

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: P332211-940

Luminaire Tested: **S123DIW-S1165D460U940-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332211-940
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: S123DIW-S1165D460U940-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5792.6 lumens
Efficiency: N/A
Efficacy: 110.5 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

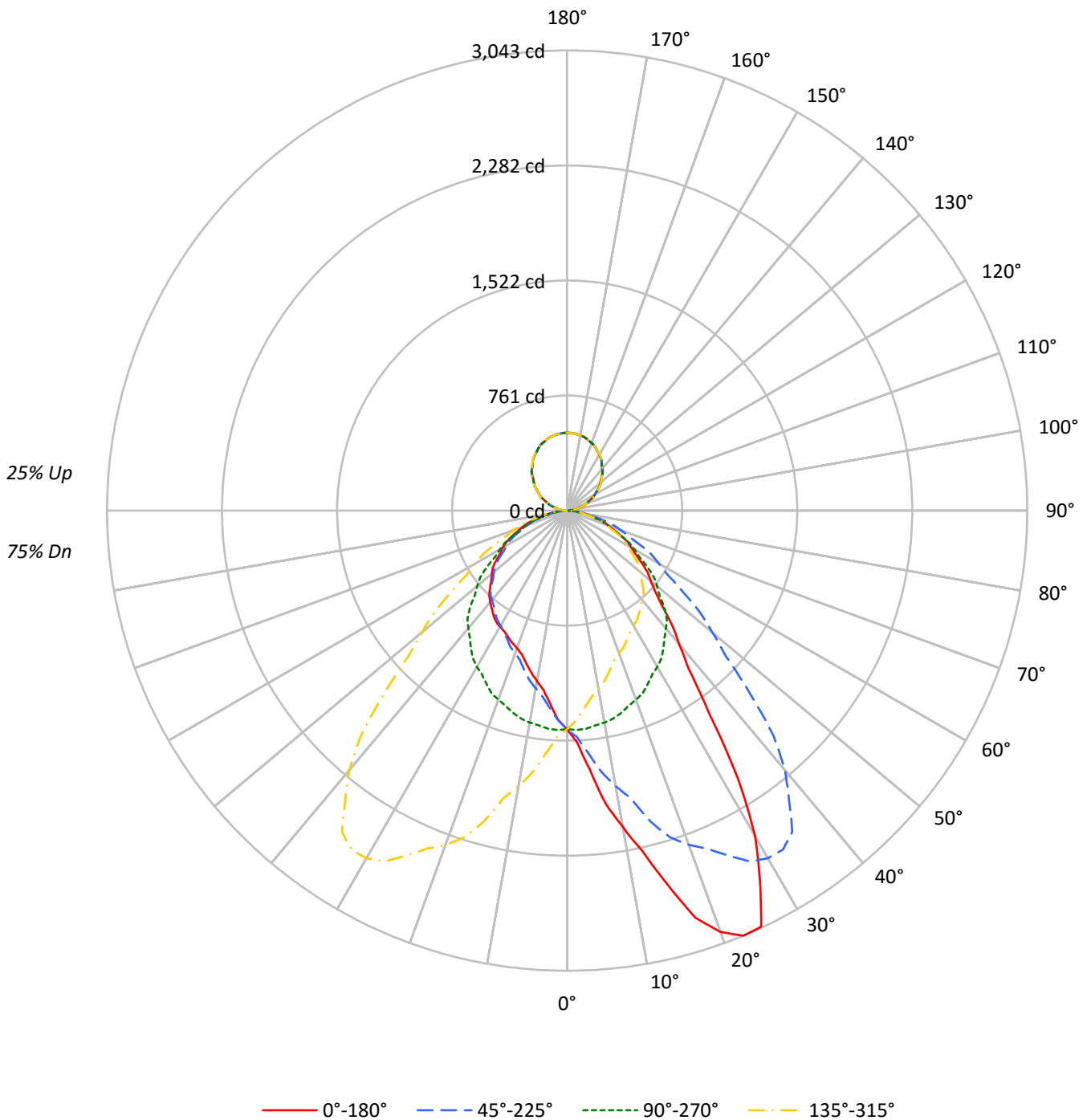
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	0														
RCR																																						
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75																				
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	64																				
2	95	87	81	76	90	83	78	73	76	72	68	69	66	63	63	60	58	55																				
3	87	77	70	64	82	74	67	62	67	62	58	62	57	54	56	53	50	47																				
4	80	69	61	54	76	66	58	53	60	54	49	55	50	46	50	46	43	40																				
5	73	61	53	47	70	59	51	46	54	48	43	50	44	40	45	41	38	35																				
6	68	55	47	41	64	53	46	40	49	43	38	45	40	36	41	37	33	31																				
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30	27																				
8	58	46	38	32	56	44	37	31	41	34	30	38	32	28	35	30	27	25																				
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	28	24	22																				
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15569	15569	15569	15569
5°	18567	15637	13857	15637
10°	23240	15557	12516	15557
15°	28505	15432	11652	15432
20°	33956	15237	11094	15237
25°	36056	14998	10969	14998
30°	30904	14825	11028	14825
35°	21494	14578	11143	14578
40°	16190	14289	11108	14289
45°	13443	13857	10966	13857
50°	12042	12980	10868	12980
55°	11258	12033	10732	12033
60°	10559	11044	10622	11044
65°	9926	10068	10282	10068
70°	9309	8954	9791	8954
75°	8339	7839	8979	7839
80°	7296	6428	7736	6428
85°	5718	4668	5199	4668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	2.5
10°-20°	456.9	7.9
20°-30°	766.8	13.2
30°-40°	868.3	15.0
40°-50°	778.6	13.4
50°-60°	628.3	10.8
60°-70°	437.9	7.6
70°-80°	230.1	4.0
80°-90°	57.8	1.0
90°-100°	33.5	0.6
100°-110°	100.3	1.7
110°-120°	170.6	2.9
120°-130°	224.4	3.9
130°-140°	252.2	4.4
140°-150°	247.9	4.3
150°-160°	208.7	3.6
160°-170°	138.9	2.4
170°-180°	48.7	0.8
0°-30°	1366.2	23.6
0°-40°	2234.5	38.6
0°-60°	3641.5	62.9
0°-90°	4367.3	75.4
90°-120°	304.4	5.3
90°-150°	1029.0	17.8
90°-180°	1425.0	24.6
0°-180°	5792.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1446	1446	1446	1446	1446	
5°	1718	1447	1282	1447	1718	178
15°	2558	1385	1046	1385	2558	739
25°	3036	1263	924	1263	3036	1331
35°	1636	1109	848	1109	1636	1063
45°	883	910	720	910	883	699
55°	600	641	572	641	600	538
