

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: P332690-930

Luminaire Tested: **SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332690-930
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: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

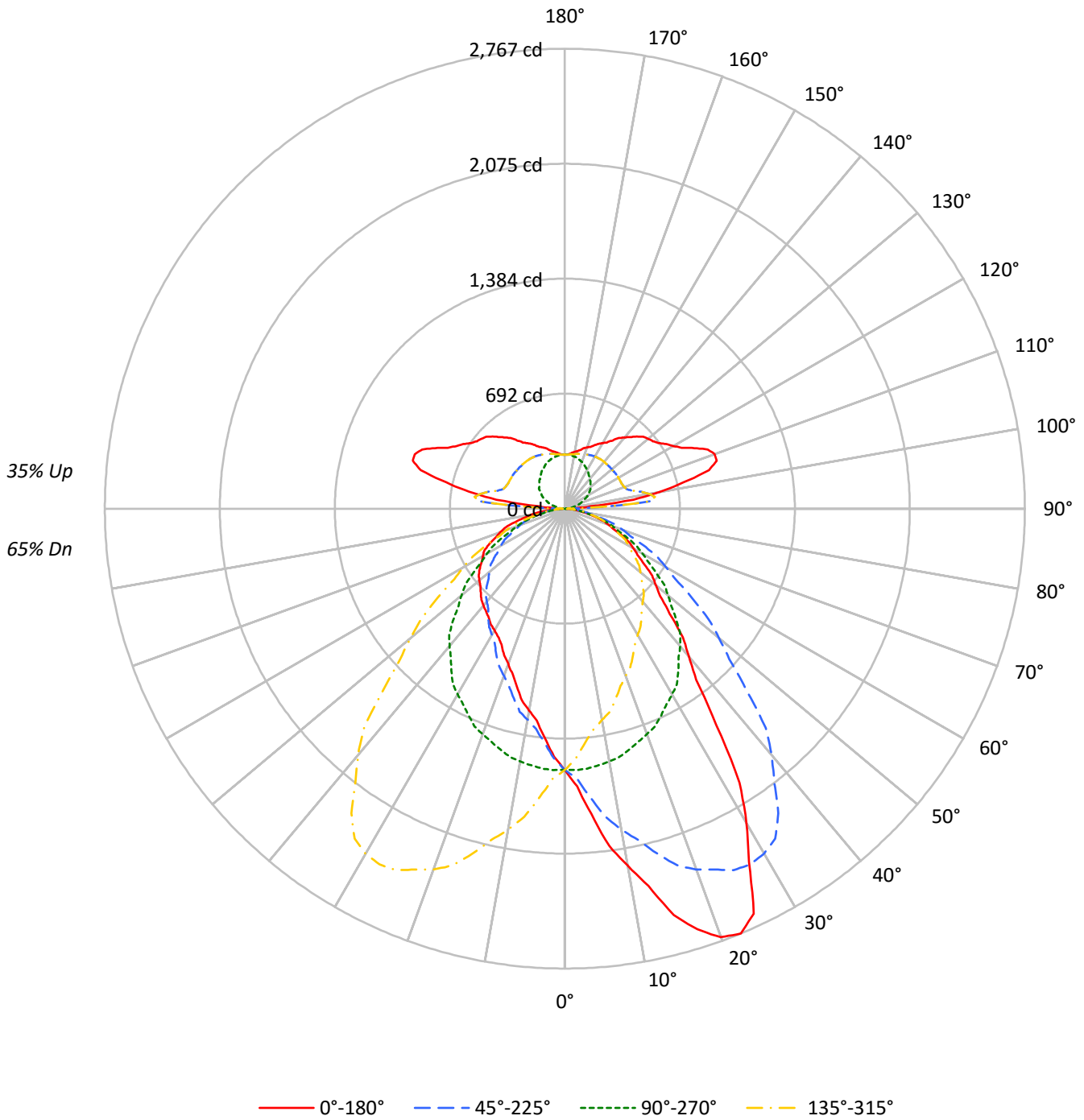
Lumens per Lamp: N/A
Luminaire Lumens: 6697.2 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.7
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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	61	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	51	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	51	46	50	45	42	44	40	38	34
5	71	60	51	45	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	35	31	37	32	29	33	29	26	24
8	57	44	36	31	53	42	35	30	38	32	28	34	29	26	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12686	12686	12686	12686
5°	14939	12719	11225	12719
10°	17887	12663	10107	12663
15°	21163	12534	9281	12534
20°	23566	12404	8546	12404
25°	23947	12211	8036	12211
30°	20377	12027	7876	12027
35°	15666	11727	7877	11727
40°	12211	11374	8026	11374
45°	10182	10843	8161	10843
50°	8961	10194	8437	10194
55°	8210	9419	8777	9419
60°	7694	8724	9185	8724
65°	7163	7947	9524	7947
70°	6545	7176	9741	7176
75°	5845	6313	9623	6313
80°	4900	5174	9321	5174
85°	3622	3742	8929	3742



