

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: P331737-830

Luminaire Tested: **SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331737-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 330 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4799.1 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Direct

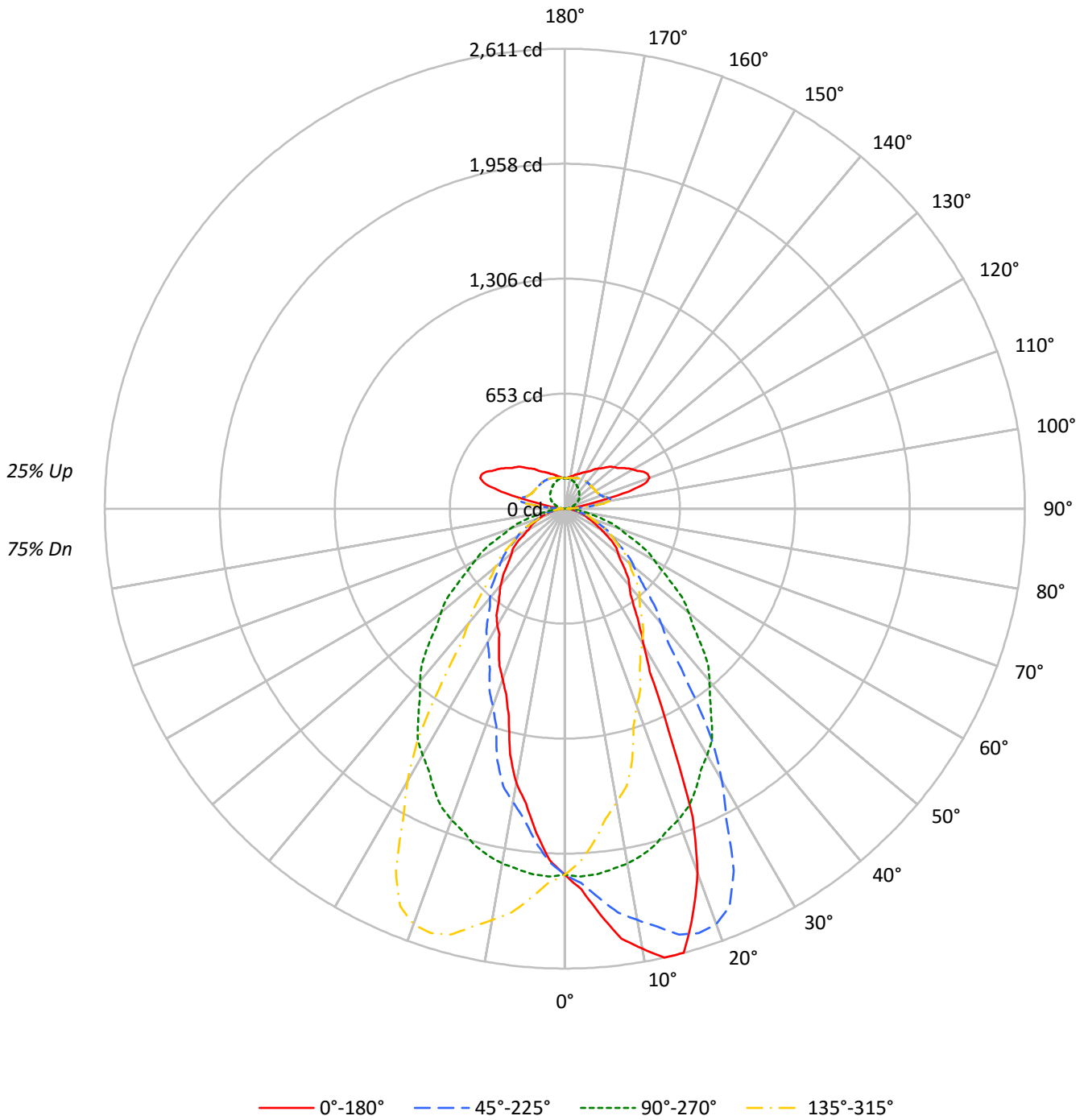
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75				75
1	104	100	97	94	99	96	93	90	87	85	82	79	77	75	72	70	69				65	
2	96	89	83	79	91	85	80	76	78	74	70	71	68	65	65	62	60				57	
3	89	80	73	67	84	76	70	65	70	65	61	64	60	57	58	55	53				50	
4	82	72	64	58	78	69	62	56	63	57	53	58	53	50	53	50	47				44	
5	76	65	57	51	72	62	55	50	57	51	47	53	48	44	49	45	42				39	
6	70	59	51	45	67	57	49	44	52	46	42	48	43	40	45	41	37				35	
7	66	54	46	41	63	52	45	40	48	42	38	45	39	36	41	37	34				32	
8	61	49	42	37	59	48	41	36	44	38	34	41	36	32	38	34	31				29	
9	58	46	38	33	55	44	37	33	41	35	31	38	33	30	36	31	28				26	
10	54	42	35	30	52	41	34	30	38	32	29	36	31	27	33	29	26				24	

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

	0°	90°	180°	270°
0°	33562	33562	33562	33562
5°	37483	33773	29945	33773
10°	41589	33536	25956	33536
15°	43632	33045	20451	33045
20°	37826	32316	17698	32316
25°	24807	31319	15800	31319
30°	16697	30109	14300	30109
35°	13525	28586	12899	28586
40°	12026	26930	11936	26930
45°	10885	24987	10654	24987
50°	9907	23059	9869	23059
55°	9312	20921	9191	20921
60°	7789	18962	7698	18962
65°	6567	17219	7450	17219
70°	6071	15375	7024	15375
75°	5677	13381	6488	13381
80°	5244	11018	5774	11018
85°	4817	8688	5076	8688



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.1	4.1
10°-20°	549.1	11.4
20°-30°	707.5	14.7
30°-40°	672.4	14.0
40°-50°	576.0	12.0
50°-60°	438.6	9.1
60°-70°	277.3	5.8
70°-80°	138.5	2.9
80°-90°	37.6	0.8
90°-100°	69.2	1.4
100°-110°	235.0	4.9
110°-120°	249.6	5.2
120°-130°	205.5	4.3
130°-140°	165.0	3.4
140°-150°	124.7	2.6
150°-160°	87.6	1.8
160°-170°	51.6	1.1
170°-180°	16.8	0.3
0°-30°	1453.7	30.3
0°-40°	2126.0	44.3
0°-60°	3140.7	65.4
0°-90°	3594.0	74.9
90°-120°	553.8	11.5
90°-150°	1049.0	21.9
90°-180°	1205.0	25.1
0°-180°	4799.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2079	2079	2079	2079	2079	
5°	2313	2084	1848	2084	2313	228
15°	2610	1977	1224	1977	2610	704
25°	1392	1758	887	1758	1392	661
35°	686	1450	654	1450	686	439
45°	477	1094	467	1094	477	369
55°	331	743	326	743	331	290
65°	172	451	195	451	172	175
75°	91	214	104	214	91	97
85°	26	47	27	47	26	28
90°	11	0	11	0	11	7
95°	38	12	38	12	38	49
105°	375	41	375	41	375	363
115°	494	72	494	72	494	484
125°	401	100	401	100	401	362
135°	332	117	332	117	332	258
145°	265	134	265	134	265	168
155°	223	152	223	152	223	104
165°	196	166	196	166	196	56
175°	176	173	176	173	176	17
180°	173	173	173	173	173	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2163.0	2164.8	2166.5	2162.5	2162.5	2159.0	2151.5	2145.7	2129.6	2127.2	2127.2
5°	2312.7	2311.3	2314.1	2304.8	2291.8	2288.9	2275.2	2257.1	2238.4	2217.4	2213.1
7.5°	2461.5	2459.4	2453.5	2452.0	2442.0	2420.2	2398.1	2374.5	2343.3	2312.9	2297.5
10°	2536.7	2560.5	2546.0	2520.7	2525.8	2491.9	2473.8	2442.8	2416.8	2371.2	2361.2
12.5°	2610.6	2620.0	2615.4	2601.0	2594.5	2571.0	2546.6	2519.6	2471.6	2430.7	2395.2
15°	2610.3	2624.0	2627.6	2623.3	2627.0	2625.5	2612.4	2590.1	2548.2	2503.4	2464.4
17.5°	2417.6	2427.1	2450.8	2466.8	2487.1	2529.9	2550.9	2559.2	2553.0	2527.4	2499.9
20°	2201.5	2185.6	2252.0	2286.0	2314.9	2387.1	2449.2	2473.0	2511.3	2510.7	2503.4
22.5°	1895.3	1899.0	1962.0	2002.3	2086.7	2158.9	2229.7	2319.4	2393.5	2442.4	2471.1
25°	1392.5	1420.0	1482.8	1537.8	1631.6	1765.9	1888.0	2029.6	2163.2	2268.7	2369.1
27.5°	1045.8	1047.9	1097.7	1148.4	1204.2	1314.3	1467.9	1637.0	1827.5	1984.7	2165.5
30°	895.6	891.3	912.2	943.3	991.0	1076.2	1191.8	1357.9	1547.8	1784.7	1995.6
32.5°	789.3	789.6	805.3	828.3	867.9	925.4	1004.6	1139.4	1319.0	1551.9	1799.2
35°	686.2	685.4	697.0	713.6	730.2	767.0	821.2	892.0	1015.5	1232.9	1485.7
37.5°	612.2	615.4	621.0	631.4	649.8	670.2	702.8	750.3	838.3	966.9	1179.3
40°	570.6	572.0	579.9	588.6	599.5	615.4	642.1	680.4	744.7	847.3	1002.5
42.5°	532.4	534.0	539.5	547.6	556.2	572.0	594.2	627.3	679.4	759.4	887.5
45°	476.7	476.7	481.7	485.4	494.7	509.2	527.3	554.7	590.8	650.1	735.3
47.5°	424.4	424.5	427.9	434.1	440.0	451.3	469.0	491.4	517.7	563.5	636.3
50°	394.4	395.1	397.3	402.3	406.0	416.0	429.8	449.2	476.7	512.1	572.8
52.5°	370.1	369.7	372.4	374.6	377.0	384.3	394.5	411.7	436.2	467.0	517.3
55°	330.8	327.9	332.2	335.8	338.0	340.9	346.7	357.5	378.4	404.4	442.1
57.5°	281.7	280.5	283.6	286.9	293.7	301.5	306.4	313.3	324.1	342.8	380.0
60°	241.2	241.2	247.7	249.9	257.9	268.0	278.1	283.9	294.7	307.0	334.4
62.5°	205.4	206.0	209.1	211.2	215.7	228.1	242.2	255.0	265.2	276.9	295.1
