

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

Luminaire Tested: **S123DIP-S1165D1195U835-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332083
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-S1165D1195U835-4F0-1E-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: 9218.5 lumens
Efficiency: N/A
Efficacy: 128.6 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

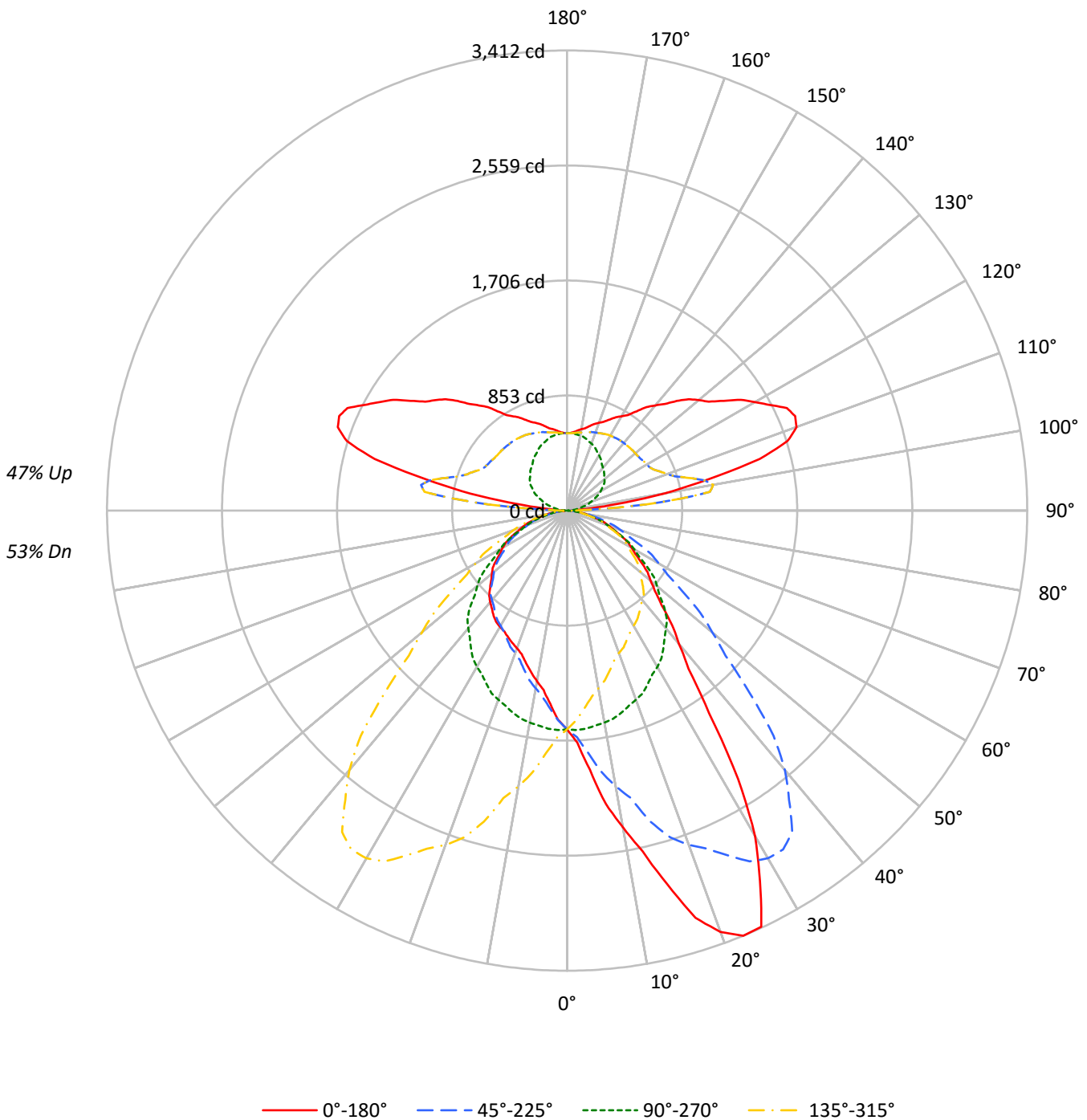
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	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°	17460	17460	17460	17460
5°	20822	17535	15540	17535
10°	26063	17446	14036	17446
15°	31967	17306	13067	17306
20°	38080	17087	12441	17087
25°	40435	16820	12302	16820
30°	34657	16625	12367	16625
35°	24103	16348	12496	16348
40°	18156	16024	12456	16024
45°	15075	15541	12298	15541
50°	13504	14555	12188	14555
55°	12624	13495	12035	13495
60°	11842	12385	11911	12385
65°	11130	11291	11530	11291
70°	10439	10043	10980	10043
75°	9349	8792	10069	8792
80°	8182	7209	8672	7209
85°	6410	5236	5829	5236



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	1.7
10°-20°	512.4	5.6
20°-30°	859.9	9.3
30°-40°	973.7	10.6
40°-50°	873.2	9.5
50°-60°	704.7	7.6
60°-70°	491.0	5.3
70°-80°	258.1	2.8
80°-90°	67.6	0.7
90°-100°	319.4	3.5
100°-110°	904.4	9.8
110°-120°	889.7	9.7
120°-130°	709.7	7.7
130°-140°	559.5	6.1
140°-150°	417.6	4.5
150°-160°	291.1	3.2
160°-170°	171.0	1.9
170°-180°	55.6	0.6
0°-30°	1532.1	16.6
0°-40°	2505.8	27.2
0°-60°	4083.7	44.3
0°-90°	4900.4	53.2
90°-120°	2113.6	22.9
90°-150°	3800.4	41.2
90°-180°	4318.0	46.8
0°-180°	9218.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1622	1622	1622	1622	1622	
5°	1927	1623	1438	1623	1927	200
15°	2869	1553	1173	1553	2869	828
25°	3405	1416	1036	1416	3405	1493
35°	1834	1244	951	1244	1834	1192
45°	990	1021	808	1021	990	784
55°	673	719	641	719	673	604
65°	437	443	453	443	437	435
75°	225	211	242	211	225	241
85°	52	42	47	42	52	62
90°	34	2	34	2	34	20
95°	135	40	135	40	135	243
105°	1478	135	1478	135	1478	1458
115°	1797	238	1797	238	1797	1746
125°	1418	331	1418	331	1418	1285
135°	1149	388	1149	388	1149	891
145°	898	443	898	443	898	571
155°	745	503	745	503	745	347
165°	650	550	650	550	650	186
175°	584	573	584	573	584	57
180°	574	574	574	574	574	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1721.5	1720.2	1717.1	1719.6	1714.6	1707.6	1707.0	1700.7	1682.5	1681.2	1676.2
5°	1927.1	1920.8	1920.0	1919.2	1908.2	1893.3	1865.0	1862.6	1824.9	1806.0	1783.3
7.5°	2193.3	2196.6	2185.2	2175.1	2141.5	2119.3	2089.0	2050.2	2003.8	1956.8	1925.5
10°	2384.5	2410.4	2378.2	2356.2	2335.8	2297.2	2252.5	2196.6	2140.8	2075.6	2026.1
12.5°	2589.5	2602.2	2595.7	2575.0	2543.2	2484.6	2405.2	2343.8	2292.4	2183.8	2139.9
15°	2868.6	2916.6	2885.9	2815.2	2816.7	2760.9	2657.2	2543.2	2482.7	2387.6	2258.0
17.5°	3166.0	3172.0	3158.9	3100.0	3060.7	2984.0	2888.3	2779.0	2656.4	2541.4	2403.8
20°	3324.4	3319.7	3292.2	3261.6	3194.0	3134.3	3029.7	2907.9	2750.7	2637.6	2487.4
22.5°	3412.5	3404.6	3391.6	3365.9	3309.7	3245.5	3151.7	3018.6	2868.9	2713.0	2539.6
25°	3404.6	3414.8	3416.4	3409.3	3389.7	3351.2	3277.3	3171.2	3021.9	2821.5	2640.7
27.5°	3096.5	3111.0	3153.0	3190.2	3231.9	3274.3	3268.6	3216.0	3105.5	2932.4	2711.4
30°	2788.4	2757.0	2834.8	2933.1	2999.9	3117.7	3183.8	3187.7	3125.6	2977.1	2761.7
32.5°	2360.9	2395.5	2429.9	2550.8	2696.8	2829.2	2960.6	3066.4	3078.5	2979.6	2791.3
35°	1834.3	1877.6	1940.4	2003.3	2160.5	2295.7	2526.7	2727.9	2888.3	2909.5	2793.9
37.5°	1478.2	1499.5	1539.3	1602.3	1705.1	1865.5	2044.2	2298.5	2530.8	2703.6	2711.1
40°	1292.1	1298.3	1343.1	1391.1	1474.4	1606.4	1767.5	1992.3	2270.5	2511.8	2612.4
42.5°	1152.5	1166.3	1185.3	1231.4	1297.7	1397.1	1546.9	1732.6	1987.6	2265.3	2462.1
45°	990.3	1006.0	1017.8	1048.4	1095.6	1162.4	1266.9	1436.7	1630.8	1917.6	2182.5
47.5°	883.1	884.3	893.1	916.2	948.3	998.4	1072.3	1181.4	1359.6	1592.3	1864.2
50°	806.4	818.9	822.1	840.1	865.3	902.2	963.5	1056.3	1202.5	1406.8	1656.7
52.5°	752.3	756.1	764.9	777.9	799.9	828.7	881.8	954.4	1069.2	1243.3	1473.1
55°	672.7	672.7	681.4	691.6	704.2	730.1	765.5	818.9	906.2	1041.3	1231.5
57.5°	599.2	603.1	609.2	612.4	623.1	640.2	669.8	710.3	775.4	879.4	1030.7
60°	550.1	557.2	556.4	562.7	572.2	585.5	610.7	643.7	701.8	785.1	912.5
62.5°	507.4	506.9	506.8	514.3	523.7	536.5	552.8	581.4	630.8	704.7	813.1
65°	437.0	435.4	440.9	445.6	448.8	458.2	470.8	495.9	528.9	583.9	668.0
67.5°	374.4	369.9	372.8	374.4	379.8	387.1	398.9	414.5	440.7	484.9	548.3
70°	331.7	327.7	326.9	328.5	333.2	338.7	347.4	362.3	386.7	422.0	468.4
72.5°	287.6	285.0	284.8	288.3	290.5	294.1	300.2	313.9	333.2	359.8	403.0
75°	224.8	224.8	224.8	225.6	227.9	231.1	235.8	242.8	257.8	276.6	305.7
77.5°	168.5	168.3	167.4	167.2	170.7	172.1	173.2	179.8	188.1	200.9	222.1
80°	132.0	128.1	129.7	132.0	133.6	134.4	136.8	138.3	145.4	152.5	167.4
