

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: P332360-830

Luminaire Tested: **S123RDIP-S1165D365U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332360-830
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: S123RDIP-S1165D365U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5677.1 lumens
Efficiency: N/A
Efficacy: 114.0 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

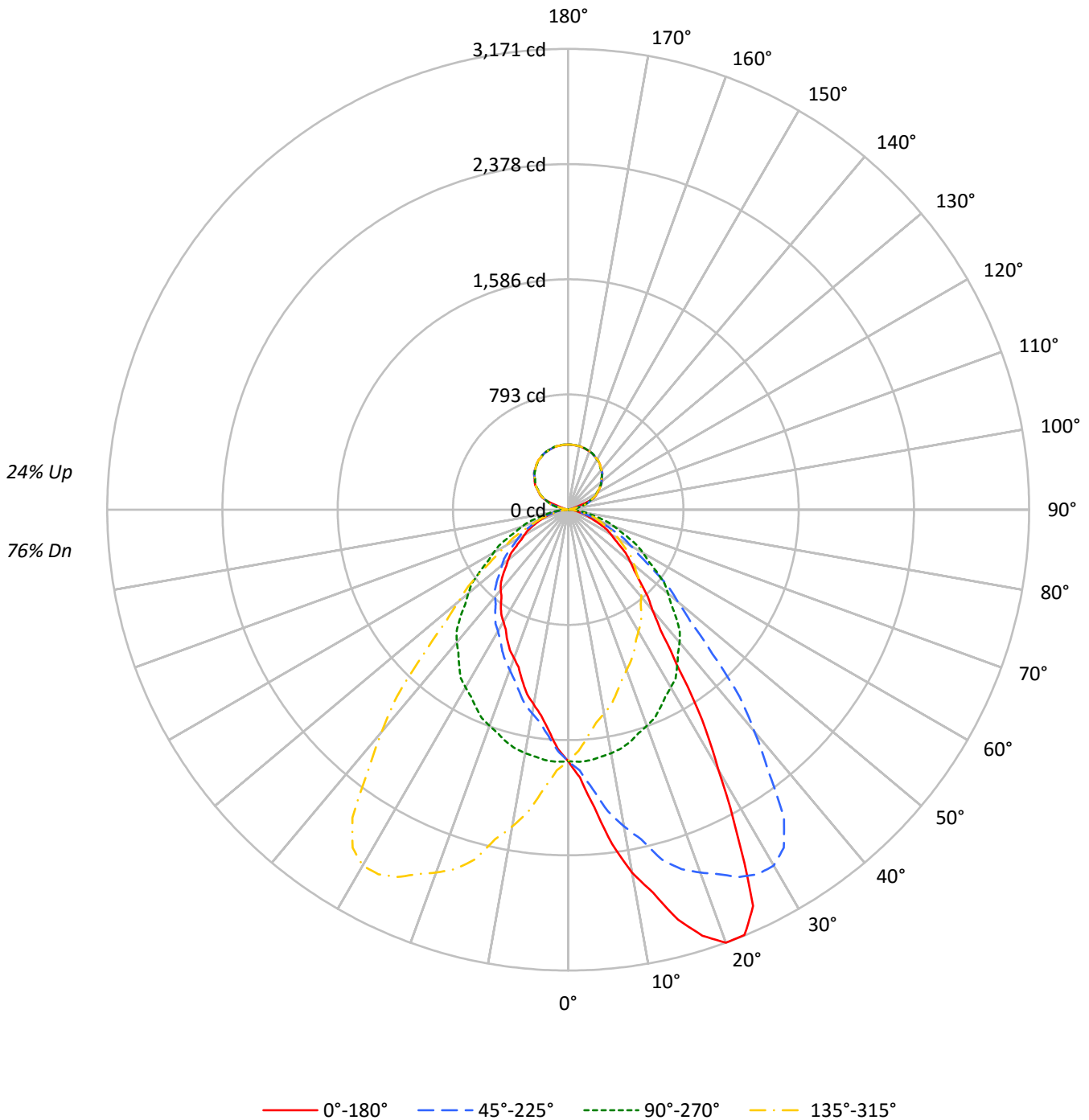
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	104	100	97	93	99	96	92	90	87	85	82	79	77	76	72	71	69	66
2	96	89	83	78	91	85	79	75	78	73	70	71	67	65	65	62	60	57
3	88	79	72	66	84	75	69	64	69	64	60	63	59	56	58	55	52	49
4	81	70	63	57	77	68	60	55	62	56	52	57	52	49	52	49	45	43
5	75	63	55	49	71	61	53	48	56	50	45	52	47	43	48	43	40	38
6	69	57	49	43	66	55	48	42	51	45	40	47	42	38	44	39	36	33
7	64	52	44	39	61	50	43	38	47	40	36	43	38	34	40	36	32	30
8	60	48	40	35	57	46	39	34	43	37	32	40	34	31	37	32	29	27
9	56	44	36	31	54	42	35	30	39	33	29	37	31	28	34	30	26	24
10	53	40	33	28	50	39	32	28	37	31	26	34	29	25	32	27	24	22

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: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	3.0
10°-20°	531.7	9.4
20°-30°	835.3	14.7
30°-40°	871.4	15.4
40°-50°	745.8	13.1
50°-60°	568.4	10.0
60°-70°	364.3	6.4
70°-80°	175.3	3.1
80°-90°	47.6	0.8
90°-100°	16.3	0.3
100°-110°	77.7	1.4
110°-120°	186.6	3.3
120°-130°	237.6	4.2
130°-140°	253.9	4.5
140°-150°	237.4	4.2
150°-160°	191.5	3.4
160°-170°	123.6	2.2
170°-180°	42.6	0.8
0°-30°	1537.1	27.1
0°-40°	2408.6	42.4
0°-60°	3722.7	65.6
0°-90°	4310.0	75.9
90°-120°	280.6	4.9
90°-150°	1009.4	17.8
90°-180°	1367.0	24.1
0°-180°	5677.1	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°	10	0	10	0	10	5
95°	13	20	13	20	13	11
105°	15	99	15	99	15	33
115°	196	186	196	186	196	181
125°	268	262	268	262	268	239
135°	330	327	330	327	330	255
145°	381	377	381	377	381	238
155°	415	415	415	415	415	191
165°	437	438	437	438	437	123
175°	447	448	447	448	447	43
180°	448	448	448	448	448	



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	7.9	9.0	7.8	8.4	8.4	9.0	8.9	8.9	10.0	9.3	9.7
90°	10.0	9.8	9.7	9.5	9.4	9.1	8.9	8.6	8.3	8.0	7.1
92.5°	11.0	10.9	10.8	10.7	10.7	10.5	10.0	9.5	9.0	8.5	7.8
95°	12.6	12.6	12.6	12.6	12.6	12.4	11.9	11.4	10.8	10.4	9.5
97.5°	13.8	13.7	13.6	13.5	13.4	13.1	12.5	11.9	11.3	10.7	16.0
100°	13.9	13.9	13.9	13.8	13.7	13.4	12.7	12.2	11.6	11.0	22.5
102.5°	14.2	14.1	13.9	13.9	13.8	14.6	16.4	18.3	20.1	22.0	34.5
105°	14.6	14.5	14.3	14.2	14.0	20.5	33.6	46.8	59.9	73.0	79.6