65°	171.9	173.3	173.3	174.7	177.7	180.6	186.3	196.4	214.5	231.1	244.9
67.5°	145.9	146.4	146.8	148.2	148.9	152.1	154.4	158.9	163.1	178.8	195.9
70°	128.6	130.7	130.0	131.5	132.1	133.7	136.5	138.6	145.2	148.8	158.9
72.5°	112.4	114.0	113.9	114.7	116.6	116.9	119.1	121.3	125.5	128.6	134.0
75°	91.0	90.3	91.0	92.5	93.2	93.9	93.9	96.8	99.0	101.8	105.5
77.5°	70.2	71.0	70.8	71.0	71.1	72.4	72.2	73.5	75.7	77.1	78.9
80°	56.4	57.0	56.4	57.0	57.8	58.5	57.8	58.5	60.7	62.1	62.1
82.5°	43.6	43.7	44.2	44.4	44.5	44.7	45.6	45.8	47.4	47.1	47.7
85°	26.0	25.3	25.3	25.3	26.0	26.8	26.0	26.0	26.8	26.8	26.8
87.5°	11.4	12.1	12.1	12.1	12.1	12.0	11.8	12.5	12.1	12.6	12.1
90°	11.0	11.0	11.0	11.0	11.0	10.7	10.0	10.7	11.0	11.3	11.0
92.5°	18.5	18.9	18.8	19.8	20.1	22.1	24.9	29.0	36.6	43.3	42.7
95°	38.0	37.6	38.6	41.3	45.6	53.0	66.9	87.3	114.2	130.5	115.6
97.5°	74.7	77.6	82.4	90.6	106.5	130.5	166.5	203.6	233.8	222.8	167.9
100°	119.2	125.3	134.9	149.2	176.8	217.2	262.8	304.1	311.0	263.1	181.2
102.5°	209.8	217.9	230.0	254.4	284.5	327.2	360.5	369.9	339.8	264.4	176.1
105°	375.3	379.9	394.3	414.9	435.6	446.6	442.2	404.6	335.4	246.8	166.2
107.5°	479.5	485.6	488.5	489.7	487.0	470.9	436.3	379.6	306.1	227.8	161.3
110°	510.9	511.2	508.2	501.9	487.6	460.2	417.6	358.0	287.8	218.8	160.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	510.3	508.5	502.8	492.3	472.4	441.0	395.5	338.3	274.9	212.9	160.4
115°	493.9	490.9	482.2	466.9	443.3	409.0	365.3	314.1	259.1	206.5	161.8
117.5°	464.5	461.9	452.9	436.7	412.6	380.4	340.8	295.8	249.1	203.3	164.3
120°	445.6	442.2	432.6	417.0	393.6	363.4	328.0	286.7	243.7	201.5	165.9
122.5°	425.8	423.1	414.5	399.1	378.1	350.8	317.4	279.6	239.2	200.4	167.7
125°	400.7	397.9	389.6	377.0	357.7	332.7	303.4	269.1	232.8	198.5	170.5
127.5°	378.5	376.4	369.2	357.3	340.4	317.4	289.8	258.7	226.8	197.4	173.3
130°	366.0	363.4	356.7	345.3	329.0	307.1	280.8	252.1	222.8	196.8	175.5
132.5°	353.0	350.5	344.4	333.1	317.1	296.4	272.2	245.7	219.6	196.5	177.7
135°	332.1	330.7	324.7	313.7	299.4	280.8	258.7	236.8	215.1	196.1	180.2
137.5°	311.5	309.5	304.3	294.8	281.7	265.5	248.1	229.7	212.0	196.0	182.5
140°	297.4	295.4	290.4	281.7	271.1	256.5	241.1	225.1	210.1	195.9	183.5
142.5°	283.2	282.9	278.4	270.5	260.4	248.2	235.0	221.4	208.3	195.9	184.3
145°	265.0	264.1	260.8	255.1	247.1	237.4	227.2	216.1	205.9	195.1	185.1
147.5°	249.9	249.2	246.9	242.4	235.8	228.8	220.7	212.1	203.3	194.0	185.4
150°	240.8	240.4	238.5	234.4	229.4	223.5	216.5	209.2	201.1	193.1	185.1
152.5°	233.1	233.0	231.5	228.1	224.1	219.0	213.0	206.2	199.3	191.8	184.6
155°	222.8	223.5	222.2	219.8	216.1	212.4	207.5	202.2	195.9	189.5	183.8
157.5°	214.1	214.1	213.5	211.5	209.0	206.0	201.9	197.5	192.6	187.1	182.3
160°	208.5	208.5	208.1	206.5	204.2	201.8	198.1	194.4	190.1	185.5	181.5
162.5°	203.1	203.4	203.1	202.0	199.6	197.8	194.7	191.5	188.0	184.2	180.7
165°	195.5	195.9	195.9	194.4	193.1	191.8	189.5	187.2	184.5	181.5	179.2
167.5°	188.4	188.8	188.9	188.1	187.6	186.3	184.7	182.9	181.1	179.2	177.7
170°	184.2	184.8	185.1	184.2	183.8	183.1	181.8	180.9	179.2	177.9	176.8
172.5°	180.7	181.1	181.4	181.0	180.6	180.2	179.2	178.4	177.3	176.3	175.8
175°	176.2	176.8	177.2	176.8	176.8	176.5	176.2	175.9	174.8	174.5	174.2
177.5°	173.4	174.0	174.3	174.3	174.3	174.3	174.0	174.0	173.4	173.1	173.4
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2128.4	2123.7	2119.8	2109.3	2104.1	2092.5	2090.8	2090.3	2075.3	2060.8	2056.7
5°	2201.5	2189.9	2172.7	2152.4	2131.5	2109.8	2095.4	2083.8	2054.8	2027.4	2011.6
7.5°	2275.2	2250.3	2220.4	2182.2	2150.2	2114.4	2087.8	2064.0	2023.0	1983.7	1957.2
10°	2330.1	2289.6	2249.8	2197.2	2156.0	2115.5	2078.0	2045.5	1999.2	1947.3	1910.4
12.5°	2364.2	2319.7	2264.9	2213.4	2160.0	2108.7	2058.3	2016.6	1962.3	1908.6	1864.8
15°	2410.3	2362.6	2296.1	2222.4	2153.8	2086.7	2028.9	1976.9	1906.1	1841.8	1788.4
17.5°	2448.0	2382.4	2311.0	2225.8	2146.4	2061.0	1986.6	1920.1	1841.4	1763.8	1700.8
20°	2460.0	2395.1	2312.7	2227.5	2133.6	2033.3	1953.0	1880.8	1796.3	1711.8	1639.6
22.5°	2452.6	2402.0	2310.5	2208.5	2112.2	2007.2	1916.7	1832.9	1739.1	1652.8	1569.1
25°	2401.6	2384.3	2297.5	2186.3	2076.5	1954.5	1849.7	1758.0	1651.1	1558.7	1467.6
27.5°	2282.6	2320.1	2266.3	2147.9	2025.8	1895.0	1777.3	1672.8	1561.9	1457.8	1367.2
30°	2168.3	2254.2	2231.1	2121.3	1984.8	1856.2	1724.1	1615.0	1496.6	1389.7	1300.1
32.5°	2011.7	2153.7	2176.2	2084.3	1943.2	1802.0	1663.4	1554.9	1431.3	1318.6	1231.3
35°	1762.4	1974.7	2072.2	2013.7	1872.2	1719.8	1576.7	1450.3	1326.1	1214.8	1128.2
37.5°	1464.9	1754.2	1916.7	1920.8	1790.8	1632.4	1476.6	1351.1	1224.0	1114.7	1021.1
40°	1272.0	1585.4	1797.1	1844.0	1734.2	1563.0	1405.5	1277.7	1153.5	1046.6	939.0
42.5°	1098.6	1410.9	1671.0	1752.7	1665.5	1495.4	1337.4	1203.7	1083.0	981.8	871.9
