

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: P332109-830

Luminaire Tested: **S123DIW-S340D1320U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332109-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S340D1320U830-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1320 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5684.1 lumens  
Efficiency: N/A  
Efficacy: 122.0 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

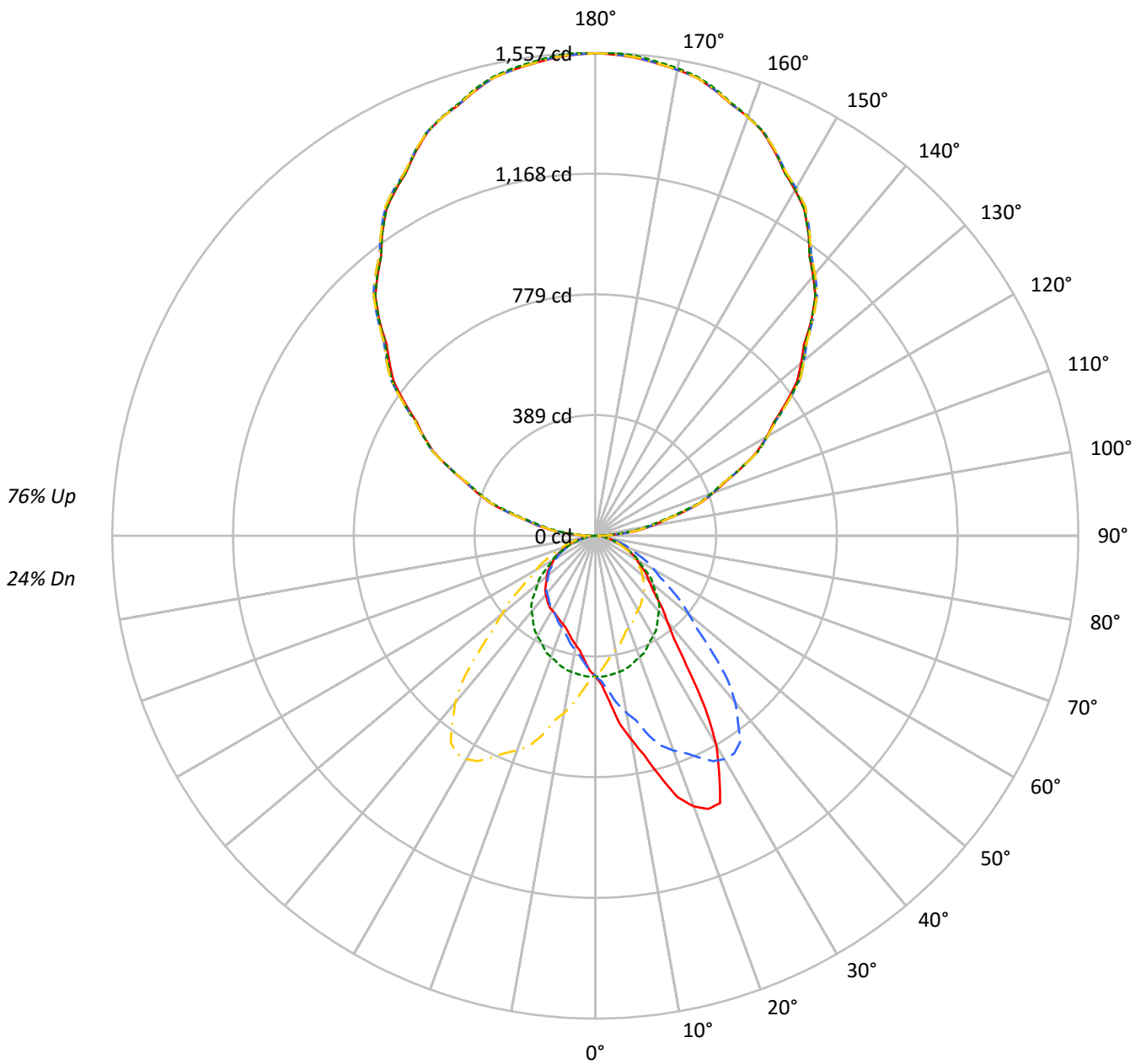
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



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



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

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

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

	0°	90°	180°	270°
0°	4878	4878	4878	4878
5°	5817	4900	4341	4900
10°	7282	4875	3922	4875
15°	8931	4835	3651	4835
20°	10639	4774	3477	4774
25°	11297	4700	3437	4700
30°	9684	4645	3455	4645
35°	6734	4568	3491	4568
40°	5073	4477	3481	4477
45°	4211	4341	3436	4341
50°	3773	4068	3404	4068
55°	3526	3772	3363	3772
60°	3309	3460	3328	3460
65°	3110	3156	3222	3156
70°	2917	2807	3068	2807
75°	2612	2458	2816	2458
80°	2287	2015	2424	2015
85°	1791	1470	1630	1470



