

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: P332374-830

Luminaire Tested: **S123RDIP-S1165D805U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332374-830  
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-S1165D805U830-4F0-1E-UDD-A4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 805 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7050.3 lumens  
Efficiency: N/A  
Efficacy: 116.1 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-Direct

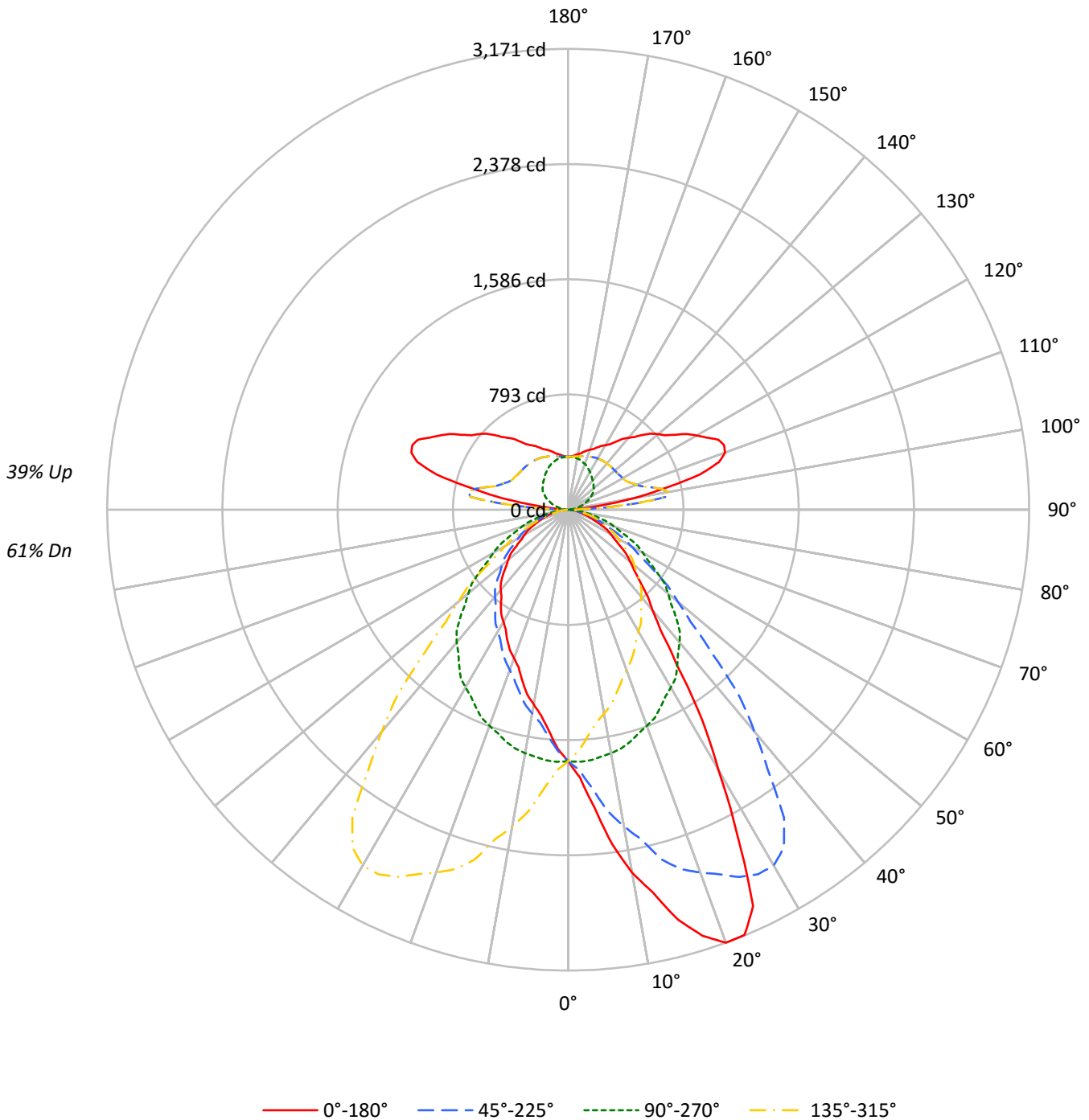
Input Watts (W): 60.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