45°	888.4	1161.4	1448.1	1594.0	1545.7	1388.2	1221.3	1094.3	980.8	893.4	788.0
47.5°	749.4	941.9	1219.4	1416.6	1415.8	1272.1	1108.0	986.2	881.0	799.1	713.8
50°	670.2	837.8	1072.6	1296.5	1315.2	1194.7	1038.6	918.0	819.8	733.9	665.2
52.5°	599.2	737.3	948.4	1163.0	1216.4	1112.0	960.6	849.2	753.9	674.9	616.1
55°	506.3	613.2	773.5	974.3	1055.3	981.6	847.3	743.2	665.9	599.5	548.9
57.5°	428.3	508.5	637.2	798.8	893.1	846.7	735.8	651.4	585.2	525.1	485.2
60°	379.2	444.9	554.0	689.1	793.1	760.5	665.9	587.2	530.8	478.9	441.3
62.5°	333.0	389.5	483.0	592.6	687.9	674.5	597.2	531.1	481.7	434.4	402.6
65°	268.0	309.2	382.1	468.1	544.6	551.1	495.5	450.7	406.6	369.1	340.9
67.5°	213.4	240.3	291.6	364.0	421.4	441.9	407.9	373.7	338.7	309.7	285.3
70°	179.8	201.5	239.0	297.6	350.3	371.9	352.5	325.7	295.4	271.5	250.6
72.5°	145.7	166.8	194.5	237.5	282.7	306.1	299.4	280.1	255.5	235.7	215.9
75°	109.8	116.3	135.1	164.0	199.3	219.6	224.6	214.5	195.0	179.8	168.2
77.5°	81.2	85.1	94.1	109.2	132.3	150.3	157.8	156.6	143.2	134.3	123.5
80°	65.0	67.2	71.5	78.0	95.4	113.4	118.5	118.5	109.1	105.5	94.6
82.5°	49.4	51.0	53.6	57.2	65.3	81.1	86.7	87.8	81.9	77.1	68.6
85°	28.2	27.4	28.9	31.1	32.5	36.9	45.5	46.9	45.5	39.7	37.5
87.5°	11.6	11.7	11.4	10.7	11.0	11.5	14.1	16.8	14.7	13.3	12.3
90°	9.0	6.7	5.0	4.0	3.3	2.6	1.3	0.4	1.3	2.6	3.3
92.5°	33.3	22.6	15.1	12.0	9.7	8.3	5.8	4.1	5.8	8.3	9.7
95°	76.9	48.0	32.6	24.6	19.3	16.3	13.0	11.7	13.0	16.3	19.3
97.5°	103.7	63.2	44.0	35.0	28.8	24.3	20.7	18.9	20.7	24.3	28.8
100°	109.2	68.6	51.0	41.7	35.0	29.6	26.7	25.6	26.7	29.6	35.0
102.5°	109.5	73.4	57.1	47.8	40.8	35.5	32.5	31.8	32.5	35.5	40.8
105°	111.2	81.6	66.0	56.6	49.3	44.3	41.9	40.6	41.9	44.3	49.3
107.5°	115.8	90.0	74.8	65.4	58.2	53.5	51.3	50.2	51.3	53.5	58.2
110°	119.5	95.6	81.0	71.3	64.3	59.9	58.0	56.6	58.0	59.9	64.3





TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	123.6	100.9	86.8	76.8	70.1	66.1	63.8	62.5	63.8	66.1	70.1
115°	129.5	109.2	94.9	86.0	79.3	75.3	73.2	71.6	73.2	75.3	79.3
117.5°	135.9	116.9	103.7	94.3	87.9	84.4	82.4	81.1	82.4	84.4	87.9
120°	140.3	122.2	109.2	99.9	93.2	90.3	88.2	86.9	88.2	90.3	93.2
122.5°	143.9	127.2	115.1	105.5	98.9	95.6	93.6	92.6	93.6	95.6	98.9
125°	149.9	134.9	122.9	113.6	106.9	102.9	100.9	99.9	100.9	102.9	106.9
127.5°	155.4	141.9	130.3	120.6	114.3	109.9	107.1	105.8	107.1	109.9	114.3
130°	158.8	146.2	134.5	125.3	118.6	113.9	110.6	109.2	110.6	113.9	118.6
132.5°	162.3	150.0	138.8	129.5	122.5	117.6	114.0	112.4	114.0	117.6	122.5
135°	166.8	155.2	144.5	135.3	127.5	122.5	118.6	117.3	118.6	122.5	127.5
137.5°	170.3	159.5	148.9	140.3	132.7	127.3	123.4	121.8	123.4	127.3	132.7
140°	172.2	161.8	151.8	143.2	135.9	130.5	126.6	125.3	126.6	130.5	135.9
142.5°	173.8	163.7	154.0	145.9	138.8	133.5	129.8	128.7	129.8	133.5	138.8
145°	175.9	166.5	157.5	150.2	143.5	138.6	135.3	133.8	135.3	138.6	143.5
147.5°	177.0	168.8	160.3	153.8	148.3	143.6	140.4	139.5	140.4	143.6	148.3
150°	177.5	169.8	162.2	156.2	151.2	146.8	144.2	143.2	144.2	146.8	151.2
152.5°	177.8	170.9	164.0	158.6	153.8	150.1	147.4	146.9	147.4	150.1	153.8
155°	178.1	172.5	166.8	161.8	158.2	154.5	152.5	152.2	152.5	154.5	158.2
157.5°	178.1	173.6	168.8	164.7	161.7	158.5	156.9	156.6	156.9	158.5	161.7
160°	178.1	174.2	170.2	166.5	163.8	161.2	159.9	159.5	159.9	161.2	163.8
162.5°	177.9	174.5	171.0	168.1	165.7	163.6	162.2	162.5	162.2	163.6	165.7
165°	177.2	174.8	171.8	169.8	168.1	166.2	165.5	165.9	165.5	166.2	168.1
167.5°	176.7	174.7	172.6	171.4	170.1	168.8	168.2	168.6	168.2	168.8	170.1
170°	176.2	174.5	172.9	171.8	171.2	170.2	169.8	170.5	169.8	170.2	171.2
172.5°	175.4	174.3	173.1	172.4	172.0	171.0	171.2	171.5	171.2	171.0	172.0
175°	174.5	173.8	173.1	172.9	172.9	172.2	172.5	172.9	172.5	172.2	172.9
177.5°	174.0	173.4	173.1	173.1	173.1	172.7	172.9	173.4	172.9	172.7	173.1
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2049.3	2045.2	2037.7	2026.1	2019.2	2007.1	1998.9	2003.6	2004.8	2003.6	2002.4
5°	1994.2	1979.1	1958.1	1937.9	1919.1	1898.8	1887.3	1882.3	1872.2	1866.3	1863.5
7.5°	1927.6	1901.5	1871.9	1836.6	1806.7	1775.4	1759.3	1751.3	1730.7	1719.5	1709.6
10°	1877.9	1836.7	1807.1	1761.0	1732.8	1691.6	1663.4	1664.2	1636.0	1620.0	1608.5
12.5°	1823.1	1777.8	1728.5	1687.0	1647.8	1614.8	1580.7	1567.1	1537.2	1521.8	1490.6
15°	1732.0	1679.3	1627.3	1570.9	1531.3	1480.0	1430.9	1370.9	1322.5	1280.6	1269.0
17.5°	1632.7	1567.4	1515.2	1449.1	1381.0	1294.8	1237.8	1203.1	1173.8	1151.8	1135.3
20°	1564.4	1498.0	1442.4	1342.7	1250.9	1192.5	1150.6	1123.9	1093.5	1069.7	1056.7
22.5°	1492.8	1423.4	1347.6	1236.4	1164.9	1117.9	1080.6	1049.9	1029.4	1010.8	998.9
25°	1391.1	1315.2	1190.3	1113.7	1055.9	1006.8	980.8	962.1	940.4	915.1	903.6
27.5°	1283.6	1163.0	1073.3	1016.3	961.2	929.3	905.9	877.9	858.5	847.1	835.1
