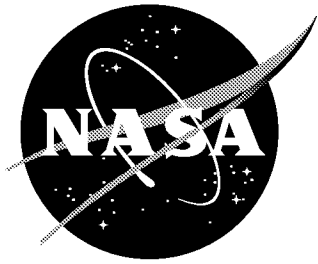


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Computational Test Cases for a Rectangular Supercritical Wing Undergoing Pitching Oscillations

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April 1999

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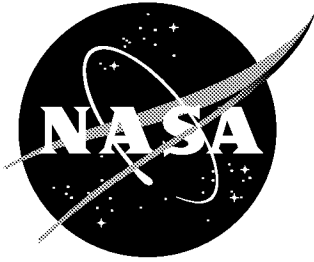
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Abstract

Proposed computational test cases have been selected from the data set for a rectangular wing of panel aspect ratio two with a twelve-percent-thick supercritical airfoil section that was tested in the NASA Langley Transonic Dynamics Tunnel. The test cases include parametric variation of static angle of attack, pitching oscillation frequency, and Mach numbers from subsonic to transonic with strong shocks. Tables and plots of the measured pressures are presented for each case. This report provides an early release of test cases that have been proposed for a document that supplements the cases presented in AGARD Report 702.

Nomenclature

c	local chord
c_r	wing root chord, ft (m)
C_p	pressure coefficient, $(p-p_\infty)/q_\infty$
C_p^*	pressure coefficient for sonic flow
f	frequency, Hz
H_o	freestream total pressure, psf (kPa)
k	reduced frequency, $\omega c_r / (2V_\infty)$
p	pressure, psf (kPa)
p_∞	freestream static pressure, psf (kPa)
q_∞	dynamic pressure, psf (kPa)
R	local radius of tip section
Rn	Reynolds number based on chord
s	semispan
T_o	total or stagnation temperature, °R (°C)
V_∞	freestream velocity, ft/sec (m/sec)
x	streamwise distance from leading edge
x/c	streamwise fraction of local chord
y	spanwise coordinate normal to freestream
z_u, z_l	airfoil vertical upper and lower ordinate normal to freestream, positive up
α_o	mean angle of attack, degrees
θ	amplitude of pitch oscillations, degrees or radians
η	fraction of span, y/s
γ	ratio of specific heats for test gas

ω frequency, radians/second

Introduction

Steady and unsteady measured pressures for a rectangular supercritical wing (referred to as RSW) undergoing pitching oscillations have been presented in references 1 to 3. From the several hundred compiled data points, 27 static and 36 pitching oscillation cases have been proposed for computational test cases to illustrate the trends with Mach number, reduced frequency, and angle of attack.

The wing was designed to be a simple configuration for Computational Fluid Dynamics (CFD) comparisons. The wing had an unswept rectangular planform plus a tip of revolution, a panel aspect ratio of 2.0, a twelve per cent thick supercritical airfoil section, and no twist. The model was tested over a wide range of Mach numbers, from 0.27 to 0.90, corresponding to low subsonic flows up to strong transonic flows. The higher Mach numbers are well beyond the design Mach number such as might be required for flutter verification beyond cruise conditions. The pitching oscillations covered a broad range of reduced frequencies.

Some early calculations for this wing are given for lifting pressure in references 3 and 4 as calculated from a linear lifting surface program and from a transonic small perturbation program. The unsteady results were given primarily for a mild transonic condition at $M = 0.70$. For these cases the agreement with the data was only fair, possibly resulting from the omission of viscous effects. Supercritical airfoil sections are known to be sensitive to viscous effects (for example, one case cited in ref. 4). Calculations using a higher level code with the full potential equation have been presented in reference 5 for one of the same cases and with the Euler equations in reference 6. The agreement around the leading edge was improved, but overall the agreement was not completely satisfactory. Typically for low-aspect-ratio rectangular wings, transonic shock waves on the wing tend to sweep forward from root to tip such that there are strong three-dimensional effects. It might also be noted that for most of the test, the model was tested with free transition, but a few points were taken with an added transition strip for comparison. Some unpublished results of a rigid wing of the same airfoil and planform that was tested on the pitch and plunge apparatus mount system (PAPA, ref. 7-8) showed effects of the lower surface transition strip on flutter at the lower subsonic Mach numbers. Significant effects of a transition strip were also obtained on a wing with a thicker supercritical section on the PAPA mount system (ref. 9). Both of these flutter tests on the PAPA resulted in very low reduced frequencies that may be a factor in this influence of the transition strip. However, these results indicate that correlation studies for RSW may require some attention to the estimation of transition location to accurately treat viscous effects.

In this report several test cases are selected to illustrate trends for a variety of different conditions with emphasis on transonic flow effects. An overview of the model and tests are given and the standard formulary for these data is listed. All of the data are presented herein both in tabular and in graphical form. Only the static pressures and the real and imaginary parts of the first harmonic of the unsteady pressures are available. All the data for the test are available in electronic file form, and are printed in the tables of reference 1. The test cases are also available as separate electronic files.

This report provides an early release of test cases that have been proposed for a document that supplements the cases presented in AGARD Report 702 (ref. 10-11) and is being generated under the NATO Research and Technology Organization (RTO) Applied Vehicle Technology (AVT) Working Group-003. The overall description of the data set is given in the body of this report by a formulary similar to that used in AGARD Report 702.

Model and Tests

The rectangular supercritical wing model was tested in the NASA Langley Transonic Dynamics Tunnel (TDT). The tunnel has a slotted test section 16-feet (4.064 m) square with cropped corners. At the time of these tests, it could be operated with air or a heavy gas, R-12, as a test medium at pressures from very low to near atmospheric values. Currently the TDT can be operated with air or R-134a as a test medium. An early description of this facility is given in an internal report (NASA LWP-799, Sep. 1969) and the early data system in reference 12. More recent descriptions of the facility are given in references 13 and 14, and of the recent data system are given in references 15 and 16. Based on cone transition results (ref. 17-18), the turbulence level for this tunnel is in the average large transonic tunnel category. Some low speed turbulence measurements in air have also been presented in reference 19.

A photograph of the model and splitter plate as installed in the TDT is shown in figure 1 and the dimensions of the model and splitter plate setup are detailed in the sketch of figure 2. The unswept rectangular planform was 48 inches (1219 mm) in span plus a tip of revolution of maximum radius of 1.434 inches (36.4 mm) such that the maximum spanwise extent was 49.43 inches (1255 mm). The chord was 24 inches (609.6 mm). The model was mounted on a splitter plate offset from the wall. It was oscillated in pitch about 46 percent root chord with a shaft that was directly driven by a rotary hydraulic actuator located behind the tunnel wall. It could be set at various mean angles, and the amplitude and frequency of oscillation could be varied.

The wing was constructed in three sections. The center section was made of aluminum with the upper and lower halves pinned and bonded together. The leading and trailing edge portions were made of balsa and Kevlar sandwich material to minimize the inertia loading. The leading and trailing edge sections were joined at 0.23 and 0.69 of the chord, respectively. Some stiffness measurements are given in reference 3. Unsteady pressures were measured on four chords. There were 14 measurement locations along each chord on both upper and lower surfaces and one location in the nose for a total of 29 points per chord as shown in figure 3 and listed in table 1. The transducers in the center portion of the wing were in-situ measurements. The transducers in the leading and trailing edges were mounted near the joints of the leading or trailing edge sections to the center beam. Equal length tubes were used between the orifices and these transducers. Other transducers were located by the first row of in-situ transducers and had tubes of the same length located in the center beam. These transducers were used to correct for dynamic effects of the tubes of the transducers in the leading and trailing edges. Each transducer was referenced to the tunnel static pressure and was used to measure both static and unsteady pressures. Eight accelerometers were located on the center section for dynamic measurements. Figure 4 (from ref. 1) shows C_L versus Mach number as integrated from the pressure data, and gives an overall indication of the performance of the wing.

The airfoil for the RSW is illustrated in figure 5. This airfoil was derived by ratioing the thickness of an 11 percent airfoil (ref. 20) to 12 percent while keeping the same mean camber line. The trailing edge thickness was increased to 0.7 percent chord by rotating the lower cusp area as described in reference 21. The design Mach number and lift coefficient for the 2-dimensional airfoil is quoted at $M = 0.80$, and $C_L = 0.6$ (ref. 3). The design ordinates and the measured ordinates for five spanwise stations are given in table 2. The design wing tip-shape is also presented in table 2. The quoted accuracy of the measured ordinates is .00040 in. (.0010 mm). The measured airfoil ordinates are compared with the theoretical ordinates in figure 6. The measured ordinates agree very well with the theoretical ones but with some small deviation in the lower surface aft, or cove, region.

By CFD standards, the theoretical and measured ordinates were given on a medium to coarse grid. In order to develop a common set of ordinates for CFD applications, the measured ordinates have been interpolated at each span station. The measured ordinates were fit with a spline using arc-length as the independent parameter and running from upper surface trailing edge around the nose to the lower surface

trailing edge. Three passes of a local 5-point least-squares cubic smoothing patch were made and the resulting curve interpolated for the ordinates. The smoothed ordinates are interpolated for 206 values of x/c at each of the five measurement span stations. These are included as a file for the data set and are listed in table 3. One airfoil section, after smoothing, and the corresponding streamwise slopes are presented in figure 7. For this wing, the measured spanwise sections are nearly identical, except at the lower surface trailing edge where the slope varies by about 8 per cent. It should also be noted that the slope varies quite rapidly near the inflection point in the cove region of the airfoil lower surface (fig. 7).

As can be seen in figure 1, the model was tested with the sidewall slots of the test section open. Some recent unpublished results for a model having about six times the root chord of this model and mounted directly to the wind tunnel wall, have shown an order of ten percent influence of closing the slots on static lift curve slope (similar to those measured in ref. 22). Significantly less influence would be anticipated for this much smaller model mounted on a splitter plate.

