

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: P332210-930

Luminaire Tested: **S123DIW-S1165D460U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332210-930
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: S123DIW-S1165D460U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5496.6 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Direct

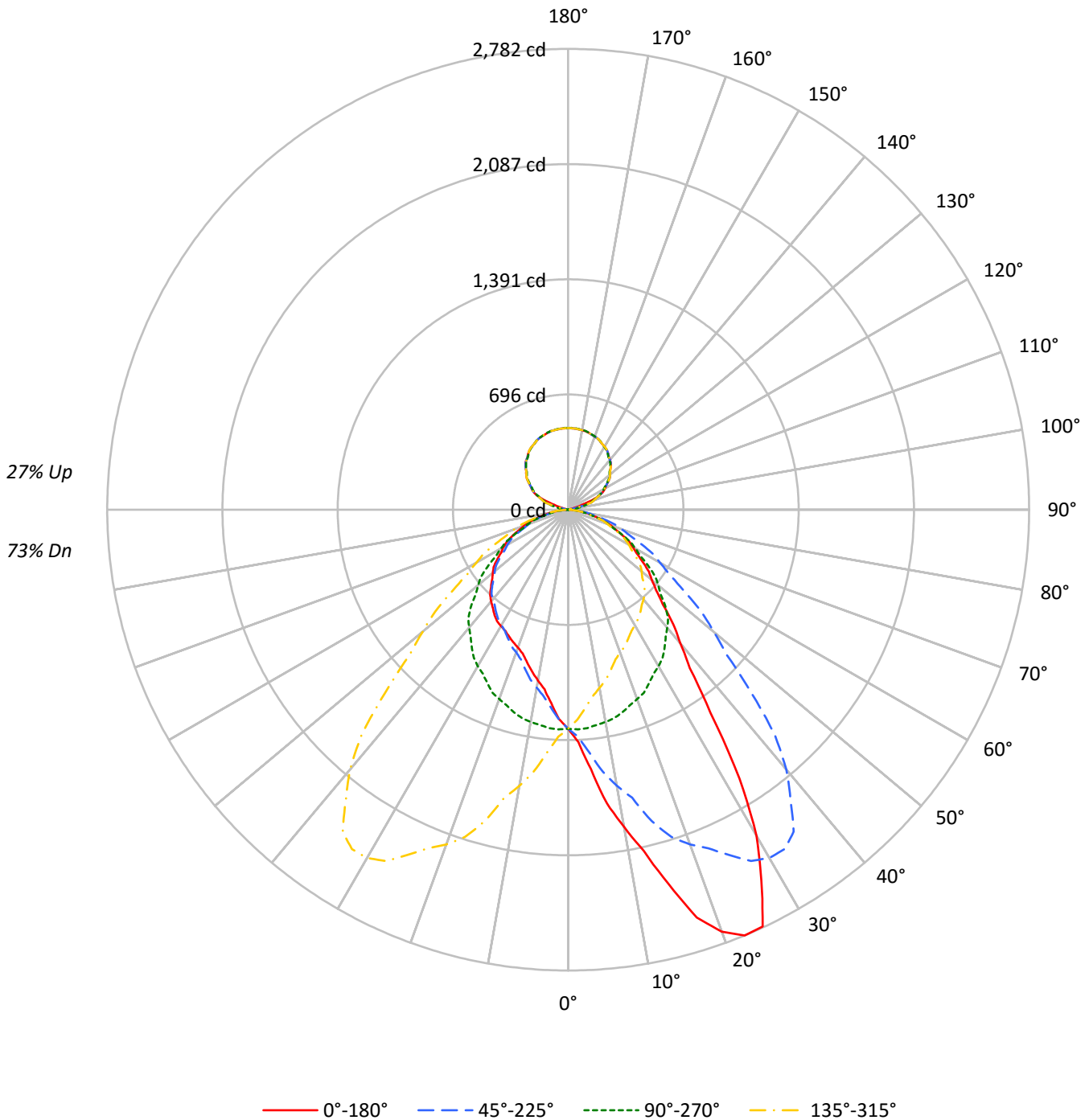
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73																												
1	103	99	95	92	98	94	91	88	85	82	80	76	74	73	69	67	66	62																												
2	94	87	81	75	89	83	77	73	75	71	67	68	64	61	61	58	56	53																												
3	86	77	69	63	82	73	66	61	66	61	57	60	56	52	54	51	48	45																												
4	79	68	60	54	75	65	58	52	59	53	49	54	49	45	49	45	42	39																												
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	44	40	37	34																												
6	67	55	47	41	64	53	45	39	48	42	37	44	39	35	40	36	32	30																												
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	37	32	29	26																												
8	58	45	37	32	55	44	36	31	40	34	29	37	31	28	34	29	26	24																												
9	54	42	34	29	51	40	33	28	37	31	26	34	29	25	31	27	23	21																												
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	24	21	19																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14235	14235	14235	14235
5°	16977	14296	12670	14296
10°	21249	14224	11444	14224
15°	26063	14110	10653	14110
20°	31047	13931	10143	13931
25°	32967	13713	10030	13713
30°	28256	13554	10082	13554
35°	19651	13328	10188	13328
40°	14802	13065	10156	13065
45°	12291	12670	10027	12670
50°	11010	11868	9937	11868
55°	10293	11003	9813	11003
60°	9655	10097	9711	10097
65°	9075	9205	9401	9205
70°	8510	8189	8954	8189
75°	7623	7170	8210	7170
80°	6670	5876	7073	5876
85°	5224	4273	4755	4273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	2.4
10°-20°	417.7	7.6
20°-30°	701.1	12.8
30°-40°	793.9	14.4
40°-50°	711.9	13.0
50°-60°	574.5	10.5
60°-70°	400.3	7.3
70°-80°	210.4	3.8
80°-90°	52.8	1.0
90°-100°	17.9	0.3
100°-110°	85.4	1.6
110°-120°	205.2	3.7
120°-130°	261.3	4.8
130°-140°	279.2	5.1
140°-150°	261.1	4.7
150°-160°	210.6	3.8
160°-170°	135.9	2.5
170°-180°	46.8	0.9
0°-30°	1249.1	22.7
0°-40°	2043.0	37.2
0°-60°	3329.4	60.6
0°-90°	3993.0	72.6
90°-120°	308.6	5.6
90°-150°	1110.2	20.2
90°-180°	1504.0	27.4
0°-180°	5496.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1322	1322	1322	1322	1322	
5°	1571	1323	1173	1323	1571	163
15°	2339	1266	956	1266	2339	675
25°	2776	1155	844	1155	2776	1217
35°	1496	1014	775	1014	1496	972
45°	807	832	659	832	807	639
