

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: P332962-940

Luminaire Tested: **SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332962-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5694.0 lumens
Efficiency: N/A
Efficacy: 116.7 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: Semi-Direct

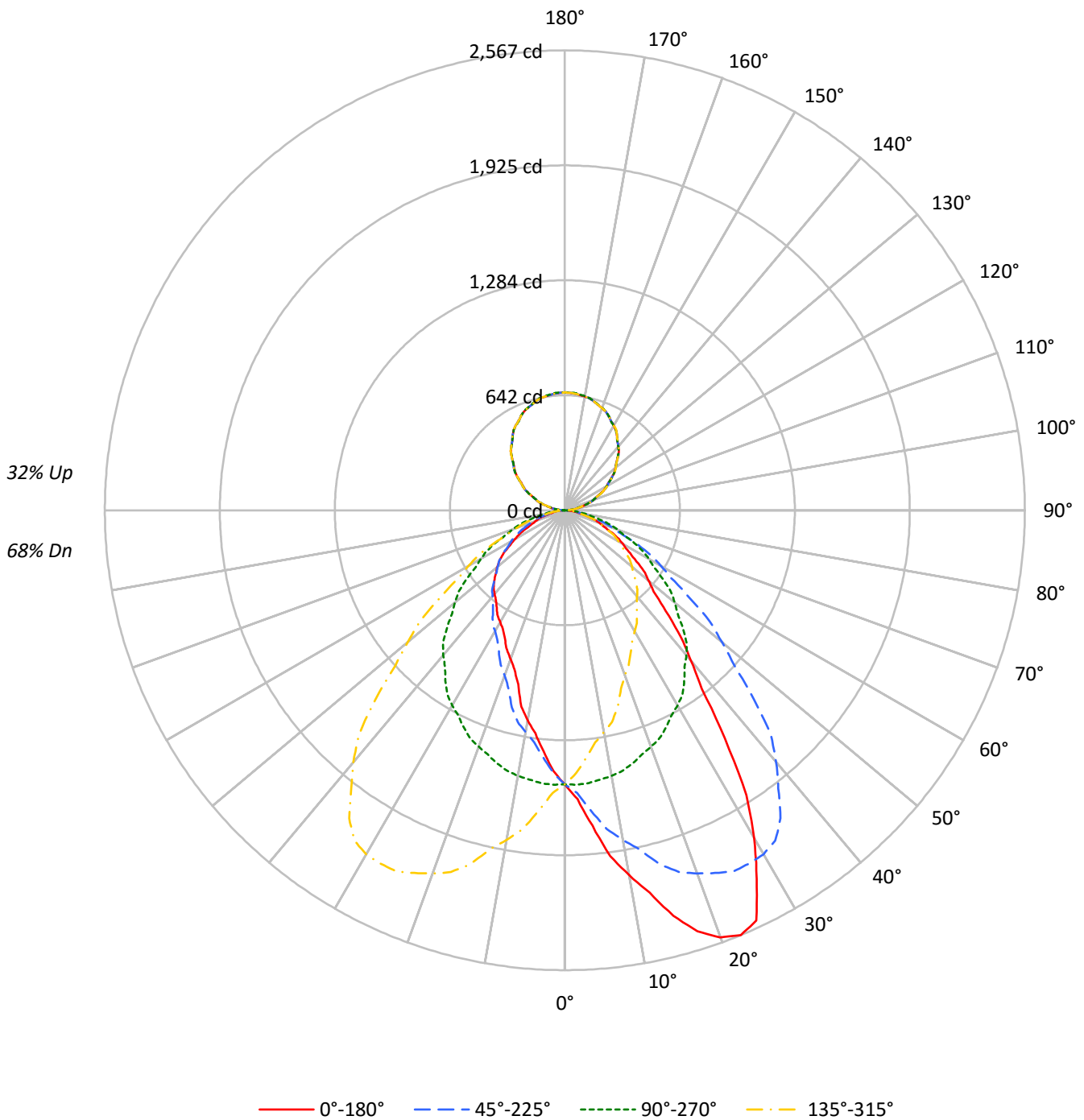
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68				
1	102	98	94	91	97	93	90	87	83	80	78	74	72	70	65	64	63	59				
2	94	87	81	75	88	82	77	72	73	69	66	65	62	60	58	56	54	50				
3	86	77	69	64	81	73	66	61	65	60	56	58	54	51	52	49	46	43				
4	79	68	60	54	74	65	58	52	58	53	48	52	48	44	47	43	40	37				
5	73	61	53	47	69	58	51	45	53	47	42	47	43	39	42	39	36	33				
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32	29				
7	62	50	42	36	59	48	40	35	43	37	33	39	34	31	35	31	28	26				
8	58	46	38	33	55	44	36	32	40	34	29	36	31	27	33	29	25	23				
9	54	42	34	29	51	40	33	28	37	31	27	33	28	25	30	26	23	21				
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	28	24	21	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12352	12352	12352	12352
5°	14327	12388	10950	12388
10°	16948	12336	9773	12336
15°	19578	12221	8398	12221
20°	21798	12064	7594	12064
25°	22502	11909	7050	11909
30°	19699	11723	6723	11723
35°	15334	11446	6525	11446
40°	11499	11129	6418	11129
45°	9079	10620	6361	10620
50°	7665	10034	6179	10034
55°	6681	9388	5847	9388
60°	6011	8719	5176	8719
65°	5299	7996	4451	7996
70°	4773	7246	4015	7246
75°	3999	6422	3425	6422
80°	3384	5472	3208	5472
85°	2862	4279	2862	4279



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.2	2.6
10°-20°	447.2	7.9
20°-30°	699.4	12.3
30°-40°	777.5	13.7
40°-50°	689.9	12.1
50°-60°	537.6	9.4
60°-70°	351.9	6.2
70°-80°	173.1	3.0
80°-90°	44.7	0.8
90°-100°	43.4	0.8
100°-110°	128.5	2.3
110°-120°	218.1	3.8
120°-130°	287.6	5.1
130°-140°	322.9	5.7
140°-150°	317.3	5.6
150°-160°	266.9	4.7
160°-170°	177.6	3.1
170°-180°	62.2	1.1
0°-30°	1294.9	22.7
0°-40°	2072.4	36.4
0°-60°	3299.8	58.0
0°-90°	3869.5	68.0
90°-120°	389.9	6.8
90°-150°	1317.8	23.1
90°-180°	1824.0	32.0
0°-180°	5694.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1530	1530	1530	1530	1530	
5°	1768	1529	1351	1529	1768	179
15°	2342	1462	1005	1462	2342	666
25°	2526	1337	792	1337	2526	1121
35°	1556	1161	662	1161	1556	975
45°	795	930	557	930	795	630
55°	475	667	415	667	475	432
65°	277	419	233	419	277	279
75°	128	206	110	206	128	141
85°	31	46	31	46	31	35
90°	15	2	15	2	15	9
95°	40	30	40	30	40	42
105°	124	118	124	118	124	131
115°	220	222	220	222	220	217
125°	320	323	320	323	320	286
135°	417	416	417	416	417	322
145°	507	506	507	506	507	317
155°	579	580	579	580	579	267
165°	630	631	630	631	630	177
175°	654	657	654	657	654	62
180°	658	658	658	658	658	



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1613.8	1618.3	1613.8	1613.4	1608.5	1607.0	1605.0	1598.6	1586.7	1579.8	1581.3
5°	1768.0	1783.3	1774.8	1773.5	1760.0	1746.4	1737.8	1718.1	1697.1	1682.9	1671.2
7.5°	1946.2	1955.1	1949.7	1941.1	1919.1	1906.7	1886.7	1860.6	1823.1	1794.3	1768.1
10°	2067.5	2074.9	2072.5	2056.5	2040.4	2007.8	1989.2	1952.9	1905.4	1867.9	1832.6
12.5°	2186.9	2194.8	2173.1	2173.8	2143.5	2117.7	2088.4	2042.6	1987.8	1939.3	1895.3
15°	2342.5	2332.6	2332.6	2320.3	2286.3	2250.7	2220.4	2172.4	2103.3	2045.3	1984.3
17.5°	2464.3	2467.7	2462.7	2433.6	2407.0	2370.0	2314.6	2258.5	2194.4	2116.7	2054.2
20°	2537.3	2537.3	2531.7	2512.0	2477.5	2438.0	2378.3	2317.2	2235.9	2157.6	2087.3
22.5°	2566.9	2568.8	2562.3	2546.0	2515.0	2476.5	2425.5	2363.6	2279.7	2191.6	2104.5
25°	2526.2	2537.9	2539.1	2534.8	2525.6	2502.1	2458.4	2394.9	2319.7	2224.1	2130.4
27.5°	2319.3	2334.1	2347.1	2368.4	2396.7	2411.5	2413.5	2381.2	2315.6	2223.7	2129.3
30°	2113.2	2125.5	2165.6	2218.0	2258.6	2295.6	2327.7	2336.3	2299.4	2216.7	2117.5
32.5°	1884.4	1901.1	1941.2	1997.5	2065.3	2128.0	2199.9	2236.7	2235.7	2186.1	2094.3
35°	1555.9	1568.3	1605.3	1664.4	1745.8	1838.9	1952.9	2041.7	2102.0	2097.7	2041.7
37.5°	1254.8	1268.7	1306.1	1355.2	1434.1	1549.3	1659.7	1782.0	1893.7	1956.5	1937.7
40°	1091.1	1091.7	1128.1	1178.7	1252.6	1353.1	1473.3	1608.9	1733.4	1835.1	1854.8
42.5°	961.9	962.0	986.1	1040.5	1093.9	1188.4	1303.1	1437.8	1583.5	1701.0	1753.3
45°	795.2	800.8	820.5	853.2	895.1	975.2	1067.0	1192.2	1355.6	1494.9	1581.8
47.5°	673.4	681.5	694.1	720.8	754.1	807.5	883.5	996.0	1128.8	1282.1	1405.8
50°	610.3	611.5	627.5	642.3	671.3	713.8	780.4	874.1	996.1	1143.5	1280.9
52.5°	556.1	555.8	565.4	584.2	607.7	640.9	694.6	779.9	888.1	1020.2	1162.1
55°	474.7	477.8	485.2	499.9	517.8	541.3	583.8	647.9	733.0	845.8	974.6
57.5°	412.8	414.4	420.2	426.4	442.8	459.9	491.8	536.3	608.1	700.4	820.5
60°	372.3	372.9	374.8	384.1	397.0	413.0	434.6	472.2	532.6	617.1	712.0
62.5°	332.9	333.9	336.8	343.6	353.6	364.7	387.3	417.5	467.5	539.7	625.2
