197.7	229.8	270.2	293.9	277.3	235.4	195.0	166.7	150.7	141.8	135.8
62.5°	175.7	204.2	238.3	259.9	251.0	211.4	175.2	150.3	136.4	128.1	123.7
65°	145.0	167.4	193.9	213.8	207.8	177.8	148.1	126.8	115.8	109.2	105.7
67.5°	119.4	135.6	153.9	171.4	166.6	145.3	121.6	104.9	96.7	91.0	88.9
70°	103.2	115.6	131.9	145.9	142.0	124.6	105.7	91.5	84.4	79.6	77.6
72.5°	87.9	98.0	110.5	121.9	119.3	104.7	89.1	78.4	72.8	68.4	66.8
75°	66.3	74.1	81.7	89.3	88.6	77.4	68.2	59.9	55.5	52.1	51.4
77.5°	49.0	53.3	58.5	62.9	61.7	55.2	48.1	43.3	40.2	37.9	37.5
80°	37.4	39.9	43.6	46.8	45.2	42.4	36.7	33.2	31.0	28.7	27.8
82.5°	27.2	29.6	31.8	33.6	32.3	29.8	26.3	23.9	22.5	21.0	20.6
85°	14.2	15.6	16.6	17.0	16.6	14.9	13.3	12.4	11.2	10.5	10.3
87.5°	13.2	11.7	10.2	9.4	8.1	7.3	5.7	4.3	4.9	5.6	6.1
90°	38.4	31.0	23.5	17.8	13.7	9.6	5.6	1.5	5.6	9.6	13.7
92.5°	44.9	43.1	41.4	39.0	36.1	33.0	30.1	27.1	30.1	33.0	36.1
95°	96.0	95.4	94.7	92.7	89.3	85.9	82.5	79.2	82.5	85.9	89.3
97.5°	161.3	160.0	158.6	156.5	153.6	150.6	147.6	144.6	147.6	150.6	153.6
100°	208.0	207.0	206.0	204.2	201.5	198.7	196.0	193.4	196.0	198.7	201.5
102.5°	257.4	256.2	254.9	253.2	251.0	248.8	246.7	244.5	246.7	248.8	251.0
105°	333.6	333.0	332.2	331.3	330.3	329.3	328.3	327.3	328.3	329.3	330.3
107.5°	417.5	417.5	417.5	416.7	415.3	413.7	412.2	410.7	412.2	413.7	415.3
110°	473.5	473.5	473.5	472.4	470.4	468.4	466.4	464.3	466.4	468.4	470.4



TEST NUMBER: P331490-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	531.3	531.5	531.8	530.9	528.9	526.8	524.8	522.8	524.8	526.8	528.9
115°	616.4	617.1	617.7	617.1	615.1	613.0	611.0	608.9	611.0	613.0	615.1
117.5°	702.3	704.2	706.1	705.7	703.0	700.2	697.5	694.9	697.5	700.2	703.0
120°	757.5	760.2	763.0	763.0	760.2	757.5	754.8	752.0	754.8	757.5	760.2
122.5°	814.4	816.3	818.1	817.5	814.2	810.9	807.7	804.5	807.7	810.9	814.2
125°	897.3	898.3	899.3	898.3	895.1	892.1	889.1	886.1	889.1	892.1	895.1
127.5°	979.9	981.1	982.3	981.0	977.1	973.2	969.4	965.5	969.4	973.2	977.1
130°	1033.6	1034.2	1034.9	1033.1	1028.6	1024.3	1019.9	1015.4	1019.9	1024.3	1028.6
132.5°	1087.9	1087.8	1087.7	1085.8	1082.3	1078.6	1075.1	1071.5	1075.1	1078.6	1082.3
135°	1164.9	1164.2	1163.5	1161.2	1157.5	1153.9	1150.1	1146.4	1150.1	1153.9	1157.5
137.5°	1241.1	1240.3	1239.4	1237.4	1234.4	1231.3	1228.3	1225.3	1228.3	1231.3	1234.4
140°	1290.7	1289.0	1287.3	1285.0	1281.9	1278.9	1275.8	1272.7	1275.8	1278.9	1281.9
142.5°	1338.1	1336.9	1335.7	1333.6	1330.6	1327.6	1324.5	1321.5	1324.5	1327.6	1330.6
145°	1407.2	1405.2	1403.2	1401.0	1398.6	1396.2	1393.9	1391.5	1393.9	1396.2	1398.6
147.5°	1470.1	1468.7	1467.4	1465.3	1462.5	1459.6	1456.7	1453.9	1456.7	1459.6	1462.5
150°	1509.0	1507.7	1506.3	1504.7	1502.7	1500.7	1498.5	1496.5	1498.5	1500.7	1502.7
152.5°	1547.5	1545.9	1544.3	1542.5	1540.3	1538.3	1536.3	1534.3	1536.3	1538.3	1540.3
155°	1598.0	1597.0	1596.0	1595.0	1594.0	1593.0	1592.0	1590.9	1592.0	1593.0	1594.0
157.5°	1644.0	1643.4	1642.7	1642.0	1641.4	1640.7	1640.0	1639.3	1640.0	1640.7	1641.4
160°	1672.4	1672.1	1671.8	1671.3	1670.6	1669.9	1669.3	1668.6	1669.3	1669.9	1670.6
162.5°	1696.9	1696.5	1696.2	1696.0	1695.8	1695.7	1695.6	1695.4	1695.6	1695.7	1695.8
165°	1729.5	1729.5	1729.5	1729.7	1730.0	1730.3	1730.7	1731.0	1730.7	1730.3	1730.0
167.5°	1756.2	1756.2	1756.3	1756.8	1757.8	1758.8	1759.8	1760.8	1759.8	1758.8	1757.8
170°	1771.3	1771.6	1771.9	1772.6	1773.6	1774.6	1775.6	1776.7	1775.6	1774.6	1773.6
172.5°	1782.2	1782.6	1782.9	1783.6	1784.6	1785.6	1786.7	1787.7	1786.7	1785.6	1784.6
175°	1794.7	1795.4	1796.1	1797.0	1798.0	1799.0	1800.0	1801.0	1800.0	1799.0	1798.0
177.5°	1801.5	1802.0	1802.6	1803.3	1804.1	1804.9	1805.7	1806.5	1805.7	1804.9	1804.1
