

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: P332102-840

Luminaire Tested: **S123DIW-S340D1030U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332102-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S340D1030U840-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1030 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5632.8 lumens  
Efficiency: N/A  
Efficacy: 148.2 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Indirect

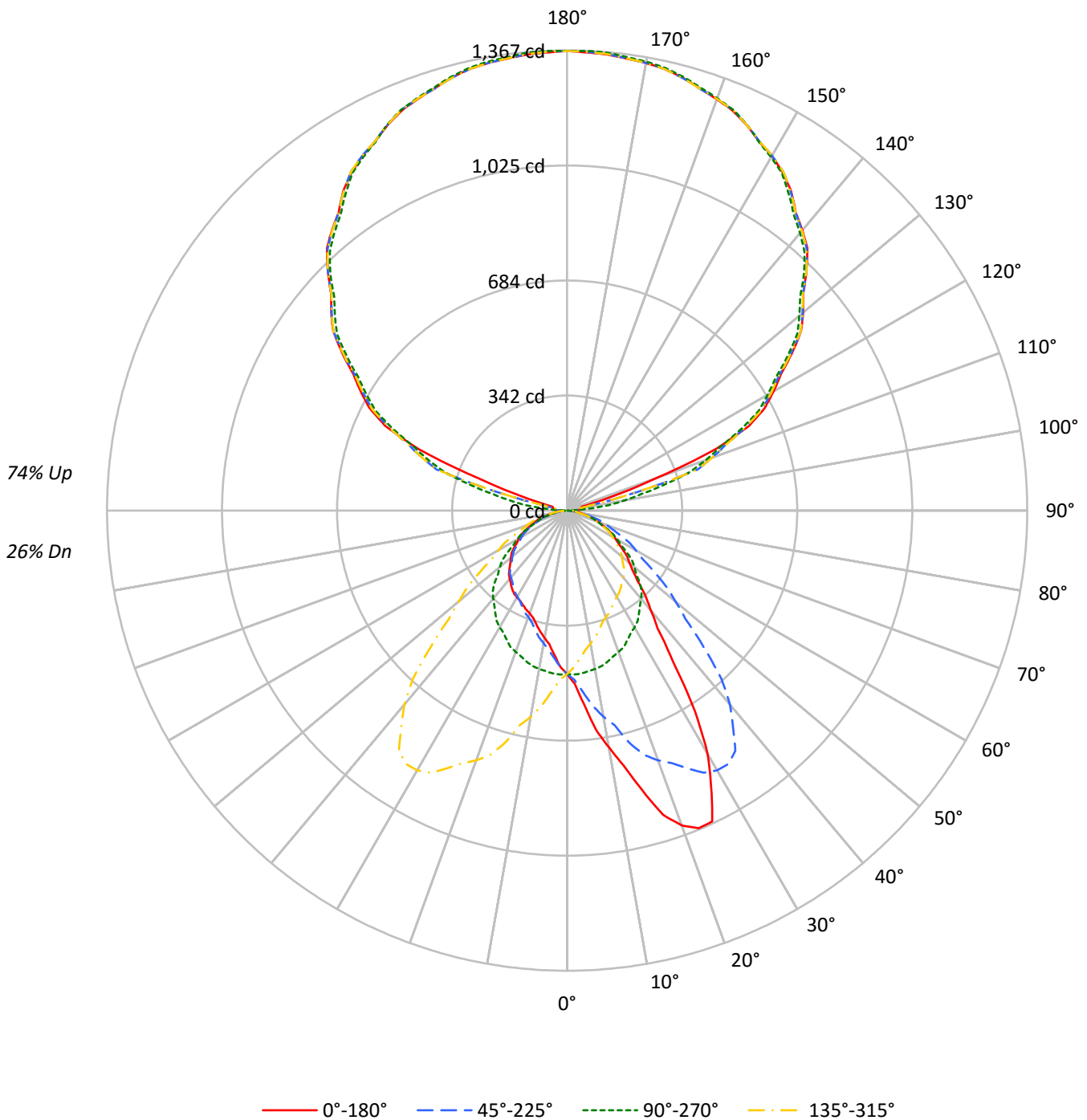
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	93	88	85	81	82	79	76	73	61	59	58	45	44	43	30	30	29	22
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	26	25	19
3	77	68	61	56	68	61	55	50	48	44	40	35	33	30	24	22	21	16
4	70	60	53	47	63	54	48	43	42	38	34	31	29	26	21	20	18	14
5	64	53	46	40	57	48	41	36	38	33	29	28	25	23	19	17	16	12
6	59	48	40	35	53	43	36	32	34	29	26	25	22	20	17	16	14	11
7	55	43	35	30	49	39	32	28	31	26	22	23	20	17	16	14	12	9
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11	8
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	13	11	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	12	10	9	7

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

	0°	90°	180°	270°
0°	5226	5226	5226	5226
5°	6232	5249	4652	5249
10°	7802	5223	4203	5223
15°	9569	5180	3911	5180
20°	11399	5116	3725	5116
25°	12105	5035	3682	5035
30°	10376	4977	3701	4977
35°	7215	4893	3741	4893
40°	5435	4796	3729	4796
45°	4512	4652	3682	4652
50°	4042	4357	3647	4357
55°	3780	4040	3603	4040
60°	3546	3707	3565	3707
65°	3331	3380	3451	3380
70°	3125	3006	3286	3006
75°	2799	2633	3015	2633
80°	2448	2157	2597	2157
85°	1927	1568	1741	1568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.8	0.8
10°-20°	153.4	2.7
20°-30°	257.4	4.6
30°-40°	291.5	5.2
40°-50°	261.4	4.6
50°-60°	210.9	3.7
60°-70°	147.0	2.6
70°-80°	77.3	1.4
80°-90°	22.7	0.4
90°-100°	49.6	0.9
100°-110°	236.6	4.2
110°-120°	568.2	10.1
120°-130°	723.6	12.8
130°-140°	773.1	13.7
140°-150°	723.0	12.8
150°-160°	583.2	10.4
160°-170°	376.4	6.7
170°-180°	129.7	2.3
0°-30°	458.6	8.1
0°-40°	750.1	13.3
0°-60°	1222.4	21.7
0°-90°	1469.4	26.1
90°-120°	854.5	15.2
90°-150°	3074.2	54.6
90°-180°	4163.0	73.9
0°-180°	5632.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	486	486	486	486	486	
5°	577	486	430	486	577	60
15°	859	465	351	465	859	248
25°	1019	424	310	424	1019	447
35°	549	372	285	372	549	357
45°	296	306	242	306	296	235
55°	201	215	192	215	201	181
65°	131	133	136	133	131	130
75°	67	63	72	63	67	72
85°	16	13	14	13	16	19
90°	30	1	30	1	30	15
95°	39	62	39	62	39	32
105°	45	302	45	302	45	102
115°	596	567	596	567	596	551
125°	816	799	816	799	816	728
135°	1005	995	1005	995	1005	775
145°	1159	1148	1159	1148	1159	724
155°	1263	1265	1263	1265	1263	582
165°	1331	1334	1331	1334	1331	376
175°	1360	1365	1360	1365	1360	129
180°	1365	1365	1365	1365	1365	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	515.3	514.9	514.0	514.7	513.2	511.2	511.0	509.1	503.6	503.3	501.8
5°	576.8	575.0	574.7	574.5	571.2	566.7	558.3	557.5	546.2	540.7	533.8
7.5°	656.6	657.5	654.1	651.2	641.1	634.4	625.3	613.7	599.9	585.7	576.4
10°	713.8	721.5	712.0	705.3	699.2	687.7	674.3	657.5	640.9	621.4	606.5
12.5°	775.2	778.9	777.0	770.8	761.3	743.8	720.0	701.6	686.2	653.7	640.6
15°	858.7	873.0	863.8	842.7	843.1	826.5	795.5	761.3	743.2	714.7	675.9
17.5°	947.8	949.5	945.6	928.0	916.3	893.2	864.5	831.9	795.2	760.7	719.5
20°	995.1	993.7	985.5	976.3	956.1	938.3	907.0	870.5	823.4	789.5	744.6
22.5°	1021.5	1019.2	1015.2	1007.5	990.8	971.6	943.4	903.6	858.8	812.1	760.2
25°	1019.2	1022.2	1022.7	1020.6	1014.7	1003.2	981.1	949.3	904.6	844.6	790.5
27.5°	927.0	931.3	943.8	955.0	967.5	980.2	978.5	962.7	929.6	877.8	811.6
30°	834.8	825.3	848.6	878.0	898.0	933.3	953.0	954.2	935.6	891.2	826.7
32.5°	706.7	717.1	727.4	763.6	807.3	846.9	886.3	917.9	921.5	891.9	835.6
35°	549.1	562.1	580.9	599.7	646.7	687.2	756.4	816.6	864.5	870.9	836.4
37.5°	442.5	448.9	460.8	479.7	510.4	558.5	611.9	688.0	757.6	809.3	811.5
40°	386.8	388.7	402.0	416.4	441.3	480.9	529.1	596.4	679.6	751.9	782.0
42.5°	345.0	349.1	354.9	368.6	388.5	418.2	463.0	518.7	595.0	678.1	737.0
45°	296.4	301.1	304.7	313.9	328.0	348.0	379.2	430.1	488.2	574.0	653.3
47.5°	264.4	264.7	267.3	274.3	283.9	298.9	321.0	353.7	407.0	476.7	558.1
50°	241.4	245.1	246.1	251.5	259.0	270.0	288.4	316.2	359.9	421.1	495.9
52.5°	225.2	226.3	228.9	232.9	239.4	248.0	264.0	285.7	320.0	372.2	441.0
55°	201.4	201.4	204.0	207.0	210.8	218.5	229.1	245.1	271.2	311.7	368.7
57.5°	179.4	180.6	182.4	183.3	186.5	191.7	200.5	212.7	232.1	263.3	308.5
60°	164.7	166.8	166.5	168.4	171.3	175.3	182.8	192.7	210.1	235.0	273.2
62.5°	151.9	151.8	151.7	154.0	156.7	160.6	165.5	174.0	188.8	211.0	243.4
65°	130.8	130.4	132.0	133.4	134.3	137.1	140.9	148.5	158.3	174.8	200.0