30°	1203.3	1082.7	1012.7	950.6	911.5	876.1	848.7	832.8	814.0	794.5	786.6
32.5°	1113.7	1017.4	950.3	898.5	858.9	828.8	807.1	781.4	767.8	755.8	739.1
35°	1002.5	929.5	868.2	826.3	788.7	764.2	738.9	723.7	699.2	689.1	682.6
37.5°	908.3	845.1	799.3	755.1	725.3	698.1	682.7	658.6	647.9	633.9	620.2
40°	855.2	793.1	749.0	712.8	679.7	659.4	639.9	620.5	604.5	598.0	581.5
42.5°	800.9	750.3	706.2	666.7	644.4	623.0	598.3	584.0	567.6	557.0	546.8
45°	725.9	681.1	643.6	611.1	586.4	564.1	548.2	524.3	515.0	494.1	485.4
47.5°	660.1	618.4	582.6	551.7	527.7	513.1	489.8	471.2	456.2	443.4	432.3
50°	613.2	578.5	543.8	516.4	494.7	473.8	450.0	440.5	417.5	410.9	404.4
52.5°	570.4	537.5	505.8	478.9	457.2	436.9	415.8	403.6	388.0	381.5	376.7
55°	510.7	478.9	448.6	424.7	403.0	382.1	369.1	353.9	346.7	341.7	335.8
57.5°	450.5	422.0	398.7	374.6	352.8	336.1	321.1	312.0	304.5	297.8	291.0
60°	412.5	384.9	364.0	341.7	319.2	305.5	294.0	283.1	274.5	264.4	261.5
62.5°	371.9	348.0	328.8	307.0	287.5	274.9	263.9	253.6	243.3	228.6	224.5
65°	316.3	297.6	277.4	259.3	242.0	229.7	213.8	202.3	197.9	196.4	195.8
67.5°	266.1	248.4	231.0	212.4	196.7	185.3	177.3	175.5	172.5	171.6	169.6
70°	232.6	215.9	198.6	181.3	166.2	164.0	161.1	158.2	154.6	153.2	151.7
72.5°	202.6	185.3	168.0	154.1	147.6	144.9	142.0	139.1	136.7	135.3	134.3
75°	155.3	139.4	127.8	122.8	119.1	117.0	112.6	110.5	109.1	106.9	106.1
77.5°	111.8	102.8	97.6	94.3	90.6	88.2	85.8	83.6	82.1	81.6	80.5
80°	85.2	80.9	77.3	73.0	71.5	68.6	67.9	65.7	66.4	64.3	64.3
82.5°	66.2	60.7	57.7	55.6	54.2	51.8	51.2	50.1	50.2	48.6	48.6
85°	33.9	32.5	31.1	29.6	29.6	27.4	28.2	27.4	27.4	26.0	25.3
87.5°	11.8	11.4	10.6	11.0	11.4	10.9	10.8	10.2	10.1	10.2	9.7
90°	4.0	5.0	6.7	9.0	11.0	11.3	11.0	10.7	10.0	10.7	11.0
92.5°	12.0	15.1	22.6	33.3	42.7	43.3	36.6	29.0	24.9	22.1	20.1
95°	24.6	32.6	48.0	76.9	115.6	130.5	114.2	87.3	66.9	53.0	45.6
97.5°	35.0	44.0	63.2	103.7	167.9	222.8	233.8	203.6	166.5	130.5	106.5
100°	41.7	51.0	68.6	109.2	181.2	263.1	311.0	304.1	262.8	217.2	176.8
102.5°	47.8	57.1	73.4	109.5	176.1	264.4	339.8	369.9	360.5	327.2	284.5
105°	56.6	66.0	81.6	111.2	166.2	246.8	335.4	404.6	442.2	446.6	435.6
107.5°	65.4	74.8	90.0	115.8	161.3	227.8	306.1	379.6	436.3	470.9	487.0
110°	71.3	81.0	95.6	119.5	160.2	218.8	287.8	358.0	417.6	460.2	487.6



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	76.8	86.8	100.9	123.6	160.4	212.9	274.9	338.3	395.5	441.0	472.4
115°	86.0	94.9	109.2	129.5	161.8	206.5	259.1	314.1	365.3	409.0	443.3
117.5°	94.3	103.7	116.9	135.9	164.3	203.3	249.1	295.8	340.8	380.4	412.6
120°	99.9	109.2	122.2	140.3	165.9	201.5	243.7	286.7	328.0	363.4	393.6
122.5°	105.5	115.1	127.2	143.9	167.7	200.4	239.2	279.6	317.4	350.8	378.1
125°	113.6	122.9	134.9	149.9	170.5	198.5	232.8	269.1	303.4	332.7	357.7
127.5°	120.6	130.3	141.9	155.4	173.3	197.4	226.8	258.7	289.8	317.4	340.4
130°	125.3	134.5	146.2	158.8	175.5	196.8	222.8	252.1	280.8	307.1	329.0
132.5°	129.5	138.8	150.0	162.3	177.7	196.5	219.6	245.7	272.2	296.4	317.1
135°	135.3	144.5	155.2	166.8	180.2	196.1	215.1	236.8	258.7	280.8	299.4
137.5°	140.3	148.9	159.5	170.3	182.5	196.0	212.0	229.7	248.1	265.5	281.7
140°	143.2	151.8	161.8	172.2	183.5	195.9	210.1	225.1	241.1	256.5	271.1
142.5°	145.9	154.0	163.7	173.8	184.3	195.9	208.3	221.4	235.0	248.2	260.4
145°	150.2	157.5	166.5	175.9	185.1	195.1	205.9	216.1	227.2	237.4	247.1
147.5°	153.8	160.3	168.8	177.0	185.4	194.0	203.3	212.1	220.7	228.8	235.8
150°	156.2	162.2	169.8	177.5	185.1	193.1	201.1	209.2	216.5	223.5	229.4
152.5°	158.6	164.0	170.9	177.8	184.6	191.8	199.3	206.2	213.0	219.0	224.1
155°	161.8	166.8	172.5	178.1	183.8	189.5	195.9	202.2	207.5	212.4	216.1
157.5°	164.7	168.8	173.6	178.1	182.3	187.1	192.6	197.5	201.9	206.0	209.0
160°	166.5	170.2	174.2	178.1	181.5	185.5	190.1	194.4	198.1	201.8	204.2
162.5°	168.1	171.0	174.5	177.9	180.7	184.2	188.0	191.5	194.7	197.8	199.6
165°	169.8	171.8	174.8	177.2	179.2	181.5	184.5	187.2	189.5	191.8	193.1
167.5°	171.4	172.6	174.7	176.7	177.7	179.2	181.1	182.9	184.7	186.3	187.6
170°	171.8	172.9	174.5	176.2	176.8	177.9	179.2	180.9	181.8	183.1	183.8
172.5°	172.4	173.1	174.3	175.4	175.8	176.3	177.3	178.4	179.2	180.2	180.6
175°	172.9	173.1	173.8	174.5	174.2	174.5	174.8	175.9	176.2	176.5	176.8
177.5°	173.1	173.1	173.4	174.0	173.4	173.1	173.4	174.0	174.0	174.3	174.3
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1996.1	1997.2	1995.6	1996.7	1995.6	1997.2	1996.1	2002.4	2003.6	2004.8	2003.6
5°	1859.8	1851.2	1849.7	1847.6	1849.7	1851.2	1859.8	1863.5	1866.3	1872.2	1882.3
7.5°	1697.2	1695.9	1692.3	1687.2	1692.3	1695.9	1697.2	1709.6	1719.5	1730.7	1751.3
10°	1592.6	1589.0	1588.3	1583.2	1588.3	1589.0	1592.6	1608.5	1620.0	1636.0	1664.2
12.5°	1470.1	1446.9	1444.4	1431.8	1444.4	1446.9	1470.1	1490.6	1521.8	1537.2	1567.1
