

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: P331777-830

Luminaire Tested: **S122RDIW-S290D1240U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331777-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDIW-S290D1240U830-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1240 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5738.4 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

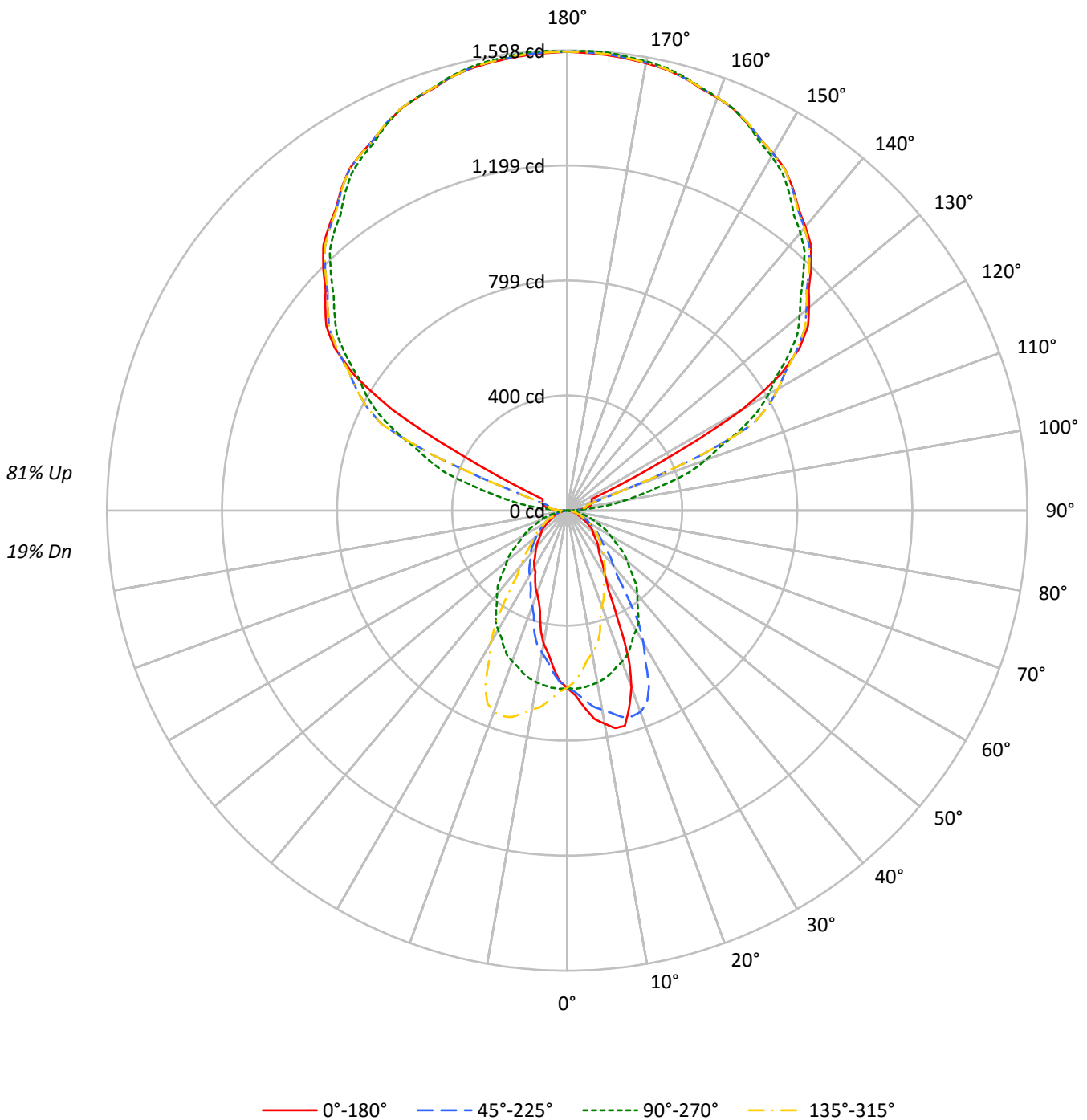
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	88	88	88	88	66	66	66	46	46	46	27	27	27	19
1	91	87	83	80	80	77	74	71	58	56	54	41	39	38	24	24	23	16
2	83	76	71	66	73	68	63	59	51	48	45	36	34	33	22	21	20	14
3	76	67	60	55	67	60	54	49	45	42	38	32	30	28	20	19	18	12
4	69	60	52	47	61	53	47	42	40	36	33	29	26	24	18	16	15	11
5	64	53	46	40	56	47	41	36	36	32	28	26	23	21	16	15	14	10
6	59	47	40	35	52	42	36	31	32	28	25	23	21	18	15	13	12	9
7	54	43	35	30	48	38	32	27	29	25	22	21	18	16	14	12	11	8
8	50	39	32	27	44	35	28	24	27	22	19	19	17	15	12	11	10	7
9	47	35	28	24	41	32	26	21	25	20	17	18	15	13	12	10	9	7
10	43	32	26	21	38	29	23	19	23	18	15	16	14	12	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9947	9947	9947	9947
5°	11110	10010	8877	10010
10°	12329	9940	7694	9940
15°	12933	9795	6063	9795
20°	11213	9579	5246	9579
25°	7352	9283	4684	9283
30°	4950	8925	4238	8925
35°	4009	8474	3824	8474
40°	3564	7982	3539	7982
45°	3226	7405	3158	7405
50°	2936	6835	2926	6835
55°	2759	6201	2725	6201
60°	2309	5622	2283	5622
65°	1948	5104	2208	5104
70°	1799	4556	2082	4556
75°	1684	3968	1921	3968
80°	1553	3273	1711	3273
85°	1426	2575	1501	2575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	1.0
10°-20°	162.8	2.8
20°-30°	209.7	3.7
30°-40°	199.3	3.5
40°-50°	170.7	3.0
50°-60°	130.0	2.3
60°-70°	82.2	1.4
70°-80°	41.0	0.7
80°-90°	14.6	0.3
90°-100°	53.1	0.9
100°-110°	194.9	3.4
110°-120°	521.0	9.1
120°-130°	860.1	15.0
130°-140°	914.7	15.9
140°-150°	850.1	14.8
150°-160°	683.5	11.9
160°-170°	440.5	7.7
170°-180°	151.6	2.6
0°-30°	430.9	7.5
0°-40°	630.2	11.0
0°-60°	931.0	16.2
0°-90°	1068.8	18.6
90°-120°	769.1	13.4
90°-150°	3394.0	59.1
90°-180°	4670.0	81.4
0°-180°	5738.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	616	616	616	616	616	
5°	686	618	548	618	686	68
15°	774	586	363	586	774	209
25°	413	521	263	521	413	196
35°	203	430	194	430	203	130
45°	141	324	138	324	141	109
55°	98	220	97	220	98	86
65°	51	134	58	134	51	52
75°	27	64	31	64	27	29
85°	8	14	8	14	8	9
90°	31	1	31	1	31	14
95°	50	75	50	75	50	46
105°	88	350	88	350	88	91
115°	94	663	94	663	94	237
125°	986	937	986	937	986	853
135°	1198	1160	1198	1160	1198	923
145°	1366	1346	1366	1346	1366	854
155°	1483	1482	1483	1482	1483	684
165°	1558	1561	1558	1561	1558	440
175°	1588	1597	1588	1597	1588	151
180°	1593	1593	1593	1593	1593	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	641.2	641.7	642.2	641.0	641.0	640.0	637.7	636.0	631.2	630.6	630.6
5°	685.5	685.1	686.0	683.2	679.4	678.4	674.4	669.0	663.5	657.3	656.0
7.5°	729.6	729.0	727.3	726.8	723.9	717.4	710.9	703.9	694.7	685.6	681.1
10°	752.0	759.0	754.7	747.2	748.7	738.7	733.3	724.1	716.3	702.9	699.9
12.5°	773.8	776.7	775.2	771.0	769.1	762.1	754.9	746.9	732.6	720.6	710.0
15°	773.7	777.8	778.9	777.6	778.6	778.3	774.4	767.8	755.4	742.1	730.5
17.5°	716.6	719.4	726.5	731.2	737.3	749.9	756.2	758.6	756.8	749.1	741.0
20°	652.6	647.9	667.6	677.6	686.2	707.6	726.0	733.1	744.4	744.2	742.1
22.5°	561.8	562.9	581.5	593.5	618.5	640.0	660.9	687.5	709.5	724.0	732.4
25°	412.7	420.9	439.5	455.8	483.6	523.5	559.7	601.6	641.2	672.5	702.3
27.5°	310.0	310.7	325.4	340.4	356.9	389.6	435.2	485.2	541.7	588.3	641.9
30°	265.5	264.2	270.4	279.7	293.8	319.1	353.3	402.5	458.8	529.0	591.5
32.5°	233.9	234.0	238.7	245.5	257.2	274.3	297.7	337.8	391.0	460.1	533.3
35°	203.4	203.2	206.6	211.5	216.4	227.3	243.5	264.4	301.0	365.4	440.4
37.5°	181.4	182.4	184.1	187.2	192.6	198.7	208.3	222.4	248.5	286.6	349.6
40°	169.1	169.6	171.9	174.5	177.7	182.4	190.3	201.7	220.7	251.1	297.2
42.5°	157.9	158.3	159.9	162.3	164.9	169.6	176.2	186.0	201.4	225.1	263.1
45°	141.3	141.3	142.8	143.8	146.7	150.9	156.3	164.5	175.1	192.7	217.9
47.5°	125.8	125.8	126.9	128.7	130.4	133.7	139.0	145.7	153.4	167.0	188.6
50°	116.9	117.2	117.7	119.2	120.4	123.3	127.4	133.2	141.3	151.8	169.8
52.5°	109.7	109.6	110.4	111.0	111.8	113.9	117.0	122.1	129.3	138.5	153.4
55°	98.0	97.2	98.5	99.5	100.2	101.0	102.7	105.9	112.2	119.9	131.0
57.5°	83.5	83.1	84.1	85.0	87.1	89.4	90.9	92.8	96.0	101.6	112.6
60°	71.5	71.5	73.4	74.1	76.4	79.5	82.5	84.2	87.4	91.0	99.2
62.5°	60.9	61.1	61.9	62.6	63.9	67.6	71.8	75.6	78.6	82.1	87.5
65°	51.0	51.4	51.4	51.8	52.7	53.5	55.2	58.2	63.6	68.5	72.6
67.5°	43.3	43.4	43.5	43.9	44.1	45.1	45.8	47.1	48.4	53.0	58.1
70°	38.1	38.7	38.5	38.9	39.2	39.6	40.4	41.1	43.1	44.1	47.1
