

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331781-830

Luminaire Tested: **S122RDIW-S290D1440U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331781-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDIW-S290D1440U830-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1440 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

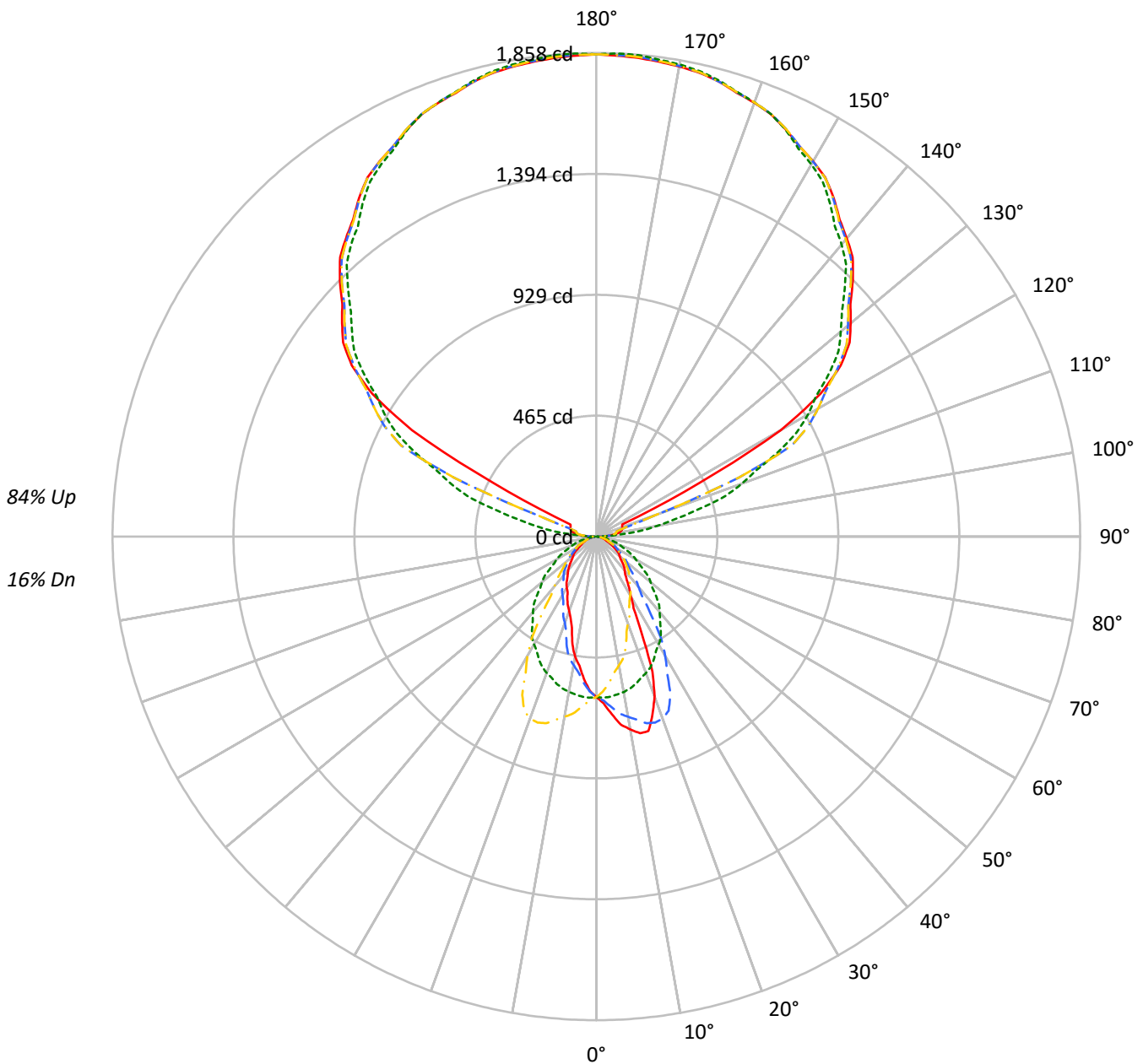
Lumens per Lamp: N/A  
Luminaire Lumens: 6498.5 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°    - - - 135°-315°



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

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16
1	91	86	83	80	79	76	73	71	57	55	53	39	38	37	23	22	22	14
2	83	76	70	65	72	67	62	58	50	47	44	35	33	31	20	19	19	12
3	75	67	60	55	66	59	53	49	44	41	38	31	29	27	18	17	16	11
4	69	59	52	46	60	52	46	41	39	35	32	28	25	23	16	15	14	10
5	63	53	45	40	55	47	40	36	35	31	28	25	22	20	15	14	12	9
6	58	47	40	34	51	42	35	31	32	27	24	22	20	18	14	12	11	8
7	54	42	35	30	47	38	31	27	29	24	21	20	18	16	12	11	10	7
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	11	10	9	6
9	46	35	28	23	41	31	25	21	24	20	17	17	14	12	11	9	8	6
10	43	32	25	21	38	28	23	19	22	18	15	16	13	11	10	8	7	5

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

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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.4	0.9
10°-20°	162.8	2.5
20°-30°	209.7	3.2
30°-40°	199.3	3.1
40°-50°	170.7	2.6
50°-60°	130.0	2.0
60°-70°	82.2	1.3
70°-80°	41.0	0.6
80°-90°	15.2	0.2
90°-100°	61.8	1.0
100°-110°	226.6	3.5
110°-120°	605.8	9.3
120°-130°	1000.0	15.4
130°-140°	1063.4	16.4
140°-150°	988.4	15.2
150°-160°	794.7	12.2
160°-170°	512.1	7.9
170°-180°	176.3	2.7
0°-30°	430.9	6.6
0°-40°	630.2	9.7
0°-60°	931.0	14.3
0°-90°	1069.5	16.5
90°-120°	894.2	13.8
90°-150°	3946.0	60.7
90°-180°	5429.0	83.5
0°-180°	6498.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	616	616	616	616	616	
5°	686	618	548	618	686	68
15°	774	586	363	586	774	209
25°	413	521	263	521	413	196
35°	203	430	194	430	203	130
45°	141	324	138	324	141	109
55°	98	220	97	220	98	86
65°	51	134	58	134	51	52
75°	27	64	31	64	27	29
85°	8	14	8	14	8	9
90°	36	1	36	1	36	16
95°	58	87	58	87	58	54
105°	102	408	102	408	102	106
115°	110	771	110	771	110	275
125°	1146	1090	1146	1090	1146	992
135°	1393	1349	1393	1349	1393	1073
145°	1589	1564	1589	1564	1589	993
155°	1724	1723	1724	1723	1724	795
165°	1811	1815	1811	1815	1811	511
175°	1846	1857	1846	1857	1846	176
180°	1853	1853	1853	1853	1853	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	641.2	641.7	642.2	641.0	641.0	640.0	637.7	636.0	631.2	630.6	630.6
5°	685.5	685.1	686.0	683.2	679.4	678.4	674.4	669.0	663.5	657.3	656.0
7.5°	729.6	729.0	727.3	726.8	723.9	717.4	710.9	703.9	694.7	685.6	681.1
10°	752.0	759.0	754.7	747.2	748.7	738.7	733.3	724.1	716.3	702.9	699.9
12.5°	773.8	776.7	775.2	771.0	769.1	762.1	754.9	746.9	732.6	720.6	710.0
15°	773.7	777.8	778.9	777.6	778.6	778.3	774.4	767.8	755.4	742.1	730.5
17.5°	716.6	719.4	726.5	731.2	737.3	749.9	756.2	758.6	756.8	749.1	741.0
20°	652.6	647.9	667.6	677.6	686.2	707.6	726.0	733.1	744.4	744.2	742.1
22.5°	561.8	562.9	581.5	593.5	618.5	640.0	660.9	687.5	709.5	724.0	732.4
25°	412.7	420.9	439.5	455.8	483.6	523.5	559.7	601.6	641.2	672.5	702.3
27.5°	310.0	310.7	325.4	340.4	356.9	389.6	435.2	485.2	541.7	588.3	641.9
30°	265.5	264.2	270.4	279.7	293.8	319.1	353.3	402.5	458.8	529.0	591.5
32.5°	233.9	234.0	238.7	245.5	257.2	274.3	297.7	337.8	391.0	460.1	533.3
35°	203.4	203.2	206.6	211.5	216.4	227.3	243.5	264.4	301.0	365.4	440.4
37.5°	181.4	182.4	184.1	187.2	192.6	198.7	208.3	222.4	248.5	286.6	349.6
40°	169.1	169.6	171.9	174.5	177.7	182.4	190.3	201.7	220.7	251.1	297.2
42.5°	157.9	158.3	159.9	162.3	164.9	169.6	176.2	186.0	201.4	225.1	263.1
45°	141.3	141.3	142.8	143.8	146.7	150.9	156.3	164.5	175.1	192.7	217.9
47.5°	125.8	125.8	126.9	128.7	130.4	133.7	139.0	145.7	153.4	167.0	188.6
50°	116.9	117.2	117.7	119.2	120.4	123.3	127.4	133.2	141.3	151.8	169.8
52.5°	109.7	109.6	110.4	111.0	111.8	113.9	117.0	122.1	129.3	138.5	153.4
55°	98.0	97.2	98.5	99.5	100.2	101.0	102.7	105.9	112.2	119.9	131.0
57.5°	83.5	83.1	84.1	85.0	87.1	89.4	90.9	92.8	96.0	101.6	112.6
60°	71.5	71.5	73.4	74.1	76.4	79.5	82.5	84.2	87.4	91.0	99.2
62.5°	60.9	61.1	61.9	62.6	63.9	67.6	71.8	75.6	78.6	82.1	87.5
65°	51.0	51.4	51.4	51.8	52.7	53.5	55.2	58.2	63.6	68.5	72.6
67.5°	43.3	43.4	43.5	43.9	44.1	45.1	45.8	47.1	48.4	53.0	58.1
70°	38.1	38.7	38.5	38.9	39.2	39.6	40.4	41.1	43.1	44.1	47.1
72.5°	33.3	33.7	33.7	34.0	34.6	34.7	35.3	36.0	37.2	38.1	39.8
75°	27.0	26.8	27.0	27.4	27.6	27.8	27.8	28.7	29.3	30.2	31.3
77.5°	20.8	21.0	21.0	21.0	21.1	21.5	21.4	21.8	22.4	22.9	23.4
80°	16.7	16.9	16.7	16.9	17.2	17.3	17.2	17.3	18.0	18.4	18.4