65°	277.4	278.0	282.3	284.8	292.8	302.6	319.3	339.7	374.2	434.6	499.4
67.5°	231.8	231.8	232.0	235.3	240.9	247.4	257.4	273.7	299.7	336.8	393.9
70°	202.2	202.2	203.4	205.3	208.4	213.9	219.5	231.8	250.9	281.1	324.9
72.5°	174.6	175.0	176.3	176.6	178.3	182.8	186.9	194.8	209.0	231.8	267.2
75°	128.2	130.1	133.1	135.6	138.7	138.1	142.4	147.3	151.7	165.2	185.6
77.5°	95.4	94.4	94.8	96.9	97.3	97.9	100.9	104.8	108.0	114.4	121.7
80°	72.8	72.8	74.5	75.2	74.5	75.2	78.3	80.2	81.4	83.8	90.6
82.5°	55.0	56.0	55.4	56.0	56.4	57.0	59.6	59.9	61.2	62.2	65.0
85°	30.9	31.5	32.0	30.9	30.9	30.9	32.0	32.6	33.9	33.3	34.5
87.5°	13.9	13.4	13.8	13.7	14.2	13.6	14.0	14.8	13.7	14.1	13.9
90°	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6	11.9	11.1	10.3
92.5°	22.6	22.5	22.3	22.2	22.0	21.8	21.4	21.0	20.5	20.2	19.5
95°	40.2	40.2	40.2	40.2	40.2	40.0	39.7	39.3	39.0	38.6	37.9
97.5°	63.0	63.0	63.0	63.0	63.0	62.8	62.3	62.0	61.5	61.2	60.2
100°	78.8	78.8	78.8	78.8	78.8	78.7	78.5	78.3	78.0	77.8	76.8
102.5°	96.8	96.7	96.6	96.5	96.4	96.1	95.9	95.5	95.2	94.9	94.0
105°	124.1	123.8	123.4	123.1	122.7	122.4	122.1	121.7	121.4	121.0	120.6
107.5°	150.8	150.8	150.8	150.8	150.9	150.7	150.3	150.1	149.7	149.5	149.4
110°	169.9	169.5	169.2	168.9	168.5	168.4	168.7	168.9	169.2	169.3	169.5



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	189.4	189.3	189.2	189.2	189.1	189.1	189.1	189.2	189.2	189.3	189.5
115°	219.7	219.8	219.9	220.1	220.2	220.3	220.4	220.5	220.6	220.7	221.0
117.5°	248.6	248.8	249.1	249.2	249.5	249.8	250.2	250.6	250.9	251.4	251.5
120°	270.5	270.4	270.1	269.9	269.7	269.8	270.4	271.0	271.5	272.1	272.4
122.5°	288.9	289.3	289.7	290.1	290.5	290.9	291.3	291.7	292.0	292.5	292.6
125°	320.4	320.7	320.8	321.1	321.3	321.6	321.7	322.0	322.2	322.4	322.5
127.5°	349.6	349.8	350.0	350.2	350.4	350.5	350.8	351.0	351.2	351.4	351.6
130°	368.7	369.2	369.6	370.1	370.5	370.9	371.1	371.3	371.6	371.8	371.8
132.5°	389.1	389.2	389.4	389.6	389.8	390.0	390.2	390.5	390.7	390.9	391.0
135°	417.1	417.4	417.7	418.0	418.4	418.7	418.9	419.1	419.4	419.5	419.5
137.5°	446.5	446.4	446.3	446.2	446.1	446.3	446.6	446.8	447.2	447.5	447.3
140°	464.3	464.5	464.6	464.7	464.8	464.9	465.0	465.1	465.2	465.4	465.4
142.5°	482.2	482.2	482.3	482.3	482.3	482.3	482.4	482.4	482.4	482.4	482.5
145°	506.6	506.8	507.2	507.6	507.9	508.1	508.3	508.4	508.5	508.5	508.5
147.5°	531.2	531.3	531.4	531.5	531.6	531.7	531.8	531.9	532.0	532.1	532.2
150°	546.3	546.4	546.4	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	560.1	560.4	560.6	561.0	561.2	561.2	561.0	560.7	560.4	560.2	560.1
155°	579.3	579.7	580.1	580.6	581.1	581.1	580.6	580.1	579.7	579.3	579.4
157.5°	596.5	596.8	597.3	597.6	598.0	598.1	597.7	597.4	597.0	596.6	596.7
160°	606.3	606.8	607.3	608.0	608.5	608.6	608.2	608.0	607.6	607.3	607.3
162.5°	616.4	617.0	617.5	618.1	618.7	618.7	618.0	617.4	616.8	616.2	616.4
165°	629.6	630.1	630.5	631.0	631.4	631.3	630.6	630.0	629.3	628.7	628.8
167.5°	639.1	639.8	640.5	641.2	641.9	641.9	641.2	640.5	639.9	639.2	639.2
170°	644.4	645.2	646.0	646.8	647.6	647.6	646.9	646.2	645.6	644.9	644.8
172.5°	648.9	649.6	650.4	651.2	652.0	652.0	651.3	650.5	649.7	649.0	648.9
175°	653.5	654.3	655.1	655.9	656.7	656.7	655.9	655.1	654.3	653.5	653.6
177.5°	655.9	656.7	657.5	658.2	658.9	658.9	658.3	657.6	657.0	656.4	656.4
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1576.4	1569.5	1566.0	1558.1	1548.7	1543.8	1539.4	1532.9	1524.6	1515.7	1509.3
5°	1656.4	1641.6	1623.1	1600.9	1581.2	1562.1	1545.4	1528.7	1509.7	1490.0	1470.3
7.5°	1738.5	1709.4	1677.9	1641.6	1606.2	1574.0	1544.4	1516.1	1484.0	1455.3	1429.1
10°	1795.7	1756.2	1712.4	1666.3	1620.0	1579.9	1540.5	1504.8	1465.3	1430.1	1400.5
12.5°	1842.1	1795.7	1743.0	1685.5	1629.9	1581.4	1536.1	1489.4	1444.6	1406.5	1367.0
15°	1919.0	1855.5	1784.6	1715.6	1643.4	1577.4	1516.4	1462.2	1411.0	1357.5	1319.8
17.5°	1971.8	1896.6	1810.4	1727.4	1642.2	1564.4	1494.0	1429.4	1370.4	1315.6	1270.9
20°	2003.4	1920.2	1824.7	1730.4	1634.8	1551.6	1475.8	1404.3	1343.3	1284.1	1237.8
22.5°	2021.2	1929.1	1824.7	1725.9	1626.9	1536.8	1453.6	1379.1	1312.7	1253.5	1202.3
25°	2026.9	1928.2	1821.6	1708.2	1599.6	1504.1	1417.8	1337.0	1263.1	1203.9	1149.7
27.5°	2019.0	1902.8	1793.6	1677.2	1565.3	1464.5	1373.9	1289.1	1215.0	1151.6	1095.9
30°	2007.2	1882.6	1765.5	1644.7	1531.2	1434.5	1338.9	1257.6	1180.4	1114.5	1058.5
32.5°	1981.5	1858.0	1732.0	1608.2	1493.3	1393.6	1302.9	1221.0	1145.5	1078.1	1018.5
35°	1930.7	1805.5	1668.7	1541.8	1428.9	1325.3	1240.3	1161.4	1089.2	1017.2	954.2
37.5°	1863.8	1735.9	1599.8	1460.7	1347.8	1250.0	1172.0	1097.9	1027.5	961.6	892.0
40°	1800.6	1684.1	1543.6	1405.5	1289.6	1195.2	1123.2	1056.0	985.1	919.7	850.1
42.5°	1724.2	1625.0	1482.9	1344.3	1229.9	1139.1	1071.8	1006.1	941.6	878.3	805.7
