

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: P332083-830

Luminaire Tested: **S123DIP-S1165D1195U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332083-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S1165D1195U830-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8688.8 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

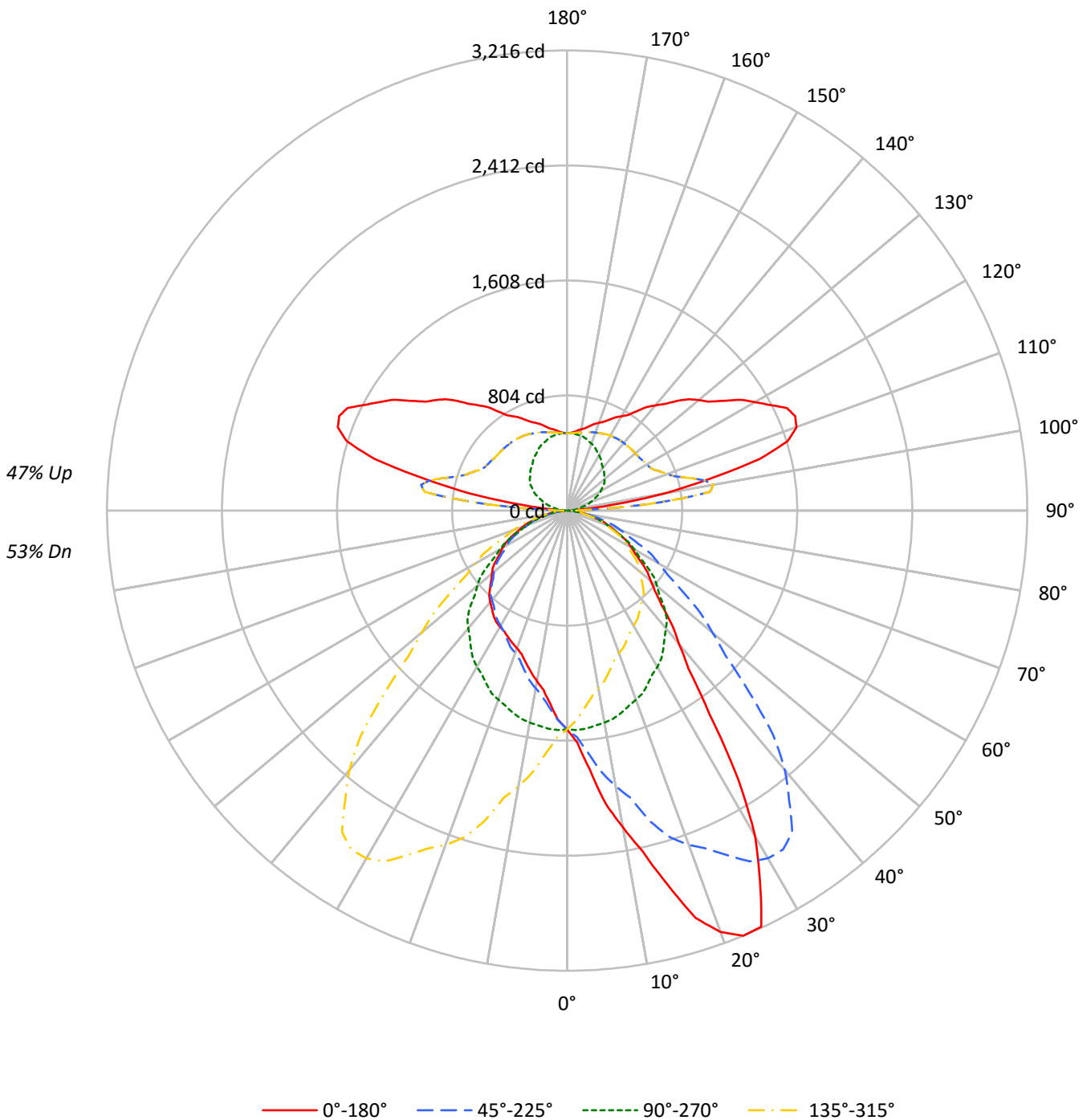
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53				53
1	99	95	91	87	91	88	84	82	75	73	71	63	62	60	53	51	50				45	
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43				38	
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37				33	
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32				28	
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	30	28				25	
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	31	27	25				22	
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	25	22				19	
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20				17	
9	51	39	31	26	47	37	30	25	32	27	23	28	23	20	24	20	18				16	
10	48	36	29	24	44	34	27	23	29	24	20	26	21	18	22	19	16				14	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16457	16457	16457	16457
5°	19626	16528	14647	16528
10°	24565	16444	13230	16444
15°	30130	16312	12316	16312
20°	35892	16105	11726	16105
25°	38112	15853	11595	15853
30°	32666	15669	11656	15669
35°	22718	15408	11779	15408
40°	17113	15104	11741	15104
45°	14209	14647	11592	14647
50°	12728	13720	11488	13720
55°	11898	12720	11344	12720
60°	11162	11672	11227	11672
65°	10491	10641	10868	10641
70°	9838	9467	10351	9467
75°	8813	8289	9491	8289
80°	7711	6794	8176	6794
85°	6039	4940	5496	4940



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	1.7
10°-20°	482.9	5.6
20°-30°	810.5	9.3
30°-40°	917.8	10.6
40°-50°	823.0	9.5
50°-60°	664.2	7.6
60°-70°	462.8	5.3
70°-80°	243.3	2.8
80°-90°	63.7	0.7
90°-100°	301.1	3.5
100°-110°	852.5	9.8
110°-120°	838.6	9.7
120°-130°	668.9	7.7
130°-140°	527.4	6.1
140°-150°	393.6	4.5
150°-160°	274.4	3.2
160°-170°	161.2	1.9
170°-180°	52.4	0.6
0°-30°	1444.1	16.6
0°-40°	2361.9	27.2
0°-60°	3849.1	44.3
0°-90°	4618.8	53.2
90°-120°	1992.1	22.9
90°-150°	3582.0	41.2
90°-180°	4070.0	46.8
0°-180°	8688.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1529	1529	1529	1529	1529	
5°	1816	1530	1356	1530	1816	188
15°	2704	1464	1105	1464	2704	781
25°	3209	1335	976	1335	3209	1407
35°	1729	1173	896	1173	1729	1123
45°	933	962	762	962	933	739
55°	634	678	604	678	634	569
65°	412	418	427	418	412	410
75°	212	199	228	199	212	227
85°	49	40	44	40	49	59
90°	32	2	32	2	32	19
95°	127	37	127	37	127	229
105°	1393	127	1393	127	1393	1374
115°	1694	224	1694	224	1694	1646
125°	1336	312	1336	312	1336	1211
135°	1083	366	1083	366	1083	840
145°	846	417	846	417	846	538
155°	702	474	702	474	702	327
165°	612	518	612	518	612	175
175°	551	540	551	540	551	54
180°	541	541	541	541	541	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1622.6	1621.4	1618.4	1620.8	1616.1	1609.5	1608.9	1603.0	1585.8	1584.6	1579.9
5°	1816.4	1810.4	1809.7	1808.9	1798.6	1784.5	1757.8	1755.6	1720.0	1702.2	1680.8
7.5°	2067.3	2070.4	2059.6	2050.1	2018.5	1997.5	1969.0	1932.4	1888.7	1844.4	1814.9
10°	2247.5	2271.9	2241.6	2220.8	2201.6	2165.2	2123.1	2070.4	2017.8	1956.3	1909.7
12.5°	2440.7	2452.7	2446.6	2427.0	2397.1	2341.8	2267.0	2209.1	2160.7	2058.3	2016.9
15°	2703.8	2749.0	2720.1	2653.4	2654.9	2602.3	2504.5	2397.1	2340.1	2250.4	2128.3
17.5°	2984.1	2989.7	2977.4	2921.9	2884.8	2812.5	2722.3	2619.3	2503.8	2395.4	2265.7
20°	3133.4	3129.0	3103.0	3074.2	3010.5	2954.2	2855.6	2740.8	2592.7	2486.1	2344.5
22.5°	3216.4	3209.0	3196.7	3172.5	3119.5	3059.0	2970.6	2845.2	2704.1	2557.1	2393.7
25°	3209.0	3218.6	3220.1	3213.4	3194.9	3158.6	3089.0	2989.0	2848.3	2659.4	2489.0
27.5°	2918.6	2932.2	2971.8	3006.9	3046.2	3086.2	3080.8	3031.2	2927.1	2763.9	2555.6
30°	2628.2	2598.6	2671.9	2764.6	2827.5	2938.6	3000.9	3004.5	2946.0	2806.0	2603.0
32.5°	2225.2	2257.9	2290.3	2404.2	2541.8	2666.6	2790.5	2890.2	2901.6	2808.4	2630.9
35°	1728.9	1769.7	1828.9	1888.2	2036.4	2163.8	2381.5	2571.2	2722.3	2742.3	2633.4
37.5°	1393.3	1413.3	1450.9	1510.2	1607.1	1758.3	1926.7	2166.4	2385.4	2548.3	2555.3
40°	1217.9	1223.7	1265.9	1311.2	1389.7	1514.1	1665.9	1877.8	2140.0	2367.5	2462.3
42.5°	1086.3	1099.3	1117.2	1160.6	1223.1	1316.8	1458.0	1633.0	1873.4	2135.1	2320.6
45°	933.4	948.2	959.3	988.2	1032.6	1095.6	1194.1	1354.2	1537.1	1807.4	2057.1
47.5°	832.4	833.5	841.8	863.6	893.8	941.0	1010.7	1113.5	1281.5	1500.8	1757.1
50°	760.1	771.8	774.9	791.8	815.6	850.4	908.1	995.6	1133.4	1326.0	1561.5
52.5°	709.1	712.7	721.0	733.2	753.9	781.1	831.1	899.6	1007.8	1171.9	1388.5
55°	634.0	634.0	642.2	651.9	663.7	688.2	721.5	771.8	854.1	981.5	1160.7
57.5°	564.8	568.4	574.2	577.2	587.3	603.4	631.3	669.5	730.8	828.9	971.5
60°	518.5	525.2	524.4	530.4	539.3	551.9	575.6	606.7	661.5	740.0	860.1
62.5°	478.2	477.8	477.7	484.7	493.6	505.7	521.0	548.0	594.6	664.2	766.4
65°	411.9	410.4	415.6	420.0	423.0	431.9	443.7	467.4	498.5	550.4	629.6
67.5°	352.9	348.6	351.4	352.9	358.0	364.9	376.0	390.7	415.4	457.0	516.8