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	0.8
10°-20°	143.2	2.5
20°-30°	240.3	4.2
30°-40°	272.0	4.8
40°-50°	244.0	4.3
50°-60°	196.9	3.5
60°-70°	137.2	2.4
70°-80°	72.1	1.3
80°-90°	22.2	0.4
90°-100°	101.4	1.8
100°-110°	303.4	5.3
110°-120°	516.1	9.1
120°-130°	678.8	11.9
130°-140°	763.0	13.4
140°-150°	750.0	13.2
150°-160°	631.4	11.1
160°-170°	420.3	7.4
170°-180°	147.2	2.6
0°-30°	428.1	7.5
0°-40°	700.1	12.3
0°-60°	1140.9	20.1
0°-90°	1372.5	24.1
90°-120°	920.9	16.2
90°-150°	3112.8	54.8
90°-180°	4312.0	75.9
0°-180°	5684.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	453	453	453	453	453	
5°	538	454	402	454	538	56
15°	801	434	328	434	801	231
25°	951	396	289	396	951	417
35°	512	348	266	348	512	333
45°	277	285	226	285	277	219
55°	188	201	179	201	188	169
65°	122	124	126	124	122	122
75°	63	59	68	59	63	67
85°	14	12	13	12	14	18
90°	37	1	37	1	37	19
95°	95	72	95	72	95	98
105°	291	275	291	275	291	309
115°	521	520	521	520	521	516
125°	752	760	752	760	752	672
135°	985	987	985	987	985	758
145°	1197	1197	1197	1197	1197	747
155°	1368	1370	1368	1370	1368	630
165°	1488	1493	1488	1493	1488	420
175°	1546	1553	1546	1553	1546	147
180°	1556	1556	1556	1556	1556	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	481.0	480.6	479.8	480.4	479.0	477.1	476.9	475.1	470.0	469.8	468.3
5°	538.4	536.7	536.4	536.2	533.1	529.0	521.0	520.4	509.8	504.6	498.2
7.5°	612.8	613.7	610.5	607.8	598.3	592.1	583.6	572.8	559.9	546.7	538.0
10°	666.2	673.4	664.5	658.3	652.6	641.9	629.3	613.7	598.1	579.9	566.1
12.5°	723.5	727.0	725.2	719.4	710.6	694.2	672.0	654.8	640.5	610.1	597.9
15°	801.4	814.8	806.3	786.6	786.9	771.4	742.4	710.6	693.6	667.0	630.8
17.5°	884.6	886.2	882.6	866.1	855.2	833.7	806.9	776.5	742.2	710.0	671.6
20°	928.8	927.5	919.8	911.3	892.4	875.7	846.5	812.5	768.5	736.9	694.9
22.5°	953.4	951.2	947.5	940.4	924.7	906.8	880.5	843.4	801.5	758.0	709.5
25°	951.2	954.0	954.5	952.5	947.1	936.3	915.7	886.0	844.3	788.2	737.8
27.5°	865.2	869.2	880.9	891.4	903.0	914.8	913.2	898.5	867.6	819.3	757.5
30°	779.1	770.2	792.0	819.4	838.1	871.1	889.5	890.6	873.3	831.8	771.6
32.5°	659.6	669.3	678.9	712.7	753.5	790.4	827.2	856.7	860.1	832.5	779.9
35°	512.5	524.6	542.2	559.7	603.6	641.4	706.0	762.1	806.9	812.8	780.6
37.5°	413.0	419.0	430.1	447.7	476.4	521.2	571.1	642.2	707.1	755.4	757.4
40°	361.0	362.8	375.2	388.6	411.9	448.8	493.8	556.7	634.3	701.8	729.9
42.5°	322.0	325.8	331.2	344.0	362.6	390.3	432.2	484.1	555.3	632.9	687.9
45°	276.6	281.1	284.4	292.9	306.1	324.8	353.9	401.4	455.6	535.7	609.7
47.5°	246.8	247.0	249.5	256.0	264.9	279.0	299.6	330.1	379.8	444.9	520.8
50°	225.3	228.8	229.7	234.7	241.8	252.0	269.2	295.1	335.9	393.0	462.9
52.5°	210.2	211.2	213.7	217.4	223.5	231.5	246.4	266.6	298.7	347.4	411.6
55°	187.9	187.9	190.4	193.2	196.7	204.0	213.9	228.8	253.2	291.0	344.1
57.5°	167.4	168.5	170.2	171.1	174.1	178.9	187.1	198.5	216.6	245.7	287.9
60°	153.7	155.7	155.4	157.2	159.9	163.6	170.6	179.8	196.0	219.3	255.0
62.5°	141.8	141.7	141.6	143.7	146.3	149.9	154.5	162.4	176.3	196.9	227.2
65°	122.1	121.7	123.2	124.5	125.4	128.0	131.5	138.6	147.8	163.2	186.6
67.5°	104.6	103.3	104.2	104.6	106.1	108.2	111.5	115.8	123.1	135.4	153.2
70°	92.7	91.5	91.3	91.8	93.1	94.6	97.1	101.2	108.0	117.9	130.8
72.5°	80.4	79.6	79.6	80.6	81.2	82.2	83.9	87.7	93.1	100.6	112.6
75°	62.8	62.8	62.8	63.1	63.7	64.6	65.9	67.9	72.0	77.3	85.4
77.5°	47.0	47.0	46.8	46.8	47.7	48.1	48.4	50.2	52.6	56.1	62.0
80°	36.9	35.8	36.2	36.9	37.3	37.5	38.2	38.6	40.6	42.6	46.8
82.5°	27.4	26.5	26.6	27.6	27.7	27.9	28.6	29.1	29.9	31.7	33.9
85°	14.5	14.5	14.7	14.7	14.9	14.7	15.4	15.6	15.6	16.7	18.0
87.5°	12.6	12.2	12.3	12.3	12.0	12.0	12.0	12.0	11.9	11.9	11.3
90°	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5	30.4	29.3	25.8
92.5°	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6	47.8	46.9	45.0
95°	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7	91.5	90.5	88.3
97.5°	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0	142.8	141.6	140.0
100°	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3	180.5	179.7	178.3
102.5°	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3	223.6	222.7	220.9
105°	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5	288.5	288.5	286.1
107.5°	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0	357.1	356.2	355.2
110°	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4	403.3	402.2	401.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7	449.5	448.2	448.1
115°	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3	521.0	520.8	521.3
117.5°	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6	592.6	592.7	593.3
120°	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0	640.3	640.6	642.0
122.5°	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1	688.7	689.5	690.1
125°	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4	760.5	761.6	762.1
127.5°	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9	831.4	833.0	833.6
130°	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8	877.9	878.9	879.8
132.5°	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3	923.6	924.9	925.5
135°	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4	991.6	992.6	992.9
137.5°	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1	1058.2	1059.4	1058.7
140°	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2
142.5°	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0	1142.3	1142.6	1142.0
145°	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3	1202.6	1202.9	1202.1
147.5°	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6	1294.6	1294.6	1294.0
152.5°	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7	1326.3	1325.9	1325.6
155°	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8	1372.7	1371.6	1371.3
157.5°	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2	1413.1	1411.9	1411.7
160°	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1	1437.8	1436.3	1436.3
162.5°	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5	1461.2	1459.8	1459.6
165°	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2	1490.5	1488.9	1488.9
167.5°	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9	1512.7
170°	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6	1525.6
172.5°	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7	1538.0	1536.3	1536.3
175°	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9	1549.3	1547.7	1547.7
177.5°	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9	1554.5	1553.2	1553.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	467.2	465.9	464.5	462.0	459.9	456.9	456.0	455.0	451.8	449.0	446.9
5°	495.8	490.5	482.9	475.8	470.1	462.4	458.1	453.5	446.9	440.9	436.1
7.5°	525.7	515.3	503.3	490.5	478.4	466.8	457.5	449.1	439.9	431.2	424.3
10°	549.4	534.4	517.7	499.7	484.4	469.5	456.9	446.0	434.1	423.8	415.2
12.5°	576.5	554.3	531.3	509.4	491.3	470.5	455.3	441.4	427.9	415.6	406.0
15°	608.4	580.3	553.1	523.0	495.4	469.5	451.5	433.9	418.3	405.6	393.2
17.5°	637.6	605.8	569.9	533.3	499.9	469.2	444.0	424.1	404.6	389.1	376.8
20°	654.1	617.9	577.3	539.3	502.4	468.2	440.5	416.8	395.7	379.2	365.4
22.5°	668.4	625.9	583.9	543.3	502.2	465.3	433.9	409.5	386.7	370.6	355.9
25°	683.2	632.4	590.2	542.6	496.7	458.5	423.4	395.7	372.9	353.9	338.8
27.5°	695.8	632.0	581.9	530.7	488.0	449.7	412.2	382.5	358.3	337.7	322.3
30°	704.2	632.8	573.3	522.6	479.6	440.1	403.6	373.7	348.3	327.4	312.9
32.5°	709.5	632.3	565.4	511.3	466.2	431.2	394.3	363.4	337.1	316.7	302.7
35°	712.6	628.4	551.8	488.1	444.7	410.6	379.7	347.6	320.2	301.0	285.2
37.5°	706.3	620.3	536.0	465.7	418.1	384.7	358.5	331.3	305.0	284.0	270.3
40°	696.7	615.0	523.7	449.9	399.8	367.6	345.4	318.6	292.7	272.7	260.0
42.5°	678.3	604.4	510.2	432.3	380.9	348.6	328.2	305.8	281.3	262.5	249.8
45°	633.3	581.0	489.8	406.0	352.9	319.5	301.5	285.2	263.1	244.9	233.8
47.5°	570.8	545.9	460.5	378.2	323.6	291.5	272.8	259.8	243.6	228.8	218.3
50°	527.4	517.1	440.7	359.2	304.2	272.7	254.7	242.9	231.2	216.5	206.9
52.5°	477.4	483.7	417.5	339.6	284.3	253.4	236.5	227.1	216.5	204.3	196.0
55°	406.9	429.9	377.5	306.5	254.7	225.3	209.2	201.0	194.7	185.8	178.5
57.5°	340.9	370.2	334.1	272.5	225.6	200.3	184.9	175.9	171.9	167.2	161.5
60°	301.7	330.6	303.2	249.7	206.2	182.0	168.4	160.7	156.7	153.4	148.6
62.5°	266.7	296.1	273.1	226.5	187.0	164.7	152.8	145.2	142.2	140.5	136.4
65°	218.7	243.9	228.6	190.4	159.7	139.9	129.1	123.9	121.0	120.4	117.7
67.5°	178.0	197.2	186.1	157.9	133.7	116.7	107.5	103.0	100.9	100.6	98.6
70°	151.3	169.3	160.7	135.3	114.4	101.0	93.1	89.2	87.8	87.7	86.5
72.5°	130.5	143.1	136.3	115.1	99.0	86.8	81.0	76.8	75.4	75.7	74.9
75°	96.6	106.0	102.1	87.4	74.5	66.5	61.7	59.1	57.8	58.4	57.5
77.5°	69.6	75.5	71.9	61.7	53.7	48.1	44.5	42.9	41.7	41.7	41.3
80°	52.5	56.0	54.0	47.9	41.3	36.5	33.6	32.5	31.9	31.6	31.4
82.5°	37.4	40.3	38.0	33.8	29.3	26.4	24.8	23.4	22.9	23.0	22.8
85°	18.9	20.0	19.1	16.5	14.7	13.4	12.5	11.9	11.4	11.6	11.2
87.5°	10.9	10.5	9.2	7.8	7.0	5.9	5.4	4.4	4.6	5.2	5.6
90°	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2	4.0	6.7	9.3
92.5°	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6	31.4	33.3	35.2
95°	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1	74.0	76.0	77.9
97.5°	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1	129.5	130.9	132.3
100°	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3	167.9	169.5	171.2
102.5°	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3	211.2	212.3	213.2
105°	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0	275.6	276.2	276.6
107.5°	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3	350.7	351.0	351.4
110°	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3	397.8	398.4	398.9





