

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: P332969-930

Luminaire Tested: **SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332969-930
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: SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5897.8 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

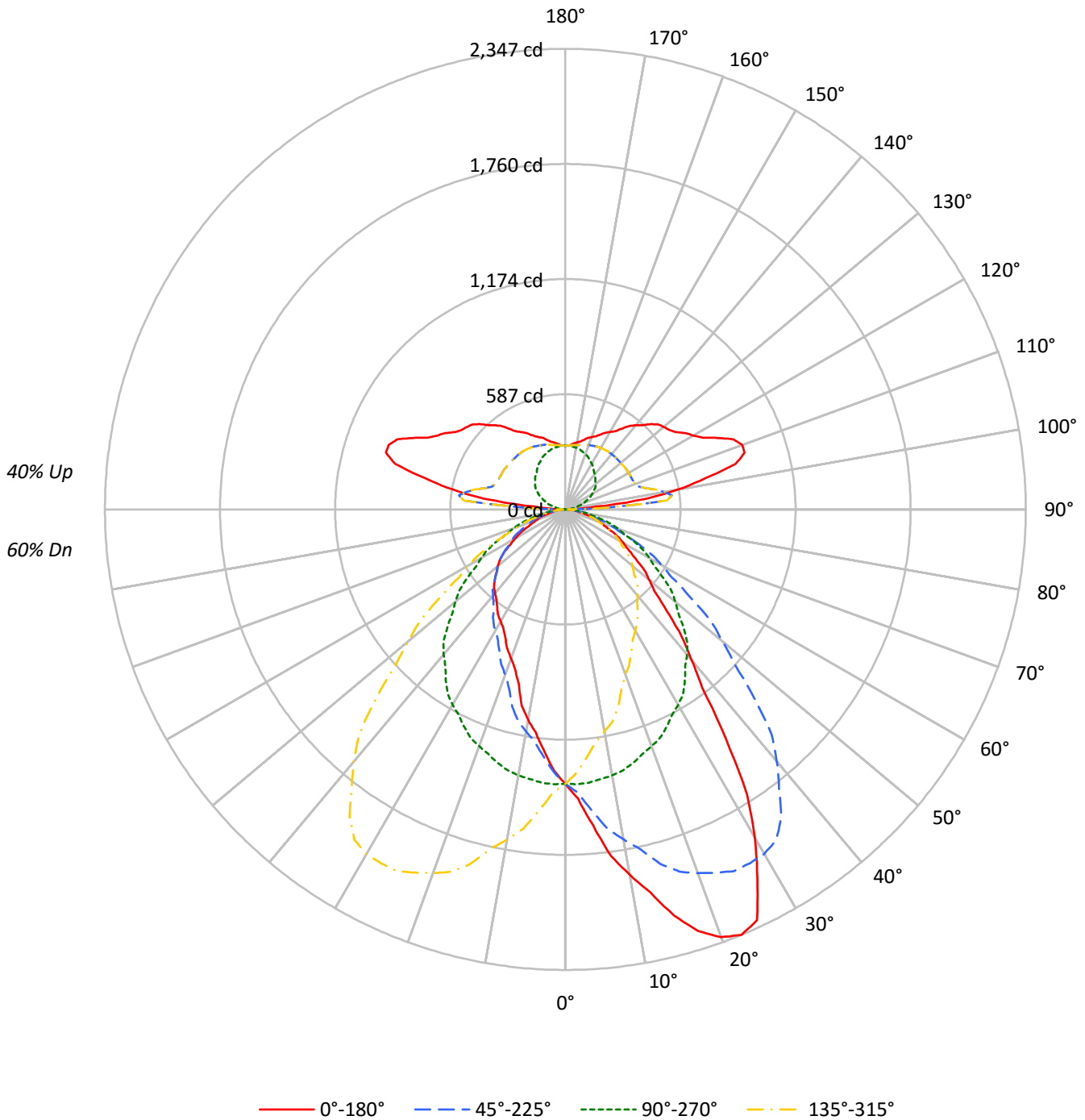
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	101	96	93	89	94	90	87	84	79	76	74	68	67	65	59	57	56	52
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	52	50	48	44
3	84	75	68	62	79	71	64	59	62	57	53	54	50	47	47	44	42	38
4	77	67	59	53	72	63	56	51	55	50	46	49	44	41	42	39	36	33
5	71	60	52	46	66	56	49	44	50	44	40	44	39	36	38	35	32	29
6	66	54	46	40	61	51	44	38	45	39	35	40	35	32	35	31	28	26
7	61	49	41	35	57	46	39	34	41	35	31	36	32	28	32	28	25	23
8	57	44	37	31	53	42	35	30	38	32	28	33	29	25	29	26	23	21
9	53	41	33	28	49	39	32	27	35	29	25	31	26	23	27	23	21	19
10	49	37	30	25	46	36	29	24	32	26	23	28	24	21	25	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11293	11293	11293	11293
5°	13100	11327	10011	11327
10°	15497	11278	8936	11278
15°	17901	11173	7678	11173
20°	19930	11030	6943	11030
25°	20574	10889	6446	10889
30°	18011	10718	6147	10718
35°	14020	10464	5966	10464
40°	10513	10175	5868	10175
45°	8301	9710	5817	9710
50°	7008	9173	5649	9173
55°	6108	8583	5346	8583
60°	5496	7971	4732	7971
65°	4844	7310	4069	7310
70°	4362	6626	3673	6626
75°	3656	5873	3132	5873
80°	3092	5002	2934	5002
85°	2612	3909	2612	3909



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	2.3
10°-20°	408.9	6.9
20°-30°	639.5	10.8
30°-40°	710.9	12.1
40°-50°	630.7	10.7
50°-60°	491.5	8.3
60°-70°	321.8	5.5
70°-80°	158.2	2.7
80°-90°	40.8	0.7
90°-100°	234.4	4.0
100°-110°	487.8	8.3
110°-120°	436.9	7.4
120°-130°	367.5	6.2
130°-140°	306.4	5.2
140°-150°	234.1	4.0
150°-160°	164.6	2.8
160°-170°	96.8	1.6
170°-180°	31.5	0.5
0°-30°	1183.9	20.1
0°-40°	1894.8	32.1
0°-60°	3017.0	51.2
0°-90°	3537.9	60.0
90°-120°	1159.1	19.7
90°-150°	2067.1	35.0
90°-180°	2360.0	40.0
0°-180°	5897.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1399	1399	1399	1399	1399	
5°	1616	1398	1235	1398	1616	164
15°	2142	1337	919	1337	2142	609
25°	2310	1222	724	1222	2310	1025
35°	1423	1062	605	1062	1423	892
45°	727	850	510	850	727	576
55°	434	610	380	610	434	395
65°	254	383	213	383	254	255
75°	117	188	100	188	117	129
85°	28	42	28	42	28	32
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°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1475.5	1479.6	1475.5	1475.1	1470.6	1469.3	1467.5	1461.6	1450.7	1444.5	1445.8
5°	1616.5	1630.5	1622.7	1621.5	1609.2	1596.8	1588.9	1570.8	1551.7	1538.7	1528.0
