

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: P332654-830

Luminaire Tested: **SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332654-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

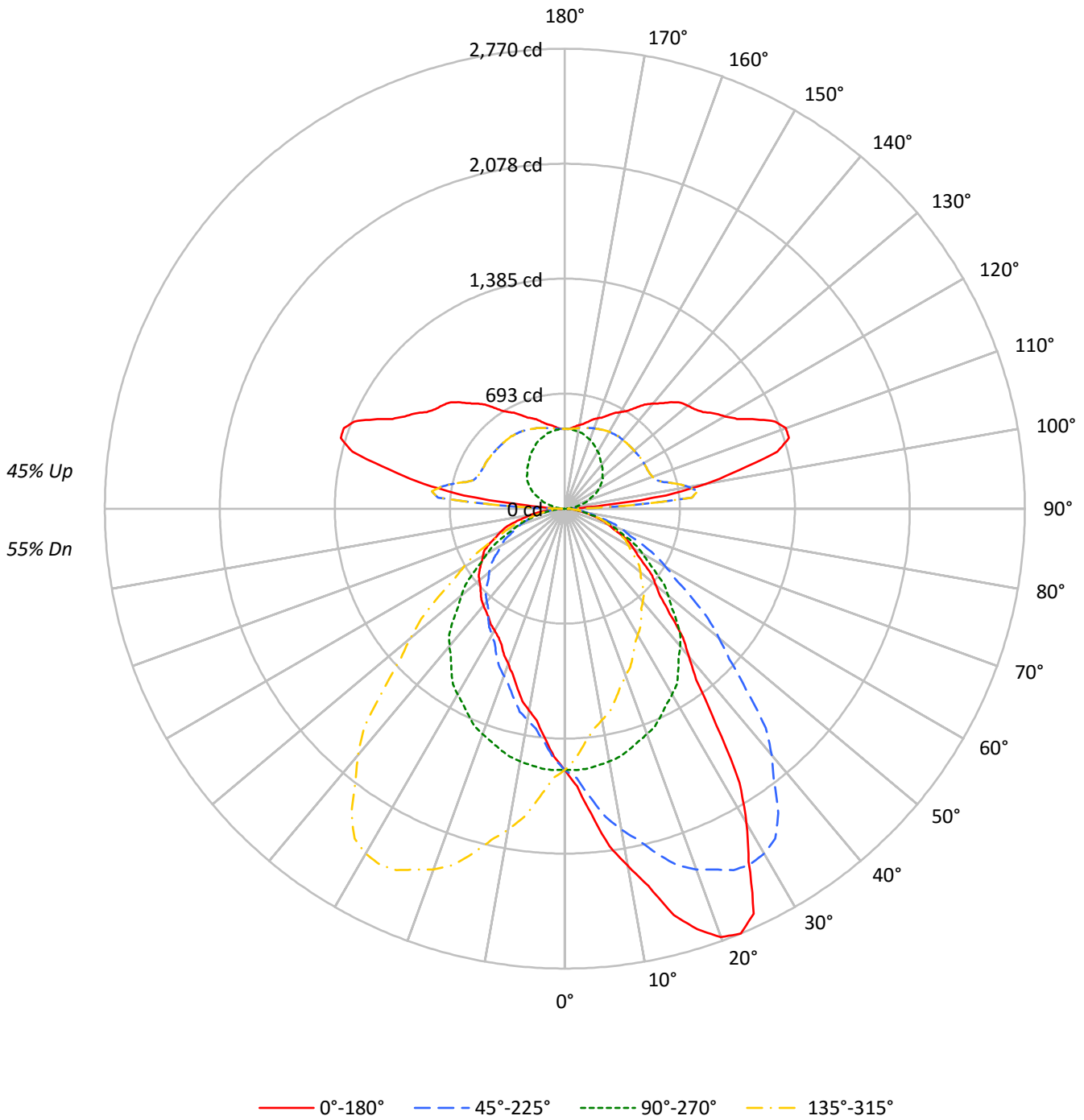
Lumens per Lamp: N/A
Luminaire Lumens: 7825.7 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55				
1	99	95	91	88	92	88	85	82	76	74	71	65	63	61	54	53	52	47				
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44	40				
3	83	73	66	60	77	69	62	57	59	54	50	51	47	44	43	40	38	34				
4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	39	35	33	29				
5	70	58	50	44	65	54	47	42	47	42	37	41	37	33	35	32	29	26				
6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	28	26	23				
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23	20				
8	55	43	35	30	51	40	33	29	36	30	26	31	26	23	27	23	20	18				
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	18	16				
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12698	12698	12698	12698
5°	14954	12730	11237	12730
10°	17905	12675	10117	12675
15°	21184	12547	9290	12547
20°	23589	12416	8553	12416
25°	23971	12223	8044	12223
30°	20396	12039	7883	12039
35°	15682	11739	7885	11739
40°	12223	11385	8033	11385
45°	10192	10853	8169	10853
50°	8970	10206	8445	10206
55°	8217	9429	8785	9429
60°	7700	8732	9195	8732
65°	7169	7952	9534	7952
70°	6552	7183	9751	7183
75°	5855	6319	9635	6319
80°	4909	5179	9331	5179
85°	3622	3742	8929	3742



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.2	2.0
10°-20°	472.3	6.0
20°-30°	749.0	9.6
30°-40°	833.5	10.7
40°-50°	758.7	9.7
50°-60°	620.0	7.9
60°-70°	442.6	5.7
70°-80°	243.7	3.1
80°-90°	69.2	0.9
90°-100°	345.9	4.4
100°-110°	720.0	9.2
110°-120°	644.9	8.2
120°-130°	542.4	6.9
130°-140°	452.3	5.8
140°-150°	345.5	4.4
150°-160°	242.9	3.1
160°-170°	142.9	1.8
170°-180°	46.5	0.6
0°-30°	1374.6	17.6
0°-40°	2208.1	28.2
0°-60°	3586.8	45.8
0°-90°	4342.4	55.5
90°-120°	1710.8	21.9
90°-150°	3051.1	39.0
90°-180°	3483.0	44.5
0°-180°	7825.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1573	1573	1573	1573	1573	
5°	1845	1571	1387	1571	1845	188
15°	2535	1501	1112	1501	2535	716
25°	2691	1372	903	1372	2691	1186
35°	1591	1191	800	1191	1591	1010
45°	893	951	716	951	893	703
55°	584	670	624	670	584	527
65°	375	416	499	416	375	372
75°	188	203	309	203	188	200
85°	39	40	96	40	39	48
90°	20	1	20	1	20	17
95°	230	31	230	31	230	356
105°	1324	110	1324	110	1324	1309
115°	1271	194	1271	194	1271	1262
125°	1014	270	1014	270	1014	922
135°	907	321	907	321	907	700
145°	741	370	741	370	741	469
155°	620	421	620	421	620	289
165°	541	458	541	458	541	155
175°	487	478	487	478	487	47
180°	479	479	479	479	479	



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1674.0	1673.6	1668.3	1667.3	1663.6	1659.0	1657.9	1649.5	1632.9	1625.0	1623.0
5°	1845.3	1858.3	1841.4	1838.1	1836.2	1814.7	1803.6	1790.5	1760.6	1742.9	1729.3
7.5°	2049.7	2051.2	2043.8	2037.8	2021.2	2002.4	1974.3	1944.4	1908.6	1871.5	1843.4
10°	2184.2	2189.3	2180.9	2179.5	2146.4	2125.4	2083.8	2048.6	2008.2	1963.2	1922.2
12.5°	2325.9	2318.6	2314.3	2286.4	2280.3	2242.2	2193.8	2157.6	2095.3	2043.5	1988.9
15°	2534.7	2520.4	2511.2	2472.8	2453.9	2401.1	2349.6	2309.9	2228.5	2150.9	2092.3
17.5°	2657.1	2671.5	2650.4	2634.6	2585.8	2548.7	2496.1	2412.7	2349.0	2252.7	2178.7
20°	2745.8	2747.0	2735.4	2719.0	2680.6	2633.7	2576.3	2485.1	2409.0	2313.1	2211.5
22.5°	2769.8	2770.0	2765.0	2749.8	2720.7	2682.7	2624.9	2548.7	2456.4	2352.2	2250.6
25°	2691.1	2688.4	2694.4	2711.2	2700.2	2688.4	2655.2	2598.5	2512.5	2402.4	2292.9
27.5°	2398.6	2416.6	2449.7	2491.4	2531.6	2562.2	2570.8	2559.2	2505.8	2415.3	2300.7
30°	2188.0	2210.2	2235.0	2276.6	2357.4	2403.7	2454.6	2492.9	2471.4	2399.1	2292.3
32.5°	1956.6	1962.1	1998.8	2046.3	2120.2	2209.2	2289.8	2367.9	2393.8	2355.9	2266.7
35°	1591.2	1600.2	1640.0	1687.0	1777.5	1886.3	2007.5	2115.7	2205.0	2240.8	2195.2
37.5°	1298.4	1324.6	1352.7	1403.2	1482.9	1580.8	1706.8	1846.7	1979.8	2068.9	2084.1
40°	1159.8	1176.1	1196.3	1234.7	1302.5	1398.9	1507.1	1667.5	1808.8	1936.5	1978.2
42.5°	1050.4	1059.9	1072.2	1107.0	1158.7	1254.5	1353.3	1494.3	1636.3	1788.9	1858.9
45°	892.7	902.5	923.3	943.5	982.6	1049.0	1140.9	1256.9	1399.6	1546.9	1675.8
47.5°	778.7	785.0	797.4	819.1	852.2	896.1	970.8	1067.7	1200.0	1342.9	1480.4
50°	714.2	719.3	729.2	748.7	774.1	813.1	874.4	965.0	1068.6	1212.6	1347.5
52.5°	663.1	665.2	672.3	685.6	705.8	738.7	788.9	863.8	960.2	1088.5	1222.9
55°	583.8	586.4	593.0	602.8	620.3	641.1	679.6	735.7	819.7	931.1	1047.7
57.5°	518.7	520.5	525.9	529.7	544.2	561.2	590.7	630.7	694.5	788.9	893.1
60°	476.9	475.7	482.2	485.4	495.2	509.5	532.3	570.8	626.1	702.4	798.1
62.5°	436.3	434.5	440.0	444.2	449.9	462.1	480.7	510.9	555.8	624.7	707.5
65°	375.3	372.7	376.0	381.2	386.3	392.9	406.6	433.3	469.1	518.7	581.8
67.5°	314.1	316.8	317.4	319.9	322.9	331.8	341.2	360.1	385.3	425.0	478.5
