

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: P332645-930

Luminaire Tested: **SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332645-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

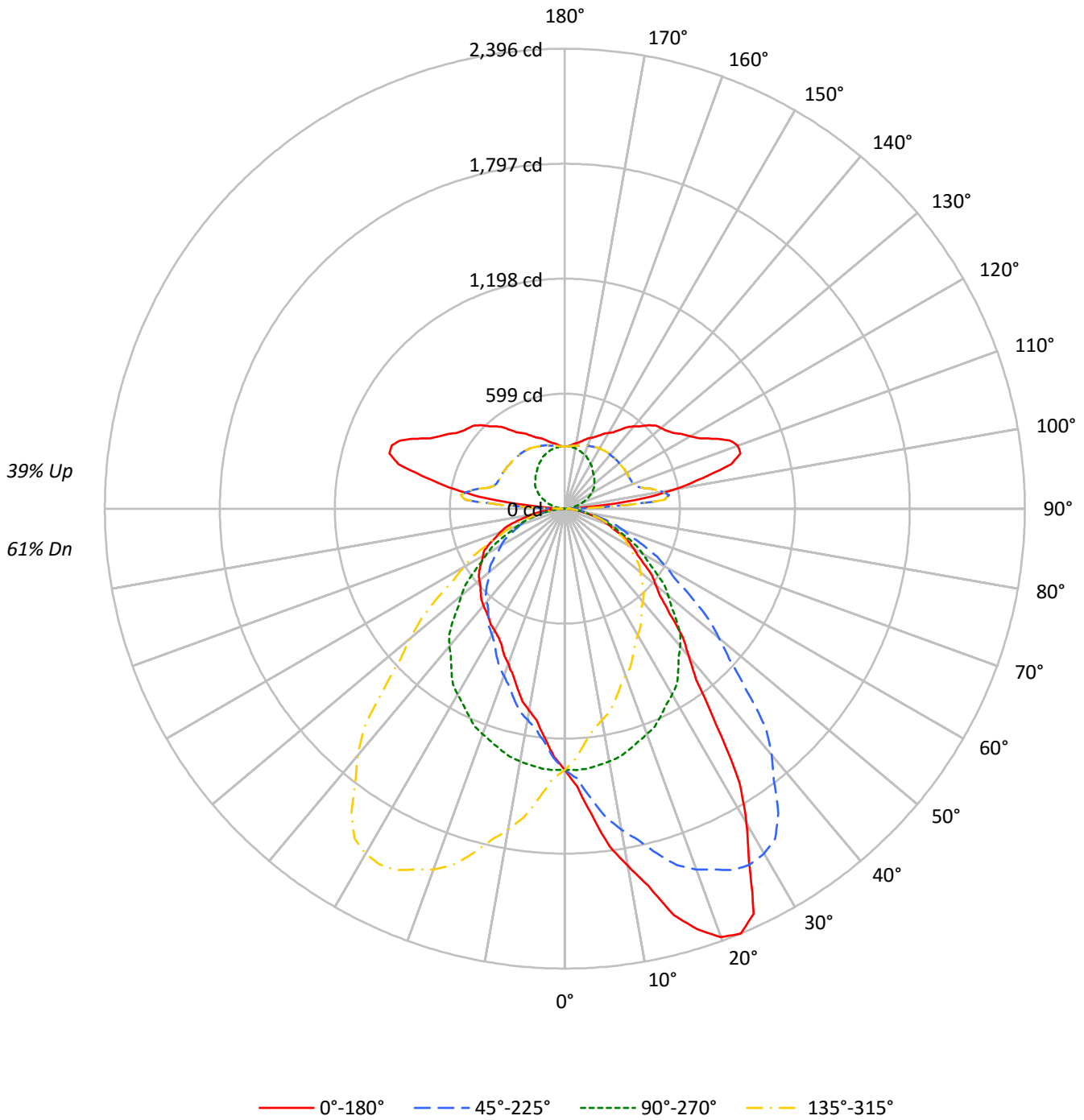
Lumens per Lamp: N/A  
Luminaire Lumens: 6115.6 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 54.4  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	64	58	62	57	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	49	44	39	44	39	35	38	34	31	29
6	65	53	45	39	61	50	43	38	45	39	34	39	35	31	35	31	28	25
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	22
8	56	44	36	31	53	42	34	29	37	31	27	33	28	25	29	25	22	20
9	52	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	10984	10984	10984	10984
5°	12935	11012	9720	11012
10°	15488	10964	8751	10964
15°	18324	10853	8037	10853
20°	20405	10740	7399	10740
25°	20735	10573	6959	10573
30°	17643	10413	6820	10413
35°	13565	10154	6821	10154
40°	10572	9848	6949	9848
45°	8816	9388	7066	9388
50°	7759	8828	7304	8828
55°	7108	8155	7600	8155
60°	6660	7553	7953	7553
65°	6202	6879	8246	6879
70°	5667	6212	8434	6212
75°	5062	5468	8334	5468
80°	4245	4482	8071	4482
85°	3131	3242	7725	3242



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.5	2.2
10°-20°	408.6	6.7
20°-30°	647.9	10.6
30°-40°	721.0	11.8
40°-50°	656.3	10.7
50°-60°	536.3	8.8
60°-70°	382.9	6.3
70°-80°	210.8	3.4
80°-90°	59.4	1.0
90°-100°	234.4	3.8
100°-110°	487.8	8.0
110°-120°	436.9	7.1
120°-130°	367.5	6.0
130°-140°	306.4	5.0
140°-150°	234.1	3.8
150°-160°	164.6	2.7
160°-170°	96.8	1.6
170°-180°	31.5	0.5
0°-30°	1189.0	19.4
0°-40°	1910.0	31.2
0°-60°	3102.6	50.7
0°-90°	3755.7	61.4
90°-120°	1159.1	19.0
90°-150°	2067.1	33.8
90°-180°	2360.0	38.6
0°-180°	6115.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1361	1361	1361	1361	1361	
5°	1596	1359	1199	1359	1596	162
15°	2192	1299	962	1299	2192	619
25°	2328	1187	781	1187	2328	1026
35°	1376	1030	692	1030	1376	874
45°	772	822	619	822	772	608
55°	505	579	540	579	505	456
65°	325	360	432	360	325	321
75°	162	175	267	175	162	173
85°	34	35	83	35	34	41
90°	13	1	13	1	13	12
95°	156	21	156	21	156	241
105°	897	75	897	75	897	887
115°	861	131	861	131	861	855
125°	687	183	687	183	687	624
135°	615	217	615	217	615	474
145°	502	250	502	250	502	318
155°	420	285	420	285	420	196
165°	367	310	367	310	367	105
175°	330	324	330	324	330	32
180°	324	324	324	324	324	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1448.1	1447.6	1443.1	1442.2	1439.0	1435.0	1434.1	1426.9	1412.4	1405.7	1403.9
5°	1596.2	1607.4	1592.8	1590.0	1588.3	1569.7	1560.1	1548.8	1522.9	1507.7	1495.8
7.5°	1772.9	1774.3	1767.9	1762.7	1748.3	1732.1	1707.8	1681.9	1651.0	1618.9	1594.6
10°	1889.3	1893.8	1886.4	1885.3	1856.6	1838.5	1802.5	1772.1	1737.1	1698.2	1662.7
12.5°	2011.9	2005.6	2001.9	1977.8	1972.5	1939.5	1897.6	1866.3	1812.4	1767.7	1720.4
15°	2192.5	2180.1	2172.2	2138.9	2122.6	2077.0	2032.4	1998.1	1927.6	1860.5	1809.8
17.5°	2298.4	2310.9	2292.6	2278.9	2236.7	2204.7	2159.2	2087.0	2031.9	1948.6	1884.6
20°	2375.1	2376.2	2366.1	2352.0	2318.7	2278.2	2228.5	2149.6	2083.7	2000.8	1912.9
22.5°	2395.8	2396.1	2391.8	2378.6	2353.4	2320.5	2270.5	2204.7	2124.8	2034.7	1946.8
25°	2327.8	2325.5	2330.6	2345.2	2335.7	2325.5	2296.8	2247.7	2173.3	2078.0	1983.4
27.5°	2074.8	2090.3	2119.0	2155.1	2189.8	2216.3	2223.7	2213.7	2167.6	2089.2	1990.1
30°	1892.6	1911.8	1933.2	1969.3	2039.1	2079.2	2123.2	2156.4	2137.8	2075.3	1982.8
32.5°	1692.5	1697.2	1729.0	1770.0	1834.0	1911.0	1980.7	2048.2	2070.6	2037.8	1960.7
35°	1376.4	1384.2	1418.6	1459.2	1537.6	1631.7	1736.5	1830.1	1907.3	1938.3	1898.8
37.5°	1123.2	1145.8	1170.1	1213.7	1282.7	1367.4	1476.3	1597.4	1712.5	1789.6	1802.7
40°	1003.2	1017.3	1034.8	1068.0	1126.7	1210.1	1303.7	1442.3	1564.6	1675.1	1711.2
42.5°	908.6	916.8	927.5	957.6	1002.2	1085.2	1170.6	1292.6	1415.4	1547.4	1607.9
45°	772.2	780.6	798.7	816.1	849.9	907.4	986.9	1087.2	1210.6	1338.1	1449.6
47.5°	673.6	679.1	689.7	708.5	737.2	775.1	839.8	923.6	1038.0	1161.6	1280.5
50°	617.8	622.2	630.7	647.6	669.6	703.4	756.4	834.7	924.3	1048.9	1165.6
52.5°	573.6	575.4	581.6	593.0	610.5	639.0	682.4	747.2	830.5	941.6	1057.8
55°	505.0	507.3	512.9	521.4	536.5	554.6	587.8	636.3	709.1	805.4	906.3
57.5°	448.7	450.2	454.9	458.2	470.8	485.4	510.9	545.6	600.7	682.4	772.5
60°	412.5	411.5	417.1	419.9	428.4	440.8	460.5	493.7	541.6	607.6	690.4
62.5°	377.4	375.9	380.6	384.3	389.1	399.7	415.8	441.9	480.8	540.4	612.0
65°	324.7	322.4	325.2	329.7	334.2	339.9	351.7	374.8	405.8	448.7	503.3
67.5°	271.7	274.0	274.5	276.7	279.3	287.0	295.1	311.4	333.3	367.6	413.9
70°	240.1	240.7	243.0	243.0	244.6	251.4	258.1	267.7	289.1	320.7	358.5
72.5°	208.6	210.9	210.0	211.8	213.0	217.5	222.5	231.6	249.9	273.4	305.2