72.5°	33.3	33.7	33.7	34.0	34.6	34.7	35.3	36.0	37.2	38.1	39.8
75°	27.0	26.8	27.0	27.4	27.6	27.8	27.8	28.7	29.3	30.2	31.3
77.5°	20.8	21.0	21.0	21.0	21.1	21.5	21.4	21.8	22.4	22.9	23.4
80°	16.7	16.9	16.7	16.9	17.2	17.3	17.2	17.3	18.0	18.4	18.4
82.5°	12.9	13.0	13.1	13.1	13.2	13.2	13.6	13.6	14.0	13.9	14.1
85°	7.7	7.5	7.5	7.5	7.7	7.9	7.7	7.7	7.9	7.9	7.9
87.5°	9.0	9.0	9.0	8.9	8.8	8.6	8.3	8.2	7.8	7.7	7.1
90°	31.1	30.6	30.1	29.6	29.1	28.2	26.9	25.6	24.3	23.1	21.0
92.5°	31.1	30.8	30.5	30.2	29.9	29.4	28.7	28.1	27.4	26.8	25.7
95°	49.6	49.9	50.0	50.3	50.6	50.0	48.8	47.5	46.3	45.0	43.2
97.5°	66.2	65.9	65.6	65.2	64.9	64.3	63.2	62.2	61.2	60.2	56.1
100°	77.3	76.7	76.3	75.7	75.2	73.9	71.8	69.8	67.8	65.7	61.4
102.5°	82.8	82.1	81.3	80.6	79.9	78.2	75.6	72.9	70.2	67.6	104.0
105°	87.7	86.6	85.6	84.5	83.5	81.6	78.8	76.0	73.1	70.3	140.3
107.5°	90.2	89.2	88.1	87.1	86.1	87.0	89.8	92.7	95.6	98.5	182.4
110°	91.0	90.1	89.1	88.0	87.0	99.2	124.9	150.5	176.2	201.8	275.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	92.0	91.1	90.4	89.5	88.7	135.1	228.6	322.0	415.5	508.9	527.3
115°	94.5	113.0	131.5	149.9	168.3	236.9	355.5	474.1	592.8	711.4	705.0
117.5°	386.0	446.7	507.3	567.9	628.5	673.2	701.8	730.6	759.2	788.0	783.5
120°	703.3	737.9	772.5	807.1	841.7	857.4	854.3	851.3	848.2	845.1	840.6
122.5°	877.6	884.4	891.1	897.8	904.5	906.9	905.1	903.2	901.4	899.6	894.6
125°	985.8	985.1	984.3	983.4	982.7	981.5	979.7	977.9	976.1	974.3	969.4
127.5°	1054.0	1053.9	1053.8	1053.6	1053.5	1052.1	1049.4	1046.8	1044.2	1041.6	1037.9
130°	1096.5	1096.7	1097.0	1097.2	1097.5	1096.2	1093.4	1090.6	1087.8	1085.0	1082.1
132.5°	1138.0	1138.2	1138.5	1138.8	1139.0	1137.9	1135.5	1133.1	1130.7	1128.3	1125.5
135°	1198.0	1198.4	1199.0	1199.5	1200.0	1199.0	1196.4	1193.8	1191.3	1188.7	1186.4
137.5°	1252.5	1253.5	1254.3	1255.2	1256.0	1255.3	1252.7	1250.2	1247.7	1245.2	1242.6
140°	1286.8	1288.0	1289.3	1290.5	1291.8	1291.4	1289.0	1286.8	1284.4	1282.1	1279.3
142.5°	1319.9	1321.2	1322.5	1323.8	1325.0	1324.6	1322.6	1320.4	1318.3	1316.3	1313.0
145°	1366.3	1367.5	1368.9	1370.1	1371.4	1371.1	1369.3	1367.5	1365.7	1364.0	1359.6
147.5°	1407.1	1408.2	1409.2	1410.3	1411.4	1411.3	1409.9	1408.6	1407.3	1405.9	1401.7
150°	1432.0	1433.2	1434.5	1435.9	1437.1	1437.0	1435.5	1433.9	1432.4	1430.9	1426.7
152.5°	1453.2	1454.9	1456.6	1458.3	1460.0	1460.1	1458.5	1457.0	1455.5	1453.9	1450.0
155°	1482.7	1484.8	1486.9	1488.8	1490.9	1491.2	1489.7	1488.1	1486.6	1485.1	1482.0
157.5°	1509.7	1511.7	1513.7	1515.7	1517.7	1517.9	1516.1	1514.4	1512.6	1510.9	1508.7
160°	1525.4	1527.2	1529.0	1530.8	1532.6	1532.7	1531.2	1529.7	1528.0	1526.5	1525.0
162.5°	1538.3	1540.5	1542.7	1544.9	1547.1	1547.4	1545.6	1543.9	1542.1	1540.4	1539.1
165°	1557.6	1559.4	1561.2	1563.0	1564.8	1564.8	1563.0	1561.2	1559.4	1557.6	1556.9
167.5°	1569.9	1572.2	1574.5	1576.8	1579.1	1579.3	1577.5	1575.7	1574.0	1572.2	1571.5
170°	1577.3	1579.6	1581.9	1584.2	1586.5	1586.8	1585.0	1583.2	1581.4	1579.6	1579.0
172.5°	1582.8	1585.1	1587.4	1589.7	1592.0	1592.2	1590.4	1588.7	1586.9	1585.1	1584.6
175°	1587.6	1590.2	1592.8	1595.3	1597.9	1598.3	1596.5	1594.7	1592.9	1591.1	1590.6
177.5°	1590.6	1592.5	1594.3	1596.2	1598.0	1598.3	1596.8	1595.3	1593.9	1592.5	1592.2
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	630.9	629.5	628.3	625.3	623.7	620.3	619.8	619.6	615.2	610.9	609.6
5°	652.6	649.1	644.0	638.0	631.8	625.4	621.1	617.6	609.1	601.0	596.3
7.5°	674.4	667.0	658.2	646.9	637.3	626.8	618.9	611.8	599.6	588.0	580.1
10°	690.7	678.7	666.9	651.3	639.0	627.1	616.0	606.3	592.7	577.2	566.3
12.5°	700.8	687.6	671.4	656.1	640.3	625.0	610.1	597.8	581.6	565.7	552.8
15°	714.4	700.3	680.6	658.7	638.5	618.5	601.4	586.0	565.1	545.9	530.1
17.5°	725.7	706.2	685.0	659.8	636.2	611.0	588.9	569.2	545.8	522.8	504.2
20°	729.2	709.9	685.5	660.3	632.4	602.7	578.9	557.5	532.4	507.4	486.0
22.5°	727.0	712.0	684.9	654.6	626.1	595.0	568.2	543.3	515.5	489.9	465.1
25°	711.9	706.7	681.1	648.1	615.6	579.4	548.3	521.1	489.5	462.0	435.1
27.5°	676.7	687.8	671.8	636.7	600.5	561.8	526.8	495.9	463.0	432.2	405.3
30°	642.7	668.2	661.4	628.8	588.3	550.3	511.0	478.7	443.7	411.9	385.4
32.5°	596.3	638.4	645.1	617.8	576.0	534.1	493.0	460.9	424.2	390.9	365.0
35°	522.4	585.3	614.3	596.9	555.0	509.7	467.4	429.9	393.0	360.1	334.4
37.5°	434.2	520.0	568.2	569.4	530.8	483.9	437.7	400.5	362.8	330.5	302.7
40°	377.0	470.0	532.7	546.6	514.1	463.4	416.6	378.7	342.0	310.2	278.3
42.5°	325.6	418.2	495.3	519.5	493.7	443.3	396.4	356.8	321.0	291.1	258.4
45°	263.3	344.3	429.2	472.5	458.2	411.5	362.0	324.3	290.8	264.9	233.6
47.5°	222.2	279.2	361.5	419.9	419.7	377.1	328.4	292.4	261.2	236.9	211.6
50°	198.7	248.4	317.9	384.3	389.8	354.1	307.8	272.1	243.0	217.5	197.2