70°	312.6	308.9	308.1	309.6	314.1	319.2	327.4	341.5	364.5	397.8	441.5
72.5°	271.1	268.6	268.4	271.7	273.8	277.2	283.0	295.9	314.1	339.1	379.8
75°	211.9	211.9	211.9	212.6	214.8	217.8	222.3	228.8	243.0	260.7	288.1
77.5°	158.8	158.6	157.8	157.6	160.9	162.2	163.2	169.5	177.3	189.4	209.3
80°	124.4	120.7	122.2	124.4	125.9	126.7	128.9	130.4	137.0	143.7	157.8
82.5°	92.5	89.4	89.6	93.0	93.3	94.1	96.3	98.4	100.9	107.0	114.5
85°	48.9	48.9	49.7	49.7	50.3	49.7	51.8	52.6	52.6	56.3	60.7
87.5°	24.1	23.2	23.6	23.9	23.6	23.7	24.0	24.4	24.8	25.6	25.5
90°	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3	26.3	27.3	24.1
92.5°	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2	127.1	168.4	185.3
95°	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3	526.7	649.4	578.2
97.5°	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7	1076.7	1006.4	736.8
100°	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1	1252.8	1037.1	700.9
102.5°	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6	1261.5	980.1	648.3
105°	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6	1194.8	880.4	583.7
107.5°	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3	1077.8	792.4	542.5
110°	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0	1004.2	742.4	526.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5	940.3	709.2	518.0
115°	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5	862.9	673.4	514.7
117.5°	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3	816.2	652.4	516.7
120°	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1	791.7	642.8	520.2
122.5°	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7	771.6	636.7	526.3
125°	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6	745.7	628.6	535.5
127.5°	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9	723.0	624.6	546.0
130°	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3	710.7	622.0	553.0
132.5°	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4	699.4	621.1	558.3
135°	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8	684.5	619.8	566.2
137.5°	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8	671.5	617.4	571.5
140°	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1	663.6	616.5	575.0
142.5°	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2	656.6	614.8	577.6
145°	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2	647.2	612.2	579.3
147.5°	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6	638.0	608.0	579.3
150°	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0	631.9	604.5	579.3
152.5°	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4	624.9	600.1	576.6
155°	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9	614.3	592.5	573.8
157.5°	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6	602.5	585.7	570.1
160°	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9	594.7	580.4	568.4
162.5°	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3	586.7	575.1	564.9
165°	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8	576.0	567.2	559.6
167.5°	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0	565.7	559.4	554.3
170°	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1	559.6	554.1	550.8
172.5°	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1	553.5	549.7	548.2
175°	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7	546.5	544.2	544.2
177.5°	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7	541.9	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1576.3	1571.6	1566.9	1558.6	1551.4	1541.3	1538.4	1534.8	1524.2	1514.8	1507.6
5°	1672.6	1654.8	1628.9	1605.2	1586.0	1560.1	1545.2	1529.7	1507.4	1487.4	1471.1
7.5°	1773.4	1738.4	1698.1	1654.5	1614.0	1574.9	1543.3	1515.1	1484.0	1454.5	1431.6
10°	1853.4	1803.0	1746.7	1686.0	1634.1	1583.8	1541.5	1504.5	1464.5	1429.6	1400.8
12.5°	1944.7	1870.0	1792.3	1718.5	1657.3	1587.3	1536.2	1489.1	1443.8	1401.8	1369.4
15°	2052.7	1957.8	1866.0	1764.5	1671.1	1583.8	1523.1	1463.8	1411.2	1368.2	1326.7
17.5°	2151.1	2043.6	1922.6	1799.1	1686.6	1582.9	1497.8	1430.9	1365.1	1312.5	1271.1
20°	2206.8	2084.5	1947.5	1819.3	1694.9	1579.3	1486.0	1406.0	1334.8	1279.3	1232.7
22.5°	2254.8	2111.8	1970.0	1833.0	1694.3	1569.8	1464.1	1381.7	1304.7	1250.3	1200.6
25°	2304.5	2133.4	1991.2	1830.4	1675.7	1546.7	1428.2	1334.8	1257.8	1194.1	1143.0
27.5°	2347.2	2131.9	1963.1	1790.3	1646.2	1517.1	1390.5	1290.4	1208.6	1139.4	1087.6
30°	2375.6	2134.9	1934.1	1763.0	1617.9	1484.5	1361.5	1260.7	1174.9	1104.5	1055.6
32.5°	2393.4	2133.1	1907.4	1725.1	1572.8	1454.8	1330.1	1225.8	1137.6	1068.4	1021.2
35°	2403.8	2120.1	1861.5	1646.7	1500.1	1385.3	1280.8	1172.6	1080.1	1015.6	962.2
37.5°	2383.0	2092.6	1808.2	1571.1	1410.6	1297.5	1209.7	1117.5	1028.9	958.0	912.0
40°	2350.4	2074.9	1766.7	1517.9	1349.0	1240.0	1165.3	1074.9	987.4	920.0	877.0
42.5°	2288.2	2038.7	1721.1	1458.6	1285.0	1176.0	1107.1	1031.6	949.0	885.6	842.7
45°	2136.4	1960.0	1652.7	1369.7	1190.4	1077.8	1017.1	962.2	887.4	826.0	788.9
47.5°	1925.7	1841.7	1553.7	1275.9	1091.7	983.4	920.3	876.2	821.5	771.8	736.3
