

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: P331489-840

Luminaire Tested: **S122DIW-S290D1440U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331489-840
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-S290D1440U840-4F0-1E-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: 7138.7 lumens
Efficiency: N/A
Efficacy: 133.7 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

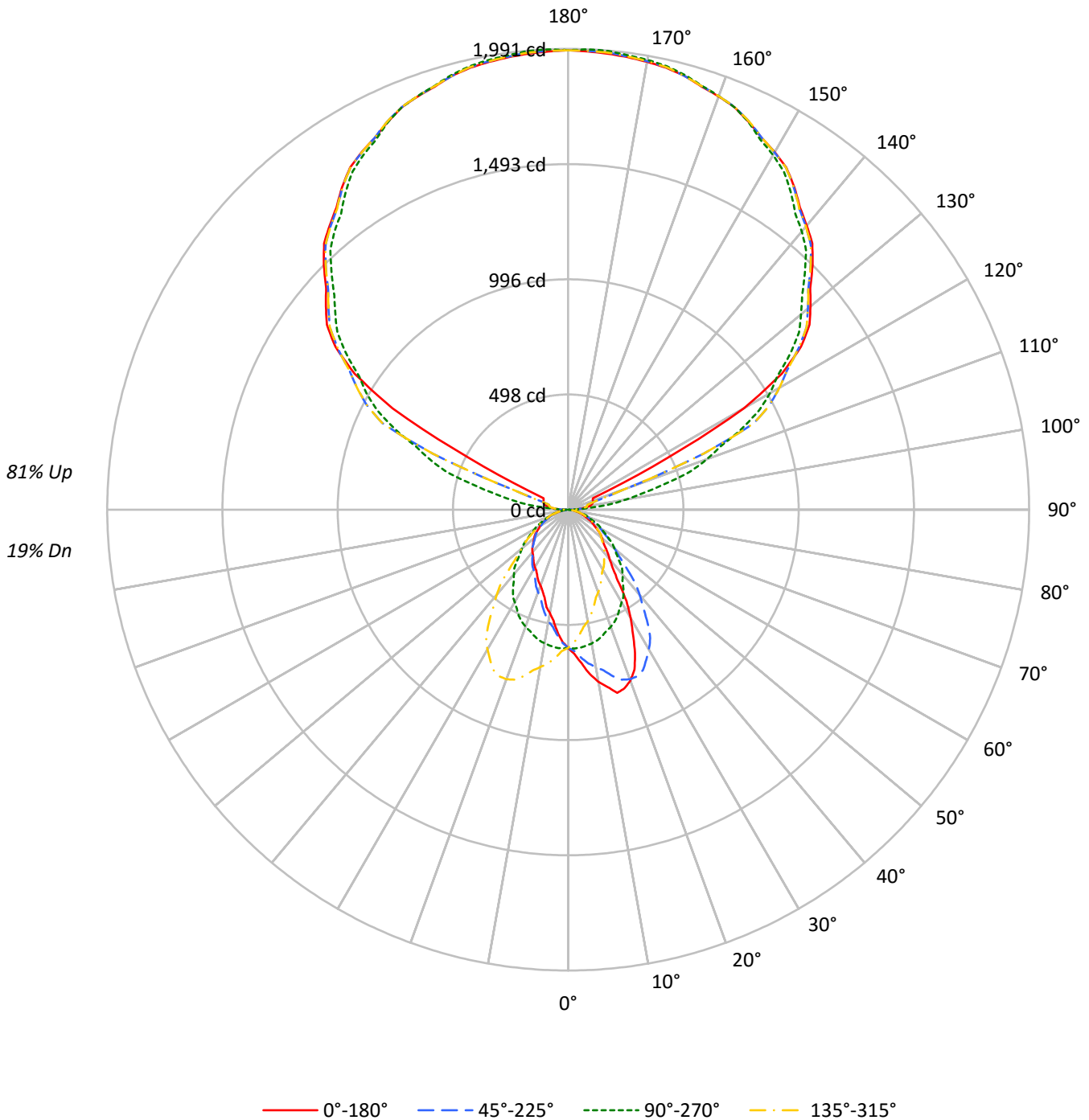
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

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	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°	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: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	0.8
10°-20°	165.3	2.3
20°-30°	239.9	3.4
30°-40°	253.1	3.5
40°-50°	224.1	3.1
50°-60°	178.8	2.5
60°-70°	121.6	1.7
70°-80°	62.3	0.9
80°-90°	19.9	0.3
90°-100°	66.2	0.9
100°-110°	242.8	3.4
110°-120°	649.0	9.1
120°-130°	1071.4	15.0
130°-140°	1139.4	16.0
140°-150°	1059.0	14.8
150°-160°	851.5	11.9
160°-170°	548.7	7.7
170°-180°	188.9	2.6
0°-30°	462.0	6.5
0°-40°	715.1	10.0
0°-60°	1118.0	15.7
0°-90°	1321.8	18.5
90°-120°	958.1	13.4
90°-150°	4227.9	59.2
90°-180°	5817.0	81.5
0°-180°	7138.7	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	15
90°	39	1	39	1	39	18
95°	62	93	62	93	62	58
105°	109	437	109	437	109	114
115°	118	826	118	826	118	295
125°	1228	1168	1228	1168	1228	1063
135°	1492	1445	1492	1445	1492	1150
145°	1702	1676	1702	1676	1702	1064
155°	1847	1846	1847	1846	1847	852
165°	1940	1945	1940	1945	1940	548
175°	1978	1989	1978	1989	1978	188
180°	1985	1985	1985	1985	1985	



