

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

Luminaire Tested: **S123DIW-S340D1320U835-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332109
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-S340D1320U835-4F0-1E-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

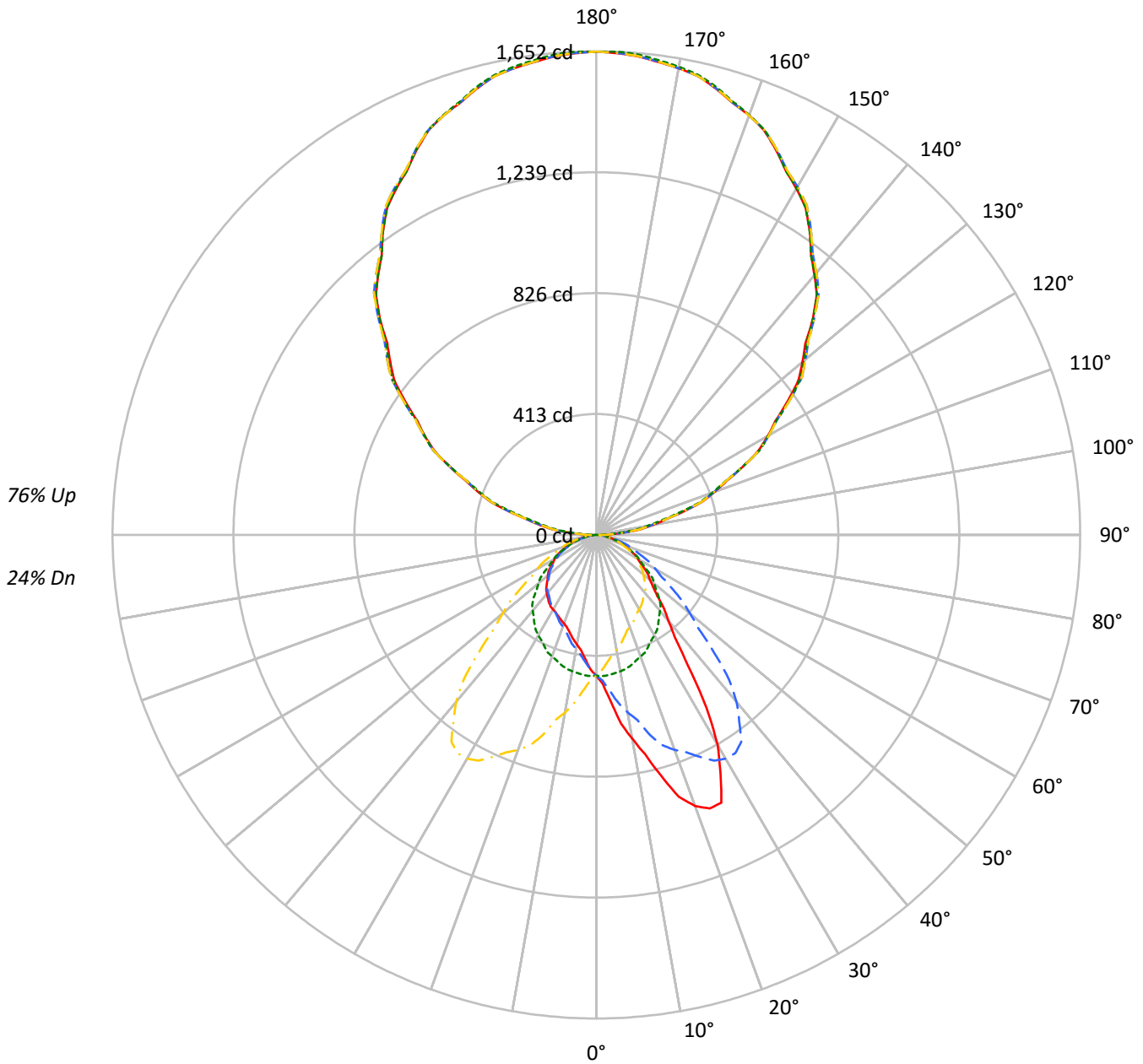
Lumens per Lamp: N/A
Luminaire Lumens: 6030.6 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (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



