

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: P332386-830

Luminaire Tested: **S123RDIP-S1165D1195U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332386-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8382.9 lumens
Efficiency: N/A
Efficacy: 116.9 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: General Diffuse

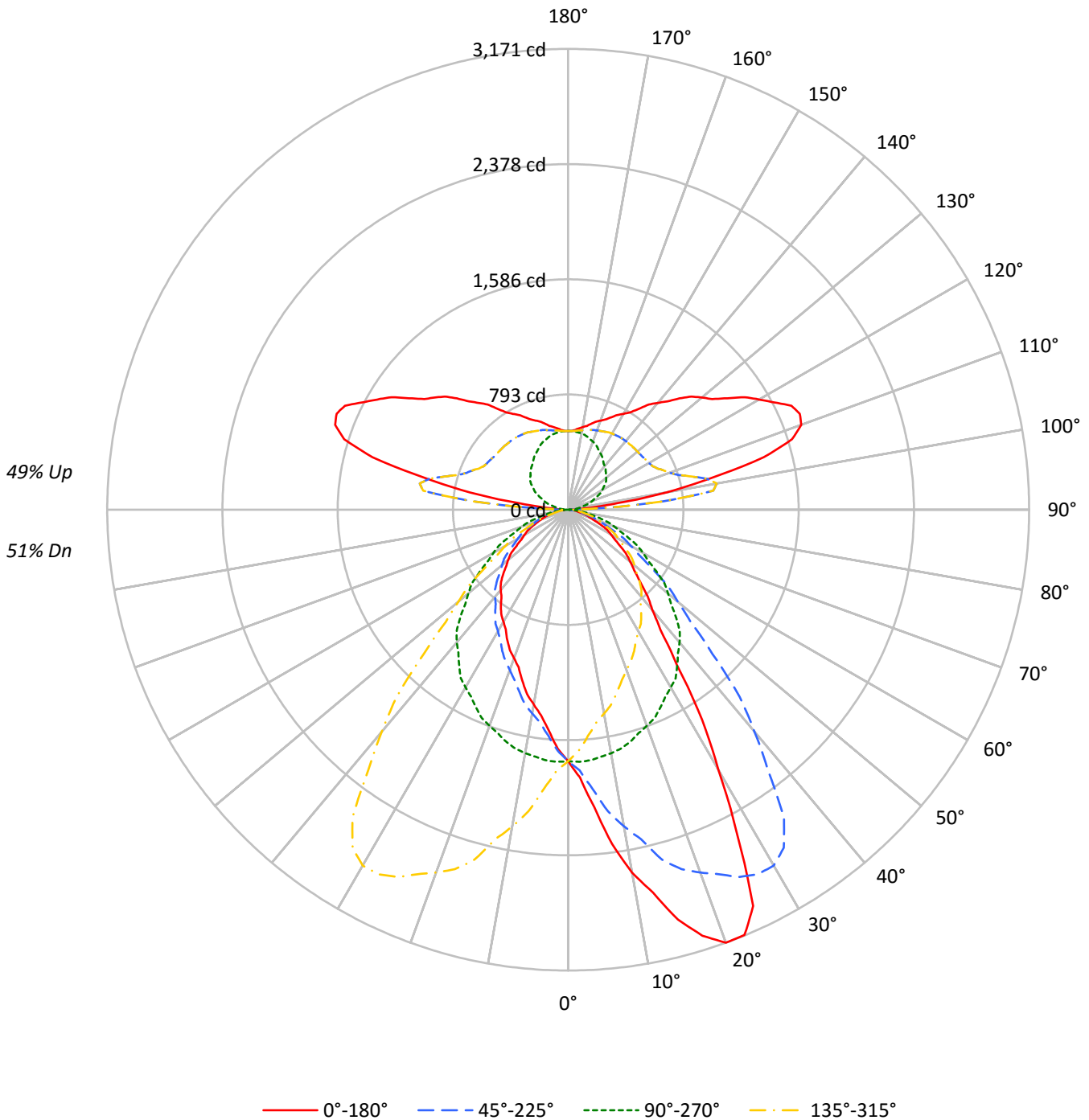
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	91	88	91	88	85	82	75	72	70	63	61	60	52	51	50	45
2	90	83	77	73	83	77	72	68	66	62	59	56	53	51	46	44	43	38
3	83	74	67	61	76	69	62	58	59	54	50	50	46	44	41	39	37	33
4	76	66	58	52	70	61	54	49	53	48	44	45	41	38	37	35	32	29
5	70	59	51	45	65	55	48	43	47	42	38	40	36	33	34	31	29	25
6	65	53	45	39	60	49	42	37	43	37	33	37	33	29	31	28	25	23
7	60	48	40	35	55	45	38	33	39	34	30	34	29	26	28	25	23	20
8	56	44	36	31	52	41	34	29	36	30	26	31	27	23	26	23	21	18
9	52	40	33	28	48	38	31	26	33	28	24	28	24	21	24	21	19	17
10	49	37	30	25	45	35	28	24	30	25	22	26	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18627	18627	18627	18627
5°	22204	18707	16473	18707
10°	27725	18600	14882	18600
15°	32543	18409	13572	18409
20°	36318	18125	12457	18125
25°	35739	17826	11772	17826
30°	25690	17550	11067	17550
35°	17152	17190	10611	17190
40°	12638	16759	10138	16759
45°	10601	16002	9677	16002
50°	9354	15011	9031	15011
55°	8203	13874	8146	13874
60°	7304	12790	7464	12790
65°	6413	11624	6943	11624
70°	5035	10584	6342	10584
75°	4438	9245	5793	9245
80°	3856	7854	5697	7854
85°	3112	6311	6039	6311



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	2.0
10°-20°	531.7	6.3
20°-30°	835.3	10.0
30°-40°	871.4	10.4
40°-50°	745.8	8.9
50°-60°	568.4	6.8
60°-70°	364.3	4.3
70°-80°	175.3	2.1
80°-90°	50.6	0.6
90°-100°	301.1	3.6
100°-110°	852.5	10.2
110°-120°	838.6	10.0
120°-130°	668.9	8.0
130°-140°	527.4	6.3
140°-150°	393.6	4.7
150°-160°	274.4	3.3
160°-170°	161.2	1.9
170°-180°	52.4	0.6
0°-30°	1537.1	18.3
0°-40°	2408.6	28.7
0°-60°	3722.7	44.4
0°-90°	4312.9	51.4
90°-120°	1992.1	23.8
90°-150°	3582.0	42.7
90°-180°	4070.0	48.6
0°-180°	8382.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1730	1730	1730	1730	1730	
5°	2055	1731	1525	1731	2055	212
15°	2920	1652	1218	1652	2920	828
25°	3009	1501	991	1501	3009	1293
35°	1305	1308	808	1308	1305	856
45°	696	1051	636	1051	696	548
55°	437	739	434	739	437	395
65°	252	456	273	456	252	248
75°	107	222	139	222	107	114
85°	25	51	49	51	25	30
90°	32	2	32	2	32	18
95°	127	37	127	37	127	229
105°	1393	127	1393	127	1393	1374
115°	1694	224	1694	224	1694	1646
125°	1336	312	1336	312	1336	1211
135°	1083	366	1083	366	1083	840
145°	846	417	846	417	846	538
155°	702	474	702	474	702	327
165°	612	518	612	518	612	175
175°	551	540	551	540	551	54
180°	541	541	541	541	541	



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1843.1	1845.5	1837.8	1836.6	1827.7	1825.3	1825.3	1812.9	1805.2	1795.2	1789.2
5°	2055.0	2066.9	2061.0	2047.6	2025.3	2020.2	2006.1	1983.9	1958.7	1927.6	1912.8
7.5°	2319.6	2335.8	2329.6	2308.9	2285.7	2266.9	2227.1	2190.3	2138.5	2093.2	2054.4
10°	2536.6	2519.5	2506.1	2486.1	2464.7	2429.9	2388.4	2331.3	2265.4	2213.6	2155.8
12.5°	2698.9	2696.1	2679.2	2658.6	2628.3	2595.2	2544.2	2474.7	2398.1	2323.2	2257.1
15°	2920.3	2924.7	2913.6	2892.1	2849.1	2790.6	2713.6	2684.7	2575.0	2493.6	2412.1
17.5°	3073.4	3072.6	3071.1	3041.3	2997.5	2955.8	2884.4	2808.4	2709.2	2594.3	2484.5
20°	3170.6	3163.3	3164.8	3131.4	3098.8	3050.6	2981.0	2870.6	2789.2	2656.6	2543.2
22.5°	3168.3	3166.8	3172.4	3161.0	3137.3	3100.4	3045.6	2952.4	2848.5	2714.6	2587.1
25°	3009.2	3003.2	3038.1	3047.7	3085.5	3092.1	3075.8	3024.7	2926.2	2788.4	2630.6
27.5°	2518.5	2515.2	2579.8	2660.7	2763.3	2842.9	2920.0	2957.1	2926.2	2827.5	2669.5
30°	2066.9	2136.5	2169.1	2286.1	2416.5	2572.1	2708.4	2838.0	2869.9	2827.0	2697.3
32.5°	1716.0	1776.8	1804.0	1904.5	2026.0	2208.2	2412.6	2596.2	2725.9	2758.7	2680.7
35°	1305.3	1306.1	1368.3	1412.7	1525.3	1712.8	1911.3	2157.2	2401.7	2586.9	2606.1
37.5°	1041.6	1045.3	1082.9	1127.2	1211.6	1310.8	1485.6	1690.1	1972.5	2256.8	2423.5
40°	899.4	906.0	934.2	977.9	1038.6	1113.4	1249.7	1442.4	1677.9	1994.2	2252.8
42.5°	808.0	818.9	833.4	867.0	904.7	974.8	1085.0	1233.8	1448.0	1747.1	2045.4
45°	696.4	702.3	713.4	729.0	763.0	811.9	886.0	986.0	1163.9	1404.6	1703.1
47.5°	614.3	611.1	622.8	635.5	658.2	691.4	741.1	822.7	949.6	1142.7	1396.0
50°	558.6	557.8	566.0	575.6	597.1	621.5	662.3	723.8	824.5	984.6	1216.4
52.5°	506.4	509.3	515.0	527.0	542.5	562.3	598.9	643.2	729.7	867.8	1061.1
55°	437.1	439.3	447.4	454.1	465.2	485.2	508.2	545.3	604.5	700.8	860.1
57.5°	378.4	377.4	385.2	386.8	399.4	415.8	433.5	462.2	505.2	576.8	684.1
60°	339.3	337.1	343.7	348.9	355.6	368.9	383.7	411.9	446.0	498.6	590.4
62.5°	303.7	302.7	307.6	312.7	318.3	330.4	342.8	364.5	391.4	435.7	508.6
65°	251.8	254.1	256.3	258.5	261.5	268.9	280.8	295.6	314.1	345.3	397.8
67.5°	197.9	200.2	201.0	205.5	211.9	216.5	223.8	237.0	249.8	276.1	305.9
70°	160.0	159.3	160.0	162.2	170.4	178.5	188.1	197.8	205.9	224.4	249.7
