

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: P332635-935

Luminaire Tested: **SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332635-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5727.9 lumens
Efficiency: N/A
Efficacy: 117.4 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

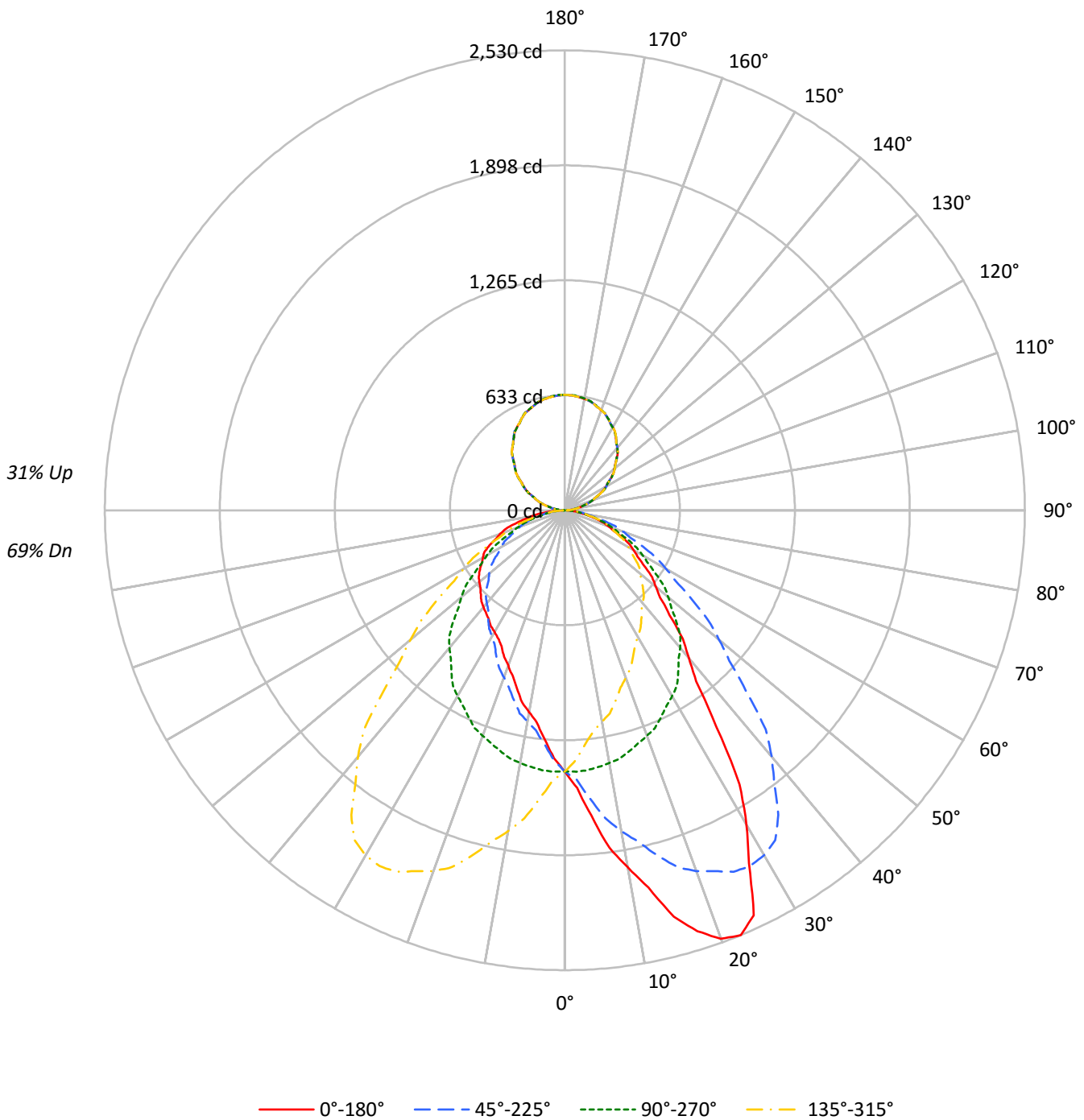
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	94	94	94	83	83	83	74	74	74	69				
1	102	98	94	91	97	93	89	86	83	80	78	74	72	70	66	64	63	59				
2	94	86	80	75	88	82	76	71	73	69	65	65	62	59	58	56	54	50				
3	86	76	69	63	81	72	65	60	65	60	55	58	54	50	52	49	46	43				
4	78	68	59	53	74	64	57	51	58	52	47	52	47	44	47	43	40	37				
5	72	60	52	46	68	58	50	44	52	46	41	47	42	38	42	38	35	32				
6	67	54	46	40	63	52	44	39	47	41	36	43	37	34	38	34	31	28				
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25				
8	58	45	37	32	54	43	36	31	39	33	29	36	30	27	32	28	25	23				
9	54	41	34	28	51	39	32	28	36	30	26	33	28	24	30	26	22	20				
10	50	38	31	26	48	36	29	25	33	27	23	30	25	22	28	24	20	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11599	11599	11599	11599
5°	13661	11629	10264	11629
10°	16356	11579	9241	11579
15°	19351	11462	8487	11462
20°	21549	11342	7814	11342
25°	21896	11166	7349	11166
30°	18632	10997	7202	10997
35°	14325	10723	7203	10723
40°	11166	10400	7339	10400
45°	9310	9914	7462	9914
50°	8194	9323	7714	9323
55°	7506	8612	8025	8612
60°	7035	7976	8399	7976
65°	6550	7265	8709	7265
70°	5986	6559	8908	6559
75°	5346	5774	8799	5774
80°	4482	4733	8522	4733
85°	3307	3418	8160	3418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	2.4
10°-20°	431.5	7.5
20°-30°	684.2	11.9
30°-40°	761.4	13.3
40°-50°	693.1	12.1
50°-60°	566.4	9.9
60°-70°	404.3	7.1
70°-80°	222.6	3.9
80°-90°	62.7	1.1
90°-100°	41.9	0.7
100°-110°	124.1	2.2
110°-120°	210.6	3.7
120°-130°	277.7	4.8
130°-140°	311.8	5.4
140°-150°	306.4	5.3
150°-160°	257.7	4.5
160°-170°	171.5	3.0
170°-180°	60.0	1.0
0°-30°	1255.6	21.9
0°-40°	2017.1	35.2
0°-60°	3276.5	57.2
0°-90°	3966.2	69.2
90°-120°	376.5	6.6
90°-150°	1272.4	22.2
90°-180°	1762.0	30.8
0°-180°	5727.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1437	1437	1437	1437	1437	
5°	1686	1435	1267	1435	1686	171
15°	2315	1371	1016	1371	2315	654
25°	2458	1254	825	1254	2458	1084
35°	1454	1088	731	1088	1454	923
45°	816	868	654	868	816	642
55°	533	612	570	612	533	482
65°	343	380	456	380	343	339
75°	171	185	282	185	171	182
85°	36	37	88	37	36	44
90°	15	2	15	2	15	9
95°	39	29	39	29	39	40
105°	120	114	120	114	120	126
115°	212	214	212	214	212	210
125°	309	312	309	312	309	276
135°	403	402	403	402	403	311
145°	489	489	489	489	489	306
155°	559	560	559	560	559	257
165°	608	609	608	609	608	171
175°	631	634	631	634	631	60
180°	635	635	635	635	635	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1529.2	1528.8	1524.0	1523.0	1519.7	1515.4	1514.5	1506.8	1491.6	1484.5	1482.6
5°	1685.7	1697.5	1682.0	1679.1	1677.3	1657.7	1647.5	1635.6	1608.3	1592.2	1579.7
7.5°	1872.3	1873.7	1867.0	1861.5	1846.3	1829.2	1803.5	1776.2	1743.5	1709.6	1683.9
10°	1995.2	1999.9	1992.2	1991.0	1960.7	1941.6	1903.5	1871.4	1834.4	1793.4	1755.9
12.5°	2124.7	2118.0	2114.1	2088.6	2083.0	2048.2	2004.0	1970.9	1914.0	1866.7	1816.8
15°	2315.4	2302.3	2294.0	2258.8	2241.6	2193.4	2146.3	2110.1	2035.7	1964.8	1911.2
17.5°	2427.2	2440.4	2421.1	2406.7	2362.1	2328.2	2280.2	2204.0	2145.8	2057.8	1990.2
20°	2508.3	2509.4	2498.7	2483.8	2448.7	2405.9	2353.5	2270.1	2200.5	2113.0	2020.2
22.5°	2530.1	2530.4	2525.8	2511.9	2485.4	2450.6	2397.8	2328.2	2243.9	2148.7	2055.9
25°	2458.2	2455.8	2461.3	2476.7	2466.6	2455.8	2425.5	2373.7	2295.2	2194.5	2094.6
27.5°	2191.1	2207.5	2237.7	2275.9	2312.6	2340.5	2348.4	2337.8	2289.1	2206.3	2101.6
30°	1998.7	2019.0	2041.6	2079.7	2153.4	2195.7	2242.2	2277.3	2257.6	2191.6	2094.0
32.5°	1787.3	1792.3	1825.9	1869.2	1936.8	2018.1	2091.7	2163.0	2186.7	2152.1	2070.6
35°	1453.5	1461.8	1498.1	1541.0	1623.8	1723.1	1833.8	1932.7	2014.2	2046.9	2005.3
37.5°	1186.1	1210.0	1235.7	1281.8	1354.6	1444.1	1559.1	1687.0	1808.5	1889.9	1903.8
40°	1059.5	1074.4	1092.8	1127.9	1189.8	1277.9	1376.7	1523.2	1652.3	1769.0	1807.1
42.5°	959.5	968.2	979.5	1011.2	1058.4	1146.0	1236.2	1365.0	1494.7	1634.2	1698.1
45°	815.5	824.4	843.4	861.9	897.6	958.3	1042.2	1148.1	1278.5	1413.1	1530.9
47.5°	711.4	717.1	728.4	748.2	778.5	818.6	886.8	975.3	1096.1	1226.8	1352.3
50°	652.4	657.1	666.1	683.9	707.1	742.8	798.7	881.5	976.1	1107.7	1230.9
52.5°	605.7	607.6	614.2	626.3	644.7	674.8	720.7	789.1	877.1	994.4	1117.1
55°	533.3	535.7	541.7	550.6	566.6	585.7	620.8	672.0	748.8	850.6	957.1
57.5°	473.8	475.4	480.4	483.9	497.1	512.6	539.6	576.2	634.4	720.7	815.8
60°	435.7	434.5	440.5	443.4	452.4	465.5	486.3	521.4	572.0	641.6	729.1
62.5°	398.6	396.9	401.9	405.8	411.0	422.1	439.1	466.7	507.7	570.7	646.3
65°	342.9	340.4	343.5	348.2	352.9	359.0	371.4	395.8	428.5	473.8	531.5
67.5°	286.9	289.4	289.9	292.2	295.0	303.1	311.7	328.9	352.0	388.2	437.1
70°	253.6	254.2	256.6	256.6	258.3	265.4	272.6	282.8	305.3	338.7	378.6
72.5°	220.2	222.7	221.8	223.7	225.0	229.7	235.0	244.6	263.9	288.7	322.4
75°	171.4	173.2	173.2	173.8	175.6	177.4	181.5	188.6	202.3	220.8	244.0
77.5°	125.0	125.3	126.1	128.2	128.2	131.0	134.1	139.9	146.6	159.3	173.4
80°	96.4	97.6	97.0	98.2	98.2	100.6	101.8	108.9	111.9	120.2	131.6
82.5°	70.7	71.9	71.8	73.4	74.4	74.9	76.5	79.4	82.4	89.7	94.4
85°	35.7	36.9	35.7	36.9	38.7	39.3	41.1	41.7	44.1	45.8	50.0
87.5°	13.4	14.8	14.7	15.2	16.1	16.5	16.9	16.3	18.0	18.3	20.1
90°	14.7	14.6	14.3	14.1	13.9	13.4	12.7	12.1	11.5	10.8	9.9
92.5°	21.8	21.7	21.5	21.4	21.3	21.0	20.7	20.2	19.8	19.5	18.9
95°	38.8	38.8	38.8	38.8	38.8	38.7	38.3	38.0	37.6	37.3	36.6
97.5°	60.8	60.8	60.8	60.8	60.8	60.6	60.2	59.8	59.4	59.1	58.1