67.5°	112.1	110.7	111.6	112.1	113.7	115.9	119.5	124.1	131.9	145.1	164.1
70°	99.3	98.1	97.9	98.4	99.8	101.4	104.0	108.5	115.7	126.3	140.2
72.5°	86.1	85.3	85.2	86.3	86.9	88.1	89.9	93.9	99.8	107.8	120.7
75°	67.3	67.3	67.3	67.6	68.3	69.2	70.6	72.7	77.2	82.8	91.5
77.5°	50.4	50.4	50.1	50.1	51.1	51.5	51.8	53.8	56.4	60.1	66.4
80°	39.5	38.4	38.8	39.5	40.0	40.2	40.9	41.4	43.5	45.6	50.1
82.5°	29.4	28.4	28.5	29.6	29.7	29.9	30.6	31.2	32.0	33.9	36.4
85°	15.6	15.6	15.8	15.8	16.0	15.8	16.5	16.7	16.7	17.9	19.3
87.5°	11.7	11.3	11.4	11.4	11.2	11.2	11.2	11.2	11.2	11.3	10.9
90°	30.4	30.0	29.5	29.1	28.6	28.0	27.1	26.2	25.2	24.3	21.4
92.5°	33.6	33.4	33.1	32.8	32.6	31.7	30.3	28.9	27.4	26.0	23.7
95°	38.6	38.6	38.6	38.6	38.6	37.8	36.2	34.6	33.0	31.4	29.0
97.5°	41.8	41.6	41.3	41.1	40.9	39.9	38.1	36.3	34.4	32.6	48.9
100°	42.6	42.4	42.1	41.9	41.7	40.7	38.9	37.1	35.2	33.4	68.7
102.5°	43.4	43.0	42.6	42.2	41.8	44.3	50.0	55.5	61.2	66.8	105.1
105°	44.6	44.1	43.7	43.3	42.8	62.5	102.4	142.4	182.3	222.2	242.5
107.5°	140.2	170.3	200.4	230.4	260.4	290.1	319.4	348.6	377.9	407.2	403.9
110°	278.9	311.1	343.4	375.7	407.9	427.7	435.2	442.6	450.0	457.5	454.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	478.6	485.3	492.2	499.0	505.7	509.1	509.0	508.9	508.7	508.6	506.1
115°	596.4	595.5	594.6	593.7	592.8	591.3	589.0	586.7	584.5	582.2	580.2
117.5°	662.6	662.4	662.2	662.0	661.9	660.9	659.0	657.2	655.4	653.6	652.6
120°	708.0	708.0	708.0	708.0	708.0	707.1	705.3	703.5	701.7	699.8	699.2
122.5°	752.7	752.5	752.2	752.0	751.9	751.1	749.9	748.6	747.4	746.1	745.3
125°	815.5	815.1	814.6	814.2	813.7	813.2	812.8	812.3	811.9	811.4	810.5
127.5°	876.0	876.5	876.9	877.3	877.8	877.7	876.9	876.2	875.5	874.7	873.6
130°	914.9	915.3	915.8	916.3	916.8	916.5	915.5	914.7	913.8	912.9	912.0
132.5°	950.6	951.3	951.9	952.5	953.1	953.0	952.1	951.2	950.3	949.4	948.7
135°	1005.2	1005.8	1006.5	1007.2	1007.8	1007.8	1007.2	1006.5	1005.8	1005.2	1004.3
137.5°	1056.5	1056.9	1057.4	1057.8	1058.3	1058.0	1056.9	1055.8	1054.7	1053.7	1053.2
140°	1087.3	1087.8	1088.2	1088.7	1089.1	1088.9	1088.0	1087.1	1086.2	1085.3	1084.6
142.5°	1115.7	1116.4	1117.0	1117.6	1118.2	1118.2	1117.5	1116.8	1116.1	1115.3	1114.7
145°	1159.3	1159.3	1159.3	1159.3	1159.3	1159.1	1158.7	1158.2	1157.8	1157.3	1156.9
147.5°	1191.8	1192.9	1193.9	1195.0	1196.0	1196.3	1195.8	1195.4	1194.9	1194.5	1194.0
150°	1216.2	1216.9	1217.5	1218.2	1218.9	1219.0	1218.5	1218.1	1217.6	1217.2	1216.7
152.5°	1235.7	1236.7	1237.7	1238.7	1239.8	1239.9	1239.1	1238.3	1237.5	1236.7	1236.4
155°	1262.8	1264.1	1265.6	1266.9	1268.2	1268.4	1267.2	1266.1	1265.0	1263.8	1263.6
157.5°	1285.8	1287.5	1289.3	1291.0	1292.7	1292.9	1291.6	1290.3	1288.9	1287.6	1287.8
160°	1300.3	1301.9	1303.5	1305.0	1306.7	1306.8	1305.5	1304.0	1302.7	1301.4	1301.6
162.5°	1314.1	1315.6	1317.0	1318.4	1319.7	1319.7	1318.2	1316.6	1315.0	1313.5	1313.7
165°	1330.8	1332.3	1333.9	1335.5	1337.1	1337.0	1335.1	1333.3	1331.6	1329.8	1330.0
167.5°	1342.7	1344.5	1346.4	1348.2	1350.0	1350.0	1348.2	1346.4	1344.5	1342.7	1342.7
170°	1350.1	1351.8	1353.6	1355.4	1357.3	1357.3	1355.4	1353.6	1351.8	1350.1	1350.1
172.5°	1354.1	1356.0	1358.1	1360.1	1362.0	1362.1	1360.3	1358.6	1356.8	1354.9	1354.7
175°	1360.2	1362.0	1363.8	1365.6	1367.5	1367.6	1365.9	1364.3	1362.8	1361.2	1361.0
177.5°	1362.0	1363.8	1365.6	1367.5	1369.3	1369.4	1368.0	1366.5	1365.1	1363.6	1363.4
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	500.6	499.2	497.7	495.0	492.7	489.6	488.6	487.5	484.0	481.1	478.8
5°	531.2	525.5	517.4	509.8	503.7	495.4	490.8	485.8	478.8	472.4	467.3
7.5°	563.2	552.1	539.3	525.5	512.6	500.2	490.2	481.2	471.3	462.0	454.6
10°	588.7	572.6	554.7	535.4	519.0	503.0	489.6	477.9	465.1	454.0	444.8
12.5°	617.6	593.9	569.3	545.8	526.3	504.1	487.9	472.9	458.5	445.2	434.9
15°	651.9	621.8	592.6	560.4	530.8	503.0	483.7	464.8	448.2	434.5	421.3
17.5°	683.2	649.0	610.6	571.4	535.6	502.7	475.7	454.4	433.5	416.9	403.7
20°	700.8	662.1	618.5	577.8	538.3	501.6	471.9	446.6	423.9	406.3	391.5
22.5°	716.1	670.7	625.6	582.1	538.1	498.6	464.9	438.8	414.3	397.1	381.3
25°	732.0	677.5	632.4	581.4	532.2	491.2	453.6	423.9	399.5	379.2	363.0
27.5°	745.5	677.1	623.5	568.6	522.8	481.8	441.6	409.8	383.8	361.8	345.4
30°	754.5	678.0	614.3	560.0	513.8	471.5	432.4	400.4	373.1	350.8	335.3
32.5°	760.1	677.4	605.8	547.9	499.5	462.0	422.4	389.3	361.2	339.3	324.4
35°	763.5	673.3	591.2	523.0	476.5	439.9	406.8	372.4	343.1	322.6	305.6
37.5°	756.8	664.6	574.3	499.0	448.0	412.1	384.2	355.0	326.8	304.3	289.6
40°	746.5	658.9	561.1	482.0	428.4	393.8	370.1	341.3	313.6	292.2	278.5
42.5°	726.7	647.5	546.6	463.2	408.1	373.5	351.6	327.6	301.3	281.2	267.6
45°	678.5	622.5	524.8	435.0	378.1	342.3	323.1	305.6	281.9	262.4	250.5
47.5°	611.6	584.9	493.4	405.3	346.7	312.4	292.3	278.3	260.9	245.1	233.9
50°	565.1	554.0	472.2	384.9	325.9	292.2	272.9	260.2	247.7	232.0	221.7