70°	277.6	278.2	280.9	280.9	282.8	290.6	298.4	309.5	334.2	370.8	414.4
72.5°	241.1	243.8	242.8	244.9	246.3	251.5	257.2	267.8	288.9	316.0	352.9
75°	187.7	189.6	189.6	190.3	192.2	194.2	198.7	206.5	221.5	241.8	267.1
77.5°	136.9	137.1	138.0	140.3	140.3	143.5	146.8	153.2	160.5	174.4	189.8
80°	105.6	106.9	106.2	107.5	107.5	110.1	111.4	119.2	122.5	131.6	144.0
82.5°	77.4	78.7	78.6	80.4	81.4	82.0	83.8	86.9	90.2	98.2	103.3
85°	39.1	40.4	39.1	40.4	42.3	43.0	45.0	45.6	48.3	50.1	54.8
87.5°	15.5	17.0	17.2	17.5	18.4	18.9	19.2	18.5	20.4	21.1	22.8
90°	19.8	19.8	20.7	19.8	18.9	18.9	17.9	17.0	16.0	17.0	15.1
92.5°	72.5	72.5	75.7	80.8	91.8	110.7	139.1	184.8	248.6	298.5	261.2
95°	229.6	241.9	258.7	287.9	334.0	425.3	551.4	697.2	788.5	766.9	578.7
97.5°	613.7	633.3	661.5	718.1	785.7	883.9	975.9	1030.2	990.6	807.7	541.6
100°	862.9	870.3	898.6	956.0	1037.8	1107.5	1153.6	1134.8	997.4	756.5	491.2
102.5°	1079.7	1085.7	1115.4	1157.0	1207.2	1236.2	1222.9	1129.5	940.9	692.6	457.3
105°	1323.9	1329.6	1342.7	1350.3	1348.4	1309.8	1216.6	1053.9	838.4	617.3	428.1
107.5°	1414.7	1412.2	1402.8	1381.3	1334.8	1250.9	1119.7	946.4	755.5	575.1	422.8
110°	1416.2	1407.7	1390.7	1351.2	1284.4	1180.9	1044.4	881.7	714.2	560.8	424.3



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1371.7	1358.0	1334.3	1286.5	1210.6	1107.1	978.2	834.2	690.9	554.0	428.9
115°	1271.2	1263.7	1233.6	1177.1	1102.8	1012.5	902.4	786.6	669.0	550.4	437.5
117.5°	1169.4	1163.6	1133.1	1085.7	1022.3	945.7	859.1	763.3	659.2	549.5	446.8
120°	1112.2	1101.8	1077.4	1035.9	982.3	915.6	840.3	752.7	653.9	549.5	453.6
122.5°	1067.1	1056.7	1035.9	1000.6	955.3	896.7	828.2	743.8	647.9	548.7	460.3
125°	1014.4	1008.7	990.8	963.6	925.9	874.1	809.2	728.3	638.0	547.6	470.5
127.5°	983.4	977.8	962.8	938.5	900.7	851.6	786.8	709.5	624.6	545.5	478.5
130°	965.4	959.8	944.7	921.1	882.6	832.7	768.7	694.5	616.3	544.8	484.6
132.5°	945.1	939.4	925.1	898.6	860.8	810.9	748.5	678.6	608.8	544.0	489.8
135°	907.1	901.4	886.4	860.1	822.4	775.3	717.9	656.8	597.5	542.9	497.8
137.5°	860.1	853.3	840.8	814.8	779.7	737.2	688.8	637.1	587.7	542.7	502.5
140°	826.1	818.6	805.5	784.8	751.8	712.3	670.0	625.8	582.5	542.0	506.2
142.5°	790.0	784.8	773.1	753.8	724.7	690.5	654.1	615.2	578.0	542.0	509.3
145°	740.6	735.8	726.4	710.4	686.9	660.5	632.4	600.3	570.2	540.1	511.0
147.5°	696.6	695.0	687.9	674.1	656.8	636.1	613.5	588.1	563.3	536.7	511.9
150°	671.8	670.9	665.2	653.0	638.0	621.0	602.2	580.6	558.0	534.4	511.9
152.5°	649.2	648.3	644.9	635.0	622.2	608.2	590.9	572.3	552.0	530.7	510.4
155°	620.1	620.1	617.3	609.7	600.3	589.0	575.0	559.9	542.9	525.1	508.1
157.5°	594.5	594.5	592.8	587.1	580.0	571.0	559.1	546.5	533.7	519.2	505.7
160°	578.7	578.7	577.8	572.1	566.5	558.9	548.6	538.2	527.0	514.7	503.4
162.5°	563.6	564.4	563.5	557.8	553.6	546.9	538.8	529.9	520.9	510.2	501.1
165°	541.0	542.0	542.9	539.1	535.4	530.7	524.1	518.5	511.0	503.4	496.8
167.5°	523.2	524.0	524.1	521.7	519.8	517.0	511.7	507.4	501.9	496.6	492.3
170°	511.9	511.9	512.8	511.9	510.0	507.2	503.4	500.6	495.9	492.1	489.3
172.5°	500.6	502.1	503.0	502.1	501.0	498.9	496.6	494.6	490.6	487.6	486.3
175°	487.4	489.3	491.2	489.3	489.3	489.3	487.4	486.4	484.6	482.7	482.7
177.5°	479.7	481.2	482.7	481.9	482.7	481.9	481.9	481.2	480.4	479.7	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1623.5	1616.2	1611.0	1606.8	1595.3	1588.6	1583.4	1576.0	1567.7	1558.9	1547.9
5°	1715.6	1693.5	1677.2	1652.5	1629.0	1609.4	1589.2	1570.9	1548.8	1524.8	1507.1
7.5°	1812.4	1779.5	1737.3	1700.6	1659.4	1623.6	1591.6	1558.7	1524.6	1491.5	1461.1
10°	1874.0	1831.6	1784.7	1729.3	1677.2	1630.9	1587.9	1546.2	1505.8	1465.4	1430.9
12.5°	1940.1	1887.3	1818.1	1753.3	1694.9	1633.0	1581.1	1530.0	1481.3	1438.8	1398.5
15°	2029.0	1952.8	1872.6	1786.0	1709.1	1636.8	1565.8	1501.3	1446.5	1390.4	1351.4
17.5°	2083.7	1989.3	1897.7	1807.1	1714.0	1622.9	1546.2	1471.8	1403.3	1347.6	1298.4
20°	2119.6	2025.8	1911.8	1821.2	1710.4	1616.6	1528.0	1445.2	1373.6	1314.3	1263.4
22.5°	2150.9	2042.5	1928.4	1809.2	1698.9	1599.4	1502.4	1419.2	1346.0	1283.5	1234.7
25°	2167.8	2043.3	1919.6	1801.0	1675.8	1557.9	1470.0	1372.2	1294.0	1228.2	1176.1
27.5°	2169.6	2036.6	1896.5	1764.7	1635.6	1525.8	1414.8	1327.4	1246.2	1176.7	1126.6
30°	2163.9	2025.1	1874.6	1731.9	1602.2	1483.0	1386.6	1291.5	1208.7	1139.6	1087.5
32.5°	2145.7	2001.1	1846.4	1695.4	1561.0	1444.4	1344.9	1254.4	1173.7	1105.7	1051.0
35°	2092.9	1950.2	1785.4	1628.3	1490.8	1372.9	1283.0	1191.1	1110.3	1045.8	993.1
37.5°	2010.4	1881.4	1713.8	1551.3	1416.3	1297.8	1208.7	1125.7	1052.8	987.3	933.2
40°	1938.4	1825.0	1657.0	1498.6	1352.7	1240.0	1156.6	1080.3	1008.0	946.1	894.7
42.5°	1855.6	1756.8	1601.8	1434.0	1293.3	1180.1	1098.7	1030.3	962.1	904.9	853.5
45°	1707.8	1642.7	1496.7	1341.6	1195.0	1088.2	1010.6	950.6	893.3	837.3	794.3