65°	390	395	404	395	390	388
75°	200	188	216	188	200	215
85°	46	38	42	38	46	55
90°	12	0	12	0	12	8
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1535.1	1533.9	1531.2	1533.4	1528.9	1522.7	1522.2	1516.5	1500.3	1499.1	1494.7
5°	1718.4	1712.8	1712.1	1711.4	1701.6	1688.3	1663.0	1660.9	1627.3	1610.4	1590.2
7.5°	1955.8	1958.7	1948.6	1939.6	1909.6	1889.8	1862.8	1828.2	1786.8	1744.9	1717.0
10°	2126.3	2149.4	2120.7	2101.0	2082.9	2048.4	2008.6	1958.7	1909.0	1850.8	1806.7
12.5°	2309.1	2320.4	2314.6	2296.2	2267.8	2215.5	2144.7	2090.0	2044.2	1947.3	1908.2
15°	2558.0	2600.8	2573.4	2510.3	2511.7	2461.9	2369.5	2267.8	2213.9	2129.0	2013.5
17.5°	2823.2	2828.5	2816.8	2764.3	2729.3	2660.9	2575.5	2478.1	2368.7	2266.2	2143.5
20°	2964.4	2960.2	2935.7	2908.4	2848.1	2794.9	2701.6	2593.0	2452.8	2352.0	2218.0
22.5°	3043.0	3035.9	3024.3	3001.4	2951.3	2894.0	2810.4	2691.7	2558.2	2419.2	2264.6
25°	3035.9	3045.0	3046.4	3040.1	3022.6	2988.3	2922.4	2827.8	2694.7	2516.0	2354.7
27.5°	2761.2	2774.1	2811.6	2844.7	2881.9	2919.7	2914.6	2867.7	2769.2	2614.9	2417.8
30°	2486.4	2458.4	2527.8	2615.5	2675.0	2780.1	2839.0	2842.5	2787.1	2654.7	2462.6
32.5°	2105.2	2136.1	2166.8	2274.6	2404.8	2522.8	2640.0	2734.3	2745.1	2656.9	2489.0
35°	1635.7	1674.3	1730.3	1786.4	1926.5	2047.1	2253.1	2432.5	2575.5	2594.4	2491.4
37.5°	1318.1	1337.1	1372.6	1428.8	1520.5	1663.5	1822.8	2049.6	2256.7	2410.8	2417.5
40°	1152.2	1157.7	1197.7	1240.5	1314.7	1432.4	1576.1	1776.6	2024.6	2239.8	2329.5
42.5°	1027.7	1040.0	1056.9	1098.1	1157.2	1245.8	1379.4	1545.0	1772.4	2020.0	2195.5
45°	883.1	897.1	907.6	934.9	977.0	1036.5	1129.7	1281.1	1454.2	1709.9	1946.2
47.5°	787.5	788.5	796.4	817.0	845.6	890.3	956.2	1053.5	1212.4	1419.9	1662.3
50°	719.1	730.2	733.1	749.1	771.6	804.5	859.2	941.9	1072.3	1254.5	1477.3
52.5°	670.8	674.2	682.1	693.7	713.3	739.0	786.3	851.0	953.4	1108.7	1313.6
55°	599.9	599.9	607.6	616.7	627.9	651.0	682.6	730.2	808.1	928.5	1098.1
57.5°	534.3	537.8	543.2	546.1	555.6	570.9	597.3	633.4	691.4	784.2	919.1
60°	490.5	496.9	496.1	501.8	510.2	522.1	544.6	574.0	625.8	700.1	813.7
62.5°	452.5	452.0	451.9	458.6	467.0	478.4	492.9	518.4	562.5	628.4	725.1
65°	389.7	388.3	393.2	397.3	400.2	408.6	419.8	442.2	471.6	520.7	595.7
67.5°	333.9	329.8	332.4	333.9	338.7	345.2	355.7	369.6	393.0	432.4	488.9
70°	295.8	292.2	291.5	292.9	297.1	302.0	309.8	323.1	344.8	376.3	417.7
72.5°	256.5	254.1	254.0	257.1	259.0	262.3	267.7	279.9	297.1	320.8	359.4
75°	200.5	200.5	200.5	201.2	203.2	206.1	210.3	216.5	229.9	246.6	272.6
77.5°	150.3	150.1	149.3	149.1	152.2	153.5	154.4	160.3	167.7	179.1	198.0
80°	117.7	114.2	115.7	117.7	119.1	119.8	122.0	123.3	129.7	136.0	149.3
82.5°	87.5	84.5	84.8	88.0	88.3	89.0	91.1	93.1	95.4	101.2	108.3
