

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: P331946-830

Luminaire Tested: **S123DIP-S560D1195U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331946-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIP-S560D1195U830-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1195 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6747.7 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Indirect

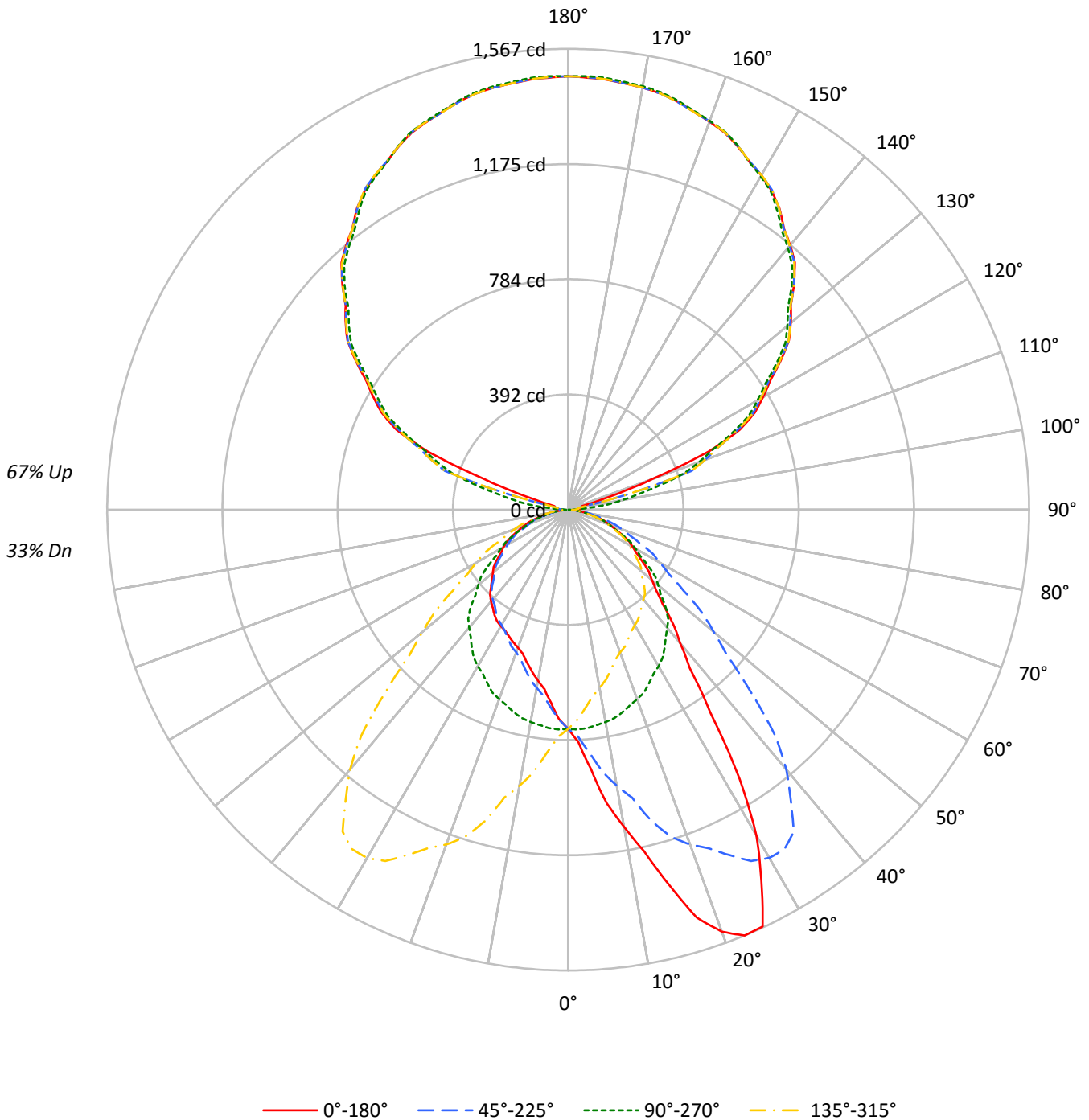
Input Watts (W): 49.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	36	36	35	28
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30	24
3	78	69	62	57	70	63	57	52	51	46	43	39	36	34	29	27	25	21
4	72	61	54	48	64	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	16
6	61	49	41	36	54	45	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	16	14	15	13	11	9

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

	0°	90°	180°	270°
0°	8020	8020	8020	8020
5°	9564	8055	7138	8055
10°	11970	8014	6446	8014
15°	14683	7949	6002	7949
20°	17491	7848	5715	7848
25°	18573	7726	5651	7726
30°	15919	7636	5680	7636
35°	11071	7510	5740	7510
40°	8338	7360	5722	7360
45°	6925	7138	5649	7138
50°	6203	6687	5598	6687
55°	5799	6199	5527	6199
60°	5440	5690	5470	5690
65°	5112	5186	5295	5186
70°	4793	4614	5042	4614
75°	4292	4038	4625	4038
80°	3756	3310	3986	3310
85°	2939	2408	2680	2408



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.4	1.1
10°-20°	235.3	3.5
20°-30°	395.0	5.9
30°-40°	447.2	6.6
40°-50°	401.1	5.9
50°-60°	323.7	4.8
60°-70°	225.5	3.3
70°-80°	118.5	1.8
80°-90°	33.1	0.5
90°-100°	53.6	0.8
100°-110°	255.4	3.8
110°-120°	613.5	9.1
120°-130°	781.2	11.6
130°-140°	834.7	12.4
140°-150°	780.5	11.6
150°-160°	629.6	9.3
160°-170°	406.3	6.0
170°-180°	140.0	2.1
0°-30°	703.7	10.4
0°-40°	1151.0	17.1
0°-60°	1875.7	27.8
0°-90°	2252.9	33.4
90°-120°	922.4	13.7
90°-150°	3318.8	49.2
90°-180°	4495.0	66.6
0°-180°	6747.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	745	745	745	745	745	
5°	885	746	661	746	885	92
15°	1318	713	539	713	1318	380
25°	1564	650	476	650	1564	686
35°	842	572	437	572	842	547
45°	455	469	371	469	455	360
55°	309	330	294	330	309	277
65°	201	204	208	204	201	200
75°	103	97	111	97	103	110
85°	24	20	22	20	24	29
90°	33	1	33	1	33	16
95°	42	67	42	67	42	35
105°	48	326	48	326	48	110
115°	644	612	644	612	644	595
125°	880	863	880	863	880	786
135°	1085	1074	1085	1074	1085	837
145°	1252	1240	1252	1240	1252	781
155°	1363	1366	1363	1366	1363	629
165°	1437	1440	1437	1440	1437	406
175°	1468	1474	1468	1474	1468	140
180°	1474	1474	1474	1474	1474	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	790.7	790.1	788.7	789.9	787.5	784.4	784.1	781.2	772.8	772.2	770.0
5°	885.1	882.2	881.9	881.6	876.5	869.6	856.6	855.5	838.2	829.5	819.1
7.5°	1007.5	1009.0	1003.7	999.1	983.6	973.5	959.5	941.7	920.4	898.8	884.4
10°	1095.2	1107.1	1092.3	1082.2	1072.9	1055.2	1034.6	1009.0	983.4	953.4	930.7
12.5°	1189.4	1195.2	1192.3	1182.7	1168.2	1141.2	1104.8	1076.6	1052.9	1003.1	982.9
15°	1317.6	1339.6	1325.6	1293.1	1293.8	1268.2	1220.5	1168.2	1140.4	1096.6	1037.1
17.5°	1454.2	1457.0	1451.0	1423.9	1405.8	1370.6	1326.6	1276.5	1220.1	1167.3	1104.1
20°	1527.0	1524.8	1512.2	1498.1	1467.1	1439.6	1391.6	1335.7	1263.5	1211.4	1142.6
22.5°	1567.4	1563.8	1557.8	1546.1	1520.2	1490.7	1447.7	1386.5	1317.8	1246.1	1166.5
25°	1563.8	1568.5	1569.2	1565.9	1557.0	1539.3	1505.3	1456.6	1388.0	1296.0	1213.0
27.5°	1422.3	1428.9	1448.2	1465.4	1484.5	1503.9	1501.4	1477.2	1426.4	1346.9	1245.4
30°	1280.8	1266.3	1302.1	1347.2	1377.9	1432.0	1462.4	1464.1	1435.7	1367.4	1268.5
32.5°	1084.4	1100.3	1116.1	1171.6	1238.7	1299.5	1359.8	1408.4	1414.0	1368.6	1282.0
35°	842.5	862.4	891.3	920.2	992.4	1054.4	1160.6	1253.0	1326.6	1336.3	1283.3
37.5°	678.9	688.8	707.0	735.9	783.2	856.9	939.0	1055.7	1162.4	1241.8	1245.3
40°	593.4	596.3	616.9	638.9	677.2	737.8	811.9	915.1	1042.9	1153.8	1200.0
42.5°	529.3	535.7	544.4	565.6	596.1	641.7	710.5	795.9	912.9	1040.5	1130.9
45°	454.9	462.0	467.5	481.5	503.2	533.9	581.9	659.9	749.0	880.8	1002.5
47.5°	405.6	406.1	410.2	420.8	435.5	458.6	492.6	542.6	624.5	731.3	856.3
50°	370.4	376.2	377.6	385.9	397.5	414.4	442.6	485.1	552.3	646.2	761.0
52.5°	345.5	347.2	351.3	357.3	367.4	380.6	405.0	438.4	491.1	571.1	676.7
55°	309.0	309.0	313.0	317.6	323.5	335.4	351.6	376.2	416.2	478.3	565.7
57.5°	275.2	277.0	279.8	281.3	286.2	294.1	307.6	326.3	356.2	404.0	473.4
60°	252.7	255.9	255.6	258.4	262.8	268.9	280.5	295.7	322.3	360.6	419.1
62.5°	233.1	232.8	232.8	236.2	240.5	246.4	253.9	267.0	289.7	323.7	373.4
65°	200.7	200.0	202.6	204.7	206.1	210.5	216.2	227.8	243.0	268.2	306.8
67.5°	172.0	169.8	171.3	172.0	174.5	177.9	183.2	190.4	202.5	222.7	251.8
70°	152.3	150.5	150.1	150.9	153.1	155.6	159.6	166.5	177.6	193.9	215.2
72.5°	132.1	130.9	130.8	132.4	133.5	135.1	137.9	144.2	153.1	165.2	185.1
75°	103.2	103.2	103.2	103.6	104.7	106.1	108.3	111.5	118.4	127.1	140.4