55°	548	586	523	586	548	492
65°	356	361	369	361	356	355
75°	183	172	197	172	183	196
85°	42	35	38	35	42	50
90°	11	0	11	0	11	7
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°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1403.5	1402.5	1400.0	1402.0	1397.9	1392.2	1391.7	1386.6	1371.7	1370.7	1366.6
5°	1571.2	1566.0	1565.4	1564.7	1555.8	1543.6	1520.5	1518.6	1487.8	1472.4	1453.9
7.5°	1788.2	1790.9	1781.6	1773.4	1746.0	1727.9	1703.2	1671.5	1633.7	1595.4	1569.9
10°	1944.1	1965.2	1938.9	1921.0	1904.4	1872.9	1836.5	1790.9	1745.4	1692.2	1651.9
12.5°	2111.2	2121.6	2116.3	2099.4	2073.5	2025.7	1961.0	1910.9	1869.0	1780.5	1744.7
15°	2338.8	2377.9	2352.9	2295.2	2296.5	2251.0	2166.4	2073.5	2024.1	1946.6	1840.9
17.5°	2581.2	2586.1	2575.4	2527.4	2495.4	2432.9	2354.8	2265.7	2165.8	2072.0	1959.8
20°	2710.4	2706.5	2684.1	2659.2	2604.1	2555.4	2470.1	2370.8	2242.6	2150.4	2028.0
22.5°	2782.2	2775.8	2765.2	2744.2	2698.4	2646.1	2569.6	2461.1	2339.0	2211.9	2070.5
25°	2775.8	2784.1	2785.4	2779.6	2763.6	2732.2	2672.0	2585.5	2463.8	2300.4	2153.0
27.5°	2524.6	2536.4	2570.6	2601.0	2635.0	2669.5	2664.9	2622.0	2531.9	2390.8	2210.6
30°	2273.4	2247.8	2311.2	2391.4	2445.8	2541.9	2595.7	2598.9	2548.3	2427.2	2251.6
32.5°	1924.8	1953.0	1981.1	2079.7	2198.7	2306.6	2413.8	2500.0	2509.9	2429.3	2275.7
35°	1495.5	1530.8	1582.0	1633.3	1761.5	1871.7	2060.0	2224.1	2354.8	2372.1	2277.9
37.5°	1205.2	1222.5	1255.0	1306.4	1390.2	1520.9	1666.6	1874.0	2063.4	2204.2	2210.4
40°	1053.4	1058.5	1095.0	1134.2	1202.1	1309.7	1441.0	1624.3	1851.1	2047.9	2129.9
42.5°	939.6	950.9	966.4	1004.0	1058.0	1139.1	1261.2	1412.6	1620.5	1846.9	2007.3
45°	807.4	820.2	829.8	854.8	893.2	947.7	1032.9	1171.3	1329.6	1563.4	1779.4
47.5°	720.0	721.0	728.1	747.0	773.1	814.0	874.2	963.2	1108.5	1298.2	1519.9
50°	657.5	667.6	670.3	684.9	705.5	735.6	785.5	861.2	980.4	1147.0	1350.7
52.5°	613.3	616.4	623.6	634.2	652.2	675.6	718.9	778.1	871.7	1013.7	1201.0
55°	548.5	548.5	555.5	563.9	574.1	595.3	624.1	667.6	738.8	849.0	1004.0
57.5°	488.5	491.7	496.7	499.3	508.0	522.0	546.1	579.1	632.2	717.0	840.3
60°	448.5	454.3	453.6	458.8	466.5	477.4	497.9	524.8	572.2	640.1	744.0
62.5°	413.7	413.3	413.2	419.3	427.0	437.4	450.7	474.0	514.3	574.5	662.9
65°	356.3	355.0	359.5	363.3	365.9	373.6	383.8	404.3	431.2	476.1	544.6
67.5°	305.2	301.6	303.9	305.2	309.7	315.6	325.2	337.9	359.3	395.3	447.0
70°	270.4	267.2	266.5	267.8	271.7	276.1	283.2	295.4	315.3	344.1	381.9
72.5°	234.5	232.4	232.2	235.1	236.8	239.8	244.8	255.9	271.7	293.3	328.6
75°	183.3	183.3	183.3	183.9	185.8	188.4	192.2	198.0	210.2	225.5	249.2
77.5°	137.4	137.2	136.5	136.3	139.2	140.3	141.2	146.6	153.4	163.8	181.1