TEST NUMBER: P332109-830

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2	446.5	446.9	447.1
115°	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5	520.4	521.1	522.0
117.5°	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4	593.9	594.5	595.0
120°	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3	640.9	642.6	644.2
122.5°	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3	688.4	689.7	690.9
125°	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3	761.2	762.0	762.8
127.5°	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8	829.6	831.3	833.0
130°	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8	875.0	877.2	879.4
132.5°	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8	920.0	922.2	924.4
135°	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6	988.2	989.8	991.4
137.5°	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1	1051.4	1052.8	1054.1
140°	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1	1095.4	1096.8	1098.2
142.5°	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2	1135.6	1136.9	1138.3
145°	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7	1197.3	1197.9	1198.4
147.5°	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5	1252.5	1253.5	1254.5
150°	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7	1290.2	1290.8	1291.3
152.5°	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0	1321.7	1322.5	1323.2
155°	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4	1412.1	1411.7	1411.5
160°	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8	1438.3	1437.8	1437.2
162.5°	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3	1461.5	1460.8	1460.0
165°	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6	1491.8	1491.0	1490.2
167.5°	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8	1515.7	1514.7	1513.5
170°	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5	1529.5	1528.3	1527.3
172.5°	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2	1540.2	1539.1	1538.0
175°	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6	1551.4	1550.4	1549.3
177.5°	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2	1556.3	1555.4	1554.5
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332109-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	445.6	444.4	442.7	440.1	437.9	434.6	434.6	435.1	435.1	435.0	434.6
5°	432.2	428.9	424.9	420.3	415.5	410.6	409.7	407.9	406.7	405.8	404.7
7.5°	417.8	412.0	406.2	399.8	393.9	389.1	385.7	382.9	381.1	379.1	377.7
10°	408.2	401.0	394.2	387.4	379.8	373.9	370.2	367.6	365.6	363.8	363.0
12.5°	396.8	388.5	381.0	374.5	366.4	360.2	356.7	355.4	353.2	349.4	347.5
15°	380.1	372.4	363.4	353.5	349.6	342.1	337.9	335.9	334.6	331.8	330.9
17.5°	365.8	355.8	345.6	338.3	330.9	324.9	322.5	320.1	318.4	316.0	315.3
20°	354.4	345.4	336.2	328.3	320.6	314.0	312.0	310.3	308.5	307.5	306.5
22.5°	342.8	333.8	326.1	318.8	310.6	306.2	304.2	302.2	301.0	300.2	299.4
25°	326.5	318.6	310.0	303.5	296.9	294.0	292.7	291.6	290.7	289.6	289.4
27.5°	312.0	303.3	296.4	290.2	285.5	283.1	281.8	281.3	281.5	281.9	282.2
30°	301.0	293.1	287.5	282.2	277.8	275.6	275.3	275.3	276.3	276.4	276.9
32.5°	291.1	284.6	278.8	273.7	270.4	268.9	269.8	269.8	270.4	271.0	271.8
35°	276.4	270.7	266.4	261.9	259.1	259.8	260.2	260.6	261.7	263.1	263.9
37.5°	262.5	257.6	253.0	249.6	248.3	249.4	250.5	251.4	252.7	253.7	254.6
40°	252.5	248.7	244.4	241.3	241.8	242.4	243.3	244.4	245.5	246.2	247.0
42.5°	243.2	239.3	235.9	233.4	234.0	234.9	235.4	235.9	237.2	238.5	238.9
45°	229.0	225.9	222.9	221.3	221.8	222.3	222.6	223.3	224.4	225.3	225.6
47.5°	213.1	210.9	208.9	207.4	208.1	207.9	208.5	209.9	210.2	210.8	212.0
50°	202.9	201.0	198.5	198.0	198.0	198.0	198.3	200.0	200.0	201.0	201.8
52.5°	191.6	190.4	188.9	188.0	187.7	187.7	188.6	189.5	189.8	191.1	192.0
55°	175.0	173.7	172.4	171.7	171.3	171.7	173.4	173.9	175.0	175.7	176.3
57.5°	157.7	156.7	155.6	155.2	155.1	155.7	156.7	158.0	158.3	160.3	161.3
60°	146.3	144.7	143.8	143.8	143.4	145.3	145.0	147.1	147.6	148.9	150.4
62.5°	134.5	132.4	132.1	132.1	132.7	133.3	133.8	134.8	136.0	137.6	138.8
65°	115.5	114.4	115.9	115.7	115.3	116.6	116.6	117.7	119.0	120.6	123.0
67.5°	97.6	97.0	97.1	97.1	97.7	98.5	99.2	100.1	101.7	103.3	104.9
70°	85.4	86.1	85.0	85.9	86.5	86.7	87.2	88.5	90.2	91.3	93.1
72.5°	73.6	73.6	73.7	74.1	74.7	75.1	75.6	77.1	79.0	79.9	81.3
75°	56.6	56.5	57.1	57.1	58.2	58.6	59.1	59.8	61.5	62.8	63.9
77.5°	41.4	41.7	41.5	42.2	41.9	42.0	43.4	44.0	44.2	46.8	47.4
80°	31.2	31.6	31.9	32.0	32.2	31.9	33.4	34.0	34.0	35.5	36.7
82.5°	22.4	22.6	23.2	23.5	23.5	23.9	24.0	24.5	25.1	25.7	27.1
85°	11.2	11.9	12.1	11.9	12.1	11.6	12.3	12.5	12.7	12.7	12.7
87.5°	5.9	6.7	7.3	8.1	8.7	9.5	9.8	9.6	9.9	10.6	10.1
90°	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5	32.6	33.6	34.5
92.5°	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6	49.6	50.4	50.7
95°	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7	93.7	94.8	95.4
97.5°	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0	145.3	146.6	147.1
100°	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3	182.1	182.9	183.6
102.5°	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3	225.2	226.0	226.3
105°	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5	288.5	288.5	288.8
107.5°	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0	358.8	359.7	360.0
110°	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4	405.5	406.5	406.8



