

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: P332114-840

Luminaire Tested: **S123DIW-S340D1535U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332114-840
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-S340D1535U840-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1535 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7668.2 lumens
Efficiency: N/A
Efficacy: 143.6 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

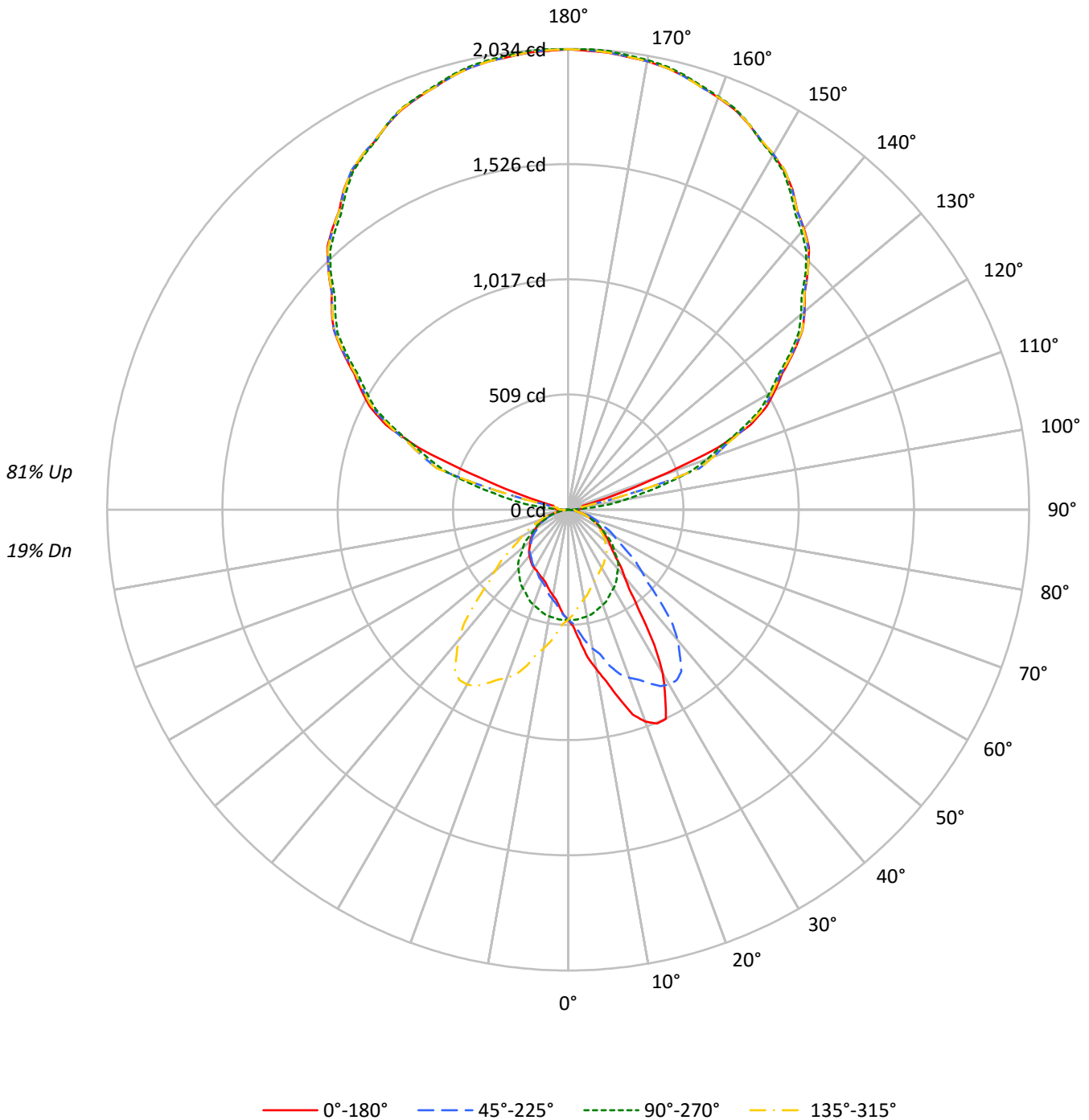
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19
1	91	87	83	80	80	77	74	71	58	56	54	41	39	38	25	24	24	16
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	76	67	60	54	66	59	53	49	45	41	38	32	29	27	19	18	17	12
4	69	59	52	46	61	52	46	41	40	36	32	28	25	23	17	16	15	10
5	63	52	45	39	56	46	40	35	35	31	28	25	22	20	16	14	13	9
6	58	47	39	34	51	42	35	30	32	27	24	23	20	18	14	13	11	8
7	54	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10	7
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	10	9	6
9	46	34	27	23	41	31	25	20	24	19	16	17	14	12	11	9	8	6
10	43	31	25	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

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	0.6
10°-20°	153.4	2.0
20°-30°	257.4	3.4
30°-40°	291.5	3.8
40°-50°	261.4	3.4
50°-60°	210.9	2.8
60°-70°	147.0	1.9
70°-80°	77.3	1.0
80°-90°	24.6	0.3
90°-100°	73.9	1.0
100°-110°	352.1	4.6
110°-120°	845.8	11.0
120°-130°	1077.0	14.0
130°-140°	1150.8	15.0
140°-150°	1076.1	14.0
150°-160°	868.0	11.3
160°-170°	560.2	7.3
170°-180°	193.1	2.5
0°-30°	458.6	6.0
0°-40°	750.1	9.8
0°-60°	1222.4	15.9
0°-90°	1471.3	19.2
90°-120°	1271.8	16.6
90°-150°	4575.6	59.7
90°-180°	6197.0	80.8
0°-180°	7668.2	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	20
90°	45	2	45	2	45	21
95°	57	92	57	92	57	48
105°	66	450	66	450	66	152
115°	888	844	888	844	888	820
125°	1214	1190	1214	1190	1214	1084
135°	1496	1481	1496	1481	1496	1154
145°	1726	1709	1726	1709	1726	1077
155°	1880	1883	1880	1883	1880	867
165°	1981	1985	1981	1985	1981	559
175°	2025	2032	2025	2032	2025	193
180°	2032	2032	2032	2032	2032	



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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°	14.7	14.2	14.2	14.3	13.9	13.9	13.9	13.8	13.7	13.6	12.9
90°	45.2	44.6	43.9	43.3	42.6	41.6	40.3	38.9	37.6	36.3	31.9
92.5°	50.1	49.7	49.3	48.9	48.5	47.3	45.1	42.9	40.8	38.7	35.3
95°	57.4	57.4	57.4	57.4	57.4	56.1	53.8	51.5	49.2	46.8	43.1
97.5°	62.2	61.9	61.5	61.2	60.9	59.4	56.7	54.0	51.3	48.6	42.8
100°	63.4	63.1	62.7	62.4	62.1	60.6	57.9	55.1	52.5	49.8	40.2
102.5°	64.6	64.0	63.4	62.8	62.2	66.0	74.4	82.7	91.0	99.4	156.5
105°	66.4	65.7	65.1	64.4	63.7	93.1	152.5	211.9	271.2	330.6	360.8
107.5°	208.6	253.4	298.1	343.0	387.7	431.8	475.3	518.9	562.5	606.0	601.3
