

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: P331413-830

Luminaire Tested: **SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331413-830
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-C865D1080U830-4F0-1E-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

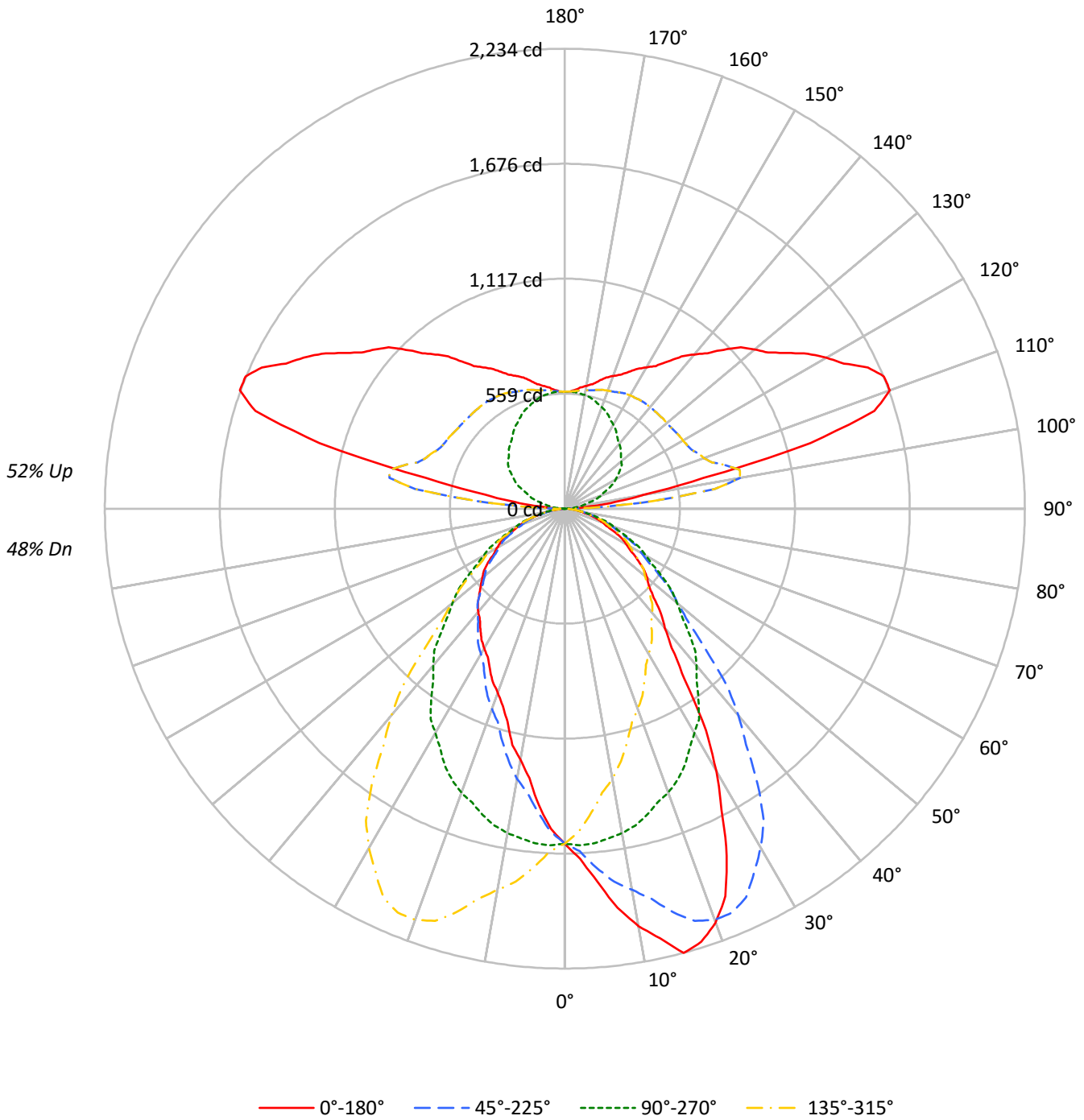
Lumens per Lamp: N/A
Luminaire Lumens: 7557.4 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	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°	26274	26274	26274	26274
5°	29457	26446	23436	26446
10°	33755	26230	20282	26230
15°	37342	25748	17919	25748
20°	36773	25232	16333	25232
25°	33157	24545	15330	24545
30°	27401	23448	14600	23448
35°	19969	22300	14079	22300
40°	15951	20946	13789	20946
45°	13938	19379	13394	19379
50°	13102	17862	13132	17862
55°	12076	16321	12780	16321
60°	11066	14683	12239	14683
65°	10082	13211	11706	13211
70°	9153	11783	10924	11783
75°	8116	10181	9676	10181
80°	6974	8433	7792	8433
85°	6243	6243	4631	6243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	2.1
10°-20°	450.6	6.0
20°-30°	653.9	8.7
30°-40°	690.0	9.1
40°-50°	611.0	8.1
50°-60°	487.6	6.5
60°-70°	331.4	4.4
70°-80°	169.9	2.2
80°-90°	46.1	0.6
90°-100°	227.7	3.0
100°-110°	772.5	10.2
110°-120°	820.7	10.9
120°-130°	675.6	8.9
130°-140°	542.5	7.2
140°-150°	410.0	5.4
150°-160°	288.1	3.8
160°-170°	169.6	2.2
170°-180°	55.2	0.7
0°-30°	1259.4	16.7
0°-40°	1949.5	25.8
0°-60°	3048.0	40.3
0°-90°	3595.4	47.6
90°-120°	1820.9	24.1
90°-150°	3449.0	45.6
90°-180°	3962.0	52.4
0°-180°	7557.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1627	1627	1627	1627	1627	
5°	1818	1632	1446	1632	1818	181
15°	2234	1540	1072	1540	2234	616
25°	1861	1378	860	1378	1861	841
35°	1013	1131	714	1131	1013	659
45°	610	849	587	849	610	480
55°	429	580	454	580	429	385
65°	264	346	306	346	264	262
75°	130	163	155	163	130	139
85°	34	34	25	34	34	38
90°	36	1	36	1	36	21
95°	125	38	125	38	125	162
105°	1234	134	1234	134	1234	1194
115°	1624	235	1624	235	1624	1590
125°	1317	328	1317	328	1317	1190
135°	1092	385	1092	385	1092	848
145°	872	440	872	440	872	554
155°	732	500	732	500	732	342
165°	643	545	643	545	643	184
175°	579	568	579	568	579	56
180°	569	569	569	569	569	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1702.4	1702.9	1703.9	1695.9	1694.9	1694.9	1687.9	1681.9	1674.9	1665.4	1666.4
5°	1817.5	1824.4	1826.8	1819.4	1808.1	1806.9	1796.2	1778.7	1762.5	1749.3	1739.9
7.5°	1954.8	1957.6	1951.4	1941.5	1933.2	1918.2	1898.4	1879.1	1851.9	1827.0	1808.5
10°	2058.9	2062.7	2052.0	2037.6	2025.7	2008.2	1979.4	1950.0	1914.4	1880.0	1852.5
12.5°	2138.0	2147.2	2133.5	2131.7	2111.3	2087.3	2053.0	2038.2	1988.0	1940.0	1910.5
15°	2234.0	2233.4	2234.7	2222.7	2207.7	2203.9	2167.8	2128.4	2057.7	2029.5	1980.8
17.5°	2206.2	2215.7	2220.2	2220.0	2219.6	2217.2	2205.6	2180.8	2145.3	2099.7	2043.3
20°	2140.2	2152.7	2154.6	2169.0	2177.1	2187.7	2192.1	2185.2	2163.3	2125.2	2076.4
22.5°	2038.2	2041.6	2047.5	2069.9	2087.5	2114.2	2128.1	2151.2	2142.8	2124.2	2083.4
25°	1861.2	1855.0	1876.9	1888.1	1928.8	1971.3	2002.0	2035.7	2065.8	2083.9	2072.0
27.5°	1648.9	1639.5	1672.3	1702.1	1735.1	1781.2	1829.0	1885.4	1932.3	1990.9	2011.1
30°	1469.7	1475.4	1506.7	1538.5	1588.6	1653.6	1707.4	1769.3	1836.3	1901.9	1947.6
32.5°	1276.6	1298.3	1318.1	1366.9	1411.0	1483.5	1562.3	1639.7	1723.2	1797.8	1868.5
35°	1013.1	1038.2	1065.7	1101.4	1163.3	1235.2	1312.1	1416.5	1530.4	1632.4	1716.2
37.5°	852.8	848.9	864.6	890.3	940.5	998.5	1087.1	1190.3	1324.3	1444.1	1562.3
40°	756.8	754.2	765.5	789.3	827.5	870.0	947.5	1038.2	1162.6	1309.0	1449.7
42.5°	690.7	692.2	698.4	715.2	741.4	776.4	834.4	911.6	1025.6	1163.4	1314.7
45°	610.4	614.8	621.7	629.8	644.8	673.5	706.1	761.1	851.2	966.3	1115.1
47.5°	552.6	552.7	559.8	566.8	575.8	592.0	618.5	653.1	716.6	810.3	938.3
50°	521.6	517.3	522.3	527.8	537.2	548.5	566.0	598.5	641.0	716.7	823.7
52.5°	483.6	483.7	488.2	490.3	498.7	510.0	525.9	548.5	587.0	646.2	734.1
55°	429.0	432.2	434.7	438.4	445.9	454.0	466.6	481.5	511.6	556.0	621.0
57.5°	377.8	378.7	381.3	388.4	393.1	400.7	412.6	426.1	445.6	478.5	527.4
60°	342.7	342.7	347.7	350.8	357.1	364.6	374.0	387.1	404.6	431.5	471.0
62.5°	310.8	310.2	312.2	317.4	322.1	329.1	338.5	349.6	366.1	390.0	422.4
65°	263.9	262.7	266.5	267.7	272.7	279.6	287.1	299.0	312.1	329.6	358.4
67.5°	218.9	220.4	222.4	224.8	227.5	234.8	239.8	248.2	259.3	273.8	293.3
70°	193.9	193.9	193.9	195.8	199.5	203.3	208.3	215.2	225.7	238.3	255.8
72.5°	165.9	167.9	169.8	168.7	173.5	175.8	181.7	185.6	195.8	203.8	219.2
75°	130.1	130.1	130.1	133.2	135.1	137.0	140.7	144.5	149.5	159.5	167.6
77.5°	97.1	96.8	97.5	98.2	100.2	102.5	103.6	107.0	111.6	116.2	123.1
80°	75.0	76.3	76.9	78.1	78.1	79.5	80.0	84.5	87.6	90.7	95.1
82.5°	58.1	58.2	58.4	58.6	59.2	59.9	61.5	63.0	64.0	66.6	70.0
85°	33.7	33.2	33.2	34.4	33.7	33.7	35.1	36.3	36.3	36.9	38.7