TEST NUMBER: P332109-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7	452.0	453.4	453.9
115°	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3	521.6	521.9	521.9
117.5°	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6	592.5	592.4	592.0
120°	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0	639.8	639.5	639.0
122.5°	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1	687.3	686.6	685.9
125°	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4	758.4	757.2	756.2
127.5°	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9	828.4	826.9	825.5
130°	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8	875.7	874.6	873.1
132.5°	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3	921.0	919.7	918.3
135°	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4	989.4	988.3	987.5
137.5°	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1	1055.9	1054.8	1053.8
140°	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.3
142.5°	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0	1141.7	1141.4	1140.6
145°	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3	1202.1	1201.8	1201.2
147.5°	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3	1259.3	1259.3	1258.6
150°	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6	1294.6	1294.6	1293.7
152.5°	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7	1327.2	1327.6	1327.1
155°	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8	1374.9	1375.9	1375.5
157.5°	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2	1415.3	1416.5	1416.3
160°	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1	1440.5	1441.8	1442.0
162.5°	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5	1464.0	1465.3	1465.1
165°	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2	1493.8	1495.4	1495.3
167.5°	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7
170°	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2
172.5°	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7	1541.4	1543.1	1543.0
175°	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9	1552.6	1554.2	1554.0
177.5°	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9	1557.2	1558.5	1558.4
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332109-830

CATALOG NUMBER: S123DIW-S340D1320U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	433.4	433.2	434.4	433.6	434.4	433.2	433.4	434.6	435.0	435.1	435.1
5°	403.4	404.1	401.8	401.8	401.8	404.1	403.4	404.7	405.8	406.7	407.9
7.5°	376.6	375.7	375.8	374.6	375.8	375.7	376.6	377.7	379.1	381.1	382.9
10°	360.3	359.0	358.5	358.8	358.5	359.0	360.3	363.0	363.8	365.6	367.6
12.5°	346.8	346.6	343.7	343.7	343.7	346.6	346.8	347.5	349.4	353.2	355.4
15°	330.9	326.8	326.3	327.6	326.3	326.8	330.9	330.9	331.8	334.6	335.9
17.5°	315.0	312.7	312.9	312.3	312.9	312.7	315.0	315.3	316.0	318.4	320.1
20°	306.5	305.2	305.0	303.5	305.0	305.2	306.5	306.5	307.5	308.5	310.3
22.5°	298.8	298.4	298.5	296.8	298.5	298.4	298.8	299.4	300.2	301.0	302.2
25°	289.2	290.3	289.4	289.4	289.4	290.3	289.2	289.4	289.6	290.7	291.6
27.5°	282.7	282.7	282.2	282.2	282.2	282.7	282.7	282.2	281.9	281.5	281.3
30°	277.8	277.6	278.0	278.0	278.0	277.6	277.8	276.9	276.4	276.3	275.3
32.5°	272.9	273.1	273.2	273.4	273.2	273.1	272.9	271.8	271.0	270.4	269.8
35°	265.2	265.5	266.2	265.7	266.2	265.5	265.2	263.9	263.1	261.7	260.6
37.5°	255.0	256.0	255.8	256.1	255.8	256.0	255.0	254.6	253.7	252.7	251.4
40°	247.2	247.9	247.7	247.7	247.7	247.9	247.2	247.0	246.2	245.5	244.4
42.5°	239.3	239.8	239.2	238.9	239.2	239.8	239.3	238.9	238.5	237.2	235.9
45°	226.4	225.9	226.6	225.7	226.6	225.9	226.4	225.6	225.3	224.4	223.3
47.5°	211.9	212.4	212.5	213.2	212.5	212.4	211.9	212.0	210.8	210.2	209.9
50°	202.3	203.6	203.6	203.3	203.6	203.6	202.3	201.8	201.0	200.0	200.0
52.5°	192.7	193.3	194.3	194.2	194.3	193.3	192.7	192.0	191.1	189.8	189.5
55°	178.0	178.5	179.0	179.2	179.0	178.5	178.0	176.3	175.7	175.0	173.9
57.5°	162.9	162.7	163.7	164.1	163.7	162.7	162.9	161.3	160.3	158.3	158.0
60°	152.1	152.1	153.9	154.6	153.9	152.1	152.1	150.4	148.9	147.6	147.1
62.5°	140.7	141.5	143.2	142.3	143.2	141.5	140.7	138.8	137.6	136.0	134.8
65°	124.0	125.8	125.6	126.5	125.6	125.8	124.0	123.0	120.6	119.0	117.7
67.5°	106.6	107.7	109.3	109.4	109.3	107.7	106.6	104.9	103.3	101.7	100.1
70°	94.8	96.0	96.8	97.5	96.8	96.0	94.8	93.1	91.3	90.2	88.5
72.5°	83.4	84.0	86.1	85.2	86.1	84.0	83.4	81.3	79.9	79.0	77.1
75°	65.4	67.0	68.3	67.7	68.3	67.0	65.4	63.9	62.8	61.5	59.8
77.5°	48.4	50.0	50.5	50.0	50.5	50.0	48.4	47.4	46.8	44.2	44.0
80°	38.2	38.0	39.3	39.1	39.3	38.0	38.2	36.7	35.5	34.0	34.0
82.5°	28.0	27.8	28.4	28.6	28.4	27.8	28.0	27.1	25.7	25.1	24.5
85°	13.6	14.2	13.4	13.2	13.4	14.2	13.6	12.7	12.7	12.7	12.5
87.5°	10.2	10.3	10.2	10.2	10.2	10.3	10.2	10.1	10.6	9.9	9.6
90°	35.1	35.6	36.1	36.7	36.1	35.6	35.1	34.5	33.6	32.6	31.5
92.5°	50.3	50.0	49.7	49.4	49.7	50.0	50.3	50.7	50.4	49.6	48.6
95°	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	94.8	93.7	92.7
97.5°	147.0	146.9	146.8	146.7	146.8	146.9	147.0	147.1	146.6	145.3	144.0
100°	184.2	184.7	185.3	185.8	185.3	184.7	184.2	183.6	182.9	182.1	181.3
102.5°	226.2	226.1	226.0	225.9	226.0	226.1	226.2	226.3	226.0	225.2	224.3
105°	289.4	289.8	290.4	291.0	290.4	289.8	289.4	288.8	288.5	288.5	288.5
107.5°	359.7	359.3	359.0	358.6	359.0	359.3	359.7	360.0	359.7	358.8	358.0
110°	406.2	405.8	405.2	404.6	405.2	405.8	406.2	406.8	406.5	405.5	404.4



