

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: P332663-830

Luminaire Tested: **SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332663-830  
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: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8397.3 lumens  
Efficiency: N/A  
Efficacy: 128.4 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

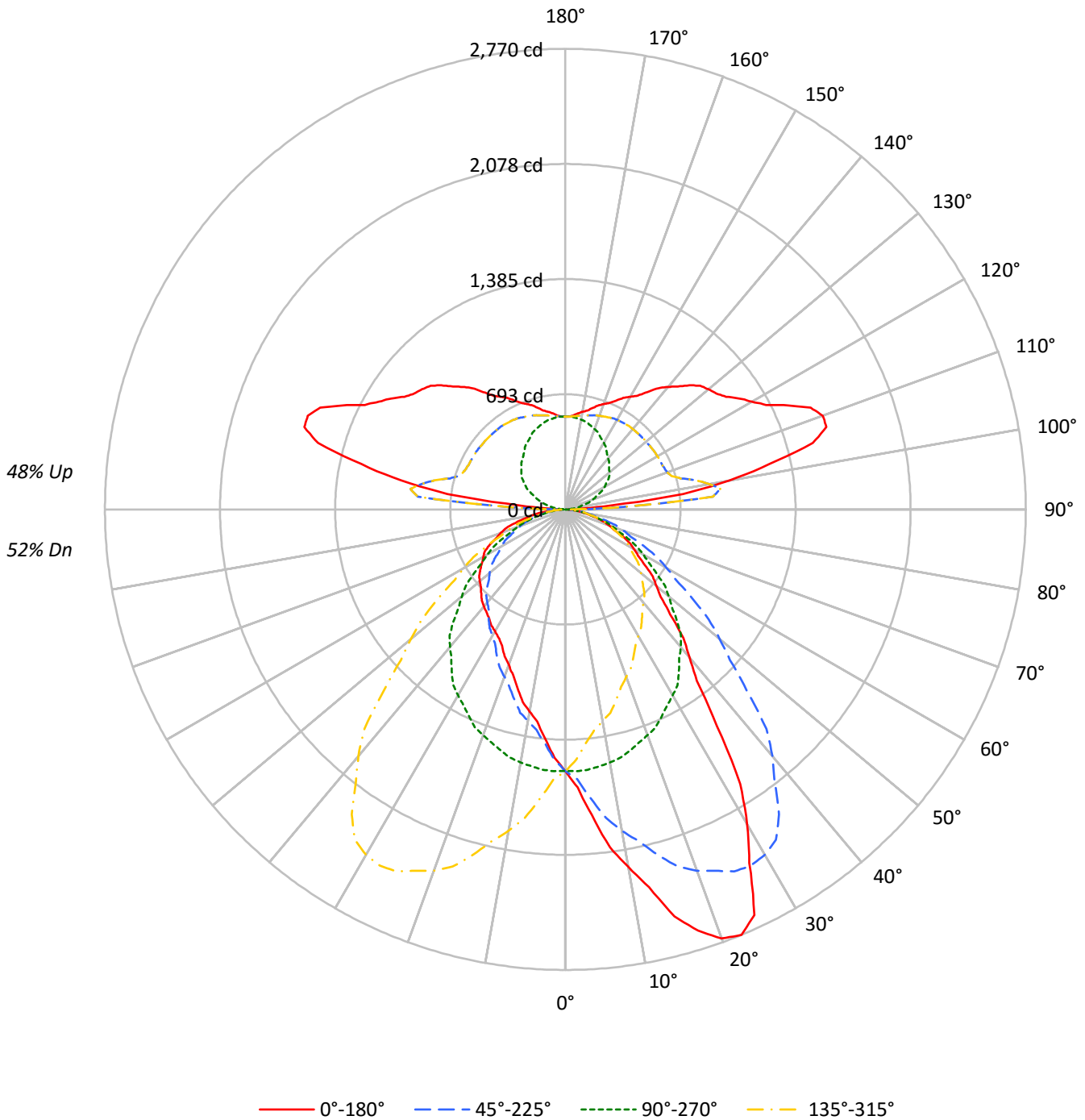
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	44
2	90	82	76	71	83	77	71	67	65	61	58	55	52	50	45	44	42	37
3	82	73	65	60	76	68	61	56	58	53	49	49	45	42	40	38	36	32
4	75	64	57	51	69	60	53	48	52	46	42	44	40	36	36	33	31	27
5	69	58	50	44	64	54	47	41	46	41	36	39	35	32	33	30	27	24
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	54	44	37	32	38	32	28	32	28	25	27	24	21	19
8	55	42	35	30	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15
10	48	36	28	24	44	33	27	23	29	24	20	25	21	18	22	18	16	14

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

	0°	90°	180°	270°
0°	12698	12698	12698	12698
5°	14954	12730	11237	12730
10°	17905	12675	10117	12675
15°	21184	12547	9290	12547
20°	23589	12416	8553	12416
25°	23971	12223	8044	12223
30°	20396	12039	7883	12039
35°	15682	11739	7885	11739
40°	12223	11385	8033	11385
45°	10192	10853	8169	10853
50°	8970	10206	8445	10206
55°	8217	9429	8785	9429
60°	7700	8732	9195	8732
65°	7169	7952	9534	7952
70°	6552	7183	9751	7183
75°	5855	6319	9635	6319
80°	4909	5179	9331	5179
85°	3622	3742	8929	3742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.2	1.8
10°-20°	472.3	5.6
20°-30°	749.0	8.9
30°-40°	833.5	9.9
40°-50°	758.7	9.0
50°-60°	620.0	7.4
60°-70°	442.6	5.3
70°-80°	243.7	2.9
80°-90°	69.6	0.8
90°-100°	402.7	4.8
100°-110°	838.0	10.0
110°-120°	750.6	8.9
120°-130°	631.4	7.5
130°-140°	526.5	6.3
140°-150°	402.2	4.8
150°-160°	282.7	3.4
160°-170°	166.3	2.0
170°-180°	54.1	0.6
0°-30°	1374.6	16.4
0°-40°	2208.1	26.3
0°-60°	3586.8	42.7
0°-90°	4342.8	51.7
90°-120°	1991.3	23.7
90°-150°	3551.4	42.3
90°-180°	4054.0	48.3
0°-180°	8397.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1573	1573	1573	1573	1573	
5°	1845	1571	1387	1571	1845	188
15°	2535	1501	1112	1501	2535	716
25°	2691	1372	903	1372	2691	1186
35°	1591	1191	800	1191	1591	1010
45°	893	951	716	951	893	703
55°	584	670	624	670	584	527
65°	375	416	499	416	375	372
75°	188	203	309	203	188	200
85°	39	40	96	40	39	48
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°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1674.0	1673.6	1668.3	1667.3	1663.6	1659.0	1657.9	1649.5	1632.9	1625.0	1623.0
5°	1845.3	1858.3	1841.4	1838.1	1836.2	1814.7	1803.6	1790.5	1760.6	1742.9	1729.3