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



TEST NUMBER: P331490-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	589.1	587.9	584.1	582.1	578.8	575.6	573.6	574.5	575.2	574.9	574.3
5°	572.1	567.7	561.1	555.4	551.3	543.7	540.5	538.9	537.5	535.9	534.3
7.5°	552.0	545.1	535.6	527.5	519.8	510.3	504.9	501.8	498.5	494.8	491.6
10°	537.8	528.1	518.0	506.5	497.4	488.9	481.3	476.3	471.6	467.3	464.1
12.5°	522.7	511.6	499.1	483.4	473.3	461.1	460.0	451.1	443.9	441.2	437.5
15°	498.8	483.1	467.3	448.7	440.7	429.7	422.8	415.9	409.7	405.4	404.2
17.5°	471.5	451.3	435.6	422.2	409.1	397.8	391.4	386.0	380.8	375.1	374.3
20°	450.8	433.3	416.2	404.5	390.9	379.4	371.6	366.2	361.7	358.3	355.4
22.5°	431.1	412.0	396.3	383.5	370.2	360.9	354.8	349.4	345.8	342.0	339.2
25°	399.6	384.8	367.5	353.0	342.0	336.1	331.0	326.5	324.2	321.6	318.4
27.5°	372.0	355.5	339.4	328.2	318.5	313.3	309.6	306.5	304.4	302.9	301.0
30°	352.6	335.9	323.3	312.3	304.2	298.9	296.6	294.8	292.3	291.3	290.4
32.5°	333.9	318.8	308.0	298.4	290.8	287.3	285.3	283.6	281.7	280.7	278.8
35°	307.4	294.8	284.3	278.9	272.8	269.7	268.2	265.9	264.1	263.2	262.9
37.5°	282.5	271.6	264.6	257.8	255.2	253.4	251.2	249.6	249.0	248.9	248.6
40°	266.3	257.4	251.2	245.7	244.6	241.8	239.9	238.6	238.6	238.8	238.6
42.5°	251.7	243.6	238.1	233.4	232.1	230.5	228.5	228.5	228.8	229.6	228.8
45°	229.4	223.7	219.7	217.5	215.0	213.4	213.1	213.8	214.0	214.3	215.0
47.5°	208.9	205.1	201.6	199.0	197.9	197.7	197.4	198.6	199.8	200.2	201.2
50°	196.8	192.5	189.5	187.8	186.9	186.5	186.9	188.3	189.2	190.4	191.1
52.5°	183.3	180.2	178.1	176.8	176.5	176.8	176.8	178.4	179.9	180.4	180.7
55°	164.5	162.2	161.8	159.7	160.6	160.4	161.5	162.4	163.8	165.2	165.4
57.5°	145.7	143.9	142.7	142.9	143.2	144.2	145.1	146.7	148.1	149.7	149.8
60°	133.3	132.4	131.7	131.7	132.1	133.5	134.6	136.2	137.1	138.1	138.8
62.5°	121.9	121.0	120.3	120.7	121.9	122.7	124.0	124.9	125.8	126.7	127.0
65°	103.9	103.5	104.1	104.6	104.8	105.9	107.6	108.3	109.2	109.7	111.3
67.5°	87.4	87.5	87.4	88.0	89.4	89.6	91.1	92.7	92.9	93.8	94.8
70°	76.1	76.6	77.1	77.6	78.7	79.2	80.3	81.0	81.9	82.6	83.3
72.5°	65.8	65.9	66.4	66.3	67.4	68.3	69.3	70.0	70.9	71.8	72.4
75°	50.7	50.7	51.2	51.4	52.5	53.7	53.4	53.9	54.8	55.7	56.2
77.5°	37.1	36.6	37.1	37.3	37.7	38.6	38.8	39.4	40.5	40.2	40.7
80°	28.2	27.6	28.2	28.5	28.5	29.6	29.6	30.1	30.7	30.1	30.7
82.5°	20.1	19.8	20.3	20.4	20.7	20.8	21.1	21.2	21.9	21.6	21.9
85°	10.1	9.9	10.1	9.9	10.1	10.3	10.3	10.1	10.1	10.5	9.9
87.5°	6.7	7.7	9.0	10.4	11.7	13.0	12.7	12.6	12.4	11.9	11.9
90°	17.8	23.5	31.0	38.4	45.8	53.3	52.6	51.9	51.3	50.6	50.4
92.5°	39.0	41.4	43.1	44.9	46.7	48.4	48.6	48.7	48.8	49.0	49.1
95°	92.7	94.7	95.4	96.0	96.7	97.5	97.5	97.5	97.5	97.5	97.0
97.5°	156.5	158.6	160.0	161.3	162.5	163.8	163.8	163.8	163.8	163.8	163.8
100°	204.2	206.0	207.0	208.0	209.0	210.1	210.1	210.1	210.1	210.1	210.0
102.5°	253.2	254.9	256.2	257.4	258.7	260.0	260.3	260.5	260.8	261.2	261.1
105°	331.3	332.2	333.0	333.6	334.3	335.0	335.6	336.3	337.0	337.6	338.0
107.5°	416.7	417.5	417.5	417.5	417.5	417.5	417.7	418.0	418.3	418.5	417.9
110°	472.4	473.5	473.5	473.5	473.5	473.5	473.5	473.5	473.5	473.5	472.9



TEST NUMBER: P331490-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	530.9	531.8	531.5	531.3	531.0	530.7	529.9	529.1	528.3	527.5	526.6
115°	617.1	617.7	617.1	616.4	615.7	615.1	614.7	614.4	614.0	613.7	613.0
117.5°	705.7	706.1	704.2	702.3	700.3	698.5	697.7	696.9	696.1	695.3	694.3
120°	763.0	763.0	760.2	757.5	754.8	752.0	752.0	752.0	752.0	752.0	751.5
122.5°	817.5	818.1	816.3	814.4	812.4	810.5	809.7	808.9	808.1	807.3	806.5