45°	1596.6	1521.3	1388.2	1255.1	1139.8	1049.8	988.2	930.2	873.5	813.1	744.7
47.5°	1450.4	1399.5	1284.5	1148.2	1041.5	960.6	901.0	853.6	805.7	745.3	685.3
50°	1348.8	1316.1	1205.1	1080.7	978.9	904.3	843.3	798.9	758.8	700.9	647.3
52.5°	1240.3	1222.9	1129.2	1010.1	911.9	838.7	786.6	746.6	706.1	658.0	607.8
55°	1075.0	1084.3	1004.8	901.9	809.4	747.8	700.3	667.0	632.5	591.8	552.9
57.5°	906.2	940.0	886.5	796.2	709.5	652.6	616.8	588.8	559.8	526.1	492.9
60°	805.0	833.4	803.3	723.7	647.9	594.9	561.6	540.0	511.0	480.2	455.0
62.5°	706.4	736.7	718.9	654.7	584.2	538.7	509.3	489.2	467.6	440.8	414.5
65°	582.6	602.3	593.6	549.3	499.4	460.5	433.4	418.6	398.9	379.2	355.7
67.5°	446.2	484.3	479.2	455.7	412.5	382.2	364.4	351.3	333.4	318.7	302.8
70°	366.8	401.9	401.3	382.2	358.7	330.4	318.1	307.0	291.0	276.8	263.9
72.5°	300.2	332.4	337.2	322.5	306.5	285.1	273.2	265.6	250.0	240.3	229.8
75°	210.2	233.6	239.8	239.8	232.4	221.3	210.8	205.9	194.8	186.2	180.0
77.5°	137.9	152.7	162.3	164.4	165.6	161.8	153.3	149.8	141.2	138.2	132.3
80°	97.4	107.3	118.3	122.1	125.1	123.9	120.2	117.7	109.8	106.6	104.2
82.5°	67.3	72.8	81.9	90.0	89.2	92.4	89.2	87.2	81.1	80.0	77.6
85°	35.1	35.8	37.0	42.5	45.7	46.8	47.4	46.2	44.4	44.4	40.0
87.5°	13.7	13.0	13.8	13.6	13.9	15.6	16.9	17.0	15.9	14.6	13.4
90°	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5	2.8	4.0	5.3
92.5°	18.9	18.3	17.6	16.6	15.2	13.7	12.3	10.9	12.3	13.7	15.2
95°	37.1	36.3	35.5	34.6	33.5	32.5	31.6	30.5	31.6	32.5	33.5
97.5°	59.3	58.3	57.4	56.5	55.7	54.9	54.1	53.3	54.1	54.9	55.7
100°	75.8	74.7	73.7	73.0	72.6	72.1	71.7	71.2	71.7	72.1	72.6
102.5°	93.0	92.1	91.2	90.6	90.4	90.2	90.1	89.9	90.1	90.2	90.4
105°	120.1	119.7	119.2	119.0	118.9	118.7	118.6	118.5	118.6	118.7	118.9
107.5°	149.3	149.2	149.2	149.1	148.9	148.7	148.6	148.5	148.6	148.7	148.9
110°	169.6	169.7	169.8	169.8	169.5	169.3	169.1	168.9	169.1	169.3	169.5



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	189.7	189.9	190.1	190.2	190.1	190.1	190.0	190.0	190.0	190.1	190.1
115°	221.1	221.4	221.6	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8
117.5°	251.6	251.8	252.0	252.0	251.9	251.8	251.7	251.6	251.7	251.8	251.9
120°	272.8	273.1	273.5	273.4	273.0	272.5	272.1	271.6	272.1	272.5	273.0
122.5°	292.7	292.9	293.1	293.0	292.8	292.7	292.5	292.3	292.5	292.7	292.8
125°	322.7	322.8	322.9	323.0	323.0	323.0	323.0	323.0	323.0	323.0	323.0
127.5°	351.8	352.0	352.1	352.0	351.8	351.4	351.1	350.7	351.1	351.4	351.8
130°	371.8	371.8	371.8	371.6	371.3	371.0	370.6	370.2	370.6	371.0	371.3
132.5°	391.1	391.2	391.3	391.2	390.9	390.7	390.5	390.2	390.5	390.7	390.9
135°	419.5	419.5	419.5	419.3	418.6	417.9	417.2	416.5	417.2	417.9	418.6
137.5°	447.1	446.9	446.7	446.5	446.1	445.9	445.5	445.2	445.5	445.9	446.1
140°	465.4	465.4	465.4	465.2	465.0	464.8	464.6	464.3	464.6	464.8	465.0
142.5°	482.6	482.7	482.8	482.8	482.5	482.3	482.1	481.8	482.1	482.3	482.5
145°	508.4	508.3	508.1	507.8	507.4	506.9	506.5	506.0	506.5	506.9	507.4
147.5°	532.3	532.4	532.4	532.3	531.6	531.1	530.6	530.0	530.6	531.1	531.6
150°	546.7	546.7	546.7	546.5	546.1	545.6	545.2	544.7	545.2	545.6	546.1
152.5°	560.0	559.9	559.8	559.6	559.4	559.1	558.8	558.6	558.8	559.1	559.4
155°	579.5	579.6	579.7	579.8	579.8	579.8	579.8	579.8	579.8	579.8	579.8
157.5°	596.7	596.7	596.7	596.9	597.1	597.3	597.4	597.7	597.4	597.3	597.1
160°	607.5	607.6	607.7	607.8	608.0	608.1	608.1	608.2	608.1	608.1	608.0
162.5°	616.4	616.5	616.6	616.9	617.2	617.4	617.8	618.0	617.8	617.4	617.2
165°	629.1	629.3	629.5	629.8	630.2	630.4	630.8	631.2	630.8	630.4	630.2
167.5°	639.2	639.1	639.1	639.4	639.8	640.2	640.8	641.2	640.8	640.2	639.8
170°	644.6	644.5	644.4	644.6	645.2	645.8	646.4	646.9	646.4	645.8	645.2
172.5°	648.9	648.9	648.9	649.1	649.6	650.1	650.5	650.9	650.5	650.1	649.6
175°	653.8	653.9	654.0	654.3	654.9	655.5	656.0	656.6	656.0	655.5	654.9
177.5°	656.4	656.4	656.4	656.6	657.1	657.5	658.0	658.4	658.0	657.5	657.1
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1502.4	1497.4	1491.0	1483.6	1474.8	1466.9	1463.5	1466.4	1467.8	1463.9	1463.5
5°	1456.7	1441.3	1428.9	1410.4	1395.6	1383.3	1374.7	1371.0	1372.2	1362.4	1359.9
7.5°	1405.2	1387.0	1366.8	1344.8	1324.4	1306.3	1296.7	1291.6	1281.1	1276.7	1269.2
10°	1372.2	1347.6	1327.8	1301.9	1278.5	1257.0	1246.4	1237.8	1227.4	1222.4	1211.9
12.5°	1338.2	1309.6	1287.9	1261.0	1237.1	1211.0	1201.0	1185.1	1168.7	1158.3	1144.9
15°	1290.2	1255.7	1229.2	1197.1	1168.8	1139.2	1112.7	1083.1	1072.0	1048.6	1035.0
17.5°	1234.1	1199.1	1166.3	1123.3	1079.5	1042.8	1014.5	986.1	969.2	954.2	947.4
20°	1197.1	1165.1	1119.5	1069.5	1020.8	980.2	957.3	938.9	920.3	909.9	902.5
22.5°	1162.1	1121.1	1068.2	1014.3	965.6	933.8	914.4	895.5	880.4	870.4	860.6
25°	1103.4	1049.8	993.7	932.1	898.8	871.0	850.1	834.6	825.5	812.4	807.5
27.5°	1043.1	978.2	916.3	874.9	840.2	814.8	796.6	785.0	773.3	765.0	758.6