75°	162.3	164.0	164.0	164.6	166.2	168.0	171.9	178.6	191.6	209.1	231.1
77.5°	118.4	118.6	119.4	121.4	121.4	124.1	127.0	132.5	138.8	150.8	164.2
80°	91.3	92.5	91.9	93.0	93.0	95.2	96.4	103.1	106.0	113.8	124.6
82.5°	66.9	68.1	68.0	69.5	70.4	70.9	72.5	75.2	78.0	85.0	89.4
85°	33.8	35.0	33.8	35.0	36.6	37.2	38.9	39.5	41.7	43.4	47.4
87.5°	12.6	13.9	14.1	14.4	15.2	15.7	16.0	15.4	17.0	17.6	19.2
90°	13.4	13.4	14.0	13.4	12.7	12.7	12.1	11.5	10.8	11.5	10.2
92.5°	49.1	49.1	51.3	54.7	62.2	75.0	94.2	125.2	168.4	202.2	177.0
95°	155.6	163.9	175.3	195.1	226.3	288.1	373.6	472.4	534.3	519.6	392.1
97.5°	415.8	429.0	448.2	486.6	532.3	598.8	661.2	697.9	671.2	547.2	367.0
100°	584.6	589.7	608.8	647.7	703.2	750.3	781.5	768.8	675.7	512.6	332.8
102.5°	731.5	735.6	755.7	783.9	817.9	837.6	828.5	765.2	637.5	469.2	309.8
105°	897.0	900.8	909.7	914.8	913.5	887.4	824.3	714.0	568.0	418.2	290.1
107.5°	958.4	956.8	950.4	935.9	904.3	847.5	758.6	641.2	511.9	389.6	286.5
110°	959.4	953.7	942.2	915.4	870.2	800.1	707.6	597.4	483.9	379.9	287.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	929.4	920.1	904.0	871.6	820.2	750.1	662.8	565.2	468.1	375.4	290.6
115°	861.3	856.1	835.8	797.5	747.1	685.9	611.4	533.0	453.2	372.9	296.4
117.5°	792.3	788.3	767.7	735.6	692.6	640.7	582.0	517.1	446.6	372.3	302.7
120°	753.5	746.5	729.9	701.9	665.5	620.3	569.3	510.0	443.0	372.3	307.3
122.5°	722.9	715.9	701.9	677.9	647.2	607.6	561.1	503.9	439.0	371.8	311.9
125°	687.2	683.4	671.3	652.8	627.3	592.2	548.3	493.4	432.2	371.0	318.8
127.5°	666.3	662.5	652.3	635.9	610.3	576.9	533.0	480.7	423.1	369.7	324.2
130°	654.1	650.3	640.1	624.1	597.9	564.2	520.8	470.5	417.6	369.1	328.3
132.5°	640.3	636.5	626.8	608.8	583.2	549.4	507.0	459.7	412.5	368.6	331.9
135°	614.6	610.7	600.5	582.7	557.2	525.3	486.4	445.0	404.8	367.9	337.2
137.5°	582.7	578.0	569.6	552.0	528.2	499.5	466.7	431.6	398.2	367.7	340.4
140°	559.7	554.6	545.7	531.7	509.4	482.6	453.9	424.0	394.6	367.2	343.0
142.5°	535.2	531.7	523.7	510.8	491.0	467.8	443.2	416.8	391.6	367.2	345.0
145°	501.7	498.6	492.1	481.4	465.4	447.5	428.4	406.8	386.3	365.9	346.2
147.5°	472.0	470.8	466.0	456.7	445.0	431.0	415.6	398.4	381.6	363.6	346.8
150°	455.2	454.5	450.7	442.5	432.2	420.8	408.0	393.3	378.1	362.1	346.8
152.5°	439.9	439.2	436.9	430.2	421.5	412.1	400.3	387.8	374.0	359.5	345.8
155°	420.1	420.1	418.2	413.1	406.8	399.1	389.6	379.3	367.9	355.7	344.2
157.5°	402.8	402.8	401.6	397.8	393.0	386.9	378.8	370.2	361.6	351.8	342.6
160°	392.1	392.1	391.4	387.6	383.8	378.7	371.7	364.7	357.0	348.7	341.0
162.5°	381.9	382.4	381.7	377.9	375.1	370.6	365.0	359.1	352.9	345.7	339.6
165°	366.6	367.2	367.9	365.3	362.7	359.5	355.1	351.2	346.2	341.0	336.6
167.5°	354.4	355.0	355.1	353.4	352.1	350.3	346.7	343.7	340.1	336.5	333.5
170°	346.8	346.8	347.4	346.8	345.5	343.6	341.0	339.2	336.0	333.4	331.5
172.5°	339.2	340.1	340.8	340.1	339.4	338.0	336.5	335.1	332.4	330.4	329.5
175°	330.2	331.5	332.8	331.5	331.5	331.5	330.2	329.6	328.3	327.0	327.0
177.5°	325.0	326.0	327.0	326.5	327.0	326.5	326.5	326.0	325.5	325.0	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1404.4	1398.0	1393.5	1389.9	1380.0	1374.1	1369.6	1363.3	1356.1	1348.4	1339.0
5°	1484.0	1464.8	1450.7	1429.4	1409.1	1392.1	1374.7	1358.9	1339.7	1318.9	1303.7
7.5°	1567.7	1539.3	1502.8	1471.0	1435.4	1404.4	1376.7	1348.3	1318.7	1290.1	1263.9
10°	1621.0	1584.4	1543.8	1495.8	1450.7	1410.7	1373.5	1337.5	1302.5	1267.5	1237.7
12.5°	1678.2	1632.6	1572.6	1516.6	1466.1	1412.6	1367.7	1323.5	1281.3	1244.6	1209.7
15°	1755.1	1689.1	1619.8	1544.9	1478.4	1415.8	1354.4	1298.6	1251.2	1202.7	1169.0
17.5°	1802.4	1720.8	1641.5	1563.2	1482.6	1403.8	1337.5	1273.1	1213.8	1165.7	1123.1
20°	1833.4	1752.3	1653.7	1575.3	1479.5	1398.3	1321.7	1250.1	1188.1	1136.9	1092.8
22.5°	1860.5	1766.8	1668.1	1565.0	1469.6	1383.5	1299.6	1227.6	1164.2	1110.2	1068.0
25°	1875.2	1767.5	1660.4	1557.9	1449.6	1347.6	1271.5	1187.0	1119.3	1062.4	1017.3
27.5°	1876.7	1761.6	1640.5	1526.5	1414.8	1319.8	1223.8	1148.2	1078.0	1017.8	974.5
30°	1871.8	1751.8	1621.5	1498.1	1385.9	1282.8	1199.4	1117.1	1045.5	985.8	940.7
32.5°	1856.0	1731.0	1597.2	1466.6	1350.3	1249.4	1163.4	1085.1	1015.3	956.4	909.1
35°	1810.4	1686.9	1544.3	1408.5	1289.6	1187.6	1109.8	1030.3	960.4	904.6	859.0
37.5°	1739.0	1627.4	1482.5	1341.9	1225.1	1122.6	1045.5	973.7	910.7	854.0	807.2
40°	1676.7	1578.7	1433.3	1296.3	1170.1	1072.6	1000.5	934.5	872.0	818.4	773.9
42.5°	1605.1	1519.6	1385.5	1240.4	1118.7	1020.8	950.4	891.2	832.3	782.8	738.3
45°	1477.2	1420.9	1294.6	1160.5	1033.7	941.3	874.2	822.3	772.7	724.2	687.1
47.5°	1330.2	1302.3	1196.0	1068.6	948.3	857.1	799.0	751.1	707.6	666.5	633.7
50°	1231.5	1218.0	1126.1	1003.2	888.3	802.6	744.0	702.9	665.6	629.6	598.6
52.5°	1134.1	1133.7	1050.8	938.3	831.9	749.4	691.2	652.8	620.5	591.3	563.4
