

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: P332981-830

Luminaire Tested: **SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332981-830  
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: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

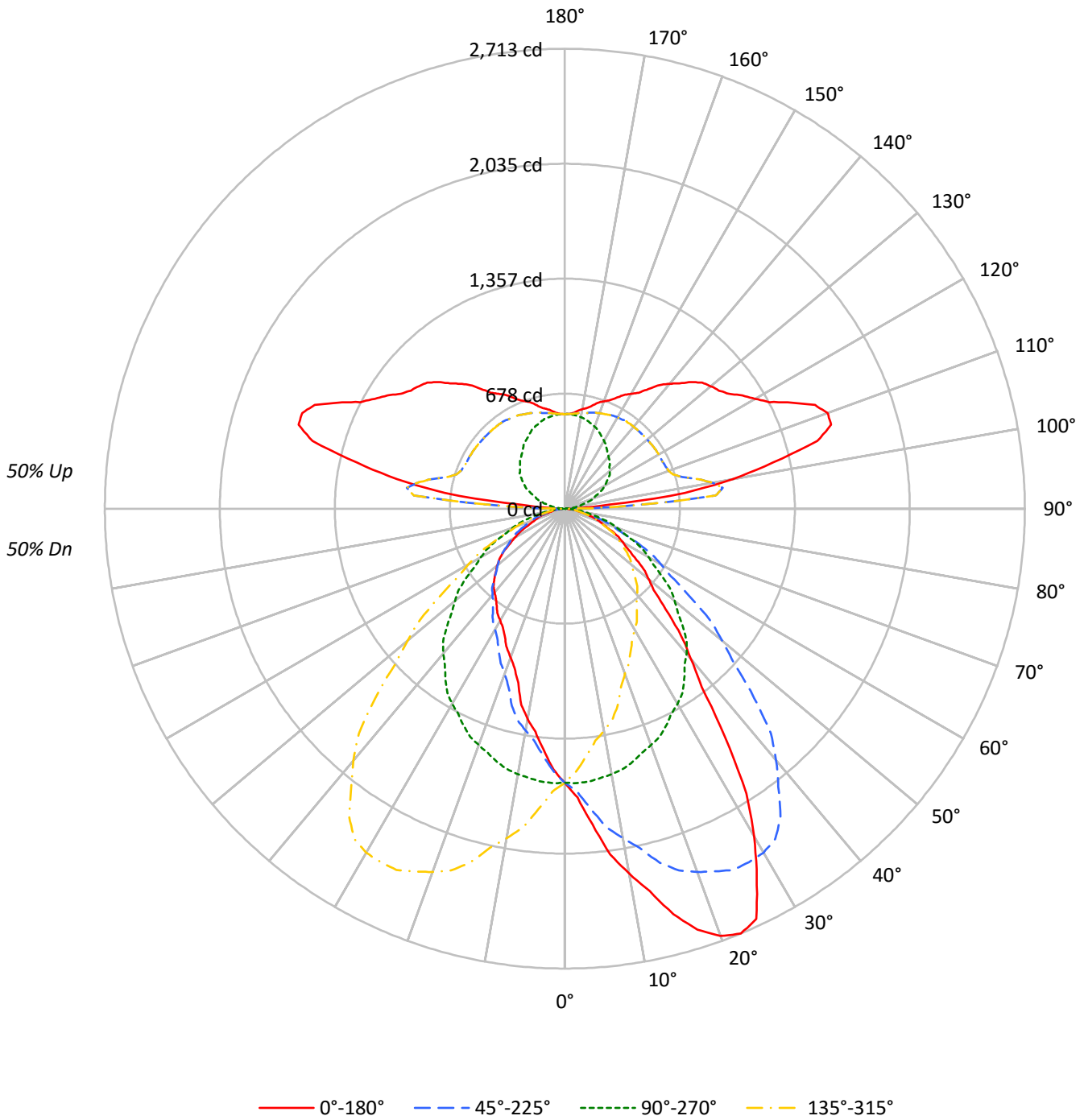
Lumens per Lamp: N/A  
Luminaire Lumens: 8145.5 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 65.4  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	91	87	84	81	74	72	70	62	60	59	51	49	48	43
2	90	83	77	72	83	77	72	67	65	62	58	55	52	50	45	43	42	37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	43	40	38	36	32
4	75	65	57	51	69	60	54	48	52	47	43	44	40	37	36	33	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	24
6	64	52	44	39	59	49	42	37	42	36	32	36	32	28	30	27	24	21
7	59	47	39	34	55	44	37	32	38	33	29	33	28	25	27	24	22	19
8	55	43	35	30	51	40	33	29	35	29	26	30	26	23	25	22	20	17
9	51	39	32	27	47	37	30	26	32	27	23	28	23	20	23	20	18	16
10	48	36	29	24	44	34	27	23	30	24	21	25	21	18	22	18	16	14

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

	0°	90°	180°	270°
0°	13056	13056	13056	13056
5°	15144	13095	11574	13095
10°	17915	13038	10330	13038
15°	20695	12918	8877	12918
20°	23040	12752	8027	12752
25°	23785	12588	7452	12588
30°	20821	12392	7106	12392
35°	16208	12098	6897	12098
40°	12154	11763	6785	11763
45°	9597	11226	6725	11226
50°	8102	10605	6531	10605
55°	7061	9923	6180	9923
60°	6353	9216	5470	9216
65°	5601	8451	4705	8451
70°	5044	7659	4244	7659
75°	4226	6787	3618	6787
80°	3575	5783	3394	5783
85°	3020	4520	3020	4520



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.7	1.9
10°-20°	472.7	5.8
20°-30°	739.3	9.1
30°-40°	821.9	10.1
40°-50°	729.2	9.0
50°-60°	568.2	7.0
60°-70°	372.0	4.6
70°-80°	182.9	2.2
80°-90°	48.2	0.6
90°-100°	402.7	4.9
100°-110°	838.0	10.3
110°-120°	750.6	9.2
120°-130°	631.4	7.8
130°-140°	526.5	6.5
140°-150°	402.2	4.9
150°-160°	282.7	3.5
160°-170°	166.3	2.0
170°-180°	54.1	0.7
0°-30°	1368.7	16.8
0°-40°	2190.5	26.9
0°-60°	3487.9	42.8
0°-90°	4091.1	50.2
90°-120°	1991.3	24.4
90°-150°	3551.4	43.6
90°-180°	4054.0	49.8
0°-180°	8145.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1617	1617	1617	1617	1617	
5°	1869	1616	1428	1616	1869	189
15°	2476	1546	1062	1546	2476	704
25°	2670	1413	837	1413	2670	1185
35°	1645	1228	700	1228	1645	1031
45°	841	983	589	983	841	666
55°	502	705	439	705	502	456
65°	293	442	246	442	293	295
75°	136	218	116	218	136	149
85°	33	49	33	49	33	37
90°	23	1	23	1	23	20
95°	267	36	267	36	267	415
105°	1541	128	1541	128	1541	1524
115°	1480	226	1480	226	1480	1469
125°	1181	314	1181	314	1181	1073
135°	1056	373	1056	373	1056	815
145°	862	430	862	430	862	546
155°	722	490	722	490	722	337
165°	630	533	630	533	630	180
175°	567	556	567	556	567	55
180°	558	558	558	558	558	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1705.8	1710.5	1705.8	1705.3	1700.2	1698.6	1696.5	1689.7	1677.2	1669.9	1671.4
5°	1868.8	1885.0	1875.9	1874.6	1860.3	1846.0	1836.8	1816.0	1793.8	1778.9	1766.4
7.5°	2057.2	2066.5	2060.9	2051.7	2028.5	2015.3	1994.2	1966.7	1927.0	1896.6	1868.9
10°	2185.4	2193.2	2190.7	2173.7	2156.7	2122.2	2102.6	2064.3	2014.0	1974.3	1937.1
12.5°	2311.6	2319.9	2297.0	2297.7	2265.7	2238.4	2207.4	2159.1	2101.1	2049.8	2003.4
15°	2476.1	2465.6	2465.6	2452.6	2416.7	2379.0	2347.0	2296.2	2223.2	2161.9	2097.4
17.5°	2604.8	2608.4	2603.1	2572.3	2544.2	2505.1	2446.6	2387.3	2319.5	2237.3	2171.3
20°	2681.9	2681.9	2676.1	2655.2	2618.8	2577.0	2513.9	2449.3	2363.3	2280.6	2206.3
22.5°	2713.2	2715.3	2708.4	2691.1	2658.3	2617.6	2563.8	2498.3	2409.7	2316.5	2224.5
25°	2670.2	2682.6	2683.9	2679.3	2669.6	2644.8	2598.5	2531.4	2451.9	2350.9	2251.8
27.5°	2451.6	2467.2	2480.9	2503.4	2533.4	2549.0	2551.1	2517.0	2447.6	2350.4	2250.7
30°	2233.6	2246.6	2289.1	2344.4	2387.4	2426.5	2460.4	2469.5	2430.4	2343.1	2238.2
32.5°	1991.8	2009.5	2051.8	2111.4	2183.0	2249.3	2325.3	2364.2	2363.1	2310.7	2213.7
35°	1644.6	1657.6	1696.8	1759.3	1845.3	1943.7	2064.3	2158.0	2221.9	2217.3	2158.0
37.5°	1326.3	1341.0	1380.5	1432.5	1515.9	1637.7	1754.4	1883.6	2001.7	2068.0	2048.1
40°	1153.3	1154.0	1192.4	1245.9	1324.0	1430.2	1557.3	1700.6	1832.2	1939.8	1960.6
42.5°	1016.7	1016.8	1042.3	1099.9	1156.2	1256.1	1377.4	1519.8	1673.8	1798.0	1853.2
45°	840.6	846.4	867.2	901.8	946.1	1030.8	1127.8	1260.2	1432.9	1580.1	1672.0
47.5°	711.8	720.4	733.7	761.9	797.1	853.6	933.9	1052.7	1193.2	1355.2	1485.9
50°	645.1	646.4	663.3	678.9	709.5	754.5	824.9	924.0	1052.9	1208.7	1354.0
52.5°	587.8	587.5	597.7	617.5	642.3	677.4	734.2	824.3	938.8	1078.4	1228.3
55°	501.7	505.0	512.8	528.4	547.3	572.1	617.1	684.9	774.8	894.0	1030.2
57.5°	436.3	438.0	444.1	450.7	468.1	486.1	519.8	566.8	642.7	740.4	867.2
60°	393.5	394.2	396.2	406.0	419.6	436.6	459.4	499.1	563.0	652.2	752.6
62.5°	351.9	353.0	356.0	363.2	373.7	385.5	409.3	441.3	494.2	570.4	660.8
65°	293.2	293.9	298.4	301.0	309.5	319.9	337.5	359.0	395.5	459.4	527.8
67.5°	245.0	245.0	245.2	248.7	254.7	261.6	272.1	289.3	316.8	356.0	416.3