87.5°	20.3	20.3	20.7	20.3	20.3	20.5	20.1	20.0	20.7	21.5	21.8
90°	36.1	36.1	36.1	36.1	36.1	35.1	32.9	35.1	36.1	37.2	36.1
92.5°	60.7	62.4	61.5	65.0	65.9	72.7	81.9	95.5	120.3	142.3	140.3
95°	124.8	123.8	127.1	135.7	150.0	174.1	220.1	286.9	375.6	429.2	379.9
97.5°	245.7	254.9	270.9	297.8	350.2	429.2	547.7	669.4	768.6	732.7	551.9
100°	392.0	411.7	443.5	490.5	581.4	713.9	863.9	999.7	1022.7	865.0	595.6
102.5°	689.8	716.5	756.2	836.5	935.3	1075.6	1185.3	1216.1	1117.3	869.4	579.0
105°	1234.0	1249.3	1296.4	1364.2	1432.2	1468.3	1454.1	1330.3	1102.6	811.3	546.4
107.5°	1576.2	1596.6	1606.0	1609.8	1601.2	1548.2	1434.4	1248.0	1006.4	749.1	530.2
110°	1679.6	1680.7	1670.8	1650.0	1603.0	1513.2	1373.0	1177.0	946.0	719.3	526.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1677.8	1672.0	1653.3	1618.5	1553.0	1450.1	1300.3	1112.2	904.0	700.1	527.5
115°	1623.8	1613.9	1585.5	1535.1	1457.4	1344.5	1201.2	1032.6	851.9	678.8	532.2
117.5°	1527.2	1518.9	1488.8	1435.7	1356.4	1250.7	1120.6	972.5	819.0	668.5	540.0
120°	1465.0	1454.1	1422.3	1370.8	1294.2	1194.6	1078.5	942.7	801.4	662.4	545.3
122.5°	1400.1	1391.0	1362.7	1312.1	1243.4	1153.4	1043.5	919.1	786.6	658.9	551.4
125°	1317.2	1308.4	1281.1	1239.4	1175.9	1093.8	997.5	884.7	765.3	652.6	560.6
127.5°	1244.5	1237.5	1213.8	1174.9	1119.5	1043.7	952.8	850.7	745.6	648.8	570.0
130°	1203.3	1194.6	1172.7	1135.5	1081.8	1009.6	923.0	828.9	732.5	647.1	577.0
132.5°	1160.4	1152.5	1132.4	1095.1	1042.4	974.5	895.0	807.9	722.0	646.2	584.0
135°	1091.7	1087.2	1067.5	1031.4	984.3	923.0	850.7	778.4	707.3	644.9	592.4
137.5°	1024.2	1017.7	1000.3	969.2	926.3	872.9	815.5	755.1	697.0	644.7	599.8
140°	977.8	971.2	954.8	926.3	891.3	843.1	792.8	740.2	690.9	643.9	603.3
142.5°	931.3	930.0	915.4	889.5	856.2	816.0	772.6	727.9	684.8	643.9	606.0
145°	871.6	868.3	857.3	838.7	812.5	780.7	746.8	710.6	676.7	641.6	608.8
147.5°	821.4	819.4	812.0	797.1	775.4	752.2	725.8	697.3	668.4	637.7	609.6
150°	791.6	790.5	784.0	770.8	754.4	734.7	711.7	687.6	661.3	635.1	608.8
152.5°	766.2	766.0	761.2	749.8	736.9	719.8	700.3	678.0	655.2	630.7	607.0
155°	732.5	734.7	730.3	722.6	710.6	698.5	682.1	664.6	643.9	623.0	604.4
157.5°	703.8	703.8	701.8	695.5	686.9	677.5	663.7	649.0	633.1	615.1	599.4
160°	685.4	685.4	684.3	678.8	671.2	663.5	651.5	639.4	625.2	609.9	596.7
162.5°	667.9	668.7	667.7	663.9	656.3	650.4	640.1	629.8	618.2	605.5	594.1
165°	642.7	643.9	643.9	639.4	635.1	630.7	623.0	615.4	606.6	596.7	589.1
167.5°	619.5	620.9	621.0	618.6	616.7	612.7	607.5	601.5	595.2	589.1	584.0
170°	605.5	607.7	608.8	605.5	604.4	602.2	597.9	594.6	589.1	584.7	581.4
172.5°	594.1	595.4	596.5	595.0	593.9	592.6	589.1	586.6	583.0	579.5	577.9
175°	579.2	581.4	582.5	581.4	581.4	580.3	579.2	578.2	574.9	573.7	572.7
177.5°	570.2	572.0	572.9	572.9	572.9	572.9	572.0	572.0	570.2	569.4	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1669.9	1665.8	1663.4	1654.4	1646.3	1638.3	1635.9	1636.8	1625.9	1615.3	1610.8
5°	1734.9	1722.4	1710.5	1693.7	1673.7	1651.7	1640.5	1631.7	1609.9	1586.1	1572.3
7.5°	1793.2	1775.3	1752.5	1720.7	1691.5	1657.1	1635.2	1615.8	1583.8	1550.3	1529.7
10°	1828.7	1804.3	1774.9	1736.2	1700.5	1658.6	1629.2	1599.9	1562.3	1522.3	1497.2
12.5°	1859.3	1826.4	1797.4	1747.7	1705.5	1653.1	1618.3	1576.8	1537.3	1489.8	1465.3
15°	1931.9	1871.2	1816.2	1759.9	1708.0	1634.8	1596.1	1540.4	1488.5	1429.7	1401.6
17.5°	1988.1	1920.0	1833.2	1761.7	1701.1	1620.1	1563.2	1496.5	1435.1	1367.9	1329.6
20°	2020.2	1941.9	1848.7	1763.7	1691.1	1598.6	1536.6	1468.5	1396.6	1320.9	1279.6
22.5°	2039.1	1956.9	1864.7	1756.1	1671.1	1581.0	1503.2	1428.4	1355.6	1273.8	1230.6
25°	2045.1	1970.1	1872.5	1749.9	1646.2	1544.2	1450.4	1377.8	1289.6	1213.3	1150.2
27.5°	2015.3	1961.5	1867.7	1738.1	1617.2	1498.0	1393.5	1311.3	1218.2	1135.4	1071.9
30°	1978.9	1947.6	1856.2	1726.2	1594.2	1466.0	1350.9	1257.7	1165.2	1081.4	1016.3
32.5°	1922.3	1915.5	1835.2	1709.1	1569.7	1425.5	1306.4	1212.2	1109.7	1027.3	965.3
35°	1811.2	1841.3	1790.5	1671.1	1523.5	1367.8	1239.0	1131.4	1025.1	946.2	888.1
37.5°	1662.4	1736.9	1723.6	1615.4	1461.2	1305.0	1162.8	1050.4	949.0	869.5	812.4
40°	1559.8	1654.8	1668.6	1572.9	1417.2	1256.5	1105.8	993.8	894.9	822.5	764.9
42.5°	1449.7	1560.8	1598.6	1521.9	1369.1	1205.4	1054.7	938.8	840.9	770.4	719.3
45°	1265.3	1412.2	1480.4	1436.6	1289.0	1121.3	966.3	848.7	759.9	693.6	654.2
47.5°	1092.7	1253.3	1345.0	1329.6	1199.8	1033.8	880.4	767.6	681.2	628.3	593.0
50°	970.6	1135.8	1246.4	1251.5	1135.8	971.3	817.5	711.1	631.7	582.3	553.5
52.5°	864.6	1022.2	1142.9	1169.4	1064.2	906.3	760.9	655.1	585.1	539.7	514.0
55°	726.1	859.3	993.2	1042.0	957.5	807.4	673.0	579.8	514.1	482.9	460.3
57.5°	603.7	714.7	838.3	892.2	840.2	711.7	585.6	504.7	451.4	424.0	406.8
60°	539.1	626.7	736.8	801.2	756.1	641.7	531.6	454.7	410.9	386.5	370.2
