

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: P332654

Luminaire Tested: **SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332654
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

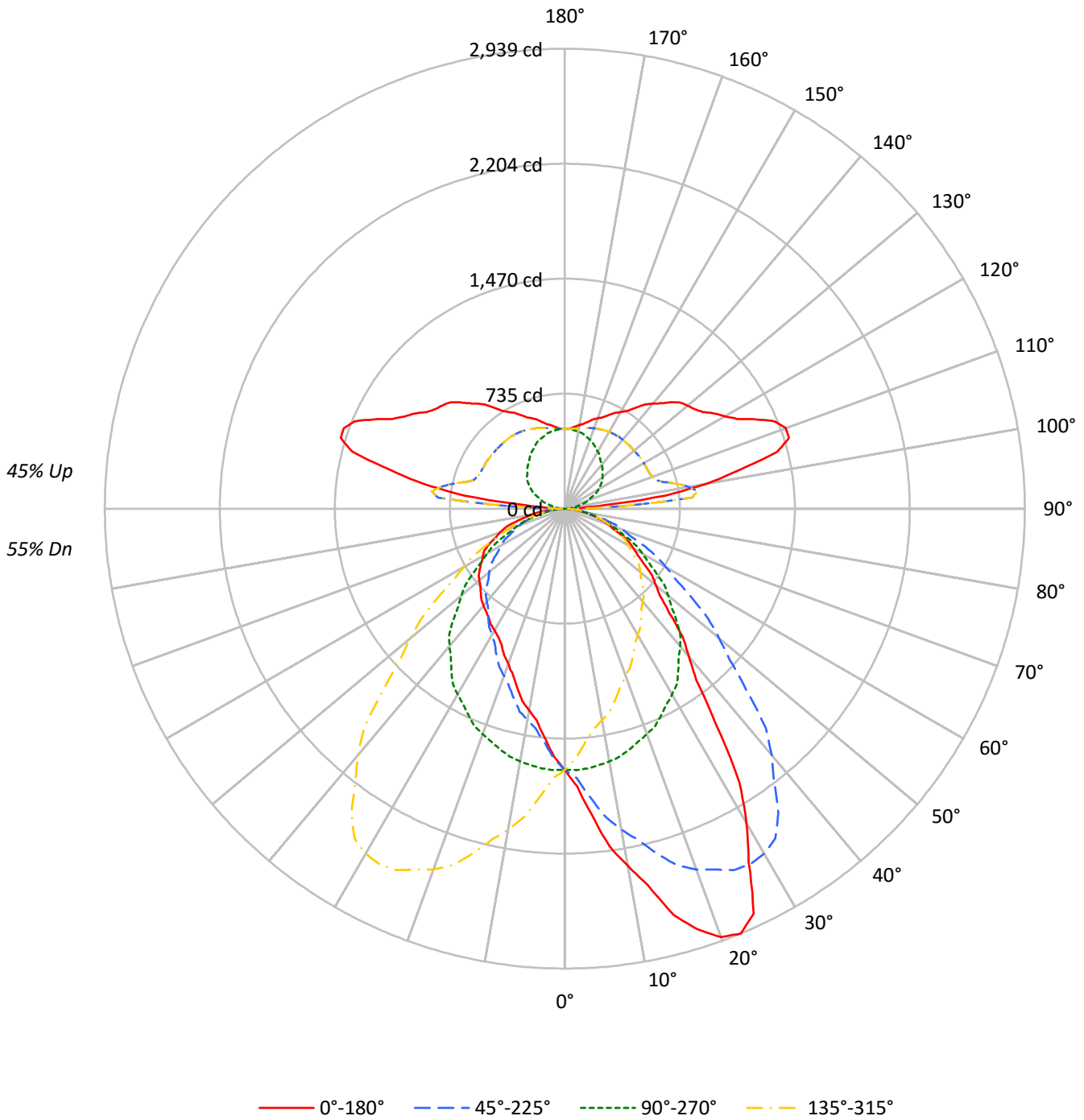
Lumens per Lamp: N/A
Luminaire Lumens: 8302.8 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
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									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	50	30	10	50	30	10	50	30	10	0																
RCR	0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																											
	1	99	95	91	88	92	88	85	82	76	74	71	65	63	61	54	53	52	47																											
	2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44	40																											
	3	83	73	66	60	77	69	62	57	59	54	50	51	47	44	43	40	38	34																											
	4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	39	35	33	29																											
	5	70	58	50	44	65	54	47	42	47	42	37	41	37	33	35	32	29	26																											
	6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	28	26	23																											
	7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23	20																											
	8	55	43	35	30	51	40	33	29	36	30	26	31	26	23	27	23	20	18																											
	9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	18	16																											
	10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15																											

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	2.0
10°-20°	501.1	6.0
20°-30°	794.6	9.6
30°-40°	884.3	10.7
40°-50°	805.0	9.7
50°-60°	657.8	7.9
60°-70°	469.6	5.7
70°-80°	258.6	3.1
80°-90°	73.4	0.9
90°-100°	367.0	4.4
100°-110°	763.9	9.2
110°-120°	684.2	8.2
120°-130°	575.5	6.9
130°-140°	479.9	5.8
140°-150°	366.6	4.4
150°-160°	257.7	3.1
160°-170°	151.6	1.8
170°-180°	49.3	0.6
0°-30°	1458.3	17.6
0°-40°	2342.7	28.2
0°-60°	3805.5	45.8
0°-90°	4607.1	55.5
90°-120°	1815.1	21.9
90°-150°	3237.1	39.0
90°-180°	3696.0	44.5
0°-180°	8302.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	51
90°	21	1	21	1	21	19
95°	244	33	244	33	244	378
105°	1405	117	1405	117	1405	1389
115°	1349	206	1349	206	1349	1339
125°	1076	286	1076	286	1076	978
135°	962	340	962	340	962	743
145°	786	392	786	392	786	498
155°	658	446	658	446	658	307
165°	574	486	574	486	574	165
175°	517	507	517	507	517	50
180°	508	508	508	508	508	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	16.4	18.0	18.2	18.6	19.5	20.0	20.4	19.6	21.6	22.4	24.2
90°	21.0	21.0	22.0	21.0	20.0	20.0	19.0	18.0	17.0	18.0	16.0
92.5°	76.9	76.9	80.3	85.7	97.4	117.4	147.6	196.1	263.8	316.7	277.1
