

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

Luminaire Tested: **SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332962  
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-C1020D590U835-4F0-1E-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: 6385.4 lumens  
Efficiency: N/A  
Efficacy: 130.8 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

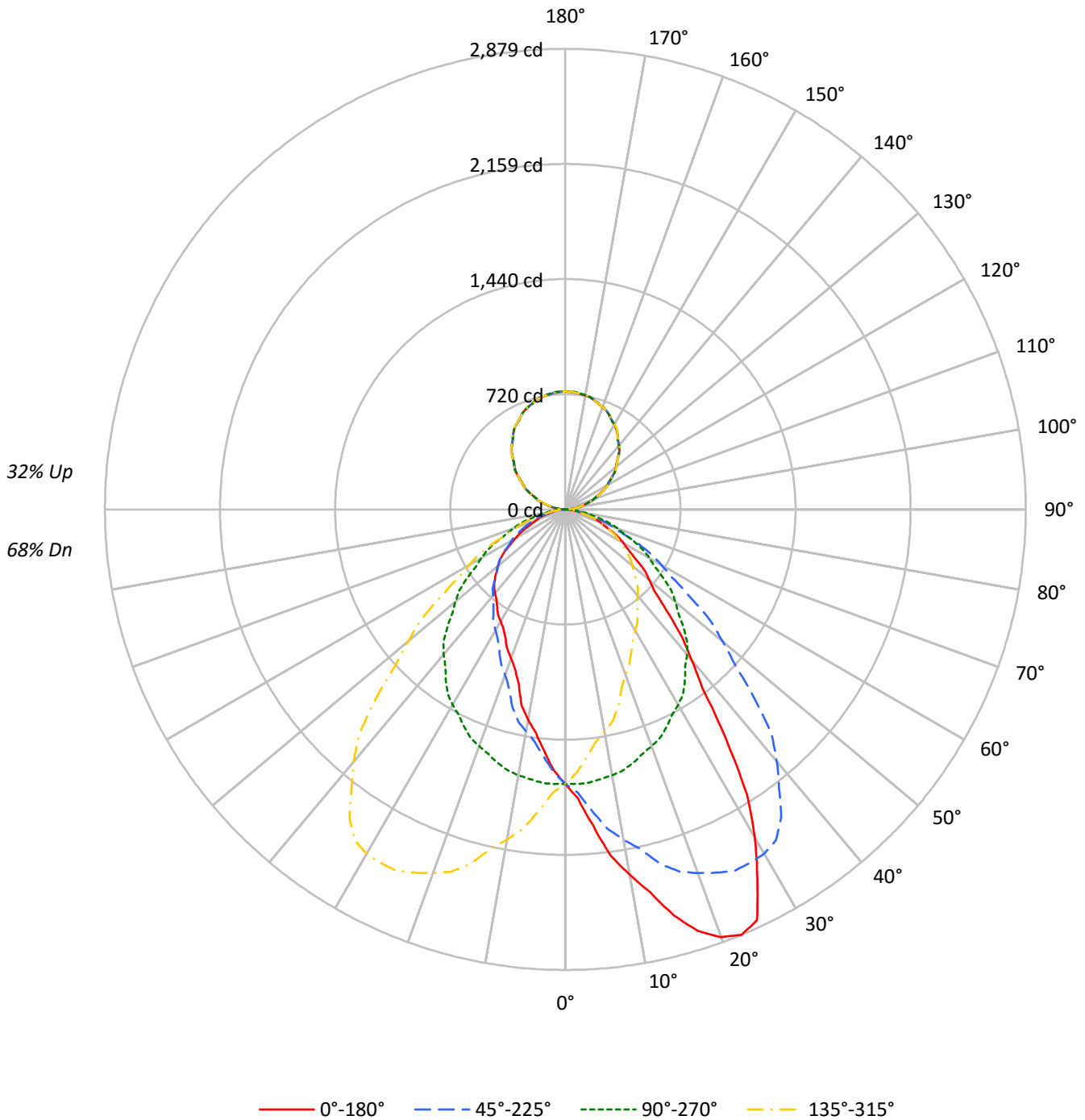
Input Watts (W): 48.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	13852	13852	13852	13852
5°	16067	13893	12280	13893
10°	19007	13833	10960	13833
15°	21956	13705	9417	13705
20°	24445	13529	8516	13529
25°	25235	13356	7906	13356
30°	22091	13147	7539	13147
35°	17196	12835	7318	12835
40°	12895	12480	7198	12480
45°	10182	11910	7134	11910
50°	8596	11252	6929	11252
55°	7492	10528	6557	10528
60°	6741	9778	5804	9778
65°	5943	8967	4991	8967
70°	5351	8127	4504	8127
75°	4485	7202	3840	7202
80°	3794	6137	3598	6137
85°	3205	4798	3205	4798



