

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: P332422-830

Luminaire Tested: **S123RDIW-S560D1320U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332422-830
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: S123RDIW-S560D1320U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1320 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7078.9 lumens
Efficiency: N/A
Efficacy: 131.6 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

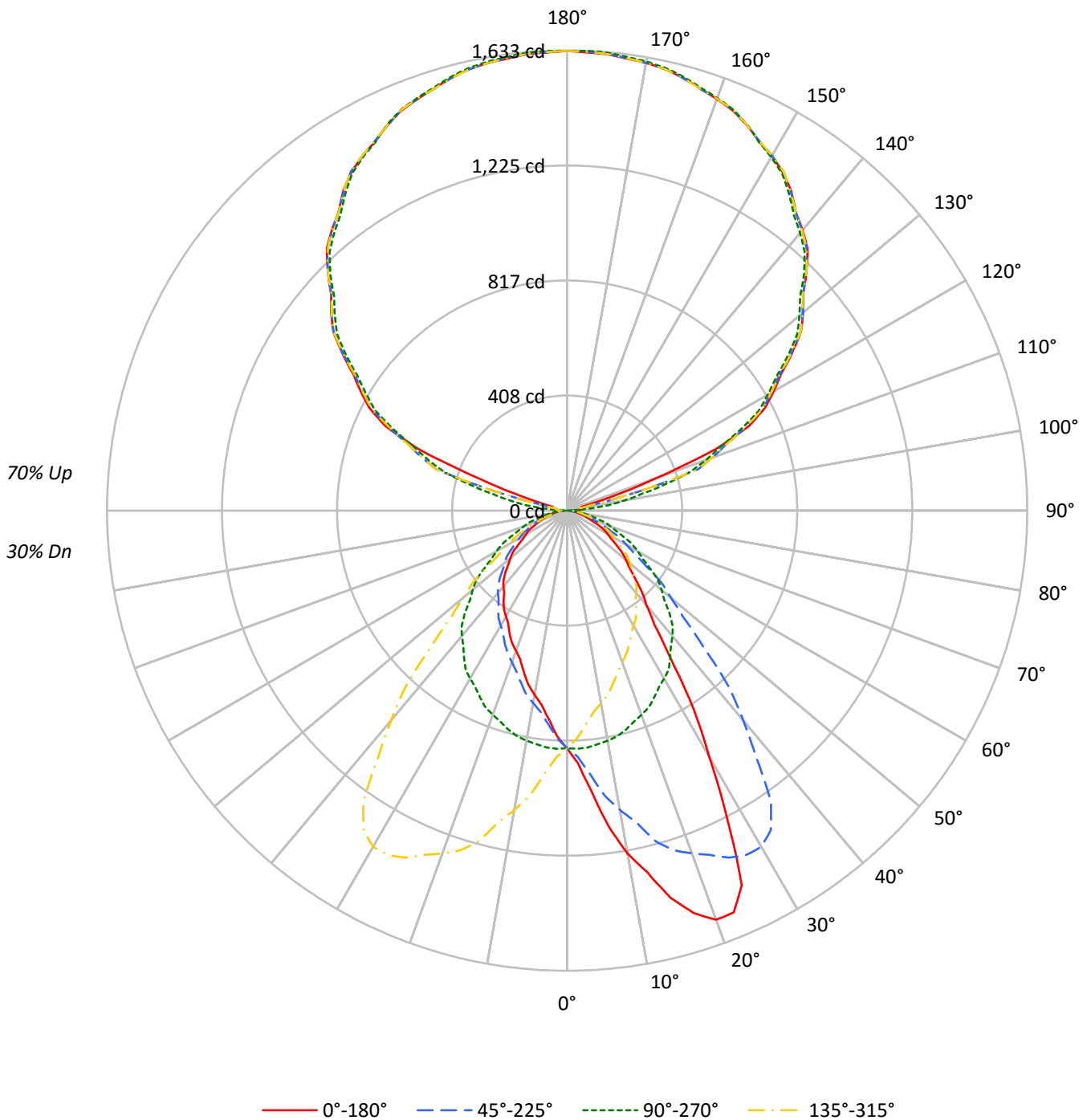
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	94	90	86	83	84	80	77	75	64	62	60	48	47	46	34	33	32	26
2	85	79	73	68	76	71	66	62	56	53	50	43	40	39	30	29	28	22
3	78	69	62	57	70	62	57	52	50	46	42	38	35	33	27	25	24	19
4	72	61	54	48	64	55	49	44	44	40	36	34	31	28	24	22	21	17
5	66	55	47	41	59	50	43	38	40	35	31	30	27	25	22	20	18	15
6	60	49	41	36	54	44	38	33	36	31	27	28	24	22	20	18	16	13
7	56	44	37	31	50	40	34	29	32	28	24	25	22	19	18	16	15	12
8	52	40	33	28	46	36	30	26	30	25	21	23	20	17	17	15	13	11
9	48	37	29	25	43	33	27	23	27	22	19	21	18	15	16	13	12	10
10	45	33	27	22	40	30	24	20	25	20	17	19	16	14	14	12	11	9

