

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: P332115-840

Luminaire Tested: **S123DIW-S340D1535U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332115-840
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-S340D1535U840-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1535 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6842.4 lumens
Efficiency: N/A
Efficacy: 128.1 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

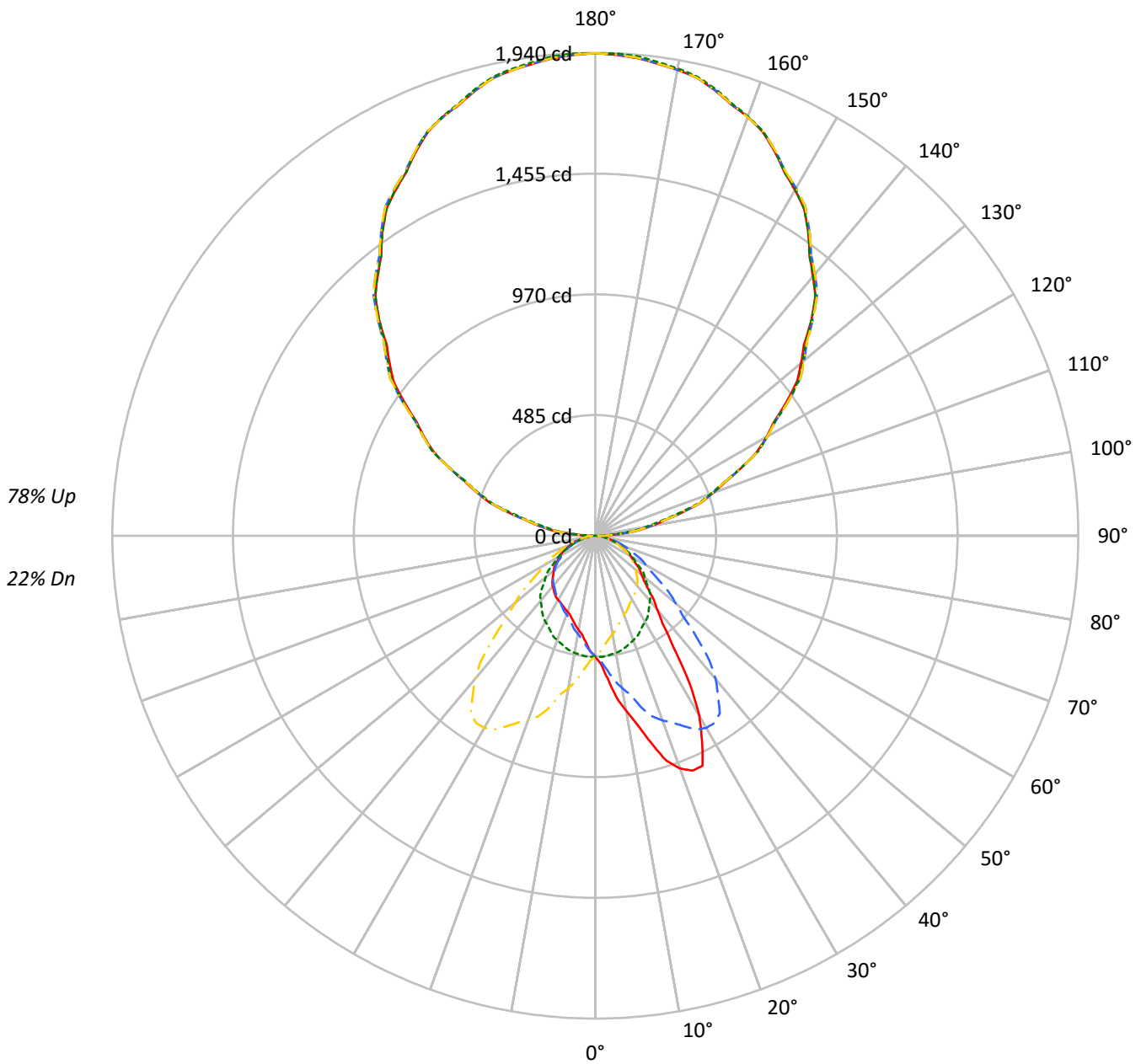
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	87	84	80	81	78	75	72	59	57	55	42	41	40	27	26	25	18
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	20	18	13
4	69	59	52	46	61	53	47	42	41	36	33	29	26	24	19	17	16	11
5	64	53	45	39	56	47	40	36	36	32	28	26	23	21	17	15	14	10
6	58	47	39	34	52	42	35	31	33	28	24	24	21	18	15	14	12	9
7	54	42	35	30	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	24	27	22	19	19	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

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	0.7
10°-20°	153.4	2.2
20°-30°	257.4	3.8
30°-40°	291.5	4.3
40°-50°	261.4	3.8
50°-60°	210.9	3.1
60°-70°	147.0	2.1
70°-80°	77.3	1.1
80°-90°	24.6	0.4
90°-100°	126.3	1.8
100°-110°	378.0	5.5
110°-120°	642.9	9.4
120°-130°	845.6	12.4
130°-140°	950.5	13.9
140°-150°	934.3	13.7
150°-160°	786.5	11.5
160°-170°	523.6	7.7
170°-180°	183.3	2.7
0°-30°	458.6	6.7
0°-40°	750.1	11.0
0°-60°	1222.4	17.9
0°-90°	1471.3	21.5
90°-120°	1147.2	16.8
90°-150°	3877.6	56.7
90°-180°	5371.0	78.5
0°-180°	6842.4	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°	46	2	46	2	46	23
95°	119	90	119	90	119	122
105°	362	343	362	343	362	385
115°	649	647	649	647	649	642
125°	936	947	936	947	936	837
135°	1227	1229	1227	1229	1227	944
145°	1491	1491	1491	1491	1491	931
155°	1704	1707	1704	1707	1704	785
165°	1853	1859	1853	1859	1853	523
175°	1926	1934	1926	1934	1926	183
180°	1938	1938	1938	1938	1938	



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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	14.3	14.3	14.0	14.0	13.9	13.8	13.8	13.7	13.0
90°	45.6	45.0	44.3	43.6	43.0	42.0	40.6	39.3	37.9	36.6	32.1
92.5°	61.5	61.9	62.3	62.7	63.1	62.8	61.7	60.6	59.6	58.5	55.9
95°	118.8	118.8	118.8	118.8	118.8	118.1	116.7	115.4	114.0	112.7	110.0
97.5°	182.8	182.9	183.0	183.2	183.3	182.6	181.0	179.5	177.9	176.3	174.4
100°	231.5	230.8	230.1	229.4	228.7	227.9	226.9	225.9	224.9	223.9	222.2
102.5°	281.4	281.6	281.7	281.9	282.0	281.6	280.5	279.5	278.5	277.4	275.2
105°	362.4	361.7	361.1	360.4	359.7	359.4	359.4	359.4	359.4	359.4	356.4
107.5°	446.8	447.2	447.6	448.0	448.4	448.1	447.0	446.0	444.8	443.7	442.5
110°	504.0	504.7	505.4	506.0	506.8	506.4	505.0	503.7	502.4	501.0	500.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	564.9	565.1	565.2	565.4	565.5	564.7	563.1	561.5	559.9	558.3	558.2
115°	648.7	649.0	649.4	649.7	650.1	650.1	649.7	649.4	649.0	648.7	649.4
