

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: P332963

Luminaire Tested: **SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332963  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6450.5 lumens  
Efficiency: N/A  
Efficacy: 132.2 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

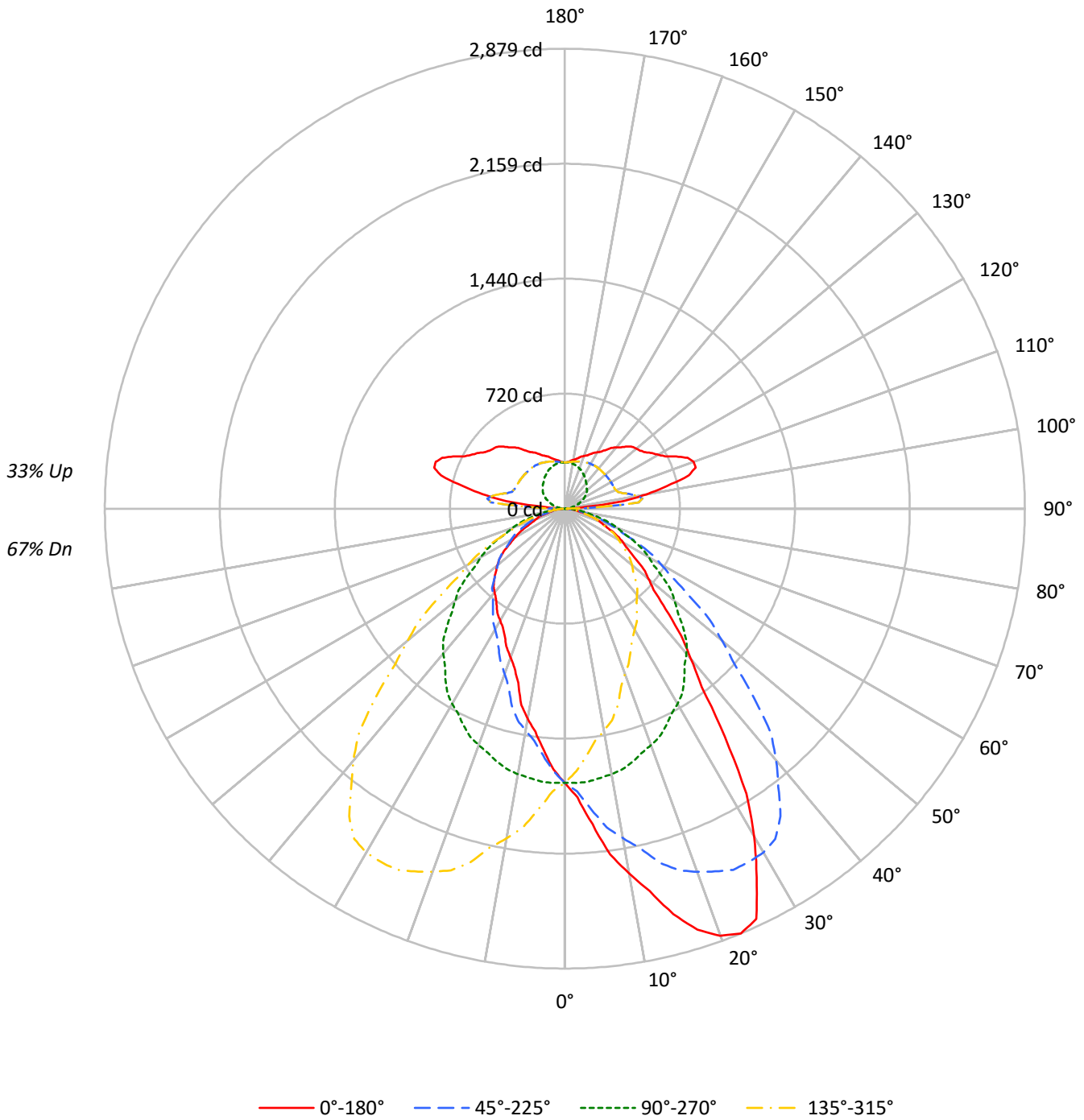
Input Watts (W): 48.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	82	82	82	72	72	72	67				
1	102	98	94	91	96	93	89	86	83	80	78	73	71	70	65	63	62	58				
2	94	86	80	75	88	82	76	72	73	69	65	65	62	59	58	55	53	50				
3	86	76	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	46	43	40	37				
5	73	61	53	47	68	58	51	45	52	46	42	47	42	39	42	38	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	43	38	34	38	34	31	29				
7	62	50	42	36	59	48	40	35	43	37	33	39	34	30	35	31	28	26				
8	58	46	38	32	55	44	36	31	40	34	29	36	31	27	32	28	25	23				
9	54	42	34	29	51	40	33	28	36	31	26	33	28	25	30	26	23	21				
10	51	38	31	26	48	37	30	26	34	28	24	31	26	22	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	7.8
20°-30°	784.4	12.2
30°-40°	872.0	13.5
40°-50°	773.6	12.0
50°-60°	602.8	9.3
60°-70°	394.7	6.1
70°-80°	194.1	3.0
80°-90°	49.5	0.8
90°-100°	209.7	3.3
100°-110°	436.5	6.8
110°-120°	391.0	6.1
120°-130°	328.9	5.1
130°-140°	274.2	4.3
140°-150°	209.5	3.2
150°-160°	147.2	2.3
160°-170°	86.6	1.3
170°-180°	28.2	0.4
0°-30°	1452.1	22.5
0°-40°	2324.1	36.0
0°-60°	3700.5	57.4
0°-90°	4338.8	67.3
90°-120°	1037.2	16.1
90°-150°	1849.7	28.7
90°-180°	2112.0	32.7
0°-180°	6450.5	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°	12	1	12	1	12	11
95°	139	19	139	19	139	216
105°	803	67	803	67	803	794
115°	771	118	771	118	771	765
125°	615	164	615	164	615	559
135°	550	194	550	194	550	424
145°	449	224	449	224	449	285
155°	376	255	376	255	376	175
165°	328	278	328	278	328	94
175°	296	290	296	290	296	29
180°	290	290	290	290	290	