107.5°	46.0	55.9	65.8	75.7	85.5	95.3	104.9	114.5	124.0	133.7	132.6
110°	91.6	102.2	112.7	123.4	133.9	140.4	142.9	145.3	147.8	150.2	149.4



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.1	159.4	161.6	163.8	166.1	167.2	167.1	167.1	167.0	167.0	166.2
115°	195.9	195.6	195.3	194.9	194.6	194.2	193.4	192.7	191.9	191.1	190.5
117.5°	217.5	217.5	217.4	217.4	217.4	217.0	216.4	215.8	215.2	214.6	214.3
120°	232.5	232.5	232.5	232.5	232.5	232.1	231.6	231.0	230.5	229.8	229.6
122.5°	247.1	247.0	247.0	246.9	246.9	246.7	246.3	245.8	245.4	245.0	244.7
125°	267.8	267.7	267.5	267.3	267.2	267.0	266.9	266.7	266.6	266.5	266.2
127.5°	287.7	287.8	287.9	288.0	288.2	288.2	287.9	287.7	287.5	287.2	286.9
130°	300.4	300.6	300.8	300.9	301.0	301.0	300.7	300.4	300.0	299.7	299.4
132.5°	312.2	312.4	312.5	312.7	313.0	312.9	312.6	312.4	312.1	311.8	311.5
135°	330.1	330.3	330.5	330.7	330.9	330.9	330.7	330.5	330.3	330.1	329.8
137.5°	346.9	347.0	347.2	347.3	347.5	347.4	347.0	346.7	346.4	346.0	345.8
140°	357.0	357.2	357.3	357.5	357.6	357.6	357.2	356.9	356.7	356.4	356.2
142.5°	366.4	366.6	366.7	367.0	367.2	367.2	366.9	366.7	366.5	366.3	366.0
145°	380.7	380.7	380.7	380.7	380.7	380.6	380.5	380.3	380.2	380.0	379.8
147.5°	391.3	391.7	392.0	392.4	392.8	392.9	392.7	392.5	392.4	392.2	392.1
150°	399.4	399.5	399.8	400.0	400.2	400.3	400.1	400.0	399.8	399.6	399.5
152.5°	405.8	406.0	406.4	406.8	407.1	407.2	406.9	406.6	406.3	406.0	406.0
155°	414.6	415.1	415.6	416.0	416.4	416.5	416.1	415.8	415.4	415.0	414.9
157.5°	422.2	422.7	423.4	424.0	424.5	424.6	424.1	423.7	423.2	422.8	422.8
160°	427.0	427.5	428.0	428.6	429.0	429.1	428.7	428.2	427.7	427.3	427.4
162.5°	431.5	432.0	432.4	432.9	433.4	433.3	432.8	432.3	431.8	431.3	431.4
165°	437.0	437.5	438.0	438.6	439.0	439.0	438.5	437.8	437.2	436.7	436.7
167.5°	440.9	441.5	442.1	442.7	443.3	443.3	442.7	442.1	441.5	440.9	440.9
170°	443.3	443.9	444.5	445.1	445.6	445.6	445.1	444.5	443.9	443.3	443.3
172.5°	444.6	445.3	445.9	446.6	447.2	447.2	446.7	446.1	445.5	444.9	444.9
175°	446.7	447.2	447.8	448.5	449.0	449.0	448.6	448.0	447.5	447.0	446.9
177.5°	447.2	447.8	448.5	449.0	449.6	449.7	449.2	448.7	448.3	447.8	447.7
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	10.7	9.9	10.9	10.7	12.3	12.8	16.2	19.0	19.8	17.5	17.7
90°	6.0	5.1	4.1	3.3	2.5	1.8	1.0	0.4	1.0	1.8	2.5
92.5°	7.1	6.3	5.7	5.4	5.6	5.7	6.0	6.2	6.0	5.7	5.6
95°	8.7	7.9	7.1	8.2	11.2	14.2	17.2	20.4	17.2	14.2	11.2
97.5°	21.4	26.7	32.0	35.3	36.8	38.1	39.5	40.8	39.5	38.1	36.8
