

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: P331781-930

Luminaire Tested: **S122RDIW-S290D1440U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331781-930
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-S290D1440U930-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1440 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5621.3 lumens
Efficiency: N/A
Efficacy: 105.3 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

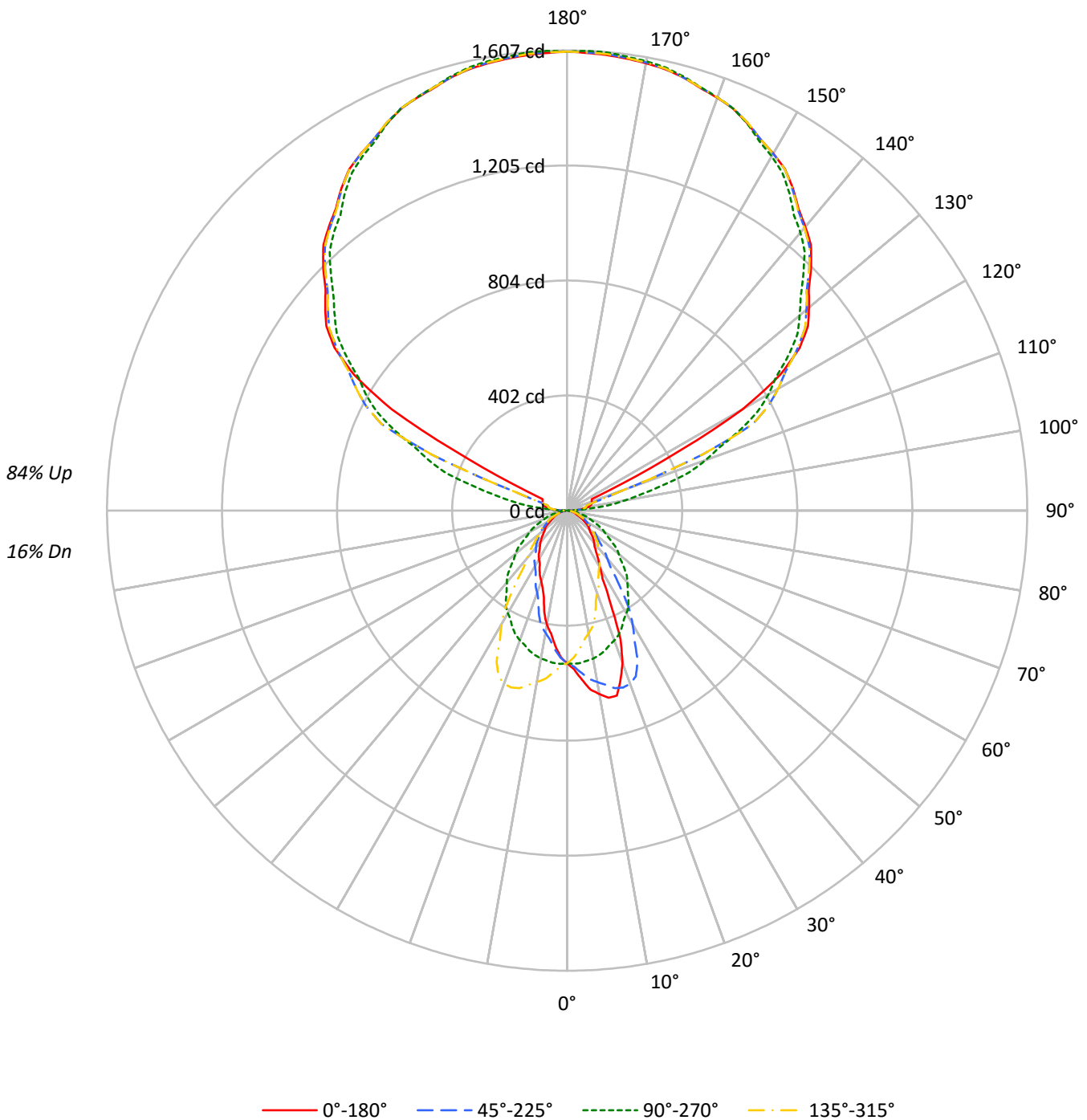
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16
1	91	86	83	80	79	76	73	71	57	55	53	39	38	37	23	22	22	14
2	83	76	70	65	72	67	62	58	50	47	44	35	33	31	20	19	19	12
3	75	67	60	55	66	59	53	49	44	41	38	31	29	27	18	17	16	11
4	69	59	52	46	60	52	46	41	39	35	32	28	25	23	16	15	14	10
5	63	53	45	40	55	47	40	36	35	31	28	25	22	20	15	14	12	9
6	58	47	40	34	51	42	35	31	32	27	24	22	20	18	14	12	11	8
7	54	42	35	30	47	38	31	27	29	24	21	20	18	16	12	11	10	7
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	11	10	9	6
9	46	35	28	23	41	31	25	21	24	20	17	17	14	12	11	9	8	6
10	43	32	25	21	38	28	23	19	22	18	15	16	13	11	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8606	8606	8606	8606
5°	9611	8660	7679	8660
10°	10663	8599	6655	8599
15°	11188	8473	5244	8473
20°	9699	8285	4538	8285
25°	6360	8031	4051	8031
30°	4282	7720	3667	7720
35°	3467	7330	3307	7330
40°	3084	6905	3060	6905
45°	2790	6405	2731	6405
50°	2539	5913	2532	5913
55°	2387	5362	2356	5362
60°	1999	4863	1973	4863
65°	1685	4413	1910	4413
70°	1553	3942	1803	3942
75°	1454	3431	1666	3431
80°	1339	2827	1478	2827
85°	1241	2242	1297	2242



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	0.9
10°-20°	140.8	2.5
20°-30°	181.4	3.2
30°-40°	172.4	3.1
40°-50°	147.7	2.6
50°-60°	112.5	2.0
60°-70°	71.1	1.3
70°-80°	35.5	0.6
80°-90°	13.2	0.2
90°-100°	53.5	1.0
100°-110°	196.0	3.5
110°-120°	524.0	9.3
120°-130°	865.0	15.4
130°-140°	919.9	16.4
140°-150°	855.0	15.2
150°-160°	687.4	12.2
160°-170°	443.0	7.9
170°-180°	152.5	2.7
0°-30°	372.7	6.6
0°-40°	545.1	9.7
0°-60°	805.3	14.3
0°-90°	925.1	16.5
90°-120°	773.5	13.8
90°-150°	3413.3	60.7
90°-180°	4696.0	83.5
0°-180°	5621.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	593	534	474	534	593	59
15°	669	507	314	507	669	181
25°	357	451	227	451	357	169
35°	176	372	168	372	176	113
45°	122	280	120	280	122	95
55°	85	190	84	190	85	74
65°	44	116	50	116	44	45
75°	23	55	27	55	23	25
85°	7	12	7	12	7	8
90°	31	1	31	1	31	14
95°	50	75	50	75	50	47
105°	88	352	88	352	88	92
115°	95	667	95	667	95	238
125°	991	943	991	943	991	858
135°	1205	1166	1205	1166	1205	929
145°	1374	1353	1374	1353	1374	859
155°	1491	1490	1491	1490	1491	688
165°	1566	1570	1566	1570	1566	442
175°	1597	1606	1597	1606	1597	152
180°	1602	1602	1602	1602	1602	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	554.6	555.1	555.5	554.5	554.5	553.6	551.6	550.2	546.0	545.4	545.4
5°	593.0	592.6	593.4	590.9	587.7	586.9	583.3	578.7	573.9	568.6	567.4
7.5°	631.1	630.6	629.1	628.7	626.1	620.5	614.9	608.9	600.9	593.0	589.1
10°	650.4	656.6	652.8	646.4	647.6	639.0	634.3	626.3	619.6	608.0	605.4
12.5°	669.4	671.8	670.6	666.9	665.3	659.3	653.0	646.0	633.7	623.3	614.2
15°	669.3	672.8	673.8	672.6	673.5	673.2	669.8	664.1	653.4	641.9	631.9
17.5°	619.9	622.3	628.4	632.5	637.7	648.7	654.1	656.2	654.6	648.0	641.0
20°	564.5	560.4	577.5	586.1	593.5	612.0	628.0	634.1	643.9	643.8	641.9
22.5°	485.9	486.9	503.0	513.4	535.0	553.6	571.7	594.7	613.7	626.2	633.6
25°	357.0	364.1	380.2	394.3	418.3	452.8	484.1	520.4	554.6	581.7	607.5
27.5°	268.2	268.7	281.4	294.5	308.8	337.0	376.4	419.7	468.6	508.9	555.2
30°	229.7	228.5	233.9	241.9	254.1	276.0	305.6	348.1	396.9	457.6	511.7
32.5°	202.4	202.4	206.5	212.4	222.5	237.3	257.6	292.2	338.2	397.9	461.3
35°	175.9	175.8	178.7	183.0	187.2	196.7	210.6	228.7	260.4	316.1	380.9
37.5°	156.9	157.8	159.2	161.9	166.6	171.9	180.2	192.4	214.9	247.9	302.4
40°	146.3	146.7	148.7	150.9	153.7	157.8	164.6	174.5	190.9	217.2	257.1
42.5°	136.6	136.9	138.4	140.4	142.6	146.7	152.4	160.9	174.2	194.7	227.6
45°	122.2	122.2	123.5	124.4	126.9	130.5	135.2	142.3	151.5	166.6	188.5
47.5°	108.8	108.8	109.7	111.3	112.8	115.7	120.3	126.0	132.7	144.5	163.1
50°	101.1	101.3	101.8	103.1	104.1	106.6	110.2	115.2	122.2	131.3	146.8
52.5°	94.9	94.8	95.5	96.0	96.7	98.5	101.2	105.6	111.9	119.8	132.6
55°	84.8	84.1	85.2	86.1	86.7	87.4	88.9	91.6	97.0	103.7	113.3
57.5°	72.2	71.9	72.7	73.5	75.3	77.3	78.6	80.3	83.1	87.9	97.4
60°	61.9	61.9	63.5	64.1	66.1	68.7	71.3	72.8	75.6	78.7	85.8
62.5°	52.7	52.8	53.6	54.1	55.3	58.5	62.1	65.4	68.0	71.0	75.7
65°	44.1	44.4	44.4	44.8	45.6	46.3	47.8	50.4	55.0	59.3	62.8
67.5°	37.4	37.5	37.7	38.0	38.2	39.0	39.6	40.8	41.8	45.8	50.2
70°	32.9	33.5	33.3	33.7	33.9	34.2	35.0	35.5	37.3	38.2	40.8