— 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	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°	5175	5175	5175	5175
5°	6172	5198	4606	5198
10°	7725	5172	4161	5172
15°	9475	5129	3874	5129
20°	11287	5065	3688	5065
25°	11986	4986	3646	4986
30°	10274	4928	3665	4928
35°	7144	4846	3704	4846
40°	5382	4749	3693	4749
45°	4468	4606	3646	4606
50°	4002	4315	3612	4315
55°	3742	4001	3567	4001
60°	3511	3670	3531	3670
65°	3298	3347	3418	3347
70°	3094	2977	3254	2977
75°	2770	2608	2986	2608
80°	2424	2139	2572	2139
85°	1902	1556	1729	1556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	0.8
10°-20°	151.9	2.5
20°-30°	254.9	4.2
30°-40°	288.6	4.8
40°-50°	258.8	4.3
50°-60°	208.9	3.5
60°-70°	145.6	2.4
70°-80°	76.5	1.3
80°-90°	23.6	0.4
90°-100°	107.6	1.8
100°-110°	321.9	5.3
110°-120°	547.5	9.1
120°-130°	720.2	11.9
130°-140°	809.5	13.4
140°-150°	795.7	13.2
150°-160°	669.9	11.1
160°-170°	445.9	7.4
170°-180°	156.2	2.6
0°-30°	454.2	7.5
0°-40°	742.8	12.3
0°-60°	1210.5	20.1
0°-90°	1456.1	24.1
90°-120°	977.1	16.2
90°-150°	3302.5	54.8
90°-180°	4574.0	75.8
0°-180°	6030.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	481	481	481	481	481	
5°	571	481	426	481	571	59
15°	850	460	348	460	850	246
25°	1009	420	307	420	1009	443
35°	544	369	282	369	544	353
45°	294	303	240	303	294	232
55°	199	213	190	213	199	179
65°	130	131	134	131	130	129
75°	67	63	72	63	67	71
85°	15	13	14	13	15	19
90°	39	1	39	1	39	20
95°	101	76	101	76	101	104
105°	309	292	309	292	309	328
115°	552	551	552	551	552	547
125°	798	807	798	807	798	713
135°	1045	1047	1045	1047	1045	804
145°	1270	1270	1270	1270	1270	793
155°	1451	1454	1451	1454	1451	668
165°	1578	1584	1578	1584	1578	445
175°	1641	1647	1641	1647	1641	156
180°	1651	1651	1651	1651	1651	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	510.3	509.9	509.0	509.7	508.2	506.2	506.0	504.1	498.7	498.4	496.9
5°	571.2	569.4	569.1	568.9	565.6	561.2	552.8	552.1	540.9	535.4	528.6
7.5°	650.2	651.1	647.7	644.8	634.8	628.2	619.2	607.7	594.0	580.0	570.8
10°	706.8	714.5	705.0	698.4	692.4	681.0	667.7	651.1	634.6	615.3	600.6
12.5°	767.6	771.3	769.4	763.3	753.9	736.5	713.0	694.7	679.5	647.3	634.3
15°	850.3	864.5	855.4	834.5	834.9	818.4	787.7	753.9	735.9	707.7	669.3
17.5°	938.5	940.2	936.4	918.9	907.3	884.5	856.1	823.8	787.4	753.3	712.5
20°	985.4	984.0	975.9	966.8	946.8	929.1	898.1	862.0	815.4	781.8	737.3
22.5°	1011.5	1009.2	1005.3	997.7	981.1	962.1	934.2	894.8	850.4	804.2	752.8
25°	1009.2	1012.2	1012.7	1010.6	1004.8	993.4	971.5	940.0	895.8	836.3	782.8
27.5°	917.9	922.2	934.6	945.7	958.0	970.6	968.9	953.3	920.5	869.2	803.7
30°	826.6	817.2	840.3	869.4	889.2	924.2	943.7	944.9	926.5	882.5	818.6
32.5°	699.8	710.1	720.3	756.1	799.4	838.6	877.6	908.9	912.5	883.2	827.4
35°	543.7	556.6	575.2	593.8	640.4	680.5	749.0	808.6	856.1	862.4	828.2
37.5°	438.2	444.5	456.3	475.0	505.4	553.0	605.9	681.3	750.2	801.4	803.6
40°	383.0	384.9	398.1	412.3	437.0	476.2	523.9	590.6	673.0	744.6	774.4
42.5°	341.6	345.7	351.4	365.0	384.7	414.1	458.5	513.6	589.2	671.5	729.8
45°	293.5	298.2	301.7	310.8	324.8	344.6	375.5	425.9	483.4	568.4	646.9
47.5°	261.8	262.1	264.7	271.6	281.1	296.0	317.9	350.2	403.0	472.0	552.6
50°	239.0	242.7	243.7	249.0	256.5	267.4	285.6	313.1	356.4	417.0	491.1
52.5°	223.0	224.1	226.7	230.6	237.1	245.6	261.4	282.9	316.9	368.6	436.7
55°	199.4	199.4	202.0	205.0	208.7	216.4	226.9	242.7	268.6	308.7	365.1
57.5°	177.6	178.8	180.6	181.5	184.7	189.8	198.5	210.6	229.8	260.7	305.5
60°	163.1	165.2	164.9	166.8	169.6	173.6	181.0	190.8	208.0	232.7	270.5
62.5°	150.4	150.3	150.2	152.5	155.2	159.0	163.9	172.3	187.0	208.9	241.0
65°	129.5	129.1	130.7	132.1	133.0	135.8	139.5	147.0	156.8	173.1	198.0
67.5°	111.0	109.6	110.5	111.0	112.6	114.8	118.3	122.9	130.6	143.7	162.5
70°	98.3	97.1	96.9	97.4	98.8	100.4	103.0	107.4	114.6	125.1	138.8
72.5°	85.3	84.5	84.4	85.5	86.1	87.2	89.0	93.0	98.8	106.7	119.5
75°	66.6	66.6	66.6	66.9	67.6	68.5	69.9	72.0	76.4	82.0	90.6
77.5°	49.9	49.9	49.6	49.6	50.6	51.0	51.3	53.3	55.8	59.5	65.8
80°	39.1	38.0	38.4	39.1	39.6	39.8	40.5	41.0	43.1	45.2	49.6
82.5°	29.1	28.1	28.2	29.3	29.4	29.6	30.3	30.9	31.7	33.6	36.0
85°	15.4	15.4	15.6	15.6	15.8	15.6	16.3	16.5	16.5	17.7	19.1
87.5°	13.4	12.9	13.0	13.0	12.7	12.7	12.7	12.7	12.6	12.6	12.0
90°	38.9	38.3	37.8	37.2	36.6	35.7	34.6	33.4	32.3	31.1	27.4
92.5°	52.4	52.7	53.1	53.4	53.8	53.5	52.6	51.6	50.7	49.8	47.7
95°	101.2	101.2	101.2	101.2	101.2	100.6	99.4	98.3	97.1	96.0	93.7
97.5°	155.6	155.8	155.9	156.0	156.1	155.5	154.2	152.8	151.5	150.2	148.5
100°	197.1	196.6	196.0	195.4	194.8	194.1	193.2	192.4	191.5	190.7	189.2
102.5°	239.7	239.8	239.9	240.0	240.1	239.8	238.9	238.0	237.2	236.3	234.4
105°	308.7	308.1	307.5	307.0	306.4	306.1	306.1	306.1	306.1	306.1	303.5
107.5°	380.5	380.9	381.2	381.6	381.9	381.6	380.7	379.8	378.9	377.9	376.9
110°	429.3	429.9	430.5	431.0	431.6	431.3	430.2	429.0	427.9	426.7	426.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	481.2	481.3	481.4	481.5	481.6	481.0	479.6	478.2	476.9	475.5	475.4
115°	552.5	552.8	553.1	553.4	553.7	553.7	553.4	553.1	552.8	552.5	553.1