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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°	14.6	14.0	14.7	14.6	15.0	14.4	14.9	15.9	14.7	15.3	15.1
90°	12.0	12.0	12.5	12.0	11.4	11.4	10.8	10.3	9.7	10.3	9.1
92.5°	43.9	43.9	45.9	48.9	55.7	67.1	84.3	112.0	150.7	180.9	158.4
95°	139.2	146.6	156.9	174.6	202.5	257.8	334.3	422.7	478.0	464.9	350.8
97.5°	372.0	383.9	401.0	435.4	476.3	535.9	591.7	624.5	600.6	489.7	328.4
100°	523.1	527.7	544.8	579.6	629.2	671.4	699.4	688.0	604.7	458.6	297.8
102.5°	654.5	658.2	676.2	701.4	731.9	749.5	741.4	684.8	570.4	419.9	277.2
105°	802.6	806.0	814.0	818.6	817.5	794.1	737.6	638.9	508.3	374.2	259.6
107.5°	857.6	856.1	850.4	837.4	809.2	758.4	678.8	573.8	458.1	348.7	256.4
110°	858.5	853.4	843.1	819.2	778.7	715.9	633.2	534.5	433.0	340.0	257.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	831.6	823.3	808.9	779.9	733.9	671.2	593.0	505.8	418.8	335.9	260.0
115°	770.7	766.1	747.9	713.6	668.6	613.8	547.1	476.9	405.6	333.7	265.3
117.5°	709.0	705.4	686.9	658.2	619.7	573.3	520.8	462.7	399.7	333.1	270.8
120°	674.3	668.0	653.2	628.1	595.5	555.0	509.4	456.4	396.5	333.1	275.0
122.5°	646.9	640.6	628.1	606.6	579.1	543.6	502.1	450.9	392.8	332.7	279.1
125°	614.9	611.5	600.7	584.1	561.3	529.9	490.6	441.5	386.8	332.0	285.2
127.5°	596.2	592.8	583.7	569.0	546.0	516.3	477.0	430.1	378.7	330.7	290.1
130°	585.3	581.9	572.7	558.5	535.1	504.8	466.1	421.0	373.6	330.3	293.8
132.5°	573.0	569.5	560.9	544.8	521.8	491.6	453.7	411.4	369.1	329.8	297.0
135°	549.9	546.5	537.4	521.4	498.6	470.0	435.3	398.2	362.2	329.1	301.8
137.5°	521.4	517.3	509.8	494.0	472.7	446.9	417.6	386.2	356.3	329.0	304.6
140°	500.9	496.3	488.3	475.8	455.8	431.8	406.2	379.3	353.1	328.6	306.9
142.5°	478.9	475.8	468.7	457.0	439.4	418.6	396.6	373.0	350.4	328.6	308.7
145°	448.9	446.1	440.4	430.7	416.4	400.5	383.3	363.9	345.7	327.4	309.8
147.5°	422.4	421.3	417.0	408.7	398.2	385.6	371.9	356.5	341.5	325.4	310.3
150°	407.3	406.7	403.3	395.9	386.8	376.5	365.1	352.0	338.3	324.0	310.3
152.5°	393.6	393.0	391.0	384.9	377.2	368.7	358.2	346.9	334.6	321.7	309.4
155°	375.9	375.9	374.2	369.7	363.9	357.1	348.5	339.4	329.1	318.3	308.0
157.5°	360.4	360.4	359.4	356.0	351.6	346.1	339.0	331.3	323.6	314.8	306.6
160°	350.8	350.8	350.3	346.8	343.4	338.8	332.6	326.3	319.5	312.0	305.2
162.5°	341.7	342.2	341.6	338.2	335.7	331.5	326.6	321.3	315.8	309.3	303.8
165°	328.0	328.6	329.1	326.9	324.6	321.7	317.7	314.3	309.8	305.2	301.2
167.5°	317.2	317.6	317.7	316.3	315.1	313.4	310.2	307.6	304.3	301.1	298.5
170°	310.3	310.3	310.9	310.3	309.2	307.5	305.2	303.5	300.6	298.3	296.6
172.5°	303.5	304.4	305.0	304.4	303.7	302.5	301.1	299.8	297.4	295.6	294.8
175°	295.5	296.6	297.8	296.6	296.6	296.6	295.5	294.9	293.8	292.6	292.6
177.5°	290.8	291.7	292.6	292.2	292.6	292.2	292.2	291.7	291.3	290.8	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