### Luminous Intensity Polar Plot





TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**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	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61
1	101	97	93	90	94	91	88	85	80	77	75	69	68	66	60	59	57	53
2	93	85	80	75	86	80	75	71	71	67	63	62	59	56	53	51	50	46
3	85	76	69	63	79	71	65	60	63	58	54	55	52	48	48	45	43	39
4	78	68	60	54	73	64	57	52	56	51	47	50	45	42	43	40	38	34
5	72	61	53	47	67	57	50	45	51	45	41	45	40	37	39	36	33	30
6	67	55	47	41	62	52	45	39	46	40	36	41	36	33	36	32	30	27
7	62	50	42	36	58	47	40	35	42	36	32	37	33	29	33	29	27	24
8	57	45	38	32	54	43	36	31	39	33	29	34	30	26	30	27	24	22
9	54	41	34	29	50	39	33	28	35	30	26	32	27	24	28	24	22	20
10	50	38	31	26	47	36	30	25	33	27	23	29	25	22	26	23	20	18

**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: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.2	2.4
10°-20°	531.7	7.5
20°-30°	835.3	11.8
30°-40°	871.4	12.4
40°-50°	745.8	10.6
50°-60°	568.4	8.1
60°-70°	364.3	5.2
70°-80°	175.3	2.5
80°-90°	49.2	0.7
90°-100°	202.6	2.9
100°-110°	573.6	8.1
110°-120°	564.3	8.0
120°-130°	450.1	6.4
130°-140°	354.9	5.0
140°-150°	264.9	3.8
150°-160°	184.6	2.6
160°-170°	108.5	1.5
170°-180°	35.3	0.5
0°-30°	1537.1	21.8
0°-40°	2408.6	34.2
0°-60°	3722.7	52.8
0°-90°	4311.5	61.2
90°-120°	1340.5	19.0
90°-150°	2410.4	34.2
90°-180°	2739.0	38.8
0°-180°	7050.3	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	29
90°	21	2	21	2	21	12
95°	86	25	86	25	86	154
105°	937	86	937	86	937	925
115°	1140	151	1140	151	1140	1108
125°	899	210	899	210	899	815
135°	729	246	729	246	729	565
145°	570	281	570	281	570	362
155°	472	319	472	319	472	220
165°	412	349	412	349	412	118
175°	371	363	371	363	371	36
180°	364	364	364	364	364	



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	10.2	11.5	10.2	10.7	10.8	11.1	10.9	10.8	11.9	11.4	11.5
90°	21.4	22.1	21.4	20.6	21.4	19.9	19.1	18.4	17.7	18.4	16.2
92.5°	35.5	36.9	36.1	38.4	39.7	43.5	49.2	62.0	85.5	113.3	124.7
95°	85.5	88.4	93.6	100.2	114.2	140.7	179.8	265.3	354.5	437.0	389.1
97.5°	232.7	239.0	258.9	292.1	346.5	434.6	529.7	661.3	724.5	677.2	495.8
100°	462.0	461.3	490.0	543.8	618.2	722.9	809.1	868.8	843.0	697.9	471.6
102.5°	677.8	694.7	718.8	761.4	819.3	885.6	935.9	937.7	848.9	659.5	436.2
105°	937.4	941.0	964.6	992.6	1026.5	1045.7	1031.6	958.0	804.0	592.5	392.8
107.5°	1086.8	1093.5	1101.5	1111.0	1110.3	1084.1	1019.5	899.9	725.3	533.2	365.0
110°	1148.1	1149.5	1151.0	1145.1	1124.5	1072.9	980.1	844.5	675.7	499.6	354.5



