

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: P331731-840

Luminaire Tested: **SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331731-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7583.2 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

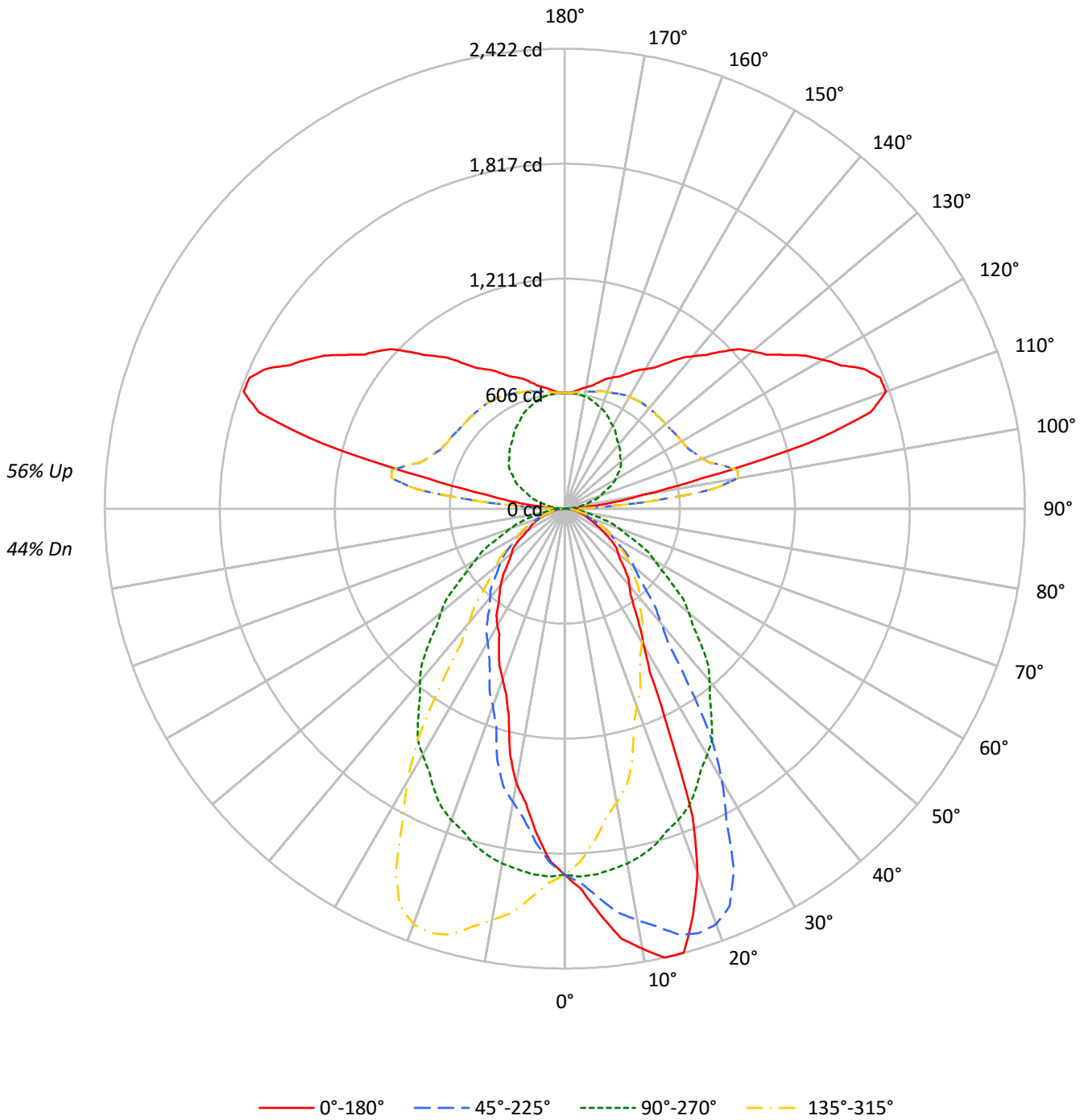
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	93	89	86	89	85	82	80	71	69	67	58	56	55	46	45	44	38
2	89	82	76	72	81	75	71	66	63	60	57	52	49	47	41	40	38	33
3	82	73	66	61	75	67	61	56	56	52	48	46	43	41	37	35	33	29
4	75	65	58	52	69	60	54	49	51	46	42	42	38	36	34	31	29	26
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23
6	64	53	45	39	59	49	42	37	41	36	32	35	31	28	28	26	23	21
7	59	48	40	35	54	44	38	33	38	33	29	32	28	25	26	23	21	19
8	55	44	36	31	51	40	34	29	35	30	26	29	25	23	24	21	19	17
9	52	40	33	28	47	37	31	26	32	27	23	27	23	21	22	20	18	16
10	48	37	30	25	44	34	28	24	30	25	21	25	21	19	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	31136	31136	31136	31136
5°	34775	31331	27780	31331
10°	38581	31111	24079	31111
15°	40478	30654	18974	30654
20°	35093	29979	16417	29979
25°	23013	29054	14658	29054
30°	15491	27932	13267	27932
35°	12546	26518	11964	26518
40°	11158	24982	11072	24982
45°	10097	23178	9882	23178
50°	9191	21391	9156	21391
55°	8639	19409	8526	19409
60°	7227	17589	7143	17589
65°	6094	15973	6911	15973
70°	5632	14266	6515	14266
75°	5265	12414	6014	12414
80°	4863	10219	5365	10219
85°	4465	8058	4705	8058



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	2.4
10°-20°	509.4	6.7
20°-30°	656.4	8.7
30°-40°	623.8	8.2
40°-50°	534.4	7.0
50°-60°	406.9	5.4
60°-70°	257.2	3.4
70°-80°	128.5	1.7
80°-90°	38.9	0.5
90°-100°	243.9	3.2
100°-110°	827.7	10.9
110°-120°	879.3	11.6
120°-130°	723.9	9.5
130°-140°	581.3	7.7
140°-150°	439.3	5.8
150°-160°	308.7	4.1
160°-170°	181.7	2.4
170°-180°	59.1	0.8
0°-30°	1348.5	17.8
0°-40°	1972.3	26.0
0°-60°	2913.6	38.4
0°-90°	3338.2	44.0
90°-120°	1951.0	25.7
90°-150°	3695.4	48.7
90°-180°	4245.0	56.0
0°-180°	7583.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1928	1928	1928	1928	1928	
5°	2146	1933	1714	1933	2146	212
15°	2422	1834	1135	1834	2422	653
25°	1292	1631	823	1631	1292	613
35°	636	1345	607	1345	636	407
45°	442	1015	433	1015	442	342
55°	307	690	303	690	307	269
65°	160	418	181	418	160	162
75°	84	199	96	199	84	90
85°	24	44	25	44	24	27
90°	39	1	39	1	39	22
95°	134	41	134	41	134	174
105°	1322	143	1322	143	1322	1279
115°	1740	252	1740	252	1740	1704
125°	1411	352	1411	352	1411	1275
135°	1170	413	1170	413	1170	909
145°	934	472	934	472	934	593
155°	785	536	785	536	785	366
165°	689	584	689	584	689	197
175°	621	609	621	609	621	60
180°	610	610	610	610	610	



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	2006.7	2008.3	2009.9	2006.1	2006.1	2003.0	1996.0	1990.6	1975.6	1973.5	1973.5
5°	2145.6	2144.1	2146.9	2138.2	2126.1	2123.4	2110.7	2094.0	2076.5	2057.1	2053.1
7.5°	2283.5	2281.5	2276.1	2274.7	2265.4	2245.2	2224.7	2202.9	2173.9	2145.7	2131.4
10°	2353.2	2375.3	2362.0	2338.4	2343.2	2311.7	2294.9	2266.1	2242.0	2199.8	2190.4
12.5°	2421.9	2430.5	2426.3	2413.0	2407.0	2385.1	2362.5	2337.4	2292.9	2255.0	2222.0
15°	2421.6	2434.3	2437.6	2433.7	2437.0	2435.7	2423.6	2402.8	2364.0	2322.4	2286.2
17.5°	2242.8	2251.7	2273.6	2288.5	2307.2	2346.9	2366.5	2374.1	2368.3	2344.6	2319.2
20°	2042.4	2027.6	2089.2	2120.7	2147.5	2214.5	2272.2	2294.3	2329.8	2329.2	2322.4
22.5°	1758.2	1761.7	1820.2	1857.5	1935.8	2002.8	2068.5	2151.7	2220.4	2265.8	2292.4
25°	1291.8	1317.4	1375.6	1426.5	1513.7	1638.3	1751.5	1882.9	2006.8	2104.7	2197.8
27.5°	970.3	972.1	1018.3	1065.4	1117.1	1219.2	1361.8	1518.6	1695.4	1841.2	2008.9
30°	830.9	826.9	846.3	875.0	919.3	998.4	1105.6	1259.7	1435.9	1655.7	1851.4
32.5°	732.3	732.5	747.1	768.4	805.2	858.5	931.9	1057.1	1223.7	1439.7	1669.1
35°	636.5	635.9	646.6	662.0	677.4	711.6	761.8	827.5	942.1	1143.8	1378.3
37.5°	567.9	570.9	576.1	585.7	602.8	621.8	652.0	696.1	777.7	897.0	1094.1
40°	529.4	530.7	538.1	546.1	556.1	570.9	595.7	631.2	690.8	786.0	930.0
42.5°	493.9	495.3	500.5	508.1	515.9	530.7	551.2	581.9	630.3	704.5	823.3
45°	442.2	442.2	447.0	450.3	459.0	472.4	489.2	514.6	548.1	603.1	682.2
47.5°	393.7	393.8	397.0	402.7	408.2	418.7	435.2	456.0	480.3	522.8	590.4
50°	365.9	366.5	368.5	373.2	376.6	386.0	398.7	416.8	442.2	475.0	531.4
52.5°	343.4	343.0	345.5	347.5	349.8	356.5	366.0	381.9	404.8	433.2	479.9
55°	306.9	304.2	308.2	311.5	313.6	316.3	321.6	331.6	351.1	375.3	410.1
57.5°	261.4	260.2	263.1	266.1	272.5	279.6	284.3	290.6	300.7	318.0	352.5
60°	223.8	223.8	229.8	231.9	239.2	248.6	258.0	263.4	273.4	284.8	310.2
62.5°	190.6	191.1	193.9	195.9	200.1	211.6	224.7	236.5	246.0	256.9	273.8
65°	159.5	160.8	160.8	162.2	164.8	167.5	172.9	182.3	199.0	214.4	227.1
67.5°	135.3	135.7	136.1	137.5	138.1	141.1	143.3	147.4	151.3	165.9	181.7
70°	119.3	121.3	120.6	122.0	122.6	123.9	126.6	128.7	134.7	138.0	147.4
