

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: P331483-840

Luminaire Tested: **S122DIW-S290D1240U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331483-840  
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: S122DIW-S290D1240U840-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1240 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6324.2 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

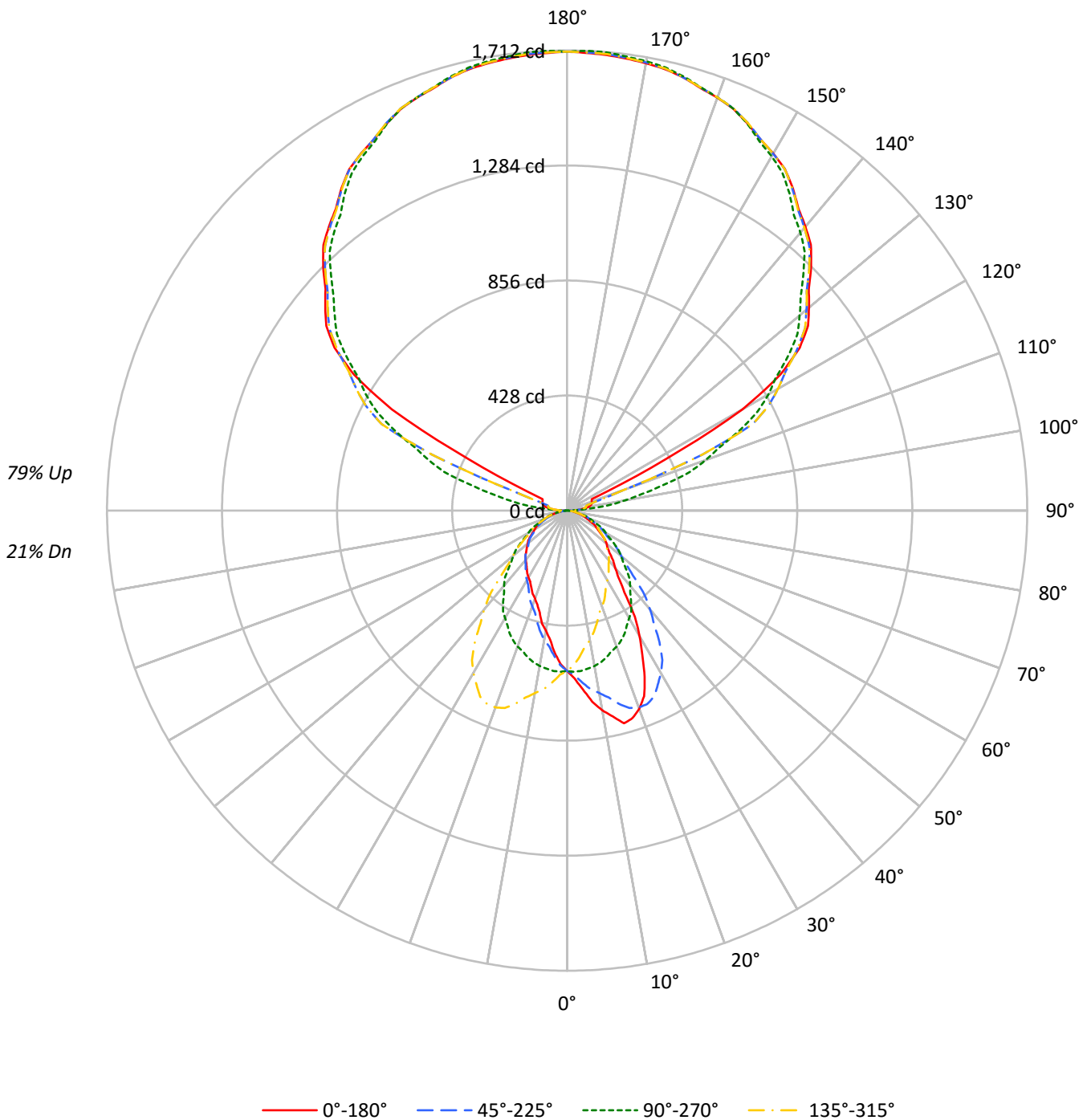
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

### Luminous Intensity Polar Plot





TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	21	15
3	76	67	60	55	67	60	54	50	46	42	39	33	30	28	21	20	18	13
4	70	60	52	47	61	53	47	42	41	36	33	29	27	24	19	17	16	12
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14	10
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	15	14	12	9
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11	8
8	50	39	31	26	44	35	28	24	27	22	19	20	17	15	13	11	10	7
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	21	38	29	23	19	23	18	15	17	14	12	11	9	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	9637	9637	9637	9637
5°	10804	9700	8596	9700
10°	12381	9621	7438	9621
15°	13697	9444	6572	9444
20°	13490	9256	5991	9256
25°	12162	9002	5624	9002
30°	10051	8600	5354	8600
35°	7324	8180	5164	8180
40°	5851	7685	5056	7685
45°	5112	7108	4914	7108
50°	4808	6551	4818	6551
55°	4428	5987	4687	5987
60°	4059	5383	4492	5383
65°	3698	4844	4294	4844
70°	3356	4319	4008	4319
75°	2982	3737	3550	3737
80°	2566	3087	2854	3087
85°	2297	2297	1704	2297



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	0.9
10°-20°	165.3	2.6
20°-30°	239.9	3.8
30°-40°	253.1	4.0
40°-50°	224.1	3.5
50°-60°	178.8	2.8
60°-70°	121.6	1.9
70°-80°	62.3	1.0
80°-90°	19.2	0.3
90°-100°	56.9	0.9
100°-110°	208.8	3.3
110°-120°	558.2	8.8
120°-130°	921.5	14.6
130°-140°	980.0	15.5
140°-150°	910.9	14.4
150°-160°	732.3	11.6
160°-170°	471.9	7.5
170°-180°	162.4	2.6
0°-30°	462.0	7.3
0°-40°	715.1	11.3
0°-60°	1118.0	17.7
0°-90°	1321.1	20.9
90°-120°	824.0	13.0
90°-150°	3636.4	57.5
90°-180°	5003.0	79.1
0°-180°	6324.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	597	597	597	597	597	
5°	667	598	530	598	667	67
15°	819	565	393	565	819	226
25°	683	505	316	505	683	309
35°	372	415	262	415	372	242
45°	224	311	215	311	224	176
55°	157	213	166	213	157	141
65°	97	127	112	127	97	96
75°	48	60	57	60	48	51
85°	12	12	9	12	12	14
90°	33	1	33	1	33	15
95°	53	80	53	80	53	50
105°	94	376	94	376	94	98
115°	101	710	101	710	101	254
125°	1056	1004	1056	1004	1056	914
135°	1284	1243	1284	1243	1284	989
145°	1464	1442	1464	1442	1464	915
155°	1589	1587	1589	1587	1589	733
165°	1669	1673	1669	1673	1669	471
175°	1701	1711	1701	1711	1701	162
180°	1707	1707	1707	1707	1707	



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	624.4	624.6	625.0	622.1	621.7	621.7	619.1	616.9	614.3	610.9	611.3
5°	666.6	669.1	670.0	667.3	663.2	662.8	658.8	652.5	646.4	641.7	638.2
7.5°	717.0	718.0	715.8	712.2	709.1	703.6	696.3	689.2	679.2	670.1	663.4
10°	755.2	756.6	752.7	747.4	743.1	736.6	726.1	715.3	702.3	689.6	679.5
12.5°	784.2	787.6	782.5	781.9	774.5	765.6	753.1	747.6	729.2	711.7	700.7
15°	819.4	819.2	819.7	815.3	809.8	808.4	795.2	780.6	754.8	744.4	726.5
17.5°	809.2	812.7	814.4	814.3	814.2	813.2	809.0	799.9	786.9	770.1	749.5
20°	785.1	789.6	790.3	795.6	798.6	802.4	804.1	801.5	793.6	779.5	761.6
22.5°	747.6	748.9	751.0	759.2	765.7	775.5	780.5	789.1	786.0	779.1	764.2
25°	682.7	680.4	688.4	692.6	707.5	723.1	734.4	746.7	757.7	764.4	760.0
27.5°	604.8	601.4	613.4	624.4	636.4	653.4	670.9	691.6	708.7	730.3	737.7
30°	539.1	541.2	552.6	564.3	582.7	606.5	626.3	648.9	673.6	697.6	714.4
32.5°	468.3	476.2	483.4	501.4	517.6	544.1	573.1	601.5	632.1	659.4	685.4
35°	371.6	380.8	390.9	403.9	426.7	453.0	481.3	519.6	561.4	598.7	629.4
37.5°	312.9	311.3	317.1	326.6	345.0	366.3	398.8	436.6	485.7	529.7	573.1
40°	277.6	276.7	280.7	289.5	303.5	319.1	347.6	380.8	426.5	480.2	531.8
42.5°	253.4	253.9	256.2	262.4	272.0	284.8	306.1	334.4	376.2	426.8	482.2
45°	223.9	225.5	228.0	231.1	236.5	247.1	259.0	279.2	312.3	354.5	409.0
47.5°	202.7	202.8	205.3	207.9	211.2	217.1	226.9	239.5	262.9	297.2	344.2
50°	191.4	189.8	191.6	193.6	197.0	201.2	207.6	219.5	235.1	262.9	302.2
52.5°	177.3	177.4	179.0	179.9	182.9	187.0	192.9	201.2	215.3	237.0	269.2
55°	157.3	158.5	159.5	160.8	163.6	166.5	171.2	176.6	187.6	203.9	227.8
57.5°	138.6	139.0	139.9	142.5	144.2	146.9	151.3	156.3	163.5	175.5	193.5
60°	125.7	125.7	127.5	128.7	131.0	133.7	137.1	142.0	148.5	158.2	172.8
62.5°	114.0	113.8	114.5	116.4	118.2	120.7	124.1	128.3	134.3	143.1	154.9
65°	96.8	96.3	97.8	98.2	100.0	102.5	105.3	109.7	114.5	120.9	131.5
67.5°	80.3	80.9	81.6	82.4	83.4	86.1	88.0	91.0	95.1	100.5	107.6
70°	71.1	71.1	71.1	71.8	73.2	74.5	76.3	78.9	82.8	87.4	93.8