117.5°	733.7	734.7	735.6	736.5	737.5	738.0	738.1	738.1	738.2	738.3	739.1
120°	793.3	794.1	794.8	795.5	796.1	796.6	797.0	797.3	797.6	798.0	799.6
122.5°	850.6	851.6	852.5	853.5	854.4	855.4	856.3	857.1	858.0	858.9	859.8
125°	936.5	937.9	939.3	940.6	941.9	943.3	944.6	946.0	947.4	948.8	949.4
127.5°	1022.1	1023.7	1025.2	1026.8	1028.3	1030.1	1032.0	1033.9	1035.7	1037.6	1038.4
130°	1078.1	1080.6	1082.9	1085.3	1087.6	1089.5	1090.9	1092.2	1093.6	1094.9	1095.9
132.5°	1136.6	1138.4	1140.3	1142.2	1144.0	1145.7	1147.3	1148.9	1150.5	1152.2	1152.9
135°	1227.4	1228.1	1228.7	1229.4	1230.1	1231.1	1232.4	1233.9	1235.2	1236.6	1236.9
137.5°	1307.5	1308.8	1310.1	1311.3	1312.6	1314.0	1315.5	1316.9	1318.3	1319.7	1318.8
140°	1359.9	1362.2	1364.6	1367.0	1369.4	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7
142.5°	1413.5	1415.3	1417.1	1419.0	1420.8	1421.9	1422.2	1422.6	1422.9	1423.2	1422.6
145°	1490.9	1492.2	1493.6	1494.9	1496.2	1497.1	1497.4	1497.7	1498.1	1498.4	1497.4
147.5°	1559.6	1561.7	1563.8	1565.8	1567.8	1568.8	1568.8	1568.8	1568.8	1568.8	1567.8
150°	1603.6	1605.6	1607.6	1609.6	1611.6	1612.7	1612.7	1612.7	1612.7	1612.7	1611.9
152.5°	1646.2	1647.9	1649.7	1651.4	1653.3	1653.9	1653.3	1652.7	1652.2	1651.6	1651.2
155°	1704.0	1706.4	1708.8	1711.1	1713.5	1714.0	1712.6	1711.3	1710.0	1708.6	1708.3
157.5°	1756.8	1758.6	1760.5	1762.4	1764.3	1764.5	1763.1	1761.7	1760.3	1758.9	1758.6
160°	1790.8	1792.2	1793.5	1794.9	1796.2	1796.0	1794.4	1792.7	1791.0	1789.3	1789.3
162.5°	1816.4	1818.6	1820.8	1822.9	1825.1	1825.3	1823.6	1821.9	1820.3	1818.6	1818.3
165°	1853.3	1855.6	1858.1	1860.4	1862.8	1862.9	1860.9	1858.9	1856.8	1854.8	1854.8
167.5°	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0	1891.0	1888.9	1886.7	1884.6	1884.4
170°	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0	1907.6	1905.2	1902.9	1900.5	1900.5
172.5°	1912.7	1915.0	1917.4	1919.8	1922.2	1922.3	1920.2	1918.0	1916.0	1913.9	1913.9
175°	1926.4	1928.7	1931.1	1933.5	1935.8	1936.0	1934.0	1932.0	1930.0	1927.9	1927.9
177.5°	1933.7	1935.6	1937.4	1939.3	1941.3	1941.4	1939.7	1938.1	1936.5	1934.9	1934.9
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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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°	12.5	11.8	10.4	8.9	7.8	6.6	5.9	4.8	5.2	5.8	6.3
90°	27.8	23.3	19.0	15.0	11.7	8.3	4.9	1.5	4.9	8.3	11.7
92.5°	53.4	51.0	48.5	46.0	43.7	41.4	39.2	36.9	39.2	41.4	43.7
95°	107.2	104.5	101.9	99.4	96.9	94.6	92.2	89.9	92.2	94.6	96.9
97.5°	172.4	170.5	168.4	166.6	164.9	163.1	161.4	159.6	161.4	163.1	164.9
100°	220.5	218.7	217.1	215.2	213.2	211.2	209.1	207.1	209.1	211.2	213.2
102.5°	273.0	270.7	268.5	266.8	265.6	264.4	263.2	262.0	263.2	264.4	265.6
105°	353.3	350.2	347.2	345.4	344.7	344.0	343.4	342.6	343.4	344.0	344.7
107.5°	441.3	440.1	438.9	438.1	437.7	437.3	436.9	436.5	436.9	437.3	437.7
