

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: P332471-940

Luminaire Tested: **S123RDIW-S1165D460U940-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332471-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D460U940-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5503.2 lumens
Efficiency: N/A
Efficacy: 105.0 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

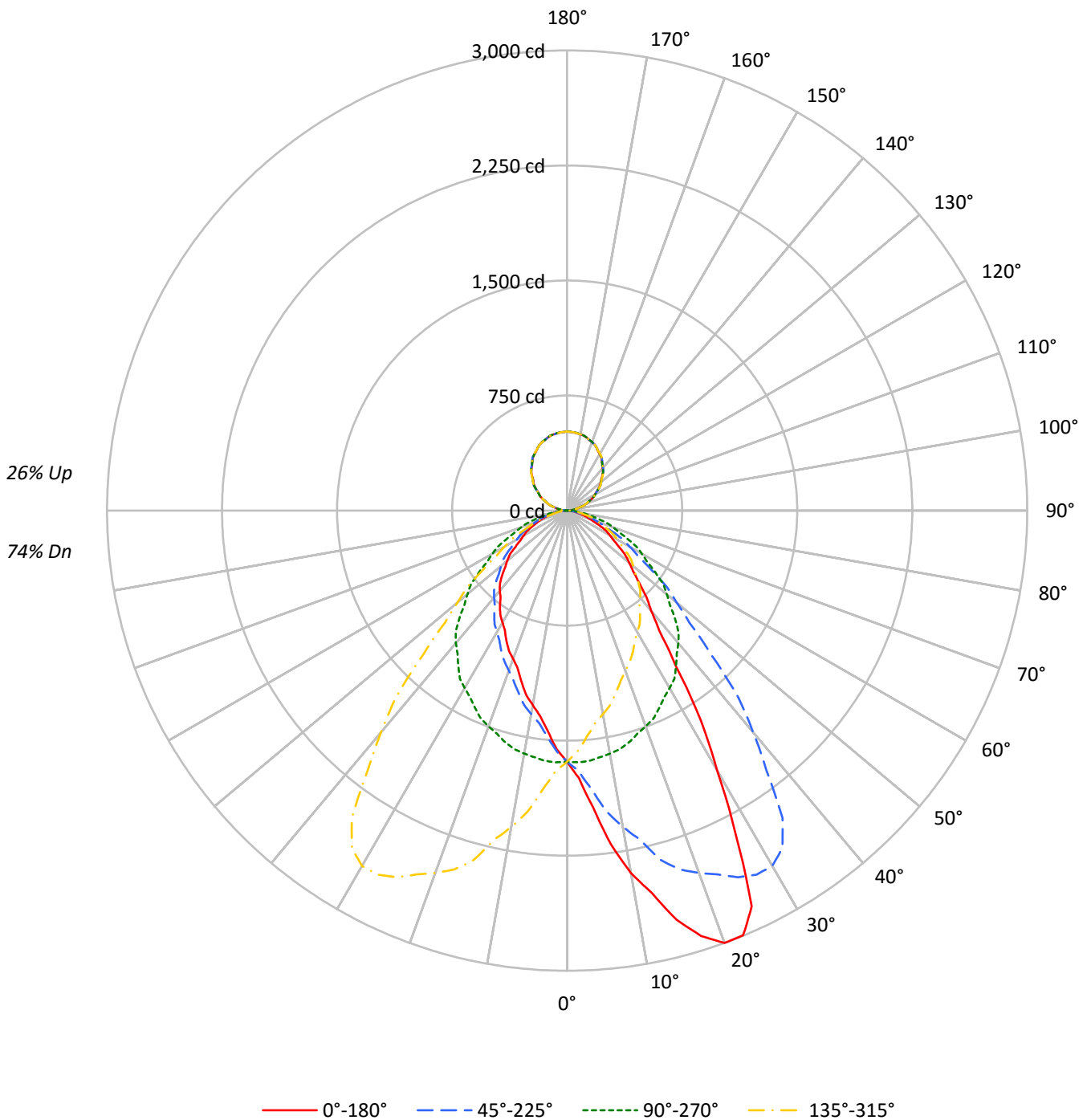
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74
1	104	100	96	93	99	95	92	89	86	84	81	78	76	74	71	69	68	64
2	95	88	82	77	91	84	79	74	77	72	69	70	66	64	63	61	58	55
3	88	78	71	66	83	75	69	63	68	63	59	62	58	55	57	54	51	48
4	81	70	62	56	77	67	60	55	61	56	51	56	52	48	51	48	44	42
5	75	63	55	49	71	60	53	48	55	49	45	51	46	42	47	43	39	37
6	69	57	49	43	66	55	47	42	50	44	40	46	41	37	43	38	35	33
7	64	52	44	38	61	50	42	37	46	40	35	42	37	33	39	35	31	29
8	60	47	40	34	57	46	38	33	42	36	32	39	34	30	36	32	28	26
9	56	44	36	31	53	42	35	30	39	33	29	36	31	27	33	29	26	24
10	52	40	33	28	50	39	32	27	36	30	26	34	28	25	31	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17623	17623	17623	17623
5°	21007	17698	15584	17698
10°	26230	17596	14080	17596
15°	30788	17416	12840	17416
20°	34360	17148	11786	17148
25°	33812	16865	11137	16865
30°	24304	16604	10470	16604
35°	16227	16264	10038	16264
40°	11956	15855	9591	15855
45°	10029	15139	9155	15139
50°	8848	14200	8544	14200
55°	7760	13127	7707	13127
60°	6910	12099	7061	12099
65°	6069	10998	6569	10998
70°	4765	10014	5998	10014
75°	4196	8746	5481	8746
80°	3651	7426	5387	7426
85°	2939	5965	5718	5965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.0	2.9
10°-20°	503.0	9.1
20°-30°	790.2	14.4
30°-40°	824.4	15.0
40°-50°	705.6	12.8
50°-60°	537.8	9.8
60°-70°	344.7	6.3
70°-80°	165.8	3.0
80°-90°	45.4	0.8
90°-100°	33.5	0.6
100°-110°	100.3	1.8
110°-120°	170.6	3.1
120°-130°	224.4	4.1
130°-140°	252.2	4.6
140°-150°	247.9	4.5
150°-160°	208.7	3.8
160°-170°	138.9	2.5
170°-180°	48.7	0.9
0°-30°	1454.2	26.4
0°-40°	2278.7	41.4
0°-60°	3522.0	64.0
0°-90°	4077.9	74.1
90°-120°	304.4	5.5
90°-150°	1029.0	18.7
90°-180°	1425.0	25.9
0°-180°	5503.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1637	1637	1637	1637	1637	
5°	1944	1638	1442	1638	1944	201
15°	2763	1563	1152	1563	2763	783
25°	2847	1420	938	1420	2847	1224
35°	1235	1238	764	1238	1235	810
45°	659	994	601	994	659	518
55°	414	700	411	700	414	374
65°	238	432	258	432	238	234
75°	101	210	132	210	101	108
85°	24	48	46	48	24	28
90°	12	0	12	0	12	7
95°	32	24	32	24	32	32
105°	96	91	96	91	96	102
115°	172	172	172	172	172	170
125°	248	251	248	251	248	222
135°	326	326	326	326	326	250
145°	396	396	396	396	396	247
155°	452	453	452	453	452	208
165°	492	493	492	493	492	139
175°	511	513	511	513	511	49
180°	514	514	514	514	514	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1743.7	1746.0	1738.7	1737.6	1729.1	1726.9	1726.9	1715.1	1707.8	1698.4	1692.7
5°	1944.2	1955.4	1949.8	1937.2	1916.1	1911.2	1897.9	1876.9	1853.1	1823.6	1809.6
7.5°	2194.5	2209.8	2204.0	2184.4	2162.4	2144.7	2107.0	2072.2	2023.2	1980.3	1943.6
10°	2399.8	2383.6	2371.0	2352.1	2331.7	2298.8	2259.6	2205.6	2143.2	2094.2	2039.5
12.5°	2553.3	2550.7	2534.7	2515.2	2486.5	2455.2	2407.0	2341.3	2268.8	2197.9	2135.4
15°	2762.8	2767.0	2756.5	2736.1	2695.5	2640.1	2567.2	2539.9	2436.2	2359.1	2282.0
17.5°	2907.7	2906.9	2905.5	2877.3	2835.8	2796.4	2728.8	2656.9	2563.0	2454.4	2350.5
20°	2999.6	2992.7	2994.1	2962.5	2931.7	2886.1	2820.2	2715.8	2638.8	2513.3	2406.0
22.5°	2997.4	2996.1	3001.3	2990.5	2968.1	2933.2	2881.4	2793.2	2694.8	2568.2	2447.6
25°	2846.9	2841.3	2874.3	2883.3	2919.1	2925.3	2909.9	2861.6	2768.4	2638.0	2488.8
27.5°	2382.7	2379.5	2440.7	2517.2	2614.2	2689.6	2762.5	2797.7	2768.4	2675.0	2525.5
30°	1955.4	2021.2	2052.1	2162.8	2286.2	2433.4	2562.3	2684.9	2715.1	2674.5	2551.8
32.5°	1623.4	1681.0	1706.7	1801.8	1916.7	2089.1	2282.5	2456.2	2578.9	2609.9	2536.1
35°	1234.9	1235.6	1294.5	1336.5	1443.1	1620.4	1808.2	2040.9	2272.2	2447.4	2465.6
37.5°	985.4	988.9	1024.5	1066.4	1146.3	1240.1	1405.5	1598.9	1866.1	2135.1	2292.8
40°	850.9	857.1	883.8	925.1	982.6	1053.4	1182.3	1364.6	1587.4	1886.7	2131.3
42.5°	764.5	774.7	788.5	820.3	855.9	922.2	1026.4	1167.2	1369.9	1652.9	1935.1
45°	658.8	664.4	674.9	689.6	721.8	768.1	838.2	932.8	1101.1	1328.8	1611.2
47.5°	581.1	578.2	589.2	601.2	622.7	654.2	701.2	778.4	898.4	1081.1	1320.7
50°	528.4	527.7	535.5	544.6	564.9	588.0	626.6	684.7	780.1	931.5	1150.8
52.5°	479.1	481.8	487.2	498.6	513.3	532.0	566.6	608.5	690.4	821.0	1003.9
55°	413.5	415.6	423.3	429.6	440.1	459.1	480.8	515.9	571.9	663.0	813.7
57.5°	358.0	357.0	364.4	366.0	377.9	393.3	410.1	437.3	478.0	545.7	647.2
60°	321.0	318.9	325.2	330.1	336.4	349.0	363.0	389.7	422.0	471.7	558.6
62.5°	287.3	286.3	291.0	295.9	301.1	312.5	324.3	344.8	370.3	412.2	481.2