85°	46.3	46.3	47.0	47.0	47.6	47.0	49.0	49.8	49.8	53.2	57.4
87.5°	19.3	18.1	18.6	19.2	18.5	19.1	19.5	20.1	20.5	21.0	21.3
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1491.3	1486.8	1482.4	1474.5	1467.8	1458.2	1455.5	1452.1	1442.0	1433.1	1426.3
5°	1582.4	1565.6	1541.1	1518.7	1500.5	1476.0	1461.9	1447.2	1426.1	1407.2	1391.8
7.5°	1677.8	1644.7	1606.5	1565.3	1527.0	1490.0	1460.1	1433.4	1404.0	1376.1	1354.4
10°	1753.5	1705.8	1652.5	1595.1	1546.0	1498.3	1458.4	1423.3	1385.5	1352.5	1325.3
12.5°	1839.8	1769.2	1695.7	1625.9	1567.9	1501.7	1453.3	1408.8	1365.9	1326.2	1295.6
15°	1942.0	1852.3	1765.3	1669.4	1581.0	1498.3	1440.9	1384.8	1335.1	1294.4	1255.2
17.5°	2035.1	1933.4	1818.9	1702.1	1595.6	1497.5	1417.0	1353.7	1291.5	1241.7	1202.6
20°	2087.8	1972.1	1842.5	1721.2	1603.5	1494.2	1405.9	1330.2	1262.8	1210.3	1166.2
22.5°	2133.2	1997.9	1863.8	1734.1	1602.9	1485.1	1385.1	1307.2	1234.3	1182.9	1135.9
25°	2180.2	2018.4	1883.8	1731.7	1585.3	1463.3	1351.2	1262.8	1190.0	1129.7	1081.4
27.5°	2220.6	2017.0	1857.3	1693.7	1557.5	1435.3	1315.5	1220.8	1143.4	1078.0	1028.9
30°	2247.5	2019.7	1829.8	1667.9	1530.6	1404.4	1288.1	1192.8	1111.5	1044.9	998.6
32.5°	2264.3	2018.0	1804.6	1632.1	1488.0	1376.4	1258.4	1159.7	1076.2	1010.8	966.2
35°	2274.1	2005.7	1761.1	1557.9	1419.2	1310.5	1211.7	1109.4	1021.8	960.8	910.3
37.5°	2254.5	1979.8	1710.7	1486.4	1334.5	1227.5	1144.4	1057.2	973.4	906.3	862.8
40°	2223.7	1963.0	1671.4	1436.0	1276.2	1173.1	1102.4	1016.9	934.2	870.4	829.7
42.5°	2164.8	1928.8	1628.3	1379.9	1215.7	1112.6	1047.4	976.0	897.8	837.9	797.3
45°	2021.2	1854.3	1563.5	1295.8	1126.2	1019.7	962.2	910.3	839.5	781.4	746.4
47.5°	1821.9	1742.4	1469.9	1207.1	1032.9	930.4	870.7	828.9	777.2	730.2	696.6
50°	1683.4	1650.4	1406.5	1146.6	970.6	870.4	813.0	775.1	738.0	691.0	660.1
52.5°	1523.6	1543.9	1332.6	1083.7	907.3	808.8	754.7	724.6	690.9	652.3	625.4
55°	1298.6	1372.2	1204.7	978.3	813.0	719.1	667.9	641.2	621.6	592.9	569.8
57.5°	1088.0	1181.6	1066.5	869.7	720.3	639.3	590.2	561.2	548.6	533.6	515.4
60°	963.0	1055.4	967.9	796.8	658.1	580.9	537.5	513.0	500.3	489.9	474.5
62.5°	851.3	944.9	871.4	722.8	596.9	525.5	487.6	463.7	453.9	448.4	435.2
65°	698.0	778.6	729.5	607.6	509.5	446.4	412.1	395.3	386.1	384.1	375.7
67.5°	568.1	629.5	593.7	504.0	426.8	372.3	343.1	328.9	321.8	321.1	314.8
70°	482.9	540.3	513.0	431.7	365.2	322.4	297.1	284.5	280.4	279.6	276.2
72.5°	416.7	456.8	435.1	367.2	315.8	277.0	258.4	245.3	240.5	241.5	239.2
75°	308.4	338.5	325.9	278.9	237.6	212.3	196.9	188.5	184.3	186.5	183.6
77.5°	221.9	240.9	229.6	197.1	171.6	153.4	142.0	136.8	133.0	132.9	131.6
80°	167.5	178.7	172.4	152.8	131.8	116.4	107.2	103.7	101.7	100.9	100.2