72.5°	137.5	136.2	138.1	138.6	142.5	144.8	150.8	159.9	170.4	182.9	201.0
75°	106.7	106.7	106.7	106.7	109.6	111.1	113.4	115.6	119.2	125.2	138.6
77.5°	78.8	79.0	80.0	80.8	81.3	82.2	83.6	85.8	87.1	90.2	96.0
80°	62.2	63.0	62.2	63.0	63.0	64.5	65.2	67.4	68.1	71.8	74.1
82.5°	46.8	46.4	46.8	47.6	47.6	49.0	49.2	50.8	51.0	52.9	55.1
85°	25.2	23.8	25.2	24.4	25.9	24.4	25.2	26.7	26.7	27.4	30.3
87.5°	12.3	13.7	12.3	12.6	12.9	13.0	12.8	12.6	13.6	13.2	13.1
90°	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3	26.3	27.3	24.1
92.5°	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2	127.1	168.4	185.3
95°	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3	526.7	649.4	578.2
97.5°	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7	1076.7	1006.4	736.8
100°	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1	1252.8	1037.1	700.9
102.5°	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6	1261.5	980.1	648.3
105°	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6	1194.8	880.4	583.7
107.5°	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3	1077.8	792.4	542.5
110°	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0	1004.2	742.4	526.7



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5	940.3	709.2	518.0
115°	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5	862.9	673.4	514.7
117.5°	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3	816.2	652.4	516.7
120°	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1	791.7	642.8	520.2
122.5°	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7	771.6	636.7	526.3
125°	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6	745.7	628.6	535.5
127.5°	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9	723.0	624.6	546.0
130°	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3	710.7	622.0	553.0
132.5°	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4	699.4	621.1	558.3
135°	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8	684.5	619.8	566.2
137.5°	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8	671.5	617.4	571.5
140°	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1	663.6	616.5	575.0
142.5°	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2	656.6	614.8	577.6
145°	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2	647.2	612.2	579.3
147.5°	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6	638.0	608.0	579.3
150°	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0	631.9	604.5	579.3
152.5°	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4	624.9	600.1	576.6
155°	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9	614.3	592.5	573.8
157.5°	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6	602.5	585.7	570.1
160°	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9	594.7	580.4	568.4
162.5°	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3	586.7	575.1	564.9
165°	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8	576.0	567.2	559.6
167.5°	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0	565.7	559.4	554.3
170°	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1	559.6	554.1	550.8
172.5°	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1	553.5	549.7	548.2
175°	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7	546.5	544.2	544.2
177.5°	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7	541.9	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1786.9	1785.1	1776.8	1767.3	1754.8	1746.5	1740.0	1736.4	1725.8	1712.8	1703.8
5°	1897.2	1875.0	1851.2	1822.4	1795.7	1768.3	1751.2	1731.3	1706.9	1679.4	1660.2
7.5°	2015.4	1971.9	1925.0	1876.5	1828.6	1785.6	1747.8	1715.2	1676.3	1637.0	1609.5
10°	2106.1	2042.4	1976.5	1909.0	1847.6	1789.8	1745.3	1701.7	1655.0	1609.8	1575.7
12.5°	2188.5	2104.6	2028.6	1945.8	1867.2	1798.1	1734.1	1682.6	1626.5	1578.4	1539.5
15°	2292.8	2206.9	2115.0	1989.0	1884.6	1797.2	1719.4	1652.0	1583.8	1524.6	1486.8
17.5°	2390.3	2261.0	2137.5	2032.5	1896.8	1787.5	1692.6	1612.0	1537.2	1474.3	1427.9
20°	2430.6	2305.4	2171.3	2037.2	1903.8	1781.7	1671.2	1582.3	1504.6	1433.4	1390.5
22.5°	2454.9	2313.1	2171.9	2027.8	1886.1	1759.2	1649.9	1552.2	1467.8	1400.2	1347.3
25°	2483.2	2314.3	2158.7	2016.5	1872.0	1734.3	1604.6	1500.9	1409.8	1337.9	1281.6
27.5°	2501.9	2303.2	2119.3	1961.2	1814.7	1677.4	1558.7	1448.7	1356.3	1280.3	1219.8
30°	2505.4	2294.2	2089.1	1918.0	1769.1	1643.1	1517.2	1412.0	1314.2	1233.4	1177.1
32.5°	2510.2	2272.4	2048.1	1866.4	1713.9	1589.2	1475.1	1374.6	1274.5	1195.0	1137.5
35°	2490.6	2260.2	1986.1	1777.2	1624.6	1503.8	1400.9	1308.2	1209.8	1132.7	1074.2
37.5°	2406.4	2212.1	1921.8	1676.8	1517.2	1405.3	1321.4	1240.7	1150.4	1067.2	1012.1
40°	2321.7	2164.6	1872.0	1615.7	1449.1	1334.2	1258.7	1192.7	1105.3	1027.5	968.3
42.5°	2195.5	2100.1	1824.6	1551.7	1372.0	1261.3	1197.6	1135.8	1059.0	980.1	924.4
45°	1963.9	1976.5	1727.6	1449.7	1265.3	1154.1	1094.2	1051.2	983.1	917.8	860.8
47.5°	1673.5	1791.3	1613.6	1341.1	1152.8	1048.6	996.1	958.6	912.7	848.7	796.6