125°	898.3	899.3	898.3	897.3	896.3	895.1	894.1	893.1	892.1	891.1	890.5
127.5°	981.0	982.3	981.1	979.9	978.7	977.4	976.1	974.9	973.7	972.5	971.4
130°	1033.1	1034.9	1034.2	1033.6	1032.9	1032.2	1031.6	1030.9	1030.2	1029.5	1028.4
132.5°	1085.8	1087.7	1087.8	1087.9	1088.1	1088.2	1086.7	1085.3	1083.8	1082.3	1081.0
135°	1161.2	1163.5	1164.2	1164.9	1165.5	1166.2	1165.9	1165.5	1165.2	1164.9	1164.2
137.5°	1237.4	1239.4	1240.3	1241.1	1242.0	1242.9	1242.6	1242.3	1242.1	1241.8	1241.0
140°	1285.0	1287.3	1289.0	1290.7	1292.4	1294.0	1294.0	1294.0	1294.0	1294.0	1293.4
142.5°	1333.6	1335.7	1336.9	1338.1	1339.2	1340.4	1340.6	1340.9	1341.2	1341.4	1340.9
145°	1401.0	1403.2	1405.2	1407.2	1409.3	1411.3	1411.6	1412.0	1412.3	1412.6	1412.1
147.5°	1465.3	1467.4	1468.7	1470.1	1471.5	1472.8	1473.6	1474.3	1475.0	1475.8	1475.5
150°	1504.7	1506.3	1507.7	1509.0	1510.5	1511.8	1512.8	1513.8	1514.8	1515.8	1515.8
152.5°	1542.5	1544.3	1545.9	1547.5	1549.1	1550.7	1552.1	1553.3	1554.6	1555.9	1555.9
155°	1595.0	1596.0	1597.0	1598.0	1599.0	1600.0	1601.7	1603.5	1605.2	1606.8	1607.2
157.5°	1642.0	1642.7	1643.4	1644.0	1644.6	1645.2	1647.4	1649.7	1652.0	1654.4	1654.7
160°	1671.3	1671.8	1672.1	1672.4	1672.8	1673.1	1675.2	1677.2	1679.2	1681.2	1681.6
162.5°	1696.0	1696.2	1696.5	1696.9	1697.2	1697.5	1699.8	1702.1	1704.5	1706.7	1707.1
165°	1729.7	1729.5	1729.5	1729.5	1729.5	1729.5	1731.8	1734.2	1736.6	1739.0	1739.3
167.5°	1756.8	1756.3	1756.2	1756.2	1756.1	1756.0	1758.4	1760.7	1763.1	1765.4	1765.7
170°	1772.6	1771.9	1771.6	1771.3	1770.9	1770.6	1772.9	1775.3	1777.7	1780.1	1780.2
172.5°	1783.6	1782.9	1782.6	1782.2	1781.9	1781.5	1783.9	1786.2	1788.7	1791.0	1791.2
175°	1797.0	1796.1	1795.4	1794.7	1794.1	1793.4	1795.8	1798.2	1800.5	1802.9	1803.1
177.5°	1803.3	1802.6	1802.0	1801.5	1801.0	1800.4	1802.0	1803.7	1805.3	1807.0	1807.0
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



TEST NUMBER: P331490-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	572.5	572.1	572.1	570.5	572.1	572.1	572.5	574.3	574.9	575.2	574.5
5°	531.1	530.4	529.3	530.4	529.3	530.4	531.1	534.3	535.9	537.5	538.9
7.5°	490.1	487.4	487.0	484.2	487.0	487.4	490.1	491.6	494.8	498.5	501.8
10°	460.2	458.4	458.1	453.7	458.1	458.4	460.2	464.1	467.3	471.6	476.3
12.5°	437.5	433.0	433.9	431.4	433.9	433.0	437.5	437.5	441.2	443.9	451.1
15°	398.0	398.0	397.1	393.2	397.1	398.0	398.0	404.2	405.4	409.7	415.9
17.5°	369.7	369.2	367.1	368.2	367.1	369.2	369.7	374.3	375.1	380.8	386.0
20°	352.8	351.4	348.7	348.7	348.7	351.4	352.8	355.4	358.3	361.7	366.2
22.5°	336.9	336.8	333.9	334.8	333.9	336.8	336.9	339.2	342.0	345.8	349.4
25°	318.2	316.4	315.0	315.7	315.0	316.4	318.2	318.4	321.6	324.2	326.5
27.5°	300.4	299.4	299.3	297.5	299.3	299.4	300.4	301.0	302.9	304.4	306.5
30°	290.2	287.9	288.3	287.2	288.3	287.9	290.2	290.4	291.3	292.3	294.8
32.5°	278.4	277.6	277.2	276.2	277.2	277.6	278.4	278.8	280.7	281.7	283.6
35°	262.5	262.7	261.6	262.0	261.6	262.7	262.5	262.9	263.2	264.1	265.9
37.5°	248.4	249.1	248.6	248.7	248.6	249.1	248.4	248.6	248.9	249.0	249.6
40°	239.2	239.2	239.2	239.9	239.2	239.2	239.2	238.6	238.8	238.6	238.6
42.5°	230.5	230.0	229.7	229.6	229.7	230.0	230.5	228.8	229.6	228.8	228.5
45°	215.4	216.1	216.3	215.2	216.3	216.1	215.4	215.0	214.3	214.0	213.8
47.5°	201.8	201.9	201.8	202.8	201.8	201.9	201.8	201.2	200.2	199.8	198.6
50°	192.3	191.8	192.3	191.8	192.3	191.8	192.3	191.1	190.4	189.2	188.3
52.5°	182.2	182.3	182.0	181.9	182.0	182.3	182.2	180.7	180.4	179.9	178.4
55°	166.3	166.7	166.5	166.5	166.5	166.7	166.3	165.4	165.2	163.8	162.4
57.5°	150.0	150.4	150.7	149.7	150.7	150.4	150.0	149.8	149.7	148.1	146.7
