

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: P332295-830

Luminaire Tested: **S123RDIP-S560D1195U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332295-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S560D1195U830-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5966.4 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Indirect

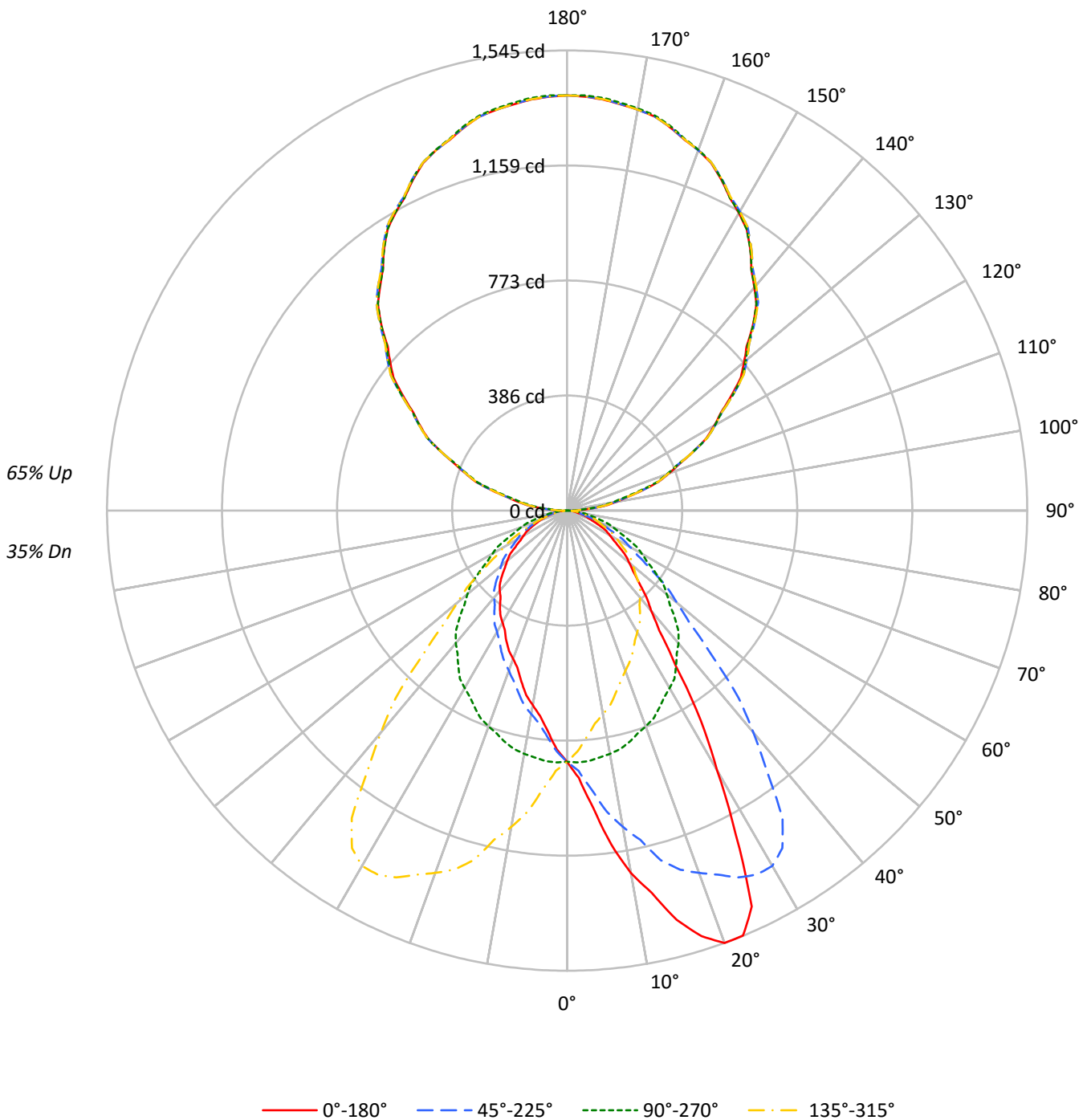
Input Watts (W): 49.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot





TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

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

RF	20				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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	38	37	37	30
2	87	80	74	69	78	72	68	63	59	55	52	46	44	42	34	33	32	26
3	79	70	63	58	72	64	58	53	52	48	44	41	38	36	31	29	27	23
4	73	62	55	49	66	57	50	45	46	42	38	37	33	31	28	26	24	20
5	67	56	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21	17
6	62	50	42	37	56	46	39	34	38	33	29	30	26	24	23	20	19	15
7	57	45	38	32	51	41	35	30	34	29	25	27	24	21	21	18	17	14
8	53	41	34	29	48	38	31	27	31	26	23	25	21	19	19	17	15	13
9	49	37	30	25	45	34	28	24	28	24	20	23	19	17	18	15	14	11
10	46	34	27	23	42	32	25	21	26	22	18	21	18	15	17	14	12	10

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

	0°	90°	180°	270°
0°	9077	9077	9077	9077
5°	10821	9116	8028	9116
10°	13511	9063	7252	9063
15°	15858	8971	6614	8971
20°	17699	8833	6071	8833
25°	17416	8687	5738	8687
30°	12519	8552	5393	8552
35°	8359	8377	5171	8377
40°	6159	8168	4942	8168
45°	5165	7798	4714	7798
50°	4558	7316	4401	7316
55°	3997	6762	3969	6762
60°	3559	6232	3638	6232
65°	3125	5662	3385	5662
70°	2452	5158	3091	5158
75°	2163	4504	2824	4504
80°	1878	3825	2777	3825
85°	1519	3075	2939	3075



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	1.4
10°-20°	259.1	4.3
20°-30°	407.0	6.8
30°-40°	424.7	7.1
40°-50°	363.4	6.1
50°-60°	277.0	4.6
60°-70°	177.6	3.0
70°-80°	85.4	1.4
80°-90°	26.7	0.4
90°-100°	90.8	1.5
100°-110°	271.8	4.6
110°-120°	462.3	7.7
120°-130°	608.1	10.2
130°-140°	683.5	11.5
140°-150°	671.9	11.3
150°-160°	565.6	9.5
160°-170°	376.5	6.3
170°-180°	131.8	2.2
0°-30°	749.1	12.6
0°-40°	1173.7	19.7
0°-60°	1814.2	30.4
0°-90°	2103.9	35.3
90°-120°	825.0	13.8
90°-150°	2788.5	46.7
90°-180°	3863.0	64.7
0°-180°	5966.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	843	843	843	843	843	
5°	1002	844	743	844	1002	103
15°	1423	805	594	805	1423	404
25°	1466	731	483	731	1466	630
35°	636	638	394	638	636	417
45°	339	512	310	512	339	267
55°	213	360	212	360	213	193
65°	123	222	133	222	123	121
75°	52	108	68	108	52	56
85°	12	25	24	25	12	15
90°	33	1	33	1	33	16
95°	85	65	85	65	85	88
105°	261	246	261	246	261	277
115°	467	465	467	465	467	462
125°	674	681	674	681	674	602
135°	883	884	883	884	883	679
145°	1072	1072	1072	1072	1072	669
155°	1225	1228	1225	1228	1225	564
165°	1333	1337	1333	1337	1333	376
175°	1385	1391	1385	1391	1385	132
180°	1394	1394	1394	1394	1394	