50°	1483.8	1652.0	1522.4	1268.3	1082.3	978.6	926.7	896.4	856.4	806.0	756.4
52.5°	1309.0	1489.6	1412.1	1187.0	1005.9	911.1	860.4	835.4	803.6	756.2	711.3
55°	1067.5	1250.5	1232.8	1064.5	891.2	806.0	767.5	739.3	717.8	682.3	646.8
57.5°	863.5	1037.0	1046.1	928.2	790.1	706.0	672.8	651.6	637.5	610.8	577.9
60°	734.9	894.2	925.3	836.4	717.8	643.8	611.1	594.1	583.1	561.6	536.3
62.5°	628.2	763.7	799.0	735.0	648.5	579.2	553.6	537.2	529.7	511.1	488.9
65°	480.8	593.4	627.5	591.9	546.7	491.2	470.4	456.4	449.7	439.3	423.0
67.5°	361.6	443.6	481.0	455.9	439.6	404.4	391.2	383.7	377.8	370.7	357.0
70°	290.4	351.1	389.6	383.0	369.7	351.1	341.5	336.3	330.4	324.5	312.6
72.5°	233.5	275.3	311.4	314.8	303.9	300.2	291.7	289.5	286.0	278.8	272.3
75°	154.9	183.7	208.9	218.6	223.0	226.7	223.0	222.3	221.5	215.6	211.9
77.5°	101.5	117.1	132.9	149.4	156.3	161.4	162.5	165.2	163.2	160.1	158.3
80°	77.8	81.5	92.6	106.7	117.8	122.2	125.2	126.7	125.9	125.2	122.2
82.5°	56.5	59.6	64.8	74.6	84.0	91.4	93.2	92.9	94.5	95.0	92.6
85°	30.3	31.1	32.6	34.1	39.3	47.4	49.7	51.1	52.6	52.6	48.2
87.5°	13.7	12.3	12.9	12.4	13.9	13.8	16.9	19.4	20.5	18.5	19.1
90°	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2	4.3	6.6	9.9
92.5°	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6	20.2	29.3	37.9
95°	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2	40.5	52.6	71.2
97.5°	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5	64.6	74.0	90.2
100°	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1	82.1	89.8	105.1
102.5°	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4	101.4	108.2	122.6
105°	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1	130.4	136.9	150.1
107.5°	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4	159.7	166.0	178.9
110°	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4	180.7	186.2	198.2



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7	200.0	205.5	217.4
115°	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5	228.8	235.4	246.4
117.5°	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3	257.3	262.8	272.9
120°	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5	274.8	280.3	291.3
122.5°	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2	291.5	297.0	308.8
125°	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1	314.3	320.8	332.9
127.5°	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3	333.6	341.7	353.9
130°	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7	345.0	354.8	368.0
132.5°	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4	354.6	365.3	381.1
135°	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8	370.1	382.2	398.6
137.5°	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2	384.8	396.6	414.2
140°	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8	395.3	406.2	423.8
142.5°	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4	405.0	416.8	432.5
145°	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3	420.5	430.4	446.8
147.5°	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3	436.3	445.9	460.1
150°	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7	446.8	455.5	469.8
152.5°	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1	457.3	466.1	478.5
155°	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2	474.2	480.8	491.7
157.5°	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8	488.6	493.9	503.5
160°	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2	498.2	502.7	511.4
162.5°	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1	506.1	509.6	516.7
165°	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0	516.9	519.1	524.5
167.5°	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0	525.7	526.7	530.9
170°	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3	530.0	531.1	534.4
172.5°	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7	534.4	534.6	537.1
175°	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9	538.8	537.7	539.9
177.5°	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9	541.0	540.1	541.0
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1700.9	1693.2	1687.9	1676.0	1668.3	1660.0	1651.7	1657.1	1656.4	1655.9	1655.9
5°	1643.9	1626.8	1611.3	1591.3	1578.7	1563.1	1551.2	1549.7	1552.7	1542.4	1536.4
7.5°	1587.2	1564.0	1541.9	1519.8	1496.5	1477.8	1466.0	1460.6	1453.0	1446.6	1440.0
10°	1547.6	1520.1	1498.6	1471.2	1446.0	1423.8	1409.8	1400.1	1395.0	1389.8	1380.2
12.5°	1506.7	1479.9	1452.5	1421.4	1397.5	1371.7	1361.1	1350.4	1340.4	1334.6	1321.4
15°	1446.8	1412.0	1383.1	1350.5	1323.8	1298.6	1283.8	1262.3	1259.3	1252.0	1238.6
17.5°	1386.8	1349.0	1309.2	1285.0	1254.9	1228.7	1206.2	1198.9	1177.7	1169.7	1158.2
20°	1339.4	1304.6	1274.2	1242.4	1198.6	1174.2	1156.4	1146.8	1129.7	1119.4	1111.9
22.5°	1298.4	1263.1	1227.9	1190.8	1154.8	1127.4	1114.4	1099.4	1090.1	1075.5	1067.5
25°	1240.1	1201.6	1159.3	1119.4	1093.4	1072.7	1052.0	1038.6	1025.3	1018.6	1003.8
27.5°	1172.2	1132.0	1092.5	1062.2	1030.3	1009.8	991.1	979.2	963.2	952.0	943.8
30°	1134.9	1087.5	1053.4	1026.1	985.2	966.0	952.0	937.2	925.3	913.4	905.3