77.5°	77.4	77.3	76.9	76.8	78.4	79.1	79.6	82.6	86.4	92.3	102.0
80°	60.6	58.8	59.6	60.6	61.4	61.7	62.8	63.5	66.8	70.0	76.9
82.5°	45.1	43.5	43.6	45.3	45.5	45.8	46.9	48.0	49.2	52.1	55.8
85°	23.8	23.8	24.2	24.2	24.5	24.2	25.3	25.6	25.6	27.4	29.6
87.5°	15.3	14.5	14.7	15.0	14.5	14.7	14.8	14.9	15.0	15.1	14.7
90°	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2	27.2	26.3	23.1
92.5°	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1	29.6	28.0	25.6
95°	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3	35.6	33.9	31.3
97.5°	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1	37.2	35.3	32.8
100°	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1	38.1	36.1	34.1
102.5°	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9	66.0	72.0	113.5
105°	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6	196.7	239.8	261.7
107.5°	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4	407.9	439.6	436.1
110°	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8	485.9	493.9	491.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3	549.2	549.0	546.4
115°	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4	631.0	628.6	626.4
117.5°	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5	707.6	705.7	704.6
120°	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5	757.5	755.5	754.9
122.5°	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2	806.9	805.5	804.6
125°	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0	876.6	876.0	875.1
127.5°	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9	945.2	944.3	943.2
130°	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5	986.6	985.5	984.6
132.5°	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9	1026.0	1025.0	1024.2
135°	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2	1084.2
137.5°	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9	1138.7	1137.6	1137.0
140°	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7	1172.7	1171.7	1171.0
142.5°	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7	1204.9	1204.1	1203.4
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5	1249.9	1249.4	1249.0
147.5°	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5	1290.1	1289.5	1289.0
150°	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0	1314.6	1314.1	1313.6
152.5°	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8	1336.0	1335.1	1334.8
155°	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9	1365.6	1364.4	1364.2
157.5°	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0	1391.6	1390.1	1390.3
160°	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9	1406.5	1405.0	1405.2
162.5°	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4	1419.8	1418.1	1418.3
165°	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5	1437.6	1435.6	1435.9
167.5°	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6	1449.6
170°	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5	1457.5
172.5°	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7	1464.7	1462.7	1462.5
175°	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0	1471.3	1469.5	1469.3
177.5°	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3	1473.8	1472.2	1472.0
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	768.2	765.9	763.6	759.5	756.0	751.1	749.7	748.0	742.8	738.1	734.7
5°	815.1	806.4	793.8	782.2	772.9	760.3	753.0	745.5	734.6	724.9	716.9
7.5°	864.2	847.2	827.6	806.3	786.6	767.4	752.1	738.4	723.2	708.8	697.7
10°	903.2	878.6	851.2	821.6	796.4	771.8	751.2	733.2	713.7	696.7	682.6
12.5°	947.6	911.3	873.5	837.4	807.6	773.5	748.7	725.7	703.6	683.2	667.3
15°	1000.3	954.1	909.4	859.9	814.4	771.8	742.2	713.3	687.7	666.8	646.5
17.5°	1048.2	995.9	936.9	876.8	821.9	771.4	729.9	697.3	665.2	639.6	619.4
20°	1075.3	1015.8	949.0	886.6	826.0	769.6	724.2	685.1	650.5	623.4	600.7
22.5°	1098.8	1029.1	960.0	893.2	825.7	765.0	713.5	673.4	635.7	609.3	585.1
25°	1123.0	1039.6	970.3	892.0	816.5	753.8	696.0	650.5	612.9	581.9	557.0
27.5°	1143.9	1039.0	956.7	872.4	802.3	739.3	677.7	628.9	589.0	555.3	530.0
30°	1157.7	1040.4	942.5	859.1	788.4	723.4	663.5	614.4	572.5	538.2	514.4
32.5°	1166.4	1039.5	929.5	840.7	766.5	709.0	648.2	597.4	554.3	520.7	497.7
35°	1171.4	1033.1	907.2	802.5	731.0	675.0	624.2	571.5	526.3	494.9	468.9
37.5°	1161.3	1019.8	881.2	765.6	687.4	632.4	589.5	544.6	501.4	466.8	444.4
40°	1145.4	1011.2	860.9	739.7	657.3	604.3	567.9	523.8	481.2	448.4	427.4
42.5°	1115.1	993.5	838.8	710.8	626.1	573.1	539.5	502.8	462.4	431.6	410.7
45°	1041.1	955.2	805.4	667.5	580.1	525.3	495.7	468.9	432.4	402.5	384.5
47.5°	938.4	897.5	757.1	621.8	532.1	479.3	448.5	427.0	400.3	376.2	358.8
50°	867.1	850.2	724.5	590.6	499.9	448.4	418.8	399.3	380.1	355.9	340.1
52.5°	784.8	795.2	686.4	558.3	467.3	416.6	388.7	373.2	355.9	336.0	322.2
55°	668.9	706.8	620.6	504.0	418.8	370.4	344.0	330.3	320.2	305.4	293.5