110°	499.7	499.0	498.3	497.7	497.0	496.2	495.6	494.9	495.6	496.2	497.0



TEST NUMBER: P332115-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	558.0	557.8	557.7	557.4	557.0	556.6	556.2	555.8	556.2	556.6	557.0
115°	650.1	650.8	651.5	651.3	650.3	649.2	648.2	647.2	648.2	649.2	650.3
117.5°	740.0	740.9	741.7	741.8	741.2	740.5	739.8	739.2	739.8	740.5	741.2
120°	801.3	803.0	804.8	804.6	802.5	800.5	798.5	796.5	798.5	800.5	802.5
122.5°	860.6	861.5	862.4	862.1	860.6	859.1	857.6	856.2	857.6	859.1	860.6
125°	950.1	950.8	951.4	951.3	950.3	949.3	948.2	947.2	948.2	949.3	950.3
127.5°	1039.2	1039.9	1040.7	1040.0	1037.7	1035.6	1033.4	1031.3	1033.4	1035.6	1037.7
130°	1096.9	1097.9	1098.9	1098.1	1095.4	1092.7	1090.0	1087.3	1090.0	1092.7	1095.4
132.5°	1153.7	1154.4	1155.2	1154.2	1151.4	1148.7	1146.0	1143.4	1146.0	1148.7	1151.4
135°	1237.2	1237.6	1237.9	1237.1	1235.0	1232.9	1230.9	1228.9	1230.9	1232.9	1235.0
137.5°	1317.9	1317.1	1316.2	1314.8	1313.2	1311.5	1309.8	1308.1	1309.8	1311.5	1313.2
140°	1371.4	1371.1	1370.7	1369.7	1368.0	1366.3	1364.6	1362.9	1364.6	1366.3	1368.0
142.5°	1422.0	1421.4	1420.8	1419.7	1418.0	1416.2	1414.5	1412.9	1414.5	1416.2	1418.0
145°	1496.4	1495.4	1494.4	1493.6	1492.9	1492.2	1491.6	1490.9	1491.6	1492.2	1492.9
147.5°	1566.9	1566.0	1565.0	1564.0	1562.8	1561.5	1560.2	1559.0	1560.2	1561.5	1562.8
150°	1611.3	1610.6	1609.9	1609.3	1608.6	1607.9	1607.3	1606.6	1607.3	1607.9	1608.6
152.5°	1650.8	1650.4	1650.0	1649.3	1648.4	1647.5	1646.5	1645.6	1646.5	1647.5	1648.4
155°	1707.9	1707.6	1707.3	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1
157.5°	1758.3	1758.1	1757.8	1757.9	1758.3	1758.7	1759.1	1759.5	1759.1	1758.7	1758.3
160°	1789.3	1789.3	1789.3	1789.7	1790.3	1791.0	1791.7	1792.4	1791.7	1791.0	1790.3
162.5°	1818.1	1817.8	1817.5	1817.9	1818.8	1819.7	1820.7	1821.6	1820.7	1819.7	1818.8
165°	1854.8	1854.8	1854.8	1855.3	1856.3	1857.3	1858.4	1859.4	1858.4	1857.3	1856.3
167.5°	1884.1	1883.8	1883.6	1884.1	1885.4	1886.8	1888.1	1889.6	1888.1	1886.8	1885.4
170°	1900.5	1900.5	1900.5	1901.2	1902.5	1903.9	1905.2	1906.5	1905.2	1903.9	1902.5
172.5°	1913.9	1913.9	1913.9	1914.6	1915.9	1917.2	1918.6	1920.0	1918.6	1917.2	1915.9
175°	1927.9	1927.9	1927.9	1928.5	1930.0	1931.3	1932.7	1934.0	1932.7	1931.3	1930.0
177.5°	1934.9	1934.9	1934.9	1935.4	1936.5	1937.6	1938.7	1939.7	1938.7	1937.6	1936.5
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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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	7.8	8.5	9.5	10.2	11.3	11.5	11.4	11.7	12.5	12.0
90°	15.0	19.0	23.3	27.8	32.1	36.6	37.9	39.3	40.6	42.0	43.0
92.5°	46.0	48.5	51.0	53.4	55.9	58.5	59.6	60.6	61.7	62.8	63.1
95°	99.4	101.9	104.5	107.2	110.0	112.7	114.0	115.4	116.7	118.1	118.8
97.5°	166.6	168.4	170.5	172.4	174.4	176.3	177.9	179.5	181.0	182.6	183.3