100°	76.1	76.1	76.1	76.1	76.1	76.0	75.8	75.6	75.3	75.2	74.1
102.5°	93.4	93.3	93.2	93.2	93.1	92.8	92.6	92.2	92.0	91.6	90.7
105°	119.9	119.5	119.2	118.8	118.5	118.2	117.9	117.5	117.2	116.8	116.4
107.5°	145.6	145.6	145.6	145.6	145.7	145.5	145.2	144.9	144.6	144.3	144.2
110°	164.0	163.7	163.3	163.1	162.7	162.6	162.9	163.1	163.3	163.5	163.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.9	182.8	182.7	182.7	182.6	182.6	182.6	182.7	182.7	182.8	183.0
115°	212.2	212.2	212.3	212.5	212.6	212.7	212.8	212.9	213.0	213.1	213.4
117.5°	240.0	240.2	240.5	240.6	240.9	241.2	241.6	241.9	242.3	242.7	242.8
120°	261.2	261.1	260.8	260.6	260.4	260.5	261.1	261.7	262.2	262.7	263.0
122.5°	279.0	279.3	279.7	280.1	280.5	280.9	281.3	281.6	282.0	282.4	282.5
125°	309.4	309.6	309.8	310.0	310.2	310.5	310.6	310.9	311.1	311.3	311.4
127.5°	337.6	337.8	337.9	338.1	338.3	338.5	338.7	338.9	339.1	339.3	339.5
130°	356.0	356.5	356.9	357.3	357.7	358.1	358.3	358.5	358.8	359.0	359.0
132.5°	375.7	375.8	376.0	376.2	376.3	376.6	376.8	377.0	377.2	377.5	377.5
135°	402.7	403.0	403.3	403.6	404.0	404.2	404.5	404.7	404.9	405.1	405.1
137.5°	431.1	431.0	430.9	430.8	430.8	430.9	431.2	431.4	431.8	432.0	431.9
140°	448.3	448.5	448.6	448.7	448.8	448.9	449.0	449.1	449.2	449.4	449.4
142.5°	465.6	465.6	465.7	465.7	465.7	465.7	465.8	465.8	465.8	465.8	465.9
145°	489.1	489.4	489.7	490.1	490.4	490.6	490.8	490.9	490.9	491.0	490.9
147.5°	512.9	513.0	513.1	513.2	513.3	513.4	513.5	513.6	513.7	513.8	513.8
150°	527.4	527.5	527.6	527.7	527.9	527.9	527.9	527.9	527.9	527.9	527.9
152.5°	540.8	541.1	541.3	541.7	541.9	541.9	541.7	541.4	541.1	540.9	540.8
155°	559.3	559.7	560.2	560.6	561.1	561.1	560.6	560.2	559.7	559.3	559.5
157.5°	575.9	576.3	576.7	577.0	577.4	577.5	577.1	576.8	576.4	576.1	576.2
160°	585.4	585.9	586.4	587.0	587.5	587.6	587.3	587.0	586.7	586.3	586.4
162.5°	595.2	595.7	596.2	596.8	597.4	597.4	596.8	596.2	595.6	595.0	595.1
165°	608.0	608.4	608.8	609.2	609.7	609.6	608.9	608.3	607.6	607.0	607.2
167.5°	617.1	617.8	618.5	619.1	619.7	619.8	619.1	618.5	617.9	617.2	617.2
170°	622.2	622.9	623.7	624.5	625.3	625.3	624.7	624.0	623.4	622.7	622.6
172.5°	626.5	627.2	628.0	628.8	629.6	629.6	628.9	628.1	627.3	626.6	626.5
175°	631.0	631.8	632.6	633.4	634.0	634.0	633.4	632.6	631.8	631.0	631.1
177.5°	633.4	634.0	634.8	635.5	636.2	636.2	635.6	635.0	634.4	633.8	633.8
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1483.1	1476.4	1471.6	1467.8	1457.3	1451.1	1446.4	1439.7	1432.1	1424.0	1414.0
5°	1567.2	1547.0	1532.1	1509.5	1488.1	1470.2	1451.7	1435.0	1414.8	1392.8	1376.7
7.5°	1655.6	1625.6	1587.0	1553.5	1515.9	1483.2	1453.9	1423.8	1392.7	1362.4	1334.7
10°	1711.8	1673.2	1630.3	1579.7	1532.1	1489.8	1450.5	1412.5	1375.5	1338.6	1307.1
12.5°	1772.3	1724.1	1660.8	1601.6	1548.3	1491.8	1444.3	1397.7	1353.1	1314.3	1277.6
15°	1853.5	1783.8	1710.6	1631.5	1561.3	1495.2	1430.3	1371.4	1321.4	1270.1	1234.5
17.5°	1903.4	1817.2	1733.5	1650.8	1565.7	1482.5	1412.5	1344.5	1281.9	1231.1	1186.0
20°	1936.2	1850.5	1746.4	1663.6	1562.5	1476.7	1395.8	1320.2	1254.7	1200.6	1154.1
22.5°	1964.8	1865.8	1761.6	1652.7	1552.0	1461.0	1372.4	1296.4	1229.5	1172.4	1127.9
25°	1980.3	1866.6	1753.5	1645.2	1530.9	1423.1	1342.8	1253.5	1182.1	1122.0	1074.4
27.5°	1981.9	1860.4	1732.4	1612.1	1494.1	1393.8	1292.4	1212.5	1138.4	1074.9	1029.2
30°	1976.7	1849.9	1712.4	1582.1	1463.6	1354.7	1266.6	1179.7	1104.1	1041.0	993.4
32.5°	1960.1	1828.0	1686.7	1548.8	1426.0	1319.5	1228.6	1145.9	1072.2	1010.0	960.1
35°	1911.9	1781.5	1630.9	1487.5	1361.8	1254.1	1172.0	1088.0	1014.3	955.3	907.1
37.5°	1836.5	1718.6	1565.6	1417.1	1293.7	1185.5	1104.1	1028.3	961.7	901.9	852.5
40°	1770.7	1667.2	1513.6	1369.0	1235.7	1132.7	1056.5	986.9	920.8	864.3	817.3
42.5°	1695.1	1604.8	1463.2	1309.9	1181.4	1078.0	1003.7	941.2	878.9	826.6	779.6
45°	1560.0	1500.6	1367.2	1225.5	1091.7	994.0	923.2	868.4	816.1	764.8	725.6
47.5°	1404.8	1375.3	1263.1	1128.5	1001.4	905.2	843.8	793.2	747.3	703.9	669.3
50°	1300.5	1286.2	1189.2	1059.5	938.1	847.6	785.7	742.3	702.9	664.9	632.1
52.5°	1197.7	1197.2	1109.7	990.9	878.6	791.4	730.0	689.4	655.3	624.4	595.0
55°	1040.4	1057.1	988.7	882.7	782.1	703.5	648.2	611.9	588.1	562.5	540.4
57.5°	896.0	923.7	867.2	773.9	690.0	617.6	569.4	542.1	516.8	501.3	485.3
60°	801.8	827.9	783.9	705.3	626.2	564.3	518.4	494.0	472.0	461.3	450.0
62.5°	718.0	741.3	708.7	635.8	567.1	507.6	468.9	445.5	430.6	418.9	411.4
65°	598.2	617.9	589.9	536.9	477.9	430.3	398.8	380.3	366.1	361.3	352.9
67.5°	483.5	501.4	486.3	441.3	394.0	358.0	333.3	315.6	307.1	303.0	297.0
70°	415.4	433.3	417.2	378.0	341.6	311.3	288.1	277.9	269.1	267.3	258.9
72.5°	357.8	370.0	354.0	323.2	292.1	266.6	248.6	238.0	233.3	230.1	225.6
75°	268.5	279.1	268.5	244.6	222.6	204.7	189.2	185.1	179.8	178.0	175.0
77.5°	190.0	199.2	191.1	176.2	159.7	145.9	137.6	132.2	131.0	127.9	129.4
80°	145.3	151.2	143.4	133.4	120.2	110.7	104.8	101.8	98.2	97.0	99.4
82.5°	104.3	106.9	103.0	96.2	86.4	80.2	76.2	72.8	72.0	72.2	72.2
85°	54.2	53.6	53.0	47.0	44.1	39.9	37.5	36.9	36.3	37.5	38.7
87.5°	19.9	20.2	19.5	17.5	15.8	14.1	13.4	12.7	13.4	14.1	14.8
90°	9.0	8.2	7.3	6.3	5.1	3.9	2.7	1.5	2.7	3.9	5.1
92.5°	18.3	17.7	17.0	16.0	14.6	13.3	11.9	10.5	11.9	13.3	14.6
95°	35.8	35.0	34.3	33.4	32.4	31.4	30.5	29.4	30.5	31.4	32.4
97.5°	57.3	56.3	55.4	54.6	53.8	53.0	52.3	51.5	52.3	53.0	53.8
100°	73.2	72.2	71.2	70.5	70.1	69.7	69.2	68.7	69.2	69.7	70.1
102.5°	89.8	88.9	88.1	87.5	87.3	87.1	87.0	86.8	87.0	87.1	87.3
105°	116.0	115.5	115.1	114.9	114.8	114.6	114.5	114.4	114.5	114.6	114.8
107.5°	144.1	144.0	144.0	144.0	143.8	143.6	143.5	143.4	143.5	143.6	143.8
110°	163.8	163.8	163.9	163.9	163.7	163.5	163.2	163.1	163.2	163.5	163.7