57.5°	560.4	608.6	549.3	448.0	371.0	329.3	304.1	289.1	282.6	274.8	265.5
60°	496.0	543.7	498.5	410.5	338.9	299.3	276.9	264.3	257.8	252.3	244.4
62.5°	438.6	486.7	448.8	372.3	307.5	270.7	251.2	238.8	233.8	230.9	224.1
65°	359.6	401.1	375.8	313.0	262.4	230.0	212.3	203.6	198.9	197.8	193.5
67.5°	292.7	324.2	305.9	259.6	219.8	191.7	176.7	169.4	165.8	165.4	162.1
70°	248.7	278.3	264.3	222.3	188.0	166.1	153.1	146.6	144.4	144.0	142.2
72.5°	214.6	235.3	224.1	189.2	162.7	142.7	133.1	126.3	123.9	124.4	123.2
75°	158.8	174.4	167.9	143.6	122.3	109.3	101.4	97.1	94.9	96.0	94.5
77.5°	114.3	124.1	118.3	101.5	88.4	79.0	73.1	70.5	68.5	68.4	67.8
80°	86.2	92.1	88.8	78.7	67.9	59.9	55.2	53.4	52.3	52.0	51.7
82.5°	61.5	66.4	62.5	55.6	48.3	43.5	40.8	38.5	37.6	37.8	37.5
85°	31.0	32.9	31.4	27.1	24.2	22.1	20.5	19.5	18.8	19.1	18.4
87.5°	14.7	14.3	12.8	11.1	10.1	8.7	8.2	7.2	7.1	7.5	7.7
90°	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1	3.5	5.9	8.4
92.5°	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4	19.7	19.0	18.3
95°	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8	56.8	46.8	36.9
97.5°	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2	129.8	125.3	120.8
100°	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0	189.9	194.8	199.6
102.5°	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9	246.4	249.9	253.4
105°	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3	329.0	331.7	334.3
107.5°	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3	416.5	418.7	420.8
110°	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1	475.0	476.9	478.9





TEST NUMBER: P331946-830

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1	530.8	532.6	534.4
115°	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2	613.6	615.0	616.5
117.5°	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5	694.3	696.1	698.0
120°	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4	744.6	746.9	749.0
122.5°	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2	795.0	796.8	798.6
125°	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9	864.9	866.8	868.7
127.5°	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4	932.3	934.2	936.2
130°	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4	974.4	976.3	978.3
132.5°	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7	1014.6	1016.6	1018.5
135°	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2	1075.7	1077.1	1078.6
137.5°	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8	1128.7	1130.5	1132.4
140°	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9	1163.3	1164.8	1166.2
142.5°	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3	1195.7	1197.2	1198.6
145°	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6	1241.3	1243.0	1244.7
147.5°	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3	1283.5	1284.6	1285.6
150°	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6	1309.3	1310.0	1310.8
152.5°	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3	1332.6	1332.9	1333.2
155°	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6	1365.1	1364.5	1364.0
157.5°	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4	1391.3	1391.3	1391.2
160°	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1	1406.9	1406.7	1406.5
162.5°	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0	1421.4	1420.8	1420.1
165°	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0	1439.3	1438.5	1437.8
167.5°	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1	1453.0	1452.1	1451.1
170°	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9	1460.9	1460.0	1459.0
172.5°	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2	1466.0	1464.8	1463.7
175°	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9	1472.7	1471.5	1470.3
177.5°	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7	1474.7	1473.8	1472.8
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331946-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	732.6	730.7	727.7	723.4	719.9	714.4	714.4	715.3	715.3	715.0	714.4
5°	710.4	705.0	698.5	691.0	683.0	675.0	673.6	670.7	668.5	667.1	665.3
7.5°	686.9	677.4	667.9	657.3	647.6	639.6	634.0	629.4	626.4	623.3	620.9
10°	671.1	659.1	648.0	636.8	624.5	614.7	608.6	604.3	601.1	598.1	596.7
12.5°	652.3	638.7	626.3	615.7	602.3	592.2	586.4	584.4	580.5	574.5	571.3
15°	624.9	612.3	597.5	581.2	574.7	562.4	555.5	552.3	550.2	545.4	544.0
17.5°	601.4	584.8	568.3	556.1	544.0	534.1	530.3	526.2	523.4	519.5	518.4
20°	582.7	567.9	552.7	539.7	527.1	516.2	512.9	510.1	507.2	505.4	504.0
22.5°	563.5	548.7	536.2	524.1	510.6	503.5	499.9	496.8	494.7	493.5	492.1
25°	536.8	523.8	509.7	498.9	488.0	483.3	481.2	479.4	478.0	476.2	475.8
27.5°	512.8	498.7	487.3	477.1	469.4	465.4	463.4	462.5	462.8	463.4	463.8
30°	494.9	481.9	472.5	463.8	456.7	453.1	452.7	452.7	454.1	454.5	455.2
32.5°	478.4	467.8	458.4	450.0	444.5	442.1	443.5	443.5	444.6	445.5	446.9