50°	1779.3	1744.5	1486.7	1211.9	1026.0	920.0	859.3	819.3	780.0	730.4	697.8
52.5°	1610.4	1631.9	1408.5	1145.5	959.0	854.9	797.7	765.9	730.3	689.5	661.1
55°	1372.6	1450.4	1273.4	1034.1	859.3	760.1	706.0	677.8	657.0	626.7	602.3
57.5°	1150.0	1249.0	1127.3	919.3	761.4	675.7	623.9	593.2	579.9	564.0	544.8
60°	1017.9	1115.6	1023.0	842.3	695.6	614.1	568.2	542.2	528.9	517.8	501.5
62.5°	899.8	998.8	921.1	764.0	630.9	555.4	515.4	490.1	479.8	473.9	460.1
65°	737.8	823.0	771.1	642.2	538.6	471.8	435.5	417.8	408.1	406.0	397.1
67.5°	600.5	665.3	627.5	532.7	451.1	393.5	362.7	347.6	340.2	339.4	332.7
70°	510.4	571.1	542.2	456.3	386.0	340.7	314.1	300.8	296.3	295.6	291.9
72.5°	440.5	482.9	459.9	388.1	333.8	292.8	273.1	259.3	254.2	255.2	252.8
75°	325.9	357.8	344.5	294.8	251.1	224.4	208.1	199.3	194.8	197.1	194.1
77.5°	234.5	254.7	242.7	208.3	181.3	162.1	150.1	144.6	140.6	140.4	139.1
80°	177.0	188.9	182.2	161.5	139.3	123.0	113.3	109.6	107.4	106.7	105.9
82.5°	126.1	136.2	128.3	114.0	99.0	89.2	83.7	78.8	77.2	77.7	76.9
85°	63.7	67.4	64.5	55.5	49.7	45.1	42.2	40.0	38.5	39.3	37.8
87.5°	26.1	26.0	23.6	20.7	19.1	16.7	16.3	14.7	13.9	14.3	14.4
90°	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2	4.3	6.6	9.9
92.5°	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6	20.2	29.3	37.9
95°	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2	40.5	52.6	71.2
97.5°	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5	64.6	74.0	90.2
100°	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1	82.1	89.8	105.1
102.5°	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4	101.4	108.2	122.6
105°	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1	130.4	136.9	150.1
107.5°	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4	159.7	166.0	178.9
110°	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4	180.7	186.2	198.2



TEST NUMBER: P332083-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7	200.0	205.5	217.4
115°	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5	228.8	235.4	246.4
117.5°	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3	257.3	262.8	272.9
120°	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5	274.8	280.3	291.3
122.5°	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2	291.5	297.0	308.8
125°	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1	314.3	320.8	332.9
127.5°	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3	333.6	341.7	353.9
130°	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7	345.0	354.8	368.0
132.5°	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4	354.6	365.3	381.1
135°	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8	370.1	382.2	398.6
137.5°	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2	384.8	396.6	414.2
140°	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8	395.3	406.2	423.8
142.5°	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4	405.0	416.8	432.5
145°	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3	420.5	430.4	446.8
147.5°	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3	436.3	445.9	460.1
150°	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7	446.8	455.5	469.8
152.5°	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1	457.3	466.1	478.5
155°	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2	474.2	480.8	491.7
157.5°	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8	488.6	493.9	503.5
160°	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2	498.2	502.7	511.4
162.5°	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1	506.1	509.6	516.7
165°	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0	516.9	519.1	524.5
167.5°	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0	525.7	526.7	530.9
170°	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3	530.0	531.1	534.4
172.5°	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7	534.4	534.6	537.1
175°	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9	538.8	537.7	539.9
177.5°	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9	541.0	540.1	541.0
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332083-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1503.4	1499.3	1493.4	1484.5	1477.3	1466.1	1466.1	1467.9	1467.9	1467.4	1466.1
5°	1457.8	1446.7	1433.4	1417.9	1401.6	1385.3	1382.2	1376.3	1371.9	1368.9	1365.3
7.5°	1409.7	1390.0	1370.6	1348.8	1328.9	1312.5	1301.1	1291.6	1285.5	1279.0	1274.2
10°	1377.1	1352.6	1329.6	1306.7	1281.5	1261.5	1249.0	1240.0	1233.4	1227.5	1224.5
12.5°	1338.6	1310.6	1285.3	1263.5	1235.9	1215.3	1203.3	1199.1	1191.3	1178.8	1172.3
15°	1282.2	1256.3	1226.0	1192.6	1179.3	1154.1	1140.0	1133.4	1128.9	1119.3	1116.3
17.5°	1234.1	1200.1	1166.1	1141.2	1116.4	1096.0	1088.2	1079.9	1073.9	1066.1	1063.8
20°	1195.6	1165.3	1134.1	1107.5	1081.5	1059.3	1052.6	1046.7	1040.8	1037.1	1034.1
22.5°	1156.5	1126.1	1100.3	1075.4	1047.7	1033.2	1026.0	1019.5	1015.3	1012.8	1009.8
25°	1101.5	1074.9	1045.9	1023.7	1001.5	991.8	987.4	983.7	980.8	977.0	976.3
27.5°	1052.3	1023.3	999.8	979.1	963.2	955.2	950.8	949.0	949.7	951.0	951.9