47.5°	1537.9	1505.5	1382.7	1235.4	1096.3	990.9	923.7	868.3	818.0	770.5	732.6
50°	1423.7	1408.1	1301.8	1159.8	1026.9	927.8	860.1	812.6	769.5	727.8	692.0
52.5°	1311.1	1310.6	1214.8	1084.8	961.8	866.4	799.1	754.7	717.4	683.5	651.3
55°	1139.0	1157.3	1082.3	966.3	856.2	770.2	709.5	669.9	643.8	615.8	591.6
57.5°	980.9	1011.2	949.3	847.2	755.4	676.1	623.3	593.4	565.7	548.7	531.2
60°	877.7	906.3	858.2	772.1	685.5	617.7	567.5	540.8	516.7	505.0	492.6
62.5°	786.0	811.5	775.8	696.1	620.9	555.6	513.3	487.7	471.4	458.5	450.3
65°	654.9	676.4	645.7	587.8	523.2	471.1	436.6	416.3	400.8	395.5	386.3
67.5°	529.3	548.9	532.3	483.1	431.3	391.9	364.9	345.4	336.2	331.7	325.2
70°	454.8	474.4	456.8	413.8	374.0	340.8	315.4	304.3	294.5	292.6	283.4
72.5°	391.7	405.0	387.5	353.8	319.8	291.8	272.1	260.5	255.4	251.9	246.9
75°	293.9	305.6	293.9	267.8	243.6	224.1	207.2	202.6	196.8	194.8	191.5
77.5°	208.0	218.1	209.2	192.8	174.8	159.8	150.6	144.8	143.5	140.1	141.7
80°	159.0	165.5	157.0	146.0	131.6	121.2	114.7	111.4	107.5	106.2	108.8
82.5°	114.1	117.1	112.7	105.3	94.6	87.8	83.4	79.6	78.8	79.1	79.1
85°	59.3	58.6	58.0	51.5	48.3	43.6	41.1	40.4	39.8	41.1	42.3
87.5°	22.4	23.0	21.3	19.2	17.4	15.7	14.6	13.8	14.6	15.7	16.4
90°	13.2	13.2	7.5	7.5	6.6	5.7	2.8	0.9	2.8	5.7	6.6
92.5°	190.1	117.1	69.3	49.7	35.9	24.5	15.6	10.7	15.6	24.5	35.9
95°	353.8	199.4	117.6	78.1	55.5	43.3	33.8	31.0	33.8	43.3	55.5
97.5°	318.0	190.7	127.6	94.4	75.1	63.8	55.7	55.7	55.7	63.8	75.1
100°	299.3	192.9	137.4	107.3	89.4	78.1	71.5	71.5	71.5	78.1	89.4
102.5°	294.0	200.4	150.1	121.6	104.4	93.9	88.0	86.5	88.0	93.9	104.4
105°	296.4	218.3	173.1	145.8	128.9	117.6	112.9	110.1	112.9	117.6	128.9
107.5°	310.3	239.2	197.7	170.9	154.7	142.6	138.0	136.1	138.0	142.6	154.7
110°	320.8	255.0	213.6	188.2	171.3	159.9	155.2	153.4	155.2	159.9	171.3



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	332.2	270.0	230.2	204.7	187.8	177.3	171.8	169.9	171.8	177.3	187.8
115°	350.1	293.6	255.9	230.5	212.6	203.2	196.6	193.9	196.6	203.2	212.6
117.5°	368.3	316.3	280.6	254.2	237.5	227.2	221.3	218.7	221.3	227.2	237.5
120°	381.1	332.2	296.4	270.0	254.0	243.7	237.1	235.3	237.1	243.7	254.0
122.5°	393.1	347.2	311.4	285.9	268.3	258.7	252.1	250.3	252.1	258.7	268.3
125°	411.2	367.9	334.0	307.6	289.8	279.5	273.8	270.0	273.8	279.5	289.8
127.5°	426.8	387.1	354.4	327.8	309.2	297.4	290.6	287.6	290.6	297.4	309.2
130°	436.6	399.9	367.9	340.6	322.7	308.6	301.1	297.4	301.1	308.6	322.7
132.5°	446.4	410.5	378.4	352.7	333.3	319.9	310.1	307.1	310.1	319.9	333.3
135°	459.2	425.3	394.3	369.8	350.1	334.0	324.6	320.8	324.6	334.0	350.1
137.5°	468.3	436.6	407.6	384.3	363.7	348.6	338.2	334.6	338.2	348.6	363.7
140°	474.2	444.1	415.9	393.3	373.5	357.6	347.2	344.4	347.2	357.6	373.5
142.5°	478.7	450.9	423.4	401.6	382.6	367.3	357.8	355.0	357.8	367.3	382.6
145°	483.6	458.3	433.8	413.1	395.2	382.0	372.6	369.8	372.6	382.0	395.2
147.5°	488.0	465.8	442.8	424.1	409.3	395.8	387.5	386.5	387.5	395.8	409.3
150°	490.2	469.6	448.8	430.9	416.9	405.6	398.0	397.1	398.0	405.6	416.9
152.5°	491.7	472.6	454.1	437.7	425.1	414.6	407.1	406.9	407.1	414.6	425.1
155°	493.0	477.0	461.1	447.0	436.6	427.2	421.5	420.6	421.5	427.2	436.6
157.5°	493.0	480.2	466.7	455.6	446.6	439.2	433.9	433.9	433.9	439.2	446.6
160°	493.0	481.7	470.5	460.1	452.6	446.0	442.2	442.2	442.2	446.0	452.6
162.5°	493.0	483.2	472.8	464.7	457.9	452.0	449.0	449.8	449.0	452.0	457.9
165°	491.2	483.6	475.1	469.6	464.9	460.1	458.3	458.3	458.3	460.1	464.9
167.5°	488.9	483.4	477.2	473.0	470.3	466.7	465.8	466.7	465.8	466.7	470.3
170°	487.4	482.7	478.0	475.1	473.3	470.5	469.6	470.5	469.6	470.5	473.3
172.5°	485.9	481.9	478.7	476.6	475.5	473.4	473.3	474.2	473.3	473.4	475.5
175°	483.6	480.8	478.9	478.9	478.0	477.0	477.0	478.0	477.0	477.0	478.0
177.5°	481.2	479.7	478.9	478.9	478.9	478.2	478.9	479.7	478.9	478.2	478.9
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1542.7	1538.0	1531.3	1521.8	1514.0	1505.7	1503.6	1500.4	1506.7	1501.5	1500.0
5°	1492.1	1478.5	1460.8	1440.7	1428.9	1412.0	1408.7	1402.2	1395.7	1395.1	1388.6
7.5°	1438.6	1418.5	1395.4	1374.9	1355.8	1337.3	1325.2	1322.6	1313.0	1307.3	1300.8
10°	1404.2	1379.4	1352.7	1333.1	1311.0	1291.5	1277.8	1270.0	1263.4	1256.2	1249.7
12.5°	1363.5	1337.2	1315.1	1294.0	1267.7	1252.8	1230.3	1216.7	1215.5	1215.6	1198.6
15°	1316.2	1290.2	1256.2	1226.2	1211.9	1183.3	1170.9	1155.3	1145.5	1135.7	1127.9
17.5°	1262.2	1229.6	1203.2	1168.8	1141.4	1118.6	1102.4	1093.0	1078.3	1064.4	1054.4
20°	1228.2	1193.7	1165.6	1129.2	1099.2	1071.2	1057.5	1044.5	1033.4	1021.7	1010.6
22.5°	1193.8	1157.7	1123.4	1088.0	1060.2	1030.6	1017.4	999.7	989.1	982.6	971.5
25°	1139.6	1100.5	1061.4	1027.6	998.9	972.8	955.3	941.5	929.8	924.6	917.5
27.5°	1080.7	1041.9	1004.1	965.6	933.1	914.2	900.1	889.8	883.1	876.1	872.9
30°	1043.2	1002.8	962.4	926.5	896.5	877.7	864.7	857.5	852.2	849.0	845.7