65°	238.3	240.4	242.5	244.6	247.4	254.4	265.6	279.6	297.2	326.6	376.4
67.5°	187.3	189.4	190.1	194.4	200.5	204.8	211.7	224.2	236.3	261.2	289.4
70°	151.4	150.7	151.4	153.5	161.2	168.9	178.0	187.2	194.8	212.3	236.2
72.5°	130.1	128.9	130.6	131.1	134.8	137.0	142.7	151.2	161.2	173.1	190.2
75°	100.9	100.9	100.9	100.9	103.7	105.1	107.3	109.3	112.8	118.4	131.1
77.5°	74.5	74.7	75.7	76.4	77.0	77.8	79.1	81.1	82.4	85.3	90.9
80°	58.9	59.6	58.9	59.6	59.6	61.0	61.7	63.8	64.5	67.9	70.1
82.5°	44.3	43.9	44.3	45.0	45.0	46.4	46.5	48.1	48.2	50.0	52.2
85°	23.8	22.5	23.8	23.1	24.5	23.1	23.8	25.2	25.2	25.9	28.7
87.5°	8.0	9.1	7.9	8.5	8.5	8.9	8.9	8.8	9.9	9.2	9.5
90°	12.1	11.9	11.8	11.6	11.4	11.1	10.8	10.4	10.1	9.7	8.6
92.5°	16.3	16.4	16.5	16.7	16.8	16.7	16.4	16.1	15.8	15.5	14.9
95°	31.5	31.5	31.5	31.5	31.5	31.3	30.9	30.6	30.2	29.9	29.2
97.5°	48.5	48.5	48.6	48.6	48.6	48.4	48.1	47.6	47.2	46.8	46.3
100°	61.4	61.3	61.1	60.9	60.7	60.5	60.2	59.9	59.7	59.4	58.9
102.5°	74.6	74.7	74.7	74.8	74.8	74.7	74.5	74.2	73.9	73.7	73.0
105°	96.2	96.0	95.9	95.7	95.4	95.3	95.3	95.3	95.3	95.3	94.5
107.5°	118.6	118.7	118.8	118.9	119.0	118.9	118.6	118.3	118.1	117.8	117.4
110°	133.8	133.9	134.1	134.3	134.5	134.4	134.0	133.7	133.3	133.0	132.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	149.9	150.0	150.0	150.0	150.1	149.9	149.5	149.0	148.6	148.1	148.1
115°	172.2	172.3	172.4	172.5	172.5	172.5	172.5	172.4	172.3	172.2	172.4
117.5°	194.7	194.9	195.2	195.5	195.7	195.8	195.8	195.9	195.9	195.9	196.2
120°	210.5	210.7	210.9	211.1	211.2	211.4	211.5	211.6	211.7	211.8	212.2
122.5°	225.7	226.0	226.2	226.5	226.8	226.9	227.2	227.5	227.7	227.9	228.2
125°	248.5	248.9	249.2	249.6	249.9	250.3	250.7	251.0	251.4	251.7	251.9
127.5°	271.3	271.6	272.1	272.5	272.9	273.3	273.8	274.4	274.8	275.4	275.5
130°	286.1	286.8	287.4	288.0	288.6	289.1	289.4	289.8	290.2	290.5	290.8
132.5°	301.6	302.1	302.6	303.1	303.5	304.0	304.4	304.9	305.3	305.8	305.9
135°	325.7	325.9	326.1	326.3	326.5	326.7	327.1	327.4	327.8	328.1	328.2
137.5°	347.0	347.3	347.7	347.9	348.3	348.7	349.1	349.5	349.8	350.2	350.0
140°	360.9	361.5	362.1	362.7	363.4	363.7	363.8	363.9	364.0	364.1	364.0
142.5°	375.1	375.6	376.0	376.6	377.0	377.3	377.4	377.5	377.6	377.6	377.6
145°	395.7	396.0	396.4	396.7	397.1	397.3	397.3	397.4	397.5	397.6	397.3
147.5°	413.8	414.4	414.9	415.5	416.1	416.3	416.3	416.3	416.3	416.3	416.1
150°	425.5	426.1	426.6	427.1	427.7	427.9	427.9	427.9	427.9	427.9	427.8
152.5°	436.8	437.3	437.7	438.3	438.7	438.9	438.7	438.5	438.5	438.3	438.2
155°	452.2	452.8	453.4	454.1	454.7	454.9	454.5	454.1	453.8	453.4	453.3
157.5°	466.2	466.6	467.2	467.7	468.1	468.2	467.9	467.5	467.1	466.7	466.6
160°	475.2	475.5	475.9	476.3	476.6	476.6	476.2	475.7	475.3	474.8	474.8
162.5°	482.0	482.6	483.1	483.8	484.3	484.4	483.9	483.5	483.0	482.6	482.5
165°	491.8	492.4	493.0	493.7	494.3	494.4	493.8	493.3	492.8	492.2	492.2
167.5°	500.1	500.7	501.2	501.8	502.3	502.3	501.8	501.2	500.7	500.1	500.1
170°	504.4	505.0	505.6	506.2	506.8	506.8	506.2	505.6	505.0	504.4	504.4
172.5°	507.6	508.2	508.8	509.4	510.1	510.1	509.5	509.0	508.5	507.8	507.8
175°	511.2	511.8	512.5	513.1	513.7	513.7	513.2	512.6	512.1	511.6	511.6
177.5°	513.1	513.6	514.2	514.6	515.1	515.1	514.8	514.3	513.9	513.4	513.4
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1690.5	1688.8	1681.0	1672.0	1660.2	1652.3	1646.2	1642.8	1632.7	1620.4	1611.9
5°	1794.9	1773.9	1751.4	1724.1	1698.9	1672.9	1656.8	1637.9	1614.8	1588.9	1570.7
7.5°	1906.7	1865.5	1821.1	1775.3	1730.0	1689.3	1653.5	1622.7	1585.9	1548.7	1522.7
10°	1992.5	1932.2	1869.9	1806.1	1747.9	1693.3	1651.2	1609.9	1565.8	1523.0	1490.8
12.5°	2070.5	1991.1	1919.2	1840.8	1766.5	1701.1	1640.6	1591.9	1538.8	1493.3	1456.5
15°	2169.2	2087.9	2000.9	1881.8	1783.0	1700.3	1626.7	1562.9	1498.4	1442.3	1406.6
17.5°	2261.4	2139.0	2022.2	1922.9	1794.5	1691.1	1601.3	1525.1	1454.3	1394.8	1350.9
20°	2299.5	2181.0	2054.2	1927.3	1801.2	1685.6	1581.1	1497.0	1423.4	1356.1	1315.5
22.5°	2322.5	2188.3	2054.8	1918.4	1784.4	1664.3	1560.9	1468.5	1388.7	1324.7	1274.6
25°	2349.3	2189.5	2042.3	1907.7	1771.0	1640.7	1518.0	1420.0	1333.7	1265.8	1212.5
27.5°	2367.0	2179.0	2005.0	1855.5	1716.8	1587.0	1474.6	1370.6	1283.2	1211.2	1154.1
30°	2370.3	2170.5	1976.4	1814.5	1673.7	1554.5	1435.4	1335.9	1243.3	1166.9	1113.7
32.5°	2374.8	2149.8	1937.7	1765.8	1621.5	1503.5	1395.5	1300.5	1205.8	1130.5	1076.1
35°	2356.3	2138.3	1879.0	1681.3	1537.0	1422.7	1325.3	1237.7	1144.5	1071.6	1016.3
37.5°	2276.6	2092.8	1818.2	1586.4	1435.4	1329.5	1250.2	1173.8	1088.3	1009.7	957.5
40°	2196.5	2047.9	1771.0	1528.6	1370.9	1262.2	1190.8	1128.4	1045.7	972.1	916.1
42.5°	2077.1	1986.8	1726.2	1468.0	1298.0	1193.3	1133.0	1074.5	1001.9	927.2	874.5