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.3	2.6
10°-20°	501.5	7.9
20°-30°	784.4	12.3
30°-40°	872.0	13.7
40°-50°	773.6	12.1
50°-60°	602.8	9.4
60°-70°	394.7	6.2
70°-80°	194.1	3.0
80°-90°	50.1	0.8
90°-100°	48.6	0.8
100°-110°	144.1	2.3
110°-120°	244.6	3.8
120°-130°	322.5	5.1
130°-140°	362.2	5.7
140°-150°	355.9	5.6
150°-160°	299.3	4.7
160°-170°	199.1	3.1
170°-180°	69.7	1.1
0°-30°	1452.1	22.7
0°-40°	2324.1	36.4
0°-60°	3700.5	58.0
0°-90°	4339.4	68.0
90°-120°	437.3	6.8
90°-150°	1477.8	23.1
90°-180°	2046.0	32.0
0°-180°	6385.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1716	1716	1716	1716	1716	
5°	1983	1714	1515	1714	1983	201
15°	2627	1640	1127	1640	2627	747
25°	2833	1499	888	1499	2833	1257
35°	1745	1302	742	1302	1745	1094
45°	892	1043	625	1043	892	706
55°	532	748	466	748	532	484
65°	311	469	261	469	311	313
75°	144	231	123	231	144	158
85°	35	52	35	52	35	39
90°	17	2	17	2	17	10
95°	45	34	45	34	45	47
105°	139	133	139	133	139	147
115°	246	249	246	249	246	244
125°	359	362	359	362	359	321
135°	468	467	468	467	468	361
145°	568	568	568	568	568	355
155°	650	650	650	650	650	299
165°	706	708	706	708	706	199
175°	733	736	733	736	733	70
180°	738	738	738	738	738	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1809.8	1814.8	1809.8	1809.3	1803.8	1802.1	1799.9	1792.7	1779.4	1771.7	1773.3
5°	1982.7	1999.9	1990.3	1988.9	1973.7	1958.5	1948.8	1926.7	1903.2	1887.3	1874.1
7.5°	2182.6	2192.5	2186.5	2176.8	2152.2	2138.2	2115.8	2086.6	2044.5	2012.2	1982.8
10°	2318.6	2326.9	2324.2	2306.2	2288.2	2251.6	2230.8	2190.1	2136.8	2094.7	2055.2
12.5°	2452.5	2461.3	2437.0	2437.8	2403.8	2374.9	2342.0	2290.7	2229.2	2174.8	2125.5
15°	2627.0	2615.9	2615.9	2602.1	2564.0	2524.0	2490.1	2436.2	2358.7	2293.7	2225.3
17.5°	2763.6	2767.4	2761.8	2729.1	2699.3	2657.8	2595.7	2532.8	2460.9	2373.7	2303.7
20°	2845.4	2845.4	2839.2	2817.1	2778.4	2734.1	2667.1	2598.6	2507.4	2419.6	2340.8
22.5°	2878.6	2880.8	2873.5	2855.2	2820.4	2777.2	2720.1	2650.6	2556.6	2457.7	2360.1
25°	2833.0	2846.1	2847.5	2842.6	2832.3	2806.0	2756.9	2685.7	2601.4	2494.2	2389.1
27.5°	2601.0	2617.6	2632.1	2656.0	2687.8	2704.4	2706.6	2670.4	2596.8	2493.7	2387.9
30°	2369.8	2383.6	2428.6	2487.3	2532.9	2574.4	2610.4	2620.0	2578.6	2485.9	2374.6
32.5°	2113.2	2132.0	2176.9	2240.1	2316.1	2386.4	2467.1	2508.3	2507.2	2451.6	2348.6
35°	1744.9	1758.7	1800.2	1866.5	1957.8	2062.2	2190.1	2289.6	2357.3	2352.5	2289.6
37.5°	1407.2	1422.8	1464.7	1519.8	1608.3	1737.5	1861.3	1998.4	2123.7	2194.1	2173.0
40°	1223.6	1224.3	1265.1	1321.8	1404.7	1517.4	1652.2	1804.3	1943.9	2058.0	2080.1
42.5°	1078.7	1078.8	1105.8	1166.9	1226.7	1332.7	1461.4	1612.4	1775.8	1907.6	1966.2
45°	891.8	898.0	920.1	956.8	1003.8	1093.6	1196.6	1337.0	1520.2	1676.4	1773.9
47.5°	755.2	764.3	778.4	808.3	845.7	905.6	990.8	1116.9	1265.9	1437.8	1576.5
50°	684.4	685.8	703.7	720.3	752.8	800.5	875.2	980.3	1117.1	1282.4	1436.5
52.5°	623.6	623.3	634.1	655.1	681.5	718.7	779.0	874.6	996.0	1144.1	1303.2
55°	532.3	535.8	544.1	560.6	580.7	607.0	654.7	726.6	822.0	948.5	1093.0
57.5°	462.9	464.7	471.2	478.2	496.6	515.7	551.5	601.4	681.9	785.5	920.1
60°	417.5	418.2	420.3	430.7	445.2	463.2	487.4	529.5	597.3	692.0	798.5
62.5°	373.3	374.5	377.7	385.3	396.5	409.0	434.3	468.2	524.3	605.2	701.1
65°	311.1	311.8	316.6	319.4	328.4	339.4	358.1	380.9	419.6	487.4	560.0
67.5°	259.9	259.9	260.2	263.9	270.2	277.5	288.7	306.9	336.1	377.7	441.7
70°	226.7	226.7	228.1	230.2	233.7	239.9	246.1	259.9	281.4	315.2	364.3
72.5°	195.8	196.3	197.7	198.1	199.9	205.0	209.6	218.5	234.4	259.9	299.6
75°	143.8	145.9	149.3	152.1	155.5	154.9	159.7	165.2	170.1	185.3	208.1
77.5°	107.0	105.9	106.3	108.7	109.1	109.8	113.2	117.5	121.1	128.3	136.5
80°	81.6	81.6	83.6	84.3	83.6	84.3	87.8	89.9	91.3	94.0	101.6
82.5°	61.7	62.8	62.1	62.8	63.2	63.9	66.8	67.2	68.6	69.7	72.9
85°	34.6	35.3	35.9	34.6	34.6	34.6	35.9	36.6	38.0	37.3	38.7
87.5°	15.6	15.0	15.5	15.4	15.9	15.3	15.7	16.6	15.4	15.8	15.6
90°	17.1	16.9	16.6	16.4	16.1	15.6	14.8	14.1	13.3	12.5	11.5
92.5°	25.3	25.2	25.0	24.9	24.7	24.4	24.0	23.5	23.0	22.6	21.9
95°	45.1	45.1	45.1	45.1	45.1	44.9	44.5	44.1	43.7	43.3	42.5
97.5°	70.6	70.6	70.6	70.6	70.6	70.4	69.9	69.5	69.0	68.6	67.5
100°	88.4	88.4	88.4	88.4	88.4	88.3	88.0	87.8	87.5	87.3	86.1
102.5°	108.5	108.4	108.3	108.2	108.1	107.8	107.5	107.1	106.8	106.4	105.4
105°	139.2	138.8	138.4	138.0	137.6	137.3	136.9	136.5	136.1	135.7	135.2
107.5°	169.1	169.1	169.1	169.1	169.2	169.0	168.6	168.3	167.9	167.6	167.5
110°	190.5	190.1	189.7	189.4	189.0	188.9	189.2	189.4	189.7	189.9	190.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	212.4	212.3	212.2	212.2	212.1	212.1	212.1	212.2	212.2	212.3	212.5
115°	246.4	246.5	246.6	246.8	246.9	247.0	247.2	247.3	247.4	247.5	247.8
117.5°	278.8	279.0	279.3	279.5	279.8	280.1	280.6	281.0	281.4	281.9	282.0
120°	303.4	303.2	302.9	302.7	302.4	302.6	303.2	303.9	304.5	305.1	305.5
122.5°	324.0	324.4	324.9	325.3	325.8	326.2	326.7	327.1	327.5	328.0	328.1
125°	359.3	359.6	359.8	360.1	360.3	360.6	360.8	361.1	361.3	361.6	361.7
127.5°	392.1	392.3	392.5	392.7	392.9	393.1	393.4	393.6	393.9	394.1	394.3
130°	413.5	414.0	414.5	415.0	415.5	415.9	416.2	416.4	416.7	416.9	416.9
132.5°	436.3	436.5	436.7	436.9	437.1	437.4	437.6	437.9	438.1	438.4	438.5
135°	467.7	468.1	468.4	468.8	469.2	469.5	469.8	470.0	470.3	470.5	470.5
137.5°	500.7	500.6	500.5	500.4	500.3	500.5	500.8	501.1	501.5	501.8	501.6
140°	520.7	520.9	521.0	521.1	521.2	521.4	521.5	521.6	521.7	521.9	521.9
142.5°	540.8	540.8	540.9	540.9	540.9	540.9	541.0	541.0	541.0	541.0	541.1
145°	568.1	568.4	568.8	569.2	569.6	569.8	570.0	570.1	570.2	570.3	570.2
147.5°	595.7	595.8	595.9	596.1	596.2	596.3	596.4	596.5	596.6	596.7	596.8
150°	612.6	612.7	612.8	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	628.1	628.4	628.7	629.1	629.4	629.4	629.1	628.8	628.5	628.2	628.1
155°	649.6	650.1	650.6	651.1	651.7	651.7	651.1	650.6	650.1	649.6	649.8
157.5°	668.9	669.3	669.8	670.2	670.6	670.7	670.3	669.9	669.5	669.1	669.2
160°	679.9	680.5	681.1	681.8	682.4	682.5	682.1	681.8	681.4	681.0	681.1
162.5°	691.3	691.9	692.5	693.2	693.8	693.8	693.1	692.4	691.7	691.0	691.2
165°	706.1	706.6	707.1	707.6	708.1	708.0	707.2	706.5	705.7	705.0	705.2
167.5°	716.7	717.5	718.3	719.1	719.8	719.9	719.1	718.3	717.6	716.8	716.8
170°	722.6	723.5	724.4	725.3	726.2	726.2	725.5	724.7	724.0	723.2	723.1
172.5°	727.7	728.5	729.4	730.3	731.2	731.2	730.4	729.5	728.6	727.8	727.7
175°	732.9	733.8	734.7	735.6	736.4	736.4	735.6	734.7	733.8	732.9	733.0
177.5°	735.6	736.4	737.3	738.1	738.9	738.9	738.2	737.5	736.8	736.1	736.1
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1767.8	1760.1	1756.2	1747.3	1736.8	1731.3	1726.3	1719.1	1709.7	1699.8	1692.6
5°	1857.5	1840.9	1820.2	1795.3	1773.2	1751.8	1733.1	1714.4	1693.0	1670.9	1648.8
7.5°	1949.6	1917.0	1881.7	1840.9	1801.3	1765.2	1732.0	1700.2	1664.2	1632.0	1602.7
10°	2013.8	1969.5	1920.4	1868.6	1816.7	1771.8	1727.6	1687.5	1643.2	1603.8	1570.6
12.5°	2065.8	2013.8	1954.7	1890.2	1827.8	1773.5	1722.6	1670.3	1620.0	1577.3	1533.0
15°	2152.0	2080.8	2001.3	1923.9	1843.0	1769.0	1700.6	1639.8	1582.4	1522.3	1480.1
17.5°	2211.3	2126.9	2030.2	1937.2	1841.6	1754.4	1675.4	1603.0	1536.8	1475.4	1425.2
20°	2246.7	2153.4	2046.3	1940.5	1833.3	1740.0	1655.0	1574.8	1506.4	1440.0	1388.1
22.5°	2266.6	2163.4	2046.3	1935.5	1824.5	1723.4	1630.1	1546.6	1472.1	1405.7	1348.3
25°	2273.0	2162.4	2042.8	1915.6	1793.9	1686.8	1590.0	1499.4	1416.5	1350.1	1289.3
27.5°	2264.2	2133.9	2011.4	1880.9	1755.4	1642.4	1540.8	1445.7	1362.6	1291.4	1229.0
30°	2250.9	2111.2	1979.9	1844.4	1717.2	1608.7	1501.5	1410.3	1323.8	1249.9	1187.0
32.5°	2222.1	2083.6	1942.3	1803.5	1674.6	1562.8	1461.1	1369.3	1284.6	1209.0	1142.2
35°	2165.2	2024.8	1871.4	1729.0	1602.4	1486.3	1390.9	1302.4	1221.5	1140.7	1070.1
37.5°	2090.1	1946.7	1794.1	1638.1	1511.5	1401.8	1314.3	1231.2	1152.3	1078.4	1000.3
40°	2019.3	1888.6	1731.0	1576.2	1446.2	1340.4	1259.6	1184.2	1104.7	1031.4	953.3
42.5°	1933.6	1822.3	1663.0	1507.6	1379.3	1277.4	1202.0	1128.3	1056.0	985.0	903.5
45°	1790.5	1706.1	1556.8	1407.5	1278.2	1177.3	1108.2	1043.2	979.6	911.8	835.1
47.5°	1626.5	1569.4	1440.5	1287.6	1168.0	1077.2	1010.4	957.3	903.5	835.8	768.5
50°	1512.6	1475.9	1351.5	1211.9	1097.8	1014.1	945.7	895.9	851.0	786.0	725.9
52.5°	1390.9	1371.4	1266.3	1132.8	1022.6	940.6	882.1	837.3	791.8	737.9	681.6
55°	1205.6	1216.0	1126.8	1011.4	907.7	838.6	785.3	748.0	709.3	663.7	620.1
57.5°	1016.2	1054.1	994.2	892.9	795.7	731.8	691.7	660.3	627.8	590.0	552.8
60°	902.8	934.6	900.8	811.6	726.6	667.1	629.8	605.6	573.1	538.5	510.2
62.5°	792.2	826.2	806.2	734.2	655.2	604.1	571.2	548.6	524.4	494.3	464.8
65°	653.3	675.4	665.7	616.0	560.0	516.4	486.0	469.4	447.3	425.2	398.9
67.5°	500.4	543.1	537.4	511.0	462.6	428.6	408.7	394.0	373.9	357.4	339.6
70°	411.3	450.7	450.0	428.6	402.3	370.5	356.7	344.3	326.3	310.4	295.9
72.5°	336.7	372.8	378.1	361.7	343.7	319.7	306.4	297.8	280.4	269.5	257.7
75°	235.7	262.0	268.9	268.9	260.6	248.2	236.4	230.9	218.5	208.8	201.9
77.5°	154.6	171.2	182.0	184.4	185.7	181.5	171.9	168.0	158.4	155.0	148.4
80°	109.2	120.3	132.7	136.9	140.3	139.0	134.8	132.0	123.1	119.6	116.8
82.5°	75.5	81.6	91.8	100.9	100.0	103.6	100.0	97.8	91.0	89.7	87.0
85°	39.4	40.1	41.5	47.7	51.2	52.5	53.2	51.8	49.8	49.8	44.9
87.5°	15.4	14.6	15.5	15.3	15.6	17.5	18.9	19.1	17.8	16.4	15.0
90°	10.5	9.5	8.5	7.3	5.9	4.5	3.1	1.7	3.1	4.5	5.9
92.5°	21.2	20.5	19.7	18.6	17.0	15.4	13.8	12.2	13.8	15.4	17.0
95°	41.6	40.7	39.8	38.8	37.6	36.5	35.4	34.2	35.4	36.5	37.6
97.5°	66.5	65.4	64.4	63.4	62.5	61.6	60.7	59.8	60.7	61.6	62.5
100°	85.0	83.8	82.7	81.9	81.4	80.9	80.4	79.8	80.4	80.9	81.4
102.5°	104.3	103.3	102.3	101.6	101.4	101.2	101.0	100.8	101.0	101.2	101.4
105°	134.7	134.2	133.7	133.4	133.3	133.1	133.0	132.9	133.0	133.1	133.3
107.5°	167.4	167.3	167.3	167.2	167.0	166.8	166.7	166.5	166.7	166.8	167.0
110°	190.2	190.3	190.4	190.4	190.1	189.9	189.6	189.4	189.6	189.9	190.1