7.5°	1779.5	1787.5	1782.7	1774.7	1754.7	1743.3	1725.0	1701.2	1666.9	1640.5	1616.6
10°	1890.4	1897.1	1894.9	1880.2	1865.6	1835.7	1818.8	1785.6	1742.1	1707.8	1675.6
12.5°	1999.5	2006.7	1986.9	1987.5	1959.8	1936.3	1909.4	1867.6	1817.5	1773.1	1732.9
15°	2141.8	2132.7	2132.7	2121.5	2090.4	2057.8	2030.2	1986.2	1923.0	1870.1	1814.3
17.5°	2253.2	2256.3	2251.7	2225.0	2200.7	2166.9	2116.3	2065.0	2006.4	1935.3	1878.2
20°	2319.9	2319.9	2314.8	2296.8	2265.2	2229.1	2174.5	2118.6	2044.3	1972.7	1908.5
22.5°	2346.9	2348.7	2342.8	2327.8	2299.5	2264.2	2217.7	2161.0	2084.4	2003.8	1924.2
25°	2309.7	2320.4	2321.6	2317.6	2309.2	2287.7	2247.7	2189.6	2120.9	2033.5	1947.8
27.5°	2120.6	2134.1	2145.9	2165.4	2191.4	2204.9	2206.7	2177.2	2117.2	2033.1	1946.9
30°	1932.1	1943.3	1980.0	2027.9	2065.1	2098.9	2128.3	2136.1	2102.3	2026.8	1936.0
32.5°	1722.9	1738.2	1774.8	1826.4	1888.3	1945.6	2011.4	2045.0	2044.1	1998.8	1914.8
35°	1422.6	1433.9	1467.7	1521.8	1596.2	1681.3	1785.6	1866.7	1921.9	1918.0	1866.7
37.5°	1147.3	1160.0	1194.2	1239.1	1311.2	1416.6	1517.5	1629.3	1731.5	1788.8	1771.6
40°	997.6	998.2	1031.4	1077.7	1145.3	1237.1	1347.0	1471.0	1584.9	1677.9	1695.9
42.5°	879.5	879.5	901.6	951.4	1000.1	1086.5	1191.5	1314.6	1447.8	1555.3	1603.0
45°	727.1	732.1	750.2	780.1	818.4	891.6	975.6	1090.1	1239.4	1366.8	1446.3
47.5°	615.7	623.1	634.6	659.0	689.5	738.3	807.8	910.6	1032.1	1172.2	1285.3
50°	558.0	559.1	573.7	587.3	613.8	652.6	713.5	799.2	910.8	1045.5	1171.2
52.5°	508.4	508.2	517.0	534.1	555.6	586.0	635.1	713.1	812.0	932.8	1062.5
55°	434.0	436.8	443.6	457.1	473.4	494.9	533.8	592.4	670.2	773.3	891.1
57.5°	377.4	378.9	384.2	389.9	404.9	420.4	449.6	490.3	556.0	640.4	750.2
60°	340.4	341.0	342.7	351.1	363.0	377.6	397.4	431.7	487.0	564.2	651.0
62.5°	304.4	305.3	307.9	314.1	323.3	333.5	354.1	381.7	427.5	493.4	571.6
65°	253.6	254.2	258.1	260.4	267.7	276.7	292.0	310.5	342.1	397.4	456.6
67.5°	211.9	211.9	212.1	215.2	220.3	226.2	235.4	250.2	274.0	307.9	360.1
70°	184.8	184.8	186.0	187.7	190.5	195.6	200.6	211.9	229.4	257.0	297.0
72.5°	159.6	160.0	161.2	161.5	163.0	167.1	170.9	178.1	191.1	211.9	244.3
75°	117.2	119.0	121.7	124.0	126.8	126.3	130.2	134.7	138.7	151.1	169.7
77.5°	87.2	86.3	86.7	88.6	88.9	89.5	92.3	95.8	98.7	104.6	111.3
80°	66.5	66.5	68.2	68.7	68.2	68.7	71.6	73.3	74.4	76.6	82.8
82.5°	50.3	51.2	50.6	51.2	51.5	52.1	54.5	54.8	55.9	56.8	59.4
85°	28.2	28.8	29.3	28.2	28.2	28.2	29.3	29.8	31.0	30.4	31.6
87.5°	12.6	12.1	12.7	12.6	12.9	12.5	12.8	13.5	12.6	13.1	12.9
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°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1441.3	1435.0	1431.8	1424.6	1416.0	1411.5	1407.5	1401.6	1393.9	1385.8	1380.0