70°	213.7	213.7	215.0	217.0	220.3	226.1	232.0	245.0	265.2	297.1	343.4
72.5°	184.5	185.0	186.3	186.7	188.4	193.2	197.6	205.9	220.9	245.0	282.4
75°	135.5	137.5	140.7	143.4	146.6	146.0	150.5	155.7	160.3	174.7	196.1
77.5°	100.9	99.8	100.2	102.5	102.8	103.5	106.7	110.7	114.1	120.9	128.7
80°	76.9	76.9	78.8	79.5	78.8	79.5	82.8	84.7	86.1	88.6	95.8
82.5°	58.2	59.2	58.5	59.2	59.6	60.2	63.0	63.3	64.7	65.7	68.7
85°	32.6	33.3	33.8	32.6	32.6	32.6	33.8	34.5	35.8	35.2	36.5
87.5°	16.0	15.6	16.3	16.0	16.4	15.8	16.1	17.0	15.7	16.5	16.0
90°	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7	18.7	19.7	17.5
92.5°	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1	289.4	347.4	304.1
95°	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5	917.8	892.6	673.5
97.5°	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1	1153.1	940.2	630.4
100°	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9	1160.9	880.5	571.7
102.5°	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8	1095.2	806.1	532.3
105°	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6	975.8	718.5	498.3
107.5°	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5	879.5	669.4	492.2
110°	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2	831.3	652.8	494.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0	804.1	644.9	499.2
115°	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6	778.7	640.7	509.3
117.5°	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4	767.3	639.6	520.0
120°	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2	761.2	639.6	527.9
122.5°	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6	754.2	638.8	535.8
125°	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7	742.5	637.4	547.6
127.5°	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8	727.0	635.0	557.0
130°	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3	717.4	634.1	564.0
132.5°	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9	708.6	633.3	570.1
135°	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5	695.5	632.0	579.4
137.5°	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5	684.1	631.7	584.8
140°	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3	678.0	630.8	589.3
142.5°	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0	672.7	630.8	592.8
145°	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8	663.7	628.7	594.7
147.5°	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6	655.6	624.7	595.8
150°	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8	649.5	622.1	595.8
152.5°	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1	642.4	617.7	594.1
155°	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7	632.0	611.1	591.4
157.5°	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1	621.2	604.4	588.6
160°	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5	613.3	599.1	586.0
162.5°	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8	606.3	593.8	583.3
165°	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5	594.7	586.0	578.2
167.5°	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6	584.2	578.1	573.1
170°	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7	577.2	572.8	569.5
172.5°	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6	571.1	567.5	566.0
175°	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3	564.0	561.8	561.8
177.5°	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1	559.2	558.4	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1666.2	1659.0	1655.3	1646.9	1637.0	1631.8	1627.1	1620.3	1611.5	1602.1	1595.3
5°	1750.8	1735.1	1715.6	1692.1	1671.3	1651.1	1633.5	1615.9	1595.7	1574.9	1554.1
7.5°	1837.6	1806.9	1773.6	1735.1	1697.8	1663.8	1632.5	1602.5	1568.6	1538.2	1510.6
10°	1898.1	1856.3	1810.1	1761.2	1712.3	1670.0	1628.3	1590.5	1548.8	1511.6	1480.4
12.5°	1947.1	1898.1	1842.4	1781.6	1722.8	1671.6	1623.6	1574.3	1526.9	1486.7	1444.9
15°	2028.4	1961.2	1886.3	1813.4	1737.1	1667.4	1602.9	1545.6	1491.5	1434.8	1395.1
17.5°	2084.2	2004.7	1913.5	1825.9	1735.8	1653.6	1579.1	1510.9	1448.5	1390.6	1343.3
20°	2117.6	2029.7	1928.7	1829.0	1728.0	1640.0	1559.9	1484.3	1419.8	1357.3	1308.3
22.5°	2136.4	2039.1	1928.7	1824.3	1719.7	1624.4	1536.4	1457.7	1387.5	1324.9	1270.8
25°	2142.4	2038.2	1925.4	1805.5	1690.8	1589.9	1498.6	1413.2	1335.1	1272.5	1215.2
27.5°	2134.1	2011.3	1895.8	1772.8	1654.5	1548.0	1452.3	1362.6	1284.3	1217.2	1158.4
30°	2121.6	1989.9	1866.1	1738.4	1618.5	1516.3	1415.2	1329.3	1247.7	1178.1	1118.8
32.5°	2094.4	1963.9	1830.7	1699.9	1578.4	1473.0	1377.1	1290.6	1210.8	1139.5	1076.6
35°	2040.8	1908.5	1763.9	1629.7	1510.3	1400.9	1311.0	1227.6	1151.3	1075.2	1008.6
37.5°	1970.0	1834.8	1691.0	1544.0	1424.7	1321.3	1238.8	1160.5	1086.1	1016.4	942.8
40°	1903.3	1780.1	1631.5	1485.6	1363.1	1263.4	1187.2	1116.2	1041.2	972.1	898.5
42.5°	1822.5	1717.6	1567.4	1421.0	1300.0	1204.0	1132.9	1063.5	995.3	928.4	851.6
45°	1687.6	1608.1	1467.4	1326.6	1204.8	1109.7	1044.5	983.3	923.3	859.4	787.1
47.5°	1533.0	1479.2	1357.7	1213.6	1100.9	1015.3	952.3	902.3	851.6	787.8	724.3
50°	1425.7	1391.1	1273.8	1142.3	1034.7	955.8	891.4	844.4	802.1	740.8	684.2
