

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: P332643

Luminaire Tested: **S124DIP-S1020D810U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332643  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIP-S1020D810U835-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7841.0 lumens  
Efficiency: N/A  
Efficacy: 144.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

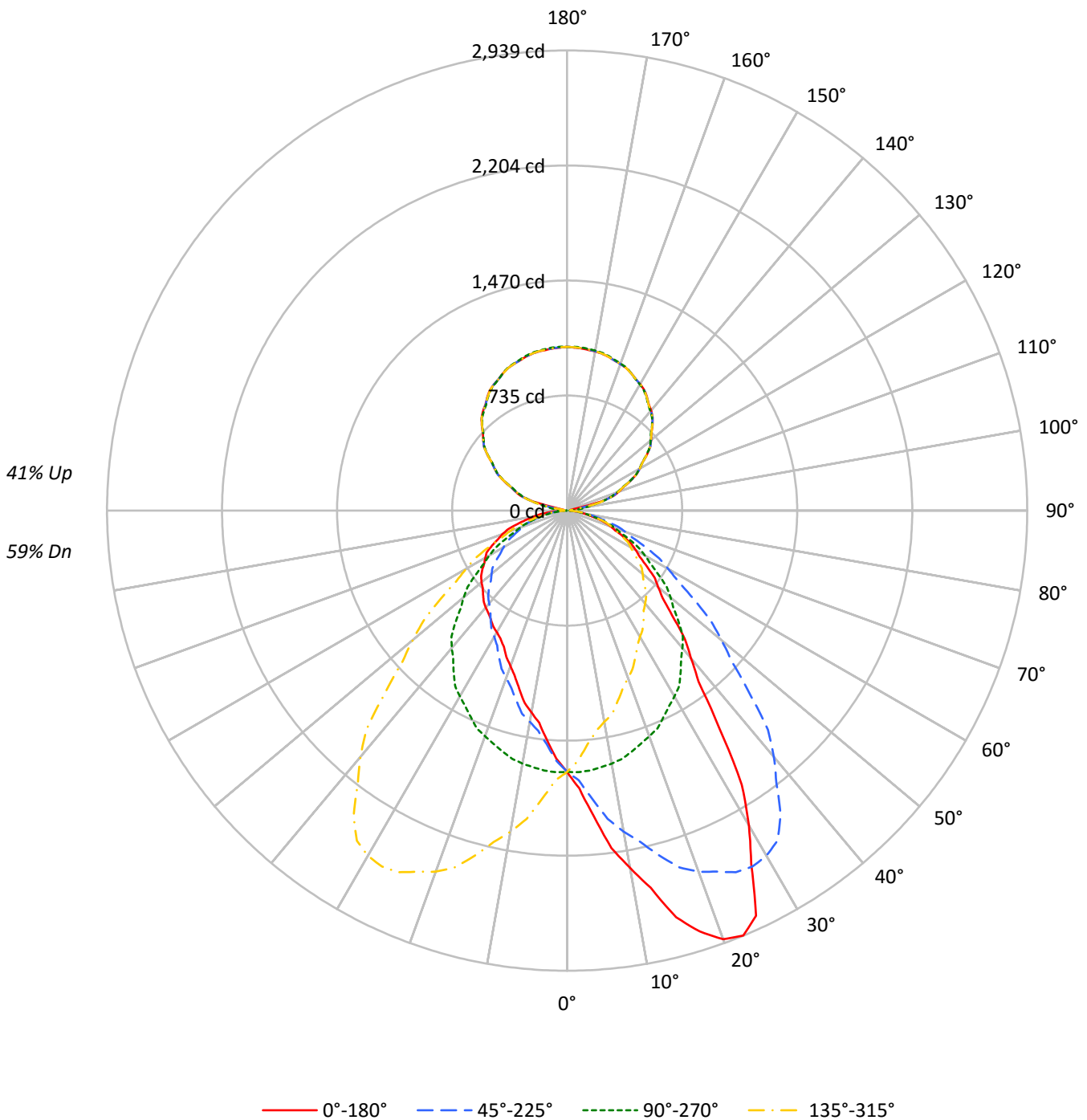
Input Watts (W): 54.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	68	64	61	59	56	54	51	48	46	42
3	83	74	67	61	78	69	63	58	61	56	52	53	49	46	45	42	40	36
4	77	66	58	52	71	62	55	49	54	49	44	47	43	39	40	37	35	31
5	70	59	51	45	65	55	48	42	49	43	38	42	38	34	37	33	30	27
6	65	53	45	39	60	50	42	37	44	38	34	38	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	27	24	21
8	56	43	36	30	52	41	34	29	36	31	27	32	27	24	28	24	21	19
9	52	40	32	27	49	38	31	26	33	28	24	30	25	22	26	22	19	17
10	49	37	29	24	45	35	28	23	31	25	22	27	23	20	24	20	18	16