72.5°	104.2	105.7	105.6	106.4	108.2	108.5	110.6	112.6	116.4	119.3	124.3
75°	84.4	83.7	84.4	85.7	86.4	87.2	87.2	89.8	91.8	94.5	97.9
77.5°	65.1	65.8	65.6	65.8	65.9	67.2	67.1	68.2	70.2	71.6	73.2
80°	52.3	52.9	52.3	52.9	53.6	54.2	53.6	54.2	56.2	57.7	57.7
82.5°	40.5	40.6	41.0	41.1	41.3	41.4	42.3	42.5	43.9	43.7	44.2
85°	24.1	23.4	23.4	23.4	24.1	24.7	24.1	24.1	24.7	24.7	24.7
87.5°	16.4	16.9	16.9	16.9	16.9	16.7	16.2	17.2	16.9	17.7	16.9
90°	38.7	38.7	38.7	38.7	38.7	37.6	35.2	37.6	38.7	39.9	38.7
92.5°	65.0	66.9	65.9	69.7	70.6	77.9	87.8	102.3	128.9	152.5	150.4
95°	133.7	132.6	136.1	145.4	160.7	186.5	235.8	307.4	402.4	459.9	407.1
97.5°	263.3	273.1	290.2	319.1	375.2	459.9	586.8	717.2	823.5	785.1	591.3
100°	420.0	441.1	475.1	525.5	622.9	764.9	925.6	1071.1	1095.7	926.8	638.1
102.5°	739.1	767.7	810.2	896.3	1002.1	1152.5	1270.0	1302.9	1197.1	931.5	620.4
105°	1322.1	1338.6	1389.0	1461.7	1534.5	1573.2	1557.9	1425.3	1181.3	869.3	585.4
107.5°	1688.8	1710.6	1720.7	1724.7	1715.6	1658.8	1536.8	1337.2	1078.3	802.6	568.0
110°	1799.6	1800.8	1790.2	1767.9	1717.5	1621.2	1471.1	1261.1	1013.6	770.7	564.3



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1797.7	1791.4	1771.4	1734.1	1664.0	1553.7	1393.2	1191.6	968.6	750.1	565.2
115°	1739.8	1729.2	1698.7	1644.8	1561.5	1440.6	1287.0	1106.3	912.7	727.3	570.2
117.5°	1636.3	1627.4	1595.2	1538.2	1453.3	1340.0	1200.6	1042.0	877.5	716.3	578.6
120°	1569.6	1557.9	1523.9	1468.7	1386.6	1279.9	1155.5	1010.1	858.7	709.7	584.2
122.5°	1500.2	1490.4	1460.1	1405.8	1332.2	1235.8	1118.0	984.7	842.7	706.0	590.8
125°	1411.3	1401.9	1372.6	1328.0	1259.9	1171.9	1068.7	947.9	820.0	699.2	600.7
127.5°	1333.4	1325.9	1300.5	1258.8	1199.4	1118.2	1020.9	911.5	798.9	695.2	610.8
130°	1289.3	1279.9	1256.5	1216.6	1159.0	1081.7	989.0	888.1	784.9	693.3	618.2
132.5°	1243.2	1234.9	1213.3	1173.4	1116.8	1044.1	959.0	865.6	773.6	692.4	625.7
135°	1169.6	1164.9	1143.8	1105.1	1054.6	989.0	911.5	834.0	757.8	690.9	634.7
137.5°	1097.3	1090.4	1071.8	1038.4	992.5	935.2	873.7	809.0	746.8	690.7	642.7
140°	1047.6	1040.6	1023.0	992.5	954.9	903.3	849.4	793.0	740.2	689.8	646.4
142.5°	997.8	996.4	980.8	953.0	917.4	874.2	827.8	779.9	733.7	689.8	649.2
145°	933.8	930.3	918.6	898.6	870.5	836.5	800.1	761.3	725.0	687.4	652.3
147.5°	880.1	878.0	870.0	854.0	830.8	806.0	777.6	747.1	716.1	683.3	653.2
150°	848.2	847.0	840.0	825.9	808.3	787.2	762.5	736.7	708.5	680.4	652.3
152.5°	820.9	820.7	815.6	803.3	789.5	771.2	750.3	726.4	702.0	675.7	650.4
155°	784.9	787.2	782.4	774.3	761.3	748.4	730.8	712.1	689.8	667.5	647.5
157.5°	754.1	754.1	751.9	745.2	736.0	725.9	711.1	695.4	678.3	659.0	642.2
160°	734.4	734.4	733.2	727.3	719.1	710.9	698.0	685.1	669.8	653.5	639.3
162.5°	715.6	716.5	715.4	711.3	703.2	696.8	685.8	674.8	662.4	648.7	636.5
165°	688.6	689.8	689.8	685.1	680.4	675.7	667.5	659.3	649.9	639.3	631.2
167.5°	663.8	665.2	665.4	662.8	660.8	656.5	650.9	644.5	637.7	631.2	625.7
170°	648.7	651.1	652.3	648.7	647.5	645.2	640.6	637.0	631.2	626.4	622.9
172.5°	636.5	637.9	639.1	637.5	636.3	634.9	631.2	628.5	624.6	620.9	619.1
175°	620.6	622.9	624.1	622.9	622.9	621.8	620.6	619.5	615.9	614.7	613.6
177.5°	611.0	612.9	613.8	613.8	613.8	613.8	612.9	612.9	611.0	610.1	611.0
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1974.5	1970.2	1966.5	1956.8	1952.0	1941.3	1939.6	1939.1	1925.2	1911.8	1908.0
5°	2042.4	2031.6	2015.5	1996.8	1977.3	1957.2	1943.8	1933.1	1906.3	1880.9	1866.1
7.5°	2110.7	2087.6	2059.9	2024.4	1994.8	1961.6	1936.8	1914.7	1876.7	1840.3	1815.7
10°	2161.6	2124.0	2087.2	2038.3	2000.1	1962.6	1927.7	1897.6	1854.7	1806.4	1772.3
12.5°	2193.2	2151.9	2101.1	2053.4	2003.9	1956.1	1909.6	1870.8	1820.4	1770.6	1729.9
15°	2235.9	2191.7	2130.1	2061.7	1998.1	1935.8	1882.2	1833.9	1768.3	1708.6	1659.0
17.5°	2271.0	2210.1	2143.9	2064.9	1991.2	1912.0	1842.9	1781.3	1708.2	1636.3	1577.8
20°	2282.2	2221.9	2145.6	2066.5	1979.3	1886.2	1811.8	1744.8	1666.4	1588.0	1521.1
22.5°	2275.2	2228.4	2143.3	2048.7	1959.5	1862.1	1778.1	1700.3	1613.4	1533.4	1455.6
25°	2228.0	2211.8	2131.4	2028.2	1926.4	1813.2	1716.0	1630.9	1531.8	1446.0	1361.5
27.5°	2117.7	2152.3	2102.5	1992.6	1879.4	1758.0	1648.7	1551.9	1449.0	1352.4	1268.3
30°	2011.6	2091.2	2069.8	1967.9	1841.3	1722.0	1599.4	1498.2	1388.4	1289.2	1206.1
32.5°	1866.2	1997.9	2018.9	1933.7	1802.7	1671.6	1543.2	1442.5	1327.8	1223.2	1142.3
35°	1635.0	1831.9	1922.4	1868.1	1736.8	1595.4	1462.7	1345.4	1230.2	1127.0	1046.6
37.5°	1359.0	1627.3	1778.1	1781.9	1661.3	1514.3	1369.9	1253.4	1135.5	1034.2	947.2
40°	1179.9	1470.8	1667.1	1710.6	1608.8	1450.0	1303.9	1185.3	1070.1	970.9	871.1
42.5°	1019.2	1308.9	1550.2	1626.0	1545.0	1387.3	1240.7	1116.7	1004.7	910.9	808.9
45°	824.2	1077.4	1343.4	1478.8	1433.9	1287.9	1133.1	1015.1	909.9	828.9	731.0
47.5°	695.3	873.7	1131.1	1314.2	1313.4	1180.1	1027.8	914.9	817.3	741.3	662.2