TEST NUMBER: P331489-840

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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°	12.5	12.4	12.4	12.1	12.0	12.0	11.6	11.1	11.0	10.9	10.6
90°	38.8	38.2	37.5	36.9	36.3	35.1	33.5	31.9	30.3	28.7	26.2
92.5°	38.8	38.4	38.0	37.7	37.3	36.7	35.9	34.9	34.1	33.3	32.0
95°	61.8	62.1	62.4	62.7	63.0	62.4	60.8	59.2	57.6	56.0	53.8
97.5°	82.4	82.1	81.7	81.3	80.9	80.1	78.8	77.6	76.2	74.9	69.8
100°	96.2	95.6	94.9	94.3	93.7	92.1	89.6	86.9	84.4	81.9	76.4
102.5°	103.1	102.2	101.3	100.5	99.6	97.5	94.1	90.8	87.5	84.1	129.6
105°	109.2	107.9	106.6	105.3	104.0	101.7	98.2	94.6	91.1	87.7	174.7
107.5°	112.3	111.1	109.8	108.5	107.2	108.4	111.9	115.5	119.1	122.7	227.1
110°	113.5	112.2	110.9	109.7	108.4	123.7	155.6	187.5	219.4	251.4	343.6



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	114.6	113.6	112.6	111.6	110.5	168.2	284.7	401.1	517.6	634.0	656.7
115°	117.8	140.8	163.7	186.7	209.6	295.1	442.8	590.7	738.4	886.2	878.2
117.5°	480.9	556.3	631.9	707.4	782.9	838.6	874.3	910.1	945.8	981.6	976.0
120°	876.2	919.2	962.3	1005.4	1048.4	1068.1	1064.3	1060.5	1056.6	1052.8	1047.0
122.5°	1093.3	1101.7	1110.0	1118.3	1126.7	1129.7	1127.5	1125.2	1122.9	1120.5	1114.3
125°	1228.0	1227.1	1226.1	1225.2	1224.2	1222.5	1220.3	1218.1	1215.9	1213.7	1207.6
127.5°	1313.0	1312.8	1312.6	1312.4	1312.3	1310.5	1307.3	1304.0	1300.8	1297.6	1293.0
130°	1365.8	1366.2	1366.5	1366.9	1367.2	1365.5	1362.1	1358.6	1355.0	1351.5	1348.0
132.5°	1417.5	1418.0	1418.3	1418.6	1418.9	1417.5	1414.5	1411.5	1408.6	1405.5	1402.0
135°	1492.3	1492.9	1493.6	1494.2	1494.8	1493.6	1490.4	1487.1	1484.0	1480.8	1477.9
137.5°	1560.3	1561.5	1562.6	1563.6	1564.7	1563.7	1560.5	1557.4	1554.3	1551.2	1547.9
140°	1602.9	1604.5	1606.1	1607.7	1609.2	1608.6	1605.8	1602.9	1600.0	1597.1	1593.7
142.5°	1644.3	1645.9	1647.4	1649.0	1650.6	1650.1	1647.5	1644.9	1642.2	1639.6	1635.6
145°	1702.0	1703.5	1705.2	1706.8	1708.4	1708.1	1705.8	1703.5	1701.3	1699.1	1693.6
147.5°	1752.8	1754.1	1755.5	1756.9	1758.2	1758.1	1756.4	1754.7	1753.0	1751.4	1746.1
150°	1783.8	1785.4	1787.1	1788.7	1790.2	1790.1	1788.2	1786.2	1784.3	1782.4	1777.3
152.5°	1810.3	1812.4	1814.5	1816.5	1818.7	1818.8	1816.8	1814.9	1813.0	1811.1	1806.2
155°	1847.0	1849.6	1852.2	1854.7	1857.2	1857.5	1855.6	1853.7	1851.8	1849.9	1846.1
157.5°	1880.7	1883.1	1885.6	1888.1	1890.6	1890.8	1888.5	1886.4	1884.3	1882.1	1879.4
160°	1900.2	1902.4	1904.6	1906.9	1909.1	1909.3	1907.3	1905.4	1903.5	1901.6	1899.7
162.5°	1916.3	1919.0	1921.8	1924.5	1927.2	1927.5	1925.4	1923.2	1921.1	1918.8	1917.2
165°	1940.4	1942.7	1944.9	1947.1	1949.3	1949.3	1947.1	1944.9	1942.7	1940.4	1939.4
167.5°	1955.6	1958.5	1961.4	1964.3	1967.1	1967.4	1965.2	1963.0	1960.8	1958.5	1957.6
170°	1964.8	1967.7	1970.5	1973.5	1976.3	1976.6	1974.4	1972.2	1969.9	1967.7	1967.0
172.5°	1971.7	1974.6	1977.4	1980.3	1983.2	1983.5	1981.3	1979.0	1976.8	1974.6	1974.0
175°	1977.7	1981.0	1984.1	1987.3	1990.5	1990.9	1988.7	1986.5	1984.3	1982.1	1981.5
177.5°	1981.5	1983.8	1986.1	1988.3	1990.6	1990.9	1989.1	1987.3	1985.6	1983.8	1983.5
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	10.2	9.7	9.2	9.0	7.7	7.0	5.6	4.3	4.8	5.4	5.7
90°	23.6	21.1	18.5	15.5	12.0	8.5	4.9	1.4	4.9	8.5	12.0
92.5°	30.8	29.5	28.2	27.8	28.1	28.4	28.7	29.0	28.7	28.4	28.1
95°	51.5	49.3	47.1	51.2	61.8	72.3	82.8	93.3	82.8	72.3	61.8
97.5°	64.6	59.5	54.3	66.6	96.2	125.9	155.6	185.3	155.6	125.9	96.2
100°	71.0	65.5	60.2	79.3	123.0	166.7	210.5	254.2	210.5	166.7	123.0
102.5°	174.9	220.4	265.7	293.1	302.3	311.5	320.8	330.0	320.8	311.5	302.3
105°	261.9	349.0	436.2	474.9	465.3	455.8	446.2	436.7	446.2	455.8	465.3
107.5°	331.6	436.2	540.7	589.1	581.3	573.6	565.8	558.2	565.8	573.6	581.3
110°	435.9	528.1	620.3	663.1	656.4	649.6	643.0	636.3	643.0	649.6	656.4



