

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: P331276-840

Luminaire Tested: **SA2XXDIP-C290D1080U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331276-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C290D1080U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

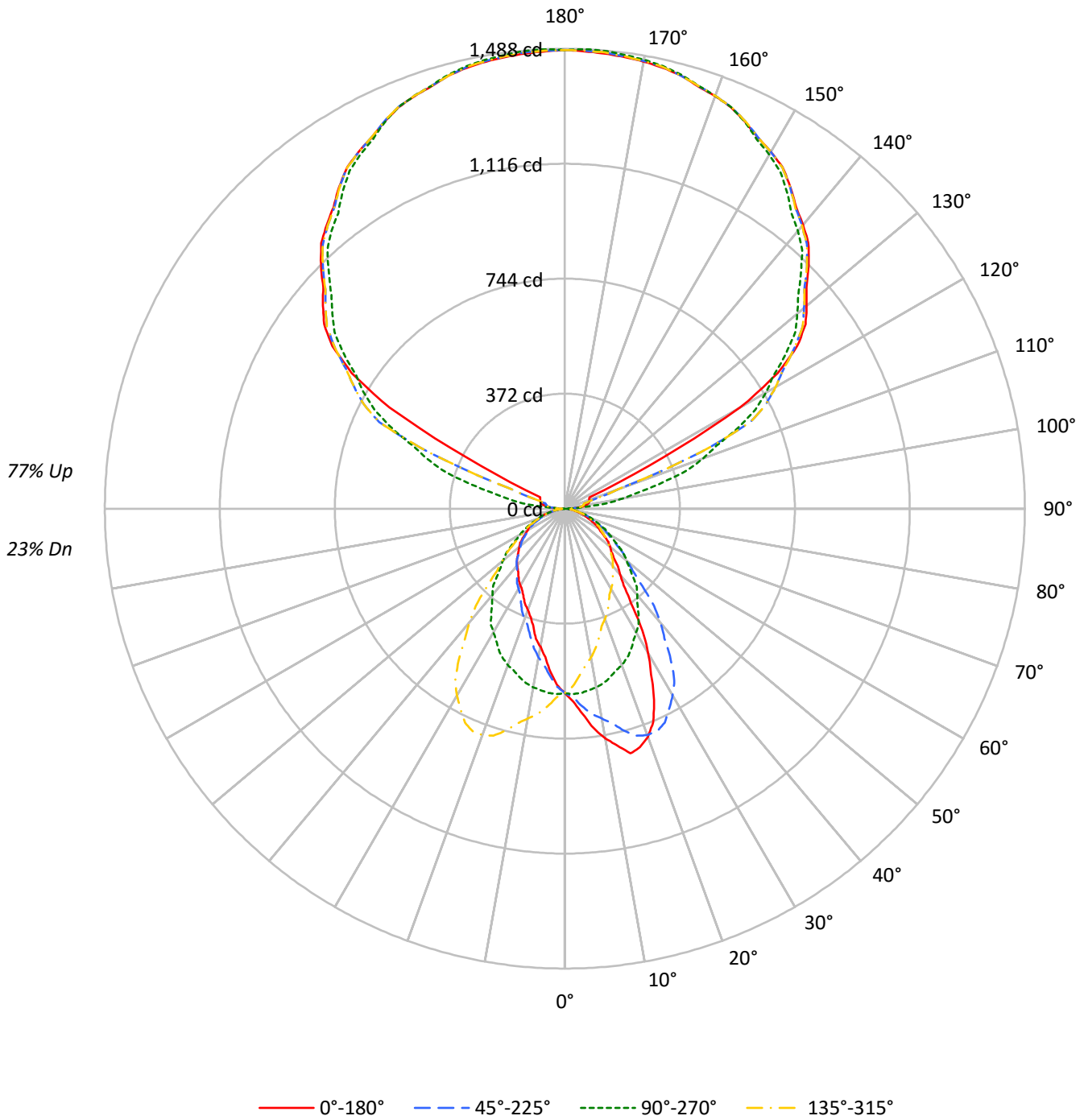
Lumens per Lamp: N/A
Luminaire Lumens: 5668.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	68	68	68	49	49	49	32	32	32	23				
1	92	88	84	81	82	78	75	73	60	58	56	44	42	41	28	28	27	20				
2	84	77	71	66	74	69	64	60	53	50	47	38	36	35	25	24	23	17				
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	22	21	20	15				
4	70	60	53	47	62	54	47	43	42	37	34	31	28	25	20	19	17	13				
5	64	53	46	40	57	48	41	36	37	33	29	27	24	22	18	17	15	11				
6	59	48	40	35	52	43	36	32	34	29	25	25	22	19	17	15	13	10				
7	55	43	36	30	48	39	32	28	30	26	22	22	19	17	15	13	12	9				
8	51	39	32	27	45	35	29	24	28	23	20	21	17	15	14	12	11	8				
9	47	35	28	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7				
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7				

