

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: P332634-840

Luminaire Tested: **SA4XXDIP-C1020D590U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332634-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 590 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

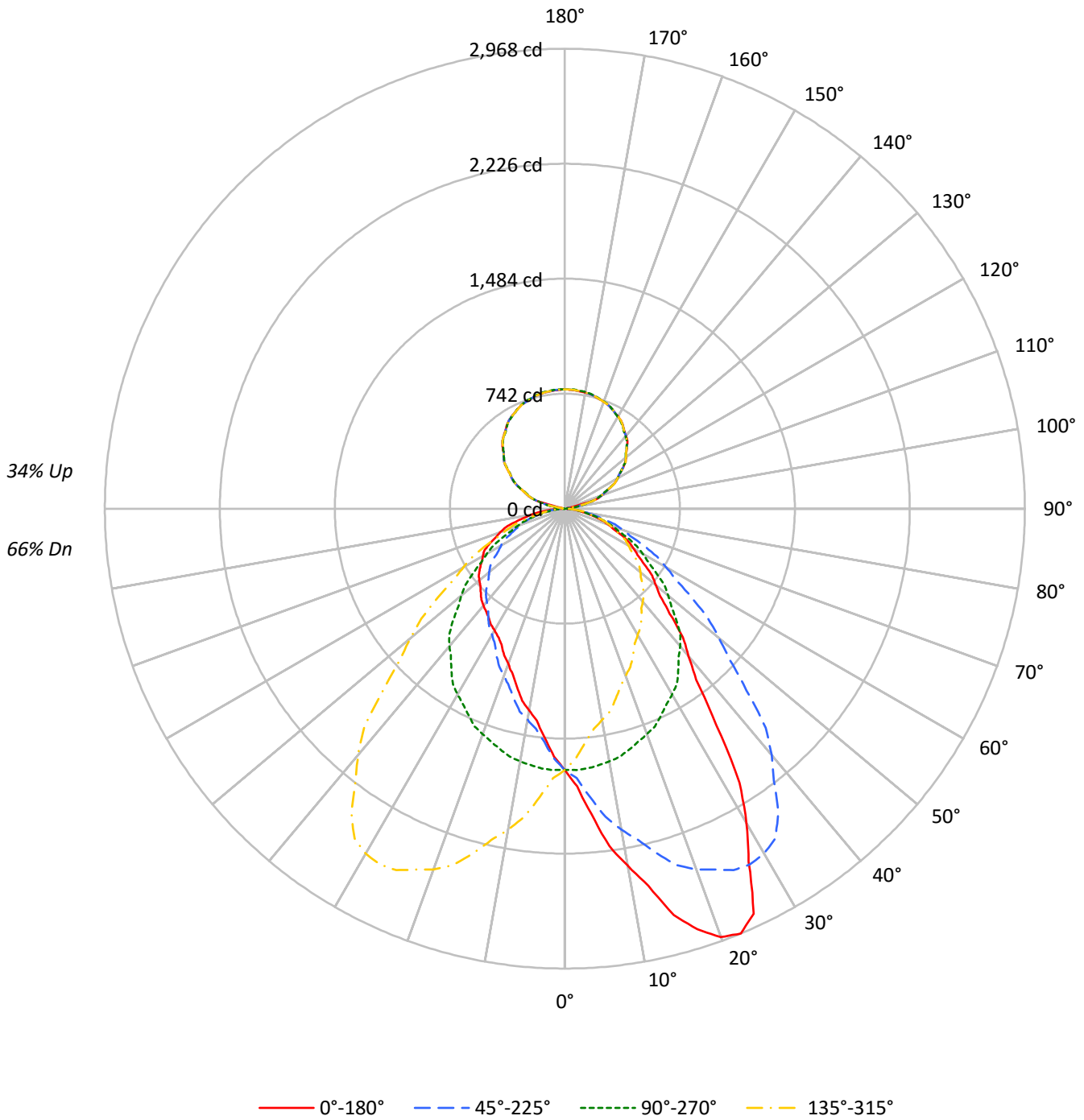
Lumens per Lamp: N/A  
Luminaire Lumens: 7034.4 lumens  
Efficiency: N/A  
Efficacy: 144.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	102	97	93	90	96	92	88	85	81	79	77	72	70	68	63	62	60	56
2	93	85	79	74	87	81	75	71	72	68	64	64	60	58	56	54	51	48
3	85	75	68	62	80	71	65	59	64	58	54	56	52	49	50	47	44	41
4	78	67	59	53	73	63	56	51	57	51	46	51	46	42	45	41	38	35
5	72	60	52	46	67	57	49	44	51	45	40	46	41	37	40	37	34	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27
7	61	49	41	35	58	46	39	34	42	36	31	38	33	29	34	30	26	24
8	57	45	37	31	54	42	35	30	38	32	28	35	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22	20
10	50	38	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

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

	0°	90°	180°	270°
0°	13605	13605	13605	13605
5°	16022	13639	12039	13639
10°	19184	13581	10839	13581
15°	22697	13443	9954	13443
20°	25274	13302	9164	13302
25°	25683	13097	8620	13097
30°	21853	12899	8447	12899
35°	16802	12577	8449	12577
40°	13095	12198	8608	12198
45°	10919	11628	8752	11628
50°	9610	10934	9048	10934
55°	8804	10101	9413	10101
60°	8251	9357	9852	9357
65°	7681	8521	10214	8521
70°	7020	7695	10447	7695
75°	6273	6772	10321	6772
80°	5258	5551	9995	5551
85°	3881	4011	9568	4011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.2	2.3
10°-20°	506.1	7.2
20°-30°	802.5	11.4
30°-40°	893.1	12.7
40°-50°	812.9	11.6
50°-60°	664.3	9.4
60°-70°	474.2	6.7
70°-80°	261.1	3.7
80°-90°	73.5	1.0
90°-100°	26.3	0.4
100°-110°	168.0	2.4
110°-120°	321.3	4.6
120°-130°	407.9	5.8
130°-140°	436.4	6.2
140°-150°	408.1	5.8
150°-160°	329.1	4.7
160°-170°	212.2	3.0
170°-180°	73.2	1.0
0°-30°	1472.7	20.9
0°-40°	2365.8	33.6
0°-60°	3843.0	54.6
0°-90°	4652.0	66.1
90°-120°	515.6	7.3
90°-150°	1767.9	25.1
90°-180°	2382.0	33.9
0°-180°	7034.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1685	1685	1685	1685	1685	
5°	1977	1683	1486	1683	1977	201
15°	2716	1608	1191	1608	2716	767
25°	2883	1470	968	1470	2883	1271
35°	1705	1276	857	1276	1705	1082
45°	956	1018	767	1018	956	753
55°	626	718	669	718	626	565
65°	402	446	535	446	402	398
75°	201	217	331	217	201	214
85°	42	43	103	43	42	51
90°	17	2	17	2	17	9
95°	17	32	17	32	17	13
105°	164	173	164	173	164	143
115°	326	324	326	324	326	323
125°	459	455	459	455	459	408
135°	569	564	569	564	569	438
145°	654	651	654	651	654	409
155°	713	714	713	714	713	329
165°	749	753	749	753	749	212
175°	766	770	766	770	766	73
180°	770	770	770	770	770	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1793.6	1793.1	1787.5	1786.4	1782.4	1777.5	1776.4	1767.4	1749.5	1741.1	1738.9
5°	1977.1	1991.0	1972.9	1969.4	1967.3	1944.3	1932.4	1918.4	1886.3	1867.4	1852.8
7.5°	2196.1	2197.7	2189.8	2183.3	2165.6	2145.5	2115.4	2083.3	2045.0	2005.2	1975.1
10°	2340.2	2345.7	2336.6	2335.2	2299.7	2277.2	2232.6	2194.9	2151.6	2103.4	2059.5
12.5°	2492.0	2484.2	2479.6	2449.7	2443.2	2402.4	2350.5	2311.7	2244.9	2189.5	2130.9
15°	2715.7	2700.4	2690.6	2649.4	2629.2	2572.6	2517.4	2474.9	2387.6	2304.5	2241.7
17.5°	2846.9	2862.4	2839.7	2822.8	2770.5	2730.8	2674.4	2585.1	2516.8	2413.6	2334.3
20°	2941.9	2943.3	2930.7	2913.3	2872.1	2821.9	2760.4	2662.6	2581.0	2478.3	2369.4
22.5°	2967.6	2967.9	2962.5	2946.2	2915.1	2874.3	2812.4	2730.8	2631.8	2520.2	2411.4
25°	2883.3	2880.4	2886.8	2904.9	2893.1	2880.4	2844.9	2784.1	2692.0	2573.9	2456.7
27.5°	2569.9	2589.2	2624.6	2669.4	2712.4	2745.2	2754.4	2742.0	2684.8	2587.8	2465.0
30°	2344.3	2368.0	2394.6	2439.2	2525.8	2575.4	2629.9	2671.0	2648.0	2570.5	2456.0
32.5°	2096.4	2102.2	2141.6	2192.4	2271.7	2367.0	2453.4	2537.0	2564.8	2524.2	2428.6
35°	1704.9	1714.5	1757.2	1807.5	1904.5	2021.0	2150.9	2266.8	2362.5	2400.9	2352.0
37.5°	1391.2	1419.3	1449.4	1503.4	1588.8	1693.7	1828.7	1978.6	2121.2	2216.7	2232.9
40°	1242.6	1260.1	1281.7	1322.9	1395.5	1498.8	1614.8	1786.6	1938.0	2074.9	2119.5
42.5°	1125.4	1135.6	1148.8	1186.1	1241.4	1344.1	1450.0	1601.0	1753.1	1916.7	1991.7
45°	956.4	966.9	989.3	1010.9	1052.8	1124.0	1222.4	1346.7	1499.5	1657.4	1795.5
47.5°	834.4	841.1	854.3	877.6	913.1	960.1	1040.2	1144.0	1285.7	1438.9	1586.1
50°	765.2	770.7	781.2	802.1	829.4	871.2	936.9	1033.9	1144.9	1299.2	1443.7
52.5°	710.4	712.7	720.3	734.6	756.2	791.4	845.3	925.5	1028.7	1166.3	1310.2
55°	625.5	628.3	635.3	645.8	664.6	686.9	728.1	788.2	878.3	997.6	1122.6
57.5°	555.7	557.6	563.5	567.5	583.1	601.3	632.9	675.8	744.1	845.3	956.8
60°	511.0	509.7	516.6	520.1	530.6	545.9	570.4	611.6	670.9	752.6	855.2
62.5°	467.5	465.5	471.4	475.9	482.0	495.1	515.0	547.3	595.5	669.3	758.0
