

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: P331489

Luminaire Tested: **S122DIW-S290D1440U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331489
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-S290D1440U835-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1440 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7068.9 lumens
Efficiency: N/A
Efficacy: 132.4 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

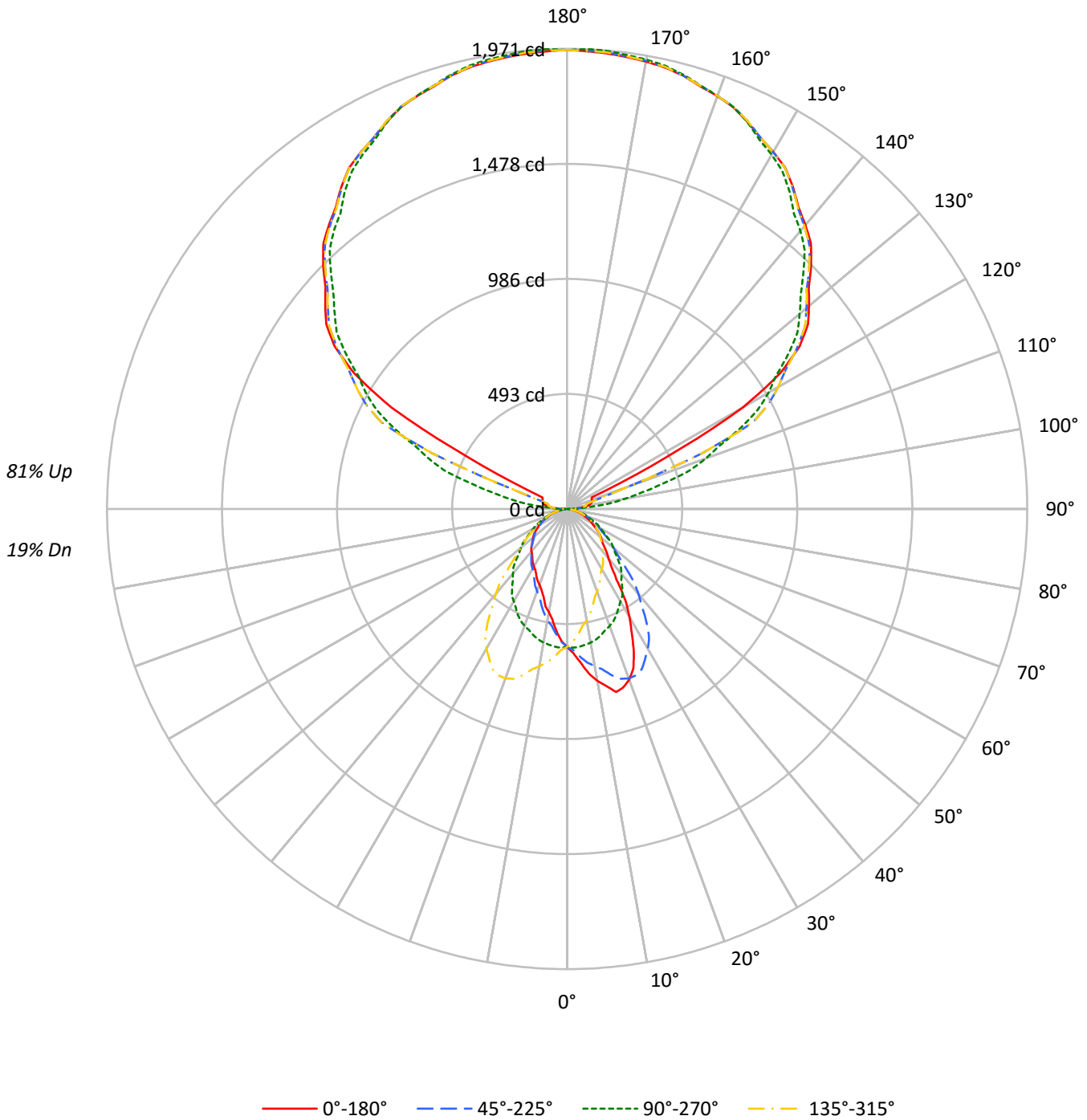
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-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	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	40	39	38	24	24	23	16
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	76	67	60	55	66	59	54	49	45	41	38	32	29	27	19	18	17	12
4	69	59	52	46	61	52	46	41	40	36	32	28	26	23	17	16	15	10
5	63	53	45	39	56	47	40	35	36	31	28	25	22	20	16	14	13	9
6	58	47	39	34	51	42	35	31	32	27	24	23	20	18	14	13	11	8
7	54	42	35	30	47	38	31	27	29	24	21	21	18	16	13	11	10	7
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	12	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	20	38	28	22	19	22	18	15	16	13	11	10	9	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9544	9544	9544	9544
5°	10699	9606	8512	9606
10°	12260	9527	7366	9527
15°	13563	9352	6509	9352
20°	13357	9165	5933	9165
25°	12043	8915	5569	8915
30°	9952	8516	5302	8516
35°	7253	8099	5113	8099
40°	5794	7609	5008	7609
45°	5062	7040	4866	7040
50°	4760	6488	4770	6488
55°	4386	5928	4642	5928
60°	4020	5331	4447	5331
65°	3664	4798	4252	4798
70°	3323	4277	3970	4277
75°	2951	3699	3512	3699
80°	2538	3059	2827	3059
85°	2279	2279	1686	2279



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	0.8
10°-20°	163.7	2.3
20°-30°	237.5	3.4
30°-40°	250.6	3.5
40°-50°	221.9	3.1
50°-60°	177.1	2.5
60°-70°	120.4	1.7
70°-80°	61.7	0.9
80°-90°	19.7	0.3
90°-100°	65.6	0.9
100°-110°	240.4	3.4
110°-120°	642.7	9.1
120°-130°	1060.9	15.0
130°-140°	1128.3	16.0
140°-150°	1048.7	14.8
150°-160°	843.1	11.9
160°-170°	543.3	7.7
170°-180°	187.0	2.6
0°-30°	457.5	6.5
0°-40°	708.1	10.0
0°-60°	1107.1	15.7
0°-90°	1308.9	18.5
90°-120°	948.7	13.4
90°-150°	4186.6	59.2
90°-180°	5760.0	81.5
0°-180°	7068.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	591	591	591	591	591	
5°	660	593	525	593	660	66
15°	811	560	389	560	811	224
25°	676	500	313	500	676	306
35°	368	411	259	411	368	239
45°	222	308	213	308	222	174
55°	156	211	165	211	156	140
65°	96	126	111	126	96	95
75°	47	59	56	59	47	51
85°	12	12	9	12	12	14
90°	38	1	38	1	38	17
95°	61	92	61	92	61	57
105°	108	432	108	432	108	112
115°	117	818	117	818	117	292
125°	1216	1156	1216	1156	1216	1052
135°	1478	1431	1478	1431	1478	1139
145°	1685	1660	1685	1660	1685	1054
155°	1829	1828	1829	1828	1829	844
165°	1921	1926	1921	1926	1921	542
175°	1958	1970	1958	1970	1958	187
180°	1966	1966	1966	1966	1966	



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	618.3	618.5	618.9	616.0	615.6	615.6	613.1	610.9	608.3	604.9	605.3
5°	660.1	662.6	663.5	660.8	656.7	656.3	652.4	646.1	640.1	635.4	632.0
7.5°	710.0	711.0	708.8	705.2	702.2	696.7	689.5	682.5	672.6	663.6	656.9
10°	747.8	749.2	745.3	740.1	735.8	729.4	719.0	708.3	695.4	682.9	672.9
12.5°	776.5	779.9	774.9	774.3	766.9	758.1	745.7	740.3	722.1	704.7	693.9
15°	811.4	811.2	811.7	807.3	801.9	800.5	787.4	773.0	747.4	737.1	719.4
17.5°	801.3	804.8	806.4	806.3	806.2	805.3	801.1	792.1	779.2	762.6	742.2
20°	777.4	781.9	782.6	787.8	790.8	794.6	796.2	793.7	785.8	771.9	754.2
22.5°	740.3	741.6	743.7	751.8	758.2	767.9	772.9	781.4	778.3	771.5	756.7
25°	676.0	673.8	681.7	685.8	700.6	716.0	727.2	739.4	750.3	756.9	752.6
27.5°	598.9	595.5	607.4	618.3	630.2	647.0	664.3	684.8	701.8	723.2	730.5
30°	533.8	535.9	547.2	558.8	577.0	600.6	620.2	642.6	667.0	690.8	707.4
32.5°	463.7	471.5	478.7	496.5	512.5	538.8	567.5	595.6	625.9	653.0	678.7
35°	368.0	377.1	387.1	400.0	422.5	448.6	476.6	514.5	555.9	592.9	623.3
37.5°	309.8	308.3	314.0	323.4	341.6	362.7	394.9	432.3	481.0	524.5	567.5
40°	274.9	274.0	278.0	286.7	300.5	316.0	344.2	377.1	422.3	475.5	526.6
42.5°	250.9	251.4	253.7	259.8	269.3	282.0	303.1	331.1	372.5	422.6	477.5
45°	221.7	223.3	225.8	228.8	234.2	244.7	256.5	276.5	309.2	351.0	405.0
47.5°	200.7	200.8	203.3	205.9	209.1	215.0	224.7	237.2	260.3	294.3	340.8
50°	189.5	187.9	189.7	191.7	195.1	199.2	205.6	217.4	232.8	260.3	299.2
52.5°	175.6	175.7	177.3	178.1	181.1	185.2	191.0	199.2	213.2	234.7	266.6
55°	155.8	157.0	157.9	159.2	162.0	164.9	169.5	174.9	185.8	201.9	225.6
57.5°	137.2	137.6	138.5	141.1	142.8	145.5	149.8	154.8	161.9	173.8	191.6
60°	124.5	124.5	126.3	127.4	129.7	132.4	135.8	140.6	147.0	156.7	171.1
62.5°	112.9	112.7	113.4	115.3	117.0	119.5	122.9	127.0	133.0	141.7	153.4
65°	95.9	95.4	96.8	97.2	99.0	101.5	104.3	108.6	113.4	119.7	130.2
67.5°	79.5	80.1	80.8	81.6	82.6	85.3	87.1	90.1	94.2	99.5	106.5