80°	107.6	104.4	105.7	107.6	108.9	109.6	111.5	112.8	118.5	124.3	136.5
82.5°	80.0	77.3	77.5	80.5	80.7	81.4	83.3	85.1	87.2	92.5	99.1
85°	42.3	42.3	43.0	43.0	43.5	43.0	44.8	45.5	45.5	48.7	52.5
87.5°	17.6	16.6	17.0	17.4	17.0	17.4	17.9	18.3	18.8	19.2	19.5
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°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1363.5	1359.4	1355.4	1348.2	1342.0	1333.3	1330.7	1327.6	1318.4	1310.3	1304.1
5°	1446.8	1431.4	1409.0	1388.5	1371.9	1349.5	1336.6	1323.1	1303.9	1286.6	1272.5
7.5°	1534.0	1503.7	1468.8	1431.2	1396.1	1362.3	1335.0	1310.6	1283.7	1258.2	1238.4
10°	1603.2	1559.6	1510.9	1458.4	1413.5	1369.9	1333.4	1301.4	1266.8	1236.6	1211.7
12.5°	1682.1	1617.6	1550.4	1486.5	1433.5	1373.0	1328.8	1288.1	1248.9	1212.6	1184.5
15°	1775.6	1693.5	1614.0	1526.3	1445.5	1369.9	1317.4	1266.2	1220.7	1183.5	1147.6
17.5°	1860.7	1767.7	1663.0	1556.2	1458.9	1369.2	1295.6	1237.7	1180.8	1135.3	1099.5
20°	1908.9	1803.1	1684.6	1573.7	1466.1	1366.1	1285.4	1216.2	1154.6	1106.6	1066.2
22.5°	1950.4	1826.7	1704.1	1585.5	1465.6	1357.9	1266.4	1195.1	1128.5	1081.5	1038.5
25°	1993.4	1845.4	1722.4	1583.3	1449.4	1337.9	1235.4	1154.6	1088.0	1032.9	988.7
27.5°	2030.3	1844.1	1698.1	1548.6	1424.0	1312.3	1202.8	1116.2	1045.5	985.6	940.8
30°	2054.9	1846.7	1673.0	1525.0	1399.5	1284.1	1177.7	1090.5	1016.3	955.4	913.1
32.5°	2070.3	1845.1	1649.9	1492.2	1360.5	1258.4	1150.6	1060.3	984.0	924.1	883.4
35°	2079.3	1833.9	1610.2	1424.4	1297.5	1198.2	1107.9	1014.3	934.3	878.5	832.3
37.5°	2061.3	1810.1	1564.1	1359.0	1220.2	1122.3	1046.4	966.6	890.0	828.7	788.9
40°	2033.1	1794.8	1528.2	1313.0	1166.9	1072.6	1008.0	929.8	854.1	795.8	758.6
42.5°	1979.3	1763.5	1488.7	1261.7	1111.5	1017.2	957.7	892.3	820.8	766.1	729.0
45°	1848.0	1695.4	1429.5	1184.8	1029.7	932.3	879.8	832.3	767.6	714.4	682.4
47.5°	1665.7	1593.1	1343.9	1103.7	944.4	850.7	796.1	757.9	710.6	667.6	636.9
50°	1539.1	1509.0	1286.0	1048.3	887.5	795.8	743.3	708.7	674.7	631.8	603.6
52.5°	1393.0	1411.6	1218.4	990.8	829.6	739.5	690.0	662.5	631.7	596.4	571.9
55°	1187.3	1254.6	1101.5	894.5	743.3	657.5	610.7	586.3	568.3	542.1	521.0
57.5°	994.7	1080.4	975.1	795.2	658.6	584.5	539.6	513.1	501.6	487.9	471.2
60°	880.4	965.0	884.9	728.6	601.7	531.2	491.5	469.0	457.5	447.9	433.8
62.5°	778.4	864.0	796.7	660.9	545.8	480.5	445.8	424.0	415.0	409.9	397.9
65°	638.2	711.9	667.0	555.5	465.9	408.1	376.7	361.4	353.0	351.1	343.5
67.5°	519.4	575.5	542.8	460.8	390.2	340.4	313.7	300.7	294.2	293.6	287.8
70°	441.5	494.0	469.0	394.7	333.9	294.7	271.7	260.2	256.3	255.7	252.5
72.5°	381.0	417.7	397.8	335.7	288.7	253.2	236.3	224.3	219.9	220.8	218.7
75°	281.9	309.5	298.0	255.0	217.2	194.1	180.0	172.4	168.5	170.5	167.9