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.1	2.3
10°-20°	471.9	7.0
20°-30°	748.2	11.2
30°-40°	832.7	12.4
40°-50°	758.0	11.3
50°-60°	619.4	9.2
60°-70°	442.2	6.6
70°-80°	243.5	3.6
80°-90°	68.3	1.0
90°-100°	234.4	3.5
100°-110°	487.8	7.3
110°-120°	436.9	6.5
120°-130°	367.5	5.5
130°-140°	306.4	4.6
140°-150°	234.1	3.5
150°-160°	164.6	2.5
160°-170°	96.8	1.4
170°-180°	31.5	0.5
0°-30°	1373.2	20.5
0°-40°	2205.9	32.9
0°-60°	3583.3	53.5
0°-90°	4337.3	64.8
90°-120°	1159.1	17.3
90°-150°	2067.1	30.9
90°-180°	2360.0	35.2
0°-180°	6697.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1571	1571	1571	1571	1571	
5°	1844	1570	1385	1570	1844	187
15°	2532	1500	1110	1500	2532	715
25°	2688	1371	902	1371	2688	1185
35°	1590	1190	799	1190	1590	1009
45°	892	950	715	950	892	703
55°	583	669	624	669	583	527
65°	375	416	499	416	375	371
75°	187	202	308	202	187	199
85°	39	40	96	40	39	48
90°	13	1	13	1	13	12
95°	156	21	156	21	156	241
105°	897	75	897	75	897	887
115°	861	131	861	131	861	855
125°	687	183	687	183	687	624
135°	615	217	615	217	615	474
145°	502	250	502	250	502	318
155°	420	285	420	285	420	196
165°	367	310	367	310	367	105
175°	330	324	330	324	330	32
180°	324	324	324	324	324	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1672.4	1671.9	1666.7	1665.7	1662.0	1657.3	1656.3	1648.0	1631.3	1623.4	1621.4
5°	1843.5	1856.5	1839.6	1836.3	1834.3	1812.9	1801.8	1788.8	1758.8	1741.3	1727.6
7.5°	2047.6	2049.2	2041.8	2035.8	2019.3	2000.5	1972.4	1942.5	1906.7	1869.6	1841.7
10°	2182.0	2187.2	2178.7	2177.4	2144.2	2123.4	2081.7	2046.6	2006.2	1961.3	1920.3
12.5°	2323.6	2316.3	2312.0	2284.1	2278.0	2240.0	2191.6	2155.4	2093.2	2041.5	1987.0
15°	2532.2	2517.9	2508.8	2470.4	2451.4	2398.7	2347.3	2307.6	2226.3	2148.8	2090.2
17.5°	2654.5	2668.9	2647.8	2632.0	2583.2	2546.3	2493.7	2410.4	2346.7	2250.5	2176.5
20°	2743.1	2744.4	2732.6	2716.4	2678.0	2631.1	2573.8	2482.7	2406.5	2310.9	2209.3
22.5°	2767.0	2767.3	2762.3	2747.2	2718.0	2680.1	2622.2	2546.3	2454.0	2349.9	2248.4
25°	2688.4	2685.8	2691.6	2708.6	2697.5	2685.8	2652.6	2596.0	2510.1	2400.0	2290.7
27.5°	2396.2	2414.2	2447.3	2488.9	2529.1	2559.6	2568.3	2556.6	2503.4	2413.0	2298.3
30°	2185.9	2208.0	2232.8	2274.4	2355.2	2401.3	2452.1	2490.5	2469.1	2396.8	2290.0
32.5°	1954.7	1960.1	1996.8	2044.2	2118.1	2207.1	2287.6	2365.5	2391.4	2353.5	2264.5
35°	1589.6	1598.7	1638.4	1685.3	1775.8	1884.5	2005.6	2113.6	2202.8	2238.6	2193.0
37.5°	1297.2	1323.4	1351.4	1401.7	1481.4	1579.3	1705.1	1844.9	1977.8	2066.9	2081.9
40°	1158.7	1174.9	1195.1	1233.5	1301.2	1397.6	1505.6	1665.7	1807.0	1934.6	1976.3
42.5°	1049.3	1058.8	1071.2	1106.0	1157.5	1253.4	1352.0	1492.9	1634.7	1787.2	1857.0
45°	891.8	901.6	922.3	942.6	981.6	1048.0	1139.8	1255.6	1398.2	1545.3	1674.2
47.5°	778.0	784.2	796.6	818.2	851.4	895.2	969.9	1066.7	1198.8	1341.6	1479.0
50°	713.5	718.6	728.4	748.0	773.3	812.4	873.6	964.0	1067.6	1211.4	1346.1
52.5°	662.4	664.5	671.6	684.9	705.1	737.9	788.1	863.0	959.2	1087.4	1221.7
55°	583.3	585.9	592.4	602.1	619.7	640.5	678.9	734.9	818.9	930.2	1046.7
57.5°	518.1	520.0	525.5	529.2	543.6	560.6	590.1	630.1	693.7	788.1	892.2
60°	476.5	475.2	481.7	484.9	494.7	509.1	531.8	570.2	625.6	701.7	797.4
62.5°	435.9	434.1	439.5	443.8	449.4	461.6	480.3	510.4	555.2	624.1	706.8
65°	375.0	372.3	375.6	380.8	386.0	392.5	406.2	432.8	468.7	518.1	581.3
67.5°	313.7	316.5	317.0	319.6	322.6	331.5	340.8	359.7	385.0	424.5	478.1
70°	277.3	277.9	280.5	280.5	282.5	290.3	298.2	309.2	333.9	370.4	414.0
72.5°	240.8	243.6	242.6	244.6	246.1	251.3	257.0	267.5	288.6	315.7	352.5
75°	187.4	189.4	189.4	190.0	192.0	194.0	198.5	206.4	221.4	241.5	266.8
77.5°	136.7	137.0	137.9	140.2	140.2	143.3	146.8	153.0	160.4	174.2	189.7
80°	105.4	106.7	106.1	107.4	107.4	110.0	111.3	119.1	122.4	131.5	143.8
82.5°	77.4	78.6	78.5	80.3	81.4	81.9	83.7	86.8	90.1	98.2	103.2
85°	39.1	40.4	39.1	40.4	42.3	43.0	44.9	45.6	48.2	50.1	54.7
87.5°	14.1	15.7	15.8	16.2	17.1	17.7	18.0	17.4	19.3	20.0	21.9
90°	13.4	13.4	14.0	13.4	12.7	12.7	12.1	11.5	10.8	11.5	10.2
92.5°	49.1	49.1	51.3	54.7	62.2	75.0	94.2	125.2	168.4	202.2	177.0
95°	155.6	163.9	175.3	195.1	226.3	288.1	373.6	472.4	534.3	519.6	392.1
97.5°	415.8	429.0	448.2	486.6	532.3	598.8	661.2	697.9	671.2	547.2	367.0
100°	584.6	589.7	608.8	647.7	703.2	750.3	781.5	768.8	675.7	512.6	332.8
102.5°	731.5	735.6	755.7	783.9	817.9	837.6	828.5	765.2	637.5	469.2	309.8
105°	897.0	900.8	909.7	914.8	913.5	887.4	824.3	714.0	568.0	418.2	290.1
107.5°	958.4	956.8	950.4	935.9	904.3	847.5	758.6	641.2	511.9	389.6	286.5
110°	959.4	953.7	942.2	915.4	870.2	800.1	707.6	597.4	483.9	379.9	287.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	929.4	920.1	904.0	871.6	820.2	750.1	662.8	565.2	468.1	375.4	290.6
115°	861.3	856.1	835.8	797.5	747.1	685.9	611.4	533.0	453.2	372.9	296.4
117.5°	792.3	788.3	767.7	735.6	692.6	640.7	582.0	517.1	446.6	372.3	302.7
120°	753.5	746.5	729.9	701.9	665.5	620.3	569.3	510.0	443.0	372.3	307.3
122.5°	722.9	715.9	701.9	677.9	647.2	607.6	561.1	503.9	439.0	371.8	311.9
125°	687.2	683.4	671.3	652.8	627.3	592.2	548.3	493.4	432.2	371.0	318.8
127.5°	666.3	662.5	652.3	635.9	610.3	576.9	533.0	480.7	423.1	369.7	324.2
130°	654.1	650.3	640.1	624.1	597.9	564.2	520.8	470.5	417.6	369.1	328.3
132.5°	640.3	636.5	626.8	608.8	583.2	549.4	507.0	459.7	412.5	368.6	331.9
135°	614.6	610.7	600.5	582.7	557.2	525.3	486.4	445.0	404.8	367.9	337.2
137.5°	582.7	578.0	569.6	552.0	528.2	499.5	466.7	431.6	398.2	367.7	340.4
140°	559.7	554.6	545.7	531.7	509.4	482.6	453.9	424.0	394.6	367.2	343.0
142.5°	535.2	531.7	523.7	510.8	491.0	467.8	443.2	416.8	391.6	367.2	345.0
145°	501.7	498.6	492.1	481.4	465.4	447.5	428.4	406.8	386.3	365.9	346.2
147.5°	472.0	470.8	466.0	456.7	445.0	431.0	415.6	398.4	381.6	363.6	346.8
150°	455.2	454.5	450.7	442.5	432.2	420.8	408.0	393.3	378.1	362.1	346.8
152.5°	439.9	439.2	436.9	430.2	421.5	412.1	400.3	387.8	374.0	359.5	345.8
155°	420.1	420.1	418.2	413.1	406.8	399.1	389.6	379.3	367.9	355.7	344.2
157.5°	402.8	402.8	401.6	397.8	393.0	386.9	378.8	370.2	361.6	351.8	342.6
160°	392.1	392.1	391.4	387.6	383.8	378.7	371.7	364.7	357.0	348.7	341.0
162.5°	381.9	382.4	381.7	377.9	375.1	370.6	365.0	359.1	352.9	345.7	339.6
165°	366.6	367.2	367.9	365.3	362.7	359.5	355.1	351.2	346.2	341.0	336.6
167.5°	354.4	355.0	355.1	353.4	352.1	350.3	346.7	343.7	340.1	336.5	333.5
170°	346.8	346.8	347.4	346.8	345.5	343.6	341.0	339.2	336.0	333.4	331.5
172.5°	339.2	340.1	340.8	340.1	339.4	338.0	336.5	335.1	332.4	330.4	329.5
175°	330.2	331.5	332.8	331.5	331.5	331.5	330.2	329.6	328.3	327.0	327.0
177.5°	325.0	326.0	327.0	326.5	327.0	326.5	326.5	326.0	325.5	325.0	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1621.9	1614.6	1609.4	1605.2	1593.7	1587.0	1581.8	1574.5	1566.2	1557.3	1546.4
5°	1713.9	1691.8	1675.5	1650.8	1627.3	1607.9	1587.6	1569.5	1547.3	1523.2	1505.6
7.5°	1810.7	1777.8	1735.5	1699.0	1657.8	1622.0	1590.0	1557.2	1523.1	1490.0	1459.7
10°	1872.1	1829.8	1782.9	1727.6	1675.5	1629.3	1586.3	1544.7	1504.3	1464.0	1429.5
12.5°	1938.3	1885.5	1816.2	1751.6	1693.2	1631.4	1579.6	1528.5	1479.8	1437.5	1397.2
15°	2027.1	1950.8	1870.8	1784.2	1707.4	1635.2	1564.2	1499.7	1445.1	1389.1	1350.1
17.5°	2081.6	1987.4	1895.8	1805.3	1712.4	1621.2	1544.7	1470.4	1401.9	1346.3	1297.1
20°	2117.5	2023.8	1909.8	1819.4	1708.7	1615.0	1526.5	1443.8	1372.2	1313.0	1262.2
22.5°	2148.8	2040.4	1926.6	1807.4	1697.3	1597.8	1501.0	1417.7	1344.6	1282.2	1233.5
25°	2165.7	2041.3	1917.7	1799.2	1674.2	1556.4	1468.5	1370.9	1292.7	1227.0	1174.9
27.5°	2167.6	2034.6	1894.7	1763.0	1634.0	1524.3	1413.3	1326.1	1245.0	1175.5	1125.5
30°	2161.8	2023.2	1872.7	1730.2	1600.7	1481.6	1385.2	1290.2	1207.5	1138.5	1086.4
32.5°	2143.6	1999.2	1844.6	1693.8	1559.5	1443.0	1343.5	1253.2	1172.6	1104.6	1049.9
35°	2090.8	1948.2	1783.5	1626.7	1489.4	1371.6	1281.7	1189.9	1109.2	1044.8	992.1
37.5°	2008.4	1879.5	1712.1	1549.8	1414.9	1296.6	1207.5	1124.5	1051.8	986.3	932.3
40°	1936.6	1823.3	1655.4	1497.1	1351.4	1238.8	1155.4	1079.3	1007.0	945.2	893.7
42.5°	1853.7	1755.1	1600.2	1432.6	1292.0	1178.8	1097.6	1029.2	961.2	904.0	852.6
45°	1706.1	1641.0	1495.3	1340.3	1193.8	1087.0	1009.6	949.7	892.4	836.5	793.5
47.5°	1536.4	1504.1	1381.3	1234.2	1095.1	989.9	922.8	867.5	817.2	769.8	731.9
50°	1422.3	1406.7	1300.6	1158.7	1025.9	926.9	859.2	811.7	768.7	727.1	691.3
52.5°	1309.9	1309.3	1213.7	1083.7	960.8	865.5	798.3	753.9	716.7	682.8	650.7
55°	1137.8	1156.1	1081.2	965.3	855.3	769.4	708.9	669.2	643.1	615.1	591.1
57.5°	979.9	1010.2	948.4	846.4	754.6	675.4	622.7	592.9	565.2	548.2	530.7
60°	876.9	905.5	857.3	771.4	684.8	617.1	567.0	540.3	516.2	504.5	492.1
62.5°	785.1	810.7	775.0	695.4	620.2	555.1	512.8	487.1	470.9	458.1	450.0
65°	654.2	675.7	645.1	587.2	522.7	470.7	436.1	416.0	400.3	395.1	386.0
67.5°	528.8	548.4	531.8	482.6	430.9	391.5	364.5	345.1	335.9	331.3	324.8
70°	454.4	473.9	456.3	413.4	373.7	340.5	315.0	304.0	294.2	292.3	283.2
72.5°	391.3	404.6	387.0	353.4	319.5	291.5	271.8	260.2	255.2	251.7	246.7
75°	293.6	305.3	293.6	267.5	243.4	224.0	207.0	202.4	196.6	194.6	191.4
77.5°	207.8	217.9	209.0	192.7	174.7	159.6	150.5	144.6	143.3	140.0	141.5
80°	158.8	165.3	156.9	145.8	131.5	121.1	114.5	111.3	107.4	106.1	108.7
82.5°	114.1	116.9	112.6	105.2	94.5	87.7	83.3	79.6	78.8	79.0	79.0
85°	59.3	58.6	58.0	51.4	48.2	43.6	41.0	40.4	39.7	41.0	42.3
87.5°	21.6	22.1	20.8	18.8	17.0	15.3	14.4	13.7	14.4	15.3	16.0
90°	8.9	8.9	5.1	5.1	4.5	3.8	1.9	0.7	1.9	3.8	4.5
92.5°	128.7	79.3	46.9	33.7	24.4	16.6	10.6	7.3	10.6	16.6	24.4
95°	239.7	135.2	79.7	52.9	37.6	29.4	22.9	21.0	22.9	29.4	37.6
97.5°	215.5	129.1	86.4	64.0	50.9	43.2	37.7	37.7	37.7	43.2	50.9
100°	202.8	130.7	93.1	72.6	60.6	52.9	48.4	48.4	48.4	52.9	60.6
102.5°	199.2	135.7	101.7	82.3	70.8	63.6	59.7	58.6	59.7	63.6	70.8
105°	200.8	147.9	117.3	98.8	87.3	79.7	76.5	74.6	76.5	79.7	87.3
107.5°	210.3	162.1	134.0	115.8	104.8	96.6	93.4	92.2	93.4	96.6	104.8
110°	217.4	172.8	144.7	127.5	116.0	108.4	105.2	104.0	105.2	108.4	116.0