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1160.5	1160.2	1154.6	1136.3	1098.5	1032.3	928.2	789.7	632.7	477.2	348.6
115°	1140.0	1136.3	1121.5	1089.1	1033.9	953.6	845.2	717.0	580.7	453.2	346.4
117.5°	1074.9	1069.8	1048.6	1011.4	953.9	872.3	775.1	664.4	549.3	439.0	347.7
120°	1020.6	1016.2	998.5	957.2	899.0	824.6	736.1	636.7	532.8	432.5	350.1
122.5°	969.9	964.3	944.8	907.7	856.0	786.8	704.9	614.9	519.2	428.5	354.1
125°	899.0	893.8	875.4	843.0	795.9	736.9	666.2	585.8	501.8	423.0	360.3
127.5°	840.7	835.9	819.3	791.5	749.6	696.0	632.1	560.5	486.5	420.4	367.4
130°	807.7	801.7	786.3	759.8	720.7	670.6	610.9	544.6	478.2	418.6	372.1
132.5°	775.2	771.1	757.4	730.8	694.2	646.4	590.9	529.8	470.6	417.9	375.7
135°	728.8	723.6	710.4	688.2	652.1	610.1	562.2	509.9	460.5	417.1	381.0
137.5°	679.8	676.4	665.2	642.7	612.4	576.0	534.7	491.8	451.9	415.5	384.6
140°	645.5	646.3	634.4	613.9	585.8	554.1	518.8	481.2	446.6	414.9	386.9
142.5°	613.7	614.4	603.8	585.5	561.7	534.1	503.4	471.2	441.9	413.7	388.6
145°	569.6	568.2	562.2	546.8	528.4	507.0	483.4	459.1	435.5	411.9	389.8
147.5°	533.4	532.8	527.2	516.7	502.8	487.6	468.5	449.2	429.3	409.2	389.8
150°	512.2	512.2	507.7	499.6	488.5	474.6	459.1	442.1	425.2	406.8	389.8
152.5°	494.5	494.5	491.8	484.3	475.6	463.9	450.3	435.6	420.5	403.8	388.0
155°	472.3	471.6	470.1	464.2	457.6	448.7	437.7	425.9	413.4	398.7	386.2
157.5°	452.1	452.3	451.1	446.7	440.9	434.0	425.5	415.6	405.5	394.1	383.6
160°	439.2	439.9	439.9	435.5	430.4	425.2	417.8	409.7	400.1	390.6	382.5
162.5°	427.4	428.1	428.1	424.3	420.9	416.3	409.5	402.7	394.8	387.0	380.1
165°	411.9	411.9	412.6	409.7	406.8	403.1	397.9	393.5	387.6	381.7	376.5
167.5°	397.2	397.2	397.9	395.9	394.5	391.9	388.9	385.5	380.7	376.5	373.1
170°	388.3	388.3	389.1	387.6	386.9	385.4	382.5	380.2	376.5	372.9	370.7
172.5°	380.1	380.7	382.0	380.5	380.4	379.5	377.1	375.5	372.4	369.9	368.9
175°	370.7	371.4	372.1	371.4	371.4	371.4	369.9	369.2	367.7	366.3	366.3
177.5°	365.2	365.2	366.4	365.8	366.4	366.4	365.8	365.2	364.6	364.0	364.6
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	12.3	11.2	12.0	11.7	13.2	13.3	16.6	19.2	20.2	18.1	18.5
90°	14.0	11.8	9.6	8.1	6.6	4.4	2.9	1.5	2.9	4.4	6.6
92.5°	93.6	61.9	42.6	31.7	25.5	19.8	13.6	9.1	13.6	19.8	25.5
95°	268.2	158.4	95.8	67.0	47.9	35.3	27.2	25.1	27.2	35.3	47.9
97.5°	294.4	170.5	110.7	79.6	60.7	49.9	43.5	42.7	43.5	49.9	60.7
100°	277.8	168.7	117.2	88.4	70.8	60.4	55.2	54.6	55.2	60.4	70.8
102.5°	263.6	171.1	124.8	98.5	82.6	72.8	68.2	66.9	68.2	72.8	82.6
105°	253.4	177.6	137.8	115.0	100.9	92.1	87.7	85.5	87.7	92.1	100.9
107.5°	252.8	189.6	154.8	133.6	120.4	111.7	107.4	105.2	107.4	111.7	120.4
110°	255.7	199.7	166.5	145.9	133.4	125.3	121.6	119.4	121.6	125.3	133.4





TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	261.6	209.7	178.9	158.9	146.4	138.3	134.6	132.3	134.6	138.3	146.4
115°	271.2	226.2	198.2	178.3	165.8	158.4	154.0	151.1	154.0	158.4	165.8
117.5°	283.9	243.7	216.0	197.7	183.6	176.8	173.1	169.8	173.1	176.8	183.6
120°	293.3	255.0	228.5	210.0	196.0	188.6	184.9	182.8	184.9	188.6	196.0
122.5°	302.1	266.7	240.8	221.2	207.8	199.8	196.1	194.0	196.1	199.8	207.8
125°	316.1	283.7	257.9	238.0	224.0	215.9	211.5	210.0	211.5	215.9	224.0
127.5°	327.6	298.4	273.5	253.6	238.2	229.9	224.4	222.3	224.4	229.9	238.2
130°	335.3	307.3	283.0	263.1	247.6	238.7	232.1	229.9	232.1	238.7	247.6
132.5°	342.3	314.9	291.2	271.9	256.5	245.8	238.7	235.8	238.7	245.8	256.5
135°	351.5	326.4	303.6	283.7	268.2	257.2	249.1	246.1	249.1	257.2	268.2
137.5°	358.3	334.4	312.5	294.0	278.7	266.9	258.9	255.8	258.9	266.9	278.7
140°	361.8	339.7	318.3	299.9	285.2	273.4	266.0	262.3	266.0	273.4	285.2
142.5°	365.3	343.8	323.0	305.9	291.1	280.5	272.5	269.4	272.5	280.5	291.1
145°	369.2	349.3	330.2	313.2	300.7	289.6	283.0	280.8	283.0	289.6	300.7
147.5°	371.6	353.7	336.2	321.7	309.6	300.1	293.6	292.3	293.6	300.1	309.6
150°	372.1	356.7	339.7	326.4	316.1	306.5	300.7	299.9	300.7	306.5	316.1
152.5°	373.3	358.4	343.8	331.1	322.1	313.6	307.7	307.6	307.7	313.6	322.1
155°	373.6	361.8	349.3	338.9	330.8	323.5	319.1	319.1	319.1	323.5	330.8
157.5°	374.4	363.7	353.7	345.7	338.8	332.3	328.8	328.2	328.8	332.3	338.8
160°	374.4	365.5	356.7	349.3	344.1	338.3	335.3	335.3	335.3	338.3	344.1
162.5°	373.7	366.1	358.4	352.2	347.7	343.0	340.6	340.6	340.6	343.0	347.7
165°	372.1	366.9	361.1	355.9	353.0	349.3	347.8	348.6	347.8	349.3	353.0
167.5°	371.0	366.8	362.6	359.3	357.2	354.5	353.7	354.6	353.7	354.5	357.2
170°	369.2	366.3	362.6	361.1	359.6	357.4	356.7	358.2	356.7	357.4	359.6
172.5°	368.6	366.3	363.2	362.2	361.4	359.8	359.6	360.5	359.6	359.8	361.4
175°	366.9	365.5	364.0	363.3	363.3	361.8	362.6	363.3	362.6	361.8	363.3
177.5°	365.8	364.6	364.0	364.0	364.0	363.4	364.0	364.6	364.0	363.4	364.0
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	18.2	20.3	21.3	22.3	23.4	23.3	23.7	23.8	24.6	24.7	25.0
90°	8.1	9.6	11.8	14.0	16.2	18.4	17.7	18.4	19.1	19.9	21.4
92.5°	31.7	42.6	61.9	93.6	124.7	113.3	85.5	62.0	49.2	43.5	39.7
95°	67.0	95.8	158.4	268.2	389.1	437.0	354.5	265.3	179.8	140.7	114.2
97.5°	79.6	110.7	170.5	294.4	495.8	677.2	724.5	661.3	529.7	434.6	346.5
100°	88.4	117.2	168.7	277.8	471.6	697.9	843.0	868.8	809.1	722.9	618.2
102.5°	98.5	124.8	171.1	263.6	436.2	659.5	848.9	937.7	935.9	885.6	819.3
105°	115.0	137.8	177.6	253.4	392.8	592.5	804.0	958.0	1031.6	1045.7	1026.5
107.5°	133.6	154.8	189.6	252.8	365.0	533.2	725.3	899.9	1019.5	1084.1	1110.3
110°	145.9	166.5	199.7	255.7	354.5	499.6	675.7	844.5	980.1	1072.9	1124.5