77.5°	202.8	220.3	209.9	180.2	156.9	140.2	129.8	125.1	121.6	121.5	120.3
80°	153.1	163.4	157.6	139.7	120.5	106.4	98.0	94.8	92.9	92.3	91.6
82.5°	109.1	117.8	111.0	98.7	85.6	77.1	72.4	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.0	43.0	39.1	36.5	34.6	33.3	34.0	32.7
87.5°	20.3	20.6	18.8	16.6	15.4	13.7	13.5	12.4	11.5	11.7	11.3
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: P332210-930

CATALOG NUMBER: S123DIW-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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1300.5	1296.9	1291.8	1284.1	1277.9	1268.2	1268.2	1269.7	1269.7	1269.3	1268.2
5°	1261.0	1251.4	1239.9	1226.5	1212.4	1198.2	1195.6	1190.5	1186.7	1184.1	1181.0
7.5°	1219.4	1202.3	1185.5	1166.7	1149.5	1135.3	1125.4	1117.2	1112.0	1106.4	1102.2
10°	1191.2	1170.0	1150.1	1130.3	1108.5	1091.2	1080.4	1072.6	1066.9	1061.8	1059.2
12.5°	1157.9	1133.7	1111.7	1092.9	1069.0	1051.2	1040.9	1037.2	1030.5	1019.7	1014.1
15°	1109.1	1086.7	1060.5	1031.6	1020.1	998.3	986.1	980.4	976.5	968.2	965.6
17.5°	1067.5	1038.1	1008.7	987.2	965.7	948.0	941.3	934.1	929.0	922.2	920.1
20°	1034.2	1008.0	981.0	958.0	935.5	916.3	910.5	905.4	900.3	897.1	894.5
22.5°	1000.4	974.1	951.8	930.3	906.3	893.7	887.5	881.8	878.2	876.0	873.5
25°	952.8	929.8	904.7	885.5	866.3	857.9	854.1	850.9	848.4	845.1	844.5
27.5°	910.3	885.2	864.9	846.9	833.2	826.2	822.5	820.9	821.5	822.6	823.4
30°	878.5	855.4	838.8	823.4	810.6	804.1	803.5	803.5	806.1	806.7	808.0
32.5°	849.3	830.3	813.7	798.7	789.0	784.6	787.1	787.1	789.1	790.8	793.1
35°	806.7	790.0	777.2	764.4	756.1	758.0	759.3	760.6	763.8	767.6	770.2
37.5°	766.1	751.6	738.3	728.3	724.5	727.9	731.0	733.7	737.4	740.4	742.9
40°	736.9	725.9	713.1	704.2	705.5	707.4	710.0	713.1	716.4	718.3	720.9
42.5°	709.7	698.3	688.6	681.1	682.9	685.3	686.9	688.6	692.3	695.8	697.2
45°	668.3	659.3	650.4	645.9	647.2	648.5	649.7	651.7	654.8	657.5	658.0
47.5°	621.8	615.6	609.5	605.1	607.2	606.7	608.4	612.5	613.4	615.0	618.6
50°	592.1	586.3	579.3	578.0	578.0	578.0	578.6	583.8	583.8	586.3	588.9
52.5°	559.3	555.5	551.1	548.8	547.7	547.7	550.4	553.0	554.0	557.6	560.2
55°	510.7	506.9	503.0	501.1	499.8	501.1	506.2	507.4	510.7	512.6	514.5
57.5°	460.1	457.1	454.0	453.0	452.7	454.4	457.2	461.1	461.9	467.7	470.7
60°	426.7	422.2	419.7	419.7	418.4	424.2	422.9	429.3	430.6	434.5	439.0
62.5°	392.4	386.4	385.4	385.4	387.2	388.8	390.6	393.5	396.7	401.6	405.1
65°	337.0	333.9	338.3	337.7	336.4	340.2	340.2	343.5	347.3	351.8	358.8
67.5°	284.6	283.0	283.3	283.3	285.3	287.5	289.3	292.0	296.7	301.4	306.1
70°	249.2	251.2	248.0	250.5	252.5	253.1	254.4	258.2	263.3	266.5	271.7
72.5°	214.9	214.7	215.2	216.2	218.1	219.2	220.5	224.9	230.6	233.3	237.3