117.5°	624.9	625.7	626.5	627.3	628.1	628.5	628.6	628.7	628.7	628.8	629.5
120°	675.7	676.3	676.9	677.5	678.0	678.5	678.8	679.0	679.3	679.6	681.1
122.5°	724.5	725.3	726.1	726.9	727.7	728.5	729.2	730.0	730.7	731.5	732.2
125°	797.6	798.8	799.9	801.1	802.3	803.4	804.6	805.7	806.9	808.0	808.6
127.5°	870.5	871.9	873.2	874.5	875.8	877.3	878.9	880.5	882.1	883.8	884.4
130°	918.3	920.3	922.3	924.3	926.3	927.9	929.1	930.2	931.4	932.5	933.4
132.5°	968.1	969.6	971.2	972.7	974.3	975.8	977.1	978.5	979.9	981.3	981.9
135°	1045.4	1045.9	1046.5	1047.1	1047.7	1048.5	1049.7	1050.8	1052.0	1053.1	1053.4
137.5°	1113.6	1114.7	1115.8	1116.9	1118.0	1119.1	1120.3	1121.5	1122.7	1124.0	1123.2
140°	1158.2	1160.2	1162.2	1164.3	1166.3	1167.4	1167.7	1168.0	1168.3	1168.6	1168.3
142.5°	1203.9	1205.4	1207.0	1208.5	1210.1	1211.0	1211.3	1211.6	1211.9	1212.2	1211.6
145°	1269.7	1270.9	1272.0	1273.2	1274.4	1275.1	1275.4	1275.6	1275.9	1276.2	1275.4
147.5°	1328.4	1330.1	1331.8	1333.6	1335.3	1336.1	1336.1	1336.1	1336.1	1336.1	1335.3
150°	1365.7	1367.4	1369.2	1370.9	1372.6	1373.5	1373.5	1373.5	1373.5	1373.5	1372.9
152.5°	1402.0	1403.5	1405.0	1406.5	1408.0	1408.5	1408.1	1407.6	1407.2	1406.7	1406.4
155°	1451.3	1453.3	1455.4	1457.4	1459.4	1459.8	1458.7	1457.5	1456.4	1455.2	1454.9
157.5°	1496.2	1497.8	1499.4	1501.0	1502.6	1502.9	1501.6	1500.4	1499.2	1498.0	1497.8
160°	1525.2	1526.4	1527.6	1528.7	1529.9	1529.7	1528.3	1526.8	1525.4	1523.9	1523.9
162.5°	1547.0	1548.9	1550.7	1552.6	1554.4	1554.6	1553.2	1551.7	1550.3	1548.8	1548.6
165°	1578.4	1580.4	1582.5	1584.5	1586.5	1586.6	1584.9	1583.2	1581.4	1579.7	1579.7
167.5°	1605.1	1606.9	1608.7	1610.5	1612.3	1612.3	1610.5	1608.7	1606.9	1605.1	1604.9
170°	1618.6	1620.6	1622.7	1624.7	1626.7	1626.7	1624.7	1622.7	1620.6	1618.6	1618.6
172.5°	1629.0	1631.0	1633.0	1635.1	1637.1	1637.2	1635.4	1633.6	1631.8	1630.0	1630.0
175°	1640.7	1642.7	1644.7	1646.7	1648.7	1648.9	1647.2	1645.4	1643.7	1642.0	1642.0
177.5°	1646.9	1648.5	1650.1	1651.7	1653.4	1653.5	1652.1	1650.7	1649.3	1647.9	1647.9
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	495.7	494.3	492.8	490.2	487.9	484.8	483.8	482.7	479.3	476.4	474.1
5°	526.0	520.4	512.3	504.8	498.8	490.6	486.0	481.1	474.1	467.8	462.7
7.5°	557.7	546.7	534.0	520.4	507.6	495.3	485.4	476.5	466.7	457.5	450.2
10°	582.9	567.0	549.3	530.2	513.9	498.1	484.8	473.2	460.6	449.6	440.5
12.5°	611.6	588.1	563.7	540.5	521.2	499.2	483.1	468.3	454.0	440.9	430.7
15°	645.5	615.7	586.8	554.9	525.6	498.1	479.0	460.3	443.8	430.3	417.2
17.5°	676.5	642.7	604.6	565.8	530.4	497.8	471.1	450.0	429.3	412.8	399.8
20°	694.0	655.6	612.5	572.2	533.0	496.7	467.3	442.2	419.8	402.3	387.7
22.5°	709.1	664.1	619.5	576.4	532.8	493.7	460.4	434.5	410.3	393.2	377.6
25°	724.8	670.9	626.2	575.7	527.0	486.4	449.2	419.8	395.6	375.5	359.5
27.5°	738.2	670.5	617.4	563.0	517.7	477.1	437.3	405.8	380.1	358.3	342.0
30°	747.1	671.4	608.3	554.5	508.8	466.9	428.2	396.5	369.5	347.4	332.0
32.5°	752.7	670.8	599.9	542.5	494.6	457.5	418.3	385.5	357.7	336.0	321.2
35°	756.0	666.7	585.4	517.9	471.8	435.6	402.8	368.8	339.7	319.4	302.6
37.5°	749.4	658.1	568.7	494.1	443.6	408.1	380.4	351.5	323.6	301.3	286.8
40°	739.2	652.5	555.6	477.3	424.2	390.0	366.5	338.0	310.5	289.3	275.8
42.5°	719.6	641.2	541.3	458.7	404.1	369.9	348.2	324.4	298.4	278.5	265.0
45°	671.9	616.4	519.7	430.8	374.4	339.0	319.9	302.6	279.1	259.8	248.1
47.5°	605.6	579.2	488.6	401.3	343.3	309.3	289.4	275.6	258.4	242.7	231.6
50°	559.6	548.6	467.6	381.1	322.7	289.3	270.2	257.7	245.3	229.7	219.5
52.5°	506.5	513.2	443.0	360.3	301.6	268.8	250.9	240.9	229.7	216.8	207.9
55°	431.7	456.1	400.5	325.2	270.2	239.0	222.0	213.2	206.6	197.1	189.4
57.5°	361.7	392.8	354.5	289.1	239.4	212.5	196.2	186.6	182.4	177.4	171.3
60°	320.1	350.8	321.7	264.9	218.8	193.1	178.7	170.5	166.3	162.8	157.7
62.5°	283.0	314.1	289.7	240.3	198.4	174.7	162.1	154.1	150.9	149.1	144.7
65°	232.0	258.8	242.5	202.0	169.4	148.4	137.0	131.4	128.4	127.7	124.9
67.5°	188.8	209.2	197.4	167.5	141.9	123.8	114.1	109.3	107.0	106.7	104.6
70°	160.5	179.6	170.5	143.5	121.4	107.2	98.8	94.6	93.2	93.0	91.8
72.5°	138.5	151.8	144.6	122.1	105.0	92.1	85.9	81.5	80.0	80.3	79.5
75°	102.5	112.5	108.3	92.7	79.0	70.6	65.5	62.7	61.3	62.0	61.0
77.5°	73.8	80.1	76.3	65.5	57.0	51.0	47.2	45.5	44.2	44.2	43.8
80°	55.7	59.4	57.3	50.8	43.8	38.7	35.6	34.5	33.8	33.5	33.3
82.5°	39.7	42.8	40.3	35.9	31.1	28.0	26.3	24.8	24.3	24.4	24.2
85°	20.0	21.2	20.3	17.5	15.6	14.2	13.3	12.6	12.1	12.3	11.9
87.5°	11.6	11.1	9.8	8.3	7.4	6.3	5.7	4.7	4.9	5.5	5.9
90°	23.6	19.9	16.1	12.8	9.9	7.1	4.2	1.3	4.2	7.1	9.9
92.5°	45.5	43.4	41.3	39.2	37.3	35.3	33.3	31.4	33.3	35.3	37.3
95°	91.4	89.1	86.8	84.6	82.6	80.6	78.5	76.5	78.5	80.6	82.6
97.5°	146.8	145.2	143.5	141.9	140.4	138.9	137.4	135.9	137.4	138.9	140.4
100°	187.8	186.3	184.9	183.3	181.6	179.8	178.1	176.4	178.1	179.8	181.6
102.5°	232.5	230.6	228.7	227.2	226.2	225.2	224.1	223.1	224.1	225.2	226.2
105°	300.9	298.3	295.7	294.1	293.5	293.0	292.4	291.8	292.4	293.0	293.5
107.5°	375.9	374.8	373.8	373.1	372.8	372.4	372.1	371.7	372.1	372.4	372.8
110°	425.6	425.0	424.4	423.8	423.2	422.7	422.1	421.5	422.1	422.7	423.2