55°	985.2	1001.0	936.2	835.8	740.6	666.2	613.8	579.4	556.8	532.6	511.8
57.5°	848.5	874.7	821.2	732.8	653.4	584.8	539.2	513.3	489.3	474.7	459.5
60°	759.2	784.0	742.3	667.9	593.0	534.3	490.9	467.8	446.9	436.8	426.1
62.5°	679.9	702.0	671.1	602.1	537.0	480.6	444.0	421.8	407.7	396.6	389.6
65°	566.5	585.1	558.6	508.4	452.6	407.5	377.6	360.1	346.7	342.1	334.2
67.5°	457.9	474.8	460.5	417.8	373.1	339.0	315.6	298.8	290.8	286.9	281.3
70°	393.4	410.3	395.1	357.9	323.5	294.8	272.8	263.2	254.8	253.1	245.2
72.5°	338.8	350.3	335.2	306.1	276.6	252.4	235.4	225.3	220.9	217.9	213.6
75°	254.2	264.3	254.2	231.6	210.8	193.9	179.2	175.3	170.2	168.5	165.7
77.5°	179.9	188.7	180.9	166.8	151.2	138.2	130.3	125.2	124.1	121.2	122.5
80°	137.5	143.2	135.8	126.3	113.8	104.8	99.2	96.4	93.0	91.9	94.1
82.5°	98.7	101.3	97.5	91.1	81.9	76.0	72.2	68.9	68.2	68.4	68.4
85°	51.3	50.7	50.1	44.5	41.7	37.7	35.5	35.0	34.4	35.5	36.6
87.5°	18.9	19.4	18.2	16.4	14.8	13.4	12.6	11.8	12.6	13.4	13.9
90°	8.9	8.9	5.1	5.1	4.5	3.8	1.9	0.7	1.9	3.8	4.5
92.5°	128.7	79.3	46.9	33.7	24.4	16.6	10.6	7.3	10.6	16.6	24.4
95°	239.7	135.2	79.7	52.9	37.6	29.4	22.9	21.0	22.9	29.4	37.6
97.5°	215.5	129.1	86.4	64.0	50.9	43.2	37.7	37.7	37.7	43.2	50.9
100°	202.8	130.7	93.1	72.6	60.6	52.9	48.4	48.4	48.4	52.9	60.6
102.5°	199.2	135.7	101.7	82.3	70.8	63.6	59.7	58.6	59.7	63.6	70.8
105°	200.8	147.9	117.3	98.8	87.3	79.7	76.5	74.6	76.5	79.7	87.3
107.5°	210.3	162.1	134.0	115.8	104.8	96.6	93.4	92.2	93.4	96.6	104.8
110°	217.4	172.8	144.7	127.5	116.0	108.4	105.2	104.0	105.2	108.4	116.0





TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	225.0	183.0	156.0	138.7	127.3	120.1	116.4	115.1	116.4	120.1	127.3
115°	237.2	198.9	173.4	156.2	144.1	137.7	133.2	131.3	133.2	137.7	144.1
117.5°	249.5	214.3	190.1	172.3	160.9	153.9	149.9	148.1	149.9	153.9	160.9
120°	258.2	225.0	200.8	183.0	172.1	165.1	160.6	159.4	160.6	165.1	172.1
122.5°	266.4	235.2	211.0	193.6	181.8	175.3	170.9	169.6	170.9	175.3	181.8
125°	278.6	249.2	226.3	208.5	196.3	189.3	185.5	183.0	185.5	189.3	196.3
127.5°	289.2	262.3	240.1	222.1	209.5	201.5	196.9	194.9	196.9	201.5	209.5
130°	295.8	270.9	249.2	230.8	218.7	209.1	204.0	201.5	204.0	209.1	218.7
132.5°	302.4	278.1	256.4	239.0	225.8	216.8	210.1	208.1	210.1	216.8	225.8
135°	311.1	288.1	267.1	250.5	237.2	226.3	220.0	217.4	220.0	226.3	237.2
137.5°	317.2	295.8	276.1	260.3	246.5	236.1	229.1	226.7	229.1	236.1	246.5
140°	321.3	300.9	281.8	266.4	253.1	242.2	235.2	233.3	235.2	242.2	253.1
142.5°	324.3	305.5	286.9	272.1	259.2	248.9	242.4	240.4	242.4	248.9	259.2
145°	327.7	310.5	293.9	279.9	267.7	258.9	252.4	250.5	252.4	258.9	267.7
147.5°	330.6	315.6	300.0	287.4	277.3	268.2	262.5	261.9	262.5	268.2	277.3
150°	332.2	318.1	304.1	292.0	282.4	274.8	269.7	269.0	269.7	274.8	282.4
152.5°	333.1	320.2	307.7	296.6	288.0	280.9	275.8	275.7	275.8	280.9	288.0
155°	334.0	323.2	312.3	302.8	295.8	289.4	285.6	284.9	285.6	289.4	295.8
157.5°	334.0	325.4	316.2	308.7	302.6	297.6	294.0	294.0	294.0	297.6	302.6
160°	334.0	326.4	318.8	311.8	306.6	302.1	299.6	299.6	299.6	302.1	306.6
162.5°	334.0	327.4	320.2	314.8	310.2	306.2	304.2	304.8	304.2	306.2	310.2
165°	332.8	327.7	322.0	318.1	315.0	311.8	310.5	310.5	310.5	311.8	315.0
167.5°	331.3	327.6	323.3	320.4	318.6	316.2	315.6	316.2	315.6	316.2	318.6
170°	330.2	327.0	323.8	322.0	320.7	318.8	318.1	318.8	318.1	318.8	320.7
172.5°	329.2	326.5	324.3	322.9	322.2	320.8	320.7	321.3	320.7	320.8	322.2
175°	327.7	325.8	324.5	324.5	323.8	323.2	323.2	323.8	323.2	323.2	323.8
177.5°	326.0	325.0	324.5	324.5	324.5	324.0	324.5	325.0	324.5	324.0	324.5
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1334.4	1330.4	1324.5	1316.4	1309.6	1302.4	1300.6	1297.9	1303.3	1298.8	1297.5
5°	1290.7	1278.9	1263.6	1246.2	1236.0	1221.4	1218.5	1212.9	1207.3	1206.7	1201.1
7.5°	1244.4	1227.0	1207.1	1189.3	1172.8	1156.7	1146.3	1144.0	1135.7	1130.8	1125.2
10°	1214.6	1193.2	1170.1	1153.2	1134.0	1117.1	1105.3	1098.5	1092.8	1086.6	1081.0
12.5°	1179.4	1156.7	1137.6	1119.3	1096.6	1083.7	1064.2	1052.5	1051.4	1051.5	1036.8
15°	1138.5	1116.0	1086.6	1060.7	1048.3	1023.5	1012.8	999.3	990.8	982.4	975.7
17.5°	1091.8	1063.6	1040.8	1011.1	987.3	967.6	953.6	945.4	932.7	920.7	912.1
20°	1062.4	1032.6	1008.3	976.7	950.8	926.6	914.8	903.5	893.9	883.8	874.2
22.5°	1032.7	1001.4	971.8	941.1	917.0	891.4	880.0	864.7	855.6	849.9	840.3
25°	985.8	951.9	918.1	888.8	864.1	841.5	826.3	814.4	804.3	799.8	793.6
27.5°	934.8	901.2	868.5	835.3	807.1	790.8	778.6	769.6	763.9	757.8	755.0
30°	902.4	867.4	832.5	801.4	775.5	759.2	748.0	741.8	737.2	734.4	731.6
32.5°	869.4	834.9	798.2	769.9	746.7	732.1	723.6	717.4	715.1	714.1	713.1
35°	816.7	781.7	748.0	722.6	700.6	695.0	687.6	684.2	683.1	687.1	688.8