70°	70.4	70.4	70.4	71.1	72.5	73.8	75.6	78.1	82.0	86.5	92.9
72.5°	60.2	61.0	61.7	61.3	63.0	63.8	66.0	67.4	71.1	74.0	79.6
75°	47.3	47.3	47.3	48.4	49.1	49.7	51.1	52.5	54.3	57.9	60.9
77.5°	35.3	35.2	35.4	35.7	36.4	37.2	37.6	38.8	40.5	42.2	44.7
80°	27.3	27.7	27.9	28.4	28.4	28.8	29.1	30.7	31.8	32.9	34.5
82.5°	21.1	21.2	21.2	21.3	21.5	21.8	22.4	22.9	23.3	24.2	25.4
85°	12.3	12.0	12.0	12.5	12.3	12.3	12.7	13.2	13.2	13.4	14.1
87.5°	12.4	12.3	12.3	12.0	11.9	11.9	11.5	11.0	10.9	10.8	10.5
90°	38.4	37.8	37.1	36.5	35.9	34.8	33.2	31.6	30.0	28.4	25.9
92.5°	38.4	38.0	37.6	37.3	36.9	36.3	35.5	34.6	33.8	33.0	31.7
95°	61.2	61.5	61.8	62.1	62.4	61.8	60.2	58.6	57.0	55.5	53.3
97.5°	81.6	81.3	80.9	80.5	80.1	79.3	78.0	76.8	75.5	74.2	69.1
100°	95.3	94.7	94.0	93.4	92.8	91.2	88.7	86.1	83.6	81.1	75.7
102.5°	102.1	101.2	100.3	99.5	98.6	96.5	93.2	89.9	86.6	83.3	128.3
105°	108.1	106.8	105.6	104.3	103.0	100.7	97.2	93.7	90.2	86.8	173.0
107.5°	111.2	110.0	108.7	107.4	106.2	107.3	110.8	114.4	117.9	121.5	224.9
110°	112.4	111.1	109.8	108.6	107.3	122.5	154.1	185.7	217.3	248.9	340.2



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	113.5	112.5	111.5	110.5	109.4	166.6	281.9	397.2	512.5	627.8	650.3
115°	116.6	139.4	162.1	184.9	207.6	292.2	438.5	584.9	731.2	877.5	869.6
117.5°	476.2	550.9	625.7	700.5	775.3	830.4	865.8	901.2	936.6	972.0	966.5
120°	867.6	910.2	952.9	995.6	1038.2	1057.7	1053.9	1050.1	1046.3	1042.5	1036.8
122.5°	1082.6	1090.9	1099.2	1107.4	1115.7	1118.7	1116.5	1114.2	1111.9	1109.6	1103.4
125°	1216.0	1215.1	1214.1	1213.2	1212.2	1210.6	1208.4	1206.2	1204.0	1201.8	1195.8
127.5°	1300.2	1300.0	1299.8	1299.6	1299.5	1297.7	1294.5	1291.3	1288.1	1284.9	1280.4
130°	1352.5	1352.9	1353.2	1353.5	1353.8	1352.2	1348.8	1345.3	1341.8	1338.3	1334.8
132.5°	1403.7	1404.1	1404.4	1404.7	1405.0	1403.7	1400.7	1397.7	1394.8	1391.8	1388.3
135°	1477.7	1478.3	1479.0	1479.6	1480.2	1479.0	1475.8	1472.6	1469.5	1466.3	1463.5
137.5°	1545.1	1546.2	1547.3	1548.3	1549.4	1548.4	1545.3	1542.2	1539.1	1536.0	1532.8
140°	1587.2	1588.8	1590.4	1592.0	1593.5	1592.9	1590.1	1587.2	1584.4	1581.5	1578.1
142.5°	1628.2	1629.8	1631.3	1632.9	1634.5	1634.0	1631.4	1628.8	1626.2	1623.6	1619.6
145°	1685.4	1686.9	1688.5	1690.1	1691.7	1691.4	1689.1	1686.9	1684.7	1682.5	1677.1
147.5°	1735.7	1737.0	1738.4	1739.7	1741.0	1740.9	1739.2	1737.6	1735.9	1734.3	1729.0
150°	1766.4	1768.0	1769.6	1771.2	1772.7	1772.6	1770.7	1768.8	1766.9	1765.0	1759.9
152.5°	1792.6	1794.7	1796.8	1798.8	1800.9	1801.0	1799.1	1797.2	1795.3	1793.4	1788.6
155°	1829.0	1831.5	1834.1	1836.6	1839.1	1839.4	1837.5	1835.6	1833.7	1831.8	1828.1
157.5°	1862.3	1864.7	1867.2	1869.7	1872.1	1872.3	1870.1	1868.0	1865.9	1863.7	1861.0
160°	1881.6	1883.8	1886.0	1888.3	1890.5	1890.6	1888.7	1886.8	1884.9	1883.0	1881.1
162.5°	1897.6	1900.3	1903.0	1905.7	1908.4	1908.7	1906.6	1904.4	1902.3	1900.1	1898.5
165°	1921.4	1923.7	1925.9	1928.1	1930.3	1930.3	1928.1	1925.9	1923.7	1921.4	1920.5
167.5°	1936.5	1939.4	1942.2	1945.1	1947.9	1948.2	1946.0	1943.8	1941.6	1939.4	1938.5
170°	1945.6	1948.5	1951.3	1954.2	1957.0	1957.3	1955.1	1952.9	1950.7	1948.5	1947.8
172.5°	1952.4	1955.3	1958.1	1961.0	1963.8	1964.1	1961.9	1959.7	1957.5	1955.3	1954.7
175°	1958.4	1961.6	1964.7	1967.9	1971.1	1971.5	1969.3	1967.1	1964.9	1962.7	1962.1
177.5°	1962.1	1964.4	1966.7	1968.9	1971.2	1971.5	1969.7	1967.9	1966.2	1964.4	1964.1
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	606.5	605.1	604.2	600.9	598.0	595.1	594.2	594.5	590.5	586.7	585.1
5°	630.2	625.6	621.3	615.2	607.9	599.9	595.9	592.7	584.7	576.1	571.1
7.5°	651.3	644.8	636.5	625.0	614.4	601.9	593.9	586.9	575.3	563.1	555.6
10°	664.2	655.4	644.7	630.6	617.7	602.4	591.8	581.1	567.5	552.9	543.8
12.5°	675.3	663.4	652.9	634.8	619.5	600.4	587.8	572.7	558.4	541.1	532.2
15°	701.7	679.7	659.7	639.2	620.4	593.8	579.7	559.5	540.7	519.3	509.1
17.5°	722.1	697.3	665.9	639.9	617.9	588.4	567.8	543.6	521.3	496.9	483.0
20°	733.7	705.3	671.5	640.6	614.3	580.6	558.1	533.4	507.3	479.8	464.8
22.5°	740.6	710.8	677.3	637.9	607.0	574.3	546.0	518.8	492.4	462.7	447.0
25°	742.8	715.6	680.1	635.6	597.9	560.9	526.8	500.4	468.4	440.7	417.8
27.5°	732.0	712.5	678.4	631.3	587.4	544.1	506.1	476.3	442.5	412.4	389.3
30°	718.7	707.4	674.2	627.0	579.0	532.5	490.7	456.8	423.2	392.8	369.1
32.5°	698.2	695.8	666.6	620.8	570.1	517.8	474.5	440.3	403.0	373.1	350.6
35°	657.9	668.8	650.4	607.0	553.4	496.8	450.0	410.9	372.3	343.7	322.6
37.5°	603.8	630.9	626.1	586.8	530.7	474.0	422.3	381.5	344.7	315.8	295.1
40°	566.5	601.1	606.1	571.3	514.8	456.4	401.6	361.0	325.1	298.7	277.8
42.5°	526.6	566.9	580.6	552.8	497.3	437.8	383.1	341.0	305.4	279.8	261.3
45°	459.6	512.9	537.7	521.8	468.2	407.3	351.0	308.3	276.0	251.9	237.6
47.5°	396.9	455.2	488.5	482.9	435.8	375.5	319.8	278.8	247.4	228.2	215.4
50°	352.6	412.5	452.7	454.6	412.5	352.8	296.9	258.3	229.4	211.5	201.0
