

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: P331413-840

Luminaire Tested: **SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331413-840
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: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

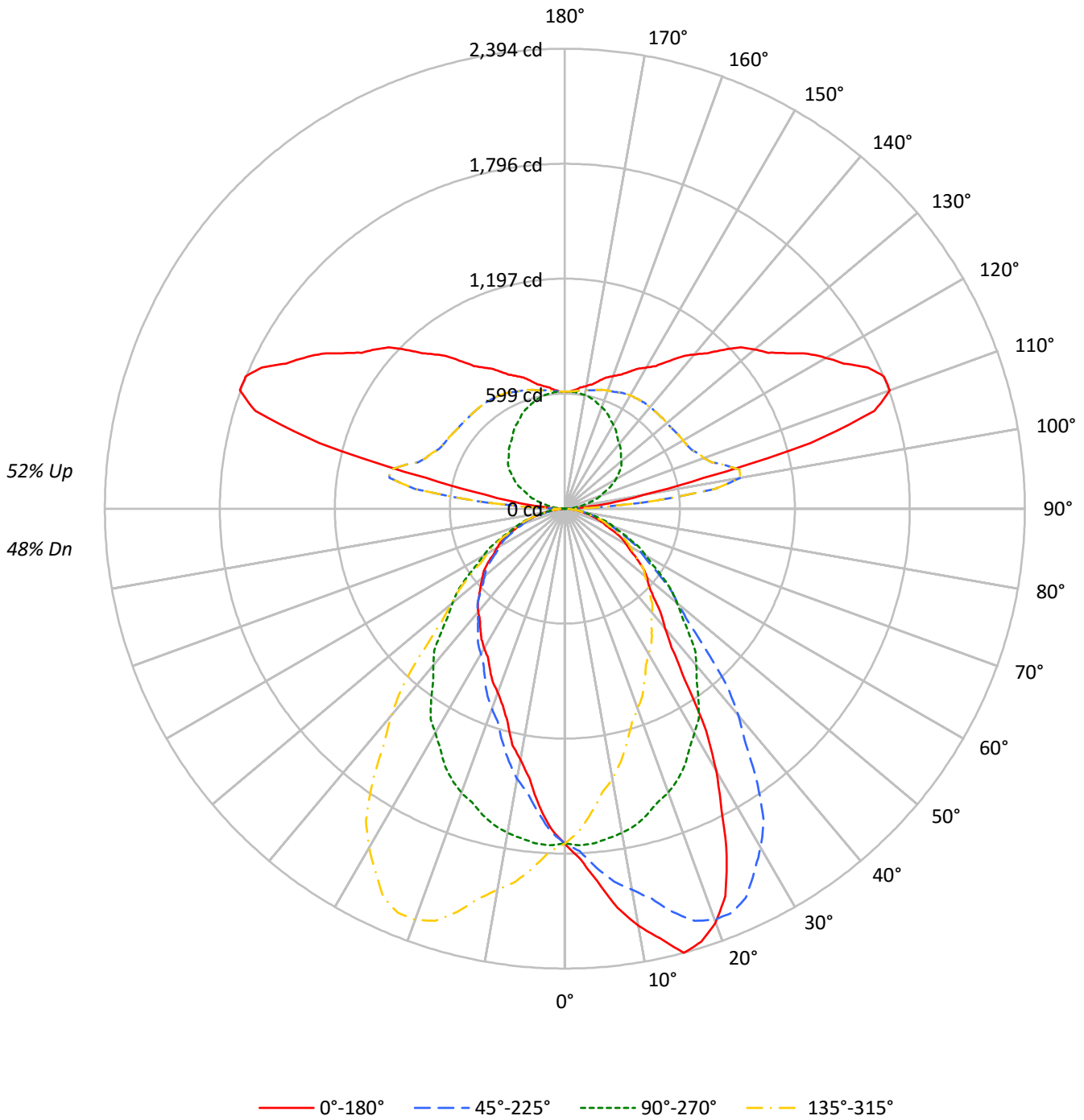
Lumens per Lamp: N/A
Luminaire Lumens: 8097.2 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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: P331413-840
CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P331413-840

CATALOG NUMBER: SA2XXDIP-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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	98	94	90	86	90	86	83	80	73	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	76	71	67	64	60	57	53	51	48	43	41	40	35
3	82	73	66	60	75	67	61	56	57	52	49	47	44	41	39	36	34	30
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	58	50	44	63	54	47	41	46	40	36	38	34	31	32	29	26	23
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	29	26	24	21
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	17
9	51	39	32	27	47	37	30	26	32	26	23	27	23	20	23	20	17	15
10	48	36	29	24	44	34	27	23	29	24	21	25	21	18	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	28150	28150	28150	28150
5°	31561	28336	25109	28336
10°	36166	28103	21730	28103
15°	40010	27587	19198	27587
20°	39400	27034	17500	27034
25°	35527	26298	16425	26298
30°	29358	25124	15642	25124
35°	21396	23893	15084	23893
40°	17089	22443	14773	22443
45°	14933	20763	14351	20763
50°	14039	19138	14071	19138
55°	12940	17486	13695	17486
60°	11858	15733	13114	15733
65°	10804	14155	12542	14155
70°	9805	12623	11703	12623
75°	8696	10911	10368	10911
80°	7476	9028	8350	9028
85°	6706	6706	4965	6706



TEST NUMBER: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.1
10°-20°	482.7	6.0
20°-30°	700.6	8.7
30°-40°	739.3	9.1
40°-50°	654.6	8.1
50°-60°	522.4	6.5
60°-70°	355.1	4.4
70°-80°	182.0	2.2
80°-90°	49.4	0.6
90°-100°	243.9	3.0
100°-110°	827.7	10.2
110°-120°	879.3	10.9
120°-130°	723.9	8.9
130°-140°	581.3	7.2
140°-150°	439.3	5.4
150°-160°	308.7	3.8
160°-170°	181.7	2.2
170°-180°	59.1	0.7
0°-30°	1349.4	16.7
0°-40°	2088.7	25.8
0°-60°	3265.7	40.3
0°-90°	3852.2	47.6
90°-120°	1951.0	24.1
90°-150°	3695.4	45.6
90°-180°	4245.0	52.4
0°-180°	8097.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1744	1744	1744	1744	1744	
5°	1947	1748	1549	1748	1947	194
15°	2394	1650	1148	1650	2394	660
25°	1994	1476	922	1476	1994	901
35°	1086	1212	765	1212	1086	706
45°	654	909	628	909	654	514
55°	460	621	486	621	460	412
65°	283	370	328	370	283	281
75°	139	175	166	175	139	149