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	453.8	453.7	453.6	453.6	453.6	453.7	453.8	453.9	453.4	452.0	450.7
115°	521.6	521.3	521.0	520.8	521.0	521.3	521.6	521.9	521.9	521.6	521.3
117.5°	591.3	590.5	589.7	589.0	589.7	590.5	591.3	592.0	592.4	592.5	592.6
120°	638.6	638.0	637.4	636.9	637.4	638.0	638.6	639.0	639.5	639.8	640.0
122.5°	685.1	684.4	683.6	682.9	683.6	684.4	685.1	685.9	686.6	687.3	688.1
125°	755.1	753.9	752.9	751.8	752.9	753.9	755.1	756.2	757.2	758.4	759.4
127.5°	824.3	823.0	821.8	820.5	821.8	823.0	824.3	825.5	826.9	828.4	829.9
130°	871.2	869.3	867.4	865.5	867.4	869.3	871.2	873.1	874.6	875.7	876.8
132.5°	916.8	915.4	913.9	912.5	913.9	915.4	916.8	918.3	919.7	921.0	922.3
135°	986.9	986.4	985.8	985.3	985.8	986.4	986.9	987.5	988.3	989.4	990.4
137.5°	1052.7	1051.7	1050.7	1049.6	1050.7	1051.7	1052.7	1053.8	1054.8	1055.9	1057.1
140°	1097.4	1095.4	1093.5	1091.7	1093.5	1095.4	1097.4	1099.3	1100.3	1100.6	1100.9
142.5°	1139.1	1137.6	1136.1	1134.7	1136.1	1137.6	1139.1	1140.6	1141.4	1141.7	1142.0
145°	1200.0	1198.9	1197.9	1196.7	1197.9	1198.9	1200.0	1201.2	1201.8	1202.1	1202.3
147.5°	1257.0	1255.3	1253.7	1252.1	1253.7	1255.3	1257.0	1258.6	1259.3	1259.3	1259.3
150°	1292.1	1290.5	1288.8	1287.2	1288.8	1290.5	1292.1	1293.7	1294.6	1294.6	1294.6
152.5°	1325.7	1324.3	1322.9	1321.4	1322.9	1324.3	1325.7	1327.1	1327.6	1327.2	1326.7
155°	1373.7	1371.8	1369.8	1367.9	1369.8	1371.8	1373.7	1375.5	1375.9	1374.9	1373.8
157.5°	1414.8	1413.2	1411.7	1410.2	1411.7	1413.2	1414.8	1416.3	1416.5	1415.3	1414.2
160°	1440.9	1439.8	1438.7	1437.6	1438.7	1439.8	1440.9	1442.0	1441.8	1440.5	1439.1
162.5°	1463.4	1461.6	1459.9	1458.1	1459.9	1461.6	1463.4	1465.1	1465.3	1464.0	1462.5
165°	1493.5	1491.6	1489.6	1487.7	1489.6	1491.6	1493.5	1495.3	1495.4	1493.8	1492.2
167.5°	1518.0	1516.3	1514.6	1512.9	1514.6	1516.3	1518.0	1519.7	1519.7	1518.0	1516.3
170°	1531.3	1529.5	1527.5	1525.6	1527.5	1529.5	1531.3	1533.2	1533.2	1531.3	1529.5
172.5°	1541.2	1539.2	1537.3	1535.4	1537.3	1539.2	1541.2	1543.0	1543.1	1541.4	1539.7
175°	1552.1	1550.2	1548.3	1546.4	1548.3	1550.2	1552.1	1554.0	1554.2	1552.6	1550.9
177.5°	1556.8	1555.3	1553.8	1552.3	1553.8	1555.3	1556.8	1558.4	1558.5	1557.2	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	434.6	434.6	437.9	440.1	442.7	444.4	445.6	446.9	449.0	451.8	455.0
5°	409.7	410.6	415.5	420.3	424.9	428.9	432.2	436.1	440.9	446.9	453.5
7.5°	385.7	389.1	393.9	399.8	406.2	412.0	417.8	424.3	431.2	439.9	449.1
10°	370.2	373.9	379.8	387.4	394.2	401.0	408.2	415.2	423.8	434.1	446.0
12.5°	356.7	360.2	366.4	374.5	381.0	388.5	396.8	406.0	415.6	427.9	441.4
15°	337.9	342.1	349.6	353.5	363.4	372.4	380.1	393.2	405.6	418.3	433.9
17.5°	322.5	324.9	330.9	338.3	345.6	355.8	365.8	376.8	389.1	404.6	424.1
20°	312.0	314.0	320.6	328.3	336.2	345.4	354.4	365.4	379.2	395.7	416.8
22.5°	304.2	306.2	310.6	318.8	326.1	333.8	342.8	355.9	370.6	386.7	409.5
25°	292.7	294.0	296.9	303.5	310.0	318.6	326.5	338.8	353.9	372.9	395.7
27.5°	281.8	283.1	285.5	290.2	296.4	303.3	312.0	322.3	337.7	358.3	382.5
30°	275.3	275.6	277.8	282.2	287.5	293.1	301.0	312.9	327.4	348.3	373.7
32.5°	269.8	268.9	270.4	273.7	278.8	284.6	291.1	302.7	316.7	337.1	363.4
35°	260.2	259.8	259.1	261.9	266.4	270.7	276.4	285.2	301.0	320.2	347.6
37.5°	250.5	249.4	248.3	249.6	253.0	257.6	262.5	270.3	284.0	305.0	331.3
40°	243.3	242.4	241.8	241.3	244.4	248.7	252.5	260.0	272.7	292.7	318.6
42.5°	235.4	234.9	234.0	233.4	235.9	239.3	243.2	249.8	262.5	281.3	305.8
45°	222.6	222.3	221.8	221.3	222.9	225.9	229.0	233.8	244.9	263.1	285.2
47.5°	208.5	207.9	208.1	207.4	208.9	210.9	213.1	218.3	228.8	243.6	259.8
50°	198.3	198.0	198.0	198.0	198.5	201.0	202.9	206.9	216.5	231.2	242.9
52.5°	188.6	187.7	187.7	188.0	188.9	190.4	191.6	196.0	204.3	216.5	227.1
55°	173.4	171.7	171.3	171.7	172.4	173.7	175.0	178.5	185.8	194.7	201.0
57.5°	156.7	155.7	155.1	155.2	155.6	156.7	157.7	161.5	167.2	171.9	175.9
60°	145.0	145.3	143.4	143.8	143.8	144.7	146.3	148.6	153.4	156.7	160.7
62.5°	133.8	133.3	132.7	132.1	132.1	132.4	134.5	136.4	140.5	142.2	145.2
65°	116.6	116.6	115.3	115.7	115.9	114.4	115.5	117.7	120.4	121.0	123.9
67.5°	99.2	98.5	97.7	97.1	97.1	97.0	97.6	98.6	100.6	100.9	103.0
70°	87.2	86.7	86.5	85.9	85.0	86.1	85.4	86.5	87.7	87.8	89.2
72.5°	75.6	75.1	74.7	74.1	73.7	73.6	73.6	74.9	75.7	75.4	76.8
75°	59.1	58.6	58.2	57.1	57.1	56.5	56.6	57.5	58.4	57.8	59.1
77.5°	43.4	42.0	41.9	42.2	41.5	41.7	41.4	41.3	41.7	41.7	42.9
80°	33.4	31.9	32.2	32.0	31.9	31.6	31.2	31.4	31.6	31.9	32.5
82.5°	24.0	23.9	23.5	23.5	23.2	22.6	22.4	22.8	23.0	22.9	23.4
85°	12.3	11.6	12.1	11.9	12.1	11.9	11.2	11.2	11.6	11.4	11.9
87.5°	9.8	9.5	8.7	8.1	7.3	6.7	5.9	5.6	5.2	4.6	4.4
90°	30.4	29.3	25.8	22.2	18.8	15.2	12.1	9.3	6.7	4.0	1.2
92.5°	47.8	46.9	45.0	42.9	40.9	38.9	36.9	35.2	33.3	31.4	29.6
95°	91.5	90.5	88.3	86.1	84.0	81.8	79.7	77.9	76.0	74.0	72.1
97.5°	142.8	141.6	140.0	138.4	136.9	135.3	133.7	132.3	130.9	129.5	128.1
100°	180.5	179.7	178.3	177.0	175.6	174.3	172.8	171.2	169.5	167.9	166.3
102.5°	223.6	222.7	220.9	219.1	217.4	215.6	214.1	213.2	212.3	211.2	210.3
105°	288.5	288.5	286.1	283.6	281.2	278.7	277.2	276.6	276.2	275.6	275.0
107.5°	357.1	356.2	355.2	354.3	353.3	352.3	351.7	351.4	351.0	350.7	350.3
110°	403.3	402.2	401.6	401.1	400.6	400.0	399.4	398.9	398.4	397.8	397.3