30°	996.8	930.9	875.4	835.9	800.8	779.8	765.0	751.4	742.2	735.4	730.5
32.5°	950.9	884.9	838.4	795.9	768.2	747.8	732.0	721.8	714.6	705.8	702.8
35°	884.6	826.0	785.3	747.2	718.8	700.3	688.0	677.4	671.3	668.9	667.0
37.5°	820.8	772.9	729.2	697.9	672.5	658.0	643.5	638.3	634.1	629.6	631.6
40°	780.4	735.4	696.6	663.3	642.9	627.0	618.3	612.2	608.4	608.4	608.4
42.5°	745.4	701.4	663.5	633.7	613.3	599.8	590.2	585.0	583.8	583.3	586.2
45°	691.1	650.3	612.2	587.5	570.2	556.6	551.1	546.8	546.8	549.3	549.8
47.5°	637.1	599.1	568.4	540.7	525.0	516.5	511.7	509.4	509.7	512.1	515.0
50°	604.1	566.5	536.3	511.7	496.9	488.8	484.6	483.3	484.6	484.6	488.8
52.5°	568.1	534.5	504.7	484.0	467.3	459.8	457.4	455.7	456.4	458.4	460.2
55°	515.3	485.2	456.8	437.0	424.7	419.8	414.3	414.8	413.7	414.8	414.8
57.5°	462.4	435.3	408.9	393.3	382.5	375.3	369.3	371.0	369.2	368.9	367.9
60°	428.5	398.9	377.9	363.7	351.3	345.2	339.7	340.9	339.0	337.8	335.4
62.5°	391.5	366.8	346.8	333.1	323.2	316.1	310.6	309.3	305.1	300.9	295.4
65°	337.8	317.4	299.6	286.7	277.4	271.9	267.5	263.9	254.6	244.7	239.8
67.5°	285.7	271.0	254.3	243.3	235.9	228.5	220.3	214.0	205.4	200.0	196.9
70°	252.1	237.9	223.7	213.3	205.3	198.5	189.2	184.9	178.8	176.3	173.3
72.5°	220.1	206.9	193.7	184.2	175.7	170.4	163.1	158.8	156.0	155.1	152.0
75°	171.4	160.9	151.1	142.4	135.6	131.9	128.9	125.7	124.5	119.0	115.9
77.5°	125.0	118.2	111.9	105.8	100.9	98.5	92.6	89.0	86.9	84.4	83.7
80°	97.4	92.5	86.3	82.6	75.8	73.4	70.9	70.3	69.6	69.0	68.4
82.5°	73.2	68.3	62.2	59.9	58.1	56.6	55.1	54.5	53.9	54.2	54.1
85°	37.0	34.5	34.5	33.9	33.3	32.6	32.0	32.0	31.5	32.0	31.5
87.5°	13.6	13.4	13.6	12.8	13.4	13.6	13.2	13.4	14.0	13.1	13.2
90°	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6	13.2	13.9	14.4
92.5°	16.6	17.6	18.3	18.9	19.5	20.2	20.5	21.0	21.4	21.8	22.0
95°	34.6	35.5	36.3	37.1	37.9	38.6	39.0	39.3	39.7	40.0	40.2
97.5°	56.5	57.4	58.3	59.3	60.2	61.2	61.5	62.0	62.3	62.8	63.0
100°	73.0	73.7	74.7	75.8	76.8	77.8	78.0	78.3	78.5	78.7	78.8
102.5°	90.6	91.2	92.1	93.0	94.0	94.9	95.2	95.5	95.9	96.1	96.4
105°	119.0	119.2	119.7	120.1	120.6	121.0	121.4	121.7	122.1	122.4	122.7
107.5°	149.1	149.2	149.2	149.3	149.4	149.5	149.7	150.1	150.3	150.7	150.9
110°	169.8	169.8	169.7	169.6	169.5	169.3	169.2	168.9	168.7	168.4	168.5



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	190.2	190.1	189.9	189.7	189.5	189.3	189.2	189.2	189.1	189.1	189.1
115°	221.8	221.6	221.4	221.1	221.0	220.7	220.6	220.5	220.4	220.3	220.2
117.5°	252.0	252.0	251.8	251.6	251.5	251.4	250.9	250.6	250.2	249.8	249.5
120°	273.4	273.5	273.1	272.8	272.4	272.1	271.5	271.0	270.4	269.8	269.7
122.5°	293.0	293.1	292.9	292.7	292.6	292.5	292.0	291.7	291.3	290.9	290.5
125°	323.0	322.9	322.8	322.7	322.5	322.4	322.2	322.0	321.7	321.6	321.3
127.5°	352.0	352.1	352.0	351.8	351.6	351.4	351.2	351.0	350.8	350.5	350.4
130°	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3	371.1	370.9	370.5
132.5°	391.2	391.3	391.2	391.1	391.0	390.9	390.7	390.5	390.2	390.0	389.8
135°	419.3	419.5	419.5	419.5	419.5	419.5	419.4	419.1	418.9	418.7	418.4
137.5°	446.5	446.7	446.9	447.1	447.3	447.5	447.2	446.8	446.6	446.3	446.1
140°	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.1	465.0	464.9	464.8
142.5°	482.8	482.8	482.7	482.6	482.5	482.4	482.4	482.4	482.4	482.3	482.3
145°	507.8	508.1	508.3	508.4	508.5	508.5	508.5	508.4	508.3	508.1	507.9
147.5°	532.3	532.4	532.4	532.3	532.2	532.1	532.0	531.9	531.8	531.7	531.6
150°	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	559.6	559.8	559.9	560.0	560.1	560.2	560.4	560.7	561.0	561.2	561.2
155°	579.8	579.7	579.6	579.5	579.4	579.3	579.7	580.1	580.6	581.1	581.1
157.5°	596.9	596.7	596.7	596.7	596.7	596.6	597.0	597.4	597.7	598.1	598.0
160°	607.8	607.7	607.6	607.5	607.3	607.3	607.6	608.0	608.2	608.6	608.5
162.5°	616.9	616.6	616.5	616.4	616.4	616.2	616.8	617.4	618.0	618.7	618.7
165°	629.8	629.5	629.3	629.1	628.8	628.7	629.3	630.0	630.6	631.3	631.4
167.5°	639.4	639.1	639.1	639.2	639.2	639.2	639.9	640.5	641.2	641.9	641.9
170°	644.6	644.4	644.5	644.6	644.8	644.9	645.6	646.2	646.9	647.6	647.6
172.5°	649.1	648.9	648.9	648.9	648.9	649.0	649.7	650.5	651.3	652.0	652.0
175°	654.3	654.0	653.9	653.8	653.6	653.5	654.3	655.1	655.9	656.7	656.7
177.5°	656.6	656.4	656.4	656.4	656.4	656.4	657.0	657.6	658.3	658.9	658.9
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1460.4	1461.4	1458.0	1457.1	1458.0	1461.4	1460.4	1463.5	1463.9	1467.8	1466.4
5°	1355.0	1353.7	1350.6	1351.2	1350.6	1353.7	1355.0	1359.9	1362.4	1372.2	1371.0
7.5°	1264.7	1259.9	1261.2	1256.3	1261.2	1259.9	1264.7	1269.2	1276.7	1281.1	1291.6
10°	1209.4	1202.7	1197.1	1192.2	1197.1	1202.7	1209.4	1211.9	1222.4	1227.4	1237.8
12.5°	1134.0	1128.2	1120.7	1122.2	1120.7	1128.2	1134.0	1144.9	1158.3	1168.7	1185.1