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	259.1	3.7
20°-30°	407.0	5.7
30°-40°	424.7	6.0
40°-50°	363.4	5.1
50°-60°	277.0	3.9
60°-70°	177.6	2.5
70°-80°	85.4	1.2
80°-90°	27.2	0.4
90°-100°	59.3	0.8
100°-110°	282.7	4.0
110°-120°	679.0	9.6
120°-130°	864.6	12.2
130°-140°	923.8	13.0
140°-150°	863.8	12.2
150°-160°	696.8	9.8
160°-170°	449.7	6.4
170°-180°	155.0	2.2
0°-30°	749.1	10.6
0°-40°	1173.7	16.6
0°-60°	1814.2	25.6
0°-90°	2104.3	29.7
90°-120°	1020.9	14.4
90°-150°	3673.1	51.9
90°-180°	4975.0	70.3
0°-180°	7078.9	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°	36	1	36	1	36	17
95°	46	74	46	74	46	39
105°	53	361	53	361	53	122
115°	713	678	713	678	713	658
125°	974	955	974	955	974	870
135°	1201	1189	1201	1189	1201	926
145°	1385	1372	1385	1372	1385	865
155°	1509	1511	1509	1511	1509	696
165°	1590	1594	1590	1594	1590	449
175°	1625	1631	1625	1631	1625	155
180°	1631	1631	1631	1631	1631	



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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°	10.2	10.7	10.0	10.1	10.0	10.2	9.9	9.7	10.1	9.6	9.1
90°	36.4	35.8	35.3	34.8	34.2	33.4	32.3	31.2	30.2	29.1	25.5
92.5°	40.2	39.9	39.6	39.3	38.9	37.9	36.2	34.5	32.7	31.0	28.4
95°	46.1	46.1	46.1	46.1	46.1	45.1	43.3	41.4	39.5	37.6	34.6
97.5°	50.0	49.7	49.4	49.1	48.8	47.6	45.5	43.4	41.2	39.0	58.4
100°	50.9	50.6	50.3	50.0	49.9	48.6	46.5	44.3	42.1	40.0	82.0
102.5°	51.8	51.4	50.9	50.4	50.0	53.1	59.7	66.4	73.0	79.7	125.6
105°	53.3	52.8	52.2	51.7	51.2	74.7	122.4	170.0	217.7	265.4	289.6
107.5°	167.5	203.4	239.3	275.3	311.2	346.7	381.6	416.6	451.5	486.4	482.7
110°	333.3	371.8	410.3	448.8	487.3	511.0	519.9	528.8	537.7	546.6	543.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	571.8	579.9	588.1	596.2	604.4	608.3	608.1	608.0	607.8	607.7	604.7
115°	712.7	711.5	710.5	709.4	708.3	706.4	703.7	701.1	698.3	695.7	693.2
117.5°	791.6	791.5	791.2	791.0	790.8	789.6	787.4	785.3	783.2	781.0	779.8
120°	845.9	845.9	845.9	845.9	845.9	844.9	842.7	840.6	838.4	836.2	835.5
122.5°	899.3	899.1	898.8	898.6	898.4	897.6	896.1	894.6	893.1	891.6	890.5
125°	974.4	973.8	973.4	972.8	972.2	971.7	971.2	970.6	970.1	969.6	968.5
127.5°	1046.6	1047.2	1047.7	1048.3	1048.8	1048.7	1047.7	1046.9	1046.0	1045.2	1043.9
130°	1093.2	1093.7	1094.3	1094.8	1095.3	1095.0	1094.0	1092.9	1091.8	1090.7	1089.7
132.5°	1135.9	1136.6	1137.4	1138.1	1138.9	1138.7	1137.6	1136.5	1135.5	1134.3	1133.5
135°	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3	1203.4	1202.7	1201.8	1201.1	1200.0
137.5°	1262.3	1262.9	1263.5	1263.9	1264.5	1264.1	1262.8	1261.6	1260.3	1259.0	1258.4
140°	1299.2	1299.8	1300.2	1300.8	1301.4	1301.1	1300.0	1298.9	1297.9	1296.8	1296.0
142.5°	1333.1	1333.9	1334.6	1335.4	1336.1	1336.1	1335.2	1334.4	1333.5	1332.7	1331.8
145°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.0	1384.4	1383.9	1383.4	1382.8	1382.3
147.5°	1424.0	1425.3	1426.5	1427.8	1429.0	1429.4	1428.8	1428.2	1427.8	1427.2	1426.6
150°	1453.1	1454.0	1454.7	1455.6	1456.3	1456.5	1455.9	1455.4	1454.9	1454.3	1453.8
152.5°	1476.4	1477.6	1478.8	1480.1	1481.4	1481.5	1480.5	1479.5	1478.6	1477.6	1477.2
155°	1508.9	1510.5	1512.1	1513.7	1515.3	1515.5	1514.1	1512.8	1511.5	1510.0	1509.9
157.5°	1536.3	1538.3	1540.5	1542.6	1544.6	1544.9	1543.3	1541.7	1540.0	1538.4	1538.7
160°	1553.7	1555.6	1557.5	1559.3	1561.2	1561.4	1559.8	1558.1	1556.5	1554.9	1555.2
162.5°	1570.2	1571.9	1573.6	1575.2	1576.9	1576.8	1575.0	1573.1	1571.3	1569.4	1569.7
165°	1590.1	1592.0	1593.8	1595.7	1597.6	1597.5	1595.3	1593.2	1591.0	1588.8	1589.1
167.5°	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0	1610.8	1608.7	1606.6	1604.4	1604.4
170°	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7	1619.6	1617.4	1615.2	1613.1	1613.1
172.5°	1618.0	1620.3	1622.7	1625.0	1627.4	1627.6	1625.4	1623.2	1621.1	1618.9	1618.7
175°	1625.2	1627.4	1629.6	1631.7	1633.8	1634.0	1632.1	1630.2	1628.3	1626.5	1626.2
177.5°	1627.4	1629.6	1631.7	1633.9	1636.1	1636.3	1634.6	1632.8	1631.1	1629.4	1629.1
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



