

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: P332993

Luminaire Tested: **SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332993  
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-C1195D590U835-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1195 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: 7122.5 lumens  
Efficiency: N/A  
Efficacy: 129.3 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

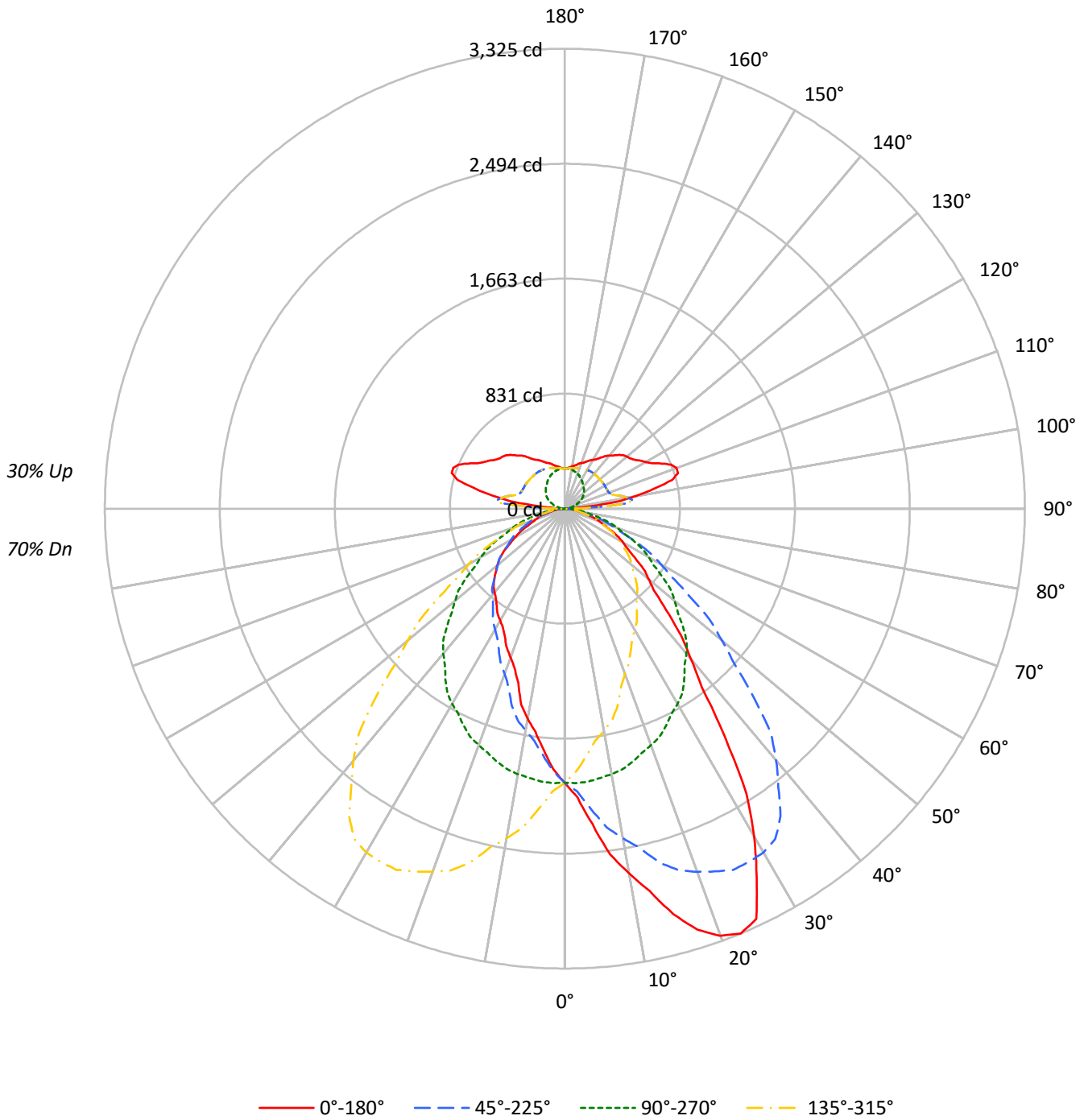
Input Watts (W): 55.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	103	99	95	92	97	94	90	87	84	82	79	75	73	72	67	66	65	61
2	94	87	81	76	89	83	77	73	74	70	67	67	64	61	60	58	55	52
3	86	77	70	64	82	73	67	62	66	61	57	60	56	52	54	50	48	45
4	79	69	61	55	75	65	58	53	59	54	49	54	49	45	48	45	42	39
5	73	62	54	48	69	59	51	46	53	47	43	48	44	40	44	40	37	34
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	37	32	29	27
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24
9	55	42	35	30	52	40	33	29	37	31	27	34	29	25	31	27	24	22
10	51	39	32	27	48	37	31	26	34	29	25	32	27	23	29	25	22	20

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

	0°	90°	180°	270°
0°	15998	15998	15998	15998
5°	18556	16046	14182	16046
10°	21952	15976	12658	15976
15°	25357	15828	10877	15828
20°	28233	15625	9836	15625
25°	29144	15425	9132	15425
30°	25513	15183	8708	15183
35°	19860	14824	8451	14824
40°	14893	14413	8313	14413
45°	11758	13755	8241	13755
50°	9927	12995	8002	12995
55°	8653	12159	7574	12159
60°	7786	11292	6704	11292
65°	6863	10355	5765	10355
70°	6182	9385	5202	9385
75°	5181	8319	4432	8319
80°	4379	7090	4156	7090
85°	3696	5548	3696	5548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.0	2.7
10°-20°	579.2	8.1
20°-30°	905.9	12.7
30°-40°	1007.1	14.1
40°-50°	893.5	12.5
50°-60°	696.2	9.8
60°-70°	455.8	6.4
70°-80°	224.2	3.1
80°-90°	56.9	0.8
90°-100°	209.7	2.9
100°-110°	436.5	6.1
110°-120°	391.0	5.5
120°-130°	328.9	4.6
130°-140°	274.2	3.8
140°-150°	209.5	2.9
150°-160°	147.2	2.1
160°-170°	86.6	1.2
170°-180°	28.2	0.4
0°-30°	1677.1	23.5
0°-40°	2684.1	37.7
0°-60°	4273.8	60.0
0°-90°	5010.8	70.4
90°-120°	1037.2	14.6
90°-150°	1849.7	26.0
90°-180°	2112.0	29.7
0°-180°	7122.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1982	1982	1982	1982	1982	
5°	2290	1980	1750	1980	2290	232
15°	3034	1894	1301	1894	3034	863
25°	3272	1732	1025	1732	3272	1452
35°	2015	1504	858	1504	2015	1263
45°	1030	1205	722	1205	1030	816
55°	615	864	538	864	615	559
65°	359	542	302	542	359	361
75°	166	267	142	267	166	183
85°	40	60	40	60	40	45
90°	12	1	12	1	12	12
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°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	2090.2	2096.0	2090.2	2089.6	2083.2	2081.3	2078.7	2070.4	2055.1	2046.2	2048.1