52.5°	1311.0	1292.6	1193.5	1067.7	963.8	886.6	831.4	789.2	746.3	695.5	642.4
55°	1136.3	1146.1	1062.1	953.3	855.5	790.4	740.2	705.0	668.5	625.6	584.5
57.5°	957.8	993.5	937.1	841.6	750.0	689.8	652.0	622.4	591.7	556.1	521.0
60°	850.9	880.9	849.0	765.0	684.9	628.8	593.6	570.8	540.2	507.6	480.9
62.5°	746.7	778.7	759.9	692.0	617.6	569.4	538.4	517.1	494.3	465.9	438.1
65°	615.8	636.6	627.5	580.6	527.8	486.7	458.1	442.4	421.6	400.8	376.0
67.5°	471.6	511.9	506.5	481.6	436.0	404.0	385.2	371.4	352.4	336.9	320.1
70°	387.7	424.8	424.1	404.0	379.2	349.2	336.2	324.5	307.6	292.6	278.9
72.5°	317.4	351.4	356.4	340.9	324.0	301.3	288.8	280.7	264.3	254.0	242.9
75°	222.2	246.9	253.4	253.4	245.6	233.9	222.8	217.6	205.9	196.8	190.3
77.5°	145.7	161.4	171.5	173.8	175.0	171.1	162.0	158.3	149.3	146.1	139.9
80°	102.9	113.4	125.1	129.0	132.2	131.0	127.1	124.4	116.0	112.7	110.1
82.5°	71.2	76.9	86.5	95.1	94.3	97.6	94.3	92.2	85.8	84.5	82.0
85°	37.1	37.8	39.1	45.0	48.3	49.5	50.1	48.8	46.9	46.9	42.3
87.5°	15.6	15.1	14.8	14.8	15.1	17.0	17.8	17.9	16.8	15.9	14.6
90°	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1	3.3	6.6	7.6
92.5°	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4	18.2	28.5	41.8
95°	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1	39.4	50.4	64.7
97.5°	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8	64.8	74.3	87.4
100°	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2	83.2	90.9	104.1
102.5°	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8	102.5	109.3	121.6
105°	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2	131.4	137.0	150.1
107.5°	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3	160.5	166.1	180.0
110°	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5	180.7	186.2	199.3





TEST NUMBER: P332981-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8	200.0	206.3	218.6
115°	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6	228.9	236.6	247.5
117.5°	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5	257.6	264.4	276.4
120°	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8	276.0	283.7	295.7
122.5°	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3	293.5	301.2	312.4
125°	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3	318.7	325.3	337.3
127.5°	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7	338.2	346.1	359.9
130°	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1	350.4	359.2	375.7
132.5°	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5	361.0	372.4	388.0
135°	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4	377.9	388.8	407.5
137.5°	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5	393.6	405.7	423.4
140°	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9	404.2	416.2	434.8
142.5°	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1	416.4	427.5	445.4
145°	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5	433.8	444.7	460.0
147.5°	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9	451.0	460.6	476.5
150°	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2	463.3	472.0	485.2
152.5°	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5	473.8	482.6	494.8
155°	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6	490.7	497.2	508.2
157.5°	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1	505.1	511.2	519.8
160°	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7	514.7	519.2	526.8
162.5°	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5	522.6	526.1	532.9
165°	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4	533.4	535.6	541.0
167.5°	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3	542.2	543.3	547.4
170°	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6	546.5	547.6	550.9
172.5°	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0	550.9	551.1	553.6
175°	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4	555.3	555.3	556.4
177.5°	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4	557.5	556.6	557.5
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332981-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1588.0	1582.8	1576.0	1568.2	1558.9	1550.5	1546.9	1550.0	1551.5	1547.4	1546.9
5°	1539.7	1523.4	1510.3	1490.8	1475.2	1462.2	1453.0	1449.2	1450.4	1440.0	1437.4
7.5°	1485.4	1466.0	1444.7	1421.4	1399.9	1380.7	1370.6	1365.2	1354.2	1349.4	1341.5
10°	1450.4	1424.4	1403.5	1376.1	1351.4	1328.6	1317.5	1308.3	1297.3	1292.1	1281.0
12.5°	1414.5	1384.2	1361.3	1332.8	1307.6	1280.1	1269.5	1252.6	1235.3	1224.4	1210.1
15°	1363.8	1327.3	1299.3	1265.4	1235.4	1204.1	1176.1	1144.8	1133.1	1108.3	1094.0
17.5°	1304.5	1267.4	1232.8	1187.3	1141.0	1102.2	1072.3	1042.4	1024.4	1008.6	1001.4
20°	1265.4	1231.5	1183.3	1130.5	1079.0	1036.0	1011.9	992.4	972.8	961.8	953.9
22.5°	1228.3	1185.1	1129.1	1072.1	1020.7	987.0	966.6	946.5	930.6	920.0	909.6
25°	1166.3	1109.7	1050.4	985.2	950.0	920.7	898.5	882.2	872.5	858.8	853.6
27.5°	1102.6	1034.0	968.6	924.7	888.1	861.3	842.0	829.7	817.4	808.6	801.8
30°	1053.6	983.9	925.3	883.5	846.4	824.3	808.6	794.3	784.5	777.3	772.1