100°	34.1	45.6	57.2	62.2	60.7	59.3	57.8	56.3	57.8	59.3	60.7
102.5°	47.1	59.8	72.4	78.1	77.1	76.0	74.9	73.9	74.9	76.0	77.1
105°	86.2	92.9	99.6	102.5	101.7	100.9	100.1	99.2	100.1	100.9	101.7
107.5°	131.6	130.5	129.5	128.7	128.0	127.3	126.7	126.0	126.7	127.3	128.0
110°	148.5	147.8	146.9	146.3	145.6	145.1	144.5	143.9	144.5	145.1	145.6



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	165.4	164.6	163.7	163.1	162.5	162.0	161.5	160.9	161.5	162.0	162.5
115°	189.8	189.2	188.5	187.9	187.5	187.1	186.6	186.2	186.6	187.1	187.5
117.5°	214.0	213.6	213.3	212.8	212.3	211.7	211.2	210.7	211.2	211.7	212.3
120°	229.4	229.1	228.9	228.5	227.8	227.2	226.5	225.8	226.5	227.2	227.8
122.5°	244.4	244.1	243.8	243.5	242.9	242.3	241.9	241.3	241.9	242.3	242.9
125°	265.9	265.6	265.2	264.9	264.2	263.6	263.1	262.5	263.1	263.6	264.2
127.5°	286.5	286.2	285.8	285.3	284.7	284.2	283.6	283.0	283.6	284.2	284.7
130°	299.2	298.9	298.6	298.1	297.6	296.9	296.3	295.8	296.3	296.9	297.6
132.5°	311.3	311.0	310.8	310.4	309.8	309.2	308.6	308.0	308.6	309.2	309.8
135°	329.5	329.1	328.9	328.5	328.1	327.6	327.2	326.8	327.2	327.6	328.1
137.5°	345.6	345.5	345.3	345.0	344.4	343.8	343.3	342.7	343.3	343.8	344.4
140°	355.9	355.7	355.5	355.2	354.7	354.3	353.8	353.4	353.8	354.3	354.7
142.5°	365.8	365.6	365.3	365.0	364.6	364.1	363.7	363.3	363.7	364.1	364.6
145°	379.8	379.6	379.5	379.1	378.6	378.1	377.6	377.0	377.6	378.1	378.6
147.5°	391.9	391.8	391.6	391.3	391.1	390.7	390.4	390.0	390.4	390.7	391.1
150°	399.4	399.3	399.1	398.9	398.7	398.4	398.2	398.0	398.2	398.4	398.7
152.5°	405.9	405.8	405.8	405.6	405.5	405.4	405.3	405.2	405.3	405.4	405.5
155°	414.8	414.8	414.7	414.7	414.9	415.0	415.2	415.4	415.2	415.0	414.9
157.5°	422.9	423.0	423.1	423.1	423.1	423.2	423.2	423.2	423.2	423.2	423.1
160°	427.4	427.5	427.6	427.7	427.7	427.8	427.9	428.0	427.9	427.8	427.7
162.5°	431.5	431.5	431.6	431.8	432.0	432.2	432.3	432.5	432.3	432.2	432.0
165°	436.8	436.9	437.0	437.1	437.3	437.5	437.7	438.0	437.7	437.5	437.3
167.5°	440.9	440.9	440.9	441.0	441.4	441.7	442.0	442.2	442.0	441.7	441.4
170°	443.3	443.3	443.3	443.5	443.7	444.0	444.3	444.6	444.3	444.0	443.7
172.5°	444.8	444.7	444.7	444.8	445.2	445.5	445.9	446.2	445.9	445.5	445.2
175°	446.9	446.8	446.7	446.9	447.2	447.5	447.9	448.3	447.9	447.5	447.2
177.5°	447.6	447.6	447.5	447.6	448.0	448.3	448.6	448.8	448.6	448.3	448.0
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	17.2	19.2	20.0	20.7	21.6	21.1	21.8	21.9	22.5	22.6	22.6
90°	3.3	4.1	5.1	6.0	7.1	8.0	8.3	8.6	8.9	9.1	9.4