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	679.5	702.4	725.1	733.6	727.6	721.6	715.7	709.8	715.7	721.6	727.6
115°	870.2	862.2	854.2	847.6	842.1	836.7	831.3	825.9	831.3	836.7	842.1
117.5°	970.6	965.0	959.6	953.8	947.8	941.7	935.6	929.6	935.6	941.7	947.8
120°	1041.3	1035.5	1029.8	1024.5	1019.8	1014.9	1010.2	1005.4	1010.2	1014.9	1019.8
122.5°	1108.0	1101.8	1095.6	1089.9	1084.9	1079.8	1074.8	1069.8	1074.8	1079.8	1084.9
125°	1201.5	1195.5	1189.4	1184.3	1180.1	1176.0	1171.8	1167.7	1171.8	1176.0	1180.1
127.5°	1288.5	1283.9	1279.4	1274.9	1270.2	1265.7	1261.0	1256.5	1261.0	1265.7	1270.2
130°	1344.5	1341.0	1337.5	1333.2	1328.1	1322.9	1317.9	1312.7	1317.9	1322.9	1328.1
132.5°	1398.5	1395.0	1391.5	1387.6	1383.2	1378.9	1374.5	1370.2	1374.5	1378.9	1383.2
135°	1475.0	1472.2	1469.3	1465.3	1460.2	1455.1	1450.0	1444.9	1450.0	1455.1	1460.2
137.5°	1544.7	1541.4	1538.1	1534.7	1531.2	1527.6	1524.0	1520.5	1524.0	1527.6	1531.2
140°	1590.1	1586.6	1583.1	1580.0	1577.5	1575.0	1572.4	1569.8	1572.4	1575.0	1577.5
142.5°	1631.6	1627.6	1623.6	1620.4	1618.1	1615.8	1613.5	1611.2	1613.5	1615.8	1618.1
145°	1688.3	1682.8	1677.4	1674.9	1675.2	1675.5	1675.8	1676.2	1675.8	1675.5	1675.2
147.5°	1740.7	1735.3	1729.9	1727.9	1729.1	1730.3	1731.5	1732.7	1731.5	1730.3	1729.1
150°	1772.2	1767.1	1762.0	1760.5	1762.8	1765.0	1767.3	1769.5	1767.3	1765.0	1762.8
152.5°	1801.4	1796.5	1791.7	1790.6	1793.0	1795.5	1798.1	1800.5	1798.1	1795.5	1793.0
155°	1842.3	1838.5	1834.6	1834.1	1836.9	1839.9	1842.7	1845.6	1842.7	1839.9	1836.9
157.5°	1876.7	1874.0	1871.4	1871.3	1873.7	1876.1	1878.6	1881.0	1878.6	1876.1	1873.7
160°	1897.8	1895.9	1894.0	1894.0	1895.9	1897.8	1899.7	1901.6	1899.7	1897.8	1895.9
162.5°	1915.5	1913.9	1912.2	1912.4	1914.3	1916.2	1918.1	1920.0	1918.1	1916.2	1914.3
165°	1938.4	1937.5	1936.6	1937.0	1938.9	1940.9	1942.8	1944.7	1942.8	1940.9	1938.9
167.5°	1956.7	1955.8	1954.9	1955.4	1957.3	1959.2	1961.2	1963.1	1961.2	1959.2	1957.3
170°	1966.4	1965.8	1965.1	1965.8	1967.7	1969.6	1971.6	1973.5	1971.6	1969.6	1967.7
172.5°	1973.3	1972.7	1972.1	1972.7	1974.6	1976.5	1978.4	1980.3	1978.4	1976.5	1974.6
175°	1980.7	1980.1	1979.5	1980.3	1982.6	1984.8	1987.0	1989.2	1987.0	1984.8	1982.6
177.5°	1983.3	1983.0	1982.8	1983.5	1985.3	1987.1	1988.9	1990.6	1988.9	1987.1	1985.3
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	6.3	6.7	7.0	7.5	7.8	8.2	8.3	8.6	8.9	8.9	9.1
90°	15.5	18.5	21.1	23.6	26.2	28.7	30.3	31.9	33.5	35.1	36.3
92.5°	27.8	28.2	29.5	30.8	32.0	33.3	34.1	34.9	35.9	36.7	37.3
95°	51.2	47.1	49.3	51.5	53.8	56.0	57.6	59.2	60.8	62.4	63.0
97.5°	66.6	54.3	59.5	64.6	69.8	74.9	76.2	77.6	78.8	80.1	80.9
100°	79.3	60.2	65.5	71.0	76.4	81.9	84.4	86.9	89.6	92.1	93.7
102.5°	293.1	265.7	220.4	174.9	129.6	84.1	87.5	90.8	94.1	97.5	99.6
105°	474.9	436.2	349.0	261.9	174.7	87.7	91.1	94.6	98.2	101.7	104.0
107.5°	589.1	540.7	436.2	331.6	227.1	122.7	119.1	115.5	111.9	108.4	107.2
110°	663.1	620.3	528.1	435.9	343.6	251.4	219.4	187.5	155.6	123.7	108.4