15°	1027.0	1017.7	1003.0	1004.8	1003.0	1017.7	1027.0	1035.0	1048.6	1072.0	1083.1
17.5°	936.4	936.5	929.7	931.3	929.7	936.5	936.4	947.4	954.2	969.2	986.1
20°	889.6	885.2	885.8	884.0	885.8	885.2	889.6	902.5	909.9	920.3	938.9
22.5°	857.0	851.7	847.4	843.6	847.4	851.7	857.0	860.6	870.4	880.4	895.5
25°	802.0	798.3	792.7	791.5	792.7	798.3	802.0	807.5	812.4	825.5	834.6
27.5°	753.7	753.0	750.7	747.9	750.7	753.0	753.7	758.6	765.0	773.3	785.0
30°	725.6	724.3	723.1	721.2	723.1	724.3	725.6	730.5	735.4	742.2	751.4
32.5°	700.4	699.6	698.4	698.6	698.4	699.6	700.4	702.8	705.8	714.6	721.8
35°	664.5	663.9	662.7	662.1	662.7	663.9	664.5	667.0	668.9	671.3	677.4
37.5°	631.0	632.6	631.9	631.7	631.9	632.6	631.0	631.6	629.6	634.1	638.3
40°	607.8	608.4	609.7	609.0	609.7	608.4	607.8	608.4	608.4	608.4	612.2
42.5°	588.6	588.7	590.4	588.4	590.4	588.7	588.6	586.2	583.3	583.8	585.0
45°	554.2	557.9	557.2	557.2	557.2	557.9	554.2	549.8	549.3	546.8	546.8
47.5°	516.6	519.8	520.7	520.5	520.7	519.8	516.6	515.0	512.1	509.7	509.4
50°	492.0	490.7	492.6	492.0	492.6	490.7	492.0	488.8	484.6	484.6	483.3
52.5°	461.8	462.1	462.0	461.4	462.0	462.1	461.8	460.2	458.4	456.4	455.7
55°	415.4	416.1	414.8	415.4	414.8	416.1	415.4	414.8	414.8	413.7	414.8
57.5°	365.2	362.2	363.5	361.9	363.5	362.2	365.2	367.9	368.9	369.2	371.0
60°	329.2	324.2	323.0	320.6	323.0	324.2	329.2	335.4	337.8	339.0	340.9
62.5°	288.7	285.3	281.1	283.0	281.1	285.3	288.7	295.4	300.9	305.1	309.3
65°	234.9	232.4	230.5	233.0	230.5	232.4	234.9	239.8	244.7	254.6	263.9
67.5°	194.4	193.1	193.1	191.8	193.1	193.1	194.4	196.9	200.0	205.4	214.0
70°	173.3	171.4	171.4	170.1	171.4	171.4	173.3	173.3	176.3	178.8	184.9
72.5°	151.5	149.6	150.2	149.5	150.2	149.6	151.5	152.0	155.1	156.0	158.8
75°	112.2	109.1	109.1	109.8	109.1	109.1	112.2	115.9	119.0	124.5	125.7
77.5°	83.7	83.1	84.0	82.8	84.0	83.1	83.7	83.7	84.4	86.9	89.0
80°	68.4	67.8	67.2	69.0	67.2	67.8	68.4	68.4	69.0	69.6	70.3
82.5°	53.1	53.1	52.9	55.2	52.9	53.1	53.1	54.1	54.2	53.9	54.5
85°	32.0	30.9	32.0	30.9	32.0	30.9	32.0	31.5	32.0	31.5	32.0
87.5°	14.3	13.8	13.4	13.9	13.4	13.8	14.3	13.2	13.1	14.0	13.4
90°	14.6	14.8	15.1	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6
92.5°	22.2	22.3	22.5	22.6	22.5	22.3	22.2	22.0	21.8	21.4	21.0
95°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.0	39.7	39.3
97.5°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	62.8	62.3	62.0
100°	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.7	78.5	78.3
102.5°	96.5	96.6	96.7	96.8	96.7	96.6	96.5	96.4	96.1	95.9	95.5
105°	123.1	123.4	123.8	124.1	123.8	123.4	123.1	122.7	122.4	122.1	121.7
107.5°	150.8	150.8	150.8	150.8	150.8	150.8	150.8	150.9	150.7	150.3	150.1
110°	168.9	169.2	169.5	169.9	169.5	169.2	168.9	168.5	168.4	168.7	168.9



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	189.2	189.2	189.3	189.4	189.3	189.2	189.2	189.1	189.1	189.1	189.2
115°	220.1	219.9	219.8	219.7	219.8	219.9	220.1	220.2	220.3	220.4	220.5
117.5°	249.2	249.1	248.8	248.6	248.8	249.1	249.2	249.5	249.8	250.2	250.6
120°	269.9	270.1	270.4	270.5	270.4	270.1	269.9	269.7	269.8	270.4	271.0
122.5°	290.1	289.7	289.3	288.9	289.3	289.7	290.1	290.5	290.9	291.3	291.7
125°	321.1	320.8	320.7	320.4	320.7	320.8	321.1	321.3	321.6	321.7	322.0
127.5°	350.2	350.0	349.8	349.6	349.8	350.0	350.2	350.4	350.5	350.8	351.0
130°	370.1	369.6	369.2	368.7	369.2	369.6	370.1	370.5	370.9	371.1	371.3
132.5°	389.6	389.4	389.2	389.1	389.2	389.4	389.6	389.8	390.0	390.2	390.5
135°	418.0	417.7	417.4	417.1	417.4	417.7	418.0	418.4	418.7	418.9	419.1
137.5°	446.2	446.3	446.4	446.5	446.4	446.3	446.2	446.1	446.3	446.6	446.8
140°	464.7	464.6	464.5	464.3	464.5	464.6	464.7	464.8	464.9	465.0	465.1
142.5°	482.3	482.3	482.2	482.2	482.2	482.3	482.3	482.3	482.3	482.4	482.4
145°	507.6	507.2	506.8	506.6	506.8	507.2	507.6	507.9	508.1	508.3	508.4
147.5°	531.5	531.4	531.3	531.2	531.3	531.4	531.5	531.6	531.7	531.8	531.9
150°	546.5	546.4	546.4	546.3	546.4	546.4	546.5	546.7	546.7	546.7	546.7
152.5°	561.0	560.6	560.4	560.1	560.4	560.6	561.0	561.2	561.2	561.0	560.7
155°	580.6	580.1	579.7	579.3	579.7	580.1	580.6	581.1	581.1	580.6	580.1
157.5°	597.6	597.3	596.8	596.5	596.8	597.3	597.6	598.0	598.1	597.7	597.4
160°	608.0	607.3	606.8	606.3	606.8	607.3	608.0	608.5	608.6	608.2	608.0
162.5°	618.1	617.5	617.0	616.4	617.0	617.5	618.1	618.7	618.7	618.0	617.4
165°	631.0	630.5	630.1	629.6	630.1	630.5	631.0	631.4	631.3	630.6	630.0
167.5°	641.2	640.5	639.8	639.1	639.8	640.5	641.2	641.9	641.9	641.2	640.5
170°	646.8	646.0	645.2	644.4	645.2	646.0	646.8	647.6	647.6	646.9	646.2
172.5°	651.2	650.4	649.6	648.9	649.6	650.4	651.2	652.0	652.0	651.3	650.5
175°	655.9	655.1	654.3	653.5	654.3	655.1	655.9	656.7	656.7	655.9	655.1
177.5°	658.2	657.5	656.7	655.9	656.7	657.5	658.2	658.9	658.9	658.3	657.6