110°	415.2	463.1	511.1	559.1	607.0	636.6	647.6	658.7	669.8	680.9	677.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	712.3	722.5	732.6	742.7	752.9	757.8	757.6	757.4	757.2	757.0	753.3
115°	887.8	886.4	885.0	883.7	882.3	880.0	876.7	873.3	869.9	866.6	863.5
117.5°	986.1	985.9	985.6	985.3	985.1	983.6	980.9	978.3	975.5	972.9	971.3
120°	1053.8	1053.8	1053.8	1053.8	1053.8	1052.5	1049.8	1047.1	1044.4	1041.7	1040.7
122.5°	1120.2	1119.9	1119.6	1119.4	1119.1	1118.1	1116.2	1114.3	1112.5	1110.5	1109.2
125°	1213.9	1213.2	1212.4	1211.8	1211.1	1210.4	1209.8	1209.1	1208.5	1207.8	1206.5
127.5°	1303.8	1304.4	1305.1	1305.9	1306.5	1306.3	1305.3	1304.1	1303.0	1302.0	1300.4
130°	1361.8	1362.4	1363.1	1363.8	1364.4	1364.1	1362.8	1361.4	1360.1	1358.8	1357.5
132.5°	1414.9	1415.8	1416.8	1417.7	1418.7	1418.5	1417.1	1415.8	1414.4	1413.1	1412.0
135°	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2	1499.1	1498.1	1497.1	1496.1	1494.8
137.5°	1572.6	1573.2	1573.9	1574.6	1575.2	1574.8	1573.2	1571.6	1569.9	1568.3	1567.6
140°	1618.4	1619.1	1619.8	1620.4	1621.1	1620.7	1619.4	1618.1	1616.8	1615.4	1614.4
142.5°	1660.7	1661.6	1662.5	1663.6	1664.5	1664.4	1663.3	1662.2	1661.1	1660.1	1659.1
145°	1725.7	1725.7	1725.7	1725.7	1725.7	1725.3	1724.6	1723.9	1723.2	1722.6	1721.9
147.5°	1773.9	1775.4	1777.1	1778.6	1780.1	1780.6	1779.9	1779.2	1778.6	1777.9	1777.2
150°	1810.2	1811.2	1812.2	1813.2	1814.2	1814.3	1813.7	1813.0	1812.3	1811.7	1811.0
152.5°	1839.2	1840.7	1842.2	1843.8	1845.3	1845.5	1844.3	1843.1	1841.9	1840.7	1840.3
155°	1879.7	1881.6	1883.6	1885.6	1887.6	1887.8	1886.1	1884.5	1882.8	1881.1	1880.8
157.5°	1913.7	1916.3	1918.9	1921.6	1924.2	1924.5	1922.5	1920.5	1918.4	1916.4	1916.8
160°	1935.5	1937.8	1940.2	1942.5	1944.9	1945.0	1943.0	1941.1	1939.0	1937.0	1937.3
162.5°	1956.0	1958.1	1960.1	1962.3	1964.3	1964.2	1962.0	1959.6	1957.4	1955.1	1955.4
165°	1980.7	1983.1	1985.5	1987.8	1990.1	1990.0	1987.3	1984.6	1982.0	1979.2	1979.6
167.5°	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3	2006.6	2004.0	2001.2	1998.6	1998.6
170°	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2	2017.5	2014.8	2012.2	2009.4	2009.4
172.5°	2015.5	2018.4	2021.4	2024.4	2027.3	2027.4	2024.8	2022.1	2019.4	2016.7	2016.4
175°	2024.6	2027.2	2029.9	2032.6	2035.3	2035.5	2033.1	2030.7	2028.4	2026.1	2025.7
177.5°	2027.3	2029.9	2032.7	2035.3	2038.0	2038.3	2036.1	2034.0	2031.8	2029.7	2029.4
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	12.4	11.8	10.3	8.8	7.8	6.6	5.9	4.8	5.2	5.8	6.3
90°	27.5	23.1	18.8	14.9	11.6	8.2	4.8	1.5	4.8	8.2	11.6
92.5°	32.1	28.8	25.4	24.3	25.2	26.2	27.2	28.1	27.2	26.2	25.2
95°	39.4	35.7	32.0	37.1	50.8	64.6	78.4	92.1	78.4	64.6	50.8
97.5°	96.9	121.1	145.2	160.4	166.5	172.8	178.9	185.1	178.9	172.8	166.5
100°	154.5	206.8	259.1	282.0	275.3	268.5	261.9	255.2	261.9	268.5	275.3
102.5°	213.7	270.8	328.0	354.2	349.3	344.6	339.7	334.9	339.7	344.6	349.3