82.5°	12.9	13.0	13.1	13.1	13.2	13.2	13.6	13.6	14.0	13.9	14.1
85°	7.7	7.5	7.5	7.5	7.7	7.9	7.7	7.7	7.9	7.9	7.9
87.5°	10.0	10.0	9.9	9.8	9.7	9.4	9.1	9.0	8.6	8.5	7.8
90°	36.2	35.6	35.0	34.4	33.8	32.8	31.3	29.8	28.3	26.8	24.4
92.5°	36.2	35.8	35.4	35.2	34.8	34.2	33.5	32.6	31.9	31.1	29.9
95°	57.7	58.0	58.2	58.5	58.8	58.2	56.7	55.2	53.7	52.3	50.2
97.5°	76.9	76.6	76.3	75.9	75.5	74.7	73.5	72.4	71.2	69.9	65.1
100°	89.8	89.3	88.6	88.0	87.5	86.0	83.6	81.2	78.8	76.4	71.4
102.5°	96.2	95.4	94.5	93.8	92.9	91.0	87.8	84.7	81.6	78.5	72.9
105°	101.9	100.7	99.5	98.3	97.1	94.9	91.6	88.3	85.0	81.8	76.1
107.5°	104.8	103.7	102.5	101.2	100.1	101.1	104.4	107.8	111.1	114.5	120.0
110°	105.9	104.7	103.5	102.4	101.1	115.5	145.2	175.0	204.8	234.6	320.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	107.0	106.0	105.1	104.2	103.1	157.0	265.7	374.4	483.1	591.7	612.9
115°	109.9	131.4	152.8	174.3	195.7	275.4	413.3	551.3	689.2	827.1	819.6
117.5°	448.8	519.2	589.7	660.3	730.8	782.7	816.1	849.4	882.8	916.2	911.0
120°	817.7	857.9	898.1	938.4	978.5	996.9	993.3	989.8	986.2	982.6	977.2
122.5°	1020.4	1028.2	1036.0	1043.8	1051.6	1054.4	1052.3	1050.2	1048.0	1045.8	1040.0
125°	1146.1	1145.3	1144.3	1143.5	1142.6	1141.0	1139.0	1136.9	1134.8	1132.7	1127.1
127.5°	1225.5	1225.3	1225.1	1224.9	1224.8	1223.1	1220.1	1217.1	1214.1	1211.1	1206.8
130°	1274.8	1275.2	1275.4	1275.7	1276.0	1274.5	1271.3	1268.0	1264.7	1261.4	1258.1
132.5°	1323.0	1323.4	1323.7	1324.0	1324.3	1323.0	1320.2	1317.4	1314.7	1311.8	1308.5
135°	1392.8	1393.4	1394.0	1394.6	1395.2	1394.0	1391.0	1388.0	1385.1	1382.1	1379.4
137.5°	1456.3	1457.4	1458.4	1459.3	1460.4	1459.4	1456.5	1453.6	1450.7	1447.7	1444.7
140°	1496.0	1497.5	1499.0	1500.5	1501.9	1501.4	1498.7	1496.0	1493.4	1490.6	1487.4
142.5°	1534.6	1536.2	1537.6	1539.1	1540.6	1540.1	1537.7	1535.2	1532.8	1530.3	1526.5
145°	1588.6	1590.0	1591.5	1593.0	1594.5	1594.2	1592.0	1590.0	1587.9	1585.8	1580.7
147.5°	1636.0	1637.2	1638.5	1639.7	1641.0	1640.9	1639.3	1637.8	1636.2	1634.7	1629.7
150°	1664.9	1666.4	1667.9	1669.4	1670.8	1670.8	1669.0	1667.2	1665.4	1663.6	1658.8
152.5°	1689.6	1691.6	1693.6	1695.4	1697.4	1697.5	1695.7	1693.9	1692.1	1690.4	1685.8
155°	1723.9	1726.3	1728.7	1731.1	1733.4	1733.7	1731.9	1730.1	1728.3	1726.5	1723.1
157.5°	1755.3	1757.6	1759.9	1762.3	1764.5	1764.7	1762.6	1760.7	1758.7	1756.6	1754.1
160°	1773.5	1775.6	1777.6	1779.8	1781.9	1782.0	1780.2	1778.4	1776.6	1774.8	1773.0
162.5°	1788.6	1791.1	1793.7	1796.2	1798.7	1799.0	1797.1	1795.0	1793.0	1790.9	1789.4
165°	1811.0	1813.2	1815.2	1817.3	1819.4	1819.4	1817.3	1815.2	1813.2	1811.0	1810.2
167.5°	1825.2	1828.0	1830.6	1833.3	1836.0	1836.3	1834.2	1832.1	1830.0	1828.0	1827.1
170°	1833.8	1836.5	1839.2	1841.9	1844.6	1844.8	1842.8	1840.7	1838.6	1836.5	1835.9
172.5°	1840.2	1843.0	1845.6	1848.3	1851.0	1851.2	1849.2	1847.1	1845.0	1843.0	1842.4
175°	1845.9	1848.9	1851.8	1854.8	1857.8	1858.2	1856.1	1854.1	1852.0	1849.9	1849.4
177.5°	1849.4	1851.5	1853.7	1855.8	1857.9	1858.2	1856.5	1854.8	1853.2	1851.5	1851.2
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	630.9	629.5	628.3	625.3	623.7	620.3	619.8	619.6	615.2	610.9	609.6
5°	652.6	649.1	644.0	638.0	631.8	625.4	621.1	617.6	609.1	601.0	596.3
7.5°	674.4	667.0	658.2	646.9	637.3	626.8	618.9	611.8	599.6	588.0	580.1
10°	690.7	678.7	666.9	651.3	639.0	627.1	616.0	606.3	592.7	577.2	566.3
12.5°	700.8	687.6	671.4	656.1	640.3	625.0	610.1	597.8	581.6	565.7	552.8
15°	714.4	700.3	680.6	658.7	638.5	618.5	601.4	586.0	565.1	545.9	530.1
17.5°	725.7	706.2	685.0	659.8	636.2	611.0	588.9	569.2	545.8	522.8	504.2
20°	729.2	709.9	685.5	660.3	632.4	602.7	578.9	557.5	532.4	507.4	486.0
22.5°	727.0	712.0	684.9	654.6	626.1	595.0	568.2	543.3	515.5	489.9	465.1
25°	711.9	706.7	681.1	648.1	615.6	579.4	548.3	521.1	489.5	462.0	435.1
27.5°	676.7	687.8	671.8	636.7	600.5	561.8	526.8	495.9	463.0	432.2	405.3
30°	642.7	668.2	661.4	628.8	588.3	550.3	511.0	478.7	443.7	411.9	385.4
32.5°	596.3	638.4	645.1	617.8	576.0	534.1	493.0	460.9	424.2	390.9	365.0
35°	522.4	585.3	614.3	596.9	555.0	509.7	467.4	429.9	393.0	360.1	334.4
37.5°	434.2	520.0	568.2	569.4	530.8	483.9	437.7	400.5	362.8	330.5	302.7
40°	377.0	470.0	532.7	546.6	514.1	463.4	416.6	378.7	342.0	310.2	278.3
42.5°	325.6	418.2	495.3	519.5	493.7	443.3	396.4	356.8	321.0	291.1	258.4
45°	263.3	344.3	429.2	472.5	458.2	411.5	362.0	324.3	290.8	264.9	233.6
47.5°	222.2	279.2	361.5	419.9	419.7	377.1	328.4	292.4	261.2	236.9	211.6
50°	198.7	248.4	317.9	384.3	389.8	354.1	307.8	272.1	243.0	217.5	197.2
52.5°	177.6	218.6	281.1	344.8	360.6	329.6	284.7	251.8	223.5	200.0	182.7
55°	150.1	181.8	229.3	288.8	312.8	291.0	251.1	220.3	197.4	177.7	162.7
57.5°	127.0	150.7	188.9	236.8	264.7	251.0	218.1	193.0	173.4	155.6	143.8
60°	112.4	131.9	164.2	204.2	235.1	225.5	197.4	174.1	157.4	141.9	130.8