37.5°	765.6	733.2	702.1	677.4	663.1	654.8	652.3	652.5	656.5	660.0	664.1
40°	732.7	701.2	671.8	650.4	636.9	631.9	630.7	633.5	638.1	642.0	646.5
42.5°	700.7	669.6	642.9	622.9	613.4	608.8	609.5	612.3	618.6	623.5	630.2
45°	651.0	625.1	599.2	582.8	574.9	576.0	576.0	581.1	587.3	594.6	601.9
47.5°	604.2	578.0	556.8	543.0	538.9	537.9	541.1	547.7	556.6	565.7	575.9
50°	572.7	547.8	529.2	516.8	512.3	514.0	518.5	524.7	535.4	546.7	557.4
52.5°	540.6	518.0	500.8	489.3	486.2	489.3	493.7	503.5	512.9	525.1	538.0
55°	490.9	471.7	458.2	449.8	448.7	450.4	455.4	466.1	479.6	494.9	507.3
57.5°	441.4	425.4	413.0	407.2	407.7	409.3	417.7	430.4	444.8	461.1	477.0
60°	408.1	393.4	383.3	378.8	379.3	382.7	392.8	404.7	422.7	438.5	455.4
62.5°	376.5	363.6	353.9	349.9	349.1	356.5	366.2	378.5	396.6	414.2	432.4
65°	325.8	315.6	307.8	305.5	307.2	312.8	325.2	341.5	356.8	375.4	394.5
67.5°	276.1	267.8	262.4	263.4	265.5	273.8	284.2	298.2	315.5	334.8	353.8
70°	244.6	236.7	232.2	232.8	236.2	246.3	255.4	269.4	288.0	307.8	323.5
72.5°	212.1	206.9	202.9	205.3	208.6	215.6	226.9	241.0	257.4	275.7	292.4
75°	162.9	162.9	160.6	162.3	167.4	174.1	182.6	197.3	213.6	228.3	241.8
77.5°	120.8	119.6	121.1	123.1	126.0	134.0	143.7	154.2	166.5	181.2	192.3
80°	92.5	93.0	95.8	99.2	100.4	106.6	116.7	126.3	135.8	148.2	158.9
82.5°	69.5	70.0	71.5	75.7	76.9	83.6	90.1	99.6	108.4	116.7	125.6
85°	37.7	37.7	40.6	42.2	45.1	49.6	53.6	59.2	67.1	72.7	81.1
87.5°	15.4	15.4	18.0	18.9	20.5	23.1	23.8	28.9	30.8	33.2	37.3
90°	5.1	5.1	8.9	8.9	10.2	11.5	10.8	11.5	12.1	12.7	12.7
92.5°	33.7	46.9	79.3	128.7	177.0	202.2	168.4	125.2	94.2	75.0	62.2
95°	52.9	79.7	135.2	239.7	392.1	519.6	534.3	472.4	373.6	288.1	226.3
97.5°	64.0	86.4	129.1	215.5	367.0	547.2	671.2	697.9	661.2	598.8	532.3
100°	72.6	93.1	130.7	202.8	332.8	512.6	675.7	768.8	781.5	750.3	703.2
102.5°	82.3	101.7	135.7	199.2	309.8	469.2	637.5	765.2	828.5	837.6	817.9
105°	98.8	117.3	147.9	200.8	290.1	418.2	568.0	714.0	824.3	887.4	913.5
107.5°	115.8	134.0	162.1	210.3	286.5	389.6	511.9	641.2	758.6	847.5	904.3
110°	127.5	144.7	172.8	217.4	287.5	379.9	483.9	597.4	707.6	800.1	870.2



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	138.7	156.0	183.0	225.0	290.6	375.4	468.1	565.2	662.8	750.1	820.2
115°	156.2	173.4	198.9	237.2	296.4	372.9	453.2	533.0	611.4	685.9	747.1
117.5°	172.3	190.1	214.3	249.5	302.7	372.3	446.6	517.1	582.0	640.7	692.6
120°	183.0	200.8	225.0	258.2	307.3	372.3	443.0	510.0	569.3	620.3	665.5
122.5°	193.6	211.0	235.2	266.4	311.9	371.8	439.0	503.9	561.1	607.6	647.2
125°	208.5	226.3	249.2	278.6	318.8	371.0	432.2	493.4	548.3	592.2	627.3
127.5°	222.1	240.1	262.3	289.2	324.2	369.7	423.1	480.7	533.0	576.9	610.3
130°	230.8	249.2	270.9	295.8	328.3	369.1	417.6	470.5	520.8	564.2	597.9
132.5°	239.0	256.4	278.1	302.4	331.9	368.6	412.5	459.7	507.0	549.4	583.2
135°	250.5	267.1	288.1	311.1	337.2	367.9	404.8	445.0	486.4	525.3	557.2
137.5°	260.3	276.1	295.8	317.2	340.4	367.7	398.2	431.6	466.7	499.5	528.2
140°	266.4	281.8	300.9	321.3	343.0	367.2	394.6	424.0	453.9	482.6	509.4
142.5°	272.1	286.9	305.5	324.3	345.0	367.2	391.6	416.8	443.2	467.8	491.0
145°	279.9	293.9	310.5	327.7	346.2	365.9	386.3	406.8	428.4	447.5	465.4
147.5°	287.4	300.0	315.6	330.6	346.8	363.6	381.6	398.4	415.6	431.0	445.0
150°	292.0	304.1	318.1	332.2	346.8	362.1	378.1	393.3	408.0	420.8	432.2
152.5°	296.6	307.7	320.2	333.1	345.8	359.5	374.0	387.8	400.3	412.1	421.5
155°	302.8	312.3	323.2	334.0	344.2	355.7	367.9	379.3	389.6	399.1	406.8
157.5°	308.7	316.2	325.4	334.0	342.6	351.8	361.6	370.2	378.8	386.9	393.0
160°	311.8	318.8	326.4	334.0	341.0	348.7	357.0	364.7	371.7	378.7	383.8
162.5°	314.8	320.2	327.4	334.0	339.6	345.7	352.9	359.1	365.0	370.6	375.1
165°	318.1	322.0	327.7	332.8	336.6	341.0	346.2	351.2	355.1	359.5	362.7
167.5°	320.4	323.3	327.6	331.3	333.5	336.5	340.1	343.7	346.7	350.3	352.1
170°	322.0	323.8	327.0	330.2	331.5	333.4	336.0	339.2	341.0	343.6	345.5
172.5°	322.9	324.3	326.5	329.2	329.5	330.4	332.4	335.1	336.5	338.0	339.4
175°	324.5	324.5	325.8	327.7	327.0	327.0	328.3	329.6	330.2	331.5	331.5
177.5°	324.5	324.5	325.0	326.0	325.0	325.0	325.5	326.0	326.5	326.5	327.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1296.6	1295.7	1292.5	1292.1	1292.5	1295.7	1296.6	1297.5	1298.8	1303.3	1297.9
5°	1197.7	1194.9	1193.2	1199.4	1193.2	1194.9	1197.7	1201.1	1206.7	1207.3	1212.9
7.5°	1123.2	1121.0	1116.0	1114.4	1116.0	1121.0	1123.2	1125.2	1130.8	1135.7	1144.0
10°	1075.4	1073.1	1068.6	1067.5	1068.6	1073.1	1075.4	1081.0	1086.6	1092.8	1098.5
12.5°	1029.4	1024.9	1024.0	1025.1	1024.0	1024.9	1029.4	1036.8	1051.5	1051.4	1052.5
15°	968.3	966.0	959.9	961.6	959.9	966.0	968.3	975.7	982.4	990.8	999.3
17.5°	908.1	905.4	897.9	904.5	897.9	905.4	908.1	912.1	920.7	932.7	945.4
20°	870.3	865.7	861.8	861.2	861.8	865.7	870.3	874.2	883.8	893.9	903.5