35°	454.5	445.1	437.9	430.6	425.9	427.1	427.7	428.5	430.3	432.4	433.9
37.5°	431.6	423.5	415.9	410.3	408.1	410.1	411.8	413.3	415.5	417.1	418.5
40°	415.1	409.0	401.8	396.7	397.5	398.5	400.0	401.8	403.6	404.6	406.1
42.5°	399.8	393.4	388.0	383.7	384.7	386.2	387.0	388.0	390.0	392.0	392.9
45°	376.5	371.5	366.4	363.9	364.6	365.3	366.1	367.1	368.9	370.4	370.7
47.5°	350.3	346.8	343.4	340.9	342.0	341.8	342.7	345.1	345.6	346.5	348.5
50°	333.6	330.3	326.3	325.6	325.6	325.6	325.9	328.9	328.9	330.3	331.8
52.5°	315.1	313.0	310.5	309.2	308.6	308.6	310.1	311.5	312.1	314.1	315.6
55°	287.7	285.5	283.4	282.3	281.5	282.3	285.2	285.9	287.7	288.8	289.8
57.5°	259.2	257.5	255.8	255.2	255.1	256.0	257.6	259.8	260.2	263.5	265.1
60°	240.4	237.9	236.5	236.5	235.7	238.9	238.3	241.9	242.6	244.8	247.3
62.5°	221.0	217.6	217.1	217.1	218.1	219.0	220.1	221.7	223.6	226.3	228.2
65°	189.9	188.0	190.6	190.2	189.5	191.7	191.7	193.5	195.7	198.2	202.2
67.5°	160.3	159.4	159.7	159.7	160.7	161.9	163.0	164.6	167.1	169.8	172.4
70°	140.4	141.5	139.7	141.2	142.2	142.6	143.3	145.4	148.4	150.1	153.1
72.5°	121.1	121.0	121.2	121.8	122.9	123.6	124.2	126.7	129.9	131.4	133.7
75°	93.1	92.7	93.9	93.9	95.7	96.4	97.1	98.2	101.0	103.2	105.1
77.5°	68.1	68.4	68.2	69.5	69.0	69.1	71.4	72.4	72.7	77.0	77.9
80°	51.3	52.0	52.3	52.7	53.1	52.3	54.9	56.0	56.0	58.4	60.3
82.5°	36.9	37.2	38.2	38.5	38.6	39.3	39.6	40.3	41.2	42.3	44.7
85°	18.4	19.5	19.9	19.5	19.9	19.1	20.2	20.5	20.9	20.9	20.9
87.5°	7.9	8.8	9.1	10.1	10.4	11.3	11.5	11.1	11.3	12.3	11.4
90°	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2	29.2	30.2	30.9
92.5°	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1	32.7	34.3	35.2
95°	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3	39.0	40.7	41.6
97.5°	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1	41.1	43.1	44.1
100°	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1	41.9	43.9	45.1
102.5°	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9	53.9	47.9	45.1
105°	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6	110.6	67.5	46.3
107.5°	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4	344.8	313.2	281.2
110°	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8	469.8	461.8	440.4



TEST NUMBER: P331946-830

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3	549.5	549.7	546.0
115°	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4	635.8	638.3	640.0
117.5°	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5	711.5	713.4	714.5
120°	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5	761.4	763.4	764.3
122.5°	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2	809.6	811.0	811.7
125°	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0	877.5	878.0	878.4
127.5°	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9	946.7	947.4	947.6
130°	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5	988.4	989.5	989.7
132.5°	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9	1027.9	1028.9	1029.0
135°	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2
137.5°	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9	1141.0	1142.2	1142.6
140°	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7	1174.6	1175.6	1175.8
142.5°	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7	1206.5	1207.2	1207.3
145°	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5	1250.9	1251.4	1251.6
147.5°	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5	1291.0	1291.5	1291.2
150°	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0	1315.5	1316.0	1315.9
152.5°	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8	1337.8	1338.6	1338.5
155°	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9	1368.1	1369.3	1369.1
157.5°	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0	1394.4	1395.9	1395.7
160°	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9	1409.3	1410.8	1410.7
162.5°	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4	1423.1	1424.7	1424.7
165°	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5	1441.4	1443.4	1443.5
167.5°	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5
170°	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3
172.5°	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7	1468.6	1470.6	1470.5
175°	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0	1474.7	1476.4	1476.2
177.5°	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3	1476.9	1478.4	1478.2
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P331946-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	712.5	712.2	714.2	712.8	714.2	712.2	712.5	714.4	715.0	715.3	715.3
5°	663.2	664.2	660.6	660.6	660.6	664.2	663.2	665.3	667.1	668.5	670.7
7.5°	619.3	617.6	617.8	615.9	617.8	617.6	619.3	620.9	623.3	626.4	629.4
10°	592.4	590.2	589.5	589.8	589.5	590.2	592.4	596.7	598.1	601.1	604.3
12.5°	570.1	569.7	565.0	565.1	565.0	569.7	570.1	571.3	574.5	580.5	584.4