5°	2289.8	2309.8	2298.6	2297.0	2279.5	2261.9	2250.7	2225.2	2198.0	2179.7	2164.5
7.5°	2520.7	2532.2	2525.2	2514.0	2485.6	2469.5	2443.6	2409.9	2361.2	2324.0	2290.0
10°	2677.9	2687.4	2684.3	2663.5	2642.7	2600.4	2576.5	2529.4	2467.9	2419.2	2373.7
12.5°	2832.4	2842.7	2814.6	2815.5	2776.2	2742.9	2704.9	2645.6	2574.6	2511.8	2454.8
15°	3034.0	3021.2	3021.2	3005.2	2961.3	2915.0	2875.9	2813.6	2724.2	2649.1	2570.1
17.5°	3191.7	3196.2	3189.6	3152.0	3117.5	3069.6	2997.9	2925.2	2842.2	2741.4	2660.6
20°	3286.3	3286.3	3279.1	3253.5	3208.8	3157.7	3080.3	3001.2	2895.8	2794.4	2703.4
22.5°	3324.6	3327.1	3318.7	3297.6	3257.4	3207.5	3141.6	3061.3	2952.7	2838.5	2725.8
25°	3271.9	3287.1	3288.6	3283.1	3271.1	3240.7	3184.1	3101.8	3004.4	2880.7	2759.3
27.5°	3003.9	3023.1	3039.9	3067.5	3104.2	3123.4	3125.9	3084.1	2999.1	2880.0	2757.9
30°	2736.9	2752.9	2804.8	2872.7	2925.4	2973.3	3014.8	3026.0	2978.1	2871.1	2742.5
32.5°	2440.6	2462.3	2514.2	2587.2	2675.0	2756.1	2849.4	2896.9	2895.7	2831.5	2712.5
35°	2015.2	2031.2	2079.1	2155.7	2261.1	2381.7	2529.4	2644.3	2722.6	2717.0	2644.3
37.5°	1625.2	1643.3	1691.7	1755.2	1857.4	2006.7	2149.6	2308.0	2452.7	2534.0	2509.7
40°	1413.2	1414.0	1461.1	1526.6	1622.4	1752.5	1908.2	2083.8	2245.1	2376.9	2402.4
42.5°	1245.8	1246.0	1277.1	1347.7	1416.7	1539.2	1687.8	1862.2	2051.0	2203.1	2270.8
45°	1029.9	1037.1	1062.7	1105.0	1159.3	1263.1	1382.0	1544.1	1755.7	1936.1	2048.7
47.5°	872.2	882.7	899.0	933.5	976.8	1045.9	1144.3	1289.9	1462.0	1660.5	1820.7
50°	790.4	792.0	812.8	831.9	869.5	924.6	1010.8	1132.1	1290.2	1481.0	1659.1
52.5°	720.2	719.8	732.3	756.6	787.1	830.0	899.6	1010.1	1150.3	1321.4	1505.2
55°	614.8	618.8	628.3	647.5	670.7	701.0	756.1	839.1	949.3	1095.4	1262.3
57.5°	534.6	536.7	544.2	552.3	573.6	595.6	637.0	694.6	787.6	907.2	1062.7
60°	482.2	483.0	485.4	497.4	514.2	534.9	562.9	611.6	689.8	799.2	922.2
62.5°	431.1	432.6	436.3	445.0	458.0	472.3	501.6	540.7	605.5	698.9	809.7
65°	359.3	360.1	365.7	368.9	379.2	392.0	413.6	439.9	484.6	562.9	646.7
67.5°	300.2	300.2	300.5	304.8	312.0	320.5	333.4	354.5	388.2	436.3	510.2
70°	261.9	261.9	263.5	265.9	269.9	277.0	284.2	300.2	325.0	364.1	420.8
72.5°	226.1	226.7	228.3	228.8	230.9	236.8	242.1	252.3	270.7	300.2	346.0
75°	166.1	168.5	172.5	175.7	179.6	178.8	184.4	190.8	196.4	214.0	240.3
77.5°	123.6	122.3	122.8	125.5	126.0	126.8	130.8	135.7	139.9	148.2	157.6
80°	94.2	94.2	96.6	97.4	96.6	97.4	101.4	103.8	105.4	108.6	117.4
82.5°	71.2	72.5	71.7	72.5	73.0	73.8	77.1	77.6	79.2	80.5	84.2
85°	39.9	40.7	41.5	39.9	39.9	39.9	41.5	42.3	43.9	43.1	44.7
87.5°	16.4	15.8	16.6	16.4	17.0	16.3	16.9	18.0	16.6	17.4	17.2
