

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: P333011-830

Luminaire Tested: **SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P333011-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

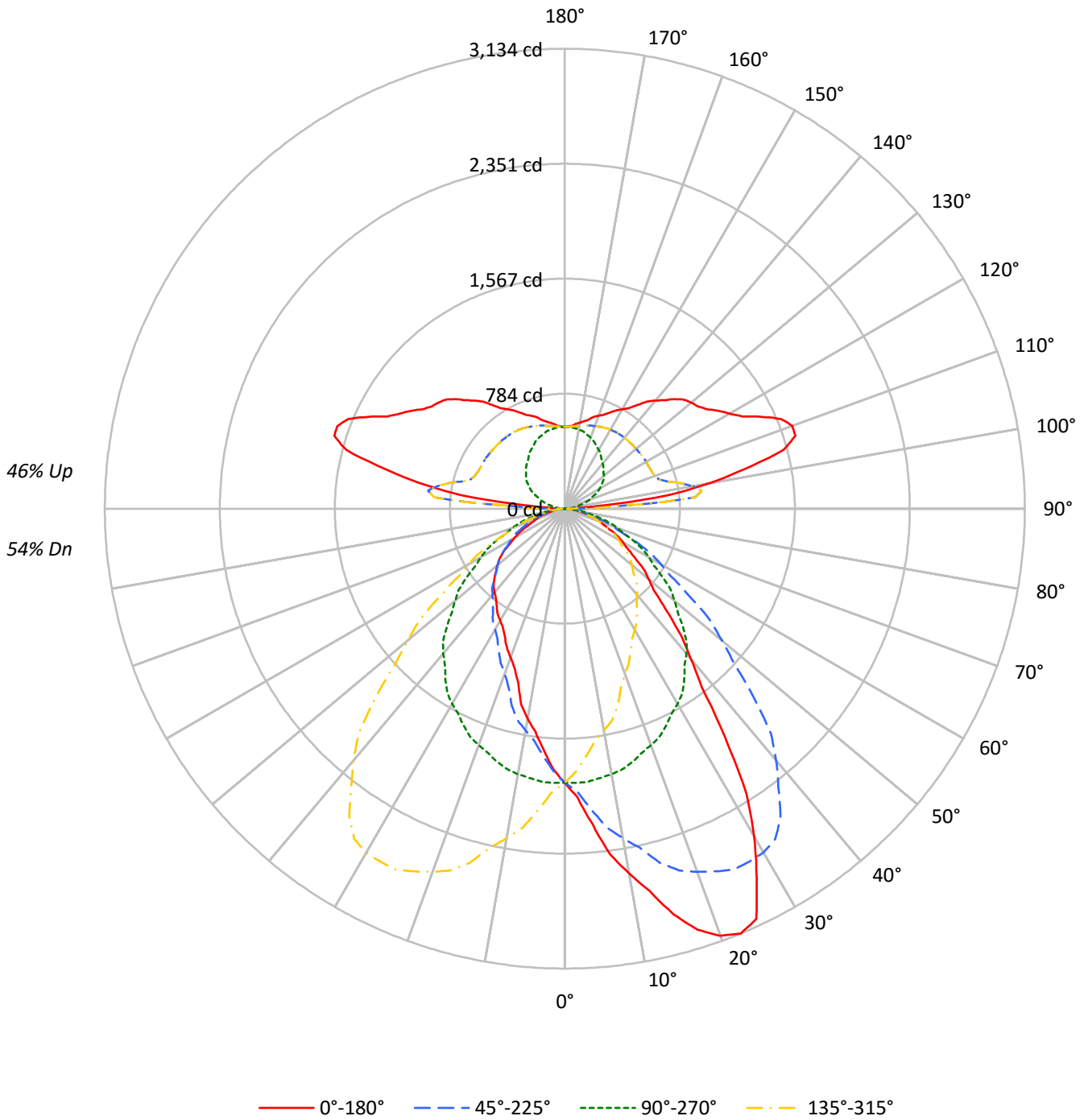
Lumens per Lamp: N/A
Luminaire Lumens: 8778.9 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

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	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40
3	83	74	67	61	77	69	63	58	59	55	51	51	47	44	43	40	38	34
4	76	66	58	52	70	61	54	49	53	48	44	45	42	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	33	35	32	29	26
6	65	53	45	39	60	49	42	37	43	38	33	37	33	30	32	28	26	23
7	60	48	40	34	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	23	21	18
9	52	40	32	27	48	37	31	26	33	27	24	29	24	21	25	21	19	17
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15079	15079	15079	15079
5°	17490	15124	13367	15124
10°	20690	15058	11931	15058
15°	23901	14919	10252	14919
20°	26611	14728	9271	14728
25°	27470	14539	8607	14539
30°	24047	14311	8207	14311
35°	18719	13973	7965	13973
40°	14037	13585	7835	13585
45°	11082	12965	7767	12965
50°	9357	12248	7542	12248
55°	8156	11461	7139	11461
60°	7338	10643	6318	10643
65°	6470	9761	5435	9761
70°	5828	8847	4902	8847
75°	4885	7842	4177	7842
80°	4128	6681	3919	6681
85°	3483	5233	3483	5233