7.5°	2049.7	2051.2	2043.8	2037.8	2021.2	2002.4	1974.3	1944.4	1908.6	1871.5	1843.4
10°	2184.2	2189.3	2180.9	2179.5	2146.4	2125.4	2083.8	2048.6	2008.2	1963.2	1922.2
12.5°	2325.9	2318.6	2314.3	2286.4	2280.3	2242.2	2193.8	2157.6	2095.3	2043.5	1988.9
15°	2534.7	2520.4	2511.2	2472.8	2453.9	2401.1	2349.6	2309.9	2228.5	2150.9	2092.3
17.5°	2657.1	2671.5	2650.4	2634.6	2585.8	2548.7	2496.1	2412.7	2349.0	2252.7	2178.7
20°	2745.8	2747.0	2735.4	2719.0	2680.6	2633.7	2576.3	2485.1	2409.0	2313.1	2211.5
22.5°	2769.8	2770.0	2765.0	2749.8	2720.7	2682.7	2624.9	2548.7	2456.4	2352.2	2250.6
25°	2691.1	2688.4	2694.4	2711.2	2700.2	2688.4	2655.2	2598.5	2512.5	2402.4	2292.9
27.5°	2398.6	2416.6	2449.7	2491.4	2531.6	2562.2	2570.8	2559.2	2505.8	2415.3	2300.7
30°	2188.0	2210.2	2235.0	2276.6	2357.4	2403.7	2454.6	2492.9	2471.4	2399.1	2292.3
32.5°	1956.6	1962.1	1998.8	2046.3	2120.2	2209.2	2289.8	2367.9	2393.8	2355.9	2266.7
35°	1591.2	1600.2	1640.0	1687.0	1777.5	1886.3	2007.5	2115.7	2205.0	2240.8	2195.2
37.5°	1298.4	1324.6	1352.7	1403.2	1482.9	1580.8	1706.8	1846.7	1979.8	2068.9	2084.1
40°	1159.8	1176.1	1196.3	1234.7	1302.5	1398.9	1507.1	1667.5	1808.8	1936.5	1978.2
42.5°	1050.4	1059.9	1072.2	1107.0	1158.7	1254.5	1353.3	1494.3	1636.3	1788.9	1858.9
45°	892.7	902.5	923.3	943.5	982.6	1049.0	1140.9	1256.9	1399.6	1546.9	1675.8
47.5°	778.7	785.0	797.4	819.1	852.2	896.1	970.8	1067.7	1200.0	1342.9	1480.4
50°	714.2	719.3	729.2	748.7	774.1	813.1	874.4	965.0	1068.6	1212.6	1347.5
52.5°	663.1	665.2	672.3	685.6	705.8	738.7	788.9	863.8	960.2	1088.5	1222.9
55°	583.8	586.4	593.0	602.8	620.3	641.1	679.6	735.7	819.7	931.1	1047.7
57.5°	518.7	520.5	525.9	529.7	544.2	561.2	590.7	630.7	694.5	788.9	893.1
60°	476.9	475.7	482.2	485.4	495.2	509.5	532.3	570.8	626.1	702.4	798.1
62.5°	436.3	434.5	440.0	444.2	449.9	462.1	480.7	510.9	555.8	624.7	707.5
65°	375.3	372.7	376.0	381.2	386.3	392.9	406.6	433.3	469.1	518.7	581.8
67.5°	314.1	316.8	317.4	319.9	322.9	331.8	341.2	360.1	385.3	425.0	478.5
70°	277.6	278.2	280.9	280.9	282.8	290.6	298.4	309.5	334.2	370.8	414.4
72.5°	241.1	243.8	242.8	244.9	246.3	251.5	257.2	267.8	288.9	316.0	352.9
75°	187.7	189.6	189.6	190.3	192.2	194.2	198.7	206.5	221.5	241.8	267.1
77.5°	136.9	137.1	138.0	140.3	140.3	143.5	146.8	153.2	160.5	174.4	189.8
80°	105.6	106.9	106.2	107.5	107.5	110.1	111.4	119.2	122.5	131.6	144.0
82.5°	77.4	78.7	78.6	80.4	81.4	82.0	83.8	86.9	90.2	98.2	103.3
85°	39.1	40.4	39.1	40.4	42.3	43.0	45.0	45.6	48.3	50.1	54.8
87.5°	16.0	17.6	17.8	18.2	18.9	19.5	19.8	19.0	20.9	21.7	23.3
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°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1623.5	1616.2	1611.0	1606.8	1595.3	1588.6	1583.4	1576.0	1567.7	1558.9	1547.9