72.5°	60.8	61.6	62.3	61.9	63.6	64.4	66.7	68.1	71.8	74.7	80.4
75°	47.8	47.8	47.8	48.9	49.6	50.2	51.6	53.0	54.8	58.5	61.5
77.5°	35.6	35.5	35.7	36.1	36.8	37.6	38.0	39.2	40.9	42.6	45.1
80°	27.6	28.0	28.2	28.7	28.7	29.1	29.4	31.0	32.1	33.2	34.8
82.5°	21.3	21.4	21.4	21.5	21.7	22.0	22.6	23.1	23.5	24.4	25.7
85°	12.4	12.1	12.1	12.6	12.4	12.4	12.8	13.3	13.3	13.5	14.2
87.5°	11.4	11.3	11.4	11.1	11.0	11.0	10.7	10.3	10.2	10.1	9.8
90°	33.3	32.8	32.2	31.7	31.2	30.2	28.8	27.5	26.1	24.7	22.5
92.5°	33.3	33.0	32.7	32.3	32.0	31.5	30.8	30.1	29.4	28.7	27.6
95°	53.1	53.4	53.6	53.9	54.2	53.6	52.3	50.9	49.6	48.2	46.3
97.5°	70.9	70.6	70.3	69.9	69.6	68.9	67.8	66.7	65.5	64.5	60.1
100°	82.8	82.2	81.7	81.1	80.6	79.2	77.0	74.8	72.6	70.4	65.7
102.5°	88.7	88.0	87.2	86.3	85.6	83.8	81.0	78.1	75.2	72.4	111.4
105°	93.9	92.8	91.7	90.6	89.5	87.5	84.4	81.4	78.4	75.3	150.3
107.5°	96.6	95.5	94.4	93.3	92.2	93.2	96.2	99.4	102.4	105.5	195.4
110°	97.6	96.5	95.4	94.3	93.2	106.3	133.8	161.3	188.7	216.2	295.5



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	98.6	97.7	96.8	95.9	95.0	144.7	244.9	345.0	445.1	545.2	564.9
115°	101.3	121.1	140.9	160.6	180.4	253.8	380.9	508.0	635.1	762.2	755.4
117.5°	413.5	478.6	543.5	608.4	673.4	721.2	751.9	782.7	813.4	844.2	839.5
120°	753.6	790.6	827.7	864.7	901.8	918.7	915.3	912.1	908.8	905.4	900.6
122.5°	940.3	947.6	954.7	961.9	969.1	971.7	969.8	967.8	965.7	963.8	958.5
125°	1056.2	1055.4	1054.6	1053.7	1052.9	1051.6	1049.7	1047.7	1045.8	1043.9	1038.6
127.5°	1129.3	1129.1	1129.0	1128.8	1128.7	1127.2	1124.4	1121.6	1118.8	1116.0	1112.1
130°	1174.8	1175.1	1175.4	1175.6	1175.9	1174.5	1171.5	1168.5	1165.5	1162.5	1159.4
132.5°	1219.3	1219.5	1219.8	1220.1	1220.3	1219.2	1216.6	1214.1	1211.4	1208.9	1205.9
135°	1283.5	1284.0	1284.6	1285.2	1285.7	1284.6	1281.8	1279.1	1276.4	1273.6	1271.1
137.5°	1342.0	1343.0	1343.9	1344.8	1345.7	1344.9	1342.2	1339.5	1336.9	1334.1	1331.3
140°	1378.7	1380.0	1381.4	1382.7	1384.1	1383.6	1381.1	1378.7	1376.1	1373.7	1370.7
142.5°	1414.2	1415.5	1416.9	1418.4	1419.7	1419.3	1417.0	1414.7	1412.5	1410.3	1406.7
145°	1463.9	1465.2	1466.6	1467.9	1469.4	1469.1	1467.1	1465.2	1463.3	1461.4	1456.7
147.5°	1507.6	1508.7	1509.8	1511.1	1512.2	1512.1	1510.7	1509.2	1507.8	1506.3	1501.8
150°	1534.3	1535.6	1537.0	1538.4	1539.7	1539.6	1538.0	1536.3	1534.7	1533.1	1528.6
152.5°	1557.0	1558.8	1560.6	1562.5	1564.3	1564.4	1562.7	1561.0	1559.4	1557.7	1553.6
155°	1588.6	1590.8	1593.1	1595.2	1597.4	1597.7	1596.1	1594.4	1592.8	1591.1	1587.8
157.5°	1617.5	1619.7	1621.8	1624.0	1626.1	1626.3	1624.4	1622.6	1620.6	1618.8	1616.5
160°	1634.4	1636.3	1638.2	1640.1	1642.0	1642.1	1640.5	1638.9	1637.2	1635.6	1634.0
162.5°	1648.2	1650.5	1652.8	1655.3	1657.6	1657.9	1656.0	1654.2	1652.2	1650.4	1649.0
165°	1668.9	1670.8	1672.7	1674.7	1676.6	1676.6	1674.7	1672.7	1670.8	1668.9	1668.1
167.5°	1682.0	1684.5	1687.0	1689.4	1691.9	1692.1	1690.2	1688.3	1686.4	1684.5	1683.7
170°	1689.9	1692.4	1694.9	1697.4	1699.8	1700.1	1698.2	1696.3	1694.4	1692.4	1691.8
172.5°	1695.9	1698.3	1700.8	1703.2	1705.8	1706.0	1704.0	1702.1	1700.2	1698.3	1697.8
175°	1701.0	1703.7	1706.6	1709.3	1712.0	1712.4	1710.5	1708.6	1706.7	1704.8	1704.2
177.5°	1704.2	1706.3	1708.2	1710.2	1712.1	1712.4	1710.8	1709.3	1707.8	1706.3	1706.0
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	612.5	611.1	610.2	606.8	603.9	601.0	600.1	600.4	596.3	592.5	590.9
5°	636.4	631.8	627.4	621.3	613.9	605.8	601.8	598.5	590.5	581.8	576.7
7.5°	657.7	651.2	642.8	631.2	620.5	607.8	599.8	592.7	581.0	568.7	561.1
10°	670.8	661.9	651.1	636.8	623.8	608.3	597.6	586.8	573.1	558.4	549.2
12.5°	682.0	669.9	659.3	641.1	625.6	606.3	593.6	578.3	563.9	546.4	537.5
15°	708.6	686.4	666.2	645.5	626.5	599.7	585.4	565.0	546.0	524.4	514.1
17.5°	729.2	704.2	672.5	646.2	624.0	594.2	573.4	549.0	526.4	501.8	487.8
20°	740.9	712.3	678.1	646.9	620.4	586.3	563.6	538.7	512.3	484.5	469.4
22.5°	747.9	717.8	684.0	644.2	613.0	580.0	551.4	523.9	497.3	467.3	451.4
25°	750.1	722.7	686.8	641.9	603.8	566.4	532.0	505.3	473.0	445.0	421.9
27.5°	739.2	719.5	685.1	637.5	593.2	549.5	511.1	481.0	446.9	416.5	393.1
30°	725.8	714.4	680.9	633.2	584.7	537.8	495.5	461.3	427.4	396.7	372.7
32.5°	705.1	702.7	673.2	626.9	575.7	522.9	479.2	444.6	407.0	376.8	354.1
35°	664.4	675.4	656.8	613.0	558.9	501.7	454.4	415.0	376.0	347.1	325.8
37.5°	609.8	637.1	632.3	592.6	535.9	478.7	426.5	385.3	348.1	318.9	298.0
40°	572.1	607.0	612.1	576.9	519.9	460.9	405.6	364.6	328.3	301.6	280.5
42.5°	531.8	572.5	586.3	558.3	502.2	442.1	386.9	344.4	308.4	282.6	263.9
45°	464.1	518.0	543.0	526.9	472.8	411.3	354.5	311.3	278.7	254.4	239.9
47.5°	400.8	459.7	493.3	487.7	440.1	379.2	323.0	281.6	249.8	230.5	217.5
50°	356.1	416.6	457.2	459.1	416.6	356.3	299.8	260.8	231.7	213.6	203.0
52.5°	317.1	375.0	419.2	429.0	390.3	332.4	279.1	240.2	214.6	197.9	188.5
