

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: P331477-840

Luminaire Tested: **S122DIW-S290D970U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331477-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D970U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 970 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5228.3 lumens
Efficiency: N/A
Efficacy: 137.6 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

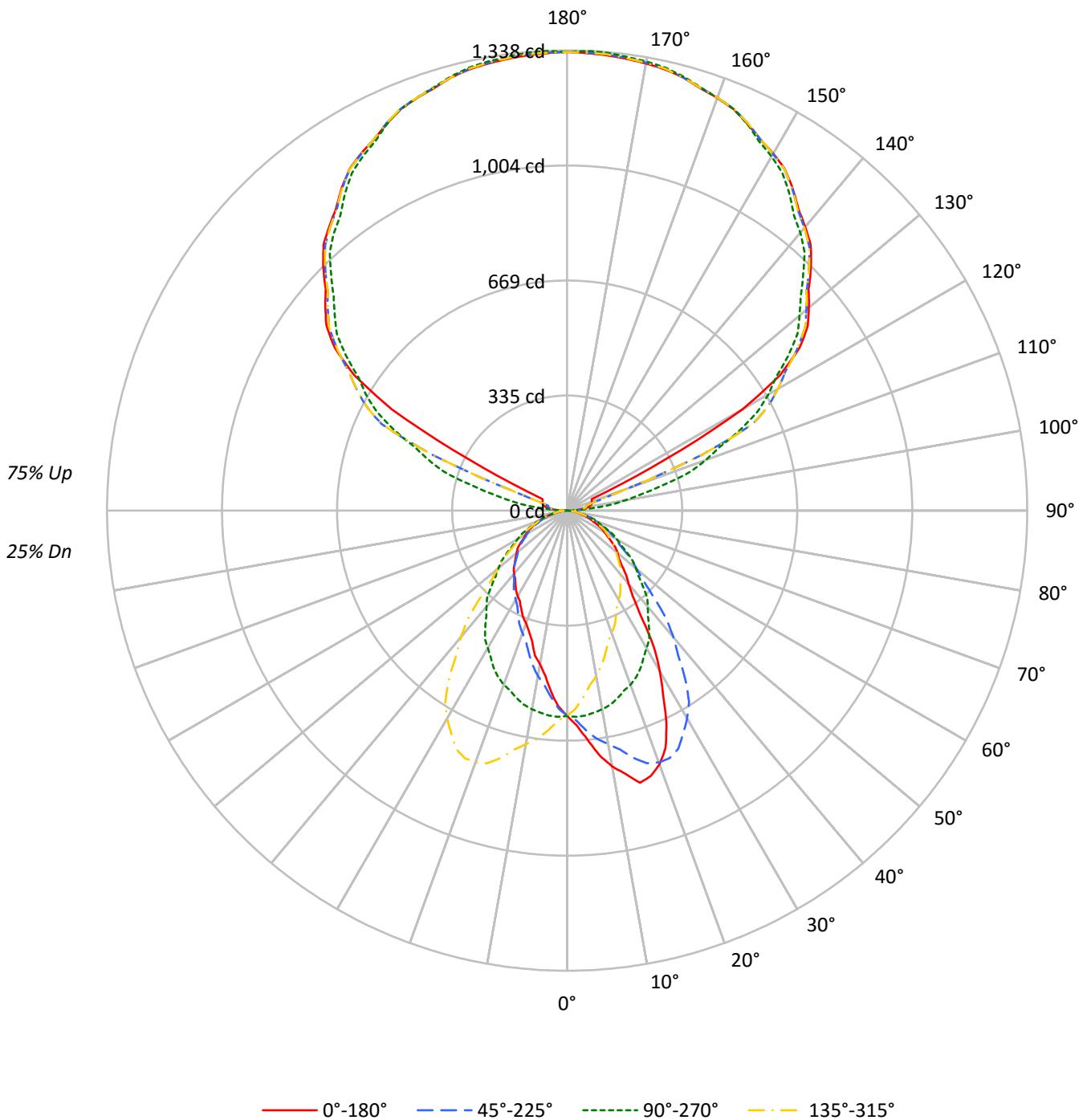
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	25	24	19
3	77	68	61	56	68	61	55	51	48	44	40	35	33	31	24	22	21	16
4	71	60	53	47	63	54	48	43	42	38	35	31	29	26	21	20	18	14
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	17	16	12
6	60	48	40	35	53	43	37	32	34	29	26	26	22	20	18	16	14	11
7	55	43	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10
8	51	39	32	27	45	35	29	25	28	23	20	21	18	16	15	13	11	9
9	47	36	29	24	42	32	26	22	26	21	18	20	16	14	14	12	10	8
10	44	33	26	21	39	30	24	20	24	19	16	18	15	13	13	11	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	1.1
10°-20°	165.3	3.2
20°-30°	239.9	4.6
30°-40°	253.1	4.8
40°-50°	224.1	4.3
50°-60°	178.8	3.4
60°-70°	121.6	2.3
70°-80°	62.3	1.2
80°-90°	18.3	0.4
90°-100°	44.5	0.9
100°-110°	163.1	3.1
110°-120°	436.1	8.3
120°-130°	719.8	13.8
130°-140°	765.5	14.6
140°-150°	711.5	13.6
150°-160°	572.1	10.9
160°-170°	368.6	7.1
170°-180°	126.9	2.4
0°-30°	462.0	8.8
0°-40°	715.1	13.7
0°-60°	1118.0	21.4
0°-90°	1320.2	25.3
90°-120°	643.7	12.3
90°-150°	2840.5	54.3
90°-180°	3908.0	74.7
0°-180°	5228.3	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°	26	1	26	1	26	12
95°	42	63	42	63	42	39
105°	73	293	73	293	73	76
115°	79	555	79	555	79	198
125°	825	784	825	784	825	714
135°	1003	971	1003	971	1003	773
145°	1144	1126	1144	1126	1144	715
155°	1241	1240	1241	1240	1241	573
165°	1304	1307	1304	1307	1304	368
175°	1329	1336	1329	1336	1329	127
180°	1334	1334	1334	1334	1334	