100°	215.2	217.1	218.7	220.5	222.2	223.9	224.9	225.9	226.9	227.9	228.7
102.5°	266.8	268.5	270.7	273.0	275.2	277.4	278.5	279.5	280.5	281.6	282.0
105°	345.4	347.2	350.2	353.3	356.4	359.4	359.4	359.4	359.4	359.4	359.7
107.5°	438.1	438.9	440.1	441.3	442.5	443.7	444.8	446.0	447.0	448.1	448.4
110°	497.7	498.3	499.0	499.7	500.3	501.0	502.4	503.7	505.0	506.4	506.8



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	557.4	557.7	557.8	558.0	558.2	558.3	559.9	561.5	563.1	564.7	565.5
115°	651.3	651.5	650.8	650.1	649.4	648.7	649.0	649.4	649.7	650.1	650.1
117.5°	741.8	741.7	740.9	740.0	739.1	738.3	738.2	738.1	738.1	738.0	737.5
120°	804.6	804.8	803.0	801.3	799.6	798.0	797.6	797.3	797.0	796.6	796.1
122.5°	862.1	862.4	861.5	860.6	859.8	858.9	858.0	857.1	856.3	855.4	854.4
125°	951.3	951.4	950.8	950.1	949.4	948.8	947.4	946.0	944.6	943.3	941.9
127.5°	1040.0	1040.7	1039.9	1039.2	1038.4	1037.6	1035.7	1033.9	1032.0	1030.1	1028.3
130°	1098.1	1098.9	1097.9	1096.9	1095.9	1094.9	1093.6	1092.2	1090.9	1089.5	1087.6
132.5°	1154.2	1155.2	1154.4	1153.7	1152.9	1152.2	1150.5	1148.9	1147.3	1145.7	1144.0
135°	1237.1	1237.9	1237.6	1237.2	1236.9	1236.6	1235.2	1233.9	1232.4	1231.1	1230.1
137.5°	1314.8	1316.2	1317.1	1317.9	1318.8	1319.7	1318.3	1316.9	1315.5	1314.0	1312.6
140°	1369.7	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7	1371.4	1371.1	1370.7	1369.4
142.5°	1419.7	1420.8	1421.4	1422.0	1422.6	1423.2	1422.9	1422.6	1422.2	1421.9	1420.8
145°	1493.6	1494.4	1495.4	1496.4	1497.4	1498.4	1498.1	1497.7	1497.4	1497.1	1496.2
147.5°	1564.0	1565.0	1566.0	1566.9	1567.8	1568.8	1568.8	1568.8	1568.8	1568.8	1567.8
150°	1609.3	1609.9	1610.6	1611.3	1611.9	1612.7	1612.7	1612.7	1612.7	1612.7	1611.6
152.5°	1649.3	1650.0	1650.4	1650.8	1651.2	1651.6	1652.2	1652.7	1653.3	1653.9	1653.3
155°	1707.1	1707.3	1707.6	1707.9	1708.3	1708.6	1710.0	1711.3	1712.6	1714.0	1713.5
157.5°	1757.9	1757.8	1758.1	1758.3	1758.6	1758.9	1760.3	1761.7	1763.1	1764.5	1764.3
160°	1789.7	1789.3	1789.3	1789.3	1789.3	1789.3	1791.0	1792.7	1794.4	1796.0	1796.2
162.5°	1817.9	1817.5	1817.8	1818.1	1818.3	1818.6	1820.3	1821.9	1823.6	1825.3	1825.1
165°	1855.3	1854.8	1854.8	1854.8	1854.8	1854.8	1856.8	1858.9	1860.9	1862.9	1862.8
167.5°	1884.1	1883.6	1883.8	1884.1	1884.4	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0
170°	1901.2	1900.5	1900.5	1900.5	1900.5	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0
172.5°	1914.6	1913.9	1913.9	1913.9	1913.9	1913.9	1916.0	1918.0	1920.2	1922.3	1922.2
175°	1928.5	1927.9	1927.9	1927.9	1927.9	1927.9	1930.0	1932.0	1934.0	1936.0	1935.8
177.5°	1935.4	1934.9	1934.9	1934.9	1934.9	1934.9	1936.5	1938.1	1939.7	1941.4	1941.3
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



TEST NUMBER: P332115-840

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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°	12.1	12.2	12.2	12.1	12.2	12.2	12.1	12.0	12.5	11.7	11.4