TEST NUMBER: P332962

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	212.7	213.0	213.2	213.3	213.2	213.2	213.1	213.1	213.1	213.2	213.2
115°	248.0	248.3	248.5	248.7	248.7	248.7	248.7	248.7	248.7	248.7	248.7
117.5°	282.2	282.4	282.6	282.6	282.5	282.4	282.3	282.2	282.3	282.4	282.5
120°	305.9	306.3	306.7	306.6	306.1	305.6	305.1	304.6	305.1	305.6	306.1
122.5°	328.3	328.5	328.7	328.6	328.4	328.2	328.0	327.8	328.0	328.2	328.4
125°	361.9	362.0	362.1	362.2	362.2	362.2	362.2	362.2	362.2	362.2	362.2
127.5°	394.5	394.7	394.9	394.8	394.5	394.1	393.7	393.3	393.7	394.1	394.5
130°	416.9	416.9	416.9	416.7	416.4	416.0	415.6	415.2	415.6	416.0	416.4
132.5°	438.6	438.7	438.8	438.7	438.4	438.1	437.9	437.6	437.9	438.1	438.4
135°	470.5	470.5	470.5	470.2	469.4	468.6	467.9	467.1	467.9	468.6	469.4
137.5°	501.4	501.2	501.0	500.7	500.3	500.0	499.6	499.3	499.6	500.0	500.3
140°	521.9	521.9	521.9	521.7	521.5	521.2	521.0	520.7	521.0	521.2	521.5
142.5°	541.2	541.3	541.4	541.4	541.1	540.9	540.6	540.3	540.6	540.9	541.1
145°	570.1	570.0	569.8	569.5	569.0	568.5	568.0	567.5	568.0	568.5	569.0
147.5°	596.9	597.0	597.1	596.9	596.2	595.6	595.0	594.4	595.0	595.6	596.2
150°	613.1	613.1	613.1	612.9	612.4	611.9	611.4	610.8	611.4	611.9	612.4
152.5°	628.0	627.9	627.8	627.6	627.3	627.0	626.7	626.4	626.7	627.0	627.3
155°	649.9	650.0	650.1	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
157.5°	669.2	669.2	669.2	669.4	669.6	669.8	670.0	670.3	670.0	669.8	669.6
160°	681.3	681.4	681.5	681.6	681.8	681.9	682.0	682.1	682.0	681.9	681.8
162.5°	691.3	691.4	691.5	691.8	692.1	692.4	692.8	693.1	692.8	692.4	692.1
165°	705.5	705.7	706.0	706.3	706.7	707.0	707.4	707.8	707.4	707.0	706.7
167.5°	716.8	716.7	716.7	717.0	717.5	718.0	718.6	719.1	718.6	718.0	717.5
170°	722.9	722.8	722.7	722.9	723.6	724.2	724.9	725.5	724.9	724.2	723.6
172.5°	727.7	727.7	727.7	727.9	728.5	729.0	729.5	730.0	729.5	729.0	728.5
175°	733.2	733.3	733.4	733.8	734.4	735.1	735.7	736.3	735.7	735.1	734.4
177.5°	736.1	736.1	736.1	736.3	736.9	737.4	737.9	738.4	737.9	737.4	736.9
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332962