60°	138.6	139.7	139.5	139.1	139.5	139.7	138.6	138.8	138.1	137.1	136.2
62.5°	128.1	128.6	128.5	128.4	128.5	128.6	128.1	127.0	126.7	125.8	124.9
65°	112.0	112.4	111.7	112.4	111.7	112.4	112.0	111.3	109.7	109.2	108.3
67.5°	94.5	94.7	95.2	95.5	95.2	94.7	94.5	94.8	93.8	92.9	92.7
70°	83.7	83.5	84.2	84.9	84.2	83.5	83.7	83.3	82.6	81.9	81.0
72.5°	72.3	72.8	72.6	73.1	72.6	72.8	72.3	72.4	71.8	70.9	70.0
75°	55.7	56.5	56.2	56.9	56.2	56.5	55.7	56.2	55.7	54.8	53.9
77.5°	40.3	40.4	40.3	40.7	40.3	40.4	40.3	40.7	40.2	40.5	39.4
80°	30.7	30.3	29.8	30.7	29.8	30.3	30.7	30.7	30.1	30.7	30.1
82.5°	21.4	21.6	21.2	21.2	21.2	21.6	21.4	21.9	21.6	21.9	21.2
85°	9.9	9.6	9.2	9.2	9.2	9.6	9.9	9.9	10.5	10.1	10.1
87.5°	12.0	11.9	11.9	11.8	11.9	11.9	12.0	11.9	11.9	12.4	12.6
90°	50.8	51.1	51.4	51.8	51.4	51.1	50.8	50.4	50.6	51.3	51.9
92.5°	49.1	49.2	49.3	49.3	49.3	49.2	49.1	49.1	49.0	48.8	48.7
95°	96.4	95.7	95.0	94.4	95.0	95.7	96.4	97.0	97.5	97.5	97.5
97.5°	163.7	163.6	163.6	163.5	163.6	163.6	163.7	163.8	163.8	163.8	163.8
100°	209.5	209.2	208.9	208.5	208.9	209.2	209.5	210.0	210.1	210.1	210.1
102.5°	260.7	260.4	260.0	259.7	260.0	260.4	260.7	261.1	261.2	260.8	260.5
105°	338.0	338.0	338.0	338.0	338.0	338.0	338.0	338.0	337.6	337.0	336.3
107.5°	416.4	414.8	413.2	411.6	413.2	414.8	416.4	417.9	418.5	418.3	418.0
110°	471.9	470.9	469.9	468.9	469.9	470.9	471.9	472.9	473.5	473.5	473.5



TEST NUMBER: P331490-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	525.9	525.2	524.4	523.7	524.4	525.2	525.9	526.6	527.5	528.3	529.1
115°	612.0	611.0	610.0	608.9	610.0	611.0	612.0	613.0	613.7	614.0	614.4
117.5°	693.3	692.3	691.3	690.2	691.3	692.3	693.3	694.3	695.3	696.1	696.9
120°	750.5	749.5	748.5	747.5	748.5	749.5	750.5	751.5	752.0	752.0	752.0
122.5°	805.8	805.1	804.3	803.5	804.3	805.1	805.8	806.5	807.3	808.1	808.9
125°	890.1	889.8	889.5	889.1	889.5	889.8	890.1	890.5	891.1	892.1	893.1
127.5°	970.3	969.2	968.2	967.0	968.2	969.2	970.3	971.4	972.5	973.7	974.9
130°	1027.1	1025.8	1024.4	1023.1	1024.4	1025.8	1027.1	1028.4	1029.5	1030.2	1030.9
132.5°	1079.9	1078.8	1077.7	1076.6	1077.7	1078.8	1079.9	1081.0	1082.3	1083.8	1085.3
135°	1163.2	1162.2	1161.1	1160.1	1161.1	1162.2	1163.2	1164.2	1164.9	1165.2	1165.5
137.5°	1239.7	1238.3	1237.0	1235.6	1237.0	1238.3	1239.7	1241.0	1241.8	1242.1	1242.3
140°	1292.0	1290.7	1289.3	1288.0	1289.3	1290.7	1292.0	1293.4	1294.0	1294.0	1294.0
142.5°	1339.6	1338.2	1336.9	1335.4	1336.9	1338.2	1339.6	1340.9	1341.4	1341.2	1340.9
145°	1410.8	1409.5	1408.1	1406.7	1408.1	1409.5	1410.8	1412.1	1412.6	1412.3	1412.0
147.5°	1474.2	1472.9	1471.7	1470.4	1471.7	1472.9	1474.2	1475.5	1475.8	1475.0	1474.3
150°	1514.8	1513.8	1512.8	1511.8	1512.8	1513.8	1514.8	1515.8	1515.8	1514.8	1513.8
152.5°	1554.6	1553.3	1552.1	1550.7	1552.1	1553.3	1554.6	1555.9	1555.9	1554.6	1553.3
155°	1606.2	1605.2	1604.2	1603.2	1604.2	1605.2	1606.2	1607.2	1606.8	1605.2	1603.5
157.5°	1653.0	1651.4	1649.8	1648.2	1649.8	1651.4	1653.0	1654.7	1654.4	1652.0	1649.7
160°	1680.2	1678.9	1677.6	1676.2	1677.6	1678.9	1680.2	1681.6	1681.2	1679.2	1677.2
162.5°	1705.5	1703.8	1702.2	1700.5	1702.2	1703.8	1705.5	1707.1	1706.7	1704.5	1702.1
165°	1737.6	1736.0	1734.2	1732.5	1734.2	1736.0	1737.6	1739.3	1739.0	1736.6	1734.2
167.5°	1764.0	1762.2	1760.5	1758.7	1760.5	1762.2	1764.0	1765.7	1765.4	1763.1	1760.7
170°	1778.2	1776.2	1774.1	1772.1	1774.1	1776.2	1778.2	1780.2	1780.1	1777.7	1775.3
172.5°	1789.2	1787.2	1785.1	1783.1	1785.1	1787.2	1789.2	1791.2	1791.0	1788.7	1786.2
175°	1801.0	1799.0	1797.0	1794.9	1797.0	1799.0	1801.0	1803.1	1802.9	1800.5	1798.2
177.5°	1805.3	1803.7	1802.0	1800.4	1802.0	1803.7	1805.3	1807.0	1807.0	1805.3	1803.7