82.5°	98.1	94.8	95.1	98.7	99.0	99.8	102.2	104.4	107.0	113.5	121.5
85°	51.9	51.9	52.7	52.7	53.4	52.7	55.0	55.8	55.8	59.7	64.4
87.5°	25.6	24.6	25.0	25.4	25.0	25.1	25.5	25.9	26.3	27.2	27.1
90°	33.7	34.9	33.7	32.5	33.7	31.4	30.2	29.0	27.9	29.0	25.6
92.5°	56.0	58.1	56.9	60.4	62.5	68.5	77.6	97.8	134.8	178.7	196.6
95°	134.8	139.4	147.6	158.0	180.1	221.9	283.5	418.3	558.8	689.0	613.5
97.5°	366.9	376.9	408.3	460.6	546.3	685.3	835.1	1042.6	1142.3	1067.7	781.7
100°	728.5	727.3	772.6	857.4	974.8	1139.8	1275.7	1369.8	1329.2	1100.3	743.6
102.5°	1068.7	1095.4	1133.3	1200.4	1291.7	1396.3	1475.5	1478.6	1338.4	1039.9	687.8
105°	1477.9	1483.7	1520.9	1565.0	1618.5	1648.7	1626.6	1510.4	1267.6	934.1	619.3
107.5°	1713.5	1724.2	1736.7	1751.6	1750.7	1709.3	1607.5	1418.8	1143.5	840.7	575.6
110°	1810.2	1812.5	1814.8	1805.5	1773.0	1691.7	1545.3	1331.5	1065.4	787.7	558.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1829.7	1829.2	1820.4	1791.6	1732.1	1627.5	1463.5	1245.0	997.6	752.4	549.6
115°	1797.4	1791.6	1768.3	1717.2	1630.1	1503.4	1332.6	1130.5	915.5	714.5	546.1
117.5°	1694.7	1686.8	1653.3	1594.8	1503.9	1375.4	1222.0	1047.5	866.0	692.2	548.2
120°	1609.2	1602.2	1574.3	1509.2	1417.5	1300.1	1160.7	1003.8	840.0	682.0	551.9
122.5°	1529.2	1520.4	1489.7	1431.2	1349.6	1240.6	1111.4	969.4	818.6	675.5	558.4
125°	1417.5	1409.3	1380.3	1329.2	1254.8	1161.8	1050.3	923.7	791.2	666.9	568.1
127.5°	1325.4	1318.0	1291.7	1248.1	1181.8	1097.2	996.6	883.7	767.1	662.7	579.3
130°	1273.4	1264.1	1239.7	1197.9	1136.3	1057.3	963.2	858.6	754.0	659.9	586.7
132.5°	1222.3	1215.8	1194.1	1152.3	1094.5	1019.2	931.6	835.4	742.0	659.0	592.3
135°	1149.1	1140.9	1120.0	1085.2	1028.2	962.0	886.5	804.0	726.2	657.6	600.7
137.5°	1071.7	1066.3	1048.7	1013.4	965.5	908.1	843.0	775.4	712.4	655.0	606.3
140°	1017.8	1018.9	1000.4	967.8	923.7	873.7	817.9	758.7	704.1	654.1	610.0
142.5°	967.6	968.7	952.0	923.2	885.6	842.1	793.8	742.9	696.6	652.3	612.8
145°	898.1	895.8	886.5	862.1	833.0	799.4	762.2	723.8	686.7	649.5	614.6
147.5°	840.9	840.0	831.2	814.7	792.6	768.7	738.7	708.3	676.9	645.1	614.6
150°	807.5	807.5	800.5	787.7	770.3	748.2	723.8	697.1	670.4	641.3	614.6
152.5°	779.6	779.6	775.4	763.6	749.9	731.5	709.9	686.9	663.0	636.7	611.8
155°	744.7	743.6	741.3	732.0	721.5	707.6	690.1	671.5	651.8	628.6	608.8
157.5°	712.9	713.1	711.3	704.3	695.2	684.3	670.9	655.3	639.2	621.4	604.9
160°	692.5	693.6	693.6	686.7	678.5	670.4	658.8	646.0	630.9	615.8	603.0
162.5°	673.9	675.0	675.0	669.0	663.6	656.4	645.8	634.8	622.5	610.2	599.3
165°	649.5	649.5	650.6	646.0	641.3	635.5	627.4	620.4	611.1	601.8	593.7
167.5°	626.2	626.2	627.4	624.1	622.1	617.9	613.2	607.9	600.2	593.5	588.1
170°	612.3	612.3	613.5	611.1	610.0	607.6	603.0	599.5	593.7	587.9	584.4
172.5°	599.3	600.2	602.3	600.0	599.7	598.4	594.6	592.1	587.2	583.2	581.6
175°	584.4	585.6	586.7	585.6	585.6	585.6	583.2	582.1	579.8	577.4	577.4
177.5°	575.8	575.8	577.7	576.7	577.7	577.7	576.7	575.8	574.9	574.0	574.9
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1672.4	1667.4	1662.4	1653.6	1646.0	1635.3	1632.2	1628.4	1617.1	1607.1	1599.5
5°	1774.6	1755.7	1728.2	1703.1	1682.7	1655.2	1639.4	1622.9	1599.3	1578.1	1560.8
7.5°	1881.5	1844.4	1801.6	1755.4	1712.4	1670.9	1637.4	1607.5	1574.5	1543.2	1518.9
10°	1966.4	1912.9	1853.2	1788.8	1733.7	1680.3	1635.5	1596.2	1553.8	1516.8	1486.2
12.5°	2063.2	1984.0	1901.6	1823.3	1758.3	1684.1	1629.8	1579.9	1531.8	1487.3	1452.9
15°	2177.8	2077.2	1979.7	1872.1	1773.0	1680.3	1615.9	1553.0	1497.2	1451.6	1407.6
17.5°	2282.2	2168.2	2039.8	1908.8	1789.4	1679.4	1589.1	1518.1	1448.3	1392.5	1348.6
20°	2341.3	2211.6	2066.2	1930.2	1798.2	1675.6	1576.6	1491.7	1416.2	1357.3	1307.8
22.5°	2392.2	2240.5	2090.1	1944.7	1797.6	1665.5	1553.3	1465.9	1384.2	1326.5	1273.8
25°	2445.0	2263.5	2112.6	1942.0	1777.8	1641.0	1515.3	1416.2	1334.5	1266.9	1212.7
27.5°	2490.3	2261.9	2082.8	1899.4	1746.6	1609.6	1475.3	1369.1	1282.3	1208.9	1153.9
30°	2520.4	2265.0	2052.0	1870.5	1716.5	1575.0	1444.5	1337.6	1246.5	1171.8	1119.9
32.5°	2539.3	2263.1	2023.7	1830.3	1668.7	1543.5	1411.2	1300.5	1206.9	1133.5	1083.5
35°	2550.3	2249.3	1975.0	1747.1	1591.5	1469.7	1358.9	1244.1	1145.9	1077.5	1020.9
37.5°	2528.3	2220.2	1918.4	1666.9	1496.6	1376.6	1283.4	1185.6	1091.6	1016.4	967.6
40°	2493.7	2201.4	1874.4	1610.4	1431.2	1315.6	1236.3	1140.4	1047.6	976.1	930.5
42.5°	2427.7	2163.0	1826.0	1547.5	1363.3	1247.7	1174.6	1094.5	1006.8	939.6	894.1
45°	2266.6	2079.5	1753.4	1453.2	1263.0	1143.5	1079.1	1020.9	941.5	876.3	837.0
47.5°	2043.1	1954.0	1648.4	1353.7	1158.3	1043.4	976.4	929.6	871.6	818.9	781.2
50°	1887.8	1850.8	1577.3	1285.8	1088.5	976.1	911.7	869.2	827.6	774.9	740.3
52.5°	1708.6	1731.4	1494.4	1215.3	1017.5	907.0	846.3	812.6	774.8	731.5	701.4
55°	1456.3	1538.8	1351.0	1097.1	911.7	806.4	749.0	719.1	697.1	664.9	639.0
57.5°	1220.1	1325.1	1196.0	975.3	807.8	716.9	661.9	629.4	615.2	598.4	578.0