45°	1858.0	1869.9	1634.4	1371.5	1197.0	1091.9	1035.2	994.5	930.1	868.3	814.4
47.5°	1583.2	1694.7	1526.6	1268.8	1090.7	992.0	942.4	906.9	863.4	802.9	753.7
50°	1403.8	1562.9	1440.3	1199.9	1024.0	925.9	876.7	848.0	810.2	762.5	715.6
52.5°	1238.4	1409.3	1336.0	1123.0	951.6	861.9	814.0	790.3	760.3	715.4	673.0
55°	1010.0	1183.0	1166.3	1007.1	843.1	762.5	726.1	699.5	679.1	645.5	611.9
57.5°	816.9	981.1	989.7	878.2	747.5	667.9	636.5	616.4	603.2	577.8	546.7
60°	695.3	846.0	875.4	791.3	679.1	609.0	578.2	562.0	551.6	531.3	507.4
62.5°	594.3	722.6	755.9	695.4	613.5	548.0	523.8	508.3	501.1	483.6	462.5
65°	454.9	561.4	593.6	560.0	517.2	464.7	445.1	431.8	425.4	415.6	400.2
67.5°	342.1	419.6	455.0	431.3	415.9	382.6	370.1	363.0	357.4	350.7	337.8
70°	274.7	332.2	368.6	362.3	349.7	332.2	323.1	318.2	312.5	307.0	295.8
72.5°	220.9	260.5	294.6	297.8	287.5	284.0	276.0	273.9	270.5	263.8	257.6
75°	146.5	173.8	197.6	206.8	211.0	214.5	211.0	210.3	209.6	203.9	200.5
77.5°	96.0	110.8	125.7	141.3	147.8	152.7	153.7	156.3	154.4	151.5	149.8
80°	73.6	77.1	87.6	100.9	111.5	115.7	118.4	119.8	119.1	118.4	115.7
82.5°	53.4	56.4	61.3	70.6	79.5	86.5	88.2	87.9	89.4	89.9	87.6
85°	28.7	29.4	30.9	32.3	37.2	44.9	47.0	48.3	49.8	49.8	45.6
87.5°	10.4	9.6	10.5	10.3	11.9	12.2	15.4	18.0	18.7	16.7	16.9
90°	7.4	6.2	5.0	4.0	3.1	2.2	1.3	0.4	1.3	2.2	3.1
92.5°	14.2	13.6	12.8	12.2	11.6	11.0	10.4	9.8	10.4	11.0	11.6
95°	28.4	27.7	27.0	26.4	25.8	25.1	24.4	23.8	24.4	25.1	25.8
97.5°	45.7	45.2	44.7	44.2	43.8	43.2	42.8	42.4	42.8	43.2	43.8
100°	58.5	58.1	57.6	57.1	56.5	56.0	55.5	54.9	55.5	56.0	56.5
102.5°	72.4	71.9	71.2	70.8	70.4	70.2	69.8	69.5	69.8	70.2	70.4
105°	93.7	92.9	92.1	91.7	91.5	91.3	91.1	91.0	91.1	91.3	91.5
107.5°	117.1	116.8	116.5	116.3	116.1	116.0	115.9	115.8	115.9	116.0	116.1
110°	132.6	132.4	132.2	132.1	131.9	131.7	131.5	131.3	131.5	131.7	131.9



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	148.1	148.0	148.0	147.9	147.8	147.8	147.6	147.5	147.6	147.8	147.8
115°	172.5	172.7	172.9	172.8	172.5	172.3	172.0	171.7	172.0	172.3	172.5
117.5°	196.4	196.6	196.8	196.9	196.7	196.5	196.4	196.2	196.4	196.5	196.7
120°	212.7	213.1	213.6	213.5	212.9	212.4	211.9	211.3	211.9	212.4	212.9
122.5°	228.4	228.6	228.8	228.7	228.4	228.0	227.6	227.2	227.6	228.0	228.4
125°	252.1	252.3	252.4	252.4	252.2	251.9	251.6	251.4	251.6	251.9	252.2
127.5°	275.7	276.0	276.2	276.0	275.4	274.8	274.2	273.7	274.2	274.8	275.4
130°	291.1	291.3	291.6	291.4	290.7	290.0	289.3	288.6	289.3	290.0	290.7
132.5°	306.1	306.3	306.6	306.3	305.6	304.9	304.1	303.4	304.1	304.9	305.6
135°	328.3	328.4	328.5	328.2	327.7	327.2	326.6	326.1	326.6	327.2	327.7
137.5°	349.7	349.5	349.3	348.9	348.5	348.0	347.6	347.1	347.6	348.0	348.5
140°	363.9	363.8	363.7	363.5	363.0	362.6	362.1	361.7	362.1	362.6	363.0
142.5°	377.4	377.2	377.0	376.7	376.3	375.9	375.4	375.0	375.4	375.9	376.3
145°	397.1	396.8	396.5	396.4	396.2	396.0	395.8	395.7	395.8	396.0	396.2
147.5°	415.8	415.5	415.3	415.0	414.6	414.4	414.0	413.8	414.0	414.4	414.6
150°	427.6	427.4	427.2	427.0	426.9	426.7	426.5	426.3	426.5	426.7	426.9
152.5°	438.1	437.9	437.8	437.7	437.4	437.2	436.9	436.7	436.9	437.2	437.4
155°	453.3	453.2	453.1	453.0	453.0	453.0	453.0	453.0	453.0	453.0	453.0
157.5°	466.6	466.5	466.5	466.5	466.5	466.7	466.8	466.9	466.8	466.7	466.5
160°	474.8	474.8	474.8	474.9	475.1	475.3	475.5	475.6	475.5	475.3	475.1
162.5°	482.4	482.3	482.3	482.4	482.6	482.9	483.1	483.4	483.1	482.9	482.6
165°	492.2	492.2	492.2	492.3	492.6	492.8	493.1	493.4	493.1	492.8	492.6
167.5°	500.0	499.9	499.8	500.0	500.3	500.7	501.1	501.4	501.1	500.7	500.3
170°	504.4	504.4	504.4	504.5	504.9	505.2	505.6	506.0	505.6	505.2	504.9
172.5°	507.8	507.8	507.8	508.0	508.5	508.8	509.2	509.5	509.2	508.8	508.5
175°	511.6	511.6	511.6	511.8	512.1	512.5	512.8	513.2	512.8	512.5	512.1
177.5°	513.4	513.4	513.4	513.6	513.9	514.2	514.4	514.8	514.4	514.2	513.9
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1609.2	1601.9	1596.9	1585.6	1578.3	1570.5	1562.6	1567.7	1567.1	1566.6	1566.6
5°	1555.2	1539.1	1524.4	1505.5	1493.5	1478.8	1467.6	1466.2	1469.0	1459.2	1453.6
7.5°	1501.6	1479.6	1458.7	1437.9	1415.8	1398.1	1387.0	1381.8	1374.7	1368.6	1362.4
10°	1464.1	1438.2	1417.8	1391.9	1368.1	1347.0	1333.7	1324.6	1319.7	1314.8	1305.7
12.5°	1425.4	1400.1	1374.1	1344.8	1322.1	1297.7	1287.7	1277.6	1268.1	1262.7	1250.2
15°	1368.8	1335.9	1308.5	1277.6	1252.4	1228.6	1214.6	1194.3	1191.4	1184.5	1171.8
17.5°	1312.0	1276.2	1238.6	1215.7	1187.2	1162.4	1141.1	1134.3	1114.2	1106.6	1095.7
20°	1267.1	1234.2	1205.5	1175.4	1134.0	1110.9	1094.0	1084.9	1068.8	1059.0	1052.0
22.5°	1228.4	1195.0	1161.7	1126.6	1092.5	1066.6	1054.3	1040.1	1031.3	1017.5	1010.0
25°	1173.2	1136.8	1096.8	1059.0	1034.5	1014.9	995.2	982.6	970.0	963.7	949.7
27.5°	1109.0	1070.9	1033.6	1004.9	974.7	955.4	937.6	926.4	911.2	900.6	892.9