50°	621.8	777.3	995.0	1202.7	1220.1	1108.2	963.5	851.6	760.5	680.8	617.1
52.5°	555.8	684.0	879.8	1078.9	1128.5	1031.6	891.2	787.9	699.4	626.1	571.6
55°	469.7	568.9	717.6	903.9	979.0	910.6	786.0	689.5	617.8	556.1	509.3
57.5°	397.4	471.7	591.1	741.0	828.5	785.5	682.7	604.3	542.9	487.2	450.1
60°	351.7	412.7	513.9	639.2	735.7	705.6	617.8	544.7	492.5	444.2	409.4
62.5°	308.9	361.3	448.0	549.7	638.1	625.7	554.0	492.7	447.0	402.9	373.4
65°	248.6	286.8	354.5	434.2	505.2	511.3	459.7	418.1	377.3	342.4	316.3
67.5°	197.9	222.9	270.5	337.7	390.9	409.9	378.4	346.7	314.3	287.3	264.7
70°	166.8	186.9	221.8	276.1	325.0	345.1	327.0	302.2	274.1	252.0	232.5
72.5°	135.2	154.8	180.5	220.4	262.3	284.0	277.7	259.8	237.0	218.7	200.4
75°	101.9	107.9	125.3	152.1	184.9	203.7	208.4	199.0	180.9	166.8	156.1
77.5°	75.3	79.0	87.3	101.3	122.8	139.5	146.3	145.2	132.8	124.6	114.6
80°	60.3	62.3	66.3	72.4	88.5	105.2	109.9	109.9	101.2	97.9	87.8
82.5°	45.8	47.3	49.7	53.0	60.6	75.1	80.4	81.5	75.9	71.6	63.6
85°	26.2	25.4	26.8	28.8	30.2	34.1	42.2	43.5	42.2	36.9	34.8
87.5°	15.5	14.3	13.1	11.9	12.0	12.0	13.8	15.8	14.3	13.6	13.0
90°	31.7	23.4	17.6	14.0	11.7	9.4	4.6	1.2	4.6	9.4	11.7
92.5°	117.0	79.8	53.2	42.2	34.2	29.1	20.6	14.3	20.6	29.1	34.2
95°	270.9	169.0	114.9	86.8	68.1	57.5	45.7	41.1	45.7	57.5	68.1
97.5°	365.1	222.9	155.1	123.2	101.6	85.6	73.2	66.9	73.2	85.6	101.6
100°	384.8	241.7	179.5	146.6	123.2	104.4	93.8	90.3	93.8	104.4	123.2
102.5°	385.8	258.5	201.1	168.2	143.8	125.0	114.5	111.9	114.5	125.0	143.8
105°	391.8	287.4	232.3	199.4	173.6	156.0	147.8	143.1	147.8	156.0	173.6
107.5°	408.0	317.0	263.5	230.5	204.8	188.6	180.7	176.9	180.7	188.6	204.8
110°	421.1	336.7	285.1	251.1	226.4	211.2	204.1	199.4	204.1	211.2	226.4



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	435.3	355.5	305.7	270.7	247.0	232.8	224.8	220.0	224.8	232.8	247.0
115°	456.4	384.8	334.4	302.7	279.2	265.1	258.1	252.3	258.1	265.1	279.2
117.5°	478.9	411.7	365.1	332.2	309.7	297.3	290.2	285.6	290.2	297.3	309.7
120°	493.9	430.5	384.8	351.9	328.5	317.9	310.8	306.2	310.8	317.9	328.5
122.5°	507.1	448.4	405.5	371.6	348.2	336.7	329.6	325.9	329.6	336.7	348.2
125°	528.0	475.1	432.9	400.0	376.6	362.5	355.5	351.9	355.5	362.5	376.6
127.5°	547.3	500.0	458.9	425.2	402.6	387.2	377.3	372.5	377.3	387.2	402.6
130°	559.6	515.0	473.9	441.1	417.7	401.2	389.5	384.8	389.5	401.2	417.7
132.5°	571.8	528.2	489.0	456.2	431.7	414.3	401.7	396.1	401.7	414.3	431.7
135°	587.7	546.6	509.2	476.3	449.3	431.7	417.7	412.9	417.7	431.7	449.3
137.5°	600.0	561.7	524.6	494.1	467.4	448.6	434.5	428.9	434.5	448.6	467.4
140°	606.5	570.2	534.9	504.4	478.7	459.9	445.8	441.1	445.8	459.9	478.7
142.5°	612.2	576.7	542.5	513.8	489.0	470.2	457.1	453.3	457.1	470.2	489.0
145°	619.5	586.5	554.9	529.1	505.6	488.1	476.3	471.6	476.3	488.1	505.6
147.5°	623.4	594.5	564.7	541.8	522.3	506.0	494.8	491.3	494.8	506.0	522.3
150°	625.3	598.3	571.3	550.2	532.6	517.4	508.0	504.4	508.0	517.4	532.6
152.5°	626.2	602.1	577.8	558.7	542.0	528.6	519.3	517.6	519.3	528.6	542.0
155°	627.6	607.6	587.7	570.2	557.2	544.3	537.2	536.1	537.2	544.3	557.2
157.5°	627.6	611.7	594.8	580.0	569.7	558.5	552.8	551.6	552.8	558.5	569.7
160°	627.6	613.6	599.5	586.5	577.1	567.7	563.1	561.9	563.1	567.7	577.1
162.5°	626.7	614.5	602.3	592.2	583.7	576.2	571.6	572.3	571.6	576.2	583.7
165°	624.1	615.9	605.3	598.3	592.4	585.4	583.1	584.2	583.1	585.4	592.4
167.5°	622.5	615.6	607.9	603.5	599.3	594.8	592.7	594.1	592.7	594.8	599.3
170°	620.6	614.7	608.8	605.3	603.0	599.5	598.3	600.7	598.3	599.5	603.0
172.5°	617.7	613.8	609.8	607.2	605.8	602.3	603.0	604.4	603.0	602.3	605.8
175°	614.7	612.4	610.1	608.8	608.8	606.5	607.6	608.8	607.6	606.5	608.8
177.5°	612.9	611.0	610.1	610.1	610.1	608.1	609.0	611.0	609.0	608.1	610.1
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1901.1	1897.3	1890.4	1879.7	1873.2	1862.0	1854.4	1858.8	1859.8	1858.8	1857.6
5°	1850.0	1835.9	1816.5	1797.8	1780.3	1761.6	1750.8	1746.2	1736.8	1731.4	1728.8
7.5°	1788.3	1764.0	1736.5	1703.8	1676.1	1647.0	1632.1	1624.8	1605.6	1595.1	1586.0
10°	1742.1	1703.9	1676.5	1633.6	1607.5	1569.2	1543.2	1543.8	1517.6	1502.9	1492.2
12.5°	1691.2	1649.3	1603.6	1565.0	1528.6	1497.9	1466.5	1453.7	1426.0	1411.8	1382.8
15°	1606.8	1557.9	1509.6	1457.3	1420.5	1372.9	1327.4	1271.7	1226.9	1188.0	1177.3
17.5°	1514.6	1454.0	1405.6	1344.2	1281.1	1201.1	1148.3	1116.0	1088.9	1068.4	1053.2
20°	1451.4	1389.7	1338.1	1245.7	1160.5	1106.3	1067.4	1042.6	1014.5	992.4	980.3
22.5°	1384.8	1320.5	1250.2	1147.0	1080.7	1037.1	1002.5	974.0	954.9	937.7	926.7
25°	1290.5	1220.1	1104.3	1033.2	979.6	934.0	909.9	892.5	872.4	849.0	838.2
27.5°	1190.8	1078.9	995.7	942.9	891.7	862.1	840.4	814.4	796.4	785.9	774.7
30°	1116.3	1004.4	939.4	881.8	845.6	812.7	787.3	772.5	755.2	737.1	729.7
32.5°	1033.2	943.8	881.5	833.5	796.8	768.8	748.7	724.9	712.3	701.1	685.7