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1463.5	1466.9	1474.8	1483.6	1491.0	1497.4	1502.4	1509.3	1515.7	1524.6	1532.9
5°	1374.7	1383.3	1395.6	1410.4	1428.9	1441.3	1456.7	1470.3	1490.0	1509.7	1528.7
7.5°	1296.7	1306.3	1324.4	1344.8	1366.8	1387.0	1405.2	1429.1	1455.3	1484.0	1516.1
10°	1246.4	1257.0	1278.5	1301.9	1327.8	1347.6	1372.2	1400.5	1430.1	1465.3	1504.8
12.5°	1201.0	1211.0	1237.1	1261.0	1287.9	1309.6	1338.2	1367.0	1406.5	1444.6	1489.4
15°	1112.7	1139.2	1168.8	1197.1	1229.2	1255.7	1290.2	1319.8	1357.5	1411.0	1462.2
17.5°	1014.5	1042.8	1079.5	1123.3	1166.3	1199.1	1234.1	1270.9	1315.6	1370.4	1429.4
20°	957.3	980.2	1020.8	1069.5	1119.5	1165.1	1197.1	1237.8	1284.1	1343.3	1404.3
22.5°	914.4	933.8	965.6	1014.3	1068.2	1121.1	1162.1	1202.3	1253.5	1312.7	1379.1
25°	850.1	871.0	898.8	932.1	993.7	1049.8	1103.4	1149.7	1203.9	1263.1	1337.0
27.5°	796.6	814.8	840.2	874.9	916.3	978.2	1043.1	1095.9	1151.6	1215.0	1289.1
30°	765.0	779.8	800.8	835.9	875.4	930.9	996.8	1058.5	1114.5	1180.4	1257.6
32.5°	732.0	747.8	768.2	795.9	838.4	884.9	950.9	1018.5	1078.1	1145.5	1221.0
35°	688.0	700.3	718.8	747.2	785.3	826.0	884.6	954.2	1017.2	1089.2	1161.4
37.5°	643.5	658.0	672.5	697.9	729.2	772.9	820.8	892.0	961.6	1027.5	1097.9
40°	618.3	627.0	642.9	663.3	696.6	735.4	780.4	850.1	919.7	985.1	1056.0
42.5°	590.2	599.8	613.3	633.7	663.5	701.4	745.4	805.7	878.3	941.6	1006.1
45°	551.1	556.6	570.2	587.5	612.2	650.3	691.1	744.7	813.1	873.5	930.2
47.5°	511.7	516.5	525.0	540.7	568.4	599.1	637.1	685.3	745.3	805.7	853.6
50°	484.6	488.8	496.9	511.7	536.3	566.5	604.1	647.3	700.9	758.8	798.9
52.5°	457.4	459.8	467.3	484.0	504.7	534.5	568.1	607.8	658.0	706.1	746.6
55°	414.3	419.8	424.7	437.0	456.8	485.2	515.3	552.9	591.8	632.5	667.0
57.5°	369.3	375.3	382.5	393.3	408.9	435.3	462.4	492.9	526.1	559.8	588.8
60°	339.7	345.2	351.3	363.7	377.9	398.9	428.5	455.0	480.2	511.0	540.0
62.5°	310.6	316.1	323.2	333.1	346.8	366.8	391.5	414.5	440.8	467.6	489.2
65°	267.5	271.9	277.4	286.7	299.6	317.4	337.8	355.7	379.2	398.9	418.6
67.5°	220.3	228.5	235.9	243.3	254.3	271.0	285.7	302.8	318.7	333.4	351.3
70°	189.2	198.5	205.3	213.3	223.7	237.9	252.1	263.9	276.8	291.0	307.0
72.5°	163.1	170.4	175.7	184.2	193.7	206.9	220.1	229.8	240.3	250.0	265.6
75°	128.9	131.9	135.6	142.4	151.1	160.9	171.4	180.0	186.2	194.8	205.9
77.5°	92.6	98.5	100.9	105.8	111.9	118.2	125.0	132.3	138.2	141.2	149.8
80°	70.9	73.4	75.8	82.6	86.3	92.5	97.4	104.2	106.6	109.8	117.7
82.5°	55.1	56.6	58.1	59.9	62.2	68.3	73.2	77.6	80.0	81.1	87.2
85°	32.0	32.6	33.3	33.9	34.5	34.5	37.0	40.0	44.4	44.4	46.2
87.5°	13.2	13.6	13.4	12.8	13.6	13.4	13.6	13.4	14.6	15.9	17.0
90°	11.9	11.1	10.3	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5
92.5°	20.5	20.2	19.5	18.9	18.3	17.6	16.6	15.2	13.7	12.3	10.9
95°	39.0	38.6	37.9	37.1	36.3	35.5	34.6	33.5	32.5	31.6	30.5
97.5°	61.5	61.2	60.2	59.3	58.3	57.4	56.5	55.7	54.9	54.1	53.3
100°	78.0	77.8	76.8	75.8	74.7	73.7	73.0	72.6	72.1	71.7	71.2
102.5°	95.2	94.9	94.0	93.0	92.1	91.2	90.6	90.4	90.2	90.1	89.9
105°	121.4	121.0	120.6	120.1	119.7	119.2	119.0	118.9	118.7	118.6	118.5
107.5°	149.7	149.5	149.4	149.3	149.2	149.2	149.1	148.9	148.7	148.6	148.5
110°	169.2	169.3	169.5	169.6	169.7	169.8	169.8	169.5	169.3	169.1	168.9



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	189.2	189.3	189.5	189.7	189.9	190.1	190.2	190.1	190.1	190.0	190.0
115°	220.6	220.7	221.0	221.1	221.4	221.6	221.8	221.8	221.8	221.8	221.8
117.5°	250.9	251.4	251.5	251.6	251.8	252.0	252.0	251.9	251.8	251.7	251.6
120°	271.5	272.1	272.4	272.8	273.1	273.5	273.4	273.0	272.5	272.1	271.6
122.5°	292.0	292.5	292.6	292.7	292.9	293.1	293.0	292.8	292.7	292.5	292.3
125°	322.2	322.4	322.5	322.7	322.8	322.9	323.0	323.0	323.0	323.0	323.0
127.5°	351.2	351.4	351.6	351.8	352.0	352.1	352.0	351.8	351.4	351.1	350.7
130°	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3	371.0	370.6	370.2
132.5°	390.7	390.9	391.0	391.1	391.2	391.3	391.2	390.9	390.7	390.5	390.2
135°	419.4	419.5	419.5	419.5	419.5	419.5	419.3	418.6	417.9	417.2	416.5
137.5°	447.2	447.5	447.3	447.1	446.9	446.7	446.5	446.1	445.9	445.5	445.2
140°	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.0	464.8	464.6	464.3
142.5°	482.4	482.4	482.5	482.6	482.7	482.8	482.8	482.5	482.3	482.1	481.8
145°	508.5	508.5	508.5	508.4	508.3	508.1	507.8	507.4	506.9	506.5	506.0
147.5°	532.0	532.1	532.2	532.3	532.4	532.4	532.3	531.6	531.1	530.6	530.0
150°	546.7	546.7	546.7	546.7	546.7	546.7	546.5	546.1	545.6	545.2	544.7
152.5°	560.4	560.2	560.1	560.0	559.9	559.8	559.6	559.4	559.1	558.8	558.6
155°	579.7	579.3	579.4	579.5	579.6	579.7	579.8	579.8	579.8	579.8	579.8
157.5°	597.0	596.6	596.7	596.7	596.7	596.7	596.9	597.1	597.3	597.4	597.7
160°	607.6	607.3	607.3	607.5	607.6	607.7	607.8	608.0	608.1	608.1	608.2