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	1.0
10°-20°	165.3	2.9
20°-30°	239.9	4.2
30°-40°	253.1	4.5
40°-50°	224.1	4.0
50°-60°	178.8	3.2
60°-70°	121.6	2.1
70°-80°	62.3	1.1
80°-90°	18.7	0.3
90°-100°	49.5	0.9
100°-110°	181.5	3.2
110°-120°	485.1	8.6
120°-130°	800.8	14.1
130°-140°	851.6	15.0
140°-150°	791.6	14.0
150°-160°	636.4	11.2
160°-170°	410.1	7.2
170°-180°	141.2	2.5
0°-30°	462.0	8.1
0°-40°	715.1	12.6
0°-60°	1118.0	19.7
0°-90°	1320.6	23.3
90°-120°	716.1	12.6
90°-150°	3160.1	55.7
90°-180°	4348.0	76.7
0°-180°	5668.4	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	14
90°	29	1	29	1	29	13
95°	46	70	46	70	46	43
105°	82	326	82	326	82	85
115°	88	617	88	617	88	220
125°	918	873	918	873	918	794
135°	1115	1080	1115	1080	1115	860
145°	1272	1253	1272	1253	1272	796
155°	1381	1380	1381	1380	1381	637
165°	1450	1454	1450	1454	1450	409
175°	1478	1487	1478	1487	1478	141
180°	1484	1484	1484	1484	1484	



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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°	10.6	10.5	10.6	10.3	10.2	10.2	10.0	9.5	9.5	9.4	9.2
90°	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8	22.6	21.5	19.6
92.5°	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2	25.5	24.9	23.9
95°	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2	43.0	41.9	40.2
97.5°	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0	57.0	56.0	52.2
100°	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0	63.1	61.2	57.2
102.5°	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9	65.4	62.9	96.8
105°	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7	68.1	65.4	130.6
107.5°	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3	89.0	91.7	169.8
110°	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2	164.0	187.8	256.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8	386.9	473.8	490.9
115°	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4	551.9	662.4	656.4
117.5°	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2	706.9	733.7	729.5
120°	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6	789.7	786.9	782.6
122.5°	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0	839.3	837.6	832.9
125°	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5	908.8	907.2	902.6
127.5°	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7	972.3	969.9	966.4
130°	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4	1012.8	1010.2	1007.5
132.5°	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0	1052.8	1050.6	1047.9
135°	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6	1109.2	1106.8	1104.7
137.5°	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1	1161.7	1159.4	1157.0
140°	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1	1195.9	1193.8	1191.1
142.5°	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4	1227.5	1225.6	1222.5
145°	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3	1271.6	1270.0	1266.0
147.5°	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5	1310.3	1309.1	1305.0
150°	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1	1333.7	1332.2	1328.5
152.5°	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6	1355.1	1353.7	1350.1
155°	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5	1384.1	1382.7	1379.9
157.5°	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0	1408.4	1406.7	1404.7
160°	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2	1422.8	1421.4	1420.0
162.5°	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4	1435.8	1434.2	1433.0
165°	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4	1449.7
167.5°	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2	1465.5	1463.9	1463.2
170°	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1	1472.4	1470.8	1470.3
172.5°	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3	1477.5	1475.9	1475.4
175°	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8	1483.2	1481.5	1481.0
177.5°	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4	1484.1	1482.8	1482.6
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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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°	9.0	8.7	8.3	8.2	7.1	6.6	5.4	4.2	4.5	4.9	5.0
90°	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1	3.7	6.4	9.0
92.5°	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7	21.4	21.2	21.0
95°	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8	61.9	54.0	46.2
97.5°	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5	116.3	94.1	71.9
100°	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1	157.3	124.6	92.0
102.5°	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7	239.7	232.9	225.9
105°	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4	333.6	340.6	347.8
107.5°	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2	422.9	428.7	434.4
110°	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5	480.6	485.6	490.6