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



TEST NUMBER: P331490-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	573.6	575.6	578.8	582.1	584.1	587.9	589.1	590.9	592.5	596.3	600.4
5°	540.5	543.7	551.3	555.4	561.1	567.7	572.1	576.7	581.8	590.5	598.5
7.5°	504.9	510.3	519.8	527.5	535.6	545.1	552.0	561.1	568.7	581.0	592.7
10°	481.3	488.9	497.4	506.5	518.0	528.1	537.8	549.2	558.4	573.1	586.8
12.5°	460.0	461.1	473.3	483.4	499.1	511.6	522.7	537.5	546.4	563.9	578.3
15°	422.8	429.7	440.7	448.7	467.3	483.1	498.8	514.1	524.4	546.0	565.0
17.5°	391.4	397.8	409.1	422.2	435.6	451.3	471.5	487.8	501.8	526.4	549.0
20°	371.6	379.4	390.9	404.5	416.2	433.3	450.8	469.4	484.5	512.3	538.7
22.5°	354.8	360.9	370.2	383.5	396.3	412.0	431.1	451.4	467.3	497.3	523.9
25°	331.0	336.1	342.0	353.0	367.5	384.8	399.6	421.9	445.0	473.0	505.3
27.5°	309.6	313.3	318.5	328.2	339.4	355.5	372.0	393.1	416.5	446.9	481.0
30°	296.6	298.9	304.2	312.3	323.3	335.9	352.6	372.7	396.7	427.4	461.3
32.5°	285.3	287.3	290.8	298.4	308.0	318.8	333.9	354.1	376.8	407.0	444.6
35°	268.2	269.7	272.8	278.9	284.3	294.8	307.4	325.8	347.1	376.0	415.0
37.5°	251.2	253.4	255.2	257.8	264.6	271.6	282.5	298.0	318.9	348.1	385.3
40°	239.9	241.8	244.6	245.7	251.2	257.4	266.3	280.5	301.6	328.3	364.6
42.5°	228.5	230.5	232.1	233.4	238.1	243.6	251.7	263.9	282.6	308.4	344.4
45°	213.1	213.4	215.0	217.5	219.7	223.7	229.4	239.9	254.4	278.7	311.3
47.5°	197.4	197.7	197.9	199.0	201.6	205.1	208.9	217.5	230.5	249.8	281.6
50°	186.9	186.5	186.9	187.8	189.5	192.5	196.8	203.0	213.6	231.7	260.8
52.5°	176.8	176.8	176.5	176.8	178.1	180.2	183.3	188.5	197.9	214.6	240.2
55°	161.5	160.4	160.6	159.7	161.8	162.2	164.5	168.8	177.1	188.5	212.7
57.5°	145.1	144.2	143.2	142.9	142.7	143.9	145.7	149.2	155.5	165.6	185.1
60°	134.6	133.5	132.1	131.7	131.7	132.4	133.3	135.8	141.8	150.7	166.7
62.5°	124.0	122.7	121.9	120.7	120.3	121.0	121.9	123.7	128.1	136.4	150.3
65°	107.6	105.9	104.8	104.6	104.1	103.5	103.9	105.7	109.2	115.8	126.8
67.5°	91.1	89.6	89.4	88.0	87.4	87.5	87.4	88.9	91.0	96.7	104.9
70°	80.3	79.2	78.7	77.6	77.1	76.6	76.1	77.6	79.6	84.4	91.5
72.5°	69.3	68.3	67.4	66.3	66.4	65.9	65.8	66.8	68.4	72.8	78.4
75°	53.4	53.7	52.5	51.4	51.2	50.7	50.7	51.4	52.1	55.5	59.9
77.5°	38.8	38.6	37.7	37.3	37.1	36.6	37.1	37.5	37.9	40.2	43.3
80°	29.6	29.6	28.5	28.5	28.2	27.6	28.2	27.8	28.7	31.0	33.2
82.5°	21.1	20.8	20.7	20.4	20.3	19.8	20.1	20.6	21.0	22.5	23.9
85°	10.3	10.3	10.1	9.9	10.1	9.9	10.1	10.3	10.5	11.2	12.4
87.5°	12.7	13.0	11.7	10.4	9.0	7.7	6.7	6.1	5.6	4.9	4.3
90°	52.6	53.3	45.8	38.4	31.0	23.5	17.8	13.7	9.6	5.6	1.5
92.5°	48.6	48.4	46.7	44.9	43.1	41.4	39.0	36.1	33.0	30.1	27.1
95°	97.5	97.5	96.7	96.0	95.4	94.7	92.7	89.3	85.9	82.5	79.2
97.5°	163.8	163.8	162.5	161.3	160.0	158.6	156.5	153.6	150.6	147.6	144.6
100°	210.1	210.1	209.0	208.0	207.0	206.0	204.2	201.5	198.7	196.0	193.4
102.5°	260.3	260.0	258.7	257.4	256.2	254.9	253.2	251.0	248.8	246.7	244.5
105°	335.6	335.0	334.3	333.6	333.0	332.2	331.3	330.3	329.3	328.3	327.3
107.5°	417.7	417.5	417.5	417.5	417.5	417.5	416.7	415.3	413.7	412.2	410.7
110°	473.5	473.5	473.5	473.5	473.5	473.5	472.4	470.4	468.4	466.4	464.3



TEST NUMBER: P331490-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	529.9	530.7	531.0	531.3	531.5	531.8	530.9	528.9	526.8	524.8	522.8
115°	614.7	615.1	615.7	616.4	617.1	617.7	617.1	615.1	613.0	611.0	608.9
117.5°	697.7	698.5	700.3	702.3	704.2	706.1	705.7	703.0	700.2	697.5	694.9
120°	752.0	752.0	754.8	757.5	760.2	763.0	763.0	760.2	757.5	754.8	752.0
122.5°	809.7	810.5	812.4	814.4	816.3	818.1	817.5	814.2	810.9	807.7	804.5