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.1
10°-20°	545.9	6.2
20°-30°	853.8	9.7
30°-40°	949.2	10.8
40°-50°	842.2	9.6
50°-60°	656.2	7.5
60°-70°	429.6	4.9
70°-80°	211.3	2.4
80°-90°	55.2	0.6
90°-100°	402.7	4.6
100°-110°	838.0	9.5
110°-120°	750.6	8.6
120°-130°	631.4	7.2
130°-140°	526.5	6.0
140°-150°	402.2	4.6
150°-160°	282.7	3.2
160°-170°	166.3	1.9
170°-180°	54.1	0.6
0°-30°	1580.7	18.0
0°-40°	2529.9	28.8
0°-60°	4028.3	45.9
0°-90°	4724.4	53.8
90°-120°	1991.3	22.7
90°-150°	3551.4	40.5
90°-180°	4054.0	46.2
0°-180°	8778.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1868	1868	1868	1868	1868	
5°	2158	1866	1650	1866	2158	218
15°	2860	1785	1227	1785	2860	813
25°	3084	1632	966	1632	3084	1368
35°	1899	1418	808	1418	1899	1191
45°	971	1136	680	1136	971	769
55°	580	814	507	814	580	527
65°	339	511	284	511	339	341
75°	157	251	134	251	157	172
85°	38	56	38	56	38	43
90°	23	1	23	1	23	20
95°	267	36	267	36	267	415
105°	1541	128	1541	128	1541	1524
115°	1480	226	1480	226	1480	1469
125°	1181	314	1181	314	1181	1073
135°	1056	373	1056	373	1056	815
145°	862	430	862	430	862	546
155°	722	490	722	490	722	337
165°	630	533	630	533	630	180
175°	567	556	567	556	567	55
180°	558	558	558	558	558	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1970.1	1975.6	1970.1	1969.5	1963.5	1961.7	1959.3	1951.4	1937.0	1928.6	1930.4
5°	2158.2	2177.1	2166.5	2165.0	2148.5	2131.9	2121.4	2097.3	2071.7	2054.5	2040.1
7.5°	2375.9	2386.7	2380.1	2369.6	2342.8	2327.6	2303.2	2271.4	2225.5	2190.5	2158.4
10°	2524.0	2533.0	2530.1	2510.5	2490.9	2451.0	2428.5	2384.1	2326.1	2280.2	2237.3
12.5°	2669.7	2679.4	2652.9	2653.7	2616.7	2585.3	2549.5	2493.6	2426.7	2367.5	2313.8
15°	2859.7	2847.6	2847.6	2832.5	2791.2	2747.5	2710.7	2651.9	2567.7	2496.9	2422.4
17.5°	3008.3	3012.6	3006.3	2970.9	2938.4	2893.2	2825.6	2757.1	2678.9	2583.9	2507.7
20°	3097.5	3097.5	3090.7	3066.6	3024.4	2976.3	2903.3	2828.8	2729.4	2633.8	2548.1
22.5°	3133.6	3135.9	3128.0	3108.1	3070.2	3023.2	2961.1	2885.4	2783.0	2675.4	2569.2
25°	3083.9	3098.2	3099.6	3094.5	3083.2	3054.5	3001.1	2923.6	2831.8	2715.2	2600.8
27.5°	2831.3	2849.4	2865.2	2891.2	2925.8	2943.9	2946.3	2906.9	2826.8	2714.5	2599.4
30°	2579.6	2594.7	2643.6	2707.6	2757.3	2802.5	2841.6	2852.1	2807.0	2706.1	2584.9
32.5°	2300.4	2320.8	2369.7	2438.5	2521.3	2597.7	2685.7	2730.5	2729.3	2668.8	2556.6
35°	1899.4	1914.5	1959.6	2031.8	2131.2	2244.9	2384.1	2492.4	2566.2	2560.9	2492.4
37.5°	1531.8	1548.9	1594.5	1654.4	1750.7	1891.4	2026.1	2175.4	2311.8	2388.4	2365.5
40°	1332.0	1332.8	1377.1	1438.9	1529.2	1651.8	1798.6	1964.1	2116.1	2240.3	2264.4
42.5°	1174.2	1174.4	1203.7	1270.3	1335.3	1450.8	1590.8	1755.2	1933.2	2076.5	2140.3
45°	970.7	977.5	1001.6	1041.5	1092.7	1190.5	1302.6	1455.4	1654.8	1824.9	1931.0
47.5°	822.1	832.0	847.3	879.9	920.7	985.8	1078.6	1215.8	1378.0	1565.1	1716.1
50°	745.0	746.5	766.1	784.1	819.5	871.5	952.7	1067.1	1216.1	1395.9	1563.8
52.5°	678.8	678.4	690.2	713.1	741.9	782.3	847.9	952.1	1084.2	1245.5	1418.7
55°	579.5	583.2	592.2	610.3	632.2	660.7	712.7	790.9	894.8	1032.5	1189.8
57.5°	503.9	505.9	512.9	520.6	540.6	561.4	600.4	654.7	742.3	855.1	1001.6
60°	454.5	455.2	457.5	468.8	484.7	504.2	530.6	576.5	650.2	753.3	869.2
62.5°	406.3	407.7	411.2	419.4	431.7	445.2	472.8	509.6	570.7	658.7	763.2
65°	338.7	339.4	344.7	347.7	357.4	369.5	389.8	414.6	456.8	530.6	609.5
67.5°	283.0	283.0	283.2	287.3	294.1	302.1	314.2	334.1	365.9	411.2	480.9
70°	246.9	246.9	248.4	250.6	254.4	261.1	267.9	283.0	306.3	343.2	396.6
72.5°	213.1	213.7	215.2	215.7	217.6	223.2	228.2	237.8	255.1	283.0	326.1
75°	156.6	158.8	162.6	165.6	169.3	168.5	173.8	179.8	185.1	201.7	226.5
77.5°	116.5	115.3	115.7	118.3	118.8	119.5	123.3	127.9	131.9	139.7	148.5
80°	88.8	88.8	91.0	91.8	91.0	91.8	95.6	97.8	99.3	102.4	110.7
82.5°	67.1	68.3	67.6	68.3	68.8	69.6	72.7	73.1	74.6	75.9	79.4
85°	37.6	38.4	39.1	37.6	37.6	37.6	39.1	39.9	41.4	40.6	42.1
87.5°	17.8	17.2	18.1	17.8	18.2	17.6	18.0	19.0	17.5	18.4	17.9
90°	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7	18.7	19.7	17.5
92.5°	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1	289.4	347.4	304.1
95°	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5	917.8	892.6	673.5
97.5°	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1	1153.1	940.2	630.4
100°	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9	1160.9	880.5	571.7
102.5°	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8	1095.2	806.1	532.3
105°	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6	975.8	718.5	498.3
107.5°	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5	879.5	669.4	492.2
110°	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2	831.3	652.8	494.0



TEST NUMBER: P333011-830
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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0	804.1	644.9	499.2
115°	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6	778.7	640.7	509.3
117.5°	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4	767.3	639.6	520.0
120°	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2	761.2	639.6	527.9
122.5°	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6	754.2	638.8	535.8
125°	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7	742.5	637.4	547.6
127.5°	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8	727.0	635.0	557.0
130°	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3	717.4	634.1	564.0
132.5°	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9	708.6	633.3	570.1
135°	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5	695.5	632.0	579.4
137.5°	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5	684.1	631.7	584.8
140°	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3	678.0	630.8	589.3
142.5°	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0	672.7	630.8	592.8
145°	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8	663.7	628.7	594.7
147.5°	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6	655.6	624.7	595.8
150°	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8	649.5	622.1	595.8
152.5°	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1	642.4	617.7	594.1
155°	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7	632.0	611.1	591.4
157.5°	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1	621.2	604.4	588.6
160°	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5	613.3	599.1	586.0
162.5°	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8	606.3	593.8	583.3
165°	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5	594.7	586.0	578.2
167.5°	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6	584.2	578.1	573.1
170°	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7	577.2	572.8	569.5
172.5°	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6	571.1	567.5	566.0
175°	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3	564.0	561.8	561.8
177.5°	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1	559.2	558.4	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