32.5°	1091.7	1048.4	1016.1	982.1	950.9	929.8	911.6	898.6	888.5	877.2	869.1
35°	1023.8	987.5	954.1	920.1	897.1	875.6	854.1	843.0	833.4	823.0	815.7
37.5°	962.4	928.5	896.8	864.5	836.0	818.6	801.3	792.8	779.8	772.8	765.3
40°	924.5	891.2	857.1	826.0	796.4	783.1	767.5	754.9	743.0	737.8	729.7
42.5°	883.1	849.7	821.0	787.5	763.2	745.1	730.8	717.0	708.0	700.5	695.9
45°	821.5	791.9	763.7	730.5	707.5	691.9	675.6	663.0	654.9	649.7	641.5
47.5°	761.9	732.3	703.6	674.6	652.3	634.6	618.3	609.5	598.7	592.4	586.8
50°	718.6	691.9	661.6	634.9	612.7	594.8	581.5	570.4	560.8	552.6	548.9
52.5°	678.9	650.4	624.2	599.3	575.9	555.7	543.6	531.9	524.6	515.3	511.0
55°	613.4	586.0	563.7	539.3	516.3	499.3	484.5	474.1	466.7	456.4	450.4
57.5°	551.9	527.4	500.8	479.6	455.9	441.5	429.2	415.2	406.1	397.9	392.2
60°	510.4	482.3	459.3	439.3	418.6	400.0	388.9	377.8	368.2	360.1	354.9
62.5°	467.1	442.5	420.8	399.0	380.0	363.9	351.0	341.7	333.2	328.0	322.8
65°	400.8	381.5	359.3	341.5	323.8	311.9	301.5	293.3	287.5	283.7	279.3
67.5°	339.7	321.0	301.6	284.2	272.3	263.3	256.5	249.5	246.6	241.8	238.8
70°	300.0	280.8	263.7	250.4	238.6	231.9	227.4	222.3	219.2	213.4	210.4
72.5°	256.7	242.8	230.5	219.6	210.1	204.1	198.4	192.0	187.3	180.8	177.8
75°	202.3	189.6	180.0	172.6	166.6	158.5	150.4	143.7	141.5	139.3	138.6
77.5°	149.8	141.8	134.8	128.6	121.2	115.3	113.5	112.0	111.6	110.4	110.4
80°	117.8	110.4	105.2	97.7	93.3	93.3	93.3	91.9	92.6	92.6	92.6
82.5°	87.6	80.8	77.9	75.3	74.4	74.9	74.9	75.3	74.8	76.0	75.4
85°	45.1	45.9	47.4	46.7	47.4	47.4	48.9	48.2	48.9	47.4	48.9
87.5°	19.0	21.2	22.4	23.8	25.0	25.1	25.4	25.6	26.4	26.7	27.1
90°	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3	28.5	29.6	31.8
92.5°	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2	73.1	64.6	58.9
95°	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3	267.2	209.2	169.8
97.5°	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7	787.1	645.9	514.9
100°	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1	1202.4	1074.3	918.8
102.5°	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6	1390.7	1316.1	1217.5
105°	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6	1533.1	1554.0	1525.5
107.5°	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3	1515.1	1611.1	1650.1
110°	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0	1456.5	1594.5	1671.1



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5	1379.4	1534.0	1632.6
115°	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5	1256.0	1417.0	1536.4
117.5°	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3	1151.8	1296.4	1417.5
120°	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1	1094.0	1225.4	1336.1
122.5°	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7	1047.5	1169.3	1272.1
125°	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6	990.0	1095.0	1182.7
127.5°	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9	939.3	1034.2	1113.9
130°	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3	907.9	996.6	1071.0
132.5°	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4	878.1	960.6	1031.6
135°	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8	835.6	906.7	969.1
137.5°	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8	794.6	855.9	910.0
140°	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1	770.9	823.5	870.6
142.5°	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2	748.2	793.7	834.7
145°	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2	718.4	753.5	785.1
147.5°	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6	696.3	724.5	747.1
150°	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0	682.2	705.2	726.0
152.5°	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4	669.1	689.5	706.8
155°	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9	650.4	666.9	680.0
157.5°	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6	632.4	645.0	655.3
160°	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9	620.9	631.9	639.5
162.5°	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3	608.7	618.7	625.5
165°	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8	591.4	599.0	604.5
167.5°	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0	578.0	582.4	586.4
170°	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1	568.4	572.7	575.0
172.5°	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1	560.4	564.0	565.2
175°	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7	549.7	552.0	552.0
177.5°	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7	543.6	544.5	544.5
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1648.8	1648.1	1648.8	1646.3	1648.8	1648.1	1648.8	1655.9	1655.9	1656.4	1657.1
5°	1534.2	1533.5	1531.3	1524.6	1531.3	1533.5	1534.2	1536.4	1542.4	1552.7	1549.7
7.5°	1434.2	1433.1	1426.6	1426.8	1426.6	1433.1	1434.2	1440.0	1446.6	1453.0	1460.6
10°	1375.0	1375.6	1366.8	1361.6	1366.8	1375.6	1375.0	1380.2	1389.8	1395.0	1400.1