125°	894.1	895.1	896.3	897.3	898.3	899.3	898.3	895.1	892.1	889.1	886.1
127.5°	976.1	977.4	978.7	979.9	981.1	982.3	981.0	977.1	973.2	969.4	965.5
130°	1031.6	1032.2	1032.9	1033.6	1034.2	1034.9	1033.1	1028.6	1024.3	1019.9	1015.4
132.5°	1086.7	1088.2	1088.1	1087.9	1087.8	1087.7	1085.8	1082.3	1078.6	1075.1	1071.5
135°	1165.9	1166.2	1165.5	1164.9	1164.2	1163.5	1161.2	1157.5	1153.9	1150.1	1146.4
137.5°	1242.6	1242.9	1242.0	1241.1	1240.3	1239.4	1237.4	1234.4	1231.3	1228.3	1225.3
140°	1294.0	1294.0	1292.4	1290.7	1289.0	1287.3	1285.0	1281.9	1278.9	1275.8	1272.7
142.5°	1340.6	1340.4	1339.2	1338.1	1336.9	1335.7	1333.6	1330.6	1327.6	1324.5	1321.5
145°	1411.6	1411.3	1409.3	1407.2	1405.2	1403.2	1401.0	1398.6	1396.2	1393.9	1391.5
147.5°	1473.6	1472.8	1471.5	1470.1	1468.7	1467.4	1465.3	1462.5	1459.6	1456.7	1453.9
150°	1512.8	1511.8	1510.5	1509.0	1507.7	1506.3	1504.7	1502.7	1500.7	1498.5	1496.5
152.5°	1552.1	1550.7	1549.1	1547.5	1545.9	1544.3	1542.5	1540.3	1538.3	1536.3	1534.3
155°	1601.7	1600.0	1599.0	1598.0	1597.0	1596.0	1595.0	1594.0	1593.0	1592.0	1590.9
157.5°	1647.4	1645.2	1644.6	1644.0	1643.4	1642.7	1642.0	1641.4	1640.7	1640.0	1639.3
160°	1675.2	1673.1	1672.8	1672.4	1672.1	1671.8	1671.3	1670.6	1669.9	1669.3	1668.6
162.5°	1699.8	1697.5	1697.2	1696.9	1696.5	1696.2	1696.0	1695.8	1695.7	1695.6	1695.4
165°	1731.8	1729.5	1729.5	1729.5	1729.5	1729.5	1729.7	1730.0	1730.3	1730.7	1731.0
167.5°	1758.4	1756.0	1756.1	1756.2	1756.2	1756.3	1756.8	1757.8	1758.8	1759.8	1760.8
170°	1772.9	1770.6	1770.9	1771.3	1771.6	1771.9	1772.6	1773.6	1774.6	1775.6	1776.7
172.5°	1783.9	1781.5	1781.9	1782.2	1782.6	1782.9	1783.6	1784.6	1785.6	1786.7	1787.7
175°	1795.8	1793.4	1794.1	1794.7	1795.4	1796.1	1797.0	1798.0	1799.0	1800.0	1801.0
177.5°	1802.0	1800.4	1801.0	1801.5	1802.0	1802.6	1803.3	1804.1	1804.9	1805.7	1806.5
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



TEST NUMBER: P331490-840

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	600.1	601.0	603.9	606.8	610.2	611.1	612.5	611.3	610.9	614.3	616.9
5°	601.8	605.8	613.9	621.3	627.4	631.8	636.4	638.2	641.7	646.4	652.5
7.5°	599.8	607.8	620.5	631.2	642.8	651.2	657.7	663.4	670.1	679.2	689.2
10°	597.6	608.3	623.8	636.8	651.1	661.9	670.8	679.5	689.6	702.3	715.3
12.5°	593.6	606.3	625.6	641.1	659.3	669.9	682.0	700.7	711.7	729.2	747.6
15°	585.4	599.7	626.5	645.5	666.2	686.4	708.6	726.5	744.4	754.8	780.6
17.5°	573.4	594.2	624.0	646.2	672.5	704.2	729.2	749.5	770.1	786.9	799.9
20°	563.6	586.3	620.4	646.9	678.1	712.3	740.9	761.6	779.5	793.6	801.5
22.5°	551.4	580.0	613.0	644.2	684.0	717.8	747.9	764.2	779.1	786.0	789.1
25°	532.0	566.4	603.8	641.9	686.8	722.7	750.1	760.0	764.4	757.7	746.7
27.5°	511.1	549.5	593.2	637.5	685.1	719.5	739.2	737.7	730.3	708.7	691.6
30°	495.5	537.8	584.7	633.2	680.9	714.4	725.8	714.4	697.6	673.6	648.9
32.5°	479.2	522.9	575.7	626.9	673.2	702.7	705.1	685.4	659.4	632.1	601.5
35°	454.4	501.7	558.9	613.0	656.8	675.4	664.4	629.4	598.7	561.4	519.6
37.5°	426.5	478.7	535.9	592.6	632.3	637.1	609.8	573.1	529.7	485.7	436.6
40°	405.6	460.9	519.9	576.9	612.1	607.0	572.1	531.8	480.2	426.5	380.8
42.5°	386.9	442.1	502.2	558.3	586.3	572.5	531.8	482.2	426.8	376.2	334.4
45°	354.5	411.3	472.8	526.9	543.0	518.0	464.1	409.0	354.5	312.3	279.2
47.5°	323.0	379.2	440.1	487.7	493.3	459.7	400.8	344.2	297.2	262.9	239.5
50°	299.8	356.3	416.6	459.1	457.2	416.6	356.1	302.2	262.9	235.1	219.5
52.5°	279.1	332.4	390.3	429.0	419.2	375.0	317.1	269.2	237.0	215.3	201.2
55°	246.8	296.2	351.2	382.2	364.3	315.2	266.3	227.8	203.9	187.6	176.6
57.5°	214.8	261.1	308.2	327.3	307.5	262.2	221.5	193.5	175.5	163.5	156.3