60°	1079.9	1183.6	1085.4	893.6	738.0	651.5	602.8	575.3	561.1	549.4	532.1
62.5°	954.7	1059.7	977.2	810.6	669.4	589.3	546.8	520.0	509.0	502.8	488.1
65°	782.8	873.2	818.1	681.4	571.4	500.6	462.1	443.3	433.0	430.7	421.3
67.5°	637.1	705.9	665.8	565.2	478.6	417.5	384.8	368.8	360.9	360.1	353.0
70°	541.5	605.9	575.3	484.1	409.5	361.5	333.2	319.1	314.4	313.6	309.7
72.5°	467.3	512.3	487.9	411.8	354.1	310.6	289.8	275.1	269.7	270.8	268.2
75°	345.8	379.6	365.5	312.8	266.4	238.1	220.8	211.4	206.7	209.1	205.9
77.5°	248.8	270.2	257.5	221.0	192.4	172.0	159.2	153.4	149.2	149.0	147.6
80°	187.8	200.4	193.3	171.3	147.8	130.5	120.2	116.3	114.0	113.2	112.4
82.5°	133.8	144.5	136.1	121.0	105.0	94.6	88.8	83.6	81.9	82.4	81.6
85°	67.6	71.5	68.4	58.9	52.7	47.9	44.8	42.4	40.9	41.7	40.1
87.5°	27.7	27.6	25.0	22.0	20.3	17.7	17.3	15.6	14.8	15.2	15.3
90°	22.1	18.6	15.1	12.8	10.5	7.0	4.6	2.3	4.6	7.0	10.5
92.5°	147.6	97.6	67.2	50.0	40.2	31.1	21.4	14.4	21.4	31.1	40.2
95°	422.9	249.8	151.0	105.7	75.5	55.8	43.0	39.5	43.0	55.8	75.5
97.5°	464.0	268.9	174.5	125.5	95.7	78.5	68.5	67.4	68.5	78.5	95.7
100°	438.0	266.1	184.7	139.4	111.5	95.3	87.1	86.0	87.1	95.3	111.5
102.5°	415.7	269.8	196.8	155.2	130.1	114.8	107.6	105.5	107.6	114.8	130.1
105°	399.7	280.0	217.3	181.2	159.2	145.2	138.3	134.8	138.3	145.2	159.2
107.5°	398.5	299.1	244.0	210.5	189.8	176.1	169.4	165.9	169.4	176.1	189.8
110°	403.2	314.9	262.6	230.0	210.3	197.5	191.7	188.2	191.7	197.5	210.3



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	412.5	330.7	282.1	250.5	230.7	218.0	212.2	208.7	212.2	218.0	230.7
115°	427.6	356.7	312.5	281.2	261.4	249.8	242.8	238.2	242.8	249.8	261.4
117.5°	447.5	384.3	340.7	311.6	289.5	278.8	273.0	267.7	273.0	278.8	289.5
120°	462.4	402.0	360.2	331.1	309.1	297.4	291.6	288.1	291.6	297.4	309.1
122.5°	476.4	420.6	379.7	348.8	327.6	315.1	309.3	305.8	309.3	315.1	327.6
125°	498.4	447.3	406.6	375.3	353.2	340.4	333.5	331.1	333.5	340.4	353.2
127.5°	516.6	470.5	431.3	399.9	375.5	362.5	353.9	350.4	353.9	362.5	375.5
130°	528.6	484.5	446.1	414.8	390.4	376.4	366.0	362.5	366.0	376.4	390.4
132.5°	539.8	496.6	459.2	428.7	404.3	387.6	376.2	371.8	376.2	387.6	404.3
135°	554.2	514.7	478.7	447.3	422.9	405.5	392.7	388.1	392.7	405.5	422.9
137.5°	564.9	527.2	492.6	463.6	439.4	420.8	408.3	403.4	408.3	420.8	439.4
140°	570.5	535.6	501.9	472.9	449.6	431.0	419.4	413.6	419.4	431.0	449.6
142.5°	576.0	542.1	509.4	482.2	458.9	442.2	429.7	424.8	429.7	442.2	458.9
145°	582.1	550.7	520.5	493.8	474.0	456.6	446.1	442.7	446.1	456.6	474.0
147.5°	585.8	557.7	530.0	507.3	488.2	473.1	462.9	460.8	462.9	473.1	488.2
150°	586.7	562.3	535.6	514.7	498.4	483.3	474.0	472.9	474.0	483.3	498.4
152.5°	588.6	565.1	542.1	522.1	507.7	494.5	485.2	485.0	485.2	494.5	507.7
155°	589.1	570.5	550.7	534.4	521.7	510.1	503.1	503.1	503.1	510.1	521.7
157.5°	590.2	573.5	557.7	545.1	534.2	524.0	518.4	517.5	518.4	524.0	534.2
160°	590.2	576.3	562.3	550.7	542.6	533.3	528.6	528.6	528.6	533.3	542.6
162.5°	589.3	577.2	565.1	555.4	548.2	540.7	537.0	537.0	537.0	540.7	548.2
165°	586.7	578.6	569.3	561.2	556.5	550.7	548.4	549.6	548.4	550.7	556.5
167.5°	584.9	578.4	571.6	566.5	563.3	558.8	557.7	559.1	557.7	558.8	563.3
170°	582.1	577.4	571.6	569.3	567.0	563.5	562.3	564.7	562.3	563.5	567.0
172.5°	581.2	577.4	572.6	571.2	569.8	567.2	567.0	568.4	567.0	567.2	569.8
175°	578.6	576.3	574.0	572.8	572.8	570.5	571.6	572.8	571.6	570.5	572.8
177.5°	576.7	574.9	574.0	574.0	574.0	573.0	574.0	574.9	574.0	573.0	574.0
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1595.1	1590.7	1584.4	1575.0	1567.4	1555.5	1555.5	1557.4	1557.4	1556.8	1555.5
5°	1546.7	1534.9	1520.8	1504.3	1487.0	1469.7	1466.5	1460.2	1455.5	1452.4	1448.5
7.5°	1495.6	1474.7	1454.1	1431.0	1409.9	1392.5	1380.4	1370.3	1363.9	1357.0	1351.9
10°	1461.0	1435.1	1410.7	1386.4	1359.6	1338.4	1325.1	1315.6	1308.6	1302.3	1299.1
12.5°	1420.2	1390.5	1363.6	1340.5	1311.2	1289.4	1276.7	1272.2	1263.9	1250.7	1243.8
15°	1360.4	1332.9	1300.7	1265.3	1251.2	1224.5	1209.5	1202.5	1197.7	1187.5	1184.4
17.5°	1309.3	1273.3	1237.2	1210.8	1184.5	1162.8	1154.5	1145.7	1139.4	1131.1	1128.6
20°	1268.5	1236.3	1203.2	1175.0	1147.4	1123.9	1116.8	1110.5	1104.2	1100.3	1097.1
22.5°	1227.0	1194.8	1167.4	1141.0	1111.6	1096.2	1088.5	1081.6	1077.2	1074.5	1071.4
25°	1168.7	1140.4	1109.7	1086.1	1062.6	1052.3	1047.6	1043.7	1040.6	1036.6	1035.8
27.5°	1116.5	1085.7	1060.8	1038.8	1021.9	1013.4	1008.8	1006.9	1007.6	1009.0	1009.9
30°	1077.5	1049.2	1028.8	1009.9	994.2	986.3	985.5	985.5	988.7	989.5	991.0
32.5°	1041.7	1018.4	998.0	979.7	967.8	962.4	965.4	965.4	967.9	970.0	972.8
35°	989.5	969.0	953.3	937.6	927.4	929.7	931.3	932.9	936.8	941.5	944.7
37.5°	939.6	921.9	905.5	893.3	888.6	892.8	896.6	899.9	904.4	908.1	911.2
40°	903.8	890.4	874.7	863.7	865.3	867.7	870.8	874.7	878.7	881.0	884.2
