

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: P332470-930

Luminaire Tested: **S123RDIW-S1165D460U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332470-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D460U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5231.9 lumens
Efficiency: N/A
Efficacy: 99.8 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

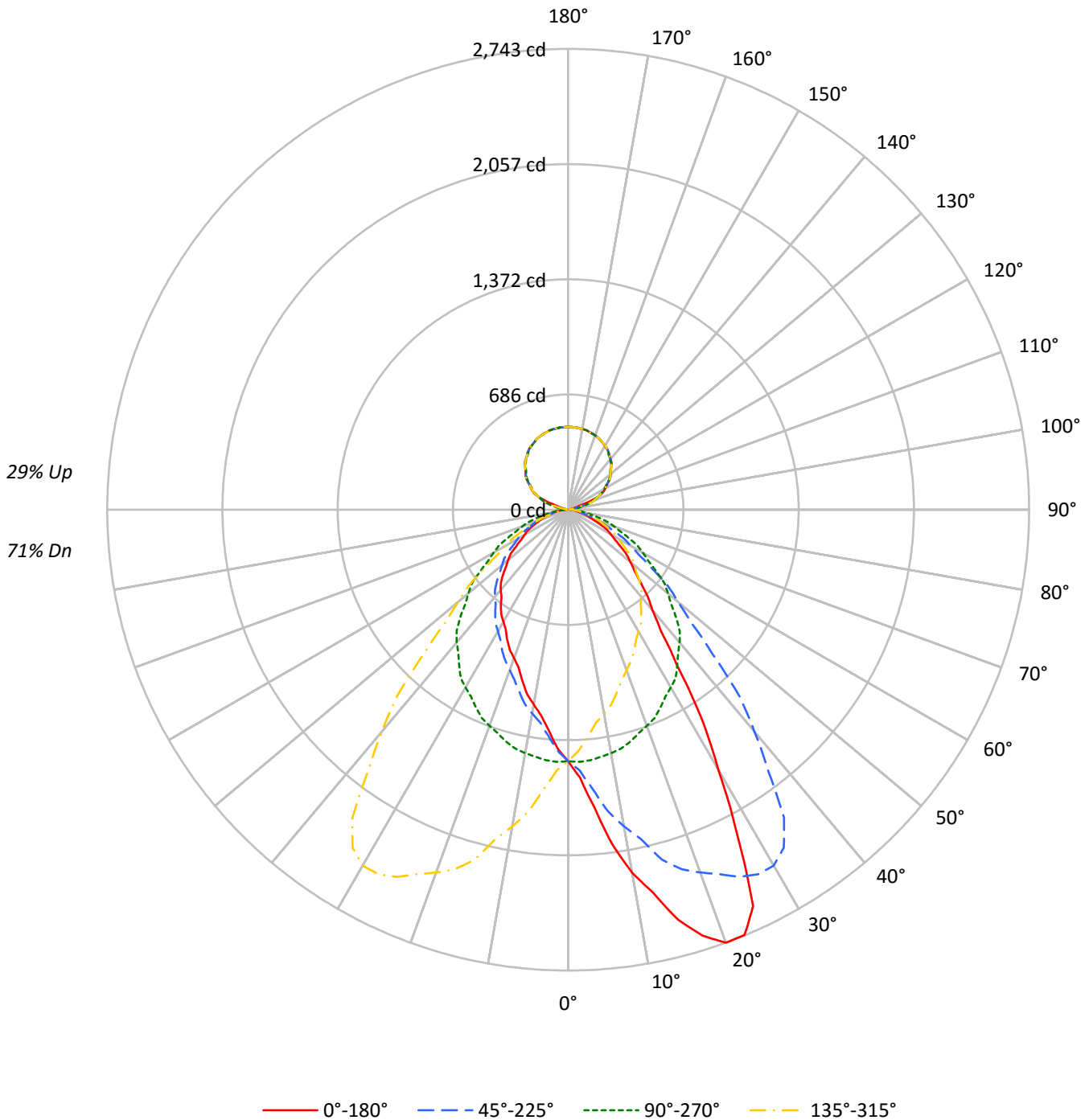
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	103	99	96	92	98	94	91	88	85	82	80	76	74	73	68	67	66	62
2	95	88	82	77	90	83	78	74	75	71	68	68	65	62	61	59	57	53
3	87	78	71	65	82	74	68	63	67	62	58	61	57	53	55	52	49	46
4	80	70	62	56	76	66	59	54	60	55	50	55	50	47	50	46	43	40
5	74	62	54	49	70	60	52	47	54	48	44	50	45	41	45	41	38	35
6	68	56	48	43	65	54	47	41	49	43	39	45	40	36	41	37	34	31
7	64	51	43	38	60	49	42	37	45	39	35	41	36	32	38	34	30	28
8	59	47	39	34	56	45	38	33	41	35	31	38	33	29	35	31	27	25
9	55	43	36	31	53	41	34	30	38	32	28	35	30	27	32	28	25	23
10	52	40	32	28	49	38	31	27	35	30	26	33	28	24	30	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16113	16113	16113	16113
5°	19207	16181	14249	16181
10°	23981	16088	12873	16088
15°	28149	15924	11739	15924
20°	31416	15678	10775	15678
25°	30914	15419	10183	15419
30°	22222	15181	9573	15181
35°	14837	14870	9179	14870
40°	10932	14497	8769	14497
45°	9168	13842	8369	13842
50°	8090	12983	7812	12983
55°	7096	12001	7047	12001
60°	6318	11063	6456	11063
65°	5547	10055	6006	10055
70°	4356	9155	5485	9155
75°	3839	7993	5011	7993
80°	3335	6794	4928	6794
85°	2692	5459	5224	5459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	2.8
10°-20°	459.9	8.8
20°-30°	722.5	13.8
30°-40°	753.8	14.4
40°-50°	645.1	12.3
50°-60°	491.7	9.4
60°-70°	315.1	6.0
70°-80°	151.6	2.9
80°-90°	41.5	0.8
90°-100°	17.9	0.3
100°-110°	85.4	1.6
110°-120°	205.2	3.9
120°-130°	261.3	5.0
130°-140°	279.2	5.3
140°-150°	261.1	5.0
150°-160°	210.6	4.0
160°-170°	135.9	2.6
170°-180°	46.8	0.9
0°-30°	1329.6	25.4
0°-40°	2083.4	39.8
0°-60°	3220.2	61.5
0°-90°	3728.4	71.3
90°-120°	308.6	5.9
90°-150°	1110.2	21.2
90°-180°	1504.0	28.7
0°-180°	5231.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1497	1497	1497	1497	1497	
5°	1778	1498	1319	1498	1778	184
15°	2526	1429	1053	1429	2526	716
25°	2603	1298	857	1298	2603	1119
35°	1129	1132	698	1132	1129	740
45°	602	909	550	909	602	474
55°	378	640	376	640	378	342
65°	218	395	236	395	218	214
75°	92	192	120	192	92	99
85°	22	44	42	44	22	25
90°	11	0	11	0	11	6
95°	14	22	14	22	14	12
105°	16	109	16	109	16	37
115°	215	205	215	205	215	199
125°	294	289	294	289	294	263
135°	363	359	363	359	363	280
145°	419	415	419	415	419	261
155°	456	457	456	457	456	210
165°	481	482	481	482	481	136
175°	491	493	491	493	491	47
180°	493	493	493	493	493	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1594.3	1596.4	1589.7	1588.7	1580.9	1578.9	1578.9	1568.1	1561.5	1552.8	1547.7
5°	1777.6	1787.9	1782.7	1771.2	1751.9	1747.4	1735.3	1716.0	1694.3	1667.4	1654.6
7.5°	2006.5	2020.5	2015.1	1997.2	1977.1	1960.9	1926.5	1894.6	1849.8	1810.6	1777.0
10°	2194.1	2179.4	2167.8	2150.5	2131.9	2101.8	2066.0	2016.6	1959.6	1914.7	1864.8
12.5°	2334.5	2332.2	2317.5	2299.7	2273.5	2244.8	2200.7	2140.6	2074.4	2009.5	1952.4
15°	2526.0	2529.9	2520.3	2501.7	2464.5	2413.9	2347.2	2322.3	2227.4	2157.0	2086.4
17.5°	2658.5	2657.8	2656.5	2630.7	2592.8	2556.8	2495.0	2429.3	2343.4	2244.1	2149.1
20°	2742.6	2736.2	2737.5	2708.7	2680.5	2638.8	2578.5	2483.1	2412.6	2297.9	2199.8
22.5°	2740.5	2739.3	2744.1	2734.3	2713.8	2681.8	2634.5	2553.8	2463.9	2348.1	2237.8
25°	2602.9	2597.8	2628.0	2636.3	2669.0	2674.7	2660.6	2616.4	2531.2	2412.0	2275.5
27.5°	2178.5	2175.6	2231.6	2301.5	2390.2	2459.1	2525.8	2557.9	2531.2	2445.8	2309.1
30°	1787.9	1848.0	1876.2	1977.5	2090.3	2224.9	2342.8	2454.9	2482.4	2445.3	2333.1
32.5°	1484.3	1536.9	1560.5	1647.4	1752.5	1910.1	2086.9	2245.7	2357.9	2386.3	2318.8
35°	1129.1	1129.8	1183.6	1222.0	1319.4	1481.6	1653.3	1866.0	2077.5	2237.7	2254.3
37.5°	901.0	904.2	936.7	975.0	1048.1	1133.8	1285.1	1461.9	1706.2	1952.2	2096.3
40°	778.0	783.7	808.0	845.9	898.4	963.1	1081.0	1247.7	1451.4	1725.0	1948.6
42.5°	699.0	708.3	720.9	750.0	782.5	843.2	938.5	1067.2	1252.5	1511.2	1769.3
45°	602.3	607.5	617.1	630.6	660.0	702.3	766.4	852.9	1006.7	1215.0	1473.2
47.5°	531.3	528.6	538.7	549.7	569.3	598.1	641.1	711.7	821.4	988.5	1207.5
50°	483.1	482.5	489.6	497.9	516.5	537.6	572.9	626.1	713.2	851.7	1052.2
52.5°	438.1	440.5	445.5	455.8	469.3	486.4	518.0	556.4	631.2	750.6	917.9
55°	378.1	380.0	387.0	392.8	402.4	419.7	439.6	471.7	522.9	606.2	744.0
57.5°	327.3	326.4	333.2	334.6	345.5	359.6	375.0	399.8	437.0	499.0	591.7
60°	293.5	291.6	297.3	301.8	307.6	319.1	331.9	356.3	385.8	431.3	510.7
62.5°	262.7	261.8	266.0	270.5	275.3	285.8	296.5	315.3	338.6	376.9	439.9
65°	217.8	219.8	221.7	223.6	226.2	232.6	242.9	255.7	271.7	298.6	344.1