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CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1924.4	1916.0	1911.8	1902.1	1890.6	1884.6	1879.2	1871.4	1861.1	1850.3	1842.5
5°	2022.0	2004.0	1981.4	1954.4	1930.2	1907.0	1886.6	1866.3	1843.0	1818.9	1794.8
7.5°	2122.3	2086.8	2048.4	2004.0	1960.8	1921.6	1885.4	1850.8	1811.7	1776.6	1744.6
10°	2192.2	2144.0	2090.6	2034.1	1977.6	1928.7	1880.6	1836.9	1788.8	1745.9	1709.8
12.5°	2248.7	2192.2	2127.9	2057.6	1989.7	1930.5	1875.2	1818.3	1763.5	1717.0	1668.9
15°	2342.6	2265.1	2178.6	2094.3	2006.3	1925.7	1851.2	1785.0	1722.6	1657.1	1611.2
17.5°	2407.3	2315.3	2210.1	2108.8	2004.8	1909.8	1823.8	1745.0	1672.9	1606.1	1551.4
20°	2445.7	2344.1	2227.5	2112.3	1995.7	1894.1	1801.6	1714.3	1639.7	1567.5	1511.1
22.5°	2467.4	2354.9	2227.5	2107.0	1986.1	1876.0	1774.4	1683.6	1602.4	1530.2	1467.7
25°	2474.4	2353.9	2223.7	2085.3	1952.9	1836.2	1730.8	1632.2	1541.9	1469.7	1403.4
27.5°	2464.7	2322.9	2189.6	2047.5	1910.8	1787.9	1677.3	1573.7	1483.3	1405.7	1337.8
30°	2450.2	2298.2	2155.2	2007.8	1869.3	1751.1	1634.5	1535.2	1441.1	1360.6	1292.1
32.5°	2418.9	2268.1	2114.3	1963.2	1823.0	1701.2	1590.5	1490.6	1398.4	1316.1	1243.3
35°	2356.9	2204.1	2037.1	1882.1	1744.4	1618.0	1514.1	1417.8	1329.7	1241.7	1164.9
37.5°	2275.2	2119.1	1952.9	1783.2	1645.3	1526.0	1430.7	1340.3	1254.3	1173.9	1088.9
40°	2198.2	2056.0	1884.3	1715.8	1574.3	1459.2	1371.1	1289.1	1202.6	1122.8	1037.7
42.5°	2104.9	1983.7	1810.3	1641.2	1501.5	1390.5	1308.5	1228.3	1149.6	1072.2	983.5
45°	1949.1	1857.3	1694.7	1532.2	1391.5	1281.6	1206.4	1135.6	1066.3	992.6	909.1
47.5°	1770.6	1708.4	1568.1	1401.7	1271.5	1172.6	1099.9	1042.1	983.5	909.8	836.5
50°	1646.5	1606.7	1471.2	1319.2	1195.0	1104.0	1029.4	975.2	926.3	855.6	790.1
52.5°	1514.1	1492.9	1378.5	1233.1	1113.1	1023.9	960.3	911.4	862.0	803.2	742.0
55°	1312.4	1323.7	1226.6	1101.0	988.1	912.9	854.9	814.3	772.1	722.5	675.0
57.5°	1106.3	1147.5	1082.3	971.9	866.2	796.6	753.0	718.8	683.4	642.2	601.7
60°	982.8	1017.4	980.5	883.4	790.9	726.2	685.6	659.2	623.9	586.3	555.3
62.5°	862.4	899.5	877.6	799.2	713.2	657.6	621.7	597.2	570.9	538.1	506.1
65°	711.1	735.2	724.7	670.5	609.5	562.1	529.0	511.0	486.9	462.8	434.2
67.5°	544.7	591.2	585.0	556.3	503.6	466.6	444.9	429.0	407.0	389.1	369.7
70°	447.8	490.7	489.9	466.6	438.0	403.3	388.3	374.8	355.2	337.9	322.1
72.5°	366.5	405.8	411.6	393.7	374.2	348.0	333.6	324.2	305.2	293.3	280.5
75°	256.7	285.2	292.8	292.8	283.7	270.1	257.4	251.4	237.8	227.2	219.7
77.5°	168.2	186.3	198.0	200.8	202.2	197.7	187.1	182.9	172.5	168.7	161.5
80°	118.9	130.9	144.5	149.0	152.8	151.3	146.8	143.7	133.9	130.2	127.1
82.5°	82.2	88.8	99.9	109.9	108.8	112.7	108.8	106.4	99.1	97.6	94.6
85°	42.9	43.6	45.1	51.9	55.7	57.2	58.0	56.5	54.2	54.2	48.9
87.5°	17.5	16.9	16.8	16.8	17.2	19.4	20.5	20.6	19.3	18.2	16.6
90°	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1	3.3	6.6	7.6
92.5°	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4	18.2	28.5	41.8
95°	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1	39.4	50.4	64.7
97.5°	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8	64.8	74.3	87.4
100°	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2	83.2	90.9	104.1
102.5°	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8	102.5	109.3	121.6
105°	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2	131.4	137.0	150.1
107.5°	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3	160.5	166.1	180.0
110°	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5	180.7	186.2	199.3



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8	200.0	206.3	218.6
115°	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6	228.9	236.6	247.5
117.5°	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5	257.6	264.4	276.4
120°	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8	276.0	283.7	295.7
122.5°	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3	293.5	301.2	312.4
125°	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3	318.7	325.3	337.3
127.5°	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7	338.2	346.1	359.9
130°	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1	350.4	359.2	375.7
132.5°	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5	361.0	372.4	388.0
135°	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4	377.9	388.8	407.5
137.5°	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5	393.6	405.7	423.4
140°	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9	404.2	416.2	434.8
142.5°	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1	416.4	427.5	445.4
145°	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5	433.8	444.7	460.0
147.5°	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9	451.0	460.6	476.5
150°	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2	463.3	472.0	485.2
152.5°	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5	473.8	482.6	494.8
155°	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6	490.7	497.2	508.2
157.5°	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1	505.1	511.2	519.8
160°	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7	514.7	519.2	526.8
162.5°	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5	522.6	526.1	532.9
165°	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4	533.4	535.6	541.0
167.5°	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3	542.2	543.3	547.4
170°	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6	546.5	547.6	550.9
172.5°	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0	550.9	551.1	553.6
175°	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4	555.3	555.3	556.4
177.5°	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4	557.5	556.6	557.5
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1834.1	1828.1	1820.2	1811.2	1800.4	1790.7	1786.5	1790.2	1792.0	1787.2	1786.5
5°	1778.2	1759.4	1744.4	1721.8	1703.7	1688.7	1678.2	1673.7	1675.2	1663.1	1660.1
7.5°	1715.5	1693.2	1668.5	1641.7	1616.7	1594.6	1583.0	1576.7	1564.0	1558.5	1549.4
10°	1675.2	1645.0	1621.0	1589.3	1560.8	1534.5	1521.6	1511.1	1498.3	1492.2	1479.5
12.5°	1633.6	1598.6	1572.2	1539.4	1510.1	1478.5	1466.2	1446.7	1426.6	1414.0	1397.6
15°	1575.1	1533.0	1500.5	1461.4	1426.8	1390.7	1358.3	1322.2	1308.6	1280.1	1263.5
17.5°	1506.6	1463.9	1423.8	1371.3	1317.9	1273.0	1238.5	1203.9	1183.2	1164.9	1156.5
20°	1461.4	1422.3	1366.6	1305.6	1246.2	1196.6	1168.7	1146.1	1123.5	1110.8	1101.7
22.5°	1418.7	1368.7	1304.0	1238.2	1178.7	1139.9	1116.3	1093.2	1074.8	1062.6	1050.6
25°	1347.1	1281.6	1213.1	1137.8	1097.2	1063.4	1037.7	1018.9	1007.7	991.8	985.8
27.5°	1273.5	1194.1	1118.6	1068.0	1025.7	994.7	972.4	958.3	944.0	933.9	926.0
30°	1216.8	1136.3	1068.6	1020.4	977.5	952.0	933.9	917.4	906.1	897.8	891.7
32.5°	1160.8	1080.3	1023.4	971.7	937.8	912.9	893.5	881.2	872.3	861.7	858.0
35°	1079.9	1008.4	958.8	912.1	877.4	854.9	839.8	827.1	819.5	816.5	814.3
37.5°	1002.1	943.5	890.1	851.9	821.0	803.2	785.5	779.2	774.0	768.6	771.1
40°	952.7	897.8	850.4	809.7	784.9	765.3	754.8	747.2	742.7	742.7	742.7
42.5°	909.9	856.2	810.0	773.6	748.8	732.3	720.5	714.2	712.7	712.1	715.7
45°	843.6	793.9	747.2	717.2	696.1	679.6	672.8	667.5	667.5	670.5	671.3
47.5°	777.8	731.3	693.8	660.2	640.8	630.5	624.6	621.9	622.2	625.2	628.7
50°	737.4	691.5	654.7	624.6	606.5	596.7	591.4	590.0	591.4	591.4	596.7
52.5°	693.5	652.4	616.1	590.9	570.4	561.3	558.4	556.3	557.1	559.6	561.8
55°	629.1	592.2	557.6	533.6	518.5	512.5	505.7	506.4	504.9	506.4	506.4
57.5°	564.6	531.4	499.3	480.1	466.8	458.2	450.7	452.9	450.6	450.3	449.1
60°	523.0	486.9	461.3	444.0	429.0	421.4	414.6	416.1	413.9	412.4	409.3
62.5°	477.9	447.8	423.4	406.7	394.6	385.9	379.1	377.6	372.4	367.2	360.6
65°	412.4	387.6	365.7	350.0	338.7	331.9	326.6	322.1	310.8	298.8	292.8
67.5°	348.7	330.8	310.5	297.1	287.9	279.1	269.0	261.3	250.7	244.1	240.3
70°	307.7	290.5	273.1	260.3	250.6	242.3	231.0	225.7	218.2	215.2	211.5
72.5°	268.6	252.5	236.5	224.9	214.4	208.0	199.2	193.9	190.6	189.4	185.6
75°	209.2	196.4	184.4	173.8	165.6	161.1	157.3	153.5	152.0	145.2	141.5
77.5°	152.6	144.2	136.7	129.1	123.3	120.3	113.0	108.7	106.1	102.9	102.2
80°	118.9	112.9	105.4	100.9	92.6	89.5	86.5	85.8	85.0	84.3	83.5
82.5°	89.4	83.4	75.9	73.1	70.9	69.1	67.3	66.5	65.8	66.3	66.1
85°	45.1	42.1	42.1	41.4	40.6	39.9	39.1	39.1	38.4	39.1	38.4
87.5°	16.8	16.2	17.5	16.3	17.3	17.8	17.0	17.2	18.0	17.1	17.1
90°	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7	20.8	21.9	21.9
92.5°	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1	161.8	128.8	106.9
95°	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5	641.8	495.0	388.8
97.5°	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1	1136.0	1028.9	914.5
100°	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9	1342.7	1289.1	1208.1
102.5°	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8	1423.3	1438.9	1405.1
105°	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6	1416.2	1524.6	1569.4
107.5°	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5	1303.3	1456.0	1553.7
110°	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2	1215.7	1374.5	1495.0