105°	391.0	421.2	451.4	464.6	461.0	457.3	453.6	449.9	453.6	457.3	461.0
107.5°	596.5	591.7	586.9	583.1	580.2	577.1	574.2	571.3	574.2	577.1	580.2
110°	673.5	669.8	666.1	663.0	660.2	657.5	654.9	652.2	654.9	657.5	660.2



TEST NUMBER: P332114-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	749.6	745.9	742.3	739.1	736.8	734.4	732.0	729.5	732.0	734.4	736.8
115°	860.5	857.6	854.5	852.0	850.0	848.0	846.0	843.9	846.0	848.0	850.0
117.5°	969.8	968.3	966.7	964.7	962.2	959.7	957.3	954.7	957.3	959.7	962.2
120°	1039.7	1038.6	1037.7	1035.7	1032.7	1029.7	1026.6	1023.6	1026.6	1029.7	1032.7
122.5°	1108.0	1106.7	1105.5	1103.6	1101.1	1098.6	1096.1	1093.7	1096.1	1098.6	1101.1
125°	1205.1	1203.8	1202.4	1200.4	1197.7	1195.1	1192.3	1189.6	1192.3	1195.1	1197.7
127.5°	1298.8	1297.2	1295.6	1293.4	1290.7	1288.1	1285.4	1282.6	1285.4	1288.1	1290.7
130°	1356.0	1354.7	1353.4	1351.4	1348.7	1346.0	1343.3	1340.6	1343.3	1346.0	1348.7
132.5°	1411.0	1409.9	1408.9	1406.9	1404.2	1401.6	1398.9	1396.2	1398.9	1401.6	1404.2
135°	1493.5	1492.1	1490.8	1489.1	1487.1	1485.1	1483.1	1481.1	1483.1	1485.1	1487.1
137.5°	1566.8	1566.1	1565.4	1563.7	1561.2	1558.6	1556.1	1553.5	1556.1	1558.6	1561.2
140°	1613.4	1612.4	1611.3	1609.9	1607.9	1605.9	1603.9	1601.8	1603.9	1605.9	1607.9
142.5°	1658.1	1657.1	1656.1	1654.6	1652.5	1650.5	1648.5	1646.5	1648.5	1650.5	1652.5
145°	1721.2	1720.6	1719.9	1718.4	1716.1	1713.7	1711.3	1709.0	1711.3	1713.7	1716.1
147.5°	1776.6	1775.8	1775.1	1774.0	1772.5	1771.0	1769.5	1767.9	1769.5	1771.0	1772.5
150°	1810.4	1809.7	1809.0	1808.2	1807.2	1806.1	1805.1	1804.1	1805.1	1806.1	1807.2
152.5°	1839.9	1839.5	1839.1	1838.7	1838.2	1837.7	1837.2	1836.7	1837.2	1837.7	1838.2
155°	1880.5	1880.2	1879.8	1880.0	1880.7	1881.3	1882.0	1882.6	1882.0	1881.3	1880.7
157.5°	1917.1	1917.4	1917.8	1918.0	1918.0	1918.1	1918.2	1918.2	1918.2	1918.1	1918.0
160°	1937.6	1938.0	1938.3	1938.6	1939.0	1939.3	1939.6	1940.1	1939.6	1939.3	1939.0
162.5°	1955.8	1956.1	1956.4	1957.0	1957.9	1958.8	1959.6	1960.6	1959.6	1958.8	1957.9
165°	1979.9	1980.2	1980.6	1981.3	1982.3	1983.3	1984.3	1985.3	1984.3	1983.3	1982.3
167.5°	1998.6	1998.6	1998.6	1999.2	2000.6	2002.0	2003.3	2004.6	2003.3	2002.0	2000.6
170°	2009.4	2009.4	2009.4	2010.1	2011.4	2012.8	2014.2	2015.5	2014.2	2012.8	2011.4
172.5°	2016.2	2015.9	2015.6	2016.3	2017.9	2019.5	2021.1	2022.8	2021.1	2019.5	2017.9
175°	2025.4	2025.1	2024.7	2025.4	2027.1	2028.7	2030.4	2032.1	2030.4	2028.7	2027.1
177.5°	2029.1	2028.9	2028.6	2029.1	2030.5	2031.8	2033.2	2034.5	2033.2	2031.8	2030.5
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	6.8	7.7	8.4	9.5	10.1	11.2	11.5	11.3	11.6	12.4	11.9
90°	14.9	18.8	23.1	27.5	31.9	36.3	37.6	38.9	40.3	41.6	42.6
92.5°	24.3	25.4	28.8	32.1	35.3	38.7	40.8	42.9	45.1	47.3	48.5
95°	37.1	32.0	35.7	39.4	43.1	46.8	49.2	51.5	53.8	56.1	57.4