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°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	2041.7	2032.8	2028.3	2018.1	2005.9	1999.5	1993.8	1985.5	1974.6	1963.1	1954.8
5°	2145.3	2126.2	2102.2	2073.5	2047.9	2023.2	2001.6	1980.1	1955.3	1929.8	1904.2
7.5°	2251.7	2214.0	2173.3	2126.2	2080.3	2038.7	2000.3	1963.6	1922.1	1884.9	1851.0
10°	2325.8	2274.7	2218.0	2158.1	2098.2	2046.3	1995.2	1948.9	1897.8	1852.3	1814.0
12.5°	2385.8	2325.8	2257.6	2183.0	2111.0	2048.2	1989.5	1929.1	1871.0	1821.7	1770.6
15°	2485.4	2403.2	2311.4	2222.0	2128.6	2043.1	1964.1	1893.8	1827.6	1758.1	1709.4
17.5°	2554.0	2456.4	2344.8	2237.3	2127.0	2026.2	1935.0	1851.4	1774.9	1704.0	1646.0
20°	2594.8	2487.0	2363.3	2241.1	2117.4	2009.6	1911.4	1818.8	1739.7	1663.1	1603.2
22.5°	2617.8	2498.5	2363.3	2235.4	2107.2	1990.4	1882.6	1786.2	1700.1	1623.5	1557.2
25°	2625.2	2497.4	2359.3	2212.4	2071.9	1948.1	1836.3	1731.7	1635.9	1559.3	1489.0
27.5°	2615.0	2464.5	2323.1	2172.3	2027.3	1896.9	1779.5	1669.6	1573.7	1491.4	1419.4
30°	2599.6	2438.3	2286.6	2130.2	1983.2	1857.9	1734.1	1628.8	1529.0	1443.5	1370.9
32.5°	2566.4	2406.4	2243.2	2082.9	1934.1	1804.9	1687.5	1581.5	1483.6	1396.3	1319.1
35°	2500.6	2338.5	2161.3	1996.8	1850.7	1716.6	1606.4	1504.2	1410.8	1317.4	1235.9
37.5°	2413.9	2248.3	2072.0	1891.9	1745.6	1619.0	1517.9	1422.0	1330.8	1245.5	1155.3
40°	2332.2	2181.3	1999.2	1820.4	1670.3	1548.1	1454.7	1367.7	1275.9	1191.2	1101.0
42.5°	2233.2	2104.6	1920.7	1741.2	1593.0	1475.3	1388.3	1303.2	1219.7	1137.6	1043.5
45°	2067.9	1970.5	1798.0	1625.6	1476.3	1359.7	1279.9	1204.8	1131.3	1053.1	964.5
47.5°	1878.5	1812.5	1663.7	1487.1	1349.0	1244.1	1167.0	1105.6	1043.5	965.3	887.5
50°	1746.9	1704.6	1560.9	1399.6	1267.9	1171.3	1092.2	1034.7	982.8	907.8	838.3
52.5°	1606.4	1583.9	1462.5	1308.3	1181.0	1086.3	1018.8	967.0	914.5	852.2	787.2
55°	1392.4	1404.4	1301.4	1168.1	1048.3	968.5	907.0	863.9	819.2	766.5	716.2
57.5°	1173.7	1217.4	1148.3	1031.2	919.0	845.2	798.9	762.6	725.1	681.4	638.4
60°	1042.7	1079.4	1040.3	937.3	839.1	770.5	727.4	699.4	661.9	622.0	589.2
62.5°	915.0	954.3	931.1	847.9	756.7	697.7	659.6	633.6	605.7	570.9	536.9
65°	754.5	780.0	768.9	711.4	646.7	596.4	561.3	542.1	516.6	491.0	460.7
67.5°	577.9	627.2	620.7	590.2	534.3	495.0	472.0	455.1	431.8	412.8	392.2
70°	475.1	520.6	519.8	495.0	464.7	427.9	412.0	397.6	376.8	358.5	341.7
72.5°	388.8	430.5	436.7	417.7	397.0	369.2	353.9	344.0	323.8	311.2	297.6
75°	272.3	302.6	310.6	310.6	301.0	286.6	273.1	266.7	252.3	241.1	233.1
77.5°	178.5	197.7	210.1	213.0	214.5	209.7	198.5	194.0	183.0	179.0	171.3
80°	126.1	138.9	153.3	158.1	162.1	160.5	155.7	152.5	142.1	138.1	134.9