5°	1514.4	1500.9	1484.0	1463.7	1445.7	1428.2	1413.0	1397.7	1380.3	1362.3	1344.3
7.5°	1589.5	1562.9	1534.1	1500.9	1468.6	1439.2	1412.1	1386.2	1356.8	1330.6	1306.7
10°	1641.8	1605.7	1565.7	1523.5	1481.2	1444.5	1408.5	1375.8	1339.7	1307.6	1280.5
12.5°	1684.2	1641.8	1593.7	1541.1	1490.2	1445.9	1404.4	1361.8	1320.8	1286.0	1249.9
15°	1754.5	1696.5	1631.7	1568.6	1502.6	1442.3	1386.5	1336.9	1290.1	1241.1	1206.7
17.5°	1802.9	1734.1	1655.2	1579.4	1501.5	1430.4	1366.0	1306.9	1253.0	1202.9	1162.0
20°	1831.7	1755.7	1668.3	1582.1	1494.7	1418.6	1349.3	1283.9	1228.2	1174.0	1131.7
22.5°	1848.0	1763.8	1668.3	1578.0	1487.5	1405.1	1329.0	1260.9	1200.2	1146.1	1099.3
25°	1853.2	1763.0	1665.5	1561.8	1462.6	1375.2	1296.3	1222.5	1154.9	1100.7	1051.2
27.5°	1846.0	1739.8	1639.9	1533.5	1431.2	1339.0	1256.2	1178.7	1110.9	1052.9	1002.0
30°	1835.2	1721.3	1614.2	1503.7	1400.0	1311.6	1224.2	1149.8	1079.3	1019.0	967.8
32.5°	1811.7	1698.8	1583.6	1470.4	1365.3	1274.1	1191.2	1116.4	1047.3	985.7	931.2
35°	1765.3	1650.8	1525.8	1409.7	1306.4	1211.8	1134.0	1061.8	995.9	930.0	872.5
37.5°	1704.1	1587.1	1462.7	1335.5	1232.3	1142.9	1071.5	1003.8	939.5	879.2	815.5
40°	1646.3	1539.8	1411.3	1285.1	1179.1	1092.8	1027.0	965.5	900.7	840.9	777.2
42.5°	1576.5	1485.7	1355.8	1229.1	1124.5	1041.5	980.0	919.9	861.0	803.1	736.6
45°	1459.8	1391.0	1269.3	1147.5	1042.1	959.9	903.5	850.5	798.7	743.4	680.9
47.5°	1326.1	1279.5	1174.4	1049.8	952.3	878.2	823.8	780.5	736.6	681.4	626.6
50°	1233.2	1203.3	1101.9	988.1	895.0	826.8	771.0	730.4	693.8	640.8	591.8
52.5°	1134.0	1118.1	1032.4	923.6	833.7	766.9	719.2	682.7	645.6	601.6	555.7
55°	982.9	991.4	918.7	824.6	740.0	683.7	640.3	609.8	578.3	541.1	505.6
57.5°	828.5	859.4	810.6	728.0	648.7	596.6	563.9	538.3	511.8	481.0	450.7
60°	736.1	762.0	734.4	661.7	592.4	543.9	513.5	493.7	467.2	439.0	416.0
62.5°	645.9	673.6	657.3	598.6	534.2	492.5	465.7	447.3	427.5	403.0	379.0
65°	532.6	550.7	542.7	502.2	456.6	421.0	396.2	382.7	364.7	346.7	325.2
67.5°	408.0	442.8	438.1	416.6	377.2	349.4	333.2	321.2	304.8	291.4	276.9
70°	335.3	367.5	366.9	349.4	328.0	302.1	290.8	280.7	266.0	253.1	241.2
72.5°	274.5	303.9	308.3	294.9	280.2	260.7	249.8	242.8	228.6	219.7	210.1
75°	192.2	213.6	219.2	219.2	212.5	202.4	192.7	188.3	178.1	170.2	164.6
77.5°	126.0	139.6	148.4	150.3	151.4	148.0	140.1	137.0	129.1	126.4	121.0
80°	89.0	98.1	108.2	111.6	114.4	113.3	109.9	107.6	100.4	97.5	95.2
82.5°	61.6	66.5	74.8	82.3	81.5	84.5	81.5	79.7	74.2	73.1	70.9
85°	32.1	32.7	33.8	38.9	41.7	42.8	43.4	42.2	40.6	40.6	36.6
87.5°	12.6	12.1	12.3	12.3	12.6	14.3	15.2	15.5	14.3	13.4	12.1