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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°	9.0	8.0	7.9	7.4	7.6	7.4	8.6	9.5	10.3	9.7	10.3
90°	22.1	18.6	15.1	12.0	9.3	6.6	3.9	1.2	3.9	6.6	9.3
92.5°	25.7	23.1	20.5	19.5	20.3	21.0	21.8	22.5	21.8	21.0	20.3
95°	31.7	28.7	25.7	29.8	40.8	51.8	62.9	73.9	62.9	51.8	40.8
97.5°	77.9	97.2	116.6	128.8	133.7	138.6	143.6	148.5	143.6	138.6	133.7
100°	124.0	166.1	208.0	226.4	220.9	215.6	210.2	204.8	210.2	215.6	220.9
102.5°	171.5	217.4	263.3	284.4	280.4	276.5	272.7	268.8	272.7	276.5	280.4
105°	313.9	338.1	362.4	373.0	370.0	367.1	364.1	361.2	364.1	367.1	370.0
107.5°	478.8	475.0	471.2	468.1	465.7	463.4	461.0	458.6	461.0	463.4	465.7
110°	540.6	537.7	534.7	532.2	530.0	527.8	525.8	523.6	525.8	527.8	530.0



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	601.7	598.8	595.8	593.3	591.4	589.5	587.6	585.6	587.6	589.5	591.4
115°	690.8	688.3	686.0	683.9	682.3	680.7	679.1	677.5	679.1	680.7	682.3
117.5°	778.5	777.2	776.0	774.4	772.4	770.4	768.5	766.5	768.5	770.4	772.4
120°	834.6	833.8	833.0	831.4	829.0	826.5	824.2	821.7	824.2	826.5	829.0
122.5°	889.5	888.4	887.4	885.9	883.9	881.9	880.0	878.0	880.0	881.9	883.9
125°	967.4	966.3	965.3	963.7	961.5	959.3	957.2	955.0	957.2	959.3	961.5
127.5°	1042.6	1041.3	1040.0	1038.3	1036.1	1034.0	1031.8	1029.6	1031.8	1034.0	1036.1
130°	1088.6	1087.5	1086.5	1084.9	1082.7	1080.5	1078.4	1076.2	1078.4	1080.5	1082.7
132.5°	1132.7	1131.8	1131.0	1129.4	1127.3	1125.1	1122.9	1120.8	1122.9	1125.1	1127.3
135°	1198.9	1197.8	1196.7	1195.4	1193.7	1192.1	1190.5	1188.9	1190.5	1192.1	1193.7
137.5°	1257.8	1257.2	1256.6	1255.3	1253.2	1251.2	1249.2	1247.1	1249.2	1251.2	1253.2
140°	1295.1	1294.4	1293.5	1292.3	1290.7	1289.1	1287.5	1285.9	1287.5	1289.1	1290.7
142.5°	1331.1	1330.2	1329.5	1328.2	1326.6	1325.0	1323.3	1321.7	1323.3	1325.0	1326.6
145°	1381.8	1381.2	1380.6	1379.5	1377.6	1375.7	1373.9	1372.0	1373.9	1375.7	1377.6
147.5°	1426.1	1425.6	1425.0	1424.2	1422.9	1421.6	1420.4	1419.2	1420.4	1421.6	1422.9
150°	1453.2	1452.7	1452.2	1451.5	1450.7	1449.9	1449.1	1448.3	1449.1	1449.9	1450.7
152.5°	1477.0	1476.7	1476.3	1475.9	1475.6	1475.2	1474.8	1474.4	1474.8	1475.2	1475.6
155°	1509.6	1509.3	1509.0	1509.1	1509.7	1510.2	1510.8	1511.3	1510.8	1510.2	1509.7
157.5°	1539.0	1539.3	1539.5	1539.6	1539.7	1539.8	1539.8	1539.9	1539.8	1539.8	1539.7
160°	1555.5	1555.8	1556.0	1556.2	1556.5	1556.8	1557.1	1557.4	1557.1	1556.8	1556.5
162.5°	1570.0	1570.3	1570.6	1571.0	1571.7	1572.4	1573.1	1573.9	1573.1	1572.4	1571.7
165°	1589.4	1589.7	1590.0	1590.4	1591.3	1592.0	1592.9	1593.7	1592.9	1592.0	1591.3
167.5°	1604.4	1604.4	1604.4	1604.9	1606.0	1607.0	1608.2	1609.2	1608.2	1607.0	1606.0
170°	1613.1	1613.1	1613.1	1613.6	1614.8	1615.8	1616.8	1618.0	1616.8	1615.8	1614.8
172.5°	1618.5	1618.3	1618.1	1618.6	1619.9	1621.2	1622.5	1623.8	1622.5	1621.2	1619.9
175°	1625.9	1625.6	1625.3	1625.9	1627.2	1628.6	1629.9	1631.3	1629.9	1628.6	1627.2
177.5°	1628.9	1628.7	1628.5	1628.9	1630.0	1631.1	1632.1	1633.2	1632.1	1631.1	1630.0
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