32.5°	1005.1	965.3	922.7	890.0	863.2	846.4	836.5	829.3	826.7	825.6	824.3
35°	944.1	903.7	864.7	835.4	809.9	803.4	794.9	791.0	789.8	794.3	796.3
37.5°	885.1	847.6	811.6	783.2	766.6	757.1	754.1	754.3	758.9	763.0	767.7
40°	847.1	810.6	776.7	752.0	736.3	730.5	729.2	732.4	737.6	742.2	747.3
42.5°	810.0	774.1	743.3	720.1	709.2	703.8	704.6	707.8	715.2	720.8	728.6
45°	752.6	722.6	692.7	673.7	664.6	665.9	665.9	671.8	678.9	687.4	695.9
47.5°	698.5	668.3	643.7	627.7	623.0	621.9	625.6	633.2	643.5	653.9	665.8
50°	662.0	633.3	611.8	597.5	592.3	594.3	599.5	606.6	619.0	632.1	644.4
52.5°	625.0	598.9	579.0	565.7	562.0	565.6	570.8	582.1	593.0	607.0	622.0
55°	567.5	545.4	529.7	520.0	518.7	520.7	526.5	538.9	554.5	572.1	586.4
57.5°	510.3	491.8	477.5	470.7	471.4	473.2	482.9	497.6	514.3	533.0	551.5
60°	471.7	454.8	443.1	437.9	438.5	442.4	454.1	467.9	488.7	506.9	526.5
62.5°	435.3	420.4	409.2	404.5	403.6	412.2	423.4	437.6	458.5	478.8	499.9
65°	376.6	364.9	355.8	353.2	355.2	361.7	376.0	394.8	412.5	433.9	456.1
67.5°	319.2	309.6	303.4	304.5	306.9	316.5	328.6	344.8	364.8	387.0	409.0
70°	282.8	273.6	268.4	269.1	273.1	284.7	295.2	311.4	333.0	355.8	374.0
72.5°	245.2	239.2	234.6	237.3	241.2	249.3	262.3	278.6	297.6	318.8	338.0
75°	188.3	188.3	185.7	187.7	193.5	201.3	211.1	228.1	246.9	263.9	279.6
77.5°	139.7	138.3	140.0	142.3	145.7	155.0	166.2	178.2	192.5	209.4	222.3
80°	106.9	107.5	110.7	114.7	116.0	123.2	134.9	146.0	157.0	171.4	183.7
82.5°	80.3	81.0	82.7	87.6	88.9	96.6	104.2	115.2	125.3	134.9	145.2
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.9	68.4	77.6	84.1	93.8
87.5°	18.2	18.2	21.4	22.4	24.4	27.3	28.2	34.1	36.4	39.2	43.9
90°	7.5	7.5	13.2	13.2	15.1	17.0	16.0	17.0	17.9	18.9	18.9
92.5°	49.7	69.3	117.1	190.1	261.2	298.5	248.6	184.8	139.1	110.7	91.8
95°	78.1	117.6	199.4	353.8	578.7	766.9	788.5	697.2	551.4	425.3	334.0
97.5°	94.4	127.6	190.7	318.0	541.6	807.7	990.6	1030.2	975.9	883.9	785.7
100°	107.3	137.4	192.9	299.3	491.2	756.5	997.4	1134.8	1153.6	1107.5	1037.8
102.5°	121.6	150.1	200.4	294.0	457.3	692.6	940.9	1129.5	1222.9	1236.2	1207.2
105°	145.8	173.1	218.3	296.4	428.1	617.3	838.4	1053.9	1216.6	1309.8	1348.4
107.5°	170.9	197.7	239.2	310.3	422.8	575.1	755.5	946.4	1119.7	1250.9	1334.8
110°	188.2	213.6	255.0	320.8	424.3	560.8	714.2	881.7	1044.4	1180.9	1284.4



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	204.7	230.2	270.0	332.2	428.9	554.0	690.9	834.2	978.2	1107.1	1210.6
115°	230.5	255.9	293.6	350.1	437.5	550.4	669.0	786.6	902.4	1012.5	1102.8
117.5°	254.2	280.6	316.3	368.3	446.8	549.5	659.2	763.3	859.1	945.7	1022.3
120°	270.0	296.4	332.2	381.1	453.6	549.5	653.9	752.7	840.3	915.6	982.3
122.5°	285.9	311.4	347.2	393.1	460.3	548.7	647.9	743.8	828.2	896.7	955.3
125°	307.6	334.0	367.9	411.2	470.5	547.6	638.0	728.3	809.2	874.1	925.9
127.5°	327.8	354.4	387.1	426.8	478.5	545.5	624.6	709.5	786.8	851.6	900.7
130°	340.6	367.9	399.9	436.6	484.6	544.8	616.3	694.5	768.7	832.7	882.6
132.5°	352.7	378.4	410.5	446.4	489.8	544.0	608.8	678.6	748.5	810.9	860.8
135°	369.8	394.3	425.3	459.2	497.8	542.9	597.5	656.8	717.9	775.3	822.4
137.5°	384.3	407.6	436.6	468.3	502.5	542.7	587.7	637.1	688.8	737.2	779.7
140°	393.3	415.9	444.1	474.2	506.2	542.0	582.5	625.8	670.0	712.3	751.8
142.5°	401.6	423.4	450.9	478.7	509.3	542.0	578.0	615.2	654.1	690.5	724.7
145°	413.1	433.8	458.3	483.6	511.0	540.1	570.2	600.3	632.4	660.5	686.9
147.5°	424.1	442.8	465.8	488.0	511.9	536.7	563.3	588.1	613.5	636.1	656.8
150°	430.9	448.8	469.6	490.2	511.9	534.4	558.0	580.6	602.2	621.0	638.0
152.5°	437.7	454.1	472.6	491.7	510.4	530.7	552.0	572.3	590.9	608.2	622.2
155°	447.0	461.1	477.0	493.0	508.1	525.1	542.9	559.9	575.0	589.0	600.3
157.5°	455.6	466.7	480.2	493.0	505.7	519.2	533.7	546.5	559.1	571.0	580.0
160°	460.1	470.5	481.7	493.0	503.4	514.7	527.0	538.2	548.6	558.9	566.5
162.5°	464.7	472.8	483.2	493.0	501.1	510.2	520.9	529.9	538.8	546.9	553.6
165°	469.6	475.1	483.6	491.2	496.8	503.4	511.0	518.5	524.1	530.7	535.4
167.5°	473.0	477.2	483.4	488.9	492.3	496.6	501.9	507.4	511.7	517.0	519.8
170°	475.1	478.0	482.7	487.4	489.3	492.1	495.9	500.6	503.4	507.2	510.0
172.5°	476.6	478.7	481.9	485.9	486.3	487.6	490.6	494.6	496.6	498.9	501.0
175°	478.9	478.9	480.8	483.6	482.7	482.7	484.6	486.4	487.4	489.3	489.3
177.5°	478.9	478.9	479.7	481.2	479.7	479.7	480.4	481.2	481.9	481.9	482.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1498.9	1497.9	1494.2	1493.7	1494.2	1497.9	1498.9	1500.0	1501.5	1506.7	1500.4
5°	1384.6	1381.4	1379.4	1386.6	1379.4	1381.4	1384.6	1388.6	1395.1	1395.7	1402.2
7.5°	1298.4	1295.9	1290.2	1288.4	1290.2	1295.9	1298.4	1300.8	1307.3	1313.0	1322.6
10°	1243.2	1240.6	1235.4	1234.1	1235.4	1240.6	1243.2	1249.7	1256.2	1263.4	1270.0
12.5°	1190.1	1184.9	1183.8	1185.1	1183.8	1184.9	1190.1	1198.6	1215.6	1215.5	1216.7
15°	1119.5	1116.8	1109.7	1111.6	1109.7	1116.8	1119.5	1127.9	1135.7	1145.5	1155.3