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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°	10.0	9.9	10.0	9.7	9.6	9.7	9.5	9.1	9.0	9.0	8.9
90°	26.1	25.7	25.1	24.7	24.3	23.6	22.5	21.4	20.4	19.3	17.6
92.5°	26.1	25.8	25.5	25.2	25.0	24.6	24.0	23.5	22.9	22.4	21.5
95°	41.5	41.7	41.9	42.1	42.3	41.9	40.9	39.8	38.7	37.7	36.2
97.5°	55.3	55.1	54.8	54.6	54.3	53.8	52.9	52.1	51.2	50.4	46.9
100°	64.6	64.2	63.8	63.3	62.9	61.9	60.2	58.5	56.8	55.0	51.4
102.5°	69.3	68.7	68.1	67.5	66.9	65.4	63.2	61.0	58.8	56.6	87.1
105°	73.3	72.5	71.6	70.8	69.9	68.3	65.9	63.6	61.2	58.9	117.4
107.5°	75.4	74.6	73.7	72.9	72.0	72.8	75.2	77.6	80.0	82.4	152.6
110°	76.2	75.3	74.5	73.6	72.8	83.1	104.5	125.9	147.4	168.8	230.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	77.1	76.3	75.6	74.9	74.2	113.0	191.3	269.4	347.7	426.0	441.2
115°	79.2	94.5	110.0	125.4	140.9	198.2	297.5	396.8	496.0	595.4	590.1
117.5°	323.1	373.9	424.5	475.2	526.0	563.4	587.4	611.4	635.4	659.4	655.8
120°	588.7	617.5	646.5	675.5	704.4	717.6	715.0	712.5	709.9	707.3	703.5
122.5°	734.6	740.1	745.8	751.3	757.0	759.0	757.5	756.0	754.4	752.9	748.6
125°	825.1	824.4	823.7	823.1	822.4	821.4	819.9	818.4	816.9	815.4	811.3
127.5°	882.1	882.0	881.9	881.8	881.6	880.5	878.3	876.2	873.9	871.7	868.7
130°	917.7	917.9	918.1	918.3	918.6	917.5	915.1	912.7	910.4	908.1	905.6
132.5°	952.4	952.6	952.8	953.0	953.3	952.4	950.4	948.4	946.3	944.3	941.9
135°	1002.6	1003.0	1003.4	1003.9	1004.3	1003.4	1001.3	999.2	997.0	994.9	992.9
137.5°	1048.3	1049.0	1049.8	1050.6	1051.3	1050.6	1048.4	1046.3	1044.3	1042.2	1040.0
140°	1076.9	1077.9	1079.0	1080.2	1081.2	1080.8	1078.8	1076.9	1075.0	1073.1	1070.7
142.5°	1104.7	1105.8	1106.8	1107.9	1108.9	1108.6	1106.9	1105.1	1103.4	1101.6	1098.9
145°	1143.5	1144.6	1145.6	1146.7	1147.8	1147.5	1146.1	1144.6	1143.1	1141.6	1137.9
147.5°	1177.6	1178.5	1179.4	1180.3	1181.2	1181.1	1180.0	1178.9	1177.8	1176.7	1173.1
150°	1198.5	1199.5	1200.6	1201.7	1202.7	1202.6	1201.3	1200.1	1198.8	1197.5	1194.1
152.5°	1216.3	1217.7	1219.1	1220.5	1221.9	1221.9	1220.6	1219.4	1218.1	1216.8	1213.6
155°	1240.9	1242.6	1244.4	1246.1	1247.8	1248.0	1246.7	1245.5	1244.2	1242.8	1240.3
157.5°	1263.5	1265.2	1266.9	1268.5	1270.2	1270.3	1268.9	1267.4	1266.0	1264.5	1262.6
160°	1276.7	1278.2	1279.6	1281.1	1282.6	1282.7	1281.4	1280.2	1278.9	1277.6	1276.4
162.5°	1287.5	1289.3	1291.1	1292.9	1294.8	1295.1	1293.5	1292.1	1290.6	1289.2	1288.1
165°	1303.6	1305.1	1306.7	1308.2	1309.7	1309.7	1308.2	1306.7	1305.1	1303.6	1303.0
167.5°	1313.9	1315.9	1317.8	1319.7	1321.6	1321.8	1320.3	1318.8	1317.3	1315.9	1315.2
170°	1320.1	1322.0	1323.9	1325.9	1327.8	1328.0	1326.5	1325.0	1323.5	1322.0	1321.6
172.5°	1324.7	1326.7	1328.6	1330.5	1332.4	1332.6	1331.1	1329.6	1328.2	1326.7	1326.2
175°	1328.8	1330.9	1333.0	1335.1	1337.4	1337.7	1336.2	1334.6	1333.1	1331.6	1331.2
177.5°	1331.3	1332.8	1334.3	1335.8	1337.5	1337.6	1336.4	1335.2	1334.0	1332.8	1332.6
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