30°	1073.7	1028.9	996.6	970.7	932.1	913.9	900.6	886.6	875.4	864.2	856.5
32.5°	1032.8	991.8	961.3	929.2	899.6	879.7	862.5	850.2	840.6	829.9	822.2
35°	968.6	934.2	902.7	870.5	848.7	828.4	808.1	797.5	788.5	778.6	771.7
37.5°	910.5	878.4	848.5	817.9	790.9	774.5	758.0	750.0	737.7	731.1	724.0
40°	874.7	843.1	810.9	781.5	753.4	740.8	726.1	714.2	702.9	698.0	690.4
42.5°	835.4	803.9	776.7	745.0	722.0	704.9	691.3	678.3	669.9	662.7	658.4
45°	777.2	749.2	722.6	691.1	669.3	654.6	639.2	627.2	619.6	614.7	606.9
47.5°	720.8	692.8	665.7	638.2	617.2	600.4	585.0	576.7	566.4	560.4	555.2
50°	679.8	654.6	625.9	600.7	579.6	562.8	550.2	539.7	530.6	522.8	519.3
52.5°	642.3	615.4	590.6	566.9	544.8	525.8	514.2	503.2	496.3	487.5	483.5
55°	580.3	554.4	533.3	510.2	488.5	472.3	458.3	448.5	441.6	431.8	426.1
57.5°	522.1	498.9	473.8	453.7	431.3	417.7	406.1	392.8	384.2	376.5	371.0
60°	482.9	456.3	434.5	415.6	396.0	378.4	367.9	357.4	348.3	340.6	335.7
62.5°	441.9	418.7	398.1	377.5	359.5	344.3	332.1	323.2	315.2	310.3	305.4
65°	379.2	361.0	339.9	323.1	306.3	295.1	285.3	277.5	272.0	268.4	264.2
67.5°	321.4	303.7	285.3	268.9	257.6	249.1	242.6	236.0	233.3	228.7	226.0
70°	283.8	265.6	249.5	236.9	225.7	219.4	215.2	210.3	207.4	201.9	199.0
72.5°	242.9	229.7	218.1	207.8	198.8	193.1	187.7	181.6	177.2	171.0	168.2
75°	191.4	179.4	170.3	163.3	157.7	150.0	142.3	136.0	133.8	131.8	131.1
77.5°	141.7	134.1	127.5	121.6	114.7	109.1	107.4	105.9	105.6	104.4	104.4
80°	111.5	104.4	99.5	92.5	88.3	88.3	88.3	86.9	87.6	87.6	87.6
82.5°	82.8	76.4	73.7	71.2	70.4	70.9	70.9	71.2	70.8	71.9	71.3
85°	42.7	43.4	44.9	44.1	44.9	44.9	46.3	45.6	46.3	44.9	46.3
87.5°	16.5	18.4	19.2	20.0	20.8	20.4	21.0	21.1	21.8	21.8	21.9
90°	4.0	5.0	6.2	7.4	8.6	9.7	10.1	10.4	10.8	11.1	11.4
92.5°	12.2	12.8	13.6	14.2	14.9	15.5	15.8	16.1	16.4	16.7	16.8
95°	26.4	27.0	27.7	28.4	29.2	29.9	30.2	30.6	30.9	31.3	31.5
97.5°	44.2	44.7	45.2	45.7	46.3	46.8	47.2	47.6	48.1	48.4	48.6
100°	57.1	57.6	58.1	58.5	58.9	59.4	59.7	59.9	60.2	60.5	60.7
102.5°	70.8	71.2	71.9	72.4	73.0	73.7	73.9	74.2	74.5	74.7	74.8
105°	91.7	92.1	92.9	93.7	94.5	95.3	95.3	95.3	95.3	95.3	95.4
107.5°	116.3	116.5	116.8	117.1	117.4	117.8	118.1	118.3	118.6	118.9	119.0
110°	132.1	132.2	132.4	132.6	132.8	133.0	133.3	133.7	134.0	134.4	134.5



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	147.9	148.0	148.0	148.1	148.1	148.1	148.6	149.0	149.5	149.9	150.1
115°	172.8	172.9	172.7	172.5	172.4	172.2	172.3	172.4	172.5	172.5	172.5
117.5°	196.9	196.8	196.6	196.4	196.2	195.9	195.9	195.9	195.8	195.8	195.7
120°	213.5	213.6	213.1	212.7	212.2	211.8	211.7	211.6	211.5	211.4	211.2
122.5°	228.7	228.8	228.6	228.4	228.2	227.9	227.7	227.5	227.2	226.9	226.8
125°	252.4	252.4	252.3	252.1	251.9	251.7	251.4	251.0	250.7	250.3	249.9
127.5°	276.0	276.2	276.0	275.7	275.5	275.4	274.8	274.4	273.8	273.3	272.9
130°	291.4	291.6	291.3	291.1	290.8	290.5	290.2	289.8	289.4	289.1	288.6
132.5°	306.3	306.6	306.3	306.1	305.9	305.8	305.3	304.9	304.4	304.0	303.5
135°	328.2	328.5	328.4	328.3	328.2	328.1	327.8	327.4	327.1	326.7	326.5
137.5°	348.9	349.3	349.5	349.7	350.0	350.2	349.8	349.5	349.1	348.7	348.3
140°	363.5	363.7	363.8	363.9	364.0	364.1	364.0	363.9	363.8	363.7	363.4
142.5°	376.7	377.0	377.2	377.4	377.6	377.6	377.6	377.5	377.4	377.3	377.0
145°	396.4	396.5	396.8	397.1	397.3	397.6	397.5	397.4	397.3	397.3	397.1
147.5°	415.0	415.3	415.5	415.8	416.1	416.3	416.3	416.3	416.3	416.3	416.1
150°	427.0	427.2	427.4	427.6	427.8	427.9	427.9	427.9	427.9	427.9	427.7
152.5°	437.7	437.8	437.9	438.1	438.2	438.3	438.5	438.5	438.7	438.9	438.7
155°	453.0	453.1	453.2	453.3	453.3	453.4	453.8	454.1	454.5	454.9	454.7
157.5°	466.5	466.5	466.5	466.6	466.6	466.7	467.1	467.5	467.9	468.2	468.1
160°	474.9	474.8	474.8	474.8	474.8	474.8	475.3	475.7	476.2	476.6	476.6
162.5°	482.4	482.3	482.3	482.4	482.5	482.6	483.0	483.5	483.9	484.4	484.3
165°	492.3	492.2	492.2	492.2	492.2	492.2	492.8	493.3	493.8	494.4	494.3
167.5°	500.0	499.8	499.9	500.0	500.1	500.1	500.7	501.2	501.8	502.3	502.3
170°	504.5	504.4	504.4	504.4	504.4	504.4	505.0	505.6	506.2	506.8	506.8
172.5°	508.0	507.8	507.8	507.8	507.8	507.8	508.5	509.0	509.5	510.1	510.1
175°	511.8	511.6	511.6	511.6	511.6	511.6	512.1	512.6	513.2	513.7	513.7
177.5°	513.6	513.4	513.4	513.4	513.4	513.4	513.9	514.3	514.8	515.1	515.1
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1559.9	1559.2	1559.9	1557.6	1559.9	1559.2	1559.9	1566.6	1566.6	1567.1	1567.7
5°	1451.4	1450.8	1448.7	1442.3	1448.7	1450.8	1451.4	1453.6	1459.2	1469.0	1466.2
7.5°	1356.8	1355.8	1349.7	1349.9	1349.7	1355.8	1356.8	1362.4	1368.6	1374.7	1381.8
10°	1300.8	1301.5	1293.1	1288.2	1293.1	1301.5	1300.8	1305.7	1314.8	1319.7	1324.6
12.5°	1246.4	1243.2	1236.4	1231.0	1236.4	1243.2	1246.4	1250.2	1262.7	1268.1	1277.6