52.5°	314.0	371.3	415.1	424.8	386.5	329.2	276.4	237.9	212.5	196.0	186.7
55°	263.7	312.1	360.7	378.5	347.8	293.3	244.4	210.6	186.7	175.4	167.2
57.5°	219.3	259.6	304.5	324.1	305.2	258.5	212.7	183.3	164.0	154.0	147.7
60°	195.8	227.6	267.6	291.0	274.6	233.1	193.1	165.1	149.2	140.4	134.5
62.5°	174.0	202.2	236.0	257.4	248.5	209.3	173.5	148.8	135.1	126.8	122.5
65°	143.6	165.8	192.0	211.7	205.8	176.1	146.7	125.6	114.7	108.1	104.7
67.5°	118.2	134.3	152.4	169.7	165.0	143.9	120.4	103.9	95.8	90.1	88.0
70°	102.2	114.5	130.6	144.5	140.6	123.4	104.7	90.6	83.6	78.8	76.8
72.5°	87.0	97.0	109.4	120.7	118.1	103.7	88.2	77.6	72.1	67.7	66.1
75°	65.7	73.4	80.9	88.4	87.7	76.6	67.5	59.3	55.0	51.6	50.9
77.5°	48.5	52.8	57.9	62.3	61.1	54.7	47.6	42.9	39.8	37.5	37.1
80°	37.0	39.5	43.2	46.3	44.8	42.0	36.3	32.9	30.7	28.4	27.5
82.5°	26.9	29.3	31.5	33.3	32.0	29.5	26.0	23.7	22.3	20.8	20.4
85°	14.1	15.4	16.4	16.8	16.4	14.8	13.2	12.3	11.1	10.4	10.2
87.5°	10.1	9.6	9.1	8.9	7.6	6.9	5.5	4.3	4.8	5.3	5.6
90°	23.4	20.9	18.3	15.3	11.9	8.4	4.9	1.4	4.9	8.4	11.9
92.5°	30.5	29.2	27.9	27.5	27.8	28.1	28.4	28.7	28.4	28.1	27.8
95°	51.0	48.8	46.6	50.7	61.2	71.6	82.0	92.4	82.0	71.6	61.2
97.5°	64.0	58.9	53.8	65.9	95.3	124.7	154.1	183.5	154.1	124.7	95.3
100°	70.3	64.9	59.6	78.5	121.8	165.1	208.4	251.7	208.4	165.1	121.8
102.5°	173.2	218.2	263.1	290.2	299.3	308.5	317.7	326.8	317.7	308.5	299.3
105°	259.3	345.6	431.9	470.3	460.8	451.3	441.8	432.4	441.8	451.3	460.8
107.5°	328.4	431.9	535.4	583.3	575.6	568.0	560.3	552.7	560.3	568.0	575.6
110°	431.6	522.9	614.2	656.6	650.0	643.3	636.7	630.1	636.7	643.3	650.0



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	672.9	695.5	718.0	726.4	720.5	714.6	708.7	702.9	708.7	714.6	720.5
115°	861.7	853.8	845.9	839.3	833.9	828.5	823.2	817.8	823.2	828.5	833.9
117.5°	961.1	955.6	950.2	944.5	938.5	932.5	926.5	920.5	926.5	932.5	938.5
120°	1031.1	1025.4	1019.7	1014.5	1009.8	1005.0	1000.3	995.6	1000.3	1005.0	1009.8
122.5°	1097.2	1091.0	1084.9	1079.3	1074.3	1069.3	1064.3	1059.3	1064.3	1069.3	1074.3
125°	1189.8	1183.8	1177.8	1172.7	1168.6	1164.5	1160.4	1156.3	1160.4	1164.5	1168.6
127.5°	1275.9	1271.4	1266.9	1262.4	1257.8	1253.3	1248.7	1244.2	1248.7	1253.3	1257.8
130°	1331.4	1327.9	1324.4	1320.2	1315.1	1310.0	1305.0	1299.9	1305.0	1310.0	1315.1
132.5°	1384.8	1381.4	1377.9	1374.0	1369.7	1365.4	1361.1	1356.8	1361.1	1365.4	1369.7
135°	1460.6	1457.8	1454.9	1451.0	1445.9	1440.9	1435.8	1430.8	1435.8	1440.9	1445.9
137.5°	1529.6	1526.3	1523.1	1519.7	1516.2	1512.7	1509.1	1505.6	1509.1	1512.7	1516.2
140°	1574.6	1571.1	1567.6	1564.6	1562.1	1559.6	1557.0	1554.5	1557.0	1559.6	1562.1
142.5°	1615.7	1611.7	1607.7	1604.6	1602.3	1600.0	1597.7	1595.5	1597.7	1600.0	1602.3
145°	1671.8	1666.4	1661.0	1658.5	1658.8	1659.1	1659.4	1659.8	1659.4	1659.1	1658.8
147.5°	1723.7	1718.3	1713.0	1711.0	1712.2	1713.4	1714.6	1715.8	1714.6	1713.4	1712.2
150°	1754.9	1749.8	1744.8	1743.3	1745.6	1747.8	1750.0	1752.2	1750.0	1747.8	1745.6
152.5°	1783.8	1779.0	1774.2	1773.1	1775.5	1778.0	1780.5	1782.9	1780.5	1778.0	1775.5
155°	1824.3	1820.5	1816.7	1816.2	1819.0	1821.9	1824.7	1827.6	1824.7	1821.9	1819.0
157.5°	1858.4	1855.7	1853.1	1853.0	1855.4	1857.8	1860.2	1862.6	1860.2	1857.8	1855.4
160°	1879.3	1877.4	1875.5	1875.5	1877.4	1879.3	1881.1	1883.0	1881.1	1879.3	1877.4
162.5°	1896.8	1895.2	1893.5	1893.7	1895.6	1897.5	1899.4	1901.2	1899.4	1897.5	1895.6
165°	1919.5	1918.6	1917.7	1918.1	1920.0	1921.9	1923.8	1925.7	1923.8	1921.9	1920.0
167.5°	1937.6	1936.7	1935.8	1936.3	1938.2	1940.1	1942.0	1943.9	1942.0	1940.1	1938.2
170°	1947.2	1946.6	1945.9	1946.6	1948.5	1950.4	1952.3	1954.2	1952.3	1950.4	1948.5
172.5°	1954.0	1953.4	1952.8	1953.4	1955.3	1957.2	1959.1	1961.0	1959.1	1957.2	1955.3
175°	1961.4	1960.8	1960.2	1961.0	1963.2	1965.4	1967.6	1969.8	1967.6	1965.4	1963.2
177.5°	1963.9	1963.6	1963.4	1964.1	1965.9	1967.7	1969.5	1971.2	1969.5	1967.7	1965.9
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	583.3	582.2	578.4	576.4	573.1	570.0	568.0	568.9	569.6	569.3	568.7
5°	566.5	562.2	555.6	550.0	545.9	538.4	535.2	533.6	532.2	530.7	529.1
7.5°	546.6	539.8	530.4	522.3	514.7	505.3	500.0	496.9	493.6	490.0	486.8
10°	532.5	522.9	512.9	501.6	492.5	484.1	476.6	471.6	467.0	462.7	459.6
12.5°	517.6	506.6	494.2	478.7	468.7	456.6	455.5	446.7	439.6	436.9	433.2
15°	493.9	478.4	462.7	444.3	436.4	425.5	418.7	411.8	405.7	401.4	400.3
17.5°	466.9	446.9	431.3	418.1	405.1	393.9	387.6	382.2	377.1	371.4	370.6
20°	446.4	429.1	412.1	400.5	387.1	375.7	368.0	362.6	358.2	354.8	351.9
22.5°	426.9	408.0	392.4	379.8	366.6	357.4	351.3	346.0	342.4	338.7	335.9
25°	395.7	381.0	363.9	349.6	338.7	332.8	327.8	323.3	321.0	318.5	315.3
27.5°	368.4	352.0	336.1	325.0	315.4	310.2	306.6	303.5	301.4	299.9	298.1
30°	349.2	332.6	320.1	309.2	301.2	296.0	293.7	291.9	289.4	288.5	287.6