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

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.6	2.1
10°-20°	501.1	6.4
20°-30°	794.6	10.1
30°-40°	884.3	11.3
40°-50°	805.0	10.3
50°-60°	657.8	8.4
60°-70°	469.6	6.0
70°-80°	258.6	3.3
80°-90°	73.6	0.9
90°-100°	35.8	0.5
100°-110°	228.0	2.9
110°-120°	436.1	5.6
120°-130°	553.6	7.1
130°-140°	592.3	7.6
140°-150°	553.9	7.1
150°-160°	446.7	5.7
160°-170°	288.1	3.7
170°-180°	99.3	1.3
0°-30°	1458.3	18.6
0°-40°	2342.7	29.9
0°-60°	3805.5	48.5
0°-90°	4607.3	58.8
90°-120°	699.8	8.9
90°-150°	2399.6	30.6
90°-180°	3234.0	41.2
0°-180°	7841.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	51
90°	24	2	24	2	24	12
95°	23	43	23	43	23	18
105°	223	235	223	235	223	194
115°	443	439	443	439	443	438
125°	622	618	622	618	622	554
135°	772	766	772	766	772	594
145°	888	884	888	884	888	555
155°	968	969	968	969	968	446
165°	1017	1022	1017	1022	1017	287
175°	1039	1045	1039	1045	1039	99
180°	1045	1045	1045	1045	1045	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	16.9	18.4	18.4	18.9	19.9	20.3	20.7	19.9	21.9	22.2	24.2
90°	23.5	23.1	22.8	22.4	22.1	21.4	20.3	19.3	18.2	17.2	15.8
92.5°	21.6	21.5	21.4	21.4	21.3	20.7	19.7	18.7	17.6	16.6	15.2
95°	22.7	22.5	22.3	22.2	22.0	21.4	20.3	19.3	18.2	17.2	17.0
97.5°	21.9	21.7	21.5	21.4	21.2	21.1	21.0	20.9	20.7	20.6	40.0
100°	21.9	21.7	21.5	21.4	21.2	22.6	25.5	28.5	31.4	34.4	58.4
102.5°	22.5	22.5	22.4	22.4	22.4	38.3	70.2	102.0	133.9	165.8	168.9
105°	222.8	229.1	235.3	241.6	247.9	250.2	248.6	247.1	245.5	243.9	243.1
107.5°	310.6	309.9	309.2	308.6	307.9	307.2	306.4	305.7	304.9	304.2	303.0
110°	348.7	348.2	347.7	347.2	346.6	346.2	345.9	345.5	345.2	344.8	343.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	386.9	386.2	385.6	384.9	384.2	383.9	384.0	384.1	384.2	384.2	383.7
115°	442.6	442.6	442.6	442.6	442.6	442.4	442.0	441.7	441.3	441.0	441.2
117.5°	499.2	499.2	499.3	499.4	499.4	499.5	499.6	499.6	499.7	499.8	499.4
120°	534.8	535.2	535.5	535.9	536.2	536.2	535.9	535.5	535.2	534.8	535.0
122.5°	569.8	570.2	570.5	570.9	571.2	571.3	571.1	570.9	570.7	570.5	570.2
125°	622.4	622.2	622.0	621.9	621.7	621.3	620.8	620.3	619.8	619.3	619.6
127.5°	668.5	668.7	668.8	668.9	669.1	669.2	669.3	669.4	669.5	669.6	668.8
130°	699.8	699.8	699.8	699.8	699.8	699.7	699.5	699.4	699.2	699.0	698.5
132.5°	728.6	728.7	728.8	729.0	729.1	729.1	728.9	728.8	728.6	728.4	727.7
135°	771.7	771.4	771.0	770.7	770.3	770.0	769.6	769.3	768.9	768.6	767.9
137.5°	808.6	808.7	808.8	808.9	809.0	808.9	808.5	808.1	807.8	807.4	806.6
140°	834.3	834.1	833.9	833.8	833.6	833.2	832.7	832.2	831.7	831.1	830.8
142.5°	855.5	855.5	855.5	855.4	855.4	855.2	854.8	854.4	854.1	853.7	853.5
145°	888.2	887.9	887.5	887.2	886.8	886.6	886.4	886.2	886.1	885.9	885.9
147.5°	915.3	915.1	914.9	914.8	914.6	914.4	914.3	914.2	914.0	913.9	914.0
150°	932.8	932.6	932.4	932.3	932.1	932.0	932.0	932.0	932.0	932.0	932.2
152.5°	947.8	947.9	948.0	948.1	948.2	948.1	947.9	947.6	947.3	947.0	947.3
155°	968.0	968.5	969.0	969.5	970.1	970.0	969.3	968.6	967.9	967.2	967.7
157.5°	984.9	985.8	986.7	987.6	988.5	988.5	987.6	986.7	985.8	984.9	985.5
160°	996.1	997.2	998.2	999.3	1000.3	1000.3	999.3	998.2	997.2	996.1	996.3
162.5°	1004.9	1006.1	1007.2	1008.4	1009.6	1009.7	1008.6	1007.6	1006.6	1005.5	1005.7
165°	1017.2	1018.8	1020.4	1021.9	1023.5	1023.6	1022.2	1020.8	1019.4	1018.0	1018.0
167.5°	1026.5	1028.2	1029.9	1031.7	1033.4	1033.5	1032.0	1030.5	1028.9	1027.4	1027.5
170°	1032.1	1033.8	1035.6	1037.3	1039.0	1039.2	1037.8	1036.4	1035.0	1033.7	1033.5
172.5°	1035.2	1037.1	1039.0	1040.9	1042.7	1043.0	1041.6	1040.2	1038.8	1037.4	1037.2
175°	1039.1	1041.2	1043.3	1045.4	1047.5	1047.7	1046.2	1044.6	1043.0	1041.5	1041.3
177.5°	1041.6	1043.3	1045.0	1046.6	1048.3	1048.6	1047.5	1046.4	1045.2	1044.1	1043.9
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	23.9	24.2	23.3	20.8	18.8	16.7	15.8	14.8	15.8	16.7	17.7
90°	14.4	13.0	11.6	10.0	8.1	6.2	4.3	2.3	4.3	6.2	8.1
92.5°	13.8	12.4	11.0	10.3	10.2	10.1	10.0	9.9	10.0	10.1	10.2
95°	16.9	16.7	16.5	19.4	25.3	31.2	37.1	43.0	37.1	31.2	25.3
97.5°	59.4	78.8	98.2	106.1	102.4	98.7	95.0	91.3	95.0	98.7	102.4
100°	82.4	106.3	130.3	140.7	137.6	134.5	131.4	128.2	131.4	134.5	137.6
102.5°	172.0	175.1	178.3	178.7	176.4	174.1	171.8	169.5	171.8	174.1	176.4
105°	242.2	241.3	240.5	239.5	238.5	237.4	236.4	235.3	236.4	237.4	238.5
107.5°	301.8	300.6	299.4	298.6	298.1	297.5	297.0	296.5	297.0	297.5	298.1
110°	342.7	341.7	340.6	339.9	339.3	338.8	338.3	337.8	338.3	338.8	339.3