85°	36	36	27	36	36	41
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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1824.0	1824.5	1825.6	1817.1	1815.9	1815.9	1808.5	1802.0	1794.5	1784.3	1785.4
5°	1947.3	1954.7	1957.3	1949.3	1937.2	1935.9	1924.5	1905.7	1888.3	1874.2	1864.2
7.5°	2094.5	2097.4	2090.8	2080.2	2071.2	2055.2	2034.0	2013.3	1984.2	1957.5	1937.6
10°	2205.9	2210.0	2198.6	2183.1	2170.4	2151.6	2120.8	2089.3	2051.1	2014.3	1984.8
12.5°	2290.7	2300.6	2285.9	2283.9	2262.1	2236.3	2199.7	2183.7	2130.0	2078.6	2047.0
15°	2393.6	2392.9	2394.3	2381.5	2365.4	2361.4	2322.6	2280.4	2204.6	2174.4	2122.2
17.5°	2363.8	2374.0	2378.7	2378.5	2378.1	2375.6	2363.2	2336.5	2298.6	2249.7	2189.3
20°	2293.1	2306.4	2308.5	2323.9	2332.6	2344.0	2348.6	2341.3	2317.8	2276.9	2224.7
22.5°	2183.7	2187.5	2193.7	2217.8	2236.6	2265.2	2280.1	2304.8	2295.8	2275.9	2232.2
25°	1994.2	1987.5	2010.9	2023.0	2066.6	2112.1	2145.0	2181.1	2213.3	2232.7	2220.0
27.5°	1766.7	1756.6	1791.7	1823.7	1859.1	1908.4	1959.6	2020.0	2070.3	2133.1	2154.7
30°	1574.7	1580.7	1614.3	1648.4	1702.0	1771.7	1829.4	1895.7	1967.4	2037.7	2086.7
32.5°	1367.8	1391.0	1412.2	1464.5	1511.8	1589.4	1673.9	1756.9	1846.2	1926.2	2002.0
35°	1085.5	1112.4	1141.9	1180.0	1246.4	1323.4	1405.8	1517.7	1639.7	1749.0	1838.8
37.5°	913.7	909.5	926.3	953.9	1007.6	1069.9	1164.8	1275.4	1418.9	1547.2	1673.9
40°	810.8	808.1	820.2	845.7	886.6	932.1	1015.2	1112.4	1245.7	1402.5	1553.3
42.5°	740.0	741.6	748.3	766.3	794.4	831.8	894.0	976.7	1098.8	1246.5	1408.6
45°	654.0	658.7	666.1	674.8	690.8	721.6	756.5	815.5	912.0	1035.3	1194.8
47.5°	592.1	592.2	599.8	607.3	616.9	634.3	662.7	699.7	767.8	868.2	1005.3
50°	558.9	554.2	559.6	565.5	575.6	587.6	606.4	641.3	686.8	767.9	882.5
52.5°	518.2	518.3	523.1	525.3	534.3	546.4	563.5	587.6	628.9	692.4	786.6
55°	459.7	463.0	465.7	469.7	477.8	486.5	499.9	515.9	548.2	595.7	665.4
57.5°	404.8	405.8	408.5	416.2	421.2	429.3	442.0	456.6	477.5	512.7	565.1
60°	367.2	367.2	372.5	375.9	382.6	390.6	400.7	414.8	433.5	462.3	504.6
62.5°	333.0	332.3	334.5	340.0	345.1	352.6	362.6	374.6	392.2	417.9	452.6
65°	282.8	281.4	285.5	286.8	292.2	299.5	307.6	320.3	334.4	353.1	384.0
67.5°	234.5	236.1	238.3	240.9	243.8	251.6	256.9	265.9	277.8	293.4	314.3
70°	207.7	207.7	207.7	209.7	213.8	217.8	223.2	230.6	241.9	255.3	274.1
72.5°	177.7	179.9	182.0	180.8	185.9	188.3	194.7	198.8	209.7	218.3	234.9
75°	139.4	139.4	139.4	142.7	144.7	146.7	150.8	154.8	160.2	170.9	179.6
77.5°	104.0	103.7	104.4	105.2	107.3	109.8	111.0	114.6	119.6	124.5	131.9
80°	80.4	81.8	82.4	83.7	83.7	85.1	85.7	90.5	93.8	97.1	101.9