TEST NUMBER: P331276-840

CATALOG NUMBER: SA2XXDIP-C290D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6	535.0	539.4	543.8
115°	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3	621.4	625.4	629.4
117.5°	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8	699.3	703.9	708.4
120°	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4	755.1	758.6	762.2
122.5°	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6	803.3	807.1	810.9
125°	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8	875.9	879.0	882.1
127.5°	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2	942.6	946.0	949.5
130°	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2	985.0	988.9	992.7
132.5°	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1	1027.4	1030.7	1033.9
135°	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9	1083.8	1087.6	1091.5
137.5°	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4	1139.1	1141.8	1144.5
140°	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4	1175.3	1177.2	1179.1
142.5°	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3	1206.0	1207.7	1209.4
145°	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8	1252.5	1252.3	1252.1
147.5°	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2	1294.2	1293.3	1292.4
150°	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6	1320.9	1319.3	1317.6
152.5°	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7	1343.9	1342.0	1340.2
155°	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5	1377.4	1375.2	1373.0
157.5°	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9	1404.1	1402.3	1400.5
160°	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1420.0	1418.5	1417.0
162.5°	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1	1433.7	1432.2	1430.8
165°	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6	1452.1	1450.7	1449.3
167.5°	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3	1465.9	1464.4	1463.0
170°	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0	1473.6	1472.2	1470.8
172.5°	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2	1478.7	1477.3	1475.9
175°	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8	1485.2	1483.5	1481.9
177.5°	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9	1486.6	1485.2	1483.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331276-840

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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°	5.5	5.7	5.9	6.3	6.5	6.7	6.8	7.0	7.2	7.1	7.3
90°	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8	25.0	26.3	27.1
92.5°	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2	26.8	27.4	27.9
95°	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2	45.4	46.7	47.2
97.5°	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0	58.9	59.9	60.5
100°	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0	67.0	68.9	70.0
102.5°	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9	70.4	72.8	74.4
105°	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7	73.3	75.9	77.8
107.5°	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3	83.6	81.0	80.2
110°	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2	116.3	92.4	81.0



TEST NUMBER: P331276-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8	212.8	125.7	82.6
115°	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4	331.0	220.6	156.7
117.5°	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2	653.5	626.8	585.2
120°	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6	795.5	798.4	783.7
122.5°	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0	842.7	844.4	842.1
125°	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5	912.1	913.8	915.0
127.5°	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7	977.1	979.6	980.9
130°	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4	1018.0	1020.7	1021.9
132.5°	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0	1057.3	1059.6	1060.6
135°	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6	1114.0	1116.3	1117.3
137.5°	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1	1166.4	1168.7	1169.5
140°	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1	1200.2	1202.3	1202.9
142.5°	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4	1231.4	1233.3	1233.8
145°	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3	1275.0	1276.7	1276.9
147.5°	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5	1312.8	1314.0	1314.1
150°	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1	1336.6	1338.0	1338.1
152.5°	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6	1358.1	1359.5	1359.4
155°	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5	1387.0	1388.5	1388.2
157.5°	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0	1411.6	1413.2	1413.1
160°	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2	1425.6	1427.0	1426.9
162.5°	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4	1439.1	1440.8	1440.5
165°	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0
167.5°	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2	1468.8	1470.6	1470.3
170°	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1	1475.7	1477.4	1477.1
172.5°	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3	1480.9	1482.6	1482.4
175°	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8	1486.5	1488.1	1487.8
177.5°	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4	1486.7	1488.1	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331276-840

CATALOG NUMBER: SA2XXDIP-C290D1080U840-4F0-1E-UDD-A

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°	7.4	7.3	7.4	7.3	7.4	7.3	7.4	7.3	7.1	7.2	7.0
90°	27.6	28.1	28.5	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8
92.5°	28.2	28.4	28.7	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2
95°	46.9	46.7	46.4	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2
97.5°	60.8	61.1	61.3	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0
100°	70.5	71.0	71.5	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0
102.5°	75.0	75.7	76.4	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9
105°	78.8	79.7	80.6	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7
107.5°	81.1	82.0	83.0	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3
110°	81.9	82.9	83.8	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2