52.5°	511.5	518.3	447.4	363.9	304.6	271.5	253.4	243.3	232.0	218.9	210.0
55°	436.0	460.6	404.5	328.4	272.9	241.4	224.2	215.3	208.6	199.0	191.3
57.5°	365.3	396.7	358.0	292.0	241.8	214.6	198.1	188.4	184.2	179.2	173.0
60°	323.3	354.3	324.9	267.5	221.0	195.0	180.5	172.2	167.9	164.4	159.3
62.5°	285.8	317.2	292.6	242.7	200.4	176.4	163.7	155.6	152.4	150.6	146.1
65°	234.3	261.4	244.9	204.0	171.1	149.9	138.4	132.7	129.7	129.0	126.1
67.5°	190.7	211.3	199.3	169.2	143.3	125.0	115.2	110.4	108.1	107.8	105.6
70°	162.1	181.4	172.2	144.9	122.6	108.3	99.8	95.5	94.1	93.9	92.7
72.5°	139.9	153.3	146.0	123.3	106.0	93.0	86.7	82.3	80.8	81.1	80.3
75°	103.5	113.6	109.4	93.6	79.8	71.3	66.1	63.3	61.9	62.6	61.6
77.5°	74.5	80.9	77.1	66.1	57.6	51.5	47.7	45.9	44.6	44.6	44.2
80°	56.2	60.0	57.9	51.3	44.2	39.1	36.0	34.8	34.1	33.8	33.6
82.5°	40.1	43.2	40.7	36.3	31.4	28.3	26.6	25.0	24.5	24.6	24.4
85°	20.2	21.4	20.5	17.7	15.8	14.3	13.4	12.7	12.2	12.4	12.0
87.5°	10.7	10.3	9.1	7.9	7.0	6.0	5.6	4.7	4.7	5.3	5.6
90°	18.5	15.6	12.6	10.0	7.8	5.6	3.2	1.0	3.2	5.6	7.8
92.5°	21.5	19.4	17.2	16.4	17.0	17.6	18.3	18.9	18.3	17.6	17.0
95°	26.5	24.0	21.5	24.9	34.1	43.4	52.6	61.9	52.6	43.4	34.1
97.5°	65.1	81.4	97.6	107.8	111.9	116.0	120.2	124.3	120.2	116.0	111.9
100°	103.8	139.0	174.1	189.5	184.9	180.5	175.9	171.4	175.9	180.5	184.9
102.5°	143.6	182.0	220.4	237.9	234.7	231.5	228.2	225.0	228.2	231.5	234.7
105°	262.7	283.0	303.3	312.1	309.7	307.2	304.8	302.3	304.8	307.2	309.7
107.5°	400.7	397.6	394.4	391.7	389.8	387.8	385.8	383.8	385.8	387.8	389.8
110°	452.5	450.0	447.6	445.4	443.6	441.8	440.0	438.2	440.0	441.8	443.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	503.6	501.1	498.7	496.7	495.0	493.3	491.7	490.1	491.7	493.3	495.0
115°	578.1	576.1	574.1	572.4	571.1	569.7	568.4	567.0	568.4	569.7	571.1
117.5°	651.6	650.6	649.4	648.1	646.4	644.8	643.1	641.5	643.1	644.8	646.4
120°	698.5	697.8	697.2	695.8	693.8	691.8	689.7	687.7	689.7	691.8	693.8
122.5°	744.4	743.6	742.7	741.4	739.7	738.1	736.4	734.8	736.4	738.1	739.7
125°	809.6	808.7	807.9	806.5	804.7	802.8	801.1	799.3	801.1	802.8	804.7
127.5°	872.6	871.5	870.4	869.0	867.2	865.4	863.5	861.7	863.5	865.4	867.2
130°	911.1	910.2	909.3	908.0	906.2	904.3	902.5	900.7	902.5	904.3	906.2
132.5°	948.0	947.3	946.5	945.2	943.4	941.6	939.9	938.1	939.9	941.6	943.4
135°	1003.4	1002.5	1001.6	1000.5	999.1	997.7	996.4	995.0	996.4	997.7	999.1
137.5°	1052.7	1052.2	1051.7	1050.6	1048.8	1047.1	1045.4	1043.7	1045.4	1047.1	1048.8
140°	1084.0	1083.3	1082.6	1081.6	1080.3	1078.9	1077.5	1076.2	1077.5	1078.9	1080.3
142.5°	1114.0	1113.3	1112.7	1111.7	1110.2	1108.9	1107.5	1106.2	1107.5	1108.9	1110.2
145°	1156.4	1156.0	1155.5	1154.5	1153.0	1151.3	1149.7	1148.2	1149.7	1151.3	1153.0
147.5°	1193.6	1193.1	1192.7	1191.9	1190.8	1189.8	1188.8	1187.8	1188.8	1189.8	1190.8
150°	1216.3	1215.8	1215.4	1214.8	1214.2	1213.5	1212.7	1212.1	1212.7	1213.5	1214.2
152.5°	1236.1	1235.9	1235.6	1235.3	1235.0	1234.7	1234.4	1234.1	1234.4	1234.7	1235.0
155°	1263.3	1263.1	1262.9	1263.0	1263.5	1263.9	1264.4	1264.9	1264.4	1263.9	1263.5
157.5°	1288.0	1288.3	1288.5	1288.6	1288.7	1288.7	1288.8	1288.8	1288.8	1288.7	1288.7
160°	1301.8	1302.0	1302.2	1302.5	1302.7	1302.9	1303.1	1303.4	1303.1	1302.9	1302.7
162.5°	1314.0	1314.2	1314.4	1314.8	1315.5	1316.1	1316.6	1317.2	1316.6	1316.1	1315.5
165°	1330.2	1330.4	1330.7	1331.1	1331.8	1332.5	1333.1	1333.8	1333.1	1332.5	1331.8
167.5°	1342.7	1342.7	1342.7	1343.2	1344.1	1345.0	1345.9	1346.8	1345.9	1345.0	1344.1
170°	1350.1	1350.1	1350.1	1350.5	1351.4	1352.3	1353.2	1354.1	1353.2	1352.3	1351.4
172.5°	1354.5	1354.3	1354.2	1354.6	1355.7	1356.9	1357.9	1359.0	1357.9	1356.9	1355.7
175°	1360.8	1360.5	1360.3	1360.8	1361.9	1363.0	1364.1	1365.2	1364.1	1363.0	1361.9
177.5°	1363.3	1363.1	1362.9	1363.3	1364.2	1365.1	1365.9	1366.9	1365.9	1365.1	1364.2
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	477.5	476.2	474.3	471.5	469.2	465.6	465.6	466.2	466.2	466.1	465.6
5°	463.0	459.5	455.2	450.3	445.1	439.9	439.0	437.1	435.8	434.7	433.6
7.5°	447.7	441.4	435.3	428.4	422.0	416.9	413.2	410.2	408.3	406.2	404.7
10°	437.4	429.6	422.3	415.1	407.0	400.6	396.7	393.8	391.7	389.8	388.9
12.5°	425.2	416.3	408.2	401.2	392.5	386.0	382.1	380.8	378.4	374.4	372.3
15°	407.3	399.0	389.4	378.8	374.6	366.6	362.0	359.9	358.5	355.5	354.6
17.5°	391.9	381.2	370.3	362.4	354.6	348.1	345.6	343.0	341.1	338.6	337.8
20°	379.7	370.1	360.2	351.7	343.5	336.4	334.3	332.4	330.5	329.4	328.4
22.5°	367.3	357.7	349.4	341.5	332.8	328.1	325.9	323.8	322.4	321.6	320.7
25°	349.8	341.3	332.1	325.2	318.1	315.0	313.6	312.5	311.4	310.3	310.0
27.5°	334.3	325.0	317.6	310.9	305.9	303.4	301.9	301.4	301.6	302.1	302.4
30°	322.6	314.1	308.0	302.4	297.6	295.3	295.0	295.0	296.0	296.2	296.7
32.5°	311.8	304.9	298.7	293.3	289.7	288.1	289.0	289.0	289.7	290.3	291.2