67.5°	171.2	173.2	173.8	177.7	183.3	187.3	193.6	205.0	216.1	238.8	264.6
70°	138.4	137.8	138.4	140.3	147.4	154.4	162.7	171.1	178.1	194.1	216.0
72.5°	119.0	117.8	119.4	119.8	123.3	125.2	130.4	138.3	147.4	158.2	173.9
75°	92.3	92.3	92.3	92.3	94.8	96.1	98.1	100.0	103.1	108.3	119.8
77.5°	68.2	68.3	69.2	69.9	70.4	71.1	72.3	74.2	75.3	78.0	83.1
80°	53.8	54.5	53.8	54.5	54.5	55.8	56.4	58.3	58.9	62.1	64.1
82.5°	40.5	40.1	40.5	41.2	41.2	42.4	42.6	43.9	44.1	45.7	47.7
85°	21.8	20.5	21.8	21.1	22.4	21.1	21.8	23.1	23.1	23.7	26.3
87.5°	7.3	8.3	7.3	7.7	7.7	8.2	8.1	8.1	9.0	8.4	8.7
90°	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5	9.1	8.8	7.7
92.5°	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4	9.9	9.4	8.6
95°	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5	11.9	11.3	10.4
97.5°	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1	12.5	11.8	17.7
100°	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4	12.7	12.1	24.8
102.5°	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1	22.1	24.1	38.0
105°	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4	65.8	80.2	87.6
107.5°	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9	136.5	147.0	145.9
110°	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8	162.5	165.2	164.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	172.8	175.3	177.7	180.2	182.6	183.8	183.8	183.8	183.7	183.7	182.8
115°	215.4	215.1	214.7	214.4	214.1	213.5	212.7	211.9	211.1	210.3	209.5
117.5°	239.3	239.2	239.1	239.0	239.0	238.6	238.0	237.3	236.7	236.0	235.7
120°	255.7	255.7	255.7	255.7	255.7	255.4	254.7	254.0	253.4	252.7	252.5
122.5°	271.8	271.7	271.7	271.6	271.5	271.3	270.8	270.4	269.9	269.5	269.1
125°	294.5	294.3	294.2	294.0	293.8	293.7	293.5	293.3	293.2	293.0	292.7
127.5°	316.3	316.5	316.7	316.8	317.0	316.9	316.7	316.4	316.2	315.9	315.5
130°	330.4	330.5	330.7	330.8	331.0	330.9	330.6	330.3	330.0	329.6	329.4
132.5°	343.3	343.5	343.7	344.0	344.2	344.1	343.8	343.5	343.2	342.8	342.6
135°	363.0	363.2	363.5	363.7	363.9	363.9	363.7	363.5	363.2	363.0	362.6
137.5°	381.6	381.7	381.9	382.0	382.2	382.0	381.6	381.3	380.9	380.5	380.3
140°	392.6	392.8	393.0	393.1	393.3	393.2	392.9	392.6	392.2	391.9	391.7
142.5°	402.9	403.2	403.4	403.6	403.8	403.8	403.6	403.3	403.0	402.8	402.5
145°	418.7	418.7	418.7	418.7	418.7	418.6	418.4	418.2	418.1	417.9	417.8
147.5°	430.4	430.8	431.1	431.5	431.9	432.0	431.9	431.7	431.5	431.4	431.2
150°	439.2	439.4	439.7	439.9	440.2	440.2	440.0	439.9	439.7	439.5	439.4
152.5°	446.2	446.6	446.9	447.4	447.7	447.8	447.4	447.2	446.9	446.6	446.5
155°	456.1	456.5	457.0	457.5	458.0	458.0	457.6	457.2	456.8	456.4	456.3
157.5°	464.3	465.0	465.6	466.2	466.8	466.9	466.4	465.9	465.5	465.0	465.0
160°	469.6	470.2	470.8	471.3	471.9	471.9	471.4	470.9	470.4	469.9	470.0
162.5°	474.6	475.1	475.6	476.1	476.6	476.5	476.1	475.5	474.9	474.3	474.4
165°	480.6	481.2	481.8	482.2	482.8	482.8	482.2	481.5	480.9	480.2	480.3
167.5°	484.9	485.6	486.2	486.8	487.5	487.5	486.8	486.2	485.6	484.9	484.9
170°	487.5	488.2	488.9	489.5	490.2	490.2	489.5	488.9	488.2	487.5	487.5
172.5°	489.0	489.8	490.4	491.1	491.9	491.9	491.2	490.6	489.9	489.3	489.3
175°	491.2	491.9	492.5	493.2	493.8	493.8	493.3	492.7	492.1	491.5	491.5
177.5°	491.9	492.5	493.2	493.8	494.5	494.6	494.0	493.5	492.9	492.4	492.4
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1545.6	1544.1	1536.9	1528.7	1517.9	1510.7	1505.1	1502.0	1492.8	1481.6	1473.8
5°	1641.1	1621.9	1601.3	1576.4	1553.3	1529.6	1514.8	1497.5	1476.4	1452.7	1436.1
7.5°	1743.4	1705.7	1665.1	1623.2	1581.8	1544.6	1511.8	1483.7	1450.0	1416.0	1392.2
10°	1821.8	1766.7	1709.7	1651.3	1598.1	1548.2	1509.7	1471.9	1431.6	1392.4	1363.0
12.5°	1893.0	1820.5	1754.8	1683.1	1615.1	1555.3	1500.0	1455.5	1407.0	1365.3	1331.7
15°	1983.3	1908.9	1829.5	1720.5	1630.2	1554.6	1487.3	1429.0	1370.0	1318.7	1286.1
17.5°	2067.6	1955.7	1848.9	1758.1	1640.7	1546.2	1464.1	1394.4	1329.7	1275.3	1235.1
20°	2102.5	1994.1	1878.2	1762.2	1646.8	1541.2	1445.6	1368.7	1301.5	1239.9	1202.8
22.5°	2123.4	2000.8	1878.7	1754.0	1631.5	1521.7	1427.2	1342.6	1269.7	1211.2	1165.4
25°	2148.0	2001.9	1867.3	1744.3	1619.3	1500.2	1388.0	1298.3	1219.4	1157.3	1108.6
27.5°	2164.1	1992.3	1833.2	1696.5	1569.7	1451.0	1348.3	1253.1	1173.2	1107.4	1055.2
30°	2167.1	1984.5	1807.0	1659.1	1530.2	1421.3	1312.4	1221.4	1136.8	1066.9	1018.2
32.5°	2171.3	1965.6	1771.6	1614.5	1482.5	1374.7	1275.9	1189.0	1102.4	1033.6	983.9
35°	2154.3	1955.1	1718.0	1537.2	1405.2	1300.8	1211.8	1131.6	1046.4	979.7	929.2
37.5°	2081.5	1913.4	1662.4	1450.4	1312.4	1215.6	1143.0	1073.2	995.1	923.2	875.5
40°	2008.2	1872.4	1619.3	1397.6	1253.4	1154.1	1088.8	1031.7	956.1	888.8	837.6
42.5°	1899.1	1816.6	1578.3	1342.2	1186.7	1091.0	1035.9	982.4	916.1	847.7	799.6
45°	1698.8	1709.7	1494.4	1254.0	1094.5	998.3	946.5	909.3	850.4	793.9	744.6