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1684.8	1679.3	1672.1	1663.8	1653.9	1645.0	1641.2	1644.5	1646.1	1641.7	1641.2
5°	1633.6	1616.3	1602.4	1581.7	1565.1	1551.3	1541.6	1537.5	1538.8	1527.8	1525.0
7.5°	1575.9	1555.4	1532.8	1508.1	1485.2	1464.9	1454.2	1448.4	1436.7	1431.7	1423.3
10°	1538.8	1511.2	1489.1	1460.0	1433.8	1409.6	1397.8	1388.1	1376.4	1370.9	1359.1
12.5°	1500.7	1468.6	1444.3	1414.1	1387.3	1358.1	1346.9	1329.0	1310.6	1299.0	1283.9
15°	1446.9	1408.2	1378.5	1342.5	1310.7	1277.5	1247.8	1214.6	1202.2	1175.9	1160.7
17.5°	1384.0	1344.7	1307.9	1259.7	1210.6	1169.4	1137.7	1105.9	1086.9	1070.1	1062.4
20°	1342.5	1306.6	1255.4	1199.4	1144.8	1099.2	1073.6	1052.9	1032.1	1020.4	1012.1
22.5°	1303.2	1257.3	1197.9	1137.5	1082.9	1047.2	1025.5	1004.2	987.3	976.1	965.1
25°	1237.4	1177.3	1114.4	1045.3	1007.9	976.8	953.3	936.0	925.7	911.1	905.6
27.5°	1169.8	1097.0	1027.6	981.1	942.2	913.8	893.3	880.3	867.2	857.9	850.7
30°	1117.8	1043.9	981.7	937.4	898.0	874.5	857.9	842.7	832.3	824.7	819.2
32.5°	1066.4	992.4	940.2	892.6	861.5	838.6	820.9	809.5	801.4	791.5	788.2
35°	992.0	926.3	880.7	837.9	806.1	785.3	771.5	759.7	752.8	750.1	748.0
37.5°	920.5	866.8	817.7	782.6	754.2	737.9	721.6	715.8	711.1	706.1	708.3
40°	875.2	824.7	781.2	743.8	721.0	703.1	693.4	686.5	682.3	682.3	682.3
42.5°	835.9	786.6	744.1	710.7	687.8	672.6	661.9	656.0	654.7	654.1	657.4
45°	775.0	729.3	686.5	658.8	639.5	624.2	618.0	613.2	613.2	616.0	616.6
47.5°	714.5	671.8	637.4	606.4	588.7	579.2	573.8	571.3	571.6	574.3	577.5
50°	677.5	635.3	601.4	573.8	557.2	548.2	543.4	542.0	543.4	543.4	548.2
52.5°	637.1	599.4	566.0	542.8	524.0	515.6	512.9	511.0	511.8	514.1	516.1
55°	577.9	544.1	512.3	490.1	476.3	470.8	464.6	465.2	463.9	465.2	465.2
57.5°	518.6	488.2	458.6	441.1	428.9	420.9	414.1	416.0	414.0	413.7	412.6
60°	480.5	447.3	423.8	407.9	394.0	387.1	380.9	382.3	380.2	378.8	376.1
62.5°	439.0	411.3	388.9	373.6	362.5	354.5	348.3	346.9	342.1	337.4	331.3
65°	378.8	356.0	336.0	321.5	311.1	304.9	300.0	295.9	285.5	274.4	268.9
67.5°	320.4	303.9	285.2	272.9	264.5	256.3	247.1	240.0	230.3	224.3	220.8
70°	282.7	266.8	250.9	239.2	230.2	222.6	212.2	207.4	200.5	197.7	194.3
72.5°	246.8	232.0	217.2	206.6	197.0	191.1	182.9	178.1	175.0	173.9	170.5
75°	192.2	180.4	169.4	159.7	152.1	147.9	144.5	141.0	139.6	133.4	130.0
77.5°	140.2	132.5	125.5	118.6	113.2	110.5	103.8	99.8	97.5	94.6	93.9
80°	109.2	103.7	96.8	92.6	85.0	82.3	79.5	78.8	78.1	77.4	76.7
82.5°	82.1	76.6	69.7	67.2	65.1	63.5	61.8	61.1	60.4	60.8	60.7
85°	41.5	38.7	38.7	38.0	37.3	36.6	35.9	35.9	35.3	35.9	35.3
87.5°	15.3	15.0	15.2	14.3	15.0	15.2	14.8	15.0	15.7	14.7	14.8
90°	7.3	8.5	9.5	10.5	11.5	12.5	13.3	14.1	14.8	15.6	16.1
92.5°	18.6	19.7	20.5	21.2	21.9	22.6	23.0	23.5	24.0	24.4	24.7
95°	38.8	39.8	40.7	41.6	42.5	43.3	43.7	44.1	44.5	44.9	45.1
97.5°	63.4	64.4	65.4	66.5	67.5	68.6	69.0	69.5	69.9	70.4	70.6
100°	81.9	82.7	83.8	85.0	86.1	87.3	87.5	87.8	88.0	88.3	88.4
102.5°	101.6	102.3	103.3	104.3	105.4	106.4	106.8	107.1	107.5	107.8	108.1
105°	133.4	133.7	134.2	134.7	135.2	135.7	136.1	136.5	136.9	137.3	137.6
107.5°	167.2	167.3	167.3	167.4	167.5	167.6	167.9	168.3	168.6	169.0	169.2
110°	190.4	190.4	190.3	190.2	190.1	189.9	189.7	189.4	189.2	188.9	189.0



TEST NUMBER: P332962

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	213.3	213.2	213.0	212.7	212.5	212.3	212.2	212.2	212.1	212.1	212.1
115°	248.7	248.5	248.3	248.0	247.8	247.5	247.4	247.3	247.2	247.0	246.9
117.5°	282.6	282.6	282.4	282.2	282.0	281.9	281.4	281.0	280.6	280.1	279.8
120°	306.6	306.7	306.3	305.9	305.5	305.1	304.5	303.9	303.2	302.6	302.4
122.5°	328.6	328.7	328.5	328.3	328.1	328.0	327.5	327.1	326.7	326.2	325.8
125°	362.2	362.1	362.0	361.9	361.7	361.6	361.3	361.1	360.8	360.6	360.3
127.5°	394.8	394.9	394.7	394.5	394.3	394.1	393.9	393.6	393.4	393.1	392.9
130°	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4	416.2	415.9	415.5
132.5°	438.7	438.8	438.7	438.6	438.5	438.4	438.1	437.9	437.6	437.4	437.1
135°	470.2	470.5	470.5	470.5	470.5	470.5	470.3	470.0	469.8	469.5	469.2
137.5°	500.7	501.0	501.2	501.4	501.6	501.8	501.5	501.1	500.8	500.5	500.3
140°	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.6	521.5	521.4	521.2
142.5°	541.4	541.4	541.3	541.2	541.1	541.0	541.0	541.0	541.0	540.9	540.9
145°	569.5	569.8	570.0	570.1	570.2	570.3	570.2	570.1	570.0	569.8	569.6
147.5°	596.9	597.1	597.0	596.9	596.8	596.7	596.6	596.5	596.4	596.3	596.2
150°	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	627.6	627.8	627.9	628.0	628.1	628.2	628.5	628.8	629.1	629.4	629.4
155°	650.2	650.1	650.0	649.9	649.8	649.6	650.1	650.6	651.1	651.7	651.7
157.5°	669.4	669.2	669.2	669.2	669.2	669.1	669.5	669.9	670.3	670.7	670.6
160°	681.6	681.5	681.4	681.3	681.1	681.0	681.4	681.8	682.1	682.5	682.4
162.5°	691.8	691.5	691.4	691.3	691.2	691.0	691.7	692.4	693.1	693.8	693.8
165°	706.3	706.0	705.7	705.5	705.2	705.0	705.7	706.5	707.2	708.0	708.1
167.5°	717.0	716.7	716.7	716.8	716.8	716.8	717.6	718.3	719.1	719.9	719.8
170°	722.9	722.7	722.8	722.9	723.1	723.2	724.0	724.7	725.5	726.2	726.2
172.5°	727.9	727.7	727.7	727.7	727.7	727.8	728.6	729.5	730.4	731.2	731.2
175°	733.8	733.4	733.3	733.2	733.0	732.9	733.8	734.7	735.6	736.4	736.4
177.5°	736.3	736.1	736.1	736.1	736.1	736.1	736.8	737.5	738.2	738.9	738.9
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332962