TEST NUMBER: P331276-840

CATALOG NUMBER: SA2XXDIP-C290D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	83.4	84.1	84.9	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8
115°	139.6	122.4	105.2	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4
117.5°	528.8	472.3	415.9	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2
120°	751.4	719.2	687.0	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6
122.5°	836.0	829.7	823.4	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0
125°	915.7	916.5	917.2	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5
127.5°	981.0	981.2	981.3	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7
130°	1021.7	1021.4	1021.2	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4
132.5°	1060.3	1060.1	1059.9	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0
135°	1116.8	1116.3	1115.9	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6
137.5°	1168.7	1167.9	1167.1	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1
140°	1201.6	1200.4	1199.2	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1
142.5°	1232.5	1231.3	1230.2	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4
145°	1275.8	1274.6	1273.3	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3
147.5°	1313.1	1312.1	1311.1	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5
150°	1336.9	1335.7	1334.5	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1
152.5°	1357.8	1356.2	1354.6	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6
155°	1386.2	1384.4	1382.5	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5
157.5°	1411.3	1409.4	1407.5	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0
160°	1425.3	1423.6	1422.0	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2
162.5°	1438.5	1436.4	1434.3	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4
165°	1455.3	1453.7	1452.0	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7
167.5°	1468.1	1466.0	1463.9	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2
170°	1475.0	1472.9	1470.8	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1
172.5°	1480.2	1478.0	1475.9	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3
175°	1485.4	1483.0	1480.7	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8
177.5°	1486.2	1484.5	1482.8	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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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°	6.8	6.7	6.5	6.3	5.9	5.7	5.5	5.0	4.9	4.5	4.2
90°	22.6	21.5	19.6	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1
92.5°	25.5	24.9	23.9	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7
95°	43.0	41.9	40.2	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8
97.5°	57.0	56.0	52.2	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5
100°	63.1	61.2	57.2	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1
102.5°	65.4	62.9	96.8	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7
105°	68.1	65.4	130.6	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4
107.5°	89.0	91.7	169.8	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2
110°	164.0	187.8	256.8	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5



TEST NUMBER: P331276-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	386.9	473.8	490.9	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6
115°	551.9	662.4	656.4	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3
117.5°	706.9	733.7	729.5	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8
120°	789.7	786.9	782.6	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4
122.5°	839.3	837.6	832.9	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6
125°	908.8	907.2	902.6	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8
127.5°	972.3	969.9	966.4	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2
130°	1012.8	1010.2	1007.5	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2
132.5°	1052.8	1050.6	1047.9	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1
135°	1109.2	1106.8	1104.7	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9
137.5°	1161.7	1159.4	1157.0	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4
140°	1195.9	1193.8	1191.1	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4
142.5°	1227.5	1225.6	1222.5	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3
145°	1271.6	1270.0	1266.0	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8
147.5°	1310.3	1309.1	1305.0	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2
150°	1333.7	1332.2	1328.5	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6
152.5°	1355.1	1353.7	1350.1	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7
155°	1384.1	1382.7	1379.9	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5
157.5°	1408.4	1406.7	1404.7	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9
160°	1422.8	1421.4	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4
162.5°	1435.8	1434.2	1433.0	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1
165°	1452.0	1450.4	1449.7	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6
167.5°	1465.5	1463.9	1463.2	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3
170°	1472.4	1470.8	1470.3	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0
172.5°	1477.5	1475.9	1475.4	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2
175°	1483.2	1481.5	1481.0	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8
177.5°	1484.1	1482.8	1482.6	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331276-840