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	733.6	725.1	702.4	679.5	656.7	634.0	517.6	401.1	284.7	168.2	110.5
115°	847.6	854.2	862.2	870.2	878.2	886.2	738.4	590.7	442.8	295.1	209.6
117.5°	953.8	959.6	965.0	970.6	976.0	981.6	945.8	910.1	874.3	838.6	782.9
120°	1024.5	1029.8	1035.5	1041.3	1047.0	1052.8	1056.6	1060.5	1064.3	1068.1	1048.4
122.5°	1089.9	1095.6	1101.8	1108.0	1114.3	1120.5	1122.9	1125.2	1127.5	1129.7	1126.7
125°	1184.3	1189.4	1195.5	1201.5	1207.6	1213.7	1215.9	1218.1	1220.3	1222.5	1224.2
127.5°	1274.9	1279.4	1283.9	1288.5	1293.0	1297.6	1300.8	1304.0	1307.3	1310.5	1312.3
130°	1333.2	1337.5	1341.0	1344.5	1348.0	1351.5	1355.0	1358.6	1362.1	1365.5	1367.2
132.5°	1387.6	1391.5	1395.0	1398.5	1402.0	1405.5	1408.6	1411.5	1414.5	1417.5	1418.9
135°	1465.3	1469.3	1472.2	1475.0	1477.9	1480.8	1484.0	1487.1	1490.4	1493.6	1494.8
137.5°	1534.7	1538.1	1541.4	1544.7	1547.9	1551.2	1554.3	1557.4	1560.5	1563.7	1564.7
140°	1580.0	1583.1	1586.6	1590.1	1593.7	1597.1	1600.0	1602.9	1605.8	1608.6	1609.2
142.5°	1620.4	1623.6	1627.6	1631.6	1635.6	1639.6	1642.2	1644.9	1647.5	1650.1	1650.6
145°	1674.9	1677.4	1682.8	1688.3	1693.6	1699.1	1701.3	1703.5	1705.8	1708.1	1708.4
147.5°	1727.9	1729.9	1735.3	1740.7	1746.1	1751.4	1753.0	1754.7	1756.4	1758.1	1758.2
150°	1760.5	1762.0	1767.1	1772.2	1777.3	1782.4	1784.3	1786.2	1788.2	1790.1	1790.2
152.5°	1790.6	1791.7	1796.5	1801.4	1806.2	1811.1	1813.0	1814.9	1816.8	1818.8	1818.7
155°	1834.1	1834.6	1838.5	1842.3	1846.1	1849.9	1851.8	1853.7	1855.6	1857.5	1857.2
157.5°	1871.3	1871.4	1874.0	1876.7	1879.4	1882.1	1884.3	1886.4	1888.5	1890.8	1890.6
160°	1894.0	1894.0	1895.9	1897.8	1899.7	1901.6	1903.5	1905.4	1907.3	1909.3	1909.1
162.5°	1912.4	1912.2	1913.9	1915.5	1917.2	1918.8	1921.1	1923.2	1925.4	1927.5	1927.2
165°	1937.0	1936.6	1937.5	1938.4	1939.4	1940.4	1942.7	1944.9	1947.1	1949.3	1949.3
167.5°	1955.4	1954.9	1955.8	1956.7	1957.6	1958.5	1960.8	1963.0	1965.2	1967.4	1967.1
170°	1965.8	1965.1	1965.8	1966.4	1967.0	1967.7	1969.9	1972.2	1974.4	1976.6	1976.3
172.5°	1972.7	1972.1	1972.7	1973.3	1974.0	1974.6	1976.8	1979.0	1981.3	1983.5	1983.2
175°	1980.3	1979.5	1980.1	1980.7	1981.5	1982.1	1984.3	1986.5	1988.7	1990.9	1990.5
177.5°	1983.5	1982.8	1983.0	1983.3	1983.5	1983.8	1985.6	1987.3	1989.1	1990.9	1990.6
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	9.2	9.2	9.3	9.2	9.3	9.2	9.2	9.1	8.9	8.9	8.6
90°	36.9	37.5	38.2	38.8	38.2	37.5	36.9	36.3	35.1	33.5	31.9
92.5°	37.7	38.0	38.4	38.8	38.4	38.0	37.7	37.3	36.7	35.9	34.9
95°	62.7	62.4	62.1	61.8	62.1	62.4	62.7	63.0	62.4	60.8	59.2
97.5°	81.3	81.7	82.1	82.4	82.1	81.7	81.3	80.9	80.1	78.8	77.6
100°	94.3	94.9	95.6	96.2	95.6	94.9	94.3	93.7	92.1	89.6	86.9
102.5°	100.5	101.3	102.2	103.1	102.2	101.3	100.5	99.6	97.5	94.1	90.8
105°	105.3	106.6	107.9	109.2	107.9	106.6	105.3	104.0	101.7	98.2	94.6
107.5°	108.5	109.8	111.1	112.3	111.1	109.8	108.5	107.2	108.4	111.9	115.5
110°	109.7	110.9	112.2	113.5	112.2	110.9	109.7	108.4	123.7	155.6	187.5