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: P332969-930

CATALOG NUMBER: SA4XXRDIP-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: P332969-930

CATALOG NUMBER: SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1373.6	1369.1	1363.3	1356.5	1348.4	1341.2	1338.1	1340.8	1342.1	1338.5	1338.1
5°	1331.9	1317.8	1306.4	1289.6	1276.0	1264.8	1256.9	1253.5	1254.6	1245.6	1243.3
7.5°	1284.8	1268.1	1249.7	1229.6	1210.9	1194.3	1185.6	1180.9	1171.3	1167.3	1160.4
10°	1254.6	1232.1	1214.1	1190.3	1169.0	1149.2	1139.6	1131.7	1122.2	1117.7	1108.1
12.5°	1223.5	1197.3	1177.5	1152.9	1131.1	1107.3	1098.1	1083.5	1068.5	1059.1	1046.8
15°	1179.7	1148.1	1123.9	1094.5	1068.6	1041.5	1017.3	990.3	980.2	958.7	946.3
17.5°	1128.4	1096.3	1066.3	1027.0	987.0	953.4	927.6	901.6	886.1	872.5	866.2
20°	1094.5	1065.3	1023.5	977.9	933.4	896.2	875.3	858.4	841.5	831.9	825.2
22.5°	1062.5	1025.1	976.6	927.4	882.9	853.8	836.1	818.7	804.9	795.8	786.8
25°	1008.9	959.9	908.6	852.2	821.7	796.4	777.2	763.1	754.7	742.8	738.3
27.5°	953.7	894.4	837.8	799.9	768.2	745.0	728.3	717.7	707.0	699.4	693.6
30°	911.3	851.1	800.4	764.3	732.1	713.0	699.4	687.1	678.6	672.4	667.9
32.5°	869.4	809.1	766.5	727.7	702.4	683.7	669.3	660.0	653.4	645.3	642.6
35°	808.8	755.2	718.0	683.1	657.2	640.3	629.0	619.4	613.8	611.6	609.8
37.5°	750.5	706.7	666.7	638.1	614.9	601.6	588.3	583.6	579.8	575.7	577.5
40°	713.5	672.4	636.9	606.4	587.8	573.2	565.3	559.7	556.3	556.3	556.3
42.5°	681.5	641.3	606.7	579.4	560.8	548.4	539.6	534.8	533.8	533.3	536.0
45°	631.9	594.6	559.7	537.1	521.4	508.9	503.9	499.9	499.9	502.2	502.7
47.5°	582.5	547.7	519.7	494.4	480.0	472.2	467.8	465.8	466.0	468.2	470.8
50°	552.4	518.0	490.3	467.8	454.3	446.9	443.0	441.9	443.0	443.0	446.9
52.5°	519.4	488.7	461.5	442.5	427.2	420.4	418.2	416.6	417.3	419.1	420.8
55°	471.2	443.6	417.7	399.6	388.3	383.8	378.8	379.3	378.2	379.3	379.3
57.5°	422.8	398.0	373.9	359.6	349.7	343.2	337.6	339.2	337.5	337.3	336.4
60°	391.8	364.7	345.5	332.6	321.2	315.6	310.5	311.7	310.0	308.8	306.6
62.5°	357.9	335.3	317.1	304.6	295.5	289.0	284.0	282.8	278.9	275.1	270.1
65°	308.8	290.2	273.9	262.1	253.6	248.6	244.6	241.2	232.8	223.7	219.2
67.5°	261.2	247.8	232.5	222.5	215.6	209.0	201.5	195.7	187.8	182.9	180.0
70°	230.5	217.5	204.6	195.0	187.7	181.5	173.0	169.1	163.5	161.2	158.4
72.5°	201.2	189.1	177.1	168.4	160.6	155.8	149.1	145.2	142.7	141.8	139.0
75°	156.7	147.1	138.1	130.2	124.0	120.6	117.8	115.0	113.8	108.8	106.0
77.5°	114.3	108.0	102.3	96.7	92.3	90.1	84.6	81.4	79.5	77.1	76.6
80°	89.0	84.5	78.9	75.5	69.3	67.1	64.8	64.2	63.7	63.1	62.5