35°	930.0	862.3	805.4	766.6	731.7	708.9	685.5	671.4	648.6	639.2	633.2
37.5°	842.6	784.0	741.4	700.4	672.9	647.6	633.3	611.0	601.1	588.0	575.3
40°	793.3	735.7	694.9	661.4	630.6	611.8	593.7	575.6	560.9	554.8	539.4
42.5°	743.0	696.1	655.2	618.4	597.8	577.9	555.1	541.8	526.5	516.7	507.3
45°	673.4	631.9	597.0	566.8	544.1	523.3	508.6	486.5	477.8	458.3	450.3
47.5°	612.3	573.7	540.5	511.8	489.6	476.1	454.4	437.2	423.2	411.3	400.9
50°	568.9	536.7	504.5	479.1	459.0	439.6	417.5	408.7	387.3	381.2	375.3
52.5°	529.2	498.7	469.2	444.2	424.1	405.3	385.8	374.5	359.9	354.0	349.5
55°	473.7	444.2	416.1	393.9	373.9	354.5	342.4	328.3	321.6	316.9	311.5
57.5°	418.0	391.4	369.9	347.5	327.3	311.8	297.9	289.4	282.5	276.3	269.9
60°	382.6	357.1	337.7	316.9	296.2	283.5	272.7	262.7	254.6	245.2	242.6
62.5°	345.1	322.9	305.0	284.8	266.7	255.0	244.8	235.3	225.7	212.0	208.2
65°	293.5	276.1	257.3	240.5	224.5	213.1	198.3	187.6	183.6	182.3	181.6
67.5°	246.8	230.4	214.3	197.1	182.5	172.0	164.4	162.8	160.0	159.2	157.3
70°	215.7	200.4	184.3	168.1	154.1	152.1	149.5	146.7	143.4	142.1	140.7
72.5°	187.8	172.0	155.8	143.0	136.9	134.4	131.7	129.1	126.7	125.4	124.6
75°	144.1	129.4	118.6	113.9	110.6	108.6	104.5	102.5	101.2	99.2	98.5
77.5°	103.7	95.4	90.5	87.6	84.0	81.9	79.6	77.6	76.1	75.7	74.6
80°	79.1	75.0	71.7	67.7	66.3	63.6	63.0	61.0	61.6	59.7	59.7
82.5°	61.4	56.2	53.4	51.6	50.3	48.1	47.5	46.5	46.7	45.1	45.1
85°	31.5	30.2	28.8	27.5	27.5	25.4	26.2	25.4	25.4	24.1	23.4
87.5°	13.0	13.1	13.2	14.9	16.4	16.1	15.8	15.0	14.5	15.0	14.7
90°	14.0	17.6	23.4	31.7	38.7	39.9	38.7	37.6	35.2	37.6	38.7
92.5°	42.2	53.2	79.8	117.0	150.4	152.5	128.9	102.3	87.8	77.9	70.6
95°	86.8	114.9	169.0	270.9	407.1	459.9	402.4	307.4	235.8	186.5	160.7
97.5°	123.2	155.1	222.9	365.1	591.3	785.1	823.5	717.2	586.8	459.9	375.2
100°	146.6	179.5	241.7	384.8	638.1	926.8	1095.7	1071.1	925.6	764.9	622.9
102.5°	168.2	201.1	258.5	385.8	620.4	931.5	1197.1	1302.9	1270.0	1152.5	1002.1
105°	199.4	232.3	287.4	391.8	585.4	869.3	1181.3	1425.3	1557.9	1573.2	1534.5
107.5°	230.5	263.5	317.0	408.0	568.0	802.6	1078.3	1337.2	1536.8	1658.8	1715.6
110°	251.1	285.1	336.7	421.1	564.3	770.7	1013.6	1261.1	1471.1	1621.2	1717.5



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	270.7	305.7	355.5	435.3	565.2	750.1	968.6	1191.6	1393.2	1553.7	1664.0
115°	302.7	334.4	384.8	456.4	570.2	727.3	912.7	1106.3	1287.0	1440.6	1561.5
117.5°	332.2	365.1	411.7	478.9	578.6	716.3	877.5	1042.0	1200.6	1340.0	1453.3
120°	351.9	384.8	430.5	493.9	584.2	709.7	858.7	1010.1	1155.5	1279.9	1386.6
122.5°	371.6	405.5	448.4	507.1	590.8	706.0	842.7	984.7	1118.0	1235.8	1332.2
125°	400.0	432.9	475.1	528.0	600.7	699.2	820.0	947.9	1068.7	1171.9	1259.9
127.5°	425.2	458.9	500.0	547.3	610.8	695.2	798.9	911.5	1020.9	1118.2	1199.4
130°	441.1	473.9	515.0	559.6	618.2	693.3	784.9	888.1	989.0	1081.7	1159.0
132.5°	456.2	489.0	528.2	571.8	625.7	692.4	773.6	865.6	959.0	1044.1	1116.8
135°	476.3	509.2	546.6	587.7	634.7	690.9	757.8	834.0	911.5	989.0	1054.6
137.5°	494.1	524.6	561.7	600.0	642.7	690.7	746.8	809.0	873.7	935.2	992.5
140°	504.4	534.9	570.2	606.5	646.4	689.8	740.2	793.0	849.4	903.3	954.9
142.5°	513.8	542.5	576.7	612.2	649.2	689.8	733.7	779.9	827.8	874.2	917.4
145°	529.1	554.9	586.5	619.5	652.3	687.4	725.0	761.3	800.1	836.5	870.5
147.5°	541.8	564.7	594.5	623.4	653.2	683.3	716.1	747.1	777.6	806.0	830.8
150°	550.2	571.3	598.3	625.3	652.3	680.4	708.5	736.7	762.5	787.2	808.3
152.5°	558.7	577.8	602.1	626.2	650.4	675.7	702.0	726.4	750.3	771.2	789.5
155°	570.2	587.7	607.6	627.6	647.5	667.5	689.8	712.1	730.8	748.4	761.3
157.5°	580.0	594.8	611.7	627.6	642.2	659.0	678.3	695.4	711.1	725.9	736.0
160°	586.5	599.5	613.6	627.6	639.3	653.5	669.8	685.1	698.0	710.9	719.1
162.5°	592.2	602.3	614.5	626.7	636.5	648.7	662.4	674.8	685.8	696.8	703.2
165°	598.3	605.3	615.9	624.1	631.2	639.3	649.9	659.3	667.5	675.7	680.4
167.5°	603.5	607.9	615.6	622.5	625.7	631.2	637.7	644.5	650.9	656.5	660.8
170°	605.3	608.8	614.7	620.6	622.9	626.4	631.2	637.0	640.6	645.2	647.5
172.5°	607.2	609.8	613.8	617.7	619.1	620.9	624.6	628.5	631.2	634.9	636.3
175°	608.8	610.1	612.4	614.7	613.6	614.7	615.9	619.5	620.6	621.8	622.9
177.5°	610.1	610.1	611.0	612.9	611.0	610.1	611.0	612.9	612.9	613.8	613.8
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1851.8	1852.8	1851.2	1852.3	1851.2	1852.8	1851.8	1857.6	1858.8	1859.8	1858.8
5°	1725.4	1717.4	1716.0	1714.0	1716.0	1717.4	1725.4	1728.8	1731.4	1736.8	1746.2
7.5°	1574.5	1573.3	1569.9	1565.3	1569.9	1573.3	1574.5	1586.0	1595.1	1605.6	1624.8
10°	1477.4	1474.1	1473.5	1468.7	1473.5	1474.1	1477.4	1492.2	1502.9	1517.6	1543.8
12.5°	1363.8	1342.2	1340.0	1328.3	1340.0	1342.2	1363.8	1382.8	1411.8	1426.0	1453.7
15°	1161.2	1157.2	1143.8	1135.1	1143.8	1157.2	1161.2	1177.3	1188.0	1226.9	1271.7