TEST NUMBER: P332635-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	183.1	183.4	183.6	183.7	183.6	183.6	183.5	183.5	183.5	183.6	183.6
115°	213.5	213.8	214.0	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1
117.5°	243.0	243.1	243.3	243.3	243.2	243.1	243.1	243.0	243.1	243.1	243.2
120°	263.4	263.7	264.1	264.0	263.6	263.1	262.7	262.3	262.7	263.1	263.6
122.5°	282.7	282.8	283.0	282.9	282.8	282.6	282.4	282.2	282.4	282.6	282.8
125°	311.6	311.7	311.8	311.9	311.9	311.9	311.9	311.9	311.9	311.9	311.9
127.5°	339.7	339.8	340.0	339.9	339.7	339.3	339.0	338.6	339.0	339.3	339.7
130°	359.0	359.0	359.0	358.8	358.5	358.2	357.8	357.5	357.8	358.2	358.5
132.5°	377.6	377.7	377.8	377.7	377.5	377.2	377.0	376.8	377.0	377.2	377.5
135°	405.1	405.1	405.1	404.8	404.2	403.5	402.9	402.2	402.9	403.5	404.2
137.5°	431.7	431.5	431.4	431.1	430.8	430.5	430.2	429.9	430.2	430.5	430.8
140°	449.4	449.4	449.4	449.2	449.0	448.8	448.6	448.3	448.6	448.8	449.0
142.5°	466.0	466.1	466.1	466.1	465.9	465.7	465.5	465.2	465.5	465.7	465.9
145°	490.9	490.8	490.6	490.3	489.9	489.5	489.0	488.6	489.0	489.5	489.9
147.5°	513.9	514.0	514.1	513.9	513.3	512.8	512.3	511.8	512.3	512.8	513.3
150°	527.9	527.9	527.9	527.7	527.3	526.8	526.4	525.9	526.4	526.8	527.3
152.5°	540.7	540.6	540.5	540.4	540.1	539.8	539.6	539.3	539.6	539.8	540.1
155°	559.6	559.6	559.7	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8
157.5°	576.2	576.2	576.2	576.4	576.5	576.7	576.9	577.1	576.9	576.7	576.5
160°	586.6	586.7	586.8	586.9	587.0	587.1	587.2	587.3	587.2	587.1	587.0
162.5°	595.2	595.3	595.4	595.6	595.9	596.2	596.5	596.8	596.5	596.2	595.9
165°	607.4	607.6	607.9	608.1	608.5	608.7	609.1	609.4	609.1	608.7	608.5
167.5°	617.2	617.1	617.1	617.3	617.8	618.2	618.7	619.1	618.7	618.2	617.8
170°	622.4	622.3	622.2	622.4	623.0	623.5	624.1	624.7	624.1	623.5	623.0
172.5°	626.5	626.5	626.5	626.7	627.2	627.7	628.1	628.5	628.1	627.7	627.2
175°	631.3	631.4	631.5	631.8	632.3	632.9	633.4	634.0	633.4	632.9	632.3
177.5°	633.8	633.8	633.8	634.0	634.5	634.9	635.3	635.8	635.3	634.9	634.5
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