TEST NUMBER: P332690-930
 CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	225.0	183.0	156.0	138.7	127.3	120.1	116.4	115.1	116.4	120.1	127.3
115°	237.2	198.9	173.4	156.2	144.1	137.7	133.2	131.3	133.2	137.7	144.1
117.5°	249.5	214.3	190.1	172.3	160.9	153.9	149.9	148.1	149.9	153.9	160.9
120°	258.2	225.0	200.8	183.0	172.1	165.1	160.6	159.4	160.6	165.1	172.1
122.5°	266.4	235.2	211.0	193.6	181.8	175.3	170.9	169.6	170.9	175.3	181.8
125°	278.6	249.2	226.3	208.5	196.3	189.3	185.5	183.0	185.5	189.3	196.3
127.5°	289.2	262.3	240.1	222.1	209.5	201.5	196.9	194.9	196.9	201.5	209.5
130°	295.8	270.9	249.2	230.8	218.7	209.1	204.0	201.5	204.0	209.1	218.7
132.5°	302.4	278.1	256.4	239.0	225.8	216.8	210.1	208.1	210.1	216.8	225.8
135°	311.1	288.1	267.1	250.5	237.2	226.3	220.0	217.4	220.0	226.3	237.2
137.5°	317.2	295.8	276.1	260.3	246.5	236.1	229.1	226.7	229.1	236.1	246.5
140°	321.3	300.9	281.8	266.4	253.1	242.2	235.2	233.3	235.2	242.2	253.1
142.5°	324.3	305.5	286.9	272.1	259.2	248.9	242.4	240.4	242.4	248.9	259.2
145°	327.7	310.5	293.9	279.9	267.7	258.9	252.4	250.5	252.4	258.9	267.7
147.5°	330.6	315.6	300.0	287.4	277.3	268.2	262.5	261.9	262.5	268.2	277.3
150°	332.2	318.1	304.1	292.0	282.4	274.8	269.7	269.0	269.7	274.8	282.4
152.5°	333.1	320.2	307.7	296.6	288.0	280.9	275.8	275.7	275.8	280.9	288.0
155°	334.0	323.2	312.3	302.8	295.8	289.4	285.6	284.9	285.6	289.4	295.8
157.5°	334.0	325.4	316.2	308.7	302.6	297.6	294.0	294.0	294.0	297.6	302.6
160°	334.0	326.4	318.8	311.8	306.6	302.1	299.6	299.6	299.6	302.1	306.6
162.5°	334.0	327.4	320.2	314.8	310.2	306.2	304.2	304.8	304.2	306.2	310.2
165°	332.8	327.7	322.0	318.1	315.0	311.8	310.5	310.5	310.5	311.8	315.0
167.5°	331.3	327.6	323.3	320.4	318.6	316.2	315.6	316.2	315.6	316.2	318.6
170°	330.2	327.0	323.8	322.0	320.7	318.8	318.1	318.8	318.1	318.8	320.7
172.5°	329.2	326.5	324.3	322.9	322.2	320.8	320.7	321.3	320.7	320.8	322.2
175°	327.7	325.8	324.5	324.5	323.8	323.2	323.2	323.8	323.2	323.2	323.8
177.5°	326.0	325.0	324.5	324.5	324.5	324.0	324.5	325.0	324.5	324.0	324.5
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332690-930

CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1541.2	1536.5	1529.7	1520.4	1512.5	1504.2	1502.1	1499.0	1505.2	1500.1	1498.4
5°	1490.7	1477.0	1459.4	1439.2	1427.5	1410.6	1407.4	1400.8	1394.3	1393.7	1387.2
7.5°	1437.1	1417.1	1394.1	1373.5	1354.5	1336.0	1323.9	1321.3	1311.7	1306.0	1299.5
10°	1402.8	1378.0	1351.4	1331.9	1309.7	1290.2	1276.5	1268.7	1262.2	1255.0	1248.5
12.5°	1362.2	1335.9	1313.9	1292.7	1266.5	1251.6	1229.1	1215.6	1214.3	1214.4	1197.5
15°	1314.9	1288.9	1255.0	1225.1	1210.7	1182.1	1169.7	1154.1	1144.4	1134.6	1126.8
17.5°	1260.9	1228.5	1202.0	1167.7	1140.4	1117.5	1101.3	1091.9	1077.2	1063.4	1053.4
20°	1227.0	1192.5	1164.6	1128.0	1098.1	1070.2	1056.5	1043.5	1032.4	1020.7	1009.6
22.5°	1192.6	1156.6	1122.3	1087.0	1059.1	1029.6	1016.4	998.7	988.1	981.6	970.5
25°	1138.5	1099.4	1060.4	1026.5	997.9	971.8	954.3	940.6	928.9	923.7	916.6
27.5°	1079.6	1040.9	1003.1	964.7	932.1	913.3	899.2	888.9	882.2	875.2	872.0
30°	1042.2	1001.8	961.5	925.6	895.7	876.9	863.8	856.6	851.4	848.2	844.9
32.5°	1004.1	964.3	921.9	889.2	862.3	845.5	835.7	828.5	825.9	824.8	823.6
35°	943.2	902.9	863.8	834.5	809.1	802.6	794.2	790.3	789.0	793.5	795.5
37.5°	884.3	846.8	810.8	782.4	765.8	756.3	753.4	753.5	758.2	762.2	767.0
40°	846.2	809.8	775.9	751.2	735.6	729.7	728.4	731.6	736.9	741.4	746.7
42.5°	809.3	773.3	742.6	719.4	708.5	703.1	703.9	707.2	714.4	720.1	727.9
45°	751.9	721.9	691.9	673.1	664.0	665.3	665.3	671.2	678.2	686.7	695.2
47.5°	697.8	667.6	643.0	627.1	622.4	621.3	624.9	632.6	642.9	653.3	665.1
50°	661.4	632.8	611.2	596.9	591.7	593.7	598.8	606.0	618.4	631.4	643.8
52.5°	624.4	598.3	578.5	565.2	561.5	565.0	570.2	581.6	592.4	606.4	621.4
55°	567.0	544.9	529.2	519.4	518.1	520.1	525.9	538.3	553.9	571.5	585.9
57.5°	509.8	491.3	477.0	470.3	470.9	472.7	482.3	497.1	513.7	532.5	551.0
60°	471.2	454.4	442.6	437.4	438.1	442.0	453.7	467.4	488.2	506.5	525.9
62.5°	434.8	420.0	408.8	404.1	403.2	411.8	423.0	437.2	458.0	478.3	499.4
65°	376.3	364.5	355.4	352.8	354.7	361.3	375.6	394.4	412.1	433.5	455.7
67.5°	318.9	309.3	303.0	304.3	306.6	316.3	328.2	344.5	364.4	386.7	408.5
70°	282.5	273.4	268.2	268.8	272.7	284.5	294.9	311.1	332.6	355.4	373.7
72.5°	245.0	239.0	234.3	237.1	241.0	249.1	262.0	278.3	297.3	318.5	337.7
75°	188.1	188.1	185.5	187.4	193.3	201.1	210.9	227.8	246.7	263.7	279.2
77.5°	139.6	138.1	139.8	142.2	145.5	154.8	166.0	178.1	192.3	209.2	222.1
80°	106.7	107.4	110.6	114.5	115.9	123.0	134.8	145.8	156.9	171.2	183.6
82.5°	80.2	80.9	82.5	87.5	88.8	96.4	104.0	115.1	125.1	134.8	145.0
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.8	68.3	77.5	84.0	93.8
87.5°	17.7	17.7	20.5	21.6	23.4	26.3	27.1	33.0	35.2	38.0	42.6
90°	5.1	5.1	8.9	8.9	10.2	11.5	10.8	11.5	12.1	12.7	12.7
92.5°	33.7	46.9	79.3	128.7	177.0	202.2	168.4	125.2	94.2	75.0	62.2
95°	52.9	79.7	135.2	239.7	392.1	519.6	534.3	472.4	373.6	288.1	226.3
97.5°	64.0	86.4	129.1	215.5	367.0	547.2	671.2	697.9	661.2	598.8	532.3
100°	72.6	93.1	130.7	202.8	332.8	512.6	675.7	768.8	781.5	750.3	703.2
102.5°	82.3	101.7	135.7	199.2	309.8	469.2	637.5	765.2	828.5	837.6	817.9
105°	98.8	117.3	147.9	200.8	290.1	418.2	568.0	714.0	824.3	887.4	913.5
107.5°	115.8	134.0	162.1	210.3	286.5	389.6	511.9	641.2	758.6	847.5	904.3
110°	127.5	144.7	172.8	217.4	287.5	379.9	483.9	597.4	707.6	800.1	870.2



TEST NUMBER: P332690-930
 CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	138.7	156.0	183.0	225.0	290.6	375.4	468.1	565.2	662.8	750.1	820.2
115°	156.2	173.4	198.9	237.2	296.4	372.9	453.2	533.0	611.4	685.9	747.1
117.5°	172.3	190.1	214.3	249.5	302.7	372.3	446.6	517.1	582.0	640.7	692.6
120°	183.0	200.8	225.0	258.2	307.3	372.3	443.0	510.0	569.3	620.3	665.5
122.5°	193.6	211.0	235.2	266.4	311.9	371.8	439.0	503.9	561.1	607.6	647.2
125°	208.5	226.3	249.2	278.6	318.8	371.0	432.2	493.4	548.3	592.2	627.3
127.5°	222.1	240.1	262.3	289.2	324.2	369.7	423.1	480.7	533.0	576.9	610.3
130°	230.8	249.2	270.9	295.8	328.3	369.1	417.6	470.5	520.8	564.2	597.9
132.5°	239.0	256.4	278.1	302.4	331.9	368.6	412.5	459.7	507.0	549.4	583.2
135°	250.5	267.1	288.1	311.1	337.2	367.9	404.8	445.0	486.4	525.3	557.2
137.5°	260.3	276.1	295.8	317.2	340.4	367.7	398.2	431.6	466.7	499.5	528.2
140°	266.4	281.8	300.9	321.3	343.0	367.2	394.6	424.0	453.9	482.6	509.4
142.5°	272.1	286.9	305.5	324.3	345.0	367.2	391.6	416.8	443.2	467.8	491.0
145°	279.9	293.9	310.5	327.7	346.2	365.9	386.3	406.8	428.4	447.5	465.4
147.5°	287.4	300.0	315.6	330.6	346.8	363.6	381.6	398.4	415.6	431.0	445.0
150°	292.0	304.1	318.1	332.2	346.8	362.1	378.1	393.3	408.0	420.8	432.2
152.5°	296.6	307.7	320.2	333.1	345.8	359.5	374.0	387.8	400.3	412.1	421.5
155°	302.8	312.3	323.2	334.0	344.2	355.7	367.9	379.3	389.6	399.1	406.8
157.5°	308.7	316.2	325.4	334.0	342.6	351.8	361.6	370.2	378.8	386.9	393.0
160°	311.8	318.8	326.4	334.0	341.0	348.7	357.0	364.7	371.7	378.7	383.8
162.5°	314.8	320.2	327.4	334.0	339.6	345.7	352.9	359.1	365.0	370.6	375.1
165°	318.1	322.0	327.7	332.8	336.6	341.0	346.2	351.2	355.1	359.5	362.7
167.5°	320.4	323.3	327.6	331.3	333.5	336.5	340.1	343.7	346.7	350.3	352.1
170°	322.0	323.8	327.0	330.2	331.5	333.4	336.0	339.2	341.0	343.6	345.5
172.5°	322.9	324.3	326.5	329.2	329.5	330.4	332.4	335.1	336.5	338.0	339.4
175°	324.5	324.5	325.8	327.7	327.0	327.0	328.3	329.6	330.2	331.5	331.5
177.5°	324.5	324.5	325.0	326.0	325.0	325.0	325.5	326.0	326.5	326.5	327.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332690-930

CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1497.5	1496.4	1492.7	1492.2	1492.7	1496.4	1497.5	1498.4	1500.1	1505.2	1499.0
5°	1383.2	1380.0	1378.0	1385.2	1378.0	1380.0	1383.2	1387.2	1393.7	1394.3	1400.8
7.5°	1297.2	1294.6	1288.9	1287.0	1288.9	1294.6	1297.2	1299.5	1306.0	1311.7	1321.3
10°	1242.0	1239.4	1234.2	1232.9	1234.2	1239.4	1242.0	1248.5	1255.0	1262.2	1268.7
12.5°	1188.9	1183.7	1182.7	1184.0	1182.7	1183.7	1188.9	1197.5	1214.4	1214.3	1215.6
15°	1118.3	1115.7	1108.6	1110.5	1108.6	1115.7	1118.3	1126.8	1134.6	1144.4	1154.1
17.5°	1048.8	1045.7	1037.0	1044.6	1037.0	1045.7	1048.8	1053.4	1063.4	1077.2	1091.9
20°	1005.0	999.9	995.3	994.7	995.3	999.9	1005.0	1009.6	1020.7	1032.4	1043.5
22.5°	963.4	958.7	958.3	954.1	958.3	958.7	963.4	970.5	981.6	988.1	998.7
25°	911.3	906.8	905.5	902.2	905.5	906.8	911.3	916.6	923.7	928.9	940.6
27.5°	871.4	869.1	866.8	867.8	866.8	869.1	871.4	872.0	875.2	882.2	888.9
30°	846.9	846.2	844.9	844.9	844.9	846.2	846.9	844.9	848.2	851.4	856.6
32.5°	826.6	826.5	827.2	827.2	827.2	826.5	826.6	823.6	824.8	825.9	828.5
35°	798.1	800.0	801.3	799.3	801.3	800.0	798.1	795.5	793.5	789.0	790.3
37.5°	772.3	774.2	776.1	778.3	776.1	774.2	772.3	767.0	762.2	758.2	753.5
40°	752.5	757.1	758.3	761.6	758.3	757.1	752.5	746.7	741.4	736.9	731.6
42.5°	733.8	738.8	742.2	742.8	742.2	738.8	733.8	727.9	720.1	714.4	707.2
45°	705.0	710.2	714.8	714.8	714.8	710.2	705.0	695.2	686.7	678.2	671.2
47.5°	675.1	682.7	687.3	688.4	687.3	682.7	675.1	665.1	653.3	642.9	632.6
50°	654.8	664.0	668.5	671.8	668.5	664.0	654.8	643.8	631.4	618.4	606.0
52.5°	635.0	644.2	650.3	652.0	650.3	644.2	635.0	621.4	606.4	592.4	581.6
55°	600.8	613.8	621.0	623.6	621.0	613.8	600.8	585.9	571.5	553.9	538.3
57.5°	568.5	580.5	588.8	590.8	588.8	580.5	568.5	551.0	532.5	513.7	497.1
60°	543.6	556.5	567.0	568.9	567.0	556.5	543.6	525.9	506.5	488.2	467.4
62.5°	518.0	531.6	541.0	546.0	541.0	531.6	518.0	499.4	478.3	458.0	437.2
65°	473.9	487.5	496.7	498.6	496.7	487.5	473.9	455.7	433.5	412.1	394.4
67.5°	425.7	439.4	445.4	449.1	445.4	439.4	425.7	408.5	386.7	364.4	344.5
70°	391.8	402.9	409.4	412.7	409.4	402.9	391.8	373.7	355.4	332.6	311.1
72.5°	353.4	364.9	372.5	373.1	372.5	364.9	353.4	337.7	318.5	297.3	278.3
75°	294.2	304.7	308.5	308.5	308.5	304.7	294.2	279.2	263.7	246.7	227.8
77.5°	232.9	238.2	243.2	244.3	243.2	238.2	232.9	222.1	209.2	192.3	178.1
80°	193.3	196.6	200.5	200.5	200.5	196.6	193.3	183.6	171.2	156.9	145.8
82.5°	152.7	155.5	159.4	158.8	159.4	155.5	152.7	145.0	134.8	125.1	115.1
85°	92.5	98.3	97.7	96.4	97.7	98.3	92.5	93.8	84.0	77.5	68.3
87.5°	44.4	45.0	46.4	47.5	46.4	45.0	44.4	42.6	38.0	35.2	33.0
90°	13.4	14.0	13.4	13.4	13.4	14.0	13.4	12.7	12.7	12.1	11.5
92.5°	54.7	51.3	49.1	49.1	49.1	51.3	54.7	62.2	75.0	94.2	125.2
95°	195.1	175.3	163.9	155.6	163.9	175.3	195.1	226.3	288.1	373.6	472.4
97.5°	486.6	448.2	429.0	415.8	429.0	448.2	486.6	532.3	598.8	661.2	697.9
100°	647.7	608.8	589.7	584.6	589.7	608.8	647.7	703.2	750.3	781.5	768.8
102.5°	783.9	755.7	735.6	731.5	735.6	755.7	783.9	817.9	837.6	828.5	765.2
105°	914.8	909.7	900.8	897.0	900.8	909.7	914.8	913.5	887.4	824.3	714.0
107.5°	935.9	950.4	956.8	958.4	956.8	950.4	935.9	904.3	847.5	758.6	641.2
110°	915.4	942.2	953.7	959.4	953.7	942.2	915.4	870.2	800.1	707.6	597.4



TEST NUMBER: P332690-930

CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	871.6	904.0	920.1	929.4	920.1	904.0	871.6	820.2	750.1	662.8	565.2
115°	797.5	835.8	856.1	861.3	856.1	835.8	797.5	747.1	685.9	611.4	533.0
117.5°	735.6	767.7	788.3	792.3	788.3	767.7	735.6	692.6	640.7	582.0	517.1
120°	701.9	729.9	746.5	753.5	746.5	729.9	701.9	665.5	620.3	569.3	510.0
122.5°	677.9	701.9	715.9	722.9	715.9	701.9	677.9	647.2	607.6	561.1	503.9
125°	652.8	671.3	683.4	687.2	683.4	671.3	652.8	627.3	592.2	548.3	493.4
127.5°	635.9	652.3	662.5	666.3	662.5	652.3	635.9	610.3	576.9	533.0	480.7
130°	624.1	640.1	650.3	654.1	650.3	640.1	624.1	597.9	564.2	520.8	470.5
132.5°	608.8	626.8	636.5	640.3	636.5	626.8	608.8	583.2	549.4	507.0	459.7
135°	582.7	600.5	610.7	614.6	610.7	600.5	582.7	557.2	525.3	486.4	445.0
137.5°	552.0	569.6	578.0	582.7	578.0	569.6	552.0	528.2	499.5	466.7	431.6
140°	531.7	545.7	554.6	559.7	554.6	545.7	531.7	509.4	482.6	453.9	424.0
142.5°	510.8	523.7	531.7	535.2	531.7	523.7	510.8	491.0	467.8	443.2	416.8
145°	481.4	492.1	498.6	501.7	498.6	492.1	481.4	465.4	447.5	428.4	406.8
147.5°	456.7	466.0	470.8	472.0	470.8	466.0	456.7	445.0	431.0	415.6	398.4
150°	442.5	450.7	454.5	455.2	454.5	450.7	442.5	432.2	420.8	408.0	393.3
152.5°	430.2	436.9	439.2	439.9	439.2	436.9	430.2	421.5	412.1	400.3	387.8
155°	413.1	418.2	420.1	420.1	420.1	418.2	413.1	406.8	399.1	389.6	379.3
157.5°	397.8	401.6	402.8	402.8	402.8	401.6	397.8	393.0	386.9	378.8	370.2
160°	387.6	391.4	392.1	392.1	392.1	391.4	387.6	383.8	378.7	371.7	364.7
162.5°	377.9	381.7	382.4	381.9	382.4	381.7	377.9	375.1	370.6	365.0	359.1
165°	365.3	367.9	367.2	366.6	367.2	367.9	365.3	362.7	359.5	355.1	351.2
167.5°	353.4	355.1	355.0	354.4	355.0	355.1	353.4	352.1	350.3	346.7	343.7
170°	346.8	347.4	346.8	346.8	346.8	347.4	346.8	345.5	343.6	341.0	339.2
172.5°	340.1	340.8	340.1	339.2	340.1	340.8	340.1	339.4	338.0	336.5	335.1
175°	331.5	332.8	331.5	330.2	331.5	332.8	331.5	331.5	331.5	330.2	329.6
177.5°	326.5	327.0	326.0	325.0	326.0	327.0	326.5	327.0	326.5	326.5	326.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332690-930

CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1502.1	1504.2	1512.5	1520.4	1529.7	1536.5	1541.2	1546.4	1557.3	1566.2	1574.5
5°	1407.4	1410.6	1427.5	1439.2	1459.4	1477.0	1490.7	1505.6	1523.2	1547.3	1569.5
7.5°	1323.9	1336.0	1354.5	1373.5	1394.1	1417.1	1437.1	1459.7	1490.0	1523.1	1557.2
10°	1276.5	1290.2	1309.7	1331.9	1351.4	1378.0	1402.8	1429.5	1464.0	1504.3	1544.7
12.5°	1229.1	1251.6	1266.5	1292.7	1313.9	1335.9	1362.2	1397.2	1437.5	1479.8	1528.5
15°	1169.7	1182.1	1210.7	1225.1	1255.0	1288.9	1314.9	1350.1	1389.1	1445.1	1499.7
17.5°	1101.3	1117.5	1140.4	1167.7	1202.0	1228.5	1260.9	1297.1	1346.3	1401.9	1470.4
20°	1056.5	1070.2	1098.1	1128.0	1164.6	1192.5	1227.0	1262.2	1313.0	1372.2	1443.8
22.5°	1016.4	1029.6	1059.1	1087.0	1122.3	1156.6	1192.6	1233.5	1282.2	1344.6	1417.7
25°	954.3	971.8	997.9	1026.5	1060.4	1099.4	1138.5	1174.9	1227.0	1292.7	1370.9
27.5°	899.2	913.3	932.1	964.7	1003.1	1040.9	1079.6	1125.5	1175.5	1245.0	1326.1
30°	863.8	876.9	895.7	925.6	961.5	1001.8	1042.2	1086.4	1138.5	1207.5	1290.2
32.5°	835.7	845.5	862.3	889.2	921.9	964.3	1004.1	1049.9	1104.6	1172.6	1253.2
35°	794.2	802.6	809.1	834.5	863.8	902.9	943.2	992.1	1044.8	1109.2	1189.9
37.5°	753.4	756.3	765.8	782.4	810.8	846.8	884.3	932.3	986.3	1051.8	1124.5
40°	728.4	729.7	735.6	751.2	775.9	809.8	846.2	893.7	945.2	1007.0	1079.3
42.5°	703.9	703.1	708.5	719.4	742.6	773.3	809.3	852.6	904.0	961.2	1029.2
45°	665.3	665.3	664.0	673.1	691.9	721.9	751.9	793.5	836.5	892.4	949.7
47.5°	624.9	621.3	622.4	627.1	643.0	667.6	697.8	731.9	769.8	817.2	867.5
50°	598.8	593.7	591.7	596.9	611.2	632.8	661.4	691.3	727.1	768.7	811.7
52.5°	570.2	565.0	561.5	565.2	578.5	598.3	624.4	650.7	682.8	716.7	753.9
55°	525.9	520.1	518.1	519.4	529.2	544.9	567.0	591.1	615.1	643.1	669.2
57.5°	482.3	472.7	470.9	470.3	477.0	491.3	509.8	530.7	548.2	565.2	592.9
60°	453.7	442.0	438.1	437.4	442.6	454.4	471.2	492.1	504.5	516.2	540.3
62.5°	423.0	411.8	403.2	404.1	408.8	420.0	434.8	450.0	458.1	470.9	487.1
65°	375.6	361.3	354.7	352.8	355.4	364.5	376.3	386.0	395.1	400.3	416.0
67.5°	328.2	316.3	306.6	304.3	303.0	309.3	318.9	324.8	331.3	335.9	345.1
70°	294.9	284.5	272.7	268.8	268.2	273.4	282.5	283.2	292.3	294.2	304.0
72.5°	262.0	249.1	241.0	237.1	234.3	239.0	245.0	246.7	251.7	255.2	260.2
75°	210.9	201.1	193.3	187.4	185.5	188.1	188.1	191.4	194.6	196.6	202.4
77.5°	166.0	154.8	145.5	142.2	139.8	138.1	139.6	141.5	140.0	143.3	144.6
80°	134.8	123.0	115.9	114.5	110.6	107.4	106.7	108.7	106.1	107.4	111.3
82.5°	104.0	96.4	88.8	87.5	82.5	80.9	80.2	79.0	79.0	78.8	79.6
85°	61.8	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.0	39.7	40.4
87.5°	27.1	26.3	23.4	21.6	20.5	17.7	17.7	16.0	15.3	14.4	13.7
90°	10.8	11.5	10.2	8.9	8.9	5.1	5.1	4.5	3.8	1.9	0.7
92.5°	168.4	202.2	177.0	128.7	79.3	46.9	33.7	24.4	16.6	10.6	7.3
95°	534.3	519.6	392.1	239.7	135.2	79.7	52.9	37.6	29.4	22.9	21.0
97.5°	671.2	547.2	367.0	215.5	129.1	86.4	64.0	50.9	43.2	37.7	37.7
100°	675.7	512.6	332.8	202.8	130.7	93.1	72.6	60.6	52.9	48.4	48.4
102.5°	637.5	469.2	309.8	199.2	135.7	101.7	82.3	70.8	63.6	59.7	58.6
105°	568.0	418.2	290.1	200.8	147.9	117.3	98.8	87.3	79.7	76.5	74.6
107.5°	511.9	389.6	286.5	210.3	162.1	134.0	115.8	104.8	96.6	93.4	92.2
110°	483.9	379.9	287.5	217.4	172.8	144.7	127.5	116.0	108.4	105.2	104.0



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CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	468.1	375.4	290.6	225.0	183.0	156.0	138.7	127.3	120.1	116.4	115.1
115°	453.2	372.9	296.4	237.2	198.9	173.4	156.2	144.1	137.7	133.2	131.3
117.5°	446.6	372.3	302.7	249.5	214.3	190.1	172.3	160.9	153.9	149.9	148.1
120°	443.0	372.3	307.3	258.2	225.0	200.8	183.0	172.1	165.1	160.6	159.4
122.5°	439.0	371.8	311.9	266.4	235.2	211.0	193.6	181.8	175.3	170.9	169.6
125°	432.2	371.0	318.8	278.6	249.2	226.3	208.5	196.3	189.3	185.5	183.0
127.5°	423.1	369.7	324.2	289.2	262.3	240.1	222.1	209.5	201.5	196.9	194.9
130°	417.6	369.1	328.3	295.8	270.9	249.2	230.8	218.7	209.1	204.0	201.5
132.5°	412.5	368.6	331.9	302.4	278.1	256.4	239.0	225.8	216.8	210.1	208.1
135°	404.8	367.9	337.2	311.1	288.1	267.1	250.5	237.2	226.3	220.0	217.4
137.5°	398.2	367.7	340.4	317.2	295.8	276.1	260.3	246.5	236.1	229.1	226.7
140°	394.6	367.2	343.0	321.3	300.9	281.8	266.4	253.1	242.2	235.2	233.3
142.5°	391.6	367.2	345.0	324.3	305.5	286.9	272.1	259.2	248.9	242.4	240.4
145°	386.3	365.9	346.2	327.7	310.5	293.9	279.9	267.7	258.9	252.4	250.5
147.5°	381.6	363.6	346.8	330.6	315.6	300.0	287.4	277.3	268.2	262.5	261.9
150°	378.1	362.1	346.8	332.2	318.1	304.1	292.0	282.4	274.8	269.7	269.0
152.5°	374.0	359.5	345.8	333.1	320.2	307.7	296.6	288.0	280.9	275.8	275.7
155°	367.9	355.7	344.2	334.0	323.2	312.3	302.8	295.8	289.4	285.6	284.9
157.5°	361.6	351.8	342.6	334.0	325.4	316.2	308.7	302.6	297.6	294.0	294.0
160°	357.0	348.7	341.0	334.0	326.4	318.8	311.8	306.6	302.1	299.6	299.6
162.5°	352.9	345.7	339.6	334.0	327.4	320.2	314.8	310.2	306.2	304.2	304.8
165°	346.2	341.0	336.6	332.8	327.7	322.0	318.1	315.0	311.8	310.5	310.5
167.5°	340.1	336.5	333.5	331.3	327.6	323.3	320.4	318.6	316.2	315.6	316.2
170°	336.0	333.4	331.5	330.2	327.0	323.8	322.0	320.7	318.8	318.1	318.8
172.5°	332.4	330.4	329.5	329.2	326.5	324.3	322.9	322.2	320.8	320.7	321.3
175°	328.3	327.0	327.0	327.7	325.8	324.5	324.5	323.8	323.2	323.2	323.8
177.5°	325.5	325.0	325.0	326.0	325.0	324.5	324.5	324.5	324.0	324.5	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