17.5°	1049.8	1046.7	1038.0	1045.7	1038.0	1046.7	1049.8	1054.4	1064.4	1078.3	1093.0
20°	1006.1	1000.8	996.3	995.6	996.3	1000.8	1006.1	1010.6	1021.7	1033.4	1044.5
22.5°	964.3	959.7	959.2	955.0	959.2	959.7	964.3	971.5	982.6	989.1	999.7
25°	912.2	907.7	906.3	903.1	906.3	907.7	912.2	917.5	924.6	929.8	941.5
27.5°	872.2	870.0	867.6	868.6	867.6	870.0	872.2	872.9	876.1	883.1	889.8
30°	847.7	847.1	845.7	845.7	845.7	847.1	847.7	845.7	849.0	852.2	857.5
32.5°	827.4	827.3	828.0	828.0	828.0	827.3	827.4	824.3	825.6	826.7	829.3
35°	798.8	800.8	802.1	800.1	802.1	800.8	798.8	796.3	794.3	789.8	791.0
37.5°	773.1	775.0	776.8	779.0	776.8	775.0	773.1	767.7	763.0	758.9	754.3
40°	753.2	757.8	759.1	762.3	759.1	757.8	753.2	747.3	742.2	737.6	732.4
42.5°	734.4	739.5	742.9	743.6	742.9	739.5	734.4	728.6	720.8	715.2	707.8
45°	705.7	710.9	715.5	715.5	715.5	710.9	705.7	695.9	687.4	678.9	671.8
47.5°	675.8	683.3	688.0	689.1	688.0	683.3	675.8	665.8	653.9	643.5	633.2
50°	655.5	664.6	669.2	672.4	669.2	664.6	655.5	644.4	632.1	619.0	606.6
52.5°	635.7	644.8	650.9	652.6	650.9	644.8	635.7	622.0	607.0	593.0	582.1
55°	601.4	614.4	621.6	624.2	621.6	614.4	601.4	586.4	572.1	554.5	538.9
57.5°	569.1	581.1	589.5	591.4	589.5	581.1	569.1	551.5	533.0	514.3	497.6
60°	544.0	557.1	567.5	569.5	567.5	557.1	544.0	526.5	506.9	488.7	467.9
62.5°	518.5	532.1	541.5	546.6	541.5	532.1	518.5	499.9	478.8	458.5	437.6
65°	474.4	488.0	497.2	499.1	497.2	488.0	474.4	456.1	433.9	412.5	394.8
67.5°	426.1	439.8	445.8	449.6	445.8	439.8	426.1	409.0	387.0	364.8	344.8
70°	392.3	403.3	409.8	413.1	409.8	403.3	392.3	374.0	355.8	333.0	311.4
72.5°	353.6	365.2	372.9	373.5	372.9	365.2	353.6	338.0	318.8	297.6	278.6
75°	294.5	304.9	308.9	308.9	308.9	304.9	294.5	279.6	263.9	246.9	228.1
77.5°	233.1	238.5	243.5	244.5	243.5	238.5	233.1	222.3	209.4	192.5	178.2
80°	193.5	196.8	200.7	200.7	200.7	196.8	193.5	183.7	171.4	157.0	146.0
82.5°	152.9	155.6	159.5	159.0	159.5	155.6	152.9	145.2	134.9	125.3	115.2
85°	92.6	98.4	97.7	96.4	97.7	98.4	92.6	93.8	84.1	77.6	68.4
87.5°	45.6	46.4	47.7	48.8	47.7	46.4	45.6	43.9	39.2	36.4	34.1
90°	19.8	20.7	19.8	19.8	19.8	20.7	19.8	18.9	18.9	17.9	17.0
92.5°	80.8	75.7	72.5	72.5	72.5	75.7	80.8	91.8	110.7	139.1	184.8
95°	287.9	258.7	241.9	229.6	241.9	258.7	287.9	334.0	425.3	551.4	697.2
97.5°	718.1	661.5	633.3	613.7	633.3	661.5	718.1	785.7	883.9	975.9	1030.2
100°	956.0	898.6	870.3	862.9	870.3	898.6	956.0	1037.8	1107.5	1153.6	1134.8
102.5°	1157.0	1115.4	1085.7	1079.7	1085.7	1115.4	1157.0	1207.2	1236.2	1222.9	1129.5
105°	1350.3	1342.7	1329.6	1323.9	1329.6	1342.7	1350.3	1348.4	1309.8	1216.6	1053.9
107.5°	1381.3	1402.8	1412.2	1414.7	1412.2	1402.8	1381.3	1334.8	1250.9	1119.7	946.4
110°	1351.2	1390.7	1407.7	1416.2	1407.7	1390.7	1351.2	1284.4	1180.9	1044.4	881.7



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1286.5	1334.3	1358.0	1371.7	1358.0	1334.3	1286.5	1210.6	1107.1	978.2	834.2
115°	1177.1	1233.6	1263.7	1271.2	1263.7	1233.6	1177.1	1102.8	1012.5	902.4	786.6
117.5°	1085.7	1133.1	1163.6	1169.4	1163.6	1133.1	1085.7	1022.3	945.7	859.1	763.3
120°	1035.9	1077.4	1101.8	1112.2	1101.8	1077.4	1035.9	982.3	915.6	840.3	752.7
122.5°	1000.6	1035.9	1056.7	1067.1	1056.7	1035.9	1000.6	955.3	896.7	828.2	743.8
125°	963.6	990.8	1008.7	1014.4	1008.7	990.8	963.6	925.9	874.1	809.2	728.3
127.5°	938.5	962.8	977.8	983.4	977.8	962.8	938.5	900.7	851.6	786.8	709.5
130°	921.1	944.7	959.8	965.4	959.8	944.7	921.1	882.6	832.7	768.7	694.5
132.5°	898.6	925.1	939.4	945.1	939.4	925.1	898.6	860.8	810.9	748.5	678.6
135°	860.1	886.4	901.4	907.1	901.4	886.4	860.1	822.4	775.3	717.9	656.8
137.5°	814.8	840.8	853.3	860.1	853.3	840.8	814.8	779.7	737.2	688.8	637.1
140°	784.8	805.5	818.6	826.1	818.6	805.5	784.8	751.8	712.3	670.0	625.8
142.5°	753.8	773.1	784.8	790.0	784.8	773.1	753.8	724.7	690.5	654.1	615.2
145°	710.4	726.4	735.8	740.6	735.8	726.4	710.4	686.9	660.5	632.4	600.3
147.5°	674.1	687.9	695.0	696.6	695.0	687.9	674.1	656.8	636.1	613.5	588.1
150°	653.0	665.2	670.9	671.8	670.9	665.2	653.0	638.0	621.0	602.2	580.6
152.5°	635.0	644.9	648.3	649.2	648.3	644.9	635.0	622.2	608.2	590.9	572.3
155°	609.7	617.3	620.1	620.1	620.1	617.3	609.7	600.3	589.0	575.0	559.9
157.5°	587.1	592.8	594.5	594.5	594.5	592.8	587.1	580.0	571.0	559.1	546.5
160°	572.1	577.8	578.7	578.7	578.7	577.8	572.1	566.5	558.9	548.6	538.2
162.5°	557.8	563.5	564.4	563.6	564.4	563.5	557.8	553.6	546.9	538.8	529.9
165°	539.1	542.9	542.0	541.0	542.0	542.9	539.1	535.4	530.7	524.1	518.5
167.5°	521.7	524.1	524.0	523.2	524.0	524.1	521.7	519.8	517.0	511.7	507.4
170°	511.9	512.8	511.9	511.9	511.9	512.8	511.9	510.0	507.2	503.4	500.6
172.5°	502.1	503.0	502.1	500.6	502.1	503.0	502.1	501.0	498.9	496.6	494.6
175°	489.3	491.2	489.3	487.4	489.3	491.2	489.3	489.3	489.3	487.4	486.4
177.5°	481.9	482.7	481.2	479.7	481.2	482.7	481.9	482.7	481.9	481.9	481.2