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1637.8	1638.9	1635.1	1634.0	1635.1	1638.9	1637.8	1641.2	1641.7	1646.1	1644.5
5°	1519.5	1518.1	1514.6	1515.3	1514.6	1518.1	1519.5	1525.0	1527.8	1538.8	1537.5
7.5°	1418.3	1412.9	1414.4	1408.9	1414.4	1412.9	1418.3	1423.3	1431.7	1436.7	1448.4
10°	1356.3	1348.7	1342.5	1337.0	1342.5	1348.7	1356.3	1359.1	1370.9	1376.4	1388.1
12.5°	1271.7	1265.2	1256.8	1258.5	1256.8	1265.2	1271.7	1283.9	1299.0	1310.6	1329.0
15°	1151.7	1141.3	1124.8	1126.8	1124.8	1141.3	1151.7	1160.7	1175.9	1202.2	1214.6
17.5°	1050.1	1050.2	1042.6	1044.4	1042.6	1050.2	1050.1	1062.4	1070.1	1086.9	1105.9
20°	997.6	992.7	993.4	991.3	993.4	992.7	997.6	1012.1	1020.4	1032.1	1052.9
22.5°	961.1	955.1	950.3	946.0	950.3	955.1	961.1	965.1	976.1	987.3	1004.2
25°	899.4	895.2	889.0	887.6	889.0	895.2	899.4	905.6	911.1	925.7	936.0
27.5°	845.2	844.4	841.9	838.7	841.9	844.4	845.2	850.7	857.9	867.2	880.3
30°	813.7	812.3	810.9	808.8	810.9	812.3	813.7	819.2	824.7	832.3	842.7
32.5°	785.5	784.6	783.2	783.4	783.2	784.6	785.5	788.2	791.5	801.4	809.5
35°	745.2	744.5	743.2	742.5	743.2	744.5	745.2	748.0	750.1	752.8	759.7
37.5°	707.6	709.4	708.6	708.4	708.6	709.4	707.6	708.3	706.1	711.1	715.8
40°	681.6	682.3	683.7	683.0	683.7	682.3	681.6	682.3	682.3	682.3	686.5
42.5°	660.1	660.2	662.1	659.8	662.1	660.2	660.1	657.4	654.1	654.7	656.0
45°	621.5	625.6	624.9	624.9	624.9	625.6	621.5	616.6	616.0	613.2	613.2
47.5°	579.3	582.9	583.9	583.7	583.9	582.9	579.3	577.5	574.3	571.6	571.3
50°	551.7	550.3	552.4	551.7	552.4	550.3	551.7	548.2	543.4	543.4	542.0
52.5°	517.9	518.2	518.1	517.4	518.1	518.2	517.9	516.1	514.1	511.8	511.0
55°	465.9	466.6	465.2	465.9	465.2	466.6	465.9	465.2	465.2	463.9	465.2
57.5°	409.5	406.2	407.6	405.9	407.6	406.2	409.5	412.6	413.7	414.0	416.0
60°	369.2	363.6	362.2	359.5	362.2	363.6	369.2	376.1	378.8	380.2	382.3
62.5°	323.8	319.9	315.2	317.4	315.2	319.9	323.8	331.3	337.4	342.1	346.9
65°	263.4	260.6	258.5	261.3	258.5	260.6	263.4	268.9	274.4	285.5	295.9
67.5°	218.0	216.5	216.5	215.1	216.5	216.5	218.0	220.8	224.3	230.3	240.0
70°	194.3	192.2	192.2	190.8	192.2	192.2	194.3	194.3	197.7	200.5	207.4
72.5°	169.9	167.8	168.4	167.6	168.4	167.8	169.9	170.5	173.9	175.0	178.1
75°	125.8	122.4	122.4	123.1	122.4	122.4	125.8	130.0	133.4	139.6	141.0
77.5°	93.9	93.2	94.2	92.9	94.2	93.2	93.9	93.9	94.6	97.5	99.8
80°	76.7	76.0	75.4	77.4	75.4	76.0	76.7	76.7	77.4	78.1	78.8
82.5°	59.6	59.5	59.3	61.9	59.3	59.5	59.6	60.7	60.8	60.4	61.1
85°	35.9	34.6	35.9	34.6	35.9	34.6	35.9	35.3	35.9	35.3	35.9
87.5°	16.0	15.5	15.0	15.6	15.0	15.5	16.0	14.8	14.7	15.7	15.0
90°	16.4	16.6	16.9	17.1	16.9	16.6	16.4	16.1	15.6	14.8	14.1
92.5°	24.9	25.0	25.2	25.3	25.2	25.0	24.9	24.7	24.4	24.0	23.5
95°	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	44.9	44.5	44.1
97.5°	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.4	69.9	69.5
100°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.3	88.0	87.8
102.5°	108.2	108.3	108.4	108.5	108.4	108.3	108.2	108.1	107.8	107.5	107.1
105°	138.0	138.4	138.8	139.2	138.8	138.4	138.0	137.6	137.3	136.9	136.5
107.5°	169.1	169.1	169.1	169.1	169.1	169.1	169.1	169.2	169.0	168.6	168.3
110°	189.4	189.7	190.1	190.5	190.1	189.7	189.4	189.0	188.9	189.2	189.4



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CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	212.2	212.2	212.3	212.4	212.3	212.2	212.2	212.1	212.1	212.1	212.2
115°	246.8	246.6	246.5	246.4	246.5	246.6	246.8	246.9	247.0	247.2	247.3
117.5°	279.5	279.3	279.0	278.8	279.0	279.3	279.5	279.8	280.1	280.6	281.0
120°	302.7	302.9	303.2	303.4	303.2	302.9	302.7	302.4	302.6	303.2	303.9
122.5°	325.3	324.9	324.4	324.0	324.4	324.9	325.3	325.8	326.2	326.7	327.1
125°	360.1	359.8	359.6	359.3	359.6	359.8	360.1	360.3	360.6	360.8	361.1
127.5°	392.7	392.5	392.3	392.1	392.3	392.5	392.7	392.9	393.1	393.4	393.6
130°	415.0	414.5	414.0	413.5	414.0	414.5	415.0	415.5	415.9	416.2	416.4
132.5°	436.9	436.7	436.5	436.3	436.5	436.7	436.9	437.1	437.4	437.6	437.9
135°	468.8	468.4	468.1	467.7	468.1	468.4	468.8	469.2	469.5	469.8	470.0
137.5°	500.4	500.5	500.6	500.7	500.6	500.5	500.4	500.3	500.5	500.8	501.1
140°	521.1	521.0	520.9	520.7	520.9	521.0	521.1	521.2	521.4	521.5	521.6
142.5°	540.9	540.9	540.8	540.8	540.8	540.9	540.9	540.9	540.9	541.0	541.0
145°	569.2	568.8	568.4	568.1	568.4	568.8	569.2	569.6	569.8	570.0	570.1
147.5°	596.1	595.9	595.8	595.7	595.8	595.9	596.1	596.2	596.3	596.4	596.5
150°	612.9	612.8	612.7	612.6	612.7	612.8	612.9	613.1	613.1	613.1	613.1
152.5°	629.1	628.7	628.4	628.1	628.4	628.7	629.1	629.4	629.4	629.1	628.8
155°	651.1	650.6	650.1	649.6	650.1	650.6	651.1	651.7	651.7	651.1	650.6
157.5°	670.2	669.8	669.3	668.9	669.3	669.8	670.2	670.6	670.7	670.3	669.9
160°	681.8	681.1	680.5	679.9	680.5	681.1	681.8	682.4	682.5	682.1	681.8
162.5°	693.2	692.5	691.9	691.3	691.9	692.5	693.2	693.8	693.8	693.1	692.4
165°	707.6	707.1	706.6	706.1	706.6	707.1	707.6	708.1	708.0	707.2	706.5
167.5°	719.1	718.3	717.5	716.7	717.5	718.3	719.1	719.8	719.9	719.1	718.3
170°	725.3	724.4	723.5	722.6	723.5	724.4	725.3	726.2	726.2	725.5	724.7
172.5°	730.3	729.4	728.5	727.7	728.5	729.4	730.3	731.2	731.2	730.4	729.5
175°	735.6	734.7	733.8	732.9	733.8	734.7	735.6	736.4	736.4	735.6	734.7
177.5°	738.1	737.3	736.4	735.6	736.4	737.3	738.1	738.9	738.9	738.2	737.5
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