47.5°	1447.6	1549.5	1395.8	1160.1	997.2	907.0	861.6	829.2	789.5	734.1	689.1
50°	1283.5	1429.0	1316.9	1097.1	936.2	846.5	801.6	775.3	740.8	697.2	654.3
52.5°	1132.3	1288.5	1221.5	1026.8	870.1	788.1	744.2	722.6	695.1	654.1	615.3
55°	923.4	1081.7	1066.3	920.8	770.9	697.2	663.9	639.5	620.9	590.2	559.5
57.5°	746.9	897.0	904.9	802.9	683.5	610.7	582.0	563.6	551.5	528.3	499.9
60°	635.7	773.5	800.4	723.5	620.9	556.8	528.6	513.9	504.3	485.8	463.9
62.5°	543.4	660.6	691.1	635.8	560.9	501.0	478.9	464.7	458.2	442.1	422.9
65°	415.9	513.3	542.7	512.0	472.9	424.9	406.9	394.8	389.0	380.0	365.9
67.5°	312.7	383.7	416.0	394.4	380.3	349.8	338.4	331.9	326.8	320.7	308.8
70°	251.2	303.7	337.0	331.3	319.8	303.7	295.4	290.9	285.8	280.7	270.4
72.5°	201.9	238.1	269.4	272.3	262.9	259.7	252.3	250.5	247.4	241.2	235.5
75°	134.0	158.9	180.7	189.1	192.9	196.1	192.9	192.2	191.6	186.5	183.3
77.5°	87.8	101.3	115.0	129.2	135.2	139.6	140.6	142.9	141.2	138.5	137.0
80°	67.3	70.5	80.1	92.3	101.9	105.7	108.3	109.6	108.9	108.3	105.7
82.5°	48.8	51.5	56.0	64.6	72.6	79.1	80.6	80.4	81.8	82.2	80.1
85°	26.3	26.9	28.2	29.5	34.0	41.0	43.0	44.2	45.5	45.5	41.7
87.5°	9.5	8.8	9.6	9.5	10.8	11.2	14.1	16.5	17.1	15.2	15.4
90°	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3	1.1	2.0	2.8
92.5°	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8	6.6	6.4	6.1
95°	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3	19.0	15.7	12.3
97.5°	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9	43.4	41.9	40.4
100°	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9	63.5	65.1	66.8
102.5°	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2	82.4	83.6	84.8
105°	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2	110.1	111.0	111.9
107.5°	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6	139.3	140.1	140.7
110°	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2	158.9	159.6	160.2



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	181.9	181.0	180.1	179.4	178.7	178.1	177.6	177.0	177.6	178.1	178.7
115°	208.8	208.1	207.3	206.7	206.2	205.7	205.2	204.7	205.2	205.7	206.2
117.5°	235.3	234.9	234.6	234.1	233.4	232.8	232.3	231.6	232.3	232.8	233.4
120°	252.3	252.0	251.8	251.3	250.5	249.8	249.1	248.3	249.1	249.8	250.5
122.5°	268.8	268.6	268.2	267.7	267.2	266.5	266.0	265.4	266.0	266.5	267.2
125°	292.4	292.0	291.7	291.2	290.6	289.9	289.3	288.6	289.3	289.9	290.6
127.5°	315.1	314.7	314.3	313.8	313.2	312.5	311.9	311.2	311.9	312.5	313.2
130°	329.1	328.7	328.4	327.9	327.3	326.6	326.0	325.3	326.0	326.6	327.3
132.5°	342.3	342.1	341.8	341.4	340.7	340.1	339.4	338.8	339.4	340.1	340.7
135°	362.3	362.0	361.7	361.3	360.8	360.3	359.8	359.3	359.8	360.3	360.8
137.5°	380.2	380.0	379.8	379.4	378.8	378.1	377.6	376.9	377.6	378.1	378.8
140°	391.4	391.2	390.9	390.6	390.1	389.6	389.1	388.7	389.1	389.6	390.1
142.5°	402.3	402.0	401.8	401.5	401.0	400.5	400.0	399.5	400.0	400.5	401.0
145°	417.6	417.4	417.3	416.9	416.4	415.8	415.2	414.7	415.2	415.8	416.4
147.5°	431.0	430.9	430.7	430.4	430.1	429.7	429.3	428.9	429.3	429.7	430.1
150°	439.2	439.0	438.9	438.7	438.5	438.2	438.0	437.7	438.0	438.2	438.5
152.5°	446.4	446.3	446.2	446.1	446.0	445.9	445.7	445.6	445.7	445.9	446.0
155°	456.2	456.2	456.1	456.2	456.3	456.4	456.6	456.7	456.6	456.4	456.3
157.5°	465.1	465.2	465.3	465.4	465.4	465.4	465.4	465.5	465.4	465.4	465.4
160°	470.1	470.2	470.3	470.3	470.4	470.5	470.6	470.7	470.6	470.5	470.4
162.5°	474.5	474.6	474.7	474.8	475.1	475.2	475.5	475.6	475.5	475.2	475.1
165°	480.4	480.5	480.5	480.7	480.9	481.2	481.4	481.7	481.4	481.2	480.9
167.5°	484.9	484.9	484.9	485.1	485.4	485.8	486.1	486.4	486.1	485.8	485.4
170°	487.5	487.5	487.5	487.7	488.0	488.4	488.7	489.0	488.7	488.4	488.0
172.5°	489.2	489.1	489.0	489.2	489.6	490.0	490.4	490.7	490.4	490.0	489.6
175°	491.4	491.3	491.2	491.4	491.8	492.2	492.6	493.0	492.6	492.2	491.8
177.5°	492.3	492.3	492.2	492.3	492.6	492.9	493.3	493.6	493.3	492.9	492.6
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1471.3	1464.6	1460.0	1449.8	1443.1	1435.9	1428.7	1433.4	1432.8	1432.3	1432.3
5°	1422.0	1407.2	1393.8	1376.5	1365.5	1352.1	1341.8	1340.5	1343.1	1334.2	1329.0
7.5°	1373.0	1352.8	1333.7	1314.7	1294.5	1278.3	1268.1	1263.4	1256.9	1251.3	1245.6
10°	1338.6	1314.9	1296.3	1272.6	1250.8	1231.6	1219.4	1211.1	1206.6	1202.2	1193.8
12.5°	1303.3	1280.1	1256.4	1229.6	1208.8	1186.5	1177.4	1168.1	1159.4	1154.5	1143.0
15°	1251.5	1221.4	1196.4	1168.2	1145.1	1123.3	1110.5	1091.9	1089.3	1083.0	1071.4
17.5°	1199.5	1166.9	1132.5	1111.5	1085.5	1062.8	1043.3	1037.1	1018.7	1011.8	1001.8
20°	1158.5	1128.5	1102.2	1074.6	1036.8	1015.7	1000.3	992.0	977.2	968.2	961.8
22.5°	1123.2	1092.6	1062.2	1030.0	998.9	975.2	963.9	951.0	942.9	930.3	923.4
25°	1072.7	1039.3	1002.8	968.2	945.8	927.9	910.0	898.4	886.9	881.1	868.3
27.5°	1014.0	979.2	945.0	918.8	891.2	873.5	857.3	847.0	833.2	823.5	816.4