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°	10.5	12.0	12.9	13.9	14.9	15.4	15.8	16.0	16.6	16.8	17.0
90°	12.0	15.1	18.6	22.1	25.5	29.1	30.2	31.2	32.3	33.4	34.2
92.5°	19.5	20.5	23.1	25.7	28.4	31.0	32.7	34.5	36.2	37.9	38.9
95°	29.8	25.7	28.7	31.7	34.6	37.6	39.5	41.4	43.3	45.1	46.1
97.5°	128.8	116.6	97.2	77.9	58.4	39.0	41.2	43.4	45.5	47.6	48.8
100°	226.4	208.0	166.1	124.0	82.0	40.0	42.1	44.3	46.5	48.6	49.9
102.5°	284.4	263.3	217.4	171.5	125.6	79.7	73.0	66.4	59.7	53.1	50.0
105°	373.0	362.4	338.1	313.9	289.6	265.4	217.7	170.0	122.4	74.7	51.2
107.5°	468.1	471.2	475.0	478.8	482.7	486.4	451.5	416.6	381.6	346.7	311.2
110°	532.2	534.7	537.7	540.6	543.7	546.6	537.7	528.8	519.9	511.0	487.3



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	593.3	595.8	598.8	601.7	604.7	607.7	607.8	608.0	608.1	608.3	604.4
115°	683.9	686.0	688.3	690.8	693.2	695.7	698.3	701.1	703.7	706.4	708.3
117.5°	774.4	776.0	777.2	778.5	779.8	781.0	783.2	785.3	787.4	789.6	790.8
120°	831.4	833.0	833.8	834.6	835.5	836.2	838.4	840.6	842.7	844.9	845.9
122.5°	885.9	887.4	888.4	889.5	890.5	891.6	893.1	894.6	896.1	897.6	898.4
125°	963.7	965.3	966.3	967.4	968.5	969.6	970.1	970.6	971.2	971.7	972.2
127.5°	1038.3	1040.0	1041.3	1042.6	1043.9	1045.2	1046.0	1046.9	1047.7	1048.7	1048.8
130°	1084.9	1086.5	1087.5	1088.6	1089.7	1090.7	1091.8	1092.9	1094.0	1095.0	1095.3
132.5°	1129.4	1131.0	1131.8	1132.7	1133.5	1134.3	1135.5	1136.5	1137.6	1138.7	1138.9
135°	1195.4	1196.7	1197.8	1198.9	1200.0	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3
137.5°	1255.3	1256.6	1257.2	1257.8	1258.4	1259.0	1260.3	1261.6	1262.8	1264.1	1264.5
140°	1292.3	1293.5	1294.4	1295.1	1296.0	1296.8	1297.9	1298.9	1300.0	1301.1	1301.4
142.5°	1328.2	1329.5	1330.2	1331.1	1331.8	1332.7	1333.5	1334.4	1335.2	1336.1	1336.1
145°	1379.5	1380.6	1381.2	1381.8	1382.3	1382.8	1383.4	1383.9	1384.4	1385.0	1385.3
147.5°	1424.2	1425.0	1425.6	1426.1	1426.6	1427.2	1427.8	1428.2	1428.8	1429.4	1429.0
150°	1451.5	1452.2	1452.7	1453.2	1453.8	1454.3	1454.9	1455.4	1455.9	1456.5	1456.3
152.5°	1475.9	1476.3	1476.7	1477.0	1477.2	1477.6	1478.6	1479.5	1480.5	1481.5	1481.4
155°	1509.1	1509.0	1509.3	1509.6	1509.9	1510.0	1511.5	1512.8	1514.1	1515.5	1515.3
157.5°	1539.6	1539.5	1539.3	1539.0	1538.7	1538.4	1540.0	1541.7	1543.3	1544.9	1544.6
160°	1556.2	1556.0	1555.8	1555.5	1555.2	1554.9	1556.5	1558.1	1559.8	1561.4	1561.2
162.5°	1571.0	1570.6	1570.3	1570.0	1569.7	1569.4	1571.3	1573.1	1575.0	1576.8	1576.9
165°	1590.4	1590.0	1589.7	1589.4	1589.1	1588.8	1591.0	1593.2	1595.3	1597.5	1597.6
167.5°	1604.9	1604.4	1604.4	1604.4	1604.4	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0
170°	1613.6	1613.1	1613.1	1613.1	1613.1	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7
172.5°	1618.6	1618.1	1618.3	1618.5	1618.7	1618.9	1621.1	1623.2	1625.4	1627.6	1627.4
175°	1625.9	1625.3	1625.6	1625.9	1626.2	1626.5	1628.3	1630.2	1632.1	1634.0	1633.8
177.5°	1628.9	1628.5	1628.7	1628.9	1629.1	1629.4	1631.1	1632.8	1634.6	1636.3	1636.1
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