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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°	14.9	14.3	14.7	14.7	15.2	17.3	18.6	18.9	17.5	16.2	14.6
90°	8.0	8.0	4.6	4.6	4.0	3.4	1.7	0.6	1.7	3.4	4.0
92.5°	115.2	71.0	42.0	30.1	21.8	14.8	9.5	6.5	9.5	14.8	21.8
95°	214.5	120.9	71.3	47.3	33.7	26.2	20.5	18.8	20.5	26.2	33.7
97.5°	192.8	115.6	77.4	57.3	45.5	38.7	33.8	33.8	33.8	38.7	45.5
100°	181.4	116.9	83.3	65.0	54.2	47.3	43.4	43.4	43.4	47.3	54.2
102.5°	178.2	121.5	91.0	73.7	63.3	56.9	53.4	52.5	53.4	56.9	63.3
105°	179.7	132.3	105.0	88.4	78.2	71.3	68.5	66.7	68.5	71.3	78.2
107.5°	188.1	145.0	119.9	103.6	93.8	86.5	83.6	82.5	83.6	86.5	93.8
110°	194.5	154.6	129.5	114.1	103.8	97.0	94.1	93.0	94.1	97.0	103.8





TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	201.4	163.7	139.5	124.1	113.9	107.5	104.2	103.0	104.2	107.5	113.9
115°	212.2	178.0	155.2	139.8	128.9	123.2	119.2	117.5	119.2	123.2	128.9
117.5°	223.3	191.8	170.1	154.1	144.0	137.7	134.2	132.6	134.2	137.7	144.0
120°	231.0	201.4	179.7	163.7	154.0	147.7	143.8	142.6	143.8	147.7	154.0
122.5°	238.3	210.5	188.8	173.3	162.7	156.9	152.9	151.7	152.9	156.9	162.7
125°	249.3	223.0	202.5	186.5	175.7	169.4	166.0	163.7	166.0	169.4	175.7
127.5°	258.8	234.7	214.8	198.7	187.4	180.3	176.2	174.3	176.2	180.3	187.4
130°	264.7	242.4	223.0	206.5	195.7	187.1	182.5	180.3	182.5	187.1	195.7
132.5°	270.6	248.8	229.4	213.8	202.1	194.0	188.0	186.2	188.0	194.0	202.1
135°	278.4	257.8	239.0	224.2	212.2	202.5	196.8	194.5	196.8	202.5	212.2
137.5°	283.9	264.7	247.1	233.0	220.5	211.3	205.0	202.9	205.0	211.3	220.5
140°	287.5	269.3	252.1	238.4	226.5	216.8	210.5	208.8	210.5	216.8	226.5
142.5°	290.2	273.4	256.7	243.5	231.9	222.7	216.9	215.2	216.9	222.7	231.9
145°	293.2	277.8	263.0	250.4	239.6	231.6	225.9	224.2	225.9	231.6	239.6
147.5°	295.8	282.4	268.5	257.2	248.1	239.9	234.9	234.3	234.9	239.9	248.1
150°	297.2	284.7	272.1	261.3	252.7	245.9	241.3	240.7	241.3	245.9	252.7
152.5°	298.1	286.5	275.3	265.4	257.7	251.3	246.8	246.7	246.8	251.3	257.7
155°	298.9	289.2	279.5	271.0	264.7	259.0	255.6	255.0	255.6	259.0	264.7
157.5°	298.9	291.2	282.9	276.2	270.7	266.3	263.1	263.1	263.1	266.3	270.7
160°	298.9	292.1	285.2	278.9	274.4	270.4	268.1	268.1	268.1	270.4	274.4
162.5°	298.9	293.0	286.6	281.7	277.6	274.0	272.2	272.7	272.2	274.0	277.6
165°	297.8	293.2	288.1	284.7	281.8	278.9	277.8	277.8	277.8	278.9	281.8
167.5°	296.4	293.1	289.3	286.7	285.1	282.9	282.4	282.9	282.4	282.9	285.1
170°	295.5	292.6	289.8	288.1	286.9	285.2	284.7	285.2	284.7	285.2	286.9
172.5°	294.6	292.2	290.2	289.0	288.3	287.0	286.9	287.5	286.9	287.0	288.3
175°	293.2	291.5	290.4	290.4	289.8	289.2	289.2	289.8	289.2	289.2	289.8
177.5°	291.7	290.8	290.4	290.4	290.4	289.9	290.4	290.8	290.4	289.9	290.4
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**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°	14.7	14.2	14.9	13.8	14.5	14.8	14.1	14.2	14.9	13.9	13.9
90°	4.6	4.6	8.0	8.0	9.1	10.3	9.7	10.3	10.8	11.4	11.4
92.5°	30.1	42.0	71.0	115.2	158.4	180.9	150.7	112.0	84.3	67.1	55.7
95°	47.3	71.3	120.9	214.5	350.8	464.9	478.0	422.7	334.3	257.8	202.5
97.5°	57.3	77.4	115.6	192.8	328.4	489.7	600.6	624.5	591.7	535.9	476.3
100°	65.0	83.3	116.9	181.4	297.8	458.6	604.7	688.0	699.4	671.4	629.2
102.5°	73.7	91.0	121.5	178.2	277.2	419.9	570.4	684.8	741.4	749.5	731.9
105°	88.4	105.0	132.3	179.7	259.6	374.2	508.3	638.9	737.6	794.1	817.5
107.5°	103.6	119.9	145.0	188.1	256.4	348.7	458.1	573.8	678.8	758.4	809.2
110°	114.1	129.5	154.6	194.5	257.3	340.0	433.0	534.5	633.2	715.9	778.7