TEST NUMBER: P332643

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	383.2	382.8	382.3	381.6	380.6	379.7	378.7	377.8	378.7	379.7	380.6
115°	441.3	441.5	441.7	441.5	441.0	440.5	439.9	439.4	439.9	440.5	441.0
117.5°	499.0	498.6	498.3	497.7	497.0	496.3	495.6	494.9	495.6	496.3	497.0
120°	535.2	535.3	535.5	535.2	534.6	533.9	533.2	532.5	533.2	533.9	534.6
122.5°	570.0	569.7	569.5	569.2	568.7	568.3	567.9	567.5	567.9	568.3	568.7
125°	620.0	620.3	620.6	620.5	619.8	619.1	618.4	617.7	618.4	619.1	619.8
127.5°	668.0	667.2	666.4	665.9	665.8	665.6	665.4	665.2	665.4	665.6	665.8
130°	698.0	697.4	696.9	696.6	696.4	696.2	696.1	695.9	696.1	696.2	696.4
132.5°	727.1	726.4	725.8	725.3	725.0	724.7	724.3	724.0	724.3	724.7	725.0
135°	767.2	766.5	765.8	765.6	765.7	765.9	766.1	766.3	766.1	765.9	765.7
137.5°	805.9	805.1	804.3	803.9	803.8	803.8	803.7	803.6	803.7	803.8	803.8
140°	830.5	830.1	829.8	829.4	829.1	828.7	828.4	828.0	828.4	828.7	829.1
142.5°	853.3	853.0	852.8	852.4	851.8	851.2	850.5	849.9	850.5	851.2	851.8
145°	885.9	885.9	885.9	885.6	885.1	884.6	884.1	883.5	884.1	884.6	885.1
147.5°	914.2	914.4	914.6	914.2	913.2	912.2	911.3	910.3	911.3	912.2	913.2
150°	932.4	932.5	932.7	932.4	931.8	931.1	930.4	929.7	930.4	931.1	931.8
152.5°	947.7	948.0	948.3	948.2	947.6	947.0	946.5	945.9	946.5	947.0	947.6
155°	968.2	968.8	969.3	969.5	969.3	969.1	968.9	968.8	968.9	969.1	969.3
157.5°	986.1	986.6	987.2	987.6	987.7	987.8	987.9	988.0	987.9	987.8	987.7
160°	996.5	996.7	996.8	997.2	997.7	998.2	998.7	999.3	998.7	998.2	997.7
162.5°	1005.9	1006.0	1006.2	1006.6	1007.3	1007.9	1008.6	1009.3	1008.6	1007.9	1007.3
165°	1018.0	1018.0	1018.0	1018.5	1019.3	1020.2	1021.1	1021.9	1021.1	1020.2	1019.3
167.5°	1027.6	1027.7	1027.8	1028.3	1029.2	1030.1	1031.0	1031.9	1031.0	1030.1	1029.2
170°	1033.3	1033.1	1033.0	1033.4	1034.4	1035.5	1036.5	1037.6	1036.5	1035.5	1034.4
172.5°	1037.1	1036.9	1036.7	1037.2	1038.2	1039.2	1040.3	1041.3	1040.3	1039.2	1038.2
175°	1041.1	1041.0	1040.8	1041.2	1042.3	1043.3	1044.3	1045.4	1044.3	1043.3	1042.3
177.5°	1043.6	1043.3	1043.0	1043.4	1044.3	1045.3	1046.3	1047.3	1046.3	1045.3	1044.3
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