52.5°	177.6	218.6	281.1	344.8	360.6	329.6	284.7	251.8	223.5	200.0	182.7
55°	150.1	181.8	229.3	288.8	312.8	291.0	251.1	220.3	197.4	177.7	162.7
57.5°	127.0	150.7	188.9	236.8	264.7	251.0	218.1	193.0	173.4	155.6	143.8
60°	112.4	131.9	164.2	204.2	235.1	225.5	197.4	174.1	157.4	141.9	130.8
62.5°	98.7	115.5	143.2	175.7	203.9	199.9	177.0	157.4	142.8	128.8	119.3
65°	79.5	91.6	113.3	138.7	161.5	163.3	146.8	133.6	120.6	109.4	101.0
67.5°	63.2	71.3	86.4	107.9	124.9	131.0	120.9	110.7	100.4	91.8	84.5
70°	53.3	59.8	70.9	88.2	103.9	110.3	104.4	96.5	87.6	80.5	74.3
72.5°	43.2	49.5	57.7	70.4	83.8	90.8	88.7	83.0	75.8	69.8	64.0
75°	32.5	34.5	40.1	48.6	59.1	65.1	66.5	63.6	57.8	53.3	49.9
77.5°	24.0	25.3	27.9	32.3	39.2	44.6	46.8	46.4	42.4	39.9	36.6
80°	19.2	19.9	21.2	23.1	28.3	33.6	35.2	35.2	32.3	31.3	28.1
82.5°	14.6	15.1	15.9	17.0	19.3	24.0	25.7	26.0	24.3	22.9	20.4
85°	8.4	8.1	8.6	9.2	9.6	10.9	13.5	13.9	13.5	11.8	11.1
87.5°	6.7	6.5	6.0	5.4	5.0	4.6	4.9	5.2	5.1	5.1	5.4
90°	18.9	16.9	14.9	12.4	9.6	6.8	4.0	1.1	4.0	6.8	9.6
92.5°	24.7	23.7	22.6	22.2	22.5	22.8	23.0	23.3	23.0	22.8	22.5
95°	41.4	39.6	37.8	41.1	49.6	58.1	66.4	74.9	66.4	58.1	49.6
97.5°	51.8	47.7	43.5	53.4	77.3	101.0	124.9	148.7	124.9	101.0	77.3
100°	57.0	52.7	48.3	63.7	98.8	133.8	169.0	204.1	169.0	133.8	98.8
102.5°	140.4	176.8	213.3	235.3	242.7	250.1	257.5	264.9	257.5	250.1	242.7
105°	210.2	280.2	350.2	381.3	373.5	365.9	358.2	350.5	358.2	365.9	373.5
107.5°	266.3	350.2	434.0	472.9	466.7	460.4	454.2	448.1	454.2	460.4	466.7
110°	349.9	424.0	497.9	532.3	526.9	521.5	516.1	510.8	516.1	521.5	526.9



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	545.5	563.8	582.1	588.9	584.1	579.3	574.6	569.8	574.6	579.3	584.1
115°	698.6	692.2	685.8	680.4	676.0	671.7	667.3	663.0	667.3	671.7	676.0
117.5°	779.1	774.7	770.3	765.7	760.8	755.9	751.1	746.2	751.1	755.9	760.8
120°	835.9	831.3	826.7	822.5	818.6	814.7	811.0	807.1	811.0	814.7	818.6
122.5°	889.5	884.5	879.5	875.0	870.9	866.9	862.8	858.8	862.8	866.9	870.9
125°	964.5	959.7	954.8	950.6	947.3	944.1	940.7	937.4	940.7	944.1	947.3
127.5°	1034.3	1030.7	1027.1	1023.4	1019.7	1016.0	1012.3	1008.6	1012.3	1016.0	1019.7
130°	1079.3	1076.5	1073.7	1070.3	1066.1	1062.1	1057.9	1053.9	1057.9	1062.1	1066.1
132.5°	1122.7	1119.8	1117.0	1113.9	1110.4	1106.9	1103.4	1099.9	1103.4	1106.9	1110.4
135°	1184.1	1181.8	1179.5	1176.3	1172.1	1168.1	1163.9	1159.9	1163.9	1168.1	1172.1
137.5°	1240.0	1237.4	1234.7	1232.0	1229.2	1226.2	1223.4	1220.5	1223.4	1226.2	1229.2
140°	1276.5	1273.7	1270.8	1268.4	1266.3	1264.3	1262.3	1260.2	1262.3	1264.3	1266.3
142.5°	1309.8	1306.6	1303.3	1300.8	1298.9	1297.1	1295.2	1293.5	1295.2	1297.1	1298.9
145°	1355.3	1350.9	1346.5	1344.5	1344.7	1345.0	1345.3	1345.5	1345.3	1345.0	1344.7
147.5°	1397.3	1393.0	1388.7	1387.0	1388.0	1389.0	1390.0	1390.9	1390.0	1389.0	1388.0
150°	1422.7	1418.5	1414.5	1413.2	1415.0	1416.9	1418.7	1420.5	1418.7	1416.9	1415.0
152.5°	1446.1	1442.2	1438.3	1437.4	1439.4	1441.3	1443.4	1445.4	1443.4	1441.3	1439.4
155°	1478.8	1475.8	1472.7	1472.3	1474.6	1477.0	1479.2	1481.6	1479.2	1477.0	1474.6
157.5°	1506.6	1504.4	1502.2	1502.1	1504.1	1506.0	1508.0	1510.0	1508.0	1506.0	1504.1
160°	1523.4	1521.9	1520.4	1520.4	1521.9	1523.4	1525.0	1526.5	1525.0	1523.4	1521.9
162.5°	1537.7	1536.3	1535.0	1535.1	1536.7	1538.2	1539.7	1541.3	1539.7	1538.2	1536.7
165°	1556.1	1555.4	1554.6	1555.0	1556.5	1558.0	1559.6	1561.1	1559.6	1558.0	1556.5
167.5°	1570.7	1570.1	1569.3	1569.7	1571.3	1572.8	1574.3	1575.9	1574.3	1572.8	1571.3
170°	1578.6	1578.0	1577.5	1578.0	1579.6	1581.1	1582.6	1584.2	1582.6	1581.1	1579.6
172.5°	1584.0	1583.6	1583.1	1583.6	1585.1	1586.7	1588.2	1589.7	1588.2	1586.7	1585.1
175°	1590.1	1589.6	1589.0	1589.7	1591.5	1593.3	1595.1	1596.9	1595.1	1593.3	1591.5
177.5°	1592.0	1591.9	1591.7	1592.2	1593.7	1595.2	1596.6	1598.0	1596.6	1595.2	1593.7
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	607.5	606.2	604.0	600.6	598.5	594.9	592.6	593.9	594.3	593.9	593.6
5°	591.2	586.6	580.4	574.4	568.8	562.9	559.4	558.0	555.0	553.3	552.3
7.5°	571.4	563.6	554.9	544.4	535.6	526.2	521.5	519.2	513.0	509.7	506.8
10°	556.7	544.4	535.6	522.0	513.6	501.4	493.0	493.3	484.9	480.2	476.8
12.5°	540.4	527.0	512.4	500.0	488.4	478.6	468.5	464.5	455.6	451.1	441.9
15°	513.4	497.8	482.4	465.7	453.9	438.7	424.1	406.3	392.0	379.6	376.2
17.5°	484.0	464.6	449.1	429.5	409.3	383.8	366.9	356.6	348.0	341.4	336.5
20°	463.7	444.0	427.5	398.0	370.8	353.5	341.1	333.1	324.1	317.1	313.2
22.5°	442.5	422.0	399.4	366.5	345.3	331.4	320.4	311.2	305.1	299.6	296.1
25°	412.4	389.8	352.8	330.2	313.0	298.4	290.8	285.2	278.8	271.3	267.9
27.5°	380.5	344.8	318.1	301.2	284.9	275.5	268.5	260.2	254.5	251.1	247.5
30°	356.7	320.9	300.2	281.7	270.2	259.7	251.6	246.9	241.3	235.5	233.2