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	124.1	139.5	163.7	201.4	260.0	335.9	418.8	505.8	593.0	671.2	733.9
115°	139.8	155.2	178.0	212.2	265.3	333.7	405.6	476.9	547.1	613.8	668.6
117.5°	154.1	170.1	191.8	223.3	270.8	333.1	399.7	462.7	520.8	573.3	619.7
120°	163.7	179.7	201.4	231.0	275.0	333.1	396.5	456.4	509.4	555.0	595.5
122.5°	173.3	188.8	210.5	238.3	279.1	332.7	392.8	450.9	502.1	543.6	579.1
125°	186.5	202.5	223.0	249.3	285.2	332.0	386.8	441.5	490.6	529.9	561.3
127.5°	198.7	214.8	234.7	258.8	290.1	330.7	378.7	430.1	477.0	516.3	546.0
130°	206.5	223.0	242.4	264.7	293.8	330.3	373.6	421.0	466.1	504.8	535.1
132.5°	213.8	229.4	248.8	270.6	297.0	329.8	369.1	411.4	453.7	491.6	521.8
135°	224.2	239.0	257.8	278.4	301.8	329.1	362.2	398.2	435.3	470.0	498.6
137.5°	233.0	247.1	264.7	283.9	304.6	329.0	356.3	386.2	417.6	446.9	472.7
140°	238.4	252.1	269.3	287.5	306.9	328.6	353.1	379.3	406.2	431.8	455.8
142.5°	243.5	256.7	273.4	290.2	308.7	328.6	350.4	373.0	396.6	418.6	439.4
145°	250.4	263.0	277.8	293.2	309.8	327.4	345.7	363.9	383.3	400.5	416.4
147.5°	257.2	268.5	282.4	295.8	310.3	325.4	341.5	356.5	371.9	385.6	398.2
150°	261.3	272.1	284.7	297.2	310.3	324.0	338.3	352.0	365.1	376.5	386.8
152.5°	265.4	275.3	286.5	298.1	309.4	321.7	334.6	346.9	358.2	368.7	377.2
155°	271.0	279.5	289.2	298.9	308.0	318.3	329.1	339.4	348.5	357.1	363.9
157.5°	276.2	282.9	291.2	298.9	306.6	314.8	323.6	331.3	339.0	346.1	351.6
160°	278.9	285.2	292.1	298.9	305.2	312.0	319.5	326.3	332.6	338.8	343.4
162.5°	281.7	286.6	293.0	298.9	303.8	309.3	315.8	321.3	326.6	331.5	335.7
165°	284.7	288.1	293.2	297.8	301.2	305.2	309.8	314.3	317.7	321.7	324.6
167.5°	286.7	289.3	293.1	296.4	298.5	301.1	304.3	307.6	310.2	313.4	315.1
170°	288.1	289.8	292.6	295.5	296.6	298.3	300.6	303.5	305.2	307.5	309.2
172.5°	289.0	290.2	292.2	294.6	294.8	295.6	297.4	299.8	301.1	302.5	303.7
175°	290.4	290.4	291.5	293.2	292.6	292.6	293.8	294.9	295.5	296.6	296.6
177.5°	290.4	290.4	290.8	291.7	290.8	290.8	291.3	291.7	292.2	292.2	292.6
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**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°	15.1	14.7	14.0	14.6	14.0	14.7	15.1	13.9	13.9	14.9	14.2
90°	12.0	12.5	12.0	12.0	12.0	12.5	12.0	11.4	11.4	10.8	10.3
92.5°	48.9	45.9	43.9	43.9	43.9	45.9	48.9	55.7	67.1	84.3	112.0
95°	174.6	156.9	146.6	139.2	146.6	156.9	174.6	202.5	257.8	334.3	422.7
97.5°	435.4	401.0	383.9	372.0	383.9	401.0	435.4	476.3	535.9	591.7	624.5
100°	579.6	544.8	527.7	523.1	527.7	544.8	579.6	629.2	671.4	699.4	688.0
102.5°	701.4	676.2	658.2	654.5	658.2	676.2	701.4	731.9	749.5	741.4	684.8
105°	818.6	814.0	806.0	802.6	806.0	814.0	818.6	817.5	794.1	737.6	638.9
107.5°	837.4	850.4	856.1	857.6	856.1	850.4	837.4	809.2	758.4	678.8	573.8
110°	819.2	843.1	853.4	858.5	853.4	843.1	819.2	778.7	715.9	633.2	534.5