75°	165.3	164.7	166.6	166.6	169.8	171.0	172.4	174.3	179.4	183.3	186.5
77.5°	120.7	121.5	121.1	123.3	122.4	122.6	126.6	128.6	129.1	136.6	138.3
80°	91.0	92.3	92.9	93.5	94.2	92.9	97.4	99.3	99.3	103.8	107.0
82.5°	65.4	66.1	67.8	68.4	68.6	69.9	70.2	71.7	73.2	75.1	79.3
85°	32.7	34.6	35.2	34.6	35.2	34.0	35.9	36.5	37.2	37.2	37.2
87.5°	11.0	11.7	11.4	12.1	11.8	12.6	12.6	11.7	11.7	13.3	11.3
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: P332210-930

CATALOG NUMBER: S123DIW-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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1264.6	1264.1	1267.7	1265.1	1267.7	1264.1	1264.6	1268.2	1269.3	1269.7	1269.7
5°	1177.0	1179.0	1172.6	1172.6	1172.6	1179.0	1177.0	1181.0	1184.1	1186.7	1190.5
7.5°	1099.2	1096.3	1096.6	1093.2	1096.6	1096.3	1099.2	1102.2	1106.4	1112.0	1117.2
10°	1051.5	1047.7	1046.4	1047.0	1046.4	1047.7	1051.5	1059.2	1061.8	1066.9	1072.6
12.5°	1012.0	1011.2	1002.8	1002.9	1002.8	1011.2	1012.0	1014.1	1019.7	1030.5	1037.2
15°	965.6	953.5	952.2	956.0	952.2	953.5	965.6	965.6	968.2	976.5	980.4
17.5°	919.1	912.7	913.1	911.2	913.1	912.7	919.1	920.1	922.2	929.0	934.1
20°	894.5	890.6	890.0	885.5	890.0	890.6	894.5	894.5	897.1	900.3	905.4
22.5°	872.0	870.7	871.1	866.1	871.1	870.7	872.0	873.5	876.0	878.2	881.8
25°	843.9	847.1	844.5	844.5	844.5	847.1	843.9	844.5	845.1	848.4	850.9
27.5°	824.9	824.8	823.5	823.5	823.5	824.8	824.9	823.4	822.6	821.5	820.9
30°	810.6	809.9	811.2	811.2	811.2	809.9	810.6	808.0	806.7	806.1	803.5
32.5°	796.2	797.1	797.4	797.9	797.4	797.1	796.2	793.1	790.8	789.1	787.1
35°	774.0	774.7	776.6	775.3	776.6	774.7	774.0	770.2	767.6	763.8	760.6
37.5°	744.0	747.0	746.3	747.4	746.3	747.0	744.0	742.9	740.4	737.4	733.7
40°	721.5	723.4	722.8	722.8	722.8	723.4	721.5	720.9	718.3	716.4	713.1
42.5°	698.5	699.9	698.1	697.2	698.1	699.9	698.5	697.2	695.8	692.3	688.6
45°	660.6	659.3	661.3	658.7	661.3	659.3	660.6	658.0	657.5	654.8	651.7
47.5°	618.3	619.6	620.1	622.1	620.1	619.6	618.3	618.6	615.0	613.4	612.5
50°	590.1	593.9	593.9	593.4	593.9	593.9	590.1	588.9	586.3	583.8	583.8
52.5°	562.5	564.3	566.8	566.7	566.8	564.3	562.5	560.2	557.6	554.0	553.0
55°	519.7	521.0	522.2	522.9	522.2	521.0	519.7	514.5	512.6	510.7	507.4
57.5°	475.3	474.8	477.8	478.7	477.8	474.8	475.3	470.7	467.7	461.9	461.1
60°	444.0	444.0	449.1	451.1	449.1	444.0	444.0	439.0	434.5	430.6	429.3
62.5°	410.7	412.8	417.9	415.2	417.9	412.8	410.7	405.1	401.6	396.7	393.5
65°	362.0	367.1	366.5	369.1	366.5	367.1	362.0	358.8	351.8	347.3	343.5
67.5°	311.1	314.4	318.9	319.4	318.9	314.4	311.1	306.1	301.4	296.7	292.0
70°	276.8	280.0	282.6	284.5	282.6	280.0	276.8	271.7	266.5	263.3	258.2