32.5°	330.6	315.7	305.0	295.5	288.0	284.5	282.5	280.8	278.9	278.0	276.1
35°	304.4	291.9	281.5	276.2	270.1	267.1	265.6	263.3	261.5	260.6	260.3
37.5°	279.7	268.9	262.0	255.3	252.7	250.9	248.7	247.2	246.6	246.5	246.2
40°	263.7	254.9	248.7	243.3	242.2	239.4	237.6	236.3	236.3	236.5	236.3
42.5°	249.2	241.2	235.8	231.1	229.8	228.2	226.3	226.3	226.6	227.4	226.6
45°	227.2	221.5	217.6	215.4	212.9	211.3	211.0	211.7	211.9	212.2	212.9
47.5°	206.9	203.1	199.6	197.1	196.0	195.8	195.5	196.7	197.8	198.2	199.2
50°	194.9	190.6	187.6	186.0	185.1	184.7	185.1	186.5	187.4	188.5	189.2
52.5°	181.5	178.4	176.4	175.1	174.8	175.1	175.1	176.7	178.1	178.6	178.9
55°	162.9	160.6	160.2	158.1	159.0	158.8	159.9	160.8	162.2	163.6	163.8
57.5°	144.3	142.5	141.3	141.5	141.8	142.8	143.7	145.3	146.7	148.2	148.3
60°	132.0	131.1	130.4	130.4	130.8	132.2	133.3	134.9	135.8	136.8	137.4
62.5°	120.7	119.8	119.1	119.5	120.7	121.5	122.8	123.7	124.6	125.5	125.8
65°	102.9	102.5	103.1	103.6	103.8	104.9	106.5	107.2	108.1	108.6	110.2
67.5°	86.5	86.6	86.5	87.1	88.5	88.7	90.2	91.8	92.0	92.9	93.9
70°	75.4	75.9	76.3	76.8	77.9	78.4	79.5	80.2	81.1	81.8	82.5
72.5°	65.2	65.3	65.8	65.7	66.7	67.6	68.6	69.3	70.2	71.1	71.7
75°	50.2	50.2	50.7	50.9	52.0	53.2	52.9	53.4	54.3	55.2	55.7
77.5°	36.7	36.2	36.7	36.9	37.3	38.2	38.4	39.0	40.1	39.8	40.3
80°	27.9	27.3	27.9	28.2	28.2	29.3	29.3	29.8	30.4	29.8	30.4
82.5°	19.9	19.6	20.1	20.2	20.5	20.6	20.9	21.0	21.7	21.4	21.7
85°	10.0	9.8	10.0	9.8	10.0	10.2	10.2	10.0	10.0	10.4	9.8
87.5°	6.2	6.6	6.9	7.4	7.7	8.1	8.2	8.5	8.8	8.8	9.0
90°	15.3	18.3	20.9	23.4	25.9	28.4	30.0	31.6	33.2	34.8	35.9
92.5°	27.5	27.9	29.2	30.5	31.7	33.0	33.8	34.6	35.5	36.3	36.9
95°	50.7	46.6	48.8	51.0	53.3	55.5	57.0	58.6	60.2	61.8	62.4
97.5°	65.9	53.8	58.9	64.0	69.1	74.2	75.5	76.8	78.0	79.3	80.1
100°	78.5	59.6	64.9	70.3	75.7	81.1	83.6	86.1	88.7	91.2	92.8
102.5°	290.2	263.1	218.2	173.2	128.3	83.3	86.6	89.9	93.2	96.5	98.6
105°	470.3	431.9	345.6	259.3	173.0	86.8	90.2	93.7	97.2	100.7	103.0
107.5°	583.3	535.4	431.9	328.4	224.9	121.5	117.9	114.4	110.8	107.3	106.2
110°	656.6	614.2	522.9	431.6	340.2	248.9	217.3	185.7	154.1	122.5	107.3



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	726.4	718.0	695.5	672.9	650.3	627.8	512.5	397.2	281.9	166.6	109.4
115°	839.3	845.9	853.8	861.7	869.6	877.5	731.2	584.9	438.5	292.2	207.6
117.5°	944.5	950.2	955.6	961.1	966.5	972.0	936.6	901.2	865.8	830.4	775.3
120°	1014.5	1019.7	1025.4	1031.1	1036.8	1042.5	1046.3	1050.1	1053.9	1057.7	1038.2
122.5°	1079.3	1084.9	1091.0	1097.2	1103.4	1109.6	1111.9	1114.2	1116.5	1118.7	1115.7
125°	1172.7	1177.8	1183.8	1189.8	1195.8	1201.8	1204.0	1206.2	1208.4	1210.6	1212.2
127.5°	1262.4	1266.9	1271.4	1275.9	1280.4	1284.9	1288.1	1291.3	1294.5	1297.7	1299.5
130°	1320.2	1324.4	1327.9	1331.4	1334.8	1338.3	1341.8	1345.3	1348.8	1352.2	1353.8
132.5°	1374.0	1377.9	1381.4	1384.8	1388.3	1391.8	1394.8	1397.7	1400.7	1403.7	1405.0
135°	1451.0	1454.9	1457.8	1460.6	1463.5	1466.3	1469.5	1472.6	1475.8	1479.0	1480.2
137.5°	1519.7	1523.1	1526.3	1529.6	1532.8	1536.0	1539.1	1542.2	1545.3	1548.4	1549.4
140°	1564.6	1567.6	1571.1	1574.6	1578.1	1581.5	1584.4	1587.2	1590.1	1592.9	1593.5
142.5°	1604.6	1607.7	1611.7	1615.7	1619.6	1623.6	1626.2	1628.8	1631.4	1634.0	1634.5
145°	1658.5	1661.0	1666.4	1671.8	1677.1	1682.5	1684.7	1686.9	1689.1	1691.4	1691.7
147.5°	1711.0	1713.0	1718.3	1723.7	1729.0	1734.3	1735.9	1737.6	1739.2	1740.9	1741.0
150°	1743.3	1744.8	1749.8	1754.9	1759.9	1765.0	1766.9	1768.8	1770.7	1772.6	1772.7
152.5°	1773.1	1774.2	1779.0	1783.8	1788.6	1793.4	1795.3	1797.2	1799.1	1801.0	1800.9
155°	1816.2	1816.7	1820.5	1824.3	1828.1	1831.8	1833.7	1835.6	1837.5	1839.4	1839.1
157.5°	1853.0	1853.1	1855.7	1858.4	1861.0	1863.7	1865.9	1868.0	1870.1	1872.3	1872.1
160°	1875.5	1875.5	1877.4	1879.3	1881.1	1883.0	1884.9	1886.8	1888.7	1890.6	1890.5
162.5°	1893.7	1893.5	1895.2	1896.8	1898.5	1900.1	1902.3	1904.4	1906.6	1908.7	1908.4
165°	1918.1	1917.7	1918.6	1919.5	1920.5	1921.4	1923.7	1925.9	1928.1	1930.3	1930.3
167.5°	1936.3	1935.8	1936.7	1937.6	1938.5	1939.4	1941.6	1943.8	1946.0	1948.2	1947.9
170°	1946.6	1945.9	1946.6	1947.2	1947.8	1948.5	1950.7	1952.9	1955.1	1957.3	1957.0
172.5°	1953.4	1952.8	1953.4	1954.0	1954.7	1955.3	1957.5	1959.7	1961.9	1964.1	1963.8
175°	1961.0	1960.2	1960.8	1961.4	1962.1	1962.7	1964.9	1967.1	1969.3	1971.5	1971.1
177.5°	1964.1	1963.4	1963.6	1963.9	1964.1	1964.4	1966.2	1967.9	1969.7	1971.5	1971.2
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	566.9	566.5	566.5	564.9	566.5	566.5	566.9	568.7	569.3	569.6	568.9
5°	525.9	525.2	524.1	525.2	524.1	525.2	525.9	529.1	530.7	532.2	533.6
7.5°	485.3	482.6	482.2	479.5	482.2	482.6	485.3	486.8	490.0	493.6	496.9
10°	455.7	453.9	453.6	449.3	453.6	453.9	455.7	459.6	462.7	467.0	471.6
12.5°	433.2	428.8	429.7	427.2	429.7	428.8	433.2	433.2	436.9	439.6	446.7