90°	43.6	44.3	45.0	45.6	45.0	44.3	43.6	43.0	42.0	40.6	39.3
92.5°	62.7	62.3	61.9	61.5	61.9	62.3	62.7	63.1	62.8	61.7	60.6
95°	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.1	116.7	115.4
97.5°	183.2	183.0	182.9	182.8	182.9	183.0	183.2	183.3	182.6	181.0	179.5
100°	229.4	230.1	230.8	231.5	230.8	230.1	229.4	228.7	227.9	226.9	225.9
102.5°	281.9	281.7	281.6	281.4	281.6	281.7	281.9	282.0	281.6	280.5	279.5
105°	360.4	361.1	361.7	362.4	361.7	361.1	360.4	359.7	359.4	359.4	359.4
107.5°	448.0	447.6	447.2	446.8	447.2	447.6	448.0	448.4	448.1	447.0	446.0
110°	506.0	505.4	504.7	504.0	504.7	505.4	506.0	506.8	506.4	505.0	503.7



TEST NUMBER: P332115-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	565.4	565.2	565.1	564.9	565.1	565.2	565.4	565.5	564.7	563.1	561.5
115°	649.7	649.4	649.0	648.7	649.0	649.4	649.7	650.1	650.1	649.7	649.4
117.5°	736.5	735.6	734.7	733.7	734.7	735.6	736.5	737.5	738.0	738.1	738.1
120°	795.5	794.8	794.1	793.3	794.1	794.8	795.5	796.1	796.6	797.0	797.3
122.5°	853.5	852.5	851.6	850.6	851.6	852.5	853.5	854.4	855.4	856.3	857.1
125°	940.6	939.3	937.9	936.5	937.9	939.3	940.6	941.9	943.3	944.6	946.0
127.5°	1026.8	1025.2	1023.7	1022.1	1023.7	1025.2	1026.8	1028.3	1030.1	1032.0	1033.9
130°	1085.3	1082.9	1080.6	1078.1	1080.6	1082.9	1085.3	1087.6	1089.5	1090.9	1092.2
132.5°	1142.2	1140.3	1138.4	1136.6	1138.4	1140.3	1142.2	1144.0	1145.7	1147.3	1148.9
135°	1229.4	1228.7	1228.1	1227.4	1228.1	1228.7	1229.4	1230.1	1231.1	1232.4	1233.9
137.5°	1311.3	1310.1	1308.8	1307.5	1308.8	1310.1	1311.3	1312.6	1314.0	1315.5	1316.9
140°	1367.0	1364.6	1362.2	1359.9	1362.2	1364.6	1367.0	1369.4	1370.7	1371.1	1371.4
142.5°	1419.0	1417.1	1415.3	1413.5	1415.3	1417.1	1419.0	1420.8	1421.9	1422.2	1422.6
145°	1494.9	1493.6	1492.2	1490.9	1492.2	1493.6	1494.9	1496.2	1497.1	1497.4	1497.7
147.5°	1565.8	1563.8	1561.7	1559.6	1561.7	1563.8	1565.8	1567.8	1568.8	1568.8	1568.8
150°	1609.6	1607.6	1605.6	1603.6	1605.6	1607.6	1609.6	1611.6	1612.7	1612.7	1612.7
152.5°	1651.4	1649.7	1647.9	1646.2	1647.9	1649.7	1651.4	1653.3	1653.9	1653.3	1652.7
155°	1711.1	1708.8	1706.4	1704.0	1706.4	1708.8	1711.1	1713.5	1714.0	1712.6	1711.3
157.5°	1762.4	1760.5	1758.6	1756.8	1758.6	1760.5	1762.4	1764.3	1764.5	1763.1	1761.7
160°	1794.9	1793.5	1792.2	1790.8	1792.2	1793.5	1794.9	1796.2	1796.0	1794.4	1792.7
162.5°	1822.9	1820.8	1818.6	1816.4	1818.6	1820.8	1822.9	1825.1	1825.3	1823.6	1821.9
165°	1860.4	1858.1	1855.6	1853.3	1855.6	1858.1	1860.4	1862.8	1862.9	1860.9	1858.9
167.5°	1891.0	1888.9	1886.7	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0	1891.0	1888.9
170°	1907.6	1905.2	1902.9	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0	1907.6	1905.2
172.5°	1919.8	1917.4	1915.0	1912.7	1915.0	1917.4	1919.8	1922.2	1922.3	1920.2	1918.0