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0	1138.6	1288.6	1409.1
115°	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6	1050.4	1178.5	1283.6
117.5°	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4	999.9	1100.7	1189.9
120°	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2	978.1	1065.6	1143.4
122.5°	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6	964.0	1043.8	1111.9
125°	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7	941.9	1017.5	1077.7
127.5°	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8	915.9	991.2	1048.4
130°	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3	894.8	969.3	1027.4
132.5°	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9	871.2	943.9	1001.9
135°	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5	835.7	902.5	957.2
137.5°	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5	801.7	858.0	907.5
140°	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3	779.8	829.1	875.1
142.5°	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0	761.4	803.7	843.6
145°	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8	736.0	768.8	799.6
147.5°	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6	714.1	740.4	764.5
150°	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8	701.0	722.8	742.5
152.5°	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1	687.8	707.9	724.2
155°	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7	669.2	685.6	698.8
157.5°	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1	650.8	664.6	675.1
160°	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5	638.5	650.5	659.3
162.5°	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8	627.2	636.6	644.4
165°	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5	610.0	617.7	623.2
167.5°	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6	595.6	601.7	605.0
170°	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7	586.0	590.3	593.6
172.5°	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6	578.1	580.7	583.1
175°	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3	567.3	569.5	569.5
177.5°	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1	561.0	561.0	561.8
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1782.9	1784.1	1779.9	1778.7	1779.9	1784.1	1782.9	1786.5	1787.2	1792.0	1790.2
5°	1654.1	1652.6	1648.8	1649.5	1648.8	1652.6	1654.1	1660.1	1663.1	1675.2	1673.7
7.5°	1543.9	1538.0	1539.6	1533.7	1539.6	1538.0	1543.9	1549.4	1558.5	1564.0	1576.7
10°	1476.5	1468.2	1461.4	1455.4	1461.4	1468.2	1476.5	1479.5	1492.2	1498.3	1511.1
12.5°	1384.4	1377.2	1368.1	1369.9	1368.1	1377.2	1384.4	1397.6	1414.0	1426.6	1446.7
15°	1253.7	1242.5	1224.4	1226.6	1224.4	1242.5	1253.7	1263.5	1280.1	1308.6	1322.2
17.5°	1143.1	1143.2	1135.0	1136.9	1135.0	1143.2	1143.1	1156.5	1164.9	1183.2	1203.9
20°	1085.9	1080.6	1081.4	1079.1	1081.4	1080.6	1085.9	1101.7	1110.8	1123.5	1146.1
22.5°	1046.1	1039.7	1034.4	1029.7	1034.4	1039.7	1046.1	1050.6	1062.6	1074.8	1093.2
25°	979.0	974.5	967.8	966.3	967.8	974.5	979.0	985.8	991.8	1007.7	1018.9
27.5°	920.0	919.2	916.4	912.9	916.4	919.2	920.0	926.0	933.9	944.0	958.3
30°	885.7	884.2	882.7	880.4	882.7	884.2	885.7	891.7	897.8	906.1	917.4
32.5°	855.1	854.1	852.6	852.8	852.6	854.1	855.1	858.0	861.7	872.3	881.2
35°	811.2	810.5	809.0	808.2	809.0	810.5	811.2	814.3	816.5	819.5	827.1
37.5°	770.3	772.2	771.4	771.2	771.4	772.2	770.3	771.1	768.6	774.0	779.2
40°	742.0	742.7	744.2	743.5	744.2	742.7	742.0	742.7	742.7	742.7	747.2
42.5°	718.5	718.7	720.8	718.2	720.8	718.7	718.5	715.7	712.1	712.7	714.2
45°	676.6	681.1	680.3	680.3	680.3	681.1	676.6	671.3	670.5	667.5	667.5
47.5°	630.7	634.5	635.6	635.5	635.6	634.5	630.7	628.7	625.2	622.2	621.9
50°	600.5	599.0	601.2	600.5	601.2	599.0	600.5	596.7	591.4	591.4	590.0
52.5°	563.8	564.1	563.9	563.2	563.9	564.1	563.8	561.8	559.6	557.1	556.3
55°	507.2	507.9	506.4	507.2	506.4	507.9	507.2	506.4	506.4	504.9	506.4
57.5°	445.8	442.1	443.7	441.9	443.7	442.1	445.8	449.1	450.3	450.6	452.9
60°	401.9	395.9	394.4	391.3	394.4	395.9	401.9	409.3	412.4	413.9	416.1
62.5°	352.5	348.3	343.2	345.5	343.2	348.3	352.5	360.6	367.2	372.4	377.6
65°	286.7	283.7	281.4	284.5	281.4	283.7	286.7	292.8	298.8	310.8	322.1
67.5°	237.3	235.7	235.7	234.2	235.7	235.7	237.3	240.3	244.1	250.7	261.3
70°	211.5	209.2	209.2	207.7	209.2	209.2	211.5	211.5	215.2	218.2	225.7
72.5°	184.9	182.8	183.3	182.4	183.3	182.8	184.9	185.6	189.4	190.6	193.9
75°	137.0	133.2	133.2	133.9	133.2	133.2	137.0	141.5	145.2	152.0	153.5
77.5°	102.2	101.4	102.5	101.1	102.5	101.4	102.2	102.2	102.9	106.1	108.7
80°	83.5	82.8	82.0	84.3	82.0	82.8	83.5	83.5	84.3	85.0	85.8
82.5°	64.8	64.8	64.6	67.4	64.6	64.8	64.8	66.1	66.3	65.8	66.5
85°	39.1	37.6	39.1	37.6	39.1	37.6	39.1	38.4	39.1	38.4	39.1
87.5°	18.5	18.1	17.2	17.8	17.2	18.1	18.5	17.1	17.1	18.0	17.2
90°	23.0	24.1	23.0	23.0	23.0	24.1	23.0	21.9	21.9	20.8	19.7
92.5°	94.0	88.0	84.4	84.4	84.4	88.0	94.0	106.9	128.8	161.8	215.1
95°	335.2	301.2	281.4	267.2	281.4	301.2	335.2	388.8	495.0	641.8	811.5
97.5°	835.8	770.0	737.1	714.4	737.1	770.0	835.8	914.5	1028.9	1136.0	1199.1
100°	1112.8	1045.9	1013.1	1004.4	1013.1	1045.9	1112.8	1208.1	1289.1	1342.7	1320.9
102.5°	1346.7	1298.3	1263.7	1256.7	1263.7	1298.3	1346.7	1405.1	1438.9	1423.3	1314.8
105°	1571.7	1562.9	1547.6	1541.0	1547.6	1562.9	1571.7	1569.4	1524.6	1416.2	1226.6
107.5°	1607.8	1632.8	1643.7	1646.6	1643.7	1632.8	1607.8	1553.7	1456.0	1303.3	1101.5
110°	1572.7	1618.7	1638.5	1648.3	1638.5	1618.7	1572.7	1495.0	1374.5	1215.7	1026.2