15°	544.0	537.2	536.4	538.6	536.4	537.2	544.0	544.0	545.4	550.2	552.3
17.5°	517.8	514.2	514.4	513.3	514.4	514.2	517.8	518.4	519.5	523.4	526.2
20°	504.0	501.8	501.4	498.9	501.4	501.8	504.0	504.0	505.4	507.2	510.1
22.5°	491.3	490.5	490.7	488.0	490.7	490.5	491.3	492.1	493.5	494.7	496.8
25°	475.4	477.2	475.8	475.8	475.8	477.2	475.4	475.8	476.2	478.0	479.4
27.5°	464.8	464.7	463.9	463.9	463.9	464.7	464.8	463.8	463.4	462.8	462.5
30°	456.7	456.3	457.0	457.0	457.0	456.3	456.7	455.2	454.5	454.1	452.7
32.5°	448.6	449.0	449.2	449.5	449.2	449.0	448.6	446.9	445.5	444.6	443.5
35°	436.1	436.4	437.5	436.8	437.5	436.4	436.1	433.9	432.4	430.3	428.5
37.5°	419.1	420.8	420.5	421.0	420.5	420.8	419.1	418.5	417.1	415.5	413.3
40°	406.5	407.6	407.2	407.2	407.2	407.6	406.5	406.1	404.6	403.6	401.8
42.5°	393.5	394.3	393.3	392.8	393.3	394.3	393.5	392.9	392.0	390.0	388.0
45°	372.2	371.5	372.6	371.1	372.6	371.5	372.2	370.7	370.4	368.9	367.1
47.5°	348.4	349.1	349.4	350.4	349.4	349.1	348.4	348.5	346.5	345.6	345.1
50°	332.4	334.6	334.6	334.3	334.6	334.6	332.4	331.8	330.3	328.9	328.9
52.5°	316.9	317.9	319.3	319.2	319.3	317.9	316.9	315.6	314.1	312.1	311.5
55°	292.8	293.5	294.2	294.5	294.2	293.5	292.8	289.8	288.8	287.7	285.9
57.5°	267.8	267.5	269.2	269.8	269.2	267.5	267.8	265.1	263.5	260.2	259.8
60°	250.2	250.2	253.1	254.1	253.1	250.2	250.2	247.3	244.8	242.6	241.9
62.5°	231.4	232.5	235.4	233.9	235.4	232.5	231.4	228.2	226.3	223.6	221.7
65°	204.0	206.9	206.5	207.9	206.5	206.9	204.0	202.2	198.2	195.7	193.5
67.5°	175.3	177.1	179.7	179.9	179.7	177.1	175.3	172.4	169.8	167.1	164.6
70°	156.0	157.8	159.2	160.2	159.2	157.8	156.0	153.1	150.1	148.4	145.4
72.5°	137.1	138.1	141.6	140.1	141.6	138.1	137.1	133.7	131.4	129.9	126.7
75°	107.5	110.1	112.3	111.2	112.3	110.1	107.5	105.1	103.2	101.0	98.2
77.5°	79.6	82.1	83.1	82.2	83.1	82.1	79.6	77.9	77.0	72.7	72.4
80°	62.8	62.5	64.7	64.3	64.7	62.5	62.8	60.3	58.4	56.0	56.0
82.5°	46.1	45.7	46.8	46.9	46.8	45.7	46.1	44.7	42.3	41.2	40.3
85°	22.3	23.5	22.1	21.7	22.1	23.5	22.3	20.9	20.9	20.9	20.5
87.5°	11.5	11.6	11.4	11.2	11.4	11.6	11.5	11.4	12.3	11.3	11.1
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2
92.5°	35.4	35.8	36.1	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1
95°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3
97.5°	44.4	44.7	44.9	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1
100°	45.2	45.5	45.7	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1
102.5°	45.5	46.0	46.5	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9
105°	46.8	47.2	47.7	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6
107.5°	248.7	216.2	183.8	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4
110°	405.6	370.7	335.9	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8



TEST NUMBER: P331946-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	538.7	531.3	524.0	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3
115°	640.9	642.0	642.9	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4
117.5°	714.7	714.9	715.1	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5
120°	764.3	764.3	764.3	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5
122.5°	811.9	812.1	812.4	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2
125°	878.9	879.5	880.0	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0
127.5°	947.2	946.7	946.2	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9
130°	989.2	988.7	988.3	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5
132.5°	1028.3	1027.7	1027.0	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9
135°	1087.4	1086.7	1085.9	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7
137.5°	1142.1	1141.6	1141.1	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9
140°	1175.4	1174.9	1174.4	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7
142.5°	1206.6	1205.9	1205.2	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5
147.5°	1290.1	1288.9	1287.8	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5
150°	1315.1	1314.5	1313.7	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0
152.5°	1337.4	1336.2	1335.1	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8
155°	1367.7	1366.3	1364.8	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9
157.5°	1393.8	1391.9	1390.0	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0
160°	1409.0	1407.3	1405.5	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9
162.5°	1423.2	1421.7	1420.2	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4
165°	1441.8	1440.1	1438.4	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5
167.5°	1455.5	1453.5	1451.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5
170°	1463.4	1461.4	1459.4	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4
172.5°	1468.3	1466.2	1464.1	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7
175°	1474.3	1472.3	1470.5	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0