72.5°	28.8	29.2	29.2	29.4	29.9	30.0	30.6	31.1	32.2	32.9	34.4
75°	23.3	23.2	23.3	23.7	23.9	24.1	24.1	24.8	25.4	26.1	27.1
77.5°	18.0	18.2	18.2	18.2	18.3	18.6	18.5	18.8	19.4	19.8	20.2
80°	14.4	14.6	14.4	14.6	14.8	15.0	14.8	15.0	15.6	15.9	15.9
82.5°	11.2	11.3	11.3	11.3	11.4	11.4	11.7	11.7	12.1	12.1	12.2
85°	6.7	6.5	6.5	6.5	6.7	6.8	6.7	6.7	6.8	6.8	6.8
87.5°	8.6	8.6	8.6	8.5	8.4	8.2	7.9	7.8	7.4	7.3	6.8
90°	31.3	30.8	30.2	29.8	29.3	28.4	27.1	25.8	24.5	23.2	21.1
92.5°	31.3	31.0	30.7	30.4	30.1	29.6	28.9	28.2	27.6	26.9	25.8
95°	49.9	50.1	50.4	50.6	50.9	50.4	49.1	47.8	46.5	45.2	43.5
97.5°	66.5	66.3	66.0	65.6	65.3	64.7	63.6	62.6	61.6	60.5	56.3
100°	77.7	77.2	76.6	76.1	75.7	74.4	72.3	70.2	68.2	66.1	61.7
102.5°	83.2	82.5	81.8	81.1	80.4	78.7	76.0	73.3	70.6	67.9	104.6
105°	88.1	87.1	86.1	85.0	84.0	82.1	79.2	76.4	73.5	70.8	141.0
107.5°	90.7	89.7	88.6	87.6	86.6	87.5	90.3	93.3	96.1	99.1	183.4
110°	91.6	90.6	89.5	88.5	87.5	99.9	125.6	151.4	177.2	202.9	277.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	92.5	91.7	90.9	90.1	89.2	135.8	229.8	323.8	417.8	511.8	530.2
115°	95.1	113.7	132.2	150.7	169.3	238.2	357.5	476.9	596.1	715.4	709.0
117.5°	388.2	449.1	510.1	571.1	632.1	677.0	705.9	734.7	763.6	792.5	788.0
120°	707.4	742.1	776.9	811.7	846.4	862.3	859.2	856.1	853.0	849.9	845.3
122.5°	882.6	889.4	896.2	902.9	909.6	912.1	910.3	908.4	906.5	904.7	899.6
125°	991.4	990.7	989.9	989.1	988.3	987.0	985.2	983.4	981.6	979.8	974.9
127.5°	1060.1	1059.9	1059.7	1059.6	1059.5	1058.0	1055.4	1052.8	1050.2	1047.6	1043.9
130°	1102.7	1103.0	1103.3	1103.5	1103.8	1102.4	1099.7	1096.8	1094.0	1091.1	1088.3
132.5°	1144.4	1144.8	1145.0	1145.3	1145.5	1144.4	1142.0	1139.5	1137.2	1134.7	1131.9
135°	1204.8	1205.3	1205.8	1206.3	1206.8	1205.8	1203.2	1200.6	1198.1	1195.5	1193.2
137.5°	1259.7	1260.6	1261.5	1262.3	1263.2	1262.4	1259.9	1257.4	1254.8	1252.3	1249.7
140°	1294.0	1295.3	1296.7	1298.0	1299.2	1298.7	1296.4	1294.0	1291.8	1289.4	1286.6
142.5°	1327.5	1328.8	1330.0	1331.3	1332.6	1332.2	1330.1	1328.0	1325.8	1323.7	1320.5
145°	1374.1	1375.3	1376.6	1377.9	1379.2	1379.0	1377.1	1375.3	1373.5	1371.7	1367.3
147.5°	1415.1	1416.2	1417.3	1418.4	1419.4	1419.4	1418.0	1416.7	1415.3	1414.0	1409.7
150°	1440.1	1441.4	1442.8	1444.1	1445.3	1445.2	1443.7	1442.1	1440.6	1439.0	1434.8
152.5°	1461.5	1463.2	1464.9	1466.6	1468.3	1468.4	1466.8	1465.3	1463.7	1462.2	1458.2
155°	1491.2	1493.2	1495.3	1497.4	1499.4	1499.7	1498.1	1496.6	1495.0	1493.5	1490.4
157.5°	1518.3	1520.3	1522.3	1524.4	1526.3	1526.5	1524.7	1523.0	1521.3	1519.5	1517.3
160°	1534.1	1535.9	1537.7	1539.5	1541.3	1541.4	1539.9	1538.3	1536.8	1535.2	1533.7
162.5°	1547.1	1549.3	1551.5	1553.7	1555.9	1556.2	1554.4	1552.7	1550.9	1549.2	1547.8
165°	1566.5	1568.4	1570.2	1572.0	1573.8	1573.8	1572.0	1570.2	1568.4	1566.5	1565.8
167.5°	1578.8	1581.2	1583.5	1585.8	1588.1	1588.4	1586.6	1584.8	1583.0	1581.2	1580.5
170°	1586.2	1588.6	1590.9	1593.3	1595.5	1595.8	1594.0	1592.2	1590.4	1588.6	1588.0
172.5°	1591.8	1594.2	1596.4	1598.8	1601.1	1601.3	1599.5	1597.7	1595.9	1594.2	1593.7
175°	1596.7	1599.3	1601.8	1604.4	1607.0	1607.4	1605.6	1603.8	1602.0	1600.2	1599.7
177.5°	1599.7	1601.6	1603.4	1605.2	1607.1	1607.4	1605.9	1604.4	1603.0	1601.6	1601.3
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	545.8	544.5	543.5	540.9	539.5	536.5	536.1	536.0	532.1	528.4	527.3
5°	564.5	561.5	557.1	551.9	546.5	541.0	537.3	534.3	526.8	519.8	515.8
7.5°	583.3	577.0	569.3	559.5	551.3	542.2	535.3	529.2	518.7	508.6	501.8
10°	597.5	587.1	576.9	563.4	552.8	542.4	532.8	524.5	512.7	499.3	489.8
12.5°	606.2	594.8	580.7	567.5	553.8	540.6	527.7	517.1	503.1	489.3	478.2
15°	618.0	605.8	588.7	569.8	552.3	535.0	520.2	506.9	488.8	472.2	458.5
17.5°	627.7	610.8	592.6	570.7	550.3	528.5	509.4	492.4	472.1	452.2	436.1
20°	630.8	614.1	593.0	571.1	547.1	521.3	500.8	482.2	460.6	438.9	420.4
22.5°	628.8	615.9	592.4	566.2	541.6	514.7	491.5	469.9	445.9	423.8	402.4
25°	615.8	611.3	589.1	560.6	532.5	501.2	474.3	450.8	423.4	399.7	376.3
27.5°	585.3	594.9	581.1	550.7	519.4	485.9	455.7	428.9	400.5	373.8	350.6
30°	556.0	578.0	572.1	543.9	508.9	476.0	442.1	414.1	383.8	356.3	333.4
32.5°	515.8	552.2	558.0	534.4	498.2	462.0	426.5	398.7	367.0	338.1	315.7
35°	451.8	506.3	531.3	516.3	480.0	440.9	404.3	371.9	340.0	311.5	289.3
37.5°	375.6	449.8	491.5	492.5	459.2	418.6	378.6	346.4	313.8	285.8	261.8
40°	326.1	406.5	460.8	472.8	444.7	400.8	360.4	327.6	295.8	268.3	240.8
42.5°	281.7	361.7	428.4	449.4	427.1	383.4	342.9	308.7	277.7	251.8	223.6
45°	227.8	297.8	371.3	408.7	396.3	356.0	313.2	280.5	251.5	229.1	202.0
47.5°	192.2	241.5	312.7	363.2	363.1	326.2	284.1	252.9	225.9	204.9	183.0
50°	171.9	214.8	275.0	332.4	337.2	306.3	266.3	235.4	210.2	188.2	170.6
52.5°	153.6	189.1	243.1	298.2	311.9	285.1	246.3	217.8	193.3	173.0	158.0
