

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: P332635-940

Luminaire Tested: **SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332635-940  
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-C1020D590U940-4F0-1E-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**

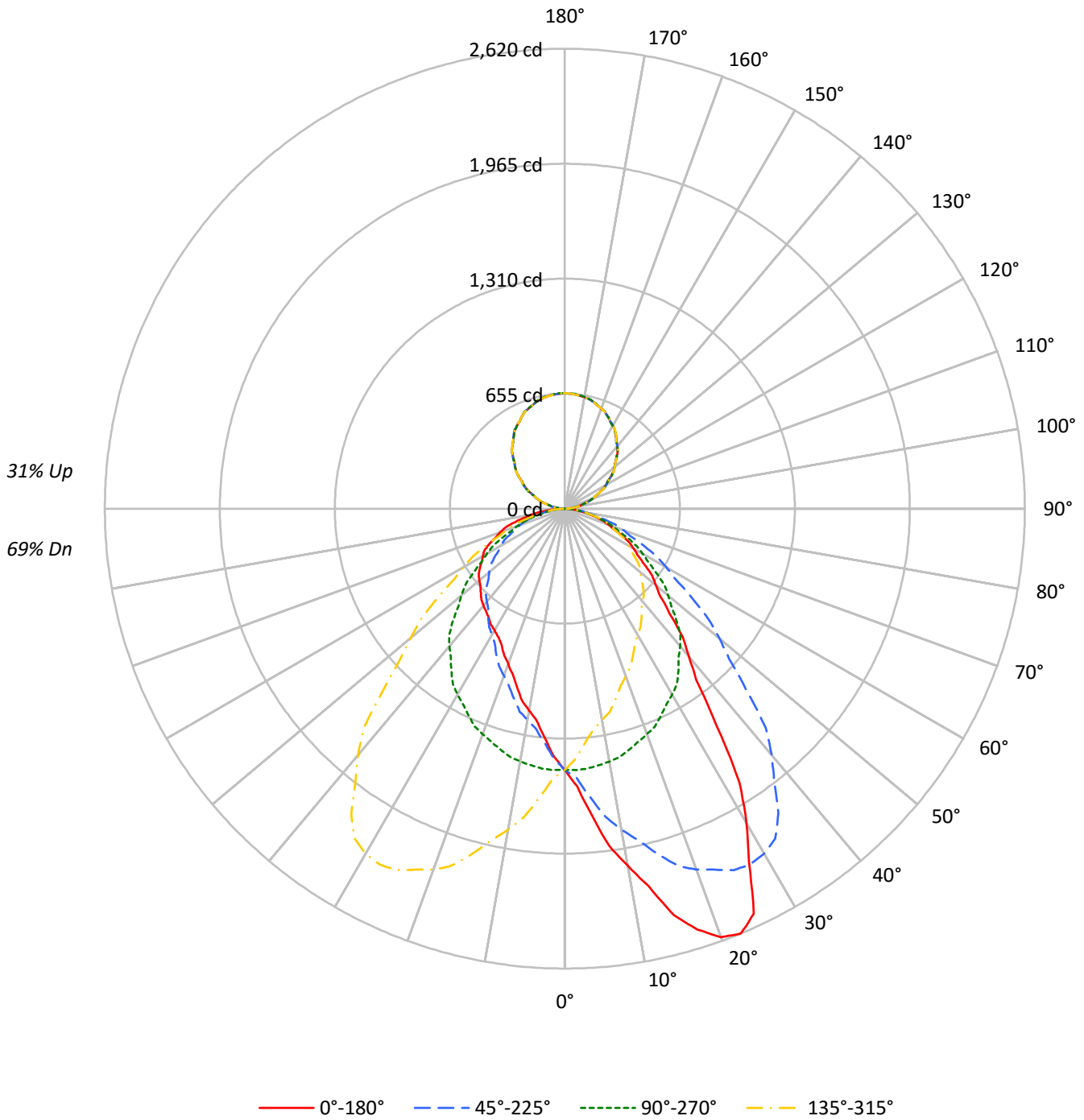
Lumens per Lamp: N/A  
Luminaire Lumens: 5932.1 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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°	12013	12013	12013	12013
5°	14148	12044	10631	12044
10°	16939	11992	9571	11992
15°	20042	11870	8790	11870
20°	22317	11747	8092	11747
25°	22678	11564	7611	11564
30°	19296	11389	7458	11389
35°	14836	11106	7460	11106
40°	11564	10771	7600	10771
45°	9642	10268	7728	10268
50°	8485	9654	7989	9654
55°	7773	8919	8313	8919
60°	7285	8262	8699	8262
65°	6783	7524	9020	7524
70°	6198	6793	9224	6793
75°	5536	5979	9114	5979
80°	4644	4900	8824	4900
85°	3427	3548	8448	3548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	2.4
10°-20°	446.9	7.5
20°-30°	708.6	11.9
30°-40°	788.6	13.3
40°-50°	717.8	12.1
50°-60°	586.6	9.9
60°-70°	418.8	7.1
70°-80°	230.6	3.9
80°-90°	64.9	1.1
90°-100°	43.4	0.7
100°-110°	128.5	2.2
110°-120°	218.1	3.7
120°-130°	287.6	4.8
130°-140°	322.9	5.4
140°-150°	317.3	5.3
150°-160°	266.9	4.5
160°-170°	177.6	3.0
170°-180°	62.2	1.0
0°-30°	1300.4	21.9
0°-40°	2089.0	35.2
0°-60°	3393.4	57.2
0°-90°	4107.7	69.2
90°-120°	389.9	6.6
90°-150°	1317.8	22.2
90°-180°	1824.0	30.7
0°-180°	5932.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1488	1488	1488	1488	1488	
5°	1746	1486	1312	1486	1746	178
15°	2398	1420	1052	1420	2398	678
25°	2546	1298	854	1298	2546	1122
35°	1505	1127	757	1127	1505	956
45°	844	899	677	899	844	665
55°	552	634	591	634	552	499
65°	355	394	472	394	355	352
75°	178	192	292	192	178	189
85°	37	38	91	38	37	45
90°	15	2	15	2	15	9
95°	40	30	40	30	40	42
105°	124	118	124	118	124	131
115°	220	222	220	222	220	217
125°	320	323	320	323	320	286
135°	417	416	417	416	417	322
145°	507	506	507	506	507	317
155°	579	580	579	580	579	267
165°	630	631	630	631	630	177
175°	654	657	654	657	654	62
180°	658	658	658	658	658	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1583.8	1583.3	1578.3	1577.3	1573.9	1569.5	1568.5	1560.6	1544.8	1537.4	1535.4
5°	1745.8	1758.1	1742.0	1739.0	1737.1	1716.8	1706.3	1694.0	1665.6	1649.0	1636.0
7.5°	1939.1	1940.5	1933.6	1927.9	1912.2	1894.4	1867.9	1839.5	1805.7	1770.6	1744.0
10°	2066.4	2071.3	2063.2	2062.0	2030.6	2010.8	1971.4	1938.1	1899.9	1857.3	1818.6
12.5°	2200.5	2193.5	2189.5	2163.1	2157.3	2121.3	2075.5	2041.2	1982.3	1933.3	1881.6
15°	2398.0	2384.4	2375.8	2339.4	2321.6	2271.6	2222.9	2185.3	2108.3	2034.9	1979.4
17.5°	2513.8	2527.5	2507.5	2492.5	2446.3	2411.3	2361.5	2282.6	2222.3	2131.2	2061.2
20°	2597.7	2598.9	2587.8	2572.4	2536.0	2491.7	2437.4	2351.1	2279.0	2188.3	2092.2
22.5°	2620.4	2620.6	2615.9	2601.5	2574.0	2538.0	2483.3	2411.3	2323.9	2225.4	2129.2
25°	2545.9	2543.4	2549.0	2565.0	2554.6	2543.4	2512.0	2458.4	2377.0	2272.8	2169.3
27.5°	2269.2	2286.3	2317.6	2357.1	2395.0	2424.0	2432.1	2421.2	2370.7	2285.0	2176.6
30°	2070.0	2091.0	2114.4	2153.8	2230.3	2274.0	2322.2	2358.5	2338.2	2269.8	2168.6
32.5°	1851.1	1856.3	1891.1	1935.9	2005.9	2090.1	2166.3	2240.2	2264.7	2228.8	2144.5
35°	1505.4	1513.9	1551.6	1596.0	1681.7	1784.6	1899.3	2001.6	2086.1	2120.0	2076.8
37.5°	1228.4	1253.2	1279.8	1327.5	1402.9	1495.6	1614.7	1747.1	1873.0	1957.3	1971.7
40°	1097.3	1112.7	1131.8	1168.1	1232.3	1323.5	1425.8	1577.5	1711.3	1832.1	1871.5
42.5°	993.7	1002.7	1014.4	1047.3	1096.2	1186.9	1280.3	1413.7	1548.0	1692.5	1758.6
45°	844.5	853.8	873.5	892.6	929.6	992.5	1079.4	1189.1	1324.1	1463.5	1585.5
47.5°	736.7	742.7	754.4	774.9	806.3	847.7	918.5	1010.1	1135.2	1270.5	1400.5
50°	675.6	680.6	689.8	708.3	732.4	769.3	827.2	912.9	1010.9	1147.2	1274.8
52.5°	627.3	629.3	636.1	648.6	667.7	698.8	746.4	817.3	908.4	1029.8	1156.9
55°	552.3	554.8	561.0	570.2	586.8	606.5	642.9	696.0	775.5	880.9	991.2
57.5°	490.7	492.4	497.6	501.1	514.9	530.9	558.8	596.7	657.0	746.4	844.9
60°	451.2	450.0	456.2	459.2	468.5	482.1	503.6	540.0	592.4	664.5	755.1
62.5°	412.8	411.1	416.3	420.3	425.6	437.2	454.8	483.3	525.8	591.0	669.3
65°	355.1	352.6	355.7	360.6	365.5	371.8	384.7	409.9	443.8	490.7	550.5
67.5°	297.1	299.7	300.2	302.6	305.5	313.9	322.8	340.6	364.5	402.1	452.7
70°	262.6	263.2	265.7	265.7	267.5	274.9	282.3	292.8	316.2	350.8	392.1
72.5°	228.1	230.7	229.7	231.7	233.0	237.9	243.3	253.3	273.3	299.0	333.9
75°	177.5	179.4	179.4	180.0	181.8	183.7	188.0	195.4	209.6	228.7	252.7
77.5°	129.5	129.7	130.5	132.8	132.8	135.7	138.9	144.9	151.9	165.0	179.6
80°	99.9	101.1	100.5	101.7	101.7	104.2	105.4	112.8	115.9	124.5	136.3