72.5°	243.5	245.2	251.3	248.6	251.3	245.2	243.5	237.3	233.3	230.6	224.9
75°	190.9	195.4	199.3	197.4	199.3	195.4	190.9	186.5	183.3	179.4	174.3
77.5°	141.2	145.7	147.5	145.9	147.5	145.7	141.2	138.3	136.6	129.1	128.6
80°	111.5	110.9	114.7	114.1	114.7	110.9	111.5	107.0	103.8	99.3	99.3
82.5°	81.8	81.1	82.9	83.3	82.9	81.1	81.8	79.3	75.1	73.2	71.7
85°	39.7	41.7	39.1	38.5	39.1	41.7	39.7	37.2	37.2	37.2	36.5
87.5°	11.3	11.3	10.8	10.4	10.8	11.3	11.3	11.3	13.3	11.7	11.7
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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1268.2	1268.2	1277.9	1284.1	1291.8	1296.9	1300.5	1304.1	1310.3	1318.4	1327.6
5°	1195.6	1198.2	1212.4	1226.5	1239.9	1251.4	1261.0	1272.5	1286.6	1303.9	1323.1
7.5°	1125.4	1135.3	1149.5	1166.7	1185.5	1202.3	1219.4	1238.4	1258.2	1283.7	1310.6
10°	1080.4	1091.2	1108.5	1130.3	1150.1	1170.0	1191.2	1211.7	1236.6	1266.8	1301.4
12.5°	1040.9	1051.2	1069.0	1092.9	1111.7	1133.7	1157.9	1184.5	1212.6	1248.9	1288.1
15°	986.1	998.3	1020.1	1031.6	1060.5	1086.7	1109.1	1147.6	1183.5	1220.7	1266.2
17.5°	941.3	948.0	965.7	987.2	1008.7	1038.1	1067.5	1099.5	1135.3	1180.8	1237.7
20°	910.5	916.3	935.5	958.0	981.0	1008.0	1034.2	1066.2	1106.6	1154.6	1216.2
22.5°	887.5	893.7	906.3	930.3	951.8	974.1	1000.4	1038.5	1081.5	1128.5	1195.1
25°	854.1	857.9	866.3	885.5	904.7	929.8	952.8	988.7	1032.9	1088.0	1154.6
27.5°	822.5	826.2	833.2	846.9	864.9	885.2	910.3	940.8	985.6	1045.5	1116.2
30°	803.5	804.1	810.6	823.4	838.8	855.4	878.5	913.1	955.4	1016.3	1090.5
32.5°	787.1	784.6	789.0	798.7	813.7	830.3	849.3	883.4	924.1	984.0	1060.3
35°	759.3	758.0	756.1	764.4	777.2	790.0	806.7	832.3	878.5	934.3	1014.3
37.5°	731.0	727.9	724.5	728.3	738.3	751.6	766.1	788.9	828.7	890.0	966.6
40°	710.0	707.4	705.5	704.2	713.1	725.9	736.9	758.6	795.8	854.1	929.8
42.5°	686.9	685.3	682.9	681.1	688.6	698.3	709.7	729.0	766.1	820.8	892.3
45°	649.7	648.5	647.2	645.9	650.4	659.3	668.3	682.4	714.4	767.6	832.3
47.5°	608.4	606.7	607.2	605.1	609.5	615.6	621.8	636.9	667.6	710.6	757.9
50°	578.6	578.0	578.0	578.0	579.3	586.3	592.1	603.6	631.8	674.7	708.7
52.5°	550.4	547.7	547.7	548.8	551.1	555.5	559.3	571.9	596.4	631.7	662.5
55°	506.2	501.1	499.8	501.1	503.0	506.9	510.7	521.0	542.1	568.3	586.3
57.5°	457.2	454.4	452.7	453.0	454.0	457.1	460.1	471.2	487.9	501.6	513.1
60°	422.9	424.2	418.4	419.7	419.7	422.2	426.7	433.8	447.9	457.5	469.0
62.5°	390.6	388.8	387.2	385.4	385.4	386.4	392.4	397.9	409.9	415.0	424.0
65°	340.2	340.2	336.4	337.7	338.3	333.9	337.0	343.5	351.1	353.0	361.4
67.5°	289.3	287.5	285.3	283.3	283.3	283.0	284.6	287.8	293.6	294.2	300.7
70°	254.4	253.1	252.5	250.5	248.0	251.2	249.2	252.5	255.7	256.3	260.2