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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°	8.7	8.4	8.0	8.0	7.0	6.5	5.3	4.2	4.5	4.8	4.9
90°	15.9	14.1	12.4	10.4	8.1	5.7	3.3	1.0	3.3	5.7	8.1
92.5°	20.7	19.8	19.0	18.7	18.9	19.1	19.3	19.5	19.3	19.1	18.9
95°	34.6	33.1	31.6	34.4	41.5	48.6	55.6	62.7	55.6	48.6	41.5
97.5°	43.4	40.0	36.5	44.7	64.6	84.6	104.5	124.5	104.5	84.6	64.6
100°	47.7	44.0	40.4	53.3	82.7	112.0	141.4	170.8	141.4	112.0	82.7
102.5°	117.5	148.0	178.5	196.8	203.1	209.3	215.5	221.8	215.5	209.3	203.1
105°	175.9	234.5	293.1	319.1	312.7	306.2	299.8	293.4	299.8	306.2	312.7
107.5°	222.8	293.1	363.2	395.8	390.5	385.4	380.2	375.0	380.2	385.4	390.5
110°	292.9	354.8	416.8	445.5	441.0	436.5	432.0	427.5	432.0	436.5	441.0



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	456.6	471.9	487.2	492.8	488.9	484.8	480.9	476.9	480.9	484.8	488.9
115°	584.6	579.3	573.9	569.5	565.8	562.2	558.5	554.8	558.5	562.2	565.8
117.5°	652.1	648.4	644.7	640.9	636.7	632.7	628.6	624.5	628.6	632.7	636.7
120°	699.6	695.7	691.9	688.3	685.1	681.9	678.7	675.5	678.7	681.9	685.1
122.5°	744.5	740.2	736.1	732.3	728.8	725.5	722.1	718.7	722.1	725.5	728.8
125°	807.3	803.1	799.1	795.7	792.8	790.1	787.3	784.5	787.3	790.1	792.8
127.5°	865.7	862.6	859.6	856.5	853.4	850.3	847.3	844.1	847.3	850.3	853.4
130°	903.3	900.9	898.6	895.6	892.2	888.9	885.4	882.0	885.4	888.9	892.2
132.5°	939.6	937.3	934.8	932.2	929.3	926.5	923.5	920.6	923.5	926.5	929.3
135°	991.0	989.1	987.1	984.5	981.1	977.7	974.2	970.8	974.2	977.7	981.1
137.5°	1037.7	1035.6	1033.4	1031.1	1028.7	1026.3	1023.9	1021.5	1023.9	1026.3	1028.7
140°	1068.3	1065.9	1063.6	1061.6	1059.9	1058.1	1056.4	1054.7	1056.4	1058.1	1059.9
142.5°	1096.2	1093.5	1090.8	1088.6	1087.1	1085.6	1084.0	1082.5	1084.0	1085.6	1087.1
145°	1134.3	1130.6	1127.0	1125.3	1125.5	1125.7	1125.9	1126.1	1125.9	1125.7	1125.5
147.5°	1169.4	1165.9	1162.3	1160.8	1161.6	1162.5	1163.3	1164.2	1163.3	1162.5	1161.6
150°	1190.6	1187.2	1183.8	1182.9	1184.4	1185.8	1187.3	1188.8	1187.3	1185.8	1184.4
152.5°	1210.3	1207.0	1203.8	1203.0	1204.7	1206.3	1208.0	1209.7	1208.0	1206.3	1204.7
155°	1237.7	1235.2	1232.5	1232.2	1234.2	1236.1	1238.0	1240.0	1238.0	1236.1	1234.2
157.5°	1260.9	1259.1	1257.3	1257.2	1258.8	1260.4	1262.1	1263.7	1262.1	1260.4	1258.8
160°	1275.1	1273.7	1272.4	1272.4	1273.7	1275.1	1276.4	1277.6	1276.4	1275.1	1273.7
162.5°	1287.0	1285.9	1284.8	1284.9	1286.1	1287.4	1288.7	1290.0	1288.7	1287.4	1286.1
165°	1302.3	1301.7	1301.1	1301.4	1302.7	1303.9	1305.3	1306.6	1305.3	1303.9	1302.7
167.5°	1314.6	1314.0	1313.4	1313.7	1315.0	1316.4	1317.6	1318.9	1317.6	1316.4	1315.0
170°	1321.1	1320.7	1320.3	1320.7	1322.0	1323.3	1324.5	1325.9	1324.5	1323.3	1322.0
172.5°	1325.8	1325.3	1324.9	1325.3	1326.7	1327.9	1329.2	1330.5	1329.2	1327.9	1326.7
175°	1330.8	1330.4	1329.9	1330.5	1332.0	1333.4	1334.9	1336.5	1334.9	1333.4	1332.0
177.5°	1332.4	1332.3	1332.1	1332.6	1333.8	1335.0	1336.3	1337.5	1336.3	1335.0	1333.8
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