TEST NUMBER: P332109-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	449.5	448.2	448.1	447.9	447.8	447.7	447.5	447.1	446.9	446.5	446.2
115°	521.0	520.8	521.3	521.9	522.4	522.9	522.8	522.0	521.1	520.4	519.5
117.5°	592.6	592.7	593.3	594.1	594.7	595.5	595.6	595.0	594.5	593.9	593.4
120°	640.3	640.6	642.0	643.3	644.6	646.0	645.8	644.2	642.6	640.9	639.3
122.5°	688.7	689.5	690.1	690.9	691.5	692.3	692.0	690.9	689.7	688.4	687.3
125°	760.5	761.6	762.1	762.7	763.2	763.7	763.6	762.8	762.0	761.2	760.3
127.5°	831.4	833.0	833.6	834.2	834.8	835.4	834.8	833.0	831.3	829.6	827.8
130°	877.9	878.9	879.8	880.6	881.4	882.2	881.6	879.4	877.2	875.0	872.8
132.5°	923.6	924.9	925.5	926.1	926.7	927.3	926.5	924.4	922.2	920.0	917.8
135°	991.6	992.6	992.9	993.2	993.4	993.7	993.1	991.4	989.8	988.2	986.6
137.5°	1058.2	1059.4	1058.7	1058.0	1057.2	1056.6	1055.6	1054.1	1052.8	1051.4	1050.1
140°	1101.2	1101.5	1101.2	1100.9	1100.6	1100.3	1099.6	1098.2	1096.8	1095.4	1094.1
142.5°	1142.3	1142.6	1142.0	1141.5	1141.0	1140.6	1139.6	1138.3	1136.9	1135.6	1134.2
145°	1202.6	1202.9	1202.1	1201.3	1200.4	1199.7	1198.9	1198.4	1197.9	1197.3	1196.7
147.5°	1259.3	1259.3	1258.6	1257.8	1257.1	1256.3	1255.5	1254.5	1253.5	1252.5	1251.5
150°	1294.6	1294.6	1294.0	1293.5	1293.0	1292.4	1291.8	1291.3	1290.8	1290.2	1289.7
152.5°	1326.3	1325.9	1325.6	1325.2	1324.9	1324.6	1324.0	1323.2	1322.5	1321.7	1321.0
155°	1372.7	1371.6	1371.3	1371.0	1370.7	1370.6	1370.4	1370.4	1370.4	1370.4	1370.4
157.5°	1413.1	1411.9	1411.7	1411.5	1411.3	1411.1	1411.1	1411.5	1411.7	1412.1	1412.4
160°	1437.8	1436.3	1436.3	1436.3	1436.3	1436.3	1436.6	1437.2	1437.8	1438.3	1438.8
162.5°	1461.2	1459.8	1459.6	1459.4	1459.2	1459.0	1459.2	1460.0	1460.8	1461.5	1462.3
165°	1490.5	1488.9	1488.9	1488.9	1488.9	1488.9	1489.4	1490.2	1491.0	1491.8	1492.6
167.5°	1514.6	1512.9	1512.7	1512.5	1512.2	1512.0	1512.5	1513.5	1514.7	1515.7	1516.8
170°	1527.5	1525.6	1525.6	1525.6	1525.6	1525.6	1526.2	1527.3	1528.3	1529.5	1530.5
172.5°	1538.0	1536.3	1536.3	1536.3	1536.3	1536.3	1536.9	1538.0	1539.1	1540.2	1541.2
175°	1549.3	1547.7	1547.7	1547.7	1547.7	1547.7	1548.1	1549.3	1550.4	1551.4	1552.6
177.5°	1554.5	1553.2	1553.2	1553.2	1553.2	1553.2	1553.7	1554.5	1555.4	1556.3	1557.2
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