30°	981.7	940.7	911.2	887.5	852.2	835.6	823.5	810.7	800.4	790.1	783.1
32.5°	944.3	906.9	878.9	849.5	822.6	804.3	788.6	777.3	768.6	758.8	751.8
35°	885.6	854.2	825.3	795.9	776.0	757.4	738.8	729.2	720.9	711.9	705.6
37.5°	832.5	803.2	775.8	747.8	723.2	708.1	693.1	685.7	674.5	668.5	661.9
40°	799.7	770.9	741.4	714.5	688.8	677.4	663.9	653.0	642.7	638.2	631.2
42.5°	763.9	735.0	710.1	681.2	660.1	644.5	632.1	620.2	612.5	605.9	601.9
45°	710.6	685.0	660.6	631.9	612.0	598.5	584.4	573.5	566.5	562.0	554.9
47.5°	659.0	633.4	608.6	583.5	564.3	548.9	534.8	527.3	517.9	512.4	507.6
50°	621.6	598.5	572.3	549.2	529.9	514.5	503.0	493.4	485.1	478.0	474.8
52.5°	587.3	562.6	540.0	518.4	498.1	480.7	470.2	460.1	453.8	445.7	442.1
55°	530.6	506.9	487.6	466.5	446.6	431.9	419.1	410.1	403.7	394.8	389.6
57.5°	477.4	456.2	433.2	414.8	394.4	381.9	371.3	359.1	351.3	344.2	339.2
60°	441.5	417.2	397.3	380.0	362.1	346.0	336.4	326.8	318.5	311.4	307.0
62.5°	404.1	382.8	363.9	345.1	328.7	314.8	303.6	295.5	288.2	283.7	279.2
65°	346.7	330.0	310.8	295.4	280.1	269.8	260.8	253.7	248.7	245.4	241.6
67.5°	293.8	277.7	260.9	245.8	235.5	227.7	221.8	215.8	213.3	209.1	206.6
70°	259.5	242.9	228.1	216.6	206.4	200.6	196.7	192.2	189.6	184.6	182.0
72.5°	222.1	210.0	199.4	190.0	181.7	176.5	171.6	166.1	162.0	156.4	153.8
75°	175.0	164.0	155.7	149.3	144.1	137.1	130.1	124.3	122.4	120.5	119.8
77.5°	129.6	122.6	116.6	111.2	104.8	99.7	98.2	96.9	96.5	95.5	95.5
80°	101.9	95.5	91.0	84.5	80.7	80.7	80.7	79.5	80.1	80.1	80.1
82.5°	75.7	69.9	67.4	65.1	64.3	64.8	64.8	65.1	64.7	65.7	65.2
85°	39.1	39.7	41.0	40.4	41.0	41.0	42.3	41.7	42.3	41.0	42.3
87.5°	15.1	16.8	17.5	18.3	19.0	18.7	19.2	19.3	19.9	20.0	20.0
90°	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5	9.8	10.1	10.4
92.5°	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4	10.9	11.5	11.7
95°	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5	13.0	13.6	13.9
97.5°	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1	13.8	14.4	14.8
100°	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4	14.0	14.7	15.1
102.5°	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1	18.0	16.1	15.1
105°	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4	37.0	22.6	15.5
107.5°	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9	115.4	104.8	94.1
110°	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8	157.1	154.4	147.3



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	179.4	180.1	181.0	181.9	182.8	183.7	183.7	183.8	183.8	183.8	182.6
115°	206.7	207.3	208.1	208.8	209.5	210.3	211.1	211.9	212.7	213.5	214.1
117.5°	234.1	234.6	234.9	235.3	235.7	236.0	236.7	237.3	238.0	238.6	239.0
120°	251.3	251.8	252.0	252.3	252.5	252.7	253.4	254.0	254.7	255.4	255.7
122.5°	267.7	268.2	268.6	268.8	269.1	269.5	269.9	270.4	270.8	271.3	271.5
125°	291.2	291.7	292.0	292.4	292.7	293.0	293.2	293.3	293.5	293.7	293.8
127.5°	313.8	314.3	314.7	315.1	315.5	315.9	316.2	316.4	316.7	316.9	317.0
130°	327.9	328.4	328.7	329.1	329.4	329.6	330.0	330.3	330.6	330.9	331.0
132.5°	341.4	341.8	342.1	342.3	342.6	342.8	343.2	343.5	343.8	344.1	344.2
135°	361.3	361.7	362.0	362.3	362.6	363.0	363.2	363.5	363.7	363.9	363.9
137.5°	379.4	379.8	380.0	380.2	380.3	380.5	380.9	381.3	381.6	382.0	382.2
140°	390.6	390.9	391.2	391.4	391.7	391.9	392.2	392.6	392.9	393.2	393.3
142.5°	401.5	401.8	402.0	402.3	402.5	402.8	403.0	403.3	403.6	403.8	403.8
145°	416.9	417.3	417.4	417.6	417.8	417.9	418.1	418.2	418.4	418.6	418.7
147.5°	430.4	430.7	430.9	431.0	431.2	431.4	431.5	431.7	431.9	432.0	431.9
150°	438.7	438.9	439.0	439.2	439.4	439.5	439.7	439.9	440.0	440.2	440.2
152.5°	446.1	446.2	446.3	446.4	446.5	446.6	446.9	447.2	447.4	447.8	447.7
155°	456.2	456.1	456.2	456.2	456.3	456.4	456.8	457.2	457.6	458.0	458.0
157.5°	465.4	465.3	465.2	465.1	465.0	465.0	465.5	465.9	466.4	466.9	466.8
160°	470.3	470.3	470.2	470.1	470.0	469.9	470.4	470.9	471.4	471.9	471.9
162.5°	474.8	474.7	474.6	474.5	474.4	474.3	474.9	475.5	476.1	476.5	476.6
165°	480.7	480.5	480.5	480.4	480.3	480.2	480.9	481.5	482.2	482.8	482.8
167.5°	485.1	484.9	484.9	484.9	484.9	484.9	485.6	486.2	486.8	487.5	487.5
170°	487.7	487.5	487.5	487.5	487.5	487.5	488.2	488.9	489.5	490.2	490.2
172.5°	489.2	489.0	489.1	489.2	489.3	489.3	489.9	490.6	491.2	491.9	491.9
175°	491.4	491.2	491.3	491.4	491.5	491.5	492.1	492.7	493.3	493.8	493.8
177.5°	492.3	492.2	492.3	492.3	492.4	492.4	492.9	493.5	494.0	494.6	494.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1426.2	1425.6	1426.2	1424.1	1426.2	1425.6	1426.2	1432.3	1432.3	1432.8	1433.4
5°	1327.1	1326.5	1324.5	1318.7	1324.5	1326.5	1327.1	1329.0	1334.2	1343.1	1340.5
7.5°	1240.6	1239.7	1234.0	1234.2	1234.0	1239.7	1240.6	1245.6	1251.3	1256.9	1263.4
10°	1189.4	1189.9	1182.3	1177.8	1182.3	1189.9	1189.4	1193.8	1202.2	1206.6	1211.1
12.5°	1139.6	1136.7	1130.5	1125.5	1130.5	1136.7	1139.6	1143.0	1154.5	1159.4	1168.1