32.5°	330.2	301.6	281.6	266.4	254.6	245.6	239.2	231.6	227.6	224.0	219.1
35°	297.2	275.5	257.3	245.0	233.8	226.5	219.0	214.5	207.3	204.2	202.4
37.5°	269.3	250.5	237.0	223.9	215.0	207.0	202.4	195.2	192.1	187.8	183.8
40°	253.4	235.1	222.1	211.3	201.4	195.5	189.7	183.9	179.2	177.3	172.4
42.5°	237.4	222.4	209.3	197.7	191.1	184.6	177.4	173.1	168.2	165.1	162.1
45°	215.2	201.9	190.8	181.2	173.8	167.2	162.5	155.4	152.7	146.5	143.8
47.5°	195.7	183.3	172.7	163.5	156.5	152.1	145.2	139.7	135.3	131.4	128.1
50°	181.8	171.4	161.2	153.1	146.7	140.4	133.4	130.6	123.8	121.8	119.9
52.5°	169.1	159.3	150.0	141.9	135.5	129.5	123.3	119.6	115.0	113.1	111.7
55°	151.4	141.9	133.0	125.9	119.5	113.3	109.4	104.9	102.7	101.2	99.5
57.5°	133.6	125.1	118.2	111.0	104.5	99.6	95.2	92.5	90.3	88.3	86.2
60°	122.2	114.1	107.9	101.2	94.6	90.6	87.2	83.9	81.3	78.3	77.5
62.5°	110.3	103.1	97.5	91.0	85.2	81.5	78.2	75.2	72.1	67.8	66.5
65°	93.8	88.2	82.2	76.8	71.7	68.1	63.3	59.9	58.6	58.2	58.1
67.5°	78.9	73.6	68.4	63.0	58.3	55.0	52.5	52.0	51.1	50.9	50.2
70°	68.9	64.0	58.9	53.7	49.2	48.6	47.8	46.8	45.8	45.4	45.0
72.5°	60.0	55.0	49.8	45.7	43.7	43.0	42.1	41.2	40.5	40.1	39.9
75°	46.0	41.3	37.9	36.4	35.3	34.7	33.4	32.8	32.3	31.7	31.5
77.5°	33.2	30.4	28.9	28.0	26.9	26.2	25.4	24.8	24.3	24.2	23.8
80°	25.3	23.9	22.9	21.6	21.2	20.4	20.2	19.5	19.7	19.0	19.0
82.5°	19.6	18.0	17.1	16.5	16.0	15.4	15.2	14.9	14.9	14.4	14.4
85°	10.1	9.6	9.2	8.8	8.8	8.1	8.4	8.1	8.1	7.7	7.5
87.5°	5.7	6.0	6.1	6.5	7.0	7.2	7.4	7.5	7.8	8.0	8.0
90°	12.4	14.9	16.9	18.9	21.0	23.1	24.3	25.6	26.9	28.2	29.1
92.5°	22.2	22.6	23.7	24.7	25.7	26.8	27.4	28.1	28.7	29.4	29.9
95°	41.1	37.8	39.6	41.4	43.2	45.0	46.3	47.5	48.8	50.0	50.6
97.5°	53.4	43.5	47.7	51.8	56.1	60.2	61.2	62.2	63.2	64.3	64.9
100°	63.7	48.3	52.7	57.0	61.4	65.7	67.8	69.8	71.8	73.9	75.2
102.5°	235.3	213.3	176.8	140.4	104.0	67.6	70.2	72.9	75.6	78.2	79.9
105°	381.3	350.2	280.2	210.2	140.3	70.3	73.1	76.0	78.8	81.6	83.5
107.5°	472.9	434.0	350.2	266.3	182.4	98.5	95.6	92.7	89.8	87.0	86.1
110°	532.3	497.9	424.0	349.9	275.8	201.8	176.2	150.5	124.9	99.2	87.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	588.9	582.1	563.8	545.5	527.3	508.9	415.5	322.0	228.6	135.1	88.7
115°	680.4	685.8	692.2	698.6	705.0	711.4	592.8	474.1	355.5	236.9	168.3
117.5°	765.7	770.3	774.7	779.1	783.5	788.0	759.2	730.6	701.8	673.2	628.5
120°	822.5	826.7	831.3	835.9	840.6	845.1	848.2	851.3	854.3	857.4	841.7
122.5°	875.0	879.5	884.5	889.5	894.6	899.6	901.4	903.2	905.1	906.9	904.5
125°	950.6	954.8	959.7	964.5	969.4	974.3	976.1	977.9	979.7	981.5	982.7
127.5°	1023.4	1027.1	1030.7	1034.3	1037.9	1041.6	1044.2	1046.8	1049.4	1052.1	1053.5
130°	1070.3	1073.7	1076.5	1079.3	1082.1	1085.0	1087.8	1090.6	1093.4	1096.2	1097.5
132.5°	1113.9	1117.0	1119.8	1122.7	1125.5	1128.3	1130.7	1133.1	1135.5	1137.9	1139.0
135°	1176.3	1179.5	1181.8	1184.1	1186.4	1188.7	1191.3	1193.8	1196.4	1199.0	1200.0
137.5°	1232.0	1234.7	1237.4	1240.0	1242.6	1245.2	1247.7	1250.2	1252.7	1255.3	1256.0
140°	1268.4	1270.8	1273.7	1276.5	1279.3	1282.1	1284.4	1286.8	1289.0	1291.4	1291.8
142.5°	1300.8	1303.3	1306.6	1309.8	1313.0	1316.3	1318.3	1320.4	1322.6	1324.6	1325.0
145°	1344.5	1346.5	1350.9	1355.3	1359.6	1364.0	1365.7	1367.5	1369.3	1371.1	1371.4
147.5°	1387.0	1388.7	1393.0	1397.3	1401.7	1405.9	1407.3	1408.6	1409.9	1411.3	1411.4
150°	1413.2	1414.5	1418.5	1422.7	1426.7	1430.9	1432.4	1433.9	1435.5	1437.0	1437.1
152.5°	1437.4	1438.3	1442.2	1446.1	1450.0	1453.9	1455.5	1457.0	1458.5	1460.1	1460.0
155°	1472.3	1472.7	1475.8	1478.8	1482.0	1485.1	1486.6	1488.1	1489.7	1491.2	1490.9
157.5°	1502.1	1502.2	1504.4	1506.6	1508.7	1510.9	1512.6	1514.4	1516.1	1517.9	1517.7
160°	1520.4	1520.4	1521.9	1523.4	1525.0	1526.5	1528.0	1529.7	1531.2	1532.7	1532.6
162.5°	1535.1	1535.0	1536.3	1537.7	1539.1	1540.4	1542.1	1543.9	1545.6	1547.4	1547.1
165°	1555.0	1554.6	1555.4	1556.1	1556.9	1557.6	1559.4	1561.2	1563.0	1564.8	1564.8
167.5°	1569.7	1569.3	1570.1	1570.7	1571.5	1572.2	1574.0	1575.7	1577.5	1579.3	1579.1
170°	1578.0	1577.5	1578.0	1578.6	1579.0	1579.6	1581.4	1583.2	1585.0	1586.8	1586.5
172.5°	1583.6	1583.1	1583.6	1584.0	1584.6	1585.1	1586.9	1588.7	1590.4	1592.2	1592.0
175°	1589.7	1589.0	1589.6	1590.1	1590.6	1591.1	1592.9	1594.7	1596.5	1598.3	1597.9
177.5°	1592.2	1591.7	1591.9	1592.0	1592.2	1592.5	1593.9	1595.3	1596.8	1598.3	1598.0
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	591.7	592.0	591.5	591.8	591.5	592.0	591.7	593.6	593.9	594.3	593.9
5°	551.3	548.7	548.3	547.7	548.3	548.7	551.3	552.3	553.3	555.0	558.0
7.5°	503.1	502.8	501.6	500.1	501.6	502.8	503.1	506.8	509.7	513.0	519.2
10°	472.1	471.0	470.8	469.3	470.8	471.0	472.1	476.8	480.2	484.9	493.3
12.5°	435.7	428.9	428.2	424.4	428.2	428.9	435.7	441.9	451.1	455.6	464.5
15°	371.1	369.8	365.4	362.7	365.4	369.8	371.1	376.2	379.6	392.0	406.3
