

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: P331489-830

Luminaire Tested: **S122DIW-S290D1440U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331489-830
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: S122DIW-S290D1440U830-4F0-1E-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: 6662.8 lumens
Efficiency: N/A
Efficacy: 124.8 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

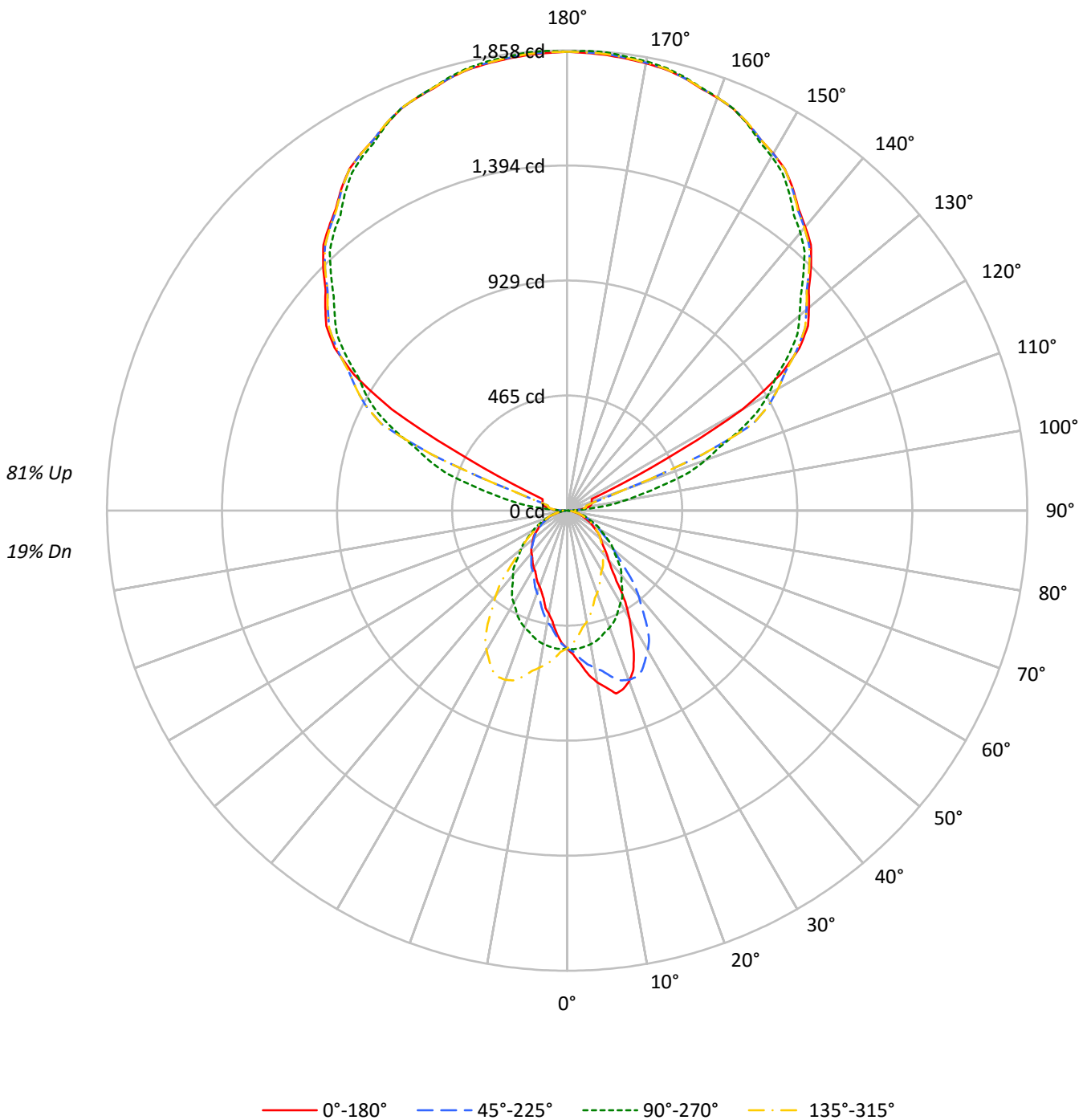
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	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°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	0.8
10°-20°	154.2	2.3
20°-30°	223.9	3.4
30°-40°	236.2	3.5
40°-50°	209.2	3.1
50°-60°	166.9	2.5
60°-70°	113.4	1.7
70°-80°	58.2	0.9
80°-90°	18.6	0.3
90°-100°	61.8	0.9
100°-110°	226.6	3.4
110°-120°	605.8	9.1
120°-130°	1000.0	15.0
130°-140°	1063.4	16.0
140°-150°	988.4	14.8
150°-160°	794.7	11.9
160°-170°	512.1	7.7
170°-180°	176.3	2.6
0°-30°	431.2	6.5
0°-40°	667.4	10.0
0°-60°	1043.5	15.7
0°-90°	1233.7	18.5
90°-120°	894.2	13.4
90°-150°	3946.0	59.2
90°-180°	5429.0	81.5
0°-180°	6662.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	14
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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	11.7	11.6	11.6	11.3	11.2	11.2	10.8	10.4	10.3	10.2	9.9
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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	9.5	9.0	8.6	8.4	7.2	6.5	5.2	4.1	4.5	5.0	5.3
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: P331489-830

CATALOG NUMBER: S122DIW-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: P331489-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	5.8	6.2	6.5	7.0	7.3	7.6	7.7	8.0	8.3	8.3	8.5
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: P331489-830

CATALOG NUMBER: S122DIW-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: P331489-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	8.6	8.6	8.7	8.6	8.7	8.6	8.6	8.5	8.3	8.3	8.0
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: P331489-830

CATALOG NUMBER: S122DIW-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: P331489-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	7.7	7.6	7.3	7.0	6.5	6.2	5.8	5.3	5.0	4.5	4.1
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: P331489-830

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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: P331489-830

CATALOG NUMBER: S122DIW-S290D1440U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	5.2	6.5	7.2	8.4	8.6	9.0	9.5	9.9	10.2	10.3	10.4
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°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	10.8	11.2	11.2	11.3	11.6	11.6	11.7
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)