97.5°	160.4	145.2	121.1	96.9	72.8	48.6	51.3	54.0	56.7	59.4	60.9
100°	282.0	259.1	206.8	154.5	102.2	49.8	52.5	55.1	57.9	60.6	62.1
102.5°	354.2	328.0	270.8	213.7	156.5	99.4	91.0	82.7	74.4	66.0	62.2
105°	464.6	451.4	421.2	391.0	360.8	330.6	271.2	211.9	152.5	93.1	63.7
107.5°	583.1	586.9	591.7	596.5	601.3	606.0	562.5	518.9	475.3	431.8	387.7
110°	663.0	666.1	669.8	673.5	677.2	680.9	669.8	658.7	647.6	636.6	607.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	739.1	742.3	745.9	749.6	753.3	757.0	757.2	757.4	757.6	757.8	752.9
115°	852.0	854.5	857.6	860.5	863.5	866.6	869.9	873.3	876.7	880.0	882.3
117.5°	964.7	966.7	968.3	969.8	971.3	972.9	975.5	978.3	980.9	983.6	985.1
120°	1035.7	1037.7	1038.6	1039.7	1040.7	1041.7	1044.4	1047.1	1049.8	1052.5	1053.8
122.5°	1103.6	1105.5	1106.7	1108.0	1109.2	1110.5	1112.5	1114.3	1116.2	1118.1	1119.1
125°	1200.4	1202.4	1203.8	1205.1	1206.5	1207.8	1208.5	1209.1	1209.8	1210.4	1211.1
127.5°	1293.4	1295.6	1297.2	1298.8	1300.4	1302.0	1303.0	1304.1	1305.3	1306.3	1306.5
130°	1351.4	1353.4	1354.7	1356.0	1357.5	1358.8	1360.1	1361.4	1362.8	1364.1	1364.4
132.5°	1406.9	1408.9	1409.9	1411.0	1412.0	1413.1	1414.4	1415.8	1417.1	1418.5	1418.7
135°	1489.1	1490.8	1492.1	1493.5	1494.8	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2
137.5°	1563.7	1565.4	1566.1	1566.8	1567.6	1568.3	1569.9	1571.6	1573.2	1574.8	1575.2
140°	1609.9	1611.3	1612.4	1613.4	1614.4	1615.4	1616.8	1618.1	1619.4	1620.7	1621.1
142.5°	1654.6	1656.1	1657.1	1658.1	1659.1	1660.1	1661.1	1662.2	1663.3	1664.4	1664.5
145°	1718.4	1719.9	1720.6	1721.2	1721.9	1722.6	1723.2	1723.9	1724.6	1725.3	1725.7
147.5°	1774.0	1775.1	1775.8	1776.6	1777.2	1777.9	1778.6	1779.2	1779.9	1780.6	1780.1
150°	1808.2	1809.0	1809.7	1810.4	1811.0	1811.7	1812.3	1813.0	1813.7	1814.3	1814.2
152.5°	1838.7	1839.1	1839.5	1839.9	1840.3	1840.7	1841.9	1843.1	1844.3	1845.5	1845.3
155°	1880.0	1879.8	1880.2	1880.5	1880.8	1881.1	1882.8	1884.5	1886.1	1887.8	1887.6
157.5°	1918.0	1917.8	1917.4	1917.1	1916.8	1916.4	1918.4	1920.5	1922.5	1924.5	1924.2
160°	1938.6	1938.3	1938.0	1937.6	1937.3	1937.0	1939.0	1941.1	1943.0	1945.0	1944.9
162.5°	1957.0	1956.4	1956.1	1955.8	1955.4	1955.1	1957.4	1959.6	1962.0	1964.2	1964.3
165°	1981.3	1980.6	1980.2	1979.9	1979.6	1979.2	1982.0	1984.6	1987.3	1990.0	1990.1
167.5°	1999.2	1998.6	1998.6	1998.6	1998.6	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3
170°	2010.1	2009.4	2009.4	2009.4	2009.4	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2
172.5°	2016.3	2015.6	2015.9	2016.2	2016.4	2016.7	2019.4	2022.1	2024.8	2027.4	2027.3
175°	2025.4	2024.7	2025.1	2025.4	2025.7	2026.1	2028.4	2030.7	2033.1	2035.5	2035.3
177.5°	2029.1	2028.6	2028.9	2029.1	2029.4	2029.7	2031.8	2034.0	2036.1	2038.3	2038.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	12.0	12.2	12.1	12.1	12.1	12.2	12.0	11.9	12.4	11.6	11.3