17.5°	1045.4	1032.3	1028.1	1026.2	1028.1	1032.3	1045.4	1053.2	1068.4	1088.9	1116.0
20°	970.9	958.9	956.8	955.5	956.8	958.9	970.9	980.3	992.4	1014.5	1042.6
22.5°	919.5	906.9	901.6	897.6	901.6	906.9	919.5	926.7	937.7	954.9	974.0
25°	831.5	826.9	824.2	822.8	824.2	826.9	831.5	838.2	849.0	872.4	892.5
27.5°	762.8	752.5	750.4	747.0	750.4	752.5	762.8	774.7	785.9	796.4	814.4
30°	723.7	720.3	715.6	711.6	715.6	720.3	723.7	729.7	737.1	755.2	772.5
32.5°	677.5	674.8	670.6	668.7	670.6	674.8	677.5	685.7	701.1	712.3	724.9
35°	626.5	617.1	613.1	607.0	613.1	617.1	626.5	633.2	639.2	648.6	671.4
37.5°	572.5	567.5	561.9	563.9	561.9	567.5	572.5	575.3	588.0	601.1	611.0
40°	530.7	527.4	526.0	525.3	526.0	527.4	530.7	539.4	554.8	560.9	575.6
42.5°	497.5	488.2	484.7	484.5	484.7	488.2	497.5	507.3	516.7	526.5	541.8
45°	447.0	438.2	432.2	432.8	432.2	438.2	447.0	450.3	458.3	477.8	486.5
47.5°	395.2	395.0	391.2	392.4	391.2	395.0	395.2	400.9	411.3	423.2	437.2
50°	370.5	366.5	363.9	364.5	363.9	366.5	370.5	375.3	381.2	387.3	408.7
52.5°	347.0	343.5	341.3	344.2	341.3	343.5	347.0	349.5	354.0	359.9	374.5
55°	308.2	304.2	303.6	302.9	303.6	304.2	308.2	311.5	316.9	321.6	328.3
57.5°	265.0	262.3	258.2	256.5	258.2	262.3	265.0	269.9	276.3	282.5	289.4
60°	233.9	228.5	221.8	221.2	221.8	228.5	233.9	242.6	245.2	254.6	262.7
62.5°	205.4	204.4	203.0	202.9	203.0	204.4	205.4	208.2	212.0	225.7	235.3
65°	180.3	179.6	180.3	180.9	180.3	179.6	180.3	181.6	182.3	183.6	187.6
67.5°	157.0	155.8	154.6	155.2	154.6	155.8	157.0	157.3	159.2	160.0	162.8
70°	139.4	138.7	138.0	138.0	138.0	138.7	139.4	140.7	142.1	143.4	146.7
72.5°	122.2	122.1	121.4	120.9	121.4	122.1	122.2	124.6	125.4	126.7	129.1
75°	97.9	96.4	96.4	96.4	96.4	96.4	97.9	98.5	99.2	101.2	102.5
77.5°	74.5	73.8	73.2	72.6	73.2	73.8	74.5	74.6	75.7	76.1	77.6
80°	59.0	58.3	57.7	57.7	57.7	58.3	59.0	59.7	59.7	61.6	61.0
82.5°	45.0	44.3	44.2	43.7	44.2	44.3	45.0	45.1	45.1	46.7	46.5
85°	24.1	24.7	24.1	25.4	24.1	24.7	24.1	23.4	24.1	25.4	25.4
87.5°	14.7	14.1	14.7	14.1	14.7	14.1	14.7	14.7	15.0	14.5	15.0
90°	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	37.6	35.2	37.6
92.5°	69.7	65.9	66.9	65.0	66.9	65.9	69.7	70.6	77.9	87.8	102.3
95°	145.4	136.1	132.6	133.7	132.6	136.1	145.4	160.7	186.5	235.8	307.4
97.5°	319.1	290.2	273.1	263.3	273.1	290.2	319.1	375.2	459.9	586.8	717.2
100°	525.5	475.1	441.1	420.0	441.1	475.1	525.5	622.9	764.9	925.6	1071.1
102.5°	896.3	810.2	767.7	739.1	767.7	810.2	896.3	1002.1	1152.5	1270.0	1302.9
105°	1461.7	1389.0	1338.6	1322.1	1338.6	1389.0	1461.7	1534.5	1573.2	1557.9	1425.3
107.5°	1724.7	1720.7	1710.6	1688.8	1710.6	1720.7	1724.7	1715.6	1658.8	1536.8	1337.2
110°	1767.9	1790.2	1800.8	1799.6	1800.8	1790.2	1767.9	1717.5	1621.2	1471.1	1261.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1734.1	1771.4	1791.4	1797.7	1791.4	1771.4	1734.1	1664.0	1553.7	1393.2	1191.6
115°	1644.8	1698.7	1729.2	1739.8	1729.2	1698.7	1644.8	1561.5	1440.6	1287.0	1106.3
117.5°	1538.2	1595.2	1627.4	1636.3	1627.4	1595.2	1538.2	1453.3	1340.0	1200.6	1042.0
120°	1468.7	1523.9	1557.9	1569.6	1557.9	1523.9	1468.7	1386.6	1279.9	1155.5	1010.1
122.5°	1405.8	1460.1	1490.4	1500.2	1490.4	1460.1	1405.8	1332.2	1235.8	1118.0	984.7
125°	1328.0	1372.6	1401.9	1411.3	1401.9	1372.6	1328.0	1259.9	1171.9	1068.7	947.9
127.5°	1258.8	1300.5	1325.9	1333.4	1325.9	1300.5	1258.8	1199.4	1118.2	1020.9	911.5
130°	1216.6	1256.5	1279.9	1289.3	1279.9	1256.5	1216.6	1159.0	1081.7	989.0	888.1
132.5°	1173.4	1213.3	1234.9	1243.2	1234.9	1213.3	1173.4	1116.8	1044.1	959.0	865.6
135°	1105.1	1143.8	1164.9	1169.6	1164.9	1143.8	1105.1	1054.6	989.0	911.5	834.0
137.5°	1038.4	1071.8	1090.4	1097.3	1090.4	1071.8	1038.4	992.5	935.2	873.7	809.0
140°	992.5	1023.0	1040.6	1047.6	1040.6	1023.0	992.5	954.9	903.3	849.4	793.0
142.5°	953.0	980.8	996.4	997.8	996.4	980.8	953.0	917.4	874.2	827.8	779.9
145°	898.6	918.6	930.3	933.8	930.3	918.6	898.6	870.5	836.5	800.1	761.3
147.5°	854.0	870.0	878.0	880.1	878.0	870.0	854.0	830.8	806.0	777.6	747.1
150°	825.9	840.0	847.0	848.2	847.0	840.0	825.9	808.3	787.2	762.5	736.7
152.5°	803.3	815.6	820.7	820.9	820.7	815.6	803.3	789.5	771.2	750.3	726.4
155°	774.3	782.4	787.2	784.9	787.2	782.4	774.3	761.3	748.4	730.8	712.1
157.5°	745.2	751.9	754.1	754.1	754.1	751.9	745.2	736.0	725.9	711.1	695.4
160°	727.3	733.2	734.4	734.4	734.4	733.2	727.3	719.1	710.9	698.0	685.1
162.5°	711.3	715.4	716.5	715.6	716.5	715.4	711.3	703.2	696.8	685.8	674.8
165°	685.1	689.8	689.8	688.6	689.8	689.8	685.1	680.4	675.7	667.5	659.3
167.5°	662.8	665.4	665.2	663.8	665.2	665.4	662.8	660.8	656.5	650.9	644.5
170°	648.7	652.3	651.1	648.7	651.1	652.3	648.7	647.5	645.2	640.6	637.0
172.5°	637.5	639.1	637.9	636.5	637.9	639.1	637.5	636.3	634.9	631.2	628.5
175°	622.9	624.1	622.9	620.6	622.9	624.1	622.9	622.9	621.8	620.6	619.5
177.5°	613.8	613.8	612.9	611.0	612.9	613.8	613.8	613.8	613.8	612.9	612.9