72.5°	220.5	219.2	218.1	216.2	215.2	214.7	214.9	218.7	220.8	219.9	224.3
75°	172.4	171.0	169.8	166.6	166.6	164.7	165.3	167.9	170.5	168.5	172.4
77.5°	126.6	122.6	122.4	123.3	121.1	121.5	120.7	120.3	121.5	121.6	125.1
80°	97.4	92.9	94.2	93.5	92.9	92.3	91.0	91.6	92.3	92.9	94.8
82.5°	70.2	69.9	68.6	68.4	67.8	66.1	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.2	34.6	35.2	34.6	32.7	32.7	34.0	33.3	34.6
87.5°	12.6	12.6	11.8	12.1	11.4	11.7	11.0	11.3	11.7	11.5	12.4
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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

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: P332210-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1330.7	1333.3	1342.0	1348.2	1355.4	1359.4	1363.5	1366.6	1370.7	1371.7	1386.6
5°	1336.6	1349.5	1371.9	1388.5	1409.0	1431.4	1446.8	1453.9	1472.4	1487.8	1518.6
7.5°	1335.0	1362.3	1396.1	1431.2	1468.8	1503.7	1534.0	1569.9	1595.4	1633.7	1671.5
10°	1333.4	1369.9	1413.5	1458.4	1510.9	1559.6	1603.2	1651.9	1692.2	1745.4	1790.9
12.5°	1328.8	1373.0	1433.5	1486.5	1550.4	1617.6	1682.1	1744.7	1780.5	1869.0	1910.9
15°	1317.4	1369.9	1445.5	1526.3	1614.0	1693.5	1775.6	1840.9	1946.6	2024.1	2073.5
17.5°	1295.6	1369.2	1458.9	1556.2	1663.0	1767.7	1860.7	1959.8	2072.0	2165.8	2265.7
20°	1285.4	1366.1	1466.1	1573.7	1684.6	1803.1	1908.9	2028.0	2150.4	2242.6	2370.8
22.5°	1266.4	1357.9	1465.6	1585.5	1704.1	1826.7	1950.4	2070.5	2211.9	2339.0	2461.1
25°	1235.4	1337.9	1449.4	1583.3	1722.4	1845.4	1993.4	2153.0	2300.4	2463.8	2585.5
27.5°	1202.8	1312.3	1424.0	1548.6	1698.1	1844.1	2030.3	2210.6	2390.8	2531.9	2622.0
30°	1177.7	1284.1	1399.5	1525.0	1673.0	1846.7	2054.9	2251.6	2427.2	2548.3	2598.9
32.5°	1150.6	1258.4	1360.5	1492.2	1649.9	1845.1	2070.3	2275.7	2429.3	2509.9	2500.0
35°	1107.9	1198.2	1297.5	1424.4	1610.2	1833.9	2079.3	2277.9	2372.1	2354.8	2224.1
37.5°	1046.4	1122.3	1220.2	1359.0	1564.1	1810.1	2061.3	2210.4	2204.2	2063.4	1874.0
40°	1008.0	1072.6	1166.9	1313.0	1528.2	1794.8	2033.1	2129.9	2047.9	1851.1	1624.3
42.5°	957.7	1017.2	1111.5	1261.7	1488.7	1763.5	1979.3	2007.3	1846.9	1620.5	1412.6
45°	879.8	932.3	1029.7	1184.8	1429.5	1695.4	1848.0	1779.4	1563.4	1329.6	1171.3
47.5°	796.1	850.7	944.4	1103.7	1343.9	1593.1	1665.7	1519.9	1298.2	1108.5	963.2
50°	743.3	795.8	887.5	1048.3	1286.0	1509.0	1539.1	1350.7	1147.0	980.4	861.2
52.5°	690.0	739.5	829.6	990.8	1218.4	1411.6	1393.0	1201.0	1013.7	871.7	778.1
55°	610.7	657.5	743.3	894.5	1101.5	1254.6	1187.3	1004.0	849.0	738.8	667.6
57.5°	539.6	584.5	658.6	795.2	975.1	1080.4	994.7	840.3	717.0	632.2	579.1
60°	491.5	531.2	601.7	728.6	884.9	965.0	880.4	744.0	640.1	572.2	524.8