82.5°	62.2	62.4	62.6	62.8	63.4	64.2	65.9	67.5	68.6	71.4	75.0
85°	36.2	35.5	35.5	36.9	36.2	36.2	37.6	38.9	38.9	39.5	41.5
87.5°	21.7	21.7	22.2	21.7	21.7	22.0	21.5	21.4	22.2	23.0	23.3
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840
 CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1789.2	1784.8	1782.2	1772.5	1763.9	1755.3	1752.7	1753.7	1742.0	1730.7	1725.9
5°	1858.9	1845.4	1832.7	1814.6	1793.2	1769.7	1757.7	1748.3	1724.8	1699.4	1684.7
7.5°	1921.3	1902.1	1877.6	1843.6	1812.3	1775.4	1752.0	1731.2	1697.0	1661.0	1639.0
10°	1959.3	1933.2	1901.7	1860.2	1822.0	1777.1	1745.6	1714.1	1673.9	1631.0	1604.2
12.5°	1992.1	1956.8	1925.8	1872.5	1827.4	1771.2	1733.8	1689.4	1647.1	1596.2	1569.9
15°	2069.9	2004.9	1945.9	1885.6	1830.0	1751.6	1710.1	1650.4	1594.8	1531.9	1501.7
17.5°	2130.1	2057.1	1964.2	1887.5	1822.6	1735.9	1674.9	1603.4	1537.6	1465.6	1424.6
20°	2164.4	2080.6	1980.7	1889.7	1811.9	1712.7	1646.4	1573.4	1496.3	1415.2	1371.0
22.5°	2184.7	2096.7	1997.9	1881.6	1790.5	1693.9	1610.5	1530.5	1452.4	1364.8	1318.5
25°	2191.2	2110.8	2006.3	1874.9	1763.7	1654.5	1554.0	1476.2	1381.7	1300.0	1232.3
27.5°	2159.3	2101.6	2001.1	1862.3	1732.7	1605.0	1493.0	1404.9	1305.3	1216.5	1148.4
30°	2120.2	2086.7	1988.8	1849.5	1708.1	1570.7	1447.4	1347.6	1248.4	1158.6	1088.9
32.5°	2059.6	2052.3	1966.3	1831.2	1681.8	1527.3	1399.7	1298.8	1188.9	1100.7	1034.2
35°	1940.6	1972.8	1918.4	1790.5	1632.3	1465.5	1327.5	1212.2	1098.3	1013.8	951.5
37.5°	1781.1	1861.0	1846.7	1730.8	1565.6	1398.3	1245.9	1125.4	1016.8	931.6	870.4
40°	1671.2	1773.0	1787.8	1685.3	1518.4	1346.3	1184.8	1064.8	958.9	881.2	819.5
42.5°	1553.3	1672.2	1712.7	1630.6	1466.9	1291.5	1130.0	1005.8	901.0	825.5	770.7
45°	1355.6	1513.1	1586.1	1539.2	1381.1	1201.4	1035.3	909.3	814.2	743.2	700.9
47.5°	1170.7	1342.8	1441.1	1424.5	1285.5	1107.6	943.3	822.4	729.8	673.2	635.4
50°	1040.0	1216.9	1335.4	1340.9	1216.9	1040.7	875.9	761.9	676.8	623.9	593.0
52.5°	926.3	1095.2	1224.6	1252.9	1140.2	971.0	815.3	701.9	626.9	578.2	550.7
55°	778.0	920.7	1064.1	1116.4	1025.9	865.1	721.0	621.2	550.8	517.4	493.2
57.5°	646.8	765.8	898.2	955.9	900.2	762.5	627.4	540.8	483.6	454.3	435.9
60°	577.6	671.5	789.4	858.4	810.1	687.5	569.6	487.2	440.3	414.1	396.7
62.5°	513.3	596.4	696.1	759.2	733.0	617.3	511.7	438.9	398.4	374.0	361.3
65°	423.5	489.2	566.2	624.5	607.1	519.3	432.9	370.5	338.4	318.9	308.9
67.5°	348.7	396.2	449.6	500.7	486.7	424.4	355.0	306.5	282.6	265.8	259.7
70°	301.5	337.7	385.3	426.2	414.8	363.9	308.9	267.4	246.6	232.6	226.5
72.5°	256.5	286.3	322.6	356.0	348.3	306.0	260.1	228.7	212.8	199.9	194.9
75°	193.7	216.4	238.5	260.6	258.6	225.8	199.0	174.9	162.2	152.1	150.1