92.5°	5.4	5.7	6.3	7.1	7.8	8.5	9.0	9.5	10.0	10.5	10.7
95°	8.2	7.1	7.9	8.7	9.5	10.4	10.8	11.4	11.9	12.4	12.6
97.5°	35.3	32.0	26.7	21.4	16.0	10.7	11.3	11.9	12.5	13.1	13.4
100°	62.2	57.2	45.6	34.1	22.5	11.0	11.6	12.2	12.7	13.4	13.7
102.5°	78.1	72.4	59.8	47.1	34.5	22.0	20.1	18.3	16.4	14.6	13.8
105°	102.5	99.6	92.9	86.2	79.6	73.0	59.9	46.8	33.6	20.5	14.0
107.5°	128.7	129.5	130.5	131.6	132.6	133.7	124.0	114.5	104.9	95.3	85.5
110°	146.3	146.9	147.8	148.5	149.4	150.2	147.8	145.3	142.9	140.4	133.9



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	163.1	163.7	164.6	165.4	166.2	167.0	167.0	167.1	167.1	167.2	166.1
115°	187.9	188.5	189.2	189.8	190.5	191.1	191.9	192.7	193.4	194.2	194.6
117.5°	212.8	213.3	213.6	214.0	214.3	214.6	215.2	215.8	216.4	217.0	217.4
120°	228.5	228.9	229.1	229.4	229.6	229.8	230.5	231.0	231.6	232.1	232.5
122.5°	243.5	243.8	244.1	244.4	244.7	245.0	245.4	245.8	246.3	246.7	246.9
125°	264.9	265.2	265.6	265.9	266.2	266.5	266.6	266.7	266.9	267.0	267.2
127.5°	285.3	285.8	286.2	286.5	286.9	287.2	287.5	287.7	287.9	288.2	288.2
130°	298.1	298.6	298.9	299.2	299.4	299.7	300.0	300.4	300.7	301.0	301.0
132.5°	310.4	310.8	311.0	311.3	311.5	311.8	312.1	312.4	312.6	312.9	313.0
135°	328.5	328.9	329.1	329.5	329.8	330.1	330.3	330.5	330.7	330.9	330.9
137.5°	345.0	345.3	345.5	345.6	345.8	346.0	346.4	346.7	347.0	347.4	347.5
140°	355.2	355.5	355.7	355.9	356.2	356.4	356.7	356.9	357.2	357.6	357.6
142.5°	365.0	365.3	365.6	365.8	366.0	366.3	366.5	366.7	366.9	367.2	367.2
145°	379.1	379.5	379.6	379.8	379.8	380.0	380.2	380.3	380.5	380.6	380.7
147.5°	391.3	391.6	391.8	391.9	392.1	392.2	392.4	392.5	392.7	392.9	392.8
150°	398.9	399.1	399.3	399.4	399.5	399.6	399.8	400.0	400.1	400.3	400.2
152.5°	405.6	405.8	405.8	405.9	406.0	406.0	406.3	406.6	406.9	407.2	407.1
155°	414.7	414.7	414.8	414.8	414.9	415.0	415.4	415.8	416.1	416.5	416.4
157.5°	423.1	423.1	423.0	422.9	422.8	422.8	423.2	423.7	424.1	424.6	424.5
160°	427.7	427.6	427.5	427.4	427.4	427.3	427.7	428.2	428.7	429.1	429.0
162.5°	431.8	431.6	431.5	431.5	431.4	431.3	431.8	432.3	432.8	433.3	433.4
165°	437.1	437.0	436.9	436.8	436.7	436.7	437.2	437.8	438.5	439.0	439.0
167.5°	441.0	440.9	440.9	440.9	440.9	440.9	441.5	442.1	442.7	443.3	443.3
170°	443.5	443.3	443.3	443.3	443.3	443.3	443.9	444.5	445.1	445.6	445.6
172.5°	444.8	444.7	444.7	444.8	444.9	444.9	445.5	446.1	446.7	447.2	447.2
175°	446.9	446.7	446.8	446.9	446.9	447.0	447.5	448.0	448.6	449.0	449.0
177.5°	447.6	447.5	447.6	447.6	447.7	447.8	448.3	448.7	449.2	449.7	449.6