90°	43.3	43.9	44.6	45.2	44.6	43.9	43.3	42.6	41.6	40.3	38.9
92.5°	48.9	49.3	49.7	50.1	49.7	49.3	48.9	48.5	47.3	45.1	42.9
95°	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	56.1	53.8	51.5
97.5°	61.2	61.5	61.9	62.2	61.9	61.5	61.2	60.9	59.4	56.7	54.0
100°	62.4	62.7	63.1	63.4	63.1	62.7	62.4	62.1	60.6	57.9	55.1
102.5°	62.8	63.4	64.0	64.6	64.0	63.4	62.8	62.2	66.0	74.4	82.7
105°	64.4	65.1	65.7	66.4	65.7	65.1	64.4	63.7	93.1	152.5	211.9
107.5°	343.0	298.1	253.4	208.6	253.4	298.1	343.0	387.7	431.8	475.3	518.9
110°	559.1	511.1	463.1	415.2	463.1	511.1	559.1	607.0	636.6	647.6	658.7



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CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	742.7	732.6	722.5	712.3	722.5	732.6	742.7	752.9	757.8	757.6	757.4
115°	883.7	885.0	886.4	887.8	886.4	885.0	883.7	882.3	880.0	876.7	873.3
117.5°	985.3	985.6	985.9	986.1	985.9	985.6	985.3	985.1	983.6	980.9	978.3
120°	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1053.8	1052.5	1049.8	1047.1
122.5°	1119.4	1119.6	1119.9	1120.2	1119.9	1119.6	1119.4	1119.1	1118.1	1116.2	1114.3
125°	1211.8	1212.4	1213.2	1213.9	1213.2	1212.4	1211.8	1211.1	1210.4	1209.8	1209.1
127.5°	1305.9	1305.1	1304.4	1303.8	1304.4	1305.1	1305.9	1306.5	1306.3	1305.3	1304.1
130°	1363.8	1363.1	1362.4	1361.8	1362.4	1363.1	1363.8	1364.4	1364.1	1362.8	1361.4
132.5°	1417.7	1416.8	1415.8	1414.9	1415.8	1416.8	1417.7	1418.7	1418.5	1417.1	1415.8
135°	1499.1	1498.1	1497.1	1496.1	1497.1	1498.1	1499.1	1500.2	1500.2	1499.1	1498.1
137.5°	1574.6	1573.9	1573.2	1572.6	1573.2	1573.9	1574.6	1575.2	1574.8	1573.2	1571.6
140°	1620.4	1619.8	1619.1	1618.4	1619.1	1619.8	1620.4	1621.1	1620.7	1619.4	1618.1
142.5°	1663.6	1662.5	1661.6	1660.7	1661.6	1662.5	1663.6	1664.5	1664.4	1663.3	1662.2
145°	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.7	1725.3	1724.6	1723.9
147.5°	1778.6	1777.1	1775.4	1773.9	1775.4	1777.1	1778.6	1780.1	1780.6	1779.9	1779.2
150°	1813.2	1812.2	1811.2	1810.2	1811.2	1812.2	1813.2	1814.2	1814.3	1813.7	1813.0
152.5°	1843.8	1842.2	1840.7	1839.2	1840.7	1842.2	1843.8	1845.3	1845.5	1844.3	1843.1
155°	1885.6	1883.6	1881.6	1879.7	1881.6	1883.6	1885.6	1887.6	1887.8	1886.1	1884.5
157.5°	1921.6	1918.9	1916.3	1913.7	1916.3	1918.9	1921.6	1924.2	1924.5	1922.5	1920.5
160°	1942.5	1940.2	1937.8	1935.5	1937.8	1940.2	1942.5	1944.9	1945.0	1943.0	1941.1
162.5°	1962.3	1960.1	1958.1	1956.0	1958.1	1960.1	1962.3	1964.3	1964.2	1962.0	1959.6
165°	1987.8	1985.5	1983.1	1980.7	1983.1	1985.5	1987.8	1990.1	1990.0	1987.3	1984.6
167.5°	2006.6	2004.0	2001.2	1998.6	2001.2	2004.0	2006.6	2009.3	2009.3	2006.6	2004.0
170°	2017.5	2014.8	2012.2	2009.4	2012.2	2014.8	2017.5	2020.2	2020.2	2017.5	2014.8
172.5°	2024.4	2021.4	2018.4	2015.5	2018.4	2021.4	2024.4	2027.3	2027.4	2024.8	2022.1