175°	1933.5	1931.1	1928.7	1926.4	1928.7	1931.1	1933.5	1935.8	1936.0	1934.0	1932.0
177.5°	1939.3	1937.4	1935.6	1933.7	1935.6	1937.4	1939.3	1941.3	1941.4	1939.7	1938.1
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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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	11.3	10.2	9.5	8.5	7.8	6.8	6.3	5.8	5.2	4.8
90°	37.9	36.6	32.1	27.8	23.3	19.0	15.0	11.7	8.3	4.9	1.5
92.5°	59.6	58.5	55.9	53.4	51.0	48.5	46.0	43.7	41.4	39.2	36.9
95°	114.0	112.7	110.0	107.2	104.5	101.9	99.4	96.9	94.6	92.2	89.9
97.5°	177.9	176.3	174.4	172.4	170.5	168.4	166.6	164.9	163.1	161.4	159.6
100°	224.9	223.9	222.2	220.5	218.7	217.1	215.2	213.2	211.2	209.1	207.1
102.5°	278.5	277.4	275.2	273.0	270.7	268.5	266.8	265.6	264.4	263.2	262.0
105°	359.4	359.4	356.4	353.3	350.2	347.2	345.4	344.7	344.0	343.4	342.6
107.5°	444.8	443.7	442.5	441.3	440.1	438.9	438.1	437.7	437.3	436.9	436.5
110°	502.4	501.0	500.3	499.7	499.0	498.3	497.7	497.0	496.2	495.6	494.9



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CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	559.9	558.3	558.2	558.0	557.8	557.7	557.4	557.0	556.6	556.2	555.8
115°	649.0	648.7	649.4	650.1	650.8	651.5	651.3	650.3	649.2	648.2	647.2
117.5°	738.2	738.3	739.1	740.0	740.9	741.7	741.8	741.2	740.5	739.8	739.2
120°	797.6	798.0	799.6	801.3	803.0	804.8	804.6	802.5	800.5	798.5	796.5
122.5°	858.0	858.9	859.8	860.6	861.5	862.4	862.1	860.6	859.1	857.6	856.2
125°	947.4	948.8	949.4	950.1	950.8	951.4	951.3	950.3	949.3	948.2	947.2
127.5°	1035.7	1037.6	1038.4	1039.2	1039.9	1040.7	1040.0	1037.7	1035.6	1033.4	1031.3
130°	1093.6	1094.9	1095.9	1096.9	1097.9	1098.9	1098.1	1095.4	1092.7	1090.0	1087.3
132.5°	1150.5	1152.2	1152.9	1153.7	1154.4	1155.2	1154.2	1151.4	1148.7	1146.0	1143.4
135°	1235.2	1236.6	1236.9	1237.2	1237.6	1237.9	1237.1	1235.0	1232.9	1230.9	1228.9
137.5°	1318.3	1319.7	1318.8	1317.9	1317.1	1316.2	1314.8	1313.2	1311.5	1309.8	1308.1
140°	1371.7	1372.1	1371.7	1371.4	1371.1	1370.7	1369.7	1368.0	1366.3	1364.6	1362.9
142.5°	1422.9	1423.2	1422.6	1422.0	1421.4	1420.8	1419.7	1418.0	1416.2	1414.5	1412.9
145°	1498.1	1498.4	1497.4	1496.4	1495.4	1494.4	1493.6	1492.9	1492.2	1491.6	1490.9
147.5°	1568.8	1568.8	1567.8	1566.9	1566.0	1565.0	1564.0	1562.8	1561.5	1560.2	1559.0
150°	1612.7	1612.7	1611.9	1611.3	1610.6	1609.9	1609.3	1608.6	1607.9	1607.3	1606.6
152.5°	1652.2	1651.6	1651.2	1650.8	1650.4	1650.0	1649.3	1648.4	1647.5	1646.5	1645.6
155°	1710.0	1708.6	1708.3	1707.9	1707.6	1707.3	1707.1	1707.1	1707.1	1707.1	1707.1
157.5°	1760.3	1758.9	1758.6	1758.3	1758.1	1757.8	1757.9	1758.3	1758.7	1759.1	1759.5
160°	1791.0	1789.3	1789.3	1789.3	1789.3	1789.3	1789.7	1790.3	1791.0	1791.7	1792.4
162.5°	1820.3	1818.6	1818.3	1818.1	1817.8	1817.5	1817.9	1818.8	1819.7	1820.7	1821.6
165°	1856.8	1854.8	1854.8	1854.8	1854.8	1854.8	1855.3	1856.3	1857.3	1858.4	1859.4