82.5°	119.3	128.9	121.4	107.9	93.6	84.4	79.2	74.5	73.0	73.5	72.8
85°	60.3	63.8	61.0	52.5	47.0	42.7	39.9	37.8	36.5	37.2	35.8
87.5°	22.2	22.6	20.6	18.2	16.9	15.0	14.8	13.6	12.6	12.8	12.4
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: P332211-940

CATALOG NUMBER: S123DIW-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: P332211-940

CATALOG NUMBER: S123DIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1422.4	1418.4	1412.8	1404.4	1397.7	1387.1	1387.1	1388.8	1388.8	1388.2	1387.1
5°	1379.2	1368.7	1356.1	1341.4	1326.0	1310.5	1307.7	1302.1	1297.9	1295.1	1291.6
7.5°	1333.6	1315.0	1296.6	1276.0	1257.2	1241.7	1230.9	1221.9	1216.2	1210.1	1205.5
10°	1302.8	1279.7	1257.9	1236.3	1212.4	1193.5	1181.6	1173.1	1166.9	1161.3	1158.4
12.5°	1266.4	1239.9	1215.9	1195.3	1169.2	1149.8	1138.4	1134.4	1127.0	1115.3	1109.1
15°	1213.1	1188.6	1159.8	1128.3	1115.7	1091.9	1078.5	1072.3	1068.0	1058.9	1056.1
17.5°	1167.5	1135.4	1103.2	1079.7	1056.2	1036.9	1029.5	1021.6	1016.0	1008.6	1006.4
20°	1131.1	1102.4	1072.9	1047.8	1023.1	1002.2	995.9	990.2	984.6	981.1	978.3
22.5°	1094.1	1065.4	1041.0	1017.4	991.2	977.5	970.6	964.5	960.6	958.1	955.4
25°	1042.1	1016.9	989.5	968.5	947.5	938.3	934.2	930.7	927.9	924.3	923.6
27.5°	995.6	968.1	945.9	926.3	911.2	903.7	899.6	897.9	898.5	899.7	900.5
30°	960.8	935.6	917.4	900.5	886.5	879.5	878.8	878.8	881.6	882.3	883.7
32.5°	928.9	908.1	889.9	873.6	863.0	858.2	860.9	860.9	863.1	865.0	867.5
35°	882.3	864.1	850.1	836.1	827.0	829.0	830.5	831.9	835.4	839.5	842.4
37.5°	837.9	822.1	807.4	796.6	792.4	796.1	799.5	802.5	806.5	809.8	812.5
40°	805.9	794.0	780.0	770.2	771.6	773.7	776.5	780.0	783.5	785.6	788.5
42.5°	776.2	763.8	753.1	744.9	746.9	749.6	751.3	753.1	757.2	761.0	762.6
45°	730.9	721.1	711.3	706.4	707.8	709.3	710.6	712.7	716.2	719.1	719.7
47.5°	680.1	673.2	666.6	661.8	664.1	663.5	665.4	669.9	670.9	672.6	676.5
50°	647.6	641.2	633.6	632.1	632.1	632.1	632.8	638.5	638.5	641.2	644.1
52.5°	611.7	607.6	602.7	600.2	599.1	599.1	602.0	604.8	605.9	609.8	612.7
55°	558.6	554.4	550.1	548.0	546.6	548.0	553.7	555.0	558.6	560.6	562.8
57.5°	503.2	500.0	496.6	495.4	495.2	497.0	500.1	504.3	505.2	511.6	514.8
60°	466.7	461.8	459.1	459.1	457.6	464.0	462.5	469.6	470.9	475.2	480.1
62.5°	429.2	422.6	421.5	421.5	423.5	425.3	427.2	430.3	433.9	439.3	443.1
65°	368.6	365.2	370.1	369.3	367.9	372.1	372.1	375.7	379.9	384.8	392.4
67.5°	311.3	309.5	309.9	309.9	312.0	314.4	316.4	319.4	324.5	329.7	334.7
70°	272.6	274.7	271.3	274.0	276.2	276.8	278.2	282.4	288.0	291.5	297.1
72.5°	235.1	234.9	235.3	236.5	238.5	239.8	241.2	246.0	252.2	255.1	259.6
75°	180.8	180.1	182.2	182.2	185.7	187.1	188.5	190.6	196.3	200.5	203.9