15°	1174.7	1167.6	1150.8	1152.2	1150.8	1167.6	1174.7	1171.8	1184.5	1191.4	1194.3
17.5°	1090.1	1084.9	1084.7	1074.9	1084.7	1084.9	1090.1	1095.7	1106.6	1114.2	1134.3
20°	1040.8	1037.2	1038.7	1028.9	1038.7	1037.2	1040.8	1052.0	1059.0	1068.8	1084.9
22.5°	1002.1	998.5	992.7	989.6	992.7	998.5	1002.1	1010.0	1017.5	1031.3	1040.1
25°	945.5	939.9	934.2	937.7	934.2	939.9	945.5	949.7	963.7	970.0	982.6
27.5°	888.9	884.7	879.0	878.3	879.0	884.7	888.9	892.9	900.6	911.2	926.4
30°	852.9	848.7	846.0	842.4	846.0	848.7	852.9	856.5	864.2	875.4	886.6
32.5°	816.5	815.6	810.7	809.9	810.7	815.6	816.5	822.2	829.9	840.6	850.2
35°	768.8	764.6	763.2	763.9	763.2	764.6	768.8	771.7	778.6	788.5	797.5
37.5°	723.5	717.9	715.4	712.9	715.4	717.9	723.5	724.0	731.1	737.7	750.0
40°	691.1	685.5	684.0	682.6	684.0	685.5	691.1	690.4	698.0	702.9	714.2
42.5°	654.6	652.4	651.5	649.0	651.5	652.4	654.6	658.4	662.7	669.9	678.3
45°	604.8	604.1	599.9	601.4	599.9	604.1	604.8	606.9	614.7	619.6	627.2
47.5°	552.4	549.3	546.4	548.3	546.4	549.3	552.4	555.2	560.4	566.4	576.7
50°	516.6	515.1	508.8	510.2	508.8	515.1	516.6	519.3	522.8	530.6	539.7
52.5°	480.6	475.3	473.0	472.1	473.0	475.3	480.6	483.5	487.5	496.3	503.2
55°	421.2	414.9	412.1	410.7	412.1	414.9	421.2	426.1	431.8	441.6	448.5
57.5°	362.9	361.2	359.0	360.5	359.0	361.2	362.9	371.0	376.5	384.2	392.8
60°	328.7	328.7	328.7	328.0	328.7	328.7	328.7	335.7	340.6	348.3	357.4
62.5°	302.4	300.7	300.1	301.1	300.1	300.7	302.4	305.4	310.3	315.2	323.2
65°	262.2	261.4	258.6	257.9	258.6	261.4	262.2	264.2	268.4	272.0	277.5
67.5°	224.2	221.6	220.8	219.8	220.8	221.6	224.2	226.0	228.7	233.3	236.0
70°	195.6	194.1	189.9	190.6	189.9	194.1	195.6	199.0	201.9	207.4	210.3
72.5°	164.7	163.3	162.5	161.5	162.5	163.3	164.7	168.2	171.0	177.2	181.6
75°	130.4	129.7	128.9	131.8	128.9	129.7	130.4	131.1	131.8	133.8	136.0
77.5°	104.4	104.4	104.9	103.7	104.9	104.4	104.4	104.4	104.4	105.6	105.9
80°	87.6	87.6	86.9	86.9	86.9	87.6	87.6	87.6	87.6	87.6	86.9
82.5°	70.3	70.8	71.2	70.1	71.2	70.8	70.3	71.3	71.9	70.8	71.2
85°	46.3	45.6	47.0	46.3	47.0	45.6	46.3	46.3	44.9	46.3	45.6
87.5°	23.1	21.9	22.0	22.6	22.0	21.9	23.1	21.9	21.8	21.8	21.1
90°	11.6	11.8	11.9	12.1	11.9	11.8	11.6	11.4	11.1	10.8	10.4
92.5°	16.7	16.5	16.4	16.3	16.4	16.5	16.7	16.8	16.7	16.4	16.1
95°	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.3	30.9	30.6
97.5°	48.6	48.6	48.5	48.5	48.5	48.6	48.6	48.6	48.4	48.1	47.6
100°	60.9	61.1	61.3	61.4	61.3	61.1	60.9	60.7	60.5	60.2	59.9
102.5°	74.8	74.7	74.7	74.6	74.7	74.7	74.8	74.8	74.7	74.5	74.2
105°	95.7	95.9	96.0	96.2	96.0	95.9	95.7	95.4	95.3	95.3	95.3
107.5°	118.9	118.8	118.7	118.6	118.7	118.8	118.9	119.0	118.9	118.6	118.3
110°	134.3	134.1	133.9	133.8	133.9	134.1	134.3	134.5	134.4	134.0	133.7



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	150.0	150.0	150.0	149.9	150.0	150.0	150.0	150.1	149.9	149.5	149.0
115°	172.5	172.4	172.3	172.2	172.3	172.4	172.5	172.5	172.5	172.5	172.4
117.5°	195.5	195.2	194.9	194.7	194.9	195.2	195.5	195.7	195.8	195.8	195.9
120°	211.1	210.9	210.7	210.5	210.7	210.9	211.1	211.2	211.4	211.5	211.6
122.5°	226.5	226.2	226.0	225.7	226.0	226.2	226.5	226.8	226.9	227.2	227.5
125°	249.6	249.2	248.9	248.5	248.9	249.2	249.6	249.9	250.3	250.7	251.0
127.5°	272.5	272.1	271.6	271.3	271.6	272.1	272.5	272.9	273.3	273.8	274.4
130°	288.0	287.4	286.8	286.1	286.8	287.4	288.0	288.6	289.1	289.4	289.8
132.5°	303.1	302.6	302.1	301.6	302.1	302.6	303.1	303.5	304.0	304.4	304.9
135°	326.3	326.1	325.9	325.7	325.9	326.1	326.3	326.5	326.7	327.1	327.4
137.5°	347.9	347.7	347.3	347.0	347.3	347.7	347.9	348.3	348.7	349.1	349.5
140°	362.7	362.1	361.5	360.9	361.5	362.1	362.7	363.4	363.7	363.8	363.9
142.5°	376.6	376.0	375.6	375.1	375.6	376.0	376.6	377.0	377.3	377.4	377.5
145°	396.7	396.4	396.0	395.7	396.0	396.4	396.7	397.1	397.3	397.3	397.4
147.5°	415.5	414.9	414.4	413.8	414.4	414.9	415.5	416.1	416.3	416.3	416.3
150°	427.1	426.6	426.1	425.5	426.1	426.6	427.1	427.7	427.9	427.9	427.9
152.5°	438.3	437.7	437.3	436.8	437.3	437.7	438.3	438.7	438.9	438.7	438.5
155°	454.1	453.4	452.8	452.2	452.8	453.4	454.1	454.7	454.9	454.5	454.1
157.5°	467.7	467.2	466.6	466.2	466.6	467.2	467.7	468.1	468.2	467.9	467.5
160°	476.3	475.9	475.5	475.2	475.5	475.9	476.3	476.6	476.6	476.2	475.7
162.5°	483.8	483.1	482.6	482.0	482.6	483.1	483.8	484.3	484.4	483.9	483.5
165°	493.7	493.0	492.4	491.8	492.4	493.0	493.7	494.3	494.4	493.8	493.3
167.5°	501.8	501.2	500.7	500.1	500.7	501.2	501.8	502.3	502.3	501.8	501.2
170°	506.2	505.6	505.0	504.4	505.0	505.6	506.2	506.8	506.8	506.2	505.6
172.5°	509.4	508.8	508.2	507.6	508.2	508.8	509.4	510.1	510.1	509.5	509.0
175°	513.1	512.5	511.8	511.2	511.8	512.5	513.1	513.7	513.7	513.2	512.6
177.5°	514.6	514.2	513.6	513.1	513.6	514.2	514.6	515.1	515.1	514.8	514.3