95°	243.6	256.6	274.5	305.5	354.4	451.2	585.0	739.7	836.6	813.6	614.0
97.5°	651.1	671.9	701.8	761.9	833.6	937.8	1035.4	1093.0	1051.0	856.9	574.6
100°	915.5	923.4	953.4	1014.3	1101.1	1175.0	1223.9	1204.0	1058.2	802.6	521.1
102.5°	1145.5	1151.9	1183.4	1227.5	1280.8	1311.6	1297.4	1198.4	998.3	734.8	485.2
105°	1404.6	1410.6	1424.6	1432.6	1430.6	1389.6	1290.8	1118.1	889.5	654.9	454.2
107.5°	1500.9	1498.3	1488.3	1465.5	1416.2	1327.2	1188.0	1004.1	801.6	610.2	448.6
110°	1502.5	1493.5	1475.5	1433.6	1362.7	1252.9	1108.1	935.4	757.7	595.0	450.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1455.3	1440.8	1415.6	1364.9	1284.4	1174.6	1037.8	885.1	733.0	587.8	455.0
115°	1348.7	1340.7	1308.8	1248.9	1170.0	1074.2	957.4	834.6	709.8	584.0	464.2
117.5°	1240.7	1234.5	1202.2	1151.9	1084.6	1003.3	911.5	809.8	699.4	583.0	474.0
120°	1180.0	1169.0	1143.1	1099.1	1042.2	971.4	891.5	798.6	693.8	583.0	481.2
122.5°	1132.1	1121.1	1099.1	1061.6	1013.5	951.4	878.7	789.1	687.4	582.2	488.4
125°	1076.2	1070.2	1051.2	1022.3	982.3	927.4	858.5	772.7	676.9	581.0	499.2
127.5°	1043.4	1037.4	1021.5	995.7	955.6	903.5	834.8	752.7	662.7	578.8	507.7
130°	1024.3	1018.3	1002.3	977.3	936.4	883.5	815.6	736.8	653.9	578.0	514.1
132.5°	1002.7	996.7	981.5	953.4	913.3	860.3	794.1	720.0	645.9	577.2	519.7
135°	962.4	956.4	940.4	912.5	872.5	822.6	761.7	696.8	633.9	576.0	528.1
137.5°	912.5	905.3	892.1	864.5	827.2	782.1	730.8	675.9	623.5	575.8	533.1
140°	876.5	868.5	854.6	832.6	797.6	755.7	710.8	663.9	618.0	575.0	537.1
142.5°	838.2	832.6	820.2	799.8	768.9	732.6	694.0	652.7	613.2	575.0	540.3
145°	785.7	780.7	770.7	753.7	728.8	700.8	670.9	636.9	605.0	573.0	542.1
147.5°	739.1	737.4	729.8	715.2	696.8	674.9	650.9	623.9	597.6	569.4	543.1
150°	712.8	711.8	705.8	692.8	676.9	658.9	638.9	616.0	592.0	567.0	543.1
152.5°	688.8	687.8	684.2	673.7	660.1	645.3	626.9	607.2	585.6	563.0	541.5
155°	657.9	657.9	654.9	646.9	636.9	624.9	610.0	594.0	576.0	557.1	539.1
157.5°	630.7	630.7	628.9	622.9	615.4	605.8	593.2	579.8	566.2	550.9	536.5
160°	614.0	614.0	613.0	607.0	601.0	593.0	582.0	571.0	559.1	546.1	534.1
162.5°	598.0	598.8	597.8	591.8	587.4	580.2	571.6	562.2	552.7	541.3	531.7
165°	574.0	575.0	576.0	572.0	568.0	563.0	556.1	550.1	542.1	534.1	527.1
167.5°	555.1	555.9	556.1	553.5	551.5	548.5	542.9	538.3	532.5	526.9	522.3
170°	543.1	543.1	544.1	543.1	541.1	538.1	534.1	531.1	526.1	522.1	519.1
172.5°	531.1	532.7	533.7	532.7	531.5	529.3	526.9	524.7	520.5	517.3	515.9
175°	517.1	519.1	521.1	519.1	519.1	519.1	517.1	516.1	514.1	512.1	512.1
177.5°	508.9	510.5	512.1	511.3	512.1	511.3	511.3	510.5	509.7	508.9	508.9
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	23.8	24.4	22.6	20.4	18.5	16.7	15.5	14.6	15.5	16.7	17.4