82.5°	66.9	62.5	56.8	54.8	53.1	51.8	50.4	49.8	49.2	49.6	49.5
85°	33.8	31.6	31.6	31.0	30.4	29.8	29.3	29.3	28.8	29.3	28.8
87.5°	12.3	11.8	12.6	11.7	12.4	12.6	12.1	12.2	12.8	12.0	12.0
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: P332969-930

CATALOG NUMBER: SA4XXRDIP-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: P332969-930

CATALOG NUMBER: SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1335.3	1336.2	1333.1	1332.2	1333.1	1336.2	1335.3	1338.1	1338.5	1342.1	1340.8
5°	1238.8	1237.7	1234.9	1235.4	1234.9	1237.7	1238.8	1243.3	1245.6	1254.6	1253.5
7.5°	1156.3	1151.9	1153.2	1148.7	1153.2	1151.9	1156.3	1160.4	1167.3	1171.3	1180.9
10°	1105.8	1099.6	1094.5	1090.1	1094.5	1099.6	1105.8	1108.1	1117.7	1122.2	1131.7
12.5°	1036.8	1031.5	1024.7	1026.1	1024.7	1031.5	1036.8	1046.8	1059.1	1068.5	1083.5
15°	939.0	930.5	917.0	918.7	917.0	930.5	939.0	946.3	958.7	980.2	990.3
17.5°	856.1	856.2	850.0	851.5	850.0	856.2	856.1	866.2	872.5	886.1	901.6
20°	813.3	809.3	809.9	808.2	809.9	809.3	813.3	825.2	831.9	841.5	858.4
22.5°	783.6	778.7	774.8	771.3	774.8	778.7	783.6	786.8	795.8	804.9	818.7
25°	733.3	729.9	724.8	723.7	724.8	729.9	733.3	738.3	742.8	754.7	763.1
27.5°	689.1	688.4	686.4	683.8	686.4	688.4	689.1	693.6	699.4	707.0	717.7
30°	663.4	662.3	661.1	659.4	661.1	662.3	663.4	667.9	672.4	678.6	687.1
32.5°	640.4	639.7	638.5	638.7	638.5	639.7	640.4	642.6	645.3	653.4	660.0
35°	607.6	607.0	605.9	605.4	605.9	607.0	607.6	609.8	611.6	613.8	619.4
37.5°	576.9	578.4	577.7	577.6	577.7	578.4	576.9	577.5	575.7	579.8	583.6
40°	555.7	556.3	557.4	556.8	557.4	556.3	555.7	556.3	556.3	556.3	559.7
42.5°	538.2	538.3	539.8	537.9	539.8	538.3	538.2	536.0	533.3	533.8	534.8
45°	506.7	510.1	509.5	509.5	509.5	510.1	506.7	502.7	502.2	499.9	499.9
47.5°	472.3	475.2	476.1	475.9	476.1	475.2	472.3	470.8	468.2	466.0	465.8
50°	449.8	448.7	450.4	449.8	450.4	448.7	449.8	446.9	443.0	443.0	441.9
52.5°	422.2	422.5	422.4	421.8	422.4	422.5	422.2	420.8	419.1	417.3	416.6
55°	379.8	380.4	379.3	379.8	379.3	380.4	379.8	379.3	379.3	378.2	379.3
57.5°	333.9	331.2	332.3	330.9	332.3	331.2	333.9	336.4	337.3	337.5	339.2
60°	301.0	296.4	295.3	293.1	295.3	296.4	301.0	306.6	308.8	310.0	311.7
62.5°	264.0	260.8	257.0	258.8	257.0	260.8	264.0	270.1	275.1	278.9	282.8
65°	214.7	212.5	210.8	213.0	210.8	212.5	214.7	219.2	223.7	232.8	241.2
67.5°	177.7	176.5	176.5	175.4	176.5	176.5	177.7	180.0	182.9	187.8	195.7
70°	158.4	156.7	156.7	155.6	156.7	156.7	158.4	158.4	161.2	163.5	169.1
72.5°	138.5	136.8	137.3	136.6	137.3	136.8	138.5	139.0	141.8	142.7	145.2
75°	102.6	99.8	99.8	100.4	99.8	99.8	102.6	106.0	108.8	113.8	115.0
77.5°	76.6	76.0	76.8	75.7	76.8	76.0	76.6	76.6	77.1	79.5	81.4