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	158.9	178.9	209.7	261.6	348.6	477.2	632.7	789.7	928.2	1032.3	1098.5
115°	178.3	198.2	226.2	271.2	346.4	453.2	580.7	717.0	845.2	953.6	1033.9
117.5°	197.7	216.0	243.7	283.9	347.7	439.0	549.3	664.4	775.1	872.3	953.9
120°	210.0	228.5	255.0	293.3	350.1	432.5	532.8	636.7	736.1	824.6	899.0
122.5°	221.2	240.8	266.7	302.1	354.1	428.5	519.2	614.9	704.9	786.8	856.0
125°	238.0	257.9	283.7	316.1	360.3	423.0	501.8	585.8	666.2	736.9	795.9
127.5°	253.6	273.5	298.4	327.6	367.4	420.4	486.5	560.5	632.1	696.0	749.6
130°	263.1	283.0	307.3	335.3	372.1	418.6	478.2	544.6	610.9	670.6	720.7
132.5°	271.9	291.2	314.9	342.3	375.7	417.9	470.6	529.8	590.9	646.4	694.2
135°	283.7	303.6	326.4	351.5	381.0	417.1	460.5	509.9	562.2	610.1	652.1
137.5°	294.0	312.5	334.4	358.3	384.6	415.5	451.9	491.8	534.7	576.0	612.4
140°	299.9	318.3	339.7	361.8	386.9	414.9	446.6	481.2	518.8	554.1	585.8
142.5°	305.9	323.0	343.8	365.3	388.6	413.7	441.9	471.2	503.4	534.1	561.7
145°	313.2	330.2	349.3	369.2	389.8	411.9	435.5	459.1	483.4	507.0	528.4
147.5°	321.7	336.2	353.7	371.6	389.8	409.2	429.3	449.2	468.5	487.6	502.8
150°	326.4	339.7	356.7	372.1	389.8	406.8	425.2	442.1	459.1	474.6	488.5
152.5°	331.1	343.8	358.4	373.3	388.0	403.8	420.5	435.6	450.3	463.9	475.6
155°	338.9	349.3	361.8	373.6	386.2	398.7	413.4	425.9	437.7	448.7	457.6
157.5°	345.7	353.7	363.7	374.4	383.6	394.1	405.5	415.6	425.5	434.0	440.9
160°	349.3	356.7	365.5	374.4	382.5	390.6	400.1	409.7	417.8	425.2	430.4
162.5°	352.2	358.4	366.1	373.7	380.1	387.0	394.8	402.7	409.5	416.3	420.9
165°	355.9	361.1	366.9	372.1	376.5	381.7	387.6	393.5	397.9	403.1	406.8
167.5°	359.3	362.6	366.8	371.0	373.1	376.5	380.7	385.5	388.9	391.9	394.5
170°	361.1	362.6	366.3	369.2	370.7	372.9	376.5	380.2	382.5	385.4	386.9
172.5°	362.2	363.2	366.3	368.6	368.9	369.9	372.4	375.5	377.1	379.5	380.4
175°	363.3	364.0	365.5	366.9	366.3	366.3	367.7	369.2	369.9	371.4	371.4
177.5°	364.0	364.0	364.6	365.8	364.6	364.0	364.6	365.2	365.8	366.4	366.4
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	26.0	25.0	25.2	25.6	25.2	25.0	26.0	25.0	24.7	24.6	23.8
90°	20.6	21.4	22.1	21.4	22.1	21.4	20.6	21.4	19.9	19.1	18.4
92.5°	38.4	36.1	36.9	35.5	36.9	36.1	38.4	39.7	43.5	49.2	62.0
95°	100.2	93.6	88.4	85.5	88.4	93.6	100.2	114.2	140.7	179.8	265.3
97.5°	292.1	258.9	239.0	232.7	239.0	258.9	292.1	346.5	434.6	529.7	661.3
100°	543.8	490.0	461.3	462.0	461.3	490.0	543.8	618.2	722.9	809.1	868.8
102.5°	761.4	718.8	694.7	677.8	694.7	718.8	761.4	819.3	885.6	935.9	937.7
105°	992.6	964.6	941.0	937.4	941.0	964.6	992.6	1026.5	1045.7	1031.6	958.0
107.5°	1111.0	1101.5	1093.5	1086.8	1093.5	1101.5	1111.0	1110.3	1084.1	1019.5	899.9
110°	1145.1	1151.0	1149.5	1148.1	1149.5	1151.0	1145.1	1124.5	1072.9	980.1	844.5