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	111.6	112.6	113.6	114.6	113.6	112.6	111.6	110.5	168.2	284.7	401.1
115°	186.7	163.7	140.8	117.8	140.8	163.7	186.7	209.6	295.1	442.8	590.7
117.5°	707.4	631.9	556.3	480.9	556.3	631.9	707.4	782.9	838.6	874.3	910.1
120°	1005.4	962.3	919.2	876.2	919.2	962.3	1005.4	1048.4	1068.1	1064.3	1060.5
122.5°	1118.3	1110.0	1101.7	1093.3	1101.7	1110.0	1118.3	1126.7	1129.7	1127.5	1125.2
125°	1225.2	1226.1	1227.1	1228.0	1227.1	1226.1	1225.2	1224.2	1222.5	1220.3	1218.1
127.5°	1312.4	1312.6	1312.8	1313.0	1312.8	1312.6	1312.4	1312.3	1310.5	1307.3	1304.0
130°	1366.9	1366.5	1366.2	1365.8	1366.2	1366.5	1366.9	1367.2	1365.5	1362.1	1358.6
132.5°	1418.6	1418.3	1418.0	1417.5	1418.0	1418.3	1418.6	1418.9	1417.5	1414.5	1411.5
135°	1494.2	1493.6	1492.9	1492.3	1492.9	1493.6	1494.2	1494.8	1493.6	1490.4	1487.1
137.5°	1563.6	1562.6	1561.5	1560.3	1561.5	1562.6	1563.6	1564.7	1563.7	1560.5	1557.4
140°	1607.7	1606.1	1604.5	1602.9	1604.5	1606.1	1607.7	1609.2	1608.6	1605.8	1602.9
142.5°	1649.0	1647.4	1645.9	1644.3	1645.9	1647.4	1649.0	1650.6	1650.1	1647.5	1644.9
145°	1706.8	1705.2	1703.5	1702.0	1703.5	1705.2	1706.8	1708.4	1708.1	1705.8	1703.5
147.5°	1756.9	1755.5	1754.1	1752.8	1754.1	1755.5	1756.9	1758.2	1758.1	1756.4	1754.7
150°	1788.7	1787.1	1785.4	1783.8	1785.4	1787.1	1788.7	1790.2	1790.1	1788.2	1786.2
152.5°	1816.5	1814.5	1812.4	1810.3	1812.4	1814.5	1816.5	1818.7	1818.8	1816.8	1814.9
155°	1854.7	1852.2	1849.6	1847.0	1849.6	1852.2	1854.7	1857.2	1857.5	1855.6	1853.7
157.5°	1888.1	1885.6	1883.1	1880.7	1883.1	1885.6	1888.1	1890.6	1890.8	1888.5	1886.4
160°	1906.9	1904.6	1902.4	1900.2	1902.4	1904.6	1906.9	1909.1	1909.3	1907.3	1905.4
162.5°	1924.5	1921.8	1919.0	1916.3	1919.0	1921.8	1924.5	1927.2	1927.5	1925.4	1923.2
165°	1947.1	1944.9	1942.7	1940.4	1942.7	1944.9	1947.1	1949.3	1949.3	1947.1	1944.9
167.5°	1964.3	1961.4	1958.5	1955.6	1958.5	1961.4	1964.3	1967.1	1967.4	1965.2	1963.0
170°	1973.5	1970.5	1967.7	1964.8	1967.7	1970.5	1973.5	1976.3	1976.6	1974.4	1972.2
172.5°	1980.3	1977.4	1974.6	1971.7	1974.6	1977.4	1980.3	1983.2	1983.5	1981.3	1979.0
175°	1987.3	1984.1	1981.0	1977.7	1981.0	1984.1	1987.3	1990.5	1990.9	1988.7	1986.5
177.5°	1988.3	1986.1	1983.8	1981.5	1983.8	1986.1	1988.3	1990.6	1990.9	1989.1	1987.3
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	8.3	8.2	7.8	7.5	7.0	6.7	6.3	5.7	5.4	4.8	4.3
90°	30.3	28.7	26.2	23.6	21.1	18.5	15.5	12.0	8.5	4.9	1.4
92.5°	34.1	33.3	32.0	30.8	29.5	28.2	27.8	28.1	28.4	28.7	29.0
95°	57.6	56.0	53.8	51.5	49.3	47.1	51.2	61.8	72.3	82.8	93.3
97.5°	76.2	74.9	69.8	64.6	59.5	54.3	66.6	96.2	125.9	155.6	185.3
100°	84.4	81.9	76.4	71.0	65.5	60.2	79.3	123.0	166.7	210.5	254.2
102.5°	87.5	84.1	129.6	174.9	220.4	265.7	293.1	302.3	311.5	320.8	330.0
105°	91.1	87.7	174.7	261.9	349.0	436.2	474.9	465.3	455.8	446.2	436.7
107.5°	119.1	122.7	227.1	331.6	436.2	540.7	589.1	581.3	573.6	565.8	558.2
110°	219.4	251.4	343.6	435.9	528.1	620.3	663.1	656.4	649.6	643.0	636.3