82.5°	87.2	94.2	106.0	116.6	115.4	119.6	115.4	112.9	105.1	103.6	100.4
85°	45.5	46.3	47.9	55.1	59.1	60.7	61.5	59.9	57.5	57.5	51.9
87.5°	16.9	16.3	16.9	16.9	17.4	19.8	21.4	21.8	20.1	18.6	16.8
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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	1945.9	1939.5	1931.2	1921.6	1910.1	1899.9	1895.4	1899.3	1901.2	1896.1	1895.4
5°	1886.6	1866.7	1850.7	1826.8	1807.6	1791.6	1780.5	1775.7	1777.3	1764.5	1761.3
7.5°	1820.1	1796.4	1770.2	1741.8	1715.3	1691.8	1679.5	1672.8	1659.3	1653.5	1643.8
10°	1777.3	1745.3	1719.8	1686.2	1655.9	1628.0	1614.4	1603.2	1589.6	1583.2	1569.7
12.5°	1733.2	1696.1	1668.0	1633.2	1602.2	1568.6	1555.6	1534.9	1513.6	1500.2	1482.8
15°	1671.1	1626.4	1592.0	1550.5	1513.8	1475.5	1441.1	1402.8	1388.4	1358.1	1340.5
17.5°	1598.4	1553.1	1510.6	1454.9	1398.2	1350.6	1314.0	1277.3	1255.3	1235.9	1227.0
20°	1550.5	1509.0	1449.9	1385.2	1322.2	1269.5	1239.9	1216.0	1192.0	1178.5	1168.9
22.5°	1505.2	1452.1	1383.5	1313.7	1250.6	1209.4	1184.4	1159.8	1140.3	1127.4	1114.6
25°	1429.2	1359.7	1287.0	1207.2	1164.1	1128.2	1101.0	1081.0	1069.1	1052.3	1045.9
27.5°	1351.1	1266.9	1186.8	1133.1	1088.2	1055.3	1031.7	1016.7	1001.5	990.8	982.5
30°	1291.0	1205.6	1133.7	1082.6	1037.1	1010.0	990.8	973.3	961.3	952.5	946.1
32.5°	1231.6	1146.2	1085.8	1030.9	995.0	968.5	948.0	934.9	925.5	914.2	910.3
35°	1145.7	1069.9	1017.2	967.7	930.9	907.0	891.0	877.5	869.5	866.3	863.9
37.5°	1063.2	1001.0	944.4	903.8	871.1	852.2	833.4	826.7	821.2	815.5	818.1
40°	1010.8	952.5	902.2	859.1	832.7	812.0	800.8	792.8	788.0	788.0	788.0
42.5°	965.4	908.4	859.4	820.8	794.4	776.9	764.4	757.7	756.1	755.5	759.3
45°	895.0	842.3	792.8	760.9	738.5	721.0	713.8	708.2	708.2	711.4	712.2
47.5°	825.2	775.9	736.1	700.4	679.9	668.9	662.7	659.8	660.1	663.3	667.0
50°	782.4	733.7	694.6	662.7	643.5	633.1	627.5	626.0	627.5	627.5	633.1
52.5°	735.8	692.2	653.7	626.9	605.2	595.5	592.4	590.2	591.1	593.7	596.1
55°	667.5	628.3	591.6	566.1	550.1	543.7	536.5	537.3	535.7	537.3	537.3
57.5°	599.0	563.8	529.7	509.4	495.3	486.1	478.2	480.5	478.1	477.8	476.5
60°	554.9	516.6	489.4	471.1	455.1	447.1	439.9	441.5	439.1	437.5	434.3
62.5°	507.0	475.1	449.2	431.5	418.7	409.4	402.2	400.6	395.1	389.6	382.6
65°	437.5	411.2	388.0	371.3	359.3	352.1	346.5	341.7	329.7	317.0	310.6
67.5°	370.0	351.0	329.4	315.2	305.5	296.1	285.4	277.2	266.0	259.0	255.0
70°	326.5	308.2	289.8	276.2	265.9	257.1	245.1	239.5	231.5	228.3	224.4
72.5°	285.0	267.9	250.9	238.6	227.5	220.7	211.3	205.7	202.2	200.9	196.9
75°	222.0	208.4	195.6	184.4	175.7	170.9	166.9	162.9	161.3	154.1	150.1
77.5°	161.9	153.0	145.0	137.0	130.8	127.6	119.9	115.3	112.6	109.2	108.4