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	23.8	22.7	22.7	23.4	22.7	22.7	23.8	22.6	22.6	22.5	21.9
90°	9.5	9.7	9.8	10.0	9.8	9.7	9.5	9.4	9.1	8.9	8.6
92.5°	10.7	10.8	10.9	11.0	10.9	10.8	10.7	10.7	10.5	10.0	9.5
95°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.4	11.9	11.4
97.5°	13.5	13.6	13.7	13.8	13.7	13.6	13.5	13.4	13.1	12.5	11.9
100°	13.8	13.9	13.9	13.9	13.9	13.9	13.8	13.7	13.4	12.7	12.2
102.5°	13.9	13.9	14.1	14.2	14.1	13.9	13.9	13.8	14.6	16.4	18.3
105°	14.2	14.3	14.5	14.6	14.5	14.3	14.2	14.0	20.5	33.6	46.8
107.5°	75.7	65.8	55.9	46.0	55.9	65.8	75.7	85.5	95.3	104.9	114.5
110°	123.4	112.7	102.2	91.6	102.2	112.7	123.4	133.9	140.4	142.9	145.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	163.8	161.6	159.4	157.1	159.4	161.6	163.8	166.1	167.2	167.1	167.1
115°	194.9	195.3	195.6	195.9	195.6	195.3	194.9	194.6	194.2	193.4	192.7
117.5°	217.4	217.4	217.5	217.5	217.5	217.4	217.4	217.4	217.0	216.4	215.8
120°	232.5	232.5	232.5	232.5	232.5	232.5	232.5	232.5	232.1	231.6	231.0
122.5°	246.9	247.0	247.0	247.1	247.0	247.0	246.9	246.9	246.7	246.3	245.8
125°	267.3	267.5	267.7	267.8	267.7	267.5	267.3	267.2	267.0	266.9	266.7
127.5°	288.0	287.9	287.8	287.7	287.8	287.9	288.0	288.2	288.2	287.9	287.7
130°	300.9	300.8	300.6	300.4	300.6	300.8	300.9	301.0	301.0	300.7	300.4
132.5°	312.7	312.5	312.4	312.2	312.4	312.5	312.7	313.0	312.9	312.6	312.4
135°	330.7	330.5	330.3	330.1	330.3	330.5	330.7	330.9	330.9	330.7	330.5
137.5°	347.3	347.2	347.0	346.9	347.0	347.2	347.3	347.5	347.4	347.0	346.7
140°	357.5	357.3	357.2	357.0	357.2	357.3	357.5	357.6	357.6	357.2	356.9
142.5°	367.0	366.7	366.6	366.4	366.6	366.7	367.0	367.2	367.2	366.9	366.7
145°	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.7	380.6	380.5	380.3
147.5°	392.4	392.0	391.7	391.3	391.7	392.0	392.4	392.8	392.9	392.7	392.5
150°	400.0	399.8	399.5	399.4	399.5	399.8	400.0	400.2	400.3	400.1	400.0
152.5°	406.8	406.4	406.0	405.8	406.0	406.4	406.8	407.1	407.2	406.9	406.6
155°	416.0	415.6	415.1	414.6	415.1	415.6	416.0	416.4	416.5	416.1	415.8
157.5°	424.0	423.4	422.7	422.2	422.7	423.4	424.0	424.5	424.6	424.1	423.7
160°	428.6	428.0	427.5	427.0	427.5	428.0	428.6	429.0	429.1	428.7	428.2
162.5°	432.9	432.4	432.0	431.5	432.0	432.4	432.9	433.4	433.3	432.8	432.3
165°	438.6	438.0	437.5	437.0	437.5	438.0	438.6	439.0	439.0	438.5	437.8
167.5°	442.7	442.1	441.5	440.9	441.5	442.1	442.7	443.3	443.3	442.7	442.1
170°	445.1	444.5	443.9	443.3	443.9	444.5	445.1	445.6	445.6	445.1	444.5