12.5°	1317.5	1314.1	1306.9	1301.2	1306.9	1314.1	1317.5	1321.4	1334.6	1340.4	1350.4
15°	1241.6	1234.2	1216.4	1217.9	1216.4	1234.2	1241.6	1238.6	1252.0	1259.3	1262.3
17.5°	1152.3	1146.8	1146.5	1136.1	1146.5	1146.8	1152.3	1158.2	1169.7	1177.7	1198.9
20°	1100.1	1096.4	1097.9	1087.5	1097.9	1096.4	1100.1	1111.9	1119.4	1129.7	1146.8
22.5°	1059.2	1055.5	1049.2	1046.0	1049.2	1055.5	1059.2	1067.5	1075.5	1090.1	1099.4
25°	999.4	993.4	987.5	991.2	987.5	993.4	999.4	1003.8	1018.6	1025.3	1038.6
27.5°	939.5	935.1	929.2	928.4	929.2	935.1	939.5	943.8	952.0	963.2	979.2
30°	901.5	897.1	894.2	890.4	894.2	897.1	901.5	905.3	913.4	925.3	937.2
32.5°	863.1	862.1	856.9	856.1	856.9	862.1	863.1	869.1	877.2	888.5	898.6
35°	812.7	808.2	806.7	807.5	806.7	808.2	812.7	815.7	823.0	833.4	843.0
37.5°	764.8	758.8	756.2	753.6	756.2	758.8	764.8	765.3	772.8	779.8	792.8
40°	730.5	724.5	723.0	721.5	723.0	724.5	730.5	729.7	737.8	743.0	754.9
42.5°	691.9	689.6	688.6	686.0	688.6	689.6	691.9	695.9	700.5	708.0	717.0
45°	639.3	638.6	634.1	635.7	634.1	638.6	639.3	641.5	649.7	654.9	663.0
47.5°	583.9	580.6	577.5	579.6	577.5	580.6	583.9	586.8	592.4	598.7	609.5
50°	546.0	544.5	537.8	539.3	537.8	544.5	546.0	548.9	552.6	560.8	570.4
52.5°	508.0	502.4	499.9	499.0	499.9	502.4	508.0	511.0	515.3	524.6	531.9
55°	445.3	438.6	435.5	434.1	435.5	438.6	445.3	450.4	456.4	466.7	474.1
57.5°	383.6	381.8	379.5	381.1	379.5	381.8	383.6	392.2	397.9	406.1	415.2
60°	347.4	347.4	347.4	346.7	347.4	347.4	347.4	354.9	360.1	368.2	377.8
62.5°	319.6	317.8	317.3	318.3	317.3	317.8	319.6	322.8	328.0	333.2	341.7
65°	277.1	276.4	273.3	272.6	273.3	276.4	277.1	279.3	283.7	287.5	293.3
67.5°	237.0	234.2	233.4	232.3	233.4	234.2	237.0	238.8	241.8	246.6	249.5
70°	206.7	205.2	200.8	201.5	200.8	205.2	206.7	210.4	213.4	219.2	222.3
72.5°	174.1	172.6	171.7	170.7	171.7	172.6	174.1	177.8	180.8	187.3	192.0
75°	137.8	137.0	136.3	139.3	136.3	137.0	137.8	138.6	139.3	141.5	143.7
77.5°	110.4	110.4	110.8	109.6	110.8	110.4	110.4	110.4	110.4	111.6	112.0
80°	92.6	92.6	91.9	91.9	91.9	92.6	92.6	92.6	92.6	92.6	91.9
82.5°	74.3	74.8	75.3	74.1	75.3	74.8	74.3	75.4	76.0	74.8	75.3
85°	48.9	48.2	49.7	48.9	49.7	48.2	48.9	48.9	47.4	48.9	48.2
87.5°	28.1	27.1	27.3	27.7	27.3	27.1	28.1	27.1	26.7	26.4	25.6
90°	30.6	31.8	32.9	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3
92.5°	56.9	53.6	54.8	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2
95°	148.9	139.1	131.4	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3
97.5°	434.1	384.8	355.2	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7
100°	808.1	728.2	685.5	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1
102.5°	1131.4	1068.2	1032.5	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6
105°	1475.1	1433.5	1398.5	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6
107.5°	1651.0	1636.9	1625.1	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3
110°	1701.8	1710.5	1708.4	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1688.7	1715.8	1724.1	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5
115°	1618.5	1666.7	1688.7	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5
117.5°	1503.2	1558.3	1589.9	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3
120°	1422.5	1483.8	1510.1	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1
122.5°	1349.0	1404.1	1433.0	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7
125°	1252.8	1301.0	1328.3	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6
127.5°	1176.4	1217.5	1242.3	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9
130°	1129.1	1168.5	1191.5	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3
132.5°	1086.1	1125.5	1145.9	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4
135°	1022.8	1055.6	1075.3	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8
137.5°	955.2	988.4	1005.0	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8
140°	912.2	942.9	960.4	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1
142.5°	870.2	897.3	913.0	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2
145°	812.6	835.6	844.3	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2
147.5°	767.9	783.4	791.7	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6
150°	742.4	754.5	761.1	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0
152.5°	719.7	730.8	734.8	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4
155°	689.9	698.7	700.9	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9
157.5°	663.8	670.4	672.1	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6
160°	647.2	653.7	653.7	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9
162.5°	630.6	636.2	636.2	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3
165°	608.9	613.2	612.2	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8
167.5°	588.2	591.4	590.2	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0
170°	576.0	578.2	577.1	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1
172.5°	565.5	567.7	565.7	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1