62.5°	479.1	556.7	649.7	708.6	684.1	576.2	477.6	409.6	371.8	349.0	337.2
65°	395.3	456.6	528.5	582.9	566.7	484.7	404.1	345.8	315.8	297.7	288.3
67.5°	325.5	369.8	419.6	467.3	454.2	396.2	331.3	286.1	263.7	248.1	242.4
70°	281.4	315.2	359.6	397.8	387.1	339.6	288.3	249.6	230.2	217.1	211.4
72.5°	239.4	267.2	301.0	332.2	325.1	285.6	242.8	213.5	198.6	186.5	181.9
75°	180.8	202.0	222.6	243.3	241.4	210.8	185.8	163.2	151.4	141.9	140.1
77.5°	133.5	145.3	159.4	171.6	168.2	150.7	131.1	118.2	109.4	103.2	102.2
80°	102.0	108.9	118.9	127.6	123.2	115.7	100.1	90.7	84.5	78.1	75.7
82.5°	73.9	80.8	86.8	91.5	88.2	81.2	71.5	65.1	61.5	57.1	56.2
85°	38.7	42.5	45.1	46.3	45.1	40.6	36.3	33.7	30.6	28.7	28.2
87.5°	20.9	19.4	18.3	18.7	16.7	16.3	13.4	11.2	11.4	11.8	11.2
90°	29.6	21.9	16.4	13.1	10.9	8.8	4.3	1.1	4.3	8.8	10.9
92.5°	109.2	74.5	49.7	39.4	32.0	27.1	19.2	13.4	19.2	27.1	32.0
95°	252.9	157.7	107.3	81.1	63.5	53.6	42.7	38.4	42.7	53.6	63.5
97.5°	340.7	208.0	144.8	115.0	94.8	79.9	68.3	62.4	68.3	79.9	94.8
100°	359.1	225.6	167.5	136.9	115.0	97.5	87.6	84.3	87.6	97.5	115.0
102.5°	360.1	241.3	187.7	157.0	134.2	116.7	106.9	104.4	106.9	116.7	134.2
105°	365.7	268.2	216.8	186.2	162.0	145.6	138.0	133.6	138.0	145.6	162.0
107.5°	380.8	295.9	245.9	215.1	191.1	176.1	168.6	165.1	168.6	176.1	191.1
110°	393.0	314.2	266.1	234.3	211.3	197.1	190.5	186.2	190.5	197.1	211.3



TEST NUMBER: P331413-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	406.2	331.8	285.3	252.7	230.5	217.3	209.8	205.4	209.8	217.3	230.5
115°	425.9	359.1	312.1	282.5	260.6	247.4	240.9	235.4	240.9	247.4	260.6
117.5°	447.0	384.3	340.7	310.1	289.1	277.5	270.9	266.6	270.9	277.5	289.1
120°	461.0	401.8	359.1	328.5	306.6	296.7	290.1	285.8	290.1	296.7	306.6
122.5°	473.3	418.5	378.4	346.9	325.0	314.2	307.6	304.2	307.6	314.2	325.0
125°	492.8	443.5	404.1	373.3	351.5	338.4	331.8	328.5	331.8	338.4	351.5
127.5°	510.9	466.7	428.3	396.8	375.8	361.4	352.1	347.7	352.1	361.4	375.8
130°	522.3	480.7	442.3	411.7	389.8	374.5	363.5	359.1	363.5	374.5	389.8
132.5°	533.7	492.9	456.4	425.7	402.9	386.7	374.9	369.7	374.9	386.7	402.9
135°	548.6	510.2	475.2	444.5	419.3	402.9	389.8	385.4	389.8	402.9	419.3
137.5°	560.0	524.2	489.7	461.2	436.2	418.7	405.6	400.3	405.6	418.7	436.2
140°	566.1	532.2	499.3	470.8	446.8	429.2	416.0	411.7	416.0	429.2	446.8
142.5°	571.4	538.3	506.3	479.6	456.4	438.8	426.6	423.1	426.6	438.8	456.4
145°	578.2	547.4	517.9	493.8	471.9	455.5	444.5	440.2	444.5	455.5	471.9
147.5°	581.8	554.9	527.1	505.7	487.5	472.3	461.8	458.5	461.8	472.3	487.5
150°	583.6	558.5	533.2	513.5	497.1	482.9	474.1	470.8	474.1	482.9	497.1
152.5°	584.5	561.9	539.3	521.4	505.9	493.3	484.7	483.1	484.7	493.3	505.9
155°	585.8	567.1	548.6	532.2	520.1	508.0	501.4	500.4	501.4	508.0	520.1
157.5°	585.8	570.9	555.2	541.3	531.7	521.2	515.9	514.8	515.9	521.2	531.7
160°	585.8	572.7	559.5	547.4	538.7	529.9	525.6	524.4	525.6	529.9	538.7
162.5°	584.9	573.5	562.1	552.7	544.8	537.8	533.5	534.1	533.5	537.8	544.8
165°	582.5	574.9	565.0	558.5	552.9	546.4	544.2	545.3	544.2	546.4	552.9
167.5°	581.0	574.6	567.4	563.3	559.3	555.2	553.2	554.5	553.2	555.2	559.3
170°	579.2	573.7	568.3	565.0	562.8	559.5	558.5	560.6	558.5	559.5	562.8
172.5°	576.6	572.9	569.1	566.8	565.4	562.1	562.8	564.1	562.8	562.1	565.4
175°	573.7	571.6	569.4	568.3	568.3	566.1	567.1	568.3	567.1	566.1	568.3
177.5°	572.0	570.2	569.4	569.4	569.4	567.6	568.4	570.2	568.4	567.6	569.4
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331413-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1605.8	1602.8	1592.3	1586.9	1577.8	1569.3	1563.8	1566.3	1568.3	1567.3	1565.8
5°	1559.8	1547.9	1529.7	1514.1	1502.9	1482.2	1473.5	1469.1	1465.4	1460.9	1456.6
7.5°	1505.1	1486.3	1460.2	1437.9	1416.9	1391.3	1376.7	1367.9	1359.0	1349.1	1340.3
10°	1466.0	1439.7	1412.2	1380.9	1355.9	1332.8	1312.1	1298.4	1285.9	1273.9	1265.3
12.5°	1424.9	1394.7	1360.7	1317.9	1290.3	1257.3	1254.1	1229.8	1210.3	1203.0	1192.7
15°	1359.7	1317.1	1273.9	1223.3	1201.5	1171.4	1152.6	1133.9	1117.0	1105.1	1102.0
17.5°	1285.5	1230.5	1187.5	1151.1	1115.2	1084.5	1067.2	1052.3	1038.3	1022.5	1020.3
20°	1229.0	1181.4	1134.5	1102.6	1065.7	1034.4	1013.1	998.2	986.3	976.9	968.7
22.5°	1175.4	1123.4	1080.4	1045.6	1009.2	983.9	967.1	952.6	942.7	932.4	924.7
25°	1089.5	1048.9	1001.9	962.5	932.5	916.2	902.5	889.9	883.7	876.8	868.1
27.5°	1014.3	969.1	925.3	894.8	868.4	853.9	844.2	835.7	829.8	825.8	820.8
30°	961.3	915.6	881.2	851.2	829.3	814.9	808.7	803.7	796.8	794.3	791.8
32.5°	910.2	869.1	839.7	813.7	792.8	783.4	777.7	773.2	767.8	765.3	760.3
35°	838.1	803.7	774.9	760.5	743.7	735.5	731.1	724.9	719.8	717.4	716.7
37.5°	770.2	740.3	721.3	702.9	695.7	690.7	684.8	680.4	678.9	678.5	678.0
40°	726.1	701.7	684.9	669.9	666.7	659.2	654.2	650.4	650.4	651.1	650.4
42.5°	686.1	664.2	649.3	636.3	632.6	628.2	623.2	622.9	624.0	626.0	624.0