22.5°	834.1	830.1	829.7	826.1	829.7	830.1	834.1	840.3	849.9	855.6	864.7
25°	789.0	785.1	784.0	781.2	784.0	785.1	789.0	793.6	799.8	804.3	814.4
27.5°	754.5	752.5	750.5	751.4	750.5	752.5	754.5	755.0	757.8	763.9	769.6
30°	733.3	732.7	731.6	731.6	731.6	732.7	733.3	731.6	734.4	737.2	741.8
32.5°	715.7	715.6	716.2	716.2	716.2	715.6	715.7	713.1	714.1	715.1	717.4
35°	691.0	692.7	693.8	692.1	693.8	692.7	691.0	688.8	687.1	683.1	684.2
37.5°	668.7	670.3	672.0	673.8	672.0	670.3	668.7	664.1	660.0	656.5	652.5
40°	651.5	655.5	656.6	659.4	656.6	655.5	651.5	646.5	642.0	638.1	633.5
42.5°	635.3	639.7	642.6	643.2	642.6	639.7	635.3	630.2	623.5	618.6	612.3
45°	610.4	614.9	618.9	618.9	618.9	614.9	610.4	601.9	594.6	587.3	581.1
47.5°	584.6	591.1	595.1	596.1	595.1	591.1	584.6	575.9	565.7	556.6	547.7
50°	567.0	574.9	578.9	581.6	578.9	574.9	567.0	557.4	546.7	535.4	524.7
52.5°	549.8	557.7	563.0	564.5	563.0	557.7	549.8	538.0	525.1	512.9	503.5
55°	520.2	531.5	537.7	540.0	537.7	531.5	520.2	507.3	494.9	479.6	466.1
57.5°	492.3	502.6	509.9	511.5	509.9	502.6	492.3	477.0	461.1	444.8	430.4
60°	470.6	481.9	490.9	492.6	490.9	481.9	470.6	455.4	438.5	422.7	404.7
62.5°	448.5	460.2	468.4	472.8	468.4	460.2	448.5	432.4	414.2	396.6	378.5
65°	410.3	422.2	430.1	431.7	430.1	422.2	410.3	394.5	375.4	356.8	341.5
67.5°	368.6	380.4	385.6	388.9	385.6	380.4	368.6	353.8	334.8	315.5	298.2
70°	339.3	348.9	354.5	357.3	354.5	348.9	339.3	323.5	307.8	288.0	269.4
72.5°	305.9	315.9	322.5	323.1	322.5	315.9	305.9	292.4	275.7	257.4	241.0
75°	254.8	263.7	267.2	267.2	267.2	263.7	254.8	241.8	228.3	213.6	197.3
77.5°	201.6	206.3	210.6	211.5	210.6	206.3	201.6	192.3	181.2	166.5	154.2
80°	167.4	170.2	173.6	173.6	173.6	170.2	167.4	158.9	148.2	135.8	126.3
82.5°	132.2	134.6	137.9	137.5	137.9	134.6	132.2	125.6	116.7	108.4	99.6
85°	80.1	85.1	84.5	83.4	84.5	85.1	80.1	81.1	72.7	67.1	59.2
87.5°	38.7	39.3	40.5	41.4	40.5	39.3	38.7	37.3	33.2	30.8	28.9
90°	13.4	14.0	13.4	13.4	13.4	14.0	13.4	12.7	12.7	12.1	11.5
92.5°	54.7	51.3	49.1	49.1	49.1	51.3	54.7	62.2	75.0	94.2	125.2
95°	195.1	175.3	163.9	155.6	163.9	175.3	195.1	226.3	288.1	373.6	472.4
97.5°	486.6	448.2	429.0	415.8	429.0	448.2	486.6	532.3	598.8	661.2	697.9
100°	647.7	608.8	589.7	584.6	589.7	608.8	647.7	703.2	750.3	781.5	768.8
102.5°	783.9	755.7	735.6	731.5	735.6	755.7	783.9	817.9	837.6	828.5	765.2
105°	914.8	909.7	900.8	897.0	900.8	909.7	914.8	913.5	887.4	824.3	714.0
107.5°	935.9	950.4	956.8	958.4	956.8	950.4	935.9	904.3	847.5	758.6	641.2
110°	915.4	942.2	953.7	959.4	953.7	942.2	915.4	870.2	800.1	707.6	597.4



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	871.6	904.0	920.1	929.4	920.1	904.0	871.6	820.2	750.1	662.8	565.2
115°	797.5	835.8	856.1	861.3	856.1	835.8	797.5	747.1	685.9	611.4	533.0
117.5°	735.6	767.7	788.3	792.3	788.3	767.7	735.6	692.6	640.7	582.0	517.1
120°	701.9	729.9	746.5	753.5	746.5	729.9	701.9	665.5	620.3	569.3	510.0
122.5°	677.9	701.9	715.9	722.9	715.9	701.9	677.9	647.2	607.6	561.1	503.9
125°	652.8	671.3	683.4	687.2	683.4	671.3	652.8	627.3	592.2	548.3	493.4
127.5°	635.9	652.3	662.5	666.3	662.5	652.3	635.9	610.3	576.9	533.0	480.7
130°	624.1	640.1	650.3	654.1	650.3	640.1	624.1	597.9	564.2	520.8	470.5
132.5°	608.8	626.8	636.5	640.3	636.5	626.8	608.8	583.2	549.4	507.0	459.7
135°	582.7	600.5	610.7	614.6	610.7	600.5	582.7	557.2	525.3	486.4	445.0
137.5°	552.0	569.6	578.0	582.7	578.0	569.6	552.0	528.2	499.5	466.7	431.6
140°	531.7	545.7	554.6	559.7	554.6	545.7	531.7	509.4	482.6	453.9	424.0
142.5°	510.8	523.7	531.7	535.2	531.7	523.7	510.8	491.0	467.8	443.2	416.8
145°	481.4	492.1	498.6	501.7	498.6	492.1	481.4	465.4	447.5	428.4	406.8
147.5°	456.7	466.0	470.8	472.0	470.8	466.0	456.7	445.0	431.0	415.6	398.4
150°	442.5	450.7	454.5	455.2	454.5	450.7	442.5	432.2	420.8	408.0	393.3
152.5°	430.2	436.9	439.2	439.9	439.2	436.9	430.2	421.5	412.1	400.3	387.8
155°	413.1	418.2	420.1	420.1	420.1	418.2	413.1	406.8	399.1	389.6	379.3
157.5°	397.8	401.6	402.8	402.8	402.8	401.6	397.8	393.0	386.9	378.8	370.2
160°	387.6	391.4	392.1	392.1	392.1	391.4	387.6	383.8	378.7	371.7	364.7
162.5°	377.9	381.7	382.4	381.9	382.4	381.7	377.9	375.1	370.6	365.0	359.1
165°	365.3	367.9	367.2	366.6	367.2	367.9	365.3	362.7	359.5	355.1	351.2
167.5°	353.4	355.1	355.0	354.4	355.0	355.1	353.4	352.1	350.3	346.7	343.7
170°	346.8	347.4	346.8	346.8	346.8	347.4	346.8	345.5	343.6	341.0	339.2
172.5°	340.1	340.8	340.1	339.2	340.1	340.8	340.1	339.4	338.0	336.5	335.1
175°	331.5	332.8	331.5	330.2	331.5	332.8	331.5	331.5	331.5	330.2	329.6
177.5°	326.5	327.0	326.0	325.0	326.0	327.0	326.5	327.0	326.5	326.5	326.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1300.6	1302.4	1309.6	1316.4	1324.5	1330.4	1334.4	1339.0	1348.4	1356.1	1363.3