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1497.4	1553.0	1580.6	1596.7	1580.6	1553.0	1497.4	1409.1	1288.6	1138.6	971.0
115°	1370.2	1435.9	1470.9	1479.7	1470.9	1435.9	1370.2	1283.6	1178.5	1050.4	915.6
117.5°	1263.7	1318.9	1354.3	1361.1	1354.3	1318.9	1263.7	1189.9	1100.7	999.9	888.4
120°	1205.9	1254.1	1282.5	1294.6	1282.5	1254.1	1205.9	1143.4	1065.6	978.1	876.2
122.5°	1164.7	1205.9	1229.9	1242.0	1229.9	1205.9	1164.7	1111.9	1043.8	964.0	865.6
125°	1121.5	1153.3	1174.1	1180.6	1174.1	1153.3	1121.5	1077.7	1017.5	941.9	847.7
127.5°	1092.4	1120.7	1138.2	1144.7	1138.2	1120.7	1092.4	1048.4	991.2	915.9	825.8
130°	1072.2	1099.6	1117.1	1123.7	1117.1	1099.6	1072.2	1027.4	969.3	894.8	808.3
132.5°	1045.9	1076.9	1093.4	1100.0	1093.4	1076.9	1045.9	1001.9	943.9	871.2	789.9
135°	1001.1	1031.7	1049.2	1055.8	1049.2	1031.7	1001.1	957.2	902.5	835.7	764.5
137.5°	948.5	978.7	993.2	1001.1	993.2	978.7	948.5	907.5	858.0	801.7	741.5
140°	913.4	937.5	952.8	961.6	952.8	937.5	913.4	875.1	829.1	779.8	728.3
142.5°	877.5	899.8	913.4	919.5	913.4	899.8	877.5	843.6	803.7	761.4	716.0
145°	826.9	845.6	856.5	862.0	856.5	845.6	826.9	799.6	768.8	736.0	698.8
147.5°	784.7	800.6	809.0	810.9	809.0	800.6	784.7	764.5	740.4	714.1	684.6
150°	760.1	774.3	780.9	782.0	780.9	774.3	760.1	742.5	722.8	701.0	675.8
152.5°	739.0	750.6	754.6	755.7	754.6	750.6	739.0	724.2	707.9	687.8	666.1
155°	709.7	718.5	721.8	721.8	721.8	718.5	709.7	698.8	685.6	669.2	651.7
157.5°	683.4	690.0	692.0	692.0	692.0	690.0	683.4	675.1	664.6	650.8	636.1
160°	665.9	672.5	673.5	673.5	673.5	672.5	665.9	659.3	650.5	638.5	626.5
162.5°	649.2	655.8	657.0	656.0	657.0	655.8	649.2	644.4	636.6	627.2	616.8
165°	627.5	632.0	630.8	629.8	630.8	632.0	627.5	623.2	617.7	610.0	603.5
167.5°	607.2	610.0	609.8	609.0	609.8	610.0	607.2	605.0	601.7	595.6	590.6
170°	595.8	596.9	595.8	595.8	595.8	596.9	595.8	593.6	590.3	586.0	582.7
172.5°	584.4	585.5	584.4	582.7	584.4	585.5	584.4	583.1	580.7	578.1	575.6
175°	569.5	571.7	569.5	567.3	569.5	571.7	569.5	569.5	569.5	567.3	566.3
177.5°	561.0	561.8	560.1	558.4	560.1	561.8	561.0	561.8	561.0	561.0	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P333011-830
 CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1786.5	1790.7	1800.4	1811.2	1820.2	1828.1	1834.1	1842.5	1850.3	1861.1	1871.4
5°	1678.2	1688.7	1703.7	1721.8	1744.4	1759.4	1778.2	1794.8	1818.9	1843.0	1866.3
7.5°	1583.0	1594.6	1616.7	1641.7	1668.5	1693.2	1715.5	1744.6	1776.6	1811.7	1850.8
10°	1521.6	1534.5	1560.8	1589.3	1621.0	1645.0	1675.2	1709.8	1745.9	1788.8	1836.9
12.5°	1466.2	1478.5	1510.1	1539.4	1572.2	1598.6	1633.6	1668.9	1717.0	1763.5	1818.3
15°	1358.3	1390.7	1426.8	1461.4	1500.5	1533.0	1575.1	1611.2	1657.1	1722.6	1785.0
17.5°	1238.5	1273.0	1317.9	1371.3	1423.8	1463.9	1506.6	1551.4	1606.1	1672.9	1745.0
20°	1168.7	1196.6	1246.2	1305.6	1366.6	1422.3	1461.4	1511.1	1567.5	1639.7	1714.3
22.5°	1116.3	1139.9	1178.7	1238.2	1304.0	1368.7	1418.7	1467.7	1530.2	1602.4	1683.6
25°	1037.7	1063.4	1097.2	1137.8	1213.1	1281.6	1347.1	1403.4	1469.7	1541.9	1632.2
27.5°	972.4	994.7	1025.7	1068.0	1118.6	1194.1	1273.5	1337.8	1405.7	1483.3	1573.7
30°	933.9	952.0	977.5	1020.4	1068.6	1136.3	1216.8	1292.1	1360.6	1441.1	1535.2
32.5°	893.5	912.9	937.8	971.7	1023.4	1080.3	1160.8	1243.3	1316.1	1398.4	1490.6
35°	839.8	854.9	877.4	912.1	958.8	1008.4	1079.9	1164.9	1241.7	1329.7	1417.8
37.5°	785.5	803.2	821.0	851.9	890.1	943.5	1002.1	1088.9	1173.9	1254.3	1340.3
40°	754.8	765.3	784.9	809.7	850.4	897.8	952.7	1037.7	1122.8	1202.6	1289.1
42.5°	720.5	732.3	748.8	773.6	810.0	856.2	909.9	983.5	1072.2	1149.6	1228.3
45°	672.8	679.6	696.1	717.2	747.2	793.9	843.6	909.1	992.6	1066.3	1135.6
47.5°	624.6	630.5	640.8	660.2	693.8	731.3	777.8	836.5	909.8	983.5	1042.1
50°	591.4	596.7	606.5	624.6	654.7	691.5	737.4	790.1	855.6	926.3	975.2
52.5°	558.4	561.3	570.4	590.9	616.1	652.4	693.5	742.0	803.2	862.0	911.4
55°	505.7	512.5	518.5	533.6	557.6	592.2	629.1	675.0	722.5	772.1	814.3
57.5°	450.7	458.2	466.8	480.1	499.3	531.4	564.6	601.7	642.2	683.4	718.8
60°	414.6	421.4	429.0	444.0	461.3	486.9	523.0	555.3	586.3	623.9	659.2
62.5°	379.1	385.9	394.6	406.7	423.4	447.8	477.9	506.1	538.1	570.9	597.2
65°	326.6	331.9	338.7	350.0	365.7	387.6	412.4	434.2	462.8	486.9	511.0
67.5°	269.0	279.1	287.9	297.1	310.5	330.8	348.7	369.7	389.1	407.0	429.0
70°	231.0	242.3	250.6	260.3	273.1	290.5	307.7	322.1	337.9	355.2	374.8
72.5°	199.2	208.0	214.4	224.9	236.5	252.5	268.6	280.5	293.3	305.2	324.2
75°	157.3	161.1	165.6	173.8	184.4	196.4	209.2	219.7	227.2	237.8	251.4
77.5°	113.0	120.3	123.3	129.1	136.7	144.2	152.6	161.5	168.7	172.5	182.9
80°	86.5	89.5	92.6	100.9	105.4	112.9	118.9	127.1	130.2	133.9	143.7
82.5°	67.3	69.1	70.9	73.1	75.9	83.4	89.4	94.6	97.6	99.1	106.4
85°	39.1	39.9	40.6	41.4	42.1	42.1	45.1	48.9	54.2	54.2	56.5
87.5°	17.0	17.8	17.3	16.3	17.5	16.2	16.8	16.6	18.2	19.3	20.6
90°	18.7	19.7	17.5	15.4	15.4	8.8	8.8	7.6	6.6	3.3	1.1
92.5°	289.4	347.4	304.1	221.2	136.3	80.6	57.9	41.8	28.5	18.2	12.4
95°	917.8	892.6	673.5	411.8	232.1	137.0	90.9	64.7	50.4	39.4	36.1
97.5°	1153.1	940.2	630.4	370.2	221.9	148.5	110.0	87.4	74.3	64.8	64.8
100°	1160.9	880.5	571.7	348.3	224.5	159.9	124.9	104.1	90.9	83.2	83.2
102.5°	1095.2	806.1	532.3	342.1	233.3	174.8	141.5	121.6	109.3	102.5	100.8
105°	975.8	718.5	498.3	345.0	254.1	201.5	169.8	150.1	137.0	131.4	128.2
107.5°	879.5	669.4	492.2	361.2	278.4	230.3	198.9	180.0	166.1	160.5	158.3
110°	831.3	652.8	494.0	373.4	296.8	248.6	219.0	199.3	186.2	180.7	178.5