62.5°	98.7	115.5	143.2	175.7	203.9	199.9	177.0	157.4	142.8	128.8	119.3
65°	79.5	91.6	113.3	138.7	161.5	163.3	146.8	133.6	120.6	109.4	101.0
67.5°	63.2	71.3	86.4	107.9	124.9	131.0	120.9	110.7	100.4	91.8	84.5
70°	53.3	59.8	70.9	88.2	103.9	110.3	104.4	96.5	87.6	80.5	74.3
72.5°	43.2	49.5	57.7	70.4	83.8	90.8	88.7	83.0	75.8	69.8	64.0
75°	32.5	34.5	40.1	48.6	59.1	65.1	66.5	63.6	57.8	53.3	49.9
77.5°	24.0	25.3	27.9	32.3	39.2	44.6	46.8	46.4	42.4	39.9	36.6
80°	19.2	19.9	21.2	23.1	28.3	33.6	35.2	35.2	32.3	31.3	28.1
82.5°	14.6	15.1	15.9	17.0	19.3	24.0	25.7	26.0	24.3	22.9	20.4
85°	8.4	8.1	8.6	9.2	9.6	10.9	13.5	13.9	13.5	11.8	11.1
87.5°	7.4	7.0	6.5	5.8	5.3	4.8	5.0	5.3	5.2	5.4	5.7
90°	22.1	19.7	17.2	14.4	11.2	7.9	4.6	1.3	4.6	7.9	11.2
92.5°	28.7	27.5	26.3	25.9	26.2	26.5	26.8	27.1	26.8	26.5	26.2
95°	48.1	46.0	43.9	47.8	57.7	67.5	77.3	87.1	77.3	67.5	57.7
97.5°	60.3	55.5	50.7	62.1	89.8	117.5	145.2	173.0	145.2	117.5	89.8
100°	66.3	61.2	56.2	74.0	114.8	155.6	196.4	237.2	196.4	155.6	114.8
102.5°	163.2	205.7	248.0	273.5	282.1	290.8	299.4	308.0	299.4	290.8	282.1
105°	244.4	325.7	407.1	443.3	434.3	425.4	416.4	407.6	416.4	425.4	434.3
107.5°	309.5	407.1	504.6	549.8	542.5	535.4	528.1	520.9	528.1	535.4	542.5
110°	406.8	492.9	578.9	618.9	612.7	606.3	600.1	593.9	600.1	606.3	612.7





TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	634.2	655.5	676.7	684.7	679.1	673.5	668.0	662.5	668.0	673.5	679.1
115°	812.2	804.7	797.3	791.1	786.0	780.9	775.9	770.8	775.9	780.9	786.0
117.5°	905.9	900.7	895.6	890.2	884.6	878.9	873.3	867.6	873.3	878.9	884.6
120°	971.9	966.5	961.1	956.2	951.8	947.3	942.8	938.4	942.8	947.3	951.8
122.5°	1034.2	1028.3	1022.6	1017.3	1012.6	1007.9	1003.1	998.4	1003.1	1007.9	1012.6
125°	1121.4	1115.8	1110.1	1105.3	1101.5	1097.6	1093.7	1089.9	1093.7	1097.6	1101.5
127.5°	1202.6	1198.3	1194.1	1189.9	1185.5	1181.3	1177.0	1172.7	1177.0	1181.3	1185.5
130°	1254.9	1251.6	1248.3	1244.3	1239.5	1234.7	1230.0	1225.2	1230.0	1234.7	1239.5
132.5°	1305.2	1302.0	1298.7	1295.1	1291.0	1286.9	1282.9	1278.8	1282.9	1286.9	1291.0
135°	1376.7	1374.0	1371.3	1367.6	1362.8	1358.1	1353.3	1348.6	1353.3	1358.1	1362.8
137.5°	1441.7	1438.6	1435.6	1432.4	1429.1	1425.8	1422.4	1419.1	1422.4	1425.8	1429.1
140°	1484.1	1480.8	1477.5	1474.7	1472.3	1470.0	1467.5	1465.2	1467.5	1470.0	1472.3
142.5°	1522.9	1519.1	1515.3	1512.4	1510.2	1508.1	1505.9	1503.8	1505.9	1508.1	1510.2
145°	1575.7	1570.7	1565.6	1563.2	1563.5	1563.8	1564.1	1564.4	1564.1	1563.8	1563.5
147.5°	1624.7	1619.6	1614.6	1612.7	1613.8	1615.0	1616.1	1617.2	1616.1	1615.0	1613.8
150°	1654.1	1649.3	1644.5	1643.1	1645.3	1647.4	1649.4	1651.5	1649.4	1647.4	1645.3
152.5°	1681.3	1676.8	1672.3	1671.2	1673.5	1675.8	1678.2	1680.5	1678.2	1675.8	1673.5
155°	1719.5	1715.9	1712.3	1711.8	1714.5	1717.2	1719.9	1722.6	1719.9	1717.2	1714.5
157.5°	1751.6	1749.1	1746.6	1746.5	1748.8	1751.1	1753.3	1755.6	1753.3	1751.1	1748.8
160°	1771.3	1769.5	1767.7	1767.7	1769.5	1771.3	1773.0	1774.8	1773.0	1771.3	1769.5
162.5°	1787.8	1786.3	1784.7	1784.9	1786.7	1788.5	1790.3	1792.0	1790.3	1788.5	1786.7
165°	1809.2	1808.4	1807.5	1807.9	1809.7	1811.5	1813.3	1815.1	1813.3	1811.5	1809.7
167.5°	1826.3	1825.4	1824.6	1825.0	1826.8	1828.6	1830.4	1832.2	1830.4	1828.6	1826.8
170°	1835.3	1834.8	1834.1	1834.8	1836.5	1838.3	1840.1	1841.9	1840.1	1838.3	1836.5
172.5°	1841.7	1841.2	1840.6	1841.2	1843.0	1844.7	1846.5	1848.3	1846.5	1844.7	1843.0
175°	1848.7	1848.1	1847.6	1848.3	1850.4	1852.5	1854.5	1856.6	1854.5	1852.5	1850.4
177.5°	1851.1	1850.8	1850.6	1851.2	1852.9	1854.6	1856.3	1857.9	1856.3	1854.6	1852.9
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	607.5	606.2	604.0	600.6	598.5	594.9	592.6	593.9	594.3	593.9	593.6
5°	591.2	586.6	580.4	574.4	568.8	562.9	559.4	558.0	555.0	553.3	552.3
7.5°	571.4	563.6	554.9	544.4	535.6	526.2	521.5	519.2	513.0	509.7	506.8
10°	556.7	544.4	535.6	522.0	513.6	501.4	493.0	493.3	484.9	480.2	476.8
12.5°	540.4	527.0	512.4	500.0	488.4	478.6	468.5	464.5	455.6	451.1	441.9
15°	513.4	497.8	482.4	465.7	453.9	438.7	424.1	406.3	392.0	379.6	376.2
17.5°	484.0	464.6	449.1	429.5	409.3	383.8	366.9	356.6	348.0	341.4	336.5
20°	463.7	444.0	427.5	398.0	370.8	353.5	341.1	333.1	324.1	317.1	313.2
22.5°	442.5	422.0	399.4	366.5	345.3	331.4	320.4	311.2	305.1	299.6	296.1
25°	412.4	389.8	352.8	330.2	313.0	298.4	290.8	285.2	278.8	271.3	267.9
27.5°	380.5	344.8	318.1	301.2	284.9	275.5	268.5	260.2	254.5	251.1	247.5
30°	356.7	320.9	300.2	281.7	270.2	259.7	251.6	246.9	241.3	235.5	233.2
32.5°	330.2	301.6	281.6	266.4	254.6	245.6	239.2	231.6	227.6	224.0	219.1
35°	297.2	275.5	257.3	245.0	233.8	226.5	219.0	214.5	207.3	204.2	202.4
37.5°	269.3	250.5	237.0	223.9	215.0	207.0	202.4	195.2	192.1	187.8	183.8