TEST NUMBER: P331477-840

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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°	5.2	5.5	5.6	6.0	6.1	6.3	6.3	6.5	6.7	6.6	6.7
90°	10.4	12.4	14.1	15.9	17.6	19.3	20.4	21.4	22.5	23.6	24.3
92.5°	18.7	19.0	19.8	20.7	21.5	22.4	22.9	23.5	24.0	24.6	25.0
95°	34.4	31.6	33.1	34.6	36.2	37.7	38.7	39.8	40.9	41.9	42.3
97.5°	44.7	36.5	40.0	43.4	46.9	50.4	51.2	52.1	52.9	53.8	54.3
100°	53.3	40.4	44.0	47.7	51.4	55.0	56.8	58.5	60.2	61.9	62.9
102.5°	196.8	178.5	148.0	117.5	87.1	56.6	58.8	61.0	63.2	65.4	66.9
105°	319.1	293.1	234.5	175.9	117.4	58.9	61.2	63.6	65.9	68.3	69.9
107.5°	395.8	363.2	293.1	222.8	152.6	82.4	80.0	77.6	75.2	72.8	72.0
110°	445.5	416.8	354.8	292.9	230.9	168.8	147.4	125.9	104.5	83.1	72.8



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	492.8	487.2	471.9	456.6	441.2	426.0	347.7	269.4	191.3	113.0	74.2
115°	569.5	573.9	579.3	584.6	590.1	595.4	496.0	396.8	297.5	198.2	140.9
117.5°	640.9	644.7	648.4	652.1	655.8	659.4	635.4	611.4	587.4	563.4	526.0
120°	688.3	691.9	695.7	699.6	703.5	707.3	709.9	712.5	715.0	717.6	704.4
122.5°	732.3	736.1	740.2	744.5	748.6	752.9	754.4	756.0	757.5	759.0	757.0
125°	795.7	799.1	803.1	807.3	811.3	815.4	816.9	818.4	819.9	821.4	822.4
127.5°	856.5	859.6	862.6	865.7	868.7	871.7	873.9	876.2	878.3	880.5	881.6
130°	895.6	898.6	900.9	903.3	905.6	908.1	910.4	912.7	915.1	917.5	918.6
132.5°	932.2	934.8	937.3	939.6	941.9	944.3	946.3	948.4	950.4	952.4	953.3
135°	984.5	987.1	989.1	991.0	992.9	994.9	997.0	999.2	1001.3	1003.4	1004.3
137.5°	1031.1	1033.4	1035.6	1037.7	1040.0	1042.2	1044.3	1046.3	1048.4	1050.6	1051.3
140°	1061.6	1063.6	1065.9	1068.3	1070.7	1073.1	1075.0	1076.9	1078.8	1080.8	1081.2
142.5°	1088.6	1090.8	1093.5	1096.2	1098.9	1101.6	1103.4	1105.1	1106.9	1108.6	1108.9
145°	1125.3	1127.0	1130.6	1134.3	1137.9	1141.6	1143.1	1144.6	1146.1	1147.5	1147.8
147.5°	1160.8	1162.3	1165.9	1169.4	1173.1	1176.7	1177.8	1178.9	1180.0	1181.1	1181.2
150°	1182.9	1183.8	1187.2	1190.6	1194.1	1197.5	1198.8	1200.1	1201.3	1202.6	1202.7
152.5°	1203.0	1203.8	1207.0	1210.3	1213.6	1216.8	1218.1	1219.4	1220.6	1221.9	1221.9
155°	1232.2	1232.5	1235.2	1237.7	1240.3	1242.8	1244.2	1245.5	1246.7	1248.0	1247.8
157.5°	1257.2	1257.3	1259.1	1260.9	1262.6	1264.5	1266.0	1267.4	1268.9	1270.3	1270.2
160°	1272.4	1272.4	1273.7	1275.1	1276.4	1277.6	1278.9	1280.2	1281.4	1282.7	1282.6
162.5°	1284.9	1284.8	1285.9	1287.0	1288.1	1289.2	1290.6	1292.1	1293.5	1295.1	1294.8
165°	1301.4	1301.1	1301.7	1302.3	1303.0	1303.6	1305.1	1306.7	1308.2	1309.7	1309.7
167.5°	1313.7	1313.4	1314.0	1314.6	1315.2	1315.9	1317.3	1318.8	1320.3	1321.8	1321.6
170°	1320.7	1320.3	1320.7	1321.1	1321.6	1322.0	1323.5	1325.0	1326.5	1328.0	1327.8
172.5°	1325.3	1324.9	1325.3	1325.8	1326.2	1326.7	1328.2	1329.6	1331.1	1332.6	1332.4
175°	1330.5	1329.9	1330.4	1330.8	1331.2	1331.6	1333.1	1334.6	1336.2	1337.7	1337.4
177.5°	1332.6	1332.1	1332.3	1332.4	1332.6	1332.8	1334.0	1335.2	1336.4	1337.6	1337.5