45°	625.4	609.8	599.2	592.9	586.0	581.6	581.0	582.9	583.5	584.2	586.0
47.5°	569.7	559.2	549.6	542.7	539.7	538.9	538.2	541.5	544.5	545.6	548.5
50°	536.6	524.7	516.6	512.2	509.7	508.5	509.7	513.5	515.9	519.1	520.9
52.5°	499.5	491.2	485.6	482.2	481.2	481.9	482.2	486.4	490.5	491.5	492.5
55°	448.5	442.1	440.9	435.3	437.8	437.2	440.3	442.8	446.6	450.3	450.9
57.5°	397.4	392.4	389.0	389.6	390.3	393.0	395.7	400.0	404.1	408.0	408.4
60°	363.4	360.9	359.0	359.0	360.2	364.0	367.1	371.5	374.0	376.5	378.3
62.5°	332.3	329.9	328.0	328.9	332.2	334.5	338.1	340.4	343.0	345.4	346.4
65°	283.3	282.1	284.0	285.2	285.8	289.0	293.3	295.2	297.7	299.0	303.3
67.5°	238.2	238.4	238.2	239.9	243.6	244.3	248.5	252.8	253.3	255.7	258.5
70°	207.6	208.9	210.2	211.4	214.5	215.7	218.9	220.7	223.3	225.2	227.1
72.5°	179.6	179.8	181.2	180.9	183.5	186.2	188.9	190.8	193.2	195.7	197.5
75°	138.2	138.2	139.5	140.1	143.3	146.4	145.7	146.9	149.5	151.9	153.3
77.5°	100.9	99.5	100.9	101.6	102.5	105.2	105.7	107.4	110.3	109.4	110.8
80°	76.9	75.0	76.9	77.6	77.6	80.7	80.7	81.9	83.8	81.9	83.8
82.5°	55.0	54.0	55.4	55.5	56.6	56.6	57.7	57.9	59.8	58.9	59.8
85°	27.5	26.9	27.5	26.9	27.5	28.2	28.2	27.5	27.5	28.7	26.9
87.5°	11.1	11.3	11.9	13.4	14.2	13.9	13.2	13.0	12.5	12.0	12.3
90°	13.1	16.4	21.9	29.6	36.1	37.2	36.1	35.1	32.9	35.1	36.1
92.5°	39.4	49.7	74.5	109.2	140.3	142.3	120.3	95.5	81.9	72.7	65.9
95°	81.1	107.3	157.7	252.9	379.9	429.2	375.6	286.9	220.1	174.1	150.0
97.5°	115.0	144.8	208.0	340.7	551.9	732.7	768.6	669.4	547.7	429.2	350.2
100°	136.9	167.5	225.6	359.1	595.6	865.0	1022.7	999.7	863.9	713.9	581.4
102.5°	157.0	187.7	241.3	360.1	579.0	869.4	1117.3	1216.1	1185.3	1075.6	935.3
105°	186.2	216.8	268.2	365.7	546.4	811.3	1102.6	1330.3	1454.1	1468.3	1432.2
107.5°	215.1	245.9	295.9	380.8	530.2	749.1	1006.4	1248.0	1434.4	1548.2	1601.2
110°	234.3	266.1	314.2	393.0	526.7	719.3	946.0	1177.0	1373.0	1513.2	1603.0



TEST NUMBER: P331413-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	252.7	285.3	331.8	406.2	527.5	700.1	904.0	1112.2	1300.3	1450.1	1553.0
115°	282.5	312.1	359.1	425.9	532.2	678.8	851.9	1032.6	1201.2	1344.5	1457.4
117.5°	310.1	340.7	384.3	447.0	540.0	668.5	819.0	972.5	1120.6	1250.7	1356.4
120°	328.5	359.1	401.8	461.0	545.3	662.4	801.4	942.7	1078.5	1194.6	1294.2
122.5°	346.9	378.4	418.5	473.3	551.4	658.9	786.6	919.1	1043.5	1153.4	1243.4
125°	373.3	404.1	443.5	492.8	560.6	652.6	765.3	884.7	997.5	1093.8	1175.9
127.5°	396.8	428.3	466.7	510.9	570.0	648.8	745.6	850.7	952.8	1043.7	1119.5
130°	411.7	442.3	480.7	522.3	577.0	647.1	732.5	828.9	923.0	1009.6	1081.8
132.5°	425.7	456.4	492.9	533.7	584.0	646.2	722.0	807.9	895.0	974.5	1042.4
135°	444.5	475.2	510.2	548.6	592.4	644.9	707.3	778.4	850.7	923.0	984.3
137.5°	461.2	489.7	524.2	560.0	599.8	644.7	697.0	755.1	815.5	872.9	926.3
140°	470.8	499.3	532.2	566.1	603.3	643.9	690.9	740.2	792.8	843.1	891.3
142.5°	479.6	506.3	538.3	571.4	606.0	643.9	684.8	727.9	772.6	816.0	856.2
145°	493.8	517.9	547.4	578.2	608.8	641.6	676.7	710.6	746.8	780.7	812.5
147.5°	505.7	527.1	554.9	581.8	609.6	637.7	668.4	697.3	725.8	752.2	775.4
150°	513.5	533.2	558.5	583.6	608.8	635.1	661.3	687.6	711.7	734.7	754.4
152.5°	521.4	539.3	561.9	584.5	607.0	630.7	655.2	678.0	700.3	719.8	736.9
155°	532.2	548.6	567.1	585.8	604.4	623.0	643.9	664.6	682.1	698.5	710.6
157.5°	541.3	555.2	570.9	585.8	599.4	615.1	633.1	649.0	663.7	677.5	686.9
160°	547.4	559.5	572.7	585.8	596.7	609.9	625.2	639.4	651.5	663.5	671.2
162.5°	552.7	562.1	573.5	584.9	594.1	605.5	618.2	629.8	640.1	650.4	656.3
165°	558.5	565.0	574.9	582.5	589.1	596.7	606.6	615.4	623.0	630.7	635.1
167.5°	563.3	567.4	574.6	581.0	584.0	589.1	595.2	601.5	607.5	612.7	616.7
170°	565.0	568.3	573.7	579.2	581.4	584.7	589.1	594.6	597.9	602.2	604.4
172.5°	566.8	569.1	572.9	576.6	577.9	579.5	583.0	586.6	589.1	592.6	593.9
175°	568.3	569.4	571.6	573.7	572.7	573.7	574.9	578.2	579.2	580.3	581.4
177.5°	569.4	569.4	570.2	572.0	570.2	569.4	570.2	572.0	572.0	572.9	572.9
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331413-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1560.8	1559.8	1559.8	1555.3	1559.8	1559.8	1560.8	1565.8	1567.3	1568.3	1566.3
5°	1447.8	1446.0	1442.8	1446.0	1442.8	1446.0	1447.8	1456.6	1460.9	1465.4	1469.1
7.5°	1336.1	1328.6	1327.5	1320.1	1327.5	1328.6	1336.1	1340.3	1349.1	1359.0	1367.9
10°	1254.6	1249.6	1249.0	1237.1	1249.0	1249.6	1254.6	1265.3	1273.9	1285.9	1298.4
12.5°	1192.6	1180.5	1182.9	1176.0	1182.9	1180.5	1192.6	1192.7	1203.0	1210.3	1229.8
15°	1085.1	1085.1	1082.6	1072.0	1082.6	1085.1	1085.1	1102.0	1105.1	1117.0	1133.9
17.5°	1008.0	1006.6	1000.7	1003.7	1000.7	1006.6	1008.0	1020.3	1022.5	1038.3	1052.3
20°	961.9	958.2	950.6	950.6	950.6	958.2	961.9	968.7	976.9	986.3	998.2
22.5°	918.4	918.1	910.1	912.6	910.1	918.1	918.4	924.7	932.4	942.7	952.6