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1854.4	1862.0	1873.2	1879.7	1890.4	1897.3	1901.1	1908.0	1911.8	1925.2	1939.1
5°	1750.8	1761.6	1780.3	1797.8	1816.5	1835.9	1850.0	1866.1	1880.9	1906.3	1933.1
7.5°	1632.1	1647.0	1676.1	1703.8	1736.5	1764.0	1788.3	1815.7	1840.3	1876.7	1914.7
10°	1543.2	1569.2	1607.5	1633.6	1676.5	1703.9	1742.1	1772.3	1806.4	1854.7	1897.6
12.5°	1466.5	1497.9	1528.6	1565.0	1603.6	1649.3	1691.2	1729.9	1770.6	1820.4	1870.8
15°	1327.4	1372.9	1420.5	1457.3	1509.6	1557.9	1606.8	1659.0	1708.6	1768.3	1833.9
17.5°	1148.3	1201.1	1281.1	1344.2	1405.6	1454.0	1514.6	1577.8	1636.3	1708.2	1781.3
20°	1067.4	1106.3	1160.5	1245.7	1338.1	1389.7	1451.4	1521.1	1588.0	1666.4	1744.8
22.5°	1002.5	1037.1	1080.7	1147.0	1250.2	1320.5	1384.8	1455.6	1533.4	1613.4	1700.3
25°	909.9	934.0	979.6	1033.2	1104.3	1220.1	1290.5	1361.5	1446.0	1531.8	1630.9
27.5°	840.4	862.1	891.7	942.9	995.7	1078.9	1190.8	1268.3	1352.4	1449.0	1551.9
30°	787.3	812.7	845.6	881.8	939.4	1004.4	1116.3	1206.1	1289.2	1388.4	1498.2
32.5°	748.7	768.8	796.8	833.5	881.5	943.8	1033.2	1142.3	1223.2	1327.8	1442.5
35°	685.5	708.9	731.7	766.6	805.4	862.3	930.0	1046.6	1127.0	1230.2	1345.4
37.5°	633.3	647.6	672.9	700.4	741.4	784.0	842.6	947.2	1034.2	1135.5	1253.4
40°	593.7	611.8	630.6	661.4	694.9	735.7	793.3	871.1	970.9	1070.1	1185.3
42.5°	555.1	577.9	597.8	618.4	655.2	696.1	743.0	808.9	910.9	1004.7	1116.7
45°	508.6	523.3	544.1	566.8	597.0	631.9	673.4	731.0	828.9	909.9	1015.1
47.5°	454.4	476.1	489.6	511.8	540.5	573.7	612.3	662.2	741.3	817.3	914.9
50°	417.5	439.6	459.0	479.1	504.5	536.7	568.9	617.1	680.8	760.5	851.6
52.5°	385.8	405.3	424.1	444.2	469.2	498.7	529.2	571.6	626.1	699.4	787.9
55°	342.4	354.5	373.9	393.9	416.1	444.2	473.7	509.3	556.1	617.8	689.5
57.5°	297.9	311.8	327.3	347.5	369.9	391.4	418.0	450.1	487.2	542.9	604.3
60°	272.7	283.5	296.2	316.9	337.7	357.1	382.6	409.4	444.2	492.5	544.7
62.5°	244.8	255.0	266.7	284.8	305.0	322.9	345.1	373.4	402.9	447.0	492.7
65°	198.3	213.1	224.5	240.5	257.3	276.1	293.5	316.3	342.4	377.3	418.1
67.5°	164.4	172.0	182.5	197.1	214.3	230.4	246.8	264.7	287.3	314.3	346.7
70°	149.5	152.1	154.1	168.1	184.3	200.4	215.7	232.5	252.0	274.1	302.2
72.5°	131.7	134.4	136.9	143.0	155.8	172.0	187.8	200.4	218.7	237.0	259.8
75°	104.5	108.6	110.6	113.9	118.6	129.4	144.1	156.1	166.8	180.9	199.0
77.5°	79.6	81.9	84.0	87.6	90.5	95.4	103.7	114.6	124.6	132.8	145.2
80°	63.0	63.6	66.3	67.7	71.7	75.0	79.1	87.8	97.9	101.2	109.9
82.5°	47.5	48.1	50.3	51.6	53.4	56.2	61.4	63.6	71.6	75.9	81.5
85°	26.2	25.4	27.5	27.5	28.8	30.2	31.5	34.8	36.9	42.2	43.5
87.5°	15.8	16.1	16.4	14.9	13.2	13.1	13.0	13.0	13.6	14.3	15.8
90°	38.7	39.9	38.7	31.7	23.4	17.6	14.0	11.7	9.4	4.6	1.2
92.5°	128.9	152.5	150.4	117.0	79.8	53.2	42.2	34.2	29.1	20.6	14.3
95°	402.4	459.9	407.1	270.9	169.0	114.9	86.8	68.1	57.5	45.7	41.1
97.5°	823.5	785.1	591.3	365.1	222.9	155.1	123.2	101.6	85.6	73.2	66.9
100°	1095.7	926.8	638.1	384.8	241.7	179.5	146.6	123.2	104.4	93.8	90.3
102.5°	1197.1	931.5	620.4	385.8	258.5	201.1	168.2	143.8	125.0	114.5	111.9
105°	1181.3	869.3	585.4	391.8	287.4	232.3	199.4	173.6	156.0	147.8	143.1
107.5°	1078.3	802.6	568.0	408.0	317.0	263.5	230.5	204.8	188.6	180.7	176.9
110°	1013.6	770.7	564.3	421.1	336.7	285.1	251.1	226.4	211.2	204.1	199.4



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	968.6	750.1	565.2	435.3	355.5	305.7	270.7	247.0	232.8	224.8	220.0
115°	912.7	727.3	570.2	456.4	384.8	334.4	302.7	279.2	265.1	258.1	252.3
117.5°	877.5	716.3	578.6	478.9	411.7	365.1	332.2	309.7	297.3	290.2	285.6
120°	858.7	709.7	584.2	493.9	430.5	384.8	351.9	328.5	317.9	310.8	306.2
122.5°	842.7	706.0	590.8	507.1	448.4	405.5	371.6	348.2	336.7	329.6	325.9
125°	820.0	699.2	600.7	528.0	475.1	432.9	400.0	376.6	362.5	355.5	351.9
127.5°	798.9	695.2	610.8	547.3	500.0	458.9	425.2	402.6	387.2	377.3	372.5
130°	784.9	693.3	618.2	559.6	515.0	473.9	441.1	417.7	401.2	389.5	384.8
132.5°	773.6	692.4	625.7	571.8	528.2	489.0	456.2	431.7	414.3	401.7	396.1
135°	757.8	690.9	634.7	587.7	546.6	509.2	476.3	449.3	431.7	417.7	412.9
137.5°	746.8	690.7	642.7	600.0	561.7	524.6	494.1	467.4	448.6	434.5	428.9
140°	740.2	689.8	646.4	606.5	570.2	534.9	504.4	478.7	459.9	445.8	441.1
142.5°	733.7	689.8	649.2	612.2	576.7	542.5	513.8	489.0	470.2	457.1	453.3
145°	725.0	687.4	652.3	619.5	586.5	554.9	529.1	505.6	488.1	476.3	471.6
147.5°	716.1	683.3	653.2	623.4	594.5	564.7	541.8	522.3	506.0	494.8	491.3
150°	708.5	680.4	652.3	625.3	598.3	571.3	550.2	532.6	517.4	508.0	504.4
152.5°	702.0	675.7	650.4	626.2	602.1	577.8	558.7	542.0	528.6	519.3	517.6
155°	689.8	667.5	647.5	627.6	607.6	587.7	570.2	557.2	544.3	537.2	536.1
157.5°	678.3	659.0	642.2	627.6	611.7	594.8	580.0	569.7	558.5	552.8	551.6
160°	669.8	653.5	639.3	627.6	613.6	599.5	586.5	577.1	567.7	563.1	561.9
162.5°	662.4	648.7	636.5	626.7	614.5	602.3	592.2	583.7	576.2	571.6	572.3