82.5°	73.2	74.5	74.4	76.1	77.0	77.6	79.3	82.2	85.3	92.9	97.7
85°	37.0	38.3	37.0	38.3	40.0	40.7	42.5	43.2	45.7	47.4	51.8
87.5°	13.9	15.3	15.2	15.7	16.7	17.1	17.5	16.9	18.6	19.0	20.8
90°	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6	11.9	11.1	10.3
92.5°	22.6	22.5	22.3	22.2	22.0	21.8	21.4	21.0	20.5	20.2	19.5
95°	40.2	40.2	40.2	40.2	40.2	40.0	39.7	39.3	39.0	38.6	37.9
97.5°	63.0	63.0	63.0	63.0	63.0	62.8	62.3	62.0	61.5	61.2	60.2
100°	78.8	78.8	78.8	78.8	78.8	78.7	78.5	78.3	78.0	77.8	76.8
102.5°	96.8	96.7	96.6	96.5	96.4	96.1	95.9	95.5	95.2	94.9	94.0
105°	124.1	123.8	123.4	123.1	122.7	122.4	122.1	121.7	121.4	121.0	120.6
107.5°	150.8	150.8	150.8	150.8	150.9	150.7	150.3	150.1	149.7	149.5	149.4
110°	169.9	169.5	169.2	168.9	168.5	168.4	168.7	168.9	169.2	169.3	169.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	189.4	189.3	189.2	189.2	189.1	189.1	189.1	189.2	189.2	189.3	189.5
115°	219.7	219.8	219.9	220.1	220.2	220.3	220.4	220.5	220.6	220.7	221.0
117.5°	248.6	248.8	249.1	249.2	249.5	249.8	250.2	250.6	250.9	251.4	251.5
120°	270.5	270.4	270.1	269.9	269.7	269.8	270.4	271.0	271.5	272.1	272.4
122.5°	288.9	289.3	289.7	290.1	290.5	290.9	291.3	291.7	292.0	292.5	292.6
125°	320.4	320.7	320.8	321.1	321.3	321.6	321.7	322.0	322.2	322.4	322.5
127.5°	349.6	349.8	350.0	350.2	350.4	350.5	350.8	351.0	351.2	351.4	351.6
130°	368.7	369.2	369.6	370.1	370.5	370.9	371.1	371.3	371.6	371.8	371.8
132.5°	389.1	389.2	389.4	389.6	389.8	390.0	390.2	390.5	390.7	390.9	391.0
135°	417.1	417.4	417.7	418.0	418.4	418.7	418.9	419.1	419.4	419.5	419.5
137.5°	446.5	446.4	446.3	446.2	446.1	446.3	446.6	446.8	447.2	447.5	447.3
140°	464.3	464.5	464.6	464.7	464.8	464.9	465.0	465.1	465.2	465.4	465.4
142.5°	482.2	482.2	482.3	482.3	482.3	482.3	482.4	482.4	482.4	482.4	482.5
145°	506.6	506.8	507.2	507.6	507.9	508.1	508.3	508.4	508.5	508.5	508.5
147.5°	531.2	531.3	531.4	531.5	531.6	531.7	531.8	531.9	532.0	532.1	532.2
150°	546.3	546.4	546.4	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	560.1	560.4	560.6	561.0	561.2	561.2	561.0	560.7	560.4	560.2	560.1
155°	579.3	579.7	580.1	580.6	581.1	581.1	580.6	580.1	579.7	579.3	579.4
157.5°	596.5	596.8	597.3	597.6	598.0	598.1	597.7	597.4	597.0	596.6	596.7
160°	606.3	606.8	607.3	608.0	608.5	608.6	608.2	608.0	607.6	607.3	607.3
162.5°	616.4	617.0	617.5	618.1	618.7	618.7	618.0	617.4	616.8	616.2	616.4
165°	629.6	630.1	630.5	631.0	631.4	631.3	630.6	630.0	629.3	628.7	628.8
167.5°	639.1	639.8	640.5	641.2	641.9	641.9	641.2	640.5	639.9	639.2	639.2
170°	644.4	645.2	646.0	646.8	647.6	647.6	646.9	646.2	645.6	644.9	644.8
172.5°	648.9	649.6	650.4	651.2	652.0	652.0	651.3	650.5	649.7	649.0	648.9
175°	653.5	654.3	655.1	655.9	656.7	656.7	655.9	655.1	654.3	653.5	653.6
177.5°	655.9	656.7	657.5	658.2	658.9	658.9	658.3	657.6	657.0	656.4	656.4
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1536.0	1529.0	1524.1	1520.2	1509.3	1502.9	1498.0	1491.0	1483.2	1474.8	1464.5
5°	1623.1	1602.1	1586.7	1563.3	1541.1	1522.6	1503.5	1486.2	1465.3	1442.5	1425.8
7.5°	1714.7	1683.6	1643.6	1608.9	1569.9	1536.1	1505.7	1474.6	1442.3	1411.0	1382.3
10°	1772.9	1732.9	1688.5	1636.0	1586.7	1542.9	1502.3	1462.9	1424.6	1386.3	1353.7
12.5°	1835.5	1785.6	1720.0	1658.8	1603.5	1545.0	1495.8	1447.5	1401.4	1361.2	1323.1
15°	1919.6	1847.4	1771.7	1689.7	1616.9	1548.5	1481.3	1420.3	1368.5	1315.5	1278.5
17.5°	1971.3	1882.0	1795.4	1709.7	1621.6	1535.3	1462.9	1392.4	1327.6	1275.0	1228.3
20°	2005.3	1916.6	1808.7	1723.0	1618.2	1529.4	1445.6	1367.3	1299.5	1243.4	1195.2
22.5°	2034.9	1932.3	1824.4	1711.6	1607.3	1513.1	1421.4	1342.6	1273.4	1214.2	1168.1
25°	2050.9	1933.1	1816.1	1703.9	1585.5	1473.9	1390.7	1298.2	1224.2	1162.0	1112.7
27.5°	2052.6	1926.7	1794.2	1669.6	1547.4	1443.5	1338.5	1255.8	1179.0	1113.2	1065.9
30°	2047.2	1915.9	1773.5	1638.5	1515.8	1403.0	1311.8	1221.8	1143.5	1078.2	1028.9
32.5°	2030.0	1893.2	1746.9	1604.0	1476.9	1366.5	1272.4	1186.8	1110.4	1046.1	994.3
35°	1980.0	1845.0	1689.1	1540.5	1410.4	1298.9	1213.8	1126.9	1050.4	989.4	939.5
37.5°	1902.0	1779.9	1621.4	1467.7	1339.9	1227.8	1143.5	1065.0	996.0	934.1	882.9
40°	1833.9	1726.6	1567.6	1417.8	1279.8	1173.1	1094.2	1022.1	953.7	895.1	846.4
42.5°	1755.5	1662.1	1515.4	1356.6	1223.5	1116.4	1039.5	974.7	910.3	856.1	807.4
45°	1615.7	1554.1	1415.9	1269.3	1130.6	1029.5	956.1	899.4	845.2	792.1	751.4
47.5°	1454.9	1424.3	1308.1	1168.8	1037.1	937.5	873.9	821.4	773.9	729.0	693.1
50°	1346.9	1332.1	1231.6	1097.3	971.5	877.8	813.7	768.7	728.0	688.6	654.7
52.5°	1240.4	1239.9	1149.3	1026.3	909.9	819.7	756.0	714.0	678.7	646.7	616.2
55°	1077.5	1094.8	1024.0	914.2	810.0	728.6	671.3	633.7	609.0	582.6	559.7
57.5°	928.0	956.6	898.1	801.5	714.6	639.6	589.7	561.4	535.2	519.2	502.6
60°	830.4	857.5	811.9	730.5	648.5	584.4	536.9	511.7	488.8	477.8	466.0