55°	266.3	315.2	364.3	382.2	351.2	296.2	246.8	212.7	188.5	177.1	168.8
57.5°	221.5	262.2	307.5	327.3	308.2	261.1	214.8	185.1	165.6	155.5	149.2
60°	197.7	229.8	270.2	293.9	277.3	235.4	195.0	166.7	150.7	141.8	135.8
62.5°	175.7	204.2	238.3	259.9	251.0	211.4	175.2	150.3	136.4	128.1	123.7
65°	145.0	167.4	193.9	213.8	207.8	177.8	148.1	126.8	115.8	109.2	105.7
67.5°	119.4	135.6	153.9	171.4	166.6	145.3	121.6	104.9	96.7	91.0	88.9
70°	103.2	115.6	131.9	145.9	142.0	124.6	105.7	91.5	84.4	79.6	77.6
72.5°	87.9	98.0	110.5	121.9	119.3	104.7	89.1	78.4	72.8	68.4	66.8
75°	66.3	74.1	81.7	89.3	88.6	77.4	68.2	59.9	55.5	52.1	51.4
77.5°	49.0	53.3	58.5	62.9	61.7	55.2	48.1	43.3	40.2	37.9	37.5
80°	37.4	39.9	43.6	46.8	45.2	42.4	36.7	33.2	31.0	28.7	27.8
82.5°	27.2	29.6	31.8	33.6	32.3	29.8	26.3	23.9	22.5	21.0	20.6
85°	14.2	15.6	16.6	17.0	16.6	14.9	13.3	12.4	11.2	10.5	10.3
87.5°	9.6	9.1	8.7	8.6	7.4	6.8	5.5	4.2	4.7	5.2	5.4
90°	20.3	18.1	16.0	13.3	10.3	7.3	4.2	1.2	4.2	7.3	10.3
92.5°	26.5	25.3	24.2	23.8	24.1	24.4	24.6	24.9	24.6	24.4	24.1
95°	44.3	42.4	40.5	44.0	53.1	62.2	71.2	80.3	71.2	62.2	53.1
97.5°	55.5	51.1	46.7	57.3	82.8	108.3	133.8	159.4	133.8	108.3	82.8
100°	61.1	56.5	51.7	68.3	105.8	143.4	181.1	218.6	181.1	143.4	105.8
102.5°	150.5	189.5	228.5	252.1	260.0	267.9	275.9	283.9	275.9	267.9	260.0
105°	225.2	300.2	375.2	408.5	400.2	392.0	383.7	375.6	383.7	392.0	400.2
107.5°	285.3	375.2	465.0	506.6	500.0	493.3	486.7	480.1	486.7	493.3	500.0
110°	374.9	454.2	533.5	570.3	564.5	558.8	553.0	547.2	553.0	558.8	564.5





TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	584.5	604.1	623.7	631.0	625.8	620.7	615.6	610.5	615.6	620.7	625.8
115°	748.5	741.6	734.8	729.0	724.3	719.6	715.0	710.3	715.0	719.6	724.3
117.5°	834.8	830.0	825.4	820.4	815.2	809.9	804.8	799.5	804.8	809.9	815.2
120°	895.6	890.7	885.8	881.2	877.1	872.9	868.9	864.7	868.9	872.9	877.1
122.5°	953.0	947.7	942.3	937.5	933.1	928.8	924.4	920.1	924.4	928.8	933.1
125°	1033.4	1028.2	1023.0	1018.5	1015.0	1011.5	1007.8	1004.3	1007.8	1011.5	1015.0
127.5°	1108.2	1104.3	1100.4	1096.5	1092.6	1088.5	1084.6	1080.7	1084.6	1088.5	1092.6
130°	1156.4	1153.4	1150.3	1146.7	1142.3	1137.9	1133.5	1129.1	1133.5	1137.9	1142.3
132.5°	1202.9	1199.8	1196.8	1193.5	1189.7	1186.0	1182.2	1178.5	1182.2	1186.0	1189.7
135°	1268.7	1266.2	1263.7	1260.3	1255.9	1251.5	1247.1	1242.7	1247.1	1251.5	1255.9
137.5°	1328.6	1325.8	1322.9	1320.0	1317.0	1313.8	1310.8	1307.7	1310.8	1313.8	1317.0
140°	1367.7	1364.6	1361.6	1359.0	1356.8	1354.6	1352.4	1350.2	1352.4	1354.6	1356.8
142.5°	1403.3	1399.9	1396.4	1393.7	1391.7	1389.8	1387.8	1385.8	1387.8	1389.8	1391.7
145°	1452.1	1447.4	1442.7	1440.6	1440.8	1441.1	1441.4	1441.6	1441.4	1441.1	1440.8
147.5°	1497.1	1492.5	1487.9	1486.1	1487.1	1488.2	1489.2	1490.3	1489.2	1488.2	1487.1
150°	1524.3	1519.8	1515.5	1514.2	1516.1	1518.1	1520.0	1522.0	1520.0	1518.1	1516.1
152.5°	1549.4	1545.2	1541.1	1540.0	1542.2	1544.3	1546.5	1548.6	1546.5	1544.3	1542.2
155°	1584.5	1581.2	1577.9	1577.5	1579.9	1582.5	1584.9	1587.4	1584.9	1582.5	1579.9
157.5°	1614.2	1611.8	1609.5	1609.4	1611.5	1613.6	1615.7	1617.8	1615.7	1613.6	1611.5
160°	1632.2	1630.6	1629.0	1629.0	1630.6	1632.2	1634.0	1635.6	1634.0	1632.2	1630.6
162.5°	1647.5	1646.1	1644.7	1644.8	1646.5	1648.1	1649.7	1651.4	1649.7	1648.1	1646.5
165°	1667.3	1666.5	1665.7	1666.1	1667.7	1669.3	1671.0	1672.6	1671.0	1669.3	1667.7
167.5°	1682.9	1682.2	1681.4	1681.8	1683.5	1685.2	1686.8	1688.5	1686.8	1685.2	1683.5
170°	1691.3	1690.7	1690.2	1690.7	1692.4	1694.0	1695.7	1697.4	1695.7	1694.0	1692.4
172.5°	1697.2	1696.7	1696.2	1696.7	1698.3	1700.0	1701.6	1703.2	1701.6	1700.0	1698.3
175°	1703.6	1703.1	1702.5	1703.2	1705.2	1707.1	1709.0	1710.9	1709.0	1707.1	1705.2
177.5°	1705.8	1705.6	1705.4	1706.0	1707.6	1709.1	1710.6	1712.1	1710.6	1709.1	1707.6
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	589.1	587.9	584.1	582.1	578.8	575.6	573.6	574.5	575.2	574.9	574.3
5°	572.1	567.7	561.1	555.4	551.3	543.7	540.5	538.9	537.5	535.9	534.3
7.5°	552.0	545.1	535.6	527.5	519.8	510.3	504.9	501.8	498.5	494.8	491.6
10°	537.8	528.1	518.0	506.5	497.4	488.9	481.3	476.3	471.6	467.3	464.1
12.5°	522.7	511.6	499.1	483.4	473.3	461.1	460.0	451.1	443.9	441.2	437.5
15°	498.8	483.1	467.3	448.7	440.7	429.7	422.8	415.9	409.7	405.4	404.2
17.5°	471.5	451.3	435.6	422.2	409.1	397.8	391.4	386.0	380.8	375.1	374.3
20°	450.8	433.3	416.2	404.5	390.9	379.4	371.6	366.2	361.7	358.3	355.4
22.5°	431.1	412.0	396.3	383.5	370.2	360.9	354.8	349.4	345.8	342.0	339.2
25°	399.6	384.8	367.5	353.0	342.0	336.1	331.0	326.5	324.2	321.6	318.4
27.5°	372.0	355.5	339.4	328.2	318.5	313.3	309.6	306.5	304.4	302.9	301.0
30°	352.6	335.9	323.3	312.3	304.2	298.9	296.6	294.8	292.3	291.3	290.4
32.5°	333.9	318.8	308.0	298.4	290.8	287.3	285.3	283.6	281.7	280.7	278.8