35°	296.2	290.0	285.4	280.6	277.6	278.3	278.8	279.2	280.4	281.9	282.8
37.5°	281.2	276.0	271.0	267.4	266.0	267.2	268.4	269.3	270.7	271.9	272.8
40°	270.5	266.5	261.9	258.5	259.0	259.7	260.6	261.9	263.1	263.8	264.7
42.5°	260.5	256.4	252.8	250.0	250.7	251.7	252.2	252.8	254.2	255.5	256.0
45°	245.4	242.1	238.8	237.1	237.6	238.1	238.5	239.2	240.4	241.4	241.7
47.5°	228.3	226.0	223.8	222.2	223.0	222.8	223.4	224.9	225.2	225.8	227.1
50°	217.4	215.3	212.7	212.2	212.2	212.2	212.5	214.3	214.3	215.3	216.2
52.5°	205.3	204.0	202.4	201.5	201.1	201.1	202.1	203.0	203.4	204.7	205.7
55°	187.5	186.1	184.7	184.0	183.5	184.0	185.8	186.3	187.5	188.2	188.9
57.5°	169.0	167.8	166.7	166.3	166.2	166.8	167.8	169.3	169.6	171.8	172.8
60°	156.7	155.0	154.1	154.1	153.6	155.7	155.3	157.6	158.1	159.6	161.2
62.5°	144.1	141.9	141.5	141.5	142.2	142.8	143.4	144.4	145.7	147.4	148.8
65°	123.7	122.6	124.2	124.0	123.5	124.9	124.9	126.1	127.5	129.2	131.8
67.5°	104.5	103.9	104.0	104.0	104.7	105.5	106.2	107.2	109.0	110.7	112.4
70°	91.5	92.2	91.1	92.0	92.7	92.9	93.4	94.8	96.6	97.9	99.8
72.5°	78.9	78.9	79.0	79.4	80.1	80.5	81.0	82.6	84.6	85.6	87.2
75°	60.7	60.5	61.2	61.2	62.3	62.8	63.3	64.0	65.8	67.3	68.5
77.5°	44.3	44.6	44.4	45.2	44.9	45.0	46.5	47.2	47.4	50.2	50.8
80°	33.4	33.8	34.1	34.3	34.5	34.1	35.7	36.5	36.5	38.1	39.3
82.5°	24.0	24.2	24.8	25.1	25.1	25.7	25.8	26.3	26.9	27.6	29.1
85°	12.0	12.7	12.9	12.7	12.9	12.4	13.1	13.4	13.6	13.6	13.6
87.5°	5.8	6.5	6.9	7.7	8.1	8.8	9.0	8.8	9.0	9.7	9.1
90°	10.0	12.6	15.6	18.5	21.4	24.3	25.2	26.2	27.1	28.0	28.6
92.5°	16.4	17.2	19.4	21.5	23.7	26.0	27.4	28.9	30.3	31.7	32.6
95°	24.9	21.5	24.0	26.5	29.0	31.4	33.0	34.6	36.2	37.8	38.6
97.5°	107.8	97.6	81.4	65.1	48.9	32.6	34.4	36.3	38.1	39.9	40.9
100°	189.5	174.1	139.0	103.8	68.7	33.4	35.2	37.1	38.9	40.7	41.7
102.5°	237.9	220.4	182.0	143.6	105.1	66.8	61.2	55.5	50.0	44.3	41.8
105°	312.1	303.3	283.0	262.7	242.5	222.2	182.3	142.4	102.4	62.5	42.8
107.5°	391.7	394.4	397.6	400.7	403.9	407.2	377.9	348.6	319.4	290.1	260.4
110°	445.4	447.6	450.0	452.5	454.9	457.5	450.0	442.6	435.2	427.7	407.9



TEST NUMBER: P332102-840

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	496.7	498.7	501.1	503.6	506.1	508.6	508.7	508.9	509.0	509.1	505.7
115°	572.4	574.1	576.1	578.1	580.2	582.2	584.5	586.7	589.0	591.3	592.8
117.5°	648.1	649.4	650.6	651.6	652.6	653.6	655.4	657.2	659.0	660.9	661.9
120°	695.8	697.2	697.8	698.5	699.2	699.8	701.7	703.5	705.3	707.1	708.0
122.5°	741.4	742.7	743.6	744.4	745.3	746.1	747.4	748.6	749.9	751.1	751.9
125°	806.5	807.9	808.7	809.6	810.5	811.4	811.9	812.3	812.8	813.2	813.7
127.5°	869.0	870.4	871.5	872.6	873.6	874.7	875.5	876.2	876.9	877.7	877.8
130°	908.0	909.3	910.2	911.1	912.0	912.9	913.8	914.7	915.5	916.5	916.8
132.5°	945.2	946.5	947.3	948.0	948.7	949.4	950.3	951.2	952.1	953.0	953.1
135°	1000.5	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.5	1007.2	1007.8	1007.8
137.5°	1050.6	1051.7	1052.2	1052.7	1053.2	1053.7	1054.7	1055.8	1056.9	1058.0	1058.3
140°	1081.6	1082.6	1083.3	1084.0	1084.6	1085.3	1086.2	1087.1	1088.0	1088.9	1089.1
142.5°	1111.7	1112.7	1113.3	1114.0	1114.7	1115.3	1116.1	1116.8	1117.5	1118.2	1118.2
145°	1154.5	1155.5	1156.0	1156.4	1156.9	1157.3	1157.8	1158.2	1158.7	1159.1	1159.3
147.5°	1191.9	1192.7	1193.1	1193.6	1194.0	1194.5	1194.9	1195.4	1195.8	1196.3	1196.0
150°	1214.8	1215.4	1215.8	1216.3	1216.7	1217.2	1217.6	1218.1	1218.5	1219.0	1218.9
152.5°	1235.3	1235.6	1235.9	1236.1	1236.4	1236.7	1237.5	1238.3	1239.1	1239.9	1239.8
155°	1263.0	1262.9	1263.1	1263.3	1263.6	1263.8	1265.0	1266.1	1267.2	1268.4	1268.2
157.5°	1288.6	1288.5	1288.3	1288.0	1287.8	1287.6	1288.9	1290.3	1291.6	1292.9	1292.7
160°	1302.5	1302.2	1302.0	1301.8	1301.6	1301.4	1302.7	1304.0	1305.5	1306.8	1306.7
162.5°	1314.8	1314.4	1314.2	1314.0	1313.7	1313.5	1315.0	1316.6	1318.2	1319.7	1319.7
165°	1331.1	1330.7	1330.4	1330.2	1330.0	1329.8	1331.6	1333.3	1335.1	1337.0	1337.1
167.5°	1343.2	1342.7	1342.7	1342.7	1342.7	1342.7	1344.5	1346.4	1348.2	1350.0	1350.0
170°	1350.5	1350.1	1350.1	1350.1	1350.1	1350.1	1351.8	1353.6	1355.4	1357.3	1357.3
172.5°	1354.6	1354.2	1354.3	1354.5	1354.7	1354.9	1356.8	1358.6	1360.3	1362.1	1362.0
175°	1360.8	1360.3	1360.5	1360.8	1361.0	1361.2	1362.8	1364.3	1365.9	1367.6	1367.5
177.5°	1363.3	1362.9	1363.1	1363.3	1363.4	1363.6	1365.1	1366.5	1368.0	1369.4	1369.3
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



TEST NUMBER: P332102-840

CATALOG NUMBER: S123DIW-S340D1030U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	464.3	464.1	465.4	464.5	465.4	464.1	464.3	465.6	466.1	466.2	466.2
5°	432.2	432.9	430.5	430.5	430.5	432.9	432.2	433.6	434.7	435.8	437.1
7.5°	403.5	402.5	402.6	401.3	402.6	402.5	403.5	404.7	406.2	408.3	410.2
10°	386.1	384.7	384.2	384.5	384.2	384.7	386.1	388.9	389.8	391.7	393.8