32.5°	1005.1	935.4	886.2	841.3	812.0	790.4	773.7	763.0	755.4	746.0	742.9
35°	935.0	873.1	830.1	789.8	759.8	740.2	727.2	716.0	709.5	707.0	705.0
37.5°	867.6	817.0	770.7	737.6	710.9	695.5	680.1	674.7	670.2	665.5	667.6
40°	824.9	777.3	736.3	701.1	679.6	662.7	653.6	647.1	643.1	643.1	643.1
42.5°	787.9	741.4	701.3	669.9	648.3	634.0	623.9	618.3	617.1	616.5	619.6
45°	730.5	687.4	647.1	620.9	602.8	588.3	582.5	578.0	578.0	580.6	581.2
47.5°	673.4	633.2	600.8	571.6	554.9	545.9	540.8	538.5	538.8	541.3	544.3
50°	638.6	598.8	566.8	540.8	525.2	516.7	512.2	510.9	512.2	512.2	516.7
52.5°	600.5	565.0	533.5	511.6	493.9	486.0	483.4	481.6	482.4	484.6	486.4
55°	544.7	512.8	482.9	461.9	448.9	443.7	437.9	438.5	437.2	438.5	438.5
57.5°	488.8	460.1	432.3	415.8	404.3	396.7	390.3	392.1	390.2	389.9	388.9
60°	452.9	421.6	399.4	384.5	371.4	364.9	359.0	360.3	358.4	357.0	354.5
62.5°	413.8	387.7	366.6	352.1	341.7	334.1	328.3	327.0	322.4	318.0	312.3
65°	357.0	335.5	316.7	303.0	293.2	287.4	282.8	278.9	269.1	258.6	253.4
67.5°	302.0	286.4	268.8	257.2	249.3	241.6	232.9	226.2	217.1	211.4	208.1
70°	266.5	251.5	236.5	225.5	217.0	209.8	200.0	195.5	189.0	186.3	183.1
72.5°	232.6	218.7	204.7	194.7	185.7	180.1	172.4	167.9	164.9	163.9	160.7
75°	181.2	170.0	159.7	150.5	143.4	139.4	136.2	132.9	131.6	125.7	122.5
77.5°	132.1	124.9	118.3	111.8	106.7	104.2	97.8	94.1	91.9	89.2	88.5
80°	102.9	97.7	91.2	87.3	80.1	77.6	74.9	74.3	73.6	73.0	72.3
82.5°	77.4	72.2	65.7	63.3	61.4	59.9	58.2	57.6	56.9	57.3	57.2
85°	39.1	36.5	36.5	35.8	35.2	34.5	33.8	33.8	33.3	33.8	33.3
87.5°	14.8	14.2	15.6	14.5	15.5	15.9	15.2	15.5	16.1	15.4	15.4
90°	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7	20.8	21.9	21.9
92.5°	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1	161.8	128.8	106.9
95°	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5	641.8	495.0	388.8
97.5°	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1	1136.0	1028.9	914.5
100°	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9	1342.7	1289.1	1208.1
102.5°	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8	1423.3	1438.9	1405.1
105°	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6	1416.2	1524.6	1569.4
107.5°	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5	1303.3	1456.0	1553.7
110°	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2	1215.7	1374.5	1495.0



TEST NUMBER: P332981-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0	1138.6	1288.6	1409.1
115°	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6	1050.4	1178.5	1283.6
117.5°	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4	999.9	1100.7	1189.9
120°	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2	978.1	1065.6	1143.4
122.5°	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6	964.0	1043.8	1111.9
125°	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7	941.9	1017.5	1077.7
127.5°	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8	915.9	991.2	1048.4
130°	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3	894.8	969.3	1027.4
132.5°	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9	871.2	943.9	1001.9
135°	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5	835.7	902.5	957.2
137.5°	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5	801.7	858.0	907.5
140°	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3	779.8	829.1	875.1
142.5°	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0	761.4	803.7	843.6
145°	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8	736.0	768.8	799.6
147.5°	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6	714.1	740.4	764.5
150°	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8	701.0	722.8	742.5
152.5°	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1	687.8	707.9	724.2
155°	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7	669.2	685.6	698.8
157.5°	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1	650.8	664.6	675.1
160°	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5	638.5	650.5	659.3
162.5°	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8	627.2	636.6	644.4
165°	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5	610.0	617.7	623.2
167.5°	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6	595.6	601.7	605.0
170°	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7	586.0	590.3	593.6
172.5°	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6	578.1	580.7	583.1
175°	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3	567.3	569.5	569.5
177.5°	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1	561.0	561.0	561.8
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332981-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1543.7	1544.7	1541.2	1540.1	1541.2	1544.7	1543.7	1546.9	1547.4	1551.5	1550.0
5°	1432.2	1430.9	1427.6	1428.2	1427.6	1430.9	1432.2	1437.4	1440.0	1450.4	1449.2
7.5°	1336.8	1331.7	1333.1	1327.9	1333.1	1331.7	1336.8	1341.5	1349.4	1354.2	1365.2
10°	1278.4	1271.2	1265.4	1260.2	1265.4	1271.2	1278.4	1281.0	1292.1	1297.3	1308.3