35°	307.4	294.8	284.3	278.9	272.8	269.7	268.2	265.9	264.1	263.2	262.9
37.5°	282.5	271.6	264.6	257.8	255.2	253.4	251.2	249.6	249.0	248.9	248.6
40°	266.3	257.4	251.2	245.7	244.6	241.8	239.9	238.6	238.6	238.8	238.6
42.5°	251.7	243.6	238.1	233.4	232.1	230.5	228.5	228.5	228.8	229.6	228.8
45°	229.4	223.7	219.7	217.5	215.0	213.4	213.1	213.8	214.0	214.3	215.0
47.5°	208.9	205.1	201.6	199.0	197.9	197.7	197.4	198.6	199.8	200.2	201.2
50°	196.8	192.5	189.5	187.8	186.9	186.5	186.9	188.3	189.2	190.4	191.1
52.5°	183.3	180.2	178.1	176.8	176.5	176.8	176.8	178.4	179.9	180.4	180.7
55°	164.5	162.2	161.8	159.7	160.6	160.4	161.5	162.4	163.8	165.2	165.4
57.5°	145.7	143.9	142.7	142.9	143.2	144.2	145.1	146.7	148.1	149.7	149.8
60°	133.3	132.4	131.7	131.7	132.1	133.5	134.6	136.2	137.1	138.1	138.8
62.5°	121.9	121.0	120.3	120.7	121.9	122.7	124.0	124.9	125.8	126.7	127.0
65°	103.9	103.5	104.1	104.6	104.8	105.9	107.6	108.3	109.2	109.7	111.3
67.5°	87.4	87.5	87.4	88.0	89.4	89.6	91.1	92.7	92.9	93.8	94.8
70°	76.1	76.6	77.1	77.6	78.7	79.2	80.3	81.0	81.9	82.6	83.3
72.5°	65.8	65.9	66.4	66.3	67.4	68.3	69.3	70.0	70.9	71.8	72.4
75°	50.7	50.7	51.2	51.4	52.5	53.7	53.4	53.9	54.8	55.7	56.2
77.5°	37.1	36.6	37.1	37.3	37.7	38.6	38.8	39.4	40.5	40.2	40.7
80°	28.2	27.6	28.2	28.5	28.5	29.6	29.6	30.1	30.7	30.1	30.7
82.5°	20.1	19.8	20.3	20.4	20.7	20.8	21.1	21.2	21.9	21.6	21.9
85°	10.1	9.9	10.1	9.9	10.1	10.3	10.3	10.1	10.1	10.5	9.9
87.5°	5.8	6.2	6.4	6.8	7.1	7.4	7.4	7.7	8.0	7.9	8.1
90°	13.3	16.0	18.1	20.3	22.5	24.7	26.1	27.5	28.8	30.2	31.2
92.5°	23.8	24.2	25.3	26.5	27.6	28.7	29.4	30.1	30.8	31.5	32.0
95°	44.0	40.5	42.4	44.3	46.3	48.2	49.6	50.9	52.3	53.6	54.2
97.5°	57.3	46.7	51.1	55.5	60.1	64.5	65.5	66.7	67.8	68.9	69.6
100°	68.3	51.7	56.5	61.1	65.7	70.4	72.6	74.8	77.0	79.2	80.6
102.5°	252.1	228.5	189.5	150.5	111.4	72.4	75.2	78.1	81.0	83.8	85.6
105°	408.5	375.2	300.2	225.2	150.3	75.3	78.4	81.4	84.4	87.5	89.5
107.5°	506.6	465.0	375.2	285.3	195.4	105.5	102.4	99.4	96.2	93.2	92.2
110°	570.3	533.5	454.2	374.9	295.5	216.2	188.7	161.3	133.8	106.3	93.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	631.0	623.7	604.1	584.5	564.9	545.2	445.1	345.0	244.9	144.7	95.0
115°	729.0	734.8	741.6	748.5	755.4	762.2	635.1	508.0	380.9	253.8	180.4
117.5°	820.4	825.4	830.0	834.8	839.5	844.2	813.4	782.7	751.9	721.2	673.4
120°	881.2	885.8	890.7	895.6	900.6	905.4	908.8	912.1	915.3	918.7	901.8
122.5°	937.5	942.3	947.7	953.0	958.5	963.8	965.7	967.8	969.8	971.7	969.1
125°	1018.5	1023.0	1028.2	1033.4	1038.6	1043.9	1045.8	1047.7	1049.7	1051.6	1052.9
127.5°	1096.5	1100.4	1104.3	1108.2	1112.1	1116.0	1118.8	1121.6	1124.4	1127.2	1128.7
130°	1146.7	1150.3	1153.4	1156.4	1159.4	1162.5	1165.5	1168.5	1171.5	1174.5	1175.9
132.5°	1193.5	1196.8	1199.8	1202.9	1205.9	1208.9	1211.4	1214.1	1216.6	1219.2	1220.3
135°	1260.3	1263.7	1266.2	1268.7	1271.1	1273.6	1276.4	1279.1	1281.8	1284.6	1285.7
137.5°	1320.0	1322.9	1325.8	1328.6	1331.3	1334.1	1336.9	1339.5	1342.2	1344.9	1345.7
140°	1359.0	1361.6	1364.6	1367.7	1370.7	1373.7	1376.1	1378.7	1381.1	1383.6	1384.1
142.5°	1393.7	1396.4	1399.9	1403.3	1406.7	1410.3	1412.5	1414.7	1417.0	1419.3	1419.7
145°	1440.6	1442.7	1447.4	1452.1	1456.7	1461.4	1463.3	1465.2	1467.1	1469.1	1469.4
147.5°	1486.1	1487.9	1492.5	1497.1	1501.8	1506.3	1507.8	1509.2	1510.7	1512.1	1512.2
150°	1514.2	1515.5	1519.8	1524.3	1528.6	1533.1	1534.7	1536.3	1538.0	1539.6	1539.7
152.5°	1540.0	1541.1	1545.2	1549.4	1553.6	1557.7	1559.4	1561.0	1562.7	1564.4	1564.3
155°	1577.5	1577.9	1581.2	1584.5	1587.8	1591.1	1592.8	1594.4	1596.1	1597.7	1597.4
157.5°	1609.4	1609.5	1611.8	1614.2	1616.5	1618.8	1620.6	1622.6	1624.4	1626.3	1626.1
160°	1629.0	1629.0	1630.6	1632.2	1634.0	1635.6	1637.2	1638.9	1640.5	1642.1	1642.0
162.5°	1644.8	1644.7	1646.1	1647.5	1649.0	1650.4	1652.2	1654.2	1656.0	1657.9	1657.6
165°	1666.1	1665.7	1666.5	1667.3	1668.1	1668.9	1670.8	1672.7	1674.7	1676.6	1676.6
167.5°	1681.8	1681.4	1682.2	1682.9	1683.7	1684.5	1686.4	1688.3	1690.2	1692.1	1691.9
170°	1690.7	1690.2	1690.7	1691.3	1691.8	1692.4	1694.4	1696.3	1698.2	1700.1	1699.8
172.5°	1696.7	1696.2	1696.7	1697.2	1697.8	1698.3	1700.2	1702.1	1704.0	1706.0	1705.8
175°	1703.2	1702.5	1703.1	1703.6	1704.2	1704.8	1706.7	1708.6	1710.5	1712.4	1712.0
177.5°	1706.0	1705.4	1705.6	1705.8	1706.0	1706.3	1707.8	1709.3	1710.8	1712.4	1712.1
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	572.5	572.1	572.1	570.5	572.1	572.1	572.5	574.3	574.9	575.2	574.5
5°	531.1	530.4	529.3	530.4	529.3	530.4	531.1	534.3	535.9	537.5	538.9
7.5°	490.1	487.4	487.0	484.2	487.0	487.4	490.1	491.6	494.8	498.5	501.8
10°	460.2	458.4	458.1	453.7	458.1	458.4	460.2	464.1	467.3	471.6	476.3
12.5°	437.5	433.0	433.9	431.4	433.9	433.0	437.5	437.5	441.2	443.9	451.1
15°	398.0	398.0	397.1	393.2	397.1	398.0	398.0	404.2	405.4	409.7	415.9