65°	402.1	399.3	402.8	408.4	413.9	421.0	435.7	464.2	502.6	555.7	623.4
67.5°	336.5	339.4	340.0	342.7	346.0	355.5	365.6	385.8	412.8	455.3	512.7
70°	297.4	298.1	300.9	300.9	303.0	311.3	319.7	331.6	358.1	397.3	444.0
72.5°	258.3	261.3	260.1	262.4	263.9	269.4	275.6	286.9	309.5	338.6	378.1
75°	201.1	203.2	203.2	203.9	205.9	208.0	212.9	221.3	237.3	259.0	286.2
77.5°	146.6	146.9	147.8	150.4	150.4	153.7	157.3	164.1	172.0	186.8	203.4
80°	113.1	114.5	113.8	115.2	115.2	118.0	119.4	127.7	131.3	141.0	154.3
82.5°	82.9	84.3	84.2	86.1	87.3	87.9	89.8	93.1	96.6	105.2	110.7
85°	41.9	43.3	41.9	43.3	45.3	46.0	48.2	48.9	51.7	53.7	58.7
87.5°	15.8	17.4	17.3	17.8	18.9	19.4	19.8	19.1	21.1	21.5	23.5
90°	17.3	17.1	16.8	16.6	16.3	15.8	14.9	14.2	13.4	12.6	11.6
92.5°	15.9	15.9	15.8	15.8	15.7	15.2	14.5	13.7	13.0	12.2	11.2
95°	16.7	16.6	16.5	16.4	16.2	15.8	14.9	14.2	13.4	12.6	12.5
97.5°	16.2	16.0	15.9	15.8	15.7	15.6	15.5	15.3	15.2	15.2	29.5
100°	16.2	16.0	15.9	15.8	15.7	16.7	18.8	21.0	23.1	25.3	43.0
102.5°	16.6	16.6	16.6	16.6	16.5	28.2	51.7	75.1	98.7	122.1	124.4
105°	164.2	168.7	173.4	178.0	182.6	184.3	183.2	182.1	180.9	179.8	179.0
107.5°	228.8	228.3	227.8	227.3	226.8	226.3	225.8	225.2	224.7	224.1	223.2
110°	256.9	256.5	256.1	255.8	255.4	255.1	254.8	254.6	254.3	254.1	253.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	285.0	284.6	284.1	283.6	283.1	282.9	283.0	283.0	283.1	283.1	282.8
115°	326.1	326.1	326.1	326.1	326.1	325.9	325.7	325.4	325.2	324.9	325.0
117.5°	367.8	367.8	367.9	367.9	368.0	368.0	368.1	368.1	368.2	368.2	367.9
120°	394.0	394.3	394.6	394.8	395.1	395.1	394.8	394.6	394.3	394.0	394.2
122.5°	419.8	420.1	420.3	420.6	420.8	420.9	420.7	420.6	420.4	420.3	420.1
125°	458.6	458.4	458.3	458.2	458.1	457.8	457.4	457.0	456.7	456.3	456.5
127.5°	492.5	492.6	492.7	492.8	492.9	493.0	493.1	493.2	493.2	493.3	492.7
130°	515.5	515.5	515.5	515.5	515.5	515.5	515.3	515.2	515.1	515.0	514.6
132.5°	536.7	536.8	536.9	537.0	537.1	537.1	537.0	536.9	536.7	536.6	536.1
135°	568.6	568.4	568.0	567.7	567.5	567.2	567.0	566.7	566.5	566.2	565.7
137.5°	595.7	595.8	595.9	596.0	596.0	595.9	595.7	595.4	595.1	594.8	594.3
140°	614.6	614.5	614.4	614.3	614.1	613.9	613.5	613.1	612.7	612.4	612.1
142.5°	630.4	630.3	630.3	630.3	630.3	630.1	629.8	629.4	629.2	628.9	628.7
145°	654.4	654.2	653.9	653.6	653.4	653.2	653.1	652.9	652.8	652.7	652.7
147.5°	674.3	674.2	674.1	674.0	673.8	673.7	673.6	673.5	673.4	673.3	673.4
150°	687.2	687.1	687.0	686.8	686.7	686.6	686.6	686.6	686.6	686.6	686.8
152.5°	698.3	698.3	698.4	698.5	698.6	698.5	698.3	698.1	697.9	697.7	697.9
155°	713.2	713.6	713.9	714.3	714.7	714.6	714.1	713.6	713.1	712.6	713.0
157.5°	725.6	726.3	726.9	727.6	728.2	728.2	727.6	726.9	726.3	725.6	726.0
160°	733.9	734.7	735.4	736.2	737.0	737.0	736.2	735.4	734.7	733.9	734.0
162.5°	740.3	741.2	742.0	743.0	743.9	743.9	743.1	742.4	741.5	740.8	740.9
165°	749.4	750.6	751.7	752.9	754.1	754.2	753.1	752.0	751.0	750.0	750.0
167.5°	756.3	757.5	758.8	760.1	761.3	761.4	760.3	759.2	758.1	756.9	757.0
170°	760.4	761.6	763.0	764.3	765.5	765.7	764.6	763.6	762.5	761.5	761.4
172.5°	762.7	764.1	765.5	766.9	768.2	768.4	767.4	766.4	765.4	764.3	764.2
175°	765.6	767.1	768.6	770.2	771.7	771.9	770.7	769.6	768.4	767.3	767.2
177.5°	767.4	768.6	769.9	771.1	772.3	772.5	771.7	770.9	770.1	769.2	769.0
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1739.5	1731.6	1726.1	1721.6	1709.3	1702.0	1696.5	1688.6	1679.7	1670.2	1658.5
5°	1838.2	1814.4	1797.0	1770.5	1745.3	1724.3	1702.7	1683.1	1659.4	1633.7	1614.8
7.5°	1941.9	1906.6	1861.4	1822.1	1778.0	1739.6	1705.3	1670.0	1633.5	1598.0	1565.5
10°	2007.8	1962.5	1912.2	1852.8	1797.0	1747.4	1701.3	1656.7	1613.4	1570.0	1533.1
12.5°	2078.7	2022.2	1947.9	1878.6	1815.9	1749.7	1694.0	1639.3	1587.1	1541.6	1498.4
15°	2173.9	2092.2	2006.4	1913.6	1831.2	1753.7	1677.6	1608.5	1549.8	1489.8	1447.9
17.5°	2232.5	2131.4	2033.3	1936.2	1836.4	1738.8	1656.7	1576.9	1503.5	1443.9	1391.1
20°	2271.0	2170.5	2048.3	1951.3	1832.6	1732.0	1637.1	1548.4	1471.7	1408.2	1353.6
22.5°	2304.5	2188.4	2066.2	1938.4	1820.3	1713.6	1609.7	1520.6	1442.1	1375.1	1322.9
25°	2322.7	2189.3	2056.7	1929.7	1795.5	1669.2	1575.0	1470.3	1386.4	1316.0	1260.1
27.5°	2324.6	2182.0	2031.9	1890.8	1752.4	1634.8	1515.8	1422.2	1335.2	1260.7	1207.1
30°	2318.4	2169.8	2008.5	1855.6	1716.7	1588.9	1485.6	1383.7	1295.1	1221.0	1165.2
32.5°	2299.0	2144.0	1978.3	1816.5	1672.5	1547.6	1441.0	1344.0	1257.6	1184.7	1126.1
35°	2242.4	2089.5	1912.9	1744.6	1597.3	1471.0	1374.6	1276.2	1189.6	1120.4	1064.0
37.5°	2154.0	2015.8	1836.2	1662.1	1517.4	1390.5	1295.1	1206.1	1128.0	1057.8	999.9
40°	2076.9	1955.4	1775.3	1605.7	1449.4	1328.6	1239.2	1157.5	1080.1	1013.7	958.6
42.5°	1988.1	1882.3	1716.2	1536.4	1385.6	1264.4	1177.2	1103.9	1030.9	969.6	914.4
45°	1829.8	1760.0	1603.6	1437.4	1280.4	1165.9	1082.8	1018.5	957.2	897.1	851.0