TEST NUMBER: P332643

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	19.7	20.0	22.5	23.9	25.8	28.9	30.2	36.5	38.9	41.9	47.0
90°	10.0	11.6	13.0	14.4	15.8	17.2	18.2	19.3	20.3	21.4	22.1
92.5°	10.3	11.0	12.4	13.8	15.2	16.6	17.6	18.7	19.7	20.7	21.3
95°	19.4	16.5	16.7	16.9	17.0	17.2	18.2	19.3	20.3	21.4	22.0
97.5°	106.1	98.2	78.8	59.4	40.0	20.6	20.7	20.9	21.0	21.1	21.2
100°	140.7	130.3	106.3	82.4	58.4	34.4	31.4	28.5	25.5	22.6	21.2
102.5°	178.7	178.3	175.1	172.0	168.9	165.8	133.9	102.0	70.2	38.3	22.4
105°	239.5	240.5	241.3	242.2	243.1	243.9	245.5	247.1	248.6	250.2	247.9
107.5°	298.6	299.4	300.6	301.8	303.0	304.2	304.9	305.7	306.4	307.2	307.9
110°	339.9	340.6	341.7	342.7	343.8	344.8	345.2	345.5	345.9	346.2	346.6



TEST NUMBER: P332643

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	381.6	382.3	382.8	383.2	383.7	384.2	384.2	384.1	384.0	383.9	384.2
115°	441.5	441.7	441.5	441.3	441.2	441.0	441.3	441.7	442.0	442.4	442.6
117.5°	497.7	498.3	498.6	499.0	499.4	499.8	499.7	499.6	499.6	499.5	499.4
120°	535.2	535.5	535.3	535.2	535.0	534.8	535.2	535.5	535.9	536.2	536.2
122.5°	569.2	569.5	569.7	570.0	570.2	570.5	570.7	570.9	571.1	571.3	571.2
125°	620.5	620.6	620.3	620.0	619.6	619.3	619.8	620.3	620.8	621.3	621.7
127.5°	665.9	666.4	667.2	668.0	668.8	669.6	669.5	669.4	669.3	669.2	669.1
130°	696.6	696.9	697.4	698.0	698.5	699.0	699.2	699.4	699.5	699.7	699.8
132.5°	725.3	725.8	726.4	727.1	727.7	728.4	728.6	728.8	728.9	729.1	729.1
135°	765.6	765.8	766.5	767.2	767.9	768.6	768.9	769.3	769.6	770.0	770.3
137.5°	803.9	804.3	805.1	805.9	806.6	807.4	807.8	808.1	808.5	808.9	809.0
140°	829.4	829.8	830.1	830.5	830.8	831.1	831.7	832.2	832.7	833.2	833.6
142.5°	852.4	852.8	853.0	853.3	853.5	853.7	854.1	854.4	854.8	855.2	855.4
145°	885.6	885.9	885.9	885.9	885.9	885.9	886.1	886.2	886.4	886.6	886.8
147.5°	914.2	914.6	914.4	914.2	914.0	913.9	914.0	914.2	914.3	914.4	914.6
150°	932.4	932.7	932.5	932.4	932.2	932.0	932.0	932.0	932.0	932.0	932.1
152.5°	948.2	948.3	948.0	947.7	947.3	947.0	947.3	947.6	947.9	948.1	948.2
155°	969.5	969.3	968.8	968.2	967.7	967.2	967.9	968.6	969.3	970.0	970.1
157.5°	987.6	987.2	986.6	986.1	985.5	984.9	985.8	986.7	987.6	988.5	988.5
160°	997.2	996.8	996.7	996.5	996.3	996.1	997.2	998.2	999.3	1000.3	1000.3
162.5°	1006.6	1006.2	1006.0	1005.9	1005.7	1005.5	1006.6	1007.6	1008.6	1009.7	1009.6
165°	1018.5	1018.0	1018.0	1018.0	1018.0	1018.0	1019.4	1020.8	1022.2	1023.6	1023.5
167.5°	1028.3	1027.8	1027.7	1027.6	1027.5	1027.4	1028.9	1030.5	1032.0	1033.5	1033.4
170°	1033.4	1033.0	1033.1	1033.3	1033.5	1033.7	1035.0	1036.4	1037.8	1039.2	1039.0
172.5°	1037.2	1036.7	1036.9	1037.1	1037.2	1037.4	1038.8	1040.2	1041.6	1043.0	1042.7
175°	1041.2	1040.8	1041.0	1041.1	1041.3	1041.5	1043.0	1044.6	1046.2	1047.7	1047.5
177.5°	1043.4	1043.0	1043.3	1043.6	1043.9	1044.1	1045.2	1046.4	1047.5	1048.6	1048.3
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