12.5°	1198.6	1192.5	1184.6	1186.2	1184.6	1192.5	1198.6	1210.1	1224.4	1235.3	1252.6
15°	1085.5	1075.7	1060.2	1062.1	1060.2	1075.7	1085.5	1094.0	1108.3	1133.1	1144.8
17.5°	989.8	989.9	982.7	984.4	982.7	989.9	989.8	1001.4	1008.6	1024.4	1042.4
20°	940.3	935.7	936.3	934.3	936.3	935.7	940.3	953.9	961.8	972.8	992.4
22.5°	905.9	900.2	895.7	891.6	895.7	900.2	905.9	909.6	920.0	930.6	946.5
25°	847.7	843.8	837.9	836.6	837.9	843.8	847.7	853.6	858.8	872.5	882.2
27.5°	796.6	795.9	793.5	790.5	793.5	795.9	796.6	801.8	808.6	817.4	829.7
30°	766.9	765.6	764.3	762.3	764.3	765.6	766.9	772.1	777.3	784.5	794.3
32.5°	740.4	739.5	738.2	738.4	738.2	739.5	740.4	742.9	746.0	755.4	763.0
35°	702.4	701.7	700.5	699.8	700.5	701.7	702.4	705.0	707.0	709.5	716.0
37.5°	666.9	668.6	667.9	667.7	667.9	668.6	666.9	667.6	665.5	670.2	674.7
40°	642.4	643.1	644.4	643.8	644.4	643.1	642.4	643.1	643.1	643.1	647.1
42.5°	622.2	622.3	624.1	621.9	624.1	622.3	622.2	619.6	616.5	617.1	618.3
45°	585.8	589.7	589.0	589.0	589.0	589.7	585.8	581.2	580.6	578.0	578.0
47.5°	546.0	549.4	550.4	550.2	550.4	549.4	546.0	544.3	541.3	538.8	538.5
50°	520.0	518.7	520.7	520.0	520.7	518.7	520.0	516.7	512.2	512.2	510.9
52.5°	488.1	488.4	488.3	487.7	488.3	488.4	488.1	486.4	484.6	482.4	481.6
55°	439.1	439.8	438.5	439.1	438.5	439.8	439.1	438.5	438.5	437.2	438.5
57.5°	386.0	382.9	384.2	382.6	384.2	382.9	386.0	388.9	389.9	390.2	392.1
60°	348.0	342.7	341.4	338.8	341.4	342.7	348.0	354.5	357.0	358.4	360.3
62.5°	305.2	301.5	297.1	299.2	297.1	301.5	305.2	312.3	318.0	322.4	327.0
65°	248.3	245.6	243.6	246.3	243.6	245.6	248.3	253.4	258.6	269.1	278.9
67.5°	205.5	204.1	204.1	202.7	204.1	204.1	205.5	208.1	211.4	217.1	226.2
70°	183.1	181.2	181.2	179.8	181.2	181.2	183.1	183.1	186.3	189.0	195.5
72.5°	160.1	158.2	158.7	158.0	158.7	158.2	160.1	160.7	163.9	164.9	167.9
75°	118.6	115.4	115.4	116.0	115.4	115.4	118.6	122.5	125.7	131.6	132.9
77.5°	88.5	87.8	88.8	87.6	88.8	87.8	88.5	88.5	89.2	91.9	94.1
80°	72.3	71.6	71.1	73.0	71.1	71.6	72.3	72.3	73.0	73.6	74.3
82.5°	56.2	56.1	55.9	58.3	55.9	56.1	56.2	57.2	57.3	56.9	57.6
85°	33.8	32.6	33.8	32.6	33.8	32.6	33.8	33.3	33.8	33.3	33.8
87.5°	16.6	16.3	15.6	16.0	15.6	16.3	16.6	15.4	15.4	16.1	15.5
90°	23.0	24.1	23.0	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7
92.5°	94.0	88.0	84.4	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1
95°	335.2	301.2	281.4	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5
97.5°	835.8	770.0	737.1	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1
100°	1112.8	1045.9	1013.1	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9
102.5°	1346.7	1298.3	1263.7	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8
105°	1571.7	1562.9	1547.6	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6
107.5°	1607.8	1632.8	1643.7	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5
110°	1572.7	1618.7	1638.5	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2



TEST NUMBER: P332981-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1497.4	1553.0	1580.6	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0
115°	1370.2	1435.9	1470.9	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6
117.5°	1263.7	1318.9	1354.3	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4
120°	1205.9	1254.1	1282.5	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2
122.5°	1164.7	1205.9	1229.9	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6
125°	1121.5	1153.3	1174.1	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7
127.5°	1092.4	1120.7	1138.2	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8
130°	1072.2	1099.6	1117.1	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3
132.5°	1045.9	1076.9	1093.4	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9
135°	1001.1	1031.7	1049.2	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5
137.5°	948.5	978.7	993.2	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5
140°	913.4	937.5	952.8	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3
142.5°	877.5	899.8	913.4	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0
145°	826.9	845.6	856.5	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8
147.5°	784.7	800.6	809.0	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6
150°	760.1	774.3	780.9	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8
152.5°	739.0	750.6	754.6	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1
155°	709.7	718.5	721.8	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7
157.5°	683.4	690.0	692.0	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1
160°	665.9	672.5	673.5	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5
162.5°	649.2	655.8	657.0	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8
165°	627.5	632.0	630.8	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5
167.5°	607.2	610.0	609.8	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6
170°	595.8	596.9	595.8	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7
172.5°	584.4	585.5	584.4	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6