5°	1715.6	1693.5	1677.2	1652.5	1629.0	1609.4	1589.2	1570.9	1548.8	1524.8	1507.1
7.5°	1812.4	1779.5	1737.3	1700.6	1659.4	1623.6	1591.6	1558.7	1524.6	1491.5	1461.1
10°	1874.0	1831.6	1784.7	1729.3	1677.2	1630.9	1587.9	1546.2	1505.8	1465.4	1430.9
12.5°	1940.1	1887.3	1818.1	1753.3	1694.9	1633.0	1581.1	1530.0	1481.3	1438.8	1398.5
15°	2029.0	1952.8	1872.6	1786.0	1709.1	1636.8	1565.8	1501.3	1446.5	1390.4	1351.4
17.5°	2083.7	1989.3	1897.7	1807.1	1714.0	1622.9	1546.2	1471.8	1403.3	1347.6	1298.4
20°	2119.6	2025.8	1911.8	1821.2	1710.4	1616.6	1528.0	1445.2	1373.6	1314.3	1263.4
22.5°	2150.9	2042.5	1928.4	1809.2	1698.9	1599.4	1502.4	1419.2	1346.0	1283.5	1234.7
25°	2167.8	2043.3	1919.6	1801.0	1675.8	1557.9	1470.0	1372.2	1294.0	1228.2	1176.1
27.5°	2169.6	2036.6	1896.5	1764.7	1635.6	1525.8	1414.8	1327.4	1246.2	1176.7	1126.6
30°	2163.9	2025.1	1874.6	1731.9	1602.2	1483.0	1386.6	1291.5	1208.7	1139.6	1087.5
32.5°	2145.7	2001.1	1846.4	1695.4	1561.0	1444.4	1344.9	1254.4	1173.7	1105.7	1051.0
35°	2092.9	1950.2	1785.4	1628.3	1490.8	1372.9	1283.0	1191.1	1110.3	1045.8	993.1
37.5°	2010.4	1881.4	1713.8	1551.3	1416.3	1297.8	1208.7	1125.7	1052.8	987.3	933.2
40°	1938.4	1825.0	1657.0	1498.6	1352.7	1240.0	1156.6	1080.3	1008.0	946.1	894.7
42.5°	1855.6	1756.8	1601.8	1434.0	1293.3	1180.1	1098.7	1030.3	962.1	904.9	853.5
45°	1707.8	1642.7	1496.7	1341.6	1195.0	1088.2	1010.6	950.6	893.3	837.3	794.3
47.5°	1537.9	1505.5	1382.7	1235.4	1096.3	990.9	923.7	868.3	818.0	770.5	732.6
50°	1423.7	1408.1	1301.8	1159.8	1026.9	927.8	860.1	812.6	769.5	727.8	692.0
52.5°	1311.1	1310.6	1214.8	1084.8	961.8	866.4	799.1	754.7	717.4	683.5	651.3
55°	1139.0	1157.3	1082.3	966.3	856.2	770.2	709.5	669.9	643.8	615.8	591.6
57.5°	980.9	1011.2	949.3	847.2	755.4	676.1	623.3	593.4	565.7	548.7	531.2
60°	877.7	906.3	858.2	772.1	685.5	617.7	567.5	540.8	516.7	505.0	492.6
62.5°	786.0	811.5	775.8	696.1	620.9	555.6	513.3	487.7	471.4	458.5	450.3
65°	654.9	676.4	645.7	587.8	523.2	471.1	436.6	416.3	400.8	395.5	386.3
67.5°	529.3	548.9	532.3	483.1	431.3	391.9	364.9	345.4	336.2	331.7	325.2
70°	454.8	474.4	456.8	413.8	374.0	340.8	315.4	304.3	294.5	292.6	283.4
72.5°	391.7	405.0	387.5	353.8	319.8	291.8	272.1	260.5	255.4	251.9	246.9
75°	293.9	305.6	293.9	267.8	243.6	224.1	207.2	202.6	196.8	194.8	191.5
77.5°	208.0	218.1	209.2	192.8	174.8	159.8	150.6	144.8	143.5	140.1	141.7
80°	159.0	165.5	157.0	146.0	131.6	121.2	114.7	111.4	107.5	106.2	108.8
82.5°	114.1	117.1	112.7	105.3	94.6	87.8	83.4	79.6	78.8	79.1	79.1
85°	59.3	58.6	58.0	51.5	48.3	43.6	41.1	40.4	39.8	41.1	42.3
87.5°	22.9	23.4	21.6	19.5	17.7	15.9	14.7	13.8	14.7	15.9	16.7