TEST NUMBER: P332635-935

CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1409.2	1405.0	1398.8	1390.2	1383.0	1375.4	1373.6	1370.6	1376.4	1371.6	1370.2
5°	1363.0	1350.6	1334.5	1316.0	1305.3	1289.9	1286.9	1280.9	1275.0	1274.4	1268.4
7.5°	1314.1	1295.8	1274.7	1255.9	1238.5	1221.6	1210.6	1208.2	1199.4	1194.2	1188.3
10°	1282.7	1260.1	1235.7	1217.8	1197.6	1179.7	1167.3	1160.1	1154.1	1147.5	1141.6
12.5°	1245.5	1221.5	1201.4	1182.1	1158.0	1144.4	1123.9	1111.5	1110.3	1110.4	1094.9
15°	1202.3	1178.5	1147.5	1120.2	1107.1	1080.9	1069.6	1055.3	1046.4	1037.4	1030.4
17.5°	1153.0	1123.3	1099.2	1067.7	1042.7	1021.8	1007.0	998.4	985.0	972.3	963.2
20°	1122.0	1090.5	1064.8	1031.5	1004.1	978.5	966.0	954.2	944.0	933.3	923.2
22.5°	1090.5	1057.6	1026.2	993.9	968.5	941.4	929.4	913.2	903.5	897.6	887.4
25°	1041.0	1005.3	969.6	938.7	912.5	888.6	872.6	860.1	849.4	844.6	838.1
27.5°	987.2	951.7	917.2	882.1	852.4	835.1	822.3	812.8	806.7	800.3	797.4
30°	953.0	916.0	879.2	846.4	819.0	801.8	789.9	783.3	778.5	775.6	772.6
32.5°	918.2	881.8	842.9	813.0	788.5	773.2	764.1	757.6	755.2	754.1	753.0
35°	862.5	825.5	789.9	763.1	739.9	733.9	726.2	722.6	721.4	725.6	727.4
37.5°	808.6	774.3	741.4	715.4	700.3	691.6	688.9	689.1	693.3	697.0	701.3
40°	773.8	740.5	709.5	686.9	672.6	667.3	666.1	669.0	673.8	678.0	682.7
42.5°	739.9	707.1	679.0	657.8	647.8	642.9	643.7	646.6	653.3	658.4	665.6
45°	687.5	660.1	632.7	615.4	607.1	608.3	608.3	613.6	620.2	627.9	635.7
47.5°	638.1	610.4	588.0	573.4	569.1	568.1	571.4	578.4	587.8	597.4	608.2
50°	604.8	578.5	558.9	545.8	541.1	542.9	547.6	554.1	565.4	577.4	588.7
52.5°	570.9	547.1	528.9	516.8	513.4	516.7	521.4	531.8	541.7	554.5	568.2
55°	518.4	498.2	483.9	475.0	473.8	475.6	481.0	492.2	506.5	522.6	535.7
57.5°	466.1	449.3	436.2	430.0	430.6	432.2	441.1	454.5	469.8	486.9	503.8
60°	430.9	415.4	404.8	400.0	400.5	404.2	414.8	427.4	446.4	463.0	481.0
62.5°	397.6	384.0	373.8	369.5	368.7	376.5	386.8	399.8	418.8	437.4	456.7
65°	344.1	333.3	325.0	322.6	324.4	330.4	343.5	360.7	376.8	396.4	416.6
67.5°	291.6	282.8	277.2	278.2	280.3	289.1	300.1	315.0	333.2	353.5	373.6
70°	258.3	249.9	245.2	245.8	249.4	260.1	269.7	284.5	304.2	325.0	341.6
72.5°	224.0	218.5	214.3	216.8	220.3	227.7	239.6	254.5	271.8	291.2	308.8
75°	172.0	172.0	169.6	171.4	176.8	183.9	192.9	208.4	225.6	241.1	255.4
77.5°	127.6	126.3	127.9	130.0	133.1	141.5	151.8	162.8	175.8	191.3	203.1
80°	97.6	98.2	101.2	104.8	106.0	112.5	123.2	133.4	143.4	156.5	167.8
82.5°	73.4	74.0	75.5	80.0	81.2	88.3	95.1	105.2	114.4	123.2	132.6
85°	39.9	39.9	42.9	44.6	47.6	52.3	56.6	62.5	70.9	76.8	85.7
87.5°	16.5	16.7	18.8	19.9	21.5	24.0	25.1	30.5	32.5	35.0	39.4
90°	6.3	7.3	8.2	9.0	9.9	10.8	11.5	12.1	12.7	13.4	13.9
92.5°	16.0	17.0	17.7	18.3	18.9	19.5	19.8	20.2	20.7	21.0	21.3
95°	33.4	34.3	35.0	35.8	36.6	37.3	37.6	38.0	38.3	38.7	38.8
97.5°	54.6	55.4	56.3	57.3	58.1	59.1	59.4	59.8	60.2	60.6	60.8
100°	70.5	71.2	72.2	73.2	74.1	75.2	75.3	75.6	75.8	76.0	76.1
102.5°	87.5	88.1	88.9	89.8	90.7	91.6	92.0	92.2	92.6	92.8	93.1
105°	114.9	115.1	115.5	116.0	116.4	116.8	117.2	117.5	117.9	118.2	118.5
107.5°	144.0	144.0	144.0	144.1	144.2	144.3	144.6	144.9	145.2	145.5	145.7
110°	163.9	163.9	163.8	163.8	163.7	163.5	163.3	163.1	162.9	162.6	162.7



TEST NUMBER: P332635-935

CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	183.7	183.6	183.4	183.1	183.0	182.8	182.7	182.7	182.6	182.6	182.6
115°	214.1	214.0	213.8	213.5	213.4	213.1	213.0	212.9	212.8	212.7	212.6
117.5°	243.3	243.3	243.1	243.0	242.8	242.7	242.3	241.9	241.6	241.2	240.9
120°	264.0	264.1	263.7	263.4	263.0	262.7	262.2	261.7	261.1	260.5	260.4
122.5°	282.9	283.0	282.8	282.7	282.5	282.4	282.0	281.6	281.3	280.9	280.5
125°	311.9	311.8	311.7	311.6	311.4	311.3	311.1	310.9	310.6	310.5	310.2
127.5°	339.9	340.0	339.8	339.7	339.5	339.3	339.1	338.9	338.7	338.5	338.3
130°	358.8	359.0	359.0	359.0	359.0	359.0	358.8	358.5	358.3	358.1	357.7
132.5°	377.7	377.8	377.7	377.6	377.5	377.5	377.2	377.0	376.8	376.6	376.3
135°	404.8	405.1	405.1	405.1	405.1	405.1	404.9	404.7	404.5	404.2	404.0
137.5°	431.1	431.4	431.5	431.7	431.9	432.0	431.8	431.4	431.2	430.9	430.8
140°	449.2	449.4	449.4	449.4	449.4	449.4	449.2	449.1	449.0	448.9	448.8
142.5°	466.1	466.1	466.1	466.0	465.9	465.8	465.8	465.8	465.8	465.7	465.7
145°	490.3	490.6	490.8	490.9	490.9	491.0	490.9	490.9	490.8	490.6	490.4
147.5°	513.9	514.1	514.0	513.9	513.8	513.8	513.7	513.6	513.5	513.4	513.3
150°	527.7	527.9	527.9	527.9	527.9	527.9	527.9	527.9	527.9	527.9	527.9
152.5°	540.4	540.5	540.6	540.7	540.8	540.9	541.1	541.4	541.7	541.9	541.9
155°	559.8	559.7	559.6	559.6	559.5	559.3	559.7	560.2	560.6	561.1	561.1
157.5°	576.4	576.2	576.2	576.2	576.2	576.1	576.4	576.8	577.1	577.5	577.4
160°	586.9	586.8	586.7	586.6	586.4	586.3	586.7	587.0	587.3	587.6	587.5
162.5°	595.6	595.4	595.3	595.2	595.1	595.0	595.6	596.2	596.8	597.4	597.4
165°	608.1	607.9	607.6	607.4	607.2	607.0	607.6	608.3	608.9	609.6	609.7
167.5°	617.3	617.1	617.1	617.2	617.2	617.2	617.9	618.5	619.1	619.8	619.7
170°	622.4	622.2	622.3	622.4	622.6	622.7	623.4	624.0	624.7	625.3	625.3
172.5°	626.7	626.5	626.5	626.5	626.5	626.6	627.3	628.1	628.9	629.6	629.6
175°	631.8	631.5	631.4	631.3	631.1	631.0	631.8	632.6	633.4	634.0	634.0
177.5°	634.0	633.8	633.8	633.8	633.8	633.8	634.4	635.0	635.6	636.2	636.2
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