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	898.1	899.4	895.6	895.0	890.7	889.6	889.6	883.4	879.7	874.8	871.9
5°	1001.5	1007.2	1004.4	997.9	987.0	984.5	977.6	966.8	954.5	939.3	932.2
7.5°	1130.4	1138.3	1135.2	1125.2	1113.9	1104.7	1085.3	1067.3	1042.2	1020.1	1001.2
10°	1236.1	1227.8	1221.3	1211.5	1201.1	1184.1	1163.9	1136.1	1104.0	1078.7	1050.6
12.5°	1315.2	1313.9	1305.6	1295.6	1280.8	1264.7	1239.8	1206.0	1168.7	1132.1	1099.9
15°	1423.1	1425.3	1419.8	1409.4	1388.5	1359.9	1322.4	1308.3	1254.9	1215.1	1175.4
17.5°	1497.8	1497.3	1496.6	1482.1	1460.8	1440.4	1405.6	1368.6	1320.2	1264.2	1210.8
20°	1545.1	1541.5	1542.3	1526.0	1510.1	1486.7	1452.7	1398.9	1359.2	1294.6	1239.3
22.5°	1544.0	1543.2	1546.0	1540.4	1528.9	1510.9	1484.2	1438.8	1388.1	1322.9	1260.7
25°	1466.4	1463.6	1480.5	1485.2	1503.6	1506.8	1498.9	1474.0	1426.0	1358.9	1282.0
27.5°	1227.3	1225.7	1257.2	1296.6	1346.6	1385.4	1423.0	1441.1	1426.0	1377.9	1300.9
30°	1007.2	1041.1	1057.1	1114.1	1177.6	1253.4	1319.8	1383.0	1398.5	1377.6	1314.5
32.5°	836.2	865.8	879.1	928.1	987.3	1076.1	1175.7	1265.2	1328.4	1344.4	1306.4
35°	636.1	636.5	666.8	688.4	743.3	834.6	931.4	1051.2	1170.4	1260.7	1270.1
37.5°	507.6	509.3	527.7	549.3	590.5	638.8	724.0	823.6	961.2	1099.8	1181.0
40°	438.3	441.5	455.2	476.5	506.1	542.6	609.1	702.9	817.7	971.9	1097.9
42.5°	393.8	399.1	406.1	422.5	440.8	475.0	528.8	601.2	705.6	851.4	996.7
45°	339.3	342.2	347.6	355.2	371.8	395.7	431.8	480.5	567.1	684.5	830.0
47.5°	299.4	297.8	303.5	309.7	320.7	337.0	361.2	401.0	462.8	556.9	680.3
50°	272.2	271.8	275.8	280.5	291.0	302.9	322.7	352.7	401.8	479.8	592.8
52.5°	246.8	248.2	251.0	256.8	264.4	274.0	291.8	313.4	355.6	422.9	517.1
55°	213.0	214.1	218.0	221.3	226.7	236.5	247.7	265.7	294.5	341.5	419.1
57.5°	184.4	183.9	187.8	188.5	194.6	202.6	211.2	225.3	246.2	281.1	333.4
60°	165.3	164.3	167.5	170.0	173.2	179.7	187.0	200.8	217.4	243.0	287.8
62.5°	148.0	147.5	149.9	152.4	155.0	161.0	167.1	177.6	190.8	212.4	247.9
65°	122.7	123.9	124.9	126.0	127.4	131.0	136.9	144.0	153.1	168.2	193.9
67.5°	96.4	97.6	97.9	100.1	103.2	105.5	109.1	115.5	121.8	134.5	149.1
70°	77.9	77.6	77.9	79.1	83.0	87.0	91.7	96.4	100.4	109.4	121.7
72.5°	67.0	66.4	67.3	67.5	69.5	70.5	73.5	77.9	83.0	89.2	98.0
75°	52.0	52.0	52.0	52.0	53.4	54.2	55.2	56.4	58.2	61.0	67.5
77.5°	38.5	38.5	39.0	39.3	39.7	40.1	40.7	41.8	42.4	44.0	46.8
80°	30.3	30.7	30.3	30.7	30.7	31.4	31.8	32.9	33.2	35.1	36.1
82.5°	22.8	22.6	22.8	23.2	23.2	23.9	23.9	24.8	24.9	25.7	26.9
85°	12.3	11.6	12.3	11.9	12.6	11.9	12.3	13.0	13.0	13.4	14.8
87.5°	9.4	9.9	9.2	9.4	9.3	9.5	9.3	9.1	9.5	9.0	8.7
90°	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.3	27.2	26.3	23.1
92.5°	44.2	44.5	44.9	45.1	45.4	45.1	44.4	43.6	42.8	42.0	40.2
95°	85.4	85.4	85.4	85.4	85.4	84.9	84.0	82.9	82.0	81.1	79.1
97.5°	131.4	131.5	131.6	131.7	131.8	131.3	130.2	129.0	127.9	126.8	125.4
100°	166.5	166.0	165.5	165.0	164.5	163.9	163.2	162.4	161.7	161.0	159.8
102.5°	202.4	202.5	202.6	202.6	202.7	202.5	201.7	201.0	200.3	199.5	197.9
105°	260.6	260.1	259.7	259.2	258.7	258.4	258.4	258.4	258.4	258.4	256.3
107.5°	321.3	321.6	321.9	322.2	322.4	322.3	321.5	320.7	319.9	319.1	318.2
110°	362.5	363.0	363.4	363.9	364.4	364.2	363.3	362.2	361.3	360.3	359.8