15°	394.1	394.1	393.2	389.4	393.2	394.1	394.1	400.3	401.4	405.7	411.8
17.5°	366.1	365.6	363.5	364.6	363.5	365.6	366.1	370.6	371.4	377.1	382.2
20°	349.4	348.0	345.3	345.3	345.3	348.0	349.4	351.9	354.8	358.2	362.6
22.5°	333.6	333.5	330.6	331.5	330.6	333.5	333.6	335.9	338.7	342.4	346.0
25°	315.1	313.3	311.9	312.6	311.9	313.3	315.1	315.3	318.5	321.0	323.3
27.5°	297.5	296.5	296.4	294.6	296.4	296.5	297.5	298.1	299.9	301.4	303.5
30°	287.4	285.1	285.5	284.4	285.5	285.1	287.4	287.6	288.5	289.4	291.9
32.5°	275.7	274.9	274.5	273.5	274.5	274.9	275.7	276.1	278.0	278.9	280.8
35°	259.9	260.1	259.0	259.4	259.0	260.1	259.9	260.3	260.6	261.5	263.3
37.5°	246.0	246.7	246.2	246.3	246.2	246.7	246.0	246.2	246.5	246.6	247.2
40°	236.9	236.9	236.9	237.6	236.9	236.9	236.9	236.3	236.5	236.3	236.3
42.5°	228.2	227.8	227.5	227.4	227.5	227.8	228.2	226.6	227.4	226.6	226.3
45°	213.3	214.0	214.2	213.1	214.2	214.0	213.3	212.9	212.2	211.9	211.7
47.5°	199.8	199.9	199.8	200.8	199.8	199.9	199.8	199.2	198.2	197.8	196.7
50°	190.4	189.9	190.4	189.9	190.4	189.9	190.4	189.2	188.5	187.4	186.5
52.5°	180.4	180.5	180.2	180.1	180.2	180.5	180.4	178.9	178.6	178.1	176.7
55°	164.7	165.1	164.9	164.9	164.9	165.1	164.7	163.8	163.6	162.2	160.8
57.5°	148.5	148.9	149.2	148.2	149.2	148.9	148.5	148.3	148.2	146.7	145.3
60°	137.2	138.3	138.1	137.7	138.1	138.3	137.2	137.4	136.8	135.8	134.9
62.5°	126.8	127.3	127.2	127.1	127.2	127.3	126.8	125.8	125.5	124.6	123.7
65°	110.9	111.3	110.6	111.3	110.6	111.3	110.9	110.2	108.6	108.1	107.2
67.5°	93.6	93.8	94.3	94.6	94.3	93.8	93.6	93.9	92.9	92.0	91.8
70°	82.9	82.7	83.4	84.1	83.4	82.7	82.9	82.5	81.8	81.1	80.2
72.5°	71.6	72.1	71.9	72.4	71.9	72.1	71.6	71.7	71.1	70.2	69.3
75°	55.2	55.9	55.7	56.3	55.7	55.9	55.2	55.7	55.2	54.3	53.4
77.5°	39.9	40.0	39.9	40.3	39.9	40.0	39.9	40.3	39.8	40.1	39.0
80°	30.4	30.0	29.5	30.4	29.5	30.0	30.4	30.4	29.8	30.4	29.8
82.5°	21.2	21.4	21.0	21.0	21.0	21.4	21.2	21.7	21.4	21.7	21.0
85°	9.8	9.5	9.1	9.1	9.1	9.5	9.8	9.8	10.4	10.0	10.0
87.5°	9.1	9.1	9.2	9.1	9.2	9.1	9.1	9.0	8.8	8.8	8.5
90°	36.5	37.1	37.8	38.4	37.8	37.1	36.5	35.9	34.8	33.2	31.6
92.5°	37.3	37.6	38.0	38.4	38.0	37.6	37.3	36.9	36.3	35.5	34.6
95°	62.1	61.8	61.5	61.2	61.5	61.8	62.1	62.4	61.8	60.2	58.6
97.5°	80.5	80.9	81.3	81.6	81.3	80.9	80.5	80.1	79.3	78.0	76.8
100°	93.4	94.0	94.7	95.3	94.7	94.0	93.4	92.8	91.2	88.7	86.1
102.5°	99.5	100.3	101.2	102.1	101.2	100.3	99.5	98.6	96.5	93.2	89.9
105°	104.3	105.6	106.8	108.1	106.8	105.6	104.3	103.0	100.7	97.2	93.7
107.5°	107.4	108.7	110.0	111.2	110.0	108.7	107.4	106.2	107.3	110.8	114.4
110°	108.6	109.8	111.1	112.4	111.1	109.8	108.6	107.3	122.5	154.1	185.7



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	110.5	111.5	112.5	113.5	112.5	111.5	110.5	109.4	166.6	281.9	397.2
115°	184.9	162.1	139.4	116.6	139.4	162.1	184.9	207.6	292.2	438.5	584.9
117.5°	700.5	625.7	550.9	476.2	550.9	625.7	700.5	775.3	830.4	865.8	901.2
120°	995.6	952.9	910.2	867.6	910.2	952.9	995.6	1038.2	1057.7	1053.9	1050.1
122.5°	1107.4	1099.2	1090.9	1082.6	1090.9	1099.2	1107.4	1115.7	1118.7	1116.5	1114.2
125°	1213.2	1214.1	1215.1	1216.0	1215.1	1214.1	1213.2	1212.2	1210.6	1208.4	1206.2
127.5°	1299.6	1299.8	1300.0	1300.2	1300.0	1299.8	1299.6	1299.5	1297.7	1294.5	1291.3
130°	1353.5	1353.2	1352.9	1352.5	1352.9	1353.2	1353.5	1353.8	1352.2	1348.8	1345.3
132.5°	1404.7	1404.4	1404.1	1403.7	1404.1	1404.4	1404.7	1405.0	1403.7	1400.7	1397.7
135°	1479.6	1479.0	1478.3	1477.7	1478.3	1479.0	1479.6	1480.2	1479.0	1475.8	1472.6
137.5°	1548.3	1547.3	1546.2	1545.1	1546.2	1547.3	1548.3	1549.4	1548.4	1545.3	1542.2
140°	1592.0	1590.4	1588.8	1587.2	1588.8	1590.4	1592.0	1593.5	1592.9	1590.1	1587.2
142.5°	1632.9	1631.3	1629.8	1628.2	1629.8	1631.3	1632.9	1634.5	1634.0	1631.4	1628.8
145°	1690.1	1688.5	1686.9	1685.4	1686.9	1688.5	1690.1	1691.7	1691.4	1689.1	1686.9
147.5°	1739.7	1738.4	1737.0	1735.7	1737.0	1738.4	1739.7	1741.0	1740.9	1739.2	1737.6
150°	1771.2	1769.6	1768.0	1766.4	1768.0	1769.6	1771.2	1772.7	1772.6	1770.7	1768.8
152.5°	1798.8	1796.8	1794.7	1792.6	1794.7	1796.8	1798.8	1800.9	1801.0	1799.1	1797.2
155°	1836.6	1834.1	1831.5	1829.0	1831.5	1834.1	1836.6	1839.1	1839.4	1837.5	1835.6
157.5°	1869.7	1867.2	1864.7	1862.3	1864.7	1867.2	1869.7	1872.1	1872.3	1870.1	1868.0
160°	1888.3	1886.0	1883.8	1881.6	1883.8	1886.0	1888.3	1890.5	1890.6	1888.7	1886.8
162.5°	1905.7	1903.0	1900.3	1897.6	1900.3	1903.0	1905.7	1908.4	1908.7	1906.6	1904.4
165°	1928.1	1925.9	1923.7	1921.4	1923.7	1925.9	1928.1	1930.3	1930.3	1928.1	1925.9
167.5°	1945.1	1942.2	1939.4	1936.5	1939.4	1942.2	1945.1	1947.9	1948.2	1946.0	1943.8
170°	1954.2	1951.3	1948.5	1945.6	1948.5	1951.3	1954.2	1957.0	1957.3	1955.1	1952.9
172.5°	1961.0	1958.1	1955.3	1952.4	1955.3	1958.1	1961.0	1963.8	1964.1	1961.9	1959.7
175°	1967.9	1964.7	1961.6	1958.4	1961.6	1964.7	1967.9	1971.1	1971.5	1969.3	1967.1