TEST NUMBER: P332635-935

CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1369.2	1368.3	1364.9	1364.5	1364.9	1368.3	1369.2	1370.2	1371.6	1376.4	1370.6
5°	1264.8	1261.9	1260.1	1266.6	1260.1	1261.9	1264.8	1268.4	1274.4	1275.0	1280.9
7.5°	1186.1	1183.8	1178.5	1176.9	1178.5	1183.8	1186.1	1188.3	1194.2	1199.4	1208.2
10°	1135.7	1133.2	1128.5	1127.3	1128.5	1133.2	1135.7	1141.6	1147.5	1154.1	1160.1
12.5°	1087.1	1082.4	1081.4	1082.5	1081.4	1082.4	1087.1	1094.9	1110.4	1110.3	1111.5
15°	1022.6	1020.2	1013.7	1015.5	1013.7	1020.2	1022.6	1030.4	1037.4	1046.4	1055.3
17.5°	959.0	956.1	948.2	955.2	948.2	956.1	959.0	963.2	972.3	985.0	998.4
20°	919.0	914.2	910.1	909.5	910.1	914.2	919.0	923.2	933.3	944.0	954.2
22.5°	880.9	876.7	876.2	872.4	876.2	876.7	880.9	887.4	897.6	903.5	913.2
25°	833.3	829.1	827.9	825.0	827.9	829.1	833.3	838.1	844.6	849.4	860.1
27.5°	796.8	794.7	792.6	793.5	792.6	794.7	796.8	797.4	800.3	806.7	812.8
30°	774.4	773.8	772.6	772.6	772.6	773.8	774.4	772.6	775.6	778.5	783.3
32.5°	755.8	755.7	756.4	756.4	756.4	755.7	755.8	753.0	754.1	755.2	757.6
35°	729.7	731.5	732.7	730.9	732.7	731.5	729.7	727.4	725.6	721.4	722.6
37.5°	706.2	707.9	709.6	711.6	709.6	707.9	706.2	701.3	697.0	693.3	689.1
40°	688.0	692.2	693.4	696.4	693.4	692.2	688.0	682.7	678.0	673.8	669.0
42.5°	670.9	675.5	678.6	679.2	678.6	675.5	670.9	665.6	658.4	653.3	646.6
45°	644.6	649.4	653.6	653.6	653.6	649.4	644.6	635.7	627.9	620.2	613.6
47.5°	617.3	624.2	628.4	629.5	628.4	624.2	617.3	608.2	597.4	587.8	578.4
50°	598.8	607.1	611.3	614.2	611.3	607.1	598.8	588.7	577.4	565.4	554.1
52.5°	580.7	589.0	594.6	596.2	594.6	589.0	580.7	568.2	554.5	541.7	531.8
55°	549.4	561.3	567.8	570.2	567.8	561.3	549.4	535.7	522.6	506.5	492.2
57.5°	519.9	530.8	538.5	540.2	538.5	530.8	519.9	503.8	486.9	469.8	454.5
60°	497.0	508.9	518.4	520.2	518.4	508.9	497.0	481.0	463.0	446.4	427.4
62.5°	473.6	486.0	494.6	499.3	494.6	486.0	473.6	456.7	437.4	418.8	399.8
65°	433.3	445.8	454.2	455.9	454.2	445.8	433.3	416.6	396.4	376.8	360.7
67.5°	389.3	401.7	407.3	410.7	407.3	401.7	389.3	373.6	353.5	333.2	315.0
70°	358.3	368.4	374.4	377.4	374.4	368.4	358.3	341.6	325.0	304.2	284.5
72.5°	323.0	333.6	340.6	341.2	340.6	333.6	323.0	308.8	291.2	271.8	254.5
75°	269.1	278.5	282.1	282.1	282.1	278.5	269.1	255.4	241.1	225.6	208.4
77.5°	212.9	217.8	222.4	223.3	222.4	217.8	212.9	203.1	191.3	175.8	162.8
80°	176.8	179.8	183.3	183.3	183.3	179.8	176.8	167.8	156.5	143.4	133.4
82.5°	139.7	142.2	145.7	145.3	145.7	142.2	139.7	132.6	123.2	114.4	105.2
85°	84.6	89.9	89.3	88.1	89.3	89.9	84.6	85.7	76.8	70.9	62.5
87.5°	40.9	41.4	42.9	43.9	42.9	41.4	40.9	39.4	35.0	32.5	30.5
90°	14.1	14.3	14.6	14.7	14.6	14.3	14.1	13.9	13.4	12.7	12.1
92.5°	21.4	21.5	21.7	21.8	21.7	21.5	21.4	21.3	21.0	20.7	20.2
95°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.7	38.3	38.0
97.5°	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.6	60.2	59.8
100°	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.0	75.8	75.6
102.5°	93.2	93.2	93.3	93.4	93.3	93.2	93.2	93.1	92.8	92.6	92.2
105°	118.8	119.2	119.5	119.9	119.5	119.2	118.8	118.5	118.2	117.9	117.5
107.5°	145.6	145.6	145.6	145.6	145.6	145.6	145.6	145.7	145.5	145.2	144.9
110°	163.1	163.3	163.7	164.0	163.7	163.3	163.1	162.7	162.6	162.9	163.1



TEST NUMBER: P332635-935

CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	182.7	182.7	182.8	182.9	182.8	182.7	182.7	182.6	182.6	182.6	182.7
115°	212.5	212.3	212.2	212.2	212.2	212.3	212.5	212.6	212.7	212.8	212.9
117.5°	240.6	240.5	240.2	240.0	240.2	240.5	240.6	240.9	241.2	241.6	241.9
120°	260.6	260.8	261.1	261.2	261.1	260.8	260.6	260.4	260.5	261.1	261.7
122.5°	280.1	279.7	279.3	279.0	279.3	279.7	280.1	280.5	280.9	281.3	281.6
125°	310.0	309.8	309.6	309.4	309.6	309.8	310.0	310.2	310.5	310.6	310.9
127.5°	338.1	337.9	337.8	337.6	337.8	337.9	338.1	338.3	338.5	338.7	338.9
130°	357.3	356.9	356.5	356.0	356.5	356.9	357.3	357.7	358.1	358.3	358.5
132.5°	376.2	376.0	375.8	375.7	375.8	376.0	376.2	376.3	376.6	376.8	377.0
135°	403.6	403.3	403.0	402.7	403.0	403.3	403.6	404.0	404.2	404.5	404.7
137.5°	430.8	430.9	431.0	431.1	431.0	430.9	430.8	430.8	430.9	431.2	431.4
140°	448.7	448.6	448.5	448.3	448.5	448.6	448.7	448.8	448.9	449.0	449.1
142.5°	465.7	465.7	465.6	465.6	465.6	465.7	465.7	465.7	465.7	465.8	465.8
145°	490.1	489.7	489.4	489.1	489.4	489.7	490.1	490.4	490.6	490.8	490.9
147.5°	513.2	513.1	513.0	512.9	513.0	513.1	513.2	513.3	513.4	513.5	513.6
150°	527.7	527.6	527.5	527.4	527.5	527.6	527.7	527.9	527.9	527.9	527.9
152.5°	541.7	541.3	541.1	540.8	541.1	541.3	541.7	541.9	541.9	541.7	541.4
155°	560.6	560.2	559.7	559.3	559.7	560.2	560.6	561.1	561.1	560.6	560.2
157.5°	577.0	576.7	576.3	575.9	576.3	576.7	577.0	577.4	577.5	577.1	576.8
160°	587.0	586.4	585.9	585.4	585.9	586.4	587.0	587.5	587.6	587.3	587.0
162.5°	596.8	596.2	595.7	595.2	595.7	596.2	596.8	597.4	597.4	596.8	596.2
165°	609.2	608.8	608.4	608.0	608.4	608.8	609.2	609.7	609.6	608.9	608.3
167.5°	619.1	618.5	617.8	617.1	617.8	618.5	619.1	619.7	619.8	619.1	618.5
170°	624.5	623.7	622.9	622.2	622.9	623.7	624.5	625.3	625.3	624.7	624.0
172.5°	628.8	628.0	627.2	626.5	627.2	628.0	628.8	629.6	629.6	628.9	628.1
175°	633.4	632.6	631.8	631.0	631.8	632.6	633.4	634.0	634.0	633.4	632.6
177.5°	635.5	634.8	634.0	633.4	634.0	634.8	635.5	636.2	636.2	635.6	635.0
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