40°	253.4	235.1	222.1	211.3	201.4	195.5	189.7	183.9	179.2	177.3	172.4
42.5°	237.4	222.4	209.3	197.7	191.1	184.6	177.4	173.1	168.2	165.1	162.1
45°	215.2	201.9	190.8	181.2	173.8	167.2	162.5	155.4	152.7	146.5	143.8
47.5°	195.7	183.3	172.7	163.5	156.5	152.1	145.2	139.7	135.3	131.4	128.1
50°	181.8	171.4	161.2	153.1	146.7	140.4	133.4	130.6	123.8	121.8	119.9
52.5°	169.1	159.3	150.0	141.9	135.5	129.5	123.3	119.6	115.0	113.1	111.7
55°	151.4	141.9	133.0	125.9	119.5	113.3	109.4	104.9	102.7	101.2	99.5
57.5°	133.6	125.1	118.2	111.0	104.5	99.6	95.2	92.5	90.3	88.3	86.2
60°	122.2	114.1	107.9	101.2	94.6	90.6	87.2	83.9	81.3	78.3	77.5
62.5°	110.3	103.1	97.5	91.0	85.2	81.5	78.2	75.2	72.1	67.8	66.5
65°	93.8	88.2	82.2	76.8	71.7	68.1	63.3	59.9	58.6	58.2	58.1
67.5°	78.9	73.6	68.4	63.0	58.3	55.0	52.5	52.0	51.1	50.9	50.2
70°	68.9	64.0	58.9	53.7	49.2	48.6	47.8	46.8	45.8	45.4	45.0
72.5°	60.0	55.0	49.8	45.7	43.7	43.0	42.1	41.2	40.5	40.1	39.9
75°	46.0	41.3	37.9	36.4	35.3	34.7	33.4	32.8	32.3	31.7	31.5
77.5°	33.2	30.4	28.9	28.0	26.9	26.2	25.4	24.8	24.3	24.2	23.8
80°	25.3	23.9	22.9	21.6	21.2	20.4	20.2	19.5	19.7	19.0	19.0
82.5°	19.6	18.0	17.1	16.5	16.0	15.4	15.2	14.9	14.9	14.4	14.4
85°	10.1	9.6	9.2	8.8	8.8	8.1	8.4	8.1	8.1	7.7	7.5
87.5°	6.1	6.5	6.7	7.2	7.6	7.9	8.2	8.4	8.7	9.0	9.0
90°	14.4	17.2	19.7	22.1	24.4	26.8	28.3	29.8	31.3	32.8	33.8
92.5°	25.9	26.3	27.5	28.7	29.9	31.1	31.9	32.6	33.5	34.2	34.8
95°	47.8	43.9	46.0	48.1	50.2	52.3	53.7	55.2	56.7	58.2	58.8
97.5°	62.1	50.7	55.5	60.3	65.1	69.9	71.2	72.4	73.5	74.7	75.5
100°	74.0	56.2	61.2	66.3	71.4	76.4	78.8	81.2	83.6	86.0	87.5
102.5°	273.5	248.0	205.7	163.2	120.9	78.5	81.6	84.7	87.8	91.0	92.9
105°	443.3	407.1	325.7	244.4	163.1	81.8	85.0	88.3	91.6	94.9	97.1
107.5°	549.8	504.6	407.1	309.5	212.0	114.5	111.1	107.8	104.4	101.1	100.1
110°	618.9	578.9	492.9	406.8	320.7	234.6	204.8	175.0	145.2	115.5	101.1



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	684.7	676.7	655.5	634.2	612.9	591.7	483.1	374.4	265.7	157.0	103.1
115°	791.1	797.3	804.7	812.2	819.6	827.1	689.2	551.3	413.3	275.4	195.7
117.5°	890.2	895.6	900.7	905.9	911.0	916.2	882.8	849.4	816.1	782.7	730.8
120°	956.2	961.1	966.5	971.9	977.2	982.6	986.2	989.8	993.3	996.9	978.5
122.5°	1017.3	1022.6	1028.3	1034.2	1040.0	1045.8	1048.0	1050.2	1052.3	1054.4	1051.6
125°	1105.3	1110.1	1115.8	1121.4	1127.1	1132.7	1134.8	1136.9	1139.0	1141.0	1142.6
127.5°	1189.9	1194.1	1198.3	1202.6	1206.8	1211.1	1214.1	1217.1	1220.1	1223.1	1224.8
130°	1244.3	1248.3	1251.6	1254.9	1258.1	1261.4	1264.7	1268.0	1271.3	1274.5	1276.0
132.5°	1295.1	1298.7	1302.0	1305.2	1308.5	1311.8	1314.7	1317.4	1320.2	1323.0	1324.3
135°	1367.6	1371.3	1374.0	1376.7	1379.4	1382.1	1385.1	1388.0	1391.0	1394.0	1395.2
137.5°	1432.4	1435.6	1438.6	1441.7	1444.7	1447.7	1450.7	1453.6	1456.5	1459.4	1460.4
140°	1474.7	1477.5	1480.8	1484.1	1487.4	1490.6	1493.4	1496.0	1498.7	1501.4	1501.9
142.5°	1512.4	1515.3	1519.1	1522.9	1526.5	1530.3	1532.8	1535.2	1537.7	1540.1	1540.6
145°	1563.2	1565.6	1570.7	1575.7	1580.7	1585.8	1587.9	1590.0	1592.0	1594.2	1594.5
147.5°	1612.7	1614.6	1619.6	1624.7	1629.7	1634.7	1636.2	1637.8	1639.3	1640.9	1641.0
150°	1643.1	1644.5	1649.3	1654.1	1658.8	1663.6	1665.4	1667.2	1669.0	1670.8	1670.8
152.5°	1671.2	1672.3	1676.8	1681.3	1685.8	1690.4	1692.1	1693.9	1695.7	1697.5	1697.4
155°	1711.8	1712.3	1715.9	1719.5	1723.1	1726.5	1728.3	1730.1	1731.9	1733.7	1733.4
157.5°	1746.5	1746.6	1749.1	1751.6	1754.1	1756.6	1758.7	1760.7	1762.6	1764.7	1764.5
160°	1767.7	1767.7	1769.5	1771.3	1773.0	1774.8	1776.6	1778.4	1780.2	1782.0	1781.9
162.5°	1784.9	1784.7	1786.3	1787.8	1789.4	1790.9	1793.0	1795.0	1797.1	1799.0	1798.7
165°	1807.9	1807.5	1808.4	1809.2	1810.2	1811.0	1813.2	1815.2	1817.3	1819.4	1819.4
167.5°	1825.0	1824.6	1825.4	1826.3	1827.1	1828.0	1830.0	1832.1	1834.2	1836.3	1836.0
170°	1834.8	1834.1	1834.8	1835.3	1835.9	1836.5	1838.6	1840.7	1842.8	1844.8	1844.6
172.5°	1841.2	1840.6	1841.2	1841.7	1842.4	1843.0	1845.0	1847.1	1849.2	1851.2	1851.0
175°	1848.3	1847.6	1848.1	1848.7	1849.4	1849.9	1852.0	1854.1	1856.1	1858.2	1857.8
177.5°	1851.2	1850.6	1850.8	1851.1	1851.2	1851.5	1853.2	1854.8	1856.5	1858.2	1857.9
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	591.7	592.0	591.5	591.8	591.5	592.0	591.7	593.6	593.9	594.3	593.9
5°	551.3	548.7	548.3	547.7	548.3	548.7	551.3	552.3	553.3	555.0	558.0
7.5°	503.1	502.8	501.6	500.1	501.6	502.8	503.1	506.8	509.7	513.0	519.2
10°	472.1	471.0	470.8	469.3	470.8	471.0	472.1	476.8	480.2	484.9	493.3
12.5°	435.7	428.9	428.2	424.4	428.2	428.9	435.7	441.9	451.1	455.6	464.5
15°	371.1	369.8	365.4	362.7	365.4	369.8	371.1	376.2	379.6	392.0	406.3
17.5°	334.0	329.8	328.5	327.9	328.5	329.8	334.0	336.5	341.4	348.0	356.6
20°	310.2	306.4	305.8	305.3	305.8	306.4	310.2	313.2	317.1	324.1	333.1