62.5°	743.6	767.8	734.0	658.5	587.4	525.7	485.6	461.4	445.9	433.8	426.1
65°	619.6	639.9	610.9	556.1	495.0	445.7	413.0	393.9	379.2	374.2	365.5
67.5°	500.8	519.3	503.6	457.0	408.0	370.8	345.2	326.8	318.1	313.8	307.6
70°	430.3	448.8	432.1	391.5	353.8	322.4	298.4	287.8	278.7	276.8	268.1
72.5°	370.6	383.2	366.6	334.7	302.6	276.1	257.4	246.5	241.7	238.4	233.6
75°	278.0	289.1	278.0	253.3	230.5	212.0	196.0	191.7	186.2	184.3	181.2
77.5°	196.8	206.3	197.9	182.4	165.4	151.1	142.5	137.0	135.7	132.5	134.0
80°	150.4	156.6	148.6	138.1	124.5	114.7	108.5	105.4	101.7	100.5	102.9
82.5°	108.0	110.8	106.6	99.6	89.5	83.1	78.9	75.3	74.5	74.8	74.8
85°	56.1	55.5	54.8	48.7	45.7	41.3	38.9	38.3	37.6	38.9	40.0
87.5°	20.6	21.0	20.2	18.1	16.3	14.6	13.9	13.1	13.9	14.6	15.3
90°	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5	2.8	4.0	5.3
92.5°	18.9	18.3	17.6	16.6	15.2	13.7	12.3	10.9	12.3	13.7	15.2
95°	37.1	36.3	35.5	34.6	33.5	32.5	31.6	30.5	31.6	32.5	33.5
97.5°	59.3	58.3	57.4	56.5	55.7	54.9	54.1	53.3	54.1	54.9	55.7
100°	75.8	74.7	73.7	73.0	72.6	72.1	71.7	71.2	71.7	72.1	72.6
102.5°	93.0	92.1	91.2	90.6	90.4	90.2	90.1	89.9	90.1	90.2	90.4
105°	120.1	119.7	119.2	119.0	118.9	118.7	118.6	118.5	118.6	118.7	118.9
107.5°	149.3	149.2	149.2	149.1	148.9	148.7	148.6	148.5	148.6	148.7	148.9
110°	169.6	169.7	169.8	169.8	169.5	169.3	169.1	168.9	169.1	169.3	169.5





TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	189.7	189.9	190.1	190.2	190.1	190.1	190.0	190.0	190.0	190.1	190.1
115°	221.1	221.4	221.6	221.8	221.8	221.8	221.8	221.8	221.8	221.8	221.8
117.5°	251.6	251.8	252.0	252.0	251.9	251.8	251.7	251.6	251.7	251.8	251.9
120°	272.8	273.1	273.5	273.4	273.0	272.5	272.1	271.6	272.1	272.5	273.0
122.5°	292.7	292.9	293.1	293.0	292.8	292.7	292.5	292.3	292.5	292.7	292.8
125°	322.7	322.8	322.9	323.0	323.0	323.0	323.0	323.0	323.0	323.0	323.0
127.5°	351.8	352.0	352.1	352.0	351.8	351.4	351.1	350.7	351.1	351.4	351.8
130°	371.8	371.8	371.8	371.6	371.3	371.0	370.6	370.2	370.6	371.0	371.3
132.5°	391.1	391.2	391.3	391.2	390.9	390.7	390.5	390.2	390.5	390.7	390.9
135°	419.5	419.5	419.5	419.3	418.6	417.9	417.2	416.5	417.2	417.9	418.6
137.5°	447.1	446.9	446.7	446.5	446.1	445.9	445.5	445.2	445.5	445.9	446.1
140°	465.4	465.4	465.4	465.2	465.0	464.8	464.6	464.3	464.6	464.8	465.0
142.5°	482.6	482.7	482.8	482.8	482.5	482.3	482.1	481.8	482.1	482.3	482.5
145°	508.4	508.3	508.1	507.8	507.4	506.9	506.5	506.0	506.5	506.9	507.4
147.5°	532.3	532.4	532.4	532.3	531.6	531.1	530.6	530.0	530.6	531.1	531.6
150°	546.7	546.7	546.7	546.5	546.1	545.6	545.2	544.7	545.2	545.6	546.1
152.5°	560.0	559.9	559.8	559.6	559.4	559.1	558.8	558.6	558.8	559.1	559.4
155°	579.5	579.6	579.7	579.8	579.8	579.8	579.8	579.8	579.8	579.8	579.8
157.5°	596.7	596.7	596.7	596.9	597.1	597.3	597.4	597.7	597.4	597.3	597.1
160°	607.5	607.6	607.7	607.8	608.0	608.1	608.1	608.2	608.1	608.1	608.0
162.5°	616.4	616.5	616.6	616.9	617.2	617.4	617.8	618.0	617.8	617.4	617.2
165°	629.1	629.3	629.5	629.8	630.2	630.4	630.8	631.2	630.8	630.4	630.2
167.5°	639.2	639.1	639.1	639.4	639.8	640.2	640.8	641.2	640.8	640.2	639.8
170°	644.6	644.5	644.4	644.6	645.2	645.8	646.4	646.9	646.4	645.8	645.2
172.5°	648.9	648.9	648.9	649.1	649.6	650.1	650.5	650.9	650.5	650.1	649.6
175°	653.8	653.9	654.0	654.3	654.9	655.5	656.0	656.6	656.0	655.5	654.9
177.5°	656.4	656.4	656.4	656.6	657.1	657.5	658.0	658.4	658.0	657.5	657.1
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1459.5	1455.1	1448.7	1439.8	1432.4	1424.5	1422.5	1419.5	1425.5	1420.5	1419.1
5°	1411.7	1398.7	1382.1	1363.0	1351.8	1335.9	1332.8	1326.6	1320.4	1319.8	1313.7
7.5°	1361.0	1342.0	1320.2	1300.7	1282.7	1265.2	1253.7	1251.2	1242.2	1236.8	1230.7
10°	1328.5	1305.0	1279.8	1261.2	1240.3	1221.8	1208.9	1201.5	1195.2	1188.5	1182.3
12.5°	1289.9	1265.1	1244.2	1224.2	1199.4	1185.3	1164.0	1151.1	1150.0	1150.0	1134.0
15°	1245.2	1220.6	1188.5	1160.1	1146.6	1119.5	1107.8	1093.0	1083.7	1074.4	1067.1
17.5°	1194.1	1163.3	1138.4	1105.8	1079.9	1058.3	1042.9	1034.0	1020.1	1007.0	997.6
20°	1162.0	1129.4	1102.8	1068.3	1039.9	1013.4	1000.5	988.2	977.7	966.6	956.1
22.5°	1129.4	1095.3	1062.8	1029.3	1003.0	975.0	962.5	945.7	935.8	929.6	919.1
25°	1078.2	1041.2	1004.2	972.1	945.0	920.3	903.7	890.7	879.7	874.8	868.0
27.5°	1022.4	985.7	949.9	913.6	882.8	864.9	851.6	841.8	835.4	828.8	825.8
30°	986.9	948.7	910.5	876.6	848.2	830.4	818.1	811.3	806.3	803.3	800.1
32.5°	950.9	913.2	873.0	842.0	816.6	800.8	791.4	784.6	782.1	781.0	779.9
35°	893.2	855.0	818.1	790.3	766.2	760.1	752.1	748.3	747.2	751.4	753.3
37.5°	837.4	801.9	767.9	740.9	725.2	716.2	713.5	713.6	718.0	721.8	726.3
40°	801.4	766.9	734.8	711.4	696.6	691.1	689.8	692.9	697.9	702.1	707.0