TEST NUMBER: P332635-935
 CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1373.6	1375.4	1383.0	1390.2	1398.8	1405.0	1409.2	1414.0	1424.0	1432.1	1439.7
5°	1286.9	1289.9	1305.3	1316.0	1334.5	1350.6	1363.0	1376.7	1392.8	1414.8	1435.0
7.5°	1210.6	1221.6	1238.5	1255.9	1274.7	1295.8	1314.1	1334.7	1362.4	1392.7	1423.8
10°	1167.3	1179.7	1197.6	1217.8	1235.7	1260.1	1282.7	1307.1	1338.6	1375.5	1412.5
12.5°	1123.9	1144.4	1158.0	1182.1	1201.4	1221.5	1245.5	1277.6	1314.3	1353.1	1397.7
15°	1069.6	1080.9	1107.1	1120.2	1147.5	1178.5	1202.3	1234.5	1270.1	1321.4	1371.4
17.5°	1007.0	1021.8	1042.7	1067.7	1099.2	1123.3	1153.0	1186.0	1231.1	1281.9	1344.5
20°	966.0	978.5	1004.1	1031.5	1064.8	1090.5	1122.0	1154.1	1200.6	1254.7	1320.2
22.5°	929.4	941.4	968.5	993.9	1026.2	1057.6	1090.5	1127.9	1172.4	1229.5	1296.4
25°	872.6	888.6	912.5	938.7	969.6	1005.3	1041.0	1074.4	1122.0	1182.1	1253.5
27.5°	822.3	835.1	852.4	882.1	917.2	951.7	987.2	1029.2	1074.9	1138.4	1212.5
30°	789.9	801.8	819.0	846.4	879.2	916.0	953.0	993.4	1041.0	1104.1	1179.7
32.5°	764.1	773.2	788.5	813.0	842.9	881.8	918.2	960.1	1010.0	1072.2	1145.9
35°	726.2	733.9	739.9	763.1	789.9	825.5	862.5	907.1	955.3	1014.3	1088.0
37.5°	688.9	691.6	700.3	715.4	741.4	774.3	808.6	852.5	901.9	961.7	1028.3
40°	666.1	667.3	672.6	686.9	709.5	740.5	773.8	817.3	864.3	920.8	986.9
42.5°	643.7	642.9	647.8	657.8	679.0	707.1	739.9	779.6	826.6	878.9	941.2
45°	608.3	608.3	607.1	615.4	632.7	660.1	687.5	725.6	764.8	816.1	868.4
47.5°	571.4	568.1	569.1	573.4	588.0	610.4	638.1	669.3	703.9	747.3	793.2
50°	547.6	542.9	541.1	545.8	558.9	578.5	604.8	632.1	664.9	702.9	742.3
52.5°	521.4	516.7	513.4	516.8	528.9	547.1	570.9	595.0	624.4	655.3	689.4
55°	481.0	475.6	473.8	475.0	483.9	498.2	518.4	540.4	562.5	588.1	611.9
57.5°	441.1	432.2	430.6	430.0	436.2	449.3	466.1	485.3	501.3	516.8	542.1
60°	414.8	404.2	400.5	400.0	404.8	415.4	430.9	450.0	461.3	472.0	494.0
62.5°	386.8	376.5	368.7	369.5	373.8	384.0	397.6	411.4	418.9	430.6	445.5
65°	343.5	330.4	324.4	322.6	325.0	333.3	344.1	352.9	361.3	366.1	380.3
67.5°	300.1	289.1	280.3	278.2	277.2	282.8	291.6	297.0	303.0	307.1	315.6
70°	269.7	260.1	249.4	245.8	245.2	249.9	258.3	258.9	267.3	269.1	277.9
72.5°	239.6	227.7	220.3	216.8	214.3	218.5	224.0	225.6	230.1	233.3	238.0
75°	192.9	183.9	176.8	171.4	169.6	172.0	172.0	175.0	178.0	179.8	185.1
77.5°	151.8	141.5	133.1	130.0	127.9	126.3	127.6	129.4	127.9	131.0	132.2
80°	123.2	112.5	106.0	104.8	101.2	98.2	97.6	99.4	97.0	98.2	101.8
82.5°	95.1	88.3	81.2	80.0	75.5	74.0	73.4	72.2	72.2	72.0	72.8
85°	56.6	52.3	47.6	44.6	42.9	39.9	39.9	38.7	37.5	36.3	36.9
87.5°	25.1	24.0	21.5	19.9	18.8	16.7	16.5	14.8	14.1	13.4	12.7
90°	11.5	10.8	9.9	9.0	8.2	7.3	6.3	5.1	3.9	2.7	1.5
92.5°	19.8	19.5	18.9	18.3	17.7	17.0	16.0	14.6	13.3	11.9	10.5
95°	37.6	37.3	36.6	35.8	35.0	34.3	33.4	32.4	31.4	30.5	29.4
97.5°	59.4	59.1	58.1	57.3	56.3	55.4	54.6	53.8	53.0	52.3	51.5
100°	75.3	75.2	74.1	73.2	72.2	71.2	70.5	70.1	69.7	69.2	68.7
102.5°	92.0	91.6	90.7	89.8	88.9	88.1	87.5	87.3	87.1	87.0	86.8
105°	117.2	116.8	116.4	116.0	115.5	115.1	114.9	114.8	114.6	114.5	114.4
107.5°	144.6	144.3	144.2	144.1	144.0	144.0	144.0	143.8	143.6	143.5	143.4
110°	163.3	163.5	163.7	163.8	163.8	163.9	163.9	163.7	163.5	163.2	163.1



TEST NUMBER: P332635-935

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	182.7	182.8	183.0	183.1	183.4	183.6	183.7	183.6	183.6	183.5	183.5
115°	213.0	213.1	213.4	213.5	213.8	214.0	214.1	214.1	214.1	214.1	214.1
117.5°	242.3	242.7	242.8	243.0	243.1	243.3	243.3	243.2	243.1	243.1	243.0
120°	262.2	262.7	263.0	263.4	263.7	264.1	264.0	263.6	263.1	262.7	262.3
122.5°	282.0	282.4	282.5	282.7	282.8	283.0	282.9	282.8	282.6	282.4	282.2
125°	311.1	311.3	311.4	311.6	311.7	311.8	311.9	311.9	311.9	311.9	311.9
127.5°	339.1	339.3	339.5	339.7	339.8	340.0	339.9	339.7	339.3	339.0	338.6
130°	358.8	359.0	359.0	359.0	359.0	359.0	358.8	358.5	358.2	357.8	357.5
132.5°	377.2	377.5	377.5	377.6	377.7	377.8	377.7	377.5	377.2	377.0	376.8
135°	404.9	405.1	405.1	405.1	405.1	405.1	404.8	404.2	403.5	402.9	402.2
137.5°	431.8	432.0	431.9	431.7	431.5	431.4	431.1	430.8	430.5	430.2	429.9
140°	449.2	449.4	449.4	449.4	449.4	449.4	449.2	449.0	448.8	448.6	448.3
142.5°	465.8	465.8	465.9	466.0	466.1	466.1	466.1	465.9	465.7	465.5	465.2
145°	490.9	491.0	490.9	490.9	490.8	490.6	490.3	489.9	489.5	489.0	488.6
147.5°	513.7	513.8	513.8	513.9	514.0	514.1	513.9	513.3	512.8	512.3	511.8
150°	527.9	527.9	527.9	527.9	527.9	527.9	527.7	527.3	526.8	526.4	525.9
152.5°	541.1	540.9	540.8	540.7	540.6	540.5	540.4	540.1	539.8	539.6	539.3
155°	559.7	559.3	559.5	559.6	559.6	559.7	559.8	559.8	559.8	559.8	559.8
157.5°	576.4	576.1	576.2	576.2	576.2	576.2	576.4	576.5	576.7	576.9	577.1
160°	586.7	586.3	586.4	586.6	586.7	586.8	586.9	587.0	587.1	587.2	587.3
162.5°	595.6	595.0	595.1	595.2	595.3	595.4	595.6	595.9	596.2	596.5	596.8
165°	607.6	607.0	607.2	607.4	607.6	607.9	608.1	608.5	608.7	609.1	609.4
167.5°	617.9	617.2	617.2	617.2	617.1	617.1	617.3	617.8	618.2	618.7	619.1
170°	623.4	622.7	622.6	622.4	622.3	622.2	622.4	623.0	623.5	624.1	624.7
172.5°	627.3	626.6	626.5	626.5	626.5	626.5	626.7	627.2	627.7	628.1	628.5
175°	631.8	631.0	631.1	631.3	631.4	631.5	631.8	632.3	632.9	633.4	634.0
177.5°	634.4	633.8	633.8	633.8	633.8	633.8	634.0	634.5	634.9	635.3	635.8
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