77.5°	132.1	132.9	132.4	134.8	133.8	134.1	138.5	140.6	141.2	149.5	151.2
80°	99.5	100.9	101.7	102.3	103.0	101.7	106.6	108.6	108.6	113.5	117.0
82.5°	71.5	72.3	74.2	74.8	75.0	76.4	76.8	78.4	80.1	82.1	86.8
85°	35.8	37.8	38.5	37.8	38.5	37.2	39.2	39.9	40.7	40.7	40.7
87.5°	12.0	12.8	12.5	13.3	12.9	13.7	13.8	12.8	12.8	14.5	12.4
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: P332211-940

CATALOG NUMBER: S123DIW-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: P332211-940

CATALOG NUMBER: S123DIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1383.1	1382.6	1386.5	1383.7	1386.5	1382.6	1383.1	1387.1	1388.2	1388.8	1388.8
5°	1287.4	1289.5	1282.5	1282.5	1282.5	1289.5	1287.4	1291.6	1295.1	1297.9	1302.1
7.5°	1202.2	1199.1	1199.4	1195.6	1199.4	1199.1	1202.2	1205.5	1210.1	1216.2	1221.9
10°	1150.0	1145.8	1144.4	1145.1	1144.4	1145.8	1150.0	1158.4	1161.3	1166.9	1173.1
12.5°	1106.9	1106.0	1096.8	1096.9	1096.8	1106.0	1106.9	1109.1	1115.3	1127.0	1134.4
15°	1056.1	1042.9	1041.4	1045.6	1041.4	1042.9	1056.1	1056.1	1058.9	1068.0	1072.3
17.5°	1005.2	998.3	998.6	996.6	998.6	998.3	1005.2	1006.4	1008.6	1016.0	1021.6
20°	978.3	974.1	973.4	968.5	973.4	974.1	978.3	978.3	981.1	984.6	990.2
22.5°	953.7	952.3	952.7	947.3	952.7	952.3	953.7	955.4	958.1	960.6	964.5
25°	923.0	926.5	923.6	923.6	923.6	926.5	923.0	923.6	924.3	927.9	930.7
27.5°	902.2	902.1	900.7	900.7	900.7	902.1	902.2	900.5	899.7	898.5	897.9
30°	886.5	885.8	887.3	887.3	887.3	885.8	886.5	883.7	882.3	881.6	878.8
32.5°	870.8	871.8	872.1	872.6	872.1	871.8	870.8	867.5	865.0	863.1	860.9
35°	846.6	847.3	849.4	848.0	849.4	847.3	846.6	842.4	839.5	835.4	831.9
37.5°	813.8	817.0	816.3	817.4	816.3	817.0	813.8	812.5	809.8	806.5	802.5
40°	789.1	791.2	790.5	790.5	790.5	791.2	789.1	788.5	785.6	783.5	780.0
42.5°	763.9	765.4	763.6	762.5	763.6	765.4	763.9	762.6	761.0	757.2	753.1
45°	722.6	721.1	723.3	720.4	723.3	721.1	722.6	719.7	719.1	716.2	712.7
47.5°	676.3	677.7	678.2	680.4	678.2	677.7	676.3	676.5	672.6	670.9	669.9
50°	645.4	649.6	649.6	649.0	649.6	649.6	645.4	644.1	641.2	638.5	638.5
52.5°	615.2	617.2	619.9	619.8	619.9	617.2	615.2	612.7	609.8	605.9	604.8
55°	568.4	569.8	571.1	571.9	571.1	569.8	568.4	562.8	560.6	558.6	555.0
57.5°	519.9	519.3	522.6	523.6	522.6	519.3	519.9	514.8	511.6	505.2	504.3
60°	485.6	485.6	491.2	493.4	491.2	485.6	485.6	480.1	475.2	470.9	469.6
62.5°	449.2	451.5	457.1	454.1	457.1	451.5	449.2	443.1	439.3	433.9	430.3
65°	395.9	401.5	400.8	403.7	400.8	401.5	395.9	392.4	384.8	379.9	375.7
67.5°	340.3	343.8	348.8	349.3	348.8	343.8	340.3	334.7	329.7	324.5	319.4
70°	302.7	306.2	309.1	311.1	309.1	306.2	302.7	297.1	291.5	288.0	282.4
72.5°	266.4	268.1	274.8	271.9	274.8	268.1	266.4	259.6	255.1	252.2	246.0