Test Cases

The static test cases for the rectangular supercritical wing are given in table 4, and the dynamic test cases are presented in table 5. The point number is used to identify the test conditions and are in the order taken during the test. The test case number is related to the enumeration given in the RTO chapter. The cases are chosen to indicate trends with Mach number at two degrees angle of attack, and also at zero and four degrees angle of attack with a coarse increment. Some cases for high angles of attack at $M=0.40$, some cases for the effect of transition at $M=0.825$, and some cases for air as the test medium are listed. The dynamic cases are chosen to evaluate unsteady effects at these static conditions. The cases illustrate variations with Mach number for nearly constant reduced frequency, and variations with reduced frequency at constant Mach numbers. Some cases are chosen also to indicate the effects of angle of attack, transition strip, and amplitude. The plot of C_L versus Mach number as integrated from the pressure data (fig. 4) was used as a guide in selecting the test cases.

All the data for the static test cases are tabulated and shown in composite plots in figure 8. The data for the dynamic cases are also tabulated and shown in the plots of figure 9 in terms of in-phase and out-of-phase parts (real and imaginary) of the pressure normalized by the amplitude of the pitching oscillation. The phase is referenced to the pitching motion. More digits than are significant are retained in the tables to accurately reproduce the phase angles of the original tabulations.

Note that most of the tests for RSW were conducted with the heavy gas, R-12, as the test medium. The ratio of specific heats, γ , is tabulated for each point in the figures. It varies from about 1.129 to 1.132 and a value of 1.132 is suggested for use in computational comparisons. The corresponding value of Prandtl number is calculated to range from 0.77 to 0.78 for the conditions of this test assuming 0.99 for the fraction of heavy gas in the heavy gas-air mixture.

Formulary for Rectangular Supercritical Wing Data Set

1. General Description of Model

1.1 Designation	Rectangular Supercritical Wing (RSW)
1.2 Type	Semispan wing
1.3 Derivation	None
1.4 Additional remarks	Shown mounted in tunnel in figure 1 and sketch of setup shown in figure 2
1.5 References	References 1-3 are the original source

2. Model Geometry

2.1 Planform	Rectangular plus tip of revolution
2.2 Aspect ratio	2.0 for panel (without tip)
2.3 Leading edge sweep	Unswept
2.4 Trailing edge sweep	Unswept
2.5 Taper ratio	1.0
2.6 Twist	None
2.7 Wing centerline chord	24.0 inches (609.6 mm)
2.8 Semi-span of model	48.0 inches (1219 mm)plus tip
2.9 Area of planform	1152 sq. in (1.786 sq m)
2.10 Location of reference sections and definition of profiles	Reduced frequency based on root semichord, 12.0 inches 304.8 mm)
2.11 Lofting procedure between reference sections	Constant percent thickness airfoil
2.12 Form of wing-body junction	No fairing
2.13 Form of wing tip	Tip of rotation. Each spanwise section formed by half circle with radius half the local thickness and rotated about the mean line
2.14 Control surface details	No control surfaces
2.15 Additional remarks	See figures 1-3 for overview
2.16 References	References 1-3

3. Wind Tunnel

3.1 Designation	NASA LaRC Transonic Dynamics Tunnel (TDT)
3.2 Type of tunnel	Continuous flow, single return
3.3 Test section dimensions	16 ft x 16 ft (4.064 x 4.064 m)
3.4 Type of roof and floor	Three slots each
3.5 Type of side walls	Two sidewall slots
3.6 Ventilation geometry	Constant width slots in test region
3.7 Thickness of side wall boundary layer	Some documentation in internal report LWP-799. Model tested with splitter plate
3.8 Thickness of boundary layers at roof and floor	Not documented
3.9 Method of measuring velocity	Calculated from static pressures measured in plenum and total pressure measured upstream of entrance nozzle of test section
3.10 Flow angularity	Not documented, considered small
3.11 Uniformity of velocity over test section	Not documented, considered nearly uniform
3.12 Sources and levels of noise or turbulence in empty tunnel	Generally unknown. Some low speed measurements are presented in reference 19. Cone transition measurements are presented in references 17 and 18

3.13 Tunnel resonances	Unknown
3.14 Additional remarks	Tests generally performed in heavy gas, R-12. Ratio of specific heats, γ , is 1.129-1.132. For computations, 1.132 is recommended. For the conditions of this test, the Prandtl number is calculated to be 0.77-0.78
3.15 References on tunnel	References 12, 13, and internal report LWP-799

4. Model Motion

4.1 General description	Pitching about 46% of root chord for wing, 11.04 inches (280.4 mm) aft of leading edge
4.2 Reference coordinate and definition of motion	Pitch about axis normal to freestream
4.3 Range of amplitude	Pitch amplitude of 0.50, 1.00, and 1.50 degrees
4.4 Range of frequency	5, 10, 15, and 20 Hz with a few lower frequencies
4.5 Method of applying motion	Pitch oscillations shaft-driven with a rotary hydraulic actuator
4.6 Timewise purity of motion	Not documented
4.7 Natural frequencies and normal modes of model and support system	First natural frequency was 34.8 Hz
4.8 Actual mode of applied	Some accelerometer measurements given in ref. 2
4.9 Additional remarks	None

5. Test Conditions

5.1 Model planform area/tunnel area	.03
5.2 Model span/tunnel height	.25
5.3 Blockage	Model less than 0.4%
5.4 Position of model in tunnel	Mounted from splitter plate on wall and in the center of the tunnel
5.5 Range of Mach number	0.40 to 0.90
5.6 Range of tunnel total pressure	175 to 2025 psf (8.38 to 812 kPa)
5.7 Range of tunnel total temperature	Not documented but generally in the range of 520 to 580 degrees Rankine (16 to 49° C)
5.8 Range of model steady or mean incidence	Generally -1 to 7 degrees, a few points from -4 to 14 degrees
5.9 Definition of model incidence	From chord line of airfoil
5.10 Position of transition, if free	Unknown except for a few points with transition strip. Although the joint was quite smooth, an initial estimate of transition might be considered to be at the joint between the leading edge section and the main spar (23 per cent chord)
5.11 Position and type of trip, if transition fixed	Generally free transition. A few points measured with transition strip of number 60 grit located at 6 percent chord on upper and lower surfaces (number is approximate grains per inch (per 25.4 mm)).

5.12 Flow instabilities during tests	None defined
5.13 Changes to mean shape of model due to steady aerodynamic load	Not measured
5.14 Additional remarks	Generally, a heavy gas, R-12, was used as a test medium for the test cases. The ratio of specific heats, γ , is tabulated for each point and varies from about 1.129 to 1.132. A value of 1.132 is suggested for use in computational comparisons. The corresponding value of Prandtl number is 0.77-0.78. A few points were also measured in air
5.15 References describing tests	References 1- 3

6. Measurements and Observations

6.1 Steady pressures for the mean conditions	yes
6.2 Steady pressures for small changes from the mean conditions	yes
6.3 Quasi-steady pressures	no
6.4 Unsteady pressures	yes
6.5 Steady section forces for the mean conditions by integration of pressures	no
6.6 Steady section forces for small changes from the mean conditions by integration	no
6.7 Quasi-steady section forces by integration	no
6.8 Unsteady section forces by integration	no
6.9 Measurement of actual motion at points of model	no
6.10 Observation or measurement of boundary layer properties	no
6.11 Visualisation of surface flow	no
6.12 Visualisation of shock wave movements	no
6.13 Additional remarks	no

7. Instrumentation

7.1 Steady pressure	
7.1.1 Position of orifices spanwise and chordwise	29 chordwise locations at 4 spanwise stations. See figure 4
7.1.2 Type of measuring system	Kulite

7.2	Unsteady pressure	
7.2.1	Position of orifices spanwise and chordwise	Same transducers measured steady and unsteady pressures
7.2.2	Diameter of orifices	Not documented
7.2.3	Type of measuring system	In situ pressure gages and short tubes to unsteady gages with tube calibrations
7.2.4	Type of transducers	Kulite
7.2.5	Principle and accuracy of calibration	Statically calibrated through reference tubes
7.3	Model motion	
7.3.1	Method of measuring motion reference coordinate	Potentiometer
7.3.2	Method of determining spatial mode of motion	Some verification with accelerometers
7.3.3	Accuracy of measured motion	Undocumented
7.4	Processing of unsteady measurements	
7.4.1	Method of acquiring and processing measurements	Analog signals digitized at about 300 samples/sec for 75-100 cycles depending on frequency
7.4.2	Type of analysis	Fourier analysis
7.4.3	Unsteady pressure quantities obtained and accuracies achieved	Amplitude and phase of each pressure signal. Accuracy not specified
7.4.4	Method of integration to obtain forces	None
7.5	Additional remarks	None
7.6	References on techniques	Data system overview for test given in reference 12

8. Data Presentation

8.1	Test cases for which data could be made available	All data are available
8.2	Test cases for which data are included in this document	All data tabulated and plotted. See figures 8 and 9.
8.3	Steady pressures	Generally available for each test case
8.4	Quasi-steady or steady perturbation pressures	Steady pressures measured for several angles of attack
8.5	Unsteady pressures	Primary data. First harmonic only. No time histories saved. C_n magnitude and phase of reference 2 converted to real and imaginary parts and normalized by amplitude of oscillation (in radians) for this report.
8.6	Steady forces or moments	None
8.7	Quasi-steady or unsteady perturbation forces	None
8.8	Unsteady forces and moments	None

8.9 Other forms in which data could be made available	None
8.10 Reference giving other representations of data	References 1-6

9. Comments on Data

9.1 Accuracy	
9.1.1 Mach number	Not documented
9.1.2 Steady incidence	Not documented
9.1.3 Reduced frequency	Should be accurate
9.1.4 Steady pressure coefficients	Not documented
9.1.5 Steady pressure derivatives	None
9.1.6 Unsteady pressure coefficients	Not documented, but each gage individually calibrated dynamically and monitored statically
9.2 Sensitivity to small changes of parameter	None indicated. Amplitudes of oscillation was varied in test
9.3 Non-linearities	Many flow conditions involve shock waves
9.4 Influence of tunnel total pressure	Some variation during test. Most of the test at constant dynamic pressure
9.5 Effects on data of uncertainty, or variation, in mode of model motion	Unknown, not expected to be appreciable.
9.6 Wall interference corrections	None applied
9.7 Other relevant tests on same model	None
9.8 Relevant tests on other models of nominally the same shapes	None
9.9 Any remarks relevant to comparison between experiment and theory	Generally free transition. R_n from 1×10^6 to 8×10^6 but generally about 4×10^6
9.10 Additional remarks	Upper and lower surface data instrumented symmetrically
9.11 References on discussion of data	References 1-6

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Concluding Remarks

Steady and unsteady measured pressures for a rectangular supercritical wing (RSW) undergoing pitching oscillations were reviewed. From the several hundred compiled data points, 27 static cases and 36 pitching oscillation cases have been proposed for computational test cases to illustrate the trends with Mach number, reduced frequency, and angle of attack. An overview of the model and tests are given, and the standard formulary for these data is listed. All of the data are presented in both tabular and graphical form. This report provides an early release of test cases that have been proposed for a document that supplements the cases presented in AGARD Report 702 and is being generated under the NATO Research and Technology Organization (RTO) Applied Vehicle Technology (AVT) Working Group-003.