80°	126.1	119.8	111.8	107.0	98.2	95.0	91.8	91.0	90.2	89.4	88.6
82.5°	94.9	88.5	80.5	77.6	75.2	73.3	71.4	70.6	69.8	70.3	70.1
85°	47.9	44.7	44.7	43.9	43.1	42.3	41.5	41.5	40.7	41.5	40.7
87.5°	16.9	16.2	16.9	15.6	16.5	16.7	16.0	16.1	16.9	15.7	15.7
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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	1891.6	1892.9	1888.4	1887.1	1888.4	1892.9	1891.6	1895.4	1896.1	1901.2	1899.3
5°	1754.9	1753.3	1749.3	1750.1	1749.3	1753.3	1754.9	1761.3	1764.5	1777.3	1775.7
7.5°	1638.0	1631.8	1633.5	1627.2	1633.5	1631.8	1638.0	1643.8	1653.5	1659.3	1672.8
10°	1566.5	1557.7	1550.5	1544.1	1550.5	1557.7	1566.5	1569.7	1583.2	1589.6	1603.2
12.5°	1468.8	1461.2	1451.5	1453.4	1451.5	1461.2	1468.8	1482.8	1500.2	1513.6	1534.9
15°	1330.1	1318.2	1299.0	1301.4	1299.0	1318.2	1330.1	1340.5	1358.1	1388.4	1402.8
17.5°	1212.8	1212.9	1204.2	1206.2	1204.2	1212.9	1212.8	1227.0	1235.9	1255.3	1277.3
20°	1152.1	1146.5	1147.3	1144.9	1147.3	1146.5	1152.1	1168.9	1178.5	1192.0	1216.0
22.5°	1109.9	1103.1	1097.5	1092.5	1097.5	1103.1	1109.9	1114.6	1127.4	1140.3	1159.8
25°	1038.7	1033.9	1026.8	1025.2	1026.8	1033.9	1038.7	1045.9	1052.3	1069.1	1081.0
27.5°	976.1	975.2	972.3	968.6	972.3	975.2	976.1	982.5	990.8	1001.5	1016.7
30°	939.7	938.1	936.5	934.1	936.5	938.1	939.7	946.1	952.5	961.3	973.3
32.5°	907.2	906.2	904.6	904.8	904.6	906.2	907.2	910.3	914.2	925.5	934.9
35°	860.7	859.9	858.3	857.5	858.3	859.9	860.7	863.9	866.3	869.5	877.5
37.5°	817.3	819.3	818.4	818.2	818.4	819.3	817.3	818.1	815.5	821.2	826.7
40°	787.2	788.0	789.6	788.8	789.6	788.0	787.2	788.0	788.0	788.0	792.8
42.5°	762.3	762.5	764.7	762.0	764.7	762.5	762.3	759.3	755.5	756.1	757.7
45°	717.8	722.6	721.8	721.8	721.8	722.6	717.8	712.2	711.4	708.2	708.2
47.5°	669.1	673.2	674.3	674.2	674.3	673.2	669.1	667.0	663.3	660.1	659.8
50°	637.1	635.5	637.9	637.1	637.9	635.5	637.1	633.1	627.5	627.5	626.0
52.5°	598.2	598.5	598.3	597.5	598.3	598.5	598.2	596.1	593.7	591.1	590.2
55°	538.1	538.9	537.3	538.1	537.3	538.9	538.1	537.3	537.3	535.7	537.3
57.5°	473.0	469.1	470.7	468.8	470.7	469.1	473.0	476.5	477.8	478.1	480.5
60°	426.4	420.0	418.4	415.2	418.4	420.0	426.4	434.3	437.5	439.1	441.5
62.5°	374.0	369.5	364.1	366.6	364.1	369.5	374.0	382.6	389.6	395.1	400.6
65°	304.2	301.0	298.6	301.8	298.6	301.0	304.2	310.6	317.0	329.7	341.7
67.5°	251.8	250.1	250.1	248.5	250.1	250.1	251.8	255.0	259.0	266.0	277.2
70°	224.4	222.0	222.0	220.4	222.0	222.0	224.4	224.4	228.3	231.5	239.5
72.5°	196.2	193.9	194.5	193.5	194.5	193.9	196.2	196.9	200.9	202.2	205.7
75°	145.3	141.3	141.3	142.1	141.3	141.3	145.3	150.1	154.1	161.3	162.9
77.5°	108.4	107.6	108.7	107.3	108.7	107.6	108.4	108.4	109.2	112.6	115.3