12.5°	371.5	371.3	368.2	368.2	368.2	371.3	371.5	372.3	374.4	378.4	380.8
15°	354.6	350.1	349.6	351.0	349.6	350.1	354.6	354.6	355.5	358.5	359.9
17.5°	337.5	335.1	335.3	334.6	335.3	335.1	337.5	337.8	338.6	341.1	343.0
20°	328.4	327.0	326.8	325.2	326.8	327.0	328.4	328.4	329.4	330.5	332.4
22.5°	320.1	319.7	319.8	318.0	319.8	319.7	320.1	320.7	321.6	322.4	323.8
25°	309.8	311.0	310.0	310.0	310.0	311.0	309.8	310.0	310.3	311.4	312.5
27.5°	302.9	302.9	302.4	302.4	302.4	302.9	302.9	302.4	302.1	301.6	301.4
30°	297.6	297.4	297.8	297.8	297.8	297.4	297.6	296.7	296.2	296.0	295.0
32.5°	292.4	292.7	292.8	293.0	292.8	292.7	292.4	291.2	290.3	289.7	289.0
35°	284.2	284.5	285.2	284.7	285.2	284.5	284.2	282.8	281.9	280.4	279.2
37.5°	273.2	274.3	274.1	274.4	274.1	274.3	273.2	272.8	271.9	270.7	269.3
40°	264.9	265.6	265.4	265.4	265.4	265.6	264.9	264.7	263.8	263.1	261.9
42.5°	256.4	256.9	256.3	256.0	256.3	256.9	256.4	256.0	255.5	254.2	252.8
45°	242.6	242.1	242.8	241.9	242.8	242.1	242.6	241.7	241.4	240.4	239.2
47.5°	227.0	227.5	227.7	228.4	227.7	227.5	227.0	227.1	225.8	225.2	224.9
50°	216.7	218.1	218.1	217.8	218.1	218.1	216.7	216.2	215.3	214.3	214.3
52.5°	206.5	207.1	208.1	208.0	208.1	207.1	206.5	205.7	204.7	203.4	203.0
55°	190.8	191.3	191.8	192.0	191.8	191.3	190.8	188.9	188.2	187.5	186.3
57.5°	174.5	174.3	175.4	175.8	175.4	174.3	174.5	172.8	171.8	169.6	169.3
60°	163.0	163.0	164.9	165.6	164.9	163.0	163.0	161.2	159.6	158.1	157.6
62.5°	150.8	151.6	153.4	152.5	153.4	151.6	150.8	148.8	147.4	145.7	144.4
65°	132.9	134.8	134.6	135.5	134.6	134.8	132.9	131.8	129.2	127.5	126.1
67.5°	114.2	115.4	117.1	117.2	117.1	115.4	114.2	112.4	110.7	109.0	107.2
70°	101.6	102.8	103.7	104.4	103.7	102.8	101.6	99.8	97.9	96.6	94.8
72.5°	89.4	90.0	92.3	91.3	92.3	90.0	89.4	87.2	85.6	84.6	82.6
75°	70.1	71.8	73.2	72.5	73.2	71.8	70.1	68.5	67.3	65.8	64.0
77.5°	51.8	53.5	54.1	53.5	54.1	53.5	51.8	50.8	50.2	47.4	47.2
80°	40.9	40.7	42.1	41.9	42.1	40.7	40.9	39.3	38.1	36.5	36.5
82.5°	30.0	29.8	30.4	30.6	30.4	29.8	30.0	29.1	27.6	26.9	26.3
85°	14.5	15.2	14.3	14.1	14.3	15.2	14.5	13.6	13.6	13.6	13.4
87.5°	9.2	9.3	9.2	9.1	9.2	9.3	9.2	9.1	9.7	9.0	8.8
90°	29.1	29.5	30.0	30.4	30.0	29.5	29.1	28.6	28.0	27.1	26.2
92.5°	32.8	33.1	33.4	33.6	33.4	33.1	32.8	32.6	31.7	30.3	28.9
95°	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	37.8	36.2	34.6
97.5°	41.1	41.3	41.6	41.8	41.6	41.3	41.1	40.9	39.9	38.1	36.3
100°	41.9	42.1	42.4	42.6	42.4	42.1	41.9	41.7	40.7	38.9	37.1
102.5°	42.2	42.6	43.0	43.4	43.0	42.6	42.2	41.8	44.3	50.0	55.5
105°	43.3	43.7	44.1	44.6	44.1	43.7	43.3	42.8	62.5	102.4	142.4
107.5°	230.4	200.4	170.3	140.2	170.3	200.4	230.4	260.4	290.1	319.4	348.6
110°	375.7	343.4	311.1	278.9	311.1	343.4	375.7	407.9	427.7	435.2	442.6



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	499.0	492.2	485.3	478.6	485.3	492.2	499.0	505.7	509.1	509.0	508.9
115°	593.7	594.6	595.5	596.4	595.5	594.6	593.7	592.8	591.3	589.0	586.7
117.5°	662.0	662.2	662.4	662.6	662.4	662.2	662.0	661.9	660.9	659.0	657.2
120°	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	707.1	705.3	703.5
122.5°	752.0	752.2	752.5	752.7	752.5	752.2	752.0	751.9	751.1	749.9	748.6
125°	814.2	814.6	815.1	815.5	815.1	814.6	814.2	813.7	813.2	812.8	812.3
127.5°	877.3	876.9	876.5	876.0	876.5	876.9	877.3	877.8	877.7	876.9	876.2
130°	916.3	915.8	915.3	914.9	915.3	915.8	916.3	916.8	916.5	915.5	914.7
132.5°	952.5	951.9	951.3	950.6	951.3	951.9	952.5	953.1	953.0	952.1	951.2
135°	1007.2	1006.5	1005.8	1005.2	1005.8	1006.5	1007.2	1007.8	1007.8	1007.2	1006.5
137.5°	1057.8	1057.4	1056.9	1056.5	1056.9	1057.4	1057.8	1058.3	1058.0	1056.9	1055.8
140°	1088.7	1088.2	1087.8	1087.3	1087.8	1088.2	1088.7	1089.1	1088.9	1088.0	1087.1
142.5°	1117.6	1117.0	1116.4	1115.7	1116.4	1117.0	1117.6	1118.2	1118.2	1117.5	1116.8
145°	1159.3	1159.3	1159.3	1159.3	1159.3	1159.3	1159.3	1159.3	1159.1	1158.7	1158.2
147.5°	1195.0	1193.9	1192.9	1191.8	1192.9	1193.9	1195.0	1196.0	1196.3	1195.8	1195.4
150°	1218.2	1217.5	1216.9	1216.2	1216.9	1217.5	1218.2	1218.9	1219.0	1218.5	1218.1
152.5°	1238.7	1237.7	1236.7	1235.7	1236.7	1237.7	1238.7	1239.8	1239.9	1239.1	1238.3
155°	1266.9	1265.6	1264.1	1262.8	1264.1	1265.6	1266.9	1268.2	1268.4	1267.2	1266.1
157.5°	1291.0	1289.3	1287.5	1285.8	1287.5	1289.3	1291.0	1292.7	1292.9	1291.6	1290.3
160°	1305.0	1303.5	1301.9	1300.3	1301.9	1303.5	1305.0	1306.7	1306.8	1305.5	1304.0
162.5°	1318.4	1317.0	1315.6	1314.1	1315.6	1317.0	1318.4	1319.7	1319.7	1318.2	1316.6
165°	1335.5	1333.9	1332.3	1330.8	1332.3	1333.9	1335.5	1337.1	1337.0	1335.1	1333.3
167.5°	1348.2	1346.4	1344.5	1342.7	1344.5	1346.4	1348.2	1350.0	1350.0	1348.2	1346.4
170°	1355.4	1353.6	1351.8	1350.1	1351.8	1353.6	1355.4	1357.3	1357.3	1355.4	1353.6
172.5°	1360.1	1358.1	1356.0	1354.1	1356.0	1358.1	1360.1	1362.0	1362.1	1360.3	1358.6