TEST NUMBER: P332635-935

CATALOG NUMBER: SA4XXDIP-C1020D590U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1446.4	1451.1	1457.3	1467.8	1471.6	1476.4	1483.1	1482.6	1484.5	1491.6	1506.8
5°	1451.7	1470.2	1488.1	1509.5	1532.1	1547.0	1567.2	1579.7	1592.2	1608.3	1635.6
7.5°	1453.9	1483.2	1515.9	1553.5	1587.0	1625.6	1655.6	1683.9	1709.6	1743.5	1776.2
10°	1450.5	1489.8	1532.1	1579.7	1630.3	1673.2	1711.8	1755.9	1793.4	1834.4	1871.4
12.5°	1444.3	1491.8	1548.3	1601.6	1660.8	1724.1	1772.3	1816.8	1866.7	1914.0	1970.9
15°	1430.3	1495.2	1561.3	1631.5	1710.6	1783.8	1853.5	1911.2	1964.8	2035.7	2110.1
17.5°	1412.5	1482.5	1565.7	1650.8	1733.5	1817.2	1903.4	1990.2	2057.8	2145.8	2204.0
20°	1395.8	1476.7	1562.5	1663.6	1746.4	1850.5	1936.2	2020.2	2113.0	2200.5	2270.1
22.5°	1372.4	1461.0	1552.0	1652.7	1761.6	1865.8	1964.8	2055.9	2148.7	2243.9	2328.2
25°	1342.8	1423.1	1530.9	1645.2	1753.5	1866.6	1980.3	2094.6	2194.5	2295.2	2373.7
27.5°	1292.4	1393.8	1494.1	1612.1	1732.4	1860.4	1981.9	2101.6	2206.3	2289.1	2337.8
30°	1266.6	1354.7	1463.6	1582.1	1712.4	1849.9	1976.7	2094.0	2191.6	2257.6	2277.3
32.5°	1228.6	1319.5	1426.0	1548.8	1686.7	1828.0	1960.1	2070.6	2152.1	2186.7	2163.0
35°	1172.0	1254.1	1361.8	1487.5	1630.9	1781.5	1911.9	2005.3	2046.9	2014.2	1932.7
37.5°	1104.1	1185.5	1293.7	1417.1	1565.6	1718.6	1836.5	1903.8	1889.9	1808.5	1687.0
40°	1056.5	1132.7	1235.7	1369.0	1513.6	1667.2	1770.7	1807.1	1769.0	1652.3	1523.2
42.5°	1003.7	1078.0	1181.4	1309.9	1463.2	1604.8	1695.1	1698.1	1634.2	1494.7	1365.0
45°	923.2	994.0	1091.7	1225.5	1367.2	1500.6	1560.0	1530.9	1413.1	1278.5	1148.1
47.5°	843.8	905.2	1001.4	1128.5	1263.1	1375.3	1404.8	1352.3	1226.8	1096.1	975.3
50°	785.7	847.6	938.1	1059.5	1189.2	1286.2	1300.5	1230.9	1107.7	976.1	881.5
52.5°	730.0	791.4	878.6	990.9	1109.7	1197.2	1197.7	1117.1	994.4	877.1	789.1
55°	648.2	703.5	782.1	882.7	988.7	1057.1	1040.4	957.1	850.6	748.8	672.0
57.5°	569.4	617.6	690.0	773.9	867.2	923.7	896.0	815.8	720.7	634.4	576.2
60°	518.4	564.3	626.2	705.3	783.9	827.9	801.8	729.1	641.6	572.0	521.4
62.5°	468.9	507.6	567.1	635.8	708.7	741.3	718.0	646.3	570.7	507.7	466.7
65°	398.8	430.3	477.9	536.9	589.9	617.9	598.2	531.5	473.8	428.5	395.8
67.5°	333.3	358.0	394.0	441.3	486.3	501.4	483.5	437.1	388.2	352.0	328.9
70°	288.1	311.3	341.6	378.0	417.2	433.3	415.4	378.6	338.7	305.3	282.8
72.5°	248.6	266.6	292.1	323.2	354.0	370.0	357.8	322.4	288.7	263.9	244.6
75°	189.2	204.7	222.6	244.6	268.5	279.1	268.5	244.0	220.8	202.3	188.6
77.5°	137.6	145.9	159.7	176.2	191.1	199.2	190.0	173.4	159.3	146.6	139.9
80°	104.8	110.7	120.2	133.4	143.4	151.2	145.3	131.6	120.2	111.9	108.9
82.5°	76.2	80.2	86.4	96.2	103.0	106.9	104.3	94.4	89.7	82.4	79.4
85°	37.5	39.9	44.1	47.0	53.0	53.6	54.2	50.0	45.8	44.1	41.7
87.5°	13.4	14.1	15.8	17.5	19.5	20.2	19.9	20.1	18.3	18.0	16.3
90°	2.7	3.9	5.1	6.3	7.3	8.2	9.0	9.9	10.8	11.5	12.1
92.5°	11.9	13.3	14.6	16.0	17.0	17.7	18.3	18.9	19.5	19.8	20.2
95°	30.5	31.4	32.4	33.4	34.3	35.0	35.8	36.6	37.3	37.6	38.0
97.5°	52.3	53.0	53.8	54.6	55.4	56.3	57.3	58.1	59.1	59.4	59.8
100°	69.2	69.7	70.1	70.5	71.2	72.2	73.2	74.1	75.2	75.3	75.6
102.5°	87.0	87.1	87.3	87.5	88.1	88.9	89.8	90.7	91.6	92.0	92.2
105°	114.5	114.6	114.8	114.9	115.1	115.5	116.0	116.4	116.8	117.2	117.5
107.5°	143.5	143.6	143.8	144.0	144.0	144.0	144.1	144.2	144.3	144.6	144.9
110°	163.2	163.5	163.7	163.9	163.9	163.8	163.8	163.7	163.5	163.3	163.1