30°	1015.6	988.9	969.7	951.9	937.1	929.6	928.9	928.9	931.9	932.6	934.1
32.5°	981.8	959.9	940.7	923.4	912.2	907.1	909.9	909.9	912.3	914.3	916.9
35°	932.6	913.3	898.5	883.7	874.1	876.3	877.8	879.3	883.0	887.4	890.4
37.5°	885.6	868.9	853.5	842.0	837.5	841.5	845.1	848.2	852.4	855.9	858.8
40°	851.9	839.2	824.4	814.1	815.6	817.8	820.8	824.4	828.2	830.4	833.4
42.5°	820.5	807.3	796.1	787.4	789.5	792.3	794.1	796.1	800.3	804.4	806.1
45°	772.6	762.2	751.9	746.7	748.2	749.7	751.1	753.4	757.1	760.1	760.7
47.5°	718.9	711.6	704.6	699.6	701.9	701.3	703.3	708.0	709.2	711.0	715.1
50°	684.5	677.8	669.7	668.2	668.2	668.2	668.9	674.9	674.9	677.8	680.8
52.5°	646.6	642.2	637.1	634.4	633.2	633.2	636.3	639.3	640.5	644.6	647.6
55°	590.4	586.0	581.5	579.3	577.8	579.3	585.2	586.6	590.4	592.6	594.8
57.5°	531.9	528.5	524.9	523.7	523.4	525.4	528.6	533.0	534.0	540.7	544.1
60°	493.3	488.1	485.2	485.2	483.7	490.4	488.9	496.3	497.8	502.3	507.5
62.5°	453.6	446.7	445.5	445.5	447.6	449.5	451.6	454.9	458.6	464.3	468.3
65°	389.6	386.0	391.2	390.4	388.9	393.3	393.3	397.1	401.5	406.7	414.8
67.5°	329.0	327.2	327.5	327.5	329.8	332.3	334.4	337.6	343.0	348.5	353.8
70°	288.1	290.4	286.7	289.6	291.9	292.6	294.1	298.5	304.4	308.1	314.1
72.5°	248.5	248.3	248.7	250.0	252.1	253.4	255.0	260.0	266.6	269.7	274.4
75°	191.1	190.4	192.6	192.6	196.3	197.7	199.3	201.5	207.5	211.9	215.6
77.5°	139.6	140.4	140.0	142.5	141.5	141.8	146.4	148.6	149.2	158.0	159.9
80°	105.2	106.7	107.4	108.1	108.9	107.4	112.6	114.8	114.8	120.0	123.7
82.5°	75.6	76.4	78.4	79.1	79.3	80.8	81.2	82.8	84.6	86.8	91.7
85°	37.8	40.0	40.7	40.0	40.7	39.3	41.5	42.2	43.0	43.0	43.0
87.5°	14.2	15.3	15.4	16.6	16.7	17.9	17.7	16.8	17.0	18.9	17.1
90°	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3	28.5	29.6	31.8
92.5°	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2	73.1	64.6	58.9
95°	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3	267.2	209.2	169.8
97.5°	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7	787.1	645.9	514.9
100°	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1	1202.4	1074.3	918.8
102.5°	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6	1390.7	1316.1	1217.5
105°	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6	1533.1	1554.0	1525.5
107.5°	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3	1515.1	1611.1	1650.1
110°	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0	1456.5	1594.5	1671.1



TEST NUMBER: P332083-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5	1379.4	1534.0	1632.6
115°	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5	1256.0	1417.0	1536.4
117.5°	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3	1151.8	1296.4	1417.5
120°	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1	1094.0	1225.4	1336.1
122.5°	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7	1047.5	1169.3	1272.1
125°	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6	990.0	1095.0	1182.7
127.5°	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9	939.3	1034.2	1113.9
130°	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3	907.9	996.6	1071.0
132.5°	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4	878.1	960.6	1031.6
135°	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8	835.6	906.7	969.1
137.5°	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8	794.6	855.9	910.0
140°	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1	770.9	823.5	870.6
142.5°	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2	748.2	793.7	834.7
145°	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2	718.4	753.5	785.1
147.5°	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6	696.3	724.5	747.1
150°	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0	682.2	705.2	726.0
152.5°	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4	669.1	689.5	706.8
155°	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9	650.4	666.9	680.0
157.5°	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6	632.4	645.0	655.3
160°	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9	620.9	631.9	639.5
162.5°	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3	608.7	618.7	625.5
165°	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8	591.4	599.0	604.5
167.5°	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0	578.0	582.4	586.4
170°	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1	568.4	572.7	575.0
172.5°	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1	560.4	564.0	565.2
175°	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7	549.7	552.0	552.0
177.5°	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7	543.6	544.5	544.5
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332083-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1462.0	1461.4	1465.6	1462.5	1465.6	1461.4	1462.0	1466.1	1467.4	1467.9	1467.9
5°	1360.7	1363.0	1355.6	1355.6	1355.6	1363.0	1360.7	1365.3	1368.9	1371.9	1376.3
7.5°	1270.7	1267.4	1267.7	1263.8	1267.7	1267.4	1270.7	1274.2	1279.0	1285.5	1291.6
10°	1215.6	1211.2	1209.7	1210.4	1209.7	1211.2	1215.6	1224.5	1227.5	1233.4	1240.0