42.5°	766.3	732.4	703.2	681.3	670.9	665.8	666.6	669.7	676.6	681.9	689.3
45°	712.0	683.7	655.3	637.4	628.7	630.0	630.0	635.5	642.3	650.3	658.4
47.5°	660.8	632.2	608.9	593.9	589.4	588.4	591.8	599.1	608.8	618.7	629.9
50°	626.3	599.1	578.8	565.3	560.4	562.2	567.1	573.9	585.6	598.0	609.7
52.5°	591.3	566.6	547.8	535.2	531.7	535.1	540.0	550.7	561.0	574.3	588.4
55°	536.9	515.9	501.1	492.0	490.7	492.6	498.1	509.8	524.6	541.3	554.8
57.5°	482.8	465.3	451.7	445.3	445.9	447.6	456.8	470.7	486.5	504.3	521.7
60°	446.3	430.3	419.2	414.3	414.8	418.6	429.6	442.6	462.4	479.6	498.1
62.5°	411.8	397.7	387.1	382.7	381.8	389.9	400.6	414.0	433.7	453.0	473.0
65°	356.3	345.2	336.6	334.1	336.0	342.1	355.7	373.5	390.2	410.5	431.5
67.5°	302.0	292.9	287.0	288.1	290.3	299.4	310.9	326.2	345.1	366.1	386.9
70°	267.5	258.9	254.0	254.6	258.3	269.4	279.3	294.6	315.0	336.6	353.8
72.5°	232.0	226.3	221.9	224.5	228.2	235.9	248.2	263.6	281.5	301.6	319.8
75°	178.2	178.2	175.7	177.5	183.1	190.5	199.7	215.8	233.6	249.7	264.5
77.5°	132.2	130.8	132.4	134.6	137.9	146.6	157.2	168.6	182.1	198.1	210.4
80°	101.1	101.7	104.8	108.5	109.8	116.5	127.6	138.1	148.6	162.1	173.8
82.5°	76.0	76.6	78.2	82.8	84.1	91.4	98.5	109.0	118.5	127.6	137.3
85°	41.3	41.3	44.4	46.2	49.3	54.2	58.6	64.7	73.4	79.5	88.7
87.5°	17.1	17.3	19.4	20.6	22.3	24.9	26.0	31.6	33.7	36.3	40.8
90°	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6	13.2	13.9	14.4
92.5°	16.6	17.6	18.3	18.9	19.5	20.2	20.5	21.0	21.4	21.8	22.0
95°	34.6	35.5	36.3	37.1	37.9	38.6	39.0	39.3	39.7	40.0	40.2
97.5°	56.5	57.4	58.3	59.3	60.2	61.2	61.5	62.0	62.3	62.8	63.0
100°	73.0	73.7	74.7	75.8	76.8	77.8	78.0	78.3	78.5	78.7	78.8
102.5°	90.6	91.2	92.1	93.0	94.0	94.9	95.2	95.5	95.9	96.1	96.4
105°	119.0	119.2	119.7	120.1	120.6	121.0	121.4	121.7	122.1	122.4	122.7
107.5°	149.1	149.2	149.2	149.3	149.4	149.5	149.7	150.1	150.3	150.7	150.9
110°	169.8	169.8	169.7	169.6	169.5	169.3	169.2	168.9	168.7	168.4	168.5



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	190.2	190.1	189.9	189.7	189.5	189.3	189.2	189.2	189.1	189.1	189.1
115°	221.8	221.6	221.4	221.1	221.0	220.7	220.6	220.5	220.4	220.3	220.2
117.5°	252.0	252.0	251.8	251.6	251.5	251.4	250.9	250.6	250.2	249.8	249.5
120°	273.4	273.5	273.1	272.8	272.4	272.1	271.5	271.0	270.4	269.8	269.7
122.5°	293.0	293.1	292.9	292.7	292.6	292.5	292.0	291.7	291.3	290.9	290.5
125°	323.0	322.9	322.8	322.7	322.5	322.4	322.2	322.0	321.7	321.6	321.3
127.5°	352.0	352.1	352.0	351.8	351.6	351.4	351.2	351.0	350.8	350.5	350.4
130°	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3	371.1	370.9	370.5
132.5°	391.2	391.3	391.2	391.1	391.0	390.9	390.7	390.5	390.2	390.0	389.8
135°	419.3	419.5	419.5	419.5	419.5	419.5	419.4	419.1	418.9	418.7	418.4
137.5°	446.5	446.7	446.9	447.1	447.3	447.5	447.2	446.8	446.6	446.3	446.1
140°	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.1	465.0	464.9	464.8
142.5°	482.8	482.8	482.7	482.6	482.5	482.4	482.4	482.4	482.4	482.3	482.3
145°	507.8	508.1	508.3	508.4	508.5	508.5	508.5	508.4	508.3	508.1	507.9
147.5°	532.3	532.4	532.4	532.3	532.2	532.1	532.0	531.9	531.8	531.7	531.6
150°	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	559.6	559.8	559.9	560.0	560.1	560.2	560.4	560.7	561.0	561.2	561.2
155°	579.8	579.7	579.6	579.5	579.4	579.3	579.7	580.1	580.6	581.1	581.1
157.5°	596.9	596.7	596.7	596.7	596.7	596.6	597.0	597.4	597.7	598.1	598.0
160°	607.8	607.7	607.6	607.5	607.3	607.3	607.6	608.0	608.2	608.6	608.5
162.5°	616.9	616.6	616.5	616.4	616.4	616.2	616.8	617.4	618.0	618.7	618.7
165°	629.8	629.5	629.3	629.1	628.8	628.7	629.3	630.0	630.6	631.3	631.4
167.5°	639.4	639.1	639.1	639.2	639.2	639.2	639.9	640.5	641.2	641.9	641.9
170°	644.6	644.4	644.5	644.6	644.8	644.9	645.6	646.2	646.9	647.6	647.6
172.5°	649.1	648.9	648.9	648.9	648.9	649.0	649.7	650.5	651.3	652.0	652.0
175°	654.3	654.0	653.9	653.8	653.6	653.5	654.3	655.1	655.9	656.7	656.7
177.5°	656.6	656.4	656.4	656.4	656.4	656.4	657.0	657.6	658.3	658.9	658.9
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1418.1	1417.1	1413.6	1413.2	1413.6	1417.1	1418.1	1419.1	1420.5	1425.5	1419.5
5°	1309.9	1306.9	1305.0	1311.8	1305.0	1306.9	1309.9	1313.7	1319.8	1320.4	1326.6
7.5°	1228.4	1226.0	1220.6	1218.9	1220.6	1226.0	1228.4	1230.7	1236.8	1242.2	1251.2
10°	1176.2	1173.7	1168.8	1167.5	1168.8	1173.7	1176.2	1182.3	1188.5	1195.2	1201.5
12.5°	1125.9	1121.0	1120.0	1121.1	1120.0	1121.0	1125.9	1134.0	1150.0	1150.0	1151.1
15°	1059.1	1056.6	1049.8	1051.7	1049.8	1056.6	1059.1	1067.1	1074.4	1083.7	1093.0
17.5°	993.2	990.2	982.0	989.3	982.0	990.2	993.2	997.6	1007.0	1020.1	1034.0
20°	951.8	946.8	942.5	941.9	942.5	946.8	951.8	956.1	966.6	977.7	988.2
22.5°	912.3	907.9	907.5	903.5	907.5	907.9	912.3	919.1	929.6	935.8	945.7