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March 8, 1999

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Table 1. Pressure Orifice Locations and Type

x/c	Type
0.000	Tube to Transducer
.003	Tube to Transducer
.050	Tube to Transducer
.100	Tube to Transducer
.200	Tube to Transducer
.260	In Situ
.320	In Situ
.380	In Situ
.440	In Situ
.500	In Situ
.560	In Situ
.620	In Situ
.700	Tube to Transducer
.800	Tube to Transducer
.900	Tube to Transducer

Table 2. Design and Measured Ordinates

		Design Values		Measured Values					
				y = 1.000 in		y = 14.932 in		y = 28.324 in	
x, in	x/c	z _u , in	z _p , in	z _u , in	z _p , in	z _u , in	z _p , in	z _u , in	z _p , in
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.1800	0.0075	0.4610	-0.4610	0.4571	-0.4726	0.4535	-0.4701	0.4514	-0.4624
0.3000	0.0125	0.5630	-0.5650	0.5602	-0.5750	0.5557	-0.5717	0.5572	-0.5669
0.6000	0.0250	0.7230	-0.7350	0.7193	-0.7435	0.7156	-0.7376	0.7197	-0.7380
0.9000	0.0375	0.8280	-0.8470	0.8226	-0.8569	0.8234	-0.8498	0.8242	-0.8492
1.2000	0.0500	0.9100	-0.9360	0.9050	-0.9436	0.9050	-0.9383	0.9062	-0.9365
1.8000	0.0750	1.0330	-1.0670	1.0289	-1.0720	1.0290	-1.0693	1.0295	-1.0683
2.4000	0.1000	1.1220	-1.1610	1.1191	-1.1638	1.1176	-1.1620	1.1176	-1.1603
3.0000	0.1250	1.1930	-1.2340	1.1901	-1.2372	1.1895	-1.2345	1.1910	-1.2346
3.6000	0.1500	1.2480	-1.2890	1.2466	-1.2928	1.2459	-1.2902	1.2465	-1.2898
4.2000	0.1750	1.2930	-1.3330	1.2936	-1.3378	1.2916	-1.3345	1.2925	-1.3330
4.8000	0.2000	1.3290	-1.3650	1.3335	-1.3691	1.3287	-1.3670	1.3300	-1.3665
6.0000	0.2500	1.3840	-1.4130	1.3876	-1.4147	1.3846	-1.4122	1.3839	-1.4116
7.2000	0.3000	1.4150	-1.4340	1.4177	-1.4343	1.4147	-1.4320	1.4148	-1.4308
8.4000	0.3500	1.4320	-1.4370	1.4343	-1.4374	1.4331	-1.4343	1.4329	-1.4326
9.6000	0.4000	1.4390	-1.4170	1.4421	-1.4153	1.4396	-1.4127	1.4397	-1.4130
10.8000	0.4500	1.4320	-1.3750	1.4354	-1.3739	1.4341	-1.3717	1.4354	-1.3721
12.0000	0.5000	1.4170	-1.3060	1.4194	-1.3069	1.4177	-1.3036	1.4190	-1.3036
13.2000	0.5500	1.3870	-1.2000	1.3893	-1.2011	1.3892	-1.1971	1.3891	-1.1978
13.8000	0.5750	1.3690	-1.1260	1.3713	-1.1266	1.3702	-1.1224	1.3697	-1.1228
14.4000	0.6000	1.3450	-1.0330	1.3492	-1.0332	1.3487	-1.0284	1.3467	-1.0291
15.0000	0.6250	1.3200	-0.9140	1.3235	-0.9129	1.3225	-0.9084	1.3216	-0.9096
15.6000	0.6500	1.2880	-0.7620	1.2920	-0.7606	1.2912	-0.7569	1.2905	-0.7564
16.2000	0.6750	1.2500	-0.5940	1.2554	-0.5942	1.2543	-0.5896	1.2531	-0.5888
16.8000	0.7000	1.2110	-0.4390	1.2091	-0.4419	1.2169	-0.4370	1.2158	-0.4352
17.4000	0.7250	1.1640	-0.3010	1.1623	-0.3074	1.1737	-0.2994	1.1744	-0.2998
18.0000	0.7500	1.1130	-0.1750	1.1133	-0.1801	1.1232	-0.1697	1.1243	-0.1731
18.6000	0.7750	1.0580	-0.0650	1.0593	-0.0670	1.0675	-0.0608	1.0702	-0.0598
19.2000	0.8000	0.9930	0.0290	0.9948	0.0284	1.0032	0.0354	1.0066	0.0369
19.8000	0.8250	0.9190	0.1080	0.9224	0.1088	0.9285	0.1237	0.9327	0.1169
20.4000	0.8500	0.8330	0.1650	0.8387	0.1685	0.8446	0.1772	0.8472	0.1755
21.0000	0.8750	0.7380	0.2030	0.7440	0.2064	0.7494	0.2154	0.7518	0.2150
21.6000	0.9000	0.6250	0.2110	0.6317	0.2147	0.6371	0.2211	0.6412	0.2231
22.2000	0.9250	0.4980	0.1870	0.5046	0.1920	0.5076	0.2004	0.5140	0.1988
22.8000	0.9500	0.3500	0.1190	0.3574	0.1255	0.3580	0.1314	0.3632	0.1333
23.4000	0.9750	0.1790	-0.0010	0.1864	0.0053	0.1829	0.0104	0.1895	0.0128
24.0000	1.0000	-0.0190	-0.1870	-0.0077	-0.1765	-0.0217	-0.1796	-0.0184	-0.1734

Table 2. Concluded

		Measured Values				Design Values
		y = 38.932 in		y = 45.948 in		Wing Tip Radius
x, in	x/c	z _u , in	z _p , in	z _u , in	z _p , in	R, in.
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
0.1800	0.0075	0.4580	-0.4583	0.4648	-0.4585	0.461
0.3000	0.0125	0.5625	-0.5640	0.5681	-0.5613	0.564
0.6000	0.0250	0.7248	-0.7321	0.7250	-0.7271	0.729
0.9000	0.0375	0.8299	-0.8446	0.8316	-0.8402	0.837
1.2000	0.0500	0.9103	-0.9320	0.9109	-0.9273	0.923
1.8000	0.0750	1.0330	-1.0639	1.0301	-1.0552	1.050
2.4000	0.1000	1.1199	-1.1560	1.1161	-1.1480	1.141
3.0000	0.1250	1.1900	-1.2284	1.1842	-1.2206	1.214
3.6000	0.1500	1.2454	-1.2836	1.2417	-1.2780	1.268
4.2000	0.1750	1.2929	-1.3283	1.2887	-1.3270	1.313
4.8000	0.2000	1.3324	-1.3631	1.3308	-1.3633	1.347
6.0000	0.2500	1.3833	-1.4117	1.3877	-1.4143	1.398
7.2000	0.3000	1.4138	-1.4310	1.4174	-1.4363	1.424
8.4000	0.3500	1.4310	-1.4283	1.4336	-1.4394	1.434
9.6000	0.4000	1.4369	-1.4073	1.4397	-1.4176	1.428
10.8000	0.4500	1.4329	-1.3670	1.4362	-1.3743	1.403
12.0000	0.5000	1.4168	-1.3004	1.4208	-1.3049	1.361
13.2000	0.5500	1.3876	-1.1963	1.3909	-1.1989	1.293
13.8000	0.5750	1.3689	-1.1224	1.3708	-1.1250	1.248
14.4000	0.6000	1.3461	-1.0287	1.3476	-1.0315	1.189
15.0000	0.6250	1.3204	-0.9091	1.3215	-0.9128	1.117
15.6000	0.6500	1.2891	-0.7564	1.2893	-0.7598	1.025
16.2000	0.6750	1.2520	-0.5891	1.2509	-0.5927	0.922
16.8000	0.7000	1.2128	-0.4338	1.2144	-0.4376	0.825
17.4000	0.7250	1.1698	-0.2965	1.1687	-0.3019	0.732
18.0000	0.7500	1.1225	-0.1706	1.1209	-0.1761	0.644
18.6000	0.7750	1.0688	-0.0577	1.0665	-0.0598	0.561
19.2000	0.8000	1.0052	0.0397	1.0004	0.0357	0.482
19.8000	0.8250	0.9320	0.1198	0.9280	0.1171	0.405
20.4000	0.8500	0.8493	0.1811	0.8447	0.1753	0.334
21.0000	0.8750	0.7546	0.2194	0.7506	0.2131	0.267
21.6000	0.9000	0.6446	0.2282	0.6387	0.2184	0.207
22.2000	0.9250	0.5153	0.2058	0.5083	0.1999	0.155
22.8000	0.9500	0.3661	0.1395	0.3586	0.1306	0.115
23.4000	0.9750	0.1892	0.0174	0.1809	0.0091	0.090
24.0000	1.0000	-0.0061	-0.1671	-0.0139	-0.1757	0.084