77.5°	143.0	155.7	170.8	183.9	180.3	161.5	140.5	126.6	117.2	110.6	109.5
80°	109.3	116.6	127.3	136.7	132.0	124.0	107.2	97.1	90.5	83.7	81.1
82.5°	79.2	86.5	93.0	98.1	94.5	86.9	76.6	69.8	65.8	61.2	60.2
85°	41.5	45.5	48.3	49.6	48.3	43.5	38.9	36.2	32.8	30.8	30.2
87.5°	22.4	20.8	19.6	20.0	17.9	17.5	14.3	12.0	12.2	12.6	12.0
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1720.5	1717.3	1706.1	1700.2	1690.5	1681.4	1675.5	1678.2	1680.3	1679.2	1677.7
5°	1671.2	1658.5	1639.0	1622.2	1610.2	1588.1	1578.7	1574.1	1570.0	1565.3	1560.6
7.5°	1612.6	1592.5	1564.5	1540.7	1518.1	1490.7	1475.0	1465.6	1456.0	1445.4	1436.0
10°	1570.7	1542.6	1513.1	1479.6	1452.8	1427.9	1405.8	1391.1	1377.8	1364.9	1355.6
12.5°	1526.7	1494.3	1457.8	1412.0	1382.5	1347.1	1343.6	1317.7	1296.8	1288.9	1277.9
15°	1456.8	1411.2	1364.9	1310.7	1287.3	1255.1	1235.0	1214.9	1196.8	1184.1	1180.7
17.5°	1377.4	1318.4	1272.3	1233.3	1194.9	1162.0	1143.5	1127.4	1112.5	1095.5	1093.2
20°	1316.8	1265.8	1215.6	1181.3	1141.9	1108.3	1085.5	1069.4	1056.7	1046.7	1037.9
22.5°	1259.4	1203.7	1157.6	1120.2	1081.3	1054.2	1036.2	1020.7	1010.1	999.0	990.8
25°	1167.3	1123.8	1073.5	1031.3	999.1	981.7	966.9	953.5	946.8	939.5	930.1
27.5°	1086.7	1038.3	991.4	958.7	930.4	914.9	904.5	895.3	889.1	884.7	879.4
30°	1030.0	981.0	944.1	912.0	888.6	873.1	866.5	861.1	853.7	851.0	848.4
32.5°	975.2	931.2	899.7	871.8	849.4	839.4	833.2	828.4	822.6	819.9	814.6
35°	898.0	861.1	830.2	814.9	796.8	788.0	783.4	776.7	771.2	768.6	767.9
37.5°	825.2	793.1	772.8	753.1	745.4	740.0	733.7	729.0	727.4	727.0	726.4
40°	778.0	751.8	733.8	717.7	714.3	706.3	700.9	696.9	696.9	697.6	696.9
42.5°	735.1	711.7	695.7	681.8	677.8	673.1	667.7	667.4	668.5	670.8	668.5
45°	670.0	653.4	642.0	635.2	627.8	623.2	622.5	624.5	625.2	625.9	627.8
47.5°	610.4	599.2	588.9	581.5	578.2	577.4	576.6	580.2	583.4	584.6	587.6
50°	574.9	562.2	553.5	548.8	546.1	544.8	546.1	550.2	552.8	556.1	558.2
52.5°	535.2	526.2	520.3	516.6	515.5	516.3	516.6	521.2	525.5	526.6	527.7
55°	480.5	473.7	472.4	466.4	469.1	468.4	471.7	474.4	478.5	482.5	483.1
57.5°	425.8	420.4	416.8	417.4	418.2	421.1	423.9	428.6	432.9	437.2	437.6
60°	389.3	386.7	384.7	384.7	386.0	390.0	393.3	398.0	400.7	403.4	405.4
62.5°	356.1	353.5	351.4	352.4	356.0	358.4	362.2	364.8	367.5	370.1	371.1
65°	303.6	302.3	304.3	305.6	306.2	309.6	314.3	316.3	318.9	320.3	325.0
67.5°	255.2	255.4	255.2	257.0	260.9	261.8	266.2	270.8	271.4	274.0	277.0
70°	222.5	223.8	225.2	226.5	229.8	231.2	234.5	236.5	239.2	241.3	243.3
72.5°	192.5	192.7	194.1	193.8	196.6	199.5	202.4	204.4	207.0	209.6	211.6
