

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: P332690-840

Luminaire Tested: **SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332690-840
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-C1195D810U840-4F0-1E-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

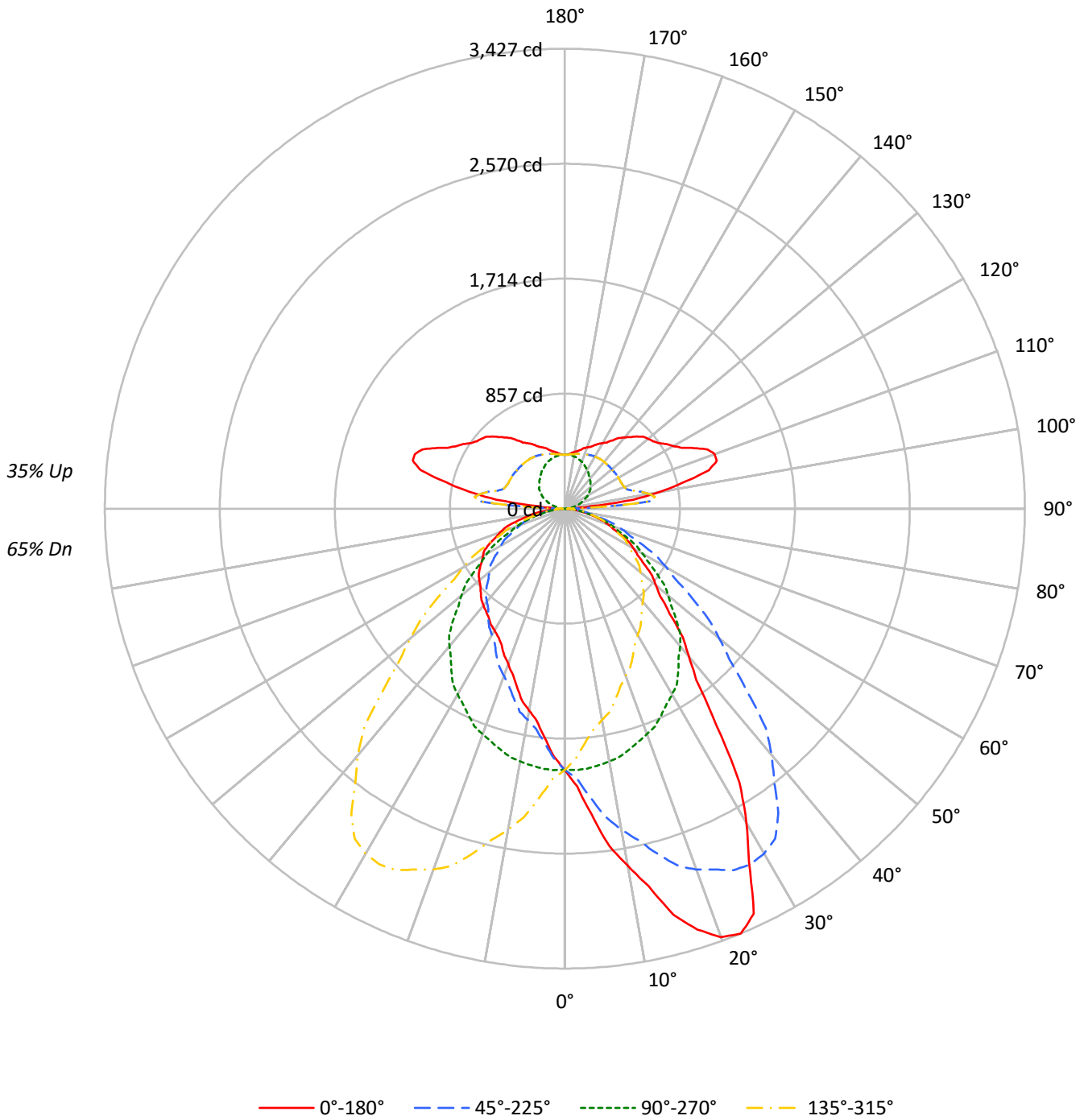
Lumens per Lamp: N/A
Luminaire Lumens: 8295.5 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

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	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°	15713	15713	15713	15713
5°	18504	15754	13904	15754
10°	22155	15684	12518	15684
15°	26213	15525	11496	15525
20°	29190	15364	10584	15364
25°	29661	15126	9954	15126
30°	25239	14897	9755	14897
35°	19404	14526	9758	14526
40°	15125	14089	9941	14089
45°	12611	13431	10107	13431
50°	11099	12627	10451	12627
55°	10169	11667	10871	11667
60°	9529	10805	11378	10805
65°	8871	9841	11798	9841
70°	8108	8889	12066	8889
75°	7243	7820	11918	7820
80°	6072	6406	11544	6406
85°	4483	4631	11060	4631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.6	2.3
10°-20°	584.5	7.0
20°-30°	926.8	11.2
30°-40°	1031.4	12.4
40°-50°	938.9	11.3
50°-60°	767.2	9.2
60°-70°	547.7	6.6
70°-80°	301.6	3.6
80°-90°	84.6	1.0
90°-100°	290.3	3.5
100°-110°	604.2	7.3
110°-120°	541.2	6.5
120°-130°	455.2	5.5
130°-140°	379.6	4.6
140°-150°	290.0	3.5
150°-160°	203.8	2.5
160°-170°	119.9	1.4
170°-180°	39.0	0.5
0°-30°	1700.9	20.5
0°-40°	2732.3	32.9
0°-60°	4438.4	53.5
0°-90°	5372.3	64.8
90°-120°	1435.7	17.3
90°-150°	2560.4	30.9
90°-180°	2923.0	35.2
0°-180°	8295.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1946	1946	1946	1946	1946	
5°	2283	1944	1716	1944	2283	232
15°	3136	1858	1376	1858	3136	886
25°	3330	1698	1118	1698	3330	1468
35°	1969	1474	990	1474	1969	1250
45°	1105	1176	885	1176	1105	870
55°	722	829	772	829	722	653
65°	464	515	618	515	464	460
75°	232	251	382	251	232	247
85°	48	50	119	50	48	59
90°	17	1	17	1	17	15
95°	193	26	193	26	193	299
105°	1111	92	1111	92	1111	1098
115°	1067	163	1067	163	1067	1059
125°	851	227	851	227	851	774
135°	761	269	761	269	761	588
145°	622	310	622	310	622	394
155°	520	353	520	353	520	243
165°	454	385	454	385	454	130
175°	409	401	409	401	409	40
180°	402	402	402	402	402	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2071.5	2070.8	2064.5	2063.2	2058.6	2052.9	2051.5	2041.2	2020.5	2010.8	2008.3
5°	2283.4	2299.6	2278.6	2274.5	2272.1	2245.5	2231.8	2215.6	2178.6	2156.9	2139.9
7.5°	2536.3	2538.2	2529.0	2521.6	2501.1	2477.9	2443.1	2406.0	2361.8	2315.8	2281.2
10°	2702.7	2709.2	2698.7	2697.0	2655.9	2630.1	2578.5	2535.0	2485.0	2429.3	2378.5
12.5°	2878.1	2869.1	2863.8	2829.2	2821.7	2774.6	2714.6	2669.8	2592.7	2528.7	2461.1
15°	3136.4	3118.8	3107.5	3059.9	3036.5	2971.1	2907.5	2858.3	2757.5	2661.6	2589.0
17.5°	3288.0	3305.8	3279.6	3260.1	3199.7	3153.9	3088.8	2985.6	2906.7	2787.5	2695.9
20°	3397.7	3399.3	3384.8	3364.7	3317.1	3259.0	3188.0	3075.1	2980.8	2862.4	2736.5
22.5°	3427.4	3427.7	3421.5	3402.7	3366.7	3319.6	3248.0	3153.9	3039.6	2910.7	2784.9
25°	3329.9	3326.7	3334.0	3355.0	3341.2	3326.7	3285.6	3215.5	3109.1	2972.7	2837.3
27.5°	2968.1	2990.3	3031.3	3082.9	3132.6	3170.5	3181.2	3166.7	3100.8	2988.8	2846.8
30°	2707.5	2734.9	2765.6	2817.1	2917.2	2974.4	3037.3	3084.8	3058.3	2968.8	2836.5
32.5°	2421.2	2427.9	2473.4	2532.0	2623.6	2733.8	2833.5	2930.0	2962.1	2915.2	2804.9
35°	1968.9	1980.2	2029.4	2087.5	2199.6	2334.2	2484.2	2618.0	2728.5	2772.8	2716.3
37.5°	1606.8	1639.2	1673.9	1736.3	1834.9	1956.2	2112.0	2285.2	2449.8	2560.1	2578.8
40°	1435.2	1455.3	1480.4	1527.9	1611.7	1731.1	1864.9	2063.3	2238.3	2396.3	2447.9
42.5°	1299.7	1311.5	1326.9	1369.9	1433.7	1552.5	1674.7	1849.2	2024.8	2213.7	2300.2
45°	1104.6	1116.7	1142.5	1167.5	1215.9	1298.1	1411.8	1555.3	1731.9	1914.1	2073.8
47.5°	963.7	971.4	986.7	1013.5	1054.6	1108.8	1201.3	1321.2	1484.9	1661.7	1831.9
50°	883.7	890.1	902.2	926.5	957.9	1006.2	1082.1	1194.1	1322.3	1500.5	1667.4
52.5°	820.5	823.0	831.9	848.4	873.3	914.0	976.2	1068.9	1188.1	1347.0	1513.3
55°	722.5	725.7	733.8	745.8	767.6	793.3	840.9	910.3	1014.3	1152.2	1296.5
57.5°	641.8	644.1	650.9	655.5	673.4	694.4	730.9	780.5	859.3	976.2	1105.1
60°	590.2	588.5	596.6	600.7	612.8	630.6	658.7	706.3	774.9	869.2	987.7
62.5°	539.9	537.7	544.4	549.8	556.6	571.8	594.9	632.2	687.7	773.1	875.5
65°	464.4	461.2	465.2	471.7	478.2	486.1	503.1	536.1	580.6	641.8	720.0
67.5°	388.6	392.0	392.6	395.9	399.6	410.6	422.1	445.6	476.9	525.8	592.2
70°	343.5	344.3	347.5	347.5	349.9	359.6	369.3	382.9	413.6	458.8	512.8
72.5°	298.3	301.7	300.4	303.0	304.8	311.2	318.3	331.3	357.5	391.0	436.7
75°	232.2	234.6	234.6	235.4	237.8	240.2	245.9	255.6	274.2	299.1	330.5
77.5°	169.4	169.7	170.8	173.7	173.7	177.5	181.8	189.5	198.6	215.8	235.0
80°	130.6	132.2	131.4	133.0	133.0	136.2	137.8	147.5	151.6	162.9	178.1