TEST NUMBER: P332109-830

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	456.0	456.9	459.9	462.0	464.5	465.9	467.2	468.3	469.8	470.0	475.1
5°	458.1	462.4	470.1	475.8	482.9	490.5	495.8	498.2	504.6	509.8	520.4
7.5°	457.5	466.8	478.4	490.5	503.3	515.3	525.7	538.0	546.7	559.9	572.8
10°	456.9	469.5	484.4	499.7	517.7	534.4	549.4	566.1	579.9	598.1	613.7
12.5°	455.3	470.5	491.3	509.4	531.3	554.3	576.5	597.9	610.1	640.5	654.8
15°	451.5	469.5	495.4	523.0	553.1	580.3	608.4	630.8	667.0	693.6	710.6
17.5°	444.0	469.2	499.9	533.3	569.9	605.8	637.6	671.6	710.0	742.2	776.5
20°	440.5	468.2	502.4	539.3	577.3	617.9	654.1	694.9	736.9	768.5	812.5
22.5°	433.9	465.3	502.2	543.3	583.9	625.9	668.4	709.5	758.0	801.5	843.4
25°	423.4	458.5	496.7	542.6	590.2	632.4	683.2	737.8	788.2	844.3	886.0
27.5°	412.2	449.7	488.0	530.7	581.9	632.0	695.8	757.5	819.3	867.6	898.5
30°	403.6	440.1	479.6	522.6	573.3	632.8	704.2	771.6	831.8	873.3	890.6
32.5°	394.3	431.2	466.2	511.3	565.4	632.3	709.5	779.9	832.5	860.1	856.7
35°	379.7	410.6	444.7	488.1	551.8	628.4	712.6	780.6	812.8	806.9	762.1
37.5°	358.5	384.7	418.1	465.7	536.0	620.3	706.3	757.4	755.4	707.1	642.2
40°	345.4	367.6	399.8	449.9	523.7	615.0	696.7	729.9	701.8	634.3	556.7
42.5°	328.2	348.6	380.9	432.3	510.2	604.4	678.3	687.9	632.9	555.3	484.1
45°	301.5	319.5	352.9	406.0	489.8	581.0	633.3	609.7	535.7	455.6	401.4
47.5°	272.8	291.5	323.6	378.2	460.5	545.9	570.8	520.8	444.9	379.8	330.1
50°	254.7	272.7	304.2	359.2	440.7	517.1	527.4	462.9	393.0	335.9	295.1
52.5°	236.5	253.4	284.3	339.6	417.5	483.7	477.4	411.6	347.4	298.7	266.6
55°	209.2	225.3	254.7	306.5	377.5	429.9	406.9	344.1	291.0	253.2	228.8
57.5°	184.9	200.3	225.6	272.5	334.1	370.2	340.9	287.9	245.7	216.6	198.5
60°	168.4	182.0	206.2	249.7	303.2	330.6	301.7	255.0	219.3	196.0	179.8
62.5°	152.8	164.7	187.0	226.5	273.1	296.1	266.7	227.2	196.9	176.3	162.4
65°	129.1	139.9	159.7	190.4	228.6	243.9	218.7	186.6	163.2	147.8	138.6
67.5°	107.5	116.7	133.7	157.9	186.1	197.2	178.0	153.2	135.4	123.1	115.8
70°	93.1	101.0	114.4	135.3	160.7	169.3	151.3	130.8	117.9	108.0	101.2
72.5°	81.0	86.8	99.0	115.1	136.3	143.1	130.5	112.6	100.6	93.1	87.7
75°	61.7	66.5	74.5	87.4	102.1	106.0	96.6	85.4	77.3	72.0	67.9
77.5°	44.5	48.1	53.7	61.7	71.9	75.5	69.6	62.0	56.1	52.6	50.2
80°	33.6	36.5	41.3	47.9	54.0	56.0	52.5	46.8	42.6	40.6	38.6
82.5°	24.8	26.4	29.3	33.8	38.0	40.3	37.4	33.9	31.7	29.9	29.1
85°	12.5	13.4	14.7	16.5	19.1	20.0	18.9	18.0	16.7	15.6	15.6
87.5°	5.4	5.9	7.0	7.8	9.2	10.5	10.9	11.3	11.9	11.9	12.0
90°	4.0	6.7	9.3	12.1	15.2	18.8	22.2	25.8	29.3	30.4	31.5
92.5°	31.4	33.3	35.2	36.9	38.9	40.9	42.9	45.0	46.9	47.8	48.6
95°	74.0	76.0	77.9	79.7	81.8	84.0	86.1	88.3	90.5	91.5	92.7
97.5°	129.5	130.9	132.3	133.7	135.3	136.9	138.4	140.0	141.6	142.8	144.0
100°	167.9	169.5	171.2	172.8	174.3	175.6	177.0	178.3	179.7	180.5	181.3
102.5°	211.2	212.3	213.2	214.1	215.6	217.4	219.1	220.9	222.7	223.6	224.3
105°	275.6	276.2	276.6	277.2	278.7	281.2	283.6	286.1	288.5	288.5	288.5
107.5°	350.7	351.0	351.4	351.7	352.3	353.3	354.3	355.2	356.2	357.1	358.0
110°	397.8	398.4	398.9	399.4	400.0	400.6	401.1	401.6	402.2	403.3	404.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	446.5	446.9	447.1	447.5	447.7	447.8	447.9	448.1	448.2	449.5	450.7
115°	520.4	521.1	522.0	522.8	522.9	522.4	521.9	521.3	520.8	521.0	521.3
117.5°	593.9	594.5	595.0	595.6	595.5	594.7	594.1	593.3	592.7	592.6	592.6
120°	640.9	642.6	644.2	645.8	646.0	644.6	643.3	642.0	640.6	640.3	640.0
122.5°	688.4	689.7	690.9	692.0	692.3	691.5	690.9	690.1	689.5	688.7	688.1
125°	761.2	762.0	762.8	763.6	763.7	763.2	762.7	762.1	761.6	760.5	759.4
127.5°	829.6	831.3	833.0	834.8	835.4	834.8	834.2	833.6	833.0	831.4	829.9
130°	875.0	877.2	879.4	881.6	882.2	881.4	880.6	879.8	878.9	877.9	876.8
132.5°	920.0	922.2	924.4	926.5	927.3	926.7	926.1	925.5	924.9	923.6	922.3
135°	988.2	989.8	991.4	993.1	993.7	993.4	993.2	992.9	992.6	991.6	990.4
137.5°	1051.4	1052.8	1054.1	1055.6	1056.6	1057.2	1058.0	1058.7	1059.4	1058.2	1057.1
140°	1095.4	1096.8	1098.2	1099.6	1100.3	1100.6	1100.9	1101.2	1101.5	1101.2	1100.9
142.5°	1135.6	1136.9	1138.3	1139.6	1140.6	1141.0	1141.5	1142.0	1142.6	1142.3	1142.0
145°	1197.3	1197.9	1198.4	1198.9	1199.7	1200.4	1201.3	1202.1	1202.9	1202.6	1202.3
147.5°	1252.5	1253.5	1254.5	1255.5	1256.3	1257.1	1257.8	1258.6	1259.3	1259.3	1259.3
150°	1290.2	1290.8	1291.3	1291.8	1292.4	1293.0	1293.5	1294.0	1294.6	1294.6	1294.6
152.5°	1321.7	1322.5	1323.2	1324.0	1324.6	1324.9	1325.2	1325.6	1325.9	1326.3	1326.7