TEST NUMBER: P332109

CATALOG NUMBER: S123DIW-S340D1320U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	475.2	475.1	475.0	474.8	474.4	474.1	473.7	473.4	473.7	474.1	474.4
115°	553.7	554.2	554.8	554.7	553.8	552.9	552.1	551.2	552.1	552.9	553.8
117.5°	630.3	631.0	631.8	631.9	631.3	630.7	630.1	629.6	630.1	630.7	631.3
120°	682.5	683.9	685.4	685.2	683.5	681.8	680.0	678.3	680.0	681.8	683.5
122.5°	733.0	733.7	734.5	734.2	733.0	731.7	730.4	729.2	730.4	731.7	733.0
125°	809.2	809.7	810.3	810.2	809.3	808.4	807.6	806.7	807.6	808.4	809.3
127.5°	885.0	885.7	886.3	885.7	883.8	882.0	880.2	878.3	880.2	882.0	883.8
130°	934.3	935.1	936.0	935.3	933.0	930.7	928.3	926.0	928.3	930.7	933.0
132.5°	982.6	983.2	983.8	983.0	980.7	978.4	976.1	973.8	976.1	978.4	980.7
135°	1053.7	1054.0	1054.3	1053.6	1051.8	1050.1	1048.4	1046.7	1048.4	1050.1	1051.8
137.5°	1122.5	1121.7	1121.0	1119.9	1118.4	1117.0	1115.5	1114.1	1115.5	1117.0	1118.4
140°	1168.0	1167.7	1167.4	1166.6	1165.1	1163.7	1162.2	1160.8	1162.2	1163.7	1165.1
142.5°	1211.1	1210.6	1210.1	1209.1	1207.7	1206.2	1204.8	1203.3	1204.8	1206.2	1207.7
145°	1274.5	1273.6	1272.8	1272.0	1271.5	1270.9	1270.3	1269.7	1270.3	1270.9	1271.5
147.5°	1334.5	1333.7	1332.9	1332.0	1331.0	1329.9	1328.9	1327.8	1328.9	1329.9	1331.0
150°	1372.3	1371.8	1371.2	1370.6	1370.0	1369.5	1368.9	1368.3	1368.9	1369.5	1370.0
152.5°	1406.0	1405.7	1405.3	1404.7	1403.9	1403.1	1402.3	1401.5	1402.3	1403.1	1403.9
155°	1454.6	1454.3	1454.1	1453.9	1453.9	1453.9	1453.9	1453.9	1453.9	1453.9	1453.9
157.5°	1497.5	1497.3	1497.1	1497.1	1497.5	1497.8	1498.2	1498.5	1498.2	1497.8	1497.5
160°	1523.9	1523.9	1523.9	1524.2	1524.8	1525.4	1526.0	1526.5	1526.0	1525.4	1524.8
162.5°	1548.4	1548.2	1547.9	1548.2	1549.0	1549.8	1550.6	1551.4	1550.6	1549.8	1549.0
165°	1579.7	1579.7	1579.7	1580.2	1581.0	1581.9	1582.7	1583.6	1582.7	1581.9	1581.0
167.5°	1604.7	1604.4	1604.2	1604.7	1605.8	1607.0	1608.1	1609.3	1608.1	1607.0	1605.8
170°	1618.6	1618.6	1618.6	1619.2	1620.4	1621.5	1622.7	1623.8	1622.7	1621.5	1620.4
172.5°	1630.0	1630.0	1630.0	1630.6	1631.8	1632.9	1634.1	1635.2	1634.1	1632.9	1631.8
175°	1642.0	1642.0	1642.0	1642.5	1643.7	1644.9	1646.0	1647.2	1646.0	1644.9	1643.7
177.5°	1647.9	1647.9	1647.9	1648.4	1649.3	1650.2	1651.2	1652.1	1651.2	1650.2	1649.3
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