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: P332663-830

CATALOG NUMBER: SA4XXDIP-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: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1542.7	1538.0	1531.3	1521.8	1514.0	1505.7	1503.6	1500.4	1506.7	1501.5	1500.0
5°	1492.1	1478.5	1460.8	1440.7	1428.9	1412.0	1408.7	1402.2	1395.7	1395.1	1388.6
7.5°	1438.6	1418.5	1395.4	1374.9	1355.8	1337.3	1325.2	1322.6	1313.0	1307.3	1300.8
10°	1404.2	1379.4	1352.7	1333.1	1311.0	1291.5	1277.8	1270.0	1263.4	1256.2	1249.7
12.5°	1363.5	1337.2	1315.1	1294.0	1267.7	1252.8	1230.3	1216.7	1215.5	1215.6	1198.6
15°	1316.2	1290.2	1256.2	1226.2	1211.9	1183.3	1170.9	1155.3	1145.5	1135.7	1127.9
17.5°	1262.2	1229.6	1203.2	1168.8	1141.4	1118.6	1102.4	1093.0	1078.3	1064.4	1054.4
20°	1228.2	1193.7	1165.6	1129.2	1099.2	1071.2	1057.5	1044.5	1033.4	1021.7	1010.6
22.5°	1193.8	1157.7	1123.4	1088.0	1060.2	1030.6	1017.4	999.7	989.1	982.6	971.5
25°	1139.6	1100.5	1061.4	1027.6	998.9	972.8	955.3	941.5	929.8	924.6	917.5
27.5°	1080.7	1041.9	1004.1	965.6	933.1	914.2	900.1	889.8	883.1	876.1	872.9
30°	1043.2	1002.8	962.4	926.5	896.5	877.7	864.7	857.5	852.2	849.0	845.7
32.5°	1005.1	965.3	922.7	890.0	863.2	846.4	836.5	829.3	826.7	825.6	824.3
35°	944.1	903.7	864.7	835.4	809.9	803.4	794.9	791.0	789.8	794.3	796.3
37.5°	885.1	847.6	811.6	783.2	766.6	757.1	754.1	754.3	758.9	763.0	767.7
40°	847.1	810.6	776.7	752.0	736.3	730.5	729.2	732.4	737.6	742.2	747.3
42.5°	810.0	774.1	743.3	720.1	709.2	703.8	704.6	707.8	715.2	720.8	728.6
45°	752.6	722.6	692.7	673.7	664.6	665.9	665.9	671.8	678.9	687.4	695.9
47.5°	698.5	668.3	643.7	627.7	623.0	621.9	625.6	633.2	643.5	653.9	665.8
50°	662.0	633.3	611.8	597.5	592.3	594.3	599.5	606.6	619.0	632.1	644.4
52.5°	625.0	598.9	579.0	565.7	562.0	565.6	570.8	582.1	593.0	607.0	622.0
55°	567.5	545.4	529.7	520.0	518.7	520.7	526.5	538.9	554.5	572.1	586.4
57.5°	510.3	491.8	477.5	470.7	471.4	473.2	482.9	497.6	514.3	533.0	551.5
60°	471.7	454.8	443.1	437.9	438.5	442.4	454.1	467.9	488.7	506.9	526.5
62.5°	435.3	420.4	409.2	404.5	403.6	412.2	423.4	437.6	458.5	478.8	499.9
65°	376.6	364.9	355.8	353.2	355.2	361.7	376.0	394.8	412.5	433.9	456.1
67.5°	319.2	309.6	303.4	304.5	306.9	316.5	328.6	344.8	364.8	387.0	409.0
70°	282.8	273.6	268.4	269.1	273.1	284.7	295.2	311.4	333.0	355.8	374.0
72.5°	245.2	239.2	234.6	237.3	241.2	249.3	262.3	278.6	297.6	318.8	338.0
75°	188.3	188.3	185.7	187.7	193.5	201.3	211.1	228.1	246.9	263.9	279.6
77.5°	139.7	138.3	140.0	142.3	145.7	155.0	166.2	178.2	192.5	209.4	222.3
80°	106.9	107.5	110.7	114.7	116.0	123.2	134.9	146.0	157.0	171.4	183.7
82.5°	80.3	81.0	82.7	87.6	88.9	96.6	104.2	115.2	125.3	134.9	145.2