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	517.6	634.0	656.7	679.5	702.4	725.1	733.6	727.6	721.6	715.7	709.8
115°	738.4	886.2	878.2	870.2	862.2	854.2	847.6	842.1	836.7	831.3	825.9
117.5°	945.8	981.6	976.0	970.6	965.0	959.6	953.8	947.8	941.7	935.6	929.6
120°	1056.6	1052.8	1047.0	1041.3	1035.5	1029.8	1024.5	1019.8	1014.9	1010.2	1005.4
122.5°	1122.9	1120.5	1114.3	1108.0	1101.8	1095.6	1089.9	1084.9	1079.8	1074.8	1069.8
125°	1215.9	1213.7	1207.6	1201.5	1195.5	1189.4	1184.3	1180.1	1176.0	1171.8	1167.7
127.5°	1300.8	1297.6	1293.0	1288.5	1283.9	1279.4	1274.9	1270.2	1265.7	1261.0	1256.5
130°	1355.0	1351.5	1348.0	1344.5	1341.0	1337.5	1333.2	1328.1	1322.9	1317.9	1312.7
132.5°	1408.6	1405.5	1402.0	1398.5	1395.0	1391.5	1387.6	1383.2	1378.9	1374.5	1370.2
135°	1484.0	1480.8	1477.9	1475.0	1472.2	1469.3	1465.3	1460.2	1455.1	1450.0	1444.9
137.5°	1554.3	1551.2	1547.9	1544.7	1541.4	1538.1	1534.7	1531.2	1527.6	1524.0	1520.5
140°	1600.0	1597.1	1593.7	1590.1	1586.6	1583.1	1580.0	1577.5	1575.0	1572.4	1569.8
142.5°	1642.2	1639.6	1635.6	1631.6	1627.6	1623.6	1620.4	1618.1	1615.8	1613.5	1611.2
145°	1701.3	1699.1	1693.6	1688.3	1682.8	1677.4	1674.9	1675.2	1675.5	1675.8	1676.2
147.5°	1753.0	1751.4	1746.1	1740.7	1735.3	1729.9	1727.9	1729.1	1730.3	1731.5	1732.7
150°	1784.3	1782.4	1777.3	1772.2	1767.1	1762.0	1760.5	1762.8	1765.0	1767.3	1769.5
152.5°	1813.0	1811.1	1806.2	1801.4	1796.5	1791.7	1790.6	1793.0	1795.5	1798.1	1800.5
155°	1851.8	1849.9	1846.1	1842.3	1838.5	1834.6	1834.1	1836.9	1839.9	1842.7	1845.6
157.5°	1884.3	1882.1	1879.4	1876.7	1874.0	1871.4	1871.3	1873.7	1876.1	1878.6	1881.0
160°	1903.5	1901.6	1899.7	1897.8	1895.9	1894.0	1894.0	1895.9	1897.8	1899.7	1901.6
162.5°	1921.1	1918.8	1917.2	1915.5	1913.9	1912.2	1912.4	1914.3	1916.2	1918.1	1920.0
165°	1942.7	1940.4	1939.4	1938.4	1937.5	1936.6	1937.0	1938.9	1940.9	1942.8	1944.7
167.5°	1960.8	1958.5	1957.6	1956.7	1955.8	1954.9	1955.4	1957.3	1959.2	1961.2	1963.1
170°	1969.9	1967.7	1967.0	1966.4	1965.8	1965.1	1965.8	1967.7	1969.6	1971.6	1973.5
172.5°	1976.8	1974.6	1974.0	1973.3	1972.7	1972.1	1972.7	1974.6	1976.5	1978.4	1980.3
175°	1984.3	1982.1	1981.5	1980.7	1980.1	1979.5	1980.3	1982.6	1984.8	1987.0	1989.2
177.5°	1985.6	1983.8	1983.5	1983.3	1983.0	1982.8	1983.5	1985.3	1987.1	1988.9	1990.6
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	5.6	7.0	7.7	9.0	9.2	9.7	10.2	10.6	10.9	11.0	11.1
90°	4.9	8.5	12.0	15.5	18.5	21.1	23.6	26.2	28.7	30.3	31.9
92.5°	28.7	28.4	28.1	27.8	28.2	29.5	30.8	32.0	33.3	34.1	34.9
95°	82.8	72.3	61.8	51.2	47.1	49.3	51.5	53.8	56.0	57.6	59.2
97.5°	155.6	125.9	96.2	66.6	54.3	59.5	64.6	69.8	74.9	76.2	77.6
100°	210.5	166.7	123.0	79.3	60.2	65.5	71.0	76.4	81.9	84.4	86.9
102.5°	320.8	311.5	302.3	293.1	265.7	220.4	174.9	129.6	84.1	87.5	90.8
105°	446.2	455.8	465.3	474.9	436.2	349.0	261.9	174.7	87.7	91.1	94.6
107.5°	565.8	573.6	581.3	589.1	540.7	436.2	331.6	227.1	122.7	119.1	115.5
110°	643.0	649.6	656.4	663.1	620.3	528.1	435.9	343.6	251.4	219.4	187.5