15°	1074.0	1067.6	1052.2	1053.4	1052.2	1067.6	1074.0	1071.4	1083.0	1089.3	1091.9
17.5°	996.7	992.0	991.7	982.8	991.7	992.0	996.7	1001.8	1011.8	1018.7	1037.1
20°	951.6	948.4	949.7	940.7	949.7	948.4	951.6	961.8	968.2	977.2	992.0
22.5°	916.2	913.0	907.6	904.8	907.6	913.0	916.2	923.4	930.3	942.9	951.0
25°	864.5	859.3	854.2	857.4	854.2	859.3	864.5	868.3	881.1	886.9	898.4
27.5°	812.7	808.9	803.7	803.1	803.7	808.9	812.7	816.4	823.5	833.2	847.0
30°	779.8	776.0	773.5	770.2	773.5	776.0	779.8	783.1	790.1	800.4	810.7
32.5°	746.6	745.8	741.2	740.5	741.2	745.8	746.6	751.8	758.8	768.6	777.3
35°	703.0	699.1	697.8	698.5	697.8	699.1	703.0	705.6	711.9	720.9	729.2
37.5°	661.5	656.4	654.1	651.8	654.1	656.4	661.5	661.9	668.5	674.5	685.7
40°	631.9	626.7	625.4	624.1	625.4	626.7	631.9	631.2	638.2	642.7	653.0
42.5°	598.5	596.5	595.7	593.4	595.7	596.5	598.5	601.9	605.9	612.5	620.2
45°	553.0	552.4	548.5	549.8	548.5	552.4	553.0	554.9	562.0	566.5	573.5
47.5°	505.1	502.2	499.5	501.3	499.5	502.2	505.1	507.6	512.4	517.9	527.3
50°	472.3	471.0	465.2	466.5	465.2	471.0	472.3	474.8	478.0	485.1	493.4
52.5°	439.4	434.6	432.4	431.6	432.4	434.6	439.4	442.1	445.7	453.8	460.1
55°	385.1	379.4	376.7	375.5	376.7	379.4	385.1	389.6	394.8	403.7	410.1
57.5°	331.8	330.3	328.2	329.6	328.2	330.3	331.8	339.2	344.2	351.3	359.1
60°	300.5	300.5	300.5	299.9	300.5	300.5	300.5	307.0	311.4	318.5	326.8
62.5°	276.5	274.9	274.4	275.3	274.4	274.9	276.5	279.2	283.7	288.2	295.5
65°	239.7	239.0	236.4	235.8	236.4	239.0	239.7	241.6	245.4	248.7	253.7
67.5°	205.0	202.6	201.9	201.0	201.9	202.6	205.0	206.6	209.1	213.3	215.8
70°	178.8	177.5	173.7	174.3	173.7	177.5	178.8	182.0	184.6	189.6	192.2
72.5°	150.6	149.3	148.5	147.7	148.5	149.3	150.6	153.8	156.4	162.0	166.1
75°	119.2	118.5	117.9	120.5	117.9	118.5	119.2	119.8	120.5	122.4	124.3
77.5°	95.5	95.5	95.9	94.8	95.9	95.5	95.5	95.5	95.5	96.5	96.9
80°	80.1	80.1	79.5	79.5	79.5	80.1	80.1	80.1	80.1	80.1	79.5
82.5°	64.2	64.7	65.1	64.1	65.1	64.7	64.2	65.2	65.7	64.7	65.1
85°	42.3	41.7	43.0	42.3	43.0	41.7	42.3	42.3	41.0	42.3	41.7
87.5°	21.0	20.1	20.1	20.6	20.1	20.1	21.0	20.0	20.0	19.9	19.3
90°	10.5	10.7	10.8	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5
92.5°	11.9	12.0	12.1	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4
95°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5
97.5°	14.8	14.9	15.0	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1
100°	15.2	15.2	15.3	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4
102.5°	15.2	15.4	15.5	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1
105°	15.7	15.8	16.0	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4
107.5°	83.2	72.3	61.5	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9
110°	135.7	124.0	112.3	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8



TEST NUMBER: P332470-930

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	180.2	177.7	175.3	172.8	175.3	177.7	180.2	182.6	183.8	183.8	183.8
115°	214.4	214.7	215.1	215.4	215.1	214.7	214.4	214.1	213.5	212.7	211.9
117.5°	239.0	239.1	239.2	239.3	239.2	239.1	239.0	239.0	238.6	238.0	237.3
120°	255.7	255.7	255.7	255.7	255.7	255.7	255.7	255.7	255.4	254.7	254.0
122.5°	271.6	271.7	271.7	271.8	271.7	271.7	271.6	271.5	271.3	270.8	270.4
125°	294.0	294.2	294.3	294.5	294.3	294.2	294.0	293.8	293.7	293.5	293.3
127.5°	316.8	316.7	316.5	316.3	316.5	316.7	316.8	317.0	316.9	316.7	316.4
130°	330.8	330.7	330.5	330.4	330.5	330.7	330.8	331.0	330.9	330.6	330.3
132.5°	344.0	343.7	343.5	343.3	343.5	343.7	344.0	344.2	344.1	343.8	343.5
135°	363.7	363.5	363.2	363.0	363.2	363.5	363.7	363.9	363.9	363.7	363.5
137.5°	382.0	381.9	381.7	381.6	381.7	381.9	382.0	382.2	382.0	381.6	381.3
140°	393.1	393.0	392.8	392.6	392.8	393.0	393.1	393.3	393.2	392.9	392.6
142.5°	403.6	403.4	403.2	402.9	403.2	403.4	403.6	403.8	403.8	403.6	403.3
145°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.6	418.4	418.2
147.5°	431.5	431.1	430.8	430.4	430.8	431.1	431.5	431.9	432.0	431.9	431.7
150°	439.9	439.7	439.4	439.2	439.4	439.7	439.9	440.2	440.2	440.0	439.9
152.5°	447.4	446.9	446.6	446.2	446.6	446.9	447.4	447.7	447.8	447.4	447.2
155°	457.5	457.0	456.5	456.1	456.5	457.0	457.5	458.0	458.0	457.6	457.2
157.5°	466.2	465.6	465.0	464.3	465.0	465.6	466.2	466.8	466.9	466.4	465.9
160°	471.3	470.8	470.2	469.6	470.2	470.8	471.3	471.9	471.9	471.4	470.9
162.5°	476.1	475.6	475.1	474.6	475.1	475.6	476.1	476.6	476.5	476.1	475.5
165°	482.2	481.8	481.2	480.6	481.2	481.8	482.2	482.8	482.8	482.2	481.5
167.5°	486.8	486.2	485.6	484.9	485.6	486.2	486.8	487.5	487.5	486.8	486.2
170°	489.5	488.9	488.2	487.5	488.2	488.9	489.5	490.2	490.2	489.5	488.9
172.5°	491.1	490.4	489.8	489.0	489.8	490.4	491.1	491.9	491.9	491.2	490.6
175°	493.2	492.5	491.9	491.2	491.9	492.5	493.2	493.8	493.8	493.3	492.7