175°	552.0	553.0	552.0	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7
177.5°	543.6	544.5	542.7	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1651.7	1660.0	1668.3	1676.0	1687.9	1693.2	1700.9	1703.8	1712.8	1725.8	1736.4
5°	1551.2	1563.1	1578.7	1591.3	1611.3	1626.8	1643.9	1660.2	1679.4	1706.9	1731.3
7.5°	1466.0	1477.8	1496.5	1519.8	1541.9	1564.0	1587.2	1609.5	1637.0	1676.3	1715.2
10°	1409.8	1423.8	1446.0	1471.2	1498.6	1520.1	1547.6	1575.7	1609.8	1655.0	1701.7
12.5°	1361.1	1371.7	1397.5	1421.4	1452.5	1479.9	1506.7	1539.5	1578.4	1626.5	1682.6
15°	1283.8	1298.6	1323.8	1350.5	1383.1	1412.0	1446.8	1486.8	1524.6	1583.8	1652.0
17.5°	1206.2	1228.7	1254.9	1285.0	1309.2	1349.0	1386.8	1427.9	1474.3	1537.2	1612.0
20°	1156.4	1174.2	1198.6	1242.4	1274.2	1304.6	1339.4	1390.5	1433.4	1504.6	1582.3
22.5°	1114.4	1127.4	1154.8	1190.8	1227.9	1263.1	1298.4	1347.3	1400.2	1467.8	1552.2
25°	1052.0	1072.7	1093.4	1119.4	1159.3	1201.6	1240.1	1281.6	1337.9	1409.8	1500.9
27.5°	991.1	1009.8	1030.3	1062.2	1092.5	1132.0	1172.2	1219.8	1280.3	1356.3	1448.7
30°	952.0	966.0	985.2	1026.1	1053.4	1087.5	1134.9	1177.1	1233.4	1314.2	1412.0
32.5°	911.6	929.8	950.9	982.1	1016.1	1048.4	1091.7	1137.5	1195.0	1274.5	1374.6
35°	854.1	875.6	897.1	920.1	954.1	987.5	1023.8	1074.2	1132.7	1209.8	1308.2
37.5°	801.3	818.6	836.0	864.5	896.8	928.5	962.4	1012.1	1067.2	1150.4	1240.7
40°	767.5	783.1	796.4	826.0	857.1	891.2	924.5	968.3	1027.5	1105.3	1192.7
42.5°	730.8	745.1	763.2	787.5	821.0	849.7	883.1	924.4	980.1	1059.0	1135.8
45°	675.6	691.9	707.5	730.5	763.7	791.9	821.5	860.8	917.8	983.1	1051.2
47.5°	618.3	634.6	652.3	674.6	703.6	732.3	761.9	796.6	848.7	912.7	958.6
50°	581.5	594.8	612.7	634.9	661.6	691.9	718.6	756.4	806.0	856.4	896.4
52.5°	543.6	555.7	575.9	599.3	624.2	650.4	678.9	711.3	756.2	803.6	835.4
55°	484.5	499.3	516.3	539.3	563.7	586.0	613.4	646.8	682.3	717.8	739.3
57.5°	429.2	441.5	455.9	479.6	500.8	527.4	551.9	577.9	610.8	637.5	651.6
60°	388.9	400.0	418.6	439.3	459.3	482.3	510.4	536.3	561.6	583.1	594.1
62.5°	351.0	363.9	380.0	399.0	420.8	442.5	467.1	488.9	511.1	529.7	537.2
65°	301.5	311.9	323.8	341.5	359.3	381.5	400.8	423.0	439.3	449.7	456.4
67.5°	256.5	263.3	272.3	284.2	301.6	321.0	339.7	357.0	370.7	377.8	383.7
70°	227.4	231.9	238.6	250.4	263.7	280.8	300.0	312.6	324.5	330.4	336.3
72.5°	198.4	204.1	210.1	219.6	230.5	242.8	256.7	272.3	278.8	286.0	289.5
75°	150.4	158.5	166.6	172.6	180.0	189.6	202.3	211.9	215.6	221.5	222.3
77.5°	113.5	115.3	121.2	128.6	134.8	141.8	149.8	158.3	160.1	163.2	165.2
80°	93.3	93.3	93.3	97.7	105.2	110.4	117.8	122.2	125.2	125.9	126.7
82.5°	74.9	74.9	74.4	75.3	77.9	80.8	87.6	92.6	95.0	94.5	92.9
85°	48.9	47.4	47.4	46.7	47.4	45.9	45.1	48.2	52.6	52.6	51.1
87.5°	25.4	25.1	25.0	23.8	22.4	21.2	19.0	19.1	18.5	20.5	19.4
90°	26.3	27.3	24.1	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2
92.5°	127.1	168.4	185.3	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6
95°	526.7	649.4	578.2	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2
97.5°	1076.7	1006.4	736.8	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5
100°	1252.8	1037.1	700.9	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1
102.5°	1261.5	980.1	648.3	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4
105°	1194.8	880.4	583.7	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1
107.5°	1077.8	792.4	542.5	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4
110°	1004.2	742.4	526.7	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	940.3	709.2	518.0	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7
115°	862.9	673.4	514.7	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5
117.5°	816.2	652.4	516.7	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3
120°	791.7	642.8	520.2	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5
122.5°	771.6	636.7	526.3	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2
125°	745.7	628.6	535.5	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1
127.5°	723.0	624.6	546.0	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3
130°	710.7	622.0	553.0	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7
132.5°	699.4	621.1	558.3	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4
135°	684.5	619.8	566.2	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8
137.5°	671.5	617.4	571.5	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2
140°	663.6	616.5	575.0	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8
142.5°	656.6	614.8	577.6	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4
145°	647.2	612.2	579.3	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3
147.5°	638.0	608.0	579.3	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3
150°	631.9	604.5	579.3	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7
152.5°	624.9	600.1	576.6	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1
155°	614.3	592.5	573.8	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2
157.5°	602.5	585.7	570.1	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8