42.5°	870.5	856.5	844.6	835.4	837.6	840.6	842.5	844.6	849.1	853.4	855.2
45°	819.7	808.7	797.7	792.2	793.8	795.4	796.9	799.3	803.2	806.4	807.1
47.5°	762.7	755.0	747.6	742.2	744.7	744.1	746.2	751.2	752.4	754.3	758.7
50°	726.2	719.1	710.5	708.9	708.9	708.9	709.7	716.0	716.0	719.1	722.3
52.5°	686.0	681.4	675.9	673.1	671.8	671.8	675.1	678.3	679.5	683.9	687.1
55°	626.4	621.7	616.9	614.6	613.0	614.6	620.9	622.4	626.4	628.7	631.1
57.5°	564.3	560.7	556.9	555.6	555.3	557.4	560.8	565.5	566.5	573.7	577.3
60°	523.4	517.9	514.8	514.8	513.2	520.3	518.7	526.6	528.1	532.9	538.4
62.5°	481.3	473.9	472.7	472.7	474.9	476.9	479.1	482.6	486.6	492.6	496.9
65°	413.4	409.5	415.0	414.2	412.6	417.3	417.3	421.3	426.0	431.5	440.1
67.5°	349.1	347.1	347.5	347.5	349.9	352.6	354.8	358.2	363.9	369.7	375.4
70°	305.7	308.1	304.2	307.3	309.7	310.4	312.0	316.7	323.0	326.9	333.2
72.5°	263.6	263.4	263.9	265.2	267.5	268.9	270.5	275.9	282.8	286.1	291.1
75°	202.8	202.0	204.3	204.3	208.3	209.8	211.4	213.8	220.1	224.8	228.7
77.5°	148.1	149.0	148.5	151.2	150.1	150.4	155.3	157.7	158.3	167.6	169.6
80°	111.6	113.2	114.0	114.7	115.5	114.0	119.5	121.8	121.8	127.3	131.2
82.5°	80.2	81.1	83.2	83.9	84.1	85.7	86.1	87.9	89.8	92.1	97.3
85°	40.1	42.4	43.2	42.4	43.2	41.7	44.0	44.8	45.6	45.6	45.6
87.5°	15.1	16.2	16.3	17.6	17.7	19.0	18.8	17.8	18.0	20.1	18.1
90°	12.8	15.1	18.6	22.1	25.6	29.0	27.9	29.0	30.2	31.4	33.7
92.5°	50.0	67.2	97.6	147.6	196.6	178.7	134.8	97.8	77.6	68.5	62.5
95°	105.7	151.0	249.8	422.9	613.5	689.0	558.8	418.3	283.5	221.9	180.1
97.5°	125.5	174.5	268.9	464.0	781.7	1067.7	1142.3	1042.6	835.1	685.3	546.3
100°	139.4	184.7	266.1	438.0	743.6	1100.3	1329.2	1369.8	1275.7	1139.8	974.8
102.5°	155.2	196.8	269.8	415.7	687.8	1039.9	1338.4	1478.6	1475.5	1396.3	1291.7
105°	181.2	217.3	280.0	399.7	619.3	934.1	1267.6	1510.4	1626.6	1648.7	1618.5
107.5°	210.5	244.0	299.1	398.5	575.6	840.7	1143.5	1418.8	1607.5	1709.3	1750.7
110°	230.0	262.6	314.9	403.2	558.8	787.7	1065.4	1331.5	1545.3	1691.7	1773.0



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	250.5	282.1	330.7	412.5	549.6	752.4	997.6	1245.0	1463.5	1627.5	1732.1
115°	281.2	312.5	356.7	427.6	546.1	714.5	915.5	1130.5	1332.6	1503.4	1630.1
117.5°	311.6	340.7	384.3	447.5	548.2	692.2	866.0	1047.5	1222.0	1375.4	1503.9
120°	331.1	360.2	402.0	462.4	551.9	682.0	840.0	1003.8	1160.7	1300.1	1417.5
122.5°	348.8	379.7	420.6	476.4	558.4	675.5	818.6	969.4	1111.4	1240.6	1349.6
125°	375.3	406.6	447.3	498.4	568.1	666.9	791.2	923.7	1050.3	1161.8	1254.8
127.5°	399.9	431.3	470.5	516.6	579.3	662.7	767.1	883.7	996.6	1097.2	1181.8
130°	414.8	446.1	484.5	528.6	586.7	659.9	754.0	858.6	963.2	1057.3	1136.3
132.5°	428.7	459.2	496.6	539.8	592.3	659.0	742.0	835.4	931.6	1019.2	1094.5
135°	447.3	478.7	514.7	554.2	600.7	657.6	726.2	804.0	886.5	962.0	1028.2
137.5°	463.6	492.6	527.2	564.9	606.3	655.0	712.4	775.4	843.0	908.1	965.5
140°	472.9	501.9	535.6	570.5	610.0	654.1	704.1	758.7	817.9	873.7	923.7
142.5°	482.2	509.4	542.1	576.0	612.8	652.3	696.6	742.9	793.8	842.1	885.6
145°	493.8	520.5	550.7	582.1	614.6	649.5	686.7	723.8	762.2	799.4	833.0
147.5°	507.3	530.0	557.7	585.8	614.6	645.1	676.9	708.3	738.7	768.7	792.6
150°	514.7	535.6	562.3	586.7	614.6	641.3	670.4	697.1	723.8	748.2	770.3
152.5°	522.1	542.1	565.1	588.6	611.8	636.7	663.0	686.9	709.9	731.5	749.9
155°	534.4	550.7	570.5	589.1	608.8	628.6	651.8	671.5	690.1	707.6	721.5
157.5°	545.1	557.7	573.5	590.2	604.9	621.4	639.2	655.3	670.9	684.3	695.2
160°	550.7	562.3	576.3	590.2	603.0	615.8	630.9	646.0	658.8	670.4	678.5
162.5°	555.4	565.1	577.2	589.3	599.3	610.2	622.5	634.8	645.8	656.4	663.6
165°	561.2	569.3	578.6	586.7	593.7	601.8	611.1	620.4	627.4	635.5	641.3
167.5°	566.5	571.6	578.4	584.9	588.1	593.5	600.2	607.9	613.2	617.9	622.1
170°	569.3	571.6	577.4	582.1	584.4	587.9	593.7	599.5	603.0	607.6	610.0
172.5°	571.2	572.6	577.4	581.2	581.6	583.2	587.2	592.1	594.6	598.4	599.7
175°	572.8	574.0	576.3	578.6	577.4	577.4	579.8	582.1	583.2	585.6	585.6
177.5°	574.0	574.0	574.9	576.7	574.9	574.0	574.9	575.8	576.7	577.7	577.7
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1551.1	1550.5	1554.9	1551.7	1554.9	1550.5	1551.1	1555.5	1556.8	1557.4	1557.4
5°	1443.7	1446.1	1438.2	1438.2	1438.2	1446.1	1443.7	1448.5	1452.4	1455.5	1460.2
7.5°	1348.2	1344.7	1345.0	1340.8	1345.0	1344.7	1348.2	1351.9	1357.0	1363.9	1370.3
10°	1289.7	1285.0	1283.4	1284.2	1283.4	1285.0	1289.7	1299.1	1302.3	1308.6	1315.6
12.5°	1241.3	1240.3	1230.0	1230.1	1230.0	1240.3	1241.3	1243.8	1250.7	1263.9	1272.2
15°	1184.4	1169.5	1167.9	1172.6	1167.9	1169.5	1184.4	1184.4	1187.5	1197.7	1202.5
17.5°	1127.3	1119.5	1119.9	1117.6	1119.9	1119.5	1127.3	1128.6	1131.1	1139.4	1145.7
20°	1097.1	1092.4	1091.6	1086.1	1091.6	1092.4	1097.1	1097.1	1100.3	1104.2	1110.5
22.5°	1069.5	1067.9	1068.4	1062.3	1068.4	1067.9	1069.5	1071.4	1074.5	1077.2	1081.6