82.5°	95.8	97.4	97.3	99.5	100.8	101.4	103.7	107.6	111.6	121.6	127.8
85°	48.4	50.0	48.4	50.0	52.4	53.2	55.6	56.5	59.7	62.1	67.8
87.5°	17.5	19.5	19.6	20.1	21.2	21.9	22.3	21.5	23.9	24.7	27.1
90°	16.6	16.6	17.4	16.6	15.8	15.8	15.0	14.2	13.4	14.2	12.6
92.5°	60.8	60.8	63.5	67.8	77.1	92.9	116.7	155.1	208.6	250.4	219.2
95°	192.7	203.0	217.1	241.7	280.3	356.9	462.7	585.1	661.8	643.6	485.6
97.5°	515.0	531.4	555.1	602.7	659.3	741.7	819.0	864.4	831.3	677.8	454.5
100°	724.1	730.4	754.1	802.2	871.0	929.4	968.1	952.3	837.0	634.9	412.2
102.5°	906.1	911.1	936.0	971.0	1013.1	1037.4	1026.2	947.9	789.6	581.2	383.7
105°	1111.1	1115.8	1126.8	1133.2	1131.6	1099.1	1021.0	884.4	703.6	518.0	359.3
107.5°	1187.1	1185.1	1177.2	1159.2	1120.1	1049.8	939.7	794.3	634.1	482.6	354.9
110°	1188.4	1181.3	1167.1	1133.9	1077.8	991.0	876.5	739.9	599.4	470.6	356.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1151.1	1139.6	1119.7	1079.5	1015.9	929.1	820.9	700.1	579.8	464.9	359.9
115°	1066.8	1060.5	1035.2	987.8	925.4	849.6	757.3	660.1	561.4	461.9	367.2
117.5°	981.4	976.4	950.9	911.1	857.9	793.6	720.9	640.6	553.2	461.1	375.0
120°	933.3	924.6	904.1	869.4	824.4	768.3	705.2	631.7	548.8	461.1	380.6
122.5°	895.4	886.8	869.4	839.7	801.6	752.6	695.0	624.1	543.7	460.5	386.3
125°	851.2	846.5	831.5	808.6	777.0	733.6	679.1	611.2	535.3	459.6	394.9
127.5°	825.4	820.6	808.0	787.6	755.9	714.6	660.2	595.4	524.1	457.9	401.6
130°	810.2	805.5	792.8	773.1	740.6	698.8	645.1	582.8	517.3	457.2	406.7
132.5°	793.1	788.4	776.4	754.1	722.4	680.5	628.0	569.5	510.9	456.6	411.1
135°	761.2	756.5	743.9	721.8	690.1	650.7	602.5	551.2	501.4	455.7	417.7
137.5°	721.8	716.0	705.6	683.8	654.3	618.6	578.0	534.6	493.2	455.4	421.6
140°	693.3	687.0	675.9	658.5	631.0	597.7	562.2	525.1	488.8	454.8	424.9
142.5°	663.0	658.5	648.7	632.7	608.1	579.5	549.0	516.2	485.0	454.8	427.4
145°	621.5	617.5	609.6	596.2	576.4	554.3	530.7	503.8	478.5	453.2	428.8
147.5°	584.6	583.2	577.2	565.7	551.2	533.8	514.8	493.5	472.7	450.4	429.6
150°	563.8	563.0	558.3	548.1	535.3	521.2	505.3	487.2	468.3	448.5	429.6
152.5°	544.8	544.0	541.2	532.8	522.1	510.4	495.8	480.3	463.2	445.4	428.3
155°	520.4	520.4	518.0	511.7	503.8	494.3	482.5	469.8	455.7	440.6	426.4
157.5°	498.9	498.9	497.5	492.7	486.8	479.2	469.2	458.6	447.9	435.8	424.3
160°	485.6	485.6	484.8	480.1	475.3	469.1	460.4	451.7	442.2	431.9	422.4
162.5°	473.0	473.6	472.8	468.1	464.6	459.0	452.1	444.7	437.2	428.2	420.6
165°	454.0	454.8	455.7	452.4	449.3	445.4	439.8	435.0	428.8	422.4	417.0
167.5°	439.0	439.7	439.8	437.8	436.2	433.8	429.4	425.8	421.2	416.8	413.1
170°	429.6	429.6	430.3	429.6	428.0	425.7	422.4	420.1	416.2	412.9	410.6
172.5°	420.1	421.3	422.1	421.3	420.4	418.7	416.8	415.1	411.7	409.2	408.1
175°	409.0	410.6	412.2	410.6	410.6	410.6	409.0	408.3	406.7	405.1	405.1
177.5°	402.5	403.8	405.1	404.5	405.1	404.5	404.5	403.8	403.1	402.5	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2008.9	1999.9	1993.5	1988.3	1974.1	1965.7	1959.2	1950.3	1940.0	1928.9	1915.4
5°	2122.9	2095.6	2075.4	2044.8	2015.7	1991.6	1966.5	1944.0	1916.5	1886.7	1864.9
7.5°	2242.8	2202.0	2149.7	2104.5	2053.5	2009.1	1969.4	1928.8	1886.5	1845.6	1808.1
10°	2318.9	2266.4	2208.4	2139.9	2075.4	2018.1	1964.9	1913.3	1863.3	1813.3	1770.6
12.5°	2400.9	2335.5	2249.7	2169.6	2097.3	2020.7	1956.5	1893.3	1833.0	1780.5	1730.6
15°	2510.8	2416.4	2317.2	2210.0	2114.9	2025.4	1937.5	1857.6	1790.0	1720.6	1672.2
17.5°	2578.4	2461.6	2348.2	2236.1	2121.0	2008.1	1913.3	1821.3	1736.5	1667.6	1606.6
20°	2622.8	2506.8	2365.6	2253.6	2116.5	2000.4	1890.8	1788.4	1699.7	1626.3	1563.4
22.5°	2661.6	2527.4	2386.3	2238.8	2102.3	1979.1	1859.2	1756.1	1665.5	1588.2	1527.9
25°	2682.5	2528.5	2375.3	2228.6	2073.8	1927.8	1819.0	1698.1	1601.2	1519.8	1455.3
27.5°	2684.8	2520.1	2346.8	2183.7	2024.0	1888.0	1750.6	1642.5	1542.1	1456.0	1394.1
30°	2677.7	2506.0	2319.7	2143.1	1982.7	1835.1	1715.8	1598.1	1495.7	1410.2	1345.6
32.5°	2655.1	2476.3	2284.8	2098.0	1931.7	1787.4	1664.2	1552.3	1452.5	1368.3	1300.5
35°	2589.8	2413.2	2209.2	2014.9	1844.8	1698.9	1587.6	1473.9	1373.9	1294.1	1228.8
37.5°	2487.7	2328.0	2120.7	1919.7	1752.5	1606.0	1495.7	1392.9	1302.8	1221.7	1154.8
40°	2398.7	2258.5	2050.4	1854.4	1673.9	1534.4	1431.2	1336.9	1247.3	1170.7	1107.0
42.5°	2296.1	2173.9	1982.1	1774.4	1600.3	1460.2	1359.6	1274.9	1190.5	1119.7	1056.1
45°	2113.2	2032.7	1852.1	1660.1	1478.7	1346.5	1250.5	1176.4	1105.4	1036.1	982.9
47.5°	1903.0	1863.0	1710.9	1528.7	1356.5	1226.2	1143.0	1074.5	1012.2	953.5	906.6
50°	1761.7	1742.4	1610.9	1435.2	1270.7	1148.1	1064.3	1005.4	952.2	900.6	856.3
52.5°	1622.4	1621.7	1503.3	1342.3	1190.1	1072.1	988.9	933.8	887.8	845.8	806.0
55°	1409.4	1432.0	1339.3	1195.7	1059.4	953.0	878.1	828.9	796.6	761.9	732.2
57.5°	1213.8	1251.2	1174.8	1048.3	934.6	836.6	771.3	734.4	700.0	679.0	657.3