5°	1218.5	1221.4	1236.0	1246.2	1263.6	1278.9	1290.7	1303.7	1318.9	1339.7	1358.9
7.5°	1146.3	1156.7	1172.8	1189.3	1207.1	1227.0	1244.4	1263.9	1290.1	1318.7	1348.3
10°	1105.3	1117.1	1134.0	1153.2	1170.1	1193.2	1214.6	1237.7	1267.5	1302.5	1337.5
12.5°	1064.2	1083.7	1096.6	1119.3	1137.6	1156.7	1179.4	1209.7	1244.6	1281.3	1323.5
15°	1012.8	1023.5	1048.3	1060.7	1086.6	1116.0	1138.5	1169.0	1202.7	1251.2	1298.6
17.5°	953.6	967.6	987.3	1011.1	1040.8	1063.6	1091.8	1123.1	1165.7	1213.8	1273.1
20°	914.8	926.6	950.8	976.7	1008.3	1032.6	1062.4	1092.8	1136.9	1188.1	1250.1
22.5°	880.0	891.4	917.0	941.1	971.8	1001.4	1032.7	1068.0	1110.2	1164.2	1227.6
25°	826.3	841.5	864.1	888.8	918.1	951.9	985.8	1017.3	1062.4	1119.3	1187.0
27.5°	778.6	790.8	807.1	835.3	868.5	901.2	934.8	974.5	1017.8	1078.0	1148.2
30°	748.0	759.2	775.5	801.4	832.5	867.4	902.4	940.7	985.8	1045.5	1117.1
32.5°	723.6	732.1	746.7	769.9	798.2	834.9	869.4	909.1	956.4	1015.3	1085.1
35°	687.6	695.0	700.6	722.6	748.0	781.7	816.7	859.0	904.6	960.4	1030.3
37.5°	652.3	654.8	663.1	677.4	702.1	733.2	765.6	807.2	854.0	910.7	973.7
40°	630.7	631.9	636.9	650.4	671.8	701.2	732.7	773.9	818.4	872.0	934.5
42.5°	609.5	608.8	613.4	622.9	642.9	669.6	700.7	738.3	782.8	832.3	891.2
45°	576.0	576.0	574.9	582.8	599.2	625.1	651.0	687.1	724.2	772.7	822.3
47.5°	541.1	537.9	538.9	543.0	556.8	578.0	604.2	633.7	666.5	707.6	751.1
50°	518.5	514.0	512.3	516.8	529.2	547.8	572.7	598.6	629.6	665.6	702.9
52.5°	493.7	489.3	486.2	489.3	500.8	518.0	540.6	563.4	591.3	620.5	652.8
55°	455.4	450.4	448.7	449.8	458.2	471.7	490.9	511.8	532.6	556.8	579.4
57.5°	417.7	409.3	407.7	407.2	413.0	425.4	441.4	459.5	474.7	489.3	513.3
60°	392.8	382.7	379.3	378.8	383.3	393.4	408.1	426.1	436.8	446.9	467.8
62.5°	366.2	356.5	349.1	349.9	353.9	363.6	376.5	389.6	396.6	407.7	421.8
65°	325.2	312.8	307.2	305.5	307.8	315.6	325.8	334.2	342.1	346.7	360.1
67.5°	284.2	273.8	265.5	263.4	262.4	267.8	276.1	281.3	286.9	290.8	298.8
70°	255.4	246.3	236.2	232.8	232.2	236.7	244.6	245.2	253.1	254.8	263.2
72.5°	226.9	215.6	208.6	205.3	202.9	206.9	212.1	213.6	217.9	220.9	225.3
75°	182.6	174.1	167.4	162.3	160.6	162.9	162.9	165.7	168.5	170.2	175.3
77.5°	143.7	134.0	126.0	123.1	121.1	119.6	120.8	122.5	121.2	124.1	125.2
80°	116.7	106.6	100.4	99.2	95.8	93.0	92.5	94.1	91.9	93.0	96.4
82.5°	90.1	83.6	76.9	75.7	71.5	70.0	69.5	68.4	68.4	68.2	68.9
85°	53.6	49.6	45.1	42.2	40.6	37.7	37.7	36.6	35.5	34.4	35.0
87.5°	23.8	23.1	20.5	18.9	18.0	15.4	15.4	13.9	13.4	12.6	11.8
90°	10.8	11.5	10.2	8.9	8.9	5.1	5.1	4.5	3.8	1.9	0.7
92.5°	168.4	202.2	177.0	128.7	79.3	46.9	33.7	24.4	16.6	10.6	7.3
95°	534.3	519.6	392.1	239.7	135.2	79.7	52.9	37.6	29.4	22.9	21.0
97.5°	671.2	547.2	367.0	215.5	129.1	86.4	64.0	50.9	43.2	37.7	37.7
100°	675.7	512.6	332.8	202.8	130.7	93.1	72.6	60.6	52.9	48.4	48.4
102.5°	637.5	469.2	309.8	199.2	135.7	101.7	82.3	70.8	63.6	59.7	58.6
105°	568.0	418.2	290.1	200.8	147.9	117.3	98.8	87.3	79.7	76.5	74.6
107.5°	511.9	389.6	286.5	210.3	162.1	134.0	115.8	104.8	96.6	93.4	92.2
110°	483.9	379.9	287.5	217.4	172.8	144.7	127.5	116.0	108.4	105.2	104.0



TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	468.1	375.4	290.6	225.0	183.0	156.0	138.7	127.3	120.1	116.4	115.1
115°	453.2	372.9	296.4	237.2	198.9	173.4	156.2	144.1	137.7	133.2	131.3
117.5°	446.6	372.3	302.7	249.5	214.3	190.1	172.3	160.9	153.9	149.9	148.1
120°	443.0	372.3	307.3	258.2	225.0	200.8	183.0	172.1	165.1	160.6	159.4
122.5°	439.0	371.8	311.9	266.4	235.2	211.0	193.6	181.8	175.3	170.9	169.6
125°	432.2	371.0	318.8	278.6	249.2	226.3	208.5	196.3	189.3	185.5	183.0
127.5°	423.1	369.7	324.2	289.2	262.3	240.1	222.1	209.5	201.5	196.9	194.9
130°	417.6	369.1	328.3	295.8	270.9	249.2	230.8	218.7	209.1	204.0	201.5
132.5°	412.5	368.6	331.9	302.4	278.1	256.4	239.0	225.8	216.8	210.1	208.1
135°	404.8	367.9	337.2	311.1	288.1	267.1	250.5	237.2	226.3	220.0	217.4
137.5°	398.2	367.7	340.4	317.2	295.8	276.1	260.3	246.5	236.1	229.1	226.7
140°	394.6	367.2	343.0	321.3	300.9	281.8	266.4	253.1	242.2	235.2	233.3
142.5°	391.6	367.2	345.0	324.3	305.5	286.9	272.1	259.2	248.9	242.4	240.4
145°	386.3	365.9	346.2	327.7	310.5	293.9	279.9	267.7	258.9	252.4	250.5
147.5°	381.6	363.6	346.8	330.6	315.6	300.0	287.4	277.3	268.2	262.5	261.9
150°	378.1	362.1	346.8	332.2	318.1	304.1	292.0	282.4	274.8	269.7	269.0
152.5°	374.0	359.5	345.8	333.1	320.2	307.7	296.6	288.0	280.9	275.8	275.7
155°	367.9	355.7	344.2	334.0	323.2	312.3	302.8	295.8	289.4	285.6	284.9
157.5°	361.6	351.8	342.6	334.0	325.4	316.2	308.7	302.6	297.6	294.0	294.0
160°	357.0	348.7	341.0	334.0	326.4	318.8	311.8	306.6	302.1	299.6	299.6
162.5°	352.9	345.7	339.6	334.0	327.4	320.2	314.8	310.2	306.2	304.2	304.8
165°	346.2	341.0	336.6	332.8	327.7	322.0	318.1	315.0	311.8	310.5	310.5