25°	1035.1	1039.0	1035.8	1035.8	1035.8	1039.0	1035.1	1035.8	1036.6	1040.6	1043.7
27.5°	1011.8	1011.6	1010.1	1010.1	1010.1	1011.6	1011.8	1009.9	1009.0	1007.6	1006.9
30°	994.2	993.4	995.0	995.0	995.0	993.4	994.2	991.0	989.5	988.7	985.5
32.5°	976.6	977.7	978.0	978.6	978.0	977.7	976.6	972.8	970.0	967.9	965.4
35°	949.4	950.2	952.5	951.0	952.5	950.2	949.4	944.7	941.5	936.8	932.9
37.5°	912.6	916.2	915.4	916.7	915.4	916.2	912.6	911.2	908.1	904.4	899.9
40°	884.9	887.3	886.5	886.5	886.5	887.3	884.9	884.2	881.0	878.7	874.7
42.5°	856.7	858.4	856.3	855.1	856.3	858.4	856.7	855.2	853.4	849.1	844.6
45°	810.3	808.7	811.1	807.9	811.1	808.7	810.3	807.1	806.4	803.2	799.3
47.5°	758.4	760.0	760.6	763.0	760.6	760.0	758.4	758.7	754.3	752.4	751.2
50°	723.8	728.5	728.5	727.8	728.5	728.5	723.8	722.3	719.1	716.0	716.0
52.5°	689.9	692.1	695.2	695.1	695.2	692.1	689.9	687.1	683.9	679.5	678.3
55°	637.4	639.0	640.5	641.3	640.5	639.0	637.4	631.1	628.7	626.4	622.4
57.5°	583.0	582.4	586.1	587.2	586.1	582.4	583.0	577.3	573.7	566.5	565.5
60°	544.6	544.6	550.9	553.3	550.9	544.6	544.6	538.4	532.9	528.1	526.6
62.5°	503.8	506.3	512.6	509.3	512.6	506.3	503.8	496.9	492.6	486.6	482.6
65°	444.0	450.3	449.5	452.7	449.5	450.3	444.0	440.1	431.5	426.0	421.3
67.5°	381.6	385.6	391.2	391.7	391.2	385.6	381.6	375.4	369.7	363.9	358.2
70°	339.5	343.4	346.6	348.9	346.6	343.4	339.5	333.2	326.9	323.0	316.7
72.5°	298.7	300.7	308.2	304.9	308.2	300.7	298.7	291.1	286.1	282.8	275.9
75°	234.2	239.7	244.4	242.1	244.4	239.7	234.2	228.7	224.8	220.1	213.8
77.5°	173.2	178.7	180.9	178.9	180.9	178.7	173.2	169.6	167.6	158.3	157.7
80°	136.8	136.0	140.7	139.9	140.7	136.0	136.8	131.2	127.3	121.8	121.8
82.5°	100.3	99.5	101.7	102.2	101.7	99.5	100.3	97.3	92.1	89.8	87.9
85°	48.7	51.1	47.9	47.2	47.9	51.1	48.7	45.6	45.6	45.6	44.8
87.5°	17.8	18.1	17.7	16.8	17.7	18.1	17.8	18.1	20.1	18.0	17.8
90°	32.5	33.7	34.9	33.7	34.9	33.7	32.5	33.7	31.4	30.2	29.0
92.5°	60.4	56.9	58.1	56.0	58.1	56.9	60.4	62.5	68.5	77.6	97.8
95°	158.0	147.6	139.4	134.8	139.4	147.6	158.0	180.1	221.9	283.5	418.3
97.5°	460.6	408.3	376.9	366.9	376.9	408.3	460.6	546.3	685.3	835.1	1042.6
100°	857.4	772.6	727.3	728.5	727.3	772.6	857.4	974.8	1139.8	1275.7	1369.8
102.5°	1200.4	1133.3	1095.4	1068.7	1095.4	1133.3	1200.4	1291.7	1396.3	1475.5	1478.6
105°	1565.0	1520.9	1483.7	1477.9	1483.7	1520.9	1565.0	1618.5	1648.7	1626.6	1510.4
107.5°	1751.6	1736.7	1724.2	1713.5	1724.2	1736.7	1751.6	1750.7	1709.3	1607.5	1418.8
110°	1805.5	1814.8	1812.5	1810.2	1812.5	1814.8	1805.5	1773.0	1691.7	1545.3	1331.5



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1791.6	1820.4	1829.2	1829.7	1829.2	1820.4	1791.6	1732.1	1627.5	1463.5	1245.0
115°	1717.2	1768.3	1791.6	1797.4	1791.6	1768.3	1717.2	1630.1	1503.4	1332.6	1130.5
117.5°	1594.8	1653.3	1686.8	1694.7	1686.8	1653.3	1594.8	1503.9	1375.4	1222.0	1047.5
120°	1509.2	1574.3	1602.2	1609.2	1602.2	1574.3	1509.2	1417.5	1300.1	1160.7	1003.8
122.5°	1431.2	1489.7	1520.4	1529.2	1520.4	1489.7	1431.2	1349.6	1240.6	1111.4	969.4
125°	1329.2	1380.3	1409.3	1417.5	1409.3	1380.3	1329.2	1254.8	1161.8	1050.3	923.7
127.5°	1248.1	1291.7	1318.0	1325.4	1318.0	1291.7	1248.1	1181.8	1097.2	996.6	883.7
130°	1197.9	1239.7	1264.1	1273.4	1264.1	1239.7	1197.9	1136.3	1057.3	963.2	858.6
132.5°	1152.3	1194.1	1215.8	1222.3	1215.8	1194.1	1152.3	1094.5	1019.2	931.6	835.4
135°	1085.2	1120.0	1140.9	1149.1	1140.9	1120.0	1085.2	1028.2	962.0	886.5	804.0
137.5°	1013.4	1048.7	1066.3	1071.7	1066.3	1048.7	1013.4	965.5	908.1	843.0	775.4
140°	967.8	1000.4	1018.9	1017.8	1018.9	1000.4	967.8	923.7	873.7	817.9	758.7
142.5°	923.2	952.0	968.7	967.6	968.7	952.0	923.2	885.6	842.1	793.8	742.9
145°	862.1	886.5	895.8	898.1	895.8	886.5	862.1	833.0	799.4	762.2	723.8
147.5°	814.7	831.2	840.0	840.9	840.0	831.2	814.7	792.6	768.7	738.7	708.3
150°	787.7	800.5	807.5	807.5	807.5	800.5	787.7	770.3	748.2	723.8	697.1
152.5°	763.6	775.4	779.6	779.6	779.6	775.4	763.6	749.9	731.5	709.9	686.9
155°	732.0	741.3	743.6	744.7	743.6	741.3	732.0	721.5	707.6	690.1	671.5
157.5°	704.3	711.3	713.1	712.9	713.1	711.3	704.3	695.2	684.3	670.9	655.3
160°	686.7	693.6	693.6	692.5	693.6	693.6	686.7	678.5	670.4	658.8	646.0
162.5°	669.0	675.0	675.0	673.9	675.0	675.0	669.0	663.6	656.4	645.8	634.8
165°	646.0	650.6	649.5	649.5	649.5	650.6	646.0	641.3	635.5	627.4	620.4
167.5°	624.1	627.4	626.2	626.2	626.2	627.4	624.1	622.1	617.9	613.2	607.9
170°	611.1	613.5	612.3	612.3	612.3	613.5	611.1	610.0	607.6	603.0	599.5
172.5°	600.0	602.3	600.2	599.3	600.2	602.3	600.0	599.7	598.4	594.6	592.1
175°	585.6	586.7	585.6	584.4	585.6	586.7	585.6	585.6	585.6	583.2	582.1
177.5°	576.7	577.7	575.8	575.8	575.8	577.7	576.7	577.7	577.7	576.7	575.8
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1555.5	1555.5	1567.4	1575.0	1584.4	1590.7	1595.1	1599.5	1607.1	1617.1	1628.4
5°	1466.5	1469.7	1487.0	1504.3	1520.8	1534.9	1546.7	1560.8	1578.1	1599.3	1622.9