80°	88.6	87.8	87.0	89.4	87.0	87.8	88.6	88.6	89.4	90.2	91.0
82.5°	68.8	68.7	68.5	71.5	68.5	68.7	68.8	70.1	70.3	69.8	70.6
85°	41.5	39.9	41.5	39.9	41.5	39.9	41.5	40.7	41.5	40.7	41.5
87.5°	17.1	16.6	15.8	16.4	15.8	16.6	17.1	15.7	15.7	16.9	16.1
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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	1895.4	1899.9	1910.1	1921.6	1931.2	1939.5	1945.9	1954.8	1963.1	1974.6	1985.5
5°	1780.5	1791.6	1807.6	1826.8	1850.7	1866.7	1886.6	1904.2	1929.8	1955.3	1980.1
7.5°	1679.5	1691.8	1715.3	1741.8	1770.2	1796.4	1820.1	1851.0	1884.9	1922.1	1963.6
10°	1614.4	1628.0	1655.9	1686.2	1719.8	1745.3	1777.3	1814.0	1852.3	1897.8	1948.9
12.5°	1555.6	1568.6	1602.2	1633.2	1668.0	1696.1	1733.2	1770.6	1821.7	1871.0	1929.1
15°	1441.1	1475.5	1513.8	1550.5	1592.0	1626.4	1671.1	1709.4	1758.1	1827.6	1893.8
17.5°	1314.0	1350.6	1398.2	1454.9	1510.6	1553.1	1598.4	1646.0	1704.0	1774.9	1851.4
20°	1239.9	1269.5	1322.2	1385.2	1449.9	1509.0	1550.5	1603.2	1663.1	1739.7	1818.8
22.5°	1184.4	1209.4	1250.6	1313.7	1383.5	1452.1	1505.2	1557.2	1623.5	1700.1	1786.2
25°	1101.0	1128.2	1164.1	1207.2	1287.0	1359.7	1429.2	1489.0	1559.3	1635.9	1731.7
27.5°	1031.7	1055.3	1088.2	1133.1	1186.8	1266.9	1351.1	1419.4	1491.4	1573.7	1669.6
30°	990.8	1010.0	1037.1	1082.6	1133.7	1205.6	1291.0	1370.9	1443.5	1529.0	1628.8
32.5°	948.0	968.5	995.0	1030.9	1085.8	1146.2	1231.6	1319.1	1396.3	1483.6	1581.5
35°	891.0	907.0	930.9	967.7	1017.2	1069.9	1145.7	1235.9	1317.4	1410.8	1504.2
37.5°	833.4	852.2	871.1	903.8	944.4	1001.0	1063.2	1155.3	1245.5	1330.8	1422.0
40°	800.8	812.0	832.7	859.1	902.2	952.5	1010.8	1101.0	1191.2	1275.9	1367.7
42.5°	764.4	776.9	794.4	820.8	859.4	908.4	965.4	1043.5	1137.6	1219.7	1303.2
45°	713.8	721.0	738.5	760.9	792.8	842.3	895.0	964.5	1053.1	1131.3	1204.8
47.5°	662.7	668.9	679.9	700.4	736.1	775.9	825.2	887.5	965.3	1043.5	1105.6
50°	627.5	633.1	643.5	662.7	694.6	733.7	782.4	838.3	907.8	982.8	1034.7
52.5°	592.4	595.5	605.2	626.9	653.7	692.2	735.8	787.2	852.2	914.5	967.0
55°	536.5	543.7	550.1	566.1	591.6	628.3	667.5	716.2	766.5	819.2	863.9
57.5°	478.2	486.1	495.3	509.4	529.7	563.8	599.0	638.4	681.4	725.1	762.6
60°	439.9	447.1	455.1	471.1	489.4	516.6	554.9	589.2	622.0	661.9	699.4
62.5°	402.2	409.4	418.7	431.5	449.2	475.1	507.0	536.9	570.9	605.7	633.6
65°	346.5	352.1	359.3	371.3	388.0	411.2	437.5	460.7	491.0	516.6	542.1
67.5°	285.4	296.1	305.5	315.2	329.4	351.0	370.0	392.2	412.8	431.8	455.1
70°	245.1	257.1	265.9	276.2	289.8	308.2	326.5	341.7	358.5	376.8	397.6
72.5°	211.3	220.7	227.5	238.6	250.9	267.9	285.0	297.6	311.2	323.8	344.0
75°	166.9	170.9	175.7	184.4	195.6	208.4	222.0	233.1	241.1	252.3	266.7