Table 3. Airfoil Ordinates Interpolated from Smoothed Measured Ordinates

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c
.0000	.000016	-.000523	.000007	-.000582	.000013	-.000369	.000038	.000015	.000258	.000020
.0001	.001999	-.002516	.001949	-.002534	.001994	-.002358	.002204	-.002152	.002361	-.002079
.0002	.002926	-.003448	.002866	-.003457	.002894	-.003263	.003114	-.003061	.003285	-.003001
.0005	.004776	-.005307	.004699	-.005300	.004693	-.005071	.004927	-.004875	.005127	-.004839
.0010	.006864	-.007406	.006769	-.007382	.006730	-.007117	.006977	-.006926	.007205	-.006914
.0020	.009797	-.010356	.009680	-.010309	.009605	-.010005	.009867	-.009820	.010126	-.009832
.0050	.015407	-.016000	.015257	-.015913	.015168	-.015589	.015439	-.015417	.015722	-.015433
.0100	.021038	-.021671	.020865	-.021541	.020866	-.021302	.021111	-.021149	.021349	-.021089
.0150	.024819	-.025538	.024646	-.025369	.024729	-.025227	.024951	-.025069	.025123	-.024939
.0200	.027728	-.028587	.027574	-.028379	.027692	-.028307	.027909	-.028121	.028019	-.027954
.0250	.030075	-.031088	.029952	-.030850	.030078	-.030821	.030296	-.030611	.030361	-.030425
.0300	.032039	-.033198	.031953	-.032941	.032071	-.032930	.032287	-.032714	.032331	-.032518
.0350	.033726	-.035019	.033677	-.034753	.033777	-.034743	.033990	-.034533	.034025	-.034331
.0400	.035217	-.036630	.035199	-.036366	.035279	-.036348	.035487	-.036145	.035515	-.035938
.0450	.036567	-.038083	.036570	-.037829	.036631	-.037801	.036832	-.037603	.036851	-.037389
.0500	.037807	-.039410	.037823	-.039172	.037869	-.039132	.038062	-.038939	.038068	-.038716
.0550	.038964	-.040636	.038987	-.040417	.039020	-.040368	.039204	-.040179	.039195	-.039942
.0600	.040047	-.041773	.040071	-.041575	.040095	-.041518	.040268	-.041333	.040242	-.041080
.0650	.041062	-.042829	.041083	-.042653	.041100	-.042591	.041263	-.042410	.041217	-.042138
.0700	.042015	-.043814	.042030	-.043659	.042042	-.043594	.042194	-.043414	.042129	-.043124
.0750	.042911	-.044736	.042919	-.044599	.042929	-.044533	.043068	-.044354	.042982	-.044047
.0800	.043755	-.045601	.043756	-.045480	.043766	-.045416	.043891	-.045235	.043784	-.044912
.0850	.044552	-.046416	.044544	-.046307	.044556	-.046246	.044666	-.046061	.044540	-.045727
.0900	.045304	-.047183	.045290	-.047085	.045304	-.047028	.045398	-.046838	.045254	-.046494
.0950	.046016	-.047909	.045995	-.047817	.046013	-.047766	.046090	-.047569	.045930	-.047220
.1000	.046691	-.048596	.046665	-.048508	.046686	-.048463	.046747	-.048258	.046573	-.047907
.1050	.047332	-.049249	.047303	-.049162	.047327	-.049123	.047371	-.048911	.047186	-.048560
.1100	.047942	-.049869	.047911	-.049783	.047938	-.049748	.047966	-.049528	.047772	-.049182
.1150	.048523	-.050460	.048491	-.050371	.048520	-.050342	.048534	-.050114	.048333	-.049775
.1200	.049078	-.051023	.049045	-.050931	.049077	-.050905	.049078	-.050671	.048872	-.050342

Table 3. Continued

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c
.1250	.049609	-.051559	.049576	-.051463	.049610	-.051441	.049600	-.051200	.049391	-.050885
.1300	.050118	-.052071	.050084	-.051971	.050120	-.051950	.050101	-.051705	.049893	-.051407
.1350	.050608	-.052560	.050572	-.052456	.050609	-.052435	.050584	-.052187	.050377	-.051908
.1400	.051078	-.053026	.051041	-.052917	.051078	-.052897	.051050	-.052648	.050846	-.052389
.1450	.051531	-.053470	.051490	-.053358	.051528	-.053336	.051499	-.053088	.051299	-.052852
.1500	.051967	-.053893	.051921	-.053777	.051960	-.053754	.051932	-.053508	.051739	-.053296
.1550	.052388	-.054295	.052334	-.054177	.052374	-.054152	.052350	-.053911	.052165	-.053722
.1600	.052793	-.054677	.052731	-.054558	.052772	-.054530	.052754	-.054296	.052577	-.054132
.1650	.053185	-.055039	.053113	-.054920	.053153	-.054891	.053143	-.054664	.052977	-.054524
.1700	.053561	-.055384	.053479	-.055264	.053519	-.055233	.053518	-.055017	.053363	-.054900
.1750	.053924	-.055711	.053830	-.055592	.053870	-.055559	.053878	-.055353	.053736	-.055260
.1800	.054273	-.056021	.054167	-.055903	.054207	-.055868	.054225	-.055675	.054097	-.055605
.1850	.054608	-.056315	.054491	-.056199	.054530	-.056163	.054557	-.055983	.054444	-.055933
.1900	.054929	-.056593	.054802	-.056479	.054839	-.056442	.054875	-.056276	.054778	-.056247
.1950	.055237	-.056857	.055100	-.056745	.055136	-.056707	.055179	-.056556	.055098	-.056545
.2000	.055531	-.057108	.055386	-.056997	.055420	-.056959	.055469	-.056822	.055406	-.056829
.2050	.055813	-.057344	.055661	-.057236	.055692	-.057198	.055745	-.057075	.055700	-.057098
.2100	.056082	-.057569	.055924	-.057462	.055953	-.057424	.056008	-.057315	.055981	-.057354
.2150	.056338	-.057780	.056175	-.057676	.056202	-.057638	.056258	-.057543	.056250	-.057595
.2200	.056583	-.057980	.056416	-.057877	.056440	-.057840	.056495	-.057758	.056505	-.057823
.2250	.056815	-.058168	.056646	-.058067	.056667	-.058030	.056720	-.057960	.056749	-.058038
.2300	.057036	-.058346	.056866	-.058246	.056884	-.058209	.056934	-.058151	.056980	-.058241
.2350	.057247	-.058512	.057076	-.058414	.057091	-.058377	.057137	-.058329	.057200	-.058431
.2400	.057446	-.058668	.057276	-.058571	.057288	-.058535	.057329	-.058496	.057408	-.058609
.2450	.057635	-.058815	.057467	-.058718	.057476	-.058682	.057511	-.058651	.057605	-.058776
.2500	.057814	-.058952	.057648	-.058855	.057654	-.058819	.057684	-.058794	.057791	-.058932
.2550	.057984	-.059080	.057821	-.058983	.057824	-.058947	.057847	-.058927	.057966	-.059077
.2600	.058144	-.059199	.057985	-.059102	.057986	-.059065	.058002	-.059048	.058131	-.059211
.2650	.058295	-.059309	.058141	-.059212	.058139	-.059174	.058148	-.059158	.058286	-.059335
.2700	.058438	-.059410	.058288	-.059312	.058285	-.059274	.058287	-.059258	.058431	-.059448

Table 3. Continued

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c
.2750	.058573	-.059502	.058428	-.059404	.058423	-.059364	.058417	-.059348	.058367	-.059351
.2800	.058699	-.059586	.058560	-.059486	.058553	-.059446	.058540	-.059427	.058495	-.059444
.2850	.058819	-.059660	.058685	-.059560	.058676	-.059518	.058656	-.059496	.058614	-.059728
.2900	.058931	-.059726	.058803	-.059624	.058793	-.059582	.058766	-.059555	.058726	-.059801
.2950	.059036	-.059784	.058914	-.059681	.058903	-.059638	.058869	-.059604	.059030	-.059865
.3000	.059136	-.059832	.059018	-.059728	.059006	-.059684	.058966	-.059644	.059128	-.059919
.3050	.059229	-.059872	.059116	-.059767	.059104	-.059723	.059057	-.059675	.059219	-.059964
.3100	.059316	-.059904	.059208	-.059798	.059195	-.059753	.059143	-.059697	.059303	-.060000
.3150	.059398	-.059927	.059294	-.059820	.059281	-.059775	.059223	-.059710	.059382	-.060026
.3200	.059474	-.059941	.059374	-.059833	.059362	-.059789	.059298	-.059714	.059455	-.060044
.3250	.059545	-.059947	.059448	-.059839	.059436	-.059794	.059369	-.059709	.059522	-.060052
.3300	.059611	-.059945	.059517	-.059836	.059506	-.059792	.059434	-.059696	.059584	-.060051
.3350	.059671	-.059934	.059581	-.059824	.059571	-.059781	.059494	-.059675	.059642	-.060041
.3400	.059727	-.059915	.059639	-.059805	.059631	-.059763	.059550	-.059646	.059694	-.060022
.3450	.059779	-.059888	.059693	-.059777	.059686	-.059736	.059602	-.059609	.059742	-.059995
.3500	.059826	-.059852	.059742	-.059741	.059736	-.059702	.059649	-.059564	.059786	-.059959
.3550	.059868	-.059808	.059786	-.059697	.059782	-.059660	.059692	-.059511	.059826	-.059914
.3600	.059907	-.059756	.059826	-.059645	.059824	-.059610	.059731	-.059451	.059863	-.059860
.3650	.059940	-.059696	.059861	-.059585	.059861	-.059552	.059766	-.059384	.059895	-.059797
.3700	.059970	-.059627	.059891	-.059516	.059894	-.059486	.059796	-.059308	.059923	-.059726
.3750	.059995	-.059550	.059917	-.059440	.059923	-.059412	.059823	-.059225	.059948	-.059646
.3800	.060016	-.059464	.059939	-.059354	.059947	-.059329	.059845	-.059135	.059968	-.059557
.3850	.060032	-.059370	.059956	-.059261	.059966	-.059238	.059863	-.059037	.059985	-.059459
.3900	.060044	-.059268	.059968	-.059158	.059982	-.059139	.059877	-.058931	.059998	-.059352
.3950	.060052	-.059157	.059976	-.059048	.059992	-.059031	.059886	-.058818	.060008	-.059236
.4000	.060055	-.059037	.059980	-.058928	.059999	-.058914	.059891	-.058697	.060013	-.059111
.4050	.060054	-.058908	.059979	-.058800	.060001	-.058789	.059892	-.058568	.060015	-.058977
.4100	.060048	-.058771	.059973	-.058663	.059998	-.058655	.059889	-.058431	.060013	-.058834
.4150	.060037	-.058625	.059963	-.058517	.059991	-.058512	.059881	-.058286	.060007	-.058681
.4200	.060022	-.058469	.059948	-.058361	.059979	-.058359	.059869	-.058133	.059996	-.058519