175°	1365.6	1363.8	1362.0	1360.2	1362.0	1363.8	1365.6	1367.5	1367.6	1365.9	1364.3
177.5°	1367.5	1365.6	1363.8	1362.0	1363.8	1365.6	1367.5	1369.3	1369.4	1368.0	1366.5
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	465.6	465.6	469.2	471.5	474.3	476.2	477.5	478.8	481.1	484.0	487.5
5°	439.0	439.9	445.1	450.3	455.2	459.5	463.0	467.3	472.4	478.8	485.8
7.5°	413.2	416.9	422.0	428.4	435.3	441.4	447.7	454.6	462.0	471.3	481.2
10°	396.7	400.6	407.0	415.1	422.3	429.6	437.4	444.8	454.0	465.1	477.9
12.5°	382.1	386.0	392.5	401.2	408.2	416.3	425.2	434.9	445.2	458.5	472.9
15°	362.0	366.6	374.6	378.8	389.4	399.0	407.3	421.3	434.5	448.2	464.8
17.5°	345.6	348.1	354.6	362.4	370.3	381.2	391.9	403.7	416.9	433.5	454.4
20°	334.3	336.4	343.5	351.7	360.2	370.1	379.7	391.5	406.3	423.9	446.6
22.5°	325.9	328.1	332.8	341.5	349.4	357.7	367.3	381.3	397.1	414.3	438.8
25°	313.6	315.0	318.1	325.2	332.1	341.3	349.8	363.0	379.2	399.5	423.9
27.5°	301.9	303.4	305.9	310.9	317.6	325.0	334.3	345.4	361.8	383.8	409.8
30°	295.0	295.3	297.6	302.4	308.0	314.1	322.6	335.3	350.8	373.1	400.4
32.5°	289.0	288.1	289.7	293.3	298.7	304.9	311.8	324.4	339.3	361.2	389.3
35°	278.8	278.3	277.6	280.6	285.4	290.0	296.2	305.6	322.6	343.1	372.4
37.5°	268.4	267.2	266.0	267.4	271.0	276.0	281.2	289.6	304.3	326.8	355.0
40°	260.6	259.7	259.0	258.5	261.9	266.5	270.5	278.5	292.2	313.6	341.3
42.5°	252.2	251.7	250.7	250.0	252.8	256.4	260.5	267.6	281.2	301.3	327.6
45°	238.5	238.1	237.6	237.1	238.8	242.1	245.4	250.5	262.4	281.9	305.6
47.5°	223.4	222.8	223.0	222.2	223.8	226.0	228.3	233.9	245.1	260.9	278.3
50°	212.5	212.2	212.2	212.2	212.7	215.3	217.4	221.7	232.0	247.7	260.2
52.5°	202.1	201.1	201.1	201.5	202.4	204.0	205.3	210.0	218.9	232.0	243.3
55°	185.8	184.0	183.5	184.0	184.7	186.1	187.5	191.3	199.0	208.6	215.3
57.5°	167.8	166.8	166.2	166.3	166.7	167.8	169.0	173.0	179.2	184.2	188.4
60°	155.3	155.7	153.6	154.1	154.1	155.0	156.7	159.3	164.4	167.9	172.2
62.5°	143.4	142.8	142.2	141.5	141.5	141.9	144.1	146.1	150.6	152.4	155.6
65°	124.9	124.9	123.5	124.0	124.2	122.6	123.7	126.1	129.0	129.7	132.7
67.5°	106.2	105.5	104.7	104.0	104.0	103.9	104.5	105.6	107.8	108.1	110.4
70°	93.4	92.9	92.7	92.0	91.1	92.2	91.5	92.7	93.9	94.1	95.5
72.5°	81.0	80.5	80.1	79.4	79.0	78.9	78.9	80.3	81.1	80.8	82.3
75°	63.3	62.8	62.3	61.2	61.2	60.5	60.7	61.6	62.6	61.9	63.3
77.5°	46.5	45.0	44.9	45.2	44.4	44.6	44.3	44.2	44.6	44.6	45.9
80°	35.7	34.1	34.5	34.3	34.1	33.8	33.4	33.6	33.8	34.1	34.8
82.5°	25.8	25.7	25.1	25.1	24.8	24.2	24.0	24.4	24.6	24.5	25.0
85°	13.1	12.4	12.9	12.7	12.9	12.7	12.0	12.0	12.4	12.2	12.7
87.5°	9.0	8.8	8.1	7.7	6.9	6.5	5.8	5.6	5.3	4.7	4.7
90°	25.2	24.3	21.4	18.5	15.6	12.6	10.0	7.8	5.6	3.2	1.0
92.5°	27.4	26.0	23.7	21.5	19.4	17.2	16.4	17.0	17.6	18.3	18.9
95°	33.0	31.4	29.0	26.5	24.0	21.5	24.9	34.1	43.4	52.6	61.9
97.5°	34.4	32.6	48.9	65.1	81.4	97.6	107.8	111.9	116.0	120.2	124.3
100°	35.2	33.4	68.7	103.8	139.0	174.1	189.5	184.9	180.5	175.9	171.4
102.5°	61.2	66.8	105.1	143.6	182.0	220.4	237.9	234.7	231.5	228.2	225.0
105°	182.3	222.2	242.5	262.7	283.0	303.3	312.1	309.7	307.2	304.8	302.3
107.5°	377.9	407.2	403.9	400.7	397.6	394.4	391.7	389.8	387.8	385.8	383.8
110°	450.0	457.5	454.9	452.5	450.0	447.6	445.4	443.6	441.8	440.0	438.2



TEST NUMBER: P332102-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	508.7	508.6	506.1	503.6	501.1	498.7	496.7	495.0	493.3	491.7	490.1
115°	584.5	582.2	580.2	578.1	576.1	574.1	572.4	571.1	569.7	568.4	567.0
117.5°	655.4	653.6	652.6	651.6	650.6	649.4	648.1	646.4	644.8	643.1	641.5
120°	701.7	699.8	699.2	698.5	697.8	697.2	695.8	693.8	691.8	689.7	687.7
122.5°	747.4	746.1	745.3	744.4	743.6	742.7	741.4	739.7	738.1	736.4	734.8
125°	811.9	811.4	810.5	809.6	808.7	807.9	806.5	804.7	802.8	801.1	799.3
127.5°	875.5	874.7	873.6	872.6	871.5	870.4	869.0	867.2	865.4	863.5	861.7
130°	913.8	912.9	912.0	911.1	910.2	909.3	908.0	906.2	904.3	902.5	900.7
132.5°	950.3	949.4	948.7	948.0	947.3	946.5	945.2	943.4	941.6	939.9	938.1
135°	1005.8	1005.2	1004.3	1003.4	1002.5	1001.6	1000.5	999.1	997.7	996.4	995.0
137.5°	1054.7	1053.7	1053.2	1052.7	1052.2	1051.7	1050.6	1048.8	1047.1	1045.4	1043.7
140°	1086.2	1085.3	1084.6	1084.0	1083.3	1082.6	1081.6	1080.3	1078.9	1077.5	1076.2
142.5°	1116.1	1115.3	1114.7	1114.0	1113.3	1112.7	1111.7	1110.2	1108.9	1107.5	1106.2
145°	1157.8	1157.3	1156.9	1156.4	1156.0	1155.5	1154.5	1153.0	1151.3	1149.7	1148.2
147.5°	1194.9	1194.5	1194.0	1193.6	1193.1	1192.7	1191.9	1190.8	1189.8	1188.8	1187.8
150°	1217.6	1217.2	1216.7	1216.3	1215.8	1215.4	1214.8	1214.2	1213.5	1212.7	1212.1
152.5°	1237.5	1236.7	1236.4	1236.1	1235.9	1235.6	1235.3	1235.0	1234.7	1234.4	1234.1
155°	1265.0	1263.8	1263.6	1263.3	1263.1	1262.9	1263.0	1263.5	1263.9	1264.4	1264.9
157.5°	1288.9	1287.6	1287.8	1288.0	1288.3	1288.5	1288.6	1288.7	1288.7	1288.8	1288.8