15°	1251.7	1247.4	1232.9	1223.5	1232.9	1247.4	1251.7	1269.0	1280.6	1322.5	1370.9
17.5°	1126.9	1112.8	1108.2	1106.3	1108.2	1112.8	1126.9	1135.3	1151.8	1173.8	1203.1
20°	1046.6	1033.6	1031.4	1030.0	1031.4	1033.6	1046.6	1056.7	1069.7	1093.5	1123.9
22.5°	991.1	977.5	971.9	967.5	971.9	977.5	991.1	998.9	1010.8	1029.4	1049.9
25°	896.4	891.3	888.4	886.9	888.4	891.3	896.4	903.6	915.1	940.4	962.1
27.5°	822.3	811.2	809.0	805.2	809.0	811.2	822.3	835.1	847.1	858.5	877.9
30°	780.0	776.5	771.4	767.0	771.4	776.5	780.0	786.6	794.5	814.0	832.8
32.5°	730.4	727.4	722.8	720.9	722.8	727.4	730.4	739.1	755.8	767.8	781.4
35°	675.3	665.2	660.9	654.4	660.9	665.2	675.3	682.6	689.1	699.2	723.7
37.5°	617.1	611.8	605.7	607.8	605.7	611.8	617.1	620.2	633.9	647.9	658.6
40°	572.0	568.4	567.0	566.3	567.0	568.4	572.0	581.5	598.0	604.5	620.5
42.5°	536.2	526.2	522.5	522.4	522.5	526.2	536.2	546.8	557.0	567.6	584.0
45°	481.7	472.4	465.9	466.6	465.9	472.4	481.7	485.4	494.1	515.0	524.3
47.5°	426.0	425.7	421.7	422.9	421.7	425.7	426.0	432.3	443.4	456.2	471.2
50°	399.4	395.1	392.2	392.9	392.2	395.1	399.4	404.4	410.9	417.5	440.5
52.5°	374.0	370.2	368.0	371.0	368.0	370.2	374.0	376.7	381.5	388.0	403.6
55°	332.2	327.9	327.2	326.5	327.2	327.9	332.2	335.8	341.7	346.7	353.9
57.5°	285.6	282.7	278.3	276.4	278.3	282.7	285.6	291.0	297.8	304.5	312.0
60°	252.0	246.3	239.0	238.4	239.0	246.3	252.0	261.5	264.4	274.5	283.1
62.5°	221.4	220.3	218.9	218.7	218.9	220.3	221.4	224.5	228.6	243.3	253.6
65°	194.3	193.6	194.3	195.0	194.3	193.6	194.3	195.8	196.4	197.9	202.3
67.5°	169.3	168.0	166.7	167.3	166.7	168.0	169.3	169.6	171.6	172.5	175.5
70°	150.2	149.5	148.8	148.8	148.8	149.5	150.2	151.7	153.2	154.6	158.2
72.5°	131.8	131.6	130.9	130.3	130.9	131.6	131.8	134.3	135.3	136.7	139.1
75°	105.5	104.0	104.0	104.0	104.0	104.0	105.5	106.1	106.9	109.1	110.5
77.5°	80.3	79.6	78.9	78.3	78.9	79.6	80.3	80.5	81.6	82.1	83.6
80°	63.5	62.9	62.1	62.1	62.1	62.9	63.5	64.3	64.3	66.4	65.7
82.5°	48.5	47.8	47.7	47.1	47.7	47.8	48.5	48.6	48.6	50.2	50.1
85°	26.0	26.8	26.0	27.4	26.0	26.8	26.0	25.3	26.0	27.4	27.4
87.5°	9.7	9.1	9.7	9.1	9.7	9.1	9.7	9.7	10.2	10.1	10.2
90°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.7	10.0	10.7
92.5°	19.8	18.8	18.9	18.5	18.9	18.8	19.8	20.1	22.1	24.9	29.0
95°	41.3	38.6	37.6	38.0	37.6	38.6	41.3	45.6	53.0	66.9	87.3
97.5°	90.6	82.4	77.6	74.7	77.6	82.4	90.6	106.5	130.5	166.5	203.6
100°	149.2	134.9	125.3	119.2	125.3	134.9	149.2	176.8	217.2	262.8	304.1
102.5°	254.4	230.0	217.9	209.8	217.9	230.0	254.4	284.5	327.2	360.5	369.9
105°	414.9	394.3	379.9	375.3	379.9	394.3	414.9	435.6	446.6	442.2	404.6
107.5°	489.7	488.5	485.6	479.5	485.6	488.5	489.7	487.0	470.9	436.3	379.6
110°	501.9	508.2	511.2	510.9	511.2	508.2	501.9	487.6	460.2	417.6	358.0



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	492.3	502.8	508.5	510.3	508.5	502.8	492.3	472.4	441.0	395.5	338.3
115°	466.9	482.2	490.9	493.9	490.9	482.2	466.9	443.3	409.0	365.3	314.1
117.5°	436.7	452.9	461.9	464.5	461.9	452.9	436.7	412.6	380.4	340.8	295.8
120°	417.0	432.6	442.2	445.6	442.2	432.6	417.0	393.6	363.4	328.0	286.7
122.5°	399.1	414.5	423.1	425.8	423.1	414.5	399.1	378.1	350.8	317.4	279.6
125°	377.0	389.6	397.9	400.7	397.9	389.6	377.0	357.7	332.7	303.4	269.1
127.5°	357.3	369.2	376.4	378.5	376.4	369.2	357.3	340.4	317.4	289.8	258.7
130°	345.3	356.7	363.4	366.0	363.4	356.7	345.3	329.0	307.1	280.8	252.1
132.5°	333.1	344.4	350.5	353.0	350.5	344.4	333.1	317.1	296.4	272.2	245.7
135°	313.7	324.7	330.7	332.1	330.7	324.7	313.7	299.4	280.8	258.7	236.8
137.5°	294.8	304.3	309.5	311.5	309.5	304.3	294.8	281.7	265.5	248.1	229.7
140°	281.7	290.4	295.4	297.4	295.4	290.4	281.7	271.1	256.5	241.1	225.1
142.5°	270.5	278.4	282.9	283.2	282.9	278.4	270.5	260.4	248.2	235.0	221.4
145°	255.1	260.8	264.1	265.0	264.1	260.8	255.1	247.1	237.4	227.2	216.1
147.5°	242.4	246.9	249.2	249.9	249.2	246.9	242.4	235.8	228.8	220.7	212.1
150°	234.4	238.5	240.4	240.8	240.4	238.5	234.4	229.4	223.5	216.5	209.2
152.5°	228.1	231.5	233.0	233.1	233.0	231.5	228.1	224.1	219.0	213.0	206.2
155°	219.8	222.2	223.5	222.8	223.5	222.2	219.8	216.1	212.4	207.5	202.2
157.5°	211.5	213.5	214.1	214.1	214.1	213.5	211.5	209.0	206.0	201.9	197.5
160°	206.5	208.1	208.5	208.5	208.5	208.1	206.5	204.2	201.8	198.1	194.4
162.5°	202.0	203.1	203.4	203.1	203.4	203.1	202.0	199.6	197.8	194.7	191.5
165°	194.4	195.9	195.9	195.5	195.9	195.9	194.4	193.1	191.8	189.5	187.2
167.5°	188.1	188.9	188.8	188.4	188.8	188.9	188.1	187.6	186.3	184.7	182.9
170°	184.2	185.1	184.8	184.2	184.8	185.1	184.2	183.8	183.1	181.8	180.9
172.5°	181.0	181.4	181.1	180.7	181.1	181.4	181.0	180.6	180.2	179.2	178.4
175°	176.8	177.2	176.8	176.2	176.8	177.2	176.8	176.8	176.5	176.2	175.9
177.5°	174.3	174.3	174.0	173.4	174.0	174.3	174.3	174.3	174.3	174.0	174.0