167.5°	340.1	336.5	333.5	331.3	327.6	323.3	320.4	318.6	316.2	315.6	316.2
170°	336.0	333.4	331.5	330.2	327.0	323.8	322.0	320.7	318.8	318.1	318.8
172.5°	332.4	330.4	329.5	329.2	326.5	324.3	322.9	322.2	320.8	320.7	321.3
175°	328.3	327.0	327.0	327.7	325.8	324.5	324.5	323.8	323.2	323.2	323.8
177.5°	325.5	325.0	325.0	326.0	325.0	324.5	324.5	324.5	324.0	324.5	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5





TEST NUMBER: P332645-930

CATALOG NUMBER: SA4XXDIP-C1020D810U930-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1369.6	1374.1	1380.0	1389.9	1393.5	1398.0	1404.4	1403.9	1405.7	1412.4	1426.9
5°	1374.7	1392.1	1409.1	1429.4	1450.7	1464.8	1484.0	1495.8	1507.7	1522.9	1548.8
7.5°	1376.7	1404.4	1435.4	1471.0	1502.8	1539.3	1567.7	1594.6	1618.9	1651.0	1681.9
10°	1373.5	1410.7	1450.7	1495.8	1543.8	1584.4	1621.0	1662.7	1698.2	1737.1	1772.1
12.5°	1367.7	1412.6	1466.1	1516.6	1572.6	1632.6	1678.2	1720.4	1767.7	1812.4	1866.3
15°	1354.4	1415.8	1478.4	1544.9	1619.8	1689.1	1755.1	1809.8	1860.5	1927.6	1998.1
17.5°	1337.5	1403.8	1482.6	1563.2	1641.5	1720.8	1802.4	1884.6	1948.6	2031.9	2087.0
20°	1321.7	1398.3	1479.5	1575.3	1653.7	1752.3	1833.4	1912.9	2000.8	2083.7	2149.6
22.5°	1299.6	1383.5	1469.6	1565.0	1668.1	1766.8	1860.5	1946.8	2034.7	2124.8	2204.7
25°	1271.5	1347.6	1449.6	1557.9	1660.4	1767.5	1875.2	1983.4	2078.0	2173.3	2247.7
27.5°	1223.8	1319.8	1414.8	1526.5	1640.5	1761.6	1876.7	1990.1	2089.2	2167.6	2213.7
30°	1199.4	1282.8	1385.9	1498.1	1621.5	1751.8	1871.8	1982.8	2075.3	2137.8	2156.4
32.5°	1163.4	1249.4	1350.3	1466.6	1597.2	1731.0	1856.0	1960.7	2037.8	2070.6	2048.2
35°	1109.8	1187.6	1289.6	1408.5	1544.3	1686.9	1810.4	1898.8	1938.3	1907.3	1830.1
37.5°	1045.5	1122.6	1225.1	1341.9	1482.5	1627.4	1739.0	1802.7	1789.6	1712.5	1597.4
40°	1000.5	1072.6	1170.1	1296.3	1433.3	1578.7	1676.7	1711.2	1675.1	1564.6	1442.3
42.5°	950.4	1020.8	1118.7	1240.4	1385.5	1519.6	1605.1	1607.9	1547.4	1415.4	1292.6
45°	874.2	941.3	1033.7	1160.5	1294.6	1420.9	1477.2	1449.6	1338.1	1210.6	1087.2
47.5°	799.0	857.1	948.3	1068.6	1196.0	1302.3	1330.2	1280.5	1161.6	1038.0	923.6
50°	744.0	802.6	888.3	1003.2	1126.1	1218.0	1231.5	1165.6	1048.9	924.3	834.7
52.5°	691.2	749.4	831.9	938.3	1050.8	1133.7	1134.1	1057.8	941.6	830.5	747.2
55°	613.8	666.2	740.6	835.8	936.2	1001.0	985.2	906.3	805.4	709.1	636.3
57.5°	539.2	584.8	653.4	732.8	821.2	874.7	848.5	772.5	682.4	600.7	545.6
60°	490.9	534.3	593.0	667.9	742.3	784.0	759.2	690.4	607.6	541.6	493.7
62.5°	444.0	480.6	537.0	602.1	671.1	702.0	679.9	612.0	540.4	480.8	441.9
65°	377.6	407.5	452.6	508.4	558.6	585.1	566.5	503.3	448.7	405.8	374.8
67.5°	315.6	339.0	373.1	417.8	460.5	474.8	457.9	413.9	367.6	333.3	311.4
70°	272.8	294.8	323.5	357.9	395.1	410.3	393.4	358.5	320.7	289.1	267.7
72.5°	235.4	252.4	276.6	306.1	335.2	350.3	338.8	305.2	273.4	249.9	231.6
75°	179.2	193.9	210.8	231.6	254.2	264.3	254.2	231.1	209.1	191.6	178.6
77.5°	130.3	138.2	151.2	166.8	180.9	188.7	179.9	164.2	150.8	138.8	132.5
80°	99.2	104.8	113.8	126.3	135.8	143.2	137.5	124.6	113.8	106.0	103.1
82.5°	72.2	76.0	81.9	91.1	97.5	101.3	98.7	89.4	85.0	78.0	75.2
85°	35.5	37.7	41.7	44.5	50.1	50.7	51.3	47.4	43.4	41.7	39.5
87.5°	12.6	13.4	14.8	16.4	18.2	19.4	18.9	19.2	17.6	17.0	15.4
90°	1.9	3.8	4.5	5.1	5.1	8.9	8.9	10.2	11.5	10.8	11.5
92.5°	10.6	16.6	24.4	33.7	46.9	79.3	128.7	177.0	202.2	168.4	125.2
95°	22.9	29.4	37.6	52.9	79.7	135.2	239.7	392.1	519.6	534.3	472.4
97.5°	37.7	43.2	50.9	64.0	86.4	129.1	215.5	367.0	547.2	671.2	697.9
100°	48.4	52.9	60.6	72.6	93.1	130.7	202.8	332.8	512.6	675.7	768.8
102.5°	59.7	63.6	70.8	82.3	101.7	135.7	199.2	309.8	469.2	637.5	765.2
105°	76.5	79.7	87.3	98.8	117.3	147.9	200.8	290.1	418.2	568.0	714.0
107.5°	93.4	96.6	104.8	115.8	134.0	162.1	210.3	286.5	389.6	511.9	641.2
110°	105.2	108.4	116.0	127.5	144.7	172.8	217.4	287.5	379.9	483.9	597.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	116.4	120.1	127.3	138.7	156.0	183.0	225.0	290.6	375.4	468.1	565.2
115°	133.2	137.7	144.1	156.2	173.4	198.9	237.2	296.4	372.9	453.2	533.0
117.5°	149.9	153.9	160.9	172.3	190.1	214.3	249.5	302.7	372.3	446.6	517.1
120°	160.6	165.1	172.1	183.0	200.8	225.0	258.2	307.3	372.3	443.0	510.0
122.5°	170.9	175.3	181.8	193.6	211.0	235.2	266.4	311.9	371.8	439.0	503.9
125°	185.5	189.3	196.3	208.5	226.3	249.2	278.6	318.8	371.0	432.2	493.4
127.5°	196.9	201.5	209.5	222.1	240.1	262.3	289.2	324.2	369.7	423.1	480.7
130°	204.0	209.1	218.7	230.8	249.2	270.9	295.8	328.3	369.1	417.6	470.5
132.5°	210.1	216.8	225.8	239.0	256.4	278.1	302.4	331.9	368.6	412.5	459.7
135°	220.0	226.3	237.2	250.5	267.1	288.1	311.1	337.2	367.9	404.8	445.0
137.5°	229.1	236.1	246.5	260.3	276.1	295.8	317.2	340.4	367.7	398.2	431.6
140°	235.2	242.2	253.1	266.4	281.8	300.9	321.3	343.0	367.2	394.6	424.0