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	406.3	406.4	406.5	406.6	406.7	406.1	405.0	403.8	402.7	401.4	401.3
115°	466.6	466.7	467.0	467.2	467.5	467.5	467.2	467.0	466.7	466.6	467.0
117.5°	527.6	528.3	529.0	529.7	530.4	530.7	530.7	530.8	530.8	530.9	531.6
120°	570.5	571.1	571.6	572.0	572.5	572.9	573.2	573.3	573.6	573.8	575.0
122.5°	611.7	612.4	613.1	613.8	614.4	615.1	615.8	616.4	617.0	617.6	618.3
125°	673.5	674.5	675.4	676.5	677.4	678.3	679.4	680.3	681.3	682.3	682.8
127.5°	735.1	736.1	737.3	738.4	739.5	740.7	742.2	743.5	744.9	746.2	746.8
130°	775.3	777.0	778.7	780.4	782.1	783.5	784.5	785.4	786.5	787.4	788.2
132.5°	817.4	818.7	820.0	821.3	822.7	823.9	825.1	826.2	827.4	828.6	829.1
135°	882.7	883.2	883.6	884.1	884.6	885.3	886.3	887.3	888.3	889.2	889.5
137.5°	940.3	941.2	942.2	943.0	944.0	944.9	945.9	947.0	948.0	949.0	948.4
140°	978.0	979.7	981.4	983.1	984.8	985.7	986.0	986.2	986.5	986.7	986.5
142.5°	1016.5	1017.9	1019.1	1020.4	1021.7	1022.6	1022.8	1023.0	1023.2	1023.5	1023.0
145°	1072.1	1073.1	1074.0	1075.1	1076.0	1076.7	1076.9	1077.1	1077.3	1077.6	1076.9
147.5°	1121.6	1123.0	1124.5	1126.0	1127.5	1128.2	1128.2	1128.2	1128.2	1128.2	1127.5
150°	1153.2	1154.6	1156.1	1157.5	1159.0	1159.7	1159.7	1159.7	1159.7	1159.7	1159.2
152.5°	1183.8	1185.1	1186.4	1187.6	1188.9	1189.3	1188.9	1188.5	1188.2	1187.8	1187.5
155°	1225.4	1227.2	1228.9	1230.6	1232.3	1232.7	1231.6	1230.7	1229.7	1228.7	1228.5
157.5°	1263.3	1264.7	1266.0	1267.4	1268.8	1268.9	1267.9	1266.9	1265.9	1264.9	1264.7
160°	1287.9	1288.8	1289.8	1290.8	1291.8	1291.7	1290.4	1289.2	1288.0	1286.8	1286.8
162.5°	1306.3	1307.8	1309.4	1310.9	1312.5	1312.7	1311.5	1310.2	1309.0	1307.8	1307.6
165°	1332.8	1334.5	1336.1	1337.8	1339.5	1339.7	1338.2	1336.8	1335.3	1333.9	1333.9
167.5°	1355.3	1356.8	1358.3	1359.8	1361.3	1361.3	1359.8	1358.3	1356.8	1355.3	1355.1
170°	1366.7	1368.4	1370.1	1371.9	1373.6	1373.6	1371.9	1370.1	1368.4	1366.7	1366.7
172.5°	1375.5	1377.1	1378.8	1380.5	1382.3	1382.4	1380.9	1379.4	1377.9	1376.4	1376.4
175°	1385.3	1387.0	1388.7	1390.4	1392.1	1392.2	1390.8	1389.3	1387.9	1386.4	1386.4
177.5°	1390.6	1391.9	1393.3	1394.7	1396.0	1396.1	1395.0	1393.8	1392.6	1391.5	1391.5
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	870.7	869.9	865.8	861.2	855.2	851.1	847.9	846.2	841.0	834.6	830.3
5°	924.5	913.7	902.2	888.1	875.1	861.8	853.5	843.7	831.8	818.4	809.0
7.5°	982.1	960.9	938.0	914.5	891.1	870.2	851.7	835.8	816.9	797.8	784.3
10°	1026.3	995.3	963.2	930.3	900.3	872.2	850.6	829.2	806.5	784.5	767.9
12.5°	1066.5	1025.7	988.6	948.2	909.9	876.3	845.1	820.0	792.7	769.2	750.3
15°	1117.3	1075.4	1030.7	969.3	918.4	875.8	837.9	805.0	771.8	743.0	724.5
17.5°	1164.8	1101.8	1041.7	990.4	924.4	871.1	824.8	785.5	749.1	718.5	695.8
20°	1184.5	1123.5	1058.1	992.8	927.8	868.3	814.5	771.1	733.2	698.5	677.6
22.5°	1196.3	1127.2	1058.4	988.2	919.2	857.2	804.1	756.4	715.3	682.4	656.6
25°	1210.1	1127.8	1052.0	982.7	912.3	845.1	781.9	731.4	687.0	652.0	624.5
27.5°	1219.2	1122.4	1032.7	955.7	884.3	817.5	759.6	706.0	660.9	623.9	594.5
30°	1221.0	1118.0	1018.0	934.6	862.0	800.7	739.3	688.1	640.5	601.1	573.6
32.5°	1223.2	1107.4	998.2	909.6	835.3	774.5	718.9	669.9	621.0	582.3	554.3
35°	1213.7	1101.5	967.9	866.1	791.7	732.8	682.7	637.5	589.6	552.0	523.5
37.5°	1172.7	1078.0	936.5	817.1	739.3	684.9	643.9	604.6	560.6	520.1	493.2
40°	1131.4	1054.9	912.3	787.4	706.2	650.2	613.3	581.3	538.7	500.7	471.8
42.5°	1069.9	1023.4	889.2	756.2	668.5	614.6	583.6	553.5	516.1	477.6	450.4
45°	957.1	963.2	841.9	706.5	616.6	562.4	533.2	512.3	479.1	447.3	419.5
47.5°	815.5	872.9	786.4	653.6	561.8	511.0	485.4	467.1	444.8	413.6	388.2
50°	723.1	805.0	741.9	618.0	527.4	476.9	451.7	436.9	417.4	392.8	368.6
52.5°	637.9	725.9	688.2	578.4	490.2	443.9	419.2	407.1	391.6	368.5	346.7
55°	520.2	609.4	600.7	518.8	434.3	392.8	374.0	360.3	349.8	332.5	315.2
57.5°	420.8	505.3	509.8	452.3	385.0	344.0	327.9	317.5	310.7	297.7	281.6
60°	358.2	435.7	450.9	407.6	349.8	313.7	297.8	289.5	284.1	273.6	261.4
62.5°	306.1	372.2	389.4	358.2	316.0	282.2	269.8	261.8	258.2	249.1	238.3
65°	234.3	289.2	305.8	288.4	266.5	239.3	229.2	222.3	219.1	214.1	206.1
67.5°	176.2	216.2	234.4	222.2	214.2	197.1	190.7	187.0	184.1	180.7	174.0
70°	141.5	171.2	189.9	186.6	180.1	171.2	166.5	163.9	161.0	158.2	152.3
72.5°	113.8	134.1	151.7	153.4	148.1	146.3	142.1	141.1	139.3	135.9	132.7
75°	75.5	89.5	101.8	106.5	108.7	110.5	108.7	108.3	107.9	105.1	103.2
77.5°	49.5	57.0	64.8	72.8	76.2	78.6	79.2	80.5	79.6	78.0	77.2
80°	37.9	39.7	45.1	52.0	57.4	59.6	61.0	61.7	61.4	61.0	59.6
82.5°	27.5	29.0	31.6	36.4	40.9	44.6	45.4	45.2	46.1	46.3	45.1
85°	14.8	15.2	15.9	16.6	19.1	23.1	24.2	24.9	25.6	25.6	23.5
87.5°	8.6	7.7	7.6	7.1	7.4	7.3	8.5	9.4	10.3	9.6	10.1
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°	38.5	36.7	34.9	33.1	31.5	29.8	28.2	26.5	28.2	29.8	31.5
95°	77.1	75.2	73.2	71.4	69.7	68.1	66.4	64.7	66.4	68.1	69.7
97.5°	124.0	122.6	121.2	119.8	118.6	117.3	116.0	114.8	116.0	117.3	118.6
100°	158.5	157.3	156.1	154.8	153.4	151.8	150.4	148.9	150.4	151.8	153.4
102.5°	196.3	194.7	193.1	191.9	191.0	190.1	189.3	188.3	189.3	190.1	191.0
105°	254.1	251.8	249.7	248.4	247.9	247.4	246.9	246.4	246.9	247.4	247.9
107.5°	317.4	316.5	315.7	315.0	314.7	314.4	314.1	313.9	314.1	314.4	314.7
110°	359.3	358.8	358.4	357.9	357.4	356.8	356.4	355.9	356.4	356.8	357.4





TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	401.2	401.1	401.1	400.9	400.6	400.3	400.0	399.7	400.0	400.3	400.6
115°	467.5	468.0	468.4	468.3	467.6	466.8	466.2	465.4	466.2	466.8	467.6
117.5°	532.2	532.8	533.5	533.5	533.0	532.5	532.1	531.6	532.1	532.5	533.0
120°	576.3	577.5	578.7	578.6	577.1	575.7	574.2	572.8	574.2	575.7	577.1
122.5°	618.9	619.5	620.2	620.0	618.9	617.8	616.7	615.7	616.7	617.8	618.9
125°	683.2	683.7	684.2	684.1	683.3	682.6	681.9	681.2	681.9	682.6	683.3
127.5°	747.2	747.8	748.4	747.8	746.3	744.7	743.2	741.6	743.2	744.7	746.3
130°	788.8	789.6	790.3	789.7	787.8	785.8	783.8	781.9	783.8	785.8	787.8
132.5°	829.6	830.2	830.8	830.0	828.0	826.1	824.2	822.2	824.2	826.1	828.0
135°	889.8	889.9	890.2	889.6	888.2	886.6	885.2	883.7	885.2	886.6	888.2
137.5°	947.7	947.2	946.5	945.6	944.3	943.1	941.9	940.8	941.9	943.1	944.3
140°	986.2	986.0	985.7	985.0	983.8	982.6	981.4	980.1	981.4	982.6	983.8
142.5°	1022.7	1022.2	1021.7	1021.0	1019.7	1018.5	1017.3	1016.1	1017.3	1018.5	1019.7
145°	1076.1	1075.4	1074.7	1074.0	1073.6	1073.1	1072.6	1072.1	1072.6	1073.1	1073.6
147.5°	1126.8	1126.1	1125.5	1124.7	1123.8	1122.9	1122.1	1121.2	1122.1	1122.9	1123.8
150°	1158.8	1158.3	1157.8	1157.3	1156.8	1156.3	1155.8	1155.4	1155.8	1156.3	1156.8
152.5°	1187.2	1186.8	1186.6	1186.1	1185.4	1184.8	1184.1	1183.4	1184.1	1184.8	1185.4
155°	1228.2	1228.0	1227.8	1227.7	1227.7	1227.7	1227.7	1227.7	1227.7	1227.7	1227.7
157.5°	1264.5	1264.3	1264.0	1264.1	1264.4	1264.7	1265.0	1265.3	1265.0	1264.7	1264.4
160°	1286.8	1286.8	1286.8	1287.0	1287.5	1288.0	1288.5	1288.9	1288.5	1288.0	1287.5
162.5°	1307.4	1307.2	1307.0	1307.3	1308.0	1308.6	1309.3	1309.9	1309.3	1308.6	1308.0
165°	1333.9	1333.9	1333.9	1334.3	1334.9	1335.7	1336.4	1337.2	1336.4	1335.7	1334.9
167.5°	1354.9	1354.7	1354.5	1354.9	1355.9	1356.9	1357.8	1358.9	1357.8	1356.9	1355.9
170°	1366.7	1366.7	1366.7	1367.2	1368.2	1369.1	1370.1	1371.1	1370.1	1369.1	1368.2
172.5°	1376.4	1376.4	1376.4	1376.9	1377.8	1378.8	1379.8	1380.7	1379.8	1378.8	1377.8
175°	1386.4	1386.4	1386.4	1387.0	1387.9	1388.8	1389.9	1390.8	1389.9	1388.8	1387.9
177.5°	1391.5	1391.5	1391.5	1391.9	1392.6	1393.5	1394.2	1395.0	1394.2	1393.5	1392.6
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	828.9	825.1	822.6	816.7	813.0	809.0	804.9	807.5	807.2	806.9	806.9
5°	801.1	792.8	785.2	775.4	769.3	761.8	755.9	755.3	756.7	751.6	748.8
7.5°	773.5	762.1	751.4	740.6	729.2	720.1	714.4	711.8	708.1	705.0	701.7
10°	754.1	740.8	730.3	717.0	704.7	693.9	687.0	682.3	679.8	677.2	672.6
12.5°	734.2	721.1	707.8	692.7	681.0	668.5	663.4	658.1	653.2	650.4	643.9
15°	705.0	688.1	674.0	658.1	645.2	632.8	625.7	615.2	613.7	610.1	603.6
17.5°	675.8	657.4	638.0	626.2	611.5	598.8	587.8	584.3	573.9	570.0	564.4
20°	652.7	635.7	620.9	605.4	584.1	572.2	563.5	558.8	550.5	545.4	541.9
22.5°	632.8	615.5	598.4	580.3	562.7	549.4	543.0	535.7	531.2	524.1	520.2
25°	604.4	585.6	565.0	545.4	532.8	522.7	512.6	506.1	499.6	496.3	489.2
27.5°	571.3	551.7	532.4	517.6	502.1	492.1	483.0	477.2	469.4	463.9	460.0
30°	553.1	530.0	513.4	500.0	480.1	470.8	463.9	456.7	450.9	445.2	441.1
32.5°	532.0	510.9	495.1	478.6	463.4	453.2	444.2	437.9	433.0	427.5	423.6
35°	498.9	481.3	465.0	448.4	437.2	426.7	416.2	410.9	406.1	401.1	397.5
37.5°	469.0	452.5	437.1	421.3	407.5	398.9	390.5	386.3	380.0	376.6	373.0
40°	450.5	434.3	417.7	402.6	388.0	381.6	374.0	367.9	362.1	359.6	355.6
42.5°	430.4	414.1	400.1	383.7	371.9	363.1	356.1	349.4	345.1	341.4	339.1
45°	400.4	385.9	372.2	356.0	344.8	337.1	329.2	323.1	319.1	316.6	312.6
47.5°	371.3	356.8	342.9	328.8	317.9	309.2	301.3	297.0	291.8	288.7	286.0
50°	350.2	337.1	322.3	309.3	298.6	289.9	283.4	278.0	273.2	269.3	267.5
52.5°	330.8	317.0	304.2	292.1	280.7	270.8	264.9	259.2	255.7	251.1	249.0
55°	298.9	285.6	274.8	262.8	251.7	243.4	236.1	231.0	227.4	222.3	219.5
57.5°	268.9	256.9	244.0	233.8	222.2	215.2	209.2	202.3	197.9	194.0	191.1
60°	248.7	235.0	223.9	214.1	204.0	194.9	189.5	184.1	179.5	175.4	173.0
62.5°	227.6	215.7	205.1	194.4	185.2	177.3	171.1	166.5	162.4	159.9	157.3
65°	195.3	186.0	175.1	166.5	157.8	152.0	146.9	143.0	140.1	138.3	136.1
67.5°	165.6	156.5	147.0	138.5	132.7	128.3	125.0	121.6	120.2	117.8	116.4
70°	146.2	136.9	128.6	122.1	116.2	113.0	110.8	108.3	106.9	104.0	102.5
72.5°	125.2	118.4	112.4	107.0	102.4	99.4	96.7	93.6	91.2	88.1	86.6
75°	98.6	92.5	87.8	84.1	81.2	77.3	73.3	70.0	69.0	67.9	67.5
77.5°	73.0	69.1	65.7	62.7	59.1	56.2	55.3	54.6	54.4	53.8	53.8
80°	57.4	53.8	51.3	47.7	45.5	45.5	45.5	44.8	45.1	45.1	45.1
82.5°	42.7	39.3	38.0	36.7	36.3	36.6	36.6	36.7	36.5	37.0	36.8
85°	22.1	22.3	23.1	22.7	23.1	23.1	23.8	23.5	23.8	23.1	23.8
87.5°	10.3	11.7	12.6	13.5	14.4	14.8	15.3	15.5	15.9	16.1	16.3
90°	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.3	29.2	30.2	30.9
92.5°	33.1	34.9	36.7	38.5	40.2	42.0	42.8	43.6	44.4	45.1	45.4
95°	71.4	73.2	75.2	77.1	79.1	81.1	82.0	82.9	84.0	84.9	85.4
97.5°	119.8	121.2	122.6	124.0	125.4	126.8	127.9	129.0	130.2	131.3	131.8
100°	154.8	156.1	157.3	158.5	159.8	161.0	161.7	162.4	163.2	163.9	164.5
102.5°	191.9	193.1	194.7	196.3	197.9	199.5	200.3	201.0	201.7	202.5	202.7
105°	248.4	249.7	251.8	254.1	256.3	258.4	258.4	258.4	258.4	258.4	258.7
107.5°	315.0	315.7	316.5	317.4	318.2	319.1	319.9	320.7	321.5	322.3	322.4
110°	357.9	358.4	358.8	359.3	359.8	360.3	361.3	362.2	363.3	364.2	364.4