75°	208.8	213.7	217.9	215.9	217.9	213.7	208.8	203.9	200.5	196.3	190.6
77.5°	154.4	159.3	161.3	159.5	161.3	159.3	154.4	151.2	149.5	141.2	140.6
80°	122.0	121.3	125.5	124.8	125.5	121.3	122.0	117.0	113.5	108.6	108.6
82.5°	89.4	88.7	90.7	91.1	90.7	88.7	89.4	86.8	82.1	80.1	78.4
85°	43.4	45.6	42.7	42.1	42.7	45.6	43.4	40.7	40.7	40.7	39.9
87.5°	12.4	12.5	11.9	11.4	11.9	12.5	12.4	12.4	14.5	12.8	12.8
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: P332211-940

CATALOG NUMBER: S123DIW-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: P332211-940

CATALOG NUMBER: S123DIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1387.1	1387.1	1397.7	1404.4	1412.8	1418.4	1422.4	1426.3	1433.1	1442.0	1452.1
5°	1307.7	1310.5	1326.0	1341.4	1356.1	1368.7	1379.2	1391.8	1407.2	1426.1	1447.2
7.5°	1230.9	1241.7	1257.2	1276.0	1296.6	1315.0	1333.6	1354.4	1376.1	1404.0	1433.4
10°	1181.6	1193.5	1212.4	1236.3	1257.9	1279.7	1302.8	1325.3	1352.5	1385.5	1423.3
12.5°	1138.4	1149.8	1169.2	1195.3	1215.9	1239.9	1266.4	1295.6	1326.2	1365.9	1408.8
15°	1078.5	1091.9	1115.7	1128.3	1159.8	1188.6	1213.1	1255.2	1294.4	1335.1	1384.8
17.5°	1029.5	1036.9	1056.2	1079.7	1103.2	1135.4	1167.5	1202.6	1241.7	1291.5	1353.7
20°	995.9	1002.2	1023.1	1047.8	1072.9	1102.4	1131.1	1166.2	1210.3	1262.8	1330.2
22.5°	970.6	977.5	991.2	1017.4	1041.0	1065.4	1094.1	1135.9	1182.9	1234.3	1307.2
25°	934.2	938.3	947.5	968.5	989.5	1016.9	1042.1	1081.4	1129.7	1190.0	1262.8
27.5°	899.6	903.7	911.2	926.3	945.9	968.1	995.6	1028.9	1078.0	1143.4	1220.8
30°	878.8	879.5	886.5	900.5	917.4	935.6	960.8	998.6	1044.9	1111.5	1192.8
32.5°	860.9	858.2	863.0	873.6	889.9	908.1	928.9	966.2	1010.8	1076.2	1159.7
35°	830.5	829.0	827.0	836.1	850.1	864.1	882.3	910.3	960.8	1021.8	1109.4
37.5°	799.5	796.1	792.4	796.6	807.4	822.1	837.9	862.8	906.3	973.4	1057.2
40°	776.5	773.7	771.6	770.2	780.0	794.0	805.9	829.7	870.4	934.2	1016.9
42.5°	751.3	749.6	746.9	744.9	753.1	763.8	776.2	797.3	837.9	897.8	976.0
45°	710.6	709.3	707.8	706.4	711.3	721.1	730.9	746.4	781.4	839.5	910.3
47.5°	665.4	663.5	664.1	661.8	666.6	673.2	680.1	696.6	730.2	777.2	828.9
50°	632.8	632.1	632.1	632.1	633.6	641.2	647.6	660.1	691.0	738.0	775.1
52.5°	602.0	599.1	599.1	600.2	602.7	607.6	611.7	625.4	652.3	690.9	724.6
55°	553.7	548.0	546.6	548.0	550.1	554.4	558.6	569.8	592.9	621.6	641.2
57.5°	500.1	497.0	495.2	495.4	496.6	500.0	503.2	515.4	533.6	548.6	561.2
60°	462.5	464.0	457.6	459.1	459.1	461.8	466.7	474.5	489.9	500.3	513.0
62.5°	427.2	425.3	423.5	421.5	421.5	422.6	429.2	435.2	448.4	453.9	463.7
65°	372.1	372.1	367.9	369.3	370.1	365.2	368.6	375.7	384.1	386.1	395.3
67.5°	316.4	314.4	312.0	309.9	309.9	309.5	311.3	314.8	321.1	321.8	328.9