75°	148.0	148.0	149.5	150.1	153.5	156.8	156.1	157.4	160.2	162.8	164.2
77.5°	108.2	106.6	108.2	108.9	109.9	112.7	113.2	115.1	118.2	117.2	118.8
80°	82.4	80.4	82.4	83.1	83.1	86.4	86.4	87.8	89.8	87.8	89.8
82.5°	58.9	57.9	59.4	59.5	60.6	60.7	61.8	62.0	64.0	63.1	64.0
85°	29.5	28.8	29.5	28.8	29.5	30.2	30.2	29.5	29.5	30.8	28.8
87.5°	11.9	12.1	12.7	14.3	15.2	14.9	14.1	13.9	13.4	12.8	13.1
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1672.2	1671.2	1671.2	1666.4	1671.2	1671.2	1672.2	1677.7	1679.2	1680.3	1678.2
5°	1551.3	1549.2	1545.9	1549.2	1545.9	1549.2	1551.3	1560.6	1565.3	1570.0	1574.1
7.5°	1431.6	1423.5	1422.3	1414.4	1422.3	1423.5	1431.6	1436.0	1445.4	1456.0	1465.6
10°	1344.2	1338.9	1338.2	1325.4	1338.2	1338.9	1344.2	1355.6	1364.9	1377.8	1391.1
12.5°	1277.8	1264.9	1267.4	1260.0	1267.4	1264.9	1277.8	1277.9	1288.9	1296.8	1317.7
15°	1162.7	1162.7	1159.9	1148.5	1159.9	1162.7	1162.7	1180.7	1184.1	1196.8	1214.9
17.5°	1079.9	1078.5	1072.2	1075.4	1072.2	1078.5	1079.9	1093.2	1095.5	1112.5	1127.4
20°	1030.6	1026.6	1018.5	1018.5	1018.5	1026.6	1030.6	1037.9	1046.7	1056.7	1069.4
22.5°	984.0	983.7	975.1	977.8	975.1	983.7	984.0	990.8	999.0	1010.1	1020.7
25°	929.4	924.0	920.1	922.0	920.1	924.0	929.4	930.1	939.5	946.8	953.5
27.5°	877.7	874.7	874.4	869.0	874.4	874.7	877.7	879.4	884.7	889.1	895.3
30°	847.7	841.0	842.3	839.0	842.3	841.0	847.7	848.4	851.0	853.7	861.1
32.5°	813.3	810.9	809.6	806.8	809.6	810.9	813.3	814.6	819.9	822.6	828.4
35°	766.6	767.3	763.9	765.3	763.9	767.3	766.6	767.9	768.6	771.2	776.7
37.5°	725.7	727.8	726.3	726.7	726.3	727.8	725.7	726.4	727.0	727.4	729.0
40°	698.9	698.9	698.9	700.9	698.9	698.9	698.9	696.9	697.6	696.9	696.9
42.5°	673.2	672.1	671.1	670.9	671.1	672.1	673.2	668.5	670.8	668.5	667.4
45°	629.2	631.3	631.9	628.5	631.9	631.3	629.2	627.8	625.9	625.2	624.5
47.5°	589.5	589.7	589.5	592.4	589.5	589.7	589.5	587.6	584.6	583.4	580.2
50°	561.6	560.2	561.6	560.2	561.6	560.2	561.6	558.2	556.1	552.8	550.2
52.5°	532.1	532.3	531.5	531.3	531.5	532.3	532.1	527.7	526.6	525.5	521.2
55°	485.8	487.2	486.5	486.5	486.5	487.2	485.8	483.1	482.5	478.5	474.4
57.5°	438.0	439.2	440.1	437.2	440.1	439.2	438.0	437.6	437.2	432.9	428.6
60°	404.8	408.1	407.4	406.1	407.4	408.1	404.8	405.4	403.4	400.7	398.0
62.5°	374.2	375.4	375.3	375.0	375.3	375.4	374.2	371.1	370.1	367.5	364.8
65°	327.0	328.3	326.3	328.3	326.3	328.3	327.0	325.0	320.3	318.9	316.3
67.5°	276.2	276.6	278.1	279.0	278.1	276.6	276.2	277.0	274.0	271.4	270.8
70°	244.6	243.9	245.9	247.9	245.9	243.9	244.6	243.3	241.3	239.2	236.5
72.5°	211.4	212.8	212.2	213.6	212.2	212.8	211.4	211.6	209.6	207.0	204.4
75°	162.8	164.8	164.2	166.2	164.2	164.8	162.8	164.2	162.8	160.2	157.4