160°	594.7	580.4	568.4	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2
162.5°	586.7	575.1	564.9	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1
165°	576.0	567.2	559.6	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0
167.5°	565.7	559.4	554.3	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0
170°	559.6	554.1	550.8	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3
172.5°	553.5	549.7	548.2	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7
175°	546.5	544.2	544.2	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9
177.5°	541.9	541.0	541.9	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1740.0	1746.5	1754.8	1767.3	1776.8	1785.1	1786.9	1789.2	1795.2	1805.2	1812.9
5°	1751.2	1768.3	1795.7	1822.4	1851.2	1875.0	1897.2	1912.8	1927.6	1958.7	1983.9
7.5°	1747.8	1785.6	1828.6	1876.5	1925.0	1971.9	2015.4	2054.4	2093.2	2138.5	2190.3
10°	1745.3	1789.8	1847.6	1909.0	1976.5	2042.4	2106.1	2155.8	2213.6	2265.4	2331.3
12.5°	1734.1	1798.1	1867.2	1945.8	2028.6	2104.6	2188.5	2257.1	2323.2	2398.1	2474.7
15°	1719.4	1797.2	1884.6	1989.0	2115.0	2206.9	2292.8	2412.1	2493.6	2575.0	2684.7
17.5°	1692.6	1787.5	1896.8	2032.5	2137.5	2261.0	2390.3	2484.5	2594.3	2709.2	2808.4
20°	1671.2	1781.7	1903.8	2037.2	2171.3	2305.4	2430.6	2543.2	2656.6	2789.2	2870.6
22.5°	1649.9	1759.2	1886.1	2027.8	2171.9	2313.1	2454.9	2587.1	2714.6	2848.5	2952.4
25°	1604.6	1734.3	1872.0	2016.5	2158.7	2314.3	2483.2	2630.6	2788.4	2926.2	3024.7
27.5°	1558.7	1677.4	1814.7	1961.2	2119.3	2303.2	2501.9	2669.5	2827.5	2926.2	2957.1
30°	1517.2	1643.1	1769.1	1918.0	2089.1	2294.2	2505.4	2697.3	2827.0	2869.9	2838.0
32.5°	1475.1	1589.2	1713.9	1866.4	2048.1	2272.4	2510.2	2680.7	2758.7	2725.9	2596.2
35°	1400.9	1503.8	1624.6	1777.2	1986.1	2260.2	2490.6	2606.1	2586.9	2401.7	2157.2
37.5°	1321.4	1405.3	1517.2	1676.8	1921.8	2212.1	2406.4	2423.5	2256.8	1972.5	1690.1
40°	1258.7	1334.2	1449.1	1615.7	1872.0	2164.6	2321.7	2252.8	1994.2	1677.9	1442.4
42.5°	1197.6	1261.3	1372.0	1551.7	1824.6	2100.1	2195.5	2045.4	1747.1	1448.0	1233.8
45°	1094.2	1154.1	1265.3	1449.7	1727.6	1976.5	1963.9	1703.1	1404.6	1163.9	986.0
47.5°	996.1	1048.6	1152.8	1341.1	1613.6	1791.3	1673.5	1396.0	1142.7	949.6	822.7
50°	926.7	978.6	1082.3	1268.3	1522.4	1652.0	1483.8	1216.4	984.6	824.5	723.8
52.5°	860.4	911.1	1005.9	1187.0	1412.1	1489.6	1309.0	1061.1	867.8	729.7	643.2
55°	767.5	806.0	891.2	1064.5	1232.8	1250.5	1067.5	860.1	700.8	604.5	545.3
57.5°	672.8	706.0	790.1	928.2	1046.1	1037.0	863.5	684.1	576.8	505.2	462.2
60°	611.1	643.8	717.8	836.4	925.3	894.2	734.9	590.4	498.6	446.0	411.9
62.5°	553.6	579.2	648.5	735.0	799.0	763.7	628.2	508.6	435.7	391.4	364.5
65°	470.4	491.2	546.7	591.9	627.5	593.4	480.8	397.8	345.3	314.1	295.6
67.5°	391.2	404.4	439.6	455.9	481.0	443.6	361.6	305.9	276.1	249.8	237.0
70°	341.5	351.1	369.7	383.0	389.6	351.1	290.4	249.7	224.4	205.9	197.8
72.5°	291.7	300.2	303.9	314.8	311.4	275.3	233.5	201.0	182.9	170.4	159.9
75°	223.0	226.7	223.0	218.6	208.9	183.7	154.9	138.6	125.2	119.2	115.6
77.5°	162.5	161.4	156.3	149.4	132.9	117.1	101.5	96.0	90.2	87.1	85.8
80°	125.2	122.2	117.8	106.7	92.6	81.5	77.8	74.1	71.8	68.1	67.4
82.5°	93.2	91.4	84.0	74.6	64.8	59.6	56.5	55.1	52.9	51.0	50.8
85°	49.7	47.4	39.3	34.1	32.6	31.1	30.3	30.3	27.4	26.7	26.7
87.5°	16.9	13.8	13.9	12.4	12.9	12.3	13.7	13.1	13.2	13.6	12.6
90°	4.3	6.6	9.9	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3
92.5°	20.2	29.3	37.9	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2
95°	40.5	52.6	71.2	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3
97.5°	64.6	74.0	90.2	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7
100°	82.1	89.8	105.1	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1
102.5°	101.4	108.2	122.6	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6
105°	130.4	136.9	150.1	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6
107.5°	159.7	166.0	178.9	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3
110°	180.7	186.2	198.2	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	205.5	217.4	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5
115°	228.8	235.4	246.4	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5
117.5°	257.3	262.8	272.9	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3
120°	274.8	280.3	291.3	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1
122.5°	291.5	297.0	308.8	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7
125°	314.3	320.8	332.9	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6
127.5°	333.6	341.7	353.9	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9
130°	345.0	354.8	368.0	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3
132.5°	354.6	365.3	381.1	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4
135°	370.1	382.2	398.6	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8
137.5°	384.8	396.6	414.2	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8