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	779.9	808.9	823.3	831.6	823.3	808.9	779.9	733.9	671.2	593.0	505.8
115°	713.6	747.9	766.1	770.7	766.1	747.9	713.6	668.6	613.8	547.1	476.9
117.5°	658.2	686.9	705.4	709.0	705.4	686.9	658.2	619.7	573.3	520.8	462.7
120°	628.1	653.2	668.0	674.3	668.0	653.2	628.1	595.5	555.0	509.4	456.4
122.5°	606.6	628.1	640.6	646.9	640.6	628.1	606.6	579.1	543.6	502.1	450.9
125°	584.1	600.7	611.5	614.9	611.5	600.7	584.1	561.3	529.9	490.6	441.5
127.5°	569.0	583.7	592.8	596.2	592.8	583.7	569.0	546.0	516.3	477.0	430.1
130°	558.5	572.7	581.9	585.3	581.9	572.7	558.5	535.1	504.8	466.1	421.0
132.5°	544.8	560.9	569.5	573.0	569.5	560.9	544.8	521.8	491.6	453.7	411.4
135°	521.4	537.4	546.5	549.9	546.5	537.4	521.4	498.6	470.0	435.3	398.2
137.5°	494.0	509.8	517.3	521.4	517.3	509.8	494.0	472.7	446.9	417.6	386.2
140°	475.8	488.3	496.3	500.9	496.3	488.3	475.8	455.8	431.8	406.2	379.3
142.5°	457.0	468.7	475.8	478.9	475.8	468.7	457.0	439.4	418.6	396.6	373.0
145°	430.7	440.4	446.1	448.9	446.1	440.4	430.7	416.4	400.5	383.3	363.9
147.5°	408.7	417.0	421.3	422.4	421.3	417.0	408.7	398.2	385.6	371.9	356.5
150°	395.9	403.3	406.7	407.3	406.7	403.3	395.9	386.8	376.5	365.1	352.0
152.5°	384.9	391.0	393.0	393.6	393.0	391.0	384.9	377.2	368.7	358.2	346.9
155°	369.7	374.2	375.9	375.9	375.9	374.2	369.7	363.9	357.1	348.5	339.4
157.5°	356.0	359.4	360.4	360.4	360.4	359.4	356.0	351.6	346.1	339.0	331.3
160°	346.8	350.3	350.8	350.8	350.8	350.3	346.8	343.4	338.8	332.6	326.3
162.5°	338.2	341.6	342.2	341.7	342.2	341.6	338.2	335.7	331.5	326.6	321.3
165°	326.9	329.1	328.6	328.0	328.6	329.1	326.9	324.6	321.7	317.7	314.3
167.5°	316.3	317.7	317.6	317.2	317.6	317.7	316.3	315.1	313.4	310.2	307.6
170°	310.3	310.9	310.3	310.3	310.3	310.9	310.3	309.2	307.5	305.2	303.5
172.5°	304.4	305.0	304.4	303.5	304.4	305.0	304.4	303.7	302.5	301.1	299.8
175°	296.6	297.8	296.6	295.5	296.6	297.8	296.6	296.6	296.6	295.5	294.9
177.5°	292.2	292.6	291.7	290.8	291.7	292.6	292.2	292.6	292.2	292.2	291.7
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**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°	14.1	14.8	14.5	13.8	14.9	14.2	14.7	14.6	16.2	17.5	18.9
90°	9.7	10.3	9.1	8.0	8.0	4.6	4.6	4.0	3.4	1.7	0.6
92.5°	150.7	180.9	158.4	115.2	71.0	42.0	30.1	21.8	14.8	9.5	6.5
95°	478.0	464.9	350.8	214.5	120.9	71.3	47.3	33.7	26.2	20.5	18.8
97.5°	600.6	489.7	328.4	192.8	115.6	77.4	57.3	45.5	38.7	33.8	33.8