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.9	68.4	77.6	84.1	93.8
87.5°	18.5	18.5	21.9	22.9	24.9	27.9	28.7	34.7	37.0	39.9	44.5
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: P332663-830

CATALOG NUMBER: SA4XXDIP-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: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1498.9	1497.9	1494.2	1493.7	1494.2	1497.9	1498.9	1500.0	1501.5	1506.7	1500.4
5°	1384.6	1381.4	1379.4	1386.6	1379.4	1381.4	1384.6	1388.6	1395.1	1395.7	1402.2
7.5°	1298.4	1295.9	1290.2	1288.4	1290.2	1295.9	1298.4	1300.8	1307.3	1313.0	1322.6
10°	1243.2	1240.6	1235.4	1234.1	1235.4	1240.6	1243.2	1249.7	1256.2	1263.4	1270.0
12.5°	1190.1	1184.9	1183.8	1185.1	1183.8	1184.9	1190.1	1198.6	1215.6	1215.5	1216.7
15°	1119.5	1116.8	1109.7	1111.6	1109.7	1116.8	1119.5	1127.9	1135.7	1145.5	1155.3
17.5°	1049.8	1046.7	1038.0	1045.7	1038.0	1046.7	1049.8	1054.4	1064.4	1078.3	1093.0
20°	1006.1	1000.8	996.3	995.6	996.3	1000.8	1006.1	1010.6	1021.7	1033.4	1044.5
22.5°	964.3	959.7	959.2	955.0	959.2	959.7	964.3	971.5	982.6	989.1	999.7
25°	912.2	907.7	906.3	903.1	906.3	907.7	912.2	917.5	924.6	929.8	941.5
27.5°	872.2	870.0	867.6	868.6	867.6	870.0	872.2	872.9	876.1	883.1	889.8
30°	847.7	847.1	845.7	845.7	845.7	847.1	847.7	845.7	849.0	852.2	857.5
32.5°	827.4	827.3	828.0	828.0	828.0	827.3	827.4	824.3	825.6	826.7	829.3
35°	798.8	800.8	802.1	800.1	802.1	800.8	798.8	796.3	794.3	789.8	791.0
37.5°	773.1	775.0	776.8	779.0	776.8	775.0	773.1	767.7	763.0	758.9	754.3
40°	753.2	757.8	759.1	762.3	759.1	757.8	753.2	747.3	742.2	737.6	732.4
42.5°	734.4	739.5	742.9	743.6	742.9	739.5	734.4	728.6	720.8	715.2	707.8
45°	705.7	710.9	715.5	715.5	715.5	710.9	705.7	695.9	687.4	678.9	671.8
47.5°	675.8	683.3	688.0	689.1	688.0	683.3	675.8	665.8	653.9	643.5	633.2
50°	655.5	664.6	669.2	672.4	669.2	664.6	655.5	644.4	632.1	619.0	606.6
52.5°	635.7	644.8	650.9	652.6	650.9	644.8	635.7	622.0	607.0	593.0	582.1
55°	601.4	614.4	621.6	624.2	621.6	614.4	601.4	586.4	572.1	554.5	538.9
57.5°	569.1	581.1	589.5	591.4	589.5	581.1	569.1	551.5	533.0	514.3	497.6
60°	544.0	557.1	567.5	569.5	567.5	557.1	544.0	526.5	506.9	488.7	467.9
62.5°	518.5	532.1	541.5	546.6	541.5	532.1	518.5	499.9	478.8	458.5	437.6
65°	474.4	488.0	497.2	499.1	497.2	488.0	474.4	456.1	433.9	412.5	394.8
67.5°	426.1	439.8	445.8	449.6	445.8	439.8	426.1	409.0	387.0	364.8	344.8
70°	392.3	403.3	409.8	413.1	409.8	403.3	392.3	374.0	355.8	333.0	311.4
72.5°	353.6	365.2	372.9	373.5	372.9	365.2	353.6	338.0	318.8	297.6	278.6
75°	294.5	304.9	308.9	308.9	308.9	304.9	294.5	279.6	263.9	246.9	228.1
77.5°	233.1	238.5	243.5	244.5	243.5	238.5	233.1	222.3	209.4	192.5	178.2