77.5°	117.6	118.0	117.6	118.8	117.6	118.0	117.6	118.8	117.2	118.2	115.1
80°	89.8	88.5	87.2	89.8	87.2	88.5	89.8	89.8	87.8	89.8	87.8
82.5°	62.4	63.2	61.9	61.9	61.9	63.2	62.4	64.0	63.1	64.0	62.0
85°	28.8	28.2	26.8	26.8	26.8	28.2	28.8	28.8	30.8	29.5	29.5
87.5°	13.1	12.5	12.5	12.0	12.5	12.5	13.1	13.1	12.8	13.4	13.9
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1675.5	1681.4	1690.5	1700.2	1706.1	1717.3	1720.5	1725.9	1730.7	1742.0	1753.7
5°	1578.7	1588.1	1610.2	1622.2	1639.0	1658.5	1671.2	1684.7	1699.4	1724.8	1748.3
7.5°	1475.0	1490.7	1518.1	1540.7	1564.5	1592.5	1612.6	1639.0	1661.0	1697.0	1731.2
10°	1405.8	1427.9	1452.8	1479.6	1513.1	1542.6	1570.7	1604.2	1631.0	1673.9	1714.1
12.5°	1343.6	1347.1	1382.5	1412.0	1457.8	1494.3	1526.7	1569.9	1596.2	1647.1	1689.4
15°	1235.0	1255.1	1287.3	1310.7	1364.9	1411.2	1456.8	1501.7	1531.9	1594.8	1650.4
17.5°	1143.5	1162.0	1194.9	1233.3	1272.3	1318.4	1377.4	1424.6	1465.6	1537.6	1603.4
20°	1085.5	1108.3	1141.9	1181.3	1215.6	1265.8	1316.8	1371.0	1415.2	1496.3	1573.4
22.5°	1036.2	1054.2	1081.3	1120.2	1157.6	1203.7	1259.4	1318.5	1364.8	1452.4	1530.5
25°	966.9	981.7	999.1	1031.3	1073.5	1123.8	1167.3	1232.3	1300.0	1381.7	1476.2
27.5°	904.5	914.9	930.4	958.7	991.4	1038.3	1086.7	1148.4	1216.5	1305.3	1404.9
30°	866.5	873.1	888.6	912.0	944.1	981.0	1030.0	1088.9	1158.6	1248.4	1347.6
32.5°	833.2	839.4	849.4	871.8	899.7	931.2	975.2	1034.2	1100.7	1188.9	1298.8
35°	783.4	788.0	796.8	814.9	830.2	861.1	898.0	951.5	1013.8	1098.3	1212.2
37.5°	733.7	740.0	745.4	753.1	772.8	793.1	825.2	870.4	931.6	1016.8	1125.4
40°	700.9	706.3	714.3	717.7	733.8	751.8	778.0	819.5	881.2	958.9	1064.8
42.5°	667.7	673.1	677.8	681.8	695.7	711.7	735.1	770.7	825.5	901.0	1005.8
45°	622.5	623.2	627.8	635.2	642.0	653.4	670.0	700.9	743.2	814.2	909.3
47.5°	576.6	577.4	578.2	581.5	588.9	599.2	610.4	635.4	673.2	729.8	822.4
50°	546.1	544.8	546.1	548.8	553.5	562.2	574.9	593.0	623.9	676.8	761.9
52.5°	516.6	516.3	515.5	516.6	520.3	526.2	535.2	550.7	578.2	626.9	701.9
55°	471.7	468.4	469.1	466.4	472.4	473.7	480.5	493.2	517.4	550.8	621.2
57.5°	423.9	421.1	418.2	417.4	416.8	420.4	425.8	435.9	454.3	483.6	540.8
60°	393.3	390.0	386.0	384.7	384.7	386.7	389.3	396.7	414.1	440.3	487.2
62.5°	362.2	358.4	356.0	352.4	351.4	353.5	356.1	361.3	374.0	398.4	438.9
65°	314.3	309.6	306.2	305.6	304.3	302.3	303.6	308.9	318.9	338.4	370.5
67.5°	266.2	261.8	260.9	257.0	255.2	255.4	255.2	259.7	265.8	282.6	306.5
70°	234.5	231.2	229.8	226.5	225.2	223.8	222.5	226.5	232.6	246.6	267.4
72.5°	202.4	199.5	196.6	193.8	194.1	192.7	192.5	194.9	199.9	212.8	228.7