7.5°	1380.4	1392.5	1409.9	1431.0	1454.1	1474.7	1495.6	1518.9	1543.2	1574.5	1607.5
10°	1325.1	1338.4	1359.6	1386.4	1410.7	1435.1	1461.0	1486.2	1516.8	1553.8	1596.2
12.5°	1276.7	1289.4	1311.2	1340.5	1363.6	1390.5	1420.2	1452.9	1487.3	1531.8	1579.9
15°	1209.5	1224.5	1251.2	1265.3	1300.7	1332.9	1360.4	1407.6	1451.6	1497.2	1553.0
17.5°	1154.5	1162.8	1184.5	1210.8	1237.2	1273.3	1309.3	1348.6	1392.5	1448.3	1518.1
20°	1116.8	1123.9	1147.4	1175.0	1203.2	1236.3	1268.5	1307.8	1357.3	1416.2	1491.7
22.5°	1088.5	1096.2	1111.6	1141.0	1167.4	1194.8	1227.0	1273.8	1326.5	1384.2	1465.9
25°	1047.6	1052.3	1062.6	1086.1	1109.7	1140.4	1168.7	1212.7	1266.9	1334.5	1416.2
27.5°	1008.8	1013.4	1021.9	1038.8	1060.8	1085.7	1116.5	1153.9	1208.9	1282.3	1369.1
30°	985.5	986.3	994.2	1009.9	1028.8	1049.2	1077.5	1119.9	1171.8	1246.5	1337.6
32.5°	965.4	962.4	967.8	979.7	998.0	1018.4	1041.7	1083.5	1133.5	1206.9	1300.5
35°	931.3	929.7	927.4	937.6	953.3	969.0	989.5	1020.9	1077.5	1145.9	1244.1
37.5°	896.6	892.8	888.6	893.3	905.5	921.9	939.6	967.6	1016.4	1091.6	1185.6
40°	870.8	867.7	865.3	863.7	874.7	890.4	903.8	930.5	976.1	1047.6	1140.4
42.5°	842.5	840.6	837.6	835.4	844.6	856.5	870.5	894.1	939.6	1006.8	1094.5
45°	796.9	795.4	793.8	792.2	797.7	808.7	819.7	837.0	876.3	941.5	1020.9
47.5°	746.2	744.1	744.7	742.2	747.6	755.0	762.7	781.2	818.9	871.6	929.6
50°	709.7	708.9	708.9	708.9	710.5	719.1	726.2	740.3	774.9	827.6	869.2
52.5°	675.1	671.8	671.8	673.1	675.9	681.4	686.0	701.4	731.5	774.8	812.6
55°	620.9	614.6	613.0	614.6	616.9	621.7	626.4	639.0	664.9	697.1	719.1
57.5°	560.8	557.4	555.3	555.6	556.9	560.7	564.3	578.0	598.4	615.2	629.4
60°	518.7	520.3	513.2	514.8	514.8	517.9	523.4	532.1	549.4	561.1	575.3
62.5°	479.1	476.9	474.9	472.7	472.7	473.9	481.3	488.1	502.8	509.0	520.0
65°	417.3	417.3	412.6	414.2	415.0	409.5	413.4	421.3	430.7	433.0	443.3
67.5°	354.8	352.6	349.9	347.5	347.5	347.1	349.1	353.0	360.1	360.9	368.8
70°	312.0	310.4	309.7	307.3	304.2	308.1	305.7	309.7	313.6	314.4	319.1
72.5°	270.5	268.9	267.5	265.2	263.9	263.4	263.6	268.2	270.8	269.7	275.1
75°	211.4	209.8	208.3	204.3	204.3	202.0	202.8	205.9	209.1	206.7	211.4
77.5°	155.3	150.4	150.1	151.2	148.5	149.0	148.1	147.6	149.0	149.2	153.4
80°	119.5	114.0	115.5	114.7	114.0	113.2	111.6	112.4	113.2	114.0	116.3
82.5°	86.1	85.7	84.1	83.9	83.2	81.1	80.2	81.6	82.4	81.9	83.6
85°	44.0	41.7	43.2	42.4	43.2	42.4	40.1	40.1	41.7	40.9	42.4
87.5°	18.8	19.0	17.7	17.6	16.3	16.2	15.1	15.3	15.2	14.8	15.6
90°	27.9	29.0	25.6	22.1	18.6	15.1	12.8	10.5	7.0	4.6	2.3
92.5°	134.8	178.7	196.6	147.6	97.6	67.2	50.0	40.2	31.1	21.4	14.4
95°	558.8	689.0	613.5	422.9	249.8	151.0	105.7	75.5	55.8	43.0	39.5
97.5°	1142.3	1067.7	781.7	464.0	268.9	174.5	125.5	95.7	78.5	68.5	67.4
100°	1329.2	1100.3	743.6	438.0	266.1	184.7	139.4	111.5	95.3	87.1	86.0
102.5°	1338.4	1039.9	687.8	415.7	269.8	196.8	155.2	130.1	114.8	107.6	105.5
105°	1267.6	934.1	619.3	399.7	280.0	217.3	181.2	159.2	145.2	138.3	134.8
107.5°	1143.5	840.7	575.6	398.5	299.1	244.0	210.5	189.8	176.1	169.4	165.9
110°	1065.4	787.7	558.8	403.2	314.9	262.6	230.0	210.3	197.5	191.7	188.2



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	997.6	752.4	549.6	412.5	330.7	282.1	250.5	230.7	218.0	212.2	208.7
115°	915.5	714.5	546.1	427.6	356.7	312.5	281.2	261.4	249.8	242.8	238.2
117.5°	866.0	692.2	548.2	447.5	384.3	340.7	311.6	289.5	278.8	273.0	267.7
120°	840.0	682.0	551.9	462.4	402.0	360.2	331.1	309.1	297.4	291.6	288.1
122.5°	818.6	675.5	558.4	476.4	420.6	379.7	348.8	327.6	315.1	309.3	305.8
125°	791.2	666.9	568.1	498.4	447.3	406.6	375.3	353.2	340.4	333.5	331.1
127.5°	767.1	662.7	579.3	516.6	470.5	431.3	399.9	375.5	362.5	353.9	350.4
130°	754.0	659.9	586.7	528.6	484.5	446.1	414.8	390.4	376.4	366.0	362.5
132.5°	742.0	659.0	592.3	539.8	496.6	459.2	428.7	404.3	387.6	376.2	371.8
135°	726.2	657.6	600.7	554.2	514.7	478.7	447.3	422.9	405.5	392.7	388.1
137.5°	712.4	655.0	606.3	564.9	527.2	492.6	463.6	439.4	420.8	408.3	403.4
140°	704.1	654.1	610.0	570.5	535.6	501.9	472.9	449.6	431.0	419.4	413.6
142.5°	696.6	652.3	612.8	576.0	542.1	509.4	482.2	458.9	442.2	429.7	424.8
145°	686.7	649.5	614.6	582.1	550.7	520.5	493.8	474.0	456.6	446.1	442.7
147.5°	676.9	645.1	614.6	585.8	557.7	530.0	507.3	488.2	473.1	462.9	460.8
150°	670.4	641.3	614.6	586.7	562.3	535.6	514.7	498.4	483.3	474.0	472.9
152.5°	663.0	636.7	611.8	588.6	565.1	542.1	522.1	507.7	494.5	485.2	485.0
155°	651.8	628.6	608.8	589.1	570.5	550.7	534.4	521.7	510.1	503.1	503.1
157.5°	639.2	621.4	604.9	590.2	573.5	557.7	545.1	534.2	524.0	518.4	517.5
160°	630.9	615.8	603.0	590.2	576.3	562.3	550.7	542.6	533.3	528.6	528.6
162.5°	622.5	610.2	599.3	589.3	577.2	565.1	555.4	548.2	540.7	537.0	537.0
165°	611.1	601.8	593.7	586.7	578.6	569.3	561.2	556.5	550.7	548.4	549.6
167.5°	600.2	593.5	588.1	584.9	578.4	571.6	566.5	563.3	558.8	557.7	559.1