47.5°	1647.7	1613.1	1481.5	1323.6	1174.6	1061.7	989.7	930.3	876.5	825.6	785.0
50°	1525.4	1508.6	1394.8	1242.6	1100.2	994.1	921.5	870.6	824.5	779.8	741.4
52.5°	1404.7	1404.2	1301.6	1162.3	1030.5	928.3	856.2	808.6	768.6	732.4	697.8
55°	1220.3	1239.9	1159.6	1035.3	917.4	825.2	760.2	717.7	689.7	659.7	633.9
57.5°	1051.0	1083.4	1017.1	907.7	809.3	724.4	667.8	635.8	606.1	587.9	569.2
60°	940.4	971.1	919.5	827.3	734.5	661.9	608.0	579.5	553.6	541.1	527.8
62.5°	842.1	869.5	831.2	745.8	665.2	595.3	550.0	522.5	505.0	491.3	482.5
65°	701.7	724.7	691.9	629.8	560.6	504.7	467.8	446.1	429.4	423.7	413.9
67.5°	567.1	588.1	570.4	517.6	462.1	419.9	390.9	370.1	360.2	355.4	348.4
70°	487.3	508.3	489.4	443.3	400.7	365.2	337.9	326.0	315.6	313.5	303.7
72.5°	419.7	433.9	415.2	379.1	342.6	312.7	291.5	279.1	273.7	269.9	264.6
75°	314.9	327.4	314.9	286.9	261.1	240.1	222.0	217.1	210.9	208.7	205.2
77.5°	222.9	233.7	224.1	206.6	187.3	171.2	161.4	155.1	153.7	150.1	151.8
80°	170.4	177.3	168.2	156.4	141.0	129.9	122.9	119.4	115.2	113.8	116.5
82.5°	122.3	125.4	120.8	112.8	101.4	94.1	89.4	85.3	84.4	84.7	84.7
85°	63.5	62.8	62.1	55.1	51.7	46.8	44.0	43.3	42.6	44.0	45.3
87.5°	23.3	23.7	22.9	20.5	18.5	16.6	15.8	14.8	15.8	16.6	17.4
90°	10.6	9.6	8.6	7.4	6.0	4.5	3.1	1.7	3.1	4.5	6.0
92.5°	10.2	9.2	8.1	7.6	7.5	7.4	7.4	7.3	7.4	7.4	7.5
95°	12.4	12.3	12.1	14.2	18.6	23.0	27.4	31.7	27.4	23.0	18.6
97.5°	43.8	58.1	72.3	78.2	75.4	72.7	70.0	67.3	70.0	72.7	75.4
100°	60.7	78.4	96.0	103.7	101.4	99.1	96.7	94.4	96.7	99.1	101.4
102.5°	126.7	129.1	131.4	131.7	130.0	128.3	126.5	124.9	126.5	128.3	130.0
105°	178.4	177.8	177.1	176.4	175.7	174.9	174.2	173.4	174.2	174.9	175.7
107.5°	222.4	221.5	220.6	219.9	219.5	219.2	218.8	218.4	218.8	219.2	219.5
110°	252.5	251.8	251.0	250.3	250.0	249.6	249.2	248.8	249.2	249.6	250.0





TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	282.4	282.0	281.7	281.1	280.4	279.7	279.0	278.3	279.0	279.7	280.4
115°	325.2	325.3	325.4	325.3	324.9	324.5	324.2	323.8	324.2	324.5	324.9
117.5°	367.7	367.4	367.1	366.7	366.2	365.7	365.2	364.7	365.2	365.7	366.2
120°	394.3	394.5	394.6	394.4	393.8	393.3	392.8	392.3	392.8	393.3	393.8
122.5°	419.9	419.8	419.6	419.3	419.0	418.7	418.4	418.1	418.4	418.7	419.0
125°	456.8	457.0	457.3	457.2	456.7	456.2	455.6	455.0	455.6	456.2	456.7
127.5°	492.1	491.6	491.0	490.6	490.5	490.4	490.2	490.1	490.2	490.4	490.5
130°	514.2	513.8	513.4	513.2	513.1	512.9	512.8	512.7	512.8	512.9	513.1
132.5°	535.6	535.2	534.7	534.3	534.1	533.9	533.6	533.4	533.6	533.9	534.1
135°	565.2	564.7	564.2	564.0	564.1	564.3	564.4	564.5	564.4	564.3	564.1
137.5°	593.7	593.1	592.6	592.3	592.2	592.2	592.1	592.1	592.1	592.2	592.2
140°	611.9	611.6	611.3	611.1	610.8	610.6	610.3	610.1	610.3	610.6	610.8
142.5°	628.6	628.4	628.3	628.0	627.5	627.1	626.6	626.2	626.6	627.1	627.5
145°	652.7	652.7	652.7	652.5	652.1	651.7	651.4	651.0	651.4	651.7	652.1
147.5°	673.6	673.7	673.8	673.5	672.8	672.1	671.4	670.7	671.4	672.1	672.8
150°	686.9	687.0	687.2	687.0	686.5	686.0	685.4	684.9	685.4	686.0	686.5
152.5°	698.2	698.4	698.6	698.5	698.1	697.7	697.3	696.9	697.3	697.7	698.1
155°	713.4	713.8	714.1	714.3	714.1	714.0	713.9	713.8	713.9	714.0	714.1
157.5°	726.5	726.9	727.3	727.6	727.7	727.7	727.8	727.9	727.8	727.7	727.7
160°	734.2	734.3	734.4	734.7	735.1	735.4	735.8	736.2	735.8	735.4	735.1
162.5°	741.0	741.1	741.3	741.6	742.1	742.6	743.1	743.6	743.1	742.6	742.1
165°	750.0	750.0	750.0	750.3	750.9	751.6	752.2	752.9	752.2	751.6	750.9
167.5°	757.1	757.2	757.2	757.6	758.3	758.9	759.6	760.2	759.6	758.9	758.3
170°	761.2	761.1	761.0	761.3	762.1	762.9	763.7	764.5	763.7	762.9	762.1
172.5°	764.1	764.0	763.8	764.2	764.9	765.7	766.4	767.2	766.4	765.7	764.9
175°	767.1	766.9	766.8	767.1	767.9	768.6	769.4	770.2	769.4	768.6	767.9
177.5°	768.8	768.6	768.4	768.7	769.4	770.1	770.8	771.5	770.8	770.1	769.4
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1652.8	1647.9	1640.6	1630.5	1622.1	1613.3	1611.0	1607.6	1614.4	1608.7	1607.1
5°	1598.7	1584.1	1565.2	1543.6	1531.0	1512.9	1509.3	1502.4	1495.4	1494.7	1487.7
7.5°	1541.4	1519.8	1495.1	1473.1	1452.7	1432.8	1419.9	1417.0	1406.7	1400.7	1393.7
10°	1504.5	1477.9	1449.4	1428.4	1404.6	1383.7	1369.1	1360.7	1353.6	1345.9	1339.0
12.5°	1460.9	1432.7	1409.1	1386.4	1358.3	1342.3	1318.2	1303.6	1302.3	1302.4	1284.2
15°	1410.2	1382.3	1345.9	1313.8	1298.5	1267.8	1254.6	1237.8	1227.3	1216.8	1208.5
17.5°	1352.3	1317.5	1289.2	1252.3	1222.9	1198.5	1181.1	1171.0	1155.3	1140.4	1129.7
20°	1316.0	1279.0	1248.9	1209.8	1177.7	1147.7	1133.1	1119.1	1107.2	1094.7	1082.8
22.5°	1279.1	1240.4	1203.7	1165.7	1135.9	1104.2	1090.0	1071.1	1059.8	1052.8	1040.9
25°	1221.0	1179.1	1137.2	1101.0	1070.3	1042.3	1023.5	1008.8	996.2	990.7	983.0
27.5°	1157.9	1116.3	1075.8	1034.6	999.8	979.5	964.4	953.3	946.1	938.7	935.2