177.5°	1476.3	1474.3	1472.3	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	714.4	714.4	719.9	723.4	727.7	730.7	732.6	734.7	738.1	742.8	748.0
5°	673.6	675.0	683.0	691.0	698.5	705.0	710.4	716.9	724.9	734.6	745.5
7.5°	634.0	639.6	647.6	657.3	667.9	677.4	686.9	697.7	708.8	723.2	738.4
10°	608.6	614.7	624.5	636.8	648.0	659.1	671.1	682.6	696.7	713.7	733.2
12.5°	586.4	592.2	602.3	615.7	626.3	638.7	652.3	667.3	683.2	703.6	725.7
15°	555.5	562.4	574.7	581.2	597.5	612.3	624.9	646.5	666.8	687.7	713.3
17.5°	530.3	534.1	544.0	556.1	568.3	584.8	601.4	619.4	639.6	665.2	697.3
20°	512.9	516.2	527.1	539.7	552.7	567.9	582.7	600.7	623.4	650.5	685.1
22.5°	499.9	503.5	510.6	524.1	536.2	548.7	563.5	585.1	609.3	635.7	673.4
25°	481.2	483.3	488.0	498.9	509.7	523.8	536.8	557.0	581.9	612.9	650.5
27.5°	463.4	465.4	469.4	477.1	487.3	498.7	512.8	530.0	555.3	589.0	628.9
30°	452.7	453.1	456.7	463.8	472.5	481.9	494.9	514.4	538.2	572.5	614.4
32.5°	443.5	442.1	444.5	450.0	458.4	467.8	478.4	497.7	520.7	554.3	597.4
35°	427.7	427.1	425.9	430.6	437.9	445.1	454.5	468.9	494.9	526.3	571.5
37.5°	411.8	410.1	408.1	410.3	415.9	423.5	431.6	444.4	466.8	501.4	544.6
40°	400.0	398.5	397.5	396.7	401.8	409.0	415.1	427.4	448.4	481.2	523.8
42.5°	387.0	386.2	384.7	383.7	388.0	393.4	399.8	410.7	431.6	462.4	502.8
45°	366.1	365.3	364.6	363.9	366.4	371.5	376.5	384.5	402.5	432.4	468.9
47.5°	342.7	341.8	342.0	340.9	343.4	346.8	350.3	358.8	376.2	400.3	427.0
50°	325.9	325.6	325.6	325.6	326.3	330.3	333.6	340.1	355.9	380.1	399.3
52.5°	310.1	308.6	308.6	309.2	310.5	313.0	315.1	322.2	336.0	355.9	373.2
55°	285.2	282.3	281.5	282.3	283.4	285.5	287.7	293.5	305.4	320.2	330.3
57.5°	257.6	256.0	255.1	255.2	255.8	257.5	259.2	265.5	274.8	282.6	289.1
60°	238.3	238.9	235.7	236.5	236.5	237.9	240.4	244.4	252.3	257.8	264.3
62.5°	220.1	219.0	218.1	217.1	217.1	217.6	221.0	224.1	230.9	233.8	238.8
65°	191.7	191.7	189.5	190.2	190.6	188.0	189.9	193.5	197.8	198.9	203.6
67.5°	163.0	161.9	160.7	159.7	159.7	159.4	160.3	162.1	165.4	165.8	169.4
70°	143.3	142.6	142.2	141.2	139.7	141.5	140.4	142.2	144.0	144.4	146.6
72.5°	124.2	123.6	122.9	121.8	121.2	121.0	121.1	123.2	124.4	123.9	126.3
75°	97.1	96.4	95.7	93.9	93.9	92.7	93.1	94.5	96.0	94.9	97.1
77.5°	71.4	69.1	69.0	69.5	68.2	68.4	68.1	67.8	68.4	68.5	70.5
80°	54.9	52.3	53.1	52.7	52.3	52.0	51.3	51.7	52.0	52.3	53.4
82.5°	39.6	39.3	38.6	38.5	38.2	37.2	36.9	37.5	37.8	37.6	38.5
85°	20.2	19.1	19.9	19.5	19.9	19.5	18.4	18.4	19.1	18.8	19.5
87.5°	11.5	11.3	10.4	10.1	9.1	8.8	7.9	7.7	7.5	7.1	7.2
90°	27.2	26.3	23.1	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1
92.5°	29.6	28.0	25.6	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4
95°	35.6	33.9	31.3	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8
97.5°	37.2	35.3	52.8	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2
100°	38.1	36.1	74.1	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0
102.5°	66.0	72.0	113.5	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9
105°	196.7	239.8	261.7	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3
107.5°	407.9	439.6	436.1	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3
110°	485.9	493.9	491.2	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	549.2	549.0	546.4	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1
115°	631.0	628.6	626.4	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2
117.5°	707.6	705.7	704.6	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5
120°	757.5	755.5	754.9	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4
122.5°	806.9	805.5	804.6	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2
125°	876.6	876.0	875.1	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9
127.5°	945.2	944.3	943.2	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4
130°	986.6	985.5	984.6	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4
132.5°	1026.0	1025.0	1024.2	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7
135°	1085.9	1085.2	1084.2	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2
137.5°	1138.7	1137.6	1137.0	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8
140°	1172.7	1171.7	1171.0	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9
142.5°	1204.9	1204.1	1203.4	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3
145°	1249.9	1249.4	1249.0	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6
147.5°	1290.1	1289.5	1289.0	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3
150°	1314.6	1314.1	1313.6	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6
152.5°	1336.0	1335.1	1334.8	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3
155°	1365.6	1364.4	1364.2	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6
157.5°	1391.6	1390.1	1390.3	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4
160°	1406.5	1405.0	1405.2	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1