160°	1302.7	1301.4	1301.6	1301.8	1302.0	1302.2	1302.5	1302.7	1302.9	1303.1	1303.4
162.5°	1315.0	1313.5	1313.7	1314.0	1314.2	1314.4	1314.8	1315.5	1316.1	1316.6	1317.2
165°	1331.6	1329.8	1330.0	1330.2	1330.4	1330.7	1331.1	1331.8	1332.5	1333.1	1333.8
167.5°	1344.5	1342.7	1342.7	1342.7	1342.7	1342.7	1343.2	1344.1	1345.0	1345.9	1346.8
170°	1351.8	1350.1	1350.1	1350.1	1350.1	1350.1	1350.5	1351.4	1352.3	1353.2	1354.1
172.5°	1356.8	1354.9	1354.7	1354.5	1354.3	1354.2	1354.6	1355.7	1356.9	1357.9	1359.0
175°	1362.8	1361.2	1361.0	1360.8	1360.5	1360.3	1360.8	1361.9	1363.0	1364.1	1365.2
177.5°	1365.1	1363.6	1363.4	1363.3	1363.1	1362.9	1363.3	1364.2	1365.1	1365.9	1366.9
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	488.6	489.6	492.7	495.0	497.7	499.2	500.6	501.8	503.3	503.6	509.1
5°	490.8	495.4	503.7	509.8	517.4	525.5	531.2	533.8	540.7	546.2	557.5
7.5°	490.2	500.2	512.6	525.5	539.3	552.1	563.2	576.4	585.7	599.9	613.7
10°	489.6	503.0	519.0	535.4	554.7	572.6	588.7	606.5	621.4	640.9	657.5
12.5°	487.9	504.1	526.3	545.8	569.3	593.9	617.6	640.6	653.7	686.2	701.6
15°	483.7	503.0	530.8	560.4	592.6	621.8	651.9	675.9	714.7	743.2	761.3
17.5°	475.7	502.7	535.6	571.4	610.6	649.0	683.2	719.5	760.7	795.2	831.9
20°	471.9	501.6	538.3	577.8	618.5	662.1	700.8	744.6	789.5	823.4	870.5
22.5°	464.9	498.6	538.1	582.1	625.6	670.7	716.1	760.2	812.1	858.8	903.6
25°	453.6	491.2	532.2	581.4	632.4	677.5	732.0	790.5	844.6	904.6	949.3
27.5°	441.6	481.8	522.8	568.6	623.5	677.1	745.5	811.6	877.8	929.6	962.7
30°	432.4	471.5	513.8	560.0	614.3	678.0	754.5	826.7	891.2	935.6	954.2
32.5°	422.4	462.0	499.5	547.9	605.8	677.4	760.1	835.6	891.9	921.5	917.9
35°	406.8	439.9	476.5	523.0	591.2	673.3	763.5	836.4	870.9	864.5	816.6
37.5°	384.2	412.1	448.0	499.0	574.3	664.6	756.8	811.5	809.3	757.6	688.0
40°	370.1	393.8	428.4	482.0	561.1	658.9	746.5	782.0	751.9	679.6	596.4
42.5°	351.6	373.5	408.1	463.2	546.6	647.5	726.7	737.0	678.1	595.0	518.7
45°	323.1	342.3	378.1	435.0	524.8	622.5	678.5	653.3	574.0	488.2	430.1
47.5°	292.3	312.4	346.7	405.3	493.4	584.9	611.6	558.1	476.7	407.0	353.7
50°	272.9	292.2	325.9	384.9	472.2	554.0	565.1	495.9	421.1	359.9	316.2
52.5°	253.4	271.5	304.6	363.9	447.4	518.3	511.5	441.0	372.2	320.0	285.7
55°	224.2	241.4	272.9	328.4	404.5	460.6	436.0	368.7	311.7	271.2	245.1
57.5°	198.1	214.6	241.8	292.0	358.0	396.7	365.3	308.5	263.3	232.1	212.7
60°	180.5	195.0	221.0	267.5	324.9	354.3	323.3	273.2	235.0	210.1	192.7
62.5°	163.7	176.4	200.4	242.7	292.6	317.2	285.8	243.4	211.0	188.8	174.0
65°	138.4	149.9	171.1	204.0	244.9	261.4	234.3	200.0	174.8	158.3	148.5
67.5°	115.2	125.0	143.3	169.2	199.3	211.3	190.7	164.1	145.1	131.9	124.1
70°	99.8	108.3	122.6	144.9	172.2	181.4	162.1	140.2	126.3	115.7	108.5
72.5°	86.7	93.0	106.0	123.3	146.0	153.3	139.9	120.7	107.8	99.8	93.9
75°	66.1	71.3	79.8	93.6	109.4	113.6	103.5	91.5	82.8	77.2	72.7
77.5°	47.7	51.5	57.6	66.1	77.1	80.9	74.5	66.4	60.1	56.4	53.8
80°	36.0	39.1	44.2	51.3	57.9	60.0	56.2	50.1	45.6	43.5	41.4
82.5°	26.6	28.3	31.4	36.3	40.7	43.2	40.1	36.4	33.9	32.0	31.2
85°	13.4	14.3	15.8	17.7	20.5	21.4	20.2	19.3	17.9	16.7	16.7
87.5°	5.6	6.0	7.0	7.9	9.1	10.3	10.7	10.9	11.3	11.2	11.2
90°	3.2	5.6	7.8	10.0	12.6	15.6	18.5	21.4	24.3	25.2	26.2
92.5°	18.3	17.6	17.0	16.4	17.2	19.4	21.5	23.7	26.0	27.4	28.9
95°	52.6	43.4	34.1	24.9	21.5	24.0	26.5	29.0	31.4	33.0	34.6
97.5°	120.2	116.0	111.9	107.8	97.6	81.4	65.1	48.9	32.6	34.4	36.3
100°	175.9	180.5	184.9	189.5	174.1	139.0	103.8	68.7	33.4	35.2	37.1
102.5°	228.2	231.5	234.7	237.9	220.4	182.0	143.6	105.1	66.8	61.2	55.5
105°	304.8	307.2	309.7	312.1	303.3	283.0	262.7	242.5	222.2	182.3	142.4
107.5°	385.8	387.8	389.8	391.7	394.4	397.6	400.7	403.9	407.2	377.9	348.6
110°	440.0	441.8	443.6	445.4	447.6	450.0	452.5	454.9	457.5	450.0	442.6





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	491.7	493.3	495.0	496.7	498.7	501.1	503.6	506.1	508.6	508.7	508.9
115°	568.4	569.7	571.1	572.4	574.1	576.1	578.1	580.2	582.2	584.5	586.7
117.5°	643.1	644.8	646.4	648.1	649.4	650.6	651.6	652.6	653.6	655.4	657.2
120°	689.7	691.8	693.8	695.8	697.2	697.8	698.5	699.2	699.8	701.7	703.5
122.5°	736.4	738.1	739.7	741.4	742.7	743.6	744.4	745.3	746.1	747.4	748.6
125°	801.1	802.8	804.7	806.5	807.9	808.7	809.6	810.5	811.4	811.9	812.3
127.5°	863.5	865.4	867.2	869.0	870.4	871.5	872.6	873.6	874.7	875.5	876.2
130°	902.5	904.3	906.2	908.0	909.3	910.2	911.1	912.0	912.9	913.8	914.7
132.5°	939.9	941.6	943.4	945.2	946.5	947.3	948.0	948.7	949.4	950.3	951.2
135°	996.4	997.7	999.1	1000.5	1001.6	1002.5	1003.4	1004.3	1005.2	1005.8	1006.5
137.5°	1045.4	1047.1	1048.8	1050.6	1051.7	1052.2	1052.7	1053.2	1053.7	1054.7	1055.8
140°	1077.5	1078.9	1080.3	1081.6	1082.6	1083.3	1084.0	1084.6	1085.3	1086.2	1087.1
142.5°	1107.5	1108.9	1110.2	1111.7	1112.7	1113.3	1114.0	1114.7	1115.3	1116.1	1116.8