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	6.8	6.7	6.8	6.7	6.8	6.7	6.8	6.7	6.6	6.7	6.5
90°	24.7	25.1	25.7	26.1	25.7	25.1	24.7	24.3	23.6	22.5	21.4
92.5°	25.2	25.5	25.8	26.1	25.8	25.5	25.2	25.0	24.6	24.0	23.5
95°	42.1	41.9	41.7	41.5	41.7	41.9	42.1	42.3	41.9	40.9	39.8
97.5°	54.6	54.8	55.1	55.3	55.1	54.8	54.6	54.3	53.8	52.9	52.1
100°	63.3	63.8	64.2	64.6	64.2	63.8	63.3	62.9	61.9	60.2	58.5
102.5°	67.5	68.1	68.7	69.3	68.7	68.1	67.5	66.9	65.4	63.2	61.0
105°	70.8	71.6	72.5	73.3	72.5	71.6	70.8	69.9	68.3	65.9	63.6
107.5°	72.9	73.7	74.6	75.4	74.6	73.7	72.9	72.0	72.8	75.2	77.6
110°	73.6	74.5	75.3	76.2	75.3	74.5	73.6	72.8	83.1	104.5	125.9



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	74.9	75.6	76.3	77.1	76.3	75.6	74.9	74.2	113.0	191.3	269.4
115°	125.4	110.0	94.5	79.2	94.5	110.0	125.4	140.9	198.2	297.5	396.8
117.5°	475.2	424.5	373.9	323.1	373.9	424.5	475.2	526.0	563.4	587.4	611.4
120°	675.5	646.5	617.5	588.7	617.5	646.5	675.5	704.4	717.6	715.0	712.5
122.5°	751.3	745.8	740.1	734.6	740.1	745.8	751.3	757.0	759.0	757.5	756.0
125°	823.1	823.7	824.4	825.1	824.4	823.7	823.1	822.4	821.4	819.9	818.4
127.5°	881.8	881.9	882.0	882.1	882.0	881.9	881.8	881.6	880.5	878.3	876.2
130°	918.3	918.1	917.9	917.7	917.9	918.1	918.3	918.6	917.5	915.1	912.7
132.5°	953.0	952.8	952.6	952.4	952.6	952.8	953.0	953.3	952.4	950.4	948.4
135°	1003.9	1003.4	1003.0	1002.6	1003.0	1003.4	1003.9	1004.3	1003.4	1001.3	999.2
137.5°	1050.6	1049.8	1049.0	1048.3	1049.0	1049.8	1050.6	1051.3	1050.6	1048.4	1046.3
140°	1080.2	1079.0	1077.9	1076.9	1077.9	1079.0	1080.2	1081.2	1080.8	1078.8	1076.9
142.5°	1107.9	1106.8	1105.8	1104.7	1105.8	1106.8	1107.9	1108.9	1108.6	1106.9	1105.1
145°	1146.7	1145.6	1144.6	1143.5	1144.6	1145.6	1146.7	1147.8	1147.5	1146.1	1144.6
147.5°	1180.3	1179.4	1178.5	1177.6	1178.5	1179.4	1180.3	1181.2	1181.1	1180.0	1178.9
150°	1201.7	1200.6	1199.5	1198.5	1199.5	1200.6	1201.7	1202.7	1202.6	1201.3	1200.1
152.5°	1220.5	1219.1	1217.7	1216.3	1217.7	1219.1	1220.5	1221.9	1221.9	1220.6	1219.4
155°	1246.1	1244.4	1242.6	1240.9	1242.6	1244.4	1246.1	1247.8	1248.0	1246.7	1245.5
157.5°	1268.5	1266.9	1265.2	1263.5	1265.2	1266.9	1268.5	1270.2	1270.3	1268.9	1267.4
160°	1281.1	1279.6	1278.2	1276.7	1278.2	1279.6	1281.1	1282.6	1282.7	1281.4	1280.2
162.5°	1292.9	1291.1	1289.3	1287.5	1289.3	1291.1	1292.9	1294.8	1295.1	1293.5	1292.1
165°	1308.2	1306.7	1305.1	1303.6	1305.1	1306.7	1308.2	1309.7	1309.7	1308.2	1306.7
167.5°	1319.7	1317.8	1315.9	1313.9	1315.9	1317.8	1319.7	1321.6	1321.8	1320.3	1318.8
170°	1325.9	1323.9	1322.0	1320.1	1322.0	1323.9	1325.9	1327.8	1328.0	1326.5	1325.0
172.5°	1330.5	1328.6	1326.7	1324.7	1326.7	1328.6	1330.5	1332.4	1332.6	1331.1	1329.6
175°	1335.1	1333.0	1330.9	1328.8	1330.9	1333.0	1335.1	1337.4	1337.7	1336.2	1334.6
177.5°	1335.8	1334.3	1332.8	1331.3	1332.8	1334.3	1335.8	1337.5	1337.6	1336.4	1335.2
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A