17.5°	334.0	329.8	328.5	327.9	328.5	329.8	334.0	336.5	341.4	348.0	356.6
20°	310.2	306.4	305.8	305.3	305.8	306.4	310.2	313.2	317.1	324.1	333.1
22.5°	293.8	289.7	288.1	286.8	288.1	289.7	293.8	296.1	299.6	305.1	311.2
25°	265.7	264.2	263.3	262.9	263.3	264.2	265.7	267.9	271.3	278.8	285.2
27.5°	243.7	240.4	239.8	238.7	239.8	240.4	243.7	247.5	251.1	254.5	260.2
30°	231.2	230.2	228.7	227.3	228.7	230.2	231.2	233.2	235.5	241.3	246.9
32.5°	216.5	215.6	214.2	213.7	214.2	215.6	216.5	219.1	224.0	227.6	231.6
35°	200.2	197.2	195.9	194.0	195.9	197.2	200.2	202.4	204.2	207.3	214.5
37.5°	182.9	181.3	179.6	180.2	179.6	181.3	182.9	183.8	187.8	192.1	195.2
40°	169.6	168.5	168.1	167.9	168.1	168.5	169.6	172.4	177.3	179.2	183.9
42.5°	158.9	156.0	154.9	154.9	154.9	156.0	158.9	162.1	165.1	168.2	173.1
45°	142.8	140.1	138.1	138.3	138.1	140.1	142.8	143.8	146.5	152.7	155.4
47.5°	126.3	126.2	125.0	125.4	125.0	126.2	126.3	128.1	131.4	135.3	139.7
50°	118.4	117.2	116.2	116.5	116.2	117.2	118.4	119.9	121.8	123.8	130.6
52.5°	110.8	109.7	109.1	110.0	109.1	109.7	110.8	111.7	113.1	115.0	119.6
55°	98.5	97.2	97.0	96.8	97.0	97.2	98.5	99.5	101.2	102.7	104.9
57.5°	84.6	83.8	82.5	82.0	82.5	83.8	84.6	86.2	88.3	90.3	92.5
60°	74.7	73.0	70.9	70.7	70.9	73.0	74.7	77.5	78.3	81.3	83.9
62.5°	65.6	65.3	64.8	64.8	64.8	65.3	65.6	66.5	67.8	72.1	75.2
65°	57.6	57.4	57.6	57.8	57.6	57.4	57.6	58.1	58.2	58.6	59.9
67.5°	50.1	49.8	49.4	49.6	49.4	49.8	50.1	50.2	50.9	51.1	52.0
70°	44.5	44.3	44.1	44.1	44.1	44.3	44.5	45.0	45.4	45.8	46.8
72.5°	39.0	39.0	38.8	38.6	38.8	39.0	39.0	39.9	40.1	40.5	41.2
75°	31.3	30.8	30.8	30.8	30.8	30.8	31.3	31.5	31.7	32.3	32.8
77.5°	23.8	23.6	23.4	23.2	23.4	23.6	23.8	23.8	24.2	24.3	24.8
80°	18.9	18.7	18.4	18.4	18.4	18.7	18.9	19.0	19.0	19.7	19.5
82.5°	14.4	14.1	14.1	13.9	14.1	14.1	14.4	14.4	14.4	14.9	14.9
85°	7.7	7.9	7.7	8.1	7.7	7.9	7.7	7.5	7.7	8.1	8.1
87.5°	8.1	8.1	8.4	8.3	8.4	8.1	8.1	8.0	8.0	7.8	7.5
90°	29.6	30.1	30.6	31.1	30.6	30.1	29.6	29.1	28.2	26.9	25.6
92.5°	30.2	30.5	30.8	31.1	30.8	30.5	30.2	29.9	29.4	28.7	28.1
95°	50.3	50.0	49.9	49.6	49.9	50.0	50.3	50.6	50.0	48.8	47.5
97.5°	65.2	65.6	65.9	66.2	65.9	65.6	65.2	64.9	64.3	63.2	62.2
100°	75.7	76.3	76.7	77.3	76.7	76.3	75.7	75.2	73.9	71.8	69.8
102.5°	80.6	81.3	82.1	82.8	82.1	81.3	80.6	79.9	78.2	75.6	72.9
105°	84.5	85.6	86.6	87.7	86.6	85.6	84.5	83.5	81.6	78.8	76.0
107.5°	87.1	88.1	89.2	90.2	89.2	88.1	87.1	86.1	87.0	89.8	92.7
110°	88.0	89.1	90.1	91.0	90.1	89.1	88.0	87.0	99.2	124.9	150.5



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	89.5	90.4	91.1	92.0	91.1	90.4	89.5	88.7	135.1	228.6	322.0
115°	149.9	131.5	113.0	94.5	113.0	131.5	149.9	168.3	236.9	355.5	474.1
117.5°	567.9	507.3	446.7	386.0	446.7	507.3	567.9	628.5	673.2	701.8	730.6
120°	807.1	772.5	737.9	703.3	737.9	772.5	807.1	841.7	857.4	854.3	851.3
122.5°	897.8	891.1	884.4	877.6	884.4	891.1	897.8	904.5	906.9	905.1	903.2
125°	983.4	984.3	985.1	985.8	985.1	984.3	983.4	982.7	981.5	979.7	977.9
127.5°	1053.6	1053.8	1053.9	1054.0	1053.9	1053.8	1053.6	1053.5	1052.1	1049.4	1046.8
130°	1097.2	1097.0	1096.7	1096.5	1096.7	1097.0	1097.2	1097.5	1096.2	1093.4	1090.6
132.5°	1138.8	1138.5	1138.2	1138.0	1138.2	1138.5	1138.8	1139.0	1137.9	1135.5	1133.1
135°	1199.5	1199.0	1198.4	1198.0	1198.4	1199.0	1199.5	1200.0	1199.0	1196.4	1193.8
137.5°	1255.2	1254.3	1253.5	1252.5	1253.5	1254.3	1255.2	1256.0	1255.3	1252.7	1250.2
140°	1290.5	1289.3	1288.0	1286.8	1288.0	1289.3	1290.5	1291.8	1291.4	1289.0	1286.8
142.5°	1323.8	1322.5	1321.2	1319.9	1321.2	1322.5	1323.8	1325.0	1324.6	1322.6	1320.4
145°	1370.1	1368.9	1367.5	1366.3	1367.5	1368.9	1370.1	1371.4	1371.1	1369.3	1367.5
147.5°	1410.3	1409.2	1408.2	1407.1	1408.2	1409.2	1410.3	1411.4	1411.3	1409.9	1408.6
150°	1435.9	1434.5	1433.2	1432.0	1433.2	1434.5	1435.9	1437.1	1437.0	1435.5	1433.9
152.5°	1458.3	1456.6	1454.9	1453.2	1454.9	1456.6	1458.3	1460.0	1460.1	1458.5	1457.0
155°	1488.8	1486.9	1484.8	1482.7	1484.8	1486.9	1488.8	1490.9	1491.2	1489.7	1488.1
157.5°	1515.7	1513.7	1511.7	1509.7	1511.7	1513.7	1515.7	1517.7	1517.9	1516.1	1514.4
160°	1530.8	1529.0	1527.2	1525.4	1527.2	1529.0	1530.8	1532.6	1532.7	1531.2	1529.7
162.5°	1544.9	1542.7	1540.5	1538.3	1540.5	1542.7	1544.9	1547.1	1547.4	1545.6	1543.9
165°	1563.0	1561.2	1559.4	1557.6	1559.4	1561.2	1563.0	1564.8	1564.8	1563.0	1561.2
167.5°	1576.8	1574.5	1572.2	1569.9	1572.2	1574.5	1576.8	1579.1	1579.3	1577.5	1575.7
170°	1584.2	1581.9	1579.6	1577.3	1579.6	1581.9	1584.2	1586.5	1586.8	1585.0	1583.2
172.5°	1589.7	1587.4	1585.1	1582.8	1585.1	1587.4	1589.7	1592.0	1592.2	1590.4	1588.7
175°	1595.3	1592.8	1590.2	1587.6	1590.2	1592.8	1595.3	1597.9	1598.3	1596.5	1594.7
177.5°	1596.2	1594.3	1592.5	1590.6	1592.5	1594.3	1596.2	1598.0	1598.3	1596.8	1595.3