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	183.5	183.6	183.6	183.7	183.6	183.4	183.1	183.0	182.8	182.7	182.7
115°	214.1	214.1	214.1	214.1	214.0	213.8	213.5	213.4	213.1	213.0	212.9
117.5°	243.1	243.1	243.2	243.3	243.3	243.1	243.0	242.8	242.7	242.3	241.9
120°	262.7	263.1	263.6	264.0	264.1	263.7	263.4	263.0	262.7	262.2	261.7
122.5°	282.4	282.6	282.8	282.9	283.0	282.8	282.7	282.5	282.4	282.0	281.6
125°	311.9	311.9	311.9	311.9	311.8	311.7	311.6	311.4	311.3	311.1	310.9
127.5°	339.0	339.3	339.7	339.9	340.0	339.8	339.7	339.5	339.3	339.1	338.9
130°	357.8	358.2	358.5	358.8	359.0	359.0	359.0	359.0	359.0	358.8	358.5
132.5°	377.0	377.2	377.5	377.7	377.8	377.7	377.6	377.5	377.5	377.2	377.0
135°	402.9	403.5	404.2	404.8	405.1	405.1	405.1	405.1	405.1	404.9	404.7
137.5°	430.2	430.5	430.8	431.1	431.4	431.5	431.7	431.9	432.0	431.8	431.4
140°	448.6	448.8	449.0	449.2	449.4	449.4	449.4	449.4	449.4	449.2	449.1
142.5°	465.5	465.7	465.9	466.1	466.1	466.1	466.0	465.9	465.8	465.8	465.8
145°	489.0	489.5	489.9	490.3	490.6	490.8	490.9	490.9	491.0	490.9	490.9
147.5°	512.3	512.8	513.3	513.9	514.1	514.0	513.9	513.8	513.8	513.7	513.6
150°	526.4	526.8	527.3	527.7	527.9	527.9	527.9	527.9	527.9	527.9	527.9
152.5°	539.6	539.8	540.1	540.4	540.5	540.6	540.7	540.8	540.9	541.1	541.4
155°	559.8	559.8	559.8	559.8	559.7	559.6	559.6	559.5	559.3	559.7	560.2
157.5°	576.9	576.7	576.5	576.4	576.2	576.2	576.2	576.2	576.1	576.4	576.8
160°	587.2	587.1	587.0	586.9	586.8	586.7	586.6	586.4	586.3	586.7	587.0
162.5°	596.5	596.2	595.9	595.6	595.4	595.3	595.2	595.1	595.0	595.6	596.2
165°	609.1	608.7	608.5	608.1	607.9	607.6	607.4	607.2	607.0	607.6	608.3
167.5°	618.7	618.2	617.8	617.3	617.1	617.1	617.2	617.2	617.2	617.9	618.5
170°	624.1	623.5	623.0	622.4	622.2	622.3	622.4	622.6	622.7	623.4	624.0
172.5°	628.1	627.7	627.2	626.7	626.5	626.5	626.5	626.5	626.6	627.3	628.1
175°	633.4	632.9	632.3	631.8	631.5	631.4	631.3	631.1	631.0	631.8	632.6
177.5°	635.3	634.9	634.5	634.0	633.8	633.8	633.8	633.8	633.8	634.4	635.0
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1514.5	1515.4	1519.7	1523.0	1524.0	1528.8	1529.2
5°	1647.5	1657.7	1677.3	1679.1	1682.0	1697.5	1685.7
7.5°	1803.5	1829.2	1846.3	1861.5	1867.0	1873.7	1872.3
10°	1903.5	1941.6	1960.7	1991.0	1992.2	1999.9	1995.2
12.5°	2004.0	2048.2	2083.0	2088.6	2114.1	2118.0	2124.7
15°	2146.3	2193.4	2241.6	2258.8	2294.0	2302.3	2315.4
17.5°	2280.2	2328.2	2362.1	2406.7	2421.1	2440.4	2427.2
20°	2353.5	2405.9	2448.7	2483.8	2498.7	2509.4	2508.3
22.5°	2397.8	2450.6	2485.4	2511.9	2525.8	2530.4	2530.1
25°	2425.5	2455.8	2466.6	2476.7	2461.3	2455.8	2458.2
27.5°	2348.4	2340.5	2312.6	2275.9	2237.7	2207.5	2191.1
30°	2242.2	2195.7	2153.4	2079.7	2041.6	2019.0	1998.7
32.5°	2091.7	2018.1	1936.8	1869.2	1825.9	1792.3	1787.3
35°	1833.8	1723.1	1623.8	1541.0	1498.1	1461.8	1453.5
37.5°	1559.1	1444.1	1354.6	1281.8	1235.7	1210.0	1186.1
40°	1376.7	1277.9	1189.8	1127.9	1092.8	1074.4	1059.5
42.5°	1236.2	1146.0	1058.4	1011.2	979.5	968.2	959.5
45°	1042.2	958.3	897.6	861.9	843.4	824.4	815.5
47.5°	886.8	818.6	778.5	748.2	728.4	717.1	711.4
50°	798.7	742.8	707.1	683.9	666.1	657.1	652.4
52.5°	720.7	674.8	644.7	626.3	614.2	607.6	605.7
55°	620.8	585.7	566.6	550.6	541.7	535.7	533.3
57.5°	539.6	512.6	497.1	483.9	480.4	475.4	473.8
60°	486.3	465.5	452.4	443.4	440.5	434.5	435.7
62.5°	439.1	422.1	411.0	405.8	401.9	396.9	398.6
65°	371.4	359.0	352.9	348.2	343.5	340.4	342.9
67.5°	311.7	303.1	295.0	292.2	289.9	289.4	286.9
70°	272.6	265.4	258.3	256.6	256.6	254.2	253.6
72.5°	235.0	229.7	225.0	223.7	221.8	222.7	220.2
75°	181.5	177.4	175.6	173.8	173.2	173.2	171.4
77.5°	134.1	131.0	128.2	128.2	126.1	125.3	125.0
80°	101.8	100.6	98.2	98.2	97.0	97.6	96.4
82.5°	76.5	74.9	74.4	73.4	71.8	71.9	70.7
85°	41.1	39.3	38.7	36.9	35.7	36.9	35.7
87.5°	16.9	16.5	16.1	15.2	14.7	14.8	13.4
90°	12.7	13.4	13.9	14.1	14.3	14.6	14.7
92.5°	20.7	21.0	21.3	21.4	21.5	21.7	21.8
95°	38.3	38.7	38.8	38.8	38.8	38.8	38.8
97.5°	60.2	60.6	60.8	60.8	60.8	60.8	60.8
100°	75.8	76.0	76.1	76.1	76.1	76.1	76.1
102.5°	92.6	92.8	93.1	93.2	93.2	93.3	93.4
105°	117.9	118.2	118.5	118.8	119.2	119.5	119.9
107.5°	145.2	145.5	145.7	145.6	145.6	145.6	145.6
110°	162.9	162.6	162.7	163.1	163.3	163.7	164.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	182.6	182.6	182.6	182.7	182.7	182.8	182.9
115°	212.8	212.7	212.6	212.5	212.3	212.2	212.2
117.5°	241.6	241.2	240.9	240.6	240.5	240.2	240.0
120°	261.1	260.5	260.4	260.6	260.8	261.1	261.2
122.5°	281.3	280.9	280.5	280.1	279.7	279.3	279.0
125°	310.6	310.5	310.2	310.0	309.8	309.6	309.4
127.5°	338.7	338.5	338.3	338.1	337.9	337.8	337.6
130°	358.3	358.1	357.7	357.3	356.9	356.5	356.0
132.5°	376.8	376.6	376.3	376.2	376.0	375.8	375.7
135°	404.5	404.2	404.0	403.6	403.3	403.0	402.7
137.5°	431.2	430.9	430.8	430.8	430.9	431.0	431.1
140°	449.0	448.9	448.8	448.7	448.6	448.5	448.3
142.5°	465.8	465.7	465.7	465.7	465.7	465.6	465.6
145°	490.8	490.6	490.4	490.1	489.7	489.4	489.1
147.5°	513.5	513.4	513.3	513.2	513.1	513.0	512.9
150°	527.9	527.9	527.9	527.7	527.6	527.5	527.4
152.5°	541.7	541.9	541.9	541.7	541.3	541.1	540.8
155°	560.6	561.1	561.1	560.6	560.2	559.7	559.3
157.5°	577.1	577.5	577.4	577.0	576.7	576.3	575.9
160°	587.3	587.6	587.5	587.0	586.4	585.9	585.4
162.5°	596.8	597.4	597.4	596.8	596.2	595.7	595.2
165°	608.9	609.6	609.7	609.2	608.8	608.4	608.0
167.5°	619.1	619.8	619.7	619.1	618.5	617.8	617.1
170°	624.7	625.3	625.3	624.5	623.7	622.9	622.2
172.5°	628.9	629.6	629.6	628.8	628.0	627.2	626.5
175°	633.4	634.0	634.0	633.4	632.6	631.8	631.0
177.5°	635.6	636.2	636.2	635.5	634.8	634.0	633.4
180°	635.0	635.0	635.0	635.0	635.0	635.0	635.0

(END OF REPORT)