17.5°	369.7	369.2	367.1	368.2	367.1	369.2	369.7	374.3	375.1	380.8	386.0
20°	352.8	351.4	348.7	348.7	348.7	351.4	352.8	355.4	358.3	361.7	366.2
22.5°	336.9	336.8	333.9	334.8	333.9	336.8	336.9	339.2	342.0	345.8	349.4
25°	318.2	316.4	315.0	315.7	315.0	316.4	318.2	318.4	321.6	324.2	326.5
27.5°	300.4	299.4	299.3	297.5	299.3	299.4	300.4	301.0	302.9	304.4	306.5
30°	290.2	287.9	288.3	287.2	288.3	287.9	290.2	290.4	291.3	292.3	294.8
32.5°	278.4	277.6	277.2	276.2	277.2	277.6	278.4	278.8	280.7	281.7	283.6
35°	262.5	262.7	261.6	262.0	261.6	262.7	262.5	262.9	263.2	264.1	265.9
37.5°	248.4	249.1	248.6	248.7	248.6	249.1	248.4	248.6	248.9	249.0	249.6
40°	239.2	239.2	239.2	239.9	239.2	239.2	239.2	238.6	238.8	238.6	238.6
42.5°	230.5	230.0	229.7	229.6	229.7	230.0	230.5	228.8	229.6	228.8	228.5
45°	215.4	216.1	216.3	215.2	216.3	216.1	215.4	215.0	214.3	214.0	213.8
47.5°	201.8	201.9	201.8	202.8	201.8	201.9	201.8	201.2	200.2	199.8	198.6
50°	192.3	191.8	192.3	191.8	192.3	191.8	192.3	191.1	190.4	189.2	188.3
52.5°	182.2	182.3	182.0	181.9	182.0	182.3	182.2	180.7	180.4	179.9	178.4
55°	166.3	166.7	166.5	166.5	166.5	166.7	166.3	165.4	165.2	163.8	162.4
57.5°	150.0	150.4	150.7	149.7	150.7	150.4	150.0	149.8	149.7	148.1	146.7
60°	138.6	139.7	139.5	139.1	139.5	139.7	138.6	138.8	138.1	137.1	136.2
62.5°	128.1	128.6	128.5	128.4	128.5	128.6	128.1	127.0	126.7	125.8	124.9
65°	112.0	112.4	111.7	112.4	111.7	112.4	112.0	111.3	109.7	109.2	108.3
67.5°	94.5	94.7	95.2	95.5	95.2	94.7	94.5	94.8	93.8	92.9	92.7
70°	83.7	83.5	84.2	84.9	84.2	83.5	83.7	83.3	82.6	81.9	81.0
72.5°	72.3	72.8	72.6	73.1	72.6	72.8	72.3	72.4	71.8	70.9	70.0
75°	55.7	56.5	56.2	56.9	56.2	56.5	55.7	56.2	55.7	54.8	53.9
77.5°	40.3	40.4	40.3	40.7	40.3	40.4	40.3	40.7	40.2	40.5	39.4
80°	30.7	30.3	29.8	30.7	29.8	30.3	30.7	30.7	30.1	30.7	30.1
82.5°	21.4	21.6	21.2	21.2	21.2	21.6	21.4	21.9	21.6	21.9	21.2
85°	9.9	9.6	9.2	9.2	9.2	9.6	9.9	9.9	10.5	10.1	10.1
87.5°	8.2	8.1	8.2	8.2	8.2	8.1	8.2	8.1	7.9	8.0	7.7
90°	31.7	32.2	32.8	33.3	32.8	32.2	31.7	31.2	30.2	28.8	27.5
92.5°	32.3	32.7	33.0	33.3	33.0	32.7	32.3	32.0	31.5	30.8	30.1
95°	53.9	53.6	53.4	53.1	53.4	53.6	53.9	54.2	53.6	52.3	50.9
97.5°	69.9	70.3	70.6	70.9	70.6	70.3	69.9	69.6	68.9	67.8	66.7
100°	81.1	81.7	82.2	82.8	82.2	81.7	81.1	80.6	79.2	77.0	74.8
102.5°	86.3	87.2	88.0	88.7	88.0	87.2	86.3	85.6	83.8	81.0	78.1
105°	90.6	91.7	92.8	93.9	92.8	91.7	90.6	89.5	87.5	84.4	81.4
107.5°	93.3	94.4	95.5	96.6	95.5	94.4	93.3	92.2	93.2	96.2	99.4
110°	94.3	95.4	96.5	97.6	96.5	95.4	94.3	93.2	106.3	133.8	161.3



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	95.9	96.8	97.7	98.6	97.7	96.8	95.9	95.0	144.7	244.9	345.0
115°	160.6	140.9	121.1	101.3	121.1	140.9	160.6	180.4	253.8	380.9	508.0
117.5°	608.4	543.5	478.6	413.5	478.6	543.5	608.4	673.4	721.2	751.9	782.7
120°	864.7	827.7	790.6	753.6	790.6	827.7	864.7	901.8	918.7	915.3	912.1
122.5°	961.9	954.7	947.6	940.3	947.6	954.7	961.9	969.1	971.7	969.8	967.8
125°	1053.7	1054.6	1055.4	1056.2	1055.4	1054.6	1053.7	1052.9	1051.6	1049.7	1047.7
127.5°	1128.8	1129.0	1129.1	1129.3	1129.1	1129.0	1128.8	1128.7	1127.2	1124.4	1121.6
130°	1175.6	1175.4	1175.1	1174.8	1175.1	1175.4	1175.6	1175.9	1174.5	1171.5	1168.5
132.5°	1220.1	1219.8	1219.5	1219.3	1219.5	1219.8	1220.1	1220.3	1219.2	1216.6	1214.1
135°	1285.2	1284.6	1284.0	1283.5	1284.0	1284.6	1285.2	1285.7	1284.6	1281.8	1279.1
137.5°	1344.8	1343.9	1343.0	1342.0	1343.0	1343.9	1344.8	1345.7	1344.9	1342.2	1339.5
140°	1382.7	1381.4	1380.0	1378.7	1380.0	1381.4	1382.7	1384.1	1383.6	1381.1	1378.7
142.5°	1418.4	1416.9	1415.5	1414.2	1415.5	1416.9	1418.4	1419.7	1419.3	1417.0	1414.7
145°	1467.9	1466.6	1465.2	1463.9	1465.2	1466.6	1467.9	1469.4	1469.1	1467.1	1465.2
147.5°	1511.1	1509.8	1508.7	1507.6	1508.7	1509.8	1511.1	1512.2	1512.1	1510.7	1509.2
150°	1538.4	1537.0	1535.6	1534.3	1535.6	1537.0	1538.4	1539.7	1539.6	1538.0	1536.3
152.5°	1562.5	1560.6	1558.8	1557.0	1558.8	1560.6	1562.5	1564.3	1564.4	1562.7	1561.0
155°	1595.2	1593.1	1590.8	1588.6	1590.8	1593.1	1595.2	1597.4	1597.7	1596.1	1594.4
157.5°	1624.0	1621.8	1619.7	1617.5	1619.7	1621.8	1624.0	1626.1	1626.3	1624.4	1622.6
160°	1640.1	1638.2	1636.3	1634.4	1636.3	1638.2	1640.1	1642.0	1642.1	1640.5	1638.9
162.5°	1655.3	1652.8	1650.5	1648.2	1650.5	1652.8	1655.3	1657.6	1657.9	1656.0	1654.2
165°	1674.7	1672.7	1670.8	1668.9	1670.8	1672.7	1674.7	1676.6	1676.6	1674.7	1672.7
167.5°	1689.4	1687.0	1684.5	1682.0	1684.5	1687.0	1689.4	1691.9	1692.1	1690.2	1688.3
170°	1697.4	1694.9	1692.4	1689.9	1692.4	1694.9	1697.4	1699.8	1700.1	1698.2	1696.3
172.5°	1703.2	1700.8	1698.3	1695.9	1698.3	1700.8	1703.2	1705.8	1706.0	1704.0	1702.1
175°	1709.3	1706.6	1703.7	1701.0	1703.7	1706.6	1709.3	1712.0	1712.4	1710.5	1708.6
177.5°	1710.2	1708.2	1706.3	1704.2	1706.3	1708.2	1710.2	1712.1	1712.4	1710.8	1709.3