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1136.3	1154.6	1160.2	1160.5	1160.2	1154.6	1136.3	1098.5	1032.3	928.2	789.7
115°	1089.1	1121.5	1136.3	1140.0	1136.3	1121.5	1089.1	1033.9	953.6	845.2	717.0
117.5°	1011.4	1048.6	1069.8	1074.9	1069.8	1048.6	1011.4	953.9	872.3	775.1	664.4
120°	957.2	998.5	1016.2	1020.6	1016.2	998.5	957.2	899.0	824.6	736.1	636.7
122.5°	907.7	944.8	964.3	969.9	964.3	944.8	907.7	856.0	786.8	704.9	614.9
125°	843.0	875.4	893.8	899.0	893.8	875.4	843.0	795.9	736.9	666.2	585.8
127.5°	791.5	819.3	835.9	840.7	835.9	819.3	791.5	749.6	696.0	632.1	560.5
130°	759.8	786.3	801.7	807.7	801.7	786.3	759.8	720.7	670.6	610.9	544.6
132.5°	730.8	757.4	771.1	775.2	771.1	757.4	730.8	694.2	646.4	590.9	529.8
135°	688.2	710.4	723.6	728.8	723.6	710.4	688.2	652.1	610.1	562.2	509.9
137.5°	642.7	665.2	676.4	679.8	676.4	665.2	642.7	612.4	576.0	534.7	491.8
140°	613.9	634.4	646.3	645.5	646.3	634.4	613.9	585.8	554.1	518.8	481.2
142.5°	585.5	603.8	614.4	613.7	614.4	603.8	585.5	561.7	534.1	503.4	471.2
145°	546.8	562.2	568.2	569.6	568.2	562.2	546.8	528.4	507.0	483.4	459.1
147.5°	516.7	527.2	532.8	533.4	532.8	527.2	516.7	502.8	487.6	468.5	449.2
150°	499.6	507.7	512.2	512.2	512.2	507.7	499.6	488.5	474.6	459.1	442.1
152.5°	484.3	491.8	494.5	494.5	494.5	491.8	484.3	475.6	463.9	450.3	435.6
155°	464.2	470.1	471.6	472.3	471.6	470.1	464.2	457.6	448.7	437.7	425.9
157.5°	446.7	451.1	452.3	452.1	452.3	451.1	446.7	440.9	434.0	425.5	415.6
160°	435.5	439.9	439.9	439.2	439.9	439.9	435.5	430.4	425.2	417.8	409.7
162.5°	424.3	428.1	428.1	427.4	428.1	428.1	424.3	420.9	416.3	409.5	402.7
165°	409.7	412.6	411.9	411.9	411.9	412.6	409.7	406.8	403.1	397.9	393.5
167.5°	395.9	397.9	397.2	397.2	397.2	397.9	395.9	394.5	391.9	388.9	385.5
170°	387.6	389.1	388.3	388.3	388.3	389.1	387.6	386.9	385.4	382.5	380.2
172.5°	380.5	382.0	380.7	380.1	380.7	382.0	380.5	380.4	379.5	377.1	375.5
175°	371.4	372.1	371.4	370.7	371.4	372.1	371.4	371.4	371.4	369.9	369.2
177.5°	365.8	366.4	365.2	365.2	365.2	366.4	365.8	366.4	366.4	365.8	365.2
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	23.7	23.3	23.4	22.3	21.3	20.3	18.2	18.5	18.1	20.2	19.2
90°	17.7	18.4	16.2	14.0	11.8	9.6	8.1	6.6	4.4	2.9	1.5
92.5°	85.5	113.3	124.7	93.6	61.9	42.6	31.7	25.5	19.8	13.6	9.1
95°	354.5	437.0	389.1	268.2	158.4	95.8	67.0	47.9	35.3	27.2	25.1
97.5°	724.5	677.2	495.8	294.4	170.5	110.7	79.6	60.7	49.9	43.5	42.7
100°	843.0	697.9	471.6	277.8	168.7	117.2	88.4	70.8	60.4	55.2	54.6
102.5°	848.9	659.5	436.2	263.6	171.1	124.8	98.5	82.6	72.8	68.2	66.9
105°	804.0	592.5	392.8	253.4	177.6	137.8	115.0	100.9	92.1	87.7	85.5
107.5°	725.3	533.2	365.0	252.8	189.6	154.8	133.6	120.4	111.7	107.4	105.2
110°	675.7	499.6	354.5	255.7	199.7	166.5	145.9	133.4	125.3	121.6	119.4