177.5°	1968.9	1966.7	1964.4	1962.1	1964.4	1966.7	1968.9	1971.2	1971.5	1969.7	1967.9
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	568.0	570.0	573.1	576.4	578.4	582.2	583.3	585.1	586.7	590.5	594.5
5°	535.2	538.4	545.9	550.0	555.6	562.2	566.5	571.1	576.1	584.7	592.7
7.5°	500.0	505.3	514.7	522.3	530.4	539.8	546.6	555.6	563.1	575.3	586.9
10°	476.6	484.1	492.5	501.6	512.9	522.9	532.5	543.8	552.9	567.5	581.1
12.5°	455.5	456.6	468.7	478.7	494.2	506.6	517.6	532.2	541.1	558.4	572.7
15°	418.7	425.5	436.4	444.3	462.7	478.4	493.9	509.1	519.3	540.7	559.5
17.5°	387.6	393.9	405.1	418.1	431.3	446.9	466.9	483.0	496.9	521.3	543.6
20°	368.0	375.7	387.1	400.5	412.1	429.1	446.4	464.8	479.8	507.3	533.4
22.5°	351.3	357.4	366.6	379.8	392.4	408.0	426.9	447.0	462.7	492.4	518.8
25°	327.8	332.8	338.7	349.6	363.9	381.0	395.7	417.8	440.7	468.4	500.4
27.5°	306.6	310.2	315.4	325.0	336.1	352.0	368.4	389.3	412.4	442.5	476.3
30°	293.7	296.0	301.2	309.2	320.1	332.6	349.2	369.1	392.8	423.2	456.8
32.5°	282.5	284.5	288.0	295.5	305.0	315.7	330.6	350.6	373.1	403.0	440.3
35°	265.6	267.1	270.1	276.2	281.5	291.9	304.4	322.6	343.7	372.3	410.9
37.5°	248.7	250.9	252.7	255.3	262.0	268.9	279.7	295.1	315.8	344.7	381.5
40°	237.6	239.4	242.2	243.3	248.7	254.9	263.7	277.8	298.7	325.1	361.0
42.5°	226.3	228.2	229.8	231.1	235.8	241.2	249.2	261.3	279.8	305.4	341.0
45°	211.0	211.3	212.9	215.4	217.6	221.5	227.2	237.6	251.9	276.0	308.3
47.5°	195.5	195.8	196.0	197.1	199.6	203.1	206.9	215.4	228.2	247.4	278.8
50°	185.1	184.7	185.1	186.0	187.6	190.6	194.9	201.0	211.5	229.4	258.3
52.5°	175.1	175.1	174.8	175.1	176.4	178.4	181.5	186.7	196.0	212.5	237.9
55°	159.9	158.8	159.0	158.1	160.2	160.6	162.9	167.2	175.4	186.7	210.6
57.5°	143.7	142.8	141.8	141.5	141.3	142.5	144.3	147.7	154.0	164.0	183.3
60°	133.3	132.2	130.8	130.4	130.4	131.1	132.0	134.5	140.4	149.2	165.1
62.5°	122.8	121.5	120.7	119.5	119.1	119.8	120.7	122.5	126.8	135.1	148.8
65°	106.5	104.9	103.8	103.6	103.1	102.5	102.9	104.7	108.1	114.7	125.6
67.5°	90.2	88.7	88.5	87.1	86.5	86.6	86.5	88.0	90.1	95.8	103.9
70°	79.5	78.4	77.9	76.8	76.3	75.9	75.4	76.8	78.8	83.6	90.6
72.5°	68.6	67.6	66.7	65.7	65.8	65.3	65.2	66.1	67.7	72.1	77.6
75°	52.9	53.2	52.0	50.9	50.7	50.2	50.2	50.9	51.6	55.0	59.3
77.5°	38.4	38.2	37.3	36.9	36.7	36.2	36.7	37.1	37.5	39.8	42.9
80°	29.3	29.3	28.2	28.2	27.9	27.3	27.9	27.5	28.4	30.7	32.9
82.5°	20.9	20.6	20.5	20.2	20.1	19.6	19.9	20.4	20.8	22.3	23.7
85°	10.2	10.2	10.0	9.8	10.0	9.8	10.0	10.2	10.4	11.1	12.3
87.5°	8.2	8.1	7.7	7.4	6.9	6.6	6.2	5.6	5.3	4.8	4.3
90°	30.0	28.4	25.9	23.4	20.9	18.3	15.3	11.9	8.4	4.9	1.4
92.5°	33.8	33.0	31.7	30.5	29.2	27.9	27.5	27.8	28.1	28.4	28.7
95°	57.0	55.5	53.3	51.0	48.8	46.6	50.7	61.2	71.6	82.0	92.4
97.5°	75.5	74.2	69.1	64.0	58.9	53.8	65.9	95.3	124.7	154.1	183.5
100°	83.6	81.1	75.7	70.3	64.9	59.6	78.5	121.8	165.1	208.4	251.7
102.5°	86.6	83.3	128.3	173.2	218.2	263.1	290.2	299.3	308.5	317.7	326.8
105°	90.2	86.8	173.0	259.3	345.6	431.9	470.3	460.8	451.3	441.8	432.4
107.5°	117.9	121.5	224.9	328.4	431.9	535.4	583.3	575.6	568.0	560.3	552.7
110°	217.3	248.9	340.2	431.6	522.9	614.2	656.6	650.0	643.3	636.7	630.1



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	512.5	627.8	650.3	672.9	695.5	718.0	726.4	720.5	714.6	708.7	702.9
115°	731.2	877.5	869.6	861.7	853.8	845.9	839.3	833.9	828.5	823.2	817.8
117.5°	936.6	972.0	966.5	961.1	955.6	950.2	944.5	938.5	932.5	926.5	920.5
120°	1046.3	1042.5	1036.8	1031.1	1025.4	1019.7	1014.5	1009.8	1005.0	1000.3	995.6
122.5°	1111.9	1109.6	1103.4	1097.2	1091.0	1084.9	1079.3	1074.3	1069.3	1064.3	1059.3
125°	1204.0	1201.8	1195.8	1189.8	1183.8	1177.8	1172.7	1168.6	1164.5	1160.4	1156.3
127.5°	1288.1	1284.9	1280.4	1275.9	1271.4	1266.9	1262.4	1257.8	1253.3	1248.7	1244.2
130°	1341.8	1338.3	1334.8	1331.4	1327.9	1324.4	1320.2	1315.1	1310.0	1305.0	1299.9
132.5°	1394.8	1391.8	1388.3	1384.8	1381.4	1377.9	1374.0	1369.7	1365.4	1361.1	1356.8
135°	1469.5	1466.3	1463.5	1460.6	1457.8	1454.9	1451.0	1445.9	1440.9	1435.8	1430.8
137.5°	1539.1	1536.0	1532.8	1529.6	1526.3	1523.1	1519.7	1516.2	1512.7	1509.1	1505.6
140°	1584.4	1581.5	1578.1	1574.6	1571.1	1567.6	1564.6	1562.1	1559.6	1557.0	1554.5
142.5°	1626.2	1623.6	1619.6	1615.7	1611.7	1607.7	1604.6	1602.3	1600.0	1597.7	1595.5
145°	1684.7	1682.5	1677.1	1671.8	1666.4	1661.0	1658.5	1658.8	1659.1	1659.4	1659.8
147.5°	1735.9	1734.3	1729.0	1723.7	1718.3	1713.0	1711.0	1712.2	1713.4	1714.6	1715.8
150°	1766.9	1765.0	1759.9	1754.9	1749.8	1744.8	1743.3	1745.6	1747.8	1750.0	1752.2
152.5°	1795.3	1793.4	1788.6	1783.8	1779.0	1774.2	1773.1	1775.5	1778.0	1780.5	1782.9
155°	1833.7	1831.8	1828.1	1824.3	1820.5	1816.7	1816.2	1819.0	1821.9	1824.7	1827.6
157.5°	1865.9	1863.7	1861.0	1858.4	1855.7	1853.1	1853.0	1855.4	1857.8	1860.2	1862.6
160°	1884.9	1883.0	1881.1	1879.3	1877.4	1875.5	1875.5	1877.4	1879.3	1881.1	1883.0