TEST NUMBER: P332643

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	48.7	49.3	51.1	52.3	51.1	49.3	48.7	47.0	41.9	38.9	36.5
90°	22.4	22.8	23.1	23.5	23.1	22.8	22.4	22.1	21.4	20.3	19.3
92.5°	21.4	21.4	21.5	21.6	21.5	21.4	21.4	21.3	20.7	19.7	18.7
95°	22.2	22.3	22.5	22.7	22.5	22.3	22.2	22.0	21.4	20.3	19.3
97.5°	21.4	21.5	21.7	21.9	21.7	21.5	21.4	21.2	21.1	21.0	20.9
100°	21.4	21.5	21.7	21.9	21.7	21.5	21.4	21.2	22.6	25.5	28.5
102.5°	22.4	22.4	22.5	22.5	22.5	22.4	22.4	22.4	38.3	70.2	102.0
105°	241.6	235.3	229.1	222.8	229.1	235.3	241.6	247.9	250.2	248.6	247.1
107.5°	308.6	309.2	309.9	310.6	309.9	309.2	308.6	307.9	307.2	306.4	305.7
110°	347.2	347.7	348.2	348.7	348.2	347.7	347.2	346.6	346.2	345.9	345.5



TEST NUMBER: P332643

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	384.9	385.6	386.2	386.9	386.2	385.6	384.9	384.2	383.9	384.0	384.1
115°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.4	442.0	441.7
117.5°	499.4	499.3	499.2	499.2	499.2	499.3	499.4	499.4	499.5	499.6	499.6
120°	535.9	535.5	535.2	534.8	535.2	535.5	535.9	536.2	536.2	535.9	535.5
122.5°	570.9	570.5	570.2	569.8	570.2	570.5	570.9	571.2	571.3	571.1	570.9
125°	621.9	622.0	622.2	622.4	622.2	622.0	621.9	621.7	621.3	620.8	620.3
127.5°	668.9	668.8	668.7	668.5	668.7	668.8	668.9	669.1	669.2	669.3	669.4
130°	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.8	699.7	699.5	699.4
132.5°	729.0	728.8	728.7	728.6	728.7	728.8	729.0	729.1	729.1	728.9	728.8
135°	770.7	771.0	771.4	771.7	771.4	771.0	770.7	770.3	770.0	769.6	769.3
137.5°	808.9	808.8	808.7	808.6	808.7	808.8	808.9	809.0	808.9	808.5	808.1
140°	833.8	833.9	834.1	834.3	834.1	833.9	833.8	833.6	833.2	832.7	832.2
142.5°	855.4	855.5	855.5	855.5	855.5	855.5	855.4	855.4	855.2	854.8	854.4
145°	887.2	887.5	887.9	888.2	887.9	887.5	887.2	886.8	886.6	886.4	886.2
147.5°	914.8	914.9	915.1	915.3	915.1	914.9	914.8	914.6	914.4	914.3	914.2
150°	932.3	932.4	932.6	932.8	932.6	932.4	932.3	932.1	932.0	932.0	932.0
152.5°	948.1	948.0	947.9	947.8	947.9	948.0	948.1	948.2	948.1	947.9	947.6
155°	969.5	969.0	968.5	968.0	968.5	969.0	969.5	970.1	970.0	969.3	968.6
157.5°	987.6	986.7	985.8	984.9	985.8	986.7	987.6	988.5	988.5	987.6	986.7
160°	999.3	998.2	997.2	996.1	997.2	998.2	999.3	1000.3	1000.3	999.3	998.2
162.5°	1008.4	1007.2	1006.1	1004.9	1006.1	1007.2	1008.4	1009.6	1009.7	1008.6	1007.6
165°	1021.9	1020.4	1018.8	1017.2	1018.8	1020.4	1021.9	1023.5	1023.6	1022.2	1020.8
167.5°	1031.7	1029.9	1028.2	1026.5	1028.2	1029.9	1031.7	1033.4	1033.5	1032.0	1030.5
170°	1037.3	1035.6	1033.8	1032.1	1033.8	1035.6	1037.3	1039.0	1039.2	1037.8	1036.4
172.5°	1040.9	1039.0	1037.1	1035.2	1037.1	1039.0	1040.9	1042.7	1043.0	1041.6	1040.2
175°	1045.4	1043.3	1041.2	1039.1	1041.2	1043.3	1045.4	1047.5	1047.7	1046.2	1044.6
177.5°	1046.6	1045.0	1043.3	1041.6	1043.3	1045.0	1046.6	1048.3	1048.6	1047.5	1046.4