170°	593.7	587.9	584.4	582.1	577.4	571.6	569.3	567.0	563.5	562.3	564.7
172.5°	587.2	583.2	581.6	581.2	577.4	572.6	571.2	569.8	567.2	567.0	568.4
175°	579.8	577.4	577.4	578.6	576.3	574.0	572.8	572.8	570.5	571.6	572.8
177.5°	574.9	574.0	574.9	576.7	574.9	574.0	574.0	574.0	573.0	574.0	574.9
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



TEST NUMBER: P332083

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1632.2	1635.3	1646.0	1653.6	1662.4	1667.4	1672.4	1676.2	1681.2	1682.5	1700.7
5°	1639.4	1655.2	1682.7	1703.1	1728.2	1755.7	1774.6	1783.3	1806.0	1824.9	1862.6
7.5°	1637.4	1670.9	1712.4	1755.4	1801.6	1844.4	1881.5	1925.5	1956.8	2003.8	2050.2
10°	1635.5	1680.3	1733.7	1788.8	1853.2	1912.9	1966.4	2026.1	2075.6	2140.8	2196.6
12.5°	1629.8	1684.1	1758.3	1823.3	1901.6	1984.0	2063.2	2139.9	2183.8	2292.4	2343.8
15°	1615.9	1680.3	1773.0	1872.1	1979.7	2077.2	2177.8	2258.0	2387.6	2482.7	2543.2
17.5°	1589.1	1679.4	1789.4	1908.8	2039.8	2168.2	2282.2	2403.8	2541.4	2656.4	2779.0
20°	1576.6	1675.6	1798.2	1930.2	2066.2	2211.6	2341.3	2487.4	2637.6	2750.7	2907.9
22.5°	1553.3	1665.5	1797.6	1944.7	2090.1	2240.5	2392.2	2539.6	2713.0	2868.9	3018.6
25°	1515.3	1641.0	1777.8	1942.0	2112.6	2263.5	2445.0	2640.7	2821.5	3021.9	3171.2
27.5°	1475.3	1609.6	1746.6	1899.4	2082.8	2261.9	2490.3	2711.4	2932.4	3105.5	3216.0
30°	1444.5	1575.0	1716.5	1870.5	2052.0	2265.0	2520.4	2761.7	2977.1	3125.6	3187.7
32.5°	1411.2	1543.5	1668.7	1830.3	2023.7	2263.1	2539.3	2791.3	2979.6	3078.5	3066.4
35°	1358.9	1469.7	1591.5	1747.1	1975.0	2249.3	2550.3	2793.9	2909.5	2888.3	2727.9
37.5°	1283.4	1376.6	1496.6	1666.9	1918.4	2220.2	2528.3	2711.1	2703.6	2530.8	2298.5
40°	1236.3	1315.6	1431.2	1610.4	1874.4	2201.4	2493.7	2612.4	2511.8	2270.5	1992.3
42.5°	1174.6	1247.7	1363.3	1547.5	1826.0	2163.0	2427.7	2462.1	2265.3	1987.6	1732.6
45°	1079.1	1143.5	1263.0	1453.2	1753.4	2079.5	2266.6	2182.5	1917.6	1630.8	1436.7
47.5°	976.4	1043.4	1158.3	1353.7	1648.4	1954.0	2043.1	1864.2	1592.3	1359.6	1181.4
50°	911.7	976.1	1088.5	1285.8	1577.3	1850.8	1887.8	1656.7	1406.8	1202.5	1056.3
52.5°	846.3	907.0	1017.5	1215.3	1494.4	1731.4	1708.6	1473.1	1243.3	1069.2	954.4
55°	749.0	806.4	911.7	1097.1	1351.0	1538.8	1456.3	1231.5	1041.3	906.2	818.9
57.5°	661.9	716.9	807.8	975.3	1196.0	1325.1	1220.1	1030.7	879.4	775.4	710.3
60°	602.8	651.5	738.0	893.6	1085.4	1183.6	1079.9	912.5	785.1	701.8	643.7
62.5°	546.8	589.3	669.4	810.6	977.2	1059.7	954.7	813.1	704.7	630.8	581.4
65°	462.1	500.6	571.4	681.4	818.1	873.2	782.8	668.0	583.9	528.9	495.9
67.5°	384.8	417.5	478.6	565.2	665.8	705.9	637.1	548.3	484.9	440.7	414.5
70°	333.2	361.5	409.5	484.1	575.3	605.9	541.5	468.4	422.0	386.7	362.3
72.5°	289.8	310.6	354.1	411.8	487.9	512.3	467.3	403.0	359.8	333.2	313.9
75°	220.8	238.1	266.4	312.8	365.5	379.6	345.8	305.7	276.6	257.8	242.8
77.5°	159.2	172.0	192.4	221.0	257.5	270.2	248.8	222.1	200.9	188.1	179.8
80°	120.2	130.5	147.8	171.3	193.3	200.4	187.8	167.4	152.5	145.4	138.3
82.5°	88.8	94.6	105.0	121.0	136.1	144.5	133.8	121.5	113.5	107.0	104.4
85°	44.8	47.9	52.7	58.9	68.4	71.5	67.6	64.4	59.7	55.8	55.8
87.5°	17.3	17.7	20.3	22.0	25.0	27.6	27.7	27.1	27.2	26.3	25.9
90°	4.6	7.0	10.5	12.8	15.1	18.6	22.1	25.6	29.0	27.9	29.0
92.5°	21.4	31.1	40.2	50.0	67.2	97.6	147.6	196.6	178.7	134.8	97.8
95°	43.0	55.8	75.5	105.7	151.0	249.8	422.9	613.5	689.0	558.8	418.3
97.5°	68.5	78.5	95.7	125.5	174.5	268.9	464.0	781.7	1067.7	1142.3	1042.6
100°	87.1	95.3	111.5	139.4	184.7	266.1	438.0	743.6	1100.3	1329.2	1369.8
102.5°	107.6	114.8	130.1	155.2	196.8	269.8	415.7	687.8	1039.9	1338.4	1478.6
105°	138.3	145.2	159.2	181.2	217.3	280.0	399.7	619.3	934.1	1267.6	1510.4
107.5°	169.4	176.1	189.8	210.5	244.0	299.1	398.5	575.6	840.7	1143.5	1418.8
110°	191.7	197.5	210.3	230.0	262.6	314.9	403.2	558.8	787.7	1065.4	1331.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	212.2	218.0	230.7	250.5	282.1	330.7	412.5	549.6	752.4	997.6	1245.0
115°	242.8	249.8	261.4	281.2	312.5	356.7	427.6	546.1	714.5	915.5	1130.5
117.5°	273.0	278.8	289.5	311.6	340.7	384.3	447.5	548.2	692.2	866.0	1047.5
120°	291.6	297.4	309.1	331.1	360.2	402.0	462.4	551.9	682.0	840.0	1003.8
122.5°	309.3	315.1	327.6	348.8	379.7	420.6	476.4	558.4	675.5	818.6	969.4
125°	333.5	340.4	353.2	375.3	406.6	447.3	498.4	568.1	666.9	791.2	923.7
127.5°	353.9	362.5	375.5	399.9	431.3	470.5	516.6	579.3	662.7	767.1	883.7
130°	366.0	376.4	390.4	414.8	446.1	484.5	528.6	586.7	659.9	754.0	858.6
132.5°	376.2	387.6	404.3	428.7	459.2	496.6	539.8	592.3	659.0	742.0	835.4
135°	392.7	405.5	422.9	447.3	478.7	514.7	554.2	600.7	657.6	726.2	804.0
137.5°	408.3	420.8	439.4	463.6	492.6	527.2	564.9	606.3	655.0	712.4	775.4
140°	419.4	431.0	449.6	472.9	501.9	535.6	570.5	610.0	654.1	704.1	758.7
142.5°	429.7	442.2	458.9	482.2	509.4	542.1	576.0	612.8	652.3	696.6	742.9