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	592.6	594.9	598.5	600.6	604.0	606.2	607.5	609.6	610.9	615.2	619.6
5°	559.4	562.9	568.8	574.4	580.4	586.6	591.2	596.3	601.0	609.1	617.6
7.5°	521.5	526.2	535.6	544.4	554.9	563.6	571.4	580.1	588.0	599.6	611.8
10°	493.0	501.4	513.6	522.0	535.6	544.4	556.7	566.3	577.2	592.7	606.3
12.5°	468.5	478.6	488.4	500.0	512.4	527.0	540.4	552.8	565.7	581.6	597.8
15°	424.1	438.7	453.9	465.7	482.4	497.8	513.4	530.1	545.9	565.1	586.0
17.5°	366.9	383.8	409.3	429.5	449.1	464.6	484.0	504.2	522.8	545.8	569.2
20°	341.1	353.5	370.8	398.0	427.5	444.0	463.7	486.0	507.4	532.4	557.5
22.5°	320.4	331.4	345.3	366.5	399.4	422.0	442.5	465.1	489.9	515.5	543.3
25°	290.8	298.4	313.0	330.2	352.8	389.8	412.4	435.1	462.0	489.5	521.1
27.5°	268.5	275.5	284.9	301.2	318.1	344.8	380.5	405.3	432.2	463.0	495.9
30°	251.6	259.7	270.2	281.7	300.2	320.9	356.7	385.4	411.9	443.7	478.7
32.5°	239.2	245.6	254.6	266.4	281.6	301.6	330.2	365.0	390.9	424.2	460.9
35°	219.0	226.5	233.8	245.0	257.3	275.5	297.2	334.4	360.1	393.0	429.9
37.5°	202.4	207.0	215.0	223.9	237.0	250.5	269.3	302.7	330.5	362.8	400.5
40°	189.7	195.5	201.4	211.3	222.1	235.1	253.4	278.3	310.2	342.0	378.7
42.5°	177.4	184.6	191.1	197.7	209.3	222.4	237.4	258.4	291.1	321.0	356.8
45°	162.5	167.2	173.8	181.2	190.8	201.9	215.2	233.6	264.9	290.8	324.3
47.5°	145.2	152.1	156.5	163.5	172.7	183.3	195.7	211.6	236.9	261.2	292.4
50°	133.4	140.4	146.7	153.1	161.2	171.4	181.8	197.2	217.5	243.0	272.1
52.5°	123.3	129.5	135.5	141.9	150.0	159.3	169.1	182.7	200.0	223.5	251.8
55°	109.4	113.3	119.5	125.9	133.0	141.9	151.4	162.7	177.7	197.4	220.3
57.5°	95.2	99.6	104.5	111.0	118.2	125.1	133.6	143.8	155.6	173.4	193.0
60°	87.2	90.6	94.6	101.2	107.9	114.1	122.2	130.8	141.9	157.4	174.1
62.5°	78.2	81.5	85.2	91.0	97.5	103.1	110.3	119.3	128.8	142.8	157.4
65°	63.3	68.1	71.7	76.8	82.2	88.2	93.8	101.0	109.4	120.6	133.6
67.5°	52.5	55.0	58.3	63.0	68.4	73.6	78.9	84.5	91.8	100.4	110.7
70°	47.8	48.6	49.2	53.7	58.9	64.0	68.9	74.3	80.5	87.6	96.5
72.5°	42.1	43.0	43.7	45.7	49.8	55.0	60.0	64.0	69.8	75.8	83.0
75°	33.4	34.7	35.3	36.4	37.9	41.3	46.0	49.9	53.3	57.8	63.6
77.5°	25.4	26.2	26.9	28.0	28.9	30.4	33.2	36.6	39.9	42.4	46.4
80°	20.2	20.4	21.2	21.6	22.9	23.9	25.3	28.1	31.3	32.3	35.2
82.5°	15.2	15.4	16.0	16.5	17.1	18.0	19.6	20.4	22.9	24.3	26.0
85°	8.4	8.1	8.8	8.8	9.2	9.6	10.1	11.1	11.8	13.5	13.9
87.5°	7.4	7.2	7.0	6.5	6.1	6.0	5.7	5.4	5.1	5.1	5.2
90°	24.3	23.1	21.0	18.9	16.9	14.9	12.4	9.6	6.8	4.0	1.1
92.5°	27.4	26.8	25.7	24.7	23.7	22.6	22.2	22.5	22.8	23.0	23.3
95°	46.3	45.0	43.2	41.4	39.6	37.8	41.1	49.6	58.1	66.4	74.9
97.5°	61.2	60.2	56.1	51.8	47.7	43.5	53.4	77.3	101.0	124.9	148.7
100°	67.8	65.7	61.4	57.0	52.7	48.3	63.7	98.8	133.8	169.0	204.1
102.5°	70.2	67.6	104.0	140.4	176.8	213.3	235.3	242.7	250.1	257.5	264.9
105°	73.1	70.3	140.3	210.2	280.2	350.2	381.3	373.5	365.9	358.2	350.5
107.5°	95.6	98.5	182.4	266.3	350.2	434.0	472.9	466.7	460.4	454.2	448.1
110°	176.2	201.8	275.8	349.9	424.0	497.9	532.3	526.9	521.5	516.1	510.8



TEST NUMBER: P331777-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	415.5	508.9	527.3	545.5	563.8	582.1	588.9	584.1	579.3	574.6	569.8
115°	592.8	711.4	705.0	698.6	692.2	685.8	680.4	676.0	671.7	667.3	663.0
117.5°	759.2	788.0	783.5	779.1	774.7	770.3	765.7	760.8	755.9	751.1	746.2
120°	848.2	845.1	840.6	835.9	831.3	826.7	822.5	818.6	814.7	811.0	807.1
122.5°	901.4	899.6	894.6	889.5	884.5	879.5	875.0	870.9	866.9	862.8	858.8
125°	976.1	974.3	969.4	964.5	959.7	954.8	950.6	947.3	944.1	940.7	937.4
127.5°	1044.2	1041.6	1037.9	1034.3	1030.7	1027.1	1023.4	1019.7	1016.0	1012.3	1008.6
130°	1087.8	1085.0	1082.1	1079.3	1076.5	1073.7	1070.3	1066.1	1062.1	1057.9	1053.9
132.5°	1130.7	1128.3	1125.5	1122.7	1119.8	1117.0	1113.9	1110.4	1106.9	1103.4	1099.9
135°	1191.3	1188.7	1186.4	1184.1	1181.8	1179.5	1176.3	1172.1	1168.1	1163.9	1159.9
137.5°	1247.7	1245.2	1242.6	1240.0	1237.4	1234.7	1232.0	1229.2	1226.2	1223.4	1220.5
140°	1284.4	1282.1	1279.3	1276.5	1273.7	1270.8	1268.4	1266.3	1264.3	1262.3	1260.2
142.5°	1318.3	1316.3	1313.0	1309.8	1306.6	1303.3	1300.8	1298.9	1297.1	1295.2	1293.5
145°	1365.7	1364.0	1359.6	1355.3	1350.9	1346.5	1344.5	1344.7	1345.0	1345.3	1345.5
147.5°	1407.3	1405.9	1401.7	1397.3	1393.0	1388.7	1387.0	1388.0	1389.0	1390.0	1390.9
150°	1432.4	1430.9	1426.7	1422.7	1418.5	1414.5	1413.2	1415.0	1416.9	1418.7	1420.5
152.5°	1455.5	1453.9	1450.0	1446.1	1442.2	1438.3	1437.4	1439.4	1441.3	1443.4	1445.4
155°	1486.6	1485.1	1482.0	1478.8	1475.8	1472.7	1472.3	1474.6	1477.0	1479.2	1481.6
157.5°	1512.6	1510.9	1508.7	1506.6	1504.4	1502.2	1502.1	1504.1	1506.0	1508.0	1510.0
160°	1528.0	1526.5	1525.0	1523.4	1521.9	1520.4	1520.4	1521.9	1523.4	1525.0	1526.5