25°	863.0	858.7	857.5	854.4	857.5	858.7	863.0	868.0	874.8	879.7	890.7
27.5°	825.2	823.0	820.8	821.8	820.8	823.0	825.2	825.8	828.8	835.4	841.8
30°	802.0	801.4	800.1	800.1	800.1	801.4	802.0	800.1	803.3	806.3	811.3
32.5°	782.7	782.7	783.4	783.4	783.4	782.7	782.7	779.9	781.0	782.1	784.6
35°	755.7	757.6	758.8	757.0	758.8	757.6	755.7	753.3	751.4	747.2	748.3
37.5°	731.4	733.2	734.9	737.0	734.9	733.2	731.4	726.3	721.8	718.0	713.6
40°	712.6	716.9	718.2	721.2	718.2	716.9	712.6	707.0	702.1	697.9	692.9
42.5°	694.8	699.6	702.8	703.5	702.8	699.6	694.8	689.3	681.9	676.6	669.7
45°	667.6	672.5	676.9	676.9	676.9	672.5	667.6	658.4	650.3	642.3	635.5
47.5°	639.4	646.5	650.9	651.9	650.9	646.5	639.4	629.9	618.7	608.8	599.1
50°	620.2	628.7	633.1	636.1	633.1	628.7	620.2	609.7	598.0	585.6	573.9
52.5°	601.4	610.0	615.8	617.4	615.8	610.0	601.4	588.4	574.3	561.0	550.7
55°	569.0	581.3	588.1	590.6	588.1	581.3	569.0	554.8	541.3	524.6	509.8
57.5°	538.4	549.7	557.7	559.5	557.7	549.7	538.4	521.7	504.3	486.5	470.7
60°	514.7	527.1	536.9	538.8	536.9	527.1	514.7	498.1	479.6	462.4	442.6
62.5°	490.5	503.4	512.3	517.1	512.3	503.4	490.5	473.0	453.0	433.7	414.0
65°	448.8	461.7	470.4	472.2	470.4	461.7	448.8	431.5	410.5	390.2	373.5
67.5°	403.1	416.1	421.8	425.3	421.8	416.1	403.1	386.9	366.1	345.1	326.2
70°	371.1	381.6	387.7	390.8	387.7	381.6	371.1	353.8	336.6	315.0	294.6
72.5°	334.6	345.5	352.8	353.4	352.8	345.5	334.6	319.8	301.6	281.5	263.6
75°	278.7	288.5	292.2	292.2	292.2	288.5	278.7	264.5	249.7	233.6	215.8
77.5°	220.5	225.6	230.3	231.3	230.3	225.6	220.5	210.4	198.1	182.1	168.6
80°	183.1	186.2	189.8	189.8	189.8	186.2	183.1	173.8	162.1	148.6	138.1
82.5°	144.6	147.2	150.9	150.4	150.9	147.2	144.6	137.3	127.6	118.5	109.0
85°	87.6	93.1	92.5	91.2	92.5	93.1	87.6	88.7	79.5	73.4	64.7
87.5°	42.4	42.9	44.4	45.5	44.4	42.9	42.4	40.8	36.3	33.7	31.6
90°	14.6	14.8	15.1	15.2	15.1	14.8	14.6	14.4	13.9	13.2	12.6
92.5°	22.2	22.3	22.5	22.6	22.5	22.3	22.2	22.0	21.8	21.4	21.0
95°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.0	39.7	39.3
97.5°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	62.8	62.3	62.0
100°	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.7	78.5	78.3
102.5°	96.5	96.6	96.7	96.8	96.7	96.6	96.5	96.4	96.1	95.9	95.5
105°	123.1	123.4	123.8	124.1	123.8	123.4	123.1	122.7	122.4	122.1	121.7
107.5°	150.8	150.8	150.8	150.8	150.8	150.8	150.8	150.9	150.7	150.3	150.1
110°	168.9	169.2	169.5	169.9	169.5	169.2	168.9	168.5	168.4	168.7	168.9



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	189.2	189.2	189.3	189.4	189.3	189.2	189.2	189.1	189.1	189.1	189.2
115°	220.1	219.9	219.8	219.7	219.8	219.9	220.1	220.2	220.3	220.4	220.5
117.5°	249.2	249.1	248.8	248.6	248.8	249.1	249.2	249.5	249.8	250.2	250.6
120°	269.9	270.1	270.4	270.5	270.4	270.1	269.9	269.7	269.8	270.4	271.0
122.5°	290.1	289.7	289.3	288.9	289.3	289.7	290.1	290.5	290.9	291.3	291.7
125°	321.1	320.8	320.7	320.4	320.7	320.8	321.1	321.3	321.6	321.7	322.0
127.5°	350.2	350.0	349.8	349.6	349.8	350.0	350.2	350.4	350.5	350.8	351.0
130°	370.1	369.6	369.2	368.7	369.2	369.6	370.1	370.5	370.9	371.1	371.3
132.5°	389.6	389.4	389.2	389.1	389.2	389.4	389.6	389.8	390.0	390.2	390.5
135°	418.0	417.7	417.4	417.1	417.4	417.7	418.0	418.4	418.7	418.9	419.1
137.5°	446.2	446.3	446.4	446.5	446.4	446.3	446.2	446.1	446.3	446.6	446.8
140°	464.7	464.6	464.5	464.3	464.5	464.6	464.7	464.8	464.9	465.0	465.1
142.5°	482.3	482.3	482.2	482.2	482.2	482.3	482.3	482.3	482.3	482.4	482.4
145°	507.6	507.2	506.8	506.6	506.8	507.2	507.6	507.9	508.1	508.3	508.4
147.5°	531.5	531.4	531.3	531.2	531.3	531.4	531.5	531.6	531.7	531.8	531.9
150°	546.5	546.4	546.4	546.3	546.4	546.4	546.5	546.7	546.7	546.7	546.7
152.5°	561.0	560.6	560.4	560.1	560.4	560.6	561.0	561.2	561.2	561.0	560.7
155°	580.6	580.1	579.7	579.3	579.7	580.1	580.6	581.1	581.1	580.6	580.1
157.5°	597.6	597.3	596.8	596.5	596.8	597.3	597.6	598.0	598.1	597.7	597.4
160°	608.0	607.3	606.8	606.3	606.8	607.3	608.0	608.5	608.6	608.2	608.0
162.5°	618.1	617.5	617.0	616.4	617.0	617.5	618.1	618.7	618.7	618.0	617.4
165°	631.0	630.5	630.1	629.6	630.1	630.5	631.0	631.4	631.3	630.6	630.0
167.5°	641.2	640.5	639.8	639.1	639.8	640.5	641.2	641.9	641.9	641.2	640.5
170°	646.8	646.0	645.2	644.4	645.2	646.0	646.8	647.6	647.6	646.9	646.2
172.5°	651.2	650.4	649.6	648.9	649.6	650.4	651.2	652.0	652.0	651.3	650.5
175°	655.9	655.1	654.3	653.5	654.3	655.1	655.9	656.7	656.7	655.9	655.1
177.5°	658.2	657.5	656.7	655.9	656.7	657.5	658.2	658.9	658.9	658.3	657.6
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1422.5	1424.5	1432.4	1439.8	1448.7	1455.1	1459.5	1464.5	1474.8	1483.2	1491.0
5°	1332.8	1335.9	1351.8	1363.0	1382.1	1398.7	1411.7	1425.8	1442.5	1465.3	1486.2