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1998.9	2007.1	2019.2	2026.1	2037.7	2045.2	2049.3	2056.7	2060.8	2075.3	2090.3
5°	1887.3	1898.8	1919.1	1937.9	1958.1	1979.1	1994.2	2011.6	2027.4	2054.8	2083.8
7.5°	1759.3	1775.4	1806.7	1836.6	1871.9	1901.5	1927.6	1957.2	1983.7	2023.0	2064.0
10°	1663.4	1691.6	1732.8	1761.0	1807.1	1836.7	1877.9	1910.4	1947.3	1999.2	2045.5
12.5°	1580.7	1614.8	1647.8	1687.0	1728.5	1777.8	1823.1	1864.8	1908.6	1962.3	2016.6
15°	1430.9	1480.0	1531.3	1570.9	1627.3	1679.3	1732.0	1788.4	1841.8	1906.1	1976.9
17.5°	1237.8	1294.8	1381.0	1449.1	1515.2	1567.4	1632.7	1700.8	1763.8	1841.4	1920.1
20°	1150.6	1192.5	1250.9	1342.7	1442.4	1498.0	1564.4	1639.6	1711.8	1796.3	1880.8
22.5°	1080.6	1117.9	1164.9	1236.4	1347.6	1423.4	1492.8	1569.1	1652.8	1739.1	1832.9
25°	980.8	1006.8	1055.9	1113.7	1190.3	1315.2	1391.1	1467.6	1558.7	1651.1	1758.0
27.5°	905.9	929.3	961.2	1016.3	1073.3	1163.0	1283.6	1367.2	1457.8	1561.9	1672.8
30°	848.7	876.1	911.5	950.6	1012.7	1082.7	1203.3	1300.1	1389.7	1496.6	1615.0
32.5°	807.1	828.8	858.9	898.5	950.3	1017.4	1113.7	1231.3	1318.6	1431.3	1554.9
35°	738.9	764.2	788.7	826.3	868.2	929.5	1002.5	1128.2	1214.8	1326.1	1450.3
37.5°	682.7	698.1	725.3	755.1	799.3	845.1	908.3	1021.1	1114.7	1224.0	1351.1
40°	639.9	659.4	679.7	712.8	749.0	793.1	855.2	939.0	1046.6	1153.5	1277.7
42.5°	598.3	623.0	644.4	666.7	706.2	750.3	800.9	871.9	981.8	1083.0	1203.7
45°	548.2	564.1	586.4	611.1	643.6	681.1	725.9	788.0	893.4	980.8	1094.3
47.5°	489.8	513.1	527.7	551.7	582.6	618.4	660.1	713.8	799.1	881.0	986.2
50°	450.0	473.8	494.7	516.4	543.8	578.5	613.2	665.2	733.9	819.8	918.0
52.5°	415.8	436.9	457.2	478.9	505.8	537.5	570.4	616.1	674.9	753.9	849.2
55°	369.1	382.1	403.0	424.7	448.6	478.9	510.7	548.9	599.5	665.9	743.2
57.5°	321.1	336.1	352.8	374.6	398.7	422.0	450.5	485.2	525.1	585.2	651.4
60°	294.0	305.5	319.2	341.7	364.0	384.9	412.5	441.3	478.9	530.8	587.2
62.5°	263.9	274.9	287.5	307.0	328.8	348.0	371.9	402.6	434.4	481.7	531.1
65°	213.8	229.7	242.0	259.3	277.4	297.6	316.3	340.9	369.1	406.6	450.7
67.5°	177.3	185.3	196.7	212.4	231.0	248.4	266.1	285.3	309.7	338.7	373.7
70°	161.1	164.0	166.2	181.3	198.6	215.9	232.6	250.6	271.5	295.4	325.7
72.5°	142.0	144.9	147.6	154.1	168.0	185.3	202.6	215.9	235.7	255.5	280.1
75°	112.6	117.0	119.1	122.8	127.8	139.4	155.3	168.2	179.8	195.0	214.5
77.5°	85.8	88.2	90.6	94.3	97.6	102.8	111.8	123.5	134.3	143.2	156.6
80°	67.9	68.6	71.5	73.0	77.3	80.9	85.2	94.6	105.5	109.1	118.5
82.5°	51.2	51.8	54.2	55.6	57.7	60.7	66.2	68.6	77.1	81.9	87.8
85°	28.2	27.4	29.6	29.6	31.1	32.5	33.9	37.5	39.7	45.5	46.9
87.5°	10.8	10.9	11.4	11.0	10.6	11.4	11.8	12.3	13.3	14.7	16.8
90°	11.0	11.3	11.0	9.0	6.7	5.0	4.0	3.3	2.6	1.3	0.4
92.5°	36.6	43.3	42.7	33.3	22.6	15.1	12.0	9.7	8.3	5.8	4.1
95°	114.2	130.5	115.6	76.9	48.0	32.6	24.6	19.3	16.3	13.0	11.7
97.5°	233.8	222.8	167.9	103.7	63.2	44.0	35.0	28.8	24.3	20.7	18.9
100°	311.0	263.1	181.2	109.2	68.6	51.0	41.7	35.0	29.6	26.7	25.6
102.5°	339.8	264.4	176.1	109.5	73.4	57.1	47.8	40.8	35.5	32.5	31.8
105°	335.4	246.8	166.2	111.2	81.6	66.0	56.6	49.3	44.3	41.9	40.6
107.5°	306.1	227.8	161.3	115.8	90.0	74.8	65.4	58.2	53.5	51.3	50.2
110°	287.8	218.8	160.2	119.5	95.6	81.0	71.3	64.3	59.9	58.0	56.6



TEST NUMBER: P331737-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	274.9	212.9	160.4	123.6	100.9	86.8	76.8	70.1	66.1	63.8	62.5
115°	259.1	206.5	161.8	129.5	109.2	94.9	86.0	79.3	75.3	73.2	71.6
117.5°	249.1	203.3	164.3	135.9	116.9	103.7	94.3	87.9	84.4	82.4	81.1
120°	243.7	201.5	165.9	140.3	122.2	109.2	99.9	93.2	90.3	88.2	86.9
122.5°	239.2	200.4	167.7	143.9	127.2	115.1	105.5	98.9	95.6	93.6	92.6
125°	232.8	198.5	170.5	149.9	134.9	122.9	113.6	106.9	102.9	100.9	99.9
127.5°	226.8	197.4	173.3	155.4	141.9	130.3	120.6	114.3	109.9	107.1	105.8
130°	222.8	196.8	175.5	158.8	146.2	134.5	125.3	118.6	113.9	110.6	109.2
132.5°	219.6	196.5	177.7	162.3	150.0	138.8	129.5	122.5	117.6	114.0	112.4
135°	215.1	196.1	180.2	166.8	155.2	144.5	135.3	127.5	122.5	118.6	117.3
137.5°	212.0	196.0	182.5	170.3	159.5	148.9	140.3	132.7	127.3	123.4	121.8
140°	210.1	195.9	183.5	172.2	161.8	151.8	143.2	135.9	130.5	126.6	125.3
142.5°	208.3	195.9	184.3	173.8	163.7	154.0	145.9	138.8	133.5	129.8	128.7
145°	205.9	195.1	185.1	175.9	166.5	157.5	150.2	143.5	138.6	135.3	133.8
147.5°	203.3	194.0	185.4	177.0	168.8	160.3	153.8	148.3	143.6	140.4	139.5
150°	201.1	193.1	185.1	177.5	169.8	162.2	156.2	151.2	146.8	144.2	143.2
152.5°	199.3	191.8	184.6	177.8	170.9	164.0	158.6	153.8	150.1	147.4	146.9
155°	195.9	189.5	183.8	178.1	172.5	166.8	161.8	158.2	154.5	152.5	152.2
157.5°	192.6	187.1	182.3	178.1	173.6	168.8	164.7	161.7	158.5	156.9	156.6
160°	190.1	185.5	181.5	178.1	174.2	170.2	166.5	163.8	161.2	159.9	159.5