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	30.2	28.9	25.8	23.9	22.5	20.0	19.7	17.7	16.7	15.8	14.8
90°	18.2	17.2	15.8	14.4	13.0	11.6	10.0	8.1	6.2	4.3	2.3
92.5°	17.6	16.6	15.2	13.8	12.4	11.0	10.3	10.2	10.1	10.0	9.9
95°	18.2	17.2	17.0	16.9	16.7	16.5	19.4	25.3	31.2	37.1	43.0
97.5°	20.7	20.6	40.0	59.4	78.8	98.2	106.1	102.4	98.7	95.0	91.3
100°	31.4	34.4	58.4	82.4	106.3	130.3	140.7	137.6	134.5	131.4	128.2
102.5°	133.9	165.8	168.9	172.0	175.1	178.3	178.7	176.4	174.1	171.8	169.5
105°	245.5	243.9	243.1	242.2	241.3	240.5	239.5	238.5	237.4	236.4	235.3
107.5°	304.9	304.2	303.0	301.8	300.6	299.4	298.6	298.1	297.5	297.0	296.5
110°	345.2	344.8	343.8	342.7	341.7	340.6	339.9	339.3	338.8	338.3	337.8



TEST NUMBER: P332643

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	384.2	384.2	383.7	383.2	382.8	382.3	381.6	380.6	379.7	378.7	377.8
115°	441.3	441.0	441.2	441.3	441.5	441.7	441.5	441.0	440.5	439.9	439.4
117.5°	499.7	499.8	499.4	499.0	498.6	498.3	497.7	497.0	496.3	495.6	494.9
120°	535.2	534.8	535.0	535.2	535.3	535.5	535.2	534.6	533.9	533.2	532.5
122.5°	570.7	570.5	570.2	570.0	569.7	569.5	569.2	568.7	568.3	567.9	567.5
125°	619.8	619.3	619.6	620.0	620.3	620.6	620.5	619.8	619.1	618.4	617.7
127.5°	669.5	669.6	668.8	668.0	667.2	666.4	665.9	665.8	665.6	665.4	665.2
130°	699.2	699.0	698.5	698.0	697.4	696.9	696.6	696.4	696.2	696.1	695.9
132.5°	728.6	728.4	727.7	727.1	726.4	725.8	725.3	725.0	724.7	724.3	724.0
135°	768.9	768.6	767.9	767.2	766.5	765.8	765.6	765.7	765.9	766.1	766.3
137.5°	807.8	807.4	806.6	805.9	805.1	804.3	803.9	803.8	803.8	803.7	803.6
140°	831.7	831.1	830.8	830.5	830.1	829.8	829.4	829.1	828.7	828.4	828.0
142.5°	854.1	853.7	853.5	853.3	853.0	852.8	852.4	851.8	851.2	850.5	849.9
145°	886.1	885.9	885.9	885.9	885.9	885.9	885.6	885.1	884.6	884.1	883.5
147.5°	914.0	913.9	914.0	914.2	914.4	914.6	914.2	913.2	912.2	911.3	910.3
150°	932.0	932.0	932.2	932.4	932.5	932.7	932.4	931.8	931.1	930.4	929.7
152.5°	947.3	947.0	947.3	947.7	948.0	948.3	948.2	947.6	947.0	946.5	945.9
155°	967.9	967.2	967.7	968.2	968.8	969.3	969.5	969.3	969.1	968.9	968.8
157.5°	985.8	984.9	985.5	986.1	986.6	987.2	987.6	987.7	987.8	987.9	988.0
160°	997.2	996.1	996.3	996.5	996.7	996.8	997.2	997.7	998.2	998.7	999.3
162.5°	1006.6	1005.5	1005.7	1005.9	1006.0	1006.2	1006.6	1007.3	1007.9	1008.6	1009.3
165°	1019.4	1018.0	1018.0	1018.0	1018.0	1018.0	1018.5	1019.3	1020.2	1021.1	1021.9
167.5°	1028.9	1027.4	1027.5	1027.6	1027.7	1027.8	1028.3	1029.2	1030.1	1031.0	1031.9
170°	1035.0	1033.7	1033.5	1033.3	1033.1	1033.0	1033.4	1034.4	1035.5	1036.5	1037.6
172.5°	1038.8	1037.4	1037.2	1037.1	1036.9	1036.7	1037.2	1038.2	1039.2	1040.3	1041.3
175°	1043.0	1041.5	1041.3	1041.1	1041.0	1040.8	1041.2	1042.3	1043.3	1044.3	1045.4
177.5°	1045.2	1044.1	1043.9	1043.6	1043.3	1043.0	1043.4	1044.3	1045.3	1046.3	1047.3
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