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1562.6	1570.5	1578.3	1585.6	1596.9	1601.9	1609.2	1611.9	1620.4	1632.7	1642.8
5°	1467.6	1478.8	1493.5	1505.5	1524.4	1539.1	1555.2	1570.7	1588.9	1614.8	1637.9
7.5°	1387.0	1398.1	1415.8	1437.9	1458.7	1479.6	1501.6	1522.7	1548.7	1585.9	1622.7
10°	1333.7	1347.0	1368.1	1391.9	1417.8	1438.2	1464.1	1490.8	1523.0	1565.8	1609.9
12.5°	1287.7	1297.7	1322.1	1344.8	1374.1	1400.1	1425.4	1456.5	1493.3	1538.8	1591.9
15°	1214.6	1228.6	1252.4	1277.6	1308.5	1335.9	1368.8	1406.6	1442.3	1498.4	1562.9
17.5°	1141.1	1162.4	1187.2	1215.7	1238.6	1276.2	1312.0	1350.9	1394.8	1454.3	1525.1
20°	1094.0	1110.9	1134.0	1175.4	1205.5	1234.2	1267.1	1315.5	1356.1	1423.4	1497.0
22.5°	1054.3	1066.6	1092.5	1126.6	1161.7	1195.0	1228.4	1274.6	1324.7	1388.7	1468.5
25°	995.2	1014.9	1034.5	1059.0	1096.8	1136.8	1173.2	1212.5	1265.8	1333.7	1420.0
27.5°	937.6	955.4	974.7	1004.9	1033.6	1070.9	1109.0	1154.1	1211.2	1283.2	1370.6
30°	900.6	913.9	932.1	970.7	996.6	1028.9	1073.7	1113.7	1166.9	1243.3	1335.9
32.5°	862.5	879.7	899.6	929.2	961.3	991.8	1032.8	1076.1	1130.5	1205.8	1300.5
35°	808.1	828.4	848.7	870.5	902.7	934.2	968.6	1016.3	1071.6	1144.5	1237.7
37.5°	758.0	774.5	790.9	817.9	848.5	878.4	910.5	957.5	1009.7	1088.3	1173.8
40°	726.1	740.8	753.4	781.5	810.9	843.1	874.7	916.1	972.1	1045.7	1128.4
42.5°	691.3	704.9	722.0	745.0	776.7	803.9	835.4	874.5	927.2	1001.9	1074.5
45°	639.2	654.6	669.3	691.1	722.6	749.2	777.2	814.4	868.3	930.1	994.5
47.5°	585.0	600.4	617.2	638.2	665.7	692.8	720.8	753.7	802.9	863.4	906.9
50°	550.2	562.8	579.6	600.7	625.9	654.6	679.8	715.6	762.5	810.2	848.0
52.5°	514.2	525.8	544.8	566.9	590.6	615.4	642.3	673.0	715.4	760.3	790.3
55°	458.3	472.3	488.5	510.2	533.3	554.4	580.3	611.9	645.5	679.1	699.5
57.5°	406.1	417.7	431.3	453.7	473.8	498.9	522.1	546.7	577.8	603.2	616.4
60°	367.9	378.4	396.0	415.6	434.5	456.3	482.9	507.4	531.3	551.6	562.0
62.5°	332.1	344.3	359.5	377.5	398.1	418.7	441.9	462.5	483.6	501.1	508.3
65°	285.3	295.1	306.3	323.1	339.9	361.0	379.2	400.2	415.6	425.4	431.8
67.5°	242.6	249.1	257.6	268.9	285.3	303.7	321.4	337.8	350.7	357.4	363.0
70°	215.2	219.4	225.7	236.9	249.5	265.6	283.8	295.8	307.0	312.5	318.2
72.5°	187.7	193.1	198.8	207.8	218.1	229.7	242.9	257.6	263.8	270.5	273.9
75°	142.3	150.0	157.7	163.3	170.3	179.4	191.4	200.5	203.9	209.6	210.3
77.5°	107.4	109.1	114.7	121.6	127.5	134.1	141.7	149.8	151.5	154.4	156.3
80°	88.3	88.3	88.3	92.5	99.5	104.4	111.5	115.7	118.4	119.1	119.8
82.5°	70.9	70.9	70.4	71.2	73.7	76.4	82.8	87.6	89.9	89.4	87.9
85°	46.3	44.9	44.9	44.1	44.9	43.4	42.7	45.6	49.8	49.8	48.3
87.5°	21.0	20.4	20.8	20.0	19.2	18.4	16.5	16.9	16.7	18.7	18.0
90°	10.1	9.7	8.6	7.4	6.2	5.0	4.0	3.1	2.2	1.3	0.4
92.5°	15.8	15.5	14.9	14.2	13.6	12.8	12.2	11.6	11.0	10.4	9.8
95°	30.2	29.9	29.2	28.4	27.7	27.0	26.4	25.8	25.1	24.4	23.8
97.5°	47.2	46.8	46.3	45.7	45.2	44.7	44.2	43.8	43.2	42.8	42.4
100°	59.7	59.4	58.9	58.5	58.1	57.6	57.1	56.5	56.0	55.5	54.9
102.5°	73.9	73.7	73.0	72.4	71.9	71.2	70.8	70.4	70.2	69.8	69.5
105°	95.3	95.3	94.5	93.7	92.9	92.1	91.7	91.5	91.3	91.1	91.0
107.5°	118.1	117.8	117.4	117.1	116.8	116.5	116.3	116.1	116.0	115.9	115.8
110°	133.3	133.0	132.8	132.6	132.4	132.2	132.1	131.9	131.7	131.5	131.3



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CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	148.6	148.1	148.1	148.1	148.0	148.0	147.9	147.8	147.8	147.6	147.5
115°	172.3	172.2	172.4	172.5	172.7	172.9	172.8	172.5	172.3	172.0	171.7
117.5°	195.9	195.9	196.2	196.4	196.6	196.8	196.9	196.7	196.5	196.4	196.2
120°	211.7	211.8	212.2	212.7	213.1	213.6	213.5	212.9	212.4	211.9	211.3
122.5°	227.7	227.9	228.2	228.4	228.6	228.8	228.7	228.4	228.0	227.6	227.2
125°	251.4	251.7	251.9	252.1	252.3	252.4	252.4	252.2	251.9	251.6	251.4
127.5°	274.8	275.4	275.5	275.7	276.0	276.2	276.0	275.4	274.8	274.2	273.7
130°	290.2	290.5	290.8	291.1	291.3	291.6	291.4	290.7	290.0	289.3	288.6
132.5°	305.3	305.8	305.9	306.1	306.3	306.6	306.3	305.6	304.9	304.1	303.4
135°	327.8	328.1	328.2	328.3	328.4	328.5	328.2	327.7	327.2	326.6	326.1
137.5°	349.8	350.2	350.0	349.7	349.5	349.3	348.9	348.5	348.0	347.6	347.1
140°	364.0	364.1	364.0	363.9	363.8	363.7	363.5	363.0	362.6	362.1	361.7
142.5°	377.6	377.6	377.6	377.4	377.2	377.0	376.7	376.3	375.9	375.4	375.0
145°	397.5	397.6	397.3	397.1	396.8	396.5	396.4	396.2	396.0	395.8	395.7
147.5°	416.3	416.3	416.1	415.8	415.5	415.3	415.0	414.6	414.4	414.0	413.8
150°	427.9	427.9	427.8	427.6	427.4	427.2	427.0	426.9	426.7	426.5	426.3
152.5°	438.5	438.3	438.2	438.1	437.9	437.8	437.7	437.4	437.2	436.9	436.7
155°	453.8	453.4	453.3	453.3	453.2	453.1	453.0	453.0	453.0	453.0	453.0
157.5°	467.1	466.7	466.6	466.6	466.5	466.5	466.5	466.5	466.7	466.8	466.9
160°	475.3	474.8	474.8	474.8	474.8	474.8	474.9	475.1	475.3	475.5	475.6