60°	1086.1	1121.6	1061.9	955.4	848.2	764.4	702.3	669.2	639.3	624.9	609.6
62.5°	972.5	1004.1	960.0	861.3	768.2	687.6	635.2	603.4	583.3	567.4	557.3
65°	810.3	837.0	799.0	727.3	647.4	583.0	540.2	515.2	495.8	489.4	478.2
67.5°	655.0	679.2	658.7	597.7	533.7	484.9	451.5	427.5	416.1	410.4	402.3
70°	562.8	586.9	565.2	512.0	462.8	421.7	390.2	376.6	364.5	362.0	350.7
72.5°	484.7	501.2	479.4	437.8	395.8	361.0	336.7	322.3	316.1	311.7	305.6
75°	363.7	378.2	363.7	331.3	301.5	277.4	256.4	250.7	243.5	241.1	237.0
77.5°	257.4	269.9	258.8	238.6	216.4	197.7	186.4	179.2	177.5	173.4	175.3
80°	196.7	204.8	194.3	180.6	162.9	150.0	141.9	137.8	133.0	131.4	134.6
82.5°	141.3	144.8	139.5	130.3	117.0	108.7	103.2	98.6	97.6	97.9	97.9
85°	73.4	72.6	71.8	63.7	59.7	54.0	50.8	50.0	49.2	50.8	52.4
87.5°	26.8	27.4	25.8	23.2	21.1	19.0	17.9	17.0	17.9	19.0	19.8
90°	11.0	11.0	6.4	6.4	5.6	4.7	2.3	0.8	2.3	4.7	5.6
92.5°	159.5	98.3	58.1	41.7	30.2	20.5	13.1	9.0	13.1	20.5	30.2
95°	296.9	167.4	98.7	65.5	46.6	36.4	28.4	26.1	28.4	36.4	46.6
97.5°	266.9	160.0	107.0	79.3	63.0	53.5	46.8	46.8	46.8	53.5	63.0
100°	251.2	161.9	115.3	90.0	75.0	65.5	60.0	60.0	60.0	65.5	75.0
102.5°	246.7	168.1	126.0	102.0	87.7	78.8	73.9	72.6	73.9	78.8	87.7
105°	248.7	183.2	145.3	122.4	108.2	98.7	94.7	92.4	94.7	98.7	108.2
107.5°	260.4	200.8	166.0	143.4	129.8	119.7	115.7	114.2	115.7	119.7	129.8
110°	269.2	214.0	179.3	157.9	143.7	134.2	130.3	128.8	130.3	134.2	143.7



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	278.7	226.6	193.2	171.8	157.6	148.8	144.2	142.6	144.2	148.8	157.6
115°	293.8	246.4	214.8	193.5	178.4	170.6	165.0	162.7	165.0	170.6	178.4
117.5°	309.0	265.5	235.5	213.4	199.3	190.7	185.7	183.5	185.7	190.7	199.3
120°	319.8	278.7	248.7	226.6	213.2	204.5	198.9	197.4	198.9	204.5	213.2
122.5°	329.9	291.3	261.4	239.8	225.2	217.1	211.7	210.1	211.7	217.1	225.2
125°	345.1	308.7	280.3	258.2	243.2	234.5	229.7	226.6	229.7	234.5	243.2
127.5°	358.2	324.9	297.4	275.1	259.4	249.5	243.9	241.4	243.9	249.5	259.4
130°	366.4	335.6	308.7	285.9	270.8	259.0	252.7	249.5	252.7	259.0	270.8
132.5°	374.6	344.5	317.6	296.0	279.7	268.5	260.2	257.7	260.2	268.5	279.7
135°	385.4	356.9	330.8	310.3	293.8	280.3	272.5	269.2	272.5	280.3	293.8
137.5°	392.9	366.4	342.0	322.4	305.3	292.5	283.8	280.8	283.8	292.5	305.3
140°	398.0	372.7	349.0	330.0	313.5	300.0	291.3	289.0	291.3	300.0	313.5
142.5°	401.7	378.4	355.4	337.0	321.0	308.3	300.2	297.8	300.2	308.3	321.0
145°	405.9	384.6	364.1	346.7	331.6	320.6	312.7	310.3	312.7	320.6	331.6
147.5°	409.5	390.9	371.6	356.0	343.5	332.1	325.2	324.4	325.2	332.1	343.5
150°	411.4	394.0	376.7	361.6	349.8	340.3	334.1	333.3	334.1	340.3	349.8
152.5°	412.6	396.6	381.1	367.4	356.8	347.9	341.6	341.4	341.6	347.9	356.8
155°	413.7	400.3	386.9	375.1	366.4	358.5	353.8	352.9	353.8	358.5	366.4
157.5°	413.7	403.0	391.6	382.3	374.8	368.6	364.2	364.2	364.2	368.6	374.8
160°	413.7	404.2	394.9	386.2	379.8	374.3	371.1	371.1	371.1	374.3	379.8
162.5°	413.7	405.6	396.7	389.9	384.3	379.3	376.8	377.5	376.8	379.3	384.3
165°	412.2	405.9	398.8	394.0	390.1	386.2	384.6	384.6	384.6	386.2	390.1
167.5°	410.3	405.8	400.5	396.9	394.7	391.6	390.9	391.6	390.9	391.6	394.7
170°	409.0	405.1	401.1	398.8	397.2	394.9	394.0	394.9	394.0	394.9	397.2
172.5°	407.8	404.5	401.7	400.0	399.1	397.4	397.2	398.0	397.2	397.4	399.1
175°	405.9	403.5	401.9	401.9	401.1	400.3	400.3	401.1	400.3	400.3	401.1
177.5°	403.8	402.5	401.9	401.9	401.9	401.3	401.9	402.5	401.9	401.3	401.9
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1908.9	1903.2	1894.8	1883.2	1873.5	1863.2	1860.6	1856.7	1864.4	1858.1	1856.0
5°	1846.4	1829.5	1807.7	1782.7	1768.2	1747.3	1743.2	1735.2	1727.1	1726.3	1718.2
7.5°	1780.1	1755.2	1726.8	1701.2	1677.7	1654.9	1639.8	1636.6	1624.7	1617.7	1609.6
10°	1737.6	1706.9	1673.9	1649.7	1622.2	1598.1	1581.1	1571.5	1563.4	1554.5	1546.5
12.5°	1687.3	1654.7	1627.4	1601.2	1568.7	1550.3	1522.5	1505.7	1504.1	1504.2	1483.3
15°	1628.7	1596.5	1554.5	1517.4	1499.6	1464.2	1448.9	1429.6	1417.4	1405.3	1395.7
17.5°	1561.8	1521.7	1488.8	1446.3	1412.5	1384.2	1364.1	1352.5	1334.2	1317.2	1304.7
20°	1519.8	1477.1	1442.5	1397.2	1360.2	1325.5	1308.6	1292.5	1278.8	1264.3	1250.5
22.5°	1477.2	1432.6	1390.2	1346.4	1311.8	1275.3	1258.9	1237.0	1224.0	1215.9	1202.1
25°	1410.2	1361.8	1313.4	1271.5	1236.1	1203.8	1182.0	1165.1	1150.5	1144.1	1135.3
27.5°	1337.3	1289.3	1242.5	1194.9	1154.6	1131.3	1113.8	1101.1	1092.7	1084.1	1080.2
30°	1290.9	1240.9	1190.9	1146.5	1109.4	1086.1	1070.0	1061.1	1054.6	1050.6	1046.5
32.5°	1243.7	1194.5	1141.9	1101.4	1068.1	1047.3	1035.1	1026.2	1023.0	1021.6	1020.2
35°	1168.3	1118.3	1070.0	1033.7	1002.2	994.1	983.7	978.9	977.2	982.9	985.3
37.5°	1095.3	1048.8	1004.3	969.2	948.6	936.8	933.2	933.3	939.2	944.1	950.0
40°	1048.1	1003.0	961.1	930.5	911.1	903.8	902.2	906.3	912.7	918.4	924.8