145°	1149.7	1151.3	1153.0	1154.5	1155.5	1156.0	1156.4	1156.9	1157.3	1157.8	1158.2
147.5°	1188.8	1189.8	1190.8	1191.9	1192.7	1193.1	1193.6	1194.0	1194.5	1194.9	1195.4
150°	1212.7	1213.5	1214.2	1214.8	1215.4	1215.8	1216.3	1216.7	1217.2	1217.6	1218.1
152.5°	1234.4	1234.7	1235.0	1235.3	1235.6	1235.9	1236.1	1236.4	1236.7	1237.5	1238.3
155°	1264.4	1263.9	1263.5	1263.0	1262.9	1263.1	1263.3	1263.6	1263.8	1265.0	1266.1
157.5°	1288.8	1288.7	1288.7	1288.6	1288.5	1288.3	1288.0	1287.8	1287.6	1288.9	1290.3
160°	1303.1	1302.9	1302.7	1302.5	1302.2	1302.0	1301.8	1301.6	1301.4	1302.7	1304.0
162.5°	1316.6	1316.1	1315.5	1314.8	1314.4	1314.2	1314.0	1313.7	1313.5	1315.0	1316.6
165°	1333.1	1332.5	1331.8	1331.1	1330.7	1330.4	1330.2	1330.0	1329.8	1331.6	1333.3
167.5°	1345.9	1345.0	1344.1	1343.2	1342.7	1342.7	1342.7	1342.7	1342.7	1344.5	1346.4
170°	1353.2	1352.3	1351.4	1350.5	1350.1	1350.1	1350.1	1350.1	1350.1	1351.8	1353.6
172.5°	1357.9	1356.9	1355.7	1354.6	1354.2	1354.3	1354.5	1354.7	1354.9	1356.8	1358.6
175°	1364.1	1363.0	1361.9	1360.8	1360.3	1360.5	1360.8	1361.0	1361.2	1362.8	1364.3
177.5°	1365.9	1365.1	1364.2	1363.3	1362.9	1363.1	1363.3	1363.4	1363.6	1365.1	1366.5
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	511.0	511.2	513.2	514.7	514.0	514.9	515.3
5°	558.3	566.7	571.2	574.5	574.7	575.0	576.8
7.5°	625.3	634.4	641.1	651.2	654.1	657.5	656.6
10°	674.3	687.7	699.2	705.3	712.0	721.5	713.8
12.5°	720.0	743.8	761.3	770.8	777.0	778.9	775.2
15°	795.5	826.5	843.1	842.7	863.8	873.0	858.7
17.5°	864.5	893.2	916.3	928.0	945.6	949.5	947.8
20°	907.0	938.3	956.1	976.3	985.5	993.7	995.1
22.5°	943.4	971.6	990.8	1007.5	1015.2	1019.2	1021.5
25°	981.1	1003.2	1014.7	1020.6	1022.7	1022.2	1019.2
27.5°	978.5	980.2	967.5	955.0	943.8	931.3	927.0
30°	953.0	933.3	898.0	878.0	848.6	825.3	834.8
32.5°	886.3	846.9	807.3	763.6	727.4	717.1	706.7
35°	756.4	687.2	646.7	599.7	580.9	562.1	549.1
37.5°	611.9	558.5	510.4	479.7	460.8	448.9	442.5
40°	529.1	480.9	441.3	416.4	402.0	388.7	386.8
42.5°	463.0	418.2	388.5	368.6	354.9	349.1	345.0
45°	379.2	348.0	328.0	313.9	304.7	301.1	296.4
47.5°	321.0	298.9	283.9	274.3	267.3	264.7	264.4
50°	288.4	270.0	259.0	251.5	246.1	245.1	241.4
52.5°	264.0	248.0	239.4	232.9	228.9	226.3	225.2
55°	229.1	218.5	210.8	207.0	204.0	201.4	201.4
57.5°	200.5	191.7	186.5	183.3	182.4	180.6	179.4
60°	182.8	175.3	171.3	168.4	166.5	166.8	164.7
62.5°	165.5	160.6	156.7	154.0	151.7	151.8	151.9
65°	140.9	137.1	134.3	133.4	132.0	130.4	130.8
67.5°	119.5	115.9	113.7	112.1	111.6	110.7	112.1
70°	104.0	101.4	99.8	98.4	97.9	98.1	99.3
72.5°	89.9	88.1	86.9	86.3	85.2	85.3	86.1
75°	70.6	69.2	68.3	67.6	67.3	67.3	67.3
77.5°	51.8	51.5	51.1	50.1	50.1	50.4	50.4
80°	40.9	40.2	40.0	39.5	38.8	38.4	39.5
82.5°	30.6	29.9	29.7	29.6	28.5	28.4	29.4
85°	16.5	15.8	16.0	15.8	15.8	15.6	15.6
87.5°	11.2	11.2	11.2	11.4	11.4	11.3	11.7
90°	27.1	28.0	28.6	29.1	29.5	30.0	30.4
92.5°	30.3	31.7	32.6	32.8	33.1	33.4	33.6
95°	36.2	37.8	38.6	38.6	38.6	38.6	38.6
97.5°	38.1	39.9	40.9	41.1	41.3	41.6	41.8
100°	38.9	40.7	41.7	41.9	42.1	42.4	42.6
102.5°	50.0	44.3	41.8	42.2	42.6	43.0	43.4
105°	102.4	62.5	42.8	43.3	43.7	44.1	44.6
107.5°	319.4	290.1	260.4	230.4	200.4	170.3	140.2
110°	435.2	427.7	407.9	375.7	343.4	311.1	278.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	509.0	509.1	505.7	499.0	492.2	485.3	478.6
115°	589.0	591.3	592.8	593.7	594.6	595.5	596.4
117.5°	659.0	660.9	661.9	662.0	662.2	662.4	662.6
120°	705.3	707.1	708.0	708.0	708.0	708.0	708.0
122.5°	749.9	751.1	751.9	752.0	752.2	752.5	752.7
125°	812.8	813.2	813.7	814.2	814.6	815.1	815.5
127.5°	876.9	877.7	877.8	877.3	876.9	876.5	876.0
130°	915.5	916.5	916.8	916.3	915.8	915.3	914.9
132.5°	952.1	953.0	953.1	952.5	951.9	951.3	950.6
135°	1007.2	1007.8	1007.8	1007.2	1006.5	1005.8	1005.2
137.5°	1056.9	1058.0	1058.3	1057.8	1057.4	1056.9	1056.5
140°	1088.0	1088.9	1089.1	1088.7	1088.2	1087.8	1087.3
142.5°	1117.5	1118.2	1118.2	1117.6	1117.0	1116.4	1115.7
145°	1158.7	1159.1	1159.3	1159.3	1159.3	1159.3	1159.3
147.5°	1195.8	1196.3	1196.0	1195.0	1193.9	1192.9	1191.8
150°	1218.5	1219.0	1218.9	1218.2	1217.5	1216.9	1216.2
152.5°	1239.1	1239.9	1239.8	1238.7	1237.7	1236.7	1235.7
155°	1267.2	1268.4	1268.2	1266.9	1265.6	1264.1	1262.8
157.5°	1291.6	1292.9	1292.7	1291.0	1289.3	1287.5	1285.8
160°	1305.5	1306.8	1306.7	1305.0	1303.5	1301.9	1300.3
162.5°	1318.2	1319.7	1319.7	1318.4	1317.0	1315.6	1314.1
165°	1335.1	1337.0	1337.1	1335.5	1333.9	1332.3	1330.8
167.5°	1348.2	1350.0	1350.0	1348.2	1346.4	1344.5	1342.7
170°	1355.4	1357.3	1357.3	1355.4	1353.6	1351.8	1350.1
172.5°	1360.3	1362.1	1362.0	1360.1	1358.1	1356.0	1354.1
175°	1365.9	1367.6	1367.5	1365.6	1363.8	1362.0	1360.2
177.5°	1368.0	1369.4	1369.3	1367.5	1365.6	1363.8	1362.0
180°	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2	1365.2

(END OF REPORT)