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°	17.6	17.2	17.2	17.6	17.2	17.2	17.6	17.0	16.8	16.6	16.0
90°	34.8	35.3	35.8	36.4	35.8	35.3	34.8	34.2	33.4	32.3	31.2
92.5°	39.3	39.6	39.9	40.2	39.9	39.6	39.3	38.9	37.9	36.2	34.5
95°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	45.1	43.3	41.4
97.5°	49.1	49.4	49.7	50.0	49.7	49.4	49.1	48.8	47.6	45.5	43.4
100°	50.0	50.3	50.6	50.9	50.6	50.3	50.0	49.9	48.6	46.5	44.3
102.5°	50.4	50.9	51.4	51.8	51.4	50.9	50.4	50.0	53.1	59.7	66.4
105°	51.7	52.2	52.8	53.3	52.8	52.2	51.7	51.2	74.7	122.4	170.0
107.5°	275.3	239.3	203.4	167.5	203.4	239.3	275.3	311.2	346.7	381.6	416.6
110°	448.8	410.3	371.8	333.3	371.8	410.3	448.8	487.3	511.0	519.9	528.8



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	596.2	588.1	579.9	571.8	579.9	588.1	596.2	604.4	608.3	608.1	608.0
115°	709.4	710.5	711.5	712.7	711.5	710.5	709.4	708.3	706.4	703.7	701.1
117.5°	791.0	791.2	791.5	791.6	791.5	791.2	791.0	790.8	789.6	787.4	785.3
120°	845.9	845.9	845.9	845.9	845.9	845.9	845.9	845.9	844.9	842.7	840.6
122.5°	898.6	898.8	899.1	899.3	899.1	898.8	898.6	898.4	897.6	896.1	894.6
125°	972.8	973.4	973.8	974.4	973.8	973.4	972.8	972.2	971.7	971.2	970.6
127.5°	1048.3	1047.7	1047.2	1046.6	1047.2	1047.7	1048.3	1048.8	1048.7	1047.7	1046.9
130°	1094.8	1094.3	1093.7	1093.2	1093.7	1094.3	1094.8	1095.3	1095.0	1094.0	1092.9
132.5°	1138.1	1137.4	1136.6	1135.9	1136.6	1137.4	1138.1	1138.9	1138.7	1137.6	1136.5
135°	1203.4	1202.7	1201.8	1201.1	1201.8	1202.7	1203.4	1204.3	1204.3	1203.4	1202.7
137.5°	1263.9	1263.5	1262.9	1262.3	1262.9	1263.5	1263.9	1264.5	1264.1	1262.8	1261.6
140°	1300.8	1300.2	1299.8	1299.2	1299.8	1300.2	1300.8	1301.4	1301.1	1300.0	1298.9
142.5°	1335.4	1334.6	1333.9	1333.1	1333.9	1334.6	1335.4	1336.1	1336.1	1335.2	1334.4
145°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.0	1384.4	1383.9
147.5°	1427.8	1426.5	1425.3	1424.0	1425.3	1426.5	1427.8	1429.0	1429.4	1428.8	1428.2
150°	1455.6	1454.7	1454.0	1453.1	1454.0	1454.7	1455.6	1456.3	1456.5	1455.9	1455.4
152.5°	1480.1	1478.8	1477.6	1476.4	1477.6	1478.8	1480.1	1481.4	1481.5	1480.5	1479.5
155°	1513.7	1512.1	1510.5	1508.9	1510.5	1512.1	1513.7	1515.3	1515.5	1514.1	1512.8
157.5°	1542.6	1540.5	1538.3	1536.3	1538.3	1540.5	1542.6	1544.6	1544.9	1543.3	1541.7
160°	1559.3	1557.5	1555.6	1553.7	1555.6	1557.5	1559.3	1561.2	1561.4	1559.8	1558.1
162.5°	1575.2	1573.6	1571.9	1570.2	1571.9	1573.6	1575.2	1576.9	1576.8	1575.0	1573.1
165°	1595.7	1593.8	1592.0	1590.1	1592.0	1593.8	1595.7	1597.6	1597.5	1595.3	1593.2
167.5°	1610.8	1608.7	1606.6	1604.4	1606.6	1608.7	1610.8	1613.0	1613.0	1610.8	1608.7
170°	1619.6	1617.4	1615.2	1613.1	1615.2	1617.4	1619.6	1621.7	1621.7	1619.6	1617.4
172.5°	1625.0	1622.7	1620.3	1618.0	1620.3	1622.7	1625.0	1627.4	1627.6	1625.4	1623.2
175°	1631.7	1629.6	1627.4	1625.2	1627.4	1629.6	1631.7	1633.8	1634.0	1632.1	1630.2
177.5°	1633.9	1631.7	1629.6	1627.4	1629.6	1631.7	1633.9	1636.1	1636.3	1634.6	1632.8
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