75°	156.1	156.8	153.5	150.1	149.5	148.0	148.0	150.1	152.1	162.2	174.9
77.5°	113.2	112.7	109.9	108.9	108.2	106.6	108.2	109.5	110.6	117.2	126.6
80°	86.4	86.4	83.1	83.1	82.4	80.4	82.4	81.1	83.7	90.5	97.1
82.5°	61.8	60.7	60.6	59.5	59.4	57.9	58.9	60.2	61.2	65.8	69.8
85°	30.2	30.2	29.5	28.8	29.5	28.8	29.5	30.2	30.8	32.8	36.2
87.5°	14.1	14.9	15.2	14.3	12.7	12.1	11.9	12.0	12.6	12.2	12.0
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1752.7	1755.3	1763.9	1772.5	1782.2	1784.8	1789.2	1785.4	1784.3	1794.5	1802.0
5°	1757.7	1769.7	1793.2	1814.6	1832.7	1845.4	1858.9	1864.2	1874.2	1888.3	1905.7
7.5°	1752.0	1775.4	1812.3	1843.6	1877.6	1902.1	1921.3	1937.6	1957.5	1984.2	2013.3
10°	1745.6	1777.1	1822.0	1860.2	1901.7	1933.2	1959.3	1984.8	2014.3	2051.1	2089.3
12.5°	1733.8	1771.2	1827.4	1872.5	1925.8	1956.8	1992.1	2047.0	2078.6	2130.0	2183.7
15°	1710.1	1751.6	1830.0	1885.6	1945.9	2004.9	2069.9	2122.2	2174.4	2204.6	2280.4
17.5°	1674.9	1735.9	1822.6	1887.5	1964.2	2057.1	2130.1	2189.3	2249.7	2298.6	2336.5
20°	1646.4	1712.7	1811.9	1889.7	1980.7	2080.6	2164.4	2224.7	2276.9	2317.8	2341.3
22.5°	1610.5	1693.9	1790.5	1881.6	1997.9	2096.7	2184.7	2232.2	2275.9	2295.8	2304.8
25°	1554.0	1654.5	1763.7	1874.9	2006.3	2110.8	2191.2	2220.0	2232.7	2213.3	2181.1
27.5°	1493.0	1605.0	1732.7	1862.3	2001.1	2101.6	2159.3	2154.7	2133.1	2070.3	2020.0
30°	1447.4	1570.7	1708.1	1849.5	1988.8	2086.7	2120.2	2086.7	2037.7	1967.4	1895.7
32.5°	1399.7	1527.3	1681.8	1831.2	1966.3	2052.3	2059.6	2002.0	1926.2	1846.2	1756.9
35°	1327.5	1465.5	1632.3	1790.5	1918.4	1972.8	1940.6	1838.8	1749.0	1639.7	1517.7
37.5°	1245.9	1398.3	1565.6	1730.8	1846.7	1861.0	1781.1	1673.9	1547.2	1418.9	1275.4
40°	1184.8	1346.3	1518.4	1685.3	1787.8	1773.0	1671.2	1553.3	1402.5	1245.7	1112.4
42.5°	1130.0	1291.5	1466.9	1630.6	1712.7	1672.2	1553.3	1408.6	1246.5	1098.8	976.7
45°	1035.3	1201.4	1381.1	1539.2	1586.1	1513.1	1355.6	1194.8	1035.3	912.0	815.5
47.5°	943.3	1107.6	1285.5	1424.5	1441.1	1342.8	1170.7	1005.3	868.2	767.8	699.7
50°	875.9	1040.7	1216.9	1340.9	1335.4	1216.9	1040.0	882.5	767.9	686.8	641.3
52.5°	815.3	971.0	1140.2	1252.9	1224.6	1095.2	926.3	786.6	692.4	628.9	587.6
55°	721.0	865.1	1025.9	1116.4	1064.1	920.7	778.0	665.4	595.7	548.2	515.9
57.5°	627.4	762.5	900.2	955.9	898.2	765.8	646.8	565.1	512.7	477.5	456.6
60°	569.6	687.5	810.1	858.4	789.4	671.5	577.6	504.6	462.3	433.5	414.8
62.5°	511.7	617.3	733.0	759.2	696.1	596.4	513.3	452.6	417.9	392.2	374.6
65°	432.9	519.3	607.1	624.5	566.2	489.2	423.5	384.0	353.1	334.4	320.3
67.5°	355.0	424.4	486.7	500.7	449.6	396.2	348.7	314.3	293.4	277.8	265.9