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	632.7	477.2	348.6	261.6	209.7	178.9	158.9	146.4	138.3	134.6	132.3
115°	580.7	453.2	346.4	271.2	226.2	198.2	178.3	165.8	158.4	154.0	151.1
117.5°	549.3	439.0	347.7	283.9	243.7	216.0	197.7	183.6	176.8	173.1	169.8
120°	532.8	432.5	350.1	293.3	255.0	228.5	210.0	196.0	188.6	184.9	182.8
122.5°	519.2	428.5	354.1	302.1	266.7	240.8	221.2	207.8	199.8	196.1	194.0
125°	501.8	423.0	360.3	316.1	283.7	257.9	238.0	224.0	215.9	211.5	210.0
127.5°	486.5	420.4	367.4	327.6	298.4	273.5	253.6	238.2	229.9	224.4	222.3
130°	478.2	418.6	372.1	335.3	307.3	283.0	263.1	247.6	238.7	232.1	229.9
132.5°	470.6	417.9	375.7	342.3	314.9	291.2	271.9	256.5	245.8	238.7	235.8
135°	460.5	417.1	381.0	351.5	326.4	303.6	283.7	268.2	257.2	249.1	246.1
137.5°	451.9	415.5	384.6	358.3	334.4	312.5	294.0	278.7	266.9	258.9	255.8
140°	446.6	414.9	386.9	361.8	339.7	318.3	299.9	285.2	273.4	266.0	262.3
142.5°	441.9	413.7	388.6	365.3	343.8	323.0	305.9	291.1	280.5	272.5	269.4
145°	435.5	411.9	389.8	369.2	349.3	330.2	313.2	300.7	289.6	283.0	280.8
147.5°	429.3	409.2	389.8	371.6	353.7	336.2	321.7	309.6	300.1	293.6	292.3
150°	425.2	406.8	389.8	372.1	356.7	339.7	326.4	316.1	306.5	300.7	299.9
152.5°	420.5	403.8	388.0	373.3	358.4	343.8	331.1	322.1	313.6	307.7	307.6
155°	413.4	398.7	386.2	373.6	361.8	349.3	338.9	330.8	323.5	319.1	319.1
157.5°	405.5	394.1	383.6	374.4	363.7	353.7	345.7	338.8	332.3	328.8	328.2
160°	400.1	390.6	382.5	374.4	365.5	356.7	349.3	344.1	338.3	335.3	335.3
162.5°	394.8	387.0	380.1	373.7	366.1	358.4	352.2	347.7	343.0	340.6	340.6
165°	387.6	381.7	376.5	372.1	366.9	361.1	355.9	353.0	349.3	347.8	348.6
167.5°	380.7	376.5	373.1	371.0	366.8	362.6	359.3	357.2	354.5	353.7	354.6
170°	376.5	372.9	370.7	369.2	366.3	362.6	361.1	359.6	357.4	356.7	358.2
172.5°	372.4	369.9	368.9	368.6	366.3	363.2	362.2	361.4	359.8	359.6	360.5
175°	367.7	366.3	366.3	366.9	365.5	364.0	363.3	363.3	361.8	362.6	363.3
177.5°	364.6	364.0	364.6	365.8	364.6	364.0	364.0	364.0	363.4	364.0	364.6
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	16.6	13.3	13.2	11.7	12.0	11.2	12.3	11.5	11.4	11.9	10.8
90°	2.9	4.4	6.6	8.1	9.6	11.8	14.0	16.2	18.4	17.7	18.4
92.5°	13.6	19.8	25.5	31.7	42.6	61.9	93.6	124.7	113.3	85.5	62.0
95°	27.2	35.3	47.9	67.0	95.8	158.4	268.2	389.1	437.0	354.5	265.3
97.5°	43.5	49.9	60.7	79.6	110.7	170.5	294.4	495.8	677.2	724.5	661.3
100°	55.2	60.4	70.8	88.4	117.2	168.7	277.8	471.6	697.9	843.0	868.8
102.5°	68.2	72.8	82.6	98.5	124.8	171.1	263.6	436.2	659.5	848.9	937.7
105°	87.7	92.1	100.9	115.0	137.8	177.6	253.4	392.8	592.5	804.0	958.0
107.5°	107.4	111.7	120.4	133.6	154.8	189.6	252.8	365.0	533.2	725.3	899.9
110°	121.6	125.3	133.4	145.9	166.5	199.7	255.7	354.5	499.6	675.7	844.5





TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	134.6	138.3	146.4	158.9	178.9	209.7	261.6	348.6	477.2	632.7	789.7
115°	154.0	158.4	165.8	178.3	198.2	226.2	271.2	346.4	453.2	580.7	717.0
117.5°	173.1	176.8	183.6	197.7	216.0	243.7	283.9	347.7	439.0	549.3	664.4
120°	184.9	188.6	196.0	210.0	228.5	255.0	293.3	350.1	432.5	532.8	636.7
122.5°	196.1	199.8	207.8	221.2	240.8	266.7	302.1	354.1	428.5	519.2	614.9
125°	211.5	215.9	224.0	238.0	257.9	283.7	316.1	360.3	423.0	501.8	585.8
127.5°	224.4	229.9	238.2	253.6	273.5	298.4	327.6	367.4	420.4	486.5	560.5
130°	232.1	238.7	247.6	263.1	283.0	307.3	335.3	372.1	418.6	478.2	544.6
132.5°	238.7	245.8	256.5	271.9	291.2	314.9	342.3	375.7	417.9	470.6	529.8
135°	249.1	257.2	268.2	283.7	303.6	326.4	351.5	381.0	417.1	460.5	509.9
137.5°	258.9	266.9	278.7	294.0	312.5	334.4	358.3	384.6	415.5	451.9	491.8
140°	266.0	273.4	285.2	299.9	318.3	339.7	361.8	386.9	414.9	446.6	481.2
142.5°	272.5	280.5	291.1	305.9	323.0	343.8	365.3	388.6	413.7	441.9	471.2
145°	283.0	289.6	300.7	313.2	330.2	349.3	369.2	389.8	411.9	435.5	459.1
147.5°	293.6	300.1	309.6	321.7	336.2	353.7	371.6	389.8	409.2	429.3	449.2
150°	300.7	306.5	316.1	326.4	339.7	356.7	372.1	389.8	406.8	425.2	442.1
152.5°	307.7	313.6	322.1	331.1	343.8	358.4	373.3	388.0	403.8	420.5	435.6
155°	319.1	323.5	330.8	338.9	349.3	361.8	373.6	386.2	398.7	413.4	425.9
157.5°	328.8	332.3	338.8	345.7	353.7	363.7	374.4	383.6	394.1	405.5	415.6
160°	335.3	338.3	344.1	349.3	356.7	365.5	374.4	382.5	390.6	400.1	409.7
162.5°	340.6	343.0	347.7	352.2	358.4	366.1	373.7	380.1	387.0	394.8	402.7
165°	347.8	349.3	353.0	355.9	361.1	366.9	372.1	376.5	381.7	387.6	393.5
167.5°	353.7	354.5	357.2	359.3	362.6	366.8	371.0	373.1	376.5	380.7	385.5
170°	356.7	357.4	359.6	361.1	362.6	366.3	369.2	370.7	372.9	376.5	380.2
172.5°	359.6	359.8	361.4	362.2	363.2	366.3	368.6	368.9	369.9	372.4	375.5
175°	362.6	361.8	363.3	363.3	364.0	365.5	366.9	366.3	366.3	367.7	369.2
177.5°	364.0	363.4	364.0	364.0	364.0	364.6	365.8	364.6	364.0	364.6	365.2
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0	364.0