30°	1117.7	1074.4	1031.2	992.7	960.6	940.4	926.5	918.8	913.1	909.7	906.2
32.5°	1076.9	1034.2	988.7	953.6	924.8	906.9	896.3	888.6	885.8	884.5	883.2
35°	1011.6	968.3	926.5	895.0	867.8	860.8	851.7	847.5	846.2	851.0	853.1
37.5°	948.4	908.2	869.6	839.1	821.3	811.1	808.0	808.2	813.1	817.5	822.5
40°	907.6	868.5	832.1	805.7	788.9	782.6	781.2	784.7	790.3	795.2	800.7
42.5°	867.9	829.4	796.4	771.5	759.8	754.1	755.0	758.4	766.3	772.2	780.6
45°	806.4	774.3	742.1	721.9	712.1	713.5	713.5	719.7	727.4	736.5	745.6
47.5°	748.4	716.0	689.6	672.6	667.5	666.3	670.2	678.4	689.4	700.6	713.4
50°	709.3	678.5	655.5	640.2	634.6	636.7	642.3	649.9	663.2	677.2	690.4
52.5°	669.6	641.7	620.4	606.1	602.2	606.0	611.6	623.7	635.3	650.4	666.4
55°	608.0	584.3	567.5	557.1	555.7	557.8	564.1	577.3	594.1	613.0	628.3
57.5°	546.7	526.9	511.6	504.3	505.0	507.0	517.4	533.1	551.0	571.1	590.9
60°	505.4	487.3	474.7	469.2	469.8	474.0	486.6	501.3	523.6	543.1	564.1
62.5°	466.4	450.4	438.4	433.4	432.4	441.6	453.6	468.9	491.2	513.0	535.6
65°	403.5	390.9	381.2	378.4	380.5	387.5	402.8	423.0	441.9	464.9	488.7
67.5°	342.0	331.7	325.1	326.3	328.8	339.1	352.0	369.4	390.8	414.7	438.2
70°	303.0	293.2	287.6	288.3	292.6	305.1	316.3	333.7	356.8	381.2	400.7
72.5°	262.8	256.3	251.4	254.3	258.4	267.1	281.0	298.5	318.8	341.5	362.1
75°	201.8	201.8	198.9	201.1	207.3	215.7	226.2	244.4	264.6	282.8	299.5
77.5°	149.7	148.1	150.0	152.5	156.1	166.0	178.0	191.0	206.2	224.4	238.2
80°	114.5	115.2	118.7	122.9	124.3	132.0	144.5	156.4	168.2	183.6	196.8
82.5°	86.0	86.7	88.6	93.8	95.2	103.5	111.6	123.4	134.2	144.5	155.5
85°	46.8	46.8	50.3	52.3	55.8	61.4	66.3	73.3	83.1	90.1	100.5
87.5°	19.4	19.6	22.0	23.3	25.2	28.2	29.5	35.7	38.2	41.1	46.3
90°	7.4	8.6	9.6	10.6	11.6	12.6	13.4	14.2	14.9	15.8	16.3
92.5°	7.6	8.1	9.2	10.2	11.2	12.2	13.0	13.7	14.5	15.2	15.7
95°	14.2	12.1	12.3	12.4	12.5	12.6	13.4	14.2	14.9	15.8	16.2
97.5°	78.2	72.3	58.1	43.8	29.5	15.2	15.2	15.3	15.5	15.6	15.7
100°	103.7	96.0	78.4	60.7	43.0	25.3	23.1	21.0	18.8	16.7	15.7
102.5°	131.7	131.4	129.1	126.7	124.4	122.1	98.7	75.1	51.7	28.2	16.5
105°	176.4	177.1	177.8	178.4	179.0	179.8	180.9	182.1	183.2	184.3	182.6
107.5°	219.9	220.6	221.5	222.4	223.2	224.1	224.7	225.2	225.8	226.3	226.8
110°	250.3	251.0	251.8	252.5	253.3	254.1	254.3	254.6	254.8	255.1	255.4



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	281.1	281.7	282.0	282.4	282.8	283.1	283.1	283.0	283.0	282.9	283.1
115°	325.3	325.4	325.3	325.2	325.0	324.9	325.2	325.4	325.7	325.9	326.1
117.5°	366.7	367.1	367.4	367.7	367.9	368.2	368.2	368.1	368.1	368.0	368.0
120°	394.4	394.6	394.5	394.3	394.2	394.0	394.3	394.6	394.8	395.1	395.1
122.5°	419.3	419.6	419.8	419.9	420.1	420.3	420.4	420.6	420.7	420.9	420.8
125°	457.2	457.3	457.0	456.8	456.5	456.3	456.7	457.0	457.4	457.8	458.1
127.5°	490.6	491.0	491.6	492.1	492.7	493.3	493.2	493.2	493.1	493.0	492.9
130°	513.2	513.4	513.8	514.2	514.6	515.0	515.1	515.2	515.3	515.5	515.5
132.5°	534.3	534.7	535.2	535.6	536.1	536.6	536.7	536.9	537.0	537.1	537.1
135°	564.0	564.2	564.7	565.2	565.7	566.2	566.5	566.7	567.0	567.2	567.5
137.5°	592.3	592.6	593.1	593.7	594.3	594.8	595.1	595.4	595.7	595.9	596.0
140°	611.1	611.3	611.6	611.9	612.1	612.4	612.7	613.1	613.5	613.9	614.1
142.5°	628.0	628.3	628.4	628.6	628.7	628.9	629.2	629.4	629.8	630.1	630.3
145°	652.5	652.7	652.7	652.7	652.7	652.7	652.8	652.9	653.1	653.2	653.4
147.5°	673.5	673.8	673.7	673.6	673.4	673.3	673.4	673.5	673.6	673.7	673.8
150°	687.0	687.2	687.0	686.9	686.8	686.6	686.6	686.6	686.6	686.6	686.7
152.5°	698.5	698.6	698.4	698.2	697.9	697.7	697.9	698.1	698.3	698.5	698.6
155°	714.3	714.1	713.8	713.4	713.0	712.6	713.1	713.6	714.1	714.6	714.7
157.5°	727.6	727.3	726.9	726.5	726.0	725.6	726.3	726.9	727.6	728.2	728.2
160°	734.7	734.4	734.3	734.2	734.0	733.9	734.7	735.4	736.2	737.0	737.0
162.5°	741.6	741.3	741.1	741.0	740.9	740.8	741.5	742.4	743.1	743.9	743.9
165°	750.3	750.0	750.0	750.0	750.0	750.0	751.0	752.0	753.1	754.2	754.1
167.5°	757.6	757.2	757.2	757.1	757.0	756.9	758.1	759.2	760.3	761.4	761.3
170°	761.3	761.0	761.1	761.2	761.4	761.5	762.5	763.6	764.6	765.7	765.5
172.5°	764.2	763.8	764.0	764.1	764.2	764.3	765.4	766.4	767.4	768.4	768.2
175°	767.1	766.8	766.9	767.1	767.2	767.3	768.4	769.6	770.7	771.9	771.7
177.5°	768.7	768.4	768.6	768.8	769.0	769.2	770.1	770.9	771.7	772.5	772.3
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1606.0	1604.9	1600.9	1600.4	1600.9	1604.9	1606.0	1607.1	1608.7	1614.4	1607.6
5°	1483.5	1480.1	1477.9	1485.6	1477.9	1480.1	1483.5	1487.7	1494.7	1495.4	1502.4
7.5°	1391.2	1388.5	1382.3	1380.4	1382.3	1388.5	1391.2	1393.7	1400.7	1406.7	1417.0
10°	1332.0	1329.2	1323.6	1322.2	1323.6	1329.2	1332.0	1339.0	1345.9	1353.6	1360.7
12.5°	1275.1	1269.5	1268.4	1269.7	1268.4	1269.5	1275.1	1284.2	1302.4	1302.3	1303.6
15°	1199.4	1196.6	1188.9	1191.0	1188.9	1196.6	1199.4	1208.5	1216.8	1227.3	1237.8