165°	649.9	639.3	631.2	624.1	615.9	605.3	598.3	592.4	585.4	583.1	584.2
167.5°	637.7	631.2	625.7	622.5	615.6	607.9	603.5	599.3	594.8	592.7	594.1
170°	631.2	626.4	622.9	620.6	614.7	608.8	605.3	603.0	599.5	598.3	600.7
172.5°	624.6	620.9	619.1	617.7	613.8	609.8	607.2	605.8	602.3	603.0	604.4
175°	615.9	614.7	613.6	614.7	612.4	610.1	608.8	608.8	606.5	607.6	608.8
177.5°	611.0	610.1	611.0	612.9	611.0	610.1	610.1	610.1	608.1	609.0	611.0
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1939.6	1941.3	1952.0	1956.8	1966.5	1970.2	1974.5	1973.5	1973.5	1975.6	1990.6
5°	1943.8	1957.2	1977.3	1996.8	2015.5	2031.6	2042.4	2053.1	2057.1	2076.5	2094.0
7.5°	1936.8	1961.6	1994.8	2024.4	2059.9	2087.6	2110.7	2131.4	2145.7	2173.9	2202.9
10°	1927.7	1962.6	2000.1	2038.3	2087.2	2124.0	2161.6	2190.4	2199.8	2242.0	2266.1
12.5°	1909.6	1956.1	2003.9	2053.4	2101.1	2151.9	2193.2	2222.0	2255.0	2292.9	2337.4
15°	1882.2	1935.8	1998.1	2061.7	2130.1	2191.7	2235.9	2286.2	2322.4	2364.0	2402.8
17.5°	1842.9	1912.0	1991.2	2064.9	2143.9	2210.1	2271.0	2319.2	2344.6	2368.3	2374.1
20°	1811.8	1886.2	1979.3	2066.5	2145.6	2221.9	2282.2	2322.4	2329.2	2329.8	2294.3
22.5°	1778.1	1862.1	1959.5	2048.7	2143.3	2228.4	2275.2	2292.4	2265.8	2220.4	2151.7
25°	1716.0	1813.2	1926.4	2028.2	2131.4	2211.8	2228.0	2197.8	2104.7	2006.8	1882.9
27.5°	1648.7	1758.0	1879.4	1992.6	2102.5	2152.3	2117.7	2008.9	1841.2	1695.4	1518.6
30°	1599.4	1722.0	1841.3	1967.9	2069.8	2091.2	2011.6	1851.4	1655.7	1435.9	1259.7
32.5°	1543.2	1671.6	1802.7	1933.7	2018.9	1997.9	1866.2	1669.1	1439.7	1223.7	1057.1
35°	1462.7	1595.4	1736.8	1868.1	1922.4	1831.9	1635.0	1378.3	1143.8	942.1	827.5
37.5°	1369.9	1514.3	1661.3	1781.9	1778.1	1627.3	1359.0	1094.1	897.0	777.7	696.1
40°	1303.9	1450.0	1608.8	1710.6	1667.1	1470.8	1179.9	930.0	786.0	690.8	631.2
42.5°	1240.7	1387.3	1545.0	1626.0	1550.2	1308.9	1019.2	823.3	704.5	630.3	581.9
45°	1133.1	1287.9	1433.9	1478.8	1343.4	1077.4	824.2	682.2	603.1	548.1	514.6
47.5°	1027.8	1180.1	1313.4	1314.2	1131.1	873.7	695.3	590.4	522.8	480.3	456.0
50°	963.5	1108.2	1220.1	1202.7	995.0	777.3	621.8	531.4	475.0	442.2	416.8
52.5°	891.2	1031.6	1128.5	1078.9	879.8	684.0	555.8	479.9	433.2	404.8	381.9
55°	786.0	910.6	979.0	903.9	717.6	568.9	469.7	410.1	375.3	351.1	331.6
57.5°	682.7	785.5	828.5	741.0	591.1	471.7	397.4	352.5	318.0	300.7	290.6
60°	617.8	705.6	735.7	639.2	513.9	412.7	351.7	310.2	284.8	273.4	263.4
62.5°	554.0	625.7	638.1	549.7	448.0	361.3	308.9	273.8	256.9	246.0	236.5
65°	459.7	511.3	505.2	434.2	354.5	286.8	248.6	227.1	214.4	199.0	182.3
67.5°	378.4	409.9	390.9	337.7	270.5	222.9	197.9	181.7	165.9	151.3	147.4
70°	327.0	345.1	325.0	276.1	221.8	186.9	166.8	147.4	138.0	134.7	128.7
72.5°	277.7	284.0	262.3	220.4	180.5	154.8	135.2	124.3	119.3	116.4	112.6
75°	208.4	203.7	184.9	152.1	125.3	107.9	101.9	97.9	94.5	91.8	89.8
77.5°	146.3	139.5	122.8	101.3	87.3	79.0	75.3	73.2	71.6	70.2	68.2
80°	109.9	105.2	88.5	72.4	66.3	62.3	60.3	57.7	57.7	56.2	54.2
82.5°	80.4	75.1	60.6	53.0	49.7	47.3	45.8	44.2	43.7	43.9	42.5
85°	42.2	34.1	30.2	28.8	26.8	25.4	26.2	24.7	24.7	24.7	24.1
87.5°	13.8	12.0	12.0	11.9	13.1	14.3	15.5	16.9	17.7	16.9	17.2
90°	4.6	9.4	11.7	14.0	17.6	23.4	31.7	38.7	39.9	38.7	37.6
92.5°	20.6	29.1	34.2	42.2	53.2	79.8	117.0	150.4	152.5	128.9	102.3
95°	45.7	57.5	68.1	86.8	114.9	169.0	270.9	407.1	459.9	402.4	307.4
97.5°	73.2	85.6	101.6	123.2	155.1	222.9	365.1	591.3	785.1	823.5	717.2
100°	93.8	104.4	123.2	146.6	179.5	241.7	384.8	638.1	926.8	1095.7	1071.1
102.5°	114.5	125.0	143.8	168.2	201.1	258.5	385.8	620.4	931.5	1197.1	1302.9
105°	147.8	156.0	173.6	199.4	232.3	287.4	391.8	585.4	869.3	1181.3	1425.3
107.5°	180.7	188.6	204.8	230.5	263.5	317.0	408.0	568.0	802.6	1078.3	1337.2
110°	204.1	211.2	226.4	251.1	285.1	336.7	421.1	564.3	770.7	1013.6	1261.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	224.8	232.8	247.0	270.7	305.7	355.5	435.3	565.2	750.1	968.6	1191.6
115°	258.1	265.1	279.2	302.7	334.4	384.8	456.4	570.2	727.3	912.7	1106.3
117.5°	290.2	297.3	309.7	332.2	365.1	411.7	478.9	578.6	716.3	877.5	1042.0
120°	310.8	317.9	328.5	351.9	384.8	430.5	493.9	584.2	709.7	858.7	1010.1
122.5°	329.6	336.7	348.2	371.6	405.5	448.4	507.1	590.8	706.0	842.7	984.7
125°	355.5	362.5	376.6	400.0	432.9	475.1	528.0	600.7	699.2	820.0	947.9
127.5°	377.3	387.2	402.6	425.2	458.9	500.0	547.3	610.8	695.2	798.9	911.5
130°	389.5	401.2	417.7	441.1	473.9	515.0	559.6	618.2	693.3	784.9	888.1
132.5°	401.7	414.3	431.7	456.2	489.0	528.2	571.8	625.7	692.4	773.6	865.6
135°	417.7	431.7	449.3	476.3	509.2	546.6	587.7	634.7	690.9	757.8	834.0
137.5°	434.5	448.6	467.4	494.1	524.6	561.7	600.0	642.7	690.7	746.8	809.0
140°	445.8	459.9	478.7	504.4	534.9	570.2	606.5	646.4	689.8	740.2	793.0
142.5°	457.1	470.2	489.0	513.8	542.5	576.7	612.2	649.2	689.8	733.7	779.9