100°	604.7	458.6	297.8	181.4	116.9	83.3	65.0	54.2	47.3	43.4	43.4
102.5°	570.4	419.9	277.2	178.2	121.5	91.0	73.7	63.3	56.9	53.4	52.5
105°	508.3	374.2	259.6	179.7	132.3	105.0	88.4	78.2	71.3	68.5	66.7
107.5°	458.1	348.7	256.4	188.1	145.0	119.9	103.6	93.8	86.5	83.6	82.5
110°	433.0	340.0	257.3	194.5	154.6	129.5	114.1	103.8	97.0	94.1	93.0



TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	418.8	335.9	260.0	201.4	163.7	139.5	124.1	113.9	107.5	104.2	103.0
115°	405.6	333.7	265.3	212.2	178.0	155.2	139.8	128.9	123.2	119.2	117.5
117.5°	399.7	333.1	270.8	223.3	191.8	170.1	154.1	144.0	137.7	134.2	132.6
120°	396.5	333.1	275.0	231.0	201.4	179.7	163.7	154.0	147.7	143.8	142.6
122.5°	392.8	332.7	279.1	238.3	210.5	188.8	173.3	162.7	156.9	152.9	151.7
125°	386.8	332.0	285.2	249.3	223.0	202.5	186.5	175.7	169.4	166.0	163.7
127.5°	378.7	330.7	290.1	258.8	234.7	214.8	198.7	187.4	180.3	176.2	174.3
130°	373.6	330.3	293.8	264.7	242.4	223.0	206.5	195.7	187.1	182.5	180.3
132.5°	369.1	329.8	297.0	270.6	248.8	229.4	213.8	202.1	194.0	188.0	186.2
135°	362.2	329.1	301.8	278.4	257.8	239.0	224.2	212.2	202.5	196.8	194.5
137.5°	356.3	329.0	304.6	283.9	264.7	247.1	233.0	220.5	211.3	205.0	202.9
140°	353.1	328.6	306.9	287.5	269.3	252.1	238.4	226.5	216.8	210.5	208.8
142.5°	350.4	328.6	308.7	290.2	273.4	256.7	243.5	231.9	222.7	216.9	215.2
145°	345.7	327.4	309.8	293.2	277.8	263.0	250.4	239.6	231.6	225.9	224.2
147.5°	341.5	325.4	310.3	295.8	282.4	268.5	257.2	248.1	239.9	234.9	234.3
150°	338.3	324.0	310.3	297.2	284.7	272.1	261.3	252.7	245.9	241.3	240.7
152.5°	334.6	321.7	309.4	298.1	286.5	275.3	265.4	257.7	251.3	246.8	246.7
155°	329.1	318.3	308.0	298.9	289.2	279.5	271.0	264.7	259.0	255.6	255.0
157.5°	323.6	314.8	306.6	298.9	291.2	282.9	276.2	270.7	266.3	263.1	263.1
160°	319.5	312.0	305.2	298.9	292.1	285.2	278.9	274.4	270.4	268.1	268.1
162.5°	315.8	309.3	303.8	298.9	293.0	286.6	281.7	277.6	274.0	272.2	272.7
165°	309.8	305.2	301.2	297.8	293.2	288.1	284.7	281.8	278.9	277.8	277.8
167.5°	304.3	301.1	298.5	296.4	293.1	289.3	286.7	285.1	282.9	282.4	282.9
170°	300.6	298.3	296.6	295.5	292.6	289.8	288.1	286.9	285.2	284.7	285.2
172.5°	297.4	295.6	294.8	294.6	292.2	290.2	289.0	288.3	287.0	286.9	287.5
175°	293.8	292.6	292.6	293.2	291.5	290.4	290.4	289.8	289.2	289.2	289.8
177.5°	291.3	290.8	290.8	291.7	290.8	290.4	290.4	290.4	289.9	290.4	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4