22.5°	293.8	289.7	288.1	286.8	288.1	289.7	293.8	296.1	299.6	305.1	311.2
25°	265.7	264.2	263.3	262.9	263.3	264.2	265.7	267.9	271.3	278.8	285.2
27.5°	243.7	240.4	239.8	238.7	239.8	240.4	243.7	247.5	251.1	254.5	260.2
30°	231.2	230.2	228.7	227.3	228.7	230.2	231.2	233.2	235.5	241.3	246.9
32.5°	216.5	215.6	214.2	213.7	214.2	215.6	216.5	219.1	224.0	227.6	231.6
35°	200.2	197.2	195.9	194.0	195.9	197.2	200.2	202.4	204.2	207.3	214.5
37.5°	182.9	181.3	179.6	180.2	179.6	181.3	182.9	183.8	187.8	192.1	195.2
40°	169.6	168.5	168.1	167.9	168.1	168.5	169.6	172.4	177.3	179.2	183.9
42.5°	158.9	156.0	154.9	154.9	154.9	156.0	158.9	162.1	165.1	168.2	173.1
45°	142.8	140.1	138.1	138.3	138.1	140.1	142.8	143.8	146.5	152.7	155.4
47.5°	126.3	126.2	125.0	125.4	125.0	126.2	126.3	128.1	131.4	135.3	139.7
50°	118.4	117.2	116.2	116.5	116.2	117.2	118.4	119.9	121.8	123.8	130.6
52.5°	110.8	109.7	109.1	110.0	109.1	109.7	110.8	111.7	113.1	115.0	119.6
55°	98.5	97.2	97.0	96.8	97.0	97.2	98.5	99.5	101.2	102.7	104.9
57.5°	84.6	83.8	82.5	82.0	82.5	83.8	84.6	86.2	88.3	90.3	92.5
60°	74.7	73.0	70.9	70.7	70.9	73.0	74.7	77.5	78.3	81.3	83.9
62.5°	65.6	65.3	64.8	64.8	64.8	65.3	65.6	66.5	67.8	72.1	75.2
65°	57.6	57.4	57.6	57.8	57.6	57.4	57.6	58.1	58.2	58.6	59.9
67.5°	50.1	49.8	49.4	49.6	49.4	49.8	50.1	50.2	50.9	51.1	52.0
70°	44.5	44.3	44.1	44.1	44.1	44.3	44.5	45.0	45.4	45.8	46.8
72.5°	39.0	39.0	38.8	38.6	38.8	39.0	39.0	39.9	40.1	40.5	41.2
75°	31.3	30.8	30.8	30.8	30.8	30.8	31.3	31.5	31.7	32.3	32.8
77.5°	23.8	23.6	23.4	23.2	23.4	23.6	23.8	23.8	24.2	24.3	24.8
80°	18.9	18.7	18.4	18.4	18.4	18.7	18.9	19.0	19.0	19.7	19.5
82.5°	14.4	14.1	14.1	13.9	14.1	14.1	14.4	14.4	14.4	14.9	14.9
85°	7.7	7.9	7.7	8.1	7.7	7.9	7.7	7.5	7.7	8.1	8.1
87.5°	9.1	9.0	9.3	9.3	9.3	9.0	9.1	9.0	9.0	8.7	8.4
90°	34.4	35.0	35.6	36.2	35.6	35.0	34.4	33.8	32.8	31.3	29.8
92.5°	35.2	35.4	35.8	36.2	35.8	35.4	35.2	34.8	34.2	33.5	32.6
95°	58.5	58.2	58.0	57.7	58.0	58.2	58.5	58.8	58.2	56.7	55.2
97.5°	75.9	76.3	76.6	76.9	76.6	76.3	75.9	75.5	74.7	73.5	72.4
100°	88.0	88.6	89.3	89.8	89.3	88.6	88.0	87.5	86.0	83.6	81.2
102.5°	93.8	94.5	95.4	96.2	95.4	94.5	93.8	92.9	91.0	87.8	84.7
105°	98.3	99.5	100.7	101.9	100.7	99.5	98.3	97.1	94.9	91.6	88.3
107.5°	101.2	102.5	103.7	104.8	103.7	102.5	101.2	100.1	101.1	104.4	107.8
110°	102.4	103.5	104.7	105.9	104.7	103.5	102.4	101.1	115.5	145.2	175.0



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	104.2	105.1	106.0	107.0	106.0	105.1	104.2	103.1	157.0	265.7	374.4
115°	174.3	152.8	131.4	109.9	131.4	152.8	174.3	195.7	275.4	413.3	551.3
117.5°	660.3	589.7	519.2	448.8	519.2	589.7	660.3	730.8	782.7	816.1	849.4
120°	938.4	898.1	857.9	817.7	857.9	898.1	938.4	978.5	996.9	993.3	989.8
122.5°	1043.8	1036.0	1028.2	1020.4	1028.2	1036.0	1043.8	1051.6	1054.4	1052.3	1050.2
125°	1143.5	1144.3	1145.3	1146.1	1145.3	1144.3	1143.5	1142.6	1141.0	1139.0	1136.9
127.5°	1224.9	1225.1	1225.3	1225.5	1225.3	1225.1	1224.9	1224.8	1223.1	1220.1	1217.1
130°	1275.7	1275.4	1275.2	1274.8	1275.2	1275.4	1275.7	1276.0	1274.5	1271.3	1268.0
132.5°	1324.0	1323.7	1323.4	1323.0	1323.4	1323.7	1324.0	1324.3	1323.0	1320.2	1317.4
135°	1394.6	1394.0	1393.4	1392.8	1393.4	1394.0	1394.6	1395.2	1394.0	1391.0	1388.0
137.5°	1459.3	1458.4	1457.4	1456.3	1457.4	1458.4	1459.3	1460.4	1459.4	1456.5	1453.6
140°	1500.5	1499.0	1497.5	1496.0	1497.5	1499.0	1500.5	1501.9	1501.4	1498.7	1496.0
142.5°	1539.1	1537.6	1536.2	1534.6	1536.2	1537.6	1539.1	1540.6	1540.1	1537.7	1535.2
145°	1593.0	1591.5	1590.0	1588.6	1590.0	1591.5	1593.0	1594.5	1594.2	1592.0	1590.0
147.5°	1639.7	1638.5	1637.2	1636.0	1637.2	1638.5	1639.7	1641.0	1640.9	1639.3	1637.8
150°	1669.4	1667.9	1666.4	1664.9	1666.4	1667.9	1669.4	1670.8	1670.8	1669.0	1667.2
152.5°	1695.4	1693.6	1691.6	1689.6	1691.6	1693.6	1695.4	1697.4	1697.5	1695.7	1693.9
155°	1731.1	1728.7	1726.3	1723.9	1726.3	1728.7	1731.1	1733.4	1733.7	1731.9	1730.1
157.5°	1762.3	1759.9	1757.6	1755.3	1757.6	1759.9	1762.3	1764.5	1764.7	1762.6	1760.7
160°	1779.8	1777.6	1775.6	1773.5	1775.6	1777.6	1779.8	1781.9	1782.0	1780.2	1778.4
162.5°	1796.2	1793.7	1791.1	1788.6	1791.1	1793.7	1796.2	1798.7	1799.0	1797.1	1795.0
165°	1817.3	1815.2	1813.2	1811.0	1813.2	1815.2	1817.3	1819.4	1819.4	1817.3	1815.2
167.5°	1833.3	1830.6	1828.0	1825.2	1828.0	1830.6	1833.3	1836.0	1836.3	1834.2	1832.1
170°	1841.9	1839.2	1836.5	1833.8	1836.5	1839.2	1841.9	1844.6	1844.8	1842.8	1840.7
172.5°	1848.3	1845.6	1843.0	1840.2	1843.0	1845.6	1848.3	1851.0	1851.2	1849.2	1847.1
175°	1854.8	1851.8	1848.9	1845.9	1848.9	1851.8	1854.8	1857.8	1858.2	1856.1	1854.1
177.5°	1855.8	1853.7	1851.5	1849.4	1851.5	1853.7	1855.8	1857.9	1858.2	1856.5	1854.8
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	592.6	594.9	598.5	600.6	604.0	606.2	607.5	609.6	610.9	615.2	619.6