TEST NUMBER: P332690-930

CATALOG NUMBER: SA4XXDIP-C1195D810U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1581.8	1587.0	1593.7	1605.2	1609.4	1614.6	1621.9	1621.4	1623.4	1631.3	1648.0
5°	1587.6	1607.9	1627.3	1650.8	1675.5	1691.8	1713.9	1727.6	1741.3	1758.8	1788.8
7.5°	1590.0	1622.0	1657.8	1699.0	1735.5	1777.8	1810.7	1841.7	1869.6	1906.7	1942.5
10°	1586.3	1629.3	1675.5	1727.6	1782.9	1829.8	1872.1	1920.3	1961.3	2006.2	2046.6
12.5°	1579.6	1631.4	1693.2	1751.6	1816.2	1885.5	1938.3	1987.0	2041.5	2093.2	2155.4
15°	1564.2	1635.2	1707.4	1784.2	1870.8	1950.8	2027.1	2090.2	2148.8	2226.3	2307.6
17.5°	1544.7	1621.2	1712.4	1805.3	1895.8	1987.4	2081.6	2176.5	2250.5	2346.7	2410.4
20°	1526.5	1615.0	1708.7	1819.4	1909.8	2023.8	2117.5	2209.3	2310.9	2406.5	2482.7
22.5°	1501.0	1597.8	1697.3	1807.4	1926.6	2040.4	2148.8	2248.4	2349.9	2454.0	2546.3
25°	1468.5	1556.4	1674.2	1799.2	1917.7	2041.3	2165.7	2290.7	2400.0	2510.1	2596.0
27.5°	1413.3	1524.3	1634.0	1763.0	1894.7	2034.6	2167.6	2298.3	2413.0	2503.4	2556.6
30°	1385.2	1481.6	1600.7	1730.2	1872.7	2023.2	2161.8	2290.0	2396.8	2469.1	2490.5
32.5°	1343.5	1443.0	1559.5	1693.8	1844.6	1999.2	2143.6	2264.5	2353.5	2391.4	2365.5
35°	1281.7	1371.6	1489.4	1626.7	1783.5	1948.2	2090.8	2193.0	2238.6	2202.8	2113.6
37.5°	1207.5	1296.6	1414.9	1549.8	1712.1	1879.5	2008.4	2081.9	2066.9	1977.8	1844.9
40°	1155.4	1238.8	1351.4	1497.1	1655.4	1823.3	1936.6	1976.3	1934.6	1807.0	1665.7
42.5°	1097.6	1178.8	1292.0	1432.6	1600.2	1755.1	1853.7	1857.0	1787.2	1634.7	1492.9
45°	1009.6	1087.0	1193.8	1340.3	1495.3	1641.0	1706.1	1674.2	1545.3	1398.2	1255.6
47.5°	922.8	989.9	1095.1	1234.2	1381.3	1504.1	1536.4	1479.0	1341.6	1198.8	1066.7
50°	859.2	926.9	1025.9	1158.7	1300.6	1406.7	1422.3	1346.1	1211.4	1067.6	964.0
52.5°	798.3	865.5	960.8	1083.7	1213.7	1309.3	1309.9	1221.7	1087.4	959.2	863.0
55°	708.9	769.4	855.3	965.3	1081.2	1156.1	1137.8	1046.7	930.2	818.9	734.9
57.5°	622.7	675.4	754.6	846.4	948.4	1010.2	979.9	892.2	788.1	693.7	630.1
60°	567.0	617.1	684.8	771.4	857.3	905.5	876.9	797.4	701.7	625.6	570.2
62.5°	512.8	555.1	620.2	695.4	775.0	810.7	785.1	706.8	624.1	555.2	510.4
65°	436.1	470.7	522.7	587.2	645.1	675.7	654.2	581.3	518.1	468.7	432.8
67.5°	364.5	391.5	430.9	482.6	531.8	548.4	528.8	478.1	424.5	385.0	359.7
70°	315.0	340.5	373.7	413.4	456.3	473.9	454.4	414.0	370.4	333.9	309.2
72.5°	271.8	291.5	319.5	353.4	387.0	404.6	391.3	352.5	315.7	288.6	267.5
75°	207.0	224.0	243.4	267.5	293.6	305.3	293.6	266.8	241.5	221.4	206.4
77.5°	150.5	159.6	174.7	192.7	209.0	217.9	207.8	189.7	174.2	160.4	153.0
80°	114.5	121.1	131.5	145.8	156.9	165.3	158.8	143.8	131.5	122.4	119.1
82.5°	83.3	87.7	94.5	105.2	112.6	116.9	114.1	103.2	98.2	90.1	86.8
85°	41.0	43.6	48.2	51.4	58.0	58.6	59.3	54.7	50.1	48.2	45.6
87.5°	14.4	15.3	17.0	18.8	20.8	22.1	21.6	21.9	20.0	19.3	17.4
90°	1.9	3.8	4.5	5.1	5.1	8.9	8.9	10.2	11.5	10.8	11.5
92.5°	10.6	16.6	24.4	33.7	46.9	79.3	128.7	177.0	202.2	168.4	125.2
95°	22.9	29.4	37.6	52.9	79.7	135.2	239.7	392.1	519.6	534.3	472.4
97.5°	37.7	43.2	50.9	64.0	86.4	129.1	215.5	367.0	547.2	671.2	697.9
100°	48.4	52.9	60.6	72.6	93.1	130.7	202.8	332.8	512.6	675.7	768.8
102.5°	59.7	63.6	70.8	82.3	101.7	135.7	199.2	309.8	469.2	637.5	765.2
105°	76.5	79.7	87.3	98.8	117.3	147.9	200.8	290.1	418.2	568.0	714.0
107.5°	93.4	96.6	104.8	115.8	134.0	162.1	210.3	286.5	389.6	511.9	641.2
110°	105.2	108.4	116.0	127.5	144.7	172.8	217.4	287.5	379.9	483.9	597.4