17.5°	1124.8	1121.5	1112.2	1120.3	1112.2	1121.5	1124.8	1129.7	1140.4	1155.3	1171.0
20°	1077.9	1072.3	1067.4	1066.7	1067.4	1072.3	1077.9	1082.8	1094.7	1107.2	1119.1
22.5°	1033.2	1028.2	1027.7	1023.2	1027.7	1028.2	1033.2	1040.9	1052.8	1059.8	1071.1
25°	977.3	972.5	971.1	967.7	971.1	972.5	977.3	983.0	990.7	996.2	1008.8
27.5°	934.5	932.1	929.6	930.7	929.6	932.1	934.5	935.2	938.7	946.1	953.3
30°	908.3	907.6	906.2	906.2	906.2	907.6	908.3	906.2	909.7	913.1	918.8
32.5°	886.5	886.4	887.2	887.2	887.2	886.4	886.5	883.2	884.5	885.8	888.6
35°	855.9	858.0	859.4	857.3	859.4	858.0	855.9	853.1	851.0	846.2	847.5
37.5°	828.3	830.3	832.3	834.7	832.3	830.3	828.3	822.5	817.5	813.1	808.2
40°	807.0	811.9	813.3	816.8	813.3	811.9	807.0	800.7	795.2	790.3	784.7
42.5°	786.9	792.3	796.0	796.7	796.0	792.3	786.9	780.6	772.2	766.3	758.4
45°	756.1	761.6	766.6	766.6	766.6	761.6	756.1	745.6	736.5	727.4	719.7
47.5°	724.1	732.2	737.1	738.3	737.1	732.2	724.1	713.4	700.6	689.4	678.4
50°	702.4	712.1	717.0	720.4	717.0	712.1	702.4	690.4	677.2	663.2	649.9
52.5°	681.1	690.8	697.4	699.2	697.4	690.8	681.1	666.4	650.4	635.3	623.7
55°	644.4	658.3	666.0	668.8	666.0	658.3	644.4	628.3	613.0	594.1	577.3
57.5°	609.8	622.6	631.6	633.6	631.6	622.6	609.8	590.9	571.1	551.0	533.1
60°	582.9	596.9	608.0	610.2	608.0	596.9	582.9	564.1	543.1	523.6	501.3
62.5°	555.5	570.1	580.2	585.6	580.2	570.1	555.5	535.6	513.0	491.2	468.9
65°	508.3	522.9	532.7	534.7	532.7	522.9	508.3	488.7	464.9	441.9	423.0
67.5°	456.6	471.2	477.7	481.7	477.7	471.2	456.6	438.2	414.7	390.8	369.4
70°	420.3	432.1	439.1	442.6	439.1	432.1	420.3	400.7	381.2	356.8	333.7
72.5°	378.9	391.3	399.5	400.2	399.5	391.3	378.9	362.1	341.5	318.8	298.5
75°	315.6	326.7	330.9	330.9	330.9	326.7	315.6	299.5	282.8	264.6	244.4
77.5°	249.7	255.5	260.8	262.0	260.8	255.5	249.7	238.2	224.4	206.2	191.0
80°	207.3	210.9	215.0	215.0	215.0	210.9	207.3	196.8	183.6	168.2	156.4
82.5°	163.8	166.7	170.9	170.4	170.9	166.7	163.8	155.5	144.5	134.2	123.4
85°	99.2	105.4	104.7	103.3	104.7	105.4	99.2	100.5	90.1	83.1	73.3
87.5°	48.0	48.6	50.3	51.5	50.3	48.6	48.0	46.3	41.1	38.2	35.7
90°	16.6	16.8	17.1	17.3	17.1	16.8	16.6	16.3	15.8	14.9	14.2
92.5°	15.8	15.8	15.9	15.9	15.9	15.8	15.8	15.7	15.2	14.5	13.7
95°	16.4	16.5	16.6	16.7	16.6	16.5	16.4	16.2	15.8	14.9	14.2
97.5°	15.8	15.9	16.0	16.2	16.0	15.9	15.8	15.7	15.6	15.5	15.3
100°	15.8	15.9	16.0	16.2	16.0	15.9	15.8	15.7	16.7	18.8	21.0
102.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.5	28.2	51.7	75.1
105°	178.0	173.4	168.7	164.2	168.7	173.4	178.0	182.6	184.3	183.2	182.1
107.5°	227.3	227.8	228.3	228.8	228.3	227.8	227.3	226.8	226.3	225.8	225.2
110°	255.8	256.1	256.5	256.9	256.5	256.1	255.8	255.4	255.1	254.8	254.6



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	283.6	284.1	284.6	285.0	284.6	284.1	283.6	283.1	282.9	283.0	283.0
115°	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1	325.9	325.7	325.4
117.5°	367.9	367.9	367.8	367.8	367.8	367.9	367.9	368.0	368.0	368.1	368.1
120°	394.8	394.6	394.3	394.0	394.3	394.6	394.8	395.1	395.1	394.8	394.6
122.5°	420.6	420.3	420.1	419.8	420.1	420.3	420.6	420.8	420.9	420.7	420.6
125°	458.2	458.3	458.4	458.6	458.4	458.3	458.2	458.1	457.8	457.4	457.0
127.5°	492.8	492.7	492.6	492.5	492.6	492.7	492.8	492.9	493.0	493.1	493.2
130°	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.5	515.3	515.2
132.5°	537.0	536.9	536.8	536.7	536.8	536.9	537.0	537.1	537.1	537.0	536.9
135°	567.7	568.0	568.4	568.6	568.4	568.0	567.7	567.5	567.2	567.0	566.7
137.5°	596.0	595.9	595.8	595.7	595.8	595.9	596.0	596.0	595.9	595.7	595.4
140°	614.3	614.4	614.5	614.6	614.5	614.4	614.3	614.1	613.9	613.5	613.1
142.5°	630.3	630.3	630.3	630.4	630.3	630.3	630.3	630.3	630.1	629.8	629.4
145°	653.6	653.9	654.2	654.4	654.2	653.9	653.6	653.4	653.2	653.1	652.9
147.5°	674.0	674.1	674.2	674.3	674.2	674.1	674.0	673.8	673.7	673.6	673.5
150°	686.8	687.0	687.1	687.2	687.1	687.0	686.8	686.7	686.6	686.6	686.6
152.5°	698.5	698.4	698.3	698.3	698.3	698.4	698.5	698.6	698.5	698.3	698.1
155°	714.3	713.9	713.6	713.2	713.6	713.9	714.3	714.7	714.6	714.1	713.6
157.5°	727.6	726.9	726.3	725.6	726.3	726.9	727.6	728.2	728.2	727.6	726.9
160°	736.2	735.4	734.7	733.9	734.7	735.4	736.2	737.0	737.0	736.2	735.4
162.5°	743.0	742.0	741.2	740.3	741.2	742.0	743.0	743.9	743.9	743.1	742.4
165°	752.9	751.7	750.6	749.4	750.6	751.7	752.9	754.1	754.2	753.1	752.0
167.5°	760.1	758.8	757.5	756.3	757.5	758.8	760.1	761.3	761.4	760.3	759.2
170°	764.3	763.0	761.6	760.4	761.6	763.0	764.3	765.5	765.7	764.6	763.6
172.5°	766.9	765.5	764.1	762.7	764.1	765.5	766.9	768.2	768.4	767.4	766.4
175°	770.2	768.6	767.1	765.6	767.1	768.6	770.2	771.7	771.9	770.7	769.6
177.5°	771.1	769.9	768.6	767.4	768.6	769.9	771.1	772.3	772.5	771.7	770.9