Table 3. Continued

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c	z _i /c
.4250	.060002	-.058304	.059929	-.058196	.059962	-.058196	.059852	-.057970	.059982	-.058348
.4300	.059978	-.058129	.059905	-.058021	.059941	-.058023	.059831	-.057799	.059963	-.058166
.4350	.059948	-.057945	.059876	-.057836	.059915	-.057841	.059804	-.057618	.059940	-.057974
.4400	.059914	-.057750	.059843	-.057641	.059884	-.057647	.059774	-.057427	.059912	-.057772
.4450	.059875	-.057545	.059805	-.057435	.059848	-.057443	.059738	-.057227	.059879	-.057559
.4500	.059831	-.057329	.059762	-.057219	.059807	-.057228	.059698	-.057016	.059842	-.057336
.4550	.059781	-.057103	.059714	-.056991	.059761	-.057002	.059653	-.056795	.059800	-.057101
.4600	.059727	-.056865	.059662	-.056752	.059710	-.056764	.059603	-.056563	.059753	-.056856
.4650	.059668	-.056616	.059605	-.056502	.059654	-.056514	.059548	-.056319	.059700	-.056599
.4700	.059603	-.056355	.059543	-.056239	.059593	-.056251	.059488	-.056064	.059642	-.056330
.4750	.059534	-.056081	.059476	-.055963	.059526	-.055976	.059423	-.055796	.059579	-.056048
.4800	.059460	-.055794	.059404	-.055674	.059454	-.055687	.059353	-.055515	.059511	-.055754
.4850	.059380	-.055494	.059327	-.055371	.059377	-.055385	.059278	-.055221	.059437	-.055447
.4900	.059296	-.055180	.059245	-.055054	.059294	-.055068	.059198	-.054913	.059357	-.055126
.4950	.059207	-.054851	.059159	-.054723	.059206	-.054737	.059112	-.054590	.059271	-.054791
.5000	.059114	-.054508	.059067	-.054376	.059112	-.054391	.059021	-.054253	.059180	-.054442
.5050	.059015	-.054149	.058971	-.054015	.059013	-.054029	.058925	-.053900	.059083	-.054078
.5100	.058912	-.053774	.058869	-.053636	.058908	-.053651	.058824	-.053531	.058979	-.053699
.5150	.058803	-.053382	.058763	-.053241	.058798	-.053256	.058718	-.053145	.058870	-.053303
.5200	.058690	-.052972	.058652	-.052827	.058683	-.052842	.058606	-.052740	.058755	-.052890
.5250	.058573	-.052543	.058536	-.052395	.058562	-.052410	.058489	-.052317	.058635	-.052458
.5300	.058450	-.052094	.058415	-.051942	.058436	-.051958	.058367	-.051873	.058509	-.052007
.5350	.058323	-.051624	.058289	-.051468	.058304	-.051485	.058240	-.051408	.058377	-.051536
.5400	.058191	-.051132	.058159	-.050973	.058168	-.050990	.058107	-.050922	.058240	-.051044
.5450	.058054	-.050618	.058024	-.050455	.058027	-.050473	.057970	-.050412	.058097	-.050529
.5500	.057913	-.050080	.057884	-.049914	.057880	-.049932	.057827	-.049878	.057949	-.049992
.5550	.057767	-.049517	.057739	-.049347	.057728	-.049367	.057679	-.049319	.057796	-.049430
.5600	.057616	-.048928	.057590	-.048754	.057572	-.048775	.057526	-.048733	.057637	-.048843
.5650	.057461	-.048309	.057435	-.048132	.057411	-.048155	.057368	-.048118	.057473	-.048227
.5700	.057300	-.047660	.057276	-.047480	.057244	-.047504	.057204	-.047472	.057304	-.047580

Table 3. Continued

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c
.5750	.057135	-.046977	.057110	-.046795	.057073	-.046821	.057035	-.046792	.057129	-.046902
.5800	.056965	-.046260	.056939	-.046075	.056897	-.046103	.056860	-.046077	.056948	-.046188
.5850	.056789	-.045504	.056762	-.045317	.056715	-.045347	.056680	-.045325	.056762	-.045438
.5900	.056607	-.044709	.056578	-.044520	.056528	-.044551	.056494	-.044532	.056569	-.044647
.5950	.056420	-.043870	.056387	-.043681	.056335	-.043713	.056301	-.043696	.056370	-.043815
.6000	.056225	-.042987	.056190	-.042797	.056136	-.042831	.056102	-.042815	.056165	-.042937
.6050	.056024	-.042055	.055985	-.041866	.055931	-.041900	.055897	-.041886	.055953	-.042012
.6100	.055816	-.041077	.055772	-.040888	.055718	-.040922	.055684	-.040910	.055734	-.041040
.6150	.055600	-.040050	.055552	-.039863	.055499	-.039896	.055463	-.039885	.055507	-.040018
.6200	.055375	-.038975	.055324	-.038791	.055271	-.038821	.055235	-.038813	.055273	-.038949
.6250	.055143	-.037853	.055087	-.037672	.055036	-.037698	.054998	-.037691	.055031	-.037830
.6300	.054901	-.036684	.054842	-.036506	.054793	-.036527	.054754	-.036522	.054780	-.036662
.6350	.054649	-.035472	.054589	-.035298	.054542	-.035312	.054500	-.035309	.054521	-.035451
.6400	.054388	-.034223	.054328	-.034052	.054282	-.034058	.054239	-.034058	.054254	-.034200
.6450	.054115	-.032942	.054060	-.032774	.054015	-.032772	.053969	-.032773	.053980	-.032915
.6500	.053832	-.031635	.053785	-.031469	.053741	-.031458	.053692	-.031459	.053699	-.031603
.6550	.053536	-.030307	.053503	-.030142	.053460	-.030122	.053406	-.030123	.053411	-.030268
.6600	.053230	-.028966	.053215	-.028799	.053172	-.028771	.053113	-.028772	.053116	-.028918
.6650	.052912	-.027619	.052921	-.027449	.052878	-.027414	.052813	-.027412	.052815	-.027560
.6700	.052584	-.026273	.052620	-.026098	.052577	-.026057	.052506	-.026051	.052508	-.026201
.6750	.052246	-.024935	.052314	-.024754	.052272	-.024709	.052193	-.024697	.052195	-.024850
.6800	.051898	-.023612	.052003	-.023422	.051962	-.023375	.051873	-.023355	.051876	-.023513
.6850	.051542	-.022308	.051685	-.022105	.051646	-.022060	.051549	-.022031	.051552	-.022193
.6900	.051178	-.021023	.051361	-.020808	.051325	-.020766	.051218	-.020727	.051222	-.020894
.6950	.050806	-.019762	.051030	-.019532	.050998	-.019495	.050883	-.019445	.050886	-.019619
.7000	.050429	-.018525	.050692	-.018279	.050665	-.018250	.050542	-.018189	.050545	-.018369
.7050	.050046	-.017315	.050347	-.017053	.050326	-.017033	.050196	-.016961	.050197	-.017148
.7100	.049658	-.016131	.049994	-.015853	.049979	-.015843	.049845	-.015761	.049843	-.015954
.7150	.049265	-.014972	.049633	-.014679	.049625	-.014679	.049488	-.014588	.049482	-.014787
.7200	.048868	-.013837	.049263	-.013530	.049262	-.013541	.049124	-.013442	.049113	-.013645

Table 3. Continued

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c	z_u/c	z_l/c
.7250	.048468	-.012726	.048883	-.012406	.048891	-.012426	.048754	-.012321	.048736	-.012527
.7300	.048064	-.011636	.048493	-.011306	.048511	-.011335	.048376	-.011225	.048351	-.011432
.7350	.047655	-.010568	.048092	-.010231	.048120	-.010266	.047990	-.010154	.047956	-.010359
.7400	.047241	-.009522	.047681	-.009180	.047719	-.009219	.047595	-.009107	.047551	-.009308
.7450	.046820	-.008498	.047259	-.008154	.047308	-.008194	.047190	-.008082	.047135	-.008278
.7500	.046391	-.007496	.046825	-.007152	.046885	-.007190	.046774	-.007080	.046709	-.007270
.7550	.045954	-.006515	.046380	-.006173	.046450	-.006208	.046347	-.006100	.046270	-.006282
.7600	.045506	-.005557	.045922	-.005219	.046002	-.005248	.045907	-.005142	.045820	-.005316
.7650	.045048	-.004622	.045452	-.004287	.045543	-.004311	.045455	-.004207	.045356	-.004372
.7700	.044578	-.003711	.044969	-.003377	.045070	-.003397	.044989	-.003295	.044879	-.003451
.7750	.044095	-.002824	.044473	-.002490	.044583	-.002508	.044509	-.002407	.044388	-.002554
.7800	.043599	-.001963	.043964	-.001624	.044083	-.001643	.044014	-.001543	.043883	-.001683
.7850	.043088	-.001128	.043440	-.000780	.043567	-.000805	.043504	-.000704	.043363	-.000837
.7900	.042563	-.000319	.042903	.000039	.043037	.000006	.042979	.000110	.042829	-.000019
.7950	.042022	.000462	.042350	.000833	.042491	.000790	.042437	.000896	.042280	.000771
.8000	.041466	.001215	.041783	.001600	.041928	.001545	.041881	.001656	.041716	.001531
.8050	.040893	.001940	.041200	.002340	.041349	.002270	.041308	.002387	.041138	.002261
.8100	.040304	.002634	.040602	.003049	.040752	.002966	.040719	.003090	.040545	.002959
.8150	.039698	.003299	.039988	.003727	.040137	.003630	.040114	.003762	.039937	.003626
.8200	.039076	.003933	.039358	.004373	.039505	.004264	.039492	.004404	.039313	.004260
.8250	.038436	.004536	.038711	.004984	.038856	.004866	.038854	.005014	.038674	.004860
.8300	.037779	.005106	.038047	.005559	.038188	.005436	.038199	.005592	.038018	.005427
.8350	.037104	.005643	.037366	.006098	.037503	.005973	.037526	.006136	.037346	.005960
.8400	.036410	.006145	.036667	.006598	.036799	.006475	.036836	.006646	.036655	.006456
.8450	.035697	.006612	.035949	.007059	.036076	.006942	.036127	.007120	.035946	.006916
.8500	.034963	.007042	.035211	.007479	.035335	.007372	.035399	.007556	.035218	.007337
.8550	.034209	.007434	.034453	.007858	.034574	.007765	.034651	.007955	.034469	.007720
.8600	.033433	.007787	.033674	.008196	.033793	.008119	.033882	.008313	.033699	.008062
.8650	.032635	.008099	.032872	.008491	.032991	.008431	.033092	.008631	.032906	.008364
.8700	.031813	.008368	.032047	.008744	.032168	.008701	.032278	.008906	.032089	.008625