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	573.6	575.6	578.8	582.1	584.1	587.9	589.1	590.9	592.5	596.3	600.4
5°	540.5	543.7	551.3	555.4	561.1	567.7	572.1	576.7	581.8	590.5	598.5
7.5°	504.9	510.3	519.8	527.5	535.6	545.1	552.0	561.1	568.7	581.0	592.7
10°	481.3	488.9	497.4	506.5	518.0	528.1	537.8	549.2	558.4	573.1	586.8
12.5°	460.0	461.1	473.3	483.4	499.1	511.6	522.7	537.5	546.4	563.9	578.3
15°	422.8	429.7	440.7	448.7	467.3	483.1	498.8	514.1	524.4	546.0	565.0
17.5°	391.4	397.8	409.1	422.2	435.6	451.3	471.5	487.8	501.8	526.4	549.0
20°	371.6	379.4	390.9	404.5	416.2	433.3	450.8	469.4	484.5	512.3	538.7
22.5°	354.8	360.9	370.2	383.5	396.3	412.0	431.1	451.4	467.3	497.3	523.9
25°	331.0	336.1	342.0	353.0	367.5	384.8	399.6	421.9	445.0	473.0	505.3
27.5°	309.6	313.3	318.5	328.2	339.4	355.5	372.0	393.1	416.5	446.9	481.0
30°	296.6	298.9	304.2	312.3	323.3	335.9	352.6	372.7	396.7	427.4	461.3
32.5°	285.3	287.3	290.8	298.4	308.0	318.8	333.9	354.1	376.8	407.0	444.6
35°	268.2	269.7	272.8	278.9	284.3	294.8	307.4	325.8	347.1	376.0	415.0
37.5°	251.2	253.4	255.2	257.8	264.6	271.6	282.5	298.0	318.9	348.1	385.3
40°	239.9	241.8	244.6	245.7	251.2	257.4	266.3	280.5	301.6	328.3	364.6
42.5°	228.5	230.5	232.1	233.4	238.1	243.6	251.7	263.9	282.6	308.4	344.4
45°	213.1	213.4	215.0	217.5	219.7	223.7	229.4	239.9	254.4	278.7	311.3
47.5°	197.4	197.7	197.9	199.0	201.6	205.1	208.9	217.5	230.5	249.8	281.6
50°	186.9	186.5	186.9	187.8	189.5	192.5	196.8	203.0	213.6	231.7	260.8
52.5°	176.8	176.8	176.5	176.8	178.1	180.2	183.3	188.5	197.9	214.6	240.2
55°	161.5	160.4	160.6	159.7	161.8	162.2	164.5	168.8	177.1	188.5	212.7
57.5°	145.1	144.2	143.2	142.9	142.7	143.9	145.7	149.2	155.5	165.6	185.1
60°	134.6	133.5	132.1	131.7	131.7	132.4	133.3	135.8	141.8	150.7	166.7
62.5°	124.0	122.7	121.9	120.7	120.3	121.0	121.9	123.7	128.1	136.4	150.3
65°	107.6	105.9	104.8	104.6	104.1	103.5	103.9	105.7	109.2	115.8	126.8
67.5°	91.1	89.6	89.4	88.0	87.4	87.5	87.4	88.9	91.0	96.7	104.9
70°	80.3	79.2	78.7	77.6	77.1	76.6	76.1	77.6	79.6	84.4	91.5
72.5°	69.3	68.3	67.4	66.3	66.4	65.9	65.8	66.8	68.4	72.8	78.4
75°	53.4	53.7	52.5	51.4	51.2	50.7	50.7	51.4	52.1	55.5	59.9
77.5°	38.8	38.6	37.7	37.3	37.1	36.6	37.1	37.5	37.9	40.2	43.3
80°	29.6	29.6	28.5	28.5	28.2	27.6	28.2	27.8	28.7	31.0	33.2
82.5°	21.1	20.8	20.7	20.4	20.3	19.8	20.1	20.6	21.0	22.5	23.9
85°	10.3	10.3	10.1	9.9	10.1	9.9	10.1	10.3	10.5	11.2	12.4
87.5°	7.4	7.4	7.1	6.8	6.4	6.2	5.8	5.4	5.2	4.7	4.2
90°	26.1	24.7	22.5	20.3	18.1	16.0	13.3	10.3	7.3	4.2	1.2
92.5°	29.4	28.7	27.6	26.5	25.3	24.2	23.8	24.1	24.4	24.6	24.9
95°	49.6	48.2	46.3	44.3	42.4	40.5	44.0	53.1	62.2	71.2	80.3
97.5°	65.5	64.5	60.1	55.5	51.1	46.7	57.3	82.8	108.3	133.8	159.4
100°	72.6	70.4	65.7	61.1	56.5	51.7	68.3	105.8	143.4	181.1	218.6
102.5°	75.2	72.4	111.4	150.5	189.5	228.5	252.1	260.0	267.9	275.9	283.9
105°	78.4	75.3	150.3	225.2	300.2	375.2	408.5	400.2	392.0	383.7	375.6
107.5°	102.4	105.5	195.4	285.3	375.2	465.0	506.6	500.0	493.3	486.7	480.1
110°	188.7	216.2	295.5	374.9	454.2	533.5	570.3	564.5	558.8	553.0	547.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	445.1	545.2	564.9	584.5	604.1	623.7	631.0	625.8	620.7	615.6	610.5
115°	635.1	762.2	755.4	748.5	741.6	734.8	729.0	724.3	719.6	715.0	710.3
117.5°	813.4	844.2	839.5	834.8	830.0	825.4	820.4	815.2	809.9	804.8	799.5
120°	908.8	905.4	900.6	895.6	890.7	885.8	881.2	877.1	872.9	868.9	864.7
122.5°	965.7	963.8	958.5	953.0	947.7	942.3	937.5	933.1	928.8	924.4	920.1
125°	1045.8	1043.9	1038.6	1033.4	1028.2	1023.0	1018.5	1015.0	1011.5	1007.8	1004.3
127.5°	1118.8	1116.0	1112.1	1108.2	1104.3	1100.4	1096.5	1092.6	1088.5	1084.6	1080.7
130°	1165.5	1162.5	1159.4	1156.4	1153.4	1150.3	1146.7	1142.3	1137.9	1133.5	1129.1
132.5°	1211.4	1208.9	1205.9	1202.9	1199.8	1196.8	1193.5	1189.7	1186.0	1182.2	1178.5
135°	1276.4	1273.6	1271.1	1268.7	1266.2	1263.7	1260.3	1255.9	1251.5	1247.1	1242.7
137.5°	1336.9	1334.1	1331.3	1328.6	1325.8	1322.9	1320.0	1317.0	1313.8	1310.8	1307.7
140°	1376.1	1373.7	1370.7	1367.7	1364.6	1361.6	1359.0	1356.8	1354.6	1352.4	1350.2
142.5°	1412.5	1410.3	1406.7	1403.3	1399.9	1396.4	1393.7	1391.7	1389.8	1387.8	1385.8
145°	1463.3	1461.4	1456.7	1452.1	1447.4	1442.7	1440.6	1440.8	1441.1	1441.4	1441.6
147.5°	1507.8	1506.3	1501.8	1497.1	1492.5	1487.9	1486.1	1487.1	1488.2	1489.2	1490.3
150°	1534.7	1533.1	1528.6	1524.3	1519.8	1515.5	1514.2	1516.1	1518.1	1520.0	1522.0
152.5°	1559.4	1557.7	1553.6	1549.4	1545.2	1541.1	1540.0	1542.2	1544.3	1546.5	1548.6
155°	1592.8	1591.1	1587.8	1584.5	1581.2	1577.9	1577.5	1579.9	1582.5	1584.9	1587.4
157.5°	1620.6	1618.8	1616.5	1614.2	1611.8	1609.5	1609.4	1611.5	1613.6	1615.7	1617.8
160°	1637.2	1635.6	1634.0	1632.2	1630.6	1629.0	1629.0	1630.6	1632.2	1634.0	1635.6
162.5°	1652.2	1650.4	1649.0	1647.5	1646.1	1644.7	1644.8	1646.5	1648.1	1649.7	1651.4