55°	129.8	157.3	198.4	249.8	270.6	251.7	217.2	190.5	170.7	153.7	140.7
57.5°	109.8	130.4	163.4	204.8	228.9	217.1	188.7	167.0	150.0	134.6	124.4
60°	97.3	114.1	142.0	176.7	203.3	195.0	170.7	150.6	136.2	122.8	113.2
62.5°	85.4	99.9	123.8	152.0	176.3	172.9	153.1	136.2	123.5	111.4	103.2
65°	68.7	79.2	98.0	120.0	139.7	141.3	127.0	115.5	104.3	94.7	87.4
67.5°	54.7	61.6	74.8	93.4	108.0	113.3	104.6	95.8	86.8	79.4	73.1
70°	46.1	51.7	61.3	76.3	89.8	95.4	90.3	83.5	75.7	69.6	64.2
72.5°	37.3	42.8	49.9	60.9	72.5	78.5	76.7	71.8	65.6	60.4	55.4
75°	28.1	29.8	34.7	42.1	51.1	56.3	57.6	55.0	50.0	46.1	43.1
77.5°	20.8	21.9	24.1	28.0	33.9	38.6	40.4	40.1	36.7	34.5	31.6
80°	16.6	17.2	18.3	20.0	24.5	29.1	30.4	30.4	28.0	27.1	24.3
82.5°	12.6	13.0	13.8	14.7	16.7	20.8	22.3	22.5	21.0	19.8	17.6
85°	7.3	7.0	7.4	8.0	8.3	9.5	11.7	12.1	11.7	10.2	9.6
87.5°	6.4	6.0	5.6	5.1	4.6	4.2	4.3	4.6	4.5	4.6	4.9
90°	19.1	17.0	14.9	12.5	9.7	6.8	4.0	1.1	4.0	6.8	9.7
92.5°	24.9	23.8	22.7	22.4	22.7	22.9	23.2	23.4	23.2	22.9	22.7
95°	41.6	39.8	38.0	41.3	49.9	58.4	66.9	75.3	66.9	58.4	49.9
97.5°	52.2	48.0	43.9	53.7	77.7	101.7	125.6	149.6	125.6	101.7	77.7
100°	57.3	52.9	48.6	64.0	99.3	134.6	169.9	205.2	169.9	134.6	99.3
102.5°	141.2	177.9	214.5	236.6	244.0	251.5	259.0	266.4	259.0	251.5	244.0
105°	211.4	281.8	352.1	383.4	375.7	367.9	360.2	352.5	360.2	367.9	375.7
107.5°	267.7	352.1	436.5	475.6	469.3	463.1	456.8	450.6	456.8	463.1	469.3
110°	351.9	426.3	500.8	535.3	529.9	524.5	519.1	513.7	519.1	524.5	529.9



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	548.6	567.0	585.4	592.2	587.4	582.6	577.8	573.1	577.8	582.6	587.4
115°	702.5	696.1	689.7	684.3	679.9	675.5	671.2	666.8	671.2	675.5	679.9
117.5°	783.6	779.1	774.7	770.1	765.2	760.3	755.4	750.5	755.4	760.3	765.2
120°	840.7	836.0	831.4	827.1	823.3	819.4	815.5	811.7	815.5	819.4	823.3
122.5°	894.5	889.5	884.5	880.0	875.9	871.8	867.7	863.6	867.7	871.8	875.9
125°	970.0	965.2	960.3	956.1	952.8	949.4	946.1	942.7	946.1	949.4	952.8
127.5°	1040.2	1036.6	1032.9	1029.2	1025.5	1021.8	1018.1	1014.4	1018.1	1021.8	1025.5
130°	1085.5	1082.6	1079.8	1076.4	1072.2	1068.0	1064.0	1059.8	1064.0	1068.0	1072.2
132.5°	1129.0	1126.3	1123.4	1120.2	1116.7	1113.2	1109.7	1106.2	1109.7	1113.2	1116.7
135°	1190.8	1188.5	1186.2	1183.0	1178.8	1174.8	1170.6	1166.5	1170.6	1174.8	1178.8
137.5°	1247.1	1244.4	1241.8	1239.0	1236.2	1233.3	1230.4	1227.5	1230.4	1233.3	1236.2
140°	1283.8	1280.9	1278.1	1275.6	1273.6	1271.5	1269.4	1267.4	1269.4	1271.5	1273.6
142.5°	1317.3	1314.0	1310.8	1308.2	1306.4	1304.5	1302.6	1300.8	1302.6	1304.5	1306.4
145°	1363.0	1358.6	1354.2	1352.2	1352.4	1352.7	1352.9	1353.2	1352.9	1352.7	1352.4
147.5°	1405.3	1400.9	1396.6	1395.0	1396.0	1396.9	1397.9	1398.9	1397.9	1396.9	1396.0
150°	1430.8	1426.6	1422.5	1421.3	1423.2	1425.0	1426.8	1428.6	1426.8	1425.0	1423.2
152.5°	1454.3	1450.4	1446.5	1445.6	1447.6	1449.6	1451.6	1453.6	1451.6	1449.6	1447.6
155°	1487.4	1484.3	1481.2	1480.7	1483.0	1485.4	1487.7	1490.0	1487.7	1485.4	1483.0
157.5°	1515.2	1513.0	1510.8	1510.7	1512.7	1514.7	1516.6	1518.6	1516.6	1514.7	1512.7
160°	1532.2	1530.6	1529.1	1529.1	1530.6	1532.2	1533.7	1535.2	1533.7	1532.2	1530.6
162.5°	1546.5	1545.2	1543.8	1543.9	1545.5	1547.0	1548.6	1550.0	1548.6	1547.0	1545.5
165°	1565.0	1564.2	1563.5	1563.8	1565.4	1566.9	1568.5	1570.0	1568.5	1566.9	1565.4
167.5°	1579.7	1579.0	1578.3	1578.7	1580.2	1581.8	1583.3	1584.9	1583.3	1581.8	1580.2
170°	1587.6	1587.1	1586.5	1587.1	1588.6	1590.2	1591.7	1593.3	1591.7	1590.2	1588.6
172.5°	1593.1	1592.6	1592.1	1592.6	1594.2	1595.7	1597.3	1598.8	1597.3	1595.7	1594.2
175°	1599.1	1598.6	1598.1	1598.8	1600.6	1602.4	1604.2	1606.0	1604.2	1602.4	1600.6
177.5°	1601.2	1600.9	1600.8	1601.3	1602.8	1604.3	1605.7	1607.1	1605.7	1604.3	1602.8
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	525.5	524.4	522.4	519.5	517.7	514.6	512.6	513.7	514.0	513.7	513.5
5°	511.4	507.4	502.1	496.8	492.0	486.9	483.9	482.7	480.0	478.6	477.8
7.5°	494.2	487.5	480.0	470.9	463.3	455.2	451.1	449.1	443.8	440.9	438.4
10°	481.5	470.9	463.3	451.5	444.3	433.7	426.5	426.7	419.5	415.4	412.5
12.5°	467.4	455.8	443.2	432.5	422.5	414.0	405.3	401.8	394.1	390.2	382.2
15°	444.1	430.6	417.3	402.8	392.6	379.4	366.9	351.5	339.1	328.3	325.4
17.5°	418.7	401.9	388.5	371.5	354.1	332.0	317.4	308.4	301.0	295.3	291.1
20°	401.1	384.1	369.8	344.3	320.7	305.7	295.1	288.1	280.4	274.3	270.9
22.5°	382.8	365.0	345.5	317.0	298.6	286.7	277.1	269.2	263.9	259.2	256.1
25°	356.7	337.2	305.2	285.6	270.8	258.1	251.5	246.7	241.2	234.6	231.7
27.5°	329.1	298.2	275.2	260.6	246.5	238.3	232.3	225.1	220.1	217.2	214.1
30°	308.5	277.6	259.7	243.7	233.7	224.6	217.6	213.5	208.7	203.7	201.7
32.5°	285.6	260.9	243.6	230.4	220.2	212.5	206.9	200.3	196.9	193.8	189.6