175°	2032.6	2029.9	2027.2	2024.6	2027.2	2029.9	2032.6	2035.3	2035.5	2033.1	2030.7
177.5°	2035.3	2032.7	2029.9	2027.3	2029.9	2032.7	2035.3	2038.0	2038.3	2036.1	2034.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	11.5	11.2	10.1	9.5	8.4	7.7	6.8	6.3	5.8	5.2	4.8
90°	37.6	36.3	31.9	27.5	23.1	18.8	14.9	11.6	8.2	4.8	1.5
92.5°	40.8	38.7	35.3	32.1	28.8	25.4	24.3	25.2	26.2	27.2	28.1
95°	49.2	46.8	43.1	39.4	35.7	32.0	37.1	50.8	64.6	78.4	92.1
97.5°	51.3	48.6	72.8	96.9	121.1	145.2	160.4	166.5	172.8	178.9	185.1
100°	52.5	49.8	102.2	154.5	206.8	259.1	282.0	275.3	268.5	261.9	255.2
102.5°	91.0	99.4	156.5	213.7	270.8	328.0	354.2	349.3	344.6	339.7	334.9
105°	271.2	330.6	360.8	391.0	421.2	451.4	464.6	461.0	457.3	453.6	449.9
107.5°	562.5	606.0	601.3	596.5	591.7	586.9	583.1	580.2	577.1	574.2	571.3
110°	669.8	680.9	677.2	673.5	669.8	666.1	663.0	660.2	657.5	654.9	652.2



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CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	757.2	757.0	753.3	749.6	745.9	742.3	739.1	736.8	734.4	732.0	729.5
115°	869.9	866.6	863.5	860.5	857.6	854.5	852.0	850.0	848.0	846.0	843.9
117.5°	975.5	972.9	971.3	969.8	968.3	966.7	964.7	962.2	959.7	957.3	954.7
120°	1044.4	1041.7	1040.7	1039.7	1038.6	1037.7	1035.7	1032.7	1029.7	1026.6	1023.6
122.5°	1112.5	1110.5	1109.2	1108.0	1106.7	1105.5	1103.6	1101.1	1098.6	1096.1	1093.7
125°	1208.5	1207.8	1206.5	1205.1	1203.8	1202.4	1200.4	1197.7	1195.1	1192.3	1189.6
127.5°	1303.0	1302.0	1300.4	1298.8	1297.2	1295.6	1293.4	1290.7	1288.1	1285.4	1282.6
130°	1360.1	1358.8	1357.5	1356.0	1354.7	1353.4	1351.4	1348.7	1346.0	1343.3	1340.6
132.5°	1414.4	1413.1	1412.0	1411.0	1409.9	1408.9	1406.9	1404.2	1401.6	1398.9	1396.2
135°	1497.1	1496.1	1494.8	1493.5	1492.1	1490.8	1489.1	1487.1	1485.1	1483.1	1481.1
137.5°	1569.9	1568.3	1567.6	1566.8	1566.1	1565.4	1563.7	1561.2	1558.6	1556.1	1553.5
140°	1616.8	1615.4	1614.4	1613.4	1612.4	1611.3	1609.9	1607.9	1605.9	1603.9	1601.8
142.5°	1661.1	1660.1	1659.1	1658.1	1657.1	1656.1	1654.6	1652.5	1650.5	1648.5	1646.5
145°	1723.2	1722.6	1721.9	1721.2	1720.6	1719.9	1718.4	1716.1	1713.7	1711.3	1709.0
147.5°	1778.6	1777.9	1777.2	1776.6	1775.8	1775.1	1774.0	1772.5	1771.0	1769.5	1767.9
150°	1812.3	1811.7	1811.0	1810.4	1809.7	1809.0	1808.2	1807.2	1806.1	1805.1	1804.1
152.5°	1841.9	1840.7	1840.3	1839.9	1839.5	1839.1	1838.7	1838.2	1837.7	1837.2	1836.7
155°	1882.8	1881.1	1880.8	1880.5	1880.2	1879.8	1880.0	1880.7	1881.3	1882.0	1882.6
157.5°	1918.4	1916.4	1916.8	1917.1	1917.4	1917.8	1918.0	1918.0	1918.1	1918.2	1918.2
160°	1939.0	1937.0	1937.3	1937.6	1938.0	1938.3	1938.6	1939.0	1939.3	1939.6	1940.1
162.5°	1957.4	1955.1	1955.4	1955.8	1956.1	1956.4	1957.0	1957.9	1958.8	1959.6	1960.6
165°	1982.0	1979.2	1979.6	1979.9	1980.2	1980.6	1981.3	1982.3	1983.3	1984.3	1985.3