142.5°	242.4	248.9	259.2	272.1	286.9	305.5	324.3	345.0	367.2	391.6	416.8
145°	252.4	258.9	267.7	279.9	293.9	310.5	327.7	346.2	365.9	386.3	406.8
147.5°	262.5	268.2	277.3	287.4	300.0	315.6	330.6	346.8	363.6	381.6	398.4
150°	269.7	274.8	282.4	292.0	304.1	318.1	332.2	346.8	362.1	378.1	393.3
152.5°	275.8	280.9	288.0	296.6	307.7	320.2	333.1	345.8	359.5	374.0	387.8
155°	285.6	289.4	295.8	302.8	312.3	323.2	334.0	344.2	355.7	367.9	379.3
157.5°	294.0	297.6	302.6	308.7	316.2	325.4	334.0	342.6	351.8	361.6	370.2
160°	299.6	302.1	306.6	311.8	318.8	326.4	334.0	341.0	348.7	357.0	364.7
162.5°	304.2	306.2	310.2	314.8	320.2	327.4	334.0	339.6	345.7	352.9	359.1
165°	310.5	311.8	315.0	318.1	322.0	327.7	332.8	336.6	341.0	346.2	351.2
167.5°	315.6	316.2	318.6	320.4	323.3	327.6	331.3	333.5	336.5	340.1	343.7
170°	318.1	318.8	320.7	322.0	323.8	327.0	330.2	331.5	333.4	336.0	339.2
172.5°	320.7	320.8	322.2	322.9	324.3	326.5	329.2	329.5	330.4	332.4	335.1
175°	323.2	323.2	323.8	324.5	324.5	325.8	327.7	327.0	327.0	328.3	329.6
177.5°	324.5	324.0	324.5	324.5	324.5	325.0	326.0	325.0	325.0	325.5	326.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1434.1	1435.0	1439.0	1442.2	1443.1	1447.6	1448.1
5°	1560.1	1569.7	1588.3	1590.0	1592.8	1607.4	1596.2
7.5°	1707.8	1732.1	1748.3	1762.7	1767.9	1774.3	1772.9
10°	1802.5	1838.5	1856.6	1885.3	1886.4	1893.8	1889.3
12.5°	1897.6	1939.5	1972.5	1977.8	2001.9	2005.6	2011.9
15°	2032.4	2077.0	2122.6	2138.9	2172.2	2180.1	2192.5
17.5°	2159.2	2204.7	2236.7	2278.9	2292.6	2310.9	2298.4
20°	2228.5	2278.2	2318.7	2352.0	2366.1	2376.2	2375.1
22.5°	2270.5	2320.5	2353.4	2378.6	2391.8	2396.1	2395.8
25°	2296.8	2325.5	2335.7	2345.2	2330.6	2325.5	2327.8
27.5°	2223.7	2216.3	2189.8	2155.1	2119.0	2090.3	2074.8
30°	2123.2	2079.2	2039.1	1969.3	1933.2	1911.8	1892.6
32.5°	1980.7	1911.0	1834.0	1770.0	1729.0	1697.2	1692.5
35°	1736.5	1631.7	1537.6	1459.2	1418.6	1384.2	1376.4
37.5°	1476.3	1367.4	1282.7	1213.7	1170.1	1145.8	1123.2
40°	1303.7	1210.1	1126.7	1068.0	1034.8	1017.3	1003.2
42.5°	1170.6	1085.2	1002.2	957.6	927.5	916.8	908.6
45°	986.9	907.4	849.9	816.1	798.7	780.6	772.2
47.5°	839.8	775.1	737.2	708.5	689.7	679.1	673.6
50°	756.4	703.4	669.6	647.6	630.7	622.2	617.8
52.5°	682.4	639.0	610.5	593.0	581.6	575.4	573.6
55°	587.8	554.6	536.5	521.4	512.9	507.3	505.0
57.5°	510.9	485.4	470.8	458.2	454.9	450.2	448.7
60°	460.5	440.8	428.4	419.9	417.1	411.5	412.5
62.5°	415.8	399.7	389.1	384.3	380.6	375.9	377.4
65°	351.7	339.9	334.2	329.7	325.2	322.4	324.7
67.5°	295.1	287.0	279.3	276.7	274.5	274.0	271.7
70°	258.1	251.4	244.6	243.0	243.0	240.7	240.1
72.5°	222.5	217.5	213.0	211.8	210.0	210.9	208.6
75°	171.9	168.0	166.2	164.6	164.0	164.0	162.3
77.5°	127.0	124.1	121.4	121.4	119.4	118.6	118.4
80°	96.4	95.2	93.0	93.0	91.9	92.5	91.3
82.5°	72.5	70.9	70.4	69.5	68.0	68.1	66.9
85°	38.9	37.2	36.6	35.0	33.8	35.0	33.8
87.5°	16.0	15.7	15.2	14.4	14.1	13.9	12.6
90°	12.1	12.7	12.7	13.4	14.0	13.4	13.4
92.5°	94.2	75.0	62.2	54.7	51.3	49.1	49.1
95°	373.6	288.1	226.3	195.1	175.3	163.9	155.6
97.5°	661.2	598.8	532.3	486.6	448.2	429.0	415.8
100°	781.5	750.3	703.2	647.7	608.8	589.7	584.6
102.5°	828.5	837.6	817.9	783.9	755.7	735.6	731.5
105°	824.3	887.4	913.5	914.8	909.7	900.8	897.0
107.5°	758.6	847.5	904.3	935.9	950.4	956.8	958.4
110°	707.6	800.1	870.2	915.4	942.2	953.7	959.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	662.8	750.1	820.2	871.6	904.0	920.1	929.4
115°	611.4	685.9	747.1	797.5	835.8	856.1	861.3
117.5°	582.0	640.7	692.6	735.6	767.7	788.3	792.3
120°	569.3	620.3	665.5	701.9	729.9	746.5	753.5
122.5°	561.1	607.6	647.2	677.9	701.9	715.9	722.9
125°	548.3	592.2	627.3	652.8	671.3	683.4	687.2
127.5°	533.0	576.9	610.3	635.9	652.3	662.5	666.3
130°	520.8	564.2	597.9	624.1	640.1	650.3	654.1
132.5°	507.0	549.4	583.2	608.8	626.8	636.5	640.3
135°	486.4	525.3	557.2	582.7	600.5	610.7	614.6
137.5°	466.7	499.5	528.2	552.0	569.6	578.0	582.7
140°	453.9	482.6	509.4	531.7	545.7	554.6	559.7
142.5°	443.2	467.8	491.0	510.8	523.7	531.7	535.2
145°	428.4	447.5	465.4	481.4	492.1	498.6	501.7
147.5°	415.6	431.0	445.0	456.7	466.0	470.8	472.0
150°	408.0	420.8	432.2	442.5	450.7	454.5	455.2
152.5°	400.3	412.1	421.5	430.2	436.9	439.2	439.9
155°	389.6	399.1	406.8	413.1	418.2	420.1	420.1
157.5°	378.8	386.9	393.0	397.8	401.6	402.8	402.8
160°	371.7	378.7	383.8	387.6	391.4	392.1	392.1
162.5°	365.0	370.6	375.1	377.9	381.7	382.4	381.9
165°	355.1	359.5	362.7	365.3	367.9	367.2	366.6
167.5°	346.7	350.3	352.1	353.4	355.1	355.0	354.4
170°	341.0	343.6	345.5	346.8	347.4	346.8	346.8
172.5°	336.5	338.0	339.4	340.1	340.8	340.1	339.2
175°	330.2	331.5	331.5	331.5	332.8	331.5	330.2
177.5°	326.5	326.5	327.0	326.5	327.0	326.0	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5

(END OF REPORT)