90°	14.0	14.0	8.0	8.0	7.0	6.0	3.0	1.0	3.0	6.0	7.0
92.5°	201.7	124.2	73.5	52.7	38.1	26.0	16.6	11.4	16.6	26.0	38.1
95°	375.4	211.6	124.8	82.9	58.9	45.9	35.9	32.9	35.9	45.9	58.9
97.5°	337.4	202.3	135.4	100.2	79.7	67.7	59.1	59.1	59.1	67.7	79.7
100°	317.5	204.7	145.8	113.8	94.8	82.9	75.9	75.9	75.9	82.9	94.8
102.5°	311.9	212.6	159.3	129.0	110.8	99.6	93.4	91.8	93.4	99.6	110.8
105°	314.5	231.6	183.7	154.7	136.8	124.8	119.8	116.8	119.8	124.8	136.8
107.5°	329.2	253.8	209.8	181.3	164.1	151.3	146.4	144.4	146.4	151.3	164.1
110°	340.4	270.5	226.6	199.7	181.7	169.7	164.7	162.7	164.7	169.7	181.7



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	352.4	286.5	244.2	217.2	199.3	188.1	182.3	180.3	182.3	188.1	199.3
115°	371.4	311.5	271.5	244.6	225.6	215.6	208.6	205.7	208.6	215.6	225.6
117.5°	390.7	335.6	297.7	269.7	252.0	241.0	234.8	232.0	234.8	241.0	252.0
120°	404.3	352.4	314.5	286.5	269.5	258.6	251.6	249.6	251.6	258.6	269.5
122.5°	417.1	368.4	330.4	303.3	284.7	274.5	267.5	265.6	267.5	274.5	284.7
125°	436.3	390.3	354.4	326.4	307.5	296.5	290.5	286.5	290.5	296.5	307.5
127.5°	452.8	410.7	376.0	347.8	328.0	315.5	308.3	305.1	308.3	315.5	328.0
130°	463.2	424.3	390.3	361.4	342.4	327.4	319.5	315.5	319.5	327.4	342.4
132.5°	473.6	435.5	401.5	374.2	353.6	339.4	329.0	325.8	329.0	339.4	353.6
135°	487.2	451.2	418.3	392.3	371.4	354.4	344.4	340.4	344.4	354.4	371.4
137.5°	496.8	463.2	432.5	407.7	385.9	369.8	358.8	355.0	358.8	369.8	385.9
140°	503.1	471.2	441.3	417.3	396.3	379.4	368.4	365.4	368.4	379.4	396.3
142.5°	507.9	478.4	449.2	426.1	405.9	389.7	379.6	376.6	379.6	389.7	405.9
145°	513.1	486.2	460.2	438.3	419.3	405.3	395.3	392.3	395.3	405.3	419.3
147.5°	517.7	494.2	469.8	450.0	434.3	419.9	411.1	410.1	411.1	419.9	434.3
150°	520.1	498.2	476.2	457.2	442.3	430.3	422.3	421.3	422.3	430.3	442.3
152.5°	521.7	501.4	481.8	464.4	451.0	439.9	431.9	431.7	431.9	439.9	451.0
155°	523.1	506.1	489.2	474.2	463.2	453.2	447.2	446.2	447.2	453.2	463.2
157.5°	523.1	509.5	495.2	483.4	473.8	466.0	460.4	460.4	460.4	466.0	473.8
160°	523.1	511.1	499.2	488.2	480.2	473.2	469.2	469.2	469.2	473.2	480.2
162.5°	523.1	512.7	501.6	493.0	485.8	479.6	476.4	477.2	476.4	479.6	485.8
165°	521.1	513.1	504.1	498.2	493.2	488.2	486.2	486.2	486.2	488.2	493.2
167.5°	518.7	512.9	506.3	501.8	499.0	495.2	494.2	495.2	494.2	495.2	499.0
170°	517.1	512.1	507.1	504.1	502.2	499.2	498.2	499.2	498.2	499.2	502.2
172.5°	515.5	511.3	507.9	505.7	504.5	502.3	502.2	503.1	502.2	502.3	504.5
175°	513.1	510.1	508.1	508.1	507.1	506.1	506.1	507.1	506.1	506.1	507.1
177.5°	510.5	508.9	508.1	508.1	508.1	507.3	508.1	508.9	508.1	507.3	508.1