80°	193.5	196.8	200.7	200.7	200.7	196.8	193.5	183.7	171.4	157.0	146.0
82.5°	152.9	155.6	159.5	159.0	159.5	155.6	152.9	145.2	134.9	125.3	115.2
85°	92.6	98.4	97.7	96.4	97.7	98.4	92.6	93.8	84.1	77.6	68.4
87.5°	46.3	47.0	48.4	49.4	48.4	47.0	46.3	44.5	39.9	37.0	34.7
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: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**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: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1503.6	1505.7	1514.0	1521.8	1531.3	1538.0	1542.7	1547.9	1558.9	1567.7	1576.0
5°	1408.7	1412.0	1428.9	1440.7	1460.8	1478.5	1492.1	1507.1	1524.8	1548.8	1570.9
7.5°	1325.2	1337.3	1355.8	1374.9	1395.4	1418.5	1438.6	1461.1	1491.5	1524.6	1558.7
10°	1277.8	1291.5	1311.0	1333.1	1352.7	1379.4	1404.2	1430.9	1465.4	1505.8	1546.2
12.5°	1230.3	1252.8	1267.7	1294.0	1315.1	1337.2	1363.5	1398.5	1438.8	1481.3	1530.0
15°	1170.9	1183.3	1211.9	1226.2	1256.2	1290.2	1316.2	1351.4	1390.4	1446.5	1501.3
17.5°	1102.4	1118.6	1141.4	1168.8	1203.2	1229.6	1262.2	1298.4	1347.6	1403.3	1471.8
20°	1057.5	1071.2	1099.2	1129.2	1165.6	1193.7	1228.2	1263.4	1314.3	1373.6	1445.2
22.5°	1017.4	1030.6	1060.2	1088.0	1123.4	1157.7	1193.8	1234.7	1283.5	1346.0	1419.2
25°	955.3	972.8	998.9	1027.6	1061.4	1100.5	1139.6	1176.1	1228.2	1294.0	1372.2
27.5°	900.1	914.2	933.1	965.6	1004.1	1041.9	1080.7	1126.6	1176.7	1246.2	1327.4
30°	864.7	877.7	896.5	926.5	962.4	1002.8	1043.2	1087.5	1139.6	1208.7	1291.5
32.5°	836.5	846.4	863.2	890.0	922.7	965.3	1005.1	1051.0	1105.7	1173.7	1254.4
35°	794.9	803.4	809.9	835.4	864.7	903.7	944.1	993.1	1045.8	1110.3	1191.1
37.5°	754.1	757.1	766.6	783.2	811.6	847.6	885.1	933.2	987.3	1052.8	1125.7
40°	729.2	730.5	736.3	752.0	776.7	810.6	847.1	894.7	946.1	1008.0	1080.3
42.5°	704.6	703.8	709.2	720.1	743.3	774.1	810.0	853.5	904.9	962.1	1030.3
45°	665.9	665.9	664.6	673.7	692.7	722.6	752.6	794.3	837.3	893.3	950.6
47.5°	625.6	621.9	623.0	627.7	643.7	668.3	698.5	732.6	770.5	818.0	868.3
50°	599.5	594.3	592.3	597.5	611.8	633.3	662.0	692.0	727.8	769.5	812.6
52.5°	570.8	565.6	562.0	565.7	579.0	598.9	625.0	651.3	683.5	717.4	754.7
55°	526.5	520.7	518.7	520.0	529.7	545.4	567.5	591.6	615.8	643.8	669.9
57.5°	482.9	473.2	471.4	470.7	477.5	491.8	510.3	531.2	548.7	565.7	593.4
60°	454.1	442.4	438.5	437.9	443.1	454.8	471.7	492.6	505.0	516.7	540.8
62.5°	423.4	412.2	403.6	404.5	409.2	420.4	435.3	450.3	458.5	471.4	487.7
65°	376.0	361.7	355.2	353.2	355.8	364.9	376.6	386.3	395.5	400.8	416.3
67.5°	328.6	316.5	306.9	304.5	303.4	309.6	319.2	325.2	331.7	336.2	345.4
70°	295.2	284.7	273.1	269.1	268.4	273.6	282.8	283.4	292.6	294.5	304.3
72.5°	262.3	249.3	241.2	237.3	234.6	239.2	245.2	246.9	251.9	255.4	260.5