77.5°	119.9	127.6	130.8	137.0	145.0	153.0	161.9	171.3	179.0	183.0	194.0
80°	91.8	95.0	98.2	107.0	111.8	119.8	126.1	134.9	138.1	142.1	152.5
82.5°	71.4	73.3	75.2	77.6	80.5	88.5	94.9	100.4	103.6	105.1	112.9
85°	41.5	42.3	43.1	43.9	44.7	44.7	47.9	51.9	57.5	57.5	59.9
87.5°	16.0	16.7	16.5	15.6	16.9	16.2	16.9	16.8	18.6	20.1	21.8
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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-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: P332993

CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	1993.8	1999.5	2005.9	2018.1	2028.3	2032.8	2041.7	2048.1	2046.2	2055.1	2070.4
5°	2001.6	2023.2	2047.9	2073.5	2102.2	2126.2	2145.3	2164.5	2179.7	2198.0	2225.2
7.5°	2000.3	2038.7	2080.3	2126.2	2173.3	2214.0	2251.7	2290.0	2324.0	2361.2	2409.9
10°	1995.2	2046.3	2098.2	2158.1	2218.0	2274.7	2325.8	2373.7	2419.2	2467.9	2529.4
12.5°	1989.5	2048.2	2111.0	2183.0	2257.6	2325.8	2385.8	2454.8	2511.8	2574.6	2645.6
15°	1964.1	2043.1	2128.6	2222.0	2311.4	2403.2	2485.4	2570.1	2649.1	2724.2	2813.6
17.5°	1935.0	2026.2	2127.0	2237.3	2344.8	2456.4	2554.0	2660.6	2741.4	2842.2	2925.2
20°	1911.4	2009.6	2117.4	2241.1	2363.3	2487.0	2594.8	2703.4	2794.4	2895.8	3001.2
22.5°	1882.6	1990.4	2107.2	2235.4	2363.3	2498.5	2617.8	2725.8	2838.5	2952.7	3061.3
25°	1836.3	1948.1	2071.9	2212.4	2359.3	2497.4	2625.2	2759.3	2880.7	3004.4	3101.8
27.5°	1779.5	1896.9	2027.3	2172.3	2323.1	2464.5	2615.0	2757.9	2880.0	2999.1	3084.1
30°	1734.1	1857.9	1983.2	2130.2	2286.6	2438.3	2599.6	2742.5	2871.1	2978.1	3026.0
32.5°	1687.5	1804.9	1934.1	2082.9	2243.2	2406.4	2566.4	2712.5	2831.5	2895.7	2896.9
35°	1606.4	1716.6	1850.7	1996.8	2161.3	2338.5	2500.6	2644.3	2717.0	2722.6	2644.3
37.5°	1517.9	1619.0	1745.6	1891.9	2072.0	2248.3	2413.9	2509.7	2534.0	2452.7	2308.0
40°	1454.7	1548.1	1670.3	1820.4	1999.2	2181.3	2332.2	2402.4	2376.9	2245.1	2083.8
42.5°	1388.3	1475.3	1593.0	1741.2	1920.7	2104.6	2233.2	2270.8	2203.1	2051.0	1862.2
45°	1279.9	1359.7	1476.3	1625.6	1798.0	1970.5	2067.9	2048.7	1936.1	1755.7	1544.1
47.5°	1167.0	1244.1	1349.0	1487.1	1663.7	1812.5	1878.5	1820.7	1660.5	1462.0	1289.9
50°	1092.2	1171.3	1267.9	1399.6	1560.9	1704.6	1746.9	1659.1	1481.0	1290.2	1132.1
52.5°	1018.8	1086.3	1181.0	1308.3	1462.5	1583.9	1606.4	1505.2	1321.4	1150.3	1010.1
55°	907.0	968.5	1048.3	1168.1	1301.4	1404.4	1392.4	1262.3	1095.4	949.3	839.1
57.5°	798.9	845.2	919.0	1031.2	1148.3	1217.4	1173.7	1062.7	907.2	787.6	694.6
60°	727.4	770.5	839.1	937.3	1040.3	1079.4	1042.7	922.2	799.2	689.8	611.6
62.5°	659.6	697.7	756.7	847.9	931.1	954.3	915.0	809.7	698.9	605.5	540.7
65°	561.3	596.4	646.7	711.4	768.9	780.0	754.5	646.7	562.9	484.6	439.9