7.5°	1253.7	1265.2	1282.7	1300.7	1320.2	1342.0	1361.0	1382.3	1411.0	1442.3	1474.6
10°	1208.9	1221.8	1240.3	1261.2	1279.8	1305.0	1328.5	1353.7	1386.3	1424.6	1462.9
12.5°	1164.0	1185.3	1199.4	1224.2	1244.2	1265.1	1289.9	1323.1	1361.2	1401.4	1447.5
15°	1107.8	1119.5	1146.6	1160.1	1188.5	1220.6	1245.2	1278.5	1315.5	1368.5	1420.3
17.5°	1042.9	1058.3	1079.9	1105.8	1138.4	1163.3	1194.1	1228.3	1275.0	1327.6	1392.4
20°	1000.5	1013.4	1039.9	1068.3	1102.8	1129.4	1162.0	1195.2	1243.4	1299.5	1367.3
22.5°	962.5	975.0	1003.0	1029.3	1062.8	1095.3	1129.4	1168.1	1214.2	1273.4	1342.6
25°	903.7	920.3	945.0	972.1	1004.2	1041.2	1078.2	1112.7	1162.0	1224.2	1298.2
27.5°	851.6	864.9	882.8	913.6	949.9	985.7	1022.4	1065.9	1113.2	1179.0	1255.8
30°	818.1	830.4	848.2	876.6	910.5	948.7	986.9	1028.9	1078.2	1143.5	1221.8
32.5°	791.4	800.8	816.6	842.0	873.0	913.2	950.9	994.3	1046.1	1110.4	1186.8
35°	752.1	760.1	766.2	790.3	818.1	855.0	893.2	939.5	989.4	1050.4	1126.9
37.5°	713.5	716.2	725.2	740.9	767.9	801.9	837.4	882.9	934.1	996.0	1065.0
40°	689.8	691.1	696.6	711.4	734.8	766.9	801.4	846.4	895.1	953.7	1022.1
42.5°	666.6	665.8	670.9	681.3	703.2	732.4	766.3	807.4	856.1	910.3	974.7
45°	630.0	630.0	628.7	637.4	655.3	683.7	712.0	751.4	792.1	845.2	899.4
47.5°	591.8	588.4	589.4	593.9	608.9	632.2	660.8	693.1	729.0	773.9	821.4
50°	567.1	562.2	560.4	565.3	578.8	599.1	626.3	654.7	688.6	728.0	768.7
52.5°	540.0	535.1	531.7	535.2	547.8	566.6	591.3	616.2	646.7	678.7	714.0
55°	498.1	492.6	490.7	492.0	501.1	515.9	536.9	559.7	582.6	609.0	633.7
57.5°	456.8	447.6	445.9	445.3	451.7	465.3	482.8	502.6	519.2	535.2	561.4
60°	429.6	418.6	414.8	414.3	419.2	430.3	446.3	466.0	477.8	488.8	511.7
62.5°	400.6	389.9	381.8	382.7	387.1	397.7	411.8	426.1	433.8	445.9	461.4
65°	355.7	342.1	336.0	334.1	336.6	345.2	356.3	365.5	374.2	379.2	393.9
67.5°	310.9	299.4	290.3	288.1	287.0	292.9	302.0	307.6	313.8	318.1	326.8
70°	279.3	269.4	258.3	254.6	254.0	258.9	267.5	268.1	276.8	278.7	287.8
72.5°	248.2	235.9	228.2	224.5	221.9	226.3	232.0	233.6	238.4	241.7	246.5
75°	199.7	190.5	183.1	177.5	175.7	178.2	178.2	181.2	184.3	186.2	191.7
77.5°	157.2	146.6	137.9	134.6	132.4	130.8	132.2	134.0	132.5	135.7	137.0
80°	127.6	116.5	109.8	108.5	104.8	101.7	101.1	102.9	100.5	101.7	105.4
82.5°	98.5	91.4	84.1	82.8	78.2	76.6	76.0	74.8	74.8	74.5	75.3
85°	58.6	54.2	49.3	46.2	44.4	41.3	41.3	40.0	38.9	37.6	38.3
87.5°	26.0	24.9	22.3	20.6	19.4	17.3	17.1	15.3	14.6	13.9	13.1
90°	11.9	11.1	10.3	9.4	8.5	7.6	6.5	5.3	4.0	2.8	1.5
92.5°	20.5	20.2	19.5	18.9	18.3	17.6	16.6	15.2	13.7	12.3	10.9
95°	39.0	38.6	37.9	37.1	36.3	35.5	34.6	33.5	32.5	31.6	30.5
97.5°	61.5	61.2	60.2	59.3	58.3	57.4	56.5	55.7	54.9	54.1	53.3
100°	78.0	77.8	76.8	75.8	74.7	73.7	73.0	72.6	72.1	71.7	71.2
102.5°	95.2	94.9	94.0	93.0	92.1	91.2	90.6	90.4	90.2	90.1	89.9
105°	121.4	121.0	120.6	120.1	119.7	119.2	119.0	118.9	118.7	118.6	118.5
107.5°	149.7	149.5	149.4	149.3	149.2	149.2	149.1	148.9	148.7	148.6	148.5
110°	169.2	169.3	169.5	169.6	169.7	169.8	169.8	169.5	169.3	169.1	168.9



TEST NUMBER: P332635-940

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	189.2	189.3	189.5	189.7	189.9	190.1	190.2	190.1	190.1	190.0	190.0
115°	220.6	220.7	221.0	221.1	221.4	221.6	221.8	221.8	221.8	221.8	221.8
117.5°	250.9	251.4	251.5	251.6	251.8	252.0	252.0	251.9	251.8	251.7	251.6
120°	271.5	272.1	272.4	272.8	273.1	273.5	273.4	273.0	272.5	272.1	271.6
122.5°	292.0	292.5	292.6	292.7	292.9	293.1	293.0	292.8	292.7	292.5	292.3
125°	322.2	322.4	322.5	322.7	322.8	322.9	323.0	323.0	323.0	323.0	323.0
127.5°	351.2	351.4	351.6	351.8	352.0	352.1	352.0	351.8	351.4	351.1	350.7
130°	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3	371.0	370.6	370.2
132.5°	390.7	390.9	391.0	391.1	391.2	391.3	391.2	390.9	390.7	390.5	390.2
135°	419.4	419.5	419.5	419.5	419.5	419.5	419.3	418.6	417.9	417.2	416.5
137.5°	447.2	447.5	447.3	447.1	446.9	446.7	446.5	446.1	445.9	445.5	445.2
140°	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.0	464.8	464.6	464.3
142.5°	482.4	482.4	482.5	482.6	482.7	482.8	482.8	482.5	482.3	482.1	481.8
145°	508.5	508.5	508.5	508.4	508.3	508.1	507.8	507.4	506.9	506.5	506.0
147.5°	532.0	532.1	532.2	532.3	532.4	532.4	532.3	531.6	531.1	530.6	530.0
150°	546.7	546.7	546.7	546.7	546.7	546.7	546.5	546.1	545.6	545.2	544.7
152.5°	560.4	560.2	560.1	560.0	559.9	559.8	559.6	559.4	559.1	558.8	558.6
155°	579.7	579.3	579.4	579.5	579.6	579.7	579.8	579.8	579.8	579.8	579.8
157.5°	597.0	596.6	596.7	596.7	596.7	596.7	596.9	597.1	597.3	597.4	597.7
160°	607.6	607.3	607.3	607.5	607.6	607.7	607.8	608.0	608.1	608.1	608.2
162.5°	616.8	616.2	616.4	616.4	616.5	616.6	616.9	617.2	617.4	617.8	618.0
165°	629.3	628.7	628.8	629.1	629.3	629.5	629.8	630.2	630.4	630.8	631.2
167.5°	639.9	639.2	639.2	639.2	639.1	639.1	639.4	639.8	640.2	640.8	641.2