12.5°	1170.0	1169.0	1159.3	1159.4	1159.3	1169.0	1170.0	1172.3	1178.8	1191.3	1199.1
15°	1116.3	1102.3	1100.8	1105.2	1100.8	1102.3	1116.3	1116.3	1119.3	1128.9	1133.4
17.5°	1062.5	1055.2	1055.6	1053.4	1055.6	1055.2	1062.5	1063.8	1066.1	1073.9	1079.9
20°	1034.1	1029.6	1028.9	1023.7	1028.9	1029.6	1034.1	1034.1	1037.1	1040.8	1046.7
22.5°	1008.0	1006.5	1007.0	1001.3	1007.0	1006.5	1008.0	1009.8	1012.8	1015.3	1019.5
25°	975.6	979.3	976.3	976.3	976.3	979.3	975.6	976.3	977.0	980.8	983.7
27.5°	953.7	953.5	952.1	952.1	952.1	953.5	953.7	951.9	951.0	949.7	949.0
30°	937.1	936.3	937.8	937.8	937.8	936.3	937.1	934.1	932.6	931.9	928.9
32.5°	920.5	921.5	921.8	922.4	921.8	921.5	920.5	916.9	914.3	912.3	909.9
35°	894.8	895.6	897.8	896.4	897.8	895.6	894.8	890.4	887.4	883.0	879.3
37.5°	860.2	863.6	862.8	864.0	862.8	863.6	860.2	858.8	855.9	852.4	848.2
40°	834.1	836.3	835.6	835.6	835.6	836.3	834.1	833.4	830.4	828.2	824.4
42.5°	807.5	809.1	807.1	806.0	807.1	809.1	807.5	806.1	804.4	800.3	796.1
45°	763.7	762.2	764.5	761.5	764.5	762.2	763.7	760.7	760.1	757.1	753.4
47.5°	714.8	716.3	716.9	719.2	716.9	716.3	714.8	715.1	711.0	709.2	708.0
50°	682.2	686.6	686.6	686.0	686.6	686.6	682.2	680.8	677.8	674.9	674.9
52.5°	650.3	652.3	655.3	655.2	655.3	652.3	650.3	647.6	644.6	640.5	639.3
55°	600.8	602.3	603.7	604.5	603.7	602.3	600.8	594.8	592.6	590.4	586.6
57.5°	549.5	548.9	552.4	553.5	552.4	548.9	549.5	544.1	540.7	534.0	533.0
60°	513.3	513.3	519.2	521.5	519.2	513.3	513.3	507.5	502.3	497.8	496.3
62.5°	474.9	477.2	483.1	480.0	483.1	477.2	474.9	468.3	464.3	458.6	454.9
65°	418.5	424.4	423.7	426.7	423.7	424.4	418.5	414.8	406.7	401.5	397.1
67.5°	359.7	363.4	368.7	369.2	368.7	363.4	359.7	353.8	348.5	343.0	337.6
70°	320.0	323.7	326.7	328.9	326.7	323.7	320.0	314.1	308.1	304.4	298.5
72.5°	281.5	283.4	290.5	287.4	290.5	283.4	281.5	274.4	269.7	266.6	260.0
75°	220.7	225.9	230.4	228.2	230.4	225.9	220.7	215.6	211.9	207.5	201.5
77.5°	163.2	168.4	170.5	168.6	170.5	168.4	163.2	159.9	158.0	149.2	148.6
80°	128.9	128.2	132.6	131.9	132.6	128.2	128.9	123.7	120.0	114.8	114.8
82.5°	94.5	93.8	95.9	96.3	95.9	93.8	94.5	91.7	86.8	84.6	82.8
85°	45.9	48.2	45.1	44.5	45.1	48.2	45.9	43.0	43.0	43.0	42.2
87.5°	16.8	17.1	16.7	15.8	16.7	17.1	16.8	17.1	18.9	17.0	16.8
90°	30.6	31.8	32.9	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3
92.5°	56.9	53.6	54.8	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2
95°	148.9	139.1	131.4	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3
97.5°	434.1	384.8	355.2	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7
100°	808.1	728.2	685.5	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1
102.5°	1131.4	1068.2	1032.5	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6
105°	1475.1	1433.5	1398.5	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6
107.5°	1651.0	1636.9	1625.1	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3
110°	1701.8	1710.5	1708.4	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1688.7	1715.8	1724.1	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5
115°	1618.5	1666.7	1688.7	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5
117.5°	1503.2	1558.3	1589.9	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3
120°	1422.5	1483.8	1510.1	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1
122.5°	1349.0	1404.1	1433.0	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7
125°	1252.8	1301.0	1328.3	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6
127.5°	1176.4	1217.5	1242.3	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9
130°	1129.1	1168.5	1191.5	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3
132.5°	1086.1	1125.5	1145.9	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4
135°	1022.8	1055.6	1075.3	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8
137.5°	955.2	988.4	1005.0	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8
140°	912.2	942.9	960.4	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1
142.5°	870.2	897.3	913.0	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2
145°	812.6	835.6	844.3	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2
147.5°	767.9	783.4	791.7	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6
150°	742.4	754.5	761.1	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0
152.5°	719.7	730.8	734.8	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4
155°	689.9	698.7	700.9	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9
157.5°	663.8	670.4	672.1	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6
160°	647.2	653.7	653.7	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9
162.5°	630.6	636.2	636.2	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3
165°	608.9	613.2	612.2	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8
167.5°	588.2	591.4	590.2	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0
170°	576.0	578.2	577.1	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1
172.5°	565.5	567.7	565.7	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1