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°	15.8	15.4	14.9	13.9	12.9	12.0	10.5	10.3	9.7	10.3	9.5
90°	30.2	29.1	25.5	22.1	18.6	15.1	12.0	9.3	6.6	3.9	1.2
92.5°	32.7	31.0	28.4	25.7	23.1	20.5	19.5	20.3	21.0	21.8	22.5
95°	39.5	37.6	34.6	31.7	28.7	25.7	29.8	40.8	51.8	62.9	73.9
97.5°	41.2	39.0	58.4	77.9	97.2	116.6	128.8	133.7	138.6	143.6	148.5
100°	42.1	40.0	82.0	124.0	166.1	208.0	226.4	220.9	215.6	210.2	204.8
102.5°	73.0	79.7	125.6	171.5	217.4	263.3	284.4	280.4	276.5	272.7	268.8
105°	217.7	265.4	289.6	313.9	338.1	362.4	373.0	370.0	367.1	364.1	361.2
107.5°	451.5	486.4	482.7	478.8	475.0	471.2	468.1	465.7	463.4	461.0	458.6
110°	537.7	546.6	543.7	540.6	537.7	534.7	532.2	530.0	527.8	525.8	523.6



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	607.8	607.7	604.7	601.7	598.8	595.8	593.3	591.4	589.5	587.6	585.6
115°	698.3	695.7	693.2	690.8	688.3	686.0	683.9	682.3	680.7	679.1	677.5
117.5°	783.2	781.0	779.8	778.5	777.2	776.0	774.4	772.4	770.4	768.5	766.5
120°	838.4	836.2	835.5	834.6	833.8	833.0	831.4	829.0	826.5	824.2	821.7
122.5°	893.1	891.6	890.5	889.5	888.4	887.4	885.9	883.9	881.9	880.0	878.0
125°	970.1	969.6	968.5	967.4	966.3	965.3	963.7	961.5	959.3	957.2	955.0
127.5°	1046.0	1045.2	1043.9	1042.6	1041.3	1040.0	1038.3	1036.1	1034.0	1031.8	1029.6
130°	1091.8	1090.7	1089.7	1088.6	1087.5	1086.5	1084.9	1082.7	1080.5	1078.4	1076.2
132.5°	1135.5	1134.3	1133.5	1132.7	1131.8	1131.0	1129.4	1127.3	1125.1	1122.9	1120.8
135°	1201.8	1201.1	1200.0	1198.9	1197.8	1196.7	1195.4	1193.7	1192.1	1190.5	1188.9
137.5°	1260.3	1259.0	1258.4	1257.8	1257.2	1256.6	1255.3	1253.2	1251.2	1249.2	1247.1
140°	1297.9	1296.8	1296.0	1295.1	1294.4	1293.5	1292.3	1290.7	1289.1	1287.5	1285.9
142.5°	1333.5	1332.7	1331.8	1331.1	1330.2	1329.5	1328.2	1326.6	1325.0	1323.3	1321.7
145°	1383.4	1382.8	1382.3	1381.8	1381.2	1380.6	1379.5	1377.6	1375.7	1373.9	1372.0
147.5°	1427.8	1427.2	1426.6	1426.1	1425.6	1425.0	1424.2	1422.9	1421.6	1420.4	1419.2
150°	1454.9	1454.3	1453.8	1453.2	1452.7	1452.2	1451.5	1450.7	1449.9	1449.1	1448.3
152.5°	1478.6	1477.6	1477.2	1477.0	1476.7	1476.3	1475.9	1475.6	1475.2	1474.8	1474.4
155°	1511.5	1510.0	1509.9	1509.6	1509.3	1509.0	1509.1	1509.7	1510.2	1510.8	1511.3
157.5°	1540.0	1538.4	1538.7	1539.0	1539.3	1539.5	1539.6	1539.7	1539.8	1539.8	1539.9
160°	1556.5	1554.9	1555.2	1555.5	1555.8	1556.0	1556.2	1556.5	1556.8	1557.1	1557.4
162.5°	1571.3	1569.4	1569.7	1570.0	1570.3	1570.6	1571.0	1571.7	1572.4	1573.1	1573.9
165°	1591.0	1588.8	1589.1	1589.4	1589.7	1590.0	1590.4	1591.3	1592.0	1592.9	1593.7
167.5°	1606.6	1604.4	1604.4	1604.4	1604.4	1604.4	1604.9	1606.0	1607.0	1608.2	1609.2
170°	1615.2	1613.1	1613.1	1613.1	1613.1	1613.1	1613.6	1614.8	1615.8	1616.8	1618.0
172.5°	1621.1	1618.9	1618.7	1618.5	1618.3	1618.1	1618.6	1619.9	1621.2	1622.5	1623.8
175°	1628.3	1626.5	1626.2	1625.9	1625.6	1625.3	1625.9	1627.2	1628.6	1629.9	1631.3
177.5°	1631.1	1629.4	1629.1	1628.9	1628.7	1628.5	1628.9	1630.0	1631.1	1632.1	1633.2
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