TEST NUMBER: P332963

CATALOG NUMBER: SA4XXRDIP-C1020D590U835-4F0-1E-UDD-A4

**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°	18.6	17.3	15.2	14.7	14.7	14.3	14.9	15.1	15.3	14.7	15.9
90°	1.7	3.4	4.0	4.6	4.6	8.0	8.0	9.1	10.3	9.7	10.3
92.5°	9.5	14.8	21.8	30.1	42.0	71.0	115.2	158.4	180.9	150.7	112.0
95°	20.5	26.2	33.7	47.3	71.3	120.9	214.5	350.8	464.9	478.0	422.7
97.5°	33.8	38.7	45.5	57.3	77.4	115.6	192.8	328.4	489.7	600.6	624.5
100°	43.4	47.3	54.2	65.0	83.3	116.9	181.4	297.8	458.6	604.7	688.0
102.5°	53.4	56.9	63.3	73.7	91.0	121.5	178.2	277.2	419.9	570.4	684.8
105°	68.5	71.3	78.2	88.4	105.0	132.3	179.7	259.6	374.2	508.3	638.9
107.5°	83.6	86.5	93.8	103.6	119.9	145.0	188.1	256.4	348.7	458.1	573.8
110°	94.1	97.0	103.8	114.1	129.5	154.6	194.5	257.3	340.0	433.0	534.5





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	104.2	107.5	113.9	124.1	139.5	163.7	201.4	260.0	335.9	418.8	505.8
115°	119.2	123.2	128.9	139.8	155.2	178.0	212.2	265.3	333.7	405.6	476.9
117.5°	134.2	137.7	144.0	154.1	170.1	191.8	223.3	270.8	333.1	399.7	462.7
120°	143.8	147.7	154.0	163.7	179.7	201.4	231.0	275.0	333.1	396.5	456.4
122.5°	152.9	156.9	162.7	173.3	188.8	210.5	238.3	279.1	332.7	392.8	450.9
125°	166.0	169.4	175.7	186.5	202.5	223.0	249.3	285.2	332.0	386.8	441.5
127.5°	176.2	180.3	187.4	198.7	214.8	234.7	258.8	290.1	330.7	378.7	430.1
130°	182.5	187.1	195.7	206.5	223.0	242.4	264.7	293.8	330.3	373.6	421.0
132.5°	188.0	194.0	202.1	213.8	229.4	248.8	270.6	297.0	329.8	369.1	411.4
135°	196.8	202.5	212.2	224.2	239.0	257.8	278.4	301.8	329.1	362.2	398.2
137.5°	205.0	211.3	220.5	233.0	247.1	264.7	283.9	304.6	329.0	356.3	386.2
140°	210.5	216.8	226.5	238.4	252.1	269.3	287.5	306.9	328.6	353.1	379.3
142.5°	216.9	222.7	231.9	243.5	256.7	273.4	290.2	308.7	328.6	350.4	373.0
145°	225.9	231.6	239.6	250.4	263.0	277.8	293.2	309.8	327.4	345.7	363.9
147.5°	234.9	239.9	248.1	257.2	268.5	282.4	295.8	310.3	325.4	341.5	356.5
150°	241.3	245.9	252.7	261.3	272.1	284.7	297.2	310.3	324.0	338.3	352.0
152.5°	246.8	251.3	257.7	265.4	275.3	286.5	298.1	309.4	321.7	334.6	346.9
155°	255.6	259.0	264.7	271.0	279.5	289.2	298.9	308.0	318.3	329.1	339.4
157.5°	263.1	266.3	270.7	276.2	282.9	291.2	298.9	306.6	314.8	323.6	331.3
160°	268.1	270.4	274.4	278.9	285.2	292.1	298.9	305.2	312.0	319.5	326.3
162.5°	272.2	274.0	277.6	281.7	286.6	293.0	298.9	303.8	309.3	315.8	321.3
165°	277.8	278.9	281.8	284.7	288.1	293.2	297.8	301.2	305.2	309.8	314.3
167.5°	282.4	282.9	285.1	286.7	289.3	293.1	296.4	298.5	301.1	304.3	307.6
170°	284.7	285.2	286.9	288.1	289.8	292.6	295.5	296.6	298.3	300.6	303.5
172.5°	286.9	287.0	288.3	289.0	290.2	292.2	294.6	294.8	295.6	297.4	299.8
175°	289.2	289.2	289.8	290.4	290.4	291.5	293.2	292.6	292.6	293.8	294.9
177.5°	290.4	289.9	290.4	290.4	290.4	290.8	291.7	290.8	290.8	291.3	291.7
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4