162.5°	483.0	482.6	482.5	482.4	482.3	482.3	482.4	482.6	482.9	483.1	483.4
165°	492.8	492.2	492.2	492.2	492.2	492.2	492.3	492.6	492.8	493.1	493.4
167.5°	500.7	500.1	500.1	500.0	499.9	499.8	500.0	500.3	500.7	501.1	501.4
170°	505.0	504.4	504.4	504.4	504.4	504.4	504.5	504.9	505.2	505.6	506.0
172.5°	508.5	507.8	507.8	507.8	507.8	507.8	508.0	508.5	508.8	509.2	509.5
175°	512.1	511.6	511.6	511.6	511.6	511.6	511.8	512.1	512.5	512.8	513.2
177.5°	513.9	513.4	513.4	513.4	513.4	513.4	513.6	513.9	514.2	514.4	514.8
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



TEST NUMBER: P332471-940

CATALOG NUMBER: S123RDIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1646.2	1652.3	1660.2	1672.0	1681.0	1688.8	1690.5	1692.7	1698.4	1707.8	1715.1
5°	1656.8	1672.9	1698.9	1724.1	1751.4	1773.9	1794.9	1809.6	1823.6	1853.1	1876.9
7.5°	1653.5	1689.3	1730.0	1775.3	1821.1	1865.5	1906.7	1943.6	1980.3	2023.2	2072.2
10°	1651.2	1693.3	1747.9	1806.1	1869.9	1932.2	1992.5	2039.5	2094.2	2143.2	2205.6
12.5°	1640.6	1701.1	1766.5	1840.8	1919.2	1991.1	2070.5	2135.4	2197.9	2268.8	2341.3
15°	1626.7	1700.3	1783.0	1881.8	2000.9	2087.9	2169.2	2282.0	2359.1	2436.2	2539.9
17.5°	1601.3	1691.1	1794.5	1922.9	2022.2	2139.0	2261.4	2350.5	2454.4	2563.0	2656.9
20°	1581.1	1685.6	1801.2	1927.3	2054.2	2181.0	2299.5	2406.0	2513.3	2638.8	2715.8
22.5°	1560.9	1664.3	1784.4	1918.4	2054.8	2188.3	2322.5	2447.6	2568.2	2694.8	2793.2
25°	1518.0	1640.7	1771.0	1907.7	2042.3	2189.5	2349.3	2488.8	2638.0	2768.4	2861.6
27.5°	1474.6	1587.0	1716.8	1855.5	2005.0	2179.0	2367.0	2525.5	2675.0	2768.4	2797.7
30°	1435.4	1554.5	1673.7	1814.5	1976.4	2170.5	2370.3	2551.8	2674.5	2715.1	2684.9
32.5°	1395.5	1503.5	1621.5	1765.8	1937.7	2149.8	2374.8	2536.1	2609.9	2578.9	2456.2
35°	1325.3	1422.7	1537.0	1681.3	1879.0	2138.3	2356.3	2465.6	2447.4	2272.2	2040.9
37.5°	1250.2	1329.5	1435.4	1586.4	1818.2	2092.8	2276.6	2292.8	2135.1	1866.1	1598.9
40°	1190.8	1262.2	1370.9	1528.6	1771.0	2047.9	2196.5	2131.3	1886.7	1587.4	1364.6
42.5°	1133.0	1193.3	1298.0	1468.0	1726.2	1986.8	2077.1	1935.1	1652.9	1369.9	1167.2
45°	1035.2	1091.9	1197.0	1371.5	1634.4	1869.9	1858.0	1611.2	1328.8	1101.1	932.8
47.5°	942.4	992.0	1090.7	1268.8	1526.6	1694.7	1583.2	1320.7	1081.1	898.4	778.4
50°	876.7	925.9	1024.0	1199.9	1440.3	1562.9	1403.8	1150.8	931.5	780.1	684.7
52.5°	814.0	861.9	951.6	1123.0	1336.0	1409.3	1238.4	1003.9	821.0	690.4	608.5
55°	726.1	762.5	843.1	1007.1	1166.3	1183.0	1010.0	813.7	663.0	571.9	515.9
57.5°	636.5	667.9	747.5	878.2	989.7	981.1	816.9	647.2	545.7	478.0	437.3
60°	578.2	609.0	679.1	791.3	875.4	846.0	695.3	558.6	471.7	422.0	389.7
62.5°	523.8	548.0	613.5	695.4	755.9	722.6	594.3	481.2	412.2	370.3	344.8
65°	445.1	464.7	517.2	560.0	593.6	561.4	454.9	376.4	326.6	297.2	279.6
67.5°	370.1	382.6	415.9	431.3	455.0	419.6	342.1	289.4	261.2	236.3	224.2
70°	323.1	332.2	349.7	362.3	368.6	332.2	274.7	236.2	212.3	194.8	187.2
72.5°	276.0	284.0	287.5	297.8	294.6	260.5	220.9	190.2	173.1	161.2	151.2
75°	211.0	214.5	211.0	206.8	197.6	173.8	146.5	131.1	118.4	112.8	109.3
77.5°	153.7	152.7	147.8	141.3	125.7	110.8	96.0	90.9	85.3	82.4	81.1
80°	118.4	115.7	111.5	100.9	87.6	77.1	73.6	70.1	67.9	64.5	63.8
82.5°	88.2	86.5	79.5	70.6	61.3	56.4	53.4	52.2	50.0	48.2	48.1
85°	47.0	44.9	37.2	32.3	30.9	29.4	28.7	28.7	25.9	25.2	25.2
87.5°	15.4	12.2	11.9	10.3	10.5	9.6	10.4	9.5	9.2	9.9	8.8
90°	1.3	2.2	3.1	4.0	5.0	6.2	7.4	8.6	9.7	10.1	10.4
92.5°	10.4	11.0	11.6	12.2	12.8	13.6	14.2	14.9	15.5	15.8	16.1
95°	24.4	25.1	25.8	26.4	27.0	27.7	28.4	29.2	29.9	30.2	30.6
97.5°	42.8	43.2	43.8	44.2	44.7	45.2	45.7	46.3	46.8	47.2	47.6
100°	55.5	56.0	56.5	57.1	57.6	58.1	58.5	58.9	59.4	59.7	59.9
102.5°	69.8	70.2	70.4	70.8	71.2	71.9	72.4	73.0	73.7	73.9	74.2
105°	91.1	91.3	91.5	91.7	92.1	92.9	93.7	94.5	95.3	95.3	95.3
107.5°	115.9	116.0	116.1	116.3	116.5	116.8	117.1	117.4	117.8	118.1	118.3
110°	131.5	131.7	131.9	132.1	132.2	132.4	132.6	132.8	133.0	133.3	133.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	147.6	147.8	147.8	147.9	148.0	148.0	148.1	148.1	148.1	148.6	149.0
115°	172.0	172.3	172.5	172.8	172.9	172.7	172.5	172.4	172.2	172.3	172.4
117.5°	196.4	196.5	196.7	196.9	196.8	196.6	196.4	196.2	195.9	195.9	195.9
120°	211.9	212.4	212.9	213.5	213.6	213.1	212.7	212.2	211.8	211.7	211.6
122.5°	227.6	228.0	228.4	228.7	228.8	228.6	228.4	228.2	227.9	227.7	227.5
125°	251.6	251.9	252.2	252.4	252.4	252.3	252.1	251.9	251.7	251.4	251.0
127.5°	274.2	274.8	275.4	276.0	276.2	276.0	275.7	275.5	275.4	274.8	274.4
130°	289.3	290.0	290.7	291.4	291.6	291.3	291.1	290.8	290.5	290.2	289.8
132.5°	304.1	304.9	305.6	306.3	306.6	306.3	306.1	305.9	305.8	305.3	304.9
135°	326.6	327.2	327.7	328.2	328.5	328.4	328.3	328.2	328.1	327.8	327.4
137.5°	347.6	348.0	348.5	348.9	349.3	349.5	349.7	350.0	350.2	349.8	349.5