TEST NUMBER: P332643

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	15.8	16.7	18.8	20.8	23.3	24.2	23.9	24.2	22.2	21.9	19.9
90°	4.3	6.2	8.1	10.0	11.6	13.0	14.4	15.8	17.2	18.2	19.3
92.5°	10.0	10.1	10.2	10.3	11.0	12.4	13.8	15.2	16.6	17.6	18.7
95°	37.1	31.2	25.3	19.4	16.5	16.7	16.9	17.0	17.2	18.2	19.3
97.5°	95.0	98.7	102.4	106.1	98.2	78.8	59.4	40.0	20.6	20.7	20.9
100°	131.4	134.5	137.6	140.7	130.3	106.3	82.4	58.4	34.4	31.4	28.5
102.5°	171.8	174.1	176.4	178.7	178.3	175.1	172.0	168.9	165.8	133.9	102.0
105°	236.4	237.4	238.5	239.5	240.5	241.3	242.2	243.1	243.9	245.5	247.1
107.5°	297.0	297.5	298.1	298.6	299.4	300.6	301.8	303.0	304.2	304.9	305.7
110°	338.3	338.8	339.3	339.9	340.6	341.7	342.7	343.8	344.8	345.2	345.5





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	378.7	379.7	380.6	381.6	382.3	382.8	383.2	383.7	384.2	384.2	384.1
115°	439.9	440.5	441.0	441.5	441.7	441.5	441.3	441.2	441.0	441.3	441.7
117.5°	495.6	496.3	497.0	497.7	498.3	498.6	499.0	499.4	499.8	499.7	499.6
120°	533.2	533.9	534.6	535.2	535.5	535.3	535.2	535.0	534.8	535.2	535.5
122.5°	567.9	568.3	568.7	569.2	569.5	569.7	570.0	570.2	570.5	570.7	570.9
125°	618.4	619.1	619.8	620.5	620.6	620.3	620.0	619.6	619.3	619.8	620.3
127.5°	665.4	665.6	665.8	665.9	666.4	667.2	668.0	668.8	669.6	669.5	669.4
130°	696.1	696.2	696.4	696.6	696.9	697.4	698.0	698.5	699.0	699.2	699.4
132.5°	724.3	724.7	725.0	725.3	725.8	726.4	727.1	727.7	728.4	728.6	728.8
135°	766.1	765.9	765.7	765.6	765.8	766.5	767.2	767.9	768.6	768.9	769.3
137.5°	803.7	803.8	803.8	803.9	804.3	805.1	805.9	806.6	807.4	807.8	808.1
140°	828.4	828.7	829.1	829.4	829.8	830.1	830.5	830.8	831.1	831.7	832.2
142.5°	850.5	851.2	851.8	852.4	852.8	853.0	853.3	853.5	853.7	854.1	854.4
145°	884.1	884.6	885.1	885.6	885.9	885.9	885.9	885.9	885.9	886.1	886.2
147.5°	911.3	912.2	913.2	914.2	914.6	914.4	914.2	914.0	913.9	914.0	914.2
150°	930.4	931.1	931.8	932.4	932.7	932.5	932.4	932.2	932.0	932.0	932.0
152.5°	946.5	947.0	947.6	948.2	948.3	948.0	947.7	947.3	947.0	947.3	947.6
155°	968.9	969.1	969.3	969.5	969.3	968.8	968.2	967.7	967.2	967.9	968.6
157.5°	987.9	987.8	987.7	987.6	987.2	986.6	986.1	985.5	984.9	985.8	986.7
160°	998.7	998.2	997.7	997.2	996.8	996.7	996.5	996.3	996.1	997.2	998.2
162.5°	1008.6	1007.9	1007.3	1006.6	1006.2	1006.0	1005.9	1005.7	1005.5	1006.6	1007.6
165°	1021.1	1020.2	1019.3	1018.5	1018.0	1018.0	1018.0	1018.0	1018.0	1019.4	1020.8