TEST NUMBER: P332422-830

CATALOG NUMBER: S123RDIW-S560D1320U830-4F0-1E-UDD-A

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°	8.6	7.4	7.6	7.4	7.9	8.0	9.0	9.1	9.6	10.1	9.7
90°	3.9	6.6	9.3	12.0	15.1	18.6	22.1	25.5	29.1	30.2	31.2
92.5°	21.8	21.0	20.3	19.5	20.5	23.1	25.7	28.4	31.0	32.7	34.5
95°	62.9	51.8	40.8	29.8	25.7	28.7	31.7	34.6	37.6	39.5	41.4
97.5°	143.6	138.6	133.7	128.8	116.6	97.2	77.9	58.4	39.0	41.2	43.4
100°	210.2	215.6	220.9	226.4	208.0	166.1	124.0	82.0	40.0	42.1	44.3
102.5°	272.7	276.5	280.4	284.4	263.3	217.4	171.5	125.6	79.7	73.0	66.4
105°	364.1	367.1	370.0	373.0	362.4	338.1	313.9	289.6	265.4	217.7	170.0
107.5°	461.0	463.4	465.7	468.1	471.2	475.0	478.8	482.7	486.4	451.5	416.6
110°	525.8	527.8	530.0	532.2	534.7	537.7	540.6	543.7	546.6	537.7	528.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	587.6	589.5	591.4	593.3	595.8	598.8	601.7	604.7	607.7	607.8	608.0
115°	679.1	680.7	682.3	683.9	686.0	688.3	690.8	693.2	695.7	698.3	701.1
117.5°	768.5	770.4	772.4	774.4	776.0	777.2	778.5	779.8	781.0	783.2	785.3
120°	824.2	826.5	829.0	831.4	833.0	833.8	834.6	835.5	836.2	838.4	840.6
122.5°	880.0	881.9	883.9	885.9	887.4	888.4	889.5	890.5	891.6	893.1	894.6
125°	957.2	959.3	961.5	963.7	965.3	966.3	967.4	968.5	969.6	970.1	970.6
127.5°	1031.8	1034.0	1036.1	1038.3	1040.0	1041.3	1042.6	1043.9	1045.2	1046.0	1046.9
130°	1078.4	1080.5	1082.7	1084.9	1086.5	1087.5	1088.6	1089.7	1090.7	1091.8	1092.9
132.5°	1122.9	1125.1	1127.3	1129.4	1131.0	1131.8	1132.7	1133.5	1134.3	1135.5	1136.5
135°	1190.5	1192.1	1193.7	1195.4	1196.7	1197.8	1198.9	1200.0	1201.1	1201.8	1202.7
137.5°	1249.2	1251.2	1253.2	1255.3	1256.6	1257.2	1257.8	1258.4	1259.0	1260.3	1261.6
140°	1287.5	1289.1	1290.7	1292.3	1293.5	1294.4	1295.1	1296.0	1296.8	1297.9	1298.9
142.5°	1323.3	1325.0	1326.6	1328.2	1329.5	1330.2	1331.1	1331.8	1332.7	1333.5	1334.4
145°	1373.9	1375.7	1377.6	1379.5	1380.6	1381.2	1381.8	1382.3	1382.8	1383.4	1383.9
147.5°	1420.4	1421.6	1422.9	1424.2	1425.0	1425.6	1426.1	1426.6	1427.2	1427.8	1428.2
150°	1449.1	1449.9	1450.7	1451.5	1452.2	1452.7	1453.2	1453.8	1454.3	1454.9	1455.4
152.5°	1474.8	1475.2	1475.6	1475.9	1476.3	1476.7	1477.0	1477.2	1477.6	1478.6	1479.5
155°	1510.8	1510.2	1509.7	1509.1	1509.0	1509.3	1509.6	1509.9	1510.0	1511.5	1512.8
157.5°	1539.8	1539.8	1539.7	1539.6	1539.5	1539.3	1539.0	1538.7	1538.4	1540.0	1541.7
160°	1557.1	1556.8	1556.5	1556.2	1556.0	1555.8	1555.5	1555.2	1554.9	1556.5	1558.1
162.5°	1573.1	1572.4	1571.7	1571.0	1570.6	1570.3	1570.0	1569.7	1569.4	1571.3	1573.1
165°	1592.9	1592.0	1591.3	1590.4	1590.0	1589.7	1589.4	1589.1	1588.8	1591.0	1593.2
167.5°	1608.2	1607.0	1606.0	1604.9	1604.4	1604.4	1604.4	1604.4	1604.4	1606.6	1608.7
170°	1616.8	1615.8	1614.8	1613.6	1613.1	1613.1	1613.1	1613.1	1613.1	1615.2	1617.4
172.5°	1622.5	1621.2	1619.9	1618.6	1618.1	1618.3	1618.5	1618.7	1618.9	1621.1	1623.2
175°	1629.9	1628.6	1627.2	1625.9	1625.3	1625.6	1625.9	1626.2	1626.5	1628.3	1630.2
177.5°	1632.1	1631.1	1630.0	1628.9	1628.5	1628.7	1628.9	1629.1	1629.4	1631.1	1632.8
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3