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	804.1	644.9	499.2	386.6	314.3	267.9	238.4	218.6	206.3	200.0	197.8
115°	778.7	640.7	509.3	407.5	341.7	297.9	268.3	247.5	236.6	228.9	225.6
117.5°	767.3	639.6	520.0	428.7	368.3	326.6	296.0	276.4	264.4	257.6	254.5
120°	761.2	639.6	527.9	443.6	386.6	345.0	314.3	295.7	283.7	276.0	273.8
122.5°	754.2	638.8	535.8	457.6	404.2	362.5	332.7	312.4	301.2	293.5	291.3
125°	742.5	637.4	547.6	478.6	428.2	388.8	358.2	337.3	325.3	318.7	314.3
127.5°	727.0	635.0	557.0	496.8	450.5	412.5	381.5	359.9	346.1	338.2	334.7
130°	717.4	634.1	564.0	508.2	465.5	428.2	396.4	375.7	359.2	350.4	346.1
132.5°	708.6	633.3	570.1	519.6	477.8	440.5	410.5	388.0	372.4	361.0	357.5
135°	695.5	632.0	579.4	534.5	495.0	458.9	430.5	407.5	388.8	377.9	373.4
137.5°	684.1	631.7	584.8	545.0	508.2	474.5	447.3	423.4	405.7	393.6	389.5
140°	678.0	630.8	589.3	552.0	517.0	484.1	457.8	434.8	416.2	404.2	400.9
142.5°	672.7	630.8	592.8	557.2	524.8	492.9	467.4	445.4	427.5	416.4	413.1
145°	663.7	628.7	594.7	563.0	533.4	504.9	480.8	460.0	444.7	433.8	430.5
147.5°	655.6	624.7	595.8	568.0	542.2	515.4	493.7	476.5	460.6	451.0	449.9
150°	649.5	622.1	595.8	570.6	546.5	522.5	501.6	485.2	472.0	463.3	462.2
152.5°	642.4	617.7	594.1	572.4	550.1	528.6	509.5	494.8	482.6	473.8	473.5
155°	632.0	611.1	591.4	573.9	555.3	536.7	520.3	508.2	497.2	490.7	489.6
157.5°	621.2	604.4	588.6	573.9	559.0	543.3	530.3	519.8	511.2	505.1	505.1
160°	613.3	599.1	586.0	573.9	560.7	547.6	535.6	526.8	519.2	514.7	514.7
162.5°	606.3	593.8	583.3	573.9	562.5	550.3	540.8	532.9	526.1	522.6	523.5
165°	594.7	586.0	578.2	571.7	563.0	553.1	546.5	541.0	535.6	533.4	533.4
167.5°	584.2	578.1	573.1	569.1	562.7	555.5	550.4	547.4	543.3	542.2	543.3
170°	577.2	572.8	569.5	567.3	561.8	556.4	553.1	550.9	547.6	546.5	547.6
172.5°	571.1	567.5	566.0	565.6	561.0	557.2	554.9	553.6	551.1	550.9	552.0
175°	564.0	561.8	561.8	563.0	559.7	557.5	557.5	556.4	555.3	555.3	556.4
177.5°	559.2	558.4	558.4	560.1	558.4	557.5	557.5	557.5	556.6	557.5	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1879.2	1884.6	1890.6	1902.1	1911.8	1916.0	1924.4	1930.4	1928.6	1937.0	1951.4
5°	1886.6	1907.0	1930.2	1954.4	1981.4	2004.0	2022.0	2040.1	2054.5	2071.7	2097.3
7.5°	1885.4	1921.6	1960.8	2004.0	2048.4	2086.8	2122.3	2158.4	2190.5	2225.5	2271.4
10°	1880.6	1928.7	1977.6	2034.1	2090.6	2144.0	2192.2	2237.3	2280.2	2326.1	2384.1
12.5°	1875.2	1930.5	1989.7	2057.6	2127.9	2192.2	2248.7	2313.8	2367.5	2426.7	2493.6
15°	1851.2	1925.7	2006.3	2094.3	2178.6	2265.1	2342.6	2422.4	2496.9	2567.7	2651.9
17.5°	1823.8	1909.8	2004.8	2108.8	2210.1	2315.3	2407.3	2507.7	2583.9	2678.9	2757.1
20°	1801.6	1894.1	1995.7	2112.3	2227.5	2344.1	2445.7	2548.1	2633.8	2729.4	2828.8
22.5°	1774.4	1876.0	1986.1	2107.0	2227.5	2354.9	2467.4	2569.2	2675.4	2783.0	2885.4
25°	1730.8	1836.2	1952.9	2085.3	2223.7	2353.9	2474.4	2600.8	2715.2	2831.8	2923.6
27.5°	1677.3	1787.9	1910.8	2047.5	2189.6	2322.9	2464.7	2599.4	2714.5	2826.8	2906.9
30°	1634.5	1751.1	1869.3	2007.8	2155.2	2298.2	2450.2	2584.9	2706.1	2807.0	2852.1
32.5°	1590.5	1701.2	1823.0	1963.2	2114.3	2268.1	2418.9	2556.6	2668.8	2729.3	2730.5
35°	1514.1	1618.0	1744.4	1882.1	2037.1	2204.1	2356.9	2492.4	2560.9	2566.2	2492.4
37.5°	1430.7	1526.0	1645.3	1783.2	1952.9	2119.1	2275.2	2365.5	2388.4	2311.8	2175.4
40°	1371.1	1459.2	1574.3	1715.8	1884.3	2056.0	2198.2	2264.4	2240.3	2116.1	1964.1
42.5°	1308.5	1390.5	1501.5	1641.2	1810.3	1983.7	2104.9	2140.3	2076.5	1933.2	1755.2
45°	1206.4	1281.6	1391.5	1532.2	1694.7	1857.3	1949.1	1931.0	1824.9	1654.8	1455.4
47.5°	1099.9	1172.6	1271.5	1401.7	1568.1	1708.4	1770.6	1716.1	1565.1	1378.0	1215.8
50°	1029.4	1104.0	1195.0	1319.2	1471.2	1606.7	1646.5	1563.8	1395.9	1216.1	1067.1
52.5°	960.3	1023.9	1113.1	1233.1	1378.5	1492.9	1514.1	1418.7	1245.5	1084.2	952.1
55°	854.9	912.9	988.1	1101.0	1226.6	1323.7	1312.4	1189.8	1032.5	894.8	790.9
57.5°	753.0	796.6	866.2	971.9	1082.3	1147.5	1106.3	1001.6	855.1	742.3	654.7
60°	685.6	726.2	790.9	883.4	980.5	1017.4	982.8	869.2	753.3	650.2	576.5
62.5°	621.7	657.6	713.2	799.2	877.6	899.5	862.4	763.2	658.7	570.7	509.6
65°	529.0	562.1	609.5	670.5	724.7	735.2	711.1	609.5	530.6	456.8	414.6
67.5°	444.9	466.6	503.6	556.3	585.0	591.2	544.7	480.9	411.2	365.9	334.1
70°	388.3	403.3	438.0	466.6	489.9	490.7	447.8	396.6	343.2	306.3	283.0
72.5°	333.6	348.0	374.2	393.7	411.6	405.8	366.5	326.1	283.0	255.1	237.8
75°	257.4	270.1	283.7	292.8	292.8	285.2	256.7	226.5	201.7	185.1	179.8
77.5°	187.1	197.7	202.2	200.8	198.0	186.3	168.2	148.5	139.7	131.9	127.9
80°	146.8	151.3	152.8	149.0	144.5	130.9	118.9	110.7	102.4	99.3	97.8
82.5°	108.8	112.7	108.8	109.9	99.9	88.8	82.2	79.4	75.9	74.6	73.1
85°	58.0	57.2	55.7	51.9	45.1	43.6	42.9	42.1	40.6	41.4	39.9
87.5°	20.5	19.4	17.2	16.8	16.8	16.9	17.5	17.9	18.4	17.5	19.0
90°	3.3	6.6	7.6	8.8	8.8	15.4	15.4	17.5	19.7	18.7	19.7
92.5°	18.2	28.5	41.8	57.9	80.6	136.3	221.2	304.1	347.4	289.4	215.1
95°	39.4	50.4	64.7	90.9	137.0	232.1	411.8	673.5	892.6	917.8	811.5
97.5°	64.8	74.3	87.4	110.0	148.5	221.9	370.2	630.4	940.2	1153.1	1199.1
100°	83.2	90.9	104.1	124.9	159.9	224.5	348.3	571.7	880.5	1160.9	1320.9
102.5°	102.5	109.3	121.6	141.5	174.8	233.3	342.1	532.3	806.1	1095.2	1314.8
105°	131.4	137.0	150.1	169.8	201.5	254.1	345.0	498.3	718.5	975.8	1226.6
107.5°	160.5	166.1	180.0	198.9	230.3	278.4	361.2	492.2	669.4	879.5	1101.5
110°	180.7	186.2	199.3	219.0	248.6	296.8	373.4	494.0	652.8	831.3	1026.2