75°	211.1	201.3	193.5	187.7	185.7	188.3	188.3	191.5	194.8	196.8	202.6
77.5°	166.2	155.0	145.7	142.3	140.0	138.3	139.7	141.7	140.1	143.5	144.8
80°	134.9	123.2	116.0	114.7	110.7	107.5	106.9	108.8	106.2	107.5	111.4
82.5°	104.2	96.6	88.9	87.6	82.7	81.0	80.3	79.1	79.1	78.8	79.6
85°	61.9	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.1	39.8	40.4
87.5°	28.7	27.9	24.9	22.9	21.9	18.5	18.5	16.7	15.9	14.7	13.8
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



TEST NUMBER: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**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: P332663-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1583.4	1588.6	1595.3	1606.8	1611.0	1616.2	1623.5	1623.0	1625.0	1632.9	1649.5
5°	1589.2	1609.4	1629.0	1652.5	1677.2	1693.5	1715.6	1729.3	1742.9	1760.6	1790.5
7.5°	1591.6	1623.6	1659.4	1700.6	1737.3	1779.5	1812.4	1843.4	1871.5	1908.6	1944.4
10°	1587.9	1630.9	1677.2	1729.3	1784.7	1831.6	1874.0	1922.2	1963.2	2008.2	2048.6
12.5°	1581.1	1633.0	1694.9	1753.3	1818.1	1887.3	1940.1	1988.9	2043.5	2095.3	2157.6
15°	1565.8	1636.8	1709.1	1786.0	1872.6	1952.8	2029.0	2092.3	2150.9	2228.5	2309.9
17.5°	1546.2	1622.9	1714.0	1807.1	1897.7	1989.3	2083.7	2178.7	2252.7	2349.0	2412.7
20°	1528.0	1616.6	1710.4	1821.2	1911.8	2025.8	2119.6	2211.5	2313.1	2409.0	2485.1
22.5°	1502.4	1599.4	1698.9	1809.2	1928.4	2042.5	2150.9	2250.6	2352.2	2456.4	2548.7
25°	1470.0	1557.9	1675.8	1801.0	1919.6	2043.3	2167.8	2292.9	2402.4	2512.5	2598.5
27.5°	1414.8	1525.8	1635.6	1764.7	1896.5	2036.6	2169.6	2300.7	2415.3	2505.8	2559.2
30°	1386.6	1483.0	1602.2	1731.9	1874.6	2025.1	2163.9	2292.3	2399.1	2471.4	2492.9
32.5°	1344.9	1444.4	1561.0	1695.4	1846.4	2001.1	2145.7	2266.7	2355.9	2393.8	2367.9
35°	1283.0	1372.9	1490.8	1628.3	1785.4	1950.2	2092.9	2195.2	2240.8	2205.0	2115.7
37.5°	1208.7	1297.8	1416.3	1551.3	1713.8	1881.4	2010.4	2084.1	2068.9	1979.8	1846.7
40°	1156.6	1240.0	1352.7	1498.6	1657.0	1825.0	1938.4	1978.2	1936.5	1808.8	1667.5
42.5°	1098.7	1180.1	1293.3	1434.0	1601.8	1756.8	1855.6	1858.9	1788.9	1636.3	1494.3
45°	1010.6	1088.2	1195.0	1341.6	1496.7	1642.7	1707.8	1675.8	1546.9	1399.6	1256.9
47.5°	923.7	990.9	1096.3	1235.4	1382.7	1505.5	1537.9	1480.4	1342.9	1200.0	1067.7
50°	860.1	927.8	1026.9	1159.8	1301.8	1408.1	1423.7	1347.5	1212.6	1068.6	965.0
52.5°	799.1	866.4	961.8	1084.8	1214.8	1310.6	1311.1	1222.9	1088.5	960.2	863.8
55°	709.5	770.2	856.2	966.3	1082.3	1157.3	1139.0	1047.7	931.1	819.7	735.7
57.5°	623.3	676.1	755.4	847.2	949.3	1011.2	980.9	893.1	788.9	694.5	630.7
60°	567.5	617.7	685.5	772.1	858.2	906.3	877.7	798.1	702.4	626.1	570.8
62.5°	513.3	555.6	620.9	696.1	775.8	811.5	786.0	707.5	624.7	555.8	510.9