42.5°	1002.4	957.9	919.8	891.1	877.6	870.9	871.9	876.0	884.9	891.9	901.6
45°	931.3	894.1	857.1	833.7	822.4	824.0	824.0	831.3	840.1	850.6	861.1
47.5°	864.3	827.0	796.5	776.8	770.9	769.5	774.1	783.6	796.3	809.2	823.8
50°	819.2	783.8	757.1	739.3	733.0	735.4	741.7	750.6	766.0	782.1	797.4
52.5°	773.4	741.1	716.5	700.0	695.5	699.8	706.3	720.3	733.8	751.1	769.7
55°	702.3	674.9	655.5	643.4	641.8	644.2	651.5	666.8	686.1	707.9	725.7
57.5°	631.5	608.5	590.9	582.5	583.3	585.5	597.4	615.7	636.3	659.5	682.5
60°	583.7	562.8	548.3	541.8	542.6	547.4	562.0	579.0	604.7	627.3	651.5
62.5°	538.6	520.2	506.3	500.6	499.4	510.1	523.9	541.5	567.3	592.5	618.5
65°	466.1	451.5	440.2	437.0	439.4	447.5	465.2	488.6	510.4	536.9	564.4
67.5°	395.1	383.1	375.4	376.9	379.8	391.7	406.6	426.7	451.4	479.0	506.0
70°	349.9	338.6	332.1	333.0	337.8	352.3	365.3	385.4	412.0	440.2	462.8
72.5°	303.5	296.1	290.2	293.7	298.5	308.5	324.6	344.8	368.2	394.5	418.3
75°	233.0	233.0	229.7	232.2	239.4	249.1	261.3	282.2	305.6	326.6	345.9
77.5°	172.9	171.1	173.2	176.1	180.3	191.8	205.6	220.6	238.2	259.1	275.1
80°	132.2	133.0	137.0	141.9	143.5	152.4	166.9	180.6	194.3	212.1	227.4
82.5°	99.4	100.2	102.2	108.4	110.0	119.5	128.9	142.6	155.0	166.9	179.7
85°	54.0	54.0	58.1	60.5	64.5	71.0	76.5	84.6	95.9	104.0	116.1
87.5°	21.9	21.9	25.4	26.8	29.0	32.5	33.6	40.9	43.6	47.1	52.8
90°	6.4	6.4	11.0	11.0	12.6	14.2	13.4	14.2	15.0	15.8	15.8
92.5°	41.7	58.1	98.3	159.5	219.2	250.4	208.6	155.1	116.7	92.9	77.1
95°	65.5	98.7	167.4	296.9	485.6	643.6	661.8	585.1	462.7	356.9	280.3
97.5°	79.3	107.0	160.0	266.9	454.5	677.8	831.3	864.4	819.0	741.7	659.3
100°	90.0	115.3	161.9	251.2	412.2	634.9	837.0	952.3	968.1	929.4	871.0
102.5°	102.0	126.0	168.1	246.7	383.7	581.2	789.6	947.9	1026.2	1037.4	1013.1
105°	122.4	145.3	183.2	248.7	359.3	518.0	703.6	884.4	1021.0	1099.1	1131.6
107.5°	143.4	166.0	200.8	260.4	354.9	482.6	634.1	794.3	939.7	1049.8	1120.1
110°	157.9	179.3	214.0	269.2	356.1	470.6	599.4	739.9	876.5	991.0	1077.8



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	171.8	193.2	226.6	278.7	359.9	464.9	579.8	700.1	820.9	929.1	1015.9
115°	193.5	214.8	246.4	293.8	367.2	461.9	561.4	660.1	757.3	849.6	925.4
117.5°	213.4	235.5	265.5	309.0	375.0	461.1	553.2	640.6	720.9	793.6	857.9
120°	226.6	248.7	278.7	319.8	380.6	461.1	548.8	631.7	705.2	768.3	824.4
122.5°	239.8	261.4	291.3	329.9	386.3	460.5	543.7	624.1	695.0	752.6	801.6
125°	258.2	280.3	308.7	345.1	394.9	459.6	535.3	611.2	679.1	733.6	777.0
127.5°	275.1	297.4	324.9	358.2	401.6	457.9	524.1	595.4	660.2	714.6	755.9
130°	285.9	308.7	335.6	366.4	406.7	457.2	517.3	582.8	645.1	698.8	740.6
132.5°	296.0	317.6	344.5	374.6	411.1	456.6	510.9	569.5	628.0	680.5	722.4
135°	310.3	330.8	356.9	385.4	417.7	455.7	501.4	551.2	602.5	650.7	690.1
137.5°	322.4	342.0	366.4	392.9	421.6	455.4	493.2	534.6	578.0	618.6	654.3
140°	330.0	349.0	372.7	398.0	424.9	454.8	488.8	525.1	562.2	597.7	631.0
142.5°	337.0	355.4	378.4	401.7	427.4	454.8	485.0	516.2	549.0	579.5	608.1
145°	346.7	364.1	384.6	405.9	428.8	453.2	478.5	503.8	530.7	554.3	576.4
147.5°	356.0	371.6	390.9	409.5	429.6	450.4	472.7	493.5	514.8	533.8	551.2
150°	361.6	376.7	394.0	411.4	429.6	448.5	468.3	487.2	505.3	521.2	535.3
152.5°	367.4	381.1	396.6	412.6	428.3	445.4	463.2	480.3	495.8	510.4	522.1
155°	375.1	386.9	400.3	413.7	426.4	440.6	455.7	469.8	482.5	494.3	503.8
157.5°	382.3	391.6	403.0	413.7	424.3	435.8	447.9	458.6	469.2	479.2	486.8
160°	386.2	394.9	404.2	413.7	422.4	431.9	442.2	451.7	460.4	469.1	475.3
162.5°	389.9	396.7	405.6	413.7	420.6	428.2	437.2	444.7	452.1	459.0	464.6
165°	394.0	398.8	405.9	412.2	417.0	422.4	428.8	435.0	439.8	445.4	449.3
167.5°	396.9	400.5	405.8	410.3	413.1	416.8	421.2	425.8	429.4	433.8	436.2
170°	398.8	401.1	405.1	409.0	410.6	412.9	416.2	420.1	422.4	425.7	428.0
172.5°	400.0	401.7	404.5	407.8	408.1	409.2	411.7	415.1	416.8	418.7	420.4
175°	401.9	401.9	403.5	405.9	405.1	405.1	406.7	408.3	409.0	410.6	410.6
177.5°	401.9	401.9	402.5	403.8	402.5	402.5	403.1	403.8	404.5	404.5	405.1
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1854.8	1853.5	1849.0	1848.4	1849.0	1853.5	1854.8	1856.0	1858.1	1864.4	1856.7
5°	1713.3	1709.3	1706.9	1715.8	1706.9	1709.3	1713.3	1718.2	1726.3	1727.1	1735.2
7.5°	1606.8	1603.6	1596.5	1594.2	1596.5	1603.6	1606.8	1609.6	1617.7	1624.7	1636.6
10°	1538.4	1535.2	1528.7	1527.1	1528.7	1535.2	1538.4	1546.5	1554.5	1563.4	1571.5
12.5°	1472.6	1466.1	1464.9	1466.5	1464.9	1466.1	1472.6	1483.3	1504.2	1504.1	1505.7
15°	1385.2	1382.0	1373.1	1375.5	1373.1	1382.0	1385.2	1395.7	1405.3	1417.4	1429.6
17.5°	1299.1	1295.3	1284.4	1293.9	1284.4	1295.3	1299.1	1304.7	1317.2	1334.2	1352.5
20°	1244.9	1238.5	1232.8	1232.0	1232.8	1238.5	1244.9	1250.5	1264.3	1278.8	1292.5
22.5°	1193.3	1187.5	1187.0	1181.7	1187.0	1187.5	1193.3	1202.1	1215.9	1224.0	1237.0