80°	62.5	62.0	61.5	63.1	61.5	62.0	62.5	62.5	63.1	63.7	64.2
82.5°	48.6	48.5	48.3	50.5	48.3	48.5	48.6	49.5	49.6	49.2	49.8
85°	29.3	28.2	29.3	28.2	29.3	28.2	29.3	28.8	29.3	28.8	29.3
87.5°	13.0	12.7	12.1	12.6	12.1	12.7	13.0	12.0	12.0	12.8	12.2
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: P332969-930

CATALOG NUMBER: SA4XXRDIP-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: P332969-930

CATALOG NUMBER: SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1338.1	1341.2	1348.4	1356.5	1363.3	1369.1	1373.6	1380.0	1385.8	1393.9	1401.6
5°	1256.9	1264.8	1276.0	1289.6	1306.4	1317.8	1331.9	1344.3	1362.3	1380.3	1397.7
7.5°	1185.6	1194.3	1210.9	1229.6	1249.7	1268.1	1284.8	1306.7	1330.6	1356.8	1386.2
10°	1139.6	1149.2	1169.0	1190.3	1214.1	1232.1	1254.6	1280.5	1307.6	1339.7	1375.8
12.5°	1098.1	1107.3	1131.1	1152.9	1177.5	1197.3	1223.5	1249.9	1286.0	1320.8	1361.8
15°	1017.3	1041.5	1068.6	1094.5	1123.9	1148.1	1179.7	1206.7	1241.1	1290.1	1336.9
17.5°	927.6	953.4	987.0	1027.0	1066.3	1096.3	1128.4	1162.0	1202.9	1253.0	1306.9
20°	875.3	896.2	933.4	977.9	1023.5	1065.3	1094.5	1131.7	1174.0	1228.2	1283.9
22.5°	836.1	853.8	882.9	927.4	976.6	1025.1	1062.5	1099.3	1146.1	1200.2	1260.9
25°	777.2	796.4	821.7	852.2	908.6	959.9	1008.9	1051.2	1100.7	1154.9	1222.5
27.5°	728.3	745.0	768.2	799.9	837.8	894.4	953.7	1002.0	1052.9	1110.9	1178.7
30°	699.4	713.0	732.1	764.3	800.4	851.1	911.3	967.8	1019.0	1079.3	1149.8
32.5°	669.3	683.7	702.4	727.7	766.5	809.1	869.4	931.2	985.7	1047.3	1116.4
35°	629.0	640.3	657.2	683.1	718.0	755.2	808.8	872.5	930.0	995.9	1061.8
37.5°	588.3	601.6	614.9	638.1	666.7	706.7	750.5	815.5	879.2	939.5	1003.8
40°	565.3	573.2	587.8	606.4	636.9	672.4	713.5	777.2	840.9	900.7	965.5
42.5°	539.6	548.4	560.8	579.4	606.7	641.3	681.5	736.6	803.1	861.0	919.9
45°	503.9	508.9	521.4	537.1	559.7	594.6	631.9	680.9	743.4	798.7	850.5
47.5°	467.8	472.2	480.0	494.4	519.7	547.7	582.5	626.6	681.4	736.6	780.5
50°	443.0	446.9	454.3	467.8	490.3	518.0	552.4	591.8	640.8	693.8	730.4
52.5°	418.2	420.4	427.2	442.5	461.5	488.7	519.4	555.7	601.6	645.6	682.7
55°	378.8	383.8	388.3	399.6	417.7	443.6	471.2	505.6	541.1	578.3	609.8
57.5°	337.6	343.2	349.7	359.6	373.9	398.0	422.8	450.7	481.0	511.8	538.3
60°	310.5	315.6	321.2	332.6	345.5	364.7	391.8	416.0	439.0	467.2	493.7
62.5°	284.0	289.0	295.5	304.6	317.1	335.3	357.9	379.0	403.0	427.5	447.3
65°	244.6	248.6	253.6	262.1	273.9	290.2	308.8	325.2	346.7	364.7	382.7
67.5°	201.5	209.0	215.6	222.5	232.5	247.8	261.2	276.9	291.4	304.8	321.2
70°	173.0	181.5	187.7	195.0	204.6	217.5	230.5	241.2	253.1	266.0	280.7