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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°	14.9	14.4	15.0	14.6	14.7	14.0	14.6
90°	10.8	11.4	11.4	12.0	12.5	12.0	12.0
92.5°	84.3	67.1	55.7	48.9	45.9	43.9	43.9
95°	334.3	257.8	202.5	174.6	156.9	146.6	139.2
97.5°	591.7	535.9	476.3	435.4	401.0	383.9	372.0
100°	699.4	671.4	629.2	579.6	544.8	527.7	523.1
102.5°	741.4	749.5	731.9	701.4	676.2	658.2	654.5
105°	737.6	794.1	817.5	818.6	814.0	806.0	802.6
107.5°	678.8	758.4	809.2	837.4	850.4	856.1	857.6
110°	633.2	715.9	778.7	819.2	843.1	853.4	858.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	593.0	671.2	733.9	779.9	808.9	823.3	831.6
115°	547.1	613.8	668.6	713.6	747.9	766.1	770.7
117.5°	520.8	573.3	619.7	658.2	686.9	705.4	709.0
120°	509.4	555.0	595.5	628.1	653.2	668.0	674.3
122.5°	502.1	543.6	579.1	606.6	628.1	640.6	646.9
125°	490.6	529.9	561.3	584.1	600.7	611.5	614.9
127.5°	477.0	516.3	546.0	569.0	583.7	592.8	596.2
130°	466.1	504.8	535.1	558.5	572.7	581.9	585.3
132.5°	453.7	491.6	521.8	544.8	560.9	569.5	573.0
135°	435.3	470.0	498.6	521.4	537.4	546.5	549.9
137.5°	417.6	446.9	472.7	494.0	509.8	517.3	521.4
140°	406.2	431.8	455.8	475.8	488.3	496.3	500.9
142.5°	396.6	418.6	439.4	457.0	468.7	475.8	478.9
145°	383.3	400.5	416.4	430.7	440.4	446.1	448.9
147.5°	371.9	385.6	398.2	408.7	417.0	421.3	422.4
150°	365.1	376.5	386.8	395.9	403.3	406.7	407.3
152.5°	358.2	368.7	377.2	384.9	391.0	393.0	393.6
155°	348.5	357.1	363.9	369.7	374.2	375.9	375.9
157.5°	339.0	346.1	351.6	356.0	359.4	360.4	360.4
160°	332.6	338.8	343.4	346.8	350.3	350.8	350.8
162.5°	326.6	331.5	335.7	338.2	341.6	342.2	341.7
165°	317.7	321.7	324.6	326.9	329.1	328.6	328.0
167.5°	310.2	313.4	315.1	316.3	317.7	317.6	317.2
170°	305.2	307.5	309.2	310.3	310.9	310.3	310.3
172.5°	301.1	302.5	303.7	304.4	305.0	304.4	303.5
175°	295.5	296.6	296.6	296.6	297.8	296.6	295.5
177.5°	292.2	292.2	292.6	292.2	292.6	291.7	290.8
180°	290.4	290.4	290.4	290.4	290.4	290.4	290.4

(END OF REPORT)