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	715.7	721.6	727.6	733.6	725.1	702.4	679.5	656.7	634.0	517.6	401.1
115°	831.3	836.7	842.1	847.6	854.2	862.2	870.2	878.2	886.2	738.4	590.7
117.5°	935.6	941.7	947.8	953.8	959.6	965.0	970.6	976.0	981.6	945.8	910.1
120°	1010.2	1014.9	1019.8	1024.5	1029.8	1035.5	1041.3	1047.0	1052.8	1056.6	1060.5
122.5°	1074.8	1079.8	1084.9	1089.9	1095.6	1101.8	1108.0	1114.3	1120.5	1122.9	1125.2
125°	1171.8	1176.0	1180.1	1184.3	1189.4	1195.5	1201.5	1207.6	1213.7	1215.9	1218.1
127.5°	1261.0	1265.7	1270.2	1274.9	1279.4	1283.9	1288.5	1293.0	1297.6	1300.8	1304.0
130°	1317.9	1322.9	1328.1	1333.2	1337.5	1341.0	1344.5	1348.0	1351.5	1355.0	1358.6
132.5°	1374.5	1378.9	1383.2	1387.6	1391.5	1395.0	1398.5	1402.0	1405.5	1408.6	1411.5
135°	1450.0	1455.1	1460.2	1465.3	1469.3	1472.2	1475.0	1477.9	1480.8	1484.0	1487.1
137.5°	1524.0	1527.6	1531.2	1534.7	1538.1	1541.4	1544.7	1547.9	1551.2	1554.3	1557.4
140°	1572.4	1575.0	1577.5	1580.0	1583.1	1586.6	1590.1	1593.7	1597.1	1600.0	1602.9
142.5°	1613.5	1615.8	1618.1	1620.4	1623.6	1627.6	1631.6	1635.6	1639.6	1642.2	1644.9
145°	1675.8	1675.5	1675.2	1674.9	1677.4	1682.8	1688.3	1693.6	1699.1	1701.3	1703.5
147.5°	1731.5	1730.3	1729.1	1727.9	1729.9	1735.3	1740.7	1746.1	1751.4	1753.0	1754.7
150°	1767.3	1765.0	1762.8	1760.5	1762.0	1767.1	1772.2	1777.3	1782.4	1784.3	1786.2
152.5°	1798.1	1795.5	1793.0	1790.6	1791.7	1796.5	1801.4	1806.2	1811.1	1813.0	1814.9
155°	1842.7	1839.9	1836.9	1834.1	1834.6	1838.5	1842.3	1846.1	1849.9	1851.8	1853.7
157.5°	1878.6	1876.1	1873.7	1871.3	1871.4	1874.0	1876.7	1879.4	1882.1	1884.3	1886.4
160°	1899.7	1897.8	1895.9	1894.0	1894.0	1895.9	1897.8	1899.7	1901.6	1903.5	1905.4
162.5°	1918.1	1916.2	1914.3	1912.4	1912.2	1913.9	1915.5	1917.2	1918.8	1921.1	1923.2
165°	1942.8	1940.9	1938.9	1937.0	1936.6	1937.5	1938.4	1939.4	1940.4	1942.7	1944.9
167.5°	1961.2	1959.2	1957.3	1955.4	1954.9	1955.8	1956.7	1957.6	1958.5	1960.8	1963.0
170°	1971.6	1969.6	1967.7	1965.8	1965.1	1965.8	1966.4	1967.0	1967.7	1969.9	1972.2
172.5°	1978.4	1976.5	1974.6	1972.7	1972.1	1972.7	1973.3	1974.0	1974.6	1976.8	1979.0
175°	1987.0	1984.8	1982.6	1980.3	1979.5	1980.1	1980.7	1981.5	1982.1	1984.3	1986.5
177.5°	1988.9	1987.1	1985.3	1983.5	1982.8	1983.0	1983.3	1983.5	1983.8	1985.6	1987.3
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-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°	11.6	12.0	12.0	12.1	12.4	12.4	12.5
90°	33.5	35.1	36.3	36.9	37.5	38.2	38.8
92.5°	35.9	36.7	37.3	37.7	38.0	38.4	38.8
95°	60.8	62.4	63.0	62.7	62.4	62.1	61.8
97.5°	78.8	80.1	80.9	81.3	81.7	82.1	82.4
100°	89.6	92.1	93.7	94.3	94.9	95.6	96.2
102.5°	94.1	97.5	99.6	100.5	101.3	102.2	103.1
105°	98.2	101.7	104.0	105.3	106.6	107.9	109.2
107.5°	111.9	108.4	107.2	108.5	109.8	111.1	112.3
110°	155.6	123.7	108.4	109.7	110.9	112.2	113.5