60°	195.0	235.4	277.3	293.9	270.2	229.8	197.7	172.8	158.2	148.5	142.0
62.5°	175.2	211.4	251.0	259.9	238.3	204.2	175.7	154.9	143.1	134.3	128.3
65°	148.1	177.8	207.8	213.8	193.9	167.4	145.0	131.5	120.9	114.5	109.7
67.5°	121.6	145.3	166.6	171.4	153.9	135.6	119.4	107.6	100.5	95.1	91.0
70°	105.7	124.6	142.0	145.9	131.9	115.6	103.2	93.8	87.4	82.8	78.9
72.5°	89.1	104.7	119.3	121.9	110.5	98.0	87.9	80.4	74.7	71.8	68.1
75°	68.2	77.4	88.6	89.3	81.7	74.1	66.3	61.5	58.5	54.8	53.0
77.5°	48.1	55.2	61.7	62.9	58.5	53.3	49.0	45.1	42.6	40.9	39.2
80°	36.7	42.4	45.2	46.8	43.6	39.9	37.4	34.8	33.2	32.1	31.0
82.5°	26.3	29.8	32.3	33.6	31.8	29.6	27.2	25.7	24.4	23.5	23.1
85°	13.3	14.9	16.6	17.0	16.6	15.6	14.2	14.2	13.5	13.3	13.3
87.5°	5.7	7.3	8.1	9.4	10.2	11.7	13.2	14.4	15.8	15.5	15.1
90°	5.6	9.6	13.7	17.8	23.5	31.0	38.4	45.8	53.3	52.6	51.9
92.5°	30.1	33.0	36.1	39.0	41.4	43.1	44.9	46.7	48.4	48.6	48.7
95°	82.5	85.9	89.3	92.7	94.7	95.4	96.0	96.7	97.5	97.5	97.5
97.5°	147.6	150.6	153.6	156.5	158.6	160.0	161.3	162.5	163.8	163.8	163.8
100°	196.0	198.7	201.5	204.2	206.0	207.0	208.0	209.0	210.1	210.1	210.1
102.5°	246.7	248.8	251.0	253.2	254.9	256.2	257.4	258.7	260.0	260.3	260.5
105°	328.3	329.3	330.3	331.3	332.2	333.0	333.6	334.3	335.0	335.6	336.3
107.5°	412.2	413.7	415.3	416.7	417.5	417.5	417.5	417.5	417.5	417.7	418.0
110°	466.4	468.4	470.4	472.4	473.5	473.5	473.5	473.5	473.5	473.5	473.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	524.8	526.8	528.9	530.9	531.8	531.5	531.3	531.0	530.7	529.9	529.1
115°	611.0	613.0	615.1	617.1	617.7	617.1	616.4	615.7	615.1	614.7	614.4
117.5°	697.5	700.2	703.0	705.7	706.1	704.2	702.3	700.3	698.5	697.7	696.9
120°	754.8	757.5	760.2	763.0	763.0	760.2	757.5	754.8	752.0	752.0	752.0
122.5°	807.7	810.9	814.2	817.5	818.1	816.3	814.4	812.4	810.5	809.7	808.9
125°	889.1	892.1	895.1	898.3	899.3	898.3	897.3	896.3	895.1	894.1	893.1
127.5°	969.4	973.2	977.1	981.0	982.3	981.1	979.9	978.7	977.4	976.1	974.9
130°	1019.9	1024.3	1028.6	1033.1	1034.9	1034.2	1033.6	1032.9	1032.2	1031.6	1030.9
132.5°	1075.1	1078.6	1082.3	1085.8	1087.7	1087.8	1087.9	1088.1	1088.2	1086.7	1085.3
135°	1150.1	1153.9	1157.5	1161.2	1163.5	1164.2	1164.9	1165.5	1166.2	1165.9	1165.5
137.5°	1228.3	1231.3	1234.4	1237.4	1239.4	1240.3	1241.1	1242.0	1242.9	1242.6	1242.3
140°	1275.8	1278.9	1281.9	1285.0	1287.3	1289.0	1290.7	1292.4	1294.0	1294.0	1294.0
142.5°	1324.5	1327.6	1330.6	1333.6	1335.7	1336.9	1338.1	1339.2	1340.4	1340.6	1340.9
145°	1393.9	1396.2	1398.6	1401.0	1403.2	1405.2	1407.2	1409.3	1411.3	1411.6	1412.0
147.5°	1456.7	1459.6	1462.5	1465.3	1467.4	1468.7	1470.1	1471.5	1472.8	1473.6	1474.3
150°	1498.5	1500.7	1502.7	1504.7	1506.3	1507.7	1509.0	1510.5	1511.8	1512.8	1513.8
152.5°	1536.3	1538.3	1540.3	1542.5	1544.3	1545.9	1547.5	1549.1	1550.7	1552.1	1553.3
155°	1592.0	1593.0	1594.0	1595.0	1596.0	1597.0	1598.0	1599.0	1600.0	1601.7	1603.5
157.5°	1640.0	1640.7	1641.4	1642.0	1642.7	1643.4	1644.0	1644.6	1645.2	1647.4	1649.7
160°	1669.3	1669.9	1670.6	1671.3	1671.8	1672.1	1672.4	1672.8	1673.1	1675.2	1677.2
162.5°	1695.6	1695.7	1695.8	1696.0	1696.2	1696.5	1696.9	1697.2	1697.5	1699.8	1702.1
165°	1730.7	1730.3	1730.0	1729.7	1729.5	1729.5	1729.5	1729.5	1729.5	1731.8	1734.2
167.5°	1759.8	1758.8	1757.8	1756.8	1756.3	1756.2	1756.2	1756.1	1756.0	1758.4	1760.7
170°	1775.6	1774.6	1773.6	1772.6	1771.9	1771.6	1771.3	1770.9	1770.6	1772.9	1775.3
172.5°	1786.7	1785.6	1784.6	1783.6	1782.9	1782.6	1782.2	1781.9	1781.5	1783.9	1786.2
175°	1800.0	1799.0	1798.0	1797.0	1796.1	1795.4	1794.7	1794.1	1793.4	1795.8	1798.2
177.5°	1805.7	1804.9	1804.1	1803.3	1802.6	1802.0	1801.5	1801.0	1800.4	1802.0	1803.7