175°	569.5	571.7	569.5	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3
177.5°	561.0	561.8	560.1	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P332981-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1546.9	1550.5	1558.9	1568.2	1576.0	1582.8	1588.0	1595.3	1602.1	1611.5	1620.3
5°	1453.0	1462.2	1475.2	1490.8	1510.3	1523.4	1539.7	1554.1	1574.9	1595.7	1615.9
7.5°	1370.6	1380.7	1399.9	1421.4	1444.7	1466.0	1485.4	1510.6	1538.2	1568.6	1602.5
10°	1317.5	1328.6	1351.4	1376.1	1403.5	1424.4	1450.4	1480.4	1511.6	1548.8	1590.5
12.5°	1269.5	1280.1	1307.6	1332.8	1361.3	1384.2	1414.5	1444.9	1486.7	1526.9	1574.3
15°	1176.1	1204.1	1235.4	1265.4	1299.3	1327.3	1363.8	1395.1	1434.8	1491.5	1545.6
17.5°	1072.3	1102.2	1141.0	1187.3	1232.8	1267.4	1304.5	1343.3	1390.6	1448.5	1510.9
20°	1011.9	1036.0	1079.0	1130.5	1183.3	1231.5	1265.4	1308.3	1357.3	1419.8	1484.3
22.5°	966.6	987.0	1020.7	1072.1	1129.1	1185.1	1228.3	1270.8	1324.9	1387.5	1457.7
25°	898.5	920.7	950.0	985.2	1050.4	1109.7	1166.3	1215.2	1272.5	1335.1	1413.2
27.5°	842.0	861.3	888.1	924.7	968.6	1034.0	1102.6	1158.4	1217.2	1284.3	1362.6
30°	808.6	824.3	846.4	883.5	925.3	983.9	1053.6	1118.8	1178.1	1247.7	1329.3
32.5°	773.7	790.4	812.0	841.3	886.2	935.4	1005.1	1076.6	1139.5	1210.8	1290.6
35°	727.2	740.2	759.8	789.8	830.1	873.1	935.0	1008.6	1075.2	1151.3	1227.6
37.5°	680.1	695.5	710.9	737.6	770.7	817.0	867.6	942.8	1016.4	1086.1	1160.5
40°	653.6	662.7	679.6	701.1	736.3	777.3	824.9	898.5	972.1	1041.2	1116.2
42.5°	623.9	634.0	648.3	669.9	701.3	741.4	787.9	851.6	928.4	995.3	1063.5
45°	582.5	588.3	602.8	620.9	647.1	687.4	730.5	787.1	859.4	923.3	983.3
47.5°	540.8	545.9	554.9	571.6	600.8	633.2	673.4	724.3	787.8	851.6	902.3
50°	512.2	516.7	525.2	540.8	566.8	598.8	638.6	684.2	740.8	802.1	844.4
52.5°	483.4	486.0	493.9	511.6	533.5	565.0	600.5	642.4	695.5	746.3	789.2
55°	437.9	443.7	448.9	461.9	482.9	512.8	544.7	584.5	625.6	668.5	705.0
57.5°	390.3	396.7	404.3	415.8	432.3	460.1	488.8	521.0	556.1	591.7	622.4
60°	359.0	364.9	371.4	384.5	399.4	421.6	452.9	480.9	507.6	540.2	570.8
62.5°	328.3	334.1	341.7	352.1	366.6	387.7	413.8	438.1	465.9	494.3	517.1
65°	282.8	287.4	293.2	303.0	316.7	335.5	357.0	376.0	400.8	421.6	442.4
67.5°	232.9	241.6	249.3	257.2	268.8	286.4	302.0	320.1	336.9	352.4	371.4
70°	200.0	209.8	217.0	225.5	236.5	251.5	266.5	278.9	292.6	307.6	324.5
72.5°	172.4	180.1	185.7	194.7	204.7	218.7	232.6	242.9	254.0	264.3	280.7
75°	136.2	139.4	143.4	150.5	159.7	170.0	181.2	190.3	196.8	205.9	217.6
77.5°	97.8	104.2	106.7	111.8	118.3	124.9	132.1	139.9	146.1	149.3	158.3
80°	74.9	77.6	80.1	87.3	91.2	97.7	102.9	110.1	112.7	116.0	124.4
82.5°	58.2	59.9	61.4	63.3	65.7	72.2	77.4	82.0	84.5	85.8	92.2
85°	33.8	34.5	35.2	35.8	36.5	36.5	39.1	42.3	46.9	46.9	48.8
87.5°	15.2	15.9	15.5	14.5	15.6	14.2	14.8	14.6	15.9	16.8	17.9
90°	18.7	19.7	17.5	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1
92.5°	289.4	347.4	304.1	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4
95°	917.8	892.6	673.5	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1
97.5°	1153.1	940.2	630.4	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8
100°	1160.9	880.5	571.7	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2
102.5°	1095.2	806.1	532.3	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8
105°	975.8	718.5	498.3	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2
107.5°	879.5	669.4	492.2	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3
110°	831.3	652.8	494.0	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	804.1	644.9	499.2	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8
115°	778.7	640.7	509.3	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6
117.5°	767.3	639.6	520.0	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5
120°	761.2	639.6	527.9	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8
122.5°	754.2	638.8	535.8	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3
125°	742.5	637.4	547.6	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3
127.5°	727.0	635.0	557.0	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7
130°	717.4	634.1	564.0	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1
132.5°	708.6	633.3	570.1	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5
135°	695.5	632.0	579.4	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4
137.5°	684.1	631.7	584.8	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5
140°	678.0	630.8	589.3	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9
142.5°	672.7	630.8	592.8	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1
145°	663.7	628.7	594.7	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5
147.5°	655.6	624.7	595.8	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9
150°	649.5	622.1	595.8	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2
152.5°	642.4	617.7	594.1	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5
155°	632.0	611.1	591.4	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6
157.5°	621.2	604.4	588.6	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1