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	116.4	120.1	127.3	138.7	156.0	183.0	225.0	290.6	375.4	468.1	565.2
115°	133.2	137.7	144.1	156.2	173.4	198.9	237.2	296.4	372.9	453.2	533.0
117.5°	149.9	153.9	160.9	172.3	190.1	214.3	249.5	302.7	372.3	446.6	517.1
120°	160.6	165.1	172.1	183.0	200.8	225.0	258.2	307.3	372.3	443.0	510.0
122.5°	170.9	175.3	181.8	193.6	211.0	235.2	266.4	311.9	371.8	439.0	503.9
125°	185.5	189.3	196.3	208.5	226.3	249.2	278.6	318.8	371.0	432.2	493.4
127.5°	196.9	201.5	209.5	222.1	240.1	262.3	289.2	324.2	369.7	423.1	480.7
130°	204.0	209.1	218.7	230.8	249.2	270.9	295.8	328.3	369.1	417.6	470.5
132.5°	210.1	216.8	225.8	239.0	256.4	278.1	302.4	331.9	368.6	412.5	459.7
135°	220.0	226.3	237.2	250.5	267.1	288.1	311.1	337.2	367.9	404.8	445.0
137.5°	229.1	236.1	246.5	260.3	276.1	295.8	317.2	340.4	367.7	398.2	431.6
140°	235.2	242.2	253.1	266.4	281.8	300.9	321.3	343.0	367.2	394.6	424.0
142.5°	242.4	248.9	259.2	272.1	286.9	305.5	324.3	345.0	367.2	391.6	416.8
145°	252.4	258.9	267.7	279.9	293.9	310.5	327.7	346.2	365.9	386.3	406.8
147.5°	262.5	268.2	277.3	287.4	300.0	315.6	330.6	346.8	363.6	381.6	398.4
150°	269.7	274.8	282.4	292.0	304.1	318.1	332.2	346.8	362.1	378.1	393.3
152.5°	275.8	280.9	288.0	296.6	307.7	320.2	333.1	345.8	359.5	374.0	387.8
155°	285.6	289.4	295.8	302.8	312.3	323.2	334.0	344.2	355.7	367.9	379.3
157.5°	294.0	297.6	302.6	308.7	316.2	325.4	334.0	342.6	351.8	361.6	370.2
160°	299.6	302.1	306.6	311.8	318.8	326.4	334.0	341.0	348.7	357.0	364.7
162.5°	304.2	306.2	310.2	314.8	320.2	327.4	334.0	339.6	345.7	352.9	359.1
165°	310.5	311.8	315.0	318.1	322.0	327.7	332.8	336.6	341.0	346.2	351.2
167.5°	315.6	316.2	318.6	320.4	323.3	327.6	331.3	333.5	336.5	340.1	343.7
170°	318.1	318.8	320.7	322.0	323.8	327.0	330.2	331.5	333.4	336.0	339.2
172.5°	320.7	320.8	322.2	322.9	324.3	326.5	329.2	329.5	330.4	332.4	335.1
175°	323.2	323.2	323.8	324.5	324.5	325.8	327.7	327.0	327.0	328.3	329.6
177.5°	324.5	324.0	324.5	324.5	324.5	325.0	326.0	325.0	325.0	325.5	326.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4	1571.4
2.5°	1656.3	1657.3	1662.0	1665.7	1666.7	1671.9	1672.4
5°	1801.8	1812.9	1834.3	1836.3	1839.6	1856.5	1843.5
7.5°	1972.4	2000.5	2019.3	2035.8	2041.8	2049.2	2047.6
10°	2081.7	2123.4	2144.2	2177.4	2178.7	2187.2	2182.0
12.5°	2191.6	2240.0	2278.0	2284.1	2312.0	2316.3	2323.6
15°	2347.3	2398.7	2451.4	2470.4	2508.8	2517.9	2532.2
17.5°	2493.7	2546.3	2583.2	2632.0	2647.8	2668.9	2654.5
20°	2573.8	2631.1	2678.0	2716.4	2732.6	2744.4	2743.1
22.5°	2622.2	2680.1	2718.0	2747.2	2762.3	2767.3	2767.0
25°	2652.6	2685.8	2697.5	2708.6	2691.6	2685.8	2688.4
27.5°	2568.3	2559.6	2529.1	2488.9	2447.3	2414.2	2396.2
30°	2452.1	2401.3	2355.2	2274.4	2232.8	2208.0	2185.9
32.5°	2287.6	2207.1	2118.1	2044.2	1996.8	1960.1	1954.7
35°	2005.6	1884.5	1775.8	1685.3	1638.4	1598.7	1589.6
37.5°	1705.1	1579.3	1481.4	1401.7	1351.4	1323.4	1297.2
40°	1505.6	1397.6	1301.2	1233.5	1195.1	1174.9	1158.7
42.5°	1352.0	1253.4	1157.5	1106.0	1071.2	1058.8	1049.3
45°	1139.8	1048.0	981.6	942.6	922.3	901.6	891.8
47.5°	969.9	895.2	851.4	818.2	796.6	784.2	778.0
50°	873.6	812.4	773.3	748.0	728.4	718.6	713.5
52.5°	788.1	737.9	705.1	684.9	671.6	664.5	662.4
55°	678.9	640.5	619.7	602.1	592.4	585.9	583.3
57.5°	590.1	560.6	543.6	529.2	525.5	520.0	518.1
60°	531.8	509.1	494.7	484.9	481.7	475.2	476.5
62.5°	480.3	461.6	449.4	443.8	439.5	434.1	435.9
65°	406.2	392.5	386.0	380.8	375.6	372.3	375.0
67.5°	340.8	331.5	322.6	319.6	317.0	316.5	313.7
70°	298.2	290.3	282.5	280.5	280.5	277.9	277.3
72.5°	257.0	251.3	246.1	244.6	242.6	243.6	240.8
75°	198.5	194.0	192.0	190.0	189.4	189.4	187.4
77.5°	146.8	143.3	140.2	140.2	137.9	137.0	136.7
80°	111.3	110.0	107.4	107.4	106.1	106.7	105.4
82.5°	83.7	81.9	81.4	80.3	78.5	78.6	77.4
85°	44.9	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	18.0	17.7	17.1	16.2	15.8	15.7	14.1
90°	12.1	12.7	12.7	13.4	14.0	13.4	13.4
92.5°	94.2	75.0	62.2	54.7	51.3	49.1	49.1
95°	373.6	288.1	226.3	195.1	175.3	163.9	155.6
97.5°	661.2	598.8	532.3	486.6	448.2	429.0	415.8
100°	781.5	750.3	703.2	647.7	608.8	589.7	584.6
102.5°	828.5	837.6	817.9	783.9	755.7	735.6	731.5
105°	824.3	887.4	913.5	914.8	909.7	900.8	897.0
107.5°	758.6	847.5	904.3	935.9	950.4	956.8	958.4
110°	707.6	800.1	870.2	915.4	942.2	953.7	959.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	662.8	750.1	820.2	871.6	904.0	920.1	929.4
115°	611.4	685.9	747.1	797.5	835.8	856.1	861.3
117.5°	582.0	640.7	692.6	735.6	767.7	788.3	792.3
120°	569.3	620.3	665.5	701.9	729.9	746.5	753.5
122.5°	561.1	607.6	647.2	677.9	701.9	715.9	722.9
125°	548.3	592.2	627.3	652.8	671.3	683.4	687.2
127.5°	533.0	576.9	610.3	635.9	652.3	662.5	666.3
130°	520.8	564.2	597.9	624.1	640.1	650.3	654.1
132.5°	507.0	549.4	583.2	608.8	626.8	636.5	640.3
135°	486.4	525.3	557.2	582.7	600.5	610.7	614.6
137.5°	466.7	499.5	528.2	552.0	569.6	578.0	582.7
140°	453.9	482.6	509.4	531.7	545.7	554.6	559.7
142.5°	443.2	467.8	491.0	510.8	523.7	531.7	535.2
145°	428.4	447.5	465.4	481.4	492.1	498.6	501.7
147.5°	415.6	431.0	445.0	456.7	466.0	470.8	472.0
150°	408.0	420.8	432.2	442.5	450.7	454.5	455.2
152.5°	400.3	412.1	421.5	430.2	436.9	439.2	439.9
155°	389.6	399.1	406.8	413.1	418.2	420.1	420.1
157.5°	378.8	386.9	393.0	397.8	401.6	402.8	402.8
160°	371.7	378.7	383.8	387.6	391.4	392.1	392.1
162.5°	365.0	370.6	375.1	377.9	381.7	382.4	381.9
165°	355.1	359.5	362.7	365.3	367.9	367.2	366.6
167.5°	346.7	350.3	352.1	353.4	355.1	355.0	354.4
170°	341.0	343.6	345.5	346.8	347.4	346.8	346.8
172.5°	336.5	338.0	339.4	340.1	340.8	340.1	339.2
175°	330.2	331.5	331.5	331.5	332.8	331.5	330.2
177.5°	326.5	326.5	327.0	326.5	327.0	326.0	325.0
180°	324.5	324.5	324.5	324.5	324.5	324.5	324.5

(END OF REPORT)