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	400.9	401.1	401.1	401.2	401.3	401.4	402.7	403.8	405.0	406.1	406.7
115°	468.3	468.4	468.0	467.5	467.0	466.6	466.7	467.0	467.2	467.5	467.5
117.5°	533.5	533.5	532.8	532.2	531.6	530.9	530.8	530.8	530.7	530.7	530.4
120°	578.6	578.7	577.5	576.3	575.0	573.8	573.6	573.3	573.2	572.9	572.5
122.5°	620.0	620.2	619.5	618.9	618.3	617.6	617.0	616.4	615.8	615.1	614.4
125°	684.1	684.2	683.7	683.2	682.8	682.3	681.3	680.3	679.4	678.3	677.4
127.5°	747.8	748.4	747.8	747.2	746.8	746.2	744.9	743.5	742.2	740.7	739.5
130°	789.7	790.3	789.6	788.8	788.2	787.4	786.5	785.4	784.5	783.5	782.1
132.5°	830.0	830.8	830.2	829.6	829.1	828.6	827.4	826.2	825.1	823.9	822.7
135°	889.6	890.2	889.9	889.8	889.5	889.2	888.3	887.3	886.3	885.3	884.6
137.5°	945.6	946.5	947.2	947.7	948.4	949.0	948.0	947.0	945.9	944.9	944.0
140°	985.0	985.7	986.0	986.2	986.5	986.7	986.5	986.2	986.0	985.7	984.8
142.5°	1021.0	1021.7	1022.2	1022.7	1023.0	1023.5	1023.2	1023.0	1022.8	1022.6	1021.7
145°	1074.0	1074.7	1075.4	1076.1	1076.9	1077.6	1077.3	1077.1	1076.9	1076.7	1076.0
147.5°	1124.7	1125.5	1126.1	1126.8	1127.5	1128.2	1128.2	1128.2	1128.2	1128.2	1127.5
150°	1157.3	1157.8	1158.3	1158.8	1159.2	1159.7	1159.7	1159.7	1159.7	1159.7	1159.0
152.5°	1186.1	1186.6	1186.8	1187.2	1187.5	1187.8	1188.2	1188.5	1188.9	1189.3	1188.9
155°	1227.7	1227.8	1228.0	1228.2	1228.5	1228.7	1229.7	1230.7	1231.6	1232.7	1232.3
157.5°	1264.1	1264.0	1264.3	1264.5	1264.7	1264.9	1265.9	1266.9	1267.9	1268.9	1268.8
160°	1287.0	1286.8	1286.8	1286.8	1286.8	1286.8	1288.0	1289.2	1290.4	1291.7	1291.8
162.5°	1307.3	1307.0	1307.2	1307.4	1307.6	1307.8	1309.0	1310.2	1311.5	1312.7	1312.5
165°	1334.3	1333.9	1333.9	1333.9	1333.9	1333.9	1335.3	1336.8	1338.2	1339.7	1339.5
167.5°	1354.9	1354.5	1354.7	1354.9	1355.1	1355.3	1356.8	1358.3	1359.8	1361.3	1361.3
170°	1367.2	1366.7	1366.7	1366.7	1366.7	1366.7	1368.4	1370.1	1371.9	1373.6	1373.6
172.5°	1376.9	1376.4	1376.4	1376.4	1376.4	1376.4	1377.9	1379.4	1380.9	1382.4	1382.3
175°	1387.0	1386.4	1386.4	1386.4	1386.4	1386.4	1387.9	1389.3	1390.8	1392.2	1392.1
177.5°	1391.9	1391.5	1391.5	1391.5	1391.5	1391.5	1392.6	1393.8	1395.0	1396.1	1396.0
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	803.4	803.1	803.4	802.3	803.4	803.1	803.4	806.9	806.9	807.2	807.5
5°	747.6	747.2	746.2	743.0	746.2	747.2	747.6	748.8	751.6	756.7	755.3
7.5°	698.9	698.4	695.2	695.3	695.2	698.4	698.9	701.7	705.0	708.1	711.8
10°	670.1	670.4	666.1	663.5	666.1	670.4	670.1	672.6	677.2	679.8	682.3
12.5°	642.1	640.4	636.9	634.0	636.9	640.4	642.1	643.9	650.4	653.2	658.1
15°	605.0	601.4	592.8	593.5	592.8	601.4	605.0	603.6	610.1	613.7	615.2
17.5°	561.5	558.8	558.7	553.6	558.7	558.8	561.5	564.4	570.0	573.9	584.3
20°	536.1	534.3	535.0	530.0	535.0	534.3	536.1	541.9	545.4	550.5	558.8
22.5°	516.1	514.3	511.3	509.7	511.3	514.3	516.1	520.2	524.1	531.2	535.7
25°	487.0	484.1	481.3	483.1	481.3	484.1	487.0	489.2	496.3	499.6	506.1
27.5°	457.8	455.6	452.8	452.4	452.8	455.6	457.8	460.0	463.9	469.4	477.2
30°	439.3	437.2	435.7	433.9	435.7	437.2	439.3	441.1	445.2	450.9	456.7
32.5°	420.6	420.2	417.5	417.2	417.5	420.2	420.6	423.6	427.5	433.0	437.9
35°	396.1	393.9	393.1	393.5	393.1	393.9	396.1	397.5	401.1	406.1	410.9
37.5°	372.7	369.9	368.5	367.2	368.5	369.9	372.7	373.0	376.6	380.0	386.3
40°	356.0	353.1	352.3	351.7	352.3	353.1	356.0	355.6	359.6	362.1	367.9
42.5°	337.1	336.0	335.6	334.3	335.6	336.0	337.1	339.1	341.4	345.1	349.4
45°	311.5	311.2	309.1	309.7	309.1	311.2	311.5	312.6	316.6	319.1	323.1
47.5°	284.6	283.0	281.4	282.5	281.4	283.0	284.6	286.0	288.7	291.8	297.0
50°	266.1	265.3	262.1	262.8	262.1	265.3	266.1	267.5	269.3	273.2	278.0
52.5°	247.6	244.9	243.6	243.2	243.6	244.9	247.6	249.0	251.1	255.7	259.2
55°	217.0	213.7	212.3	211.5	212.3	213.7	217.0	219.5	222.3	227.4	231.0
57.5°	186.9	186.1	184.9	185.7	184.9	186.1	186.9	191.1	194.0	197.9	202.3
60°	169.3	169.3	169.3	169.0	169.3	169.3	169.3	173.0	175.4	179.5	184.1
62.5°	155.7	154.9	154.6	155.0	154.6	154.9	155.7	157.3	159.9	162.4	166.5
65°	135.0	134.7	133.2	132.9	133.2	134.7	135.0	136.1	138.3	140.1	143.0
67.5°	115.5	114.1	113.8	113.2	113.8	114.1	115.5	116.4	117.8	120.2	121.6
70°	100.8	100.0	97.8	98.2	97.8	100.0	100.8	102.5	104.0	106.9	108.3
72.5°	84.8	84.1	83.7	83.1	83.7	84.1	84.8	86.6	88.1	91.2	93.6
75°	67.1	66.8	66.4	67.9	66.4	66.8	67.1	67.5	67.9	69.0	70.0
77.5°	53.8	53.8	54.0	53.4	54.0	53.8	53.8	53.8	53.8	54.4	54.6
80°	45.1	45.1	44.8	44.8	44.8	45.1	45.1	45.1	45.1	45.1	44.8
82.5°	36.2	36.5	36.7	36.1	36.7	36.5	36.2	36.8	37.0	36.5	36.7
85°	23.8	23.5	24.2	23.8	24.2	23.5	23.8	23.8	23.1	23.8	23.5
87.5°	17.0	16.5	16.6	17.0	16.6	16.5	17.0	16.3	16.1	15.9	15.5
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.3
92.5°	45.1	44.9	44.5	44.2	44.5	44.9	45.1	45.4	45.1	44.4	43.6
95°	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	84.9	84.0	82.9
97.5°	131.7	131.6	131.5	131.4	131.5	131.6	131.7	131.8	131.3	130.2	129.0
100°	165.0	165.5	166.0	166.5	166.0	165.5	165.0	164.5	163.9	163.2	162.4
102.5°	202.6	202.6	202.5	202.4	202.5	202.6	202.6	202.7	202.5	201.7	201.0
105°	259.2	259.7	260.1	260.6	260.1	259.7	259.2	258.7	258.4	258.4	258.4
107.5°	322.2	321.9	321.6	321.3	321.6	321.9	322.2	322.4	322.3	321.5	320.7
110°	363.9	363.4	363.0	362.5	363.0	363.4	363.9	364.4	364.2	363.3	362.2