172.5°	446.6	445.9	445.3	444.6	445.3	445.9	446.6	447.2	447.2	446.7	446.1
175°	448.5	447.8	447.2	446.7	447.2	447.8	448.5	449.0	449.0	448.6	448.0
177.5°	449.0	448.5	447.8	447.2	447.8	448.5	449.0	449.6	449.7	449.2	448.7
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	21.8	21.1	21.6	20.7	20.0	19.2	17.2	17.7	17.5	19.8	19.0
90°	8.3	8.0	7.1	6.0	5.1	4.1	3.3	2.5	1.8	1.0	0.4
92.5°	9.0	8.5	7.8	7.1	6.3	5.7	5.4	5.6	5.7	6.0	6.2
95°	10.8	10.4	9.5	8.7	7.9	7.1	8.2	11.2	14.2	17.2	20.4
97.5°	11.3	10.7	16.0	21.4	26.7	32.0	35.3	36.8	38.1	39.5	40.8
100°	11.6	11.0	22.5	34.1	45.6	57.2	62.2	60.7	59.3	57.8	56.3
102.5°	20.1	22.0	34.5	47.1	59.8	72.4	78.1	77.1	76.0	74.9	73.9
105°	59.9	73.0	79.6	86.2	92.9	99.6	102.5	101.7	100.9	100.1	99.2
107.5°	124.0	133.7	132.6	131.6	130.5	129.5	128.7	128.0	127.3	126.7	126.0
110°	147.8	150.2	149.4	148.5	147.8	146.9	146.3	145.6	145.1	144.5	143.9



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	167.0	167.0	166.2	165.4	164.6	163.7	163.1	162.5	162.0	161.5	160.9
115°	191.9	191.1	190.5	189.8	189.2	188.5	187.9	187.5	187.1	186.6	186.2
117.5°	215.2	214.6	214.3	214.0	213.6	213.3	212.8	212.3	211.7	211.2	210.7
120°	230.5	229.8	229.6	229.4	229.1	228.9	228.5	227.8	227.2	226.5	225.8
122.5°	245.4	245.0	244.7	244.4	244.1	243.8	243.5	242.9	242.3	241.9	241.3
125°	266.6	266.5	266.2	265.9	265.6	265.2	264.9	264.2	263.6	263.1	262.5
127.5°	287.5	287.2	286.9	286.5	286.2	285.8	285.3	284.7	284.2	283.6	283.0
130°	300.0	299.7	299.4	299.2	298.9	298.6	298.1	297.6	296.9	296.3	295.8
132.5°	312.1	311.8	311.5	311.3	311.0	310.8	310.4	309.8	309.2	308.6	308.0
135°	330.3	330.1	329.8	329.5	329.1	328.9	328.5	328.1	327.6	327.2	326.8
137.5°	346.4	346.0	345.8	345.6	345.5	345.3	345.0	344.4	343.8	343.3	342.7
140°	356.7	356.4	356.2	355.9	355.7	355.5	355.2	354.7	354.3	353.8	353.4
142.5°	366.5	366.3	366.0	365.8	365.6	365.3	365.0	364.6	364.1	363.7	363.3
145°	380.2	380.0	379.8	379.8	379.6	379.5	379.1	378.6	378.1	377.6	377.0
147.5°	392.4	392.2	392.1	391.9	391.8	391.6	391.3	391.1	390.7	390.4	390.0
150°	399.8	399.6	399.5	399.4	399.3	399.1	398.9	398.7	398.4	398.2	398.0
152.5°	406.3	406.0	406.0	405.9	405.8	405.8	405.6	405.5	405.4	405.3	405.2
155°	415.4	415.0	414.9	414.8	414.8	414.7	414.7	414.9	415.0	415.2	415.4
157.5°	423.2	422.8	422.8	422.9	423.0	423.1	423.1	423.1	423.2	423.2	423.2
160°	427.7	427.3	427.4	427.4	427.5	427.6	427.7	427.7	427.8	427.9	428.0
162.5°	431.8	431.3	431.4	431.5	431.5	431.6	431.8	432.0	432.2	432.3	432.5
165°	437.2	436.7	436.7	436.8	436.9	437.0	437.1	437.3	437.5	437.7	438.0