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	19.3	19.3	22.7	23.8	25.9	29.0	29.9	36.2	38.6	41.6	46.6
90°	8.0	8.0	14.0	14.0	16.0	18.0	17.0	18.0	19.0	20.0	20.0
92.5°	52.7	73.5	124.2	201.7	277.1	316.7	263.8	196.1	147.6	117.4	97.4
95°	82.9	124.8	211.6	375.4	614.0	813.6	836.6	739.7	585.0	451.2	354.4
97.5°	100.2	135.4	202.3	337.4	574.6	856.9	1051.0	1093.0	1035.4	937.8	833.6
100°	113.8	145.8	204.7	317.5	521.1	802.6	1058.2	1204.0	1223.9	1175.0	1101.1
102.5°	129.0	159.3	212.6	311.9	485.2	734.8	998.3	1198.4	1297.4	1311.6	1280.8
105°	154.7	183.7	231.6	314.5	454.2	654.9	889.5	1118.1	1290.8	1389.6	1430.6
107.5°	181.3	209.8	253.8	329.2	448.6	610.2	801.6	1004.1	1188.0	1327.2	1416.2
110°	199.7	226.6	270.5	340.4	450.2	595.0	757.7	935.4	1108.1	1252.9	1362.7



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	217.2	244.2	286.5	352.4	455.0	587.8	733.0	885.1	1037.8	1174.6	1284.4
115°	244.6	271.5	311.5	371.4	464.2	584.0	709.8	834.6	957.4	1074.2	1170.0
117.5°	269.7	297.7	335.6	390.7	474.0	583.0	699.4	809.8	911.5	1003.3	1084.6
120°	286.5	314.5	352.4	404.3	481.2	583.0	693.8	798.6	891.5	971.4	1042.2
122.5°	303.3	330.4	368.4	417.1	488.4	582.2	687.4	789.1	878.7	951.4	1013.5
125°	326.4	354.4	390.3	436.3	499.2	581.0	676.9	772.7	858.5	927.4	982.3
127.5°	347.8	376.0	410.7	452.8	507.7	578.8	662.7	752.7	834.8	903.5	955.6
130°	361.4	390.3	424.3	463.2	514.1	578.0	653.9	736.8	815.6	883.5	936.4
132.5°	374.2	401.5	435.5	473.6	519.7	577.2	645.9	720.0	794.1	860.3	913.3
135°	392.3	418.3	451.2	487.2	528.1	576.0	633.9	696.8	761.7	822.6	872.5
137.5°	407.7	432.5	463.2	496.8	533.1	575.8	623.5	675.9	730.8	782.1	827.2
140°	417.3	441.3	471.2	503.1	537.1	575.0	618.0	663.9	710.8	755.7	797.6
142.5°	426.1	449.2	478.4	507.9	540.3	575.0	613.2	652.7	694.0	732.6	768.9
145°	438.3	460.2	486.2	513.1	542.1	573.0	605.0	636.9	670.9	700.8	728.8
147.5°	450.0	469.8	494.2	517.7	543.1	569.4	597.6	623.9	650.9	674.9	696.8
150°	457.2	476.2	498.2	520.1	543.1	567.0	592.0	616.0	638.9	658.9	676.9
152.5°	464.4	481.8	501.4	521.7	541.5	563.0	585.6	607.2	626.9	645.3	660.1
155°	474.2	489.2	506.1	523.1	539.1	557.1	576.0	594.0	610.0	624.9	636.9
157.5°	483.4	495.2	509.5	523.1	536.5	550.9	566.2	579.8	593.2	605.8	615.4
160°	488.2	499.2	511.1	523.1	534.1	546.1	559.1	571.0	582.0	593.0	601.0
162.5°	493.0	501.6	512.7	523.1	531.7	541.3	552.7	562.2	571.6	580.2	587.4
165°	498.2	504.1	513.1	521.1	527.1	534.1	542.1	550.1	556.1	563.0	568.0
167.5°	501.8	506.3	512.9	518.7	522.3	526.9	532.5	538.3	542.9	548.5	551.5
170°	504.1	507.1	512.1	517.1	519.1	522.1	526.1	531.1	534.1	538.1	541.1
172.5°	505.7	507.9	511.3	515.5	515.9	517.3	520.5	524.7	526.9	529.3	531.5