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°	6.3	6.3	6.1	6.0	5.6	5.5	5.2	4.9	4.8	4.5	4.2
90°	20.4	19.3	17.6	15.9	14.1	12.4	10.4	8.1	5.7	3.3	1.0
92.5°	22.9	22.4	21.5	20.7	19.8	19.0	18.7	18.9	19.1	19.3	19.5
95°	38.7	37.7	36.2	34.6	33.1	31.6	34.4	41.5	48.6	55.6	62.7
97.5°	51.2	50.4	46.9	43.4	40.0	36.5	44.7	64.6	84.6	104.5	124.5
100°	56.8	55.0	51.4	47.7	44.0	40.4	53.3	82.7	112.0	141.4	170.8
102.5°	58.8	56.6	87.1	117.5	148.0	178.5	196.8	203.1	209.3	215.5	221.8
105°	61.2	58.9	117.4	175.9	234.5	293.1	319.1	312.7	306.2	299.8	293.4
107.5°	80.0	82.4	152.6	222.8	293.1	363.2	395.8	390.5	385.4	380.2	375.0
110°	147.4	168.8	230.9	292.9	354.8	416.8	445.5	441.0	436.5	432.0	427.5



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	347.7	426.0	441.2	456.6	471.9	487.2	492.8	488.9	484.8	480.9	476.9
115°	496.0	595.4	590.1	584.6	579.3	573.9	569.5	565.8	562.2	558.5	554.8
117.5°	635.4	659.4	655.8	652.1	648.4	644.7	640.9	636.7	632.7	628.6	624.5
120°	709.9	707.3	703.5	699.6	695.7	691.9	688.3	685.1	681.9	678.7	675.5
122.5°	754.4	752.9	748.6	744.5	740.2	736.1	732.3	728.8	725.5	722.1	718.7
125°	816.9	815.4	811.3	807.3	803.1	799.1	795.7	792.8	790.1	787.3	784.5
127.5°	873.9	871.7	868.7	865.7	862.6	859.6	856.5	853.4	850.3	847.3	844.1
130°	910.4	908.1	905.6	903.3	900.9	898.6	895.6	892.2	888.9	885.4	882.0
132.5°	946.3	944.3	941.9	939.6	937.3	934.8	932.2	929.3	926.5	923.5	920.6
135°	997.0	994.9	992.9	991.0	989.1	987.1	984.5	981.1	977.7	974.2	970.8
137.5°	1044.3	1042.2	1040.0	1037.7	1035.6	1033.4	1031.1	1028.7	1026.3	1023.9	1021.5
140°	1075.0	1073.1	1070.7	1068.3	1065.9	1063.6	1061.6	1059.9	1058.1	1056.4	1054.7
142.5°	1103.4	1101.6	1098.9	1096.2	1093.5	1090.8	1088.6	1087.1	1085.6	1084.0	1082.5
145°	1143.1	1141.6	1137.9	1134.3	1130.6	1127.0	1125.3	1125.5	1125.7	1125.9	1126.1
147.5°	1177.8	1176.7	1173.1	1169.4	1165.9	1162.3	1160.8	1161.6	1162.5	1163.3	1164.2
150°	1198.8	1197.5	1194.1	1190.6	1187.2	1183.8	1182.9	1184.4	1185.8	1187.3	1188.8
152.5°	1218.1	1216.8	1213.6	1210.3	1207.0	1203.8	1203.0	1204.7	1206.3	1208.0	1209.7
155°	1244.2	1242.8	1240.3	1237.7	1235.2	1232.5	1232.2	1234.2	1236.1	1238.0	1240.0
157.5°	1266.0	1264.5	1262.6	1260.9	1259.1	1257.3	1257.2	1258.8	1260.4	1262.1	1263.7
160°	1278.9	1277.6	1276.4	1275.1	1273.7	1272.4	1272.4	1273.7	1275.1	1276.4	1277.6
162.5°	1290.6	1289.2	1288.1	1287.0	1285.9	1284.8	1284.9	1286.1	1287.4	1288.7	1290.0
165°	1305.1	1303.6	1303.0	1302.3	1301.7	1301.1	1301.4	1302.7	1303.9	1305.3	1306.6
167.5°	1317.3	1315.9	1315.2	1314.6	1314.0	1313.4	1313.7	1315.0	1316.4	1317.6	1318.9
170°	1323.5	1322.0	1321.6	1321.1	1320.7	1320.3	1320.7	1322.0	1323.3	1324.5	1325.9
172.5°	1328.2	1326.7	1326.2	1325.8	1325.3	1324.9	1325.3	1326.7	1327.9	1329.2	1330.5
175°	1333.1	1331.6	1331.2	1330.8	1330.4	1329.9	1330.5	1332.0	1333.4	1334.9	1336.5
177.5°	1334.0	1332.8	1332.6	1332.4	1332.3	1332.1	1332.6	1333.8	1335.0	1336.3	1337.5
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