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	406.6	406.5	406.4	406.3	406.4	406.5	406.6	406.7	406.1	405.0	403.8
115°	467.2	467.0	466.7	466.6	466.7	467.0	467.2	467.5	467.5	467.2	467.0
117.5°	529.7	529.0	528.3	527.6	528.3	529.0	529.7	530.4	530.7	530.7	530.8
120°	572.0	571.6	571.1	570.5	571.1	571.6	572.0	572.5	572.9	573.2	573.3
122.5°	613.8	613.1	612.4	611.7	612.4	613.1	613.8	614.4	615.1	615.8	616.4
125°	676.5	675.4	674.5	673.5	674.5	675.4	676.5	677.4	678.3	679.4	680.3
127.5°	738.4	737.3	736.1	735.1	736.1	737.3	738.4	739.5	740.7	742.2	743.5
130°	780.4	778.7	777.0	775.3	777.0	778.7	780.4	782.1	783.5	784.5	785.4
132.5°	821.3	820.0	818.7	817.4	818.7	820.0	821.3	822.7	823.9	825.1	826.2
135°	884.1	883.6	883.2	882.7	883.2	883.6	884.1	884.6	885.3	886.3	887.3
137.5°	943.0	942.2	941.2	940.3	941.2	942.2	943.0	944.0	944.9	945.9	947.0
140°	983.1	981.4	979.7	978.0	979.7	981.4	983.1	984.8	985.7	986.0	986.2
142.5°	1020.4	1019.1	1017.9	1016.5	1017.9	1019.1	1020.4	1021.7	1022.6	1022.8	1023.0
145°	1075.1	1074.0	1073.1	1072.1	1073.1	1074.0	1075.1	1076.0	1076.7	1076.9	1077.1
147.5°	1126.0	1124.5	1123.0	1121.6	1123.0	1124.5	1126.0	1127.5	1128.2	1128.2	1128.2
150°	1157.5	1156.1	1154.6	1153.2	1154.6	1156.1	1157.5	1159.0	1159.7	1159.7	1159.7
152.5°	1187.6	1186.4	1185.1	1183.8	1185.1	1186.4	1187.6	1188.9	1189.3	1188.9	1188.5
155°	1230.6	1228.9	1227.2	1225.4	1227.2	1228.9	1230.6	1232.3	1232.7	1231.6	1230.7
157.5°	1267.4	1266.0	1264.7	1263.3	1264.7	1266.0	1267.4	1268.8	1268.9	1267.9	1266.9
160°	1290.8	1289.8	1288.8	1287.9	1288.8	1289.8	1290.8	1291.8	1291.7	1290.4	1289.2
162.5°	1310.9	1309.4	1307.8	1306.3	1307.8	1309.4	1310.9	1312.5	1312.7	1311.5	1310.2
165°	1337.8	1336.1	1334.5	1332.8	1334.5	1336.1	1337.8	1339.5	1339.7	1338.2	1336.8
167.5°	1359.8	1358.3	1356.8	1355.3	1356.8	1358.3	1359.8	1361.3	1361.3	1359.8	1358.3
170°	1371.9	1370.1	1368.4	1366.7	1368.4	1370.1	1371.9	1373.6	1373.6	1371.9	1370.1
172.5°	1380.5	1378.8	1377.1	1375.5	1377.1	1378.8	1380.5	1382.3	1382.4	1380.9	1379.4
175°	1390.4	1388.7	1387.0	1385.3	1387.0	1388.7	1390.4	1392.1	1392.2	1390.8	1389.3
177.5°	1394.7	1393.3	1391.9	1390.6	1391.9	1393.3	1394.7	1396.0	1396.1	1395.0	1393.8
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	804.9	809.0	813.0	816.7	822.6	825.1	828.9	830.3	834.6	841.0	846.2
5°	755.9	761.8	769.3	775.4	785.2	792.8	801.1	809.0	818.4	831.8	843.7
7.5°	714.4	720.1	729.2	740.6	751.4	762.1	773.5	784.3	797.8	816.9	835.8
10°	687.0	693.9	704.7	717.0	730.3	740.8	754.1	767.9	784.5	806.5	829.2
12.5°	663.4	668.5	681.0	692.7	707.8	721.1	734.2	750.3	769.2	792.7	820.0
15°	625.7	632.8	645.2	658.1	674.0	688.1	705.0	724.5	743.0	771.8	805.0
17.5°	587.8	598.8	611.5	626.2	638.0	657.4	675.8	695.8	718.5	749.1	785.5
20°	563.5	572.2	584.1	605.4	620.9	635.7	652.7	677.6	698.5	733.2	771.1
22.5°	543.0	549.4	562.7	580.3	598.4	615.5	632.8	656.6	682.4	715.3	756.4
25°	512.6	522.7	532.8	545.4	565.0	585.6	604.4	624.5	652.0	687.0	731.4
27.5°	483.0	492.1	502.1	517.6	532.4	551.7	571.3	594.5	623.9	660.9	706.0
30°	463.9	470.8	480.1	500.0	513.4	530.0	553.1	573.6	601.1	640.5	688.1
32.5°	444.2	453.2	463.4	478.6	495.1	510.9	532.0	554.3	582.3	621.0	669.9
35°	416.2	426.7	437.2	448.4	465.0	481.3	498.9	523.5	552.0	589.6	637.5
37.5°	390.5	398.9	407.5	421.3	437.1	452.5	469.0	493.2	520.1	560.6	604.6
40°	374.0	381.6	388.0	402.6	417.7	434.3	450.5	471.8	500.7	538.7	581.3
42.5°	356.1	363.1	371.9	383.7	400.1	414.1	430.4	450.4	477.6	516.1	553.5
45°	329.2	337.1	344.8	356.0	372.2	385.9	400.4	419.5	447.3	479.1	512.3
47.5°	301.3	309.2	317.9	328.8	342.9	356.8	371.3	388.2	413.6	444.8	467.1
50°	283.4	289.9	298.6	309.3	322.3	337.1	350.2	368.6	392.8	417.4	436.9
52.5°	264.9	270.8	280.7	292.1	304.2	317.0	330.8	346.7	368.5	391.6	407.1
55°	236.1	243.4	251.7	262.8	274.8	285.6	298.9	315.2	332.5	349.8	360.3
57.5°	209.2	215.2	222.2	233.8	244.0	256.9	268.9	281.6	297.7	310.7	317.5
60°	189.5	194.9	204.0	214.1	223.9	235.0	248.7	261.4	273.6	284.1	289.5
62.5°	171.1	177.3	185.2	194.4	205.1	215.7	227.6	238.3	249.1	258.2	261.8
65°	146.9	152.0	157.8	166.5	175.1	186.0	195.3	206.1	214.1	219.1	222.3
67.5°	125.0	128.3	132.7	138.5	147.0	156.5	165.6	174.0	180.7	184.1	187.0
70°	110.8	113.0	116.2	122.1	128.6	136.9	146.2	152.3	158.2	161.0	163.9
72.5°	96.7	99.4	102.4	107.0	112.4	118.4	125.2	132.7	135.9	139.3	141.1
75°	73.3	77.3	81.2	84.1	87.8	92.5	98.6	103.2	105.1	107.9	108.3
77.5°	55.3	56.2	59.1	62.7	65.7	69.1	73.0	77.2	78.0	79.6	80.5
80°	45.5	45.5	45.5	47.7	51.3	53.8	57.4	59.6	61.0	61.4	61.7
82.5°	36.6	36.6	36.3	36.7	38.0	39.3	42.7	45.1	46.3	46.1	45.2
85°	23.8	23.1	23.1	22.7	23.1	22.3	22.1	23.5	25.6	25.6	24.9
87.5°	15.3	14.8	14.4	13.5	12.6	11.7	10.3	10.1	9.6	10.3	9.4
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°	42.8	42.0	40.2	38.5	36.7	34.9	33.1	31.5	29.8	28.2	26.5
95°	82.0	81.1	79.1	77.1	75.2	73.2	71.4	69.7	68.1	66.4	64.7
97.5°	127.9	126.8	125.4	124.0	122.6	121.2	119.8	118.6	117.3	116.0	114.8
100°	161.7	161.0	159.8	158.5	157.3	156.1	154.8	153.4	151.8	150.4	148.9
102.5°	200.3	199.5	197.9	196.3	194.7	193.1	191.9	191.0	190.1	189.3	188.3
105°	258.4	258.4	256.3	254.1	251.8	249.7	248.4	247.9	247.4	246.9	246.4
107.5°	319.9	319.1	318.2	317.4	316.5	315.7	315.0	314.7	314.4	314.1	313.9
110°	361.3	360.3	359.8	359.3	358.8	358.4	357.9	357.4	356.8	356.4	355.9