162.5°	1419.8	1418.1	1418.3	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0
165°	1437.6	1435.6	1435.9	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0
167.5°	1451.6	1449.6	1449.6	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1
170°	1459.4	1457.5	1457.5	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9
172.5°	1464.7	1462.7	1462.5	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2
175°	1471.3	1469.5	1469.3	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9
177.5°	1473.8	1472.2	1472.0	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	749.7	751.1	756.0	759.5	763.6	765.9	768.2	770.0	772.2	772.8	781.2
5°	753.0	760.3	772.9	782.2	793.8	806.4	815.1	819.1	829.5	838.2	855.5
7.5°	752.1	767.4	786.6	806.3	827.6	847.2	864.2	884.4	898.8	920.4	941.7
10°	751.2	771.8	796.4	821.6	851.2	878.6	903.2	930.7	953.4	983.4	1009.0
12.5°	748.7	773.5	807.6	837.4	873.5	911.3	947.6	982.9	1003.1	1052.9	1076.6
15°	742.2	771.8	814.4	859.9	909.4	954.1	1000.3	1037.1	1096.6	1140.4	1168.2
17.5°	729.9	771.4	821.9	876.8	936.9	995.9	1048.2	1104.1	1167.3	1220.1	1276.5
20°	724.2	769.6	826.0	886.6	949.0	1015.8	1075.3	1142.6	1211.4	1263.5	1335.7
22.5°	713.5	765.0	825.7	893.2	960.0	1029.1	1098.8	1166.5	1246.1	1317.8	1386.5
25°	696.0	753.8	816.5	892.0	970.3	1039.6	1123.0	1213.0	1296.0	1388.0	1456.6
27.5°	677.7	739.3	802.3	872.4	956.7	1039.0	1143.9	1245.4	1346.9	1426.4	1477.2
30°	663.5	723.4	788.4	859.1	942.5	1040.4	1157.7	1268.5	1367.4	1435.7	1464.1
32.5°	648.2	709.0	766.5	840.7	929.5	1039.5	1166.4	1282.0	1368.6	1414.0	1408.4
35°	624.2	675.0	731.0	802.5	907.2	1033.1	1171.4	1283.3	1336.3	1326.6	1253.0
37.5°	589.5	632.4	687.4	765.6	881.2	1019.8	1161.3	1245.3	1241.8	1162.4	1055.7
40°	567.9	604.3	657.3	739.7	860.9	1011.2	1145.4	1200.0	1153.8	1042.9	915.1
42.5°	539.5	573.1	626.1	710.8	838.8	993.5	1115.1	1130.9	1040.5	912.9	795.9
45°	495.7	525.3	580.1	667.5	805.4	955.2	1041.1	1002.5	880.8	749.0	659.9
47.5°	448.5	479.3	532.1	621.8	757.1	897.5	938.4	856.3	731.3	624.5	542.6
50°	418.8	448.4	499.9	590.6	724.5	850.2	867.1	761.0	646.2	552.3	485.1
52.5°	388.7	416.6	467.3	558.3	686.4	795.2	784.8	676.7	571.1	491.1	438.4
55°	344.0	370.4	418.8	504.0	620.6	706.8	668.9	565.7	478.3	416.2	376.2
57.5°	304.1	329.3	371.0	448.0	549.3	608.6	560.4	473.4	404.0	356.2	326.3
60°	276.9	299.3	338.9	410.5	498.5	543.7	496.0	419.1	360.6	322.3	295.7
62.5°	251.2	270.7	307.5	372.3	448.8	486.7	438.6	373.4	323.7	289.7	267.0
65°	212.3	230.0	262.4	313.0	375.8	401.1	359.6	306.8	268.2	243.0	227.8
67.5°	176.7	191.7	219.8	259.6	305.9	324.2	292.7	251.8	222.7	202.5	190.4
70°	153.1	166.1	188.0	222.3	264.3	278.3	248.7	215.2	193.9	177.6	166.5
72.5°	133.1	142.7	162.7	189.2	224.1	235.3	214.6	185.1	165.2	153.1	144.2
75°	101.4	109.3	122.3	143.6	167.9	174.4	158.8	140.4	127.1	118.4	111.5
77.5°	73.1	79.0	88.4	101.5	118.3	124.1	114.3	102.0	92.3	86.4	82.6
80°	55.2	59.9	67.9	78.7	88.8	92.1	86.2	76.9	70.0	66.8	63.5
82.5°	40.8	43.5	48.3	55.6	62.5	66.4	61.5	55.8	52.1	49.2	48.0
85°	20.5	22.1	24.2	27.1	31.4	32.9	31.0	29.6	27.4	25.6	25.6
87.5°	8.2	8.7	10.1	11.1	12.8	14.3	14.7	14.7	15.1	15.0	14.9
90°	3.5	5.9	8.4	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2
92.5°	19.7	19.0	18.3	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1
95°	56.8	46.8	36.9	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3
97.5°	129.8	125.3	120.8	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1
100°	189.9	194.8	199.6	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1
102.5°	246.4	249.9	253.4	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9
105°	329.0	331.7	334.3	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6
107.5°	416.5	418.7	420.8	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4
110°	475.0	476.9	478.9	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.8	532.6	534.4	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3
115°	613.6	615.0	616.5	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4
117.5°	694.3	696.1	698.0	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5
120°	744.6	746.9	749.0	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5
122.5°	795.0	796.8	798.6	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2
125°	864.9	866.8	868.7	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0
127.5°	932.3	934.2	936.2	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9
130°	974.4	976.3	978.3	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5
132.5°	1014.6	1016.6	1018.5	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9
135°	1075.7	1077.1	1078.6	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7
137.5°	1128.7	1130.5	1132.4	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9
140°	1163.3	1164.8	1166.2	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7
142.5°	1195.7	1197.2	1198.6	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7