70°	278.2	276.8	276.2	274.0	271.3	274.7	272.6	276.2	279.6	280.4	284.5
72.5°	241.2	239.8	238.5	236.5	235.3	234.9	235.1	239.2	241.5	240.5	245.3
75°	188.5	187.1	185.7	182.2	182.2	180.1	180.8	183.6	186.5	184.3	188.5
77.5°	138.5	134.1	133.8	134.8	132.4	132.9	132.1	131.6	132.9	133.0	136.8
80°	106.6	101.7	103.0	102.3	101.7	100.9	99.5	100.2	100.9	101.7	103.7
82.5°	76.8	76.4	75.0	74.8	74.2	72.3	71.5	72.8	73.5	73.0	74.5
85°	39.2	37.2	38.5	37.8	38.5	37.8	35.8	35.8	37.2	36.5	37.8
87.5°	13.8	13.7	12.9	13.3	12.5	12.8	12.0	12.4	12.8	12.6	13.6
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



TEST NUMBER: P332211-940

CATALOG NUMBER: S123DIW-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: P332211-940

CATALOG NUMBER: S123DIW-S1165D460U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1455.5	1458.2	1467.8	1474.5	1482.4	1486.8	1491.3	1494.7	1499.1	1500.3	1516.5
5°	1461.9	1476.0	1500.5	1518.7	1541.1	1565.6	1582.4	1590.2	1610.4	1627.3	1660.9
7.5°	1460.1	1490.0	1527.0	1565.3	1606.5	1644.7	1677.8	1717.0	1744.9	1786.8	1828.2
10°	1458.4	1498.3	1546.0	1595.1	1652.5	1705.8	1753.5	1806.7	1850.8	1909.0	1958.7
12.5°	1453.3	1501.7	1567.9	1625.9	1695.7	1769.2	1839.8	1908.2	1947.3	2044.2	2090.0
15°	1440.9	1498.3	1581.0	1669.4	1765.3	1852.3	1942.0	2013.5	2129.0	2213.9	2267.8
17.5°	1417.0	1497.5	1595.6	1702.1	1818.9	1933.4	2035.1	2143.5	2266.2	2368.7	2478.1
20°	1405.9	1494.2	1603.5	1721.2	1842.5	1972.1	2087.8	2218.0	2352.0	2452.8	2593.0
22.5°	1385.1	1485.1	1602.9	1734.1	1863.8	1997.9	2133.2	2264.6	2419.2	2558.2	2691.7
25°	1351.2	1463.3	1585.3	1731.7	1883.8	2018.4	2180.2	2354.7	2516.0	2694.7	2827.8
27.5°	1315.5	1435.3	1557.5	1693.7	1857.3	2017.0	2220.6	2417.8	2614.9	2769.2	2867.7
30°	1288.1	1404.4	1530.6	1667.9	1829.8	2019.7	2247.5	2462.6	2654.7	2787.1	2842.5
32.5°	1258.4	1376.4	1488.0	1632.1	1804.6	2018.0	2264.3	2489.0	2656.9	2745.1	2734.3
35°	1211.7	1310.5	1419.2	1557.9	1761.1	2005.7	2274.1	2491.4	2594.4	2575.5	2432.5
37.5°	1144.4	1227.5	1334.5	1486.4	1710.7	1979.8	2254.5	2417.5	2410.8	2256.7	2049.6
40°	1102.4	1173.1	1276.2	1436.0	1671.4	1963.0	2223.7	2329.5	2239.8	2024.6	1776.6
42.5°	1047.4	1112.6	1215.7	1379.9	1628.3	1928.8	2164.8	2195.5	2020.0	1772.4	1545.0
45°	962.2	1019.7	1126.2	1295.8	1563.5	1854.3	2021.2	1946.2	1709.9	1454.2	1281.1
47.5°	870.7	930.4	1032.9	1207.1	1469.9	1742.4	1821.9	1662.3	1419.9	1212.4	1053.5
50°	813.0	870.4	970.6	1146.6	1406.5	1650.4	1683.4	1477.3	1254.5	1072.3	941.9
52.5°	754.7	808.8	907.3	1083.7	1332.6	1543.9	1523.6	1313.6	1108.7	953.4	851.0
55°	667.9	719.1	813.0	978.3	1204.7	1372.2	1298.6	1098.1	928.5	808.1	730.2
57.5°	590.2	639.3	720.3	869.7	1066.5	1181.6	1088.0	919.1	784.2	691.4	633.4