5°	559.4	562.9	568.8	574.4	580.4	586.6	591.2	596.3	601.0	609.1	617.6
7.5°	521.5	526.2	535.6	544.4	554.9	563.6	571.4	580.1	588.0	599.6	611.8
10°	493.0	501.4	513.6	522.0	535.6	544.4	556.7	566.3	577.2	592.7	606.3
12.5°	468.5	478.6	488.4	500.0	512.4	527.0	540.4	552.8	565.7	581.6	597.8
15°	424.1	438.7	453.9	465.7	482.4	497.8	513.4	530.1	545.9	565.1	586.0
17.5°	366.9	383.8	409.3	429.5	449.1	464.6	484.0	504.2	522.8	545.8	569.2
20°	341.1	353.5	370.8	398.0	427.5	444.0	463.7	486.0	507.4	532.4	557.5
22.5°	320.4	331.4	345.3	366.5	399.4	422.0	442.5	465.1	489.9	515.5	543.3
25°	290.8	298.4	313.0	330.2	352.8	389.8	412.4	435.1	462.0	489.5	521.1
27.5°	268.5	275.5	284.9	301.2	318.1	344.8	380.5	405.3	432.2	463.0	495.9
30°	251.6	259.7	270.2	281.7	300.2	320.9	356.7	385.4	411.9	443.7	478.7
32.5°	239.2	245.6	254.6	266.4	281.6	301.6	330.2	365.0	390.9	424.2	460.9
35°	219.0	226.5	233.8	245.0	257.3	275.5	297.2	334.4	360.1	393.0	429.9
37.5°	202.4	207.0	215.0	223.9	237.0	250.5	269.3	302.7	330.5	362.8	400.5
40°	189.7	195.5	201.4	211.3	222.1	235.1	253.4	278.3	310.2	342.0	378.7
42.5°	177.4	184.6	191.1	197.7	209.3	222.4	237.4	258.4	291.1	321.0	356.8
45°	162.5	167.2	173.8	181.2	190.8	201.9	215.2	233.6	264.9	290.8	324.3
47.5°	145.2	152.1	156.5	163.5	172.7	183.3	195.7	211.6	236.9	261.2	292.4
50°	133.4	140.4	146.7	153.1	161.2	171.4	181.8	197.2	217.5	243.0	272.1
52.5°	123.3	129.5	135.5	141.9	150.0	159.3	169.1	182.7	200.0	223.5	251.8
55°	109.4	113.3	119.5	125.9	133.0	141.9	151.4	162.7	177.7	197.4	220.3
57.5°	95.2	99.6	104.5	111.0	118.2	125.1	133.6	143.8	155.6	173.4	193.0
60°	87.2	90.6	94.6	101.2	107.9	114.1	122.2	130.8	141.9	157.4	174.1
62.5°	78.2	81.5	85.2	91.0	97.5	103.1	110.3	119.3	128.8	142.8	157.4
65°	63.3	68.1	71.7	76.8	82.2	88.2	93.8	101.0	109.4	120.6	133.6
67.5°	52.5	55.0	58.3	63.0	68.4	73.6	78.9	84.5	91.8	100.4	110.7
70°	47.8	48.6	49.2	53.7	58.9	64.0	68.9	74.3	80.5	87.6	96.5
72.5°	42.1	43.0	43.7	45.7	49.8	55.0	60.0	64.0	69.8	75.8	83.0
75°	33.4	34.7	35.3	36.4	37.9	41.3	46.0	49.9	53.3	57.8	63.6
77.5°	25.4	26.2	26.9	28.0	28.9	30.4	33.2	36.6	39.9	42.4	46.4
80°	20.2	20.4	21.2	21.6	22.9	23.9	25.3	28.1	31.3	32.3	35.2
82.5°	15.2	15.4	16.0	16.5	17.1	18.0	19.6	20.4	22.9	24.3	26.0
85°	8.4	8.1	8.8	8.8	9.2	9.6	10.1	11.1	11.8	13.5	13.9
87.5°	8.2	7.9	7.6	7.2	6.7	6.5	6.1	5.7	5.4	5.2	5.3
90°	28.3	26.8	24.4	22.1	19.7	17.2	14.4	11.2	7.9	4.6	1.3
92.5°	31.9	31.1	29.9	28.7	27.5	26.3	25.9	26.2	26.5	26.8	27.1
95°	53.7	52.3	50.2	48.1	46.0	43.9	47.8	57.7	67.5	77.3	87.1
97.5°	71.2	69.9	65.1	60.3	55.5	50.7	62.1	89.8	117.5	145.2	173.0
100°	78.8	76.4	71.4	66.3	61.2	56.2	74.0	114.8	155.6	196.4	237.2
102.5°	81.6	78.5	120.9	163.2	205.7	248.0	273.5	282.1	290.8	299.4	308.0
105°	85.0	81.8	163.1	244.4	325.7	407.1	443.3	434.3	425.4	416.4	407.6
107.5°	111.1	114.5	212.0	309.5	407.1	504.6	549.8	542.5	535.4	528.1	520.9
110°	204.8	234.6	320.7	406.8	492.9	578.9	618.9	612.7	606.3	600.1	593.9



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	483.1	591.7	612.9	634.2	655.5	676.7	684.7	679.1	673.5	668.0	662.5
115°	689.2	827.1	819.6	812.2	804.7	797.3	791.1	786.0	780.9	775.9	770.8
117.5°	882.8	916.2	911.0	905.9	900.7	895.6	890.2	884.6	878.9	873.3	867.6
120°	986.2	982.6	977.2	971.9	966.5	961.1	956.2	951.8	947.3	942.8	938.4
122.5°	1048.0	1045.8	1040.0	1034.2	1028.3	1022.6	1017.3	1012.6	1007.9	1003.1	998.4
125°	1134.8	1132.7	1127.1	1121.4	1115.8	1110.1	1105.3	1101.5	1097.6	1093.7	1089.9
127.5°	1214.1	1211.1	1206.8	1202.6	1198.3	1194.1	1189.9	1185.5	1181.3	1177.0	1172.7
130°	1264.7	1261.4	1258.1	1254.9	1251.6	1248.3	1244.3	1239.5	1234.7	1230.0	1225.2
132.5°	1314.7	1311.8	1308.5	1305.2	1302.0	1298.7	1295.1	1291.0	1286.9	1282.9	1278.8
135°	1385.1	1382.1	1379.4	1376.7	1374.0	1371.3	1367.6	1362.8	1358.1	1353.3	1348.6
137.5°	1450.7	1447.7	1444.7	1441.7	1438.6	1435.6	1432.4	1429.1	1425.8	1422.4	1419.1
140°	1493.4	1490.6	1487.4	1484.1	1480.8	1477.5	1474.7	1472.3	1470.0	1467.5	1465.2
142.5°	1532.8	1530.3	1526.5	1522.9	1519.1	1515.3	1512.4	1510.2	1508.1	1505.9	1503.8
145°	1587.9	1585.8	1580.7	1575.7	1570.7	1565.6	1563.2	1563.5	1563.8	1564.1	1564.4
147.5°	1636.2	1634.7	1629.7	1624.7	1619.6	1614.6	1612.7	1613.8	1615.0	1616.1	1617.2
150°	1665.4	1663.6	1658.8	1654.1	1649.3	1644.5	1643.1	1645.3	1647.4	1649.4	1651.5
152.5°	1692.1	1690.4	1685.8	1681.3	1676.8	1672.3	1671.2	1673.5	1675.8	1678.2	1680.5
155°	1728.3	1726.5	1723.1	1719.5	1715.9	1712.3	1711.8	1714.5	1717.2	1719.9	1722.6
157.5°	1758.7	1756.6	1754.1	1751.6	1749.1	1746.6	1746.5	1748.8	1751.1	1753.3	1755.6
160°	1776.6	1774.8	1773.0	1771.3	1769.5	1767.7	1767.7	1769.5	1771.3	1773.0	1774.8
162.5°	1793.0	1790.9	1789.4	1787.8	1786.3	1784.7	1784.9	1786.7	1788.5	1790.3	1792.0
165°	1813.2	1811.0	1810.2	1809.2	1808.4	1807.5	1807.9	1809.7	1811.5	1813.3	1815.1