TEST NUMBER: P332962

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1641.2	1645.0	1653.9	1663.8	1672.1	1679.3	1684.8	1692.6	1699.8	1709.7	1719.1
5°	1541.6	1551.3	1565.1	1581.7	1602.4	1616.3	1633.6	1648.8	1670.9	1693.0	1714.4
7.5°	1454.2	1464.9	1485.2	1508.1	1532.8	1555.4	1575.9	1602.7	1632.0	1664.2	1700.2
10°	1397.8	1409.6	1433.8	1460.0	1489.1	1511.2	1538.8	1570.6	1603.8	1643.2	1687.5
12.5°	1346.9	1358.1	1387.3	1414.1	1444.3	1468.6	1500.7	1533.0	1577.3	1620.0	1670.3
15°	1247.8	1277.5	1310.7	1342.5	1378.5	1408.2	1446.9	1480.1	1522.3	1582.4	1639.8
17.5°	1137.7	1169.4	1210.6	1259.7	1307.9	1344.7	1384.0	1425.2	1475.4	1536.8	1603.0
20°	1073.6	1099.2	1144.8	1199.4	1255.4	1306.6	1342.5	1388.1	1440.0	1506.4	1574.8
22.5°	1025.5	1047.2	1082.9	1137.5	1197.9	1257.3	1303.2	1348.3	1405.7	1472.1	1546.6
25°	953.3	976.8	1007.9	1045.3	1114.4	1177.3	1237.4	1289.3	1350.1	1416.5	1499.4
27.5°	893.3	913.8	942.2	981.1	1027.6	1097.0	1169.8	1229.0	1291.4	1362.6	1445.7
30°	857.9	874.5	898.0	937.4	981.7	1043.9	1117.8	1187.0	1249.9	1323.8	1410.3
32.5°	820.9	838.6	861.5	892.6	940.2	992.4	1066.4	1142.2	1209.0	1284.6	1369.3
35°	771.5	785.3	806.1	837.9	880.7	926.3	992.0	1070.1	1140.7	1221.5	1302.4
37.5°	721.6	737.9	754.2	782.6	817.7	866.8	920.5	1000.3	1078.4	1152.3	1231.2
40°	693.4	703.1	721.0	743.8	781.2	824.7	875.2	953.3	1031.4	1104.7	1184.2
42.5°	661.9	672.6	687.8	710.7	744.1	786.6	835.9	903.5	985.0	1056.0	1128.3
45°	618.0	624.2	639.5	658.8	686.5	729.3	775.0	835.1	911.8	979.6	1043.2
47.5°	573.8	579.2	588.7	606.4	637.4	671.8	714.5	768.5	835.8	903.5	957.3
50°	543.4	548.2	557.2	573.8	601.4	635.3	677.5	725.9	786.0	851.0	895.9
52.5°	512.9	515.6	524.0	542.8	566.0	599.4	637.1	681.6	737.9	791.8	837.3
55°	464.6	470.8	476.3	490.1	512.3	544.1	577.9	620.1	663.7	709.3	748.0
57.5°	414.1	420.9	428.9	441.1	458.6	488.2	518.6	552.8	590.0	627.8	660.3
60°	380.9	387.1	394.0	407.9	423.8	447.3	480.5	510.2	538.5	573.1	605.6
62.5°	348.3	354.5	362.5	373.6	388.9	411.3	439.0	464.8	494.3	524.4	548.6
65°	300.0	304.9	311.1	321.5	336.0	356.0	378.8	398.9	425.2	447.3	469.4
67.5°	247.1	256.3	264.5	272.9	285.2	303.9	320.4	339.6	357.4	373.9	394.0
70°	212.2	222.6	230.2	239.2	250.9	266.8	282.7	295.9	310.4	326.3	344.3
72.5°	182.9	191.1	197.0	206.6	217.2	232.0	246.8	257.7	269.5	280.4	297.8
75°	144.5	147.9	152.1	159.7	169.4	180.4	192.2	201.9	208.8	218.5	230.9
77.5°	103.8	110.5	113.2	118.6	125.5	132.5	140.2	148.4	155.0	158.4	168.0
80°	79.5	82.3	85.0	92.6	96.8	103.7	109.2	116.8	119.6	123.1	132.0
82.5°	61.8	63.5	65.1	67.2	69.7	76.6	82.1	87.0	89.7	91.0	97.8
85°	35.9	36.6	37.3	38.0	38.7	38.7	41.5	44.9	49.8	49.8	51.8
87.5°	14.8	15.2	15.0	14.3	15.2	15.0	15.3	15.0	16.4	17.8	19.1
90°	13.3	12.5	11.5	10.5	9.5	8.5	7.3	5.9	4.5	3.1	1.7
92.5°	23.0	22.6	21.9	21.2	20.5	19.7	18.6	17.0	15.4	13.8	12.2
95°	43.7	43.3	42.5	41.6	40.7	39.8	38.8	37.6	36.5	35.4	34.2
97.5°	69.0	68.6	67.5	66.5	65.4	64.4	63.4	62.5	61.6	60.7	59.8
100°	87.5	87.3	86.1	85.0	83.8	82.7	81.9	81.4	80.9	80.4	79.8
102.5°	106.8	106.4	105.4	104.3	103.3	102.3	101.6	101.4	101.2	101.0	100.8
105°	136.1	135.7	135.2	134.7	134.2	133.7	133.4	133.3	133.1	133.0	132.9
107.5°	167.9	167.6	167.5	167.4	167.3	167.3	167.2	167.0	166.8	166.7	166.5
110°	189.7	189.9	190.1	190.2	190.3	190.4	190.4	190.1	189.9	189.6	189.4