CATALOG NUMBER: SA2XXDIP-C290D1080U840-4F0-1E-UDD-A

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°	5.4	6.6	7.1	8.2	8.3	8.7	9.0	9.2	9.4	9.5	9.5
90°	3.7	6.4	9.0	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8
92.5°	21.4	21.2	21.0	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2
95°	61.9	54.0	46.2	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2
97.5°	116.3	94.1	71.9	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0
100°	157.3	124.6	92.0	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0
102.5°	239.7	232.9	225.9	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9
105°	333.6	340.6	347.8	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7
107.5°	422.9	428.7	434.4	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3
110°	480.6	485.6	490.6	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	535.0	539.4	543.8	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8
115°	621.4	625.4	629.4	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4
117.5°	699.3	703.9	708.4	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2
120°	755.1	758.6	762.2	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6
122.5°	803.3	807.1	810.9	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0
125°	875.9	879.0	882.1	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5
127.5°	942.6	946.0	949.5	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7
130°	985.0	988.9	992.7	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4
132.5°	1027.4	1030.7	1033.9	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0
135°	1083.8	1087.6	1091.5	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6
137.5°	1139.1	1141.8	1144.5	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1
140°	1175.3	1177.2	1179.1	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1
142.5°	1206.0	1207.7	1209.4	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4
145°	1252.5	1252.3	1252.1	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3
147.5°	1294.2	1293.3	1292.4	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5
150°	1320.9	1319.3	1317.6	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1
152.5°	1343.9	1342.0	1340.2	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6
155°	1377.4	1375.2	1373.0	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5
157.5°	1404.1	1402.3	1400.5	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0
160°	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2
162.5°	1433.7	1432.2	1430.8	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4
165°	1452.1	1450.7	1449.3	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7
167.5°	1465.9	1464.4	1463.0	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2
170°	1473.6	1472.2	1470.8	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1
172.5°	1478.7	1477.3	1475.9	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3
175°	1485.2	1483.5	1481.9	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8
177.5°	1486.6	1485.2	1483.9	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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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°	10.0	10.2	10.2	10.3	10.6	10.5	10.6
90°	25.0	26.3	27.1	27.6	28.1	28.5	29.0
92.5°	26.8	27.4	27.9	28.2	28.4	28.7	29.0
95°	45.4	46.7	47.2	46.9	46.7	46.4	46.2
97.5°	58.9	59.9	60.5	60.8	61.1	61.3	61.6
100°	67.0	68.9	70.0	70.5	71.0	71.5	71.9
102.5°	70.4	72.8	74.4	75.0	75.7	76.4	77.1
105°	73.3	75.9	77.8	78.8	79.7	80.6	81.6
107.5°	83.6	81.0	80.2	81.1	82.0	83.0	83.9
110°	116.3	92.4	81.0	81.9	82.9	83.8	84.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.8	125.7	82.6	83.4	84.1	84.9	85.6
115°	331.0	220.6	156.7	139.6	122.4	105.2	88.1
117.5°	653.5	626.8	585.2	528.8	472.3	415.9	359.4
120°	795.5	798.4	783.7	751.4	719.2	687.0	654.9
122.5°	842.7	844.4	842.1	836.0	829.7	823.4	817.2
125°	912.1	913.8	915.0	915.7	916.5	917.2	917.9
127.5°	977.1	979.6	980.9	981.0	981.2	981.3	981.4
130°	1018.0	1020.7	1021.9	1021.7	1021.4	1021.2	1021.0
132.5°	1057.3	1059.6	1060.6	1060.3	1060.1	1059.9	1059.6
135°	1114.0	1116.3	1117.3	1116.8	1116.3	1115.9	1115.4
137.5°	1166.4	1168.7	1169.5	1168.7	1167.9	1167.1	1166.3
140°	1200.2	1202.3	1202.9	1201.6	1200.4	1199.2	1198.1
142.5°	1231.4	1233.3	1233.8	1232.5	1231.3	1230.2	1229.0
145°	1275.0	1276.7	1276.9	1275.8	1274.6	1273.3	1272.1
147.5°	1312.8	1314.0	1314.1	1313.1	1312.1	1311.1	1310.1
150°	1336.6	1338.0	1338.1	1336.9	1335.7	1334.5	1333.3
152.5°	1358.1	1359.5	1359.4	1357.8	1356.2	1354.6	1353.1
155°	1387.0	1388.5	1388.2	1386.2	1384.4	1382.5	1380.6
157.5°	1411.6	1413.2	1413.1	1411.3	1409.4	1407.5	1405.6
160°	1425.6	1427.0	1426.9	1425.3	1423.6	1422.0	1420.3
162.5°	1439.1	1440.8	1440.5	1438.5	1436.4	1434.3	1432.3
165°	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4
167.5°	1468.8	1470.6	1470.3	1468.1	1466.0	1463.9	1461.7
170°	1475.7	1477.4	1477.1	1475.0	1472.9	1470.8	1468.5
172.5°	1480.9	1482.6	1482.4	1480.2	1478.0	1475.9	1473.7
175°	1486.5	1488.1	1487.8	1485.4	1483.0	1480.7	1478.2
177.5°	1486.7	1488.1	1487.9	1486.2	1484.5	1482.8	1481.1
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6

(END OF REPORT)