177.5°	493.8	493.2	492.5	491.9	492.5	493.2	493.8	494.5	494.6	494.0	493.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1428.7	1435.9	1443.1	1449.8	1460.0	1464.6	1471.3	1473.8	1481.6	1492.8	1502.0
5°	1341.8	1352.1	1365.5	1376.5	1393.8	1407.2	1422.0	1436.1	1452.7	1476.4	1497.5
7.5°	1268.1	1278.3	1294.5	1314.7	1333.7	1352.8	1373.0	1392.2	1416.0	1450.0	1483.7
10°	1219.4	1231.6	1250.8	1272.6	1296.3	1314.9	1338.6	1363.0	1392.4	1431.6	1471.9
12.5°	1177.4	1186.5	1208.8	1229.6	1256.4	1280.1	1303.3	1331.7	1365.3	1407.0	1455.5
15°	1110.5	1123.3	1145.1	1168.2	1196.4	1221.4	1251.5	1286.1	1318.7	1370.0	1429.0
17.5°	1043.3	1062.8	1085.5	1111.5	1132.5	1166.9	1199.5	1235.1	1275.3	1329.7	1394.4
20°	1000.3	1015.7	1036.8	1074.6	1102.2	1128.5	1158.5	1202.8	1239.9	1301.5	1368.7
22.5°	963.9	975.2	998.9	1030.0	1062.2	1092.6	1123.2	1165.4	1211.2	1269.7	1342.6
25°	910.0	927.9	945.8	968.2	1002.8	1039.3	1072.7	1108.6	1157.3	1219.4	1298.3
27.5°	857.3	873.5	891.2	918.8	945.0	979.2	1014.0	1055.2	1107.4	1173.2	1253.1
30°	823.5	835.6	852.2	887.5	911.2	940.7	981.7	1018.2	1066.9	1136.8	1221.4
32.5°	788.6	804.3	822.6	849.5	878.9	906.9	944.3	983.9	1033.6	1102.4	1189.0
35°	738.8	757.4	776.0	795.9	825.3	854.2	885.6	929.2	979.7	1046.4	1131.6
37.5°	693.1	708.1	723.2	747.8	775.8	803.2	832.5	875.5	923.2	995.1	1073.2
40°	663.9	677.4	688.8	714.5	741.4	770.9	799.7	837.6	888.8	956.1	1031.7
42.5°	632.1	644.5	660.1	681.2	710.1	735.0	763.9	799.6	847.7	916.1	982.4
45°	584.4	598.5	612.0	631.9	660.6	685.0	710.6	744.6	793.9	850.4	909.3
47.5°	534.8	548.9	564.3	583.5	608.6	633.4	659.0	689.1	734.1	789.5	829.2
50°	503.0	514.5	529.9	549.2	572.3	598.5	621.6	654.3	697.2	740.8	775.3
52.5°	470.2	480.7	498.1	518.4	540.0	562.6	587.3	615.3	654.1	695.1	722.6
55°	419.1	431.9	446.6	466.5	487.6	506.9	530.6	559.5	590.2	620.9	639.5
57.5°	371.3	381.9	394.4	414.8	433.2	456.2	477.4	499.9	528.3	551.5	563.6
60°	336.4	346.0	362.1	380.0	397.3	417.2	441.5	463.9	485.8	504.3	513.9
62.5°	303.6	314.8	328.7	345.1	363.9	382.8	404.1	422.9	442.1	458.2	464.7
65°	260.8	269.8	280.1	295.4	310.8	330.0	346.7	365.9	380.0	389.0	394.8
67.5°	221.8	227.7	235.5	245.8	260.9	277.7	293.8	308.8	320.7	326.8	331.9
70°	196.7	200.6	206.4	216.6	228.1	242.9	259.5	270.4	280.7	285.8	290.9
72.5°	171.6	176.5	181.7	190.0	199.4	210.0	222.1	235.5	241.2	247.4	250.5
75°	130.1	137.1	144.1	149.3	155.7	164.0	175.0	183.3	186.5	191.6	192.2
77.5°	98.2	99.7	104.8	111.2	116.6	122.6	129.6	137.0	138.5	141.2	142.9
80°	80.7	80.7	80.7	84.5	91.0	95.5	101.9	105.7	108.3	108.9	109.6
82.5°	64.8	64.8	64.3	65.1	67.4	69.9	75.7	80.1	82.2	81.8	80.4
85°	42.3	41.0	41.0	40.4	41.0	39.7	39.1	41.7	45.5	45.5	44.2
87.5°	19.2	18.7	19.0	18.3	17.5	16.8	15.1	15.4	15.2	17.1	16.5
90°	9.1	8.8	7.7	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3
92.5°	9.9	9.4	8.6	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8
95°	11.9	11.3	10.4	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3
97.5°	12.5	11.8	17.7	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9
100°	12.7	12.1	24.8	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9
102.5°	22.1	24.1	38.0	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2
105°	65.8	80.2	87.6	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2
107.5°	136.5	147.0	145.9	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6
110°	162.5	165.2	164.3	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2



TEST NUMBER: P332470-930

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	183.7	183.7	182.8	181.9	181.0	180.1	179.4	178.7	178.1	177.6	177.0
115°	211.1	210.3	209.5	208.8	208.1	207.3	206.7	206.2	205.7	205.2	204.7
117.5°	236.7	236.0	235.7	235.3	234.9	234.6	234.1	233.4	232.8	232.3	231.6
120°	253.4	252.7	252.5	252.3	252.0	251.8	251.3	250.5	249.8	249.1	248.3
122.5°	269.9	269.5	269.1	268.8	268.6	268.2	267.7	267.2	266.5	266.0	265.4
125°	293.2	293.0	292.7	292.4	292.0	291.7	291.2	290.6	289.9	289.3	288.6
127.5°	316.2	315.9	315.5	315.1	314.7	314.3	313.8	313.2	312.5	311.9	311.2
130°	330.0	329.6	329.4	329.1	328.7	328.4	327.9	327.3	326.6	326.0	325.3
132.5°	343.2	342.8	342.6	342.3	342.1	341.8	341.4	340.7	340.1	339.4	338.8
135°	363.2	363.0	362.6	362.3	362.0	361.7	361.3	360.8	360.3	359.8	359.3
137.5°	380.9	380.5	380.3	380.2	380.0	379.8	379.4	378.8	378.1	377.6	376.9
140°	392.2	391.9	391.7	391.4	391.2	390.9	390.6	390.1	389.6	389.1	388.7
142.5°	403.0	402.8	402.5	402.3	402.0	401.8	401.5	401.0	400.5	400.0	399.5
145°	418.1	417.9	417.8	417.6	417.4	417.3	416.9	416.4	415.8	415.2	414.7
147.5°	431.5	431.4	431.2	431.0	430.9	430.7	430.4	430.1	429.7	429.3	428.9
150°	439.7	439.5	439.4	439.2	439.0	438.9	438.7	438.5	438.2	438.0	437.7
152.5°	446.9	446.6	446.5	446.4	446.3	446.2	446.1	446.0	445.9	445.7	445.6
155°	456.8	456.4	456.3	456.2	456.2	456.1	456.2	456.3	456.4	456.6	456.7
157.5°	465.5	465.0	465.0	465.1	465.2	465.3	465.4	465.4	465.4	465.4	465.5