TEST NUMBER: P331477-840

CATALOG NUMBER: S122DIW-S290D970U840-4F0-1E-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°	5.3	6.5	7.0	8.0	8.0	8.4	8.7	8.9	9.0	9.0	9.1
90°	3.3	5.7	8.1	10.4	12.4	14.1	15.9	17.6	19.3	20.4	21.4
92.5°	19.3	19.1	18.9	18.7	19.0	19.8	20.7	21.5	22.4	22.9	23.5
95°	55.6	48.6	41.5	34.4	31.6	33.1	34.6	36.2	37.7	38.7	39.8
97.5°	104.5	84.6	64.6	44.7	36.5	40.0	43.4	46.9	50.4	51.2	52.1
100°	141.4	112.0	82.7	53.3	40.4	44.0	47.7	51.4	55.0	56.8	58.5
102.5°	215.5	209.3	203.1	196.8	178.5	148.0	117.5	87.1	56.6	58.8	61.0
105°	299.8	306.2	312.7	319.1	293.1	234.5	175.9	117.4	58.9	61.2	63.6
107.5°	380.2	385.4	390.5	395.8	363.2	293.1	222.8	152.6	82.4	80.0	77.6
110°	432.0	436.5	441.0	445.5	416.8	354.8	292.9	230.9	168.8	147.4	125.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	480.9	484.8	488.9	492.8	487.2	471.9	456.6	441.2	426.0	347.7	269.4
115°	558.5	562.2	565.8	569.5	573.9	579.3	584.6	590.1	595.4	496.0	396.8
117.5°	628.6	632.7	636.7	640.9	644.7	648.4	652.1	655.8	659.4	635.4	611.4
120°	678.7	681.9	685.1	688.3	691.9	695.7	699.6	703.5	707.3	709.9	712.5
122.5°	722.1	725.5	728.8	732.3	736.1	740.2	744.5	748.6	752.9	754.4	756.0
125°	787.3	790.1	792.8	795.7	799.1	803.1	807.3	811.3	815.4	816.9	818.4
127.5°	847.3	850.3	853.4	856.5	859.6	862.6	865.7	868.7	871.7	873.9	876.2
130°	885.4	888.9	892.2	895.6	898.6	900.9	903.3	905.6	908.1	910.4	912.7
132.5°	923.5	926.5	929.3	932.2	934.8	937.3	939.6	941.9	944.3	946.3	948.4
135°	974.2	977.7	981.1	984.5	987.1	989.1	991.0	992.9	994.9	997.0	999.2
137.5°	1023.9	1026.3	1028.7	1031.1	1033.4	1035.6	1037.7	1040.0	1042.2	1044.3	1046.3
140°	1056.4	1058.1	1059.9	1061.6	1063.6	1065.9	1068.3	1070.7	1073.1	1075.0	1076.9
142.5°	1084.0	1085.6	1087.1	1088.6	1090.8	1093.5	1096.2	1098.9	1101.6	1103.4	1105.1
145°	1125.9	1125.7	1125.5	1125.3	1127.0	1130.6	1134.3	1137.9	1141.6	1143.1	1144.6
147.5°	1163.3	1162.5	1161.6	1160.8	1162.3	1165.9	1169.4	1173.1	1176.7	1177.8	1178.9
150°	1187.3	1185.8	1184.4	1182.9	1183.8	1187.2	1190.6	1194.1	1197.5	1198.8	1200.1
152.5°	1208.0	1206.3	1204.7	1203.0	1203.8	1207.0	1210.3	1213.6	1216.8	1218.1	1219.4
155°	1238.0	1236.1	1234.2	1232.2	1232.5	1235.2	1237.7	1240.3	1242.8	1244.2	1245.5
157.5°	1262.1	1260.4	1258.8	1257.2	1257.3	1259.1	1260.9	1262.6	1264.5	1266.0	1267.4
160°	1276.4	1275.1	1273.7	1272.4	1272.4	1273.7	1275.1	1276.4	1277.6	1278.9	1280.2
162.5°	1288.7	1287.4	1286.1	1284.9	1284.8	1285.9	1287.0	1288.1	1289.2	1290.6	1292.1
165°	1305.3	1303.9	1302.7	1301.4	1301.1	1301.7	1302.3	1303.0	1303.6	1305.1	1306.7
167.5°	1317.6	1316.4	1315.0	1313.7	1313.4	1314.0	1314.6	1315.2	1315.9	1317.3	1318.8
170°	1324.5	1323.3	1322.0	1320.7	1320.3	1320.7	1321.1	1321.6	1322.0	1323.5	1325.0
172.5°	1329.2	1327.9	1326.7	1325.3	1324.9	1325.3	1325.8	1326.2	1326.7	1328.2	1329.6
175°	1334.9	1333.4	1332.0	1330.5	1329.9	1330.4	1330.8	1331.2	1331.6	1333.1	1334.6
177.5°	1336.3	1335.0	1333.8	1332.6	1332.1	1332.3	1332.4	1332.6	1332.8	1334.0	1335.2
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5