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1611.0	1613.3	1622.1	1630.5	1640.6	1647.9	1652.8	1658.5	1670.2	1679.7	1688.6
5°	1509.3	1512.9	1531.0	1543.6	1565.2	1584.1	1598.7	1614.8	1633.7	1659.4	1683.1
7.5°	1419.9	1432.8	1452.7	1473.1	1495.1	1519.8	1541.4	1565.5	1598.0	1633.5	1670.0
10°	1369.1	1383.7	1404.6	1428.4	1449.4	1477.9	1504.5	1533.1	1570.0	1613.4	1656.7
12.5°	1318.2	1342.3	1358.3	1386.4	1409.1	1432.7	1460.9	1498.4	1541.6	1587.1	1639.3
15°	1254.6	1267.8	1298.5	1313.8	1345.9	1382.3	1410.2	1447.9	1489.8	1549.8	1608.5
17.5°	1181.1	1198.5	1222.9	1252.3	1289.2	1317.5	1352.3	1391.1	1443.9	1503.5	1576.9
20°	1133.1	1147.7	1177.7	1209.8	1248.9	1279.0	1316.0	1353.6	1408.2	1471.7	1548.4
22.5°	1090.0	1104.2	1135.9	1165.7	1203.7	1240.4	1279.1	1322.9	1375.1	1442.1	1520.6
25°	1023.5	1042.3	1070.3	1101.0	1137.2	1179.1	1221.0	1260.1	1316.0	1386.4	1470.3
27.5°	964.4	979.5	999.8	1034.6	1075.8	1116.3	1157.9	1207.1	1260.7	1335.2	1422.2
30°	926.5	940.4	960.6	992.7	1031.2	1074.4	1117.7	1165.2	1221.0	1295.1	1383.7
32.5°	896.3	906.9	924.8	953.6	988.7	1034.2	1076.9	1126.1	1184.7	1257.6	1344.0
35°	851.7	860.8	867.8	895.0	926.5	968.3	1011.6	1064.0	1120.4	1189.6	1276.2
37.5°	808.0	811.1	821.3	839.1	869.6	908.2	948.4	999.9	1057.8	1128.0	1206.1
40°	781.2	782.6	788.9	805.7	832.1	868.5	907.6	958.6	1013.7	1080.1	1157.5
42.5°	755.0	754.1	759.8	771.5	796.4	829.4	867.9	914.4	969.6	1030.9	1103.9
45°	713.5	713.5	712.1	721.9	742.1	774.3	806.4	851.0	897.1	957.2	1018.5
47.5°	670.2	666.3	667.5	672.6	689.6	716.0	748.4	785.0	825.6	876.5	930.3
50°	642.3	636.7	634.6	640.2	655.5	678.5	709.3	741.4	779.8	824.5	870.6
52.5°	611.6	606.0	602.2	606.1	620.4	641.7	669.6	697.8	732.4	768.6	808.6
55°	564.1	557.8	555.7	557.1	567.5	584.3	608.0	633.9	659.7	689.7	717.7
57.5°	517.4	507.0	505.0	504.3	511.6	526.9	546.7	569.2	587.9	606.1	635.8
60°	486.6	474.0	469.8	469.2	474.7	487.3	505.4	527.8	541.1	553.6	579.5
62.5°	453.6	441.6	432.4	433.4	438.4	450.4	466.4	482.5	491.3	505.0	522.5
65°	402.8	387.5	380.5	378.4	381.2	390.9	403.5	413.9	423.7	429.4	446.1
67.5°	352.0	339.1	328.8	326.3	325.1	331.7	342.0	348.4	355.4	360.2	370.1
70°	316.3	305.1	292.6	288.3	287.6	293.2	303.0	303.7	313.5	315.6	326.0
72.5°	281.0	267.1	258.4	254.3	251.4	256.3	262.8	264.6	269.9	273.7	279.1
75°	226.2	215.7	207.3	201.1	198.9	201.8	201.8	205.2	208.7	210.9	217.1
77.5°	178.0	166.0	156.1	152.5	150.0	148.1	149.7	151.8	150.1	153.7	155.1
80°	144.5	132.0	124.3	122.9	118.7	115.2	114.5	116.5	113.8	115.2	119.4
82.5°	111.6	103.5	95.2	93.8	88.6	86.7	86.0	84.7	84.7	84.4	85.3
85°	66.3	61.4	55.8	52.3	50.3	46.8	46.8	45.3	44.0	42.6	43.3
87.5°	29.5	28.2	25.2	23.3	22.0	19.6	19.4	17.4	16.6	15.8	14.8
90°	13.4	12.6	11.6	10.6	9.6	8.6	7.4	6.0	4.5	3.1	1.7
92.5°	13.0	12.2	11.2	10.2	9.2	8.1	7.6	7.5	7.4	7.4	7.3
95°	13.4	12.6	12.5	12.4	12.3	12.1	14.2	18.6	23.0	27.4	31.7
97.5°	15.2	15.2	29.5	43.8	58.1	72.3	78.2	75.4	72.7	70.0	67.3
100°	23.1	25.3	43.0	60.7	78.4	96.0	103.7	101.4	99.1	96.7	94.4
102.5°	98.7	122.1	124.4	126.7	129.1	131.4	131.7	130.0	128.3	126.5	124.9
105°	180.9	179.8	179.0	178.4	177.8	177.1	176.4	175.7	174.9	174.2	173.4
107.5°	224.7	224.1	223.2	222.4	221.5	220.6	219.9	219.5	219.2	218.8	218.4
110°	254.3	254.1	253.3	252.5	251.8	251.0	250.3	250.0	249.6	249.2	248.8



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	283.1	283.1	282.8	282.4	282.0	281.7	281.1	280.4	279.7	279.0	278.3
115°	325.2	324.9	325.0	325.2	325.3	325.4	325.3	324.9	324.5	324.2	323.8
117.5°	368.2	368.2	367.9	367.7	367.4	367.1	366.7	366.2	365.7	365.2	364.7
120°	394.3	394.0	394.2	394.3	394.5	394.6	394.4	393.8	393.3	392.8	392.3
122.5°	420.4	420.3	420.1	419.9	419.8	419.6	419.3	419.0	418.7	418.4	418.1
125°	456.7	456.3	456.5	456.8	457.0	457.3	457.2	456.7	456.2	455.6	455.0
127.5°	493.2	493.3	492.7	492.1	491.6	491.0	490.6	490.5	490.4	490.2	490.1
130°	515.1	515.0	514.6	514.2	513.8	513.4	513.2	513.1	512.9	512.8	512.7
132.5°	536.7	536.6	536.1	535.6	535.2	534.7	534.3	534.1	533.9	533.6	533.4
135°	566.5	566.2	565.7	565.2	564.7	564.2	564.0	564.1	564.3	564.4	564.5
137.5°	595.1	594.8	594.3	593.7	593.1	592.6	592.3	592.2	592.2	592.1	592.1
140°	612.7	612.4	612.1	611.9	611.6	611.3	611.1	610.8	610.6	610.3	610.1
142.5°	629.2	628.9	628.7	628.6	628.4	628.3	628.0	627.5	627.1	626.6	626.2
145°	652.8	652.7	652.7	652.7	652.7	652.7	652.5	652.1	651.7	651.4	651.0
147.5°	673.4	673.3	673.4	673.6	673.7	673.8	673.5	672.8	672.1	671.4	670.7
150°	686.6	686.6	686.8	686.9	687.0	687.2	687.0	686.5	686.0	685.4	684.9
152.5°	697.9	697.7	697.9	698.2	698.4	698.6	698.5	698.1	697.7	697.3	696.9
155°	713.1	712.6	713.0	713.4	713.8	714.1	714.3	714.1	714.0	713.9	713.8
157.5°	726.3	725.6	726.0	726.5	726.9	727.3	727.6	727.7	727.7	727.8	727.9
160°	734.7	733.9	734.0	734.2	734.3	734.4	734.7	735.1	735.4	735.8	736.2
162.5°	741.5	740.8	740.9	741.0	741.1	741.3	741.6	742.1	742.6	743.1	743.6