TEST NUMBER: P332109

CATALOG NUMBER: S123DIW-S340D1320U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	472.8	471.5	469.7	466.9	464.6	461.1	461.1	461.6	461.6	461.5	461.1
5°	458.5	455.0	450.8	445.9	440.8	435.6	434.7	432.8	431.5	430.5	429.4
7.5°	443.3	437.1	431.0	424.2	417.9	412.8	409.2	406.2	404.3	402.2	400.7
10°	433.1	425.4	418.2	411.0	403.0	396.7	392.8	390.0	387.9	386.0	385.1
12.5°	421.0	412.2	404.2	397.3	388.7	382.2	378.4	377.1	374.7	370.7	368.7
15°	403.3	395.1	385.6	375.1	370.9	363.0	358.5	356.4	355.0	352.0	351.1
17.5°	388.1	377.5	366.7	358.9	351.1	344.7	342.2	339.6	337.8	335.3	334.5
20°	376.0	366.5	356.7	348.3	340.1	333.1	331.0	329.2	327.3	326.2	325.2
22.5°	363.7	354.2	346.0	338.2	329.5	324.9	322.7	320.6	319.3	318.5	317.6
25°	346.4	338.0	328.9	322.0	315.0	311.9	310.5	309.4	308.4	307.3	307.0
27.5°	331.0	321.8	314.5	307.9	302.9	300.4	299.0	298.5	298.7	299.1	299.4
30°	319.4	311.0	305.0	299.4	294.7	292.4	292.1	292.1	293.1	293.3	293.8
32.5°	308.8	301.9	295.8	290.4	286.9	285.3	286.2	286.2	286.9	287.5	288.4
35°	293.3	287.2	282.6	277.9	274.9	275.6	276.1	276.5	277.7	279.1	280.0
37.5°	278.5	273.3	268.4	264.8	263.4	264.6	265.8	266.7	268.1	269.2	270.1
40°	267.9	263.9	259.3	256.0	256.5	257.2	258.1	259.3	260.5	261.2	262.1
42.5°	258.0	253.9	250.3	247.6	248.3	249.2	249.7	250.3	251.7	253.0	253.5
45°	243.0	239.7	236.5	234.8	235.3	235.8	236.2	236.9	238.1	239.0	239.3
47.5°	226.1	223.8	221.6	220.0	220.8	220.6	221.2	222.7	223.0	223.6	224.9
50°	215.3	213.2	210.6	210.1	210.1	210.1	210.4	212.2	212.2	213.2	214.1
52.5°	203.3	202.0	200.4	199.5	199.1	199.1	200.1	201.0	201.4	202.7	203.7
55°	185.7	184.3	182.9	182.2	181.7	182.2	184.0	184.5	185.7	186.4	187.1
57.5°	167.3	166.2	165.1	164.7	164.6	165.2	166.2	167.6	167.9	170.1	171.1
60°	155.2	153.5	152.6	152.6	152.1	154.2	153.8	156.1	156.6	158.0	159.6
62.5°	142.7	140.5	140.1	140.1	140.8	141.4	142.0	143.0	144.3	146.0	147.3
65°	122.5	121.4	123.0	122.8	122.3	123.7	123.7	124.9	126.3	127.9	130.5
67.5°	103.5	102.9	103.0	103.0	103.7	104.5	105.2	106.2	107.9	109.6	111.3
70°	90.6	91.3	90.2	91.1	91.8	92.0	92.5	93.9	95.7	96.9	98.8
72.5°	78.1	78.1	78.2	78.6	79.3	79.7	80.2	81.8	83.8	84.8	86.3
75°	60.1	59.9	60.6	60.6	61.7	62.2	62.7	63.4	65.2	66.6	67.8
77.5°	43.9	44.2	44.0	44.8	44.5	44.6	46.0	46.7	46.9	49.7	50.3
80°	33.1	33.5	33.8	34.0	34.2	33.8	35.4	36.1	36.1	37.7	38.9
82.5°	23.8	24.0	24.6	24.9	24.9	25.4	25.5	26.0	26.6	27.3	28.8
85°	11.9	12.6	12.8	12.6	12.8	12.3	13.0	13.3	13.5	13.5	13.5
87.5°	6.3	7.1	7.7	8.6	9.2	10.1	10.4	10.2	10.5	11.2	10.7
90°	12.8	16.1	19.9	23.6	27.4	31.1	32.3	33.4	34.6	35.7	36.6
92.5°	39.2	41.3	43.4	45.5	47.7	49.8	50.7	51.6	52.6	53.5	53.8
95°	84.6	86.8	89.1	91.4	93.7	96.0	97.1	98.3	99.4	100.6	101.2
97.5°	141.9	143.5	145.2	146.8	148.5	150.2	151.5	152.8	154.2	155.5	156.1
100°	183.3	184.9	186.3	187.8	189.2	190.7	191.5	192.4	193.2	194.1	194.8
102.5°	227.2	228.7	230.6	232.5	234.4	236.3	237.2	238.0	238.9	239.8	240.1
105°	294.1	295.7	298.3	300.9	303.5	306.1	306.1	306.1	306.1	306.1	306.4
107.5°	373.1	373.8	374.8	375.9	376.9	377.9	378.9	379.8	380.7	381.6	381.9
110°	423.8	424.4	425.0	425.6	426.1	426.7	427.9	429.0	430.2	431.3	431.6



TEST NUMBER: P332109

CATALOG NUMBER: S123DIW-S340D1320U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	474.8	475.0	475.1	475.2	475.4	475.5	476.9	478.2	479.6	481.0	481.6
115°	554.7	554.8	554.2	553.7	553.1	552.5	552.8	553.1	553.4	553.7	553.7
117.5°	631.9	631.8	631.0	630.3	629.5	628.8	628.7	628.7	628.6	628.5	628.1
120°	685.2	685.4	683.9	682.5	681.1	679.6	679.3	679.0	678.8	678.5	678.0
122.5°	734.2	734.5	733.7	733.0	732.2	731.5	730.7	730.0	729.2	728.5	727.7
125°	810.2	810.3	809.7	809.2	808.6	808.0	806.9	805.7	804.6	803.4	802.3
127.5°	885.7	886.3	885.7	885.0	884.4	883.8	882.1	880.5	878.9	877.3	875.8
130°	935.3	936.0	935.1	934.3	933.4	932.5	931.4	930.2	929.1	927.9	926.3
132.5°	983.0	983.8	983.2	982.6	981.9	981.3	979.9	978.5	977.1	975.8	974.3
135°	1053.6	1054.3	1054.0	1053.7	1053.4	1053.1	1052.0	1050.8	1049.7	1048.5	1047.7
137.5°	1119.9	1121.0	1121.7	1122.5	1123.2	1124.0	1122.7	1121.5	1120.3	1119.1	1118.0
140°	1166.6	1167.4	1167.7	1168.0	1168.3	1168.6	1168.3	1168.0	1167.7	1167.4	1166.3
142.5°	1209.1	1210.1	1210.6	1211.1	1211.6	1212.2	1211.9	1211.6	1211.3	1211.0	1210.1
145°	1272.0	1272.8	1273.6	1274.5	1275.4	1276.2	1275.9	1275.6	1275.4	1275.1	1274.4
147.5°	1332.0	1332.9	1333.7	1334.5	1335.3	1336.1	1336.1	1336.1	1336.1	1336.1	1335.3
150°	1370.6	1371.2	1371.8	1372.3	1372.9	1373.5	1373.5	1373.5	1373.5	1373.5	1372.6
152.5°	1404.7	1405.3	1405.7	1406.0	1406.4	1406.7	1407.2	1407.6	1408.1	1408.5	1408.0
155°	1453.9	1454.1	1454.3	1454.6	1454.9	1455.2	1456.4	1457.5	1458.7	1459.8	1459.4
157.5°	1497.1	1497.1	1497.3	1497.5	1497.8	1498.0	1499.2	1500.4	1501.6	1502.9	1502.6
160°	1524.2	1523.9	1523.9	1523.9	1523.9	1523.9	1525.4	1526.8	1528.3	1529.7	1529.9
162.5°	1548.2	1547.9	1548.2	1548.4	1548.6	1548.8	1550.3	1551.7	1553.2	1554.6	1554.4
165°	1580.2	1579.7	1579.7	1579.7	1579.7	1579.7	1581.4	1583.2	1584.9	1586.6	1586.5
167.5°	1604.7	1604.2	1604.4	1604.7	1604.9	1605.1	1606.9	1608.7	1610.5	1612.3	1612.3
170°	1619.2	1618.6	1618.6	1618.6	1618.6	1618.6	1620.6	1622.7	1624.7	1626.7	1626.7
172.5°	1630.6	1630.0	1630.0	1630.0	1630.0	1630.0	1631.8	1633.6	1635.4	1637.2	1637.1
175°	1642.5	1642.0	1642.0	1642.0	1642.0	1642.0	1643.7	1645.4	1647.2	1648.9	1648.7
177.5°	1648.4	1647.9	1647.9	1647.9	1647.9	1647.9	1649.3	1650.7	1652.1	1653.5	1653.4
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