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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°	9.5	9.7	9.6	9.7	10.0	9.9	10.0
90°	22.5	23.6	24.3	24.7	25.1	25.7	26.1
92.5°	24.0	24.6	25.0	25.2	25.5	25.8	26.1
95°	40.9	41.9	42.3	42.1	41.9	41.7	41.5
97.5°	52.9	53.8	54.3	54.6	54.8	55.1	55.3
100°	60.2	61.9	62.9	63.3	63.8	64.2	64.6
102.5°	63.2	65.4	66.9	67.5	68.1	68.7	69.3
105°	65.9	68.3	69.9	70.8	71.6	72.5	73.3
107.5°	75.2	72.8	72.0	72.9	73.7	74.6	75.4
110°	104.5	83.1	72.8	73.6	74.5	75.3	76.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	191.3	113.0	74.2	74.9	75.6	76.3	77.1
115°	297.5	198.2	140.9	125.4	110.0	94.5	79.2
117.5°	587.4	563.4	526.0	475.2	424.5	373.9	323.1
120°	715.0	717.6	704.4	675.5	646.5	617.5	588.7
122.5°	757.5	759.0	757.0	751.3	745.8	740.1	734.6
125°	819.9	821.4	822.4	823.1	823.7	824.4	825.1
127.5°	878.3	880.5	881.6	881.8	881.9	882.0	882.1
130°	915.1	917.5	918.6	918.3	918.1	917.9	917.7
132.5°	950.4	952.4	953.3	953.0	952.8	952.6	952.4
135°	1001.3	1003.4	1004.3	1003.9	1003.4	1003.0	1002.6
137.5°	1048.4	1050.6	1051.3	1050.6	1049.8	1049.0	1048.3
140°	1078.8	1080.8	1081.2	1080.2	1079.0	1077.9	1076.9
142.5°	1106.9	1108.6	1108.9	1107.9	1106.8	1105.8	1104.7
145°	1146.1	1147.5	1147.8	1146.7	1145.6	1144.6	1143.5
147.5°	1180.0	1181.1	1181.2	1180.3	1179.4	1178.5	1177.6
150°	1201.3	1202.6	1202.7	1201.7	1200.6	1199.5	1198.5
152.5°	1220.6	1221.9	1221.9	1220.5	1219.1	1217.7	1216.3
155°	1246.7	1248.0	1247.8	1246.1	1244.4	1242.6	1240.9
157.5°	1268.9	1270.3	1270.2	1268.5	1266.9	1265.2	1263.5
160°	1281.4	1282.7	1282.6	1281.1	1279.6	1278.2	1276.7
162.5°	1293.5	1295.1	1294.8	1292.9	1291.1	1289.3	1287.5
165°	1308.2	1309.7	1309.7	1308.2	1306.7	1305.1	1303.6
167.5°	1320.3	1321.8	1321.6	1319.7	1317.8	1315.9	1313.9
170°	1326.5	1328.0	1327.8	1325.9	1323.9	1322.0	1320.1
172.5°	1331.1	1332.6	1332.4	1330.5	1328.6	1326.7	1324.7
175°	1336.2	1337.7	1337.4	1335.1	1333.0	1330.9	1328.8
177.5°	1336.4	1337.6	1337.5	1335.8	1334.3	1332.8	1331.3
180°	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5	1333.5

(END OF REPORT)