145°	476.3	488.1	505.6	529.1	554.9	586.5	619.5	652.3	687.4	725.0	761.3
147.5°	494.8	506.0	522.3	541.8	564.7	594.5	623.4	653.2	683.3	716.1	747.1
150°	508.0	517.4	532.6	550.2	571.3	598.3	625.3	652.3	680.4	708.5	736.7
152.5°	519.3	528.6	542.0	558.7	577.8	602.1	626.2	650.4	675.7	702.0	726.4
155°	537.2	544.3	557.2	570.2	587.7	607.6	627.6	647.5	667.5	689.8	712.1
157.5°	552.8	558.5	569.7	580.0	594.8	611.7	627.6	642.2	659.0	678.3	695.4
160°	563.1	567.7	577.1	586.5	599.5	613.6	627.6	639.3	653.5	669.8	685.1
162.5°	571.6	576.2	583.7	592.2	602.3	614.5	626.7	636.5	648.7	662.4	674.8
165°	583.1	585.4	592.4	598.3	605.3	615.9	624.1	631.2	639.3	649.9	659.3
167.5°	592.7	594.8	599.3	603.5	607.9	615.6	622.5	625.7	631.2	637.7	644.5
170°	598.3	599.5	603.0	605.3	608.8	614.7	620.6	622.9	626.4	631.2	637.0
172.5°	603.0	602.3	605.8	607.2	609.8	613.8	617.7	619.1	620.9	624.6	628.5
175°	607.6	606.5	608.8	608.8	610.1	612.4	614.7	613.6	614.7	615.9	619.5
177.5°	609.0	608.1	610.1	610.1	610.1	611.0	612.9	611.0	610.1	611.0	612.9
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1	610.1



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4	1928.4
2.5°	1996.0	2003.0	2006.1	2006.1	2009.9	2008.3	2006.7
5°	2110.7	2123.4	2126.1	2138.2	2146.9	2144.1	2145.6
7.5°	2224.7	2245.2	2265.4	2274.7	2276.1	2281.5	2283.5
10°	2294.9	2311.7	2343.2	2338.4	2362.0	2375.3	2353.2
12.5°	2362.5	2385.1	2407.0	2413.0	2426.3	2430.5	2421.9
15°	2423.6	2435.7	2437.0	2433.7	2437.6	2434.3	2421.6
17.5°	2366.5	2346.9	2307.2	2288.5	2273.6	2251.7	2242.8
20°	2272.2	2214.5	2147.5	2120.7	2089.2	2027.6	2042.4
22.5°	2068.5	2002.8	1935.8	1857.5	1820.2	1761.7	1758.2
25°	1751.5	1638.3	1513.7	1426.5	1375.6	1317.4	1291.8
27.5°	1361.8	1219.2	1117.1	1065.4	1018.3	972.1	970.3
30°	1105.6	998.4	919.3	875.0	846.3	826.9	830.9
32.5°	931.9	858.5	805.2	768.4	747.1	732.5	732.3
35°	761.8	711.6	677.4	662.0	646.6	635.9	636.5
37.5°	652.0	621.8	602.8	585.7	576.1	570.9	567.9
40°	595.7	570.9	556.1	546.1	538.1	530.7	529.4
42.5°	551.2	530.7	515.9	508.1	500.5	495.3	493.9
45°	489.2	472.4	459.0	450.3	447.0	442.2	442.2
47.5°	435.2	418.7	408.2	402.7	397.0	393.8	393.7
50°	398.7	386.0	376.6	373.2	368.5	366.5	365.9
52.5°	366.0	356.5	349.8	347.5	345.5	343.0	343.4
55°	321.6	316.3	313.6	311.5	308.2	304.2	306.9
57.5°	284.3	279.6	272.5	266.1	263.1	260.2	261.4
60°	258.0	248.6	239.2	231.9	229.8	223.8	223.8
62.5°	224.7	211.6	200.1	195.9	193.9	191.1	190.6
65°	172.9	167.5	164.8	162.2	160.8	160.8	159.5
67.5°	143.3	141.1	138.1	137.5	136.1	135.7	135.3
70°	126.6	123.9	122.6	122.0	120.6	121.3	119.3
72.5°	110.6	108.5	108.2	106.4	105.6	105.7	104.2
75°	87.2	87.2	86.4	85.7	84.4	83.7	84.4
77.5°	67.1	67.2	65.9	65.8	65.6	65.8	65.1
80°	53.6	54.2	53.6	52.9	52.3	52.9	52.3
82.5°	42.3	41.4	41.3	41.1	41.0	40.6	40.5
85°	24.1	24.7	24.1	23.4	23.4	23.4	24.1
87.5°	16.2	16.7	16.9	16.9	16.9	16.9	16.4
90°	35.2	37.6	38.7	38.7	38.7	38.7	38.7
92.5°	87.8	77.9	70.6	69.7	65.9	66.9	65.0
95°	235.8	186.5	160.7	145.4	136.1	132.6	133.7
97.5°	586.8	459.9	375.2	319.1	290.2	273.1	263.3
100°	925.6	764.9	622.9	525.5	475.1	441.1	420.0
102.5°	1270.0	1152.5	1002.1	896.3	810.2	767.7	739.1
105°	1557.9	1573.2	1534.5	1461.7	1389.0	1338.6	1322.1
107.5°	1536.8	1658.8	1715.6	1724.7	1720.7	1710.6	1688.8
110°	1471.1	1621.2	1717.5	1767.9	1790.2	1800.8	1799.6



TEST NUMBER: P331731-840

CATALOG NUMBER: SA2XXRDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1393.2	1553.7	1664.0	1734.1	1771.4	1791.4	1797.7
115°	1287.0	1440.6	1561.5	1644.8	1698.7	1729.2	1739.8
117.5°	1200.6	1340.0	1453.3	1538.2	1595.2	1627.4	1636.3
120°	1155.5	1279.9	1386.6	1468.7	1523.9	1557.9	1569.6
122.5°	1118.0	1235.8	1332.2	1405.8	1460.1	1490.4	1500.2
125°	1068.7	1171.9	1259.9	1328.0	1372.6	1401.9	1411.3
127.5°	1020.9	1118.2	1199.4	1258.8	1300.5	1325.9	1333.4
130°	989.0	1081.7	1159.0	1216.6	1256.5	1279.9	1289.3
132.5°	959.0	1044.1	1116.8	1173.4	1213.3	1234.9	1243.2
135°	911.5	989.0	1054.6	1105.1	1143.8	1164.9	1169.6
137.5°	873.7	935.2	992.5	1038.4	1071.8	1090.4	1097.3
140°	849.4	903.3	954.9	992.5	1023.0	1040.6	1047.6
142.5°	827.8	874.2	917.4	953.0	980.8	996.4	997.8
145°	800.1	836.5	870.5	898.6	918.6	930.3	933.8
147.5°	777.6	806.0	830.8	854.0	870.0	878.0	880.1
150°	762.5	787.2	808.3	825.9	840.0	847.0	848.2
152.5°	750.3	771.2	789.5	803.3	815.6	820.7	820.9
155°	730.8	748.4	761.3	774.3	782.4	787.2	784.9
157.5°	711.1	725.9	736.0	745.2	751.9	754.1	754.1
160°	698.0	710.9	719.1	727.3	733.2	734.4	734.4
162.5°	685.8	696.8	703.2	711.3	715.4	716.5	715.6
165°	667.5	675.7	680.4	685.1	689.8	689.8	688.6
167.5°	650.9	656.5	660.8	662.8	665.4	665.2	663.8
170°	640.6	645.2	647.5	648.7	652.3	651.1	648.7
172.5°	631.2	634.9	636.3	637.5	639.1	637.9	636.5
175°	620.6	621.8	622.9	622.9	624.1	622.9	620.6
177.5°	612.9	613.8	613.8	613.8	613.8	612.9	611.0
180°	610.1	610.1	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)