72.5°	149.1	155.8	160.6	168.4	177.1	189.1	201.2	210.1	219.7	228.6	242.8
75°	117.8	120.6	124.0	130.2	138.1	147.1	156.7	164.6	170.2	178.1	188.3
77.5°	84.6	90.1	92.3	96.7	102.3	108.0	114.3	121.0	126.4	129.1	137.0
80°	64.8	67.1	69.3	75.5	78.9	84.5	89.0	95.2	97.5	100.4	107.6
82.5°	50.4	51.8	53.1	54.8	56.8	62.5	66.9	70.9	73.1	74.2	79.7
85°	29.3	29.8	30.4	31.0	31.6	31.6	33.8	36.6	40.6	40.6	42.2
87.5°	12.1	12.6	12.4	11.7	12.6	11.8	12.3	12.1	13.4	14.3	15.5
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: P332969-930

CATALOG NUMBER: SA4XXRDIP-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: P332969-930

CATALOG NUMBER: SA4XXRDIP-C1020D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1407.5	1411.5	1416.0	1424.6	1431.8	1435.0	1441.3	1445.8	1444.5	1450.7	1461.6
5°	1413.0	1428.2	1445.7	1463.7	1484.0	1500.9	1514.4	1528.0	1538.7	1551.7	1570.8
7.5°	1412.1	1439.2	1468.6	1500.9	1534.1	1562.9	1589.5	1616.6	1640.5	1666.9	1701.2
10°	1408.5	1444.5	1481.2	1523.5	1565.7	1605.7	1641.8	1675.6	1707.8	1742.1	1785.6
12.5°	1404.4	1445.9	1490.2	1541.1	1593.7	1641.8	1684.2	1732.9	1773.1	1817.5	1867.6
15°	1386.5	1442.3	1502.6	1568.6	1631.7	1696.5	1754.5	1814.3	1870.1	1923.0	1986.2
17.5°	1366.0	1430.4	1501.5	1579.4	1655.2	1734.1	1802.9	1878.2	1935.3	2006.4	2065.0
20°	1349.3	1418.6	1494.7	1582.1	1668.3	1755.7	1831.7	1908.5	1972.7	2044.3	2118.6
22.5°	1329.0	1405.1	1487.5	1578.0	1668.3	1763.8	1848.0	1924.2	2003.8	2084.4	2161.0
25°	1296.3	1375.2	1462.6	1561.8	1665.5	1763.0	1853.2	1947.8	2033.5	2120.9	2189.6
27.5°	1256.2	1339.0	1431.2	1533.5	1639.9	1739.8	1846.0	1946.9	2033.1	2117.2	2177.2
30°	1224.2	1311.6	1400.0	1503.7	1614.2	1721.3	1835.2	1936.0	2026.8	2102.3	2136.1
32.5°	1191.2	1274.1	1365.3	1470.4	1583.6	1698.8	1811.7	1914.8	1998.8	2044.1	2045.0
35°	1134.0	1211.8	1306.4	1409.7	1525.8	1650.8	1765.3	1866.7	1918.0	1921.9	1866.7
37.5°	1071.5	1142.9	1232.3	1335.5	1462.7	1587.1	1704.1	1771.6	1788.8	1731.5	1629.3
40°	1027.0	1092.8	1179.1	1285.1	1411.3	1539.8	1646.3	1695.9	1677.9	1584.9	1471.0
42.5°	980.0	1041.5	1124.5	1229.1	1355.8	1485.7	1576.5	1603.0	1555.3	1447.8	1314.6
45°	903.5	959.9	1042.1	1147.5	1269.3	1391.0	1459.8	1446.3	1366.8	1239.4	1090.1
47.5°	823.8	878.2	952.3	1049.8	1174.4	1279.5	1326.1	1285.3	1172.2	1032.1	910.6
50°	771.0	826.8	895.0	988.1	1101.9	1203.3	1233.2	1171.2	1045.5	910.8	799.2
52.5°	719.2	766.9	833.7	923.6	1032.4	1118.1	1134.0	1062.5	932.8	812.0	713.1
55°	640.3	683.7	740.0	824.6	918.7	991.4	982.9	891.1	773.3	670.2	592.4
57.5°	563.9	596.6	648.7	728.0	810.6	859.4	828.5	750.2	640.4	556.0	490.3
60°	513.5	543.9	592.4	661.7	734.4	762.0	736.1	651.0	564.2	487.0	431.7