175°	552.0	553.0	552.0	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7
177.5°	543.6	544.5	542.7	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332083-830

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1466.1	1466.1	1477.3	1484.5	1493.4	1499.3	1503.4	1507.6	1514.8	1524.2	1534.8
5°	1382.2	1385.3	1401.6	1417.9	1433.4	1446.7	1457.8	1471.1	1487.4	1507.4	1529.7
7.5°	1301.1	1312.5	1328.9	1348.8	1370.6	1390.0	1409.7	1431.6	1454.5	1484.0	1515.1
10°	1249.0	1261.5	1281.5	1306.7	1329.6	1352.6	1377.1	1400.8	1429.6	1464.5	1504.5
12.5°	1203.3	1215.3	1235.9	1263.5	1285.3	1310.6	1338.6	1369.4	1401.8	1443.8	1489.1
15°	1140.0	1154.1	1179.3	1192.6	1226.0	1256.3	1282.2	1326.7	1368.2	1411.2	1463.8
17.5°	1088.2	1096.0	1116.4	1141.2	1166.1	1200.1	1234.1	1271.1	1312.5	1365.1	1430.9
20°	1052.6	1059.3	1081.5	1107.5	1134.1	1165.3	1195.6	1232.7	1279.3	1334.8	1406.0
22.5°	1026.0	1033.2	1047.7	1075.4	1100.3	1126.1	1156.5	1200.6	1250.3	1304.7	1381.7
25°	987.4	991.8	1001.5	1023.7	1045.9	1074.9	1101.5	1143.0	1194.1	1257.8	1334.8
27.5°	950.8	955.2	963.2	979.1	999.8	1023.3	1052.3	1087.6	1139.4	1208.6	1290.4
30°	928.9	929.6	937.1	951.9	969.7	988.9	1015.6	1055.6	1104.5	1174.9	1260.7
32.5°	909.9	907.1	912.2	923.4	940.7	959.9	981.8	1021.2	1068.4	1137.6	1225.8
35°	877.8	876.3	874.1	883.7	898.5	913.3	932.6	962.2	1015.6	1080.1	1172.6
37.5°	845.1	841.5	837.5	842.0	853.5	868.9	885.6	912.0	958.0	1028.9	1117.5
40°	820.8	817.8	815.6	814.1	824.4	839.2	851.9	877.0	920.0	987.4	1074.9
42.5°	794.1	792.3	789.5	787.4	796.1	807.3	820.5	842.7	885.6	949.0	1031.6
45°	751.1	749.7	748.2	746.7	751.9	762.2	772.6	788.9	826.0	887.4	962.2
47.5°	703.3	701.3	701.9	699.6	704.6	711.6	718.9	736.3	771.8	821.5	876.2
50°	668.9	668.2	668.2	668.2	669.7	677.8	684.5	697.8	730.4	780.0	819.3
52.5°	636.3	633.2	633.2	634.4	637.1	642.2	646.6	661.1	689.5	730.3	765.9
55°	585.2	579.3	577.8	579.3	581.5	586.0	590.4	602.3	626.7	657.0	677.8
57.5°	528.6	525.4	523.4	523.7	524.9	528.5	531.9	544.8	564.0	579.9	593.2
60°	488.9	490.4	483.7	485.2	485.2	488.1	493.3	501.5	517.8	528.9	542.2
62.5°	451.6	449.5	447.6	445.5	445.5	446.7	453.6	460.1	473.9	479.8	490.1
65°	393.3	393.3	388.9	390.4	391.2	386.0	389.6	397.1	406.0	408.1	417.8
67.5°	334.4	332.3	329.8	327.5	327.5	327.2	329.0	332.7	339.4	340.2	347.6
70°	294.1	292.6	291.9	289.6	286.7	290.4	288.1	291.9	295.6	296.3	300.8
72.5°	255.0	253.4	252.1	250.0	248.7	248.3	248.5	252.8	255.2	254.2	259.3
75°	199.3	197.7	196.3	192.6	192.6	190.4	191.1	194.1	197.1	194.8	199.3
77.5°	146.4	141.8	141.5	142.5	140.0	140.4	139.6	139.1	140.4	140.6	144.6
80°	112.6	107.4	108.9	108.1	107.4	106.7	105.2	105.9	106.7	107.4	109.6
82.5°	81.2	80.8	79.3	79.1	78.4	76.4	75.6	76.9	77.7	77.2	78.8
85°	41.5	39.3	40.7	40.0	40.7	40.0	37.8	37.8	39.3	38.5	40.0
87.5°	17.7	17.9	16.7	16.6	15.4	15.3	14.2	14.4	14.3	13.9	14.7
90°	26.3	27.3	24.1	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2
92.5°	127.1	168.4	185.3	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6
95°	526.7	649.4	578.2	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2
97.5°	1076.7	1006.4	736.8	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5
100°	1252.8	1037.1	700.9	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1
102.5°	1261.5	980.1	648.3	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4
105°	1194.8	880.4	583.7	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1
107.5°	1077.8	792.4	542.5	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4
110°	1004.2	742.4	526.7	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4



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CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	940.3	709.2	518.0	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7
115°	862.9	673.4	514.7	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5
117.5°	816.2	652.4	516.7	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3
120°	791.7	642.8	520.2	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5
122.5°	771.6	636.7	526.3	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2
125°	745.7	628.6	535.5	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1
127.5°	723.0	624.6	546.0	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3
130°	710.7	622.0	553.0	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7
132.5°	699.4	621.1	558.3	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4
135°	684.5	619.8	566.2	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8
137.5°	671.5	617.4	571.5	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2
140°	663.6	616.5	575.0	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8
142.5°	656.6	614.8	577.6	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4
145°	647.2	612.2	579.3	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3
147.5°	638.0	608.0	579.3	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3
150°	631.9	604.5	579.3	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7
152.5°	624.9	600.1	576.6	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1
155°	614.3	592.5	573.8	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2