35°	257.1	238.3	222.6	211.9	202.2	195.9	189.5	185.6	179.3	176.7	175.0
37.5°	232.9	216.7	205.0	193.6	186.0	179.0	175.0	168.8	166.2	162.5	159.0
40°	219.2	203.3	192.1	182.8	174.2	169.1	164.1	159.1	155.0	153.4	149.1
42.5°	205.4	192.4	181.1	171.0	165.3	159.7	153.4	149.8	145.5	142.8	140.2
45°	186.1	174.6	165.0	156.7	150.3	144.6	140.6	134.4	132.1	126.7	124.4
47.5°	169.3	158.6	149.4	141.5	135.3	131.6	125.6	120.8	117.0	113.7	110.8
50°	157.3	148.3	139.4	132.4	126.9	121.5	115.4	113.0	107.0	105.3	103.7
52.5°	146.3	137.8	129.7	122.8	117.2	112.0	106.6	103.5	99.5	97.8	96.6
55°	130.9	122.8	115.0	108.9	103.4	98.0	94.7	90.7	88.9	87.6	86.1
57.5°	115.5	108.2	102.2	96.0	90.4	86.2	82.3	80.0	78.1	76.4	74.6
60°	105.7	98.7	93.4	87.6	81.9	78.4	75.4	72.6	70.4	67.8	67.0
62.5°	95.4	89.2	84.3	78.7	73.7	70.5	67.7	65.1	62.4	58.6	57.6
65°	81.1	76.3	71.1	66.4	62.0	58.9	54.8	51.9	50.7	50.4	50.2
67.5°	68.2	63.7	59.2	54.5	50.5	47.5	45.4	45.0	44.2	44.0	43.5
70°	59.6	55.4	51.0	46.5	42.6	42.1	41.3	40.5	39.6	39.3	38.9
72.5°	51.9	47.5	43.0	39.5	37.8	37.2	36.4	35.6	35.1	34.7	34.5
75°	39.8	35.7	32.8	31.5	30.6	30.0	28.9	28.4	28.0	27.4	27.2
77.5°	28.7	26.3	25.0	24.2	23.2	22.7	22.0	21.4	21.0	21.0	20.6
80°	21.9	20.7	19.8	18.7	18.3	17.6	17.4	16.9	17.0	16.5	16.5
82.5°	17.0	15.6	14.8	14.3	13.9	13.3	13.1	12.9	12.9	12.5	12.5
85°	8.7	8.3	8.0	7.6	7.6	7.0	7.3	7.0	7.0	6.7	6.5
87.5°	5.3	5.6	5.8	6.2	6.6	6.8	7.1	7.3	7.5	7.7	7.7
90°	12.5	14.9	17.0	19.1	21.1	23.2	24.5	25.8	27.1	28.4	29.3
92.5°	22.4	22.7	23.8	24.9	25.8	26.9	27.6	28.2	28.9	29.6	30.1
95°	41.3	38.0	39.8	41.6	43.5	45.2	46.5	47.8	49.1	50.4	50.9
97.5°	53.7	43.9	48.0	52.2	56.3	60.5	61.6	62.6	63.6	64.7	65.3
100°	64.0	48.6	52.9	57.3	61.7	66.1	68.2	70.2	72.3	74.4	75.7
102.5°	236.6	214.5	177.9	141.2	104.6	67.9	70.6	73.3	76.0	78.7	80.4
105°	383.4	352.1	281.8	211.4	141.0	70.8	73.5	76.4	79.2	82.1	84.0
107.5°	475.6	436.5	352.1	267.7	183.4	99.1	96.1	93.3	90.3	87.5	86.6
110°	535.3	500.8	426.3	351.9	277.4	202.9	177.2	151.4	125.6	99.9	87.5



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	592.2	585.4	567.0	548.6	530.2	511.8	417.8	323.8	229.8	135.8	89.2
115°	684.3	689.7	696.1	702.5	709.0	715.4	596.1	476.9	357.5	238.2	169.3
117.5°	770.1	774.7	779.1	783.6	788.0	792.5	763.6	734.7	705.9	677.0	632.1
120°	827.1	831.4	836.0	840.7	845.3	849.9	853.0	856.1	859.2	862.3	846.4
122.5°	880.0	884.5	889.5	894.5	899.6	904.7	906.5	908.4	910.3	912.1	909.6
125°	956.1	960.3	965.2	970.0	974.9	979.8	981.6	983.4	985.2	987.0	988.3
127.5°	1029.2	1032.9	1036.6	1040.2	1043.9	1047.6	1050.2	1052.8	1055.4	1058.0	1059.5
130°	1076.4	1079.8	1082.6	1085.5	1088.3	1091.1	1094.0	1096.8	1099.7	1102.4	1103.8
132.5°	1120.2	1123.4	1126.3	1129.0	1131.9	1134.7	1137.2	1139.5	1142.0	1144.4	1145.5
135°	1183.0	1186.2	1188.5	1190.8	1193.2	1195.5	1198.1	1200.6	1203.2	1205.8	1206.8
137.5°	1239.0	1241.8	1244.4	1247.1	1249.7	1252.3	1254.8	1257.4	1259.9	1262.4	1263.2
140°	1275.6	1278.1	1280.9	1283.8	1286.6	1289.4	1291.8	1294.0	1296.4	1298.7	1299.2
142.5°	1308.2	1310.8	1314.0	1317.3	1320.5	1323.7	1325.8	1328.0	1330.1	1332.2	1332.6
145°	1352.2	1354.2	1358.6	1363.0	1367.3	1371.7	1373.5	1375.3	1377.1	1379.0	1379.2
147.5°	1395.0	1396.6	1400.9	1405.3	1409.7	1414.0	1415.3	1416.7	1418.0	1419.4	1419.4
150°	1421.3	1422.5	1426.6	1430.8	1434.8	1439.0	1440.6	1442.1	1443.7	1445.2	1445.3
152.5°	1445.6	1446.5	1450.4	1454.3	1458.2	1462.2	1463.7	1465.3	1466.8	1468.4	1468.3
155°	1480.7	1481.2	1484.3	1487.4	1490.4	1493.5	1495.0	1496.6	1498.1	1499.7	1499.4
157.5°	1510.7	1510.8	1513.0	1515.2	1517.3	1519.5	1521.3	1523.0	1524.7	1526.5	1526.3
160°	1529.1	1529.1	1530.6	1532.2	1533.7	1535.2	1536.8	1538.3	1539.9	1541.4	1541.3
162.5°	1543.9	1543.8	1545.2	1546.5	1547.8	1549.2	1550.9	1552.7	1554.4	1556.2	1555.9
165°	1563.8	1563.5	1564.2	1565.0	1565.8	1566.5	1568.4	1570.2	1572.0	1573.8	1573.8
167.5°	1578.7	1578.3	1579.0	1579.7	1580.5	1581.2	1583.0	1584.8	1586.6	1588.4	1588.1
170°	1587.1	1586.5	1587.1	1587.6	1588.0	1588.6	1590.4	1592.2	1594.0	1595.8	1595.5
172.5°	1592.6	1592.1	1592.6	1593.1	1593.7	1594.2	1595.9	1597.7	1599.5	1601.3	1601.1
175°	1598.8	1598.1	1598.6	1599.1	1599.7	1600.2	1602.0	1603.8	1605.6	1607.4	1607.0
177.5°	1601.3	1600.8	1600.9	1601.2	1601.3	1601.6	1603.0	1604.4	1605.9	1607.4	1607.1
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	511.8	512.1	511.7	511.9	511.7	512.1	511.8	513.5	513.7	514.0	513.7
5°	476.9	474.7	474.3	473.8	474.3	474.7	476.9	477.8	478.6	480.0	482.7
7.5°	435.2	434.9	433.9	432.6	433.9	434.9	435.2	438.4	440.9	443.8	449.1
10°	408.4	407.4	407.2	405.9	407.2	407.4	408.4	412.5	415.4	419.5	426.7
12.5°	376.9	371.0	370.4	367.1	370.4	371.0	376.9	382.2	390.2	394.1	401.8
15°	321.0	319.8	316.1	313.7	316.1	319.8	321.0	325.4	328.3	339.1	351.5