170°	645.6	644.9	644.8	644.6	644.5	644.4	644.6	645.2	645.8	646.4	646.9
172.5°	649.7	649.0	648.9	648.9	648.9	648.9	649.1	649.6	650.1	650.5	650.9
175°	654.3	653.5	653.6	653.8	653.9	654.0	654.3	654.9	655.5	656.0	656.6
177.5°	657.0	656.4	656.4	656.4	656.4	656.4	656.6	657.1	657.5	658.0	658.4
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



TEST NUMBER: P332635-940

CATALOG NUMBER: SA4XXDIP-C1020D590U940-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1498.0	1502.9	1509.3	1520.2	1524.1	1529.0	1536.0	1535.4	1537.4	1544.8	1560.6
5°	1503.5	1522.6	1541.1	1563.3	1586.7	1602.1	1623.1	1636.0	1649.0	1665.6	1694.0
7.5°	1505.7	1536.1	1569.9	1608.9	1643.6	1683.6	1714.7	1744.0	1770.6	1805.7	1839.5
10°	1502.3	1542.9	1586.7	1636.0	1688.5	1732.9	1772.9	1818.6	1857.3	1899.9	1938.1
12.5°	1495.8	1545.0	1603.5	1658.8	1720.0	1785.6	1835.5	1881.6	1933.3	1982.3	2041.2
15°	1481.3	1548.5	1616.9	1689.7	1771.7	1847.4	1919.6	1979.4	2034.9	2108.3	2185.3
17.5°	1462.9	1535.3	1621.6	1709.7	1795.4	1882.0	1971.3	2061.2	2131.2	2222.3	2282.6
20°	1445.6	1529.4	1618.2	1723.0	1808.7	1916.6	2005.3	2092.2	2188.3	2279.0	2351.1
22.5°	1421.4	1513.1	1607.3	1711.6	1824.4	1932.3	2034.9	2129.2	2225.4	2323.9	2411.3
25°	1390.7	1473.9	1585.5	1703.9	1816.1	1933.1	2050.9	2169.3	2272.8	2377.0	2458.4
27.5°	1338.5	1443.5	1547.4	1669.6	1794.2	1926.7	2052.6	2176.6	2285.0	2370.7	2421.2
30°	1311.8	1403.0	1515.8	1638.5	1773.5	1915.9	2047.2	2168.6	2269.8	2338.2	2358.5
32.5°	1272.4	1366.5	1476.9	1604.0	1746.9	1893.2	2030.0	2144.5	2228.8	2264.7	2240.2
35°	1213.8	1298.9	1410.4	1540.5	1689.1	1845.0	1980.0	2076.8	2120.0	2086.1	2001.6
37.5°	1143.5	1227.8	1339.9	1467.7	1621.4	1779.9	1902.0	1971.7	1957.3	1873.0	1747.1
40°	1094.2	1173.1	1279.8	1417.8	1567.6	1726.6	1833.9	1871.5	1832.1	1711.3	1577.5
42.5°	1039.5	1116.4	1223.5	1356.6	1515.4	1662.1	1755.5	1758.6	1692.5	1548.0	1413.7
45°	956.1	1029.5	1130.6	1269.3	1415.9	1554.1	1615.7	1585.5	1463.5	1324.1	1189.1
47.5°	873.9	937.5	1037.1	1168.8	1308.1	1424.3	1454.9	1400.5	1270.5	1135.2	1010.1
50°	813.7	877.8	971.5	1097.3	1231.6	1332.1	1346.9	1274.8	1147.2	1010.9	912.9
52.5°	756.0	819.7	909.9	1026.3	1149.3	1239.9	1240.4	1156.9	1029.8	908.4	817.3
55°	671.3	728.6	810.0	914.2	1024.0	1094.8	1077.5	991.2	880.9	775.5	696.0
57.5°	589.7	639.6	714.6	801.5	898.1	956.6	928.0	844.9	746.4	657.0	596.7
60°	536.9	584.4	648.5	730.5	811.9	857.5	830.4	755.1	664.5	592.4	540.0
62.5°	485.6	525.7	587.4	658.5	734.0	767.8	743.6	669.3	591.0	525.8	483.3
65°	413.0	445.7	495.0	556.1	610.9	639.9	619.6	550.5	490.7	443.8	409.9
67.5°	345.2	370.8	408.0	457.0	503.6	519.3	500.8	452.7	402.1	364.5	340.6
70°	298.4	322.4	353.8	391.5	432.1	448.8	430.3	392.1	350.8	316.2	292.8
72.5°	257.4	276.1	302.6	334.7	366.6	383.2	370.6	333.9	299.0	273.3	253.3
75°	196.0	212.0	230.5	253.3	278.0	289.1	278.0	252.7	228.7	209.6	195.4
77.5°	142.5	151.1	165.4	182.4	197.9	206.3	196.8	179.6	165.0	151.9	144.9
80°	108.5	114.7	124.5	138.1	148.6	156.6	150.4	136.3	124.5	115.9	112.8
82.5°	78.9	83.1	89.5	99.6	106.6	110.8	108.0	97.7	92.9	85.3	82.2
85°	38.9	41.3	45.7	48.7	54.8	55.5	56.1	51.8	47.4	45.7	43.2
87.5°	13.9	14.6	16.3	18.1	20.2	21.0	20.6	20.8	19.0	18.6	16.9
90°	2.8	4.0	5.3	6.5	7.6	8.5	9.4	10.3	11.1	11.9	12.6
92.5°	12.3	13.7	15.2	16.6	17.6	18.3	18.9	19.5	20.2	20.5	21.0
95°	31.6	32.5	33.5	34.6	35.5	36.3	37.1	37.9	38.6	39.0	39.3
97.5°	54.1	54.9	55.7	56.5	57.4	58.3	59.3	60.2	61.2	61.5	62.0
100°	71.7	72.1	72.6	73.0	73.7	74.7	75.8	76.8	77.8	78.0	78.3
102.5°	90.1	90.2	90.4	90.6	91.2	92.1	93.0	94.0	94.9	95.2	95.5
105°	118.6	118.7	118.9	119.0	119.2	119.7	120.1	120.6	121.0	121.4	121.7
107.5°	148.6	148.7	148.9	149.1	149.2	149.2	149.3	149.4	149.5	149.7	150.1
110°	169.1	169.3	169.5	169.8	169.8	169.7	169.6	169.5	169.3	169.2	168.9





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	190.0	190.1	190.1	190.2	190.1	189.9	189.7	189.5	189.3	189.2	189.2
115°	221.8	221.8	221.8	221.8	221.6	221.4	221.1	221.0	220.7	220.6	220.5
117.5°	251.7	251.8	251.9	252.0	252.0	251.8	251.6	251.5	251.4	250.9	250.6
120°	272.1	272.5	273.0	273.4	273.5	273.1	272.8	272.4	272.1	271.5	271.0
122.5°	292.5	292.7	292.8	293.0	293.1	292.9	292.7	292.6	292.5	292.0	291.7
125°	323.0	323.0	323.0	323.0	322.9	322.8	322.7	322.5	322.4	322.2	322.0
127.5°	351.1	351.4	351.8	352.0	352.1	352.0	351.8	351.6	351.4	351.2	351.0
130°	370.6	371.0	371.3	371.6	371.8	371.8	371.8	371.8	371.8	371.6	371.3
132.5°	390.5	390.7	390.9	391.2	391.3	391.2	391.1	391.0	390.9	390.7	390.5
135°	417.2	417.9	418.6	419.3	419.5	419.5	419.5	419.5	419.5	419.4	419.1
137.5°	445.5	445.9	446.1	446.5	446.7	446.9	447.1	447.3	447.5	447.2	446.8
140°	464.6	464.8	465.0	465.2	465.4	465.4	465.4	465.4	465.4	465.2	465.1