25°	867.4	862.4	858.8	860.5	858.8	862.4	867.4	868.1	876.8	883.7	889.9
27.5°	819.2	816.4	816.1	811.1	816.1	816.4	819.2	820.8	825.8	829.8	835.7
30°	791.2	784.9	786.2	783.1	786.2	784.9	791.2	791.8	794.3	796.8	803.7
32.5°	759.1	756.9	755.6	753.0	755.6	756.9	759.1	760.3	765.3	767.8	773.2
35°	715.5	716.1	712.9	714.3	712.9	716.1	715.5	716.7	717.4	719.8	724.9
37.5°	677.3	679.3	677.9	678.3	677.9	679.3	677.3	678.0	678.5	678.9	680.4
40°	652.3	652.3	652.3	654.2	652.3	652.3	652.3	650.4	651.1	650.4	650.4
42.5°	628.3	627.3	626.3	626.1	626.3	627.3	628.3	624.0	626.0	624.0	622.9
45°	587.3	589.2	589.7	586.6	589.7	589.2	587.3	586.0	584.2	583.5	582.9
47.5°	550.2	550.4	550.2	552.9	550.2	550.4	550.2	548.5	545.6	544.5	541.5
50°	524.1	522.8	524.1	522.8	524.1	522.8	524.1	520.9	519.1	515.9	513.5
52.5°	496.6	496.8	496.1	495.9	496.1	496.8	496.6	492.5	491.5	490.5	486.4
55°	453.5	454.7	454.0	454.0	454.0	454.7	453.5	450.9	450.3	446.6	442.8
57.5°	408.8	409.9	410.8	408.0	410.8	409.9	408.8	408.4	408.0	404.1	400.0
60°	377.8	380.9	380.2	379.0	380.2	380.9	377.8	378.3	376.5	374.0	371.5
62.5°	349.2	350.3	350.2	350.0	350.2	350.3	349.2	346.4	345.4	343.0	340.4
65°	305.2	306.4	304.5	306.4	304.5	306.4	305.2	303.3	299.0	297.7	295.2
67.5°	257.8	258.2	259.6	260.4	259.6	258.2	257.8	258.5	255.7	253.3	252.8
70°	228.3	227.6	229.5	231.4	229.5	227.6	228.3	227.1	225.2	223.3	220.7
72.5°	197.3	198.6	198.0	199.3	198.0	198.6	197.3	197.5	195.7	193.2	190.8
75°	151.9	153.8	153.3	155.1	153.3	153.8	151.9	153.3	151.9	149.5	146.9
77.5°	109.8	110.1	109.8	110.8	109.8	110.1	109.8	110.8	109.4	110.3	107.4
80°	83.8	82.6	81.3	83.8	81.3	82.6	83.8	83.8	81.9	83.8	81.9
82.5°	58.2	59.0	57.8	57.8	57.8	59.0	58.2	59.8	58.9	59.8	57.9
85°	26.9	26.3	25.0	25.0	25.0	26.3	26.9	26.9	28.7	27.5	27.5
87.5°	12.3	11.7	11.7	11.2	11.7	11.7	12.3	12.3	12.0	12.5	13.0
90°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	35.1	32.9	35.1
92.5°	65.0	61.5	62.4	60.7	62.4	61.5	65.0	65.9	72.7	81.9	95.5
95°	135.7	127.1	123.8	124.8	123.8	127.1	135.7	150.0	174.1	220.1	286.9
97.5°	297.8	270.9	254.9	245.7	254.9	270.9	297.8	350.2	429.2	547.7	669.4
100°	490.5	443.5	411.7	392.0	411.7	443.5	490.5	581.4	713.9	863.9	999.7
102.5°	836.5	756.2	716.5	689.8	716.5	756.2	836.5	935.3	1075.6	1185.3	1216.1
105°	1364.2	1296.4	1249.3	1234.0	1249.3	1296.4	1364.2	1432.2	1468.3	1454.1	1330.3
107.5°	1609.8	1606.0	1596.6	1576.2	1596.6	1606.0	1609.8	1601.2	1548.2	1434.4	1248.0
110°	1650.0	1670.8	1680.7	1679.6	1680.7	1670.8	1650.0	1603.0	1513.2	1373.0	1177.0



TEST NUMBER: P331413-830

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1618.5	1653.3	1672.0	1677.8	1672.0	1653.3	1618.5	1553.0	1450.1	1300.3	1112.2
115°	1535.1	1585.5	1613.9	1623.8	1613.9	1585.5	1535.1	1457.4	1344.5	1201.2	1032.6
117.5°	1435.7	1488.8	1518.9	1527.2	1518.9	1488.8	1435.7	1356.4	1250.7	1120.6	972.5
120°	1370.8	1422.3	1454.1	1465.0	1454.1	1422.3	1370.8	1294.2	1194.6	1078.5	942.7
122.5°	1312.1	1362.7	1391.0	1400.1	1391.0	1362.7	1312.1	1243.4	1153.4	1043.5	919.1
125°	1239.4	1281.1	1308.4	1317.2	1308.4	1281.1	1239.4	1175.9	1093.8	997.5	884.7
127.5°	1174.9	1213.8	1237.5	1244.5	1237.5	1213.8	1174.9	1119.5	1043.7	952.8	850.7
130°	1135.5	1172.7	1194.6	1203.3	1194.6	1172.7	1135.5	1081.8	1009.6	923.0	828.9
132.5°	1095.1	1132.4	1152.5	1160.4	1152.5	1132.4	1095.1	1042.4	974.5	895.0	807.9
135°	1031.4	1067.5	1087.2	1091.7	1087.2	1067.5	1031.4	984.3	923.0	850.7	778.4
137.5°	969.2	1000.3	1017.7	1024.2	1017.7	1000.3	969.2	926.3	872.9	815.5	755.1
140°	926.3	954.8	971.2	977.8	971.2	954.8	926.3	891.3	843.1	792.8	740.2
142.5°	889.5	915.4	930.0	931.3	930.0	915.4	889.5	856.2	816.0	772.6	727.9
145°	838.7	857.3	868.3	871.6	868.3	857.3	838.7	812.5	780.7	746.8	710.6
147.5°	797.1	812.0	819.4	821.4	819.4	812.0	797.1	775.4	752.2	725.8	697.3
150°	770.8	784.0	790.5	791.6	790.5	784.0	770.8	754.4	734.7	711.7	687.6
152.5°	749.8	761.2	766.0	766.2	766.0	761.2	749.8	736.9	719.8	700.3	678.0
155°	722.6	730.3	734.7	732.5	734.7	730.3	722.6	710.6	698.5	682.1	664.6
157.5°	695.5	701.8	703.8	703.8	703.8	701.8	695.5	686.9	677.5	663.7	649.0
160°	678.8	684.3	685.4	685.4	685.4	684.3	678.8	671.2	663.5	651.5	639.4
162.5°	663.9	667.7	668.7	667.9	668.7	667.7	663.9	656.3	650.4	640.1	629.8
165°	639.4	643.9	643.9	642.7	643.9	643.9	639.4	635.1	630.7	623.0	615.4
167.5°	618.6	621.0	620.9	619.5	620.9	621.0	618.6	616.7	612.7	607.5	601.5
170°	605.5	608.8	607.7	605.5	607.7	608.8	605.5	604.4	602.2	597.9	594.6
172.5°	595.0	596.5	595.4	594.1	595.4	596.5	595.0	593.9	592.6	589.1	586.6
175°	581.4	582.5	581.4	579.2	581.4	582.5	581.4	581.4	580.3	579.2	578.2
177.5°	572.9	572.9	572.0	570.2	572.0	572.9	572.9	572.9	572.9	572.0	572.0
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331413-830

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1563.8	1569.3	1577.8	1586.9	1592.3	1602.8	1605.8	1610.8	1615.3	1625.9	1636.8