62.5°	465.7	492.5	534.2	598.6	657.3	673.6	645.9	571.6	493.4	427.5	381.7
65°	396.2	421.0	456.6	502.2	542.7	550.7	532.6	456.6	397.4	342.1	310.5
67.5°	333.2	349.4	377.2	416.6	438.1	442.8	408.0	360.1	307.9	274.0	250.2
70°	290.8	302.1	328.0	349.4	366.9	367.5	335.3	297.0	257.0	229.4	211.9
72.5°	249.8	260.7	280.2	294.9	308.3	303.9	274.5	244.3	211.9	191.1	178.1
75°	192.7	202.4	212.5	219.2	219.2	213.6	192.2	169.7	151.1	138.7	134.7
77.5°	140.1	148.0	151.4	150.3	148.4	139.6	126.0	111.3	104.6	98.7	95.8
80°	109.9	113.3	114.4	111.6	108.2	98.1	89.0	82.8	76.6	74.4	73.3
82.5°	81.5	84.5	81.5	82.3	74.8	66.5	61.6	59.4	56.8	55.9	54.8
85°	43.4	42.8	41.7	38.9	33.8	32.7	32.1	31.6	30.4	31.0	29.8
87.5°	15.2	14.3	12.6	12.3	12.3	12.1	12.6	12.9	13.1	12.6	13.5
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°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1467.5	1469.3	1470.6	1475.1	1475.5	1479.6	1475.5
5°	1588.9	1596.8	1609.2	1621.5	1622.7	1630.5	1616.5
7.5°	1725.0	1743.3	1754.7	1774.7	1782.7	1787.5	1779.5
10°	1818.8	1835.7	1865.6	1880.2	1894.9	1897.1	1890.4
12.5°	1909.4	1936.3	1959.8	1987.5	1986.9	2006.7	1999.5
15°	2030.2	2057.8	2090.4	2121.5	2132.7	2132.7	2141.8
17.5°	2116.3	2166.9	2200.7	2225.0	2251.7	2256.3	2253.2
20°	2174.5	2229.1	2265.2	2296.8	2314.8	2319.9	2319.9
22.5°	2217.7	2264.2	2299.5	2327.8	2342.8	2348.7	2346.9
25°	2247.7	2287.7	2309.2	2317.6	2321.6	2320.4	2309.7
27.5°	2206.7	2204.9	2191.4	2165.4	2145.9	2134.1	2120.6
30°	2128.3	2098.9	2065.1	2027.9	1980.0	1943.3	1932.1
32.5°	2011.4	1945.6	1888.3	1826.4	1774.8	1738.2	1722.9
35°	1785.6	1681.3	1596.2	1521.8	1467.7	1433.9	1422.6
37.5°	1517.5	1416.6	1311.2	1239.1	1194.2	1160.0	1147.3
40°	1347.0	1237.1	1145.3	1077.7	1031.4	998.2	997.6
42.5°	1191.5	1086.5	1000.1	951.4	901.6	879.5	879.5
45°	975.6	891.6	818.4	780.1	750.2	732.1	727.1
47.5°	807.8	738.3	689.5	659.0	634.6	623.1	615.7
50°	713.5	652.6	613.8	587.3	573.7	559.1	558.0
52.5°	635.1	586.0	555.6	534.1	517.0	508.2	508.4
55°	533.8	494.9	473.4	457.1	443.6	436.8	434.0
57.5°	449.6	420.4	404.9	389.9	384.2	378.9	377.4
60°	397.4	377.6	363.0	351.1	342.7	341.0	340.4
62.5°	354.1	333.5	323.3	314.1	307.9	305.3	304.4
65°	292.0	276.7	267.7	260.4	258.1	254.2	253.6
67.5°	235.4	226.2	220.3	215.2	212.1	211.9	211.9
70°	200.6	195.6	190.5	187.7	186.0	184.8	184.8
72.5°	170.9	167.1	163.0	161.5	161.2	160.0	159.6
75°	130.2	126.3	126.8	124.0	121.7	119.0	117.2
77.5°	92.3	89.5	88.9	88.6	86.7	86.3	87.2
80°	71.6	68.7	68.2	68.7	68.2	66.5	66.5
82.5°	54.5	52.1	51.5	51.2	50.6	51.2	50.3
85°	29.3	28.2	28.2	28.2	29.3	28.8	28.2
87.5°	12.8	12.5	12.9	12.6	12.7	12.1	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)