Table 3. Concluded

x/c	y = 1.000 in.		y = 14.932 in.		y = 28.324 in.		y = 38.932 in.		y = 45.948 in.	
	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c	z _u /c	z _l /c
.8750	.030967	.008594	.031198	.008954	.031323	.008927	.031441	.009137	.031246	.008844
.8800	.030096	.008774	.030323	.009121	.030454	.009107	.030578	.009322	.030377	.009019
.8850	.029200	.008906	.029422	.009243	.029561	.009239	.029688	.009459	.029481	.009149
.8900	.028277	.008989	.028494	.009317	.028643	.009322	.028771	.009547	.028555	.009230
.8950	.027327	.009020	.027539	.009341	.027698	.009352	.027825	.009583	.027600	.009262
.9000	.026350	.008998	.026554	.009314	.026726	.009328	.026849	.009564	.026614	.009240
.9050	.025344	.008919	.025540	.009231	.025724	.009248	.025841	.009490	.025596	.009163
.9100	.024309	.008781	.024495	.009091	.024692	.009109	.024800	.009356	.024545	.009027
.9150	.023244	.008581	.023418	.008890	.023628	.008908	.023726	.009158	.023460	.008829
.9200	.022147	.008315	.022309	.008623	.022530	.008641	.022616	.008895	.022340	.008564
.9250	.021018	.007980	.021165	.008287	.021397	.008306	.021471	.008561	.021185	.008229
.9300	.019856	.007573	.019986	.007879	.020227	.007899	.020288	.008154	.019994	.007821
.9350	.018660	.007092	.018772	.007397	.019020	.007420	.019068	.007672	.018766	.007338
.9400	.017429	.006536	.017522	.006839	.017775	.006866	.017811	.007114	.017502	.006778
.9450	.016165	.005904	.016235	.006202	.016493	.006236	.016516	.006479	.016201	.006140
.9500	.014867	.005195	.014912	.005487	.015172	.005529	.015185	.005765	.014863	.005422
.9550	.013533	.004407	.013550	.004688	.013813	.004741	.013815	.004969	.013488	.004622
.9600	.012162	.003529	.012146	.003796	.012409	.003863	.012407	.004083	.012075	.003731
.9650	.010749	.002550	.010694	.002797	.010955	.002881	.010958	.003094	.010622	.002736
.9700	.009291	.001459	.009189	.001678	.009444	.001781	.009466	.001989	.009127	.001628
.9750	.007784	.000243	.007625	.000425	.007870	.000549	.007929	.000756	.007589	.000392
.9800	.006226	-.001106	.005998	-.000970	.006230	-.000823	.006347	-.000613	.006008	-.000978
.9850	.004626	-.002568	.004319	-.002488	.004532	-.002316	.004727	-.002098	.004390	-.002462
.9900	.002994	-.004116	.002600	-.004100	.002792	-.003902	.003079	-.003672	.002745	-.004033
.9950	.001340	-.005723	.000854	-.005775	.001023	-.005550	.001412	-.005306	.001081	-.005664
1.000	-.000325	-.007359	-.000905	-.007481	-.000761	-.007229	-.000265	-.006971	-.000592	-.007324

Table 4. Static Test Cases for the Rectangular Supercritical Wing

Test Case No.	Point	M	α_o , deg.	Comments
6E1	212	.404	2.22	vs M, $\alpha_o = 2^\circ$
6E2	394	.604	2.00	
6E3	364	.701	2.00	
6E4	331	.753	2.05	
6E5	152	.802	2.00	
6E6	462	.828	2.00	
6E7	276	.850	2.01	
6E8	423	.876	2.00	
6E9	251	.907	2.00	

6E10	489	.803	1.99	Repeat of 152
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6E11	214	.403	.21	vs M, $\alpha_o = 0^\circ$
6E12	154	.801	.03	
6E13	464	.821	-.01	
6E14	253	.901	.00	

6E15	210	.403	4.20	vs M, $\alpha_o = 4^\circ$
6E16	150	.803	3.99	
6E17	460	.828	4.00	
6E18	249	.903	4.00	

6E19	604	.400	7.01	vs α_o , M=.4
6E20	607	.400	9.97	
6E21	609	.401	12.00	

6E22	628	.826	.00	With transition
6E23	626	.825	2.00	strip
6E24	624	.826	4.00	

6E25	52	.802	-.05	Air
6E26	53	.802	2.01	
6E27	54	.801	4.01	

Table 5. Dynamic Test Cases for the Rectangular Supercritical Wing

Test Case No.	Point	M	q psf	α_o deg.	θ deg.	f Hz	k	Comments
6E28	514	.402	54.8	1.97	1.003	10.00	.309	vs M, $\alpha_o = 2^\circ$
6E29	344	.750	100.8	2.05	1.052	14.99	.249	
6E30	316	.802	107.6	2.08	1.035	15.03	.233	
6E31	475	.826	108.1	1.97	1.023	15.01	.228	
6E32	289	.854	113.7	1.99	1.006	14.96	.219	
6E33	435	.875	115.2	1.96	.987	14.99	.215	
6E34	264	.894	116.8	2.01	1.032	14.99	.210	
6E35	513	.403	54.7	1.97	1.008	5.02	.155	vs k, $\alpha_o = 2^\circ$
6E36	515	.402	54.7	1.98	1.020	15.06	.466	M = .40
6E37	516	.402	54.8	1.98	1.060	19.97	.617	
6E38	494	.803	106.1	2.19	1.069	1.98	.031	vs k, $\alpha_o = 2^\circ$
6E39	493	.802	105.8	1.89	1.025	3.00	.047	M = .80
6E40	495	.803	106.1	1.84	1.080	3.95	.062	
6E41	314	.803	107.7	2.10	1.080	4.95	.077	
6E42	315	.804	107.9	2.08	1.057	9.96	.154	
6E43	317	.802	107.5	2.07	1.039	20.01	.311	
6E44	473	.825	107.8	1.98	1.070	4.97	.076	vs k, $\alpha_o = 2^\circ$
6E45	474	.825	107.8	1.97	1.038	9.96	.152	M = .825
6E46	476	.825	108.0	1.97	1.035	20.07	.305	
6E47	262	.896	117.1	2.00	1.022	4.96	.069	vs k, $\alpha_o = 2^\circ$
6E48	263	.896	117.1	2.00	.989	9.95	.139	M = .90
6E49	265	.902	118.3	2.01	1.055	19.99	.278	
6E50	481	.823	107.6	-.03	1.023	15.01	.229	vs α_o , M = .825
6E51	469	.822	107.2	3.99	1.018	15.04	.230	
6E52	269	.901	118.2	-.03	1.065	14.98	.208	vs α_o , M = .90
6E53	258	.900	117.9	4.03	1.024	14.95	.208	
6E54	632	.825	108.7	1.98	1.014	10.03	.152	With Transition
6E55	633	.826	108.9	1.98	.984	15.03	.228	Strip, M = .825
6E56	634	.826	108.9	1.98	1.005	20.09	.305	
6E57	180	.802	108.0	3.30	.500	15.12	.234	vs θ , $\alpha_o = 3.3^\circ$
6E58	184	.801	107.8	3.30	.983	15.03	.233	M = .80
6E59	189	.802	108.2	3.29	1.513	14.99	.232	
6E60	613	.402	54.4	11.99	1.004	5.00	.155	vs k, $\alpha_o = 12^\circ$
6E61	614	.401	54.2	12.00	.998	10.02	.312	M = .40
6E62	615	.401	54.2	12.01	1.012	14.99	.466	
6E63	616	.401	54.3	12.02	1.087	19.99	.621	



Figure 1. Rectangular supercritical wing installed in wind tunnel.