140°	395.3	406.2	423.8	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1
142.5°	405.0	416.8	432.5	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2
145°	420.5	430.4	446.8	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2
147.5°	436.3	445.9	460.1	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6
150°	446.8	455.5	469.8	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0
152.5°	457.3	466.1	478.5	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4
155°	474.2	480.8	491.7	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9
157.5°	488.6	493.9	503.5	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6
160°	498.2	502.7	511.4	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9
162.5°	506.1	509.6	516.7	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3
165°	516.9	519.1	524.5	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8
167.5°	525.7	526.7	530.9	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0
170°	530.0	531.1	534.4	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1
172.5°	534.4	534.6	537.1	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1
175°	538.8	537.7	539.9	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7
177.5°	541.0	540.1	541.0	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1825.3	1825.3	1827.7	1836.6	1837.8	1845.5	1843.1
5°	2006.1	2020.2	2025.3	2047.6	2061.0	2066.9	2055.0
7.5°	2227.1	2266.9	2285.7	2308.9	2329.6	2335.8	2319.6
10°	2388.4	2429.9	2464.7	2486.1	2506.1	2519.5	2536.6
12.5°	2544.2	2595.2	2628.3	2658.6	2679.2	2696.1	2698.9
15°	2713.6	2790.6	2849.1	2892.1	2913.6	2924.7	2920.3
17.5°	2884.4	2955.8	2997.5	3041.3	3071.1	3072.6	3073.4
20°	2981.0	3050.6	3098.8	3131.4	3164.8	3163.3	3170.6
22.5°	3045.6	3100.4	3137.3	3161.0	3172.4	3166.8	3168.3
25°	3075.8	3092.1	3085.5	3047.7	3038.1	3003.2	3009.2
27.5°	2920.0	2842.9	2763.3	2660.7	2579.8	2515.2	2518.5
30°	2708.4	2572.1	2416.5	2286.1	2169.1	2136.5	2066.9
32.5°	2412.6	2208.2	2026.0	1904.5	1804.0	1776.8	1716.0
35°	1911.3	1712.8	1525.3	1412.7	1368.3	1306.1	1305.3
37.5°	1485.6	1310.8	1211.6	1127.2	1082.9	1045.3	1041.6
40°	1249.7	1113.4	1038.6	977.9	934.2	906.0	899.4
42.5°	1085.0	974.8	904.7	867.0	833.4	818.9	808.0
45°	886.0	811.9	763.0	729.0	713.4	702.3	696.4
47.5°	741.1	691.4	658.2	635.5	622.8	611.1	614.3
50°	662.3	621.5	597.1	575.6	566.0	557.8	558.6
52.5°	598.9	562.3	542.5	527.0	515.0	509.3	506.4
55°	508.2	485.2	465.2	454.1	447.4	439.3	437.1
57.5°	433.5	415.8	399.4	386.8	385.2	377.4	378.4
60°	383.7	368.9	355.6	348.9	343.7	337.1	339.3
62.5°	342.8	330.4	318.3	312.7	307.6	302.7	303.7
65°	280.8	268.9	261.5	258.5	256.3	254.1	251.8
67.5°	223.8	216.5	211.9	205.5	201.0	200.2	197.9
70°	188.1	178.5	170.4	162.2	160.0	159.3	160.0
72.5°	150.8	144.8	142.5	138.6	138.1	136.2	137.5
75°	113.4	111.1	109.6	106.7	106.7	106.7	106.7
77.5°	83.6	82.2	81.3	80.8	80.0	79.0	78.8
80°	65.2	64.5	63.0	63.0	62.2	63.0	62.2
82.5°	49.2	49.0	47.6	47.6	46.8	46.4	46.8
85°	25.2	24.4	25.9	24.4	25.2	23.8	25.2
87.5°	12.8	13.0	12.9	12.6	12.3	13.7	12.3
90°	28.5	29.6	31.8	30.6	31.8	32.9	31.8
92.5°	73.1	64.6	58.9	56.9	53.6	54.8	52.8
95°	267.2	209.2	169.8	148.9	139.1	131.4	127.1
97.5°	787.1	645.9	514.9	434.1	384.8	355.2	345.8
100°	1202.4	1074.3	918.8	808.1	728.2	685.5	686.6
102.5°	1390.7	1316.1	1217.5	1131.4	1068.2	1032.5	1007.3
105°	1533.1	1554.0	1525.5	1475.1	1433.5	1398.5	1393.0
107.5°	1515.1	1611.1	1650.1	1651.0	1636.9	1625.1	1615.0
110°	1456.5	1594.5	1671.1	1701.8	1710.5	1708.4	1706.2



TEST NUMBER: P332386-830

CATALOG NUMBER: S123RDIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1379.4	1534.0	1632.6	1688.7	1715.8	1724.1	1724.6
115°	1256.0	1417.0	1536.4	1618.5	1666.7	1688.7	1694.1
117.5°	1151.8	1296.4	1417.5	1503.2	1558.3	1589.9	1597.3
120°	1094.0	1225.4	1336.1	1422.5	1483.8	1510.1	1516.7
122.5°	1047.5	1169.3	1272.1	1349.0	1404.1	1433.0	1441.3
125°	990.0	1095.0	1182.7	1252.8	1301.0	1328.3	1336.1
127.5°	939.3	1034.2	1113.9	1176.4	1217.5	1242.3	1249.2
130°	907.9	996.6	1071.0	1129.1	1168.5	1191.5	1200.2
132.5°	878.1	960.6	1031.6	1086.1	1125.5	1145.9	1152.1
135°	835.6	906.7	969.1	1022.8	1055.6	1075.3	1083.1
137.5°	794.6	855.9	910.0	955.2	988.4	1005.0	1010.1
140°	770.9	823.5	870.6	912.2	942.9	960.4	959.3
142.5°	748.2	793.7	834.7	870.2	897.3	913.0	912.0
145°	718.4	753.5	785.1	812.6	835.6	844.3	846.5
147.5°	696.3	724.5	747.1	767.9	783.4	791.7	792.6
150°	682.2	705.2	726.0	742.4	754.5	761.1	761.1
152.5°	669.1	689.5	706.8	719.7	730.8	734.8	734.8
155°	650.4	666.9	680.0	689.9	698.7	700.9	701.9
157.5°	632.4	645.0	655.3	663.8	670.4	672.1	671.9
160°	620.9	631.9	639.5	647.2	653.7	653.7	652.7
162.5°	608.7	618.7	625.5	630.6	636.2	636.2	635.2
165°	591.4	599.0	604.5	608.9	613.2	612.2	612.2
167.5°	578.0	582.4	586.4	588.2	591.4	590.2	590.2
170°	568.4	572.7	575.0	576.0	578.2	577.1	577.1
172.5°	560.4	564.0	565.2	565.5	567.7	565.7	564.9
175°	549.7	552.0	552.0	552.0	553.0	552.0	550.8
177.5°	543.6	544.5	544.5	543.6	544.5	542.7	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0

(END OF REPORT)