5°	1473.5	1482.2	1502.9	1514.1	1529.7	1547.9	1559.8	1572.3	1586.1	1609.9	1631.7
7.5°	1376.7	1391.3	1416.9	1437.9	1460.2	1486.3	1505.1	1529.7	1550.3	1583.8	1615.8
10°	1312.1	1332.8	1355.9	1380.9	1412.2	1439.7	1466.0	1497.2	1522.3	1562.3	1599.9
12.5°	1254.1	1257.3	1290.3	1317.9	1360.7	1394.7	1424.9	1465.3	1489.8	1537.3	1576.8
15°	1152.6	1171.4	1201.5	1223.3	1273.9	1317.1	1359.7	1401.6	1429.7	1488.5	1540.4
17.5°	1067.2	1084.5	1115.2	1151.1	1187.5	1230.5	1285.5	1329.6	1367.9	1435.1	1496.5
20°	1013.1	1034.4	1065.7	1102.6	1134.5	1181.4	1229.0	1279.6	1320.9	1396.6	1468.5
22.5°	967.1	983.9	1009.2	1045.6	1080.4	1123.4	1175.4	1230.6	1273.8	1355.6	1428.4
25°	902.5	916.2	932.5	962.5	1001.9	1048.9	1089.5	1150.2	1213.3	1289.6	1377.8
27.5°	844.2	853.9	868.4	894.8	925.3	969.1	1014.3	1071.9	1135.4	1218.2	1311.3
30°	808.7	814.9	829.3	851.2	881.2	915.6	961.3	1016.3	1081.4	1165.2	1257.7
32.5°	777.7	783.4	792.8	813.7	839.7	869.1	910.2	965.3	1027.3	1109.7	1212.2
35°	731.1	735.5	743.7	760.5	774.9	803.7	838.1	888.1	946.2	1025.1	1131.4
37.5°	684.8	690.7	695.7	702.9	721.3	740.3	770.2	812.4	869.5	949.0	1050.4
40°	654.2	659.2	666.7	669.9	684.9	701.7	726.1	764.9	822.5	894.9	993.8
42.5°	623.2	628.2	632.6	636.3	649.3	664.2	686.1	719.3	770.4	840.9	938.8
45°	581.0	581.6	586.0	592.9	599.2	609.8	625.4	654.2	693.6	759.9	848.7
47.5°	538.2	538.9	539.7	542.7	549.6	559.2	569.7	593.0	628.3	681.2	767.6
50°	509.7	508.5	509.7	512.2	516.6	524.7	536.6	553.5	582.3	631.7	711.1
52.5°	482.2	481.9	481.2	482.2	485.6	491.2	499.5	514.0	539.7	585.1	655.1
55°	440.3	437.2	437.8	435.3	440.9	442.1	448.5	460.3	482.9	514.1	579.8
57.5°	395.7	393.0	390.3	389.6	389.0	392.4	397.4	406.8	424.0	451.4	504.7
60°	367.1	364.0	360.2	359.0	359.0	360.9	363.4	370.2	386.5	410.9	454.7
62.5°	338.1	334.5	332.2	328.9	328.0	329.9	332.3	337.2	349.0	371.8	409.6
65°	293.3	289.0	285.8	285.2	284.0	282.1	283.3	288.3	297.7	315.8	345.8
67.5°	248.5	244.3	243.6	239.9	238.2	238.4	238.2	242.4	248.1	263.7	286.1
70°	218.9	215.7	214.5	211.4	210.2	208.9	207.6	211.4	217.1	230.2	249.6
72.5°	188.9	186.2	183.5	180.9	181.2	179.8	179.6	181.9	186.5	198.6	213.5
75°	145.7	146.4	143.3	140.1	139.5	138.2	138.2	140.1	141.9	151.4	163.2
77.5°	105.7	105.2	102.5	101.6	100.9	99.5	100.9	102.2	103.2	109.4	118.2
80°	80.7	80.7	77.6	77.6	76.9	75.0	76.9	75.7	78.1	84.5	90.7
82.5°	57.7	56.6	56.6	55.5	55.4	54.0	55.0	56.2	57.1	61.5	65.1
85°	28.2	28.2	27.5	26.9	27.5	26.9	27.5	28.2	28.7	30.6	33.7
87.5°	13.2	13.9	14.2	13.4	11.9	11.3	11.1	11.2	11.8	11.4	11.2
90°	36.1	37.2	36.1	29.6	21.9	16.4	13.1	10.9	8.8	4.3	1.1
92.5°	120.3	142.3	140.3	109.2	74.5	49.7	39.4	32.0	27.1	19.2	13.4
95°	375.6	429.2	379.9	252.9	157.7	107.3	81.1	63.5	53.6	42.7	38.4
97.5°	768.6	732.7	551.9	340.7	208.0	144.8	115.0	94.8	79.9	68.3	62.4
100°	1022.7	865.0	595.6	359.1	225.6	167.5	136.9	115.0	97.5	87.6	84.3
102.5°	1117.3	869.4	579.0	360.1	241.3	187.7	157.0	134.2	116.7	106.9	104.4
105°	1102.6	811.3	546.4	365.7	268.2	216.8	186.2	162.0	145.6	138.0	133.6
107.5°	1006.4	749.1	530.2	380.8	295.9	245.9	215.1	191.1	176.1	168.6	165.1
110°	946.0	719.3	526.7	393.0	314.2	266.1	234.3	211.3	197.1	190.5	186.2



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	904.0	700.1	527.5	406.2	331.8	285.3	252.7	230.5	217.3	209.8	205.4
115°	851.9	678.8	532.2	425.9	359.1	312.1	282.5	260.6	247.4	240.9	235.4
117.5°	819.0	668.5	540.0	447.0	384.3	340.7	310.1	289.1	277.5	270.9	266.6
120°	801.4	662.4	545.3	461.0	401.8	359.1	328.5	306.6	296.7	290.1	285.8
122.5°	786.6	658.9	551.4	473.3	418.5	378.4	346.9	325.0	314.2	307.6	304.2
125°	765.3	652.6	560.6	492.8	443.5	404.1	373.3	351.5	338.4	331.8	328.5
127.5°	745.6	648.8	570.0	510.9	466.7	428.3	396.8	375.8	361.4	352.1	347.7
130°	732.5	647.1	577.0	522.3	480.7	442.3	411.7	389.8	374.5	363.5	359.1
132.5°	722.0	646.2	584.0	533.7	492.9	456.4	425.7	402.9	386.7	374.9	369.7
135°	707.3	644.9	592.4	548.6	510.2	475.2	444.5	419.3	402.9	389.8	385.4
137.5°	697.0	644.7	599.8	560.0	524.2	489.7	461.2	436.2	418.7	405.6	400.3
140°	690.9	643.9	603.3	566.1	532.2	499.3	470.8	446.8	429.2	416.0	411.7
142.5°	684.8	643.9	606.0	571.4	538.3	506.3	479.6	456.4	438.8	426.6	423.1
145°	676.7	641.6	608.8	578.2	547.4	517.9	493.8	471.9	455.5	444.5	440.2
147.5°	668.4	637.7	609.6	581.8	554.9	527.1	505.7	487.5	472.3	461.8	458.5
150°	661.3	635.1	608.8	583.6	558.5	533.2	513.5	497.1	482.9	474.1	470.8
152.5°	655.2	630.7	607.0	584.5	561.9	539.3	521.4	505.9	493.3	484.7	483.1
155°	643.9	623.0	604.4	585.8	567.1	548.6	532.2	520.1	508.0	501.4	500.4
157.5°	633.1	615.1	599.4	585.8	570.9	555.2	541.3	531.7	521.2	515.9	514.8
160°	625.2	609.9	596.7	585.8	572.7	559.5	547.4	538.7	529.9	525.6	524.4
162.5°	618.2	605.5	594.1	584.9	573.5	562.1	552.7	544.8	537.8	533.5	534.1
165°	606.6	596.7	589.1	582.5	574.9	565.0	558.5	552.9	546.4	544.2	545.3