162.5°	1902.3	1900.1	1898.5	1896.8	1895.2	1893.5	1893.7	1895.6	1897.5	1899.4	1901.2
165°	1923.7	1921.4	1920.5	1919.5	1918.6	1917.7	1918.1	1920.0	1921.9	1923.8	1925.7
167.5°	1941.6	1939.4	1938.5	1937.6	1936.7	1935.8	1936.3	1938.2	1940.1	1942.0	1943.9
170°	1950.7	1948.5	1947.8	1947.2	1946.6	1945.9	1946.6	1948.5	1950.4	1952.3	1954.2
172.5°	1957.5	1955.3	1954.7	1954.0	1953.4	1952.8	1953.4	1955.3	1957.2	1959.1	1961.0
175°	1964.9	1962.7	1962.1	1961.4	1960.8	1960.2	1961.0	1963.2	1965.4	1967.6	1969.8
177.5°	1966.2	1964.4	1964.1	1963.9	1963.6	1963.4	1964.1	1965.9	1967.7	1969.5	1971.2
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	594.2	595.1	598.0	600.9	604.2	605.1	606.5	605.3	604.9	608.3	610.9
5°	595.9	599.9	607.9	615.2	621.3	625.6	630.2	632.0	635.4	640.1	646.1
7.5°	593.9	601.9	614.4	625.0	636.5	644.8	651.3	656.9	663.6	672.6	682.5
10°	591.8	602.4	617.7	630.6	644.7	655.4	664.2	672.9	682.9	695.4	708.3
12.5°	587.8	600.4	619.5	634.8	652.9	663.4	675.3	693.9	704.7	722.1	740.3
15°	579.7	593.8	620.4	639.2	659.7	679.7	701.7	719.4	737.1	747.4	773.0
17.5°	567.8	588.4	617.9	639.9	665.9	697.3	722.1	742.2	762.6	779.2	792.1
20°	558.1	580.6	614.3	640.6	671.5	705.3	733.7	754.2	771.9	785.8	793.7
22.5°	546.0	574.3	607.0	637.9	677.3	710.8	740.6	756.7	771.5	778.3	781.4
25°	526.8	560.9	597.9	635.6	680.1	715.6	742.8	752.6	756.9	750.3	739.4
27.5°	506.1	544.1	587.4	631.3	678.4	712.5	732.0	730.5	723.2	701.8	684.8
30°	490.7	532.5	579.0	627.0	674.2	707.4	718.7	707.4	690.8	667.0	642.6
32.5°	474.5	517.8	570.1	620.8	666.6	695.8	698.2	678.7	653.0	625.9	595.6
35°	450.0	496.8	553.4	607.0	650.4	668.8	657.9	623.3	592.9	555.9	514.5
37.5°	422.3	474.0	530.7	586.8	626.1	630.9	603.8	567.5	524.5	481.0	432.3
40°	401.6	456.4	514.8	571.3	606.1	601.1	566.5	526.6	475.5	422.3	377.1
42.5°	383.1	437.8	497.3	552.8	580.6	566.9	526.6	477.5	422.6	372.5	331.1
45°	351.0	407.3	468.2	521.8	537.7	512.9	459.6	405.0	351.0	309.2	276.5
47.5°	319.8	375.5	435.8	482.9	488.5	455.2	396.9	340.8	294.3	260.3	237.2
50°	296.9	352.8	412.5	454.6	452.7	412.5	352.6	299.2	260.3	232.8	217.4
52.5°	276.4	329.2	386.5	424.8	415.1	371.3	314.0	266.6	234.7	213.2	199.2
55°	244.4	293.3	347.8	378.5	360.7	312.1	263.7	225.6	201.9	185.8	174.9
57.5°	212.7	258.5	305.2	324.1	304.5	259.6	219.3	191.6	173.8	161.9	154.8
60°	193.1	233.1	274.6	291.0	267.6	227.6	195.8	171.1	156.7	147.0	140.6
62.5°	173.5	209.3	248.5	257.4	236.0	202.2	174.0	153.4	141.7	133.0	127.0
65°	146.7	176.1	205.8	211.7	192.0	165.8	143.6	130.2	119.7	113.4	108.6
67.5°	120.4	143.9	165.0	169.7	152.4	134.3	118.2	106.5	99.5	94.2	90.1
70°	104.7	123.4	140.6	144.5	130.6	114.5	102.2	92.9	86.5	82.0	78.1
72.5°	88.2	103.7	118.1	120.7	109.4	97.0	87.0	79.6	74.0	71.1	67.4
75°	67.5	76.6	87.7	88.4	80.9	73.4	65.7	60.9	57.9	54.3	52.5
77.5°	47.6	54.7	61.1	62.3	57.9	52.8	48.5	44.7	42.2	40.5	38.8
80°	36.3	42.0	44.8	46.3	43.2	39.5	37.0	34.5	32.9	31.8	30.7
82.5°	26.0	29.5	32.0	33.3	31.5	29.3	26.9	25.4	24.2	23.3	22.9
85°	13.2	14.8	16.4	16.8	16.4	15.4	14.1	14.1	13.4	13.2	13.2
87.5°	5.5	6.9	7.6	8.9	9.1	9.6	10.1	10.5	10.8	10.9	11.0
90°	4.9	8.4	11.9	15.3	18.3	20.9	23.4	25.9	28.4	30.0	31.6
92.5°	28.4	28.1	27.8	27.5	27.9	29.2	30.5	31.7	33.0	33.8	34.6
95°	82.0	71.6	61.2	50.7	46.6	48.8	51.0	53.3	55.5	57.0	58.6
97.5°	154.1	124.7	95.3	65.9	53.8	58.9	64.0	69.1	74.2	75.5	76.8
100°	208.4	165.1	121.8	78.5	59.6	64.9	70.3	75.7	81.1	83.6	86.1
102.5°	317.7	308.5	299.3	290.2	263.1	218.2	173.2	128.3	83.3	86.6	89.9
105°	441.8	451.3	460.8	470.3	431.9	345.6	259.3	173.0	86.8	90.2	93.7
107.5°	560.3	568.0	575.6	583.3	535.4	431.9	328.4	224.9	121.5	117.9	114.4
110°	636.7	643.3	650.0	656.6	614.2	522.9	431.6	340.2	248.9	217.3	185.7



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	708.7	714.6	720.5	726.4	718.0	695.5	672.9	650.3	627.8	512.5	397.2
115°	823.2	828.5	833.9	839.3	845.9	853.8	861.7	869.6	877.5	731.2	584.9
117.5°	926.5	932.5	938.5	944.5	950.2	955.6	961.1	966.5	972.0	936.6	901.2
120°	1000.3	1005.0	1009.8	1014.5	1019.7	1025.4	1031.1	1036.8	1042.5	1046.3	1050.1
122.5°	1064.3	1069.3	1074.3	1079.3	1084.9	1091.0	1097.2	1103.4	1109.6	1111.9	1114.2
125°	1160.4	1164.5	1168.6	1172.7	1177.8	1183.8	1189.8	1195.8	1201.8	1204.0	1206.2
127.5°	1248.7	1253.3	1257.8	1262.4	1266.9	1271.4	1275.9	1280.4	1284.9	1288.1	1291.3
130°	1305.0	1310.0	1315.1	1320.2	1324.4	1327.9	1331.4	1334.8	1338.3	1341.8	1345.3
132.5°	1361.1	1365.4	1369.7	1374.0	1377.9	1381.4	1384.8	1388.3	1391.8	1394.8	1397.7
135°	1435.8	1440.9	1445.9	1451.0	1454.9	1457.8	1460.6	1463.5	1466.3	1469.5	1472.6
137.5°	1509.1	1512.7	1516.2	1519.7	1523.1	1526.3	1529.6	1532.8	1536.0	1539.1	1542.2
140°	1557.0	1559.6	1562.1	1564.6	1567.6	1571.1	1574.6	1578.1	1581.5	1584.4	1587.2
142.5°	1597.7	1600.0	1602.3	1604.6	1607.7	1611.7	1615.7	1619.6	1623.6	1626.2	1628.8
145°	1659.4	1659.1	1658.8	1658.5	1661.0	1666.4	1671.8	1677.1	1682.5	1684.7	1686.9