167.5°	441.5	440.9	440.9	440.9	440.9	440.9	441.0	441.4	441.7	442.0	442.2
170°	443.9	443.3	443.3	443.3	443.3	443.3	443.5	443.7	444.0	444.3	444.6
172.5°	445.5	444.9	444.9	444.8	444.7	444.7	444.8	445.2	445.5	445.9	446.2
175°	447.5	447.0	446.9	446.9	446.8	446.7	446.9	447.2	447.5	447.9	448.3
177.5°	448.3	447.8	447.7	447.6	447.6	447.5	447.6	448.0	448.3	448.6	448.8
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	16.2	12.8	12.3	10.7	10.9	9.9	10.7	9.7	9.3	10.0	8.9
90°	1.0	1.8	2.5	3.3	4.1	5.1	6.0	7.1	8.0	8.3	8.6
92.5°	6.0	5.7	5.6	5.4	5.7	6.3	7.1	7.8	8.5	9.0	9.5
95°	17.2	14.2	11.2	8.2	7.1	7.9	8.7	9.5	10.4	10.8	11.4
97.5°	39.5	38.1	36.8	35.3	32.0	26.7	21.4	16.0	10.7	11.3	11.9
100°	57.8	59.3	60.7	62.2	57.2	45.6	34.1	22.5	11.0	11.6	12.2
102.5°	74.9	76.0	77.1	78.1	72.4	59.8	47.1	34.5	22.0	20.1	18.3
105°	100.1	100.9	101.7	102.5	99.6	92.9	86.2	79.6	73.0	59.9	46.8
107.5°	126.7	127.3	128.0	128.7	129.5	130.5	131.6	132.6	133.7	124.0	114.5
110°	144.5	145.1	145.6	146.3	146.9	147.8	148.5	149.4	150.2	147.8	145.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	161.5	162.0	162.5	163.1	163.7	164.6	165.4	166.2	167.0	167.0	167.1
115°	186.6	187.1	187.5	187.9	188.5	189.2	189.8	190.5	191.1	191.9	192.7
117.5°	211.2	211.7	212.3	212.8	213.3	213.6	214.0	214.3	214.6	215.2	215.8
120°	226.5	227.2	227.8	228.5	228.9	229.1	229.4	229.6	229.8	230.5	231.0
122.5°	241.9	242.3	242.9	243.5	243.8	244.1	244.4	244.7	245.0	245.4	245.8
125°	263.1	263.6	264.2	264.9	265.2	265.6	265.9	266.2	266.5	266.6	266.7
127.5°	283.6	284.2	284.7	285.3	285.8	286.2	286.5	286.9	287.2	287.5	287.7
130°	296.3	296.9	297.6	298.1	298.6	298.9	299.2	299.4	299.7	300.0	300.4
132.5°	308.6	309.2	309.8	310.4	310.8	311.0	311.3	311.5	311.8	312.1	312.4
135°	327.2	327.6	328.1	328.5	328.9	329.1	329.5	329.8	330.1	330.3	330.5
137.5°	343.3	343.8	344.4	345.0	345.3	345.5	345.6	345.8	346.0	346.4	346.7
140°	353.8	354.3	354.7	355.2	355.5	355.7	355.9	356.2	356.4	356.7	356.9
142.5°	363.7	364.1	364.6	365.0	365.3	365.6	365.8	366.0	366.3	366.5	366.7
145°	377.6	378.1	378.6	379.1	379.5	379.6	379.8	379.8	380.0	380.2	380.3
147.5°	390.4	390.7	391.1	391.3	391.6	391.8	391.9	392.1	392.2	392.4	392.5
150°	398.2	398.4	398.7	398.9	399.1	399.3	399.4	399.5	399.6	399.8	400.0
152.5°	405.3	405.4	405.5	405.6	405.8	405.8	405.9	406.0	406.0	406.3	406.6
155°	415.2	415.0	414.9	414.7	414.7	414.8	414.8	414.9	415.0	415.4	415.8
157.5°	423.2	423.2	423.1	423.1	423.1	423.0	422.9	422.8	422.8	423.2	423.7