145°	1241.3	1243.0	1244.7	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5
147.5°	1283.5	1284.6	1285.6	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5
150°	1309.3	1310.0	1310.8	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0
152.5°	1332.6	1332.9	1333.2	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8
155°	1365.1	1364.5	1364.0	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9
157.5°	1391.3	1391.3	1391.2	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0
160°	1406.9	1406.7	1406.5	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9
162.5°	1421.4	1420.8	1420.1	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4
165°	1439.3	1438.5	1437.8	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5
167.5°	1453.0	1452.1	1451.1	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5
170°	1460.9	1460.0	1459.0	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4
172.5°	1466.0	1464.8	1463.7	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7
175°	1472.7	1471.5	1470.3	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0
177.5°	1474.7	1473.8	1472.8	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	784.1	784.4	787.5	789.9	788.7	790.1	790.7
5°	856.6	869.6	876.5	881.6	881.9	882.2	885.1
7.5°	959.5	973.5	983.6	999.1	1003.7	1009.0	1007.5
10°	1034.6	1055.2	1072.9	1082.2	1092.3	1107.1	1095.2
12.5°	1104.8	1141.2	1168.2	1182.7	1192.3	1195.2	1189.4
15°	1220.5	1268.2	1293.8	1293.1	1325.6	1339.6	1317.6
17.5°	1326.6	1370.6	1405.8	1423.9	1451.0	1457.0	1454.2
20°	1391.6	1439.6	1467.1	1498.1	1512.2	1524.8	1527.0
22.5°	1447.7	1490.7	1520.2	1546.1	1557.8	1563.8	1567.4
25°	1505.3	1539.3	1557.0	1565.9	1569.2	1568.5	1563.8
27.5°	1501.4	1503.9	1484.5	1465.4	1448.2	1428.9	1422.3
30°	1462.4	1432.0	1377.9	1347.2	1302.1	1266.3	1280.8
32.5°	1359.8	1299.5	1238.7	1171.6	1116.1	1100.3	1084.4
35°	1160.6	1054.4	992.4	920.2	891.3	862.4	842.5
37.5°	939.0	856.9	783.2	735.9	707.0	688.8	678.9
40°	811.9	737.8	677.2	638.9	616.9	596.3	593.4
42.5°	710.5	641.7	596.1	565.6	544.4	535.7	529.3
45°	581.9	533.9	503.2	481.5	467.5	462.0	454.9
47.5°	492.6	458.6	435.5	420.8	410.2	406.1	405.6
50°	442.6	414.4	397.5	385.9	377.6	376.2	370.4
52.5°	405.0	380.6	367.4	357.3	351.3	347.2	345.5
55°	351.6	335.4	323.5	317.6	313.0	309.0	309.0
57.5°	307.6	294.1	286.2	281.3	279.8	277.0	275.2
60°	280.5	268.9	262.8	258.4	255.6	255.9	252.7
62.5°	253.9	246.4	240.5	236.2	232.8	232.8	233.1
65°	216.2	210.5	206.1	204.7	202.6	200.0	200.7
67.5°	183.2	177.9	174.5	172.0	171.3	169.8	172.0
70°	159.6	155.6	153.1	150.9	150.1	150.5	152.3
72.5°	137.9	135.1	133.5	132.4	130.8	130.9	132.1
75°	108.3	106.1	104.7	103.6	103.2	103.2	103.2
77.5°	79.6	79.1	78.4	76.8	76.9	77.3	77.4
80°	62.8	61.7	61.4	60.6	59.6	58.8	60.6
82.5°	46.9	45.8	45.5	45.3	43.6	43.5	45.1
85°	25.3	24.2	24.5	24.2	24.2	23.8	23.8
87.5°	14.8	14.7	14.5	15.0	14.7	14.5	15.3
90°	29.2	30.2	30.9	31.4	31.9	32.3	32.9
92.5°	32.7	34.3	35.2	35.4	35.8	36.1	36.4
95°	39.0	40.7	41.6	41.6	41.6	41.6	41.6
97.5°	41.1	43.1	44.1	44.4	44.7	44.9	45.1
100°	41.9	43.9	45.1	45.2	45.5	45.7	46.0
102.5°	53.9	47.9	45.1	45.5	46.0	46.5	46.8
105°	110.6	67.5	46.3	46.8	47.2	47.7	48.2
107.5°	344.8	313.2	281.2	248.7	216.2	183.8	151.4
110°	469.8	461.8	440.4	405.6	370.7	335.9	301.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	549.5	549.7	546.0	538.7	531.3	524.0	516.6
115°	635.8	638.3	640.0	640.9	642.0	642.9	643.9
117.5°	711.5	713.4	714.5	714.7	714.9	715.1	715.3
120°	761.4	763.4	764.3	764.3	764.3	764.3	764.3
122.5°	809.6	811.0	811.7	811.9	812.1	812.4	812.6
125°	877.5	878.0	878.4	878.9	879.5	880.0	880.4
127.5°	946.7	947.4	947.6	947.2	946.7	946.2	945.7
130°	988.4	989.5	989.7	989.2	988.7	988.3	987.8
132.5°	1027.9	1028.9	1029.0	1028.3	1027.7	1027.0	1026.2
135°	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2
137.5°	1141.0	1142.2	1142.6	1142.1	1141.6	1141.1	1140.6
140°	1174.6	1175.6	1175.8	1175.4	1174.9	1174.4	1173.9
142.5°	1206.5	1207.2	1207.3	1206.6	1205.9	1205.2	1204.6
145°	1250.9	1251.4	1251.6	1251.6	1251.6	1251.6	1251.6
147.5°	1291.0	1291.5	1291.2	1290.1	1288.9	1287.8	1286.7
150°	1315.5	1316.0	1315.9	1315.1	1314.5	1313.7	1313.0
152.5°	1337.8	1338.6	1338.5	1337.4	1336.2	1335.1	1334.0
155°	1368.1	1369.3	1369.1	1367.7	1366.3	1364.8	1363.4
157.5°	1394.4	1395.9	1395.7	1393.8	1391.9	1390.0	1388.1
160°	1409.3	1410.8	1410.7	1409.0	1407.3	1405.5	1403.8
162.5°	1423.1	1424.7	1424.7	1423.2	1421.7	1420.2	1418.7
165°	1441.4	1443.4	1443.5	1441.8	1440.1	1438.4	1436.7
167.5°	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6
170°	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5
172.5°	1468.6	1470.6	1470.5	1468.3	1466.2	1464.1	1461.9
175°	1474.7	1476.4	1476.2	1474.3	1472.3	1470.5	1468.5
177.5°	1476.9	1478.4	1478.2	1476.3	1474.3	1472.3	1470.5
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9

(END OF REPORT)