175°	508.1	508.1	510.1	513.1	512.1	512.1	514.1	516.1	517.1	519.1	519.1
177.5°	508.1	508.1	508.9	510.5	508.9	508.9	509.7	510.5	511.3	511.3	512.1
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	48.4	49.2	50.6	51.8	50.6	49.2	48.4	46.6	41.6	38.6	36.2
90°	21.0	22.0	21.0	21.0	21.0	22.0	21.0	20.0	20.0	19.0	18.0
92.5°	85.7	80.3	76.9	76.9	76.9	80.3	85.7	97.4	117.4	147.6	196.1
95°	305.5	274.5	256.6	243.6	256.6	274.5	305.5	354.4	451.2	585.0	739.7
97.5°	761.9	701.8	671.9	651.1	671.9	701.8	761.9	833.6	937.8	1035.4	1093.0
100°	1014.3	953.4	923.4	915.5	923.4	953.4	1014.3	1101.1	1175.0	1223.9	1204.0
102.5°	1227.5	1183.4	1151.9	1145.5	1151.9	1183.4	1227.5	1280.8	1311.6	1297.4	1198.4
105°	1432.6	1424.6	1410.6	1404.6	1410.6	1424.6	1432.6	1430.6	1389.6	1290.8	1118.1
107.5°	1465.5	1488.3	1498.3	1500.9	1498.3	1488.3	1465.5	1416.2	1327.2	1188.0	1004.1
110°	1433.6	1475.5	1493.5	1502.5	1493.5	1475.5	1433.6	1362.7	1252.9	1108.1	935.4



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1364.9	1415.6	1440.8	1455.3	1440.8	1415.6	1364.9	1284.4	1174.6	1037.8	885.1
115°	1248.9	1308.8	1340.7	1348.7	1340.7	1308.8	1248.9	1170.0	1074.2	957.4	834.6
117.5°	1151.9	1202.2	1234.5	1240.7	1234.5	1202.2	1151.9	1084.6	1003.3	911.5	809.8
120°	1099.1	1143.1	1169.0	1180.0	1169.0	1143.1	1099.1	1042.2	971.4	891.5	798.6
122.5°	1061.6	1099.1	1121.1	1132.1	1121.1	1099.1	1061.6	1013.5	951.4	878.7	789.1
125°	1022.3	1051.2	1070.2	1076.2	1070.2	1051.2	1022.3	982.3	927.4	858.5	772.7
127.5°	995.7	1021.5	1037.4	1043.4	1037.4	1021.5	995.7	955.6	903.5	834.8	752.7
130°	977.3	1002.3	1018.3	1024.3	1018.3	1002.3	977.3	936.4	883.5	815.6	736.8
132.5°	953.4	981.5	996.7	1002.7	996.7	981.5	953.4	913.3	860.3	794.1	720.0
135°	912.5	940.4	956.4	962.4	956.4	940.4	912.5	872.5	822.6	761.7	696.8
137.5°	864.5	892.1	905.3	912.5	905.3	892.1	864.5	827.2	782.1	730.8	675.9
140°	832.6	854.6	868.5	876.5	868.5	854.6	832.6	797.6	755.7	710.8	663.9
142.5°	799.8	820.2	832.6	838.2	832.6	820.2	799.8	768.9	732.6	694.0	652.7
145°	753.7	770.7	780.7	785.7	780.7	770.7	753.7	728.8	700.8	670.9	636.9
147.5°	715.2	729.8	737.4	739.1	737.4	729.8	715.2	696.8	674.9	650.9	623.9
150°	692.8	705.8	711.8	712.8	711.8	705.8	692.8	676.9	658.9	638.9	616.0
152.5°	673.7	684.2	687.8	688.8	687.8	684.2	673.7	660.1	645.3	626.9	607.2
155°	646.9	654.9	657.9	657.9	657.9	654.9	646.9	636.9	624.9	610.0	594.0
157.5°	622.9	628.9	630.7	630.7	630.7	628.9	622.9	615.4	605.8	593.2	579.8
160°	607.0	613.0	614.0	614.0	614.0	613.0	607.0	601.0	593.0	582.0	571.0
162.5°	591.8	597.8	598.8	598.0	598.8	597.8	591.8	587.4	580.2	571.6	562.2
165°	572.0	576.0	575.0	574.0	575.0	576.0	572.0	568.0	563.0	556.1	550.1