160°	613.3	599.1	586.0	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7
162.5°	606.3	593.8	583.3	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5
165°	594.7	586.0	578.2	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4
167.5°	584.2	578.1	573.1	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3
170°	577.2	572.8	569.5	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6
172.5°	571.1	567.5	566.0	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0
175°	564.0	561.8	561.8	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4
177.5°	559.2	558.4	558.4	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5





TEST NUMBER: P332981-830  
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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1627.1	1631.8	1637.0	1646.9	1655.3	1659.0	1666.2	1671.4	1669.9	1677.2	1689.7
5°	1633.5	1651.1	1671.3	1692.1	1715.6	1735.1	1750.8	1766.4	1778.9	1793.8	1816.0
7.5°	1632.5	1663.8	1697.8	1735.1	1773.6	1806.9	1837.6	1868.9	1896.6	1927.0	1966.7
10°	1628.3	1670.0	1712.3	1761.2	1810.1	1856.3	1898.1	1937.1	1974.3	2014.0	2064.3
12.5°	1623.6	1671.6	1722.8	1781.6	1842.4	1898.1	1947.1	2003.4	2049.8	2101.1	2159.1
15°	1602.9	1667.4	1737.1	1813.4	1886.3	1961.2	2028.4	2097.4	2161.9	2223.2	2296.2
17.5°	1579.1	1653.6	1735.8	1825.9	1913.5	2004.7	2084.2	2171.3	2237.3	2319.5	2387.3
20°	1559.9	1640.0	1728.0	1829.0	1928.7	2029.7	2117.6	2206.3	2280.6	2363.3	2449.3
22.5°	1536.4	1624.4	1719.7	1824.3	1928.7	2039.1	2136.4	2224.5	2316.5	2409.7	2498.3
25°	1498.6	1589.9	1690.8	1805.5	1925.4	2038.2	2142.4	2251.8	2350.9	2451.9	2531.4
27.5°	1452.3	1548.0	1654.5	1772.8	1895.8	2011.3	2134.1	2250.7	2350.4	2447.6	2517.0
30°	1415.2	1516.3	1618.5	1738.4	1866.1	1989.9	2121.6	2238.2	2343.1	2430.4	2469.5
32.5°	1377.1	1473.0	1578.4	1699.9	1830.7	1963.9	2094.4	2213.7	2310.7	2363.1	2364.2
35°	1311.0	1400.9	1510.3	1629.7	1763.9	1908.5	2040.8	2158.0	2217.3	2221.9	2158.0
37.5°	1238.8	1321.3	1424.7	1544.0	1691.0	1834.8	1970.0	2048.1	2068.0	2001.7	1883.6
40°	1187.2	1263.4	1363.1	1485.6	1631.5	1780.1	1903.3	1960.6	1939.8	1832.2	1700.6
42.5°	1132.9	1204.0	1300.0	1421.0	1567.4	1717.6	1822.5	1853.2	1798.0	1673.8	1519.8
45°	1044.5	1109.7	1204.8	1326.6	1467.4	1608.1	1687.6	1672.0	1580.1	1432.9	1260.2
47.5°	952.3	1015.3	1100.9	1213.6	1357.7	1479.2	1533.0	1485.9	1355.2	1193.2	1052.7
50°	891.4	955.8	1034.7	1142.3	1273.8	1391.1	1425.7	1354.0	1208.7	1052.9	924.0
52.5°	831.4	886.6	963.8	1067.7	1193.5	1292.6	1311.0	1228.3	1078.4	938.8	824.3
55°	740.2	790.4	855.5	953.3	1062.1	1146.1	1136.3	1030.2	894.0	774.8	684.9
57.5°	652.0	689.8	750.0	841.6	937.1	993.5	957.8	867.2	740.4	642.7	566.8
60°	593.6	628.8	684.9	765.0	849.0	880.9	850.9	752.6	652.2	563.0	499.1
62.5°	538.4	569.4	617.6	692.0	759.9	778.7	746.7	660.8	570.4	494.2	441.3
65°	458.1	486.7	527.8	580.6	627.5	636.6	615.8	527.8	459.4	395.5	359.0
67.5°	385.2	404.0	436.0	481.6	506.5	511.9	471.6	416.3	356.0	316.8	289.3
70°	336.2	349.2	379.2	404.0	424.1	424.8	387.7	343.4	297.1	265.2	245.0
72.5°	288.8	301.3	324.0	340.9	356.4	351.4	317.4	282.4	245.0	220.9	205.9
75°	222.8	233.9	245.6	253.4	253.4	246.9	222.2	196.1	174.7	160.3	155.7
77.5°	162.0	171.1	175.0	173.8	171.5	161.4	145.7	128.7	120.9	114.1	110.7
80°	127.1	131.0	132.2	129.0	125.1	113.4	102.9	95.8	88.6	86.1	84.7
82.5°	94.3	97.6	94.3	95.1	86.5	76.9	71.2	68.7	65.7	64.7	63.3
85°	50.1	49.5	48.3	45.0	39.1	37.8	37.1	36.5	35.2	35.8	34.5
87.5°	17.8	17.0	15.1	14.8	14.8	15.1	15.6	16.0	16.5	15.7	17.0
90°	3.3	6.6	7.6	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7
92.5°	18.2	28.5	41.8	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1
95°	39.4	50.4	64.7	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5
97.5°	64.8	74.3	87.4	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1
100°	83.2	90.9	104.1	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9
102.5°	102.5	109.3	121.6	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8
105°	131.4	137.0	150.1	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6
107.5°	160.5	166.1	180.0	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5
110°	180.7	186.2	199.3	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	206.3	218.6	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0
115°	228.9	236.6	247.5	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6
117.5°	257.6	264.4	276.4	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4
120°	276.0	283.7	295.7	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2
122.5°	293.5	301.2	312.4	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6
125°	318.7	325.3	337.3	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7
127.5°	338.2	346.1	359.9	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8
130°	350.4	359.2	375.7	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3
132.5°	361.0	372.4	388.0	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9
135°	377.9	388.8	407.5	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5