167.5°	595.2	589.1	584.0	581.0	574.6	567.4	563.3	559.3	555.2	553.2	554.5
170°	589.1	584.7	581.4	579.2	573.7	568.3	565.0	562.8	559.5	558.5	560.6
172.5°	583.0	579.5	577.9	576.6	572.9	569.1	566.8	565.4	562.1	562.8	564.1
175°	574.9	573.7	572.7	573.7	571.6	569.4	568.3	568.3	566.1	567.1	568.3
177.5°	570.2	569.4	570.2	572.0	570.2	569.4	569.4	569.4	567.6	568.4	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



TEST NUMBER: P331413-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1635.9	1638.3	1646.3	1654.4	1663.4	1665.8	1669.9	1666.4	1665.4	1674.9	1681.9
5°	1640.5	1651.7	1673.7	1693.7	1710.5	1722.4	1734.9	1739.9	1749.3	1762.5	1778.7
7.5°	1635.2	1657.1	1691.5	1720.7	1752.5	1775.3	1793.2	1808.5	1827.0	1851.9	1879.1
10°	1629.2	1658.6	1700.5	1736.2	1774.9	1804.3	1828.7	1852.5	1880.0	1914.4	1950.0
12.5°	1618.3	1653.1	1705.5	1747.7	1797.4	1826.4	1859.3	1910.5	1940.0	1988.0	2038.2
15°	1596.1	1634.8	1708.0	1759.9	1816.2	1871.2	1931.9	1980.8	2029.5	2057.7	2128.4
17.5°	1563.2	1620.1	1701.1	1761.7	1833.2	1920.0	1988.1	2043.3	2099.7	2145.3	2180.8
20°	1536.6	1598.6	1691.1	1763.7	1848.7	1941.9	2020.2	2076.4	2125.2	2163.3	2185.2
22.5°	1503.2	1581.0	1671.1	1756.1	1864.7	1956.9	2039.1	2083.4	2124.2	2142.8	2151.2
25°	1450.4	1544.2	1646.2	1749.9	1872.5	1970.1	2045.1	2072.0	2083.9	2065.8	2035.7
27.5°	1393.5	1498.0	1617.2	1738.1	1867.7	1961.5	2015.3	2011.1	1990.9	1932.3	1885.4
30°	1350.9	1466.0	1594.2	1726.2	1856.2	1947.6	1978.9	1947.6	1901.9	1836.3	1769.3
32.5°	1306.4	1425.5	1569.7	1709.1	1835.2	1915.5	1922.3	1868.5	1797.8	1723.2	1639.7
35°	1239.0	1367.8	1523.5	1671.1	1790.5	1841.3	1811.2	1716.2	1632.4	1530.4	1416.5
37.5°	1162.8	1305.0	1461.2	1615.4	1723.6	1736.9	1662.4	1562.3	1444.1	1324.3	1190.3
40°	1105.8	1256.5	1417.2	1572.9	1668.6	1654.8	1559.8	1449.7	1309.0	1162.6	1038.2
42.5°	1054.7	1205.4	1369.1	1521.9	1598.6	1560.8	1449.7	1314.7	1163.4	1025.6	911.6
45°	966.3	1121.3	1289.0	1436.6	1480.4	1412.2	1265.3	1115.1	966.3	851.2	761.1
47.5°	880.4	1033.8	1199.8	1329.6	1345.0	1253.3	1092.7	938.3	810.3	716.6	653.1
50°	817.5	971.3	1135.8	1251.5	1246.4	1135.8	970.6	823.7	716.7	641.0	598.5
52.5°	760.9	906.3	1064.2	1169.4	1142.9	1022.2	864.6	734.1	646.2	587.0	548.5
55°	673.0	807.4	957.5	1042.0	993.2	859.3	726.1	621.0	556.0	511.6	481.5
57.5°	585.6	711.7	840.2	892.2	838.3	714.7	603.7	527.4	478.5	445.6	426.1
60°	531.6	641.7	756.1	801.2	736.8	626.7	539.1	471.0	431.5	404.6	387.1
62.5°	477.6	576.2	684.1	708.6	649.7	556.7	479.1	422.4	390.0	366.1	349.6
65°	404.1	484.7	566.7	582.9	528.5	456.6	395.3	358.4	329.6	312.1	299.0
67.5°	331.3	396.2	454.2	467.3	419.6	369.8	325.5	293.3	273.8	259.3	248.2
70°	288.3	339.6	387.1	397.8	359.6	315.2	281.4	255.8	238.3	225.7	215.2
72.5°	242.8	285.6	325.1	332.2	301.0	267.2	239.4	219.2	203.8	195.8	185.6
75°	185.8	210.8	241.4	243.3	222.6	202.0	180.8	167.6	159.5	149.5	144.5
77.5°	131.1	150.7	168.2	171.6	159.4	145.3	133.5	123.1	116.2	111.6	107.0
80°	100.1	115.7	123.2	127.6	118.9	108.9	102.0	95.1	90.7	87.6	84.5
82.5°	71.5	81.2	88.2	91.5	86.8	80.8	73.9	70.0	66.6	64.0	63.0
85°	36.3	40.6	45.1	46.3	45.1	42.5	38.7	38.7	36.9	36.3	36.3
87.5°	13.4	16.3	16.7	18.7	18.3	19.4	20.9	21.8	21.5	20.7	20.0
90°	4.3	8.8	10.9	13.1	16.4	21.9	29.6	36.1	37.2	36.1	35.1
92.5°	19.2	27.1	32.0	39.4	49.7	74.5	109.2	140.3	142.3	120.3	95.5
95°	42.7	53.6	63.5	81.1	107.3	157.7	252.9	379.9	429.2	375.6	286.9
97.5°	68.3	79.9	94.8	115.0	144.8	208.0	340.7	551.9	732.7	768.6	669.4
100°	87.6	97.5	115.0	136.9	167.5	225.6	359.1	595.6	865.0	1022.7	999.7
102.5°	106.9	116.7	134.2	157.0	187.7	241.3	360.1	579.0	869.4	1117.3	1216.1
105°	138.0	145.6	162.0	186.2	216.8	268.2	365.7	546.4	811.3	1102.6	1330.3
107.5°	168.6	176.1	191.1	215.1	245.9	295.9	380.8	530.2	749.1	1006.4	1248.0
110°	190.5	197.1	211.3	234.3	266.1	314.2	393.0	526.7	719.3	946.0	1177.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	209.8	217.3	230.5	252.7	285.3	331.8	406.2	527.5	700.1	904.0	1112.2
115°	240.9	247.4	260.6	282.5	312.1	359.1	425.9	532.2	678.8	851.9	1032.6
117.5°	270.9	277.5	289.1	310.1	340.7	384.3	447.0	540.0	668.5	819.0	972.5
120°	290.1	296.7	306.6	328.5	359.1	401.8	461.0	545.3	662.4	801.4	942.7
122.5°	307.6	314.2	325.0	346.9	378.4	418.5	473.3	551.4	658.9	786.6	919.1
125°	331.8	338.4	351.5	373.3	404.1	443.5	492.8	560.6	652.6	765.3	884.7
127.5°	352.1	361.4	375.8	396.8	428.3	466.7	510.9	570.0	648.8	745.6	850.7
130°	363.5	374.5	389.8	411.7	442.3	480.7	522.3	577.0	647.1	732.5	828.9
132.5°	374.9	386.7	402.9	425.7	456.4	492.9	533.7	584.0	646.2	722.0	807.9
135°	389.8	402.9	419.3	444.5	475.2	510.2	548.6	592.4	644.9	707.3	778.4
137.5°	405.6	418.7	436.2	461.2	489.7	524.2	560.0	599.8	644.7	697.0	755.1
140°	416.0	429.2	446.8	470.8	499.3	532.2	566.1	603.3	643.9	690.9	740.2
142.5°	426.6	438.8	456.4	479.6	506.3	538.3	571.4	606.0	643.9	684.8	727.9