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1503.6	1505.7	1514.0	1521.8	1531.3	1538.0	1542.7	1547.9	1558.9	1567.7	1576.0
5°	1408.7	1412.0	1428.9	1440.7	1460.8	1478.5	1492.1	1507.1	1524.8	1548.8	1570.9
7.5°	1325.2	1337.3	1355.8	1374.9	1395.4	1418.5	1438.6	1461.1	1491.5	1524.6	1558.7
10°	1277.8	1291.5	1311.0	1333.1	1352.7	1379.4	1404.2	1430.9	1465.4	1505.8	1546.2
12.5°	1230.3	1252.8	1267.7	1294.0	1315.1	1337.2	1363.5	1398.5	1438.8	1481.3	1530.0
15°	1170.9	1183.3	1211.9	1226.2	1256.2	1290.2	1316.2	1351.4	1390.4	1446.5	1501.3
17.5°	1102.4	1118.6	1141.4	1168.8	1203.2	1229.6	1262.2	1298.4	1347.6	1403.3	1471.8
20°	1057.5	1071.2	1099.2	1129.2	1165.6	1193.7	1228.2	1263.4	1314.3	1373.6	1445.2
22.5°	1017.4	1030.6	1060.2	1088.0	1123.4	1157.7	1193.8	1234.7	1283.5	1346.0	1419.2
25°	955.3	972.8	998.9	1027.6	1061.4	1100.5	1139.6	1176.1	1228.2	1294.0	1372.2
27.5°	900.1	914.2	933.1	965.6	1004.1	1041.9	1080.7	1126.6	1176.7	1246.2	1327.4
30°	864.7	877.7	896.5	926.5	962.4	1002.8	1043.2	1087.5	1139.6	1208.7	1291.5
32.5°	836.5	846.4	863.2	890.0	922.7	965.3	1005.1	1051.0	1105.7	1173.7	1254.4
35°	794.9	803.4	809.9	835.4	864.7	903.7	944.1	993.1	1045.8	1110.3	1191.1
37.5°	754.1	757.1	766.6	783.2	811.6	847.6	885.1	933.2	987.3	1052.8	1125.7
40°	729.2	730.5	736.3	752.0	776.7	810.6	847.1	894.7	946.1	1008.0	1080.3
42.5°	704.6	703.8	709.2	720.1	743.3	774.1	810.0	853.5	904.9	962.1	1030.3
45°	665.9	665.9	664.6	673.7	692.7	722.6	752.6	794.3	837.3	893.3	950.6
47.5°	625.6	621.9	623.0	627.7	643.7	668.3	698.5	732.6	770.5	818.0	868.3
50°	599.5	594.3	592.3	597.5	611.8	633.3	662.0	692.0	727.8	769.5	812.6
52.5°	570.8	565.6	562.0	565.7	579.0	598.9	625.0	651.3	683.5	717.4	754.7
55°	526.5	520.7	518.7	520.0	529.7	545.4	567.5	591.6	615.8	643.8	669.9
57.5°	482.9	473.2	471.4	470.7	477.5	491.8	510.3	531.2	548.7	565.7	593.4
60°	454.1	442.4	438.5	437.9	443.1	454.8	471.7	492.6	505.0	516.7	540.8
62.5°	423.4	412.2	403.6	404.5	409.2	420.4	435.3	450.3	458.5	471.4	487.7
65°	376.0	361.7	355.2	353.2	355.8	364.9	376.6	386.3	395.5	400.8	416.3
67.5°	328.6	316.5	306.9	304.5	303.4	309.6	319.2	325.2	331.7	336.2	345.4
70°	295.2	284.7	273.1	269.1	268.4	273.6	282.8	283.4	292.6	294.5	304.3
72.5°	262.3	249.3	241.2	237.3	234.6	239.2	245.2	246.9	251.9	255.4	260.5
75°	211.1	201.3	193.5	187.7	185.7	188.3	188.3	191.5	194.8	196.8	202.6
77.5°	166.2	155.0	145.7	142.3	140.0	138.3	139.7	141.7	140.1	143.5	144.8
80°	134.9	123.2	116.0	114.7	110.7	107.5	106.9	108.8	106.2	107.5	111.4
82.5°	104.2	96.6	88.9	87.6	82.7	81.0	80.3	79.1	79.1	78.8	79.6
85°	61.9	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.1	39.8	40.4
87.5°	28.2	27.3	24.4	22.4	21.4	18.2	18.2	16.4	15.7	14.6	13.8
90°	16.0	17.0	15.1	13.2	13.2	7.5	7.5	6.6	5.7	2.8	0.9
92.5°	248.6	298.5	261.2	190.1	117.1	69.3	49.7	35.9	24.5	15.6	10.7
95°	788.5	766.9	578.7	353.8	199.4	117.6	78.1	55.5	43.3	33.8	31.0
97.5°	990.6	807.7	541.6	318.0	190.7	127.6	94.4	75.1	63.8	55.7	55.7
100°	997.4	756.5	491.2	299.3	192.9	137.4	107.3	89.4	78.1	71.5	71.5
102.5°	940.9	692.6	457.3	294.0	200.4	150.1	121.6	104.4	93.9	88.0	86.5
105°	838.4	617.3	428.1	296.4	218.3	173.1	145.8	128.9	117.6	112.9	110.1
107.5°	755.5	575.1	422.8	310.3	239.2	197.7	170.9	154.7	142.6	138.0	136.1
110°	714.2	560.8	424.3	320.8	255.0	213.6	188.2	171.3	159.9	155.2	153.4



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	690.9	554.0	428.9	332.2	270.0	230.2	204.7	187.8	177.3	171.8	169.9
115°	669.0	550.4	437.5	350.1	293.6	255.9	230.5	212.6	203.2	196.6	193.9
117.5°	659.2	549.5	446.8	368.3	316.3	280.6	254.2	237.5	227.2	221.3	218.7
120°	653.9	549.5	453.6	381.1	332.2	296.4	270.0	254.0	243.7	237.1	235.3
122.5°	647.9	548.7	460.3	393.1	347.2	311.4	285.9	268.3	258.7	252.1	250.3
125°	638.0	547.6	470.5	411.2	367.9	334.0	307.6	289.8	279.5	273.8	270.0
127.5°	624.6	545.5	478.5	426.8	387.1	354.4	327.8	309.2	297.4	290.6	287.6
130°	616.3	544.8	484.6	436.6	399.9	367.9	340.6	322.7	308.6	301.1	297.4
132.5°	608.8	544.0	489.8	446.4	410.5	378.4	352.7	333.3	319.9	310.1	307.1
135°	597.5	542.9	497.8	459.2	425.3	394.3	369.8	350.1	334.0	324.6	320.8
137.5°	587.7	542.7	502.5	468.3	436.6	407.6	384.3	363.7	348.6	338.2	334.6
140°	582.5	542.0	506.2	474.2	444.1	415.9	393.3	373.5	357.6	347.2	344.4
142.5°	578.0	542.0	509.3	478.7	450.9	423.4	401.6	382.6	367.3	357.8	355.0
145°	570.2	540.1	511.0	483.6	458.3	433.8	413.1	395.2	382.0	372.6	369.8
147.5°	563.3	536.7	511.9	488.0	465.8	442.8	424.1	409.3	395.8	387.5	386.5
150°	558.0	534.4	511.9	490.2	469.6	448.8	430.9	416.9	405.6	398.0	397.1
152.5°	552.0	530.7	510.4	491.7	472.6	454.1	437.7	425.1	414.6	407.1	406.9
155°	542.9	525.1	508.1	493.0	477.0	461.1	447.0	436.6	427.2	421.5	420.6
157.5°	533.7	519.2	505.7	493.0	480.2	466.7	455.6	446.6	439.2	433.9	433.9
160°	527.0	514.7	503.4	493.0	481.7	470.5	460.1	452.6	446.0	442.2	442.2