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	206.3	218.6	238.4	267.9	314.3	386.6	499.2	644.9	804.1	971.0
115°	228.9	236.6	247.5	268.3	297.9	341.7	407.5	509.3	640.7	778.7	915.6
117.5°	257.6	264.4	276.4	296.0	326.6	368.3	428.7	520.0	639.6	767.3	888.4
120°	276.0	283.7	295.7	314.3	345.0	386.6	443.6	527.9	639.6	761.2	876.2
122.5°	293.5	301.2	312.4	332.7	362.5	404.2	457.6	535.8	638.8	754.2	865.6
125°	318.7	325.3	337.3	358.2	388.8	428.2	478.6	547.6	637.4	742.5	847.7
127.5°	338.2	346.1	359.9	381.5	412.5	450.5	496.8	557.0	635.0	727.0	825.8
130°	350.4	359.2	375.7	396.4	428.2	465.5	508.2	564.0	634.1	717.4	808.3
132.5°	361.0	372.4	388.0	410.5	440.5	477.8	519.6	570.1	633.3	708.6	789.9
135°	377.9	388.8	407.5	430.5	458.9	495.0	534.5	579.4	632.0	695.5	764.5
137.5°	393.6	405.7	423.4	447.3	474.5	508.2	545.0	584.8	631.7	684.1	741.5
140°	404.2	416.2	434.8	457.8	484.1	517.0	552.0	589.3	630.8	678.0	728.3
142.5°	416.4	427.5	445.4	467.4	492.9	524.8	557.2	592.8	630.8	672.7	716.0
145°	433.8	444.7	460.0	480.8	504.9	533.4	563.0	594.7	628.7	663.7	698.8
147.5°	451.0	460.6	476.5	493.7	515.4	542.2	568.0	595.8	624.7	655.6	684.6
150°	463.3	472.0	485.2	501.6	522.5	546.5	570.6	595.8	622.1	649.5	675.8
152.5°	473.8	482.6	494.8	509.5	528.6	550.1	572.4	594.1	617.7	642.4	666.1
155°	490.7	497.2	508.2	520.3	536.7	555.3	573.9	591.4	611.1	632.0	651.7
157.5°	505.1	511.2	519.8	530.3	543.3	559.0	573.9	588.6	604.4	621.2	636.1
160°	514.7	519.2	526.8	535.6	547.6	560.7	573.9	586.0	599.1	613.3	626.5
162.5°	522.6	526.1	532.9	540.8	550.3	562.5	573.9	583.3	593.8	606.3	616.8
165°	533.4	535.6	541.0	546.5	553.1	563.0	571.7	578.2	586.0	594.7	603.5
167.5°	542.2	543.3	547.4	550.4	555.5	562.7	569.1	573.1	578.1	584.2	590.6
170°	546.5	547.6	550.9	553.1	556.4	561.8	567.3	569.5	572.8	577.2	582.7
172.5°	550.9	551.1	553.6	554.9	557.2	561.0	565.6	566.0	567.5	571.1	575.6
175°	555.3	555.3	556.4	557.5	557.5	559.7	563.0	561.8	561.8	564.0	566.3
177.5°	557.5	556.6	557.5	557.5	557.5	558.4	560.1	558.4	558.4	559.2	560.1
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8	1867.8
2.5°	1959.3	1961.7	1963.5	1969.5	1970.1	1975.6	1970.1
5°	2121.4	2131.9	2148.5	2165.0	2166.5	2177.1	2158.2
7.5°	2303.2	2327.6	2342.8	2369.6	2380.1	2386.7	2375.9
10°	2428.5	2451.0	2490.9	2510.5	2530.1	2533.0	2524.0
12.5°	2549.5	2585.3	2616.7	2653.7	2652.9	2679.4	2669.7
15°	2710.7	2747.5	2791.2	2832.5	2847.6	2847.6	2859.7
17.5°	2825.6	2893.2	2938.4	2970.9	3006.3	3012.6	3008.3
20°	2903.3	2976.3	3024.4	3066.6	3090.7	3097.5	3097.5
22.5°	2961.1	3023.2	3070.2	3108.1	3128.0	3135.9	3133.6
25°	3001.1	3054.5	3083.2	3094.5	3099.6	3098.2	3083.9
27.5°	2946.3	2943.9	2925.8	2891.2	2865.2	2849.4	2831.3
30°	2841.6	2802.5	2757.3	2707.6	2643.6	2594.7	2579.6
32.5°	2685.7	2597.7	2521.3	2438.5	2369.7	2320.8	2300.4
35°	2384.1	2244.9	2131.2	2031.8	1959.6	1914.5	1899.4
37.5°	2026.1	1891.4	1750.7	1654.4	1594.5	1548.9	1531.8
40°	1798.6	1651.8	1529.2	1438.9	1377.1	1332.8	1332.0
42.5°	1590.8	1450.8	1335.3	1270.3	1203.7	1174.4	1174.2
45°	1302.6	1190.5	1092.7	1041.5	1001.6	977.5	970.7
47.5°	1078.6	985.8	920.7	879.9	847.3	832.0	822.1
50°	952.7	871.5	819.5	784.1	766.1	746.5	745.0
52.5°	847.9	782.3	741.9	713.1	690.2	678.4	678.8
55°	712.7	660.7	632.2	610.3	592.2	583.2	579.5
57.5°	600.4	561.4	540.6	520.6	512.9	505.9	503.9
60°	530.6	504.2	484.7	468.8	457.5	455.2	454.5
62.5°	472.8	445.2	431.7	419.4	411.2	407.7	406.3
65°	389.8	369.5	357.4	347.7	344.7	339.4	338.7
67.5°	314.2	302.1	294.1	287.3	283.2	283.0	283.0
70°	267.9	261.1	254.4	250.6	248.4	246.9	246.9
72.5°	228.2	223.2	217.6	215.7	215.2	213.7	213.1
75°	173.8	168.5	169.3	165.6	162.6	158.8	156.6
77.5°	123.3	119.5	118.8	118.3	115.7	115.3	116.5
80°	95.6	91.8	91.0	91.8	91.0	88.8	88.8
82.5°	72.7	69.6	68.8	68.3	67.6	68.3	67.1
85°	39.1	37.6	37.6	37.6	39.1	38.4	37.6
87.5°	18.0	17.6	18.2	17.8	18.1	17.2	17.8
90°	20.8	21.9	21.9	23.0	24.1	23.0	23.0
92.5°	161.8	128.8	106.9	94.0	88.0	84.4	84.4
95°	641.8	495.0	388.8	335.2	301.2	281.4	267.2
97.5°	1136.0	1028.9	914.5	835.8	770.0	737.1	714.4
100°	1342.7	1289.1	1208.1	1112.8	1045.9	1013.1	1004.4
102.5°	1423.3	1438.9	1405.1	1346.7	1298.3	1263.7	1256.7
105°	1416.2	1524.6	1569.4	1571.7	1562.9	1547.6	1541.0
107.5°	1303.3	1456.0	1553.7	1607.8	1632.8	1643.7	1646.6
110°	1215.7	1374.5	1495.0	1572.7	1618.7	1638.5	1648.3