167.5°	1886.7	1884.6	1884.4	1884.1	1883.8	1883.6	1884.1	1885.4	1886.8	1888.1	1889.6
170°	1902.9	1900.5	1900.5	1900.5	1900.5	1900.5	1901.2	1902.5	1903.9	1905.2	1906.5
172.5°	1916.0	1913.9	1913.9	1913.9	1913.9	1913.9	1914.6	1915.9	1917.2	1918.6	1920.0
175°	1930.0	1927.9	1927.9	1927.9	1927.9	1927.9	1928.5	1930.0	1931.3	1932.7	1934.0
177.5°	1936.5	1934.9	1934.9	1934.9	1934.9	1934.9	1935.4	1936.5	1937.6	1938.7	1939.7
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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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	8.9	10.4	11.8	12.5	13.0	13.7	13.8	13.8
90°	4.9	8.3	11.7	15.0	19.0	23.3	27.8	32.1	36.6	37.9	39.3
92.5°	39.2	41.4	43.7	46.0	48.5	51.0	53.4	55.9	58.5	59.6	60.6
95°	92.2	94.6	96.9	99.4	101.9	104.5	107.2	110.0	112.7	114.0	115.4
97.5°	161.4	163.1	164.9	166.6	168.4	170.5	172.4	174.4	176.3	177.9	179.5
100°	209.1	211.2	213.2	215.2	217.1	218.7	220.5	222.2	223.9	224.9	225.9
102.5°	263.2	264.4	265.6	266.8	268.5	270.7	273.0	275.2	277.4	278.5	279.5
105°	343.4	344.0	344.7	345.4	347.2	350.2	353.3	356.4	359.4	359.4	359.4
107.5°	436.9	437.3	437.7	438.1	438.9	440.1	441.3	442.5	443.7	444.8	446.0
110°	495.6	496.2	497.0	497.7	498.3	499.0	499.7	500.3	501.0	502.4	503.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	556.2	556.6	557.0	557.4	557.7	557.8	558.0	558.2	558.3	559.9	561.5
115°	648.2	649.2	650.3	651.3	651.5	650.8	650.1	649.4	648.7	649.0	649.4
117.5°	739.8	740.5	741.2	741.8	741.7	740.9	740.0	739.1	738.3	738.2	738.1
120°	798.5	800.5	802.5	804.6	804.8	803.0	801.3	799.6	798.0	797.6	797.3
122.5°	857.6	859.1	860.6	862.1	862.4	861.5	860.6	859.8	858.9	858.0	857.1
125°	948.2	949.3	950.3	951.3	951.4	950.8	950.1	949.4	948.8	947.4	946.0
127.5°	1033.4	1035.6	1037.7	1040.0	1040.7	1039.9	1039.2	1038.4	1037.6	1035.7	1033.9
130°	1090.0	1092.7	1095.4	1098.1	1098.9	1097.9	1096.9	1095.9	1094.9	1093.6	1092.2
132.5°	1146.0	1148.7	1151.4	1154.2	1155.2	1154.4	1153.7	1152.9	1152.2	1150.5	1148.9
135°	1230.9	1232.9	1235.0	1237.1	1237.9	1237.6	1237.2	1236.9	1236.6	1235.2	1233.9
137.5°	1309.8	1311.5	1313.2	1314.8	1316.2	1317.1	1317.9	1318.8	1319.7	1318.3	1316.9
140°	1364.6	1366.3	1368.0	1369.7	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7	1371.4
142.5°	1414.5	1416.2	1418.0	1419.7	1420.8	1421.4	1422.0	1422.6	1423.2	1422.9	1422.6
145°	1491.6	1492.2	1492.9	1493.6	1494.4	1495.4	1496.4	1497.4	1498.4	1498.1	1497.7
147.5°	1560.2	1561.5	1562.8	1564.0	1565.0	1566.0	1566.9	1567.8	1568.8	1568.8	1568.8
150°	1607.3	1607.9	1608.6	1609.3	1609.9	1610.6	1611.3	1611.9	1612.7	1612.7	1612.7
152.5°	1646.5	1647.5	1648.4	1649.3	1650.0	1650.4	1650.8	1651.2	1651.6	1652.2	1652.7
155°	1707.1	1707.1	1707.1	1707.1	1707.3	1707.6	1707.9	1708.3	1708.6	1710.0	1711.3
157.5°	1759.1	1758.7	1758.3	1757.9	1757.8	1758.1	1758.3	1758.6	1758.9	1760.3	1761.7