162.5°	616.8	616.2	616.4	616.4	616.5	616.6	616.9	617.2	617.4	617.8	618.0
165°	629.3	628.7	628.8	629.1	629.3	629.5	629.8	630.2	630.4	630.8	631.2
167.5°	639.9	639.2	639.2	639.2	639.1	639.1	639.4	639.8	640.2	640.8	641.2
170°	645.6	644.9	644.8	644.6	644.5	644.4	644.6	645.2	645.8	646.4	646.9
172.5°	649.7	649.0	648.9	648.9	648.9	648.9	649.1	649.6	650.1	650.5	650.9
175°	654.3	653.5	653.6	653.8	653.9	654.0	654.3	654.9	655.5	656.0	656.6
177.5°	657.0	656.4	656.4	656.4	656.4	656.4	656.6	657.1	657.5	658.0	658.4
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1539.4	1543.8	1548.7	1558.1	1566.0	1569.5	1576.4	1581.3	1579.8	1586.7	1598.6
5°	1545.4	1562.1	1581.2	1600.9	1623.1	1641.6	1656.4	1671.2	1682.9	1697.1	1718.1
7.5°	1544.4	1574.0	1606.2	1641.6	1677.9	1709.4	1738.5	1768.1	1794.3	1823.1	1860.6
10°	1540.5	1579.9	1620.0	1666.3	1712.4	1756.2	1795.7	1832.6	1867.9	1905.4	1952.9
12.5°	1536.1	1581.4	1629.9	1685.5	1743.0	1795.7	1842.1	1895.3	1939.3	1987.8	2042.6
15°	1516.4	1577.4	1643.4	1715.6	1784.6	1855.5	1919.0	1984.3	2045.3	2103.3	2172.4
17.5°	1494.0	1564.4	1642.2	1727.4	1810.4	1896.6	1971.8	2054.2	2116.7	2194.4	2258.5
20°	1475.8	1551.6	1634.8	1730.4	1824.7	1920.2	2003.4	2087.3	2157.6	2235.9	2317.2
22.5°	1453.6	1536.8	1626.9	1725.9	1824.7	1929.1	2021.2	2104.5	2191.6	2279.7	2363.6
25°	1417.8	1504.1	1599.6	1708.2	1821.6	1928.2	2026.9	2130.4	2224.1	2319.7	2394.9
27.5°	1373.9	1464.5	1565.3	1677.2	1793.6	1902.8	2019.0	2129.3	2223.7	2315.6	2381.2
30°	1338.9	1434.5	1531.2	1644.7	1765.5	1882.6	2007.2	2117.5	2216.7	2299.4	2336.3
32.5°	1302.9	1393.6	1493.3	1608.2	1732.0	1858.0	1981.5	2094.3	2186.1	2235.7	2236.7
35°	1240.3	1325.3	1428.9	1541.8	1668.7	1805.5	1930.7	2041.7	2097.7	2102.0	2041.7
37.5°	1172.0	1250.0	1347.8	1460.7	1599.8	1735.9	1863.8	1937.7	1956.5	1893.7	1782.0
40°	1123.2	1195.2	1289.6	1405.5	1543.6	1684.1	1800.6	1854.8	1835.1	1733.4	1608.9
42.5°	1071.8	1139.1	1229.9	1344.3	1482.9	1625.0	1724.2	1753.3	1701.0	1583.5	1437.8
45°	988.2	1049.8	1139.8	1255.1	1388.2	1521.3	1596.6	1581.8	1494.9	1355.6	1192.2
47.5°	901.0	960.6	1041.5	1148.2	1284.5	1399.5	1450.4	1405.8	1282.1	1128.8	996.0
50°	843.3	904.3	978.9	1080.7	1205.1	1316.1	1348.8	1280.9	1143.5	996.1	874.1
52.5°	786.6	838.7	911.9	1010.1	1129.2	1222.9	1240.3	1162.1	1020.2	888.1	779.9
55°	700.3	747.8	809.4	901.9	1004.8	1084.3	1075.0	974.6	845.8	733.0	647.9
57.5°	616.8	652.6	709.5	796.2	886.5	940.0	906.2	820.5	700.4	608.1	536.3
60°	561.6	594.9	647.9	723.7	803.3	833.4	805.0	712.0	617.1	532.6	472.2
62.5°	509.3	538.7	584.2	654.7	718.9	736.7	706.4	625.2	539.7	467.5	417.5
65°	433.4	460.5	499.4	549.3	593.6	602.3	582.6	499.4	434.6	374.2	339.7
67.5°	364.4	382.2	412.5	455.7	479.2	484.3	446.2	393.9	336.8	299.7	273.7
70°	318.1	330.4	358.7	382.2	401.3	401.9	366.8	324.9	281.1	250.9	231.8
72.5°	273.2	285.1	306.5	322.5	337.2	332.4	300.2	267.2	231.8	209.0	194.8
75°	210.8	221.3	232.4	239.8	239.8	233.6	210.2	185.6	165.2	151.7	147.3
77.5°	153.3	161.8	165.6	164.4	162.3	152.7	137.9	121.7	114.4	108.0	104.8
80°	120.2	123.9	125.1	122.1	118.3	107.3	97.4	90.6	83.8	81.4	80.2
82.5°	89.2	92.4	89.2	90.0	81.9	72.8	67.3	65.0	62.2	61.2	59.9
85°	47.4	46.8	45.7	42.5	37.0	35.8	35.1	34.5	33.3	33.9	32.6
87.5°	16.9	15.6	13.9	13.6	13.8	13.0	13.7	13.9	14.1	13.7	14.8
90°	2.8	4.0	5.3	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6
92.5°	12.3	13.7	15.2	16.6	17.6	18.3	18.9	19.5	20.2	20.5	21.0
95°	31.6	32.5	33.5	34.6	35.5	36.3	37.1	37.9	38.6	39.0	39.3
97.5°	54.1	54.9	55.7	56.5	57.4	58.3	59.3	60.2	61.2	61.5	62.0
100°	71.7	72.1	72.6	73.0	73.7	74.7	75.8	76.8	77.8	78.0	78.3
102.5°	90.1	90.2	90.4	90.6	91.2	92.1	93.0	94.0	94.9	95.2	95.5
105°	118.6	118.7	118.9	119.0	119.2	119.7	120.1	120.6	121.0	121.4	121.7
107.5°	148.6	148.7	148.9	149.1	149.2	149.2	149.3	149.4	149.5	149.7	150.1
110°	169.1	169.3	169.5	169.8	169.8	169.7	169.6	169.5	169.3	169.2	168.9



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	190.0	190.1	190.1	190.2	190.1	189.9	189.7	189.5	189.3	189.2	189.2
115°	221.8	221.8	221.8	221.8	221.6	221.4	221.1	221.0	220.7	220.6	220.5
117.5°	251.7	251.8	251.9	252.0	252.0	251.8	251.6	251.5	251.4	250.9	250.6
120°	272.1	272.5	273.0	273.4	273.5	273.1	272.8	272.4	272.1	271.5	271.0
122.5°	292.5	292.7	292.8	293.0	293.1	292.9	292.7	292.6	292.5	292.0	291.7
125°	323.0	323.0	323.0	323.0	322.9	322.8	322.7	322.5	322.4	322.2	322.0
127.5°	351.1	351.4	351.8	352.0	352.1	352.0	351.8	351.6	351.4	351.2	351.0
130°	370.6	371.0	371.3	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3
132.5°	390.5	390.7	390.9	391.2	391.3	391.2	391.1	391.0	390.9	390.7	390.5
135°	417.2	417.9	418.6	419.3	419.5	419.5	419.5	419.5	419.5	419.4	419.1
137.5°	445.5	445.9	446.1	446.5	446.7	446.9	447.1	447.3	447.5	447.2	446.8
140°	464.6	464.8	465.0	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.1