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	212.2	212.3	212.5	212.7	213.0	213.2	213.3	213.2	213.2	213.1	213.1
115°	247.4	247.5	247.8	248.0	248.3	248.5	248.7	248.7	248.7	248.7	248.7
117.5°	281.4	281.9	282.0	282.2	282.4	282.6	282.6	282.5	282.4	282.3	282.2
120°	304.5	305.1	305.5	305.9	306.3	306.7	306.6	306.1	305.6	305.1	304.6
122.5°	327.5	328.0	328.1	328.3	328.5	328.7	328.6	328.4	328.2	328.0	327.8
125°	361.3	361.6	361.7	361.9	362.0	362.1	362.2	362.2	362.2	362.2	362.2
127.5°	393.9	394.1	394.3	394.5	394.7	394.9	394.8	394.5	394.1	393.7	393.3
130°	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4	416.0	415.6	415.2
132.5°	438.1	438.4	438.5	438.6	438.7	438.8	438.7	438.4	438.1	437.9	437.6
135°	470.3	470.5	470.5	470.5	470.5	470.5	470.2	469.4	468.6	467.9	467.1
137.5°	501.5	501.8	501.6	501.4	501.2	501.0	500.7	500.3	500.0	499.6	499.3
140°	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.5	521.2	521.0	520.7
142.5°	541.0	541.0	541.1	541.2	541.3	541.4	541.4	541.1	540.9	540.6	540.3
145°	570.2	570.3	570.2	570.1	570.0	569.8	569.5	569.0	568.5	568.0	567.5
147.5°	596.6	596.7	596.8	596.9	597.0	597.1	596.9	596.2	595.6	595.0	594.4
150°	613.1	613.1	613.1	613.1	613.1	613.1	612.9	612.4	611.9	611.4	610.8
152.5°	628.5	628.2	628.1	628.0	627.9	627.8	627.6	627.3	627.0	626.7	626.4
155°	650.1	649.6	649.8	649.9	650.0	650.1	650.2	650.2	650.2	650.2	650.2
157.5°	669.5	669.1	669.2	669.2	669.2	669.2	669.4	669.6	669.8	670.0	670.3
160°	681.4	681.0	681.1	681.3	681.4	681.5	681.6	681.8	681.9	682.0	682.1
162.5°	691.7	691.0	691.2	691.3	691.4	691.5	691.8	692.1	692.4	692.8	693.1
165°	705.7	705.0	705.2	705.5	705.7	706.0	706.3	706.7	707.0	707.4	707.8
167.5°	717.6	716.8	716.8	716.8	716.7	716.7	717.0	717.5	718.0	718.6	719.1
170°	724.0	723.2	723.1	722.9	722.8	722.7	722.9	723.6	724.2	724.9	725.5
172.5°	728.6	727.8	727.7	727.7	727.7	727.7	727.9	728.5	729.0	729.5	730.0
175°	733.8	732.9	733.0	733.2	733.3	733.4	733.8	734.4	735.1	735.7	736.3
177.5°	736.8	736.1	736.1	736.1	736.1	736.1	736.3	736.9	737.4	737.9	738.4
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1726.3	1731.3	1736.8	1747.3	1756.2	1760.1	1767.8	1773.3	1771.7	1779.4	1792.7
5°	1733.1	1751.8	1773.2	1795.3	1820.2	1840.9	1857.5	1874.1	1887.3	1903.2	1926.7
7.5°	1732.0	1765.2	1801.3	1840.9	1881.7	1917.0	1949.6	1982.8	2012.2	2044.5	2086.6
10°	1727.6	1771.8	1816.7	1868.6	1920.4	1969.5	2013.8	2055.2	2094.7	2136.8	2190.1
12.5°	1722.6	1773.5	1827.8	1890.2	1954.7	2013.8	2065.8	2125.5	2174.8	2229.2	2290.7
15°	1700.6	1769.0	1843.0	1923.9	2001.3	2080.8	2152.0	2225.3	2293.7	2358.7	2436.2
17.5°	1675.4	1754.4	1841.6	1937.2	2030.2	2126.9	2211.3	2303.7	2373.7	2460.9	2532.8
20°	1655.0	1740.0	1833.3	1940.5	2046.3	2153.4	2246.7	2340.8	2419.6	2507.4	2598.6
22.5°	1630.1	1723.4	1824.5	1935.5	2046.3	2163.4	2266.6	2360.1	2457.7	2556.6	2650.6
25°	1590.0	1686.8	1793.9	1915.6	2042.8	2162.4	2273.0	2389.1	2494.2	2601.4	2685.7
27.5°	1540.8	1642.4	1755.4	1880.9	2011.4	2133.9	2264.2	2387.9	2493.7	2596.8	2670.4
30°	1501.5	1608.7	1717.2	1844.4	1979.9	2111.2	2250.9	2374.6	2485.9	2578.6	2620.0
32.5°	1461.1	1562.8	1674.6	1803.5	1942.3	2083.6	2222.1	2348.6	2451.6	2507.2	2508.3
35°	1390.9	1486.3	1602.4	1729.0	1871.4	2024.8	2165.2	2289.6	2352.5	2357.3	2289.6
37.5°	1314.3	1401.8	1511.5	1638.1	1794.1	1946.7	2090.1	2173.0	2194.1	2123.7	1998.4
40°	1259.6	1340.4	1446.2	1576.2	1731.0	1888.6	2019.3	2080.1	2058.0	1943.9	1804.3
42.5°	1202.0	1277.4	1379.3	1507.6	1663.0	1822.3	1933.6	1966.2	1907.6	1775.8	1612.4
45°	1108.2	1177.3	1278.2	1407.5	1556.8	1706.1	1790.5	1773.9	1676.4	1520.2	1337.0
47.5°	1010.4	1077.2	1168.0	1287.6	1440.5	1569.4	1626.5	1576.5	1437.8	1265.9	1116.9
50°	945.7	1014.1	1097.8	1211.9	1351.5	1475.9	1512.6	1436.5	1282.4	1117.1	980.3
52.5°	882.1	940.6	1022.6	1132.8	1266.3	1371.4	1390.9	1303.2	1144.1	996.0	874.6
55°	785.3	838.6	907.7	1011.4	1126.8	1216.0	1205.6	1093.0	948.5	822.0	726.6
57.5°	691.7	731.8	795.7	892.9	994.2	1054.1	1016.2	920.1	785.5	681.9	601.4
60°	629.8	667.1	726.6	811.6	900.8	934.6	902.8	798.5	692.0	597.3	529.5
62.5°	571.2	604.1	655.2	734.2	806.2	826.2	792.2	701.1	605.2	524.3	468.2
65°	486.0	516.4	560.0	616.0	665.7	675.4	653.3	560.0	487.4	419.6	380.9
67.5°	408.7	428.6	462.6	511.0	537.4	543.1	500.4	441.7	377.7	336.1	306.9
70°	356.7	370.5	402.3	428.6	450.0	450.7	411.3	364.3	315.2	281.4	259.9
72.5°	306.4	319.7	343.7	361.7	378.1	372.8	336.7	299.6	259.9	234.4	218.5
75°	236.4	248.2	260.6	268.9	268.9	262.0	235.7	208.1	185.3	170.1	165.2
77.5°	171.9	181.5	185.7	184.4	182.0	171.2	154.6	136.5	128.3	121.1	117.5
80°	134.8	139.0	140.3	136.9	132.7	120.3	109.2	101.6	94.0	91.3	89.9
82.5°	100.0	103.6	100.0	100.9	91.8	81.6	75.5	72.9	69.7	68.6	67.2
85°	53.2	52.5	51.2	47.7	41.5	40.1	39.4	38.7	37.3	38.0	36.6
87.5°	18.9	17.5	15.6	15.3	15.5	14.6	15.4	15.6	15.8	15.4	16.6
90°	3.1	4.5	5.9	7.3	8.5	9.5	10.5	11.5	12.5	13.3	14.1
92.5°	13.8	15.4	17.0	18.6	19.7	20.5	21.2	21.9	22.6	23.0	23.5
95°	35.4	36.5	37.6	38.8	39.8	40.7	41.6	42.5	43.3	43.7	44.1
97.5°	60.7	61.6	62.5	63.4	64.4	65.4	66.5	67.5	68.6	69.0	69.5
100°	80.4	80.9	81.4	81.9	82.7	83.8	85.0	86.1	87.3	87.5	87.8
102.5°	101.0	101.2	101.4	101.6	102.3	103.3	104.3	105.4	106.4	106.8	107.1
105°	133.0	133.1	133.3	133.4	133.7	134.2	134.7	135.2	135.7	136.1	136.5
107.5°	166.7	166.8	167.0	167.2	167.3	167.3	167.4	167.5	167.6	167.9	168.3
110°	189.6	189.9	190.1	190.4	190.4	190.3	190.2	190.1	189.9	189.7	189.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	213.1	213.2	213.2	213.3	213.2	213.0	212.7	212.5	212.3	212.2	212.2