TEST NUMBER: P332109

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	459.8	459.6	460.9	460.0	460.9	459.6	459.8	461.1	461.5	461.6	461.6
5°	428.0	428.7	426.3	426.3	426.3	428.7	428.0	429.4	430.5	431.5	432.8
7.5°	399.6	398.6	398.7	397.4	398.7	398.6	399.6	400.7	402.2	404.3	406.2
10°	382.3	380.9	380.4	380.7	380.4	380.9	382.3	385.1	386.0	387.9	390.0
12.5°	367.9	367.7	364.6	364.6	364.6	367.7	367.9	368.7	370.7	374.7	377.1
15°	351.1	346.7	346.2	347.6	346.2	346.7	351.1	351.1	352.0	355.0	356.4
17.5°	334.2	331.8	332.0	331.3	332.0	331.8	334.2	334.5	335.3	337.8	339.6
20°	325.2	323.8	323.6	322.0	323.6	323.8	325.2	325.2	326.2	327.3	329.2
22.5°	317.0	316.6	316.7	314.9	316.7	316.6	317.0	317.6	318.5	319.3	320.6
25°	306.8	308.0	307.0	307.0	307.0	308.0	306.8	307.0	307.3	308.4	309.4
27.5°	299.9	299.9	299.4	299.4	299.4	299.9	299.9	299.4	299.1	298.7	298.5
30°	294.7	294.5	294.9	294.9	294.9	294.5	294.7	293.8	293.3	293.1	292.1
32.5°	289.5	289.8	289.9	290.1	289.9	289.8	289.5	288.4	287.5	286.9	286.2
35°	281.4	281.7	282.4	281.9	282.4	281.7	281.4	280.0	279.1	277.7	276.5
37.5°	270.5	271.6	271.4	271.7	271.4	271.6	270.5	270.1	269.2	268.1	266.7
40°	262.3	263.0	262.8	262.8	262.8	263.0	262.3	262.1	261.2	260.5	259.3
42.5°	253.9	254.4	253.8	253.5	253.8	254.4	253.9	253.5	253.0	251.7	250.3
45°	240.2	239.7	240.4	239.5	240.4	239.7	240.2	239.3	239.0	238.1	236.9
47.5°	224.8	225.3	225.5	226.2	225.5	225.3	224.8	224.9	223.6	223.0	222.7
50°	214.6	216.0	216.0	215.7	216.0	216.0	214.6	214.1	213.2	212.2	212.2
52.5°	204.5	205.1	206.1	206.0	206.1	205.1	204.5	203.7	202.7	201.4	201.0
55°	188.9	189.4	189.9	190.1	189.9	189.4	188.9	187.1	186.4	185.7	184.5
57.5°	172.8	172.6	173.7	174.1	173.7	172.6	172.8	171.1	170.1	167.9	167.6
60°	161.4	161.4	163.3	164.0	163.3	161.4	161.4	159.6	158.0	156.6	156.1
62.5°	149.3	150.1	151.9	151.0	151.9	150.1	149.3	147.3	146.0	144.3	143.0
65°	131.6	133.5	133.3	134.2	133.3	133.5	131.6	130.5	127.9	126.3	124.9
67.5°	113.1	114.3	116.0	116.1	116.0	114.3	113.1	111.3	109.6	107.9	106.2
70°	100.6	101.8	102.7	103.4	102.7	101.8	100.6	98.8	96.9	95.7	93.9
72.5°	88.5	89.1	91.4	90.4	91.4	89.1	88.5	86.3	84.8	83.8	81.8
75°	69.4	71.1	72.5	71.8	72.5	71.1	69.4	67.8	66.6	65.2	63.4
77.5°	51.3	53.0	53.6	53.0	53.6	53.0	51.3	50.3	49.7	46.9	46.7
80°	40.5	40.3	41.7	41.5	41.7	40.3	40.5	38.9	37.7	36.1	36.1
82.5°	29.7	29.5	30.1	30.3	30.1	29.5	29.7	28.8	27.3	26.6	26.0
85°	14.4	15.1	14.2	14.0	14.2	15.1	14.4	13.5	13.5	13.5	13.3
87.5°	10.8	10.9	10.8	10.8	10.8	10.9	10.8	10.7	11.2	10.5	10.2
90°	37.2	37.8	38.3	38.9	38.3	37.8	37.2	36.6	35.7	34.6	33.4
92.5°	53.4	53.1	52.7	52.4	52.7	53.1	53.4	53.8	53.5	52.6	51.6
95°	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	100.6	99.4	98.3
97.5°	156.0	155.9	155.8	155.6	155.8	155.9	156.0	156.1	155.5	154.2	152.8
100°	195.4	196.0	196.6	197.1	196.6	196.0	195.4	194.8	194.1	193.2	192.4
102.5°	240.0	239.9	239.8	239.7	239.8	239.9	240.0	240.1	239.8	238.9	238.0
105°	307.0	307.5	308.1	308.7	308.1	307.5	307.0	306.4	306.1	306.1	306.1
107.5°	381.6	381.2	380.9	380.5	380.9	381.2	381.6	381.9	381.6	380.7	379.8
110°	431.0	430.5	429.9	429.3	429.9	430.5	431.0	431.6	431.3	430.2	429.0



TEST NUMBER: P332109

CATALOG NUMBER: S123DIW-S340D1320U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	481.5	481.4	481.3	481.2	481.3	481.4	481.5	481.6	481.0	479.6	478.2
115°	553.4	553.1	552.8	552.5	552.8	553.1	553.4	553.7	553.7	553.4	553.1
117.5°	627.3	626.5	625.7	624.9	625.7	626.5	627.3	628.1	628.5	628.6	628.7
120°	677.5	676.9	676.3	675.7	676.3	676.9	677.5	678.0	678.5	678.8	679.0
122.5°	726.9	726.1	725.3	724.5	725.3	726.1	726.9	727.7	728.5	729.2	730.0
125°	801.1	799.9	798.8	797.6	798.8	799.9	801.1	802.3	803.4	804.6	805.7
127.5°	874.5	873.2	871.9	870.5	871.9	873.2	874.5	875.8	877.3	878.9	880.5
130°	924.3	922.3	920.3	918.3	920.3	922.3	924.3	926.3	927.9	929.1	930.2
132.5°	972.7	971.2	969.6	968.1	969.6	971.2	972.7	974.3	975.8	977.1	978.5
135°	1047.1	1046.5	1045.9	1045.4	1045.9	1046.5	1047.1	1047.7	1048.5	1049.7	1050.8
137.5°	1116.9	1115.8	1114.7	1113.6	1114.7	1115.8	1116.9	1118.0	1119.1	1120.3	1121.5
140°	1164.3	1162.2	1160.2	1158.2	1160.2	1162.2	1164.3	1166.3	1167.4	1167.7	1168.0
142.5°	1208.5	1207.0	1205.4	1203.9	1205.4	1207.0	1208.5	1210.1	1211.0	1211.3	1211.6
145°	1273.2	1272.0	1270.9	1269.7	1270.9	1272.0	1273.2	1274.4	1275.1	1275.4	1275.6
147.5°	1333.6	1331.8	1330.1	1328.4	1330.1	1331.8	1333.6	1335.3	1336.1	1336.1	1336.1
150°	1370.9	1369.2	1367.4	1365.7	1367.4	1369.2	1370.9	1372.6	1373.5	1373.5	1373.5
152.5°	1406.5	1405.0	1403.5	1402.0	1403.5	1405.0	1406.5	1408.0	1408.5	1408.1	1407.6
155°	1457.4	1455.4	1453.3	1451.3	1453.3	1455.4	1457.4	1459.4	1459.8	1458.7	1457.5
157.5°	1501.0	1499.4	1497.8	1496.2	1497.8	1499.4	1501.0	1502.6	1502.9	1501.6	1500.4
160°	1528.7	1527.6	1526.4	1525.2	1526.4	1527.6	1528.7	1529.9	1529.7	1528.3	1526.8
162.5°	1552.6	1550.7	1548.9	1547.0	1548.9	1550.7	1552.6	1554.4	1554.6	1553.2	1551.7
165°	1584.5	1582.5	1580.4	1578.4	1580.4	1582.5	1584.5	1586.5	1586.6	1584.9	1583.2
167.5°	1610.5	1608.7	1606.9	1605.1	1606.9	1608.7	1610.5	1612.3	1612.3	1610.5	1608.7
170°	1624.7	1622.7	1620.6	1618.6	1620.6	1622.7	1624.7	1626.7	1626.7	1624.7	1622.7
172.5°	1635.1	1633.0	1631.0	1629.0	1631.0	1633.0	1635.1	1637.1	1637.2	1635.4	1633.6
175°	1646.7	1644.7	1642.7	1640.7	1642.7	1644.7	1646.7	1648.7	1648.9	1647.2	1645.4
177.5°	1651.7	1650.1	1648.5	1646.9	1648.5	1650.1	1651.7	1653.4	1653.5	1652.1	1650.7
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