25°	1128.8	1123.2	1121.6	1117.5	1121.6	1123.2	1128.8	1135.3	1144.1	1150.5	1165.1
27.5°	1079.3	1076.5	1073.7	1074.9	1073.7	1076.5	1079.3	1080.2	1084.1	1092.7	1101.1
30°	1048.9	1048.1	1046.5	1046.5	1046.5	1048.1	1048.9	1046.5	1050.6	1054.6	1061.1
32.5°	1023.8	1023.7	1024.6	1024.6	1024.6	1023.7	1023.8	1020.2	1021.6	1023.0	1026.2
35°	988.6	990.9	992.5	990.1	992.5	990.9	988.6	985.3	982.9	977.2	978.9
37.5°	956.5	959.0	961.3	964.0	961.3	959.0	956.5	950.0	944.1	939.2	933.3
40°	932.1	937.8	939.3	943.3	939.3	937.8	932.1	924.8	918.4	912.7	906.3
42.5°	908.9	915.1	919.3	920.1	919.3	915.1	908.9	901.6	891.9	884.9	876.0
45°	873.2	879.7	885.3	885.3	885.3	879.7	873.2	861.1	850.6	840.1	831.3
47.5°	836.3	845.7	851.3	852.7	851.3	845.7	836.3	823.8	809.2	796.3	783.6
50°	811.1	822.4	828.1	832.1	828.1	822.4	811.1	797.4	782.1	766.0	750.6
52.5°	786.6	797.9	805.5	807.6	805.5	797.9	786.6	769.7	751.1	733.8	720.3
55°	744.2	760.3	769.2	772.4	769.2	760.3	744.2	725.7	707.9	686.1	666.8
57.5°	704.2	719.0	729.3	731.7	729.3	719.0	704.2	682.5	659.5	636.3	615.7
60°	673.3	689.3	702.3	704.7	702.3	689.3	673.3	651.5	627.3	604.7	579.0
62.5°	641.7	658.4	670.0	676.3	670.0	658.4	641.7	618.5	592.5	567.3	541.5
65°	586.9	603.9	615.2	617.6	615.2	603.9	586.9	564.4	536.9	510.4	488.6
67.5°	527.4	544.2	551.7	556.3	551.7	544.2	527.4	506.0	479.0	451.4	426.7
70°	485.3	499.1	507.2	511.2	507.2	499.1	485.3	462.8	440.2	412.0	385.4
72.5°	437.7	452.0	461.4	462.1	461.4	452.0	437.7	418.3	394.5	368.2	344.8
75°	364.5	377.4	382.1	382.1	382.1	377.4	364.5	345.9	326.6	305.6	282.2
77.5°	288.5	295.1	301.2	302.6	301.2	295.1	288.5	275.1	259.1	238.2	220.6
80°	239.4	243.5	248.3	248.3	248.3	243.5	239.4	227.4	212.1	194.3	180.6
82.5°	189.1	192.6	197.4	196.7	197.4	192.6	189.1	179.7	166.9	155.0	142.6
85°	114.5	121.8	121.0	119.4	121.0	121.8	114.5	116.1	104.0	95.9	84.6
87.5°	54.9	55.7	57.5	58.8	57.5	55.7	54.9	52.8	47.1	43.6	40.9
90°	16.6	17.4	16.6	16.6	16.6	17.4	16.6	15.8	15.8	15.0	14.2
92.5°	67.8	63.5	60.8	60.8	60.8	63.5	67.8	77.1	92.9	116.7	155.1
95°	241.7	217.1	203.0	192.7	203.0	217.1	241.7	280.3	356.9	462.7	585.1
97.5°	602.7	555.1	531.4	515.0	531.4	555.1	602.7	659.3	741.7	819.0	864.4
100°	802.2	754.1	730.4	724.1	730.4	754.1	802.2	871.0	929.4	968.1	952.3
102.5°	971.0	936.0	911.1	906.1	911.1	936.0	971.0	1013.1	1037.4	1026.2	947.9
105°	1133.2	1126.8	1115.8	1111.1	1115.8	1126.8	1133.2	1131.6	1099.1	1021.0	884.4
107.5°	1159.2	1177.2	1185.1	1187.1	1185.1	1177.2	1159.2	1120.1	1049.8	939.7	794.3
110°	1133.9	1167.1	1181.3	1188.4	1181.3	1167.1	1133.9	1077.8	991.0	876.5	739.9



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1079.5	1119.7	1139.6	1151.1	1139.6	1119.7	1079.5	1015.9	929.1	820.9	700.1
115°	987.8	1035.2	1060.5	1066.8	1060.5	1035.2	987.8	925.4	849.6	757.3	660.1
117.5°	911.1	950.9	976.4	981.4	976.4	950.9	911.1	857.9	793.6	720.9	640.6
120°	869.4	904.1	924.6	933.3	924.6	904.1	869.4	824.4	768.3	705.2	631.7
122.5°	839.7	869.4	886.8	895.4	886.8	869.4	839.7	801.6	752.6	695.0	624.1
125°	808.6	831.5	846.5	851.2	846.5	831.5	808.6	777.0	733.6	679.1	611.2
127.5°	787.6	808.0	820.6	825.4	820.6	808.0	787.6	755.9	714.6	660.2	595.4
130°	773.1	792.8	805.5	810.2	805.5	792.8	773.1	740.6	698.8	645.1	582.8
132.5°	754.1	776.4	788.4	793.1	788.4	776.4	754.1	722.4	680.5	628.0	569.5
135°	721.8	743.9	756.5	761.2	756.5	743.9	721.8	690.1	650.7	602.5	551.2
137.5°	683.8	705.6	716.0	721.8	716.0	705.6	683.8	654.3	618.6	578.0	534.6
140°	658.5	675.9	687.0	693.3	687.0	675.9	658.5	631.0	597.7	562.2	525.1
142.5°	632.7	648.7	658.5	663.0	658.5	648.7	632.7	608.1	579.5	549.0	516.2
145°	596.2	609.6	617.5	621.5	617.5	609.6	596.2	576.4	554.3	530.7	503.8
147.5°	565.7	577.2	583.2	584.6	583.2	577.2	565.7	551.2	533.8	514.8	493.5
150°	548.1	558.3	563.0	563.8	563.0	558.3	548.1	535.3	521.2	505.3	487.2
152.5°	532.8	541.2	544.0	544.8	544.0	541.2	532.8	522.1	510.4	495.8	480.3
155°	511.7	518.0	520.4	520.4	520.4	518.0	511.7	503.8	494.3	482.5	469.8
157.5°	492.7	497.5	498.9	498.9	498.9	497.5	492.7	486.8	479.2	469.2	458.6
160°	480.1	484.8	485.6	485.6	485.6	484.8	480.1	475.3	469.1	460.4	451.7
162.5°	468.1	472.8	473.6	473.0	473.6	472.8	468.1	464.6	459.0	452.1	444.7
165°	452.4	455.7	454.8	454.0	454.8	455.7	452.4	449.3	445.4	439.8	435.0
167.5°	437.8	439.8	439.7	439.0	439.7	439.8	437.8	436.2	433.8	429.4	425.8
170°	429.6	430.3	429.6	429.6	429.6	430.3	429.6	428.0	425.7	422.4	420.1
172.5°	421.3	422.1	421.3	420.1	421.3	422.1	421.3	420.4	418.7	416.8	415.1
175°	410.6	412.2	410.6	409.0	410.6	412.2	410.6	410.6	410.6	409.0	408.3
177.5°	404.5	405.1	403.8	402.5	403.8	405.1	404.5	405.1	404.5	404.5	403.8
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1860.6	1863.2	1873.5	1883.2	1894.8	1903.2	1908.9	1915.4	1928.9	1940.0	1950.3
5°	1743.2	1747.3	1768.2	1782.7	1807.7	1829.5	1846.4	1864.9	1886.7	1916.5	1944.0