140°	362.1	362.6	363.0	363.5	363.7	363.8	363.9	364.0	364.1	364.0	363.9
142.5°	375.4	375.9	376.3	376.7	377.0	377.2	377.4	377.6	377.6	377.6	377.5
145°	395.8	396.0	396.2	396.4	396.5	396.8	397.1	397.3	397.6	397.5	397.4
147.5°	414.0	414.4	414.6	415.0	415.3	415.5	415.8	416.1	416.3	416.3	416.3
150°	426.5	426.7	426.9	427.0	427.2	427.4	427.6	427.8	427.9	427.9	427.9
152.5°	436.9	437.2	437.4	437.7	437.8	437.9	438.1	438.2	438.3	438.5	438.5
155°	453.0	453.0	453.0	453.0	453.1	453.2	453.3	453.3	453.4	453.8	454.1
157.5°	466.8	466.7	466.5	466.5	466.5	466.5	466.6	466.6	466.7	467.1	467.5
160°	475.5	475.3	475.1	474.9	474.8	474.8	474.8	474.8	474.8	475.3	475.7
162.5°	483.1	482.9	482.6	482.4	482.3	482.3	482.4	482.5	482.6	483.0	483.5
165°	493.1	492.8	492.6	492.3	492.2	492.2	492.2	492.2	492.2	492.8	493.3
167.5°	501.1	500.7	500.3	500.0	499.8	499.9	500.0	500.1	500.1	500.7	501.2
170°	505.6	505.2	504.9	504.5	504.4	504.4	504.4	504.4	504.4	505.0	505.6
172.5°	509.2	508.8	508.5	508.0	507.8	507.8	507.8	507.8	507.8	508.5	509.0
175°	512.8	512.5	512.1	511.8	511.6	511.6	511.6	511.6	511.6	512.1	512.6
177.5°	514.4	514.2	513.9	513.6	513.4	513.4	513.4	513.4	513.4	513.9	514.3
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2	1637.2
2.5°	1726.9	1726.9	1729.1	1737.6	1738.7	1746.0	1743.7
5°	1897.9	1911.2	1916.1	1937.2	1949.8	1955.4	1944.2
7.5°	2107.0	2144.7	2162.4	2184.4	2204.0	2209.8	2194.5
10°	2259.6	2298.8	2331.7	2352.1	2371.0	2383.6	2399.8
12.5°	2407.0	2455.2	2486.5	2515.2	2534.7	2550.7	2553.3
15°	2567.2	2640.1	2695.5	2736.1	2756.5	2767.0	2762.8
17.5°	2728.8	2796.4	2835.8	2877.3	2905.5	2906.9	2907.7
20°	2820.2	2886.1	2931.7	2962.5	2994.1	2992.7	2999.6
22.5°	2881.4	2933.2	2968.1	2990.5	3001.3	2996.1	2997.4
25°	2909.9	2925.3	2919.1	2883.3	2874.3	2841.3	2846.9
27.5°	2762.5	2689.6	2614.2	2517.2	2440.7	2379.5	2382.7
30°	2562.3	2433.4	2286.2	2162.8	2052.1	2021.2	1955.4
32.5°	2282.5	2089.1	1916.7	1801.8	1706.7	1681.0	1623.4
35°	1808.2	1620.4	1443.1	1336.5	1294.5	1235.6	1234.9
37.5°	1405.5	1240.1	1146.3	1066.4	1024.5	988.9	985.4
40°	1182.3	1053.4	982.6	925.1	883.8	857.1	850.9
42.5°	1026.4	922.2	855.9	820.3	788.5	774.7	764.5
45°	838.2	768.1	721.8	689.6	674.9	664.4	658.8
47.5°	701.2	654.2	622.7	601.2	589.2	578.2	581.1
50°	626.6	588.0	564.9	544.6	535.5	527.7	528.4
52.5°	566.6	532.0	513.3	498.6	487.2	481.8	479.1
55°	480.8	459.1	440.1	429.6	423.3	415.6	413.5
57.5°	410.1	393.3	377.9	366.0	364.4	357.0	358.0
60°	363.0	349.0	336.4	330.1	325.2	318.9	321.0
62.5°	324.3	312.5	301.1	295.9	291.0	286.3	287.3
65°	265.6	254.4	247.4	244.6	242.5	240.4	238.3
67.5°	211.7	204.8	200.5	194.4	190.1	189.4	187.3
70°	178.0	168.9	161.2	153.5	151.4	150.7	151.4
72.5°	142.7	137.0	134.8	131.1	130.6	128.9	130.1
75°	107.3	105.1	103.7	100.9	100.9	100.9	100.9
77.5°	79.1	77.8	77.0	76.4	75.7	74.7	74.5
80°	61.7	61.0	59.6	59.6	58.9	59.6	58.9
82.5°	46.5	46.4	45.0	45.0	44.3	43.9	44.3
85°	23.8	23.1	24.5	23.1	23.8	22.5	23.8
87.5°	8.9	8.9	8.5	8.5	7.9	9.1	8.0
90°	10.8	11.1	11.4	11.6	11.8	11.9	12.1
92.5°	16.4	16.7	16.8	16.7	16.5	16.4	16.3
95°	30.9	31.3	31.5	31.5	31.5	31.5	31.5
97.5°	48.1	48.4	48.6	48.6	48.6	48.5	48.5
100°	60.2	60.5	60.7	60.9	61.1	61.3	61.4
102.5°	74.5	74.7	74.8	74.8	74.7	74.7	74.6
105°	95.3	95.3	95.4	95.7	95.9	96.0	96.2
107.5°	118.6	118.9	119.0	118.9	118.8	118.7	118.6
110°	134.0	134.4	134.5	134.3	134.1	133.9	133.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	149.5	149.9	150.1	150.0	150.0	150.0	149.9
115°	172.5	172.5	172.5	172.5	172.4	172.3	172.2
117.5°	195.8	195.8	195.7	195.5	195.2	194.9	194.7
120°	211.5	211.4	211.2	211.1	210.9	210.7	210.5
122.5°	227.2	226.9	226.8	226.5	226.2	226.0	225.7
125°	250.7	250.3	249.9	249.6	249.2	248.9	248.5
127.5°	273.8	273.3	272.9	272.5	272.1	271.6	271.3
130°	289.4	289.1	288.6	288.0	287.4	286.8	286.1
132.5°	304.4	304.0	303.5	303.1	302.6	302.1	301.6
135°	327.1	326.7	326.5	326.3	326.1	325.9	325.7
137.5°	349.1	348.7	348.3	347.9	347.7	347.3	347.0
140°	363.8	363.7	363.4	362.7	362.1	361.5	360.9
142.5°	377.4	377.3	377.0	376.6	376.0	375.6	375.1
145°	397.3	397.3	397.1	396.7	396.4	396.0	395.7
147.5°	416.3	416.3	416.1	415.5	414.9	414.4	413.8
150°	427.9	427.9	427.7	427.1	426.6	426.1	425.5
152.5°	438.7	438.9	438.7	438.3	437.7	437.3	436.8
155°	454.5	454.9	454.7	454.1	453.4	452.8	452.2
157.5°	467.9	468.2	468.1	467.7	467.2	466.6	466.2
160°	476.2	476.6	476.6	476.3	475.9	475.5	475.2
162.5°	483.9	484.4	484.3	483.8	483.1	482.6	482.0
165°	493.8	494.4	494.3	493.7	493.0	492.4	491.8
167.5°	501.8	502.3	502.3	501.8	501.2	500.7	500.1
170°	506.2	506.8	506.8	506.2	505.6	505.0	504.4
172.5°	509.5	510.1	510.1	509.4	508.8	508.2	507.6
175°	513.2	513.7	513.7	513.1	512.5	511.8	511.2
177.5°	514.8	515.1	515.1	514.6	514.2	513.6	513.1
180°	514.4	514.4	514.4	514.4	514.4	514.4	514.4

(END OF REPORT)