162.5°	1542.1	1540.4	1539.1	1537.7	1536.3	1535.0	1535.1	1536.7	1538.2	1539.7	1541.3
165°	1559.4	1557.6	1556.9	1556.1	1555.4	1554.6	1555.0	1556.5	1558.0	1559.6	1561.1
167.5°	1574.0	1572.2	1571.5	1570.7	1570.1	1569.3	1569.7	1571.3	1572.8	1574.3	1575.9
170°	1581.4	1579.6	1579.0	1578.6	1578.0	1577.5	1578.0	1579.6	1581.1	1582.6	1584.2
172.5°	1586.9	1585.1	1584.6	1584.0	1583.6	1583.1	1583.6	1585.1	1586.7	1588.2	1589.7
175°	1592.9	1591.1	1590.6	1590.1	1589.6	1589.0	1589.7	1591.5	1593.3	1595.1	1596.9
177.5°	1593.9	1592.5	1592.2	1592.0	1591.9	1591.7	1592.2	1593.7	1595.2	1596.6	1598.0
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



TEST NUMBER: P331777-830

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	619.8	620.3	623.7	625.3	628.3	629.5	630.9	630.6	630.6	631.2	636.0
5°	621.1	625.4	631.8	638.0	644.0	649.1	652.6	656.0	657.3	663.5	669.0
7.5°	618.9	626.8	637.3	646.9	658.2	667.0	674.4	681.1	685.6	694.7	703.9
10°	616.0	627.1	639.0	651.3	666.9	678.7	690.7	699.9	702.9	716.3	724.1
12.5°	610.1	625.0	640.3	656.1	671.4	687.6	700.8	710.0	720.6	732.6	746.9
15°	601.4	618.5	638.5	658.7	680.6	700.3	714.4	730.5	742.1	755.4	767.8
17.5°	588.9	611.0	636.2	659.8	685.0	706.2	725.7	741.0	749.1	756.8	758.6
20°	578.9	602.7	632.4	660.3	685.5	709.9	729.2	742.1	744.2	744.4	733.1
22.5°	568.2	595.0	626.1	654.6	684.9	712.0	727.0	732.4	724.0	709.5	687.5
25°	548.3	579.4	615.6	648.1	681.1	706.7	711.9	702.3	672.5	641.2	601.6
27.5°	526.8	561.8	600.5	636.7	671.8	687.8	676.7	641.9	588.3	541.7	485.2
30°	511.0	550.3	588.3	628.8	661.4	668.2	642.7	591.5	529.0	458.8	402.5
32.5°	493.0	534.1	576.0	617.8	645.1	638.4	596.3	533.3	460.1	391.0	337.8
35°	467.4	509.7	555.0	596.9	614.3	585.3	522.4	440.4	365.4	301.0	264.4
37.5°	437.7	483.9	530.8	569.4	568.2	520.0	434.2	349.6	286.6	248.5	222.4
40°	416.6	463.4	514.1	546.6	532.7	470.0	377.0	297.2	251.1	220.7	201.7
42.5°	396.4	443.3	493.7	519.5	495.3	418.2	325.6	263.1	225.1	201.4	186.0
45°	362.0	411.5	458.2	472.5	429.2	344.3	263.3	217.9	192.7	175.1	164.5
47.5°	328.4	377.1	419.7	419.9	361.5	279.2	222.2	188.6	167.0	153.4	145.7
50°	307.8	354.1	389.8	384.3	317.9	248.4	198.7	169.8	151.8	141.3	133.2
52.5°	284.7	329.6	360.6	344.8	281.1	218.6	177.6	153.4	138.5	129.3	122.1
55°	251.1	291.0	312.8	288.8	229.3	181.8	150.1	131.0	119.9	112.2	105.9
57.5°	218.1	251.0	264.7	236.8	188.9	150.7	127.0	112.6	101.6	96.0	92.8
60°	197.4	225.5	235.1	204.2	164.2	131.9	112.4	99.2	91.0	87.4	84.2
62.5°	177.0	199.9	203.9	175.7	143.2	115.5	98.7	87.5	82.1	78.6	75.6
65°	146.8	163.3	161.5	138.7	113.3	91.6	79.5	72.6	68.5	63.6	58.2
67.5°	120.9	131.0	124.9	107.9	86.4	71.3	63.2	58.1	53.0	48.4	47.1
70°	104.4	110.3	103.9	88.2	70.9	59.8	53.3	47.1	44.1	43.1	41.1
72.5°	88.7	90.8	83.8	70.4	57.7	49.5	43.2	39.8	38.1	37.2	36.0
75°	66.5	65.1	59.1	48.6	40.1	34.5	32.5	31.3	30.2	29.3	28.7
77.5°	46.8	44.6	39.2	32.3	27.9	25.3	24.0	23.4	22.9	22.4	21.8
80°	35.2	33.6	28.3	23.1	21.2	19.9	19.2	18.4	18.4	18.0	17.3
82.5°	25.7	24.0	19.3	17.0	15.9	15.1	14.6	14.1	13.9	14.0	13.6
85°	13.5	10.9	9.6	9.2	8.6	8.1	8.4	7.9	7.9	7.9	7.7
87.5°	4.9	4.6	5.0	5.4	6.0	6.5	6.7	7.1	7.7	7.8	8.2
90°	4.0	6.8	9.6	12.4	14.9	16.9	18.9	21.0	23.1	24.3	25.6
92.5°	23.0	22.8	22.5	22.2	22.6	23.7	24.7	25.7	26.8	27.4	28.1
95°	66.4	58.1	49.6	41.1	37.8	39.6	41.4	43.2	45.0	46.3	47.5
97.5°	124.9	101.0	77.3	53.4	43.5	47.7	51.8	56.1	60.2	61.2	62.2
100°	169.0	133.8	98.8	63.7	48.3	52.7	57.0	61.4	65.7	67.8	69.8
102.5°	257.5	250.1	242.7	235.3	213.3	176.8	140.4	104.0	67.6	70.2	72.9
105°	358.2	365.9	373.5	381.3	350.2	280.2	210.2	140.3	70.3	73.1	76.0
107.5°	454.2	460.4	466.7	472.9	434.0	350.2	266.3	182.4	98.5	95.6	92.7
110°	516.1	521.5	526.9	532.3	497.9	424.0	349.9	275.8	201.8	176.2	150.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	574.6	579.3	584.1	588.9	582.1	563.8	545.5	527.3	508.9	415.5	322.0
115°	667.3	671.7	676.0	680.4	685.8	692.2	698.6	705.0	711.4	592.8	474.1
117.5°	751.1	755.9	760.8	765.7	770.3	774.7	779.1	783.5	788.0	759.2	730.6
120°	811.0	814.7	818.6	822.5	826.7	831.3	835.9	840.6	845.1	848.2	851.3
122.5°	862.8	866.9	870.9	875.0	879.5	884.5	889.5	894.6	899.6	901.4	903.2
125°	940.7	944.1	947.3	950.6	954.8	959.7	964.5	969.4	974.3	976.1	977.9
127.5°	1012.3	1016.0	1019.7	1023.4	1027.1	1030.7	1034.3	1037.9	1041.6	1044.2	1046.8
130°	1057.9	1062.1	1066.1	1070.3	1073.7	1076.5	1079.3	1082.1	1085.0	1087.8	1090.6
132.5°	1103.4	1106.9	1110.4	1113.9	1117.0	1119.8	1122.7	1125.5	1128.3	1130.7	1133.1
135°	1163.9	1168.1	1172.1	1176.3	1179.5	1181.8	1184.1	1186.4	1188.7	1191.3	1193.8
137.5°	1223.4	1226.2	1229.2	1232.0	1234.7	1237.4	1240.0	1242.6	1245.2	1247.7	1250.2
140°	1262.3	1264.3	1266.3	1268.4	1270.8	1273.7	1276.5	1279.3	1282.1	1284.4	1286.8
142.5°	1295.2	1297.1	1298.9	1300.8	1303.3	1306.6	1309.8	1313.0	1316.3	1318.3	1320.4