167.5°	1031.0	1030.1	1029.2	1028.3	1027.8	1027.7	1027.6	1027.5	1027.4	1028.9	1030.5
170°	1036.5	1035.5	1034.4	1033.4	1033.0	1033.1	1033.3	1033.5	1033.7	1035.0	1036.4
172.5°	1040.3	1039.2	1038.2	1037.2	1036.7	1036.9	1037.1	1037.2	1037.4	1038.8	1040.2
175°	1044.3	1043.3	1042.3	1041.2	1040.8	1041.0	1041.1	1041.3	1041.5	1043.0	1044.6
177.5°	1046.3	1045.3	1044.3	1043.4	1043.0	1043.3	1043.6	1043.9	1044.1	1045.2	1046.4
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	20.7	20.3	19.9	18.9	18.4	18.4	16.9
90°	20.3	21.4	22.1	22.4	22.8	23.1	23.5
92.5°	19.7	20.7	21.3	21.4	21.4	21.5	21.6
95°	20.3	21.4	22.0	22.2	22.3	22.5	22.7
97.5°	21.0	21.1	21.2	21.4	21.5	21.7	21.9
100°	25.5	22.6	21.2	21.4	21.5	21.7	21.9
102.5°	70.2	38.3	22.4	22.4	22.4	22.5	22.5
105°	248.6	250.2	247.9	241.6	235.3	229.1	222.8
107.5°	306.4	307.2	307.9	308.6	309.2	309.9	310.6
110°	345.9	346.2	346.6	347.2	347.7	348.2	348.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	384.0	383.9	384.2	384.9	385.6	386.2	386.9
115°	442.0	442.4	442.6	442.6	442.6	442.6	442.6
117.5°	499.6	499.5	499.4	499.4	499.3	499.2	499.2
120°	535.9	536.2	536.2	535.9	535.5	535.2	534.8
122.5°	571.1	571.3	571.2	570.9	570.5	570.2	569.8
125°	620.8	621.3	621.7	621.9	622.0	622.2	622.4
127.5°	669.3	669.2	669.1	668.9	668.8	668.7	668.5
130°	699.5	699.7	699.8	699.8	699.8	699.8	699.8
132.5°	728.9	729.1	729.1	729.0	728.8	728.7	728.6
135°	769.6	770.0	770.3	770.7	771.0	771.4	771.7
137.5°	808.5	808.9	809.0	808.9	808.8	808.7	808.6
140°	832.7	833.2	833.6	833.8	833.9	834.1	834.3
142.5°	854.8	855.2	855.4	855.4	855.5	855.5	855.5
145°	886.4	886.6	886.8	887.2	887.5	887.9	888.2
147.5°	914.3	914.4	914.6	914.8	914.9	915.1	915.3
150°	932.0	932.0	932.1	932.3	932.4	932.6	932.8
152.5°	947.9	948.1	948.2	948.1	948.0	947.9	947.8
155°	969.3	970.0	970.1	969.5	969.0	968.5	968.0
157.5°	987.6	988.5	988.5	987.6	986.7	985.8	984.9
160°	999.3	1000.3	1000.3	999.3	998.2	997.2	996.1
162.5°	1008.6	1009.7	1009.6	1008.4	1007.2	1006.1	1004.9
165°	1022.2	1023.6	1023.5	1021.9	1020.4	1018.8	1017.2
167.5°	1032.0	1033.5	1033.4	1031.7	1029.9	1028.2	1026.5
170°	1037.8	1039.2	1039.0	1037.3	1035.6	1033.8	1032.1
172.5°	1041.6	1043.0	1042.7	1040.9	1039.0	1037.1	1035.2
175°	1046.2	1047.7	1047.5	1045.4	1043.3	1041.2	1039.1
177.5°	1047.5	1048.6	1048.3	1046.6	1045.0	1043.3	1041.6
180°	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4	1045.4

(END OF REPORT)