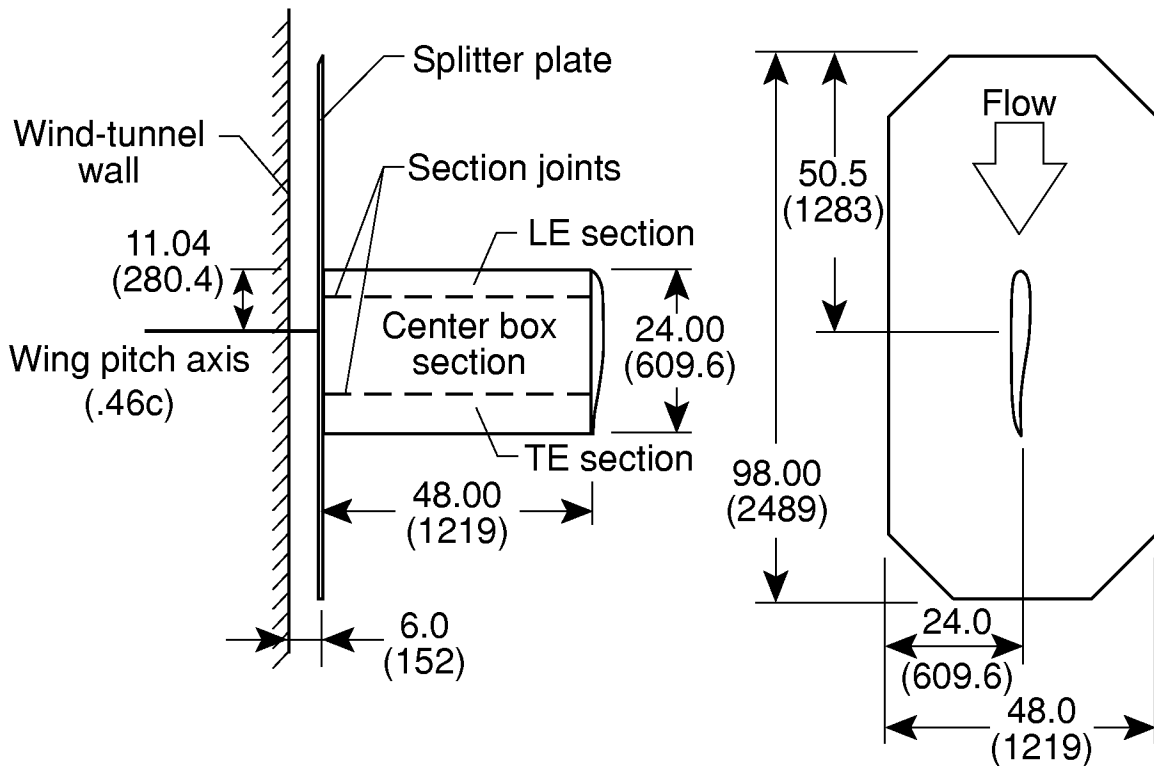


Figure 2. Diagram of wing and splitter plate in wind tunnel. Dimensions in inches (mm).

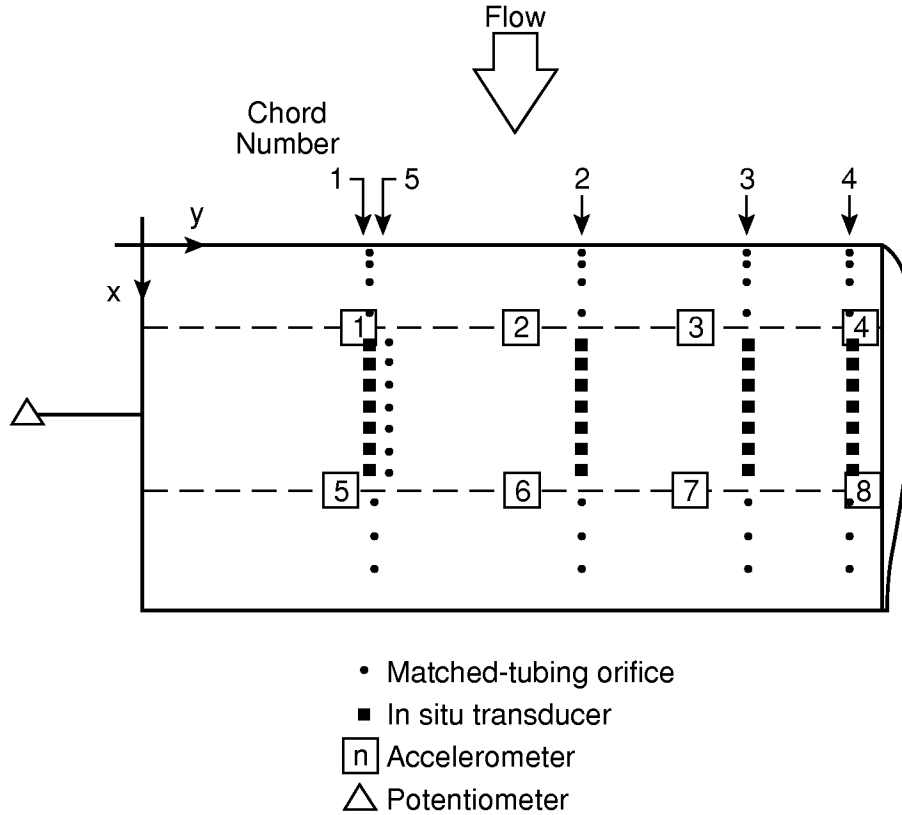


Figure 3. Instrumentation layout for the RSW model.

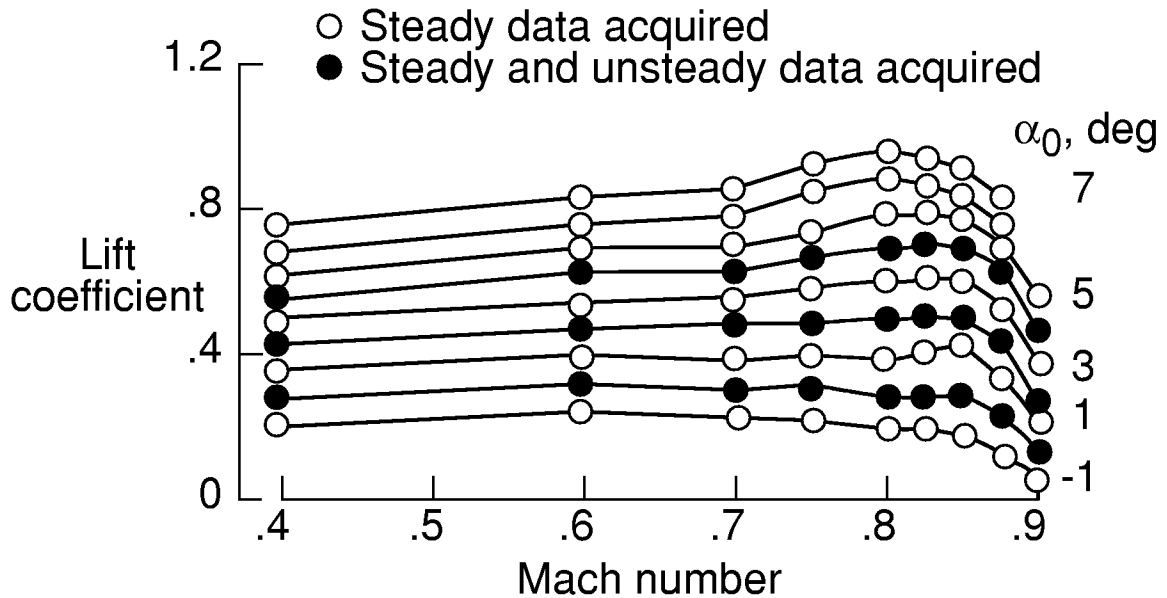


Figure 4. Lift coefficient vs. Mach number.

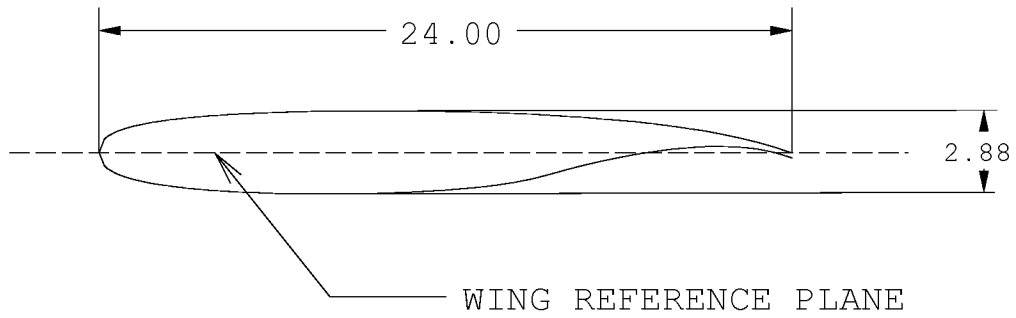
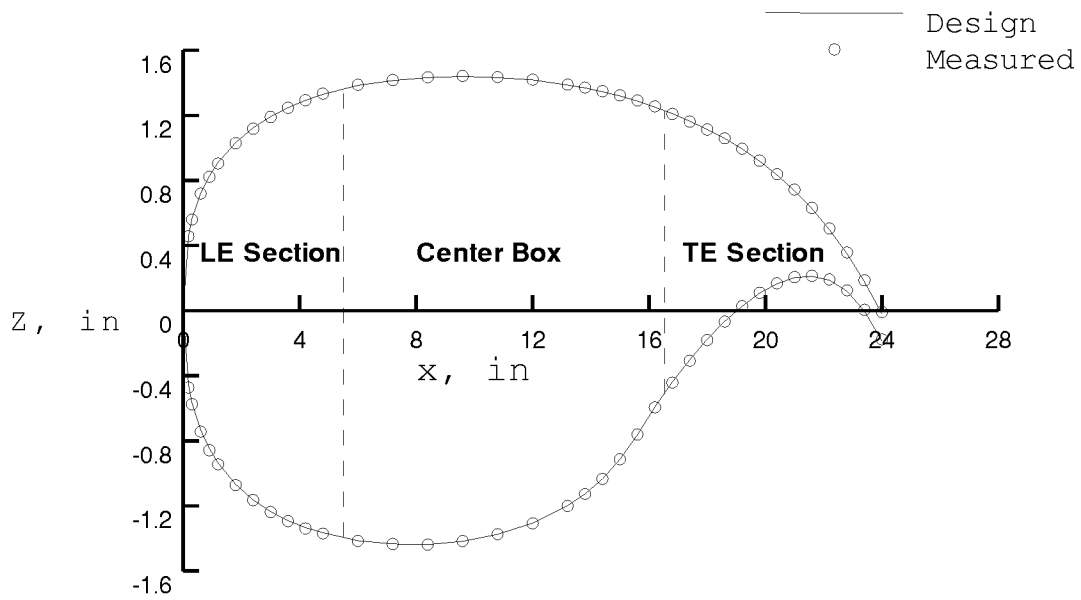
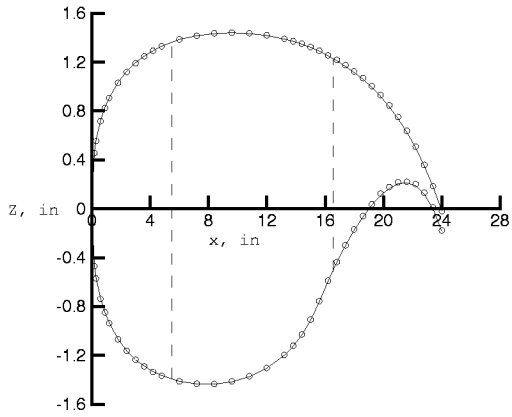


Figure 5. Airfoil for rectangular supercritical wing.