7.5°	1639.8	1654.9	1677.7	1701.2	1726.8	1755.2	1780.1	1808.1	1845.6	1886.5	1928.8
10°	1581.1	1598.1	1622.2	1649.7	1673.9	1706.9	1737.6	1770.6	1813.3	1863.3	1913.3
12.5°	1522.5	1550.3	1568.7	1601.2	1627.4	1654.7	1687.3	1730.6	1780.5	1833.0	1893.3
15°	1448.9	1464.2	1499.6	1517.4	1554.5	1596.5	1628.7	1672.2	1720.6	1790.0	1857.6
17.5°	1364.1	1384.2	1412.5	1446.3	1488.8	1521.7	1561.8	1606.6	1667.6	1736.5	1821.3
20°	1308.6	1325.5	1360.2	1397.2	1442.5	1477.1	1519.8	1563.4	1626.3	1699.7	1788.4
22.5°	1258.9	1275.3	1311.8	1346.4	1390.2	1432.6	1477.2	1527.9	1588.2	1665.5	1756.1
25°	1182.0	1203.8	1236.1	1271.5	1313.4	1361.8	1410.2	1455.3	1519.8	1601.2	1698.1
27.5°	1113.8	1131.3	1154.6	1194.9	1242.5	1289.3	1337.3	1394.1	1456.0	1542.1	1642.5
30°	1070.0	1086.1	1109.4	1146.5	1190.9	1240.9	1290.9	1345.6	1410.2	1495.7	1598.1
32.5°	1035.1	1047.3	1068.1	1101.4	1141.9	1194.5	1243.7	1300.5	1368.3	1452.5	1552.3
35°	983.7	994.1	1002.2	1033.7	1070.0	1118.3	1168.3	1228.8	1294.1	1373.9	1473.9
37.5°	933.2	936.8	948.6	969.2	1004.3	1048.8	1095.3	1154.8	1221.7	1302.8	1392.9
40°	902.2	903.8	911.1	930.5	961.1	1003.0	1048.1	1107.0	1170.7	1247.3	1336.9
42.5°	871.9	870.9	877.6	891.1	919.8	957.9	1002.4	1056.1	1119.7	1190.5	1274.9
45°	824.0	824.0	822.4	833.7	857.1	894.1	931.3	982.9	1036.1	1105.4	1176.4
47.5°	774.1	769.5	770.9	776.8	796.5	827.0	864.3	906.6	953.5	1012.2	1074.5
50°	741.7	735.4	733.0	739.3	757.1	783.8	819.2	856.3	900.6	952.2	1005.4
52.5°	706.3	699.8	695.5	700.0	716.5	741.1	773.4	806.0	845.8	887.8	933.8
55°	651.5	644.2	641.8	643.4	655.5	674.9	702.3	732.2	761.9	796.6	828.9
57.5°	597.4	585.5	583.3	582.5	590.9	608.5	631.5	657.3	679.0	700.0	734.4
60°	562.0	547.4	542.6	541.8	548.3	562.8	583.7	609.6	624.9	639.3	669.2
62.5°	523.9	510.1	499.4	500.6	506.3	520.2	538.6	557.3	567.4	583.3	603.4
65°	465.2	447.5	439.4	437.0	440.2	451.5	466.1	478.2	489.4	495.8	515.2
67.5°	406.6	391.7	379.8	376.9	375.4	383.1	395.1	402.3	410.4	416.1	427.5
70°	365.3	352.3	337.8	333.0	332.1	338.6	349.9	350.7	362.0	364.5	376.6
72.5°	324.6	308.5	298.5	293.7	290.2	296.1	303.5	305.6	311.7	316.1	322.3
75°	261.3	249.1	239.4	232.2	229.7	233.0	233.0	237.0	241.1	243.5	250.7
77.5°	205.6	191.8	180.3	176.1	173.2	171.1	172.9	175.3	173.4	177.5	179.2
80°	166.9	152.4	143.5	141.9	137.0	133.0	132.2	134.6	131.4	133.0	137.8
82.5°	128.9	119.5	110.0	108.4	102.2	100.2	99.4	97.9	97.9	97.6	98.6
85°	76.5	71.0	64.5	60.5	58.1	54.0	54.0	52.4	50.8	49.2	50.0
87.5°	33.6	32.5	29.0	26.8	25.4	21.9	21.9	19.8	19.0	17.9	17.0
90°	13.4	14.2	12.6	11.0	11.0	6.4	6.4	5.6	4.7	2.3	0.8
92.5°	208.6	250.4	219.2	159.5	98.3	58.1	41.7	30.2	20.5	13.1	9.0
95°	661.8	643.6	485.6	296.9	167.4	98.7	65.5	46.6	36.4	28.4	26.1
97.5°	831.3	677.8	454.5	266.9	160.0	107.0	79.3	63.0	53.5	46.8	46.8
100°	837.0	634.9	412.2	251.2	161.9	115.3	90.0	75.0	65.5	60.0	60.0
102.5°	789.6	581.2	383.7	246.7	168.1	126.0	102.0	87.7	78.8	73.9	72.6
105°	703.6	518.0	359.3	248.7	183.2	145.3	122.4	108.2	98.7	94.7	92.4
107.5°	634.1	482.6	354.9	260.4	200.8	166.0	143.4	129.8	119.7	115.7	114.2
110°	599.4	470.6	356.1	269.2	214.0	179.3	157.9	143.7	134.2	130.3	128.8



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	579.8	464.9	359.9	278.7	226.6	193.2	171.8	157.6	148.8	144.2	142.6
115°	561.4	461.9	367.2	293.8	246.4	214.8	193.5	178.4	170.6	165.0	162.7
117.5°	553.2	461.1	375.0	309.0	265.5	235.5	213.4	199.3	190.7	185.7	183.5
120°	548.8	461.1	380.6	319.8	278.7	248.7	226.6	213.2	204.5	198.9	197.4
122.5°	543.7	460.5	386.3	329.9	291.3	261.4	239.8	225.2	217.1	211.7	210.1
125°	535.3	459.6	394.9	345.1	308.7	280.3	258.2	243.2	234.5	229.7	226.6
127.5°	524.1	457.9	401.6	358.2	324.9	297.4	275.1	259.4	249.5	243.9	241.4
130°	517.3	457.2	406.7	366.4	335.6	308.7	285.9	270.8	259.0	252.7	249.5
132.5°	510.9	456.6	411.1	374.6	344.5	317.6	296.0	279.7	268.5	260.2	257.7
135°	501.4	455.7	417.7	385.4	356.9	330.8	310.3	293.8	280.3	272.5	269.2
137.5°	493.2	455.4	421.6	392.9	366.4	342.0	322.4	305.3	292.5	283.8	280.8
140°	488.8	454.8	424.9	398.0	372.7	349.0	330.0	313.5	300.0	291.3	289.0
142.5°	485.0	454.8	427.4	401.7	378.4	355.4	337.0	321.0	308.3	300.2	297.8
145°	478.5	453.2	428.8	405.9	384.6	364.1	346.7	331.6	320.6	312.7	310.3
147.5°	472.7	450.4	429.6	409.5	390.9	371.6	356.0	343.5	332.1	325.2	324.4
150°	468.3	448.5	429.6	411.4	394.0	376.7	361.6	349.8	340.3	334.1	333.3
152.5°	463.2	445.4	428.3	412.6	396.6	381.1	367.4	356.8	347.9	341.6	341.4
155°	455.7	440.6	426.4	413.7	400.3	386.9	375.1	366.4	358.5	353.8	352.9
157.5°	447.9	435.8	424.3	413.7	403.0	391.6	382.3	374.8	368.6	364.2	364.2
160°	442.2	431.9	422.4	413.7	404.2	394.9	386.2	379.8	374.3	371.1	371.1
162.5°	437.2	428.2	420.6	413.7	405.6	396.7	389.9	384.3	379.3	376.8	377.5
165°	428.8	422.4	417.0	412.2	405.9	398.8	394.0	390.1	386.2	384.6	384.6