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	402.7	401.4	401.3	401.2	401.1	401.1	400.9	400.6	400.3	400.0	399.7
115°	466.7	466.6	467.0	467.5	468.0	468.4	468.3	467.6	466.8	466.2	465.4
117.5°	530.8	530.9	531.6	532.2	532.8	533.5	533.5	533.0	532.5	532.1	531.6
120°	573.6	573.8	575.0	576.3	577.5	578.7	578.6	577.1	575.7	574.2	572.8
122.5°	617.0	617.6	618.3	618.9	619.5	620.2	620.0	618.9	617.8	616.7	615.7
125°	681.3	682.3	682.8	683.2	683.7	684.2	684.1	683.3	682.6	681.9	681.2
127.5°	744.9	746.2	746.8	747.2	747.8	748.4	747.8	746.3	744.7	743.2	741.6
130°	786.5	787.4	788.2	788.8	789.6	790.3	789.7	787.8	785.8	783.8	781.9
132.5°	827.4	828.6	829.1	829.6	830.2	830.8	830.0	828.0	826.1	824.2	822.2
135°	888.3	889.2	889.5	889.8	889.9	890.2	889.6	888.2	886.6	885.2	883.7
137.5°	948.0	949.0	948.4	947.7	947.2	946.5	945.6	944.3	943.1	941.9	940.8
140°	986.5	986.7	986.5	986.2	986.0	985.7	985.0	983.8	982.6	981.4	980.1
142.5°	1023.2	1023.5	1023.0	1022.7	1022.2	1021.7	1021.0	1019.7	1018.5	1017.3	1016.1
145°	1077.3	1077.6	1076.9	1076.1	1075.4	1074.7	1074.0	1073.6	1073.1	1072.6	1072.1
147.5°	1128.2	1128.2	1127.5	1126.8	1126.1	1125.5	1124.7	1123.8	1122.9	1122.1	1121.2
150°	1159.7	1159.7	1159.2	1158.8	1158.3	1157.8	1157.3	1156.8	1156.3	1155.8	1155.4
152.5°	1188.2	1187.8	1187.5	1187.2	1186.8	1186.6	1186.1	1185.4	1184.8	1184.1	1183.4
155°	1229.7	1228.7	1228.5	1228.2	1228.0	1227.8	1227.7	1227.7	1227.7	1227.7	1227.7
157.5°	1265.9	1264.9	1264.7	1264.5	1264.3	1264.0	1264.1	1264.4	1264.7	1265.0	1265.3
160°	1288.0	1286.8	1286.8	1286.8	1286.8	1286.8	1287.0	1287.5	1288.0	1288.5	1288.9
162.5°	1309.0	1307.8	1307.6	1307.4	1307.2	1307.0	1307.3	1308.0	1308.6	1309.3	1309.9
165°	1335.3	1333.9	1333.9	1333.9	1333.9	1333.9	1334.3	1334.9	1335.7	1336.4	1337.2
167.5°	1356.8	1355.3	1355.1	1354.9	1354.7	1354.5	1354.9	1355.9	1356.9	1357.8	1358.9
170°	1368.4	1366.7	1366.7	1366.7	1366.7	1366.7	1367.2	1368.2	1369.1	1370.1	1371.1
172.5°	1377.9	1376.4	1376.4	1376.4	1376.4	1376.4	1376.9	1377.8	1378.8	1379.8	1380.7
175°	1387.9	1386.4	1386.4	1386.4	1386.4	1386.4	1387.0	1387.9	1388.8	1389.9	1390.8
177.5°	1392.6	1391.5	1391.5	1391.5	1391.5	1391.5	1391.9	1392.6	1393.5	1394.2	1395.0
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	847.9	851.1	855.2	861.2	865.8	869.9	870.7	871.9	874.8	879.7	883.4
5°	853.5	861.8	875.1	888.1	902.2	913.7	924.5	932.2	939.3	954.5	966.8
7.5°	851.7	870.2	891.1	914.5	938.0	960.9	982.1	1001.2	1020.1	1042.2	1067.3
10°	850.6	872.2	900.3	930.3	963.2	995.3	1026.3	1050.6	1078.7	1104.0	1136.1
12.5°	845.1	876.3	909.9	948.2	988.6	1025.7	1066.5	1099.9	1132.1	1168.7	1206.0
15°	837.9	875.8	918.4	969.3	1030.7	1075.4	1117.3	1175.4	1215.1	1254.9	1308.3
17.5°	824.8	871.1	924.4	990.4	1041.7	1101.8	1164.8	1210.8	1264.2	1320.2	1368.6
20°	814.5	868.3	927.8	992.8	1058.1	1123.5	1184.5	1239.3	1294.6	1359.2	1398.9
22.5°	804.1	857.2	919.2	988.2	1058.4	1127.2	1196.3	1260.7	1322.9	1388.1	1438.8
25°	781.9	845.1	912.3	982.7	1052.0	1127.8	1210.1	1282.0	1358.9	1426.0	1474.0
27.5°	759.6	817.5	884.3	955.7	1032.7	1122.4	1219.2	1300.9	1377.9	1426.0	1441.1
30°	739.3	800.7	862.0	934.6	1018.0	1118.0	1221.0	1314.5	1377.6	1398.5	1383.0
32.5°	718.9	774.5	835.3	909.6	998.2	1107.4	1223.2	1306.4	1344.4	1328.4	1265.2
35°	682.7	732.8	791.7	866.1	967.9	1101.5	1213.7	1270.1	1260.7	1170.4	1051.2
37.5°	643.9	684.9	739.3	817.1	936.5	1078.0	1172.7	1181.0	1099.8	961.2	823.6
40°	613.3	650.2	706.2	787.4	912.3	1054.9	1131.4	1097.9	971.9	817.7	702.9
42.5°	583.6	614.6	668.5	756.2	889.2	1023.4	1069.9	996.7	851.4	705.6	601.2
45°	533.2	562.4	616.6	706.5	841.9	963.2	957.1	830.0	684.5	567.1	480.5
47.5°	485.4	511.0	561.8	653.6	786.4	872.9	815.5	680.3	556.9	462.8	401.0
50°	451.7	476.9	527.4	618.0	741.9	805.0	723.1	592.8	479.8	401.8	352.7
52.5°	419.2	443.9	490.2	578.4	688.2	725.9	637.9	517.1	422.9	355.6	313.4
55°	374.0	392.8	434.3	518.8	600.7	609.4	520.2	419.1	341.5	294.5	265.7
57.5°	327.9	344.0	385.0	452.3	509.8	505.3	420.8	333.4	281.1	246.2	225.3
60°	297.8	313.7	349.8	407.6	450.9	435.7	358.2	287.8	243.0	217.4	200.8
62.5°	269.8	282.2	316.0	358.2	389.4	372.2	306.1	247.9	212.4	190.8	177.6
65°	229.2	239.3	266.5	288.4	305.8	289.2	234.3	193.9	168.2	153.1	144.0
67.5°	190.7	197.1	214.2	222.2	234.4	216.2	176.2	149.1	134.5	121.8	115.5
70°	166.5	171.2	180.1	186.6	189.9	171.2	141.5	121.7	109.4	100.4	96.4
72.5°	142.1	146.3	148.1	153.4	151.7	134.1	113.8	98.0	89.2	83.0	77.9
75°	108.7	110.5	108.7	106.5	101.8	89.5	75.5	67.5	61.0	58.2	56.4
77.5°	79.2	78.6	76.2	72.8	64.8	57.0	49.5	46.8	44.0	42.4	41.8
80°	61.0	59.6	57.4	52.0	45.1	39.7	37.9	36.1	35.1	33.2	32.9
82.5°	45.4	44.6	40.9	36.4	31.6	29.0	27.5	26.9	25.7	24.9	24.8
85°	24.2	23.1	19.1	16.6	15.9	15.2	14.8	14.8	13.4	13.0	13.0
87.5°	8.5	7.3	7.4	7.1	7.6	7.7	8.6	8.7	9.0	9.5	9.1
90°	3.5	5.9	8.4	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.3
92.5°	28.2	29.8	31.5	33.1	34.9	36.7	38.5	40.2	42.0	42.8	43.6
95°	66.4	68.1	69.7	71.4	73.2	75.2	77.1	79.1	81.1	82.0	82.9
97.5°	116.0	117.3	118.6	119.8	121.2	122.6	124.0	125.4	126.8	127.9	129.0
100°	150.4	151.8	153.4	154.8	156.1	157.3	158.5	159.8	161.0	161.7	162.4
102.5°	189.3	190.1	191.0	191.9	193.1	194.7	196.3	197.9	199.5	200.3	201.0
105°	246.9	247.4	247.9	248.4	249.7	251.8	254.1	256.3	258.4	258.4	258.4
107.5°	314.1	314.4	314.7	315.0	315.7	316.5	317.4	318.2	319.1	319.9	320.7
110°	356.4	356.8	357.4	357.9	358.4	358.8	359.3	359.8	360.3	361.3	362.2





TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	400.0	400.3	400.6	400.9	401.1	401.1	401.2	401.3	401.4	402.7	403.8
115°	466.2	466.8	467.6	468.3	468.4	468.0	467.5	467.0	466.6	466.7	467.0
117.5°	532.1	532.5	533.0	533.5	533.5	532.8	532.2	531.6	530.9	530.8	530.8
120°	574.2	575.7	577.1	578.6	578.7	577.5	576.3	575.0	573.8	573.6	573.3
122.5°	616.7	617.8	618.9	620.0	620.2	619.5	618.9	618.3	617.6	617.0	616.4
125°	681.9	682.6	683.3	684.1	684.2	683.7	683.2	682.8	682.3	681.3	680.3
127.5°	743.2	744.7	746.3	747.8	748.4	747.8	747.2	746.8	746.2	744.9	743.5
130°	783.8	785.8	787.8	789.7	790.3	789.6	788.8	788.2	787.4	786.5	785.4
132.5°	824.2	826.1	828.0	830.0	830.8	830.2	829.6	829.1	828.6	827.4	826.2
135°	885.2	886.6	888.2	889.6	890.2	889.9	889.8	889.5	889.2	888.3	887.3
137.5°	941.9	943.1	944.3	945.6	946.5	947.2	947.7	948.4	949.0	948.0	947.0
140°	981.4	982.6	983.8	985.0	985.7	986.0	986.2	986.5	986.7	986.5	986.2
142.5°	1017.3	1018.5	1019.7	1021.0	1021.7	1022.2	1022.7	1023.0	1023.5	1023.2	1023.0
145°	1072.6	1073.1	1073.6	1074.0	1074.7	1075.4	1076.1	1076.9	1077.6	1077.3	1077.1
147.5°	1122.1	1122.9	1123.8	1124.7	1125.5	1126.1	1126.8	1127.5	1128.2	1128.2	1128.2
150°	1155.8	1156.3	1156.8	1157.3	1157.8	1158.3	1158.8	1159.2	1159.7	1159.7	1159.7
152.5°	1184.1	1184.8	1185.4	1186.1	1186.6	1186.8	1187.2	1187.5	1187.8	1188.2	1188.5
155°	1227.7	1227.7	1227.7	1227.7	1227.8	1228.0	1228.2	1228.5	1228.7	1229.7	1230.7
157.5°	1265.0	1264.7	1264.4	1264.1	1264.0	1264.3	1264.5	1264.7	1264.9	1265.9	1266.9
160°	1288.5	1288.0	1287.5	1287.0	1286.8	1286.8	1286.8	1286.8	1286.8	1288.0	1289.2
162.5°	1309.3	1308.6	1308.0	1307.3	1307.0	1307.2	1307.4	1307.6	1307.8	1309.0	1310.2
165°	1336.4	1335.7	1334.9	1334.3	1333.9	1333.9	1333.9	1333.9	1333.9	1335.3	1336.8
167.5°	1357.8	1356.9	1355.9	1354.9	1354.5	1354.7	1354.9	1355.1	1355.3	1356.8	1358.3
170°	1370.1	1369.1	1368.2	1367.2	1366.7	1366.7	1366.7	1366.7	1366.7	1368.4	1370.1
172.5°	1379.8	1378.8	1377.8	1376.9	1376.4	1376.4	1376.4	1376.4	1376.4	1377.9	1379.4
175°	1389.9	1388.8	1387.9	1387.0	1386.4	1386.4	1386.4	1386.4	1386.4	1387.9	1389.3
177.5°	1394.2	1393.5	1392.6	1391.9	1391.5	1391.5	1391.5	1391.5	1391.5	1392.6	1393.8
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	889.6	889.6	890.7	895.0	895.6	899.4	898.1
5°	977.6	984.5	987.0	997.9	1004.4	1007.2	1001.5
7.5°	1085.3	1104.7	1113.9	1125.2	1135.2	1138.3	1130.4
10°	1163.9	1184.1	1201.1	1211.5	1221.3	1227.8	1236.1
12.5°	1239.8	1264.7	1280.8	1295.6	1305.6	1313.9	1315.2
15°	1322.4	1359.9	1388.5	1409.4	1419.8	1425.3	1423.1
17.5°	1405.6	1440.4	1460.8	1482.1	1496.6	1497.3	1497.8
20°	1452.7	1486.7	1510.1	1526.0	1542.3	1541.5	1545.1
22.5°	1484.2	1510.9	1528.9	1540.4	1546.0	1543.2	1544.0
25°	1498.9	1506.8	1503.6	1485.2	1480.5	1463.6	1466.4
27.5°	1423.0	1385.4	1346.6	1296.6	1257.2	1225.7	1227.3
30°	1319.8	1253.4	1177.6	1114.1	1057.1	1041.1	1007.2
32.5°	1175.7	1076.1	987.3	928.1	879.1	865.8	836.2
35°	931.4	834.6	743.3	688.4	666.8	636.5	636.1
37.5°	724.0	638.8	590.5	549.3	527.7	509.3	507.6
40°	609.1	542.6	506.1	476.5	455.2	441.5	438.3
42.5°	528.8	475.0	440.8	422.5	406.1	399.1	393.8
45°	431.8	395.7	371.8	355.2	347.6	342.2	339.3
47.5°	361.2	337.0	320.7	309.7	303.5	297.8	299.4
50°	322.7	302.9	291.0	280.5	275.8	271.8	272.2
52.5°	291.8	274.0	264.4	256.8	251.0	248.2	246.8
55°	247.7	236.5	226.7	221.3	218.0	214.1	213.0
57.5°	211.2	202.6	194.6	188.5	187.8	183.9	184.4
60°	187.0	179.7	173.2	170.0	167.5	164.3	165.3
62.5°	167.1	161.0	155.0	152.4	149.9	147.5	148.0
65°	136.9	131.0	127.4	126.0	124.9	123.9	122.7
67.5°	109.1	105.5	103.2	100.1	97.9	97.6	96.4
70°	91.7	87.0	83.0	79.1	77.9	77.6	77.9
72.5°	73.5	70.5	69.5	67.5	67.3	66.4	67.0
75°	55.2	54.2	53.4	52.0	52.0	52.0	52.0
77.5°	40.7	40.1	39.7	39.3	39.0	38.5	38.5
80°	31.8	31.4	30.7	30.7	30.3	30.7	30.3
82.5°	23.9	23.9	23.2	23.2	22.8	22.6	22.8
85°	12.3	11.9	12.6	11.9	12.3	11.6	12.3
87.5°	9.3	9.5	9.3	9.4	9.2	9.9	9.4
90°	29.2	30.2	30.9	31.4	31.9	32.3	32.9
92.5°	44.4	45.1	45.4	45.1	44.9	44.5	44.2
95°	84.0	84.9	85.4	85.4	85.4	85.4	85.4
97.5°	130.2	131.3	131.8	131.7	131.6	131.5	131.4
100°	163.2	163.9	164.5	165.0	165.5	166.0	166.5
102.5°	201.7	202.5	202.7	202.6	202.6	202.5	202.4
105°	258.4	258.4	258.7	259.2	259.7	260.1	260.6
107.5°	321.5	322.3	322.4	322.2	321.9	321.6	321.3
110°	363.3	364.2	364.4	363.9	363.4	363.0	362.5



TEST NUMBER: P332295-830

CATALOG NUMBER: S123RDIP-S560D1195U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	405.0	406.1	406.7	406.6	406.5	406.4	406.3
115°	467.2	467.5	467.5	467.2	467.0	466.7	466.6
117.5°	530.7	530.7	530.4	529.7	529.0	528.3	527.6
120°	573.2	572.9	572.5	572.0	571.6	571.1	570.5
122.5°	615.8	615.1	614.4	613.8	613.1	612.4	611.7
125°	679.4	678.3	677.4	676.5	675.4	674.5	673.5
127.5°	742.2	740.7	739.5	738.4	737.3	736.1	735.1
130°	784.5	783.5	782.1	780.4	778.7	777.0	775.3
132.5°	825.1	823.9	822.7	821.3	820.0	818.7	817.4
135°	886.3	885.3	884.6	884.1	883.6	883.2	882.7
137.5°	945.9	944.9	944.0	943.0	942.2	941.2	940.3
140°	986.0	985.7	984.8	983.1	981.4	979.7	978.0
142.5°	1022.8	1022.6	1021.7	1020.4	1019.1	1017.9	1016.5
145°	1076.9	1076.7	1076.0	1075.1	1074.0	1073.1	1072.1
147.5°	1128.2	1128.2	1127.5	1126.0	1124.5	1123.0	1121.6
150°	1159.7	1159.7	1159.0	1157.5	1156.1	1154.6	1153.2
152.5°	1188.9	1189.3	1188.9	1187.6	1186.4	1185.1	1183.8
155°	1231.6	1232.7	1232.3	1230.6	1228.9	1227.2	1225.4
157.5°	1267.9	1268.9	1268.8	1267.4	1266.0	1264.7	1263.3
160°	1290.4	1291.7	1291.8	1290.8	1289.8	1288.8	1287.9
162.5°	1311.5	1312.7	1312.5	1310.9	1309.4	1307.8	1306.3
165°	1338.2	1339.7	1339.5	1337.8	1336.1	1334.5	1332.8
167.5°	1359.8	1361.3	1361.3	1359.8	1358.3	1356.8	1355.3
170°	1371.9	1373.6	1373.6	1371.9	1370.1	1368.4	1366.7
172.5°	1380.9	1382.4	1382.3	1380.5	1378.8	1377.1	1375.5
175°	1390.8	1392.2	1392.1	1390.4	1388.7	1387.0	1385.3
177.5°	1395.0	1396.1	1396.0	1394.7	1393.3	1391.9	1390.6
180°	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1	1394.1

(END OF REPORT)