TEST NUMBER: P332109

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	461.1	461.1	464.6	466.9	469.7	471.5	472.8	474.1	476.4	479.3	482.7
5°	434.7	435.6	440.8	445.9	450.8	455.0	458.5	462.7	467.8	474.1	481.1
7.5°	409.2	412.8	417.9	424.2	431.0	437.1	443.3	450.2	457.5	466.7	476.5
10°	392.8	396.7	403.0	411.0	418.2	425.4	433.1	440.5	449.6	460.6	473.2
12.5°	378.4	382.2	388.7	397.3	404.2	412.2	421.0	430.7	440.9	454.0	468.3
15°	358.5	363.0	370.9	375.1	385.6	395.1	403.3	417.2	430.3	443.8	460.3
17.5°	342.2	344.7	351.1	358.9	366.7	377.5	388.1	399.8	412.8	429.3	450.0
20°	331.0	333.1	340.1	348.3	356.7	366.5	376.0	387.7	402.3	419.8	442.2
22.5°	322.7	324.9	329.5	338.2	346.0	354.2	363.7	377.6	393.2	410.3	434.5
25°	310.5	311.9	315.0	322.0	328.9	338.0	346.4	359.5	375.5	395.6	419.8
27.5°	299.0	300.4	302.9	307.9	314.5	321.8	331.0	342.0	358.3	380.1	405.8
30°	292.1	292.4	294.7	299.4	305.0	311.0	319.4	332.0	347.4	369.5	396.5
32.5°	286.2	285.3	286.9	290.4	295.8	301.9	308.8	321.2	336.0	357.7	385.5
35°	276.1	275.6	274.9	277.9	282.6	287.2	293.3	302.6	319.4	339.7	368.8
37.5°	265.8	264.6	263.4	264.8	268.4	273.3	278.5	286.8	301.3	323.6	351.5
40°	258.1	257.2	256.5	256.0	259.3	263.9	267.9	275.8	289.3	310.5	338.0
42.5°	249.7	249.2	248.3	247.6	250.3	253.9	258.0	265.0	278.5	298.4	324.4
45°	236.2	235.8	235.3	234.8	236.5	239.7	243.0	248.1	259.8	279.1	302.6
47.5°	221.2	220.6	220.8	220.0	221.6	223.8	226.1	231.6	242.7	258.4	275.6
50°	210.4	210.1	210.1	210.1	210.6	213.2	215.3	219.5	229.7	245.3	257.7
52.5°	200.1	199.1	199.1	199.5	200.4	202.0	203.3	207.9	216.8	229.7	240.9
55°	184.0	182.2	181.7	182.2	182.9	184.3	185.7	189.4	197.1	206.6	213.2
57.5°	166.2	165.2	164.6	164.7	165.1	166.2	167.3	171.3	177.4	182.4	186.6
60°	153.8	154.2	152.1	152.6	152.6	153.5	155.2	157.7	162.8	166.3	170.5
62.5°	142.0	141.4	140.8	140.1	140.1	140.5	142.7	144.7	149.1	150.9	154.1
65°	123.7	123.7	122.3	122.8	123.0	121.4	122.5	124.9	127.7	128.4	131.4
67.5°	105.2	104.5	103.7	103.0	103.0	102.9	103.5	104.6	106.7	107.0	109.3
70°	92.5	92.0	91.8	91.1	90.2	91.3	90.6	91.8	93.0	93.2	94.6
72.5°	80.2	79.7	79.3	78.6	78.2	78.1	78.1	79.5	80.3	80.0	81.5
75°	62.7	62.2	61.7	60.6	60.6	59.9	60.1	61.0	62.0	61.3	62.7
77.5°	46.0	44.6	44.5	44.8	44.0	44.2	43.9	43.8	44.2	44.2	45.5
80°	35.4	33.8	34.2	34.0	33.8	33.5	33.1	33.3	33.5	33.8	34.5
82.5°	25.5	25.4	24.9	24.9	24.6	24.0	23.8	24.2	24.4	24.3	24.8
85°	13.0	12.3	12.8	12.6	12.8	12.6	11.9	11.9	12.3	12.1	12.6
87.5°	10.4	10.1	9.2	8.6	7.7	7.1	6.3	5.9	5.5	4.9	4.7
90°	32.3	31.1	27.4	23.6	19.9	16.1	12.8	9.9	7.1	4.2	1.3
92.5°	50.7	49.8	47.7	45.5	43.4	41.3	39.2	37.3	35.3	33.3	31.4
95°	97.1	96.0	93.7	91.4	89.1	86.8	84.6	82.6	80.6	78.5	76.5
97.5°	151.5	150.2	148.5	146.8	145.2	143.5	141.9	140.4	138.9	137.4	135.9
100°	191.5	190.7	189.2	187.8	186.3	184.9	183.3	181.6	179.8	178.1	176.4
102.5°	237.2	236.3	234.4	232.5	230.6	228.7	227.2	226.2	225.2	224.1	223.1
105°	306.1	306.1	303.5	300.9	298.3	295.7	294.1	293.5	293.0	292.4	291.8
107.5°	378.9	377.9	376.9	375.9	374.8	373.8	373.1	372.8	372.4	372.1	371.7
110°	427.9	426.7	426.1	425.6	425.0	424.4	423.8	423.2	422.7	422.1	421.5



TEST NUMBER: P332109

CATALOG NUMBER: S123DIW-S340D1320U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	476.9	475.5	475.4	475.2	475.1	475.0	474.8	474.4	474.1	473.7	473.4
115°	552.8	552.5	553.1	553.7	554.2	554.8	554.7	553.8	552.9	552.1	551.2
117.5°	628.7	628.8	629.5	630.3	631.0	631.8	631.9	631.3	630.7	630.1	629.6
120°	679.3	679.6	681.1	682.5	683.9	685.4	685.2	683.5	681.8	680.0	678.3
122.5°	730.7	731.5	732.2	733.0	733.7	734.5	734.2	733.0	731.7	730.4	729.2
125°	806.9	808.0	808.6	809.2	809.7	810.3	810.2	809.3	808.4	807.6	806.7
127.5°	882.1	883.8	884.4	885.0	885.7	886.3	885.7	883.8	882.0	880.2	878.3
130°	931.4	932.5	933.4	934.3	935.1	936.0	935.3	933.0	930.7	928.3	926.0
132.5°	979.9	981.3	981.9	982.6	983.2	983.8	983.0	980.7	978.4	976.1	973.8
135°	1052.0	1053.1	1053.4	1053.7	1054.0	1054.3	1053.6	1051.8	1050.1	1048.4	1046.7
137.5°	1122.7	1124.0	1123.2	1122.5	1121.7	1121.0	1119.9	1118.4	1117.0	1115.5	1114.1
140°	1168.3	1168.6	1168.3	1168.0	1167.7	1167.4	1166.6	1165.1	1163.7	1162.2	1160.8
142.5°	1211.9	1212.2	1211.6	1211.1	1210.6	1210.1	1209.1	1207.7	1206.2	1204.8	1203.3
145°	1275.9	1276.2	1275.4	1274.5	1273.6	1272.8	1272.0	1271.5	1270.9	1270.3	1269.7
147.5°	1336.1	1336.1	1335.3	1334.5	1333.7	1332.9	1332.0	1331.0	1329.9	1328.9	1327.8
150°	1373.5	1373.5	1372.9	1372.3	1371.8	1371.2	1370.6	1370.0	1369.5	1368.9	1368.3
152.5°	1407.2	1406.7	1406.4	1406.0	1405.7	1405.3	1404.7	1403.9	1403.1	1402.3	1401.5
155°	1456.4	1455.2	1454.9	1454.6	1454.3	1454.1	1453.9	1453.9	1453.9	1453.9	1453.9
157.5°	1499.2	1498.0	1497.8	1497.5	1497.3	1497.1	1497.1	1497.5	1497.8	1498.2	1498.5
160°	1525.4	1523.9	1523.9	1523.9	1523.9	1523.9	1524.2	1524.8	1525.4	1526.0	1526.5
162.5°	1550.3	1548.8	1548.6	1548.4	1548.2	1547.9	1548.2	1549.0	1549.8	1550.6	1551.4
165°	1581.4	1579.7	1579.7	1579.7	1579.7	1579.7	1580.2	1581.0	1581.9	1582.7	1583.6
167.5°	1606.9	1605.1	1604.9	1604.7	1604.4	1604.2	1604.7	1605.8	1607.0	1608.1	1609.3
170°	1620.6	1618.6	1618.6	1618.6	1618.6	1618.6	1619.2	1620.4	1621.5	1622.7	1623.8
172.5°	1631.8	1630.0	1630.0	1630.0	1630.0	1630.0	1630.6	1631.8	1632.9	1634.1	1635.2
175°	1643.7	1642.0	1642.0	1642.0	1642.0	1642.0	1642.5	1643.7	1644.9	1646.0	1647.2
177.5°	1649.3	1647.9	1647.9	1647.9	1647.9	1647.9	1648.4	1649.3	1650.2	1651.2	1652.1
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