165°	751.0	750.0	750.0	750.0	750.0	750.0	750.3	750.9	751.6	752.2	752.9
167.5°	758.1	756.9	757.0	757.1	757.2	757.2	757.6	758.3	758.9	759.6	760.2
170°	762.5	761.5	761.4	761.2	761.1	761.0	761.3	762.1	762.9	763.7	764.5
172.5°	765.4	764.3	764.2	764.1	764.0	763.8	764.2	764.9	765.7	766.4	767.2
175°	768.4	767.3	767.2	767.1	766.9	766.8	767.1	767.9	768.6	769.4	770.2
177.5°	770.1	769.2	769.0	768.8	768.6	768.4	768.7	769.4	770.1	770.8	771.5
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



TEST NUMBER: P332634-840

CATALOG NUMBER: SA4XXDIP-C1020D590U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1696.5	1702.0	1709.3	1721.6	1726.1	1731.6	1739.5	1738.9	1741.1	1749.5	1767.4
5°	1702.7	1724.3	1745.3	1770.5	1797.0	1814.4	1838.2	1852.8	1867.4	1886.3	1918.4
7.5°	1705.3	1739.6	1778.0	1822.1	1861.4	1906.6	1941.9	1975.1	2005.2	2045.0	2083.3
10°	1701.3	1747.4	1797.0	1852.8	1912.2	1962.5	2007.8	2059.5	2103.4	2151.6	2194.9
12.5°	1694.0	1749.7	1815.9	1878.6	1947.9	2022.2	2078.7	2130.9	2189.5	2244.9	2311.7
15°	1677.6	1753.7	1831.2	1913.6	2006.4	2092.2	2173.9	2241.7	2304.5	2387.6	2474.9
17.5°	1656.7	1738.8	1836.4	1936.2	2033.3	2131.4	2232.5	2334.3	2413.6	2516.8	2585.1
20°	1637.1	1732.0	1832.6	1951.3	2048.3	2170.5	2271.0	2369.4	2478.3	2581.0	2662.6
22.5°	1609.7	1713.6	1820.3	1938.4	2066.2	2188.4	2304.5	2411.4	2520.2	2631.8	2730.8
25°	1575.0	1669.2	1795.5	1929.7	2056.7	2189.3	2322.7	2456.7	2573.9	2692.0	2784.1
27.5°	1515.8	1634.8	1752.4	1890.8	2031.9	2182.0	2324.6	2465.0	2587.8	2684.8	2742.0
30°	1485.6	1588.9	1716.7	1855.6	2008.5	2169.8	2318.4	2456.0	2570.5	2648.0	2671.0
32.5°	1441.0	1547.6	1672.5	1816.5	1978.3	2144.0	2299.0	2428.6	2524.2	2564.8	2537.0
35°	1374.6	1471.0	1597.3	1744.6	1912.9	2089.5	2242.4	2352.0	2400.9	2362.5	2266.8
37.5°	1295.1	1390.5	1517.4	1662.1	1836.2	2015.8	2154.0	2232.9	2216.7	2121.2	1978.6
40°	1239.2	1328.6	1449.4	1605.7	1775.3	1955.4	2076.9	2119.5	2074.9	1938.0	1786.6
42.5°	1177.2	1264.4	1385.6	1536.4	1716.2	1882.3	1988.1	1991.7	1916.7	1753.1	1601.0
45°	1082.8	1165.9	1280.4	1437.4	1603.6	1760.0	1829.8	1795.5	1657.4	1499.5	1346.7
47.5°	989.7	1061.7	1174.6	1323.6	1481.5	1613.1	1647.7	1586.1	1438.9	1285.7	1144.0
50°	921.5	994.1	1100.2	1242.6	1394.8	1508.6	1525.4	1443.7	1299.2	1144.9	1033.9
52.5°	856.2	928.3	1030.5	1162.3	1301.6	1404.2	1404.7	1310.2	1166.3	1028.7	925.5
55°	760.2	825.2	917.4	1035.3	1159.6	1239.9	1220.3	1122.6	997.6	878.3	788.2
57.5°	667.8	724.4	809.3	907.7	1017.1	1083.4	1051.0	956.8	845.3	744.1	675.8
60°	608.0	661.9	734.5	827.3	919.5	971.1	940.4	855.2	752.6	670.9	611.6
62.5°	550.0	595.3	665.2	745.8	831.2	869.5	842.1	758.0	669.3	595.5	547.3
65°	467.8	504.7	560.6	629.8	691.9	724.7	701.7	623.4	555.7	502.6	464.2
67.5°	390.9	419.9	462.1	517.6	570.4	588.1	567.1	512.7	455.3	412.8	385.8
70°	337.9	365.2	400.7	443.3	489.4	508.3	487.3	444.0	397.3	358.1	331.6
72.5°	291.5	312.7	342.6	379.1	415.2	433.9	419.7	378.1	338.6	309.5	286.9
75°	222.0	240.1	261.1	286.9	314.9	327.4	314.9	286.2	259.0	237.3	221.3
77.5°	161.4	171.2	187.3	206.6	224.1	233.7	222.9	203.4	186.8	172.0	164.1
80°	122.9	129.9	141.0	156.4	168.2	177.3	170.4	154.3	141.0	131.3	127.7
82.5°	89.4	94.1	101.4	112.8	120.8	125.4	122.3	110.7	105.2	96.6	93.1
85°	44.0	46.8	51.7	55.1	62.1	62.8	63.5	58.7	53.7	51.7	48.9
87.5°	15.8	16.6	18.5	20.5	22.9	23.7	23.3	23.5	21.5	21.1	19.1
90°	3.1	4.5	6.0	7.4	8.6	9.6	10.6	11.6	12.6	13.4	14.2
92.5°	7.4	7.4	7.5	7.6	8.1	9.2	10.2	11.2	12.2	13.0	13.7
95°	27.4	23.0	18.6	14.2	12.1	12.3	12.4	12.5	12.6	13.4	14.2
97.5°	70.0	72.7	75.4	78.2	72.3	58.1	43.8	29.5	15.2	15.2	15.3
100°	96.7	99.1	101.4	103.7	96.0	78.4	60.7	43.0	25.3	23.1	21.0
102.5°	126.5	128.3	130.0	131.7	131.4	129.1	126.7	124.4	122.1	98.7	75.1
105°	174.2	174.9	175.7	176.4	177.1	177.8	178.4	179.0	179.8	180.9	182.1
107.5°	218.8	219.2	219.5	219.9	220.6	221.5	222.4	223.2	224.1	224.7	225.2
110°	249.2	249.6	250.0	250.3	251.0	251.8	252.5	253.3	254.1	254.3	254.6





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	279.0	279.7	280.4	281.1	281.7	282.0	282.4	282.8	283.1	283.1	283.0
115°	324.2	324.5	324.9	325.3	325.4	325.3	325.2	325.0	324.9	325.2	325.4
117.5°	365.2	365.7	366.2	366.7	367.1	367.4	367.7	367.9	368.2	368.2	368.1
120°	392.8	393.3	393.8	394.4	394.6	394.5	394.3	394.2	394.0	394.3	394.6
122.5°	418.4	418.7	419.0	419.3	419.6	419.8	419.9	420.1	420.3	420.4	420.6
125°	455.6	456.2	456.7	457.2	457.3	457.0	456.8	456.5	456.3	456.7	457.0
127.5°	490.2	490.4	490.5	490.6	491.0	491.6	492.1	492.7	493.3	493.2	493.2
130°	512.8	512.9	513.1	513.2	513.4	513.8	514.2	514.6	515.0	515.1	515.2
132.5°	533.6	533.9	534.1	534.3	534.7	535.2	535.6	536.1	536.6	536.7	536.9
135°	564.4	564.3	564.1	564.0	564.2	564.7	565.2	565.7	566.2	566.5	566.7
137.5°	592.1	592.2	592.2	592.3	592.6	593.1	593.7	594.3	594.8	595.1	595.4
140°	610.3	610.6	610.8	611.1	611.3	611.6	611.9	612.1	612.4	612.7	613.1