137.5°	393.6	405.7	423.4	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5
140°	404.2	416.2	434.8	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3
142.5°	416.4	427.5	445.4	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0
145°	433.8	444.7	460.0	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8
147.5°	451.0	460.6	476.5	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6
150°	463.3	472.0	485.2	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8
152.5°	473.8	482.6	494.8	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1
155°	490.7	497.2	508.2	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7
157.5°	505.1	511.2	519.8	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1
160°	514.7	519.2	526.8	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5
162.5°	522.6	526.1	532.9	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8
165°	533.4	535.6	541.0	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5
167.5°	542.2	543.3	547.4	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6
170°	546.5	547.6	550.9	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7
172.5°	550.9	551.1	553.6	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6
175°	555.3	555.3	556.4	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3
177.5°	557.5	556.6	557.5	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1696.5	1698.6	1700.2	1705.3	1705.8	1710.5	1705.8
5°	1836.8	1846.0	1860.3	1874.6	1875.9	1885.0	1868.8
7.5°	1994.2	2015.3	2028.5	2051.7	2060.9	2066.5	2057.2
10°	2102.6	2122.2	2156.7	2173.7	2190.7	2193.2	2185.4
12.5°	2207.4	2238.4	2265.7	2297.7	2297.0	2319.9	2311.6
15°	2347.0	2379.0	2416.7	2452.6	2465.6	2465.6	2476.1
17.5°	2446.6	2505.1	2544.2	2572.3	2603.1	2608.4	2604.8
20°	2513.9	2577.0	2618.8	2655.2	2676.1	2681.9	2681.9
22.5°	2563.8	2617.6	2658.3	2691.1	2708.4	2715.3	2713.2
25°	2598.5	2644.8	2669.6	2679.3	2683.9	2682.6	2670.2
27.5°	2551.1	2549.0	2533.4	2503.4	2480.9	2467.2	2451.6
30°	2460.4	2426.5	2387.4	2344.4	2289.1	2246.6	2233.6
32.5°	2325.3	2249.3	2183.0	2111.4	2051.8	2009.5	1991.8
35°	2064.3	1943.7	1845.3	1759.3	1696.8	1657.6	1644.6
37.5°	1754.4	1637.7	1515.9	1432.5	1380.5	1341.0	1326.3
40°	1557.3	1430.2	1324.0	1245.9	1192.4	1154.0	1153.3
42.5°	1377.4	1256.1	1156.2	1099.9	1042.3	1016.8	1016.7
45°	1127.8	1030.8	946.1	901.8	867.2	846.4	840.6
47.5°	933.9	853.6	797.1	761.9	733.7	720.4	711.8
50°	824.9	754.5	709.5	678.9	663.3	646.4	645.1
52.5°	734.2	677.4	642.3	617.5	597.7	587.5	587.8
55°	617.1	572.1	547.3	528.4	512.8	505.0	501.7
57.5°	519.8	486.1	468.1	450.7	444.1	438.0	436.3
60°	459.4	436.6	419.6	406.0	396.2	394.2	393.5
62.5°	409.3	385.5	373.7	363.2	356.0	353.0	351.9
65°	337.5	319.9	309.5	301.0	298.4	293.9	293.2
67.5°	272.1	261.6	254.7	248.7	245.2	245.0	245.0
70°	232.0	226.1	220.3	217.0	215.0	213.7	213.7
72.5°	197.6	193.2	188.4	186.7	186.3	185.0	184.5
75°	150.5	146.0	146.6	143.4	140.7	137.5	135.5
77.5°	106.7	103.5	102.8	102.5	100.2	99.8	100.9
80°	82.8	79.5	78.8	79.5	78.8	76.9	76.9
82.5°	63.0	60.2	59.6	59.2	58.5	59.2	58.2
85°	33.8	32.6	32.6	32.6	33.8	33.3	32.6
87.5°	16.1	15.8	16.4	16.0	16.3	15.6	16.0
90°	20.8	21.9	21.9	23.0	24.1	23.0	23.0
92.5°	161.8	128.8	106.9	94.0	88.0	84.4	84.4
95°	641.8	495.0	388.8	335.2	301.2	281.4	267.2
97.5°	1136.0	1028.9	914.5	835.8	770.0	737.1	714.4
100°	1342.7	1289.1	1208.1	1112.8	1045.9	1013.1	1004.4
102.5°	1423.3	1438.9	1405.1	1346.7	1298.3	1263.7	1256.7
105°	1416.2	1524.6	1569.4	1571.7	1562.9	1547.6	1541.0
107.5°	1303.3	1456.0	1553.7	1607.8	1632.8	1643.7	1646.6
110°	1215.7	1374.5	1495.0	1572.7	1618.7	1638.5	1648.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1138.6	1288.6	1409.1	1497.4	1553.0	1580.6	1596.7
115°	1050.4	1178.5	1283.6	1370.2	1435.9	1470.9	1479.7
117.5°	999.9	1100.7	1189.9	1263.7	1318.9	1354.3	1361.1
120°	978.1	1065.6	1143.4	1205.9	1254.1	1282.5	1294.6
122.5°	964.0	1043.8	1111.9	1164.7	1205.9	1229.9	1242.0
125°	941.9	1017.5	1077.7	1121.5	1153.3	1174.1	1180.6
127.5°	915.9	991.2	1048.4	1092.4	1120.7	1138.2	1144.7
130°	894.8	969.3	1027.4	1072.2	1099.6	1117.1	1123.7
132.5°	871.2	943.9	1001.9	1045.9	1076.9	1093.4	1100.0
135°	835.7	902.5	957.2	1001.1	1031.7	1049.2	1055.8
137.5°	801.7	858.0	907.5	948.5	978.7	993.2	1001.1
140°	779.8	829.1	875.1	913.4	937.5	952.8	961.6
142.5°	761.4	803.7	843.6	877.5	899.8	913.4	919.5
145°	736.0	768.8	799.6	826.9	845.6	856.5	862.0
147.5°	714.1	740.4	764.5	784.7	800.6	809.0	810.9
150°	701.0	722.8	742.5	760.1	774.3	780.9	782.0
152.5°	687.8	707.9	724.2	739.0	750.6	754.6	755.7
155°	669.2	685.6	698.8	709.7	718.5	721.8	721.8
157.5°	650.8	664.6	675.1	683.4	690.0	692.0	692.0
160°	638.5	650.5	659.3	665.9	672.5	673.5	673.5
162.5°	627.2	636.6	644.4	649.2	655.8	657.0	656.0
165°	610.0	617.7	623.2	627.5	632.0	630.8	629.8
167.5°	595.6	601.7	605.0	607.2	610.0	609.8	609.0
170°	586.0	590.3	593.6	595.8	596.9	595.8	595.8
172.5°	578.1	580.7	583.1	584.4	585.5	584.4	582.7
175°	567.3	569.5	569.5	569.5	571.7	569.5	567.3
177.5°	561.0	561.0	561.8	561.0	561.8	560.1	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5

(END OF REPORT)