TEST NUMBER: P332109

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	483.8	484.8	487.9	490.2	492.8	494.3	495.7	496.9	498.4	498.7	504.1
5°	486.0	490.6	498.8	504.8	512.3	520.4	526.0	528.6	535.4	540.9	552.1
7.5°	485.4	495.3	507.6	520.4	534.0	546.7	557.7	570.8	580.0	594.0	607.7
10°	484.8	498.1	513.9	530.2	549.3	567.0	582.9	600.6	615.3	634.6	651.1
12.5°	483.1	499.2	521.2	540.5	563.7	588.1	611.6	634.3	647.3	679.5	694.7
15°	479.0	498.1	525.6	554.9	586.8	615.7	645.5	669.3	707.7	735.9	753.9
17.5°	471.1	497.8	530.4	565.8	604.6	642.7	676.5	712.5	753.3	787.4	823.8
20°	467.3	496.7	533.0	572.2	612.5	655.6	694.0	737.3	781.8	815.4	862.0
22.5°	460.4	493.7	532.8	576.4	619.5	664.1	709.1	752.8	804.2	850.4	894.8
25°	449.2	486.4	527.0	575.7	626.2	670.9	724.8	782.8	836.3	895.8	940.0
27.5°	437.3	477.1	517.7	563.0	617.4	670.5	738.2	803.7	869.2	920.5	953.3
30°	428.2	466.9	508.8	554.5	608.3	671.4	747.1	818.6	882.5	926.5	944.9
32.5°	418.3	457.5	494.6	542.5	599.9	670.8	752.7	827.4	883.2	912.5	908.9
35°	402.8	435.6	471.8	517.9	585.4	666.7	756.0	828.2	862.4	856.1	808.6
37.5°	380.4	408.1	443.6	494.1	568.7	658.1	749.4	803.6	801.4	750.2	681.3
40°	366.5	390.0	424.2	477.3	555.6	652.5	739.2	774.4	744.6	673.0	590.6
42.5°	348.2	369.9	404.1	458.7	541.3	641.2	719.6	729.8	671.5	589.2	513.6
45°	319.9	339.0	374.4	430.8	519.7	616.4	671.9	646.9	568.4	483.4	425.9
47.5°	289.4	309.3	343.3	401.3	488.6	579.2	605.6	552.6	472.0	403.0	350.2
50°	270.2	289.3	322.7	381.1	467.6	548.6	559.6	491.1	417.0	356.4	313.1
52.5°	250.9	268.8	301.6	360.3	443.0	513.2	506.5	436.7	368.6	316.9	282.9
55°	222.0	239.0	270.2	325.2	400.5	456.1	431.7	365.1	308.7	268.6	242.7
57.5°	196.2	212.5	239.4	289.1	354.5	392.8	361.7	305.5	260.7	229.8	210.6
60°	178.7	193.1	218.8	264.9	321.7	350.8	320.1	270.5	232.7	208.0	190.8
62.5°	162.1	174.7	198.4	240.3	289.7	314.1	283.0	241.0	208.9	187.0	172.3
65°	137.0	148.4	169.4	202.0	242.5	258.8	232.0	198.0	173.1	156.8	147.0
67.5°	114.1	123.8	141.9	167.5	197.4	209.2	188.8	162.5	143.7	130.6	122.9
70°	98.8	107.2	121.4	143.5	170.5	179.6	160.5	138.8	125.1	114.6	107.4
72.5°	85.9	92.1	105.0	122.1	144.6	151.8	138.5	119.5	106.7	98.8	93.0
75°	65.5	70.6	79.0	92.7	108.3	112.5	102.5	90.6	82.0	76.4	72.0
77.5°	47.2	51.0	57.0	65.5	76.3	80.1	73.8	65.8	59.5	55.8	53.3
80°	35.6	38.7	43.8	50.8	57.3	59.4	55.7	49.6	45.2	43.1	41.0
82.5°	26.3	28.0	31.1	35.9	40.3	42.8	39.7	36.0	33.6	31.7	30.9
85°	13.3	14.2	15.6	17.5	20.3	21.2	20.0	19.1	17.7	16.5	16.5
87.5°	5.7	6.3	7.4	8.3	9.8	11.1	11.6	12.0	12.6	12.6	12.7
90°	4.2	7.1	9.9	12.8	16.1	19.9	23.6	27.4	31.1	32.3	33.4
92.5°	33.3	35.3	37.3	39.2	41.3	43.4	45.5	47.7	49.8	50.7	51.6
95°	78.5	80.6	82.6	84.6	86.8	89.1	91.4	93.7	96.0	97.1	98.3
97.5°	137.4	138.9	140.4	141.9	143.5	145.2	146.8	148.5	150.2	151.5	152.8
100°	178.1	179.8	181.6	183.3	184.9	186.3	187.8	189.2	190.7	191.5	192.4
102.5°	224.1	225.2	226.2	227.2	228.7	230.6	232.5	234.4	236.3	237.2	238.0
105°	292.4	293.0	293.5	294.1	295.7	298.3	300.9	303.5	306.1	306.1	306.1
107.5°	372.1	372.4	372.8	373.1	373.8	374.8	375.9	376.9	377.9	378.9	379.8
110°	422.1	422.7	423.2	423.8	424.4	425.0	425.6	426.1	426.7	427.9	429.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	473.7	474.1	474.4	474.8	475.0	475.1	475.2	475.4	475.5	476.9	478.2
115°	552.1	552.9	553.8	554.7	554.8	554.2	553.7	553.1	552.5	552.8	553.1
117.5°	630.1	630.7	631.3	631.9	631.8	631.0	630.3	629.5	628.8	628.7	628.7
120°	680.0	681.8	683.5	685.2	685.4	683.9	682.5	681.1	679.6	679.3	679.0
122.5°	730.4	731.7	733.0	734.2	734.5	733.7	733.0	732.2	731.5	730.7	730.0
125°	807.6	808.4	809.3	810.2	810.3	809.7	809.2	808.6	808.0	806.9	805.7
127.5°	880.2	882.0	883.8	885.7	886.3	885.7	885.0	884.4	883.8	882.1	880.5
130°	928.3	930.7	933.0	935.3	936.0	935.1	934.3	933.4	932.5	931.4	930.2
132.5°	976.1	978.4	980.7	983.0	983.8	983.2	982.6	981.9	981.3	979.9	978.5
135°	1048.4	1050.1	1051.8	1053.6	1054.3	1054.0	1053.7	1053.4	1053.1	1052.0	1050.8
137.5°	1115.5	1117.0	1118.4	1119.9	1121.0	1121.7	1122.5	1123.2	1124.0	1122.7	1121.5
140°	1162.2	1163.7	1165.1	1166.6	1167.4	1167.7	1168.0	1168.3	1168.6	1168.3	1168.0
142.5°	1204.8	1206.2	1207.7	1209.1	1210.1	1210.6	1211.1	1211.6	1212.2	1211.9	1211.6
145°	1270.3	1270.9	1271.5	1272.0	1272.8	1273.6	1274.5	1275.4	1276.2	1275.9	1275.6
147.5°	1328.9	1329.9	1331.0	1332.0	1332.9	1333.7	1334.5	1335.3	1336.1	1336.1	1336.1
150°	1368.9	1369.5	1370.0	1370.6	1371.2	1371.8	1372.3	1372.9	1373.5	1373.5	1373.5
152.5°	1402.3	1403.1	1403.9	1404.7	1405.3	1405.7	1406.0	1406.4	1406.7	1407.2	1407.6
155°	1453.9	1453.9	1453.9	1453.9	1454.1	1454.3	1454.6	1454.9	1455.2	1456.4	1457.5
157.5°	1498.2	1497.8	1497.5	1497.1	1497.1	1497.3	1497.5	1497.8	1498.0	1499.2	1500.4
160°	1526.0	1525.4	1524.8	1524.2	1523.9	1523.9	1523.9	1523.9	1523.9	1525.4	1526.8
162.5°	1550.6	1549.8	1549.0	1548.2	1547.9	1548.2	1548.4	1548.6	1548.8	1550.3	1551.7
165°	1582.7	1581.9	1581.0	1580.2	1579.7	1579.7	1579.7	1579.7	1579.7	1581.4	1583.2
167.5°	1608.1	1607.0	1605.8	1604.7	1604.2	1604.4	1604.7	1604.9	1605.1	1606.9	1608.7
170°	1622.7	1621.5	1620.4	1619.2	1618.6	1618.6	1618.6	1618.6	1618.6	1620.6	1622.7
172.5°	1634.1	1632.9	1631.8	1630.6	1630.0	1630.0	1630.0	1630.0	1630.0	1631.8	1633.6
175°	1646.0	1644.9	1643.7	1642.5	1642.0	1642.0	1642.0	1642.0	1642.0	1643.7	1645.4
177.5°	1651.2	1650.2	1649.3	1648.4	1647.9	1647.9	1647.9	1647.9	1647.9	1649.3	1650.7
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	506.0	506.2	508.2	509.7	509.0	509.9	510.3
5°	552.8	561.2	565.6	568.9	569.1	569.4	571.2
7.5°	619.2	628.2	634.8	644.8	647.7	651.1	650.2
10°	667.7	681.0	692.4	698.4	705.0	714.5	706.8
12.5°	713.0	736.5	753.9	763.3	769.4	771.3	767.6
15°	787.7	818.4	834.9	834.5	855.4	864.5	850.3
17.5°	856.1	884.5	907.3	918.9	936.4	940.2	938.5
20°	898.1	929.1	946.8	966.8	975.9	984.0	985.4
22.5°	934.2	962.1	981.1	997.7	1005.3	1009.2	1011.5
25°	971.5	993.4	1004.8	1010.6	1012.7	1012.2	1009.2
27.5°	968.9	970.6	958.0	945.7	934.6	922.2	917.9
30°	943.7	924.2	889.2	869.4	840.3	817.2	826.6
32.5°	877.6	838.6	799.4	756.1	720.3	710.1	699.8
35°	749.0	680.5	640.4	593.8	575.2	556.6	543.7
37.5°	605.9	553.0	505.4	475.0	456.3	444.5	438.2
40°	523.9	476.2	437.0	412.3	398.1	384.9	383.0
42.5°	458.5	414.1	384.7	365.0	351.4	345.7	341.6
45°	375.5	344.6	324.8	310.8	301.7	298.2	293.5
47.5°	317.9	296.0	281.1	271.6	264.7	262.1	261.8
50°	285.6	267.4	256.5	249.0	243.7	242.7	239.0
52.5°	261.4	245.6	237.1	230.6	226.7	224.1	223.0
55°	226.9	216.4	208.7	205.0	202.0	199.4	199.4
57.5°	198.5	189.8	184.7	181.5	180.6	178.8	177.6
60°	181.0	173.6	169.6	166.8	164.9	165.2	163.1
62.5°	163.9	159.0	155.2	152.5	150.2	150.3	150.4
65°	139.5	135.8	133.0	132.1	130.7	129.1	129.5
67.5°	118.3	114.8	112.6	111.0	110.5	109.6	111.0
70°	103.0	100.4	98.8	97.4	96.9	97.1	98.3
72.5°	89.0	87.2	86.1	85.5	84.4	84.5	85.3
75°	69.9	68.5	67.6	66.9	66.6	66.6	66.6
77.5°	51.3	51.0	50.6	49.6	49.6	49.9	49.9
80°	40.5	39.8	39.6	39.1	38.4	38.0	39.1
82.5°	30.3	29.6	29.4	29.3	28.2	28.1	29.1
85°	16.3	15.6	15.8	15.6	15.6	15.4	15.4
87.5°	12.7	12.7	12.7	13.0	13.0	12.9	13.4
90°	34.6	35.7	36.6	37.2	37.8	38.3	38.9
92.5°	52.6	53.5	53.8	53.4	53.1	52.7	52.4
95°	99.4	100.6	101.2	101.2	101.2	101.2	101.2
97.5°	154.2	155.5	156.1	156.0	155.9	155.8	155.6
100°	193.2	194.1	194.8	195.4	196.0	196.6	197.1
102.5°	238.9	239.8	240.1	240.0	239.9	239.8	239.7
105°	306.1	306.1	306.4	307.0	307.5	308.1	308.7
107.5°	380.7	381.6	381.9	381.6	381.2	380.9	380.5
110°	430.2	431.3	431.6	431.0	430.5	429.9	429.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	479.6	481.0	481.6	481.5	481.4	481.3	481.2
115°	553.4	553.7	553.7	553.4	553.1	552.8	552.5
117.5°	628.6	628.5	628.1	627.3	626.5	625.7	624.9
120°	678.8	678.5	678.0	677.5	676.9	676.3	675.7
122.5°	729.2	728.5	727.7	726.9	726.1	725.3	724.5
125°	804.6	803.4	802.3	801.1	799.9	798.8	797.6
127.5°	878.9	877.3	875.8	874.5	873.2	871.9	870.5
130°	929.1	927.9	926.3	924.3	922.3	920.3	918.3
132.5°	977.1	975.8	974.3	972.7	971.2	969.6	968.1
135°	1049.7	1048.5	1047.7	1047.1	1046.5	1045.9	1045.4
137.5°	1120.3	1119.1	1118.0	1116.9	1115.8	1114.7	1113.6
140°	1167.7	1167.4	1166.3	1164.3	1162.2	1160.2	1158.2
142.5°	1211.3	1211.0	1210.1	1208.5	1207.0	1205.4	1203.9
145°	1275.4	1275.1	1274.4	1273.2	1272.0	1270.9	1269.7
147.5°	1336.1	1336.1	1335.3	1333.6	1331.8	1330.1	1328.4
150°	1373.5	1373.5	1372.6	1370.9	1369.2	1367.4	1365.7
152.5°	1408.1	1408.5	1408.0	1406.5	1405.0	1403.5	1402.0
155°	1458.7	1459.8	1459.4	1457.4	1455.4	1453.3	1451.3
157.5°	1501.6	1502.9	1502.6	1501.0	1499.4	1497.8	1496.2
160°	1528.3	1529.7	1529.9	1528.7	1527.6	1526.4	1525.2
162.5°	1553.2	1554.6	1554.4	1552.6	1550.7	1548.9	1547.0
165°	1584.9	1586.6	1586.5	1584.5	1582.5	1580.4	1578.4
167.5°	1610.5	1612.3	1612.3	1610.5	1608.7	1606.9	1605.1
170°	1624.7	1626.7	1626.7	1624.7	1622.7	1620.6	1618.6
172.5°	1635.4	1637.2	1637.1	1635.1	1633.0	1631.0	1629.0
175°	1647.2	1648.9	1648.7	1646.7	1644.7	1642.7	1640.7
177.5°	1652.1	1653.5	1653.4	1651.7	1650.1	1648.5	1646.9
180°	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1	1651.1

(END OF REPORT)