TEST NUMBER: P333011-830

CATALOG NUMBER: SA4XXRDIP-C1195D1205U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1138.6	1288.6	1409.1	1497.4	1553.0	1580.6	1596.7
115°	1050.4	1178.5	1283.6	1370.2	1435.9	1470.9	1479.7
117.5°	999.9	1100.7	1189.9	1263.7	1318.9	1354.3	1361.1
120°	978.1	1065.6	1143.4	1205.9	1254.1	1282.5	1294.6
122.5°	964.0	1043.8	1111.9	1164.7	1205.9	1229.9	1242.0
125°	941.9	1017.5	1077.7	1121.5	1153.3	1174.1	1180.6
127.5°	915.9	991.2	1048.4	1092.4	1120.7	1138.2	1144.7
130°	894.8	969.3	1027.4	1072.2	1099.6	1117.1	1123.7
132.5°	871.2	943.9	1001.9	1045.9	1076.9	1093.4	1100.0
135°	835.7	902.5	957.2	1001.1	1031.7	1049.2	1055.8
137.5°	801.7	858.0	907.5	948.5	978.7	993.2	1001.1
140°	779.8	829.1	875.1	913.4	937.5	952.8	961.6
142.5°	761.4	803.7	843.6	877.5	899.8	913.4	919.5
145°	736.0	768.8	799.6	826.9	845.6	856.5	862.0
147.5°	714.1	740.4	764.5	784.7	800.6	809.0	810.9
150°	701.0	722.8	742.5	760.1	774.3	780.9	782.0
152.5°	687.8	707.9	724.2	739.0	750.6	754.6	755.7
155°	669.2	685.6	698.8	709.7	718.5	721.8	721.8
157.5°	650.8	664.6	675.1	683.4	690.0	692.0	692.0
160°	638.5	650.5	659.3	665.9	672.5	673.5	673.5
162.5°	627.2	636.6	644.4	649.2	655.8	657.0	656.0
165°	610.0	617.7	623.2	627.5	632.0	630.8	629.8
167.5°	595.6	601.7	605.0	607.2	610.0	609.8	609.0
170°	586.0	590.3	593.6	595.8	596.9	595.8	595.8
172.5°	578.1	580.7	583.1	584.4	585.5	584.4	582.7
175°	567.3	569.5	569.5	569.5	571.7	569.5	567.3
177.5°	561.0	561.0	561.8	561.0	561.8	560.1	558.4
180°	557.5	557.5	557.5	557.5	557.5	557.5	557.5

(END OF REPORT)