167.5°	553.5	556.1	555.9	555.1	555.9	556.1	553.5	551.5	548.5	542.9	538.3
170°	543.1	544.1	543.1	543.1	543.1	544.1	543.1	541.1	538.1	534.1	531.1
172.5°	532.7	533.7	532.7	531.1	532.7	533.7	532.7	531.5	529.3	526.9	524.7
175°	519.1	521.1	519.1	517.1	519.1	521.1	519.1	519.1	519.1	517.1	516.1
177.5°	511.3	512.1	510.5	508.9	510.5	512.1	511.3	512.1	511.3	511.3	510.5
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	29.9	29.0	25.9	23.8	22.7	19.3	19.3	17.4	16.7	15.5	14.6
90°	17.0	18.0	16.0	14.0	14.0	8.0	8.0	7.0	6.0	3.0	1.0
92.5°	263.8	316.7	277.1	201.7	124.2	73.5	52.7	38.1	26.0	16.6	11.4
95°	836.6	813.6	614.0	375.4	211.6	124.8	82.9	58.9	45.9	35.9	32.9
97.5°	1051.0	856.9	574.6	337.4	202.3	135.4	100.2	79.7	67.7	59.1	59.1
100°	1058.2	802.6	521.1	317.5	204.7	145.8	113.8	94.8	82.9	75.9	75.9
102.5°	998.3	734.8	485.2	311.9	212.6	159.3	129.0	110.8	99.6	93.4	91.8
105°	889.5	654.9	454.2	314.5	231.6	183.7	154.7	136.8	124.8	119.8	116.8
107.5°	801.6	610.2	448.6	329.2	253.8	209.8	181.3	164.1	151.3	146.4	144.4
110°	757.7	595.0	450.2	340.4	270.5	226.6	199.7	181.7	169.7	164.7	162.7



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	733.0	587.8	455.0	352.4	286.5	244.2	217.2	199.3	188.1	182.3	180.3
115°	709.8	584.0	464.2	371.4	311.5	271.5	244.6	225.6	215.6	208.6	205.7
117.5°	699.4	583.0	474.0	390.7	335.6	297.7	269.7	252.0	241.0	234.8	232.0
120°	693.8	583.0	481.2	404.3	352.4	314.5	286.5	269.5	258.6	251.6	249.6
122.5°	687.4	582.2	488.4	417.1	368.4	330.4	303.3	284.7	274.5	267.5	265.6
125°	676.9	581.0	499.2	436.3	390.3	354.4	326.4	307.5	296.5	290.5	286.5
127.5°	662.7	578.8	507.7	452.8	410.7	376.0	347.8	328.0	315.5	308.3	305.1
130°	653.9	578.0	514.1	463.2	424.3	390.3	361.4	342.4	327.4	319.5	315.5
132.5°	645.9	577.2	519.7	473.6	435.5	401.5	374.2	353.6	339.4	329.0	325.8
135°	633.9	576.0	528.1	487.2	451.2	418.3	392.3	371.4	354.4	344.4	340.4
137.5°	623.5	575.8	533.1	496.8	463.2	432.5	407.7	385.9	369.8	358.8	355.0
140°	618.0	575.0	537.1	503.1	471.2	441.3	417.3	396.3	379.4	368.4	365.4
142.5°	613.2	575.0	540.3	507.9	478.4	449.2	426.1	405.9	389.7	379.6	376.6
145°	605.0	573.0	542.1	513.1	486.2	460.2	438.3	419.3	405.3	395.3	392.3
147.5°	597.6	569.4	543.1	517.7	494.2	469.8	450.0	434.3	419.9	411.1	410.1
150°	592.0	567.0	543.1	520.1	498.2	476.2	457.2	442.3	430.3	422.3	421.3
152.5°	585.6	563.0	541.5	521.7	501.4	481.8	464.4	451.0	439.9	431.9	431.7
155°	576.0	557.1	539.1	523.1	506.1	489.2	474.2	463.2	453.2	447.2	446.2
157.5°	566.2	550.9	536.5	523.1	509.5	495.2	483.4	473.8	466.0	460.4	460.4
160°	559.1	546.1	534.1	523.1	511.1	499.2	488.2	480.2	473.2	469.2	469.2
162.5°	552.7	541.3	531.7	523.1	512.7	501.6	493.0	485.8	479.6	476.4	477.2