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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°	9.9	10.2	10.0	10.1	10.0	10.7	10.2
90°	32.3	33.4	34.2	34.8	35.3	35.8	36.4
92.5°	36.2	37.9	38.9	39.3	39.6	39.9	40.2
95°	43.3	45.1	46.1	46.1	46.1	46.1	46.1
97.5°	45.5	47.6	48.8	49.1	49.4	49.7	50.0
100°	46.5	48.6	49.9	50.0	50.3	50.6	50.9
102.5°	59.7	53.1	50.0	50.4	50.9	51.4	51.8
105°	122.4	74.7	51.2	51.7	52.2	52.8	53.3
107.5°	381.6	346.7	311.2	275.3	239.3	203.4	167.5
110°	519.9	511.0	487.3	448.8	410.3	371.8	333.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	608.1	608.3	604.4	596.2	588.1	579.9	571.8
115°	703.7	706.4	708.3	709.4	710.5	711.5	712.7
117.5°	787.4	789.6	790.8	791.0	791.2	791.5	791.6
120°	842.7	844.9	845.9	845.9	845.9	845.9	845.9
122.5°	896.1	897.6	898.4	898.6	898.8	899.1	899.3
125°	971.2	971.7	972.2	972.8	973.4	973.8	974.4
127.5°	1047.7	1048.7	1048.8	1048.3	1047.7	1047.2	1046.6
130°	1094.0	1095.0	1095.3	1094.8	1094.3	1093.7	1093.2
132.5°	1137.6	1138.7	1138.9	1138.1	1137.4	1136.6	1135.9
135°	1203.4	1204.3	1204.3	1203.4	1202.7	1201.8	1201.1
137.5°	1262.8	1264.1	1264.5	1263.9	1263.5	1262.9	1262.3
140°	1300.0	1301.1	1301.4	1300.8	1300.2	1299.8	1299.2
142.5°	1335.2	1336.1	1336.1	1335.4	1334.6	1333.9	1333.1
145°	1384.4	1385.0	1385.3	1385.3	1385.3	1385.3	1385.3
147.5°	1428.8	1429.4	1429.0	1427.8	1426.5	1425.3	1424.0
150°	1455.9	1456.5	1456.3	1455.6	1454.7	1454.0	1453.1
152.5°	1480.5	1481.5	1481.4	1480.1	1478.8	1477.6	1476.4
155°	1514.1	1515.5	1515.3	1513.7	1512.1	1510.5	1508.9
157.5°	1543.3	1544.9	1544.6	1542.6	1540.5	1538.3	1536.3
160°	1559.8	1561.4	1561.2	1559.3	1557.5	1555.6	1553.7
162.5°	1575.0	1576.8	1576.9	1575.2	1573.6	1571.9	1570.2
165°	1595.3	1597.5	1597.6	1595.7	1593.8	1592.0	1590.1
167.5°	1610.8	1613.0	1613.0	1610.8	1608.7	1606.6	1604.4
170°	1619.6	1621.7	1621.7	1619.6	1617.4	1615.2	1613.1
172.5°	1625.4	1627.6	1627.4	1625.0	1622.7	1620.3	1618.0
175°	1632.1	1634.0	1633.8	1631.7	1629.6	1627.4	1625.2
177.5°	1634.6	1636.3	1636.1	1633.9	1631.7	1629.6	1627.4
180°	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3	1631.3

(END OF REPORT)