160°	470.4	469.9	470.0	470.1	470.2	470.3	470.3	470.4	470.5	470.6	470.7
162.5°	474.9	474.3	474.4	474.5	474.6	474.7	474.8	475.1	475.2	475.5	475.6
165°	480.9	480.2	480.3	480.4	480.5	480.5	480.7	480.9	481.2	481.4	481.7
167.5°	485.6	484.9	484.9	484.9	484.9	484.9	485.1	485.4	485.8	486.1	486.4
170°	488.2	487.5	487.5	487.5	487.5	487.5	487.7	488.0	488.4	488.7	489.0
172.5°	489.9	489.3	489.3	489.2	489.1	489.0	489.2	489.6	490.0	490.4	490.7
175°	492.1	491.5	491.5	491.4	491.3	491.2	491.4	491.8	492.2	492.6	493.0
177.5°	492.9	492.4	492.4	492.3	492.3	492.2	492.3	492.6	492.9	493.3	493.6
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332470-930

CATALOG NUMBER: S123RDIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1505.1	1510.7	1517.9	1528.7	1536.9	1544.1	1545.6	1547.7	1552.8	1561.5	1568.1
5°	1514.8	1529.6	1553.3	1576.4	1601.3	1621.9	1641.1	1654.6	1667.4	1694.3	1716.0
7.5°	1511.8	1544.6	1581.8	1623.2	1665.1	1705.7	1743.4	1777.0	1810.6	1849.8	1894.6
10°	1509.7	1548.2	1598.1	1651.3	1709.7	1766.7	1821.8	1864.8	1914.7	1959.6	2016.6
12.5°	1500.0	1555.3	1615.1	1683.1	1754.8	1820.5	1893.0	1952.4	2009.5	2074.4	2140.6
15°	1487.3	1554.6	1630.2	1720.5	1829.5	1908.9	1983.3	2086.4	2157.0	2227.4	2322.3
17.5°	1464.1	1546.2	1640.7	1758.1	1848.9	1955.7	2067.6	2149.1	2244.1	2343.4	2429.3
20°	1445.6	1541.2	1646.8	1762.2	1878.2	1994.1	2102.5	2199.8	2297.9	2412.6	2483.1
22.5°	1427.2	1521.7	1631.5	1754.0	1878.7	2000.8	2123.4	2237.8	2348.1	2463.9	2553.8
25°	1388.0	1500.2	1619.3	1744.3	1867.3	2001.9	2148.0	2275.5	2412.0	2531.2	2616.4
27.5°	1348.3	1451.0	1569.7	1696.5	1833.2	1992.3	2164.1	2309.1	2445.8	2531.2	2557.9
30°	1312.4	1421.3	1530.2	1659.1	1807.0	1984.5	2167.1	2333.1	2445.3	2482.4	2454.9
32.5°	1275.9	1374.7	1482.5	1614.5	1771.6	1965.6	2171.3	2318.8	2386.3	2357.9	2245.7
35°	1211.8	1300.8	1405.2	1537.2	1718.0	1955.1	2154.3	2254.3	2237.7	2077.5	1866.0
37.5°	1143.0	1215.6	1312.4	1450.4	1662.4	1913.4	2081.5	2096.3	1952.2	1706.2	1461.9
40°	1088.8	1154.1	1253.4	1397.6	1619.3	1872.4	2008.2	1948.6	1725.0	1451.4	1247.7
42.5°	1035.9	1091.0	1186.7	1342.2	1578.3	1816.6	1899.1	1769.3	1511.2	1252.5	1067.2
45°	946.5	998.3	1094.5	1254.0	1494.4	1709.7	1698.8	1473.2	1215.0	1006.7	852.9
47.5°	861.6	907.0	997.2	1160.1	1395.8	1549.5	1447.6	1207.5	988.5	821.4	711.7
50°	801.6	846.5	936.2	1097.1	1316.9	1429.0	1283.5	1052.2	851.7	713.2	626.1
52.5°	744.2	788.1	870.1	1026.8	1221.5	1288.5	1132.3	917.9	750.6	631.2	556.4
55°	663.9	697.2	770.9	920.8	1066.3	1081.7	923.4	744.0	606.2	522.9	471.7
57.5°	582.0	610.7	683.5	802.9	904.9	897.0	746.9	591.7	499.0	437.0	399.8
60°	528.6	556.8	620.9	723.5	800.4	773.5	635.7	510.7	431.3	385.8	356.3
62.5°	478.9	501.0	560.9	635.8	691.1	660.6	543.4	439.9	376.9	338.6	315.3
65°	406.9	424.9	472.9	512.0	542.7	513.3	415.9	344.1	298.6	271.7	255.7
67.5°	338.4	349.8	380.3	394.4	416.0	383.7	312.7	264.6	238.8	216.1	205.0
70°	295.4	303.7	319.8	331.3	337.0	303.7	251.2	216.0	194.1	178.1	171.1
72.5°	252.3	259.7	262.9	272.3	269.4	238.1	201.9	173.9	158.2	147.4	138.3
75°	192.9	196.1	192.9	189.1	180.7	158.9	134.0	119.8	108.3	103.1	100.0
77.5°	140.6	139.6	135.2	129.2	115.0	101.3	87.8	83.1	78.0	75.3	74.2
80°	108.3	105.7	101.9	92.3	80.1	70.5	67.3	64.1	62.1	58.9	58.3
82.5°	80.6	79.1	72.6	64.6	56.0	51.5	48.8	47.7	45.7	44.1	43.9
85°	43.0	41.0	34.0	29.5	28.2	26.9	26.3	26.3	23.7	23.1	23.1
87.5°	14.1	11.2	10.8	9.5	9.6	8.8	9.5	8.7	8.4	9.0	8.1
90°	1.1	2.0	2.8	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5
92.5°	6.6	6.4	6.1	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4
95°	19.0	15.7	12.3	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5
97.5°	43.4	41.9	40.4	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1
100°	63.5	65.1	66.8	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4
102.5°	82.4	83.6	84.8	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1
105°	110.1	111.0	111.9	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4
107.5°	139.3	140.1	140.7	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9
110°	158.9	159.6	160.2	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	177.6	178.1	178.7	179.4	180.1	181.0	181.9	182.8	183.7	183.7	183.8
115°	205.2	205.7	206.2	206.7	207.3	208.1	208.8	209.5	210.3	211.1	211.9
117.5°	232.3	232.8	233.4	234.1	234.6	234.9	235.3	235.7	236.0	236.7	237.3
120°	249.1	249.8	250.5	251.3	251.8	252.0	252.3	252.5	252.7	253.4	254.0
122.5°	266.0	266.5	267.2	267.7	268.2	268.6	268.8	269.1	269.5	269.9	270.4
125°	289.3	289.9	290.6	291.2	291.7	292.0	292.4	292.7	293.0	293.2	293.3
127.5°	311.9	312.5	313.2	313.8	314.3	314.7	315.1	315.5	315.9	316.2	316.4
130°	326.0	326.6	327.3	327.9	328.4	328.7	329.1	329.4	329.6	330.0	330.3
132.5°	339.4	340.1	340.7	341.4	341.8	342.1	342.3	342.6	342.8	343.2	343.5
135°	359.8	360.3	360.8	361.3	361.7	362.0	362.3	362.6	363.0	363.2	363.5