115°	248.7	248.7	248.7	248.7	248.5	248.3	248.0	247.8	247.5	247.4	247.3
117.5°	282.3	282.4	282.5	282.6	282.6	282.4	282.2	282.0	281.9	281.4	281.0
120°	305.1	305.6	306.1	306.6	306.7	306.3	305.9	305.5	305.1	304.5	303.9
122.5°	328.0	328.2	328.4	328.6	328.7	328.5	328.3	328.1	328.0	327.5	327.1
125°	362.2	362.2	362.2	362.2	362.1	362.0	361.9	361.7	361.6	361.3	361.1
127.5°	393.7	394.1	394.5	394.8	394.9	394.7	394.5	394.3	394.1	393.9	393.6
130°	415.6	416.0	416.4	416.7	416.9	416.9	416.9	416.9	416.9	416.7	416.4
132.5°	437.9	438.1	438.4	438.7	438.8	438.7	438.6	438.5	438.4	438.1	437.9
135°	467.9	468.6	469.4	470.2	470.5	470.5	470.5	470.5	470.5	470.3	470.0
137.5°	499.6	500.0	500.3	500.7	501.0	501.2	501.4	501.6	501.8	501.5	501.1
140°	521.0	521.2	521.5	521.7	521.9	521.9	521.9	521.9	521.9	521.7	521.6
142.5°	540.6	540.9	541.1	541.4	541.4	541.3	541.2	541.1	541.0	541.0	541.0
145°	568.0	568.5	569.0	569.5	569.8	570.0	570.1	570.2	570.3	570.2	570.1
147.5°	595.0	595.6	596.2	596.9	597.1	597.0	596.9	596.8	596.7	596.6	596.5
150°	611.4	611.9	612.4	612.9	613.1	613.1	613.1	613.1	613.1	613.1	613.1
152.5°	626.7	627.0	627.3	627.6	627.8	627.9	628.0	628.1	628.2	628.5	628.8
155°	650.2	650.2	650.2	650.2	650.1	650.0	649.9	649.8	649.6	650.1	650.6
157.5°	670.0	669.8	669.6	669.4	669.2	669.2	669.2	669.2	669.1	669.5	669.9
160°	682.0	681.9	681.8	681.6	681.5	681.4	681.3	681.1	681.0	681.4	681.8
162.5°	692.8	692.4	692.1	691.8	691.5	691.4	691.3	691.2	691.0	691.7	692.4
165°	707.4	707.0	706.7	706.3	706.0	705.7	705.5	705.2	705.0	705.7	706.5
167.5°	718.6	718.0	717.5	717.0	716.7	716.7	716.8	716.8	716.8	717.6	718.3
170°	724.9	724.2	723.6	722.9	722.7	722.8	722.9	723.1	723.2	724.0	724.7
172.5°	729.5	729.0	728.5	727.9	727.7	727.7	727.7	727.7	727.8	728.6	729.5
175°	735.7	735.1	734.4	733.8	733.4	733.3	733.2	733.0	732.9	733.8	734.7
177.5°	737.9	737.4	736.9	736.3	736.1	736.1	736.1	736.1	736.1	736.8	737.5
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5	737.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1799.9	1802.1	1803.8	1809.3	1809.8	1814.8	1809.8
5°	1948.8	1958.5	1973.7	1988.9	1990.3	1999.9	1982.7
7.5°	2115.8	2138.2	2152.2	2176.8	2186.5	2192.5	2182.6
10°	2230.8	2251.6	2288.2	2306.2	2324.2	2326.9	2318.6
12.5°	2342.0	2374.9	2403.8	2437.8	2437.0	2461.3	2452.5
15°	2490.1	2524.0	2564.0	2602.1	2615.9	2615.9	2627.0
17.5°	2595.7	2657.8	2699.3	2729.1	2761.8	2767.4	2763.6
20°	2667.1	2734.1	2778.4	2817.1	2839.2	2845.4	2845.4
22.5°	2720.1	2777.2	2820.4	2855.2	2873.5	2880.8	2878.6
25°	2756.9	2806.0	2832.3	2842.6	2847.5	2846.1	2833.0
27.5°	2706.6	2704.4	2687.8	2656.0	2632.1	2617.6	2601.0
30°	2610.4	2574.4	2532.9	2487.3	2428.6	2383.6	2369.8
32.5°	2467.1	2386.4	2316.1	2240.1	2176.9	2132.0	2113.2
35°	2190.1	2062.2	1957.8	1866.5	1800.2	1758.7	1744.9
37.5°	1861.3	1737.5	1608.3	1519.8	1464.7	1422.8	1407.2
40°	1652.2	1517.4	1404.7	1321.8	1265.1	1224.3	1223.6
42.5°	1461.4	1332.7	1226.7	1166.9	1105.8	1078.8	1078.7
45°	1196.6	1093.6	1003.8	956.8	920.1	898.0	891.8
47.5°	990.8	905.6	845.7	808.3	778.4	764.3	755.2
50°	875.2	800.5	752.8	720.3	703.7	685.8	684.4
52.5°	779.0	718.7	681.5	655.1	634.1	623.3	623.6
55°	654.7	607.0	580.7	560.6	544.1	535.8	532.3
57.5°	551.5	515.7	496.6	478.2	471.2	464.7	462.9
60°	487.4	463.2	445.2	430.7	420.3	418.2	417.5
62.5°	434.3	409.0	396.5	385.3	377.7	374.5	373.3
65°	358.1	339.4	328.4	319.4	316.6	311.8	311.1
67.5°	288.7	277.5	270.2	263.9	260.2	259.9	259.9
70°	246.1	239.9	233.7	230.2	228.1	226.7	226.7
72.5°	209.6	205.0	199.9	198.1	197.7	196.3	195.8
75°	159.7	154.9	155.5	152.1	149.3	145.9	143.8
77.5°	113.2	109.8	109.1	108.7	106.3	105.9	107.0
80°	87.8	84.3	83.6	84.3	83.6	81.6	81.6
82.5°	66.8	63.9	63.2	62.8	62.1	62.8	61.7
85°	35.9	34.6	34.6	34.6	35.9	35.3	34.6
87.5°	15.7	15.3	15.9	15.4	15.5	15.0	15.6
90°	14.8	15.6	16.1	16.4	16.6	16.9	17.1
92.5°	24.0	24.4	24.7	24.9	25.0	25.2	25.3
95°	44.5	44.9	45.1	45.1	45.1	45.1	45.1
97.5°	69.9	70.4	70.6	70.6	70.6	70.6	70.6
100°	88.0	88.3	88.4	88.4	88.4	88.4	88.4
102.5°	107.5	107.8	108.1	108.2	108.3	108.4	108.5
105°	136.9	137.3	137.6	138.0	138.4	138.8	139.2
107.5°	168.6	169.0	169.2	169.1	169.1	169.1	169.1
110°	189.2	188.9	189.0	189.4	189.7	190.1	190.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.1	212.1	212.1	212.2	212.2	212.3	212.4
115°	247.2	247.0	246.9	246.8	246.6	246.5	246.4
117.5°	280.6	280.1	279.8	279.5	279.3	279.0	278.8
120°	303.2	302.6	302.4	302.7	302.9	303.2	303.4
122.5°	326.7	326.2	325.8	325.3	324.9	324.4	324.0
125°	360.8	360.6	360.3	360.1	359.8	359.6	359.3
127.5°	393.4	393.1	392.9	392.7	392.5	392.3	392.1
130°	416.2	415.9	415.5	415.0	414.5	414.0	413.5
132.5°	437.6	437.4	437.1	436.9	436.7	436.5	436.3
135°	469.8	469.5	469.2	468.8	468.4	468.1	467.7
137.5°	500.8	500.5	500.3	500.4	500.5	500.6	500.7
140°	521.5	521.4	521.2	521.1	521.0	520.9	520.7
142.5°	541.0	540.9	540.9	540.9	540.9	540.8	540.8
145°	570.0	569.8	569.6	569.2	568.8	568.4	568.1
147.5°	596.4	596.3	596.2	596.1	595.9	595.8	595.7
150°	613.1	613.1	613.1	612.9	612.8	612.7	612.6
152.5°	629.1	629.4	629.4	629.1	628.7	628.4	628.1
155°	651.1	651.7	651.7	651.1	650.6	650.1	649.6
157.5°	670.3	670.7	670.6	670.2	669.8	669.3	668.9
160°	682.1	682.5	682.4	681.8	681.1	680.5	679.9
162.5°	693.1	693.8	693.8	693.2	692.5	691.9	691.3
165°	707.2	708.0	708.1	707.6	707.1	706.6	706.1
167.5°	719.1	719.9	719.8	719.1	718.3	717.5	716.7
170°	725.5	726.2	726.2	725.3	724.4	723.5	722.6
172.5°	730.4	731.2	731.2	730.3	729.4	728.5	727.7
175°	735.6	736.4	736.4	735.6	734.7	733.8	732.9
177.5°	738.2	738.9	738.9	738.1	737.3	736.4	735.6
180°	737.5	737.5	737.5	737.5	737.5	737.5	737.5

(END OF REPORT)