145°	446.1	456.6	474.0	493.8	520.5	550.7	582.1	614.6	649.5	686.7	723.8
147.5°	462.9	473.1	488.2	507.3	530.0	557.7	585.8	614.6	645.1	676.9	708.3
150°	474.0	483.3	498.4	514.7	535.6	562.3	586.7	614.6	641.3	670.4	697.1
152.5°	485.2	494.5	507.7	522.1	542.1	565.1	588.6	611.8	636.7	663.0	686.9
155°	503.1	510.1	521.7	534.4	550.7	570.5	589.1	608.8	628.6	651.8	671.5
157.5°	518.4	524.0	534.2	545.1	557.7	573.5	590.2	604.9	621.4	639.2	655.3
160°	528.6	533.3	542.6	550.7	562.3	576.3	590.2	603.0	615.8	630.9	646.0
162.5°	537.0	540.7	548.2	555.4	565.1	577.2	589.3	599.3	610.2	622.5	634.8
165°	548.4	550.7	556.5	561.2	569.3	578.6	586.7	593.7	601.8	611.1	620.4
167.5°	557.7	558.8	563.3	566.5	571.6	578.4	584.9	588.1	593.5	600.2	607.9
170°	562.3	563.5	567.0	569.3	571.6	577.4	582.1	584.4	587.9	593.7	599.5
172.5°	567.0	567.2	569.8	571.2	572.6	577.4	581.2	581.6	583.2	587.2	592.1
175°	571.6	570.5	572.8	572.8	574.0	576.3	578.6	577.4	577.4	579.8	582.1
177.5°	574.0	573.0	574.0	574.0	574.0	574.9	576.7	574.9	574.0	574.9	575.8
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0	574.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1	1622.1
2.5°	1707.0	1707.6	1714.6	1719.6	1717.1	1720.2	1721.5
5°	1865.0	1893.3	1908.2	1919.2	1920.0	1920.8	1927.1
7.5°	2089.0	2119.3	2141.5	2175.1	2185.2	2196.6	2193.3
10°	2252.5	2297.2	2335.8	2356.2	2378.2	2410.4	2384.5
12.5°	2405.2	2484.6	2543.2	2575.0	2595.7	2602.2	2589.5
15°	2657.2	2760.9	2816.7	2815.2	2885.9	2916.6	2868.6
17.5°	2888.3	2984.0	3060.7	3100.0	3158.9	3172.0	3166.0
20°	3029.7	3134.3	3194.0	3261.6	3292.2	3319.7	3324.4
22.5°	3151.7	3245.5	3309.7	3365.9	3391.6	3404.6	3412.5
25°	3277.3	3351.2	3389.7	3409.3	3416.4	3414.8	3404.6
27.5°	3268.6	3274.3	3231.9	3190.2	3153.0	3111.0	3096.5
30°	3183.8	3117.7	2999.9	2933.1	2834.8	2757.0	2788.4
32.5°	2960.6	2829.2	2696.8	2550.8	2429.9	2395.5	2360.9
35°	2526.7	2295.7	2160.5	2003.3	1940.4	1877.6	1834.3
37.5°	2044.2	1865.5	1705.1	1602.3	1539.3	1499.5	1478.2
40°	1767.5	1606.4	1474.4	1391.1	1343.1	1298.3	1292.1
42.5°	1546.9	1397.1	1297.7	1231.4	1185.3	1166.3	1152.5
45°	1266.9	1162.4	1095.6	1048.4	1017.8	1006.0	990.3
47.5°	1072.3	998.4	948.3	916.2	893.1	884.3	883.1
50°	963.5	902.2	865.3	840.1	822.1	818.9	806.4
52.5°	881.8	828.7	799.9	777.9	764.9	756.1	752.3
55°	765.5	730.1	704.2	691.6	681.4	672.7	672.7
57.5°	669.8	640.2	623.1	612.4	609.2	603.1	599.2
60°	610.7	585.5	572.2	562.7	556.4	557.2	550.1
62.5°	552.8	536.5	523.7	514.3	506.8	506.9	507.4
65°	470.8	458.2	448.8	445.6	440.9	435.4	437.0
67.5°	398.9	387.1	379.8	374.4	372.8	369.9	374.4
70°	347.4	338.7	333.2	328.5	326.9	327.7	331.7
72.5°	300.2	294.1	290.5	288.3	284.8	285.0	287.6
75°	235.8	231.1	227.9	225.6	224.8	224.8	224.8
77.5°	173.2	172.1	170.7	167.2	167.4	168.3	168.5
80°	136.8	134.4	133.6	132.0	129.7	128.1	132.0
82.5°	102.2	99.8	99.0	98.7	95.1	94.8	98.1
85°	55.0	52.7	53.4	52.7	52.7	51.9	51.9
87.5°	25.5	25.1	25.0	25.4	25.0	24.6	25.6
90°	30.2	31.4	33.7	32.5	33.7	34.9	33.7
92.5°	77.6	68.5	62.5	60.4	56.9	58.1	56.0
95°	283.5	221.9	180.1	158.0	147.6	139.4	134.8
97.5°	835.1	685.3	546.3	460.6	408.3	376.9	366.9
100°	1275.7	1139.8	974.8	857.4	772.6	727.3	728.5
102.5°	1475.5	1396.3	1291.7	1200.4	1133.3	1095.4	1068.7
105°	1626.6	1648.7	1618.5	1565.0	1520.9	1483.7	1477.9
107.5°	1607.5	1709.3	1750.7	1751.6	1736.7	1724.2	1713.5
110°	1545.3	1691.7	1773.0	1805.5	1814.8	1812.5	1810.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1463.5	1627.5	1732.1	1791.6	1820.4	1829.2	1829.7
115°	1332.6	1503.4	1630.1	1717.2	1768.3	1791.6	1797.4
117.5°	1222.0	1375.4	1503.9	1594.8	1653.3	1686.8	1694.7
120°	1160.7	1300.1	1417.5	1509.2	1574.3	1602.2	1609.2
122.5°	1111.4	1240.6	1349.6	1431.2	1489.7	1520.4	1529.2
125°	1050.3	1161.8	1254.8	1329.2	1380.3	1409.3	1417.5
127.5°	996.6	1097.2	1181.8	1248.1	1291.7	1318.0	1325.4
130°	963.2	1057.3	1136.3	1197.9	1239.7	1264.1	1273.4
132.5°	931.6	1019.2	1094.5	1152.3	1194.1	1215.8	1222.3
135°	886.5	962.0	1028.2	1085.2	1120.0	1140.9	1149.1
137.5°	843.0	908.1	965.5	1013.4	1048.7	1066.3	1071.7
140°	817.9	873.7	923.7	967.8	1000.4	1018.9	1017.8
142.5°	793.8	842.1	885.6	923.2	952.0	968.7	967.6
145°	762.2	799.4	833.0	862.1	886.5	895.8	898.1
147.5°	738.7	768.7	792.6	814.7	831.2	840.0	840.9
150°	723.8	748.2	770.3	787.7	800.5	807.5	807.5
152.5°	709.9	731.5	749.9	763.6	775.4	779.6	779.6
155°	690.1	707.6	721.5	732.0	741.3	743.6	744.7
157.5°	670.9	684.3	695.2	704.3	711.3	713.1	712.9
160°	658.8	670.4	678.5	686.7	693.6	693.6	692.5
162.5°	645.8	656.4	663.6	669.0	675.0	675.0	673.9
165°	627.4	635.5	641.3	646.0	650.6	649.5	649.5
167.5°	613.2	617.9	622.1	624.1	627.4	626.2	626.2
170°	603.0	607.6	610.0	611.1	613.5	612.3	612.3
172.5°	594.6	598.4	599.7	600.0	602.3	600.2	599.3
175°	583.2	585.6	585.6	585.6	586.7	585.6	584.4
177.5°	576.7	577.7	577.7	576.7	577.7	575.8	575.8
180°	574.0	574.0	574.0	574.0	574.0	574.0	574.0

(END OF REPORT)