17.5°	288.9	285.3	284.1	283.6	284.1	285.3	288.9	291.1	295.3	301.0	308.4
20°	268.3	265.1	264.5	264.1	264.5	265.1	268.3	270.9	274.3	280.4	288.1
22.5°	254.1	250.6	249.2	248.1	249.2	250.6	254.1	256.1	259.2	263.9	269.2
25°	229.8	228.5	227.8	227.4	227.8	228.5	229.8	231.7	234.6	241.2	246.7
27.5°	210.8	208.0	207.4	206.4	207.4	208.0	210.8	214.1	217.2	220.1	225.1
30°	200.0	199.1	197.8	196.7	197.8	199.1	200.0	201.7	203.7	208.7	213.5
32.5°	187.3	186.5	185.3	184.8	185.3	186.5	187.3	189.6	193.8	196.9	200.3
35°	173.2	170.6	169.4	167.8	169.4	170.6	173.2	175.0	176.7	179.3	185.6
37.5°	158.2	156.9	155.3	155.9	155.3	156.9	158.2	159.0	162.5	166.2	168.8
40°	146.7	145.8	145.4	145.2	145.4	145.8	146.7	149.1	153.4	155.0	159.1
42.5°	137.5	134.9	134.0	134.0	134.0	134.9	137.5	140.2	142.8	145.5	149.8
45°	123.5	121.2	119.4	119.6	119.4	121.2	123.5	124.4	126.7	132.1	134.4
47.5°	109.3	109.2	108.1	108.4	108.1	109.2	109.3	110.8	113.7	117.0	120.8
50°	102.4	101.3	100.5	100.8	100.5	101.3	102.4	103.7	105.3	107.0	113.0
52.5°	95.9	94.9	94.3	95.1	94.3	94.9	95.9	96.6	97.8	99.5	103.5
55°	85.2	84.1	83.9	83.7	83.9	84.1	85.2	86.1	87.6	88.9	90.7
57.5°	73.2	72.5	71.3	70.9	71.3	72.5	73.2	74.6	76.4	78.1	80.0
60°	64.7	63.2	61.3	61.1	61.3	63.2	64.7	67.0	67.8	70.4	72.6
62.5°	56.7	56.5	56.1	56.1	56.1	56.5	56.7	57.6	58.6	62.4	65.1
65°	49.8	49.7	49.8	50.0	49.8	49.7	49.8	50.2	50.4	50.7	51.9
67.5°	43.4	43.0	42.7	42.9	42.7	43.0	43.4	43.5	44.0	44.2	45.0
70°	38.5	38.3	38.2	38.2	38.2	38.3	38.5	38.9	39.3	39.6	40.5
72.5°	33.8	33.8	33.6	33.4	33.6	33.8	33.8	34.5	34.7	35.1	35.6
75°	27.1	26.7	26.7	26.7	26.7	26.7	27.1	27.2	27.4	28.0	28.4
77.5°	20.6	20.4	20.2	20.1	20.2	20.4	20.6	20.6	21.0	21.0	21.4
80°	16.3	16.1	15.9	15.9	15.9	16.1	16.3	16.5	16.5	17.0	16.9
82.5°	12.5	12.2	12.2	12.1	12.2	12.2	12.5	12.5	12.5	12.9	12.9
85°	6.7	6.8	6.7	7.0	6.7	6.8	6.7	6.5	6.7	7.0	7.0
87.5°	7.9	7.8	8.1	8.1	8.1	7.8	7.9	7.7	7.7	7.5	7.3
90°	29.8	30.2	30.8	31.3	30.8	30.2	29.8	29.3	28.4	27.1	25.8
92.5°	30.4	30.7	31.0	31.3	31.0	30.7	30.4	30.1	29.6	28.9	28.2
95°	50.6	50.4	50.1	49.9	50.1	50.4	50.6	50.9	50.4	49.1	47.8
97.5°	65.6	66.0	66.3	66.5	66.3	66.0	65.6	65.3	64.7	63.6	62.6
100°	76.1	76.6	77.2	77.7	77.2	76.6	76.1	75.7	74.4	72.3	70.2
102.5°	81.1	81.8	82.5	83.2	82.5	81.8	81.1	80.4	78.7	76.0	73.3
105°	85.0	86.1	87.1	88.1	87.1	86.1	85.0	84.0	82.1	79.2	76.4
107.5°	87.6	88.6	89.7	90.7	89.7	88.6	87.6	86.6	87.5	90.3	93.3
110°	88.5	89.5	90.6	91.6	90.6	89.5	88.5	87.5	99.9	125.6	151.4



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	90.1	90.9	91.7	92.5	91.7	90.9	90.1	89.2	135.8	229.8	323.8
115°	150.7	132.2	113.7	95.1	113.7	132.2	150.7	169.3	238.2	357.5	476.9
117.5°	571.1	510.1	449.1	388.2	449.1	510.1	571.1	632.1	677.0	705.9	734.7
120°	811.7	776.9	742.1	707.4	742.1	776.9	811.7	846.4	862.3	859.2	856.1
122.5°	902.9	896.2	889.4	882.6	889.4	896.2	902.9	909.6	912.1	910.3	908.4
125°	989.1	989.9	990.7	991.4	990.7	989.9	989.1	988.3	987.0	985.2	983.4
127.5°	1059.6	1059.7	1059.9	1060.1	1059.9	1059.7	1059.6	1059.5	1058.0	1055.4	1052.8
130°	1103.5	1103.3	1103.0	1102.7	1103.0	1103.3	1103.5	1103.8	1102.4	1099.7	1096.8
132.5°	1145.3	1145.0	1144.8	1144.4	1144.8	1145.0	1145.3	1145.5	1144.4	1142.0	1139.5
135°	1206.3	1205.8	1205.3	1204.8	1205.3	1205.8	1206.3	1206.8	1205.8	1203.2	1200.6
137.5°	1262.3	1261.5	1260.6	1259.7	1260.6	1261.5	1262.3	1263.2	1262.4	1259.9	1257.4
140°	1298.0	1296.7	1295.3	1294.0	1295.3	1296.7	1298.0	1299.2	1298.7	1296.4	1294.0
142.5°	1331.3	1330.0	1328.8	1327.5	1328.8	1330.0	1331.3	1332.6	1332.2	1330.1	1328.0
145°	1377.9	1376.6	1375.3	1374.1	1375.3	1376.6	1377.9	1379.2	1379.0	1377.1	1375.3
147.5°	1418.4	1417.3	1416.2	1415.1	1416.2	1417.3	1418.4	1419.4	1419.4	1418.0	1416.7
150°	1444.1	1442.8	1441.4	1440.1	1441.4	1442.8	1444.1	1445.3	1445.2	1443.7	1442.1
152.5°	1466.6	1464.9	1463.2	1461.5	1463.2	1464.9	1466.6	1468.3	1468.4	1466.8	1465.3
155°	1497.4	1495.3	1493.2	1491.2	1493.2	1495.3	1497.4	1499.4	1499.7	1498.1	1496.6
157.5°	1524.4	1522.3	1520.3	1518.3	1520.3	1522.3	1524.4	1526.3	1526.5	1524.7	1523.0
160°	1539.5	1537.7	1535.9	1534.1	1535.9	1537.7	1539.5	1541.3	1541.4	1539.9	1538.3
162.5°	1553.7	1551.5	1549.3	1547.1	1549.3	1551.5	1553.7	1555.9	1556.2	1554.4	1552.7
165°	1572.0	1570.2	1568.4	1566.5	1568.4	1570.2	1572.0	1573.8	1573.8	1572.0	1570.2
167.5°	1585.8	1583.5	1581.2	1578.8	1581.2	1583.5	1585.8	1588.1	1588.4	1586.6	1584.8
170°	1593.3	1590.9	1588.6	1586.2	1588.6	1590.9	1593.3	1595.5	1595.8	1594.0	1592.2
172.5°	1598.8	1596.4	1594.2	1591.8	1594.2	1596.4	1598.8	1601.1	1601.3	1599.5	1597.7
175°	1604.4	1601.8	1599.3	1596.7	1599.3	1601.8	1604.4	1607.0	1607.4	1605.6	1603.8
177.5°	1605.2	1603.4	1601.6	1599.7	1601.6	1603.4	1605.2	1607.1	1607.4	1605.9	1604.4