70°	308.9	363.9	414.8	426.2	385.3	337.7	301.5	274.1	255.3	241.9	230.6
72.5°	260.1	306.0	348.3	356.0	322.6	286.3	256.5	234.9	218.3	209.7	198.8
75°	199.0	225.8	258.6	260.6	238.5	216.4	193.7	179.6	170.9	160.2	154.8
77.5°	140.5	161.5	180.3	183.9	170.8	155.7	143.0	131.9	124.5	119.6	114.6
80°	107.2	124.0	132.0	136.7	127.3	116.6	109.3	101.9	97.1	93.8	90.5
82.5°	76.6	86.9	94.5	98.1	93.0	86.5	79.2	75.0	71.4	68.6	67.5
85°	38.9	43.5	48.3	49.6	48.3	45.5	41.5	41.5	39.5	38.9	38.9
87.5°	14.3	17.5	17.9	20.0	19.6	20.8	22.4	23.3	23.0	22.2	21.4
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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: P331413-840

CATALOG NUMBER: SA2XXDIP-C865D1080U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1808.5	1815.9	1815.9	1817.1	1825.6	1824.5	1824.0
5°	1924.5	1935.9	1937.2	1949.3	1957.3	1954.7	1947.3
7.5°	2034.0	2055.2	2071.2	2080.2	2090.8	2097.4	2094.5
10°	2120.8	2151.6	2170.4	2183.1	2198.6	2210.0	2205.9
12.5°	2199.7	2236.3	2262.1	2283.9	2285.9	2300.6	2290.7
15°	2322.6	2361.4	2365.4	2381.5	2394.3	2392.9	2393.6
17.5°	2363.2	2375.6	2378.1	2378.5	2378.7	2374.0	2363.8
20°	2348.6	2344.0	2332.6	2323.9	2308.5	2306.4	2293.1
22.5°	2280.1	2265.2	2236.6	2217.8	2193.7	2187.5	2183.7
25°	2145.0	2112.1	2066.6	2023.0	2010.9	1987.5	1994.2
27.5°	1959.6	1908.4	1859.1	1823.7	1791.7	1756.6	1766.7
30°	1829.4	1771.7	1702.0	1648.4	1614.3	1580.7	1574.7
32.5°	1673.9	1589.4	1511.8	1464.5	1412.2	1391.0	1367.8
35°	1405.8	1323.4	1246.4	1180.0	1141.9	1112.4	1085.5
37.5°	1164.8	1069.9	1007.6	953.9	926.3	909.5	913.7
40°	1015.2	932.1	886.6	845.7	820.2	808.1	810.8
42.5°	894.0	831.8	794.4	766.3	748.3	741.6	740.0
45°	756.5	721.6	690.8	674.8	666.1	658.7	654.0
47.5°	662.7	634.3	616.9	607.3	599.8	592.2	592.1
50°	606.4	587.6	575.6	565.5	559.6	554.2	558.9
52.5°	563.5	546.4	534.3	525.3	523.1	518.3	518.2
55°	499.9	486.5	477.8	469.7	465.7	463.0	459.7
57.5°	442.0	429.3	421.2	416.2	408.5	405.8	404.8
60°	400.7	390.6	382.6	375.9	372.5	367.2	367.2
62.5°	362.6	352.6	345.1	340.0	334.5	332.3	333.0
65°	307.6	299.5	292.2	286.8	285.5	281.4	282.8
67.5°	256.9	251.6	243.8	240.9	238.3	236.1	234.5
70°	223.2	217.8	213.8	209.7	207.7	207.7	207.7
72.5°	194.7	188.3	185.9	180.8	182.0	179.9	177.7
75°	150.8	146.7	144.7	142.7	139.4	139.4	139.4
77.5°	111.0	109.8	107.3	105.2	104.4	103.7	104.0
80°	85.7	85.1	83.7	83.7	82.4	81.8	80.4
82.5°	65.9	64.2	63.4	62.8	62.6	62.4	62.2
85°	37.6	36.2	36.2	36.9	35.5	35.5	36.2
87.5°	21.5	22.0	21.7	21.7	22.2	21.7	21.7
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: P331413-840

CATALOG NUMBER: SA2XXDIP-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)