137.5°	377.6	378.1	378.8	379.4	379.8	380.0	380.2	380.3	380.5	380.9	381.3
140°	389.1	389.6	390.1	390.6	390.9	391.2	391.4	391.7	391.9	392.2	392.6
142.5°	400.0	400.5	401.0	401.5	401.8	402.0	402.3	402.5	402.8	403.0	403.3
145°	415.2	415.8	416.4	416.9	417.3	417.4	417.6	417.8	417.9	418.1	418.2
147.5°	429.3	429.7	430.1	430.4	430.7	430.9	431.0	431.2	431.4	431.5	431.7
150°	438.0	438.2	438.5	438.7	438.9	439.0	439.2	439.4	439.5	439.7	439.9
152.5°	445.7	445.9	446.0	446.1	446.2	446.3	446.4	446.5	446.6	446.9	447.2
155°	456.6	456.4	456.3	456.2	456.1	456.2	456.2	456.3	456.4	456.8	457.2
157.5°	465.4	465.4	465.4	465.4	465.3	465.2	465.1	465.0	465.0	465.5	465.9
160°	470.6	470.5	470.4	470.3	470.3	470.2	470.1	470.0	469.9	470.4	470.9
162.5°	475.5	475.2	475.1	474.8	474.7	474.6	474.5	474.4	474.3	474.9	475.5
165°	481.4	481.2	480.9	480.7	480.5	480.5	480.4	480.3	480.2	480.9	481.5
167.5°	486.1	485.8	485.4	485.1	484.9	484.9	484.9	484.9	484.9	485.6	486.2
170°	488.7	488.4	488.0	487.7	487.5	487.5	487.5	487.5	487.5	488.2	488.9
172.5°	490.4	490.0	489.6	489.2	489.0	489.1	489.2	489.3	489.3	489.9	490.6
175°	492.6	492.2	491.8	491.4	491.2	491.3	491.4	491.5	491.5	492.1	492.7
177.5°	493.3	492.9	492.6	492.3	492.2	492.3	492.3	492.4	492.4	492.9	493.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1578.9	1578.9	1580.9	1588.7	1589.7	1596.4	1594.3
5°	1735.3	1747.4	1751.9	1771.2	1782.7	1787.9	1777.6
7.5°	1926.5	1960.9	1977.1	1997.2	2015.1	2020.5	2006.5
10°	2066.0	2101.8	2131.9	2150.5	2167.8	2179.4	2194.1
12.5°	2200.7	2244.8	2273.5	2299.7	2317.5	2332.2	2334.5
15°	2347.2	2413.9	2464.5	2501.7	2520.3	2529.9	2526.0
17.5°	2495.0	2556.8	2592.8	2630.7	2656.5	2657.8	2658.5
20°	2578.5	2638.8	2680.5	2708.7	2737.5	2736.2	2742.6
22.5°	2634.5	2681.8	2713.8	2734.3	2744.1	2739.3	2740.5
25°	2660.6	2674.7	2669.0	2636.3	2628.0	2597.8	2602.9
27.5°	2525.8	2459.1	2390.2	2301.5	2231.6	2175.6	2178.5
30°	2342.8	2224.9	2090.3	1977.5	1876.2	1848.0	1787.9
32.5°	2086.9	1910.1	1752.5	1647.4	1560.5	1536.9	1484.3
35°	1653.3	1481.6	1319.4	1222.0	1183.6	1129.8	1129.1
37.5°	1285.1	1133.8	1048.1	975.0	936.7	904.2	901.0
40°	1081.0	963.1	898.4	845.9	808.0	783.7	778.0
42.5°	938.5	843.2	782.5	750.0	720.9	708.3	699.0
45°	766.4	702.3	660.0	630.6	617.1	607.5	602.3
47.5°	641.1	598.1	569.3	549.7	538.7	528.6	531.3
50°	572.9	537.6	516.5	497.9	489.6	482.5	483.1
52.5°	518.0	486.4	469.3	455.8	445.5	440.5	438.1
55°	439.6	419.7	402.4	392.8	387.0	380.0	378.1
57.5°	375.0	359.6	345.5	334.6	333.2	326.4	327.3
60°	331.9	319.1	307.6	301.8	297.3	291.6	293.5
62.5°	296.5	285.8	275.3	270.5	266.0	261.8	262.7
65°	242.9	232.6	226.2	223.6	221.7	219.8	217.8
67.5°	193.6	187.3	183.3	177.7	173.8	173.2	171.2
70°	162.7	154.4	147.4	140.3	138.4	137.8	138.4
72.5°	130.4	125.2	123.3	119.8	119.4	117.8	119.0
75°	98.1	96.1	94.8	92.3	92.3	92.3	92.3
77.5°	72.3	71.1	70.4	69.9	69.2	68.3	68.2
80°	56.4	55.8	54.5	54.5	53.8	54.5	53.8
82.5°	42.6	42.4	41.2	41.2	40.5	40.1	40.5
85°	21.8	21.1	22.4	21.1	21.8	20.5	21.8
87.5°	8.1	8.2	7.7	7.7	7.3	8.3	7.3
90°	9.8	10.1	10.4	10.5	10.7	10.8	11.0
92.5°	10.9	11.5	11.7	11.9	12.0	12.1	12.1
95°	13.0	13.6	13.9	13.9	13.9	13.9	13.9
97.5°	13.8	14.4	14.8	14.8	14.9	15.0	15.1
100°	14.0	14.7	15.1	15.2	15.2	15.3	15.4
102.5°	18.0	16.1	15.1	15.2	15.4	15.5	15.7
105°	37.0	22.6	15.5	15.7	15.8	16.0	16.1
107.5°	115.4	104.8	94.1	83.2	72.3	61.5	50.6
110°	157.1	154.4	147.3	135.7	124.0	112.3	100.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	183.8	183.8	182.6	180.2	177.7	175.3	172.8
115°	212.7	213.5	214.1	214.4	214.7	215.1	215.4
117.5°	238.0	238.6	239.0	239.0	239.1	239.2	239.3
120°	254.7	255.4	255.7	255.7	255.7	255.7	255.7
122.5°	270.8	271.3	271.5	271.6	271.7	271.7	271.8
125°	293.5	293.7	293.8	294.0	294.2	294.3	294.5
127.5°	316.7	316.9	317.0	316.8	316.7	316.5	316.3
130°	330.6	330.9	331.0	330.8	330.7	330.5	330.4
132.5°	343.8	344.1	344.2	344.0	343.7	343.5	343.3
135°	363.7	363.9	363.9	363.7	363.5	363.2	363.0
137.5°	381.6	382.0	382.2	382.0	381.9	381.7	381.6
140°	392.9	393.2	393.3	393.1	393.0	392.8	392.6
142.5°	403.6	403.8	403.8	403.6	403.4	403.2	402.9
145°	418.4	418.6	418.7	418.7	418.7	418.7	418.7
147.5°	431.9	432.0	431.9	431.5	431.1	430.8	430.4
150°	440.0	440.2	440.2	439.9	439.7	439.4	439.2
152.5°	447.4	447.8	447.7	447.4	446.9	446.6	446.2
155°	457.6	458.0	458.0	457.5	457.0	456.5	456.1
157.5°	466.4	466.9	466.8	466.2	465.6	465.0	464.3
160°	471.4	471.9	471.9	471.3	470.8	470.2	469.6
162.5°	476.1	476.5	476.6	476.1	475.6	475.1	474.6
165°	482.2	482.8	482.8	482.2	481.8	481.2	480.6
167.5°	486.8	487.5	487.5	486.8	486.2	485.6	484.9
170°	489.5	490.2	490.2	489.5	488.9	488.2	487.5
172.5°	491.2	491.9	491.9	491.1	490.4	489.8	489.0
175°	493.3	493.8	493.8	493.2	492.5	491.9	491.2
177.5°	494.0	494.6	494.5	493.8	493.2	492.5	491.9
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0

(END OF REPORT)