165°	1670.8	1668.9	1668.1	1667.3	1666.5	1665.7	1666.1	1667.7	1669.3	1671.0	1672.6
167.5°	1686.4	1684.5	1683.7	1682.9	1682.2	1681.4	1681.8	1683.5	1685.2	1686.8	1688.5
170°	1694.4	1692.4	1691.8	1691.3	1690.7	1690.2	1690.7	1692.4	1694.0	1695.7	1697.4
172.5°	1700.2	1698.3	1697.8	1697.2	1696.7	1696.2	1696.7	1698.3	1700.0	1701.6	1703.2
175°	1706.7	1704.8	1704.2	1703.6	1703.1	1702.5	1703.2	1705.2	1707.1	1709.0	1710.9
177.5°	1707.8	1706.3	1706.0	1705.8	1705.6	1705.4	1706.0	1707.6	1709.1	1710.6	1712.1
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	600.1	601.0	603.9	606.8	610.2	611.1	612.5	611.3	610.9	614.3	616.9
5°	601.8	605.8	613.9	621.3	627.4	631.8	636.4	638.2	641.7	646.4	652.5
7.5°	599.8	607.8	620.5	631.2	642.8	651.2	657.7	663.4	670.1	679.2	689.2
10°	597.6	608.3	623.8	636.8	651.1	661.9	670.8	679.5	689.6	702.3	715.3
12.5°	593.6	606.3	625.6	641.1	659.3	669.9	682.0	700.7	711.7	729.2	747.6
15°	585.4	599.7	626.5	645.5	666.2	686.4	708.6	726.5	744.4	754.8	780.6
17.5°	573.4	594.2	624.0	646.2	672.5	704.2	729.2	749.5	770.1	786.9	799.9
20°	563.6	586.3	620.4	646.9	678.1	712.3	740.9	761.6	779.5	793.6	801.5
22.5°	551.4	580.0	613.0	644.2	684.0	717.8	747.9	764.2	779.1	786.0	789.1
25°	532.0	566.4	603.8	641.9	686.8	722.7	750.1	760.0	764.4	757.7	746.7
27.5°	511.1	549.5	593.2	637.5	685.1	719.5	739.2	737.7	730.3	708.7	691.6
30°	495.5	537.8	584.7	633.2	680.9	714.4	725.8	714.4	697.6	673.6	648.9
32.5°	479.2	522.9	575.7	626.9	673.2	702.7	705.1	685.4	659.4	632.1	601.5
35°	454.4	501.7	558.9	613.0	656.8	675.4	664.4	629.4	598.7	561.4	519.6
37.5°	426.5	478.7	535.9	592.6	632.3	637.1	609.8	573.1	529.7	485.7	436.6
40°	405.6	460.9	519.9	576.9	612.1	607.0	572.1	531.8	480.2	426.5	380.8
42.5°	386.9	442.1	502.2	558.3	586.3	572.5	531.8	482.2	426.8	376.2	334.4
45°	354.5	411.3	472.8	526.9	543.0	518.0	464.1	409.0	354.5	312.3	279.2
47.5°	323.0	379.2	440.1	487.7	493.3	459.7	400.8	344.2	297.2	262.9	239.5
50°	299.8	356.3	416.6	459.1	457.2	416.6	356.1	302.2	262.9	235.1	219.5
52.5°	279.1	332.4	390.3	429.0	419.2	375.0	317.1	269.2	237.0	215.3	201.2
55°	246.8	296.2	351.2	382.2	364.3	315.2	266.3	227.8	203.9	187.6	176.6
57.5°	214.8	261.1	308.2	327.3	307.5	262.2	221.5	193.5	175.5	163.5	156.3
60°	195.0	235.4	277.3	293.9	270.2	229.8	197.7	172.8	158.2	148.5	142.0
62.5°	175.2	211.4	251.0	259.9	238.3	204.2	175.7	154.9	143.1	134.3	128.3
65°	148.1	177.8	207.8	213.8	193.9	167.4	145.0	131.5	120.9	114.5	109.7
67.5°	121.6	145.3	166.6	171.4	153.9	135.6	119.4	107.6	100.5	95.1	91.0
70°	105.7	124.6	142.0	145.9	131.9	115.6	103.2	93.8	87.4	82.8	78.9
72.5°	89.1	104.7	119.3	121.9	110.5	98.0	87.9	80.4	74.7	71.8	68.1
75°	68.2	77.4	88.6	89.3	81.7	74.1	66.3	61.5	58.5	54.8	53.0
77.5°	48.1	55.2	61.7	62.9	58.5	53.3	49.0	45.1	42.6	40.9	39.2
80°	36.7	42.4	45.2	46.8	43.6	39.9	37.4	34.8	33.2	32.1	31.0
82.5°	26.3	29.8	32.3	33.6	31.8	29.6	27.2	25.7	24.4	23.5	23.1
85°	13.3	14.9	16.6	17.0	16.6	15.6	14.2	14.2	13.5	13.3	13.3
87.5°	5.5	6.8	7.4	8.6	8.7	9.1	9.6	9.8	10.1	10.2	10.3
90°	4.2	7.3	10.3	13.3	16.0	18.1	20.3	22.5	24.7	26.1	27.5
92.5°	24.6	24.4	24.1	23.8	24.2	25.3	26.5	27.6	28.7	29.4	30.1
95°	71.2	62.2	53.1	44.0	40.5	42.4	44.3	46.3	48.2	49.6	50.9
97.5°	133.8	108.3	82.8	57.3	46.7	51.1	55.5	60.1	64.5	65.5	66.7
100°	181.1	143.4	105.8	68.3	51.7	56.5	61.1	65.7	70.4	72.6	74.8
102.5°	275.9	267.9	260.0	252.1	228.5	189.5	150.5	111.4	72.4	75.2	78.1
105°	383.7	392.0	400.2	408.5	375.2	300.2	225.2	150.3	75.3	78.4	81.4
107.5°	486.7	493.3	500.0	506.6	465.0	375.2	285.3	195.4	105.5	102.4	99.4
110°	553.0	558.8	564.5	570.3	533.5	454.2	374.9	295.5	216.2	188.7	161.3





TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	615.6	620.7	625.8	631.0	623.7	604.1	584.5	564.9	545.2	445.1	345.0
115°	715.0	719.6	724.3	729.0	734.8	741.6	748.5	755.4	762.2	635.1	508.0
117.5°	804.8	809.9	815.2	820.4	825.4	830.0	834.8	839.5	844.2	813.4	782.7
120°	868.9	872.9	877.1	881.2	885.8	890.7	895.6	900.6	905.4	908.8	912.1
122.5°	924.4	928.8	933.1	937.5	942.3	947.7	953.0	958.5	963.8	965.7	967.8
125°	1007.8	1011.5	1015.0	1018.5	1023.0	1028.2	1033.4	1038.6	1043.9	1045.8	1047.7
127.5°	1084.6	1088.5	1092.6	1096.5	1100.4	1104.3	1108.2	1112.1	1116.0	1118.8	1121.6
130°	1133.5	1137.9	1142.3	1146.7	1150.3	1153.4	1156.4	1159.4	1162.5	1165.5	1168.5
132.5°	1182.2	1186.0	1189.7	1193.5	1196.8	1199.8	1202.9	1205.9	1208.9	1211.4	1214.1
135°	1247.1	1251.5	1255.9	1260.3	1263.7	1266.2	1268.7	1271.1	1273.6	1276.4	1279.1
137.5°	1310.8	1313.8	1317.0	1320.0	1322.9	1325.8	1328.6	1331.3	1334.1	1336.9	1339.5
140°	1352.4	1354.6	1356.8	1359.0	1361.6	1364.6	1367.7	1370.7	1373.7	1376.1	1378.7
142.5°	1387.8	1389.8	1391.7	1393.7	1396.4	1399.9	1403.3	1406.7	1410.3	1412.5	1414.7
145°	1441.4	1441.1	1440.8	1440.6	1442.7	1447.4	1452.1	1456.7	1461.4	1463.3	1465.2