TEST NUMBER: P331489-840

CATALOG NUMBER: S122DIW-S290D1440U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	284.7	168.2	110.5	111.6	112.6	113.6	114.6
115°	442.8	295.1	209.6	186.7	163.7	140.8	117.8
117.5°	874.3	838.6	782.9	707.4	631.9	556.3	480.9
120°	1064.3	1068.1	1048.4	1005.4	962.3	919.2	876.2
122.5°	1127.5	1129.7	1126.7	1118.3	1110.0	1101.7	1093.3
125°	1220.3	1222.5	1224.2	1225.2	1226.1	1227.1	1228.0
127.5°	1307.3	1310.5	1312.3	1312.4	1312.6	1312.8	1313.0
130°	1362.1	1365.5	1367.2	1366.9	1366.5	1366.2	1365.8
132.5°	1414.5	1417.5	1418.9	1418.6	1418.3	1418.0	1417.5
135°	1490.4	1493.6	1494.8	1494.2	1493.6	1492.9	1492.3
137.5°	1560.5	1563.7	1564.7	1563.6	1562.6	1561.5	1560.3
140°	1605.8	1608.6	1609.2	1607.7	1606.1	1604.5	1602.9
142.5°	1647.5	1650.1	1650.6	1649.0	1647.4	1645.9	1644.3
145°	1705.8	1708.1	1708.4	1706.8	1705.2	1703.5	1702.0
147.5°	1756.4	1758.1	1758.2	1756.9	1755.5	1754.1	1752.8
150°	1788.2	1790.1	1790.2	1788.7	1787.1	1785.4	1783.8
152.5°	1816.8	1818.8	1818.7	1816.5	1814.5	1812.4	1810.3
155°	1855.6	1857.5	1857.2	1854.7	1852.2	1849.6	1847.0
157.5°	1888.5	1890.8	1890.6	1888.1	1885.6	1883.1	1880.7
160°	1907.3	1909.3	1909.1	1906.9	1904.6	1902.4	1900.2
162.5°	1925.4	1927.5	1927.2	1924.5	1921.8	1919.0	1916.3
165°	1947.1	1949.3	1949.3	1947.1	1944.9	1942.7	1940.4
167.5°	1965.2	1967.4	1967.1	1964.3	1961.4	1958.5	1955.6
170°	1974.4	1976.6	1976.3	1973.5	1970.5	1967.7	1964.8
172.5°	1981.3	1983.5	1983.2	1980.3	1977.4	1974.6	1971.7
175°	1988.7	1990.9	1990.5	1987.3	1984.1	1981.0	1977.7
177.5°	1989.1	1990.9	1990.6	1988.3	1986.1	1983.8	1981.5
180°	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9	1984.9

(END OF REPORT)