145°	444.5	455.5	471.9	493.8	517.9	547.4	578.2	608.8	641.6	676.7	710.6
147.5°	461.8	472.3	487.5	505.7	527.1	554.9	581.8	609.6	637.7	668.4	697.3
150°	474.1	482.9	497.1	513.5	533.2	558.5	583.6	608.8	635.1	661.3	687.6
152.5°	484.7	493.3	505.9	521.4	539.3	561.9	584.5	607.0	630.7	655.2	678.0
155°	501.4	508.0	520.1	532.2	548.6	567.1	585.8	604.4	623.0	643.9	664.6
157.5°	515.9	521.2	531.7	541.3	555.2	570.9	585.8	599.4	615.1	633.1	649.0
160°	525.6	529.9	538.7	547.4	559.5	572.7	585.8	596.7	609.9	625.2	639.4
162.5°	533.5	537.8	544.8	552.7	562.1	573.5	584.9	594.1	605.5	618.2	629.8
165°	544.2	546.4	552.9	558.5	565.0	574.9	582.5	589.1	596.7	606.6	615.4
167.5°	553.2	555.2	559.3	563.3	567.4	574.6	581.0	584.0	589.1	595.2	601.5
170°	558.5	559.5	562.8	565.0	568.3	573.7	579.2	581.4	584.7	589.1	594.6
172.5°	562.8	562.1	565.4	566.8	569.1	572.9	576.6	577.9	579.5	583.0	586.6
175°	567.1	566.1	568.3	568.3	569.4	571.6	573.7	572.7	573.7	574.9	578.2
177.5°	568.4	567.6	569.4	569.4	569.4	570.2	572.0	570.2	569.4	570.2	572.0
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4	569.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1687.9	1694.9	1694.9	1695.9	1703.9	1702.9	1702.4
5°	1796.2	1806.9	1808.1	1819.4	1826.8	1824.4	1817.5
7.5°	1898.4	1918.2	1933.2	1941.5	1951.4	1957.6	1954.8
10°	1979.4	2008.2	2025.7	2037.6	2052.0	2062.7	2058.9
12.5°	2053.0	2087.3	2111.3	2131.7	2133.5	2147.2	2138.0
15°	2167.8	2203.9	2207.7	2222.7	2234.7	2233.4	2234.0
17.5°	2205.6	2217.2	2219.6	2220.0	2220.2	2215.7	2206.2
20°	2192.1	2187.7	2177.1	2169.0	2154.6	2152.7	2140.2
22.5°	2128.1	2114.2	2087.5	2069.9	2047.5	2041.6	2038.2
25°	2002.0	1971.3	1928.8	1888.1	1876.9	1855.0	1861.2
27.5°	1829.0	1781.2	1735.1	1702.1	1672.3	1639.5	1648.9
30°	1707.4	1653.6	1588.6	1538.5	1506.7	1475.4	1469.7
32.5°	1562.3	1483.5	1411.0	1366.9	1318.1	1298.3	1276.6
35°	1312.1	1235.2	1163.3	1101.4	1065.7	1038.2	1013.1
37.5°	1087.1	998.5	940.5	890.3	864.6	848.9	852.8
40°	947.5	870.0	827.5	789.3	765.5	754.2	756.8
42.5°	834.4	776.4	741.4	715.2	698.4	692.2	690.7
45°	706.1	673.5	644.8	629.8	621.7	614.8	610.4
47.5°	618.5	592.0	575.8	566.8	559.8	552.7	552.6
50°	566.0	548.5	537.2	527.8	522.3	517.3	521.6
52.5°	525.9	510.0	498.7	490.3	488.2	483.7	483.6
55°	466.6	454.0	445.9	438.4	434.7	432.2	429.0
57.5°	412.6	400.7	393.1	388.4	381.3	378.7	377.8
60°	374.0	364.6	357.1	350.8	347.7	342.7	342.7
62.5°	338.5	329.1	322.1	317.4	312.2	310.2	310.8
65°	287.1	279.6	272.7	267.7	266.5	262.7	263.9
67.5°	239.8	234.8	227.5	224.8	222.4	220.4	218.9
70°	208.3	203.3	199.5	195.8	193.9	193.9	193.9
72.5°	181.7	175.8	173.5	168.7	169.8	167.9	165.9
75°	140.7	137.0	135.1	133.2	130.1	130.1	130.1
77.5°	103.6	102.5	100.2	98.2	97.5	96.8	97.1
80°	80.0	79.5	78.1	78.1	76.9	76.3	75.0
82.5°	61.5	59.9	59.2	58.6	58.4	58.2	58.1
85°	35.1	33.7	33.7	34.4	33.2	33.2	33.7
87.5°	20.1	20.5	20.3	20.3	20.7	20.3	20.3
90°	32.9	35.1	36.1	36.1	36.1	36.1	36.1
92.5°	81.9	72.7	65.9	65.0	61.5	62.4	60.7
95°	220.1	174.1	150.0	135.7	127.1	123.8	124.8
97.5°	547.7	429.2	350.2	297.8	270.9	254.9	245.7
100°	863.9	713.9	581.4	490.5	443.5	411.7	392.0
102.5°	1185.3	1075.6	935.3	836.5	756.2	716.5	689.8
105°	1454.1	1468.3	1432.2	1364.2	1296.4	1249.3	1234.0
107.5°	1434.4	1548.2	1601.2	1609.8	1606.0	1596.6	1576.2
110°	1373.0	1513.2	1603.0	1650.0	1670.8	1680.7	1679.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1300.3	1450.1	1553.0	1618.5	1653.3	1672.0	1677.8
115°	1201.2	1344.5	1457.4	1535.1	1585.5	1613.9	1623.8
117.5°	1120.6	1250.7	1356.4	1435.7	1488.8	1518.9	1527.2
120°	1078.5	1194.6	1294.2	1370.8	1422.3	1454.1	1465.0
122.5°	1043.5	1153.4	1243.4	1312.1	1362.7	1391.0	1400.1
125°	997.5	1093.8	1175.9	1239.4	1281.1	1308.4	1317.2
127.5°	952.8	1043.7	1119.5	1174.9	1213.8	1237.5	1244.5
130°	923.0	1009.6	1081.8	1135.5	1172.7	1194.6	1203.3
132.5°	895.0	974.5	1042.4	1095.1	1132.4	1152.5	1160.4
135°	850.7	923.0	984.3	1031.4	1067.5	1087.2	1091.7
137.5°	815.5	872.9	926.3	969.2	1000.3	1017.7	1024.2
140°	792.8	843.1	891.3	926.3	954.8	971.2	977.8
142.5°	772.6	816.0	856.2	889.5	915.4	930.0	931.3
145°	746.8	780.7	812.5	838.7	857.3	868.3	871.6
147.5°	725.8	752.2	775.4	797.1	812.0	819.4	821.4
150°	711.7	734.7	754.4	770.8	784.0	790.5	791.6
152.5°	700.3	719.8	736.9	749.8	761.2	766.0	766.2
155°	682.1	698.5	710.6	722.6	730.3	734.7	732.5
157.5°	663.7	677.5	686.9	695.5	701.8	703.8	703.8
160°	651.5	663.5	671.2	678.8	684.3	685.4	685.4
162.5°	640.1	650.4	656.3	663.9	667.7	668.7	667.9
165°	623.0	630.7	635.1	639.4	643.9	643.9	642.7
167.5°	607.5	612.7	616.7	618.6	621.0	620.9	619.5
170°	597.9	602.2	604.4	605.5	608.8	607.7	605.5
172.5°	589.1	592.6	593.9	595.0	596.5	595.4	594.1
175°	579.2	580.3	581.4	581.4	582.5	581.4	579.2
177.5°	572.0	572.9	572.9	572.9	572.9	572.0	570.2
180°	569.4	569.4	569.4	569.4	569.4	569.4	569.4

(END OF REPORT)