167.5°	2001.2	1998.6	1998.6	1998.6	1998.6	1998.6	1999.2	2000.6	2002.0	2003.3	2004.6
170°	2012.2	2009.4	2009.4	2009.4	2009.4	2009.4	2010.1	2011.4	2012.8	2014.2	2015.5
172.5°	2019.4	2016.7	2016.4	2016.2	2015.9	2015.6	2016.3	2017.9	2019.5	2021.1	2022.8
175°	2028.4	2026.1	2025.7	2025.4	2025.1	2024.7	2025.4	2027.1	2028.7	2030.4	2032.1
177.5°	2031.8	2029.7	2029.4	2029.1	2028.9	2028.6	2029.1	2030.5	2031.8	2033.2	2034.5
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	5.9	6.6	7.8	8.8	10.3	11.8	12.4	12.9	13.6	13.7	13.8
90°	4.8	8.2	11.6	14.9	18.8	23.1	27.5	31.9	36.3	37.6	38.9
92.5°	27.2	26.2	25.2	24.3	25.4	28.8	32.1	35.3	38.7	40.8	42.9
95°	78.4	64.6	50.8	37.1	32.0	35.7	39.4	43.1	46.8	49.2	51.5
97.5°	178.9	172.8	166.5	160.4	145.2	121.1	96.9	72.8	48.6	51.3	54.0
100°	261.9	268.5	275.3	282.0	259.1	206.8	154.5	102.2	49.8	52.5	55.1
102.5°	339.7	344.6	349.3	354.2	328.0	270.8	213.7	156.5	99.4	91.0	82.7
105°	453.6	457.3	461.0	464.6	451.4	421.2	391.0	360.8	330.6	271.2	211.9
107.5°	574.2	577.1	580.2	583.1	586.9	591.7	596.5	601.3	606.0	562.5	518.9
110°	654.9	657.5	660.2	663.0	666.1	669.8	673.5	677.2	680.9	669.8	658.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	732.0	734.4	736.8	739.1	742.3	745.9	749.6	753.3	757.0	757.2	757.4
115°	846.0	848.0	850.0	852.0	854.5	857.6	860.5	863.5	866.6	869.9	873.3
117.5°	957.3	959.7	962.2	964.7	966.7	968.3	969.8	971.3	972.9	975.5	978.3
120°	1026.6	1029.7	1032.7	1035.7	1037.7	1038.6	1039.7	1040.7	1041.7	1044.4	1047.1
122.5°	1096.1	1098.6	1101.1	1103.6	1105.5	1106.7	1108.0	1109.2	1110.5	1112.5	1114.3
125°	1192.3	1195.1	1197.7	1200.4	1202.4	1203.8	1205.1	1206.5	1207.8	1208.5	1209.1
127.5°	1285.4	1288.1	1290.7	1293.4	1295.6	1297.2	1298.8	1300.4	1302.0	1303.0	1304.1
130°	1343.3	1346.0	1348.7	1351.4	1353.4	1354.7	1356.0	1357.5	1358.8	1360.1	1361.4
132.5°	1398.9	1401.6	1404.2	1406.9	1408.9	1409.9	1411.0	1412.0	1413.1	1414.4	1415.8
135°	1483.1	1485.1	1487.1	1489.1	1490.8	1492.1	1493.5	1494.8	1496.1	1497.1	1498.1
137.5°	1556.1	1558.6	1561.2	1563.7	1565.4	1566.1	1566.8	1567.6	1568.3	1569.9	1571.6
140°	1603.9	1605.9	1607.9	1609.9	1611.3	1612.4	1613.4	1614.4	1615.4	1616.8	1618.1
142.5°	1648.5	1650.5	1652.5	1654.6	1656.1	1657.1	1658.1	1659.1	1660.1	1661.1	1662.2
145°	1711.3	1713.7	1716.1	1718.4	1719.9	1720.6	1721.2	1721.9	1722.6	1723.2	1723.9
147.5°	1769.5	1771.0	1772.5	1774.0	1775.1	1775.8	1776.6	1777.2	1777.9	1778.6	1779.2
150°	1805.1	1806.1	1807.2	1808.2	1809.0	1809.7	1810.4	1811.0	1811.7	1812.3	1813.0
152.5°	1837.2	1837.7	1838.2	1838.7	1839.1	1839.5	1839.9	1840.3	1840.7	1841.9	1843.1
155°	1882.0	1881.3	1880.7	1880.0	1879.8	1880.2	1880.5	1880.8	1881.1	1882.8	1884.5
157.5°	1918.2	1918.1	1918.0	1918.0	1917.8	1917.4	1917.1	1916.8	1916.4	1918.4	1920.5
160°	1939.6	1939.3	1939.0	1938.6	1938.3	1938.0	1937.6	1937.3	1937.0	1939.0	1941.1