67.5°	472.0	495.0	534.3	590.2	620.7	627.2	577.9	510.2	436.3	388.2	354.5
70°	412.0	427.9	464.7	495.0	519.8	520.6	475.1	420.8	364.1	325.0	300.2
72.5°	353.9	369.2	397.0	417.7	436.7	430.5	388.8	346.0	300.2	270.7	252.3
75°	273.1	286.6	301.0	310.6	310.6	302.6	272.3	240.3	214.0	196.4	190.8
77.5°	198.5	209.7	214.5	213.0	210.1	197.7	178.5	157.6	148.2	139.9	135.7
80°	155.7	160.5	162.1	158.1	153.3	138.9	126.1	117.4	108.6	105.4	103.8
82.5°	115.4	119.6	115.4	116.6	106.0	94.2	87.2	84.2	80.5	79.2	77.6
85°	61.5	60.7	59.1	55.1	47.9	46.3	45.5	44.7	43.1	43.9	42.3
87.5°	21.4	19.8	17.4	16.9	16.9	16.3	16.9	17.2	17.4	16.6	18.0
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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CATALOG NUMBER: SA4XXRDIP-C1195D590U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7	1981.7
2.5°	2078.7	2081.3	2083.2	2089.6	2090.2	2096.0	2090.2
5°	2250.7	2261.9	2279.5	2297.0	2298.6	2309.8	2289.8
7.5°	2443.6	2469.5	2485.6	2514.0	2525.2	2532.2	2520.7
10°	2576.5	2600.4	2642.7	2663.5	2684.3	2687.4	2677.9
12.5°	2704.9	2742.9	2776.2	2815.5	2814.6	2842.7	2832.4
15°	2875.9	2915.0	2961.3	3005.2	3021.2	3021.2	3034.0
17.5°	2997.9	3069.6	3117.5	3152.0	3189.6	3196.2	3191.7
20°	3080.3	3157.7	3208.8	3253.5	3279.1	3286.3	3286.3
22.5°	3141.6	3207.5	3257.4	3297.6	3318.7	3327.1	3324.6
25°	3184.1	3240.7	3271.1	3283.1	3288.6	3287.1	3271.9
27.5°	3125.9	3123.4	3104.2	3067.5	3039.9	3023.1	3003.9
30°	3014.8	2973.3	2925.4	2872.7	2804.8	2752.9	2736.9
32.5°	2849.4	2756.1	2675.0	2587.2	2514.2	2462.3	2440.6
35°	2529.4	2381.7	2261.1	2155.7	2079.1	2031.2	2015.2
37.5°	2149.6	2006.7	1857.4	1755.2	1691.7	1643.3	1625.2
40°	1908.2	1752.5	1622.4	1526.6	1461.1	1414.0	1413.2
42.5°	1687.8	1539.2	1416.7	1347.7	1277.1	1246.0	1245.8
45°	1382.0	1263.1	1159.3	1105.0	1062.7	1037.1	1029.9
47.5°	1144.3	1045.9	976.8	933.5	899.0	882.7	872.2
50°	1010.8	924.6	869.5	831.9	812.8	792.0	790.4
52.5°	899.6	830.0	787.1	756.6	732.3	719.8	720.2
55°	756.1	701.0	670.7	647.5	628.3	618.8	614.8
57.5°	637.0	595.6	573.6	552.3	544.2	536.7	534.6
60°	562.9	534.9	514.2	497.4	485.4	483.0	482.2
62.5°	501.6	472.3	458.0	445.0	436.3	432.6	431.1
65°	413.6	392.0	379.2	368.9	365.7	360.1	359.3
67.5°	333.4	320.5	312.0	304.8	300.5	300.2	300.2
70°	284.2	277.0	269.9	265.9	263.5	261.9	261.9
72.5°	242.1	236.8	230.9	228.8	228.3	226.7	226.1
75°	184.4	178.8	179.6	175.7	172.5	168.5	166.1
77.5°	130.8	126.8	126.0	125.5	122.8	122.3	123.6
80°	101.4	97.4	96.6	97.4	96.6	94.2	94.2
82.5°	77.1	73.8	73.0	72.5	71.7	72.5	71.2
85°	41.5	39.9	39.9	39.9	41.5	40.7	39.9
87.5°	16.9	16.3	17.0	16.4	16.6	15.8	16.4
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)