167.5°	421.2	416.8	413.1	410.3	405.8	400.5	396.9	394.7	391.6	390.9	391.6
170°	416.2	412.9	410.6	409.0	405.1	401.1	398.8	397.2	394.9	394.0	394.9
172.5°	411.7	409.2	408.1	407.8	404.5	401.7	400.0	399.1	397.4	397.2	398.0
175°	406.7	405.1	405.1	405.9	403.5	401.9	401.9	401.1	400.3	400.3	401.1
177.5°	403.1	402.5	402.5	403.8	402.5	401.9	401.9	401.9	401.3	401.9	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332690-840

CATALOG NUMBER: SA4XXDIP-C1195D810U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1959.2	1965.7	1974.1	1988.3	1993.5	1999.9	2008.9	2008.3	2010.8	2020.5	2041.2
5°	1966.5	1991.6	2015.7	2044.8	2075.4	2095.6	2122.9	2139.9	2156.9	2178.6	2215.6
7.5°	1969.4	2009.1	2053.5	2104.5	2149.7	2202.0	2242.8	2281.2	2315.8	2361.8	2406.0
10°	1964.9	2018.1	2075.4	2139.9	2208.4	2266.4	2318.9	2378.5	2429.3	2485.0	2535.0
12.5°	1956.5	2020.7	2097.3	2169.6	2249.7	2335.5	2400.9	2461.1	2528.7	2592.7	2669.8
15°	1937.5	2025.4	2114.9	2210.0	2317.2	2416.4	2510.8	2589.0	2661.6	2757.5	2858.3
17.5°	1913.3	2008.1	2121.0	2236.1	2348.2	2461.6	2578.4	2695.9	2787.5	2906.7	2985.6
20°	1890.8	2000.4	2116.5	2253.6	2365.6	2506.8	2622.8	2736.5	2862.4	2980.8	3075.1
22.5°	1859.2	1979.1	2102.3	2238.8	2386.3	2527.4	2661.6	2784.9	2910.7	3039.6	3153.9
25°	1819.0	1927.8	2073.8	2228.6	2375.3	2528.5	2682.5	2837.3	2972.7	3109.1	3215.5
27.5°	1750.6	1888.0	2024.0	2183.7	2346.8	2520.1	2684.8	2846.8	2988.8	3100.8	3166.7
30°	1715.8	1835.1	1982.7	2143.1	2319.7	2506.0	2677.7	2836.5	2968.8	3058.3	3084.8
32.5°	1664.2	1787.4	1931.7	2098.0	2284.8	2476.3	2655.1	2804.9	2915.2	2962.1	2930.0
35°	1587.6	1698.9	1844.8	2014.9	2209.2	2413.2	2589.8	2716.3	2772.8	2728.5	2618.0
37.5°	1495.7	1606.0	1752.5	1919.7	2120.7	2328.0	2487.7	2578.8	2560.1	2449.8	2285.2
40°	1431.2	1534.4	1673.9	1854.4	2050.4	2258.5	2398.7	2447.9	2396.3	2238.3	2063.3
42.5°	1359.6	1460.2	1600.3	1774.4	1982.1	2173.9	2296.1	2300.2	2213.7	2024.8	1849.2
45°	1250.5	1346.5	1478.7	1660.1	1852.1	2032.7	2113.2	2073.8	1914.1	1731.9	1555.3
47.5°	1143.0	1226.2	1356.5	1528.7	1710.9	1863.0	1903.0	1831.9	1661.7	1484.9	1321.2
50°	1064.3	1148.1	1270.7	1435.2	1610.9	1742.4	1761.7	1667.4	1500.5	1322.3	1194.1
52.5°	988.9	1072.1	1190.1	1342.3	1503.3	1621.7	1622.4	1513.3	1347.0	1188.1	1068.9
55°	878.1	953.0	1059.4	1195.7	1339.3	1432.0	1409.4	1296.5	1152.2	1014.3	910.3
57.5°	771.3	836.6	934.6	1048.3	1174.8	1251.2	1213.8	1105.1	976.2	859.3	780.5
60°	702.3	764.4	848.2	955.4	1061.9	1121.6	1086.1	987.7	869.2	774.9	706.3
62.5°	635.2	687.6	768.2	861.3	960.0	1004.1	972.5	875.5	773.1	687.7	632.2
65°	540.2	583.0	647.4	727.3	799.0	837.0	810.3	720.0	641.8	580.6	536.1
67.5°	451.5	484.9	533.7	597.7	658.7	679.2	655.0	592.2	525.8	476.9	445.6
70°	390.2	421.7	462.8	512.0	565.2	586.9	562.8	512.8	458.8	413.6	382.9
72.5°	336.7	361.0	395.8	437.8	479.4	501.2	484.7	436.7	391.0	357.5	331.3
75°	256.4	277.4	301.5	331.3	363.7	378.2	363.7	330.5	299.1	274.2	255.6
77.5°	186.4	197.7	216.4	238.6	258.8	269.9	257.4	235.0	215.8	198.6	189.5
80°	141.9	150.0	162.9	180.6	194.3	204.8	196.7	178.1	162.9	151.6	147.5
82.5°	103.2	108.7	117.0	130.3	139.5	144.8	141.3	127.8	121.6	111.6	107.6
85°	50.8	54.0	59.7	63.7	71.8	72.6	73.4	67.8	62.1	59.7	56.5
87.5°	17.9	19.0	21.1	23.2	25.8	27.4	26.8	27.1	24.7	23.9	21.5
90°	2.3	4.7	5.6	6.4	6.4	11.0	11.0	12.6	14.2	13.4	14.2
92.5°	13.1	20.5	30.2	41.7	58.1	98.3	159.5	219.2	250.4	208.6	155.1
95°	28.4	36.4	46.6	65.5	98.7	167.4	296.9	485.6	643.6	661.8	585.1
97.5°	46.8	53.5	63.0	79.3	107.0	160.0	266.9	454.5	677.8	831.3	864.4
100°	60.0	65.5	75.0	90.0	115.3	161.9	251.2	412.2	634.9	837.0	952.3
102.5°	73.9	78.8	87.7	102.0	126.0	168.1	246.7	383.7	581.2	789.6	947.9
105°	94.7	98.7	108.2	122.4	145.3	183.2	248.7	359.3	518.0	703.6	884.4
107.5°	115.7	119.7	129.8	143.4	166.0	200.8	260.4	354.9	482.6	634.1	794.3
110°	130.3	134.2	143.7	157.9	179.3	214.0	269.2	356.1	470.6	599.4	739.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	144.2	148.8	157.6	171.8	193.2	226.6	278.7	359.9	464.9	579.8	700.1
115°	165.0	170.6	178.4	193.5	214.8	246.4	293.8	367.2	461.9	561.4	660.1
117.5°	185.7	190.7	199.3	213.4	235.5	265.5	309.0	375.0	461.1	553.2	640.6
120°	198.9	204.5	213.2	226.6	248.7	278.7	319.8	380.6	461.1	548.8	631.7
122.5°	211.7	217.1	225.2	239.8	261.4	291.3	329.9	386.3	460.5	543.7	624.1
125°	229.7	234.5	243.2	258.2	280.3	308.7	345.1	394.9	459.6	535.3	611.2
127.5°	243.9	249.5	259.4	275.1	297.4	324.9	358.2	401.6	457.9	524.1	595.4
130°	252.7	259.0	270.8	285.9	308.7	335.6	366.4	406.7	457.2	517.3	582.8
132.5°	260.2	268.5	279.7	296.0	317.6	344.5	374.6	411.1	456.6	510.9	569.5
135°	272.5	280.3	293.8	310.3	330.8	356.9	385.4	417.7	455.7	501.4	551.2
137.5°	283.8	292.5	305.3	322.4	342.0	366.4	392.9	421.6	455.4	493.2	534.6
140°	291.3	300.0	313.5	330.0	349.0	372.7	398.0	424.9	454.8	488.8	525.1