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



TEST NUMBER: P331781-930

CATALOG NUMBER: S122RDIW-S290D1440U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	512.6	514.6	517.7	519.5	522.4	524.4	525.5	527.3	528.4	532.1	536.0
5°	483.9	486.9	492.0	496.8	502.1	507.4	511.4	515.8	519.8	526.8	534.3
7.5°	451.1	455.2	463.3	470.9	480.0	487.5	494.2	501.8	508.6	518.7	529.2
10°	426.5	433.7	444.3	451.5	463.3	470.9	481.5	489.8	499.3	512.7	524.5
12.5°	405.3	414.0	422.5	432.5	443.2	455.8	467.4	478.2	489.3	503.1	517.1
15°	366.9	379.4	392.6	402.8	417.3	430.6	444.1	458.5	472.2	488.8	506.9
17.5°	317.4	332.0	354.1	371.5	388.5	401.9	418.7	436.1	452.2	472.1	492.4
20°	295.1	305.7	320.7	344.3	369.8	384.1	401.1	420.4	438.9	460.6	482.2
22.5°	277.1	286.7	298.6	317.0	345.5	365.0	382.8	402.4	423.8	445.9	469.9
25°	251.5	258.1	270.8	285.6	305.2	337.2	356.7	376.3	399.7	423.4	450.8
27.5°	232.3	238.3	246.5	260.6	275.2	298.2	329.1	350.6	373.8	400.5	428.9
30°	217.6	224.6	233.7	243.7	259.7	277.6	308.5	333.4	356.3	383.8	414.1
32.5°	206.9	212.5	220.2	230.4	243.6	260.9	285.6	315.7	338.1	367.0	398.7
35°	189.5	195.9	202.2	211.9	222.6	238.3	257.1	289.3	311.5	340.0	371.9
37.5°	175.0	179.0	186.0	193.6	205.0	216.7	232.9	261.8	285.8	313.8	346.4
40°	164.1	169.1	174.2	182.8	192.1	203.3	219.2	240.8	268.3	295.8	327.6
42.5°	153.4	159.7	165.3	171.0	181.1	192.4	205.4	223.6	251.8	277.7	308.7
45°	140.6	144.6	150.3	156.7	165.0	174.6	186.1	202.0	229.1	251.5	280.5
47.5°	125.6	131.6	135.3	141.5	149.4	158.6	169.3	183.0	204.9	225.9	252.9
50°	115.4	121.5	126.9	132.4	139.4	148.3	157.3	170.6	188.2	210.2	235.4
52.5°	106.6	112.0	117.2	122.8	129.7	137.8	146.3	158.0	173.0	193.3	217.8
55°	94.7	98.0	103.4	108.9	115.0	122.8	130.9	140.7	153.7	170.7	190.5
57.5°	82.3	86.2	90.4	96.0	102.2	108.2	115.5	124.4	134.6	150.0	167.0
60°	75.4	78.4	81.9	87.6	93.4	98.7	105.7	113.2	122.8	136.2	150.6
62.5°	67.7	70.5	73.7	78.7	84.3	89.2	95.4	103.2	111.4	123.5	136.2
65°	54.8	58.9	62.0	66.4	71.1	76.3	81.1	87.4	94.7	104.3	115.5
67.5°	45.4	47.5	50.5	54.5	59.2	63.7	68.2	73.1	79.4	86.8	95.8
70°	41.3	42.1	42.6	46.5	51.0	55.4	59.6	64.2	69.6	75.7	83.5
72.5°	36.4	37.2	37.8	39.5	43.0	47.5	51.9	55.4	60.4	65.6	71.8
75°	28.9	30.0	30.6	31.5	32.8	35.7	39.8	43.1	46.1	50.0	55.0
77.5°	22.0	22.7	23.2	24.2	25.0	26.3	28.7	31.6	34.5	36.7	40.1
80°	17.4	17.6	18.3	18.7	19.8	20.7	21.9	24.3	27.1	28.0	30.4
82.5°	13.1	13.3	13.9	14.3	14.8	15.6	17.0	17.6	19.8	21.0	22.5
85°	7.3	7.0	7.6	7.6	8.0	8.3	8.7	9.6	10.2	11.7	12.1
87.5°	7.1	6.8	6.6	6.2	5.8	5.6	5.3	4.9	4.6	4.5	4.6
90°	24.5	23.2	21.1	19.1	17.0	14.9	12.5	9.7	6.8	4.0	1.1
92.5°	27.6	26.9	25.8	24.9	23.8	22.7	22.4	22.7	22.9	23.2	23.4
95°	46.5	45.2	43.5	41.6	39.8	38.0	41.3	49.9	58.4	66.9	75.3
97.5°	61.6	60.5	56.3	52.2	48.0	43.9	53.7	77.7	101.7	125.6	149.6
100°	68.2	66.1	61.7	57.3	52.9	48.6	64.0	99.3	134.6	169.9	205.2
102.5°	70.6	67.9	104.6	141.2	177.9	214.5	236.6	244.0	251.5	259.0	266.4
105°	73.5	70.8	141.0	211.4	281.8	352.1	383.4	375.7	367.9	360.2	352.5
107.5°	96.1	99.1	183.4	267.7	352.1	436.5	475.6	469.3	463.1	456.8	450.6
110°	177.2	202.9	277.4	351.9	426.3	500.8	535.3	529.9	524.5	519.1	513.7



TEST NUMBER: P331781-930

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	417.8	511.8	530.2	548.6	567.0	585.4	592.2	587.4	582.6	577.8	573.1
115°	596.1	715.4	709.0	702.5	696.1	689.7	684.3	679.9	675.5	671.2	666.8
117.5°	763.6	792.5	788.0	783.6	779.1	774.7	770.1	765.2	760.3	755.4	750.5
120°	853.0	849.9	845.3	840.7	836.0	831.4	827.1	823.3	819.4	815.5	811.7
122.5°	906.5	904.7	899.6	894.5	889.5	884.5	880.0	875.9	871.8	867.7	863.6
125°	981.6	979.8	974.9	970.0	965.2	960.3	956.1	952.8	949.4	946.1	942.7
127.5°	1050.2	1047.6	1043.9	1040.2	1036.6	1032.9	1029.2	1025.5	1021.8	1018.1	1014.4
130°	1094.0	1091.1	1088.3	1085.5	1082.6	1079.8	1076.4	1072.2	1068.0	1064.0	1059.8
132.5°	1137.2	1134.7	1131.9	1129.0	1126.3	1123.4	1120.2	1116.7	1113.2	1109.7	1106.2
135°	1198.1	1195.5	1193.2	1190.8	1188.5	1186.2	1183.0	1178.8	1174.8	1170.6	1166.5
137.5°	1254.8	1252.3	1249.7	1247.1	1244.4	1241.8	1239.0	1236.2	1233.3	1230.4	1227.5
140°	1291.8	1289.4	1286.6	1283.8	1280.9	1278.1	1275.6	1273.6	1271.5	1269.4	1267.4
142.5°	1325.8	1323.7	1320.5	1317.3	1314.0	1310.8	1308.2	1306.4	1304.5	1302.6	1300.8
145°	1373.5	1371.7	1367.3	1363.0	1358.6	1354.2	1352.2	1352.4	1352.7	1352.9	1353.2
147.5°	1415.3	1414.0	1409.7	1405.3	1400.9	1396.6	1395.0	1396.0	1396.9	1397.9	1398.9
150°	1440.6	1439.0	1434.8	1430.8	1426.6	1422.5	1421.3	1423.2	1425.0	1426.8	1428.6
152.5°	1463.7	1462.2	1458.2	1454.3	1450.4	1446.5	1445.6	1447.6	1449.6	1451.6	1453.6
155°	1495.0	1493.5	1490.4	1487.4	1484.3	1481.2	1480.7	1483.0	1485.4	1487.7	1490.0
157.5°	1521.3	1519.5	1517.3	1515.2	1513.0	1510.8	1510.7	1512.7	1514.7	1516.6	1518.6