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-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°	10.9	11.1	10.8	10.7	10.2	11.5	10.2
90°	19.1	19.9	21.4	20.6	21.4	22.1	21.4
92.5°	49.2	43.5	39.7	38.4	36.1	36.9	35.5
95°	179.8	140.7	114.2	100.2	93.6	88.4	85.5
97.5°	529.7	434.6	346.5	292.1	258.9	239.0	232.7
100°	809.1	722.9	618.2	543.8	490.0	461.3	462.0
102.5°	935.9	885.6	819.3	761.4	718.8	694.7	677.8
105°	1031.6	1045.7	1026.5	992.6	964.6	941.0	937.4
107.5°	1019.5	1084.1	1110.3	1111.0	1101.5	1093.5	1086.8
110°	980.1	1072.9	1124.5	1145.1	1151.0	1149.5	1148.1



TEST NUMBER: P332374-830

CATALOG NUMBER: S123RDIP-S1165D805U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	928.2	1032.3	1098.5	1136.3	1154.6	1160.2	1160.5
115°	845.2	953.6	1033.9	1089.1	1121.5	1136.3	1140.0
117.5°	775.1	872.3	953.9	1011.4	1048.6	1069.8	1074.9
120°	736.1	824.6	899.0	957.2	998.5	1016.2	1020.6
122.5°	704.9	786.8	856.0	907.7	944.8	964.3	969.9
125°	666.2	736.9	795.9	843.0	875.4	893.8	899.0
127.5°	632.1	696.0	749.6	791.5	819.3	835.9	840.7
130°	610.9	670.6	720.7	759.8	786.3	801.7	807.7
132.5°	590.9	646.4	694.2	730.8	757.4	771.1	775.2
135°	562.2	610.1	652.1	688.2	710.4	723.6	728.8
137.5°	534.7	576.0	612.4	642.7	665.2	676.4	679.8
140°	518.8	554.1	585.8	613.9	634.4	646.3	645.5
142.5°	503.4	534.1	561.7	585.5	603.8	614.4	613.7
145°	483.4	507.0	528.4	546.8	562.2	568.2	569.6
147.5°	468.5	487.6	502.8	516.7	527.2	532.8	533.4
150°	459.1	474.6	488.5	499.6	507.7	512.2	512.2
152.5°	450.3	463.9	475.6	484.3	491.8	494.5	494.5
155°	437.7	448.7	457.6	464.2	470.1	471.6	472.3
157.5°	425.5	434.0	440.9	446.7	451.1	452.3	452.1
160°	417.8	425.2	430.4	435.5	439.9	439.9	439.2
162.5°	409.5	416.3	420.9	424.3	428.1	428.1	427.4
165°	397.9	403.1	406.8	409.7	412.6	411.9	411.9
167.5°	388.9	391.9	394.5	395.9	397.9	397.2	397.2
170°	382.5	385.4	386.9	387.6	389.1	388.3	388.3
172.5°	377.1	379.5	380.4	380.5	382.0	380.7	380.1
175°	369.9	371.4	371.4	371.4	372.1	371.4	370.7
177.5°	365.8	366.4	366.4	365.8	366.4	365.2	365.2
180°	364.0	364.0	364.0	364.0	364.0	364.0	364.0

(END OF REPORT)