160°	1791.7	1791.0	1790.3	1789.7	1789.3	1789.3	1789.3	1789.3	1789.3	1791.0	1792.7
162.5°	1820.7	1819.7	1818.8	1817.9	1817.5	1817.8	1818.1	1818.3	1818.6	1820.3	1821.9
165°	1858.4	1857.3	1856.3	1855.3	1854.8	1854.8	1854.8	1854.8	1854.8	1856.8	1858.9
167.5°	1888.1	1886.8	1885.4	1884.1	1883.6	1883.8	1884.1	1884.4	1884.6	1886.7	1888.9
170°	1905.2	1903.9	1902.5	1901.2	1900.5	1900.5	1900.5	1900.5	1900.5	1902.9	1905.2
172.5°	1918.6	1917.2	1915.9	1914.6	1913.9	1913.9	1913.9	1913.9	1913.9	1916.0	1918.0
175°	1932.7	1931.3	1930.0	1928.5	1927.9	1927.9	1927.9	1927.9	1927.9	1930.0	1932.0
177.5°	1938.7	1937.6	1936.5	1935.4	1934.9	1934.9	1934.9	1934.9	1934.9	1936.5	1938.1
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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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	14.0	14.0	14.3	14.3	14.2	14.7
90°	40.6	42.0	43.0	43.6	44.3	45.0	45.6
92.5°	61.7	62.8	63.1	62.7	62.3	61.9	61.5
95°	116.7	118.1	118.8	118.8	118.8	118.8	118.8
97.5°	181.0	182.6	183.3	183.2	183.0	182.9	182.8
100°	226.9	227.9	228.7	229.4	230.1	230.8	231.5
102.5°	280.5	281.6	282.0	281.9	281.7	281.6	281.4
105°	359.4	359.4	359.7	360.4	361.1	361.7	362.4
107.5°	447.0	448.1	448.4	448.0	447.6	447.2	446.8
110°	505.0	506.4	506.8	506.0	505.4	504.7	504.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	563.1	564.7	565.5	565.4	565.2	565.1	564.9
115°	649.7	650.1	650.1	649.7	649.4	649.0	648.7
117.5°	738.1	738.0	737.5	736.5	735.6	734.7	733.7
120°	797.0	796.6	796.1	795.5	794.8	794.1	793.3
122.5°	856.3	855.4	854.4	853.5	852.5	851.6	850.6
125°	944.6	943.3	941.9	940.6	939.3	937.9	936.5
127.5°	1032.0	1030.1	1028.3	1026.8	1025.2	1023.7	1022.1
130°	1090.9	1089.5	1087.6	1085.3	1082.9	1080.6	1078.1
132.5°	1147.3	1145.7	1144.0	1142.2	1140.3	1138.4	1136.6
135°	1232.4	1231.1	1230.1	1229.4	1228.7	1228.1	1227.4
137.5°	1315.5	1314.0	1312.6	1311.3	1310.1	1308.8	1307.5
140°	1371.1	1370.7	1369.4	1367.0	1364.6	1362.2	1359.9
142.5°	1422.2	1421.9	1420.8	1419.0	1417.1	1415.3	1413.5
145°	1497.4	1497.1	1496.2	1494.9	1493.6	1492.2	1490.9
147.5°	1568.8	1568.8	1567.8	1565.8	1563.8	1561.7	1559.6
150°	1612.7	1612.7	1611.6	1609.6	1607.6	1605.6	1603.6
152.5°	1653.3	1653.9	1653.3	1651.4	1649.7	1647.9	1646.2
155°	1712.6	1714.0	1713.5	1711.1	1708.8	1706.4	1704.0
157.5°	1763.1	1764.5	1764.3	1762.4	1760.5	1758.6	1756.8
160°	1794.4	1796.0	1796.2	1794.9	1793.5	1792.2	1790.8
162.5°	1823.6	1825.3	1825.1	1822.9	1820.8	1818.6	1816.4
165°	1860.9	1862.9	1862.8	1860.4	1858.1	1855.6	1853.3
167.5°	1891.0	1893.0	1893.0	1891.0	1888.9	1886.7	1884.6
170°	1907.6	1910.0	1910.0	1907.6	1905.2	1902.9	1900.5
172.5°	1920.2	1922.3	1922.2	1919.8	1917.4	1915.0	1912.7
175°	1934.0	1936.0	1935.8	1933.5	1931.1	1928.7	1926.4
177.5°	1939.7	1941.4	1941.3	1939.3	1937.4	1935.6	1933.7
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5

(END OF REPORT)