142.5°	300.2	308.3	321.0	337.0	355.4	378.4	401.7	427.4	454.8	485.0	516.2
145°	312.7	320.6	331.6	346.7	364.1	384.6	405.9	428.8	453.2	478.5	503.8
147.5°	325.2	332.1	343.5	356.0	371.6	390.9	409.5	429.6	450.4	472.7	493.5
150°	334.1	340.3	349.8	361.6	376.7	394.0	411.4	429.6	448.5	468.3	487.2
152.5°	341.6	347.9	356.8	367.4	381.1	396.6	412.6	428.3	445.4	463.2	480.3
155°	353.8	358.5	366.4	375.1	386.9	400.3	413.7	426.4	440.6	455.7	469.8
157.5°	364.2	368.6	374.8	382.3	391.6	403.0	413.7	424.3	435.8	447.9	458.6
160°	371.1	374.3	379.8	386.2	394.9	404.2	413.7	422.4	431.9	442.2	451.7
162.5°	376.8	379.3	384.3	389.9	396.7	405.6	413.7	420.6	428.2	437.2	444.7
165°	384.6	386.2	390.1	394.0	398.8	405.9	412.2	417.0	422.4	428.8	435.0
167.5°	390.9	391.6	394.7	396.9	400.5	405.8	410.3	413.1	416.8	421.2	425.8
170°	394.0	394.9	397.2	398.8	401.1	405.1	409.0	410.6	412.9	416.2	420.1
172.5°	397.2	397.4	399.1	400.0	401.7	404.5	407.8	408.1	409.2	411.7	415.1
175°	400.3	400.3	401.1	401.9	401.9	403.5	405.9	405.1	405.1	406.7	408.3
177.5°	401.9	401.3	401.9	401.9	401.9	402.5	403.8	402.5	402.5	403.1	403.8
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2051.5	2052.9	2058.6	2063.2	2064.5	2070.8	2071.5
5°	2231.8	2245.5	2272.1	2274.5	2278.6	2299.6	2283.4
7.5°	2443.1	2477.9	2501.1	2521.6	2529.0	2538.2	2536.3
10°	2578.5	2630.1	2655.9	2697.0	2698.7	2709.2	2702.7
12.5°	2714.6	2774.6	2821.7	2829.2	2863.8	2869.1	2878.1
15°	2907.5	2971.1	3036.5	3059.9	3107.5	3118.8	3136.4
17.5°	3088.8	3153.9	3199.7	3260.1	3279.6	3305.8	3288.0
20°	3188.0	3259.0	3317.1	3364.7	3384.8	3399.3	3397.7
22.5°	3248.0	3319.6	3366.7	3402.7	3421.5	3427.7	3427.4
25°	3285.6	3326.7	3341.2	3355.0	3334.0	3326.7	3329.9
27.5°	3181.2	3170.5	3132.6	3082.9	3031.3	2990.3	2968.1
30°	3037.3	2974.4	2917.2	2817.1	2765.6	2734.9	2707.5
32.5°	2833.5	2733.8	2623.6	2532.0	2473.4	2427.9	2421.2
35°	2484.2	2334.2	2199.6	2087.5	2029.4	1980.2	1968.9
37.5°	2112.0	1956.2	1834.9	1736.3	1673.9	1639.2	1606.8
40°	1864.9	1731.1	1611.7	1527.9	1480.4	1455.3	1435.2
42.5°	1674.7	1552.5	1433.7	1369.9	1326.9	1311.5	1299.7
45°	1411.8	1298.1	1215.9	1167.5	1142.5	1116.7	1104.6
47.5°	1201.3	1108.8	1054.6	1013.5	986.7	971.4	963.7
50°	1082.1	1006.2	957.9	926.5	902.2	890.1	883.7
52.5°	976.2	914.0	873.3	848.4	831.9	823.0	820.5
55°	840.9	793.3	767.6	745.8	733.8	725.7	722.5
57.5°	730.9	694.4	673.4	655.5	650.9	644.1	641.8
60°	658.7	630.6	612.8	600.7	596.6	588.5	590.2
62.5°	594.9	571.8	556.6	549.8	544.4	537.7	539.9
65°	503.1	486.1	478.2	471.7	465.2	461.2	464.4
67.5°	422.1	410.6	399.6	395.9	392.6	392.0	388.6
70°	369.3	359.6	349.9	347.5	347.5	344.3	343.5
72.5°	318.3	311.2	304.8	303.0	300.4	301.7	298.3
75°	245.9	240.2	237.8	235.4	234.6	234.6	232.2
77.5°	181.8	177.5	173.7	173.7	170.8	169.7	169.4
80°	137.8	136.2	133.0	133.0	131.4	132.2	130.6
82.5°	103.7	101.4	100.8	99.5	97.3	97.4	95.8
85°	55.6	53.2	52.4	50.0	48.4	50.0	48.4
87.5°	22.3	21.9	21.2	20.1	19.6	19.5	17.5
90°	15.0	15.8	15.8	16.6	17.4	16.6	16.6
92.5°	116.7	92.9	77.1	67.8	63.5	60.8	60.8
95°	462.7	356.9	280.3	241.7	217.1	203.0	192.7
97.5°	819.0	741.7	659.3	602.7	555.1	531.4	515.0
100°	968.1	929.4	871.0	802.2	754.1	730.4	724.1
102.5°	1026.2	1037.4	1013.1	971.0	936.0	911.1	906.1
105°	1021.0	1099.1	1131.6	1133.2	1126.8	1115.8	1111.1
107.5°	939.7	1049.8	1120.1	1159.2	1177.2	1185.1	1187.1
110°	876.5	991.0	1077.8	1133.9	1167.1	1181.3	1188.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	820.9	929.1	1015.9	1079.5	1119.7	1139.6	1151.1
115°	757.3	849.6	925.4	987.8	1035.2	1060.5	1066.8
117.5°	720.9	793.6	857.9	911.1	950.9	976.4	981.4
120°	705.2	768.3	824.4	869.4	904.1	924.6	933.3
122.5°	695.0	752.6	801.6	839.7	869.4	886.8	895.4
125°	679.1	733.6	777.0	808.6	831.5	846.5	851.2
127.5°	660.2	714.6	755.9	787.6	808.0	820.6	825.4
130°	645.1	698.8	740.6	773.1	792.8	805.5	810.2
132.5°	628.0	680.5	722.4	754.1	776.4	788.4	793.1
135°	602.5	650.7	690.1	721.8	743.9	756.5	761.2
137.5°	578.0	618.6	654.3	683.8	705.6	716.0	721.8
140°	562.2	597.7	631.0	658.5	675.9	687.0	693.3
142.5°	549.0	579.5	608.1	632.7	648.7	658.5	663.0
145°	530.7	554.3	576.4	596.2	609.6	617.5	621.5
147.5°	514.8	533.8	551.2	565.7	577.2	583.2	584.6
150°	505.3	521.2	535.3	548.1	558.3	563.0	563.8
152.5°	495.8	510.4	522.1	532.8	541.2	544.0	544.8
155°	482.5	494.3	503.8	511.7	518.0	520.4	520.4
157.5°	469.2	479.2	486.8	492.7	497.5	498.9	498.9
160°	460.4	469.1	475.3	480.1	484.8	485.6	485.6
162.5°	452.1	459.0	464.6	468.1	472.8	473.6	473.0
165°	439.8	445.4	449.3	452.4	455.7	454.8	454.0
167.5°	429.4	433.8	436.2	437.8	439.8	439.7	439.0
170°	422.4	425.7	428.0	429.6	430.3	429.6	429.6
172.5°	416.8	418.7	420.4	421.3	422.1	421.3	420.1
175°	409.0	410.6	410.6	410.6	412.2	410.6	409.0
177.5°	404.5	404.5	405.1	404.5	405.1	403.8	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9

(END OF REPORT)