147.5°	1714.6	1713.4	1712.2	1711.0	1713.0	1718.3	1723.7	1729.0	1734.3	1735.9	1737.6
150°	1750.0	1747.8	1745.6	1743.3	1744.8	1749.8	1754.9	1759.9	1765.0	1766.9	1768.8
152.5°	1780.5	1778.0	1775.5	1773.1	1774.2	1779.0	1783.8	1788.6	1793.4	1795.3	1797.2
155°	1824.7	1821.9	1819.0	1816.2	1816.7	1820.5	1824.3	1828.1	1831.8	1833.7	1835.6
157.5°	1860.2	1857.8	1855.4	1853.0	1853.1	1855.7	1858.4	1861.0	1863.7	1865.9	1868.0
160°	1881.1	1879.3	1877.4	1875.5	1875.5	1877.4	1879.3	1881.1	1883.0	1884.9	1886.8
162.5°	1899.4	1897.5	1895.6	1893.7	1893.5	1895.2	1896.8	1898.5	1900.1	1902.3	1904.4
165°	1923.8	1921.9	1920.0	1918.1	1917.7	1918.6	1919.5	1920.5	1921.4	1923.7	1925.9
167.5°	1942.0	1940.1	1938.2	1936.3	1935.8	1936.7	1937.6	1938.5	1939.4	1941.6	1943.8
170°	1952.3	1950.4	1948.5	1946.6	1945.9	1946.6	1947.2	1947.8	1948.5	1950.7	1952.9
172.5°	1959.1	1957.2	1955.3	1953.4	1952.8	1953.4	1954.0	1954.7	1955.3	1957.5	1959.7
175°	1967.6	1965.4	1963.2	1961.0	1960.2	1960.8	1961.4	1962.1	1962.7	1964.9	1967.1
177.5°	1969.5	1967.7	1965.9	1964.1	1963.4	1963.6	1963.9	1964.1	1964.4	1966.2	1967.9
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	613.1	615.6	615.6	616.0	618.9	618.5	618.3
5°	652.4	656.3	656.7	660.8	663.5	662.6	660.1
7.5°	689.5	696.7	702.2	705.2	708.8	711.0	710.0
10°	719.0	729.4	735.8	740.1	745.3	749.2	747.8
12.5°	745.7	758.1	766.9	774.3	774.9	779.9	776.5
15°	787.4	800.5	801.9	807.3	811.7	811.2	811.4
17.5°	801.1	805.3	806.2	806.3	806.4	804.8	801.3
20°	796.2	794.6	790.8	787.8	782.6	781.9	777.4
22.5°	772.9	767.9	758.2	751.8	743.7	741.6	740.3
25°	727.2	716.0	700.6	685.8	681.7	673.8	676.0
27.5°	664.3	647.0	630.2	618.3	607.4	595.5	598.9
30°	620.2	600.6	577.0	558.8	547.2	535.9	533.8
32.5°	567.5	538.8	512.5	496.5	478.7	471.5	463.7
35°	476.6	448.6	422.5	400.0	387.1	377.1	368.0
37.5°	394.9	362.7	341.6	323.4	314.0	308.3	309.8
40°	344.2	316.0	300.5	286.7	278.0	274.0	274.9
42.5°	303.1	282.0	269.3	259.8	253.7	251.4	250.9
45°	256.5	244.7	234.2	228.8	225.8	223.3	221.7
47.5°	224.7	215.0	209.1	205.9	203.3	200.8	200.7
50°	205.6	199.2	195.1	191.7	189.7	187.9	189.5
52.5°	191.0	185.2	181.1	178.1	177.3	175.7	175.6
55°	169.5	164.9	162.0	159.2	157.9	157.0	155.8
57.5°	149.8	145.5	142.8	141.1	138.5	137.6	137.2
60°	135.8	132.4	129.7	127.4	126.3	124.5	124.5
62.5°	122.9	119.5	117.0	115.3	113.4	112.7	112.9
65°	104.3	101.5	99.0	97.2	96.8	95.4	95.9
67.5°	87.1	85.3	82.6	81.6	80.8	80.1	79.5
70°	75.6	73.8	72.5	71.1	70.4	70.4	70.4
72.5°	66.0	63.8	63.0	61.3	61.7	61.0	60.2
75°	51.1	49.7	49.1	48.4	47.3	47.3	47.3
77.5°	37.6	37.2	36.4	35.7	35.4	35.2	35.3
80°	29.1	28.8	28.4	28.4	27.9	27.7	27.3
82.5°	22.4	21.8	21.5	21.3	21.2	21.2	21.1
85°	12.7	12.3	12.3	12.5	12.0	12.0	12.3
87.5°	11.5	11.9	11.9	12.0	12.3	12.3	12.4
90°	33.2	34.8	35.9	36.5	37.1	37.8	38.4
92.5°	35.5	36.3	36.9	37.3	37.6	38.0	38.4
95°	60.2	61.8	62.4	62.1	61.8	61.5	61.2
97.5°	78.0	79.3	80.1	80.5	80.9	81.3	81.6
100°	88.7	91.2	92.8	93.4	94.0	94.7	95.3
102.5°	93.2	96.5	98.6	99.5	100.3	101.2	102.1
105°	97.2	100.7	103.0	104.3	105.6	106.8	108.1
107.5°	110.8	107.3	106.2	107.4	108.7	110.0	111.2
110°	154.1	122.5	107.3	108.6	109.8	111.1	112.4



TEST NUMBER: P331489

CATALOG NUMBER: S122DIW-S290D1440U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	281.9	166.6	109.4	110.5	111.5	112.5	113.5
115°	438.5	292.2	207.6	184.9	162.1	139.4	116.6
117.5°	865.8	830.4	775.3	700.5	625.7	550.9	476.2
120°	1053.9	1057.7	1038.2	995.6	952.9	910.2	867.6
122.5°	1116.5	1118.7	1115.7	1107.4	1099.2	1090.9	1082.6
125°	1208.4	1210.6	1212.2	1213.2	1214.1	1215.1	1216.0
127.5°	1294.5	1297.7	1299.5	1299.6	1299.8	1300.0	1300.2
130°	1348.8	1352.2	1353.8	1353.5	1353.2	1352.9	1352.5
132.5°	1400.7	1403.7	1405.0	1404.7	1404.4	1404.1	1403.7
135°	1475.8	1479.0	1480.2	1479.6	1479.0	1478.3	1477.7
137.5°	1545.3	1548.4	1549.4	1548.3	1547.3	1546.2	1545.1
140°	1590.1	1592.9	1593.5	1592.0	1590.4	1588.8	1587.2
142.5°	1631.4	1634.0	1634.5	1632.9	1631.3	1629.8	1628.2
145°	1689.1	1691.4	1691.7	1690.1	1688.5	1686.9	1685.4
147.5°	1739.2	1740.9	1741.0	1739.7	1738.4	1737.0	1735.7
150°	1770.7	1772.6	1772.7	1771.2	1769.6	1768.0	1766.4
152.5°	1799.1	1801.0	1800.9	1798.8	1796.8	1794.7	1792.6
155°	1837.5	1839.4	1839.1	1836.6	1834.1	1831.5	1829.0
157.5°	1870.1	1872.3	1872.1	1869.7	1867.2	1864.7	1862.3
160°	1888.7	1890.6	1890.5	1888.3	1886.0	1883.8	1881.6
162.5°	1906.6	1908.7	1908.4	1905.7	1903.0	1900.3	1897.6
165°	1928.1	1930.3	1930.3	1928.1	1925.9	1923.7	1921.4
167.5°	1946.0	1948.2	1947.9	1945.1	1942.2	1939.4	1936.5
170°	1955.1	1957.3	1957.0	1954.2	1951.3	1948.5	1945.6
172.5°	1961.9	1964.1	1963.8	1961.0	1958.1	1955.3	1952.4
175°	1969.3	1971.5	1971.1	1967.9	1964.7	1961.6	1958.4
177.5°	1969.7	1971.5	1971.2	1968.9	1966.7	1964.4	1962.1
180°	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5	1965.5

(END OF REPORT)