145°	1345.3	1345.0	1344.7	1344.5	1346.5	1350.9	1355.3	1359.6	1364.0	1365.7	1367.5
147.5°	1390.0	1389.0	1388.0	1387.0	1388.7	1393.0	1397.3	1401.7	1405.9	1407.3	1408.6
150°	1418.7	1416.9	1415.0	1413.2	1414.5	1418.5	1422.7	1426.7	1430.9	1432.4	1433.9
152.5°	1443.4	1441.3	1439.4	1437.4	1438.3	1442.2	1446.1	1450.0	1453.9	1455.5	1457.0
155°	1479.2	1477.0	1474.6	1472.3	1472.7	1475.8	1478.8	1482.0	1485.1	1486.6	1488.1
157.5°	1508.0	1506.0	1504.1	1502.1	1502.2	1504.4	1506.6	1508.7	1510.9	1512.6	1514.4
160°	1525.0	1523.4	1521.9	1520.4	1520.4	1521.9	1523.4	1525.0	1526.5	1528.0	1529.7
162.5°	1539.7	1538.2	1536.7	1535.1	1535.0	1536.3	1537.7	1539.1	1540.4	1542.1	1543.9
165°	1559.6	1558.0	1556.5	1555.0	1554.6	1555.4	1556.1	1556.9	1557.6	1559.4	1561.2
167.5°	1574.3	1572.8	1571.3	1569.7	1569.3	1570.1	1570.7	1571.5	1572.2	1574.0	1575.7
170°	1582.6	1581.1	1579.6	1578.0	1577.5	1578.0	1578.6	1579.0	1579.6	1581.4	1583.2
172.5°	1588.2	1586.7	1585.1	1583.6	1583.1	1583.6	1584.0	1584.6	1585.1	1586.9	1588.7
175°	1595.1	1593.3	1591.5	1589.7	1589.0	1589.6	1590.1	1590.6	1591.1	1592.9	1594.7
177.5°	1596.6	1595.2	1593.7	1592.2	1591.7	1591.9	1592.0	1592.2	1592.5	1593.9	1595.3
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	637.7	640.0	641.0	641.0	642.2	641.7	641.2
5°	674.4	678.4	679.4	683.2	686.0	685.1	685.5
7.5°	710.9	717.4	723.9	726.8	727.3	729.0	729.6
10°	733.3	738.7	748.7	747.2	754.7	759.0	752.0
12.5°	754.9	762.1	769.1	771.0	775.2	776.7	773.8
15°	774.4	778.3	778.6	777.6	778.9	777.8	773.7
17.5°	756.2	749.9	737.3	731.2	726.5	719.4	716.6
20°	726.0	707.6	686.2	677.6	667.6	647.9	652.6
22.5°	660.9	640.0	618.5	593.5	581.5	562.9	561.8
25°	559.7	523.5	483.6	455.8	439.5	420.9	412.7
27.5°	435.2	389.6	356.9	340.4	325.4	310.7	310.0
30°	353.3	319.1	293.8	279.7	270.4	264.2	265.5
32.5°	297.7	274.3	257.2	245.5	238.7	234.0	233.9
35°	243.5	227.3	216.4	211.5	206.6	203.2	203.4
37.5°	208.3	198.7	192.6	187.2	184.1	182.4	181.4
40°	190.3	182.4	177.7	174.5	171.9	169.6	169.1
42.5°	176.2	169.6	164.9	162.3	159.9	158.3	157.9
45°	156.3	150.9	146.7	143.8	142.8	141.3	141.3
47.5°	139.0	133.7	130.4	128.7	126.9	125.8	125.8
50°	127.4	123.3	120.4	119.2	117.7	117.2	116.9
52.5°	117.0	113.9	111.8	111.0	110.4	109.6	109.7
55°	102.7	101.0	100.2	99.5	98.5	97.2	98.0
57.5°	90.9	89.4	87.1	85.0	84.1	83.1	83.5
60°	82.5	79.5	76.4	74.1	73.4	71.5	71.5
62.5°	71.8	67.6	63.9	62.6	61.9	61.1	60.9
65°	55.2	53.5	52.7	51.8	51.4	51.4	51.0
67.5°	45.8	45.1	44.1	43.9	43.5	43.4	43.3
70°	40.4	39.6	39.2	38.9	38.5	38.7	38.1
72.5°	35.3	34.7	34.6	34.0	33.7	33.7	33.3
75°	27.8	27.8	27.6	27.4	27.0	26.8	27.0
77.5°	21.4	21.5	21.1	21.0	21.0	21.0	20.8
80°	17.2	17.3	17.2	16.9	16.7	16.9	16.7
82.5°	13.6	13.2	13.2	13.1	13.1	13.0	12.9
85°	7.7	7.9	7.7	7.5	7.5	7.5	7.7
87.5°	8.3	8.6	8.8	8.9	9.0	9.0	9.0
90°	26.9	28.2	29.1	29.6	30.1	30.6	31.1
92.5°	28.7	29.4	29.9	30.2	30.5	30.8	31.1
95°	48.8	50.0	50.6	50.3	50.0	49.9	49.6
97.5°	63.2	64.3	64.9	65.2	65.6	65.9	66.2
100°	71.8	73.9	75.2	75.7	76.3	76.7	77.3
102.5°	75.6	78.2	79.9	80.6	81.3	82.1	82.8
105°	78.8	81.6	83.5	84.5	85.6	86.6	87.7
107.5°	89.8	87.0	86.1	87.1	88.1	89.2	90.2
110°	124.9	99.2	87.0	88.0	89.1	90.1	91.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	228.6	135.1	88.7	89.5	90.4	91.1	92.0
115°	355.5	236.9	168.3	149.9	131.5	113.0	94.5
117.5°	701.8	673.2	628.5	567.9	507.3	446.7	386.0
120°	854.3	857.4	841.7	807.1	772.5	737.9	703.3
122.5°	905.1	906.9	904.5	897.8	891.1	884.4	877.6
125°	979.7	981.5	982.7	983.4	984.3	985.1	985.8
127.5°	1049.4	1052.1	1053.5	1053.6	1053.8	1053.9	1054.0
130°	1093.4	1096.2	1097.5	1097.2	1097.0	1096.7	1096.5
132.5°	1135.5	1137.9	1139.0	1138.8	1138.5	1138.2	1138.0
135°	1196.4	1199.0	1200.0	1199.5	1199.0	1198.4	1198.0
137.5°	1252.7	1255.3	1256.0	1255.2	1254.3	1253.5	1252.5
140°	1289.0	1291.4	1291.8	1290.5	1289.3	1288.0	1286.8
142.5°	1322.6	1324.6	1325.0	1323.8	1322.5	1321.2	1319.9
145°	1369.3	1371.1	1371.4	1370.1	1368.9	1367.5	1366.3
147.5°	1409.9	1411.3	1411.4	1410.3	1409.2	1408.2	1407.1
150°	1435.5	1437.0	1437.1	1435.9	1434.5	1433.2	1432.0
152.5°	1458.5	1460.1	1460.0	1458.3	1456.6	1454.9	1453.2
155°	1489.7	1491.2	1490.9	1488.8	1486.9	1484.8	1482.7
157.5°	1516.1	1517.9	1517.7	1515.7	1513.7	1511.7	1509.7
160°	1531.2	1532.7	1532.6	1530.8	1529.0	1527.2	1525.4
162.5°	1545.6	1547.4	1547.1	1544.9	1542.7	1540.5	1538.3
165°	1563.0	1564.8	1564.8	1563.0	1561.2	1559.4	1557.6
167.5°	1577.5	1579.3	1579.1	1576.8	1574.5	1572.2	1569.9
170°	1585.0	1586.8	1586.5	1584.2	1581.9	1579.6	1577.3
172.5°	1590.4	1592.2	1592.0	1589.7	1587.4	1585.1	1582.8
175°	1596.5	1598.3	1597.9	1595.3	1592.8	1590.2	1587.6
177.5°	1596.8	1598.3	1598.0	1596.2	1594.3	1592.5	1590.6
180°	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4	1593.4

(END OF REPORT)