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	619.1	621.7	621.7	622.1	625.0	624.6	624.4
5°	658.8	662.8	663.2	667.3	670.0	669.1	666.6
7.5°	696.3	703.6	709.1	712.2	715.8	718.0	717.0
10°	726.1	736.6	743.1	747.4	752.7	756.6	755.2
12.5°	753.1	765.6	774.5	781.9	782.5	787.6	784.2
15°	795.2	808.4	809.8	815.3	819.7	819.2	819.4
17.5°	809.0	813.2	814.2	814.3	814.4	812.7	809.2
20°	804.1	802.4	798.6	795.6	790.3	789.6	785.1
22.5°	780.5	775.5	765.7	759.2	751.0	748.9	747.6
25°	734.4	723.1	707.5	692.6	688.4	680.4	682.7
27.5°	670.9	653.4	636.4	624.4	613.4	601.4	604.8
30°	626.3	606.5	582.7	564.3	552.6	541.2	539.1
32.5°	573.1	544.1	517.6	501.4	483.4	476.2	468.3
35°	481.3	453.0	426.7	403.9	390.9	380.8	371.6
37.5°	398.8	366.3	345.0	326.6	317.1	311.3	312.9
40°	347.6	319.1	303.5	289.5	280.7	276.7	277.6
42.5°	306.1	284.8	272.0	262.4	256.2	253.9	253.4
45°	259.0	247.1	236.5	231.1	228.0	225.5	223.9
47.5°	226.9	217.1	211.2	207.9	205.3	202.8	202.7
50°	207.6	201.2	197.0	193.6	191.6	189.8	191.4
52.5°	192.9	187.0	182.9	179.9	179.0	177.4	177.3
55°	171.2	166.5	163.6	160.8	159.5	158.5	157.3
57.5°	151.3	146.9	144.2	142.5	139.9	139.0	138.6
60°	137.1	133.7	131.0	128.7	127.5	125.7	125.7
62.5°	124.1	120.7	118.2	116.4	114.5	113.8	114.0
65°	105.3	102.5	100.0	98.2	97.8	96.3	96.8
67.5°	88.0	86.1	83.4	82.4	81.6	80.9	80.3
70°	76.3	74.5	73.2	71.8	71.1	71.1	71.1
72.5°	66.7	64.4	63.6	61.9	62.3	61.6	60.8
75°	51.6	50.2	49.6	48.9	47.8	47.8	47.8
77.5°	38.0	37.6	36.8	36.1	35.7	35.5	35.6
80°	29.4	29.1	28.7	28.7	28.2	28.0	27.6
82.5°	22.6	22.0	21.7	21.5	21.4	21.4	21.3
85°	12.8	12.4	12.4	12.6	12.1	12.1	12.4
87.5°	15.2	15.0	14.8	14.9	15.1	15.0	15.1
90°	51.3	50.6	50.4	50.8	51.1	51.4	51.8
92.5°	48.8	49.0	49.1	49.1	49.2	49.3	49.3
95°	97.5	97.5	97.0	96.4	95.7	95.0	94.4
97.5°	163.8	163.8	163.8	163.7	163.6	163.6	163.5
100°	210.1	210.1	210.0	209.5	209.2	208.9	208.5
102.5°	260.8	261.2	261.1	260.7	260.4	260.0	259.7
105°	337.0	337.6	338.0	338.0	338.0	338.0	338.0
107.5°	418.3	418.5	417.9	416.4	414.8	413.2	411.6
110°	473.5	473.5	472.9	471.9	470.9	469.9	468.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	528.3	527.5	526.6	525.9	525.2	524.4	523.7
115°	614.0	613.7	613.0	612.0	611.0	610.0	608.9
117.5°	696.1	695.3	694.3	693.3	692.3	691.3	690.2
120°	752.0	752.0	751.5	750.5	749.5	748.5	747.5
122.5°	808.1	807.3	806.5	805.8	805.1	804.3	803.5
125°	892.1	891.1	890.5	890.1	889.8	889.5	889.1
127.5°	973.7	972.5	971.4	970.3	969.2	968.2	967.0
130°	1030.2	1029.5	1028.4	1027.1	1025.8	1024.4	1023.1
132.5°	1083.8	1082.3	1081.0	1079.9	1078.8	1077.7	1076.6
135°	1165.2	1164.9	1164.2	1163.2	1162.2	1161.1	1160.1
137.5°	1242.1	1241.8	1241.0	1239.7	1238.3	1237.0	1235.6
140°	1294.0	1294.0	1293.4	1292.0	1290.7	1289.3	1288.0
142.5°	1341.2	1341.4	1340.9	1339.6	1338.2	1336.9	1335.4
145°	1412.3	1412.6	1412.1	1410.8	1409.5	1408.1	1406.7
147.5°	1475.0	1475.8	1475.5	1474.2	1472.9	1471.7	1470.4
150°	1514.8	1515.8	1515.8	1514.8	1513.8	1512.8	1511.8
152.5°	1554.6	1555.9	1555.9	1554.6	1553.3	1552.1	1550.7
155°	1605.2	1606.8	1607.2	1606.2	1605.2	1604.2	1603.2
157.5°	1652.0	1654.4	1654.7	1653.0	1651.4	1649.8	1648.2
160°	1679.2	1681.2	1681.6	1680.2	1678.9	1677.6	1676.2
162.5°	1704.5	1706.7	1707.1	1705.5	1703.8	1702.2	1700.5
165°	1736.6	1739.0	1739.3	1737.6	1736.0	1734.2	1732.5
167.5°	1763.1	1765.4	1765.7	1764.0	1762.2	1760.5	1758.7
170°	1777.7	1780.1	1780.2	1778.2	1776.2	1774.1	1772.1
172.5°	1788.7	1791.0	1791.2	1789.2	1787.2	1785.1	1783.1
175°	1800.5	1802.9	1803.1	1801.0	1799.0	1797.0	1794.9
177.5°	1805.3	1807.0	1807.0	1805.3	1803.7	1802.0	1800.4
180°	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1	1804.1

(END OF REPORT)