167.5°	1830.0	1828.0	1827.1	1826.3	1825.4	1824.6	1825.0	1826.8	1828.6	1830.4	1832.2
170°	1838.6	1836.5	1835.9	1835.3	1834.8	1834.1	1834.8	1836.5	1838.3	1840.1	1841.9
172.5°	1845.0	1843.0	1842.4	1841.7	1841.2	1840.6	1841.2	1843.0	1844.7	1846.5	1848.3
175°	1852.0	1849.9	1849.4	1848.7	1848.1	1847.6	1848.3	1850.4	1852.5	1854.5	1856.6
177.5°	1853.2	1851.5	1851.2	1851.1	1850.8	1850.6	1851.2	1852.9	1854.6	1856.3	1857.9
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



TEST NUMBER: P331781-830

CATALOG NUMBER: S122RDIW-S290D1440U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	619.8	620.3	623.7	625.3	628.3	629.5	630.9	630.6	630.6	631.2	636.0
5°	621.1	625.4	631.8	638.0	644.0	649.1	652.6	656.0	657.3	663.5	669.0
7.5°	618.9	626.8	637.3	646.9	658.2	667.0	674.4	681.1	685.6	694.7	703.9
10°	616.0	627.1	639.0	651.3	666.9	678.7	690.7	699.9	702.9	716.3	724.1
12.5°	610.1	625.0	640.3	656.1	671.4	687.6	700.8	710.0	720.6	732.6	746.9
15°	601.4	618.5	638.5	658.7	680.6	700.3	714.4	730.5	742.1	755.4	767.8
17.5°	588.9	611.0	636.2	659.8	685.0	706.2	725.7	741.0	749.1	756.8	758.6
20°	578.9	602.7	632.4	660.3	685.5	709.9	729.2	742.1	744.2	744.4	733.1
22.5°	568.2	595.0	626.1	654.6	684.9	712.0	727.0	732.4	724.0	709.5	687.5
25°	548.3	579.4	615.6	648.1	681.1	706.7	711.9	702.3	672.5	641.2	601.6
27.5°	526.8	561.8	600.5	636.7	671.8	687.8	676.7	641.9	588.3	541.7	485.2
30°	511.0	550.3	588.3	628.8	661.4	668.2	642.7	591.5	529.0	458.8	402.5
32.5°	493.0	534.1	576.0	617.8	645.1	638.4	596.3	533.3	460.1	391.0	337.8
35°	467.4	509.7	555.0	596.9	614.3	585.3	522.4	440.4	365.4	301.0	264.4
37.5°	437.7	483.9	530.8	569.4	568.2	520.0	434.2	349.6	286.6	248.5	222.4
40°	416.6	463.4	514.1	546.6	532.7	470.0	377.0	297.2	251.1	220.7	201.7
42.5°	396.4	443.3	493.7	519.5	495.3	418.2	325.6	263.1	225.1	201.4	186.0
45°	362.0	411.5	458.2	472.5	429.2	344.3	263.3	217.9	192.7	175.1	164.5
47.5°	328.4	377.1	419.7	419.9	361.5	279.2	222.2	188.6	167.0	153.4	145.7
50°	307.8	354.1	389.8	384.3	317.9	248.4	198.7	169.8	151.8	141.3	133.2
52.5°	284.7	329.6	360.6	344.8	281.1	218.6	177.6	153.4	138.5	129.3	122.1
55°	251.1	291.0	312.8	288.8	229.3	181.8	150.1	131.0	119.9	112.2	105.9
57.5°	218.1	251.0	264.7	236.8	188.9	150.7	127.0	112.6	101.6	96.0	92.8
60°	197.4	225.5	235.1	204.2	164.2	131.9	112.4	99.2	91.0	87.4	84.2
62.5°	177.0	199.9	203.9	175.7	143.2	115.5	98.7	87.5	82.1	78.6	75.6
65°	146.8	163.3	161.5	138.7	113.3	91.6	79.5	72.6	68.5	63.6	58.2
67.5°	120.9	131.0	124.9	107.9	86.4	71.3	63.2	58.1	53.0	48.4	47.1
70°	104.4	110.3	103.9	88.2	70.9	59.8	53.3	47.1	44.1	43.1	41.1
72.5°	88.7	90.8	83.8	70.4	57.7	49.5	43.2	39.8	38.1	37.2	36.0
75°	66.5	65.1	59.1	48.6	40.1	34.5	32.5	31.3	30.2	29.3	28.7
77.5°	46.8	44.6	39.2	32.3	27.9	25.3	24.0	23.4	22.9	22.4	21.8
80°	35.2	33.6	28.3	23.1	21.2	19.9	19.2	18.4	18.4	18.0	17.3
82.5°	25.7	24.0	19.3	17.0	15.9	15.1	14.6	14.1	13.9	14.0	13.6
85°	13.5	10.9	9.6	9.2	8.6	8.1	8.4	7.9	7.9	7.9	7.7
87.5°	5.0	4.8	5.3	5.8	6.5	7.0	7.4	7.8	8.5	8.6	9.0
90°	4.6	7.9	11.2	14.4	17.2	19.7	22.1	24.4	26.8	28.3	29.8
92.5°	26.8	26.5	26.2	25.9	26.3	27.5	28.7	29.9	31.1	31.9	32.6
95°	77.3	67.5	57.7	47.8	43.9	46.0	48.1	50.2	52.3	53.7	55.2
97.5°	145.2	117.5	89.8	62.1	50.7	55.5	60.3	65.1	69.9	71.2	72.4
100°	196.4	155.6	114.8	74.0	56.2	61.2	66.3	71.4	76.4	78.8	81.2
102.5°	299.4	290.8	282.1	273.5	248.0	205.7	163.2	120.9	78.5	81.6	84.7
105°	416.4	425.4	434.3	443.3	407.1	325.7	244.4	163.1	81.8	85.0	88.3
107.5°	528.1	535.4	542.5	549.8	504.6	407.1	309.5	212.0	114.5	111.1	107.8
110°	600.1	606.3	612.7	618.9	578.9	492.9	406.8	320.7	234.6	204.8	175.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	668.0	673.5	679.1	684.7	676.7	655.5	634.2	612.9	591.7	483.1	374.4
115°	775.9	780.9	786.0	791.1	797.3	804.7	812.2	819.6	827.1	689.2	551.3
117.5°	873.3	878.9	884.6	890.2	895.6	900.7	905.9	911.0	916.2	882.8	849.4
120°	942.8	947.3	951.8	956.2	961.1	966.5	971.9	977.2	982.6	986.2	989.8
122.5°	1003.1	1007.9	1012.6	1017.3	1022.6	1028.3	1034.2	1040.0	1045.8	1048.0	1050.2
125°	1093.7	1097.6	1101.5	1105.3	1110.1	1115.8	1121.4	1127.1	1132.7	1134.8	1136.9
127.5°	1177.0	1181.3	1185.5	1189.9	1194.1	1198.3	1202.6	1206.8	1211.1	1214.1	1217.1
130°	1230.0	1234.7	1239.5	1244.3	1248.3	1251.6	1254.9	1258.1	1261.4	1264.7	1268.0
132.5°	1282.9	1286.9	1291.0	1295.1	1298.7	1302.0	1305.2	1308.5	1311.8	1314.7	1317.4
135°	1353.3	1358.1	1362.8	1367.6	1371.3	1374.0	1376.7	1379.4	1382.1	1385.1	1388.0
137.5°	1422.4	1425.8	1429.1	1432.4	1435.6	1438.6	1441.7	1444.7	1447.7	1450.7	1453.6
140°	1467.5	1470.0	1472.3	1474.7	1477.5	1480.8	1484.1	1487.4	1490.6	1493.4	1496.0
142.5°	1505.9	1508.1	1510.2	1512.4	1515.3	1519.1	1522.9	1526.5	1530.3	1532.8	1535.2
145°	1564.1	1563.8	1563.5	1563.2	1565.6	1570.7	1575.7	1580.7	1585.8	1587.9	1590.0