157.5°	602.5	585.7	570.1	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8
160°	594.7	580.4	568.4	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2
162.5°	586.7	575.1	564.9	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1
165°	576.0	567.2	559.6	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0
167.5°	565.7	559.4	554.3	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0
170°	559.6	554.1	550.8	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3
172.5°	553.5	549.7	548.2	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7
175°	546.5	544.2	544.2	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9
177.5°	541.9	541.0	541.9	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P332083-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1538.4	1541.3	1551.4	1558.6	1566.9	1571.6	1576.3	1579.9	1584.6	1585.8	1603.0
5°	1545.2	1560.1	1586.0	1605.2	1628.9	1654.8	1672.6	1680.8	1702.2	1720.0	1755.6
7.5°	1543.3	1574.9	1614.0	1654.5	1698.1	1738.4	1773.4	1814.9	1844.4	1888.7	1932.4
10°	1541.5	1583.8	1634.1	1686.0	1746.7	1803.0	1853.4	1909.7	1956.3	2017.8	2070.4
12.5°	1536.2	1587.3	1657.3	1718.5	1792.3	1870.0	1944.7	2016.9	2058.3	2160.7	2209.1
15°	1523.1	1583.8	1671.1	1764.5	1866.0	1957.8	2052.7	2128.3	2250.4	2340.1	2397.1
17.5°	1497.8	1582.9	1686.6	1799.1	1922.6	2043.6	2151.1	2265.7	2395.4	2503.8	2619.3
20°	1486.0	1579.3	1694.9	1819.3	1947.5	2084.5	2206.8	2344.5	2486.1	2592.7	2740.8
22.5°	1464.1	1569.8	1694.3	1833.0	1970.0	2111.8	2254.8	2393.7	2557.1	2704.1	2845.2
25°	1428.2	1546.7	1675.7	1830.4	1991.2	2133.4	2304.5	2489.0	2659.4	2848.3	2989.0
27.5°	1390.5	1517.1	1646.2	1790.3	1963.1	2131.9	2347.2	2555.6	2763.9	2927.1	3031.2
30°	1361.5	1484.5	1617.9	1763.0	1934.1	2134.9	2375.6	2603.0	2806.0	2946.0	3004.5
32.5°	1330.1	1454.8	1572.8	1725.1	1907.4	2133.1	2393.4	2630.9	2808.4	2901.6	2890.2
35°	1280.8	1385.3	1500.1	1646.7	1861.5	2120.1	2403.8	2633.4	2742.3	2722.3	2571.2
37.5°	1209.7	1297.5	1410.6	1571.1	1808.2	2092.6	2383.0	2555.3	2548.3	2385.4	2166.4
40°	1165.3	1240.0	1349.0	1517.9	1766.7	2074.9	2350.4	2462.3	2367.5	2140.0	1877.8
42.5°	1107.1	1176.0	1285.0	1458.6	1721.1	2038.7	2288.2	2320.6	2135.1	1873.4	1633.0
45°	1017.1	1077.8	1190.4	1369.7	1652.7	1960.0	2136.4	2057.1	1807.4	1537.1	1354.2
47.5°	920.3	983.4	1091.7	1275.9	1553.7	1841.7	1925.7	1757.1	1500.8	1281.5	1113.5
50°	859.3	920.0	1026.0	1211.9	1486.7	1744.5	1779.3	1561.5	1326.0	1133.4	995.6
52.5°	797.7	854.9	959.0	1145.5	1408.5	1631.9	1610.4	1388.5	1171.9	1007.8	899.6
55°	706.0	760.1	859.3	1034.1	1273.4	1450.4	1372.6	1160.7	981.5	854.1	771.8
57.5°	623.9	675.7	761.4	919.3	1127.3	1249.0	1150.0	971.5	828.9	730.8	669.5
60°	568.2	614.1	695.6	842.3	1023.0	1115.6	1017.9	860.1	740.0	661.5	606.7
62.5°	515.4	555.4	630.9	764.0	921.1	998.8	899.8	766.4	664.2	594.6	548.0
65°	435.5	471.8	538.6	642.2	771.1	823.0	737.8	629.6	550.4	498.5	467.4
67.5°	362.7	393.5	451.1	532.7	627.5	665.3	600.5	516.8	457.0	415.4	390.7
70°	314.1	340.7	386.0	456.3	542.2	571.1	510.4	441.5	397.8	364.5	341.5
72.5°	273.1	292.8	333.8	388.1	459.9	482.9	440.5	379.8	339.1	314.1	295.9
75°	208.1	224.4	251.1	294.8	344.5	357.8	325.9	288.1	260.7	243.0	228.8
77.5°	150.1	162.1	181.3	208.3	242.7	254.7	234.5	209.3	189.4	177.3	169.5
80°	113.3	123.0	139.3	161.5	182.2	188.9	177.0	157.8	143.7	137.0	130.4
82.5°	83.7	89.2	99.0	114.0	128.3	136.2	126.1	114.5	107.0	100.9	98.4
85°	42.2	45.1	49.7	55.5	64.5	67.4	63.7	60.7	56.3	52.6	52.6
87.5°	16.3	16.7	19.1	20.7	23.6	26.0	26.1	25.5	25.6	24.8	24.4
90°	4.3	6.6	9.9	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3
92.5°	20.2	29.3	37.9	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2
95°	40.5	52.6	71.2	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3
97.5°	64.6	74.0	90.2	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7
100°	82.1	89.8	105.1	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1
102.5°	101.4	108.2	122.6	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6
105°	130.4	136.9	150.1	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6
107.5°	159.7	166.0	178.9	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3
110°	180.7	186.2	198.2	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	205.5	217.4	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5
115°	228.8	235.4	246.4	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5
117.5°	257.3	262.8	272.9	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3
120°	274.8	280.3	291.3	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1
122.5°	291.5	297.0	308.8	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7
125°	314.3	320.8	332.9	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6
127.5°	333.6	341.7	353.9	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9
130°	345.0	354.8	368.0	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3
132.5°	354.6	365.3	381.1	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4
135°	370.1	382.2	398.6	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8