142.5°	626.6	627.1	627.5	628.0	628.3	628.4	628.6	628.7	628.9	629.2	629.4
145°	651.4	651.7	652.1	652.5	652.7	652.7	652.7	652.7	652.7	652.8	652.9
147.5°	671.4	672.1	672.8	673.5	673.8	673.7	673.6	673.4	673.3	673.4	673.5
150°	685.4	686.0	686.5	687.0	687.2	687.0	686.9	686.8	686.6	686.6	686.6
152.5°	697.3	697.7	698.1	698.5	698.6	698.4	698.2	697.9	697.7	697.9	698.1
155°	713.9	714.0	714.1	714.3	714.1	713.8	713.4	713.0	712.6	713.1	713.6
157.5°	727.8	727.7	727.7	727.6	727.3	726.9	726.5	726.0	725.6	726.3	726.9
160°	735.8	735.4	735.1	734.7	734.4	734.3	734.2	734.0	733.9	734.7	735.4
162.5°	743.1	742.6	742.1	741.6	741.3	741.1	741.0	740.9	740.8	741.5	742.4
165°	752.2	751.6	750.9	750.3	750.0	750.0	750.0	750.0	750.0	751.0	752.0
167.5°	759.6	758.9	758.3	757.6	757.2	757.2	757.1	757.0	756.9	758.1	759.2
170°	763.7	762.9	762.1	761.3	761.0	761.1	761.2	761.4	761.5	762.5	763.6
172.5°	766.4	765.7	764.9	764.2	763.8	764.0	764.1	764.2	764.3	765.4	766.4
175°	769.4	768.6	767.9	767.1	766.8	766.9	767.1	767.2	767.3	768.4	769.6
177.5°	770.8	770.1	769.4	768.7	768.4	768.6	768.8	769.0	769.2	770.1	770.9
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2	770.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1776.4	1777.5	1782.4	1786.4	1787.5	1793.1	1793.6
5°	1932.4	1944.3	1967.3	1969.4	1972.9	1991.0	1977.1
7.5°	2115.4	2145.5	2165.6	2183.3	2189.8	2197.7	2196.1
10°	2232.6	2277.2	2299.7	2335.2	2336.6	2345.7	2340.2
12.5°	2350.5	2402.4	2443.2	2449.7	2479.6	2484.2	2492.0
15°	2517.4	2572.6	2629.2	2649.4	2690.6	2700.4	2715.7
17.5°	2674.4	2730.8	2770.5	2822.8	2839.7	2862.4	2846.9
20°	2760.4	2821.9	2872.1	2913.3	2930.7	2943.3	2941.9
22.5°	2812.4	2874.3	2915.1	2946.2	2962.5	2967.9	2967.6
25°	2844.9	2880.4	2893.1	2904.9	2886.8	2880.4	2883.3
27.5°	2754.4	2745.2	2712.4	2669.4	2624.6	2589.2	2569.9
30°	2629.9	2575.4	2525.8	2439.2	2394.6	2368.0	2344.3
32.5°	2453.4	2367.0	2271.7	2192.4	2141.6	2102.2	2096.4
35°	2150.9	2021.0	1904.5	1807.5	1757.2	1714.5	1704.9
37.5°	1828.7	1693.7	1588.8	1503.4	1449.4	1419.3	1391.2
40°	1614.8	1498.8	1395.5	1322.9	1281.7	1260.1	1242.6
42.5°	1450.0	1344.1	1241.4	1186.1	1148.8	1135.6	1125.4
45°	1222.4	1124.0	1052.8	1010.9	989.3	966.9	956.4
47.5°	1040.2	960.1	913.1	877.6	854.3	841.1	834.4
50°	936.9	871.2	829.4	802.1	781.2	770.7	765.2
52.5°	845.3	791.4	756.2	734.6	720.3	712.7	710.4
55°	728.1	686.9	664.6	645.8	635.3	628.3	625.5
57.5°	632.9	601.3	583.1	567.5	563.5	557.6	555.7
60°	570.4	545.9	530.6	520.1	516.6	509.7	511.0
62.5°	515.0	495.1	482.0	475.9	471.4	465.5	467.5
65°	435.7	421.0	413.9	408.4	402.8	399.3	402.1
67.5°	365.6	355.5	346.0	342.7	340.0	339.4	336.5
70°	319.7	311.3	303.0	300.9	300.9	298.1	297.4
72.5°	275.6	269.4	263.9	262.4	260.1	261.3	258.3
75°	212.9	208.0	205.9	203.9	203.2	203.2	201.1
77.5°	157.3	153.7	150.4	150.4	147.8	146.9	146.6
80°	119.4	118.0	115.2	115.2	113.8	114.5	113.1
82.5°	89.8	87.9	87.3	86.1	84.2	84.3	82.9
85°	48.2	46.0	45.3	43.3	41.9	43.3	41.9
87.5°	19.8	19.4	18.9	17.8	17.3	17.4	15.8
90°	14.9	15.8	16.3	16.6	16.8	17.1	17.3
92.5°	14.5	15.2	15.7	15.8	15.8	15.9	15.9
95°	14.9	15.8	16.2	16.4	16.5	16.6	16.7
97.5°	15.5	15.6	15.7	15.8	15.9	16.0	16.2
100°	18.8	16.7	15.7	15.8	15.9	16.0	16.2
102.5°	51.7	28.2	16.5	16.6	16.6	16.6	16.6
105°	183.2	184.3	182.6	178.0	173.4	168.7	164.2
107.5°	225.8	226.3	226.8	227.3	227.8	228.3	228.8
110°	254.8	255.1	255.4	255.8	256.1	256.5	256.9



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	283.0	282.9	283.1	283.6	284.1	284.6	285.0
115°	325.7	325.9	326.1	326.1	326.1	326.1	326.1
117.5°	368.1	368.0	368.0	367.9	367.9	367.8	367.8
120°	394.8	395.1	395.1	394.8	394.6	394.3	394.0
122.5°	420.7	420.9	420.8	420.6	420.3	420.1	419.8
125°	457.4	457.8	458.1	458.2	458.3	458.4	458.6
127.5°	493.1	493.0	492.9	492.8	492.7	492.6	492.5
130°	515.3	515.5	515.5	515.5	515.5	515.5	515.5
132.5°	537.0	537.1	537.1	537.0	536.9	536.8	536.7
135°	567.0	567.2	567.5	567.7	568.0	568.4	568.6
137.5°	595.7	595.9	596.0	596.0	595.9	595.8	595.7
140°	613.5	613.9	614.1	614.3	614.4	614.5	614.6
142.5°	629.8	630.1	630.3	630.3	630.3	630.3	630.4
145°	653.1	653.2	653.4	653.6	653.9	654.2	654.4
147.5°	673.6	673.7	673.8	674.0	674.1	674.2	674.3
150°	686.6	686.6	686.7	686.8	687.0	687.1	687.2
152.5°	698.3	698.5	698.6	698.5	698.4	698.3	698.3
155°	714.1	714.6	714.7	714.3	713.9	713.6	713.2
157.5°	727.6	728.2	728.2	727.6	726.9	726.3	725.6
160°	736.2	737.0	737.0	736.2	735.4	734.7	733.9
162.5°	743.1	743.9	743.9	743.0	742.0	741.2	740.3
165°	753.1	754.2	754.1	752.9	751.7	750.6	749.4
167.5°	760.3	761.4	761.3	760.1	758.8	757.5	756.3
170°	764.6	765.7	765.5	764.3	763.0	761.6	760.4
172.5°	767.4	768.4	768.2	766.9	765.5	764.1	762.7
175°	770.7	771.9	771.7	770.2	768.6	767.1	765.6
177.5°	771.7	772.5	772.3	771.1	769.9	768.6	767.4
180°	770.2	770.2	770.2	770.2	770.2	770.2	770.2

(END OF REPORT)