62.5°	445.8	480.5	545.8	660.9	796.7	864.0	778.4	662.9	574.5	514.3	474.0
65°	376.7	408.1	465.9	555.5	667.0	711.9	638.2	544.6	476.1	431.2	404.3
67.5°	313.7	340.4	390.2	460.8	542.8	575.5	519.4	447.0	395.3	359.3	337.9
70°	271.7	294.7	333.9	394.7	469.0	494.0	441.5	381.9	344.1	315.3	295.4
72.5°	236.3	253.2	288.7	335.7	397.8	417.7	381.0	328.6	293.3	271.7	255.9
75°	180.0	194.1	217.2	255.0	298.0	309.5	281.9	249.2	225.5	210.2	198.0
77.5°	129.8	140.2	156.9	180.2	209.9	220.3	202.8	181.1	163.8	153.4	146.6
80°	98.0	106.4	120.5	139.7	157.6	163.4	153.1	136.5	124.3	118.5	112.8
82.5°	72.4	77.1	85.6	98.7	111.0	117.8	109.1	99.1	92.5	87.2	85.1
85°	36.5	39.1	43.0	48.0	55.8	58.3	55.1	52.5	48.7	45.5	45.5
87.5°	13.5	13.7	15.4	16.6	18.8	20.6	20.3	19.5	19.2	18.8	18.3
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°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1391.7	1392.2	1397.9	1402.0	1400.0	1402.5	1403.5
5°	1520.5	1543.6	1555.8	1564.7	1565.4	1566.0	1571.2
7.5°	1703.2	1727.9	1746.0	1773.4	1781.6	1790.9	1788.2
10°	1836.5	1872.9	1904.4	1921.0	1938.9	1965.2	1944.1
12.5°	1961.0	2025.7	2073.5	2099.4	2116.3	2121.6	2111.2
15°	2166.4	2251.0	2296.5	2295.2	2352.9	2377.9	2338.8
17.5°	2354.8	2432.9	2495.4	2527.4	2575.4	2586.1	2581.2
20°	2470.1	2555.4	2604.1	2659.2	2684.1	2706.5	2710.4
22.5°	2569.6	2646.1	2698.4	2744.2	2765.2	2775.8	2782.2
25°	2672.0	2732.2	2763.6	2779.6	2785.4	2784.1	2775.8
27.5°	2664.9	2669.5	2635.0	2601.0	2570.6	2536.4	2524.6
30°	2595.7	2541.9	2445.8	2391.4	2311.2	2247.8	2273.4
32.5°	2413.8	2306.6	2198.7	2079.7	1981.1	1953.0	1924.8
35°	2060.0	1871.7	1761.5	1633.3	1582.0	1530.8	1495.5
37.5°	1666.6	1520.9	1390.2	1306.4	1255.0	1222.5	1205.2
40°	1441.0	1309.7	1202.1	1134.2	1095.0	1058.5	1053.4
42.5°	1261.2	1139.1	1058.0	1004.0	966.4	950.9	939.6
45°	1032.9	947.7	893.2	854.8	829.8	820.2	807.4
47.5°	874.2	814.0	773.1	747.0	728.1	721.0	720.0
50°	785.5	735.6	705.5	684.9	670.3	667.6	657.5
52.5°	718.9	675.6	652.2	634.2	623.6	616.4	613.3
55°	624.1	595.3	574.1	563.9	555.5	548.5	548.5
57.5°	546.1	522.0	508.0	499.3	496.7	491.7	488.5
60°	497.9	477.4	466.5	458.8	453.6	454.3	448.5
62.5°	450.7	437.4	427.0	419.3	413.2	413.3	413.7
65°	383.8	373.6	365.9	363.3	359.5	355.0	356.3
67.5°	325.2	315.6	309.7	305.2	303.9	301.6	305.2
70°	283.2	276.1	271.7	267.8	266.5	267.2	270.4
72.5°	244.8	239.8	236.8	235.1	232.2	232.4	234.5
75°	192.2	188.4	185.8	183.9	183.3	183.3	183.3
77.5°	141.2	140.3	139.2	136.3	136.5	137.2	137.4
80°	111.5	109.6	108.9	107.6	105.7	104.4	107.6
82.5°	83.3	81.4	80.7	80.5	77.5	77.3	80.0
85°	44.8	43.0	43.5	43.0	43.0	42.3	42.3
87.5°	17.9	17.4	17.0	17.4	17.0	16.6	17.6
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)