147.5°	1616.1	1615.0	1613.8	1612.7	1614.6	1619.6	1624.7	1629.7	1634.7	1636.2	1637.8
150°	1649.4	1647.4	1645.3	1643.1	1644.5	1649.3	1654.1	1658.8	1663.6	1665.4	1667.2
152.5°	1678.2	1675.8	1673.5	1671.2	1672.3	1676.8	1681.3	1685.8	1690.4	1692.1	1693.9
155°	1719.9	1717.2	1714.5	1711.8	1712.3	1715.9	1719.5	1723.1	1726.5	1728.3	1730.1
157.5°	1753.3	1751.1	1748.8	1746.5	1746.6	1749.1	1751.6	1754.1	1756.6	1758.7	1760.7
160°	1773.0	1771.3	1769.5	1767.7	1767.7	1769.5	1771.3	1773.0	1774.8	1776.6	1778.4
162.5°	1790.3	1788.5	1786.7	1784.9	1784.7	1786.3	1787.8	1789.4	1790.9	1793.0	1795.0
165°	1813.3	1811.5	1809.7	1807.9	1807.5	1808.4	1809.2	1810.2	1811.0	1813.2	1815.2
167.5°	1830.4	1828.6	1826.8	1825.0	1824.6	1825.4	1826.3	1827.1	1828.0	1830.0	1832.1
170°	1840.1	1838.3	1836.5	1834.8	1834.1	1834.8	1835.3	1835.9	1836.5	1838.6	1840.7
172.5°	1846.5	1844.7	1843.0	1841.2	1840.6	1841.2	1841.7	1842.4	1843.0	1845.0	1847.1
175°	1854.5	1852.5	1850.4	1848.3	1847.6	1848.1	1848.7	1849.4	1849.9	1852.0	1854.1
177.5°	1856.3	1854.6	1852.9	1851.2	1850.6	1850.8	1851.1	1851.2	1851.5	1853.2	1854.8
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	616.1	616.1	616.1	616.1	616.1	616.1	616.1
2.5°	637.7	640.0	641.0	641.0	642.2	641.7	641.2
5°	674.4	678.4	679.4	683.2	686.0	685.1	685.5
7.5°	710.9	717.4	723.9	726.8	727.3	729.0	729.6
10°	733.3	738.7	748.7	747.2	754.7	759.0	752.0
12.5°	754.9	762.1	769.1	771.0	775.2	776.7	773.8
15°	774.4	778.3	778.6	777.6	778.9	777.8	773.7
17.5°	756.2	749.9	737.3	731.2	726.5	719.4	716.6
20°	726.0	707.6	686.2	677.6	667.6	647.9	652.6
22.5°	660.9	640.0	618.5	593.5	581.5	562.9	561.8
25°	559.7	523.5	483.6	455.8	439.5	420.9	412.7
27.5°	435.2	389.6	356.9	340.4	325.4	310.7	310.0
30°	353.3	319.1	293.8	279.7	270.4	264.2	265.5
32.5°	297.7	274.3	257.2	245.5	238.7	234.0	233.9
35°	243.5	227.3	216.4	211.5	206.6	203.2	203.4
37.5°	208.3	198.7	192.6	187.2	184.1	182.4	181.4
40°	190.3	182.4	177.7	174.5	171.9	169.6	169.1
42.5°	176.2	169.6	164.9	162.3	159.9	158.3	157.9
45°	156.3	150.9	146.7	143.8	142.8	141.3	141.3
47.5°	139.0	133.7	130.4	128.7	126.9	125.8	125.8
50°	127.4	123.3	120.4	119.2	117.7	117.2	116.9
52.5°	117.0	113.9	111.8	111.0	110.4	109.6	109.7
55°	102.7	101.0	100.2	99.5	98.5	97.2	98.0
57.5°	90.9	89.4	87.1	85.0	84.1	83.1	83.5
60°	82.5	79.5	76.4	74.1	73.4	71.5	71.5
62.5°	71.8	67.6	63.9	62.6	61.9	61.1	60.9
65°	55.2	53.5	52.7	51.8	51.4	51.4	51.0
67.5°	45.8	45.1	44.1	43.9	43.5	43.4	43.3
70°	40.4	39.6	39.2	38.9	38.5	38.7	38.1
72.5°	35.3	34.7	34.6	34.0	33.7	33.7	33.3
75°	27.8	27.8	27.6	27.4	27.0	26.8	27.0
77.5°	21.4	21.5	21.1	21.0	21.0	21.0	20.8
80°	17.2	17.3	17.2	16.9	16.7	16.9	16.7
82.5°	13.6	13.2	13.2	13.1	13.1	13.0	12.9
85°	7.7	7.9	7.7	7.5	7.5	7.5	7.7
87.5°	9.1	9.4	9.7	9.8	9.9	10.0	10.0
90°	31.3	32.8	33.8	34.4	35.0	35.6	36.2
92.5°	33.5	34.2	34.8	35.2	35.4	35.8	36.2
95°	56.7	58.2	58.8	58.5	58.2	58.0	57.7
97.5°	73.5	74.7	75.5	75.9	76.3	76.6	76.9
100°	83.6	86.0	87.5	88.0	88.6	89.3	89.8
102.5°	87.8	91.0	92.9	93.8	94.5	95.4	96.2
105°	91.6	94.9	97.1	98.3	99.5	100.7	101.9
107.5°	104.4	101.1	100.1	101.2	102.5	103.7	104.8
110°	145.2	115.5	101.1	102.4	103.5	104.7	105.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	265.7	157.0	103.1	104.2	105.1	106.0	107.0
115°	413.3	275.4	195.7	174.3	152.8	131.4	109.9
117.5°	816.1	782.7	730.8	660.3	589.7	519.2	448.8
120°	993.3	996.9	978.5	938.4	898.1	857.9	817.7
122.5°	1052.3	1054.4	1051.6	1043.8	1036.0	1028.2	1020.4
125°	1139.0	1141.0	1142.6	1143.5	1144.3	1145.3	1146.1
127.5°	1220.1	1223.1	1224.8	1224.9	1225.1	1225.3	1225.5
130°	1271.3	1274.5	1276.0	1275.7	1275.4	1275.2	1274.8
132.5°	1320.2	1323.0	1324.3	1324.0	1323.7	1323.4	1323.0
135°	1391.0	1394.0	1395.2	1394.6	1394.0	1393.4	1392.8
137.5°	1456.5	1459.4	1460.4	1459.3	1458.4	1457.4	1456.3
140°	1498.7	1501.4	1501.9	1500.5	1499.0	1497.5	1496.0
142.5°	1537.7	1540.1	1540.6	1539.1	1537.6	1536.2	1534.6
145°	1592.0	1594.2	1594.5	1593.0	1591.5	1590.0	1588.6
147.5°	1639.3	1640.9	1641.0	1639.7	1638.5	1637.2	1636.0
150°	1669.0	1670.8	1670.8	1669.4	1667.9	1666.4	1664.9
152.5°	1695.7	1697.5	1697.4	1695.4	1693.6	1691.6	1689.6
155°	1731.9	1733.7	1733.4	1731.1	1728.7	1726.3	1723.9
157.5°	1762.6	1764.7	1764.5	1762.3	1759.9	1757.6	1755.3
160°	1780.2	1782.0	1781.9	1779.8	1777.6	1775.6	1773.5
162.5°	1797.1	1799.0	1798.7	1796.2	1793.7	1791.1	1788.6
165°	1817.3	1819.4	1819.4	1817.3	1815.2	1813.2	1811.0
167.5°	1834.2	1836.3	1836.0	1833.3	1830.6	1828.0	1825.2
170°	1842.8	1844.8	1844.6	1841.9	1839.2	1836.5	1833.8
172.5°	1849.2	1851.2	1851.0	1848.3	1845.6	1843.0	1840.2
175°	1856.1	1858.2	1857.8	1854.8	1851.8	1848.9	1845.9
177.5°	1856.5	1858.2	1857.9	1855.8	1853.7	1851.5	1849.4
180°	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6	1852.6

(END OF REPORT)