162.5°	188.0	184.2	180.7	177.9	174.5	171.0	168.1	165.7	163.6	162.2	162.5
165°	184.5	181.5	179.2	177.2	174.8	171.8	169.8	168.1	166.2	165.5	165.9
167.5°	181.1	179.2	177.7	176.7	174.7	172.6	171.4	170.1	168.8	168.2	168.6
170°	179.2	177.9	176.8	176.2	174.5	172.9	171.8	171.2	170.2	169.8	170.5
172.5°	177.3	176.3	175.8	175.4	174.3	173.1	172.4	172.0	171.0	171.2	171.5
175°	174.8	174.5	174.2	174.5	173.8	173.1	172.9	172.9	172.2	172.5	172.9
177.5°	173.4	173.1	173.4	174.0	173.4	173.1	173.1	173.1	172.7	172.9	173.4
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



TEST NUMBER: P331737-830

CATALOG NUMBER: SA2XXRDIP-C1005D330U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2090.8	2092.5	2104.1	2109.3	2119.8	2123.7	2128.4	2127.2	2127.2	2129.6	2145.7
5°	2095.4	2109.8	2131.5	2152.4	2172.7	2189.9	2201.5	2213.1	2217.4	2238.4	2257.1
7.5°	2087.8	2114.4	2150.2	2182.2	2220.4	2250.3	2275.2	2297.5	2312.9	2343.3	2374.5
10°	2078.0	2115.5	2156.0	2197.2	2249.8	2289.6	2330.1	2361.2	2371.2	2416.8	2442.8
12.5°	2058.3	2108.7	2160.0	2213.4	2264.9	2319.7	2364.2	2395.2	2430.7	2471.6	2519.6
15°	2028.9	2086.7	2153.8	2222.4	2296.1	2362.6	2410.3	2464.4	2503.4	2548.2	2590.1
17.5°	1986.6	2061.0	2146.4	2225.8	2311.0	2382.4	2448.0	2499.9	2527.4	2553.0	2559.2
20°	1953.0	2033.3	2133.6	2227.5	2312.7	2395.1	2460.0	2503.4	2510.7	2511.3	2473.0
22.5°	1916.7	2007.2	2112.2	2208.5	2310.5	2402.0	2452.6	2471.1	2442.4	2393.5	2319.4
25°	1849.7	1954.5	2076.5	2186.3	2297.5	2384.3	2401.6	2369.1	2268.7	2163.2	2029.6
27.5°	1777.3	1895.0	2025.8	2147.9	2266.3	2320.1	2282.6	2165.5	1984.7	1827.5	1637.0
30°	1724.1	1856.2	1984.8	2121.3	2231.1	2254.2	2168.3	1995.6	1784.7	1547.8	1357.9
32.5°	1663.4	1802.0	1943.2	2084.3	2176.2	2153.7	2011.7	1799.2	1551.9	1319.0	1139.4
35°	1576.7	1719.8	1872.2	2013.7	2072.2	1974.7	1762.4	1485.7	1232.9	1015.5	892.0
37.5°	1476.6	1632.4	1790.8	1920.8	1916.7	1754.2	1464.9	1179.3	966.9	838.3	750.3
40°	1405.5	1563.0	1734.2	1844.0	1797.1	1585.4	1272.0	1002.5	847.3	744.7	680.4
42.5°	1337.4	1495.4	1665.5	1752.7	1671.0	1410.9	1098.6	887.5	759.4	679.4	627.3
45°	1221.3	1388.2	1545.7	1594.0	1448.1	1161.4	888.4	735.3	650.1	590.8	554.7
47.5°	1108.0	1272.1	1415.8	1416.6	1219.4	941.9	749.4	636.3	563.5	517.7	491.4
50°	1038.6	1194.7	1315.2	1296.5	1072.6	837.8	670.2	572.8	512.1	476.7	449.2
52.5°	960.6	1112.0	1216.4	1163.0	948.4	737.3	599.2	517.3	467.0	436.2	411.7
55°	847.3	981.6	1055.3	974.3	773.5	613.2	506.3	442.1	404.4	378.4	357.5
57.5°	735.8	846.7	893.1	798.8	637.2	508.5	428.3	380.0	342.8	324.1	313.3
60°	665.9	760.5	793.1	689.1	554.0	444.9	379.2	334.4	307.0	294.7	283.9
62.5°	597.2	674.5	687.9	592.6	483.0	389.5	333.0	295.1	276.9	265.2	255.0
65°	495.5	551.1	544.6	468.1	382.1	309.2	268.0	244.9	231.1	214.5	196.4
67.5°	407.9	441.9	421.4	364.0	291.6	240.3	213.4	195.9	178.8	163.1	158.9
70°	352.5	371.9	350.3	297.6	239.0	201.5	179.8	158.9	148.8	145.2	138.6
72.5°	299.4	306.1	282.7	237.5	194.5	166.8	145.7	134.0	128.6	125.5	121.3
75°	224.6	219.6	199.3	164.0	135.1	116.3	109.8	105.5	101.8	99.0	96.8
77.5°	157.8	150.3	132.3	109.2	94.1	85.1	81.2	78.9	77.1	75.7	73.5
80°	118.5	113.4	95.4	78.0	71.5	67.2	65.0	62.1	62.1	60.7	58.5
82.5°	86.7	81.1	65.3	57.2	53.6	51.0	49.4	47.7	47.1	47.4	45.8
85°	45.5	36.9	32.5	31.1	28.9	27.4	28.2	26.8	26.8	26.8	26.0
87.5°	14.1	11.5	11.0	10.7	11.4	11.7	11.6	12.1	12.6	12.1	12.5
90°	1.3	2.6	3.3	4.0	5.0	6.7	9.0	11.0	11.3	11.0	10.7
92.5°	5.8	8.3	9.7	12.0	15.1	22.6	33.3	42.7	43.3	36.6	29.0
95°	13.0	16.3	19.3	24.6	32.6	48.0	76.9	115.6	130.5	114.2	87.3
97.5°	20.7	24.3	28.8	35.0	44.0	63.2	103.7	167.9	222.8	233.8	203.6
100°	26.7	29.6	35.0	41.7	51.0	68.6	109.2	181.2	263.1	311.0	304.1
102.5°	32.5	35.5	40.8	47.8	57.1	73.4	109.5	176.1	264.4	339.8	369.9
105°	41.9	44.3	49.3	56.6	66.0	81.6	111.2	166.2	246.8	335.4	404.6
107.5°	51.3	53.5	58.2	65.4	74.8	90.0	115.8	161.3	227.8	306.1	379.6
110°	58.0	59.9	64.3	71.3	81.0	95.6	119.5	160.2	218.8	287.8	358.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	63.8	66.1	70.1	76.8	86.8	100.9	123.6	160.4	212.9	274.9	338.3
115°	73.2	75.3	79.3	86.0	94.9	109.2	129.5	161.8	206.5	259.1	314.1
117.5°	82.4	84.4	87.9	94.3	103.7	116.9	135.9	164.3	203.3	249.1	295.8
120°	88.2	90.3	93.2	99.9	109.2	122.2	140.3	165.9	201.5	243.7	286.7
122.5°	93.6	95.6	98.9	105.5	115.1	127.2	143.9	167.7	200.4	239.2	279.6
125°	100.9	102.9	106.9	113.6	122.9	134.9	149.9	170.5	198.5	232.8	269.1
127.5°	107.1	109.9	114.3	120.6	130.3	141.9	155.4	173.3	197.4	226.8	258.7
130°	110.6	113.9	118.6	125.3	134.5	146.2	158.8	175.5	196.8	222.8	252.1
132.5°	114.0	117.6	122.5	129.5	138.8	150.0	162.3	177.7	196.5	219.6	245.7
135°	118.6	122.5	127.5	135.3	144.5	155.2	166.8	180.2	196.1	215.1	236.8
137.5°	123.4	127.3	132.7	140.3	148.9	159.5	170.3	182.5	196.0	212.0	229.7
140°	126.6	130.5	135.9	143.2	151.8	161.8	172.2	183.5	195.9	210.1	225.1