142.5°	482.1	482.3	482.5	482.8	482.8	482.7	482.6	482.5	482.4	482.4	482.4
145°	506.5	506.9	507.4	507.8	508.1	508.3	508.4	508.5	508.5	508.5	508.4
147.5°	530.6	531.1	531.6	532.3	532.4	532.4	532.3	532.2	532.1	532.0	531.9
150°	545.2	545.6	546.1	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	558.8	559.1	559.4	559.6	559.8	559.9	560.0	560.1	560.2	560.4	560.7
155°	579.8	579.8	579.8	579.8	579.7	579.6	579.5	579.4	579.3	579.7	580.1
157.5°	597.4	597.3	597.1	596.9	596.7	596.7	596.7	596.7	596.6	597.0	597.4
160°	608.1	608.1	608.0	607.8	607.7	607.6	607.5	607.3	607.3	607.6	608.0
162.5°	617.8	617.4	617.2	616.9	616.6	616.5	616.4	616.4	616.2	616.8	617.4
165°	630.8	630.4	630.2	629.8	629.5	629.3	629.1	628.8	628.7	629.3	630.0
167.5°	640.8	640.2	639.8	639.4	639.1	639.1	639.2	639.2	639.2	639.9	640.5
170°	646.4	645.8	645.2	644.6	644.4	644.5	644.6	644.8	644.9	645.6	646.2
172.5°	650.5	650.1	649.6	649.1	648.9	648.9	648.9	648.9	649.0	649.7	650.5
175°	656.0	655.5	654.9	654.3	654.0	653.9	653.8	653.6	653.5	654.3	655.1
177.5°	658.0	657.5	657.1	656.6	656.4	656.4	656.4	656.4	656.4	657.0	657.6
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1605.0	1607.0	1608.5	1613.4	1613.8	1618.3	1613.8
5°	1737.8	1746.4	1760.0	1773.5	1774.8	1783.3	1768.0
7.5°	1886.7	1906.7	1919.1	1941.1	1949.7	1955.1	1946.2
10°	1989.2	2007.8	2040.4	2056.5	2072.5	2074.9	2067.5
12.5°	2088.4	2117.7	2143.5	2173.8	2173.1	2194.8	2186.9
15°	2220.4	2250.7	2286.3	2320.3	2332.6	2332.6	2342.5
17.5°	2314.6	2370.0	2407.0	2433.6	2462.7	2467.7	2464.3
20°	2378.3	2438.0	2477.5	2512.0	2531.7	2537.3	2537.3
22.5°	2425.5	2476.5	2515.0	2546.0	2562.3	2568.8	2566.9
25°	2458.4	2502.1	2525.6	2534.8	2539.1	2537.9	2526.2
27.5°	2413.5	2411.5	2396.7	2368.4	2347.1	2334.1	2319.3
30°	2327.7	2295.6	2258.6	2218.0	2165.6	2125.5	2113.2
32.5°	2199.9	2128.0	2065.3	1997.5	1941.2	1901.1	1884.4
35°	1952.9	1838.9	1745.8	1664.4	1605.3	1568.3	1555.9
37.5°	1659.7	1549.3	1434.1	1355.2	1306.1	1268.7	1254.8
40°	1473.3	1353.1	1252.6	1178.7	1128.1	1091.7	1091.1
42.5°	1303.1	1188.4	1093.9	1040.5	986.1	962.0	961.9
45°	1067.0	975.2	895.1	853.2	820.5	800.8	795.2
47.5°	883.5	807.5	754.1	720.8	694.1	681.5	673.4
50°	780.4	713.8	671.3	642.3	627.5	611.5	610.3
52.5°	694.6	640.9	607.7	584.2	565.4	555.8	556.1
55°	583.8	541.3	517.8	499.9	485.2	477.8	474.7
57.5°	491.8	459.9	442.8	426.4	420.2	414.4	412.8
60°	434.6	413.0	397.0	384.1	374.8	372.9	372.3
62.5°	387.3	364.7	353.6	343.6	336.8	333.9	332.9
65°	319.3	302.6	292.8	284.8	282.3	278.0	277.4
67.5°	257.4	247.4	240.9	235.3	232.0	231.8	231.8
70°	219.5	213.9	208.4	205.3	203.4	202.2	202.2
72.5°	186.9	182.8	178.3	176.6	176.3	175.0	174.6
75°	142.4	138.1	138.7	135.6	133.1	130.1	128.2
77.5°	100.9	97.9	97.3	96.9	94.8	94.4	95.4
80°	78.3	75.2	74.5	75.2	74.5	72.8	72.8
82.5°	59.6	57.0	56.4	56.0	55.4	56.0	55.0
85°	32.0	30.9	30.9	30.9	32.0	31.5	30.9
87.5°	14.0	13.6	14.2	13.7	13.8	13.4	13.9
90°	13.2	13.9	14.4	14.6	14.8	15.1	15.2
92.5°	21.4	21.8	22.0	22.2	22.3	22.5	22.6
95°	39.7	40.0	40.2	40.2	40.2	40.2	40.2
97.5°	62.3	62.8	63.0	63.0	63.0	63.0	63.0
100°	78.5	78.7	78.8	78.8	78.8	78.8	78.8
102.5°	95.9	96.1	96.4	96.5	96.6	96.7	96.8
105°	122.1	122.4	122.7	123.1	123.4	123.8	124.1
107.5°	150.3	150.7	150.9	150.8	150.8	150.8	150.8
110°	168.7	168.4	168.5	168.9	169.2	169.5	169.9



TEST NUMBER: P332962-940

CATALOG NUMBER: SA4XXRDIP-C1020D590U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	189.1	189.1	189.1	189.2	189.2	189.3	189.4
115°	220.4	220.3	220.2	220.1	219.9	219.8	219.7
117.5°	250.2	249.8	249.5	249.2	249.1	248.8	248.6
120°	270.4	269.8	269.7	269.9	270.1	270.4	270.5
122.5°	291.3	290.9	290.5	290.1	289.7	289.3	288.9
125°	321.7	321.6	321.3	321.1	320.8	320.7	320.4
127.5°	350.8	350.5	350.4	350.2	350.0	349.8	349.6
130°	371.1	370.9	370.5	370.1	369.6	369.2	368.7
132.5°	390.2	390.0	389.8	389.6	389.4	389.2	389.1
135°	418.9	418.7	418.4	418.0	417.7	417.4	417.1
137.5°	446.6	446.3	446.1	446.2	446.3	446.4	446.5
140°	465.0	464.9	464.8	464.7	464.6	464.5	464.3
142.5°	482.4	482.3	482.3	482.3	482.3	482.2	482.2
145°	508.3	508.1	507.9	507.6	507.2	506.8	506.6
147.5°	531.8	531.7	531.6	531.5	531.4	531.3	531.2
150°	546.7	546.7	546.7	546.5	546.4	546.4	546.3
152.5°	561.0	561.2	561.2	561.0	560.6	560.4	560.1
155°	580.6	581.1	581.1	580.6	580.1	579.7	579.3
157.5°	597.7	598.1	598.0	597.6	597.3	596.8	596.5
160°	608.2	608.6	608.5	608.0	607.3	606.8	606.3
162.5°	618.0	618.7	618.7	618.1	617.5	617.0	616.4
165°	630.6	631.3	631.4	631.0	630.5	630.1	629.6
167.5°	641.2	641.9	641.9	641.2	640.5	639.8	639.1
170°	646.9	647.6	647.6	646.8	646.0	645.2	644.4
172.5°	651.3	652.0	652.0	651.2	650.4	649.6	648.9
175°	655.9	656.7	656.7	655.9	655.1	654.3	653.5
177.5°	658.3	658.9	658.9	658.2	657.5	656.7	655.9
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6

(END OF REPORT)