165°	542.1	534.1	527.1	521.1	513.1	504.1	498.2	493.2	488.2	486.2	486.2
167.5°	532.5	526.9	522.3	518.7	512.9	506.3	501.8	499.0	495.2	494.2	495.2
170°	526.1	522.1	519.1	517.1	512.1	507.1	504.1	502.2	499.2	498.2	499.2
172.5°	520.5	517.3	515.9	515.5	511.3	507.9	505.7	504.5	502.3	502.2	503.1
175°	514.1	512.1	512.1	513.1	510.1	508.1	508.1	507.1	506.1	506.1	507.1
177.5°	509.7	508.9	508.9	510.5	508.9	508.1	508.1	508.1	507.3	508.1	508.9
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



TEST NUMBER: P332654

CATALOG NUMBER: SA4XXDIP-C1020D1035U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	15.5	16.7	18.5	20.4	22.6	24.4	23.8	24.2	22.4	21.6	19.6
90°	3.0	6.0	7.0	8.0	8.0	14.0	14.0	16.0	18.0	17.0	18.0
92.5°	16.6	26.0	38.1	52.7	73.5	124.2	201.7	277.1	316.7	263.8	196.1
95°	35.9	45.9	58.9	82.9	124.8	211.6	375.4	614.0	813.6	836.6	739.7
97.5°	59.1	67.7	79.7	100.2	135.4	202.3	337.4	574.6	856.9	1051.0	1093.0
100°	75.9	82.9	94.8	113.8	145.8	204.7	317.5	521.1	802.6	1058.2	1204.0
102.5°	93.4	99.6	110.8	129.0	159.3	212.6	311.9	485.2	734.8	998.3	1198.4
105°	119.8	124.8	136.8	154.7	183.7	231.6	314.5	454.2	654.9	889.5	1118.1
107.5°	146.4	151.3	164.1	181.3	209.8	253.8	329.2	448.6	610.2	801.6	1004.1
110°	164.7	169.7	181.7	199.7	226.6	270.5	340.4	450.2	595.0	757.7	935.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	182.3	188.1	199.3	217.2	244.2	286.5	352.4	455.0	587.8	733.0	885.1
115°	208.6	215.6	225.6	244.6	271.5	311.5	371.4	464.2	584.0	709.8	834.6
117.5°	234.8	241.0	252.0	269.7	297.7	335.6	390.7	474.0	583.0	699.4	809.8
120°	251.6	258.6	269.5	286.5	314.5	352.4	404.3	481.2	583.0	693.8	798.6
122.5°	267.5	274.5	284.7	303.3	330.4	368.4	417.1	488.4	582.2	687.4	789.1
125°	290.5	296.5	307.5	326.4	354.4	390.3	436.3	499.2	581.0	676.9	772.7
127.5°	308.3	315.5	328.0	347.8	376.0	410.7	452.8	507.7	578.8	662.7	752.7
130°	319.5	327.4	342.4	361.4	390.3	424.3	463.2	514.1	578.0	653.9	736.8
132.5°	329.0	339.4	353.6	374.2	401.5	435.5	473.6	519.7	577.2	645.9	720.0
135°	344.4	354.4	371.4	392.3	418.3	451.2	487.2	528.1	576.0	633.9	696.8
137.5°	358.8	369.8	385.9	407.7	432.5	463.2	496.8	533.1	575.8	623.5	675.9
140°	368.4	379.4	396.3	417.3	441.3	471.2	503.1	537.1	575.0	618.0	663.9
142.5°	379.6	389.7	405.9	426.1	449.2	478.4	507.9	540.3	575.0	613.2	652.7
145°	395.3	405.3	419.3	438.3	460.2	486.2	513.1	542.1	573.0	605.0	636.9
147.5°	411.1	419.9	434.3	450.0	469.8	494.2	517.7	543.1	569.4	597.6	623.9
150°	422.3	430.3	442.3	457.2	476.2	498.2	520.1	543.1	567.0	592.0	616.0
152.5°	431.9	439.9	451.0	464.4	481.8	501.4	521.7	541.5	563.0	585.6	607.2
155°	447.2	453.2	463.2	474.2	489.2	506.1	523.1	539.1	557.1	576.0	594.0