60°	537.5	580.9	658.1	796.8	967.9	1055.4	963.0	813.7	700.1	625.8	574.0
62.5°	487.6	525.5	596.9	722.8	871.4	944.9	851.3	725.1	628.4	562.5	518.4
65°	412.1	446.4	509.5	607.6	729.5	778.6	698.0	595.7	520.7	471.6	442.2
67.5°	343.1	372.3	426.8	504.0	593.7	629.5	568.1	488.9	432.4	393.0	369.6
70°	297.1	322.4	365.2	431.7	513.0	540.3	482.9	417.7	376.3	344.8	323.1
72.5°	258.4	277.0	315.8	367.2	435.1	456.8	416.7	359.4	320.8	297.1	279.9
75°	196.9	212.3	237.6	278.9	325.9	338.5	308.4	272.6	246.6	229.9	216.5
77.5°	142.0	153.4	171.6	197.1	229.6	240.9	221.9	198.0	179.1	167.7	160.3
80°	107.2	116.4	131.8	152.8	172.4	178.7	167.5	149.3	136.0	129.7	123.3
82.5°	79.2	84.4	93.6	107.9	121.4	128.9	119.3	108.3	101.2	95.4	93.1
85°	39.9	42.7	47.0	52.5	61.0	63.8	60.3	57.4	53.2	49.8	49.8
87.5°	14.8	15.0	16.9	18.2	20.6	22.6	22.2	21.3	21.0	20.5	20.1
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1522.2	1522.7	1528.9	1533.4	1531.2	1533.9	1535.1
5°	1663.0	1688.3	1701.6	1711.4	1712.1	1712.8	1718.4
7.5°	1862.8	1889.8	1909.6	1939.6	1948.6	1958.7	1955.8
10°	2008.6	2048.4	2082.9	2101.0	2120.7	2149.4	2126.3
12.5°	2144.7	2215.5	2267.8	2296.2	2314.6	2320.4	2309.1
15°	2369.5	2461.9	2511.7	2510.3	2573.4	2600.8	2558.0
17.5°	2575.5	2660.9	2729.3	2764.3	2816.8	2828.5	2823.2
20°	2701.6	2794.9	2848.1	2908.4	2935.7	2960.2	2964.4
22.5°	2810.4	2894.0	2951.3	3001.4	3024.3	3035.9	3043.0
25°	2922.4	2988.3	3022.6	3040.1	3046.4	3045.0	3035.9
27.5°	2914.6	2919.7	2881.9	2844.7	2811.6	2774.1	2761.2
30°	2839.0	2780.1	2675.0	2615.5	2527.8	2458.4	2486.4
32.5°	2640.0	2522.8	2404.8	2274.6	2166.8	2136.1	2105.2
35°	2253.1	2047.1	1926.5	1786.4	1730.3	1674.3	1635.7
37.5°	1822.8	1663.5	1520.5	1428.8	1372.6	1337.1	1318.1
40°	1576.1	1432.4	1314.7	1240.5	1197.7	1157.7	1152.2
42.5°	1379.4	1245.8	1157.2	1098.1	1056.9	1040.0	1027.7
45°	1129.7	1036.5	977.0	934.9	907.6	897.1	883.1
47.5°	956.2	890.3	845.6	817.0	796.4	788.5	787.5
50°	859.2	804.5	771.6	749.1	733.1	730.2	719.1
52.5°	786.3	739.0	713.3	693.7	682.1	674.2	670.8
55°	682.6	651.0	627.9	616.7	607.6	599.9	599.9
57.5°	597.3	570.9	555.6	546.1	543.2	537.8	534.3
60°	544.6	522.1	510.2	501.8	496.1	496.9	490.5
62.5°	492.9	478.4	467.0	458.6	451.9	452.0	452.5
65°	419.8	408.6	400.2	397.3	393.2	388.3	389.7
67.5°	355.7	345.2	338.7	333.9	332.4	329.8	333.9
70°	309.8	302.0	297.1	292.9	291.5	292.2	295.8
72.5°	267.7	262.3	259.0	257.1	254.0	254.1	256.5
75°	210.3	206.1	203.2	201.2	200.5	200.5	200.5
77.5°	154.4	153.5	152.2	149.1	149.3	150.1	150.3
80°	122.0	119.8	119.1	117.7	115.7	114.2	117.7
82.5°	91.1	89.0	88.3	88.0	84.8	84.5	87.5
85°	49.0	47.0	47.6	47.0	47.0	46.3	46.3
87.5°	19.5	19.1	18.5	19.2	18.6	18.1	19.3
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)