155°	1370.4	1370.4	1370.4	1370.4	1370.6	1370.7	1371.0	1371.3	1371.6	1372.7	1373.8
157.5°	1412.1	1411.7	1411.5	1411.1	1411.1	1411.3	1411.5	1411.7	1411.9	1413.1	1414.2
160°	1438.3	1437.8	1437.2	1436.6	1436.3	1436.3	1436.3	1436.3	1436.3	1437.8	1439.1
162.5°	1461.5	1460.8	1460.0	1459.2	1459.0	1459.2	1459.4	1459.6	1459.8	1461.2	1462.5
165°	1491.8	1491.0	1490.2	1489.4	1488.9	1488.9	1488.9	1488.9	1488.9	1490.5	1492.2
167.5°	1515.7	1514.7	1513.5	1512.5	1512.0	1512.2	1512.5	1512.7	1512.9	1514.6	1516.3
170°	1529.5	1528.3	1527.3	1526.2	1525.6	1525.6	1525.6	1525.6	1525.6	1527.5	1529.5
172.5°	1540.2	1539.1	1538.0	1536.9	1536.3	1536.3	1536.3	1536.3	1536.3	1538.0	1539.7
175°	1551.4	1550.4	1549.3	1548.1	1547.7	1547.7	1547.7	1547.7	1547.7	1549.3	1550.9
177.5°	1556.3	1555.4	1554.5	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1554.5	1555.9
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	476.9	477.1	479.0	480.4	479.8	480.6	481.0
5°	521.0	529.0	533.1	536.2	536.4	536.7	538.4
7.5°	583.6	592.1	598.3	607.8	610.5	613.7	612.8
10°	629.3	641.9	652.6	658.3	664.5	673.4	666.2
12.5°	672.0	694.2	710.6	719.4	725.2	727.0	723.5
15°	742.4	771.4	786.9	786.6	806.3	814.8	801.4
17.5°	806.9	833.7	855.2	866.1	882.6	886.2	884.6
20°	846.5	875.7	892.4	911.3	919.8	927.5	928.8
22.5°	880.5	906.8	924.7	940.4	947.5	951.2	953.4
25°	915.7	936.3	947.1	952.5	954.5	954.0	951.2
27.5°	913.2	914.8	903.0	891.4	880.9	869.2	865.2
30°	889.5	871.1	838.1	819.4	792.0	770.2	779.1
32.5°	827.2	790.4	753.5	712.7	678.9	669.3	659.6
35°	706.0	641.4	603.6	559.7	542.2	524.6	512.5
37.5°	571.1	521.2	476.4	447.7	430.1	419.0	413.0
40°	493.8	448.8	411.9	388.6	375.2	362.8	361.0
42.5°	432.2	390.3	362.6	344.0	331.2	325.8	322.0
45°	353.9	324.8	306.1	292.9	284.4	281.1	276.6
47.5°	299.6	279.0	264.9	256.0	249.5	247.0	246.8
50°	269.2	252.0	241.8	234.7	229.7	228.8	225.3
52.5°	246.4	231.5	223.5	217.4	213.7	211.2	210.2
55°	213.9	204.0	196.7	193.2	190.4	187.9	187.9
57.5°	187.1	178.9	174.1	171.1	170.2	168.5	167.4
60°	170.6	163.6	159.9	157.2	155.4	155.7	153.7
62.5°	154.5	149.9	146.3	143.7	141.6	141.7	141.8
65°	131.5	128.0	125.4	124.5	123.2	121.7	122.1
67.5°	111.5	108.2	106.1	104.6	104.2	103.3	104.6
70°	97.1	94.6	93.1	91.8	91.3	91.5	92.7
72.5°	83.9	82.2	81.2	80.6	79.6	79.6	80.4
75°	65.9	64.6	63.7	63.1	62.8	62.8	62.8
77.5°	48.4	48.1	47.7	46.8	46.8	47.0	47.0
80°	38.2	37.5	37.3	36.9	36.2	35.8	36.9
82.5°	28.6	27.9	27.7	27.6	26.6	26.5	27.4
85°	15.4	14.7	14.9	14.7	14.7	14.5	14.5
87.5°	12.0	12.0	12.0	12.3	12.3	12.2	12.6
90°	32.6	33.6	34.5	35.1	35.6	36.1	36.7
92.5°	49.6	50.4	50.7	50.3	50.0	49.7	49.4
95°	93.7	94.8	95.4	95.4	95.4	95.4	95.4
97.5°	145.3	146.6	147.1	147.0	146.9	146.8	146.7
100°	182.1	182.9	183.6	184.2	184.7	185.3	185.8
102.5°	225.2	226.0	226.3	226.2	226.1	226.0	225.9
105°	288.5	288.5	288.8	289.4	289.8	290.4	291.0
107.5°	358.8	359.7	360.0	359.7	359.3	359.0	358.6
110°	405.5	406.5	406.8	406.2	405.8	405.2	404.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	452.0	453.4	453.9	453.8	453.7	453.6	453.6
115°	521.6	521.9	521.9	521.6	521.3	521.0	520.8
117.5°	592.5	592.4	592.0	591.3	590.5	589.7	589.0
120°	639.8	639.5	639.0	638.6	638.0	637.4	636.9
122.5°	687.3	686.6	685.9	685.1	684.4	683.6	682.9
125°	758.4	757.2	756.2	755.1	753.9	752.9	751.8
127.5°	828.4	826.9	825.5	824.3	823.0	821.8	820.5
130°	875.7	874.6	873.1	871.2	869.3	867.4	865.5
132.5°	921.0	919.7	918.3	916.8	915.4	913.9	912.5
135°	989.4	988.3	987.5	986.9	986.4	985.8	985.3
137.5°	1055.9	1054.8	1053.8	1052.7	1051.7	1050.7	1049.6
140°	1100.6	1100.3	1099.3	1097.4	1095.4	1093.5	1091.7
142.5°	1141.7	1141.4	1140.6	1139.1	1137.6	1136.1	1134.7
145°	1202.1	1201.8	1201.2	1200.0	1198.9	1197.9	1196.7
147.5°	1259.3	1259.3	1258.6	1257.0	1255.3	1253.7	1252.1
150°	1294.6	1294.6	1293.7	1292.1	1290.5	1288.8	1287.2
152.5°	1327.2	1327.6	1327.1	1325.7	1324.3	1322.9	1321.4
155°	1374.9	1375.9	1375.5	1373.7	1371.8	1369.8	1367.9
157.5°	1415.3	1416.5	1416.3	1414.8	1413.2	1411.7	1410.2
160°	1440.5	1441.8	1442.0	1440.9	1439.8	1438.7	1437.6
162.5°	1464.0	1465.3	1465.1	1463.4	1461.6	1459.9	1458.1
165°	1493.8	1495.4	1495.3	1493.5	1491.6	1489.6	1487.7
167.5°	1518.0	1519.7	1519.7	1518.0	1516.3	1514.6	1512.9
170°	1531.3	1533.2	1533.2	1531.3	1529.5	1527.5	1525.6
172.5°	1541.4	1543.1	1543.0	1541.2	1539.2	1537.3	1535.4
175°	1552.6	1554.2	1554.0	1552.1	1550.2	1548.3	1546.4
177.5°	1557.2	1558.5	1558.4	1556.8	1555.3	1553.8	1552.3
180°	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2	1556.2

(END OF REPORT)