160°	1536.8	1535.2	1533.7	1532.2	1530.6	1529.1	1529.1	1530.6	1532.2	1533.7	1535.2
162.5°	1550.9	1549.2	1547.8	1546.5	1545.2	1543.8	1543.9	1545.5	1547.0	1548.6	1550.0
165°	1568.4	1566.5	1565.8	1565.0	1564.2	1563.5	1563.8	1565.4	1566.9	1568.5	1570.0
167.5°	1583.0	1581.2	1580.5	1579.7	1579.0	1578.3	1578.7	1580.2	1581.8	1583.3	1584.9
170°	1590.4	1588.6	1588.0	1587.6	1587.1	1586.5	1587.1	1588.6	1590.2	1591.7	1593.3
172.5°	1595.9	1594.2	1593.7	1593.1	1592.6	1592.1	1592.6	1594.2	1595.7	1597.3	1598.8
175°	1602.0	1600.2	1599.7	1599.1	1598.6	1598.1	1598.8	1600.6	1602.4	1604.2	1606.0
177.5°	1603.0	1601.6	1601.3	1601.2	1600.9	1600.8	1601.3	1602.8	1604.3	1605.7	1607.1
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	536.1	536.5	539.5	540.9	543.5	544.5	545.8	545.4	545.4	546.0	550.2
5°	537.3	541.0	546.5	551.9	557.1	561.5	564.5	567.4	568.6	573.9	578.7
7.5°	535.3	542.2	551.3	559.5	569.3	577.0	583.3	589.1	593.0	600.9	608.9
10°	532.8	542.4	552.8	563.4	576.9	587.1	597.5	605.4	608.0	619.6	626.3
12.5°	527.7	540.6	553.8	567.5	580.7	594.8	606.2	614.2	623.3	633.7	646.0
15°	520.2	535.0	552.3	569.8	588.7	605.8	618.0	631.9	641.9	653.4	664.1
17.5°	509.4	528.5	550.3	570.7	592.6	610.8	627.7	641.0	648.0	654.6	656.2
20°	500.8	521.3	547.1	571.1	593.0	614.1	630.8	641.9	643.8	643.9	634.1
22.5°	491.5	514.7	541.6	566.2	592.4	615.9	628.8	633.6	626.2	613.7	594.7
25°	474.3	501.2	532.5	560.6	589.1	611.3	615.8	607.5	581.7	554.6	520.4
27.5°	455.7	485.9	519.4	550.7	581.1	594.9	585.3	555.2	508.9	468.6	419.7
30°	442.1	476.0	508.9	543.9	572.1	578.0	556.0	511.7	457.6	396.9	348.1
32.5°	426.5	462.0	498.2	534.4	558.0	552.2	515.8	461.3	397.9	338.2	292.2
35°	404.3	440.9	480.0	516.3	531.3	506.3	451.8	380.9	316.1	260.4	228.7
37.5°	378.6	418.6	459.2	492.5	491.5	449.8	375.6	302.4	247.9	214.9	192.4
40°	360.4	400.8	444.7	472.8	460.8	406.5	326.1	257.1	217.2	190.9	174.5
42.5°	342.9	383.4	427.1	449.4	428.4	361.7	281.7	227.6	194.7	174.2	160.9
45°	313.2	356.0	396.3	408.7	371.3	297.8	227.8	188.5	166.6	151.5	142.3
47.5°	284.1	326.2	363.1	363.2	312.7	241.5	192.2	163.1	144.5	132.7	126.0
50°	266.3	306.3	337.2	332.4	275.0	214.8	171.9	146.8	131.3	122.2	115.2
52.5°	246.3	285.1	311.9	298.2	243.1	189.1	153.6	132.6	119.8	111.9	105.6
55°	217.2	251.7	270.6	249.8	198.4	157.3	129.8	113.3	103.7	97.0	91.6
57.5°	188.7	217.1	228.9	204.8	163.4	130.4	109.8	97.4	87.9	83.1	80.3
60°	170.7	195.0	203.3	176.7	142.0	114.1	97.3	85.8	78.7	75.6	72.8
62.5°	153.1	172.9	176.3	152.0	123.8	99.9	85.4	75.7	71.0	68.0	65.4
65°	127.0	141.3	139.7	120.0	98.0	79.2	68.7	62.8	59.3	55.0	50.4
67.5°	104.6	113.3	108.0	93.4	74.8	61.6	54.7	50.2	45.8	41.8	40.8
70°	90.3	95.4	89.8	76.3	61.3	51.7	46.1	40.8	38.2	37.3	35.5
72.5°	76.7	78.5	72.5	60.9	49.9	42.8	37.3	34.4	32.9	32.2	31.1
75°	57.6	56.3	51.1	42.1	34.7	29.8	28.1	27.1	26.1	25.4	24.8
77.5°	40.4	38.6	33.9	28.0	24.1	21.9	20.8	20.2	19.8	19.4	18.8
80°	30.4	29.1	24.5	20.0	18.3	17.2	16.6	15.9	15.9	15.6	15.0
82.5°	22.3	20.8	16.7	14.7	13.8	13.0	12.6	12.2	12.1	12.1	11.7
85°	11.7	9.5	8.3	8.0	7.4	7.0	7.3	6.8	6.8	6.8	6.7
87.5°	4.3	4.2	4.6	5.1	5.6	6.0	6.4	6.8	7.3	7.4	7.8
90°	4.0	6.8	9.7	12.5	14.9	17.0	19.1	21.1	23.2	24.5	25.8
92.5°	23.2	22.9	22.7	22.4	22.7	23.8	24.9	25.8	26.9	27.6	28.2
95°	66.9	58.4	49.9	41.3	38.0	39.8	41.6	43.5	45.2	46.5	47.8
97.5°	125.6	101.7	77.7	53.7	43.9	48.0	52.2	56.3	60.5	61.6	62.6
100°	169.9	134.6	99.3	64.0	48.6	52.9	57.3	61.7	66.1	68.2	70.2
102.5°	259.0	251.5	244.0	236.6	214.5	177.9	141.2	104.6	67.9	70.6	73.3
105°	360.2	367.9	375.7	383.4	352.1	281.8	211.4	141.0	70.8	73.5	76.4
107.5°	456.8	463.1	469.3	475.6	436.5	352.1	267.7	183.4	99.1	96.1	93.3
110°	519.1	524.5	529.9	535.3	500.8	426.3	351.9	277.4	202.9	177.2	151.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	577.8	582.6	587.4	592.2	585.4	567.0	548.6	530.2	511.8	417.8	323.8
115°	671.2	675.5	679.9	684.3	689.7	696.1	702.5	709.0	715.4	596.1	476.9
117.5°	755.4	760.3	765.2	770.1	774.7	779.1	783.6	788.0	792.5	763.6	734.7
120°	815.5	819.4	823.3	827.1	831.4	836.0	840.7	845.3	849.9	853.0	856.1
122.5°	867.7	871.8	875.9	880.0	884.5	889.5	894.5	899.6	904.7	906.5	908.4
125°	946.1	949.4	952.8	956.1	960.3	965.2	970.0	974.9	979.8	981.6	983.4
127.5°	1018.1	1021.8	1025.5	1029.2	1032.9	1036.6	1040.2	1043.9	1047.6	1050.2	1052.8
130°	1064.0	1068.0	1072.2	1076.4	1079.8	1082.6	1085.5	1088.3	1091.1	1094.0	1096.8
132.5°	1109.7	1113.2	1116.7	1120.2	1123.4	1126.3	1129.0	1131.9	1134.7	1137.2	1139.5
135°	1170.6	1174.8	1178.8	1183.0	1186.2	1188.5	1190.8	1193.2	1195.5	1198.1	1200.6
137.5°	1230.4	1233.3	1236.2	1239.0	1241.8	1244.4	1247.1	1249.7	1252.3	1254.8	1257.4
140°	1269.4	1271.5	1273.6	1275.6	1278.1	1280.9	1283.8	1286.6	1289.4	1291.8	1294.0
142.5°	1302.6	1304.5	1306.4	1308.2	1310.8	1314.0	1317.3	1320.5	1323.7	1325.8	1328.0