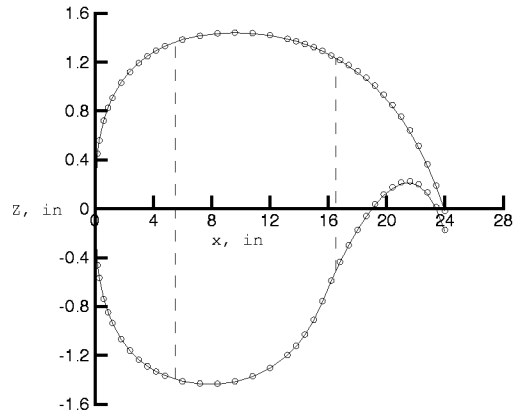


(a) Span station 1.000 in.

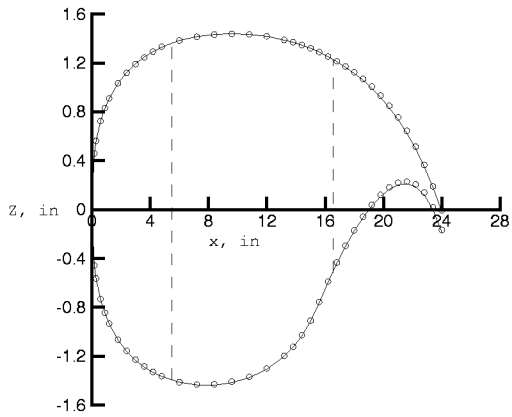
Figure 6. Comparison of the design and measured coordinates.



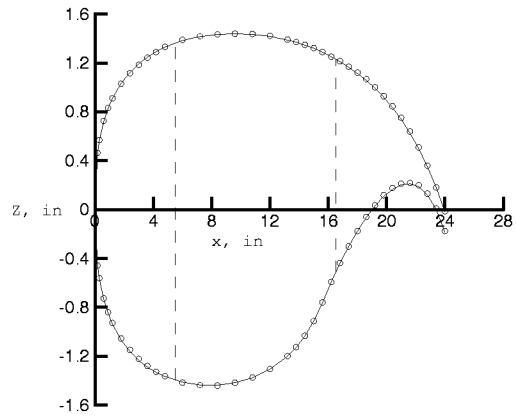
(b) Span station 14.932 in.



(c) Span station 28.324 in.



(d) Span station 38.932 in.



(e) Span station 45.948 in.

Figure 6. Concluded.

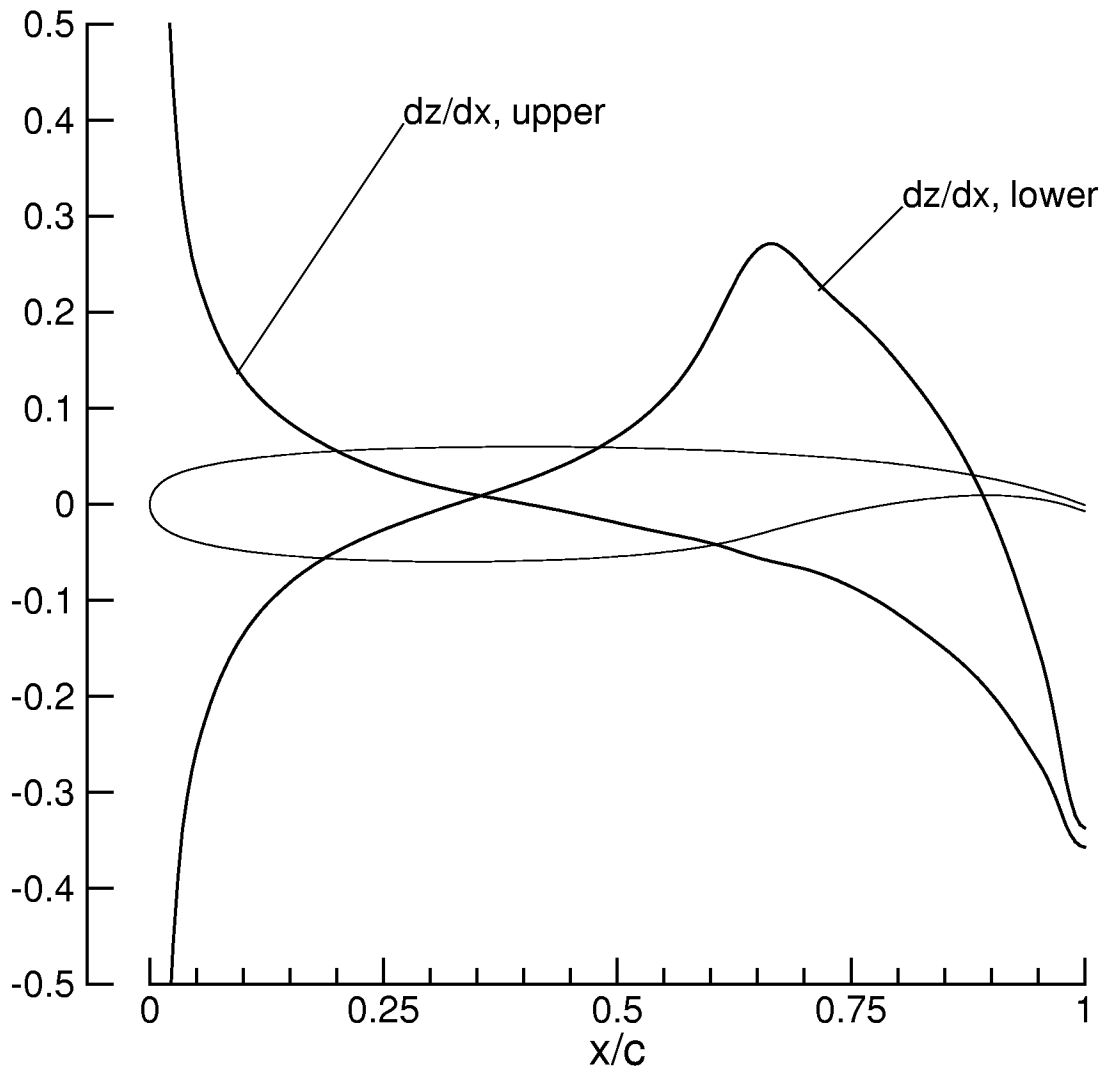
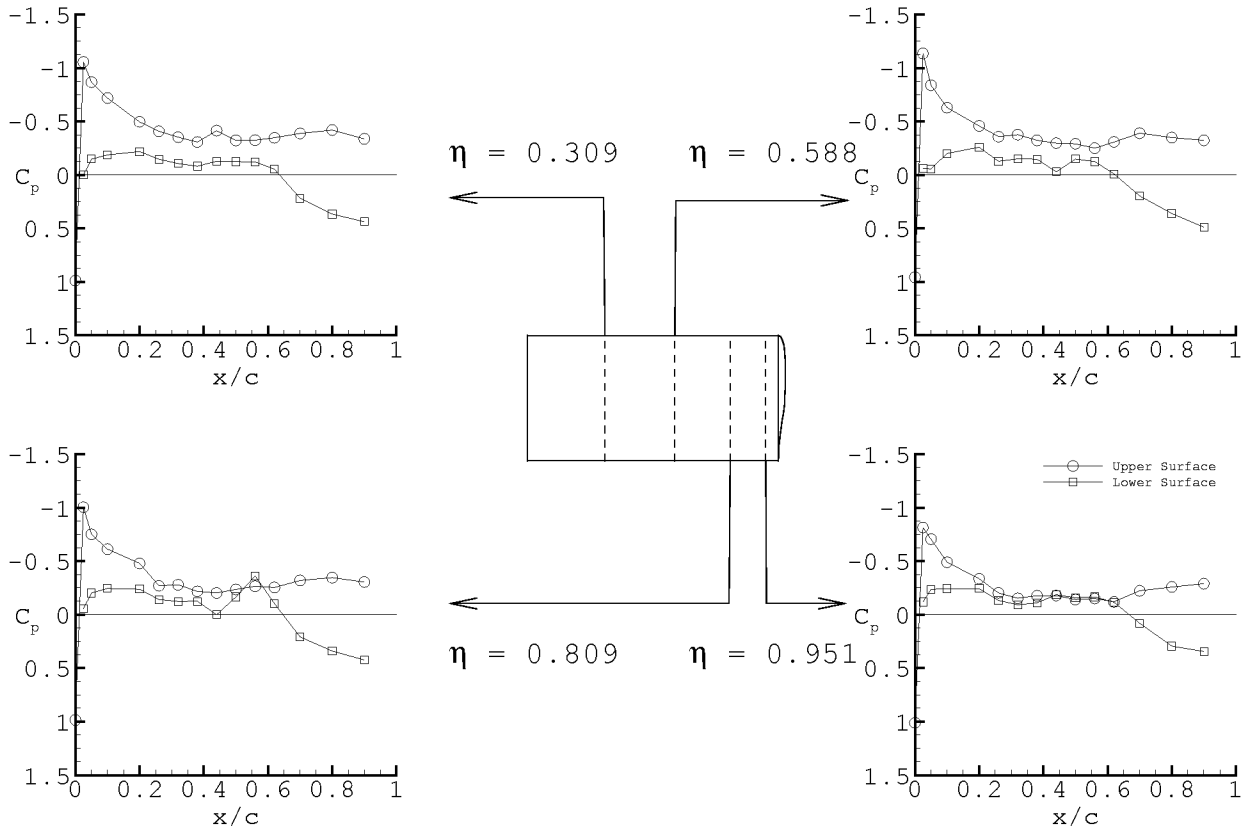


Figure 7. Plot of interpolated ordinates and slopes of smoothed measured airfoil, $y = 28.324$ in.

Point Number = 212 Mach Number = 0.404 Alpha = 2.22, deg.