142.5°	129.8	133.5	138.8	145.9	154.0	163.7	173.8	184.3	195.9	208.3	221.4
145°	135.3	138.6	143.5	150.2	157.5	166.5	175.9	185.1	195.1	205.9	216.1
147.5°	140.4	143.6	148.3	153.8	160.3	168.8	177.0	185.4	194.0	203.3	212.1
150°	144.2	146.8	151.2	156.2	162.2	169.8	177.5	185.1	193.1	201.1	209.2
152.5°	147.4	150.1	153.8	158.6	164.0	170.9	177.8	184.6	191.8	199.3	206.2
155°	152.5	154.5	158.2	161.8	166.8	172.5	178.1	183.8	189.5	195.9	202.2
157.5°	156.9	158.5	161.7	164.7	168.8	173.6	178.1	182.3	187.1	192.6	197.5
160°	159.9	161.2	163.8	166.5	170.2	174.2	178.1	181.5	185.5	190.1	194.4
162.5°	162.2	163.6	165.7	168.1	171.0	174.5	177.9	180.7	184.2	188.0	191.5
165°	165.5	166.2	168.1	169.8	171.8	174.8	177.2	179.2	181.5	184.5	187.2
167.5°	168.2	168.8	170.1	171.4	172.6	174.7	176.7	177.7	179.2	181.1	182.9
170°	169.8	170.2	171.2	171.8	172.9	174.5	176.2	176.8	177.9	179.2	180.9
172.5°	171.2	171.0	172.0	172.4	173.1	174.3	175.4	175.8	176.3	177.3	178.4
175°	172.5	172.2	172.9	172.9	173.1	173.8	174.5	174.2	174.5	174.8	175.9
177.5°	172.9	172.7	173.1	173.1	173.1	173.4	174.0	173.4	173.1	173.4	174.0
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1	173.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2151.5	2159.0	2162.5	2162.5	2166.5	2164.8	2163.0
5°	2275.2	2288.9	2291.8	2304.8	2314.1	2311.3	2312.7
7.5°	2398.1	2420.2	2442.0	2452.0	2453.5	2459.4	2461.5
10°	2473.8	2491.9	2525.8	2520.7	2546.0	2560.5	2536.7
12.5°	2546.6	2571.0	2594.5	2601.0	2615.4	2620.0	2610.6
15°	2612.4	2625.5	2627.0	2623.3	2627.6	2624.0	2610.3
17.5°	2550.9	2529.9	2487.1	2466.8	2450.8	2427.1	2417.6
20°	2449.2	2387.1	2314.9	2286.0	2252.0	2185.6	2201.5
22.5°	2229.7	2158.9	2086.7	2002.3	1962.0	1899.0	1895.3
25°	1888.0	1765.9	1631.6	1537.8	1482.8	1420.0	1392.5
27.5°	1467.9	1314.3	1204.2	1148.4	1097.7	1047.9	1045.8
30°	1191.8	1076.2	991.0	943.3	912.2	891.3	895.6
32.5°	1004.6	925.4	867.9	828.3	805.3	789.6	789.3
35°	821.2	767.0	730.2	713.6	697.0	685.4	686.2
37.5°	702.8	670.2	649.8	631.4	621.0	615.4	612.2
40°	642.1	615.4	599.5	588.6	579.9	572.0	570.6
42.5°	594.2	572.0	556.2	547.6	539.5	534.0	532.4
45°	527.3	509.2	494.7	485.4	481.7	476.7	476.7
47.5°	469.0	451.3	440.0	434.1	427.9	424.5	424.4
50°	429.8	416.0	406.0	402.3	397.3	395.1	394.4
52.5°	394.5	384.3	377.0	374.6	372.4	369.7	370.1
55°	346.7	340.9	338.0	335.8	332.2	327.9	330.8
57.5°	306.4	301.5	293.7	286.9	283.6	280.5	281.7
60°	278.1	268.0	257.9	249.9	247.7	241.2	241.2
62.5°	242.2	228.1	215.7	211.2	209.1	206.0	205.4
65°	186.3	180.6	177.7	174.7	173.3	173.3	171.9
67.5°	154.4	152.1	148.9	148.2	146.8	146.4	145.9
70°	136.5	133.7	132.1	131.5	130.0	130.7	128.6
72.5°	119.1	116.9	116.6	114.7	113.9	114.0	112.4
75°	93.9	93.9	93.2	92.5	91.0	90.3	91.0
77.5°	72.2	72.4	71.1	71.0	70.8	71.0	70.2
80°	57.8	58.5	57.8	57.0	56.4	57.0	56.4
82.5°	45.6	44.7	44.5	44.4	44.2	43.7	43.6
85°	26.0	26.8	26.0	25.3	25.3	25.3	26.0
87.5°	11.8	12.0	12.1	12.1	12.1	12.1	11.4
90°	10.0	10.7	11.0	11.0	11.0	11.0	11.0
92.5°	24.9	22.1	20.1	19.8	18.8	18.9	18.5
95°	66.9	53.0	45.6	41.3	38.6	37.6	38.0
97.5°	166.5	130.5	106.5	90.6	82.4	77.6	74.7
100°	262.8	217.2	176.8	149.2	134.9	125.3	119.2
102.5°	360.5	327.2	284.5	254.4	230.0	217.9	209.8
105°	442.2	446.6	435.6	414.9	394.3	379.9	375.3
107.5°	436.3	470.9	487.0	489.7	488.5	485.6	479.5
110°	417.6	460.2	487.6	501.9	508.2	511.2	510.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	395.5	441.0	472.4	492.3	502.8	508.5	510.3
115°	365.3	409.0	443.3	466.9	482.2	490.9	493.9
117.5°	340.8	380.4	412.6	436.7	452.9	461.9	464.5
120°	328.0	363.4	393.6	417.0	432.6	442.2	445.6
122.5°	317.4	350.8	378.1	399.1	414.5	423.1	425.8
125°	303.4	332.7	357.7	377.0	389.6	397.9	400.7
127.5°	289.8	317.4	340.4	357.3	369.2	376.4	378.5
130°	280.8	307.1	329.0	345.3	356.7	363.4	366.0
132.5°	272.2	296.4	317.1	333.1	344.4	350.5	353.0
135°	258.7	280.8	299.4	313.7	324.7	330.7	332.1
137.5°	248.1	265.5	281.7	294.8	304.3	309.5	311.5
140°	241.1	256.5	271.1	281.7	290.4	295.4	297.4
142.5°	235.0	248.2	260.4	270.5	278.4	282.9	283.2
145°	227.2	237.4	247.1	255.1	260.8	264.1	265.0
147.5°	220.7	228.8	235.8	242.4	246.9	249.2	249.9
150°	216.5	223.5	229.4	234.4	238.5	240.4	240.8
152.5°	213.0	219.0	224.1	228.1	231.5	233.0	233.1
155°	207.5	212.4	216.1	219.8	222.2	223.5	222.8
157.5°	201.9	206.0	209.0	211.5	213.5	214.1	214.1
160°	198.1	201.8	204.2	206.5	208.1	208.5	208.5
162.5°	194.7	197.8	199.6	202.0	203.1	203.4	203.1
165°	189.5	191.8	193.1	194.4	195.9	195.9	195.5
167.5°	184.7	186.3	187.6	188.1	188.9	188.8	188.4
170°	181.8	183.1	183.8	184.2	185.1	184.8	184.2
172.5°	179.2	180.2	180.6	181.0	181.4	181.1	180.7
175°	176.2	176.5	176.8	176.8	177.2	176.8	176.2
177.5°	174.0	174.3	174.3	174.3	174.3	174.0	173.4
180°	173.1	173.1	173.1	173.1	173.1	173.1	173.1

(END OF REPORT)