160°	427.9	427.8	427.7	427.7	427.6	427.5	427.4	427.4	427.3	427.7	428.2
162.5°	432.3	432.2	432.0	431.8	431.6	431.5	431.5	431.4	431.3	431.8	432.3
165°	437.7	437.5	437.3	437.1	437.0	436.9	436.8	436.7	436.7	437.2	437.8
167.5°	442.0	441.7	441.4	441.0	440.9	440.9	440.9	440.9	440.9	441.5	442.1
170°	444.3	444.0	443.7	443.5	443.3	443.3	443.3	443.3	443.3	443.9	444.5
172.5°	445.9	445.5	445.2	444.8	444.7	444.7	444.8	444.9	444.9	445.5	446.1
175°	447.9	447.5	447.2	446.9	446.7	446.8	446.9	446.9	447.0	447.5	448.0
177.5°	448.6	448.3	448.0	447.6	447.5	447.6	447.6	447.7	447.8	448.3	448.7
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

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°	8.9	9.0	8.4	8.4	7.8	9.0	7.9
90°	8.9	9.1	9.4	9.5	9.7	9.8	10.0
92.5°	10.0	10.5	10.7	10.7	10.8	10.9	11.0
95°	11.9	12.4	12.6	12.6	12.6	12.6	12.6
97.5°	12.5	13.1	13.4	13.5	13.6	13.7	13.8
100°	12.7	13.4	13.7	13.8	13.9	13.9	13.9
102.5°	16.4	14.6	13.8	13.9	13.9	14.1	14.2
105°	33.6	20.5	14.0	14.2	14.3	14.5	14.6
107.5°	104.9	95.3	85.5	75.7	65.8	55.9	46.0
110°	142.9	140.4	133.9	123.4	112.7	102.2	91.6



TEST NUMBER: P332360-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	167.1	167.2	166.1	163.8	161.6	159.4	157.1
115°	193.4	194.2	194.6	194.9	195.3	195.6	195.9
117.5°	216.4	217.0	217.4	217.4	217.4	217.5	217.5
120°	231.6	232.1	232.5	232.5	232.5	232.5	232.5
122.5°	246.3	246.7	246.9	246.9	247.0	247.0	247.1
125°	266.9	267.0	267.2	267.3	267.5	267.7	267.8
127.5°	287.9	288.2	288.2	288.0	287.9	287.8	287.7
130°	300.7	301.0	301.0	300.9	300.8	300.6	300.4
132.5°	312.6	312.9	313.0	312.7	312.5	312.4	312.2
135°	330.7	330.9	330.9	330.7	330.5	330.3	330.1
137.5°	347.0	347.4	347.5	347.3	347.2	347.0	346.9
140°	357.2	357.6	357.6	357.5	357.3	357.2	357.0
142.5°	366.9	367.2	367.2	367.0	366.7	366.6	366.4
145°	380.5	380.6	380.7	380.7	380.7	380.7	380.7
147.5°	392.7	392.9	392.8	392.4	392.0	391.7	391.3
150°	400.1	400.3	400.2	400.0	399.8	399.5	399.4
152.5°	406.9	407.2	407.1	406.8	406.4	406.0	405.8
155°	416.1	416.5	416.4	416.0	415.6	415.1	414.6
157.5°	424.1	424.6	424.5	424.0	423.4	422.7	422.2
160°	428.7	429.1	429.0	428.6	428.0	427.5	427.0
162.5°	432.8	433.3	433.4	432.9	432.4	432.0	431.5
165°	438.5	439.0	439.0	438.6	438.0	437.5	437.0
167.5°	442.7	443.3	443.3	442.7	442.1	441.5	440.9
170°	445.1	445.6	445.6	445.1	444.5	443.9	443.3
172.5°	446.7	447.2	447.2	446.6	445.9	445.3	444.6
175°	448.6	449.0	449.0	448.5	447.8	447.2	446.7
177.5°	449.2	449.7	449.6	449.0	448.5	447.8	447.2
180°	448.3	448.3	448.3	448.3	448.3	448.3	448.3

(END OF REPORT)