157.5°	460.4	466.0	473.8	483.4	495.2	509.5	523.1	536.5	550.9	566.2	579.8
160°	469.2	473.2	480.2	488.2	499.2	511.1	523.1	534.1	546.1	559.1	571.0
162.5°	476.4	479.6	485.8	493.0	501.6	512.7	523.1	531.7	541.3	552.7	562.2
165°	486.2	488.2	493.2	498.2	504.1	513.1	521.1	527.1	534.1	542.1	550.1
167.5°	494.2	495.2	499.0	501.8	506.3	512.9	518.7	522.3	526.9	532.5	538.3
170°	498.2	499.2	502.2	504.1	507.1	512.1	517.1	519.1	522.1	526.1	531.1
172.5°	502.2	502.3	504.5	505.7	507.9	511.3	515.5	515.9	517.3	520.5	524.7
175°	506.1	506.1	507.1	508.1	508.1	510.1	513.1	512.1	512.1	514.1	516.1
177.5°	508.1	507.3	508.1	508.1	508.1	508.9	510.5	508.9	508.9	509.7	510.5
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	20.4	20.0	19.5	18.6	18.2	18.0	16.4
90°	19.0	20.0	20.0	21.0	22.0	21.0	21.0
92.5°	147.6	117.4	97.4	85.7	80.3	76.9	76.9
95°	585.0	451.2	354.4	305.5	274.5	256.6	243.6
97.5°	1035.4	937.8	833.6	761.9	701.8	671.9	651.1
100°	1223.9	1175.0	1101.1	1014.3	953.4	923.4	915.5
102.5°	1297.4	1311.6	1280.8	1227.5	1183.4	1151.9	1145.5
105°	1290.8	1389.6	1430.6	1432.6	1424.6	1410.6	1404.6
107.5°	1188.0	1327.2	1416.2	1465.5	1488.3	1498.3	1500.9
110°	1108.1	1252.9	1362.7	1433.6	1475.5	1493.5	1502.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1037.8	1174.6	1284.4	1364.9	1415.6	1440.8	1455.3
115°	957.4	1074.2	1170.0	1248.9	1308.8	1340.7	1348.7
117.5°	911.5	1003.3	1084.6	1151.9	1202.2	1234.5	1240.7
120°	891.5	971.4	1042.2	1099.1	1143.1	1169.0	1180.0
122.5°	878.7	951.4	1013.5	1061.6	1099.1	1121.1	1132.1
125°	858.5	927.4	982.3	1022.3	1051.2	1070.2	1076.2
127.5°	834.8	903.5	955.6	995.7	1021.5	1037.4	1043.4
130°	815.6	883.5	936.4	977.3	1002.3	1018.3	1024.3
132.5°	794.1	860.3	913.3	953.4	981.5	996.7	1002.7
135°	761.7	822.6	872.5	912.5	940.4	956.4	962.4
137.5°	730.8	782.1	827.2	864.5	892.1	905.3	912.5
140°	710.8	755.7	797.6	832.6	854.6	868.5	876.5
142.5°	694.0	732.6	768.9	799.8	820.2	832.6	838.2
145°	670.9	700.8	728.8	753.7	770.7	780.7	785.7
147.5°	650.9	674.9	696.8	715.2	729.8	737.4	739.1
150°	638.9	658.9	676.9	692.8	705.8	711.8	712.8
152.5°	626.9	645.3	660.1	673.7	684.2	687.8	688.8
155°	610.0	624.9	636.9	646.9	654.9	657.9	657.9
157.5°	593.2	605.8	615.4	622.9	628.9	630.7	630.7
160°	582.0	593.0	601.0	607.0	613.0	614.0	614.0
162.5°	571.6	580.2	587.4	591.8	597.8	598.8	598.0
165°	556.1	563.0	568.0	572.0	576.0	575.0	574.0
167.5°	542.9	548.5	551.5	553.5	556.1	555.9	555.1
170°	534.1	538.1	541.1	543.1	544.1	543.1	543.1
172.5°	526.9	529.3	531.5	532.7	533.7	532.7	531.1
175°	517.1	519.1	519.1	519.1	521.1	519.1	517.1
177.5°	511.3	511.3	512.1	511.3	512.1	510.5	508.9
180°	508.1	508.1	508.1	508.1	508.1	508.1	508.1

(END OF REPORT)