145°	1352.9	1352.7	1352.4	1352.2	1354.2	1358.6	1363.0	1367.3	1371.7	1373.5	1375.3
147.5°	1397.9	1396.9	1396.0	1395.0	1396.6	1400.9	1405.3	1409.7	1414.0	1415.3	1416.7
150°	1426.8	1425.0	1423.2	1421.3	1422.5	1426.6	1430.8	1434.8	1439.0	1440.6	1442.1
152.5°	1451.6	1449.6	1447.6	1445.6	1446.5	1450.4	1454.3	1458.2	1462.2	1463.7	1465.3
155°	1487.7	1485.4	1483.0	1480.7	1481.2	1484.3	1487.4	1490.4	1493.5	1495.0	1496.6
157.5°	1516.6	1514.7	1512.7	1510.7	1510.8	1513.0	1515.2	1517.3	1519.5	1521.3	1523.0
160°	1533.7	1532.2	1530.6	1529.1	1529.1	1530.6	1532.2	1533.7	1535.2	1536.8	1538.3
162.5°	1548.6	1547.0	1545.5	1543.9	1543.8	1545.2	1546.5	1547.8	1549.2	1550.9	1552.7
165°	1568.5	1566.9	1565.4	1563.8	1563.5	1564.2	1565.0	1565.8	1566.5	1568.4	1570.2
167.5°	1583.3	1581.8	1580.2	1578.7	1578.3	1579.0	1579.7	1580.5	1581.2	1583.0	1584.8
170°	1591.7	1590.2	1588.6	1587.1	1586.5	1587.1	1587.6	1588.0	1588.6	1590.4	1592.2
172.5°	1597.3	1595.7	1594.2	1592.6	1592.1	1592.6	1593.1	1593.7	1594.2	1595.9	1597.7
175°	1604.2	1602.4	1600.6	1598.8	1598.1	1598.6	1599.1	1599.7	1600.2	1602.0	1603.8
177.5°	1605.7	1604.3	1602.8	1601.3	1600.8	1600.9	1601.2	1601.3	1601.6	1603.0	1604.4
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	551.6	553.6	554.5	554.5	555.5	555.1	554.6
5°	583.3	586.9	587.7	590.9	593.4	592.6	593.0
7.5°	614.9	620.5	626.1	628.7	629.1	630.6	631.1
10°	634.3	639.0	647.6	646.4	652.8	656.6	650.4
12.5°	653.0	659.3	665.3	666.9	670.6	671.8	669.4
15°	669.8	673.2	673.5	672.6	673.8	672.8	669.3
17.5°	654.1	648.7	637.7	632.5	628.4	622.3	619.9
20°	628.0	612.0	593.5	586.1	577.5	560.4	564.5
22.5°	571.7	553.6	535.0	513.4	503.0	486.9	485.9
25°	484.1	452.8	418.3	394.3	380.2	364.1	357.0
27.5°	376.4	337.0	308.8	294.5	281.4	268.7	268.2
30°	305.6	276.0	254.1	241.9	233.9	228.5	229.7
32.5°	257.6	237.3	222.5	212.4	206.5	202.4	202.4
35°	210.6	196.7	187.2	183.0	178.7	175.8	175.9
37.5°	180.2	171.9	166.6	161.9	159.2	157.8	156.9
40°	164.6	157.8	153.7	150.9	148.7	146.7	146.3
42.5°	152.4	146.7	142.6	140.4	138.4	136.9	136.6
45°	135.2	130.5	126.9	124.4	123.5	122.2	122.2
47.5°	120.3	115.7	112.8	111.3	109.7	108.8	108.8
50°	110.2	106.6	104.1	103.1	101.8	101.3	101.1
52.5°	101.2	98.5	96.7	96.0	95.5	94.8	94.9
55°	88.9	87.4	86.7	86.1	85.2	84.1	84.8
57.5°	78.6	77.3	75.3	73.5	72.7	71.9	72.2
60°	71.3	68.7	66.1	64.1	63.5	61.9	61.9
62.5°	62.1	58.5	55.3	54.1	53.6	52.8	52.7
65°	47.8	46.3	45.6	44.8	44.4	44.4	44.1
67.5°	39.6	39.0	38.2	38.0	37.7	37.5	37.4
70°	35.0	34.2	33.9	33.7	33.3	33.5	32.9
72.5°	30.6	30.0	29.9	29.4	29.2	29.2	28.8
75°	24.1	24.1	23.9	23.7	23.3	23.2	23.3
77.5°	18.5	18.6	18.3	18.2	18.2	18.2	18.0
80°	14.8	15.0	14.8	14.6	14.4	14.6	14.4
82.5°	11.7	11.4	11.4	11.3	11.3	11.3	11.2
85°	6.7	6.8	6.7	6.5	6.5	6.5	6.7
87.5°	7.9	8.2	8.4	8.5	8.6	8.6	8.6
90°	27.1	28.4	29.3	29.8	30.2	30.8	31.3
92.5°	28.9	29.6	30.1	30.4	30.7	31.0	31.3
95°	49.1	50.4	50.9	50.6	50.4	50.1	49.9
97.5°	63.6	64.7	65.3	65.6	66.0	66.3	66.5
100°	72.3	74.4	75.7	76.1	76.6	77.2	77.7
102.5°	76.0	78.7	80.4	81.1	81.8	82.5	83.2
105°	79.2	82.1	84.0	85.0	86.1	87.1	88.1
107.5°	90.3	87.5	86.6	87.6	88.6	89.7	90.7
110°	125.6	99.9	87.5	88.5	89.5	90.6	91.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	229.8	135.8	89.2	90.1	90.9	91.7	92.5
115°	357.5	238.2	169.3	150.7	132.2	113.7	95.1
117.5°	705.9	677.0	632.1	571.1	510.1	449.1	388.2
120°	859.2	862.3	846.4	811.7	776.9	742.1	707.4
122.5°	910.3	912.1	909.6	902.9	896.2	889.4	882.6
125°	985.2	987.0	988.3	989.1	989.9	990.7	991.4
127.5°	1055.4	1058.0	1059.5	1059.6	1059.7	1059.9	1060.1
130°	1099.7	1102.4	1103.8	1103.5	1103.3	1103.0	1102.7
132.5°	1142.0	1144.4	1145.5	1145.3	1145.0	1144.8	1144.4
135°	1203.2	1205.8	1206.8	1206.3	1205.8	1205.3	1204.8
137.5°	1259.9	1262.4	1263.2	1262.3	1261.5	1260.6	1259.7
140°	1296.4	1298.7	1299.2	1298.0	1296.7	1295.3	1294.0
142.5°	1330.1	1332.2	1332.6	1331.3	1330.0	1328.8	1327.5
145°	1377.1	1379.0	1379.2	1377.9	1376.6	1375.3	1374.1
147.5°	1418.0	1419.4	1419.4	1418.4	1417.3	1416.2	1415.1
150°	1443.7	1445.2	1445.3	1444.1	1442.8	1441.4	1440.1
152.5°	1466.8	1468.4	1468.3	1466.6	1464.9	1463.2	1461.5
155°	1498.1	1499.7	1499.4	1497.4	1495.3	1493.2	1491.2
157.5°	1524.7	1526.5	1526.3	1524.4	1522.3	1520.3	1518.3
160°	1539.9	1541.4	1541.3	1539.5	1537.7	1535.9	1534.1
162.5°	1554.4	1556.2	1555.9	1553.7	1551.5	1549.3	1547.1
165°	1572.0	1573.8	1573.8	1572.0	1570.2	1568.4	1566.5
167.5°	1586.6	1588.4	1588.1	1585.8	1583.5	1581.2	1578.8
170°	1594.0	1595.8	1595.5	1593.3	1590.9	1588.6	1586.2
172.5°	1599.5	1601.3	1601.1	1598.8	1596.4	1594.2	1591.8
175°	1605.6	1607.4	1607.0	1604.4	1601.8	1599.3	1596.7
177.5°	1605.9	1607.4	1607.1	1605.2	1603.4	1601.6	1599.7
180°	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5	1602.5

(END OF REPORT)