162.5°	520.9	510.2	501.1	493.0	483.2	472.8	464.7	457.9	452.0	449.0	449.8
165°	511.0	503.4	496.8	491.2	483.6	475.1	469.6	464.9	460.1	458.3	458.3
167.5°	501.9	496.6	492.3	488.9	483.4	477.2	473.0	470.3	466.7	465.8	466.7
170°	495.9	492.1	489.3	487.4	482.7	478.0	475.1	473.3	470.5	469.6	470.5
172.5°	490.6	487.6	486.3	485.9	481.9	478.7	476.6	475.5	473.4	473.3	474.2
175°	484.6	482.7	482.7	483.6	480.8	478.9	478.9	478.0	477.0	477.0	478.0
177.5°	480.4	479.7	479.7	481.2	479.7	478.9	478.9	478.9	478.2	478.9	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1583.4	1588.6	1595.3	1606.8	1611.0	1616.2	1623.5	1623.0	1625.0	1632.9	1649.5
5°	1589.2	1609.4	1629.0	1652.5	1677.2	1693.5	1715.6	1729.3	1742.9	1760.6	1790.5
7.5°	1591.6	1623.6	1659.4	1700.6	1737.3	1779.5	1812.4	1843.4	1871.5	1908.6	1944.4
10°	1587.9	1630.9	1677.2	1729.3	1784.7	1831.6	1874.0	1922.2	1963.2	2008.2	2048.6
12.5°	1581.1	1633.0	1694.9	1753.3	1818.1	1887.3	1940.1	1988.9	2043.5	2095.3	2157.6
15°	1565.8	1636.8	1709.1	1786.0	1872.6	1952.8	2029.0	2092.3	2150.9	2228.5	2309.9
17.5°	1546.2	1622.9	1714.0	1807.1	1897.7	1989.3	2083.7	2178.7	2252.7	2349.0	2412.7
20°	1528.0	1616.6	1710.4	1821.2	1911.8	2025.8	2119.6	2211.5	2313.1	2409.0	2485.1
22.5°	1502.4	1599.4	1698.9	1809.2	1928.4	2042.5	2150.9	2250.6	2352.2	2456.4	2548.7
25°	1470.0	1557.9	1675.8	1801.0	1919.6	2043.3	2167.8	2292.9	2402.4	2512.5	2598.5
27.5°	1414.8	1525.8	1635.6	1764.7	1896.5	2036.6	2169.6	2300.7	2415.3	2505.8	2559.2
30°	1386.6	1483.0	1602.2	1731.9	1874.6	2025.1	2163.9	2292.3	2399.1	2471.4	2492.9
32.5°	1344.9	1444.4	1561.0	1695.4	1846.4	2001.1	2145.7	2266.7	2355.9	2393.8	2367.9
35°	1283.0	1372.9	1490.8	1628.3	1785.4	1950.2	2092.9	2195.2	2240.8	2205.0	2115.7
37.5°	1208.7	1297.8	1416.3	1551.3	1713.8	1881.4	2010.4	2084.1	2068.9	1979.8	1846.7
40°	1156.6	1240.0	1352.7	1498.6	1657.0	1825.0	1938.4	1978.2	1936.5	1808.8	1667.5
42.5°	1098.7	1180.1	1293.3	1434.0	1601.8	1756.8	1855.6	1858.9	1788.9	1636.3	1494.3
45°	1010.6	1088.2	1195.0	1341.6	1496.7	1642.7	1707.8	1675.8	1546.9	1399.6	1256.9
47.5°	923.7	990.9	1096.3	1235.4	1382.7	1505.5	1537.9	1480.4	1342.9	1200.0	1067.7
50°	860.1	927.8	1026.9	1159.8	1301.8	1408.1	1423.7	1347.5	1212.6	1068.6	965.0
52.5°	799.1	866.4	961.8	1084.8	1214.8	1310.6	1311.1	1222.9	1088.5	960.2	863.8
55°	709.5	770.2	856.2	966.3	1082.3	1157.3	1139.0	1047.7	931.1	819.7	735.7
57.5°	623.3	676.1	755.4	847.2	949.3	1011.2	980.9	893.1	788.9	694.5	630.7
60°	567.5	617.7	685.5	772.1	858.2	906.3	877.7	798.1	702.4	626.1	570.8
62.5°	513.3	555.6	620.9	696.1	775.8	811.5	786.0	707.5	624.7	555.8	510.9
65°	436.6	471.1	523.2	587.8	645.7	676.4	654.9	581.8	518.7	469.1	433.3
67.5°	364.9	391.9	431.3	483.1	532.3	548.9	529.3	478.5	425.0	385.3	360.1
70°	315.4	340.8	374.0	413.8	456.8	474.4	454.8	414.4	370.8	334.2	309.5
72.5°	272.1	291.8	319.8	353.8	387.5	405.0	391.7	352.9	316.0	288.9	267.8
75°	207.2	224.1	243.6	267.8	293.9	305.6	293.9	267.1	241.8	221.5	206.5
77.5°	150.6	159.8	174.8	192.8	209.2	218.1	208.0	189.8	174.4	160.5	153.2
80°	114.7	121.2	131.6	146.0	157.0	165.5	159.0	144.0	131.6	122.5	119.2
82.5°	83.4	87.8	94.6	105.3	112.7	117.1	114.1	103.3	98.2	90.2	86.9
85°	41.1	43.6	48.3	51.5	58.0	58.6	59.3	54.8	50.1	48.3	45.6
87.5°	14.6	15.7	17.4	19.2	21.3	23.0	22.4	22.8	21.1	20.4	18.5
90°	2.8	5.7	6.6	7.5	7.5	13.2	13.2	15.1	17.0	16.0	17.0
92.5°	15.6	24.5	35.9	49.7	69.3	117.1	190.1	261.2	298.5	248.6	184.8
95°	33.8	43.3	55.5	78.1	117.6	199.4	353.8	578.7	766.9	788.5	697.2
97.5°	55.7	63.8	75.1	94.4	127.6	190.7	318.0	541.6	807.7	990.6	1030.2
100°	71.5	78.1	89.4	107.3	137.4	192.9	299.3	491.2	756.5	997.4	1134.8
102.5°	88.0	93.9	104.4	121.6	150.1	200.4	294.0	457.3	692.6	940.9	1129.5
105°	112.9	117.6	128.9	145.8	173.1	218.3	296.4	428.1	617.3	838.4	1053.9
107.5°	138.0	142.6	154.7	170.9	197.7	239.2	310.3	422.8	575.1	755.5	946.4
110°	155.2	159.9	171.3	188.2	213.6	255.0	320.8	424.3	560.8	714.2	881.7



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	171.8	177.3	187.8	204.7	230.2	270.0	332.2	428.9	554.0	690.9	834.2
115°	196.6	203.2	212.6	230.5	255.9	293.6	350.1	437.5	550.4	669.0	786.6
117.5°	221.3	227.2	237.5	254.2	280.6	316.3	368.3	446.8	549.5	659.2	763.3
120°	237.1	243.7	254.0	270.0	296.4	332.2	381.1	453.6	549.5	653.9	752.7
122.5°	252.1	258.7	268.3	285.9	311.4	347.2	393.1	460.3	548.7	647.9	743.8
125°	273.8	279.5	289.8	307.6	334.0	367.9	411.2	470.5	547.6	638.0	728.3
127.5°	290.6	297.4	309.2	327.8	354.4	387.1	426.8	478.5	545.5	624.6	709.5
130°	301.1	308.6	322.7	340.6	367.9	399.9	436.6	484.6	544.8	616.3	694.5
132.5°	310.1	319.9	333.3	352.7	378.4	410.5	446.4	489.8	544.0	608.8	678.6
135°	324.6	334.0	350.1	369.8	394.3	425.3	459.2	497.8	542.9	597.5	656.8
137.5°	338.2	348.6	363.7	384.3	407.6	436.6	468.3	502.5	542.7	587.7	637.1
140°	347.2	357.6	373.5	393.3	415.9	444.1	474.2	506.2	542.0	582.5	625.8
142.5°	357.8	367.3	382.6	401.6	423.4	450.9	478.7	509.3	542.0	578.0	615.2