142.5°	482.1	482.3	482.5	482.8	482.8	482.7	482.6	482.5	482.4	482.4	482.4
145°	506.5	506.9	507.4	507.8	508.1	508.3	508.4	508.5	508.5	508.5	508.4
147.5°	530.6	531.1	531.6	532.3	532.4	532.4	532.3	532.2	532.1	532.0	531.9
150°	545.2	545.6	546.1	546.5	546.7	546.7	546.7	546.7	546.7	546.7	546.7
152.5°	558.8	559.1	559.4	559.6	559.8	559.9	560.0	560.1	560.2	560.4	560.7
155°	579.8	579.8	579.8	579.8	579.7	579.6	579.5	579.4	579.3	579.7	580.1
157.5°	597.4	597.3	597.1	596.9	596.7	596.7	596.7	596.7	596.6	597.0	597.4
160°	608.1	608.1	608.0	607.8	607.7	607.6	607.5	607.3	607.3	607.6	608.0
162.5°	617.8	617.4	617.2	616.9	616.6	616.5	616.4	616.4	616.2	616.8	617.4
165°	630.8	630.4	630.2	629.8	629.5	629.3	629.1	628.8	628.7	629.3	630.0
167.5°	640.8	640.2	639.8	639.4	639.1	639.1	639.2	639.2	639.2	639.9	640.5
170°	646.4	645.8	645.2	644.6	644.4	644.5	644.6	644.8	644.9	645.6	646.2
172.5°	650.5	650.1	649.6	649.1	648.9	648.9	648.9	648.9	649.0	649.7	650.5
175°	656.0	655.5	654.9	654.3	654.0	653.9	653.8	653.6	653.5	654.3	655.1
177.5°	658.0	657.5	657.1	656.6	656.4	656.4	656.4	656.4	656.4	657.0	657.6
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1568.5	1569.5	1573.9	1577.3	1578.3	1583.3	1583.8
5°	1706.3	1716.8	1737.1	1739.0	1742.0	1758.1	1745.8
7.5°	1867.9	1894.4	1912.2	1927.9	1933.6	1940.5	1939.1
10°	1971.4	2010.8	2030.6	2062.0	2063.2	2071.3	2066.4
12.5°	2075.5	2121.3	2157.3	2163.1	2189.5	2193.5	2200.5
15°	2222.9	2271.6	2321.6	2339.4	2375.8	2384.4	2398.0
17.5°	2361.5	2411.3	2446.3	2492.5	2507.5	2527.5	2513.8
20°	2437.4	2491.7	2536.0	2572.4	2587.8	2598.9	2597.7
22.5°	2483.3	2538.0	2574.0	2601.5	2615.9	2620.6	2620.4
25°	2512.0	2543.4	2554.6	2565.0	2549.0	2543.4	2545.9
27.5°	2432.1	2424.0	2395.0	2357.1	2317.6	2286.3	2269.2
30°	2322.2	2274.0	2230.3	2153.8	2114.4	2091.0	2070.0
32.5°	2166.3	2090.1	2005.9	1935.9	1891.1	1856.3	1851.1
35°	1899.3	1784.6	1681.7	1596.0	1551.6	1513.9	1505.4
37.5°	1614.7	1495.6	1402.9	1327.5	1279.8	1253.2	1228.4
40°	1425.8	1323.5	1232.3	1168.1	1131.8	1112.7	1097.3
42.5°	1280.3	1186.9	1096.2	1047.3	1014.4	1002.7	993.7
45°	1079.4	992.5	929.6	892.6	873.5	853.8	844.5
47.5°	918.5	847.7	806.3	774.9	754.4	742.7	736.7
50°	827.2	769.3	732.4	708.3	689.8	680.6	675.6
52.5°	746.4	698.8	667.7	648.6	636.1	629.3	627.3
55°	642.9	606.5	586.8	570.2	561.0	554.8	552.3
57.5°	558.8	530.9	514.9	501.1	497.6	492.4	490.7
60°	503.6	482.1	468.5	459.2	456.2	450.0	451.2
62.5°	454.8	437.2	425.6	420.3	416.3	411.1	412.8
65°	384.7	371.8	365.5	360.6	355.7	352.6	355.1
67.5°	322.8	313.9	305.5	302.6	300.2	299.7	297.1
70°	282.3	274.9	267.5	265.7	265.7	263.2	262.6
72.5°	243.3	237.9	233.0	231.7	229.7	230.7	228.1
75°	188.0	183.7	181.8	180.0	179.4	179.4	177.5
77.5°	138.9	135.7	132.8	132.8	130.5	129.7	129.5
80°	105.4	104.2	101.7	101.7	100.5	101.1	99.9
82.5°	79.3	77.6	77.0	76.1	74.4	74.5	73.2
85°	42.5	40.7	40.0	38.3	37.0	38.3	37.0
87.5°	17.5	17.1	16.7	15.7	15.2	15.3	13.9
90°	13.2	13.9	14.4	14.6	14.8	15.1	15.2
92.5°	21.4	21.8	22.0	22.2	22.3	22.5	22.6
95°	39.7	40.0	40.2	40.2	40.2	40.2	40.2
97.5°	62.3	62.8	63.0	63.0	63.0	63.0	63.0
100°	78.5	78.7	78.8	78.8	78.8	78.8	78.8
102.5°	95.9	96.1	96.4	96.5	96.6	96.7	96.8
105°	122.1	122.4	122.7	123.1	123.4	123.8	124.1
107.5°	150.3	150.7	150.9	150.8	150.8	150.8	150.8
110°	168.7	168.4	168.5	168.9	169.2	169.5	169.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	189.1	189.1	189.1	189.2	189.2	189.3	189.4
115°	220.4	220.3	220.2	220.1	219.9	219.8	219.7
117.5°	250.2	249.8	249.5	249.2	249.1	248.8	248.6
120°	270.4	269.8	269.7	269.9	270.1	270.4	270.5
122.5°	291.3	290.9	290.5	290.1	289.7	289.3	288.9
125°	321.7	321.6	321.3	321.1	320.8	320.7	320.4
127.5°	350.8	350.5	350.4	350.2	350.0	349.8	349.6
130°	371.1	370.9	370.5	370.1	369.6	369.2	368.7
132.5°	390.2	390.0	389.8	389.6	389.4	389.2	389.1
135°	418.9	418.7	418.4	418.0	417.7	417.4	417.1
137.5°	446.6	446.3	446.1	446.2	446.3	446.4	446.5
140°	465.0	464.9	464.8	464.7	464.6	464.5	464.3
142.5°	482.4	482.3	482.3	482.3	482.3	482.2	482.2
145°	508.3	508.1	507.9	507.6	507.2	506.8	506.6
147.5°	531.8	531.7	531.6	531.5	531.4	531.3	531.2
150°	546.7	546.7	546.7	546.5	546.4	546.4	546.3
152.5°	561.0	561.2	561.2	561.0	560.6	560.4	560.1
155°	580.6	581.1	581.1	580.6	580.1	579.7	579.3
157.5°	597.7	598.1	598.0	597.6	597.3	596.8	596.5
160°	608.2	608.6	608.5	608.0	607.3	606.8	606.3
162.5°	618.0	618.7	618.7	618.1	617.5	617.0	616.4
165°	630.6	631.3	631.4	631.0	630.5	630.1	629.6
167.5°	641.2	641.9	641.9	641.2	640.5	639.8	639.1
170°	646.9	647.6	647.6	646.8	646.0	645.2	644.4
172.5°	651.3	652.0	652.0	651.2	650.4	649.6	648.9
175°	655.9	656.7	656.7	655.9	655.1	654.3	653.5
177.5°	658.3	658.9	658.9	658.2	657.5	656.7	655.9
180°	657.6	657.6	657.6	657.6	657.6	657.6	657.6

(END OF REPORT)