65°	436.6	471.1	523.2	587.8	645.7	676.4	654.9	581.8	518.7	469.1	433.3
67.5°	364.9	391.9	431.3	483.1	532.3	548.9	529.3	478.5	425.0	385.3	360.1
70°	315.4	340.8	374.0	413.8	456.8	474.4	454.8	414.4	370.8	334.2	309.5
72.5°	272.1	291.8	319.8	353.8	387.5	405.0	391.7	352.9	316.0	288.9	267.8
75°	207.2	224.1	243.6	267.8	293.9	305.6	293.9	267.1	241.8	221.5	206.5
77.5°	150.6	159.8	174.8	192.8	209.2	218.1	208.0	189.8	174.4	160.5	153.2
80°	114.7	121.2	131.6	146.0	157.0	165.5	159.0	144.0	131.6	122.5	119.2
82.5°	83.4	87.8	94.6	105.3	112.7	117.1	114.1	103.3	98.2	90.2	86.9
85°	41.1	43.6	48.3	51.5	58.0	58.6	59.3	54.8	50.1	48.3	45.6
87.5°	14.7	15.9	17.7	19.5	21.6	23.4	22.9	23.3	21.7	20.9	19.0
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°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1657.9	1659.0	1663.6	1667.3	1668.3	1673.6	1674.0
5°	1803.6	1814.7	1836.2	1838.1	1841.4	1858.3	1845.3
7.5°	1974.3	2002.4	2021.2	2037.8	2043.8	2051.2	2049.7
10°	2083.8	2125.4	2146.4	2179.5	2180.9	2189.3	2184.2
12.5°	2193.8	2242.2	2280.3	2286.4	2314.3	2318.6	2325.9
15°	2349.6	2401.1	2453.9	2472.8	2511.2	2520.4	2534.7
17.5°	2496.1	2548.7	2585.8	2634.6	2650.4	2671.5	2657.1
20°	2576.3	2633.7	2680.6	2719.0	2735.4	2747.0	2745.8
22.5°	2624.9	2682.7	2720.7	2749.8	2765.0	2770.0	2769.8
25°	2655.2	2688.4	2700.2	2711.2	2694.4	2688.4	2691.1
27.5°	2570.8	2562.2	2531.6	2491.4	2449.7	2416.6	2398.6
30°	2454.6	2403.7	2357.4	2276.6	2235.0	2210.2	2188.0
32.5°	2289.8	2209.2	2120.2	2046.3	1998.8	1962.1	1956.6
35°	2007.5	1886.3	1777.5	1687.0	1640.0	1600.2	1591.2
37.5°	1706.8	1580.8	1482.9	1403.2	1352.7	1324.6	1298.4
40°	1507.1	1398.9	1302.5	1234.7	1196.3	1176.1	1159.8
42.5°	1353.3	1254.5	1158.7	1107.0	1072.2	1059.9	1050.4
45°	1140.9	1049.0	982.6	943.5	923.3	902.5	892.7
47.5°	970.8	896.1	852.2	819.1	797.4	785.0	778.7
50°	874.4	813.1	774.1	748.7	729.2	719.3	714.2
52.5°	788.9	738.7	705.8	685.6	672.3	665.2	663.1
55°	679.6	641.1	620.3	602.8	593.0	586.4	583.8
57.5°	590.7	561.2	544.2	529.7	525.9	520.5	518.7
60°	532.3	509.5	495.2	485.4	482.2	475.7	476.9
62.5°	480.7	462.1	449.9	444.2	440.0	434.5	436.3
65°	406.6	392.9	386.3	381.2	376.0	372.7	375.3
67.5°	341.2	331.8	322.9	319.9	317.4	316.8	314.1
70°	298.4	290.6	282.8	280.9	280.9	278.2	277.6
72.5°	257.2	251.5	246.3	244.9	242.8	243.8	241.1
75°	198.7	194.2	192.2	190.3	189.6	189.6	187.7
77.5°	146.8	143.5	140.3	140.3	138.0	137.1	136.9
80°	111.4	110.1	107.5	107.5	106.2	106.9	105.6
82.5°	83.8	82.0	81.4	80.4	78.6	78.7	77.4
85°	45.0	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	19.8	19.5	18.9	18.2	17.8	17.6	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)