145°	372.6	382.0	395.2	413.1	433.8	458.3	483.6	511.0	540.1	570.2	600.3
147.5°	387.5	395.8	409.3	424.1	442.8	465.8	488.0	511.9	536.7	563.3	588.1
150°	398.0	405.6	416.9	430.9	448.8	469.6	490.2	511.9	534.4	558.0	580.6
152.5°	407.1	414.6	425.1	437.7	454.1	472.6	491.7	510.4	530.7	552.0	572.3
155°	421.5	427.2	436.6	447.0	461.1	477.0	493.0	508.1	525.1	542.9	559.9
157.5°	433.9	439.2	446.6	455.6	466.7	480.2	493.0	505.7	519.2	533.7	546.5
160°	442.2	446.0	452.6	460.1	470.5	481.7	493.0	503.4	514.7	527.0	538.2
162.5°	449.0	452.0	457.9	464.7	472.8	483.2	493.0	501.1	510.2	520.9	529.9
165°	458.3	460.1	464.9	469.6	475.1	483.6	491.2	496.8	503.4	511.0	518.5
167.5°	465.8	466.7	470.3	473.0	477.2	483.4	488.9	492.3	496.6	501.9	507.4
170°	469.6	470.5	473.3	475.1	478.0	482.7	487.4	489.3	492.1	495.9	500.6
172.5°	473.3	473.4	475.5	476.6	478.7	481.9	485.9	486.3	487.6	490.6	494.6
175°	477.0	477.0	478.0	478.9	478.9	480.8	483.6	482.7	482.7	484.6	486.4
177.5°	478.9	478.2	478.9	478.9	478.9	479.7	481.2	479.7	479.7	480.4	481.2
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1657.9	1659.0	1663.6	1667.3	1668.3	1673.6	1674.0
5°	1803.6	1814.7	1836.2	1838.1	1841.4	1858.3	1845.3
7.5°	1974.3	2002.4	2021.2	2037.8	2043.8	2051.2	2049.7
10°	2083.8	2125.4	2146.4	2179.5	2180.9	2189.3	2184.2
12.5°	2193.8	2242.2	2280.3	2286.4	2314.3	2318.6	2325.9
15°	2349.6	2401.1	2453.9	2472.8	2511.2	2520.4	2534.7
17.5°	2496.1	2548.7	2585.8	2634.6	2650.4	2671.5	2657.1
20°	2576.3	2633.7	2680.6	2719.0	2735.4	2747.0	2745.8
22.5°	2624.9	2682.7	2720.7	2749.8	2765.0	2770.0	2769.8
25°	2655.2	2688.4	2700.2	2711.2	2694.4	2688.4	2691.1
27.5°	2570.8	2562.2	2531.6	2491.4	2449.7	2416.6	2398.6
30°	2454.6	2403.7	2357.4	2276.6	2235.0	2210.2	2188.0
32.5°	2289.8	2209.2	2120.2	2046.3	1998.8	1962.1	1956.6
35°	2007.5	1886.3	1777.5	1687.0	1640.0	1600.2	1591.2
37.5°	1706.8	1580.8	1482.9	1403.2	1352.7	1324.6	1298.4
40°	1507.1	1398.9	1302.5	1234.7	1196.3	1176.1	1159.8
42.5°	1353.3	1254.5	1158.7	1107.0	1072.2	1059.9	1050.4
45°	1140.9	1049.0	982.6	943.5	923.3	902.5	892.7
47.5°	970.8	896.1	852.2	819.1	797.4	785.0	778.7
50°	874.4	813.1	774.1	748.7	729.2	719.3	714.2
52.5°	788.9	738.7	705.8	685.6	672.3	665.2	663.1
55°	679.6	641.1	620.3	602.8	593.0	586.4	583.8
57.5°	590.7	561.2	544.2	529.7	525.9	520.5	518.7
60°	532.3	509.5	495.2	485.4	482.2	475.7	476.9
62.5°	480.7	462.1	449.9	444.2	440.0	434.5	436.3
65°	406.6	392.9	386.3	381.2	376.0	372.7	375.3
67.5°	341.2	331.8	322.9	319.9	317.4	316.8	314.1
70°	298.4	290.6	282.8	280.9	280.9	278.2	277.6
72.5°	257.2	251.5	246.3	244.9	242.8	243.8	241.1
75°	198.7	194.2	192.2	190.3	189.6	189.6	187.7
77.5°	146.8	143.5	140.3	140.3	138.0	137.1	136.9
80°	111.4	110.1	107.5	107.5	106.2	106.9	105.6
82.5°	83.8	82.0	81.4	80.4	78.6	78.7	77.4
85°	45.0	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	19.2	18.9	18.4	17.5	17.2	17.0	15.5
90°	17.9	18.9	18.9	19.8	20.7	19.8	19.8
92.5°	139.1	110.7	91.8	80.8	75.7	72.5	72.5
95°	551.4	425.3	334.0	287.9	258.7	241.9	229.6
97.5°	975.9	883.9	785.7	718.1	661.5	633.3	613.7
100°	1153.6	1107.5	1037.8	956.0	898.6	870.3	862.9
102.5°	1222.9	1236.2	1207.2	1157.0	1115.4	1085.7	1079.7
105°	1216.6	1309.8	1348.4	1350.3	1342.7	1329.6	1323.9
107.5°	1119.7	1250.9	1334.8	1381.3	1402.8	1412.2	1414.7
110°	1044.4	1180.9	1284.4	1351.2	1390.7	1407.7	1416.2



TEST NUMBER: P332654-830

CATALOG NUMBER: SA4XXDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	978.2	1107.1	1210.6	1286.5	1334.3	1358.0	1371.7
115°	902.4	1012.5	1102.8	1177.1	1233.6	1263.7	1271.2
117.5°	859.1	945.7	1022.3	1085.7	1133.1	1163.6	1169.4
120°	840.3	915.6	982.3	1035.9	1077.4	1101.8	1112.2
122.5°	828.2	896.7	955.3	1000.6	1035.9	1056.7	1067.1
125°	809.2	874.1	925.9	963.6	990.8	1008.7	1014.4
127.5°	786.8	851.6	900.7	938.5	962.8	977.8	983.4
130°	768.7	832.7	882.6	921.1	944.7	959.8	965.4
132.5°	748.5	810.9	860.8	898.6	925.1	939.4	945.1
135°	717.9	775.3	822.4	860.1	886.4	901.4	907.1
137.5°	688.8	737.2	779.7	814.8	840.8	853.3	860.1
140°	670.0	712.3	751.8	784.8	805.5	818.6	826.1
142.5°	654.1	690.5	724.7	753.8	773.1	784.8	790.0
145°	632.4	660.5	686.9	710.4	726.4	735.8	740.6
147.5°	613.5	636.1	656.8	674.1	687.9	695.0	696.6
150°	602.2	621.0	638.0	653.0	665.2	670.9	671.8
152.5°	590.9	608.2	622.2	635.0	644.9	648.3	649.2
155°	575.0	589.0	600.3	609.7	617.3	620.1	620.1
157.5°	559.1	571.0	580.0	587.1	592.8	594.5	594.5
160°	548.6	558.9	566.5	572.1	577.8	578.7	578.7
162.5°	538.8	546.9	553.6	557.8	563.5	564.4	563.6
165°	524.1	530.7	535.4	539.1	542.9	542.0	541.0
167.5°	511.7	517.0	519.8	521.7	524.1	524.0	523.2
170°	503.4	507.2	510.0	511.9	512.8	511.9	511.9
172.5°	496.6	498.9	501.0	502.1	503.0	502.1	500.6
175°	487.4	489.3	489.3	489.3	491.2	489.3	487.4
177.5°	481.9	481.9	482.7	481.9	482.7	481.2	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9

(END OF REPORT)