162.5°	1959.6	1958.8	1957.9	1957.0	1956.4	1956.1	1955.8	1955.4	1955.1	1957.4	1959.6
165°	1984.3	1983.3	1982.3	1981.3	1980.6	1980.2	1979.9	1979.6	1979.2	1982.0	1984.6
167.5°	2003.3	2002.0	2000.6	1999.2	1998.6	1998.6	1998.6	1998.6	1998.6	2001.2	2004.0
170°	2014.2	2012.8	2011.4	2010.1	2009.4	2009.4	2009.4	2009.4	2009.4	2012.2	2014.8
172.5°	2021.1	2019.5	2017.9	2016.3	2015.6	2015.9	2016.2	2016.4	2016.7	2019.4	2022.1
175°	2030.4	2028.7	2027.1	2025.4	2024.7	2025.1	2025.4	2025.7	2026.1	2028.4	2030.7
177.5°	2033.2	2031.8	2030.5	2029.1	2028.6	2028.9	2029.1	2029.4	2029.7	2031.8	2034.0
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1



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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°	13.9	13.9	13.9	14.3	14.2	14.2	14.7
90°	40.3	41.6	42.6	43.3	43.9	44.6	45.2
92.5°	45.1	47.3	48.5	48.9	49.3	49.7	50.1
95°	53.8	56.1	57.4	57.4	57.4	57.4	57.4
97.5°	56.7	59.4	60.9	61.2	61.5	61.9	62.2
100°	57.9	60.6	62.1	62.4	62.7	63.1	63.4
102.5°	74.4	66.0	62.2	62.8	63.4	64.0	64.6
105°	152.5	93.1	63.7	64.4	65.1	65.7	66.4
107.5°	475.3	431.8	387.7	343.0	298.1	253.4	208.6
110°	647.6	636.6	607.0	559.1	511.1	463.1	415.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	757.6	757.8	752.9	742.7	732.6	722.5	712.3
115°	876.7	880.0	882.3	883.7	885.0	886.4	887.8
117.5°	980.9	983.6	985.1	985.3	985.6	985.9	986.1
120°	1049.8	1052.5	1053.8	1053.8	1053.8	1053.8	1053.8
122.5°	1116.2	1118.1	1119.1	1119.4	1119.6	1119.9	1120.2
125°	1209.8	1210.4	1211.1	1211.8	1212.4	1213.2	1213.9
127.5°	1305.3	1306.3	1306.5	1305.9	1305.1	1304.4	1303.8
130°	1362.8	1364.1	1364.4	1363.8	1363.1	1362.4	1361.8
132.5°	1417.1	1418.5	1418.7	1417.7	1416.8	1415.8	1414.9
135°	1499.1	1500.2	1500.2	1499.1	1498.1	1497.1	1496.1
137.5°	1573.2	1574.8	1575.2	1574.6	1573.9	1573.2	1572.6
140°	1619.4	1620.7	1621.1	1620.4	1619.8	1619.1	1618.4
142.5°	1663.3	1664.4	1664.5	1663.6	1662.5	1661.6	1660.7
145°	1724.6	1725.3	1725.7	1725.7	1725.7	1725.7	1725.7
147.5°	1779.9	1780.6	1780.1	1778.6	1777.1	1775.4	1773.9
150°	1813.7	1814.3	1814.2	1813.2	1812.2	1811.2	1810.2
152.5°	1844.3	1845.5	1845.3	1843.8	1842.2	1840.7	1839.2
155°	1886.1	1887.8	1887.6	1885.6	1883.6	1881.6	1879.7
157.5°	1922.5	1924.5	1924.2	1921.6	1918.9	1916.3	1913.7
160°	1943.0	1945.0	1944.9	1942.5	1940.2	1937.8	1935.5
162.5°	1962.0	1964.2	1964.3	1962.3	1960.1	1958.1	1956.0
165°	1987.3	1990.0	1990.1	1987.8	1985.5	1983.1	1980.7
167.5°	2006.6	2009.3	2009.3	2006.6	2004.0	2001.2	1998.6
170°	2017.5	2020.2	2020.2	2017.5	2014.8	2012.2	2009.4
172.5°	2024.8	2027.4	2027.3	2024.4	2021.4	2018.4	2015.5
175°	2033.1	2035.5	2035.3	2032.6	2029.9	2027.2	2024.6
177.5°	2036.1	2038.3	2038.0	2035.3	2032.7	2029.9	2027.3
180°	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1	2032.1

(END OF REPORT)