147.5°	1489.2	1488.2	1487.1	1486.1	1487.9	1492.5	1497.1	1501.8	1506.3	1507.8	1509.2
150°	1520.0	1518.1	1516.1	1514.2	1515.5	1519.8	1524.3	1528.6	1533.1	1534.7	1536.3
152.5°	1546.5	1544.3	1542.2	1540.0	1541.1	1545.2	1549.4	1553.6	1557.7	1559.4	1561.0
155°	1584.9	1582.5	1579.9	1577.5	1577.9	1581.2	1584.5	1587.8	1591.1	1592.8	1594.4
157.5°	1615.7	1613.6	1611.5	1609.4	1609.5	1611.8	1614.2	1616.5	1618.8	1620.6	1622.6
160°	1634.0	1632.2	1630.6	1629.0	1629.0	1630.6	1632.2	1634.0	1635.6	1637.2	1638.9
162.5°	1649.7	1648.1	1646.5	1644.8	1644.7	1646.1	1647.5	1649.0	1650.4	1652.2	1654.2
165°	1671.0	1669.3	1667.7	1666.1	1665.7	1666.5	1667.3	1668.1	1668.9	1670.8	1672.7
167.5°	1686.8	1685.2	1683.5	1681.8	1681.4	1682.2	1682.9	1683.7	1684.5	1686.4	1688.3
170°	1695.7	1694.0	1692.4	1690.7	1690.2	1690.7	1691.3	1691.8	1692.4	1694.4	1696.3
172.5°	1701.6	1700.0	1698.3	1696.7	1696.2	1696.7	1697.2	1697.8	1698.3	1700.2	1702.1
175°	1709.0	1707.1	1705.2	1703.2	1702.5	1703.1	1703.6	1704.2	1704.8	1706.7	1708.6
177.5°	1710.6	1709.1	1707.6	1706.0	1705.4	1705.6	1705.8	1706.0	1706.3	1707.8	1709.3
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	596.9	596.9	596.9	596.9	596.9	596.9	596.9
2.5°	619.1	621.7	621.7	622.1	625.0	624.6	624.4
5°	658.8	662.8	663.2	667.3	670.0	669.1	666.6
7.5°	696.3	703.6	709.1	712.2	715.8	718.0	717.0
10°	726.1	736.6	743.1	747.4	752.7	756.6	755.2
12.5°	753.1	765.6	774.5	781.9	782.5	787.6	784.2
15°	795.2	808.4	809.8	815.3	819.7	819.2	819.4
17.5°	809.0	813.2	814.2	814.3	814.4	812.7	809.2
20°	804.1	802.4	798.6	795.6	790.3	789.6	785.1
22.5°	780.5	775.5	765.7	759.2	751.0	748.9	747.6
25°	734.4	723.1	707.5	692.6	688.4	680.4	682.7
27.5°	670.9	653.4	636.4	624.4	613.4	601.4	604.8
30°	626.3	606.5	582.7	564.3	552.6	541.2	539.1
32.5°	573.1	544.1	517.6	501.4	483.4	476.2	468.3
35°	481.3	453.0	426.7	403.9	390.9	380.8	371.6
37.5°	398.8	366.3	345.0	326.6	317.1	311.3	312.9
40°	347.6	319.1	303.5	289.5	280.7	276.7	277.6
42.5°	306.1	284.8	272.0	262.4	256.2	253.9	253.4
45°	259.0	247.1	236.5	231.1	228.0	225.5	223.9
47.5°	226.9	217.1	211.2	207.9	205.3	202.8	202.7
50°	207.6	201.2	197.0	193.6	191.6	189.8	191.4
52.5°	192.9	187.0	182.9	179.9	179.0	177.4	177.3
55°	171.2	166.5	163.6	160.8	159.5	158.5	157.3
57.5°	151.3	146.9	144.2	142.5	139.9	139.0	138.6
60°	137.1	133.7	131.0	128.7	127.5	125.7	125.7
62.5°	124.1	120.7	118.2	116.4	114.5	113.8	114.0
65°	105.3	102.5	100.0	98.2	97.8	96.3	96.8
67.5°	88.0	86.1	83.4	82.4	81.6	80.9	80.3
70°	76.3	74.5	73.2	71.8	71.1	71.1	71.1
72.5°	66.7	64.4	63.6	61.9	62.3	61.6	60.8
75°	51.6	50.2	49.6	48.9	47.8	47.8	47.8
77.5°	38.0	37.6	36.8	36.1	35.7	35.5	35.6
80°	29.4	29.1	28.7	28.7	28.2	28.0	27.6
82.5°	22.6	22.0	21.7	21.5	21.4	21.4	21.3
85°	12.8	12.4	12.4	12.6	12.1	12.1	12.4
87.5°	10.7	11.0	11.0	11.1	11.4	11.3	11.4
90°	28.8	30.2	31.2	31.7	32.2	32.8	33.3
92.5°	30.8	31.5	32.0	32.3	32.7	33.0	33.3
95°	52.3	53.6	54.2	53.9	53.6	53.4	53.1
97.5°	67.8	68.9	69.6	69.9	70.3	70.6	70.9
100°	77.0	79.2	80.6	81.1	81.7	82.2	82.8
102.5°	81.0	83.8	85.6	86.3	87.2	88.0	88.7
105°	84.4	87.5	89.5	90.6	91.7	92.8	93.9
107.5°	96.2	93.2	92.2	93.3	94.4	95.5	96.6
110°	133.8	106.3	93.2	94.3	95.4	96.5	97.6



TEST NUMBER: P331483-840

CATALOG NUMBER: S122DIW-S290D1240U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	244.9	144.7	95.0	95.9	96.8	97.7	98.6
115°	380.9	253.8	180.4	160.6	140.9	121.1	101.3
117.5°	751.9	721.2	673.4	608.4	543.5	478.6	413.5
120°	915.3	918.7	901.8	864.7	827.7	790.6	753.6
122.5°	969.8	971.7	969.1	961.9	954.7	947.6	940.3
125°	1049.7	1051.6	1052.9	1053.7	1054.6	1055.4	1056.2
127.5°	1124.4	1127.2	1128.7	1128.8	1129.0	1129.1	1129.3
130°	1171.5	1174.5	1175.9	1175.6	1175.4	1175.1	1174.8
132.5°	1216.6	1219.2	1220.3	1220.1	1219.8	1219.5	1219.3
135°	1281.8	1284.6	1285.7	1285.2	1284.6	1284.0	1283.5
137.5°	1342.2	1344.9	1345.7	1344.8	1343.9	1343.0	1342.0
140°	1381.1	1383.6	1384.1	1382.7	1381.4	1380.0	1378.7
142.5°	1417.0	1419.3	1419.7	1418.4	1416.9	1415.5	1414.2
145°	1467.1	1469.1	1469.4	1467.9	1466.6	1465.2	1463.9
147.5°	1510.7	1512.1	1512.2	1511.1	1509.8	1508.7	1507.6
150°	1538.0	1539.6	1539.7	1538.4	1537.0	1535.6	1534.3
152.5°	1562.7	1564.4	1564.3	1562.5	1560.6	1558.8	1557.0
155°	1596.1	1597.7	1597.4	1595.2	1593.1	1590.8	1588.6
157.5°	1624.4	1626.3	1626.1	1624.0	1621.8	1619.7	1617.5
160°	1640.5	1642.1	1642.0	1640.1	1638.2	1636.3	1634.4
162.5°	1656.0	1657.9	1657.6	1655.3	1652.8	1650.5	1648.2
165°	1674.7	1676.6	1676.6	1674.7	1672.7	1670.8	1668.9
167.5°	1690.2	1692.1	1691.9	1689.4	1687.0	1684.5	1682.0
170°	1698.2	1700.1	1699.8	1697.4	1694.9	1692.4	1689.9
172.5°	1704.0	1706.0	1705.8	1703.2	1700.8	1698.3	1695.9
175°	1710.5	1712.4	1712.0	1709.3	1706.6	1703.7	1701.0
177.5°	1710.8	1712.4	1712.1	1710.2	1708.2	1706.3	1704.2
180°	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2	1707.2

(END OF REPORT)