137.5°	384.8	396.6	414.2	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8
140°	395.3	406.2	423.8	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1
142.5°	405.0	416.8	432.5	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2
145°	420.5	430.4	446.8	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2
147.5°	436.3	445.9	460.1	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6
150°	446.8	455.5	469.8	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0
152.5°	457.3	466.1	478.5	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4
155°	474.2	480.8	491.7	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9
157.5°	488.6	493.9	503.5	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6
160°	498.2	502.7	511.4	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9
162.5°	506.1	509.6	516.7	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3
165°	516.9	519.1	524.5	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8
167.5°	525.7	526.7	530.9	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0
170°	530.0	531.1	534.4	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1
172.5°	534.4	534.6	537.1	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1
175°	538.8	537.7	539.9	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7
177.5°	541.0	540.1	541.0	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1608.9	1609.5	1616.1	1620.8	1618.4	1621.4	1622.6
5°	1757.8	1784.5	1798.6	1808.9	1809.7	1810.4	1816.4
7.5°	1969.0	1997.5	2018.5	2050.1	2059.6	2070.4	2067.3
10°	2123.1	2165.2	2201.6	2220.8	2241.6	2271.9	2247.5
12.5°	2267.0	2341.8	2397.1	2427.0	2446.6	2452.7	2440.7
15°	2504.5	2602.3	2654.9	2653.4	2720.1	2749.0	2703.8
17.5°	2722.3	2812.5	2884.8	2921.9	2977.4	2989.7	2984.1
20°	2855.6	2954.2	3010.5	3074.2	3103.0	3129.0	3133.4
22.5°	2970.6	3059.0	3119.5	3172.5	3196.7	3209.0	3216.4
25°	3089.0	3158.6	3194.9	3213.4	3220.1	3218.6	3209.0
27.5°	3080.8	3086.2	3046.2	3006.9	2971.8	2932.2	2918.6
30°	3000.9	2938.6	2827.5	2764.6	2671.9	2598.6	2628.2
32.5°	2790.5	2666.6	2541.8	2404.2	2290.3	2257.9	2225.2
35°	2381.5	2163.8	2036.4	1888.2	1828.9	1769.7	1728.9
37.5°	1926.7	1758.3	1607.1	1510.2	1450.9	1413.3	1393.3
40°	1665.9	1514.1	1389.7	1311.2	1265.9	1223.7	1217.9
42.5°	1458.0	1316.8	1223.1	1160.6	1117.2	1099.3	1086.3
45°	1194.1	1095.6	1032.6	988.2	959.3	948.2	933.4
47.5°	1010.7	941.0	893.8	863.6	841.8	833.5	832.4
50°	908.1	850.4	815.6	791.8	774.9	771.8	760.1
52.5°	831.1	781.1	753.9	733.2	721.0	712.7	709.1
55°	721.5	688.2	663.7	651.9	642.2	634.0	634.0
57.5°	631.3	603.4	587.3	577.2	574.2	568.4	564.8
60°	575.6	551.9	539.3	530.4	524.4	525.2	518.5
62.5°	521.0	505.7	493.6	484.7	477.7	477.8	478.2
65°	443.7	431.9	423.0	420.0	415.6	410.4	411.9
67.5°	376.0	364.9	358.0	352.9	351.4	348.6	352.9
70°	327.4	319.2	314.1	309.6	308.1	308.9	312.6
72.5°	283.0	277.2	273.8	271.7	268.4	268.6	271.1
75°	222.3	217.8	214.8	212.6	211.9	211.9	211.9
77.5°	163.2	162.2	160.9	157.6	157.8	158.6	158.8
80°	128.9	126.7	125.9	124.4	122.2	120.7	124.4
82.5°	96.3	94.1	93.3	93.0	89.6	89.4	92.5
85°	51.8	49.7	50.3	49.7	49.7	48.9	48.9
87.5°	24.0	23.7	23.6	23.9	23.6	23.2	24.1
90°	28.5	29.6	31.8	30.6	31.8	32.9	31.8
92.5°	73.1	64.6	58.9	56.9	53.6	54.8	52.8
95°	267.2	209.2	169.8	148.9	139.1	131.4	127.1
97.5°	787.1	645.9	514.9	434.1	384.8	355.2	345.8
100°	1202.4	1074.3	918.8	808.1	728.2	685.5	686.6
102.5°	1390.7	1316.1	1217.5	1131.4	1068.2	1032.5	1007.3
105°	1533.1	1554.0	1525.5	1475.1	1433.5	1398.5	1393.0
107.5°	1515.1	1611.1	1650.1	1651.0	1636.9	1625.1	1615.0
110°	1456.5	1594.5	1671.1	1701.8	1710.5	1708.4	1706.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1379.4	1534.0	1632.6	1688.7	1715.8	1724.1	1724.6
115°	1256.0	1417.0	1536.4	1618.5	1666.7	1688.7	1694.1
117.5°	1151.8	1296.4	1417.5	1503.2	1558.3	1589.9	1597.3
120°	1094.0	1225.4	1336.1	1422.5	1483.8	1510.1	1516.7
122.5°	1047.5	1169.3	1272.1	1349.0	1404.1	1433.0	1441.3
125°	990.0	1095.0	1182.7	1252.8	1301.0	1328.3	1336.1
127.5°	939.3	1034.2	1113.9	1176.4	1217.5	1242.3	1249.2
130°	907.9	996.6	1071.0	1129.1	1168.5	1191.5	1200.2
132.5°	878.1	960.6	1031.6	1086.1	1125.5	1145.9	1152.1
135°	835.6	906.7	969.1	1022.8	1055.6	1075.3	1083.1
137.5°	794.6	855.9	910.0	955.2	988.4	1005.0	1010.1
140°	770.9	823.5	870.6	912.2	942.9	960.4	959.3
142.5°	748.2	793.7	834.7	870.2	897.3	913.0	912.0
145°	718.4	753.5	785.1	812.6	835.6	844.3	846.5
147.5°	696.3	724.5	747.1	767.9	783.4	791.7	792.6
150°	682.2	705.2	726.0	742.4	754.5	761.1	761.1
152.5°	669.1	689.5	706.8	719.7	730.8	734.8	734.8
155°	650.4	666.9	680.0	689.9	698.7	700.9	701.9
157.5°	632.4	645.0	655.3	663.8	670.4	672.1	671.9
160°	620.9	631.9	639.5	647.2	653.7	653.7	652.7
162.5°	608.7	618.7	625.5	630.6	636.2	636.2	635.2
165°	591.4	599.0	604.5	608.9	613.2	612.2	612.2
167.5°	578.0	582.4	586.4	588.2	591.4	590.2	590.2
170°	568.4	572.7	575.0	576.0	578.2	577.1	577.1
172.5°	560.4	564.0	565.2	565.5	567.7	565.7	564.9
175°	549.7	552.0	552.0	552.0	553.0	552.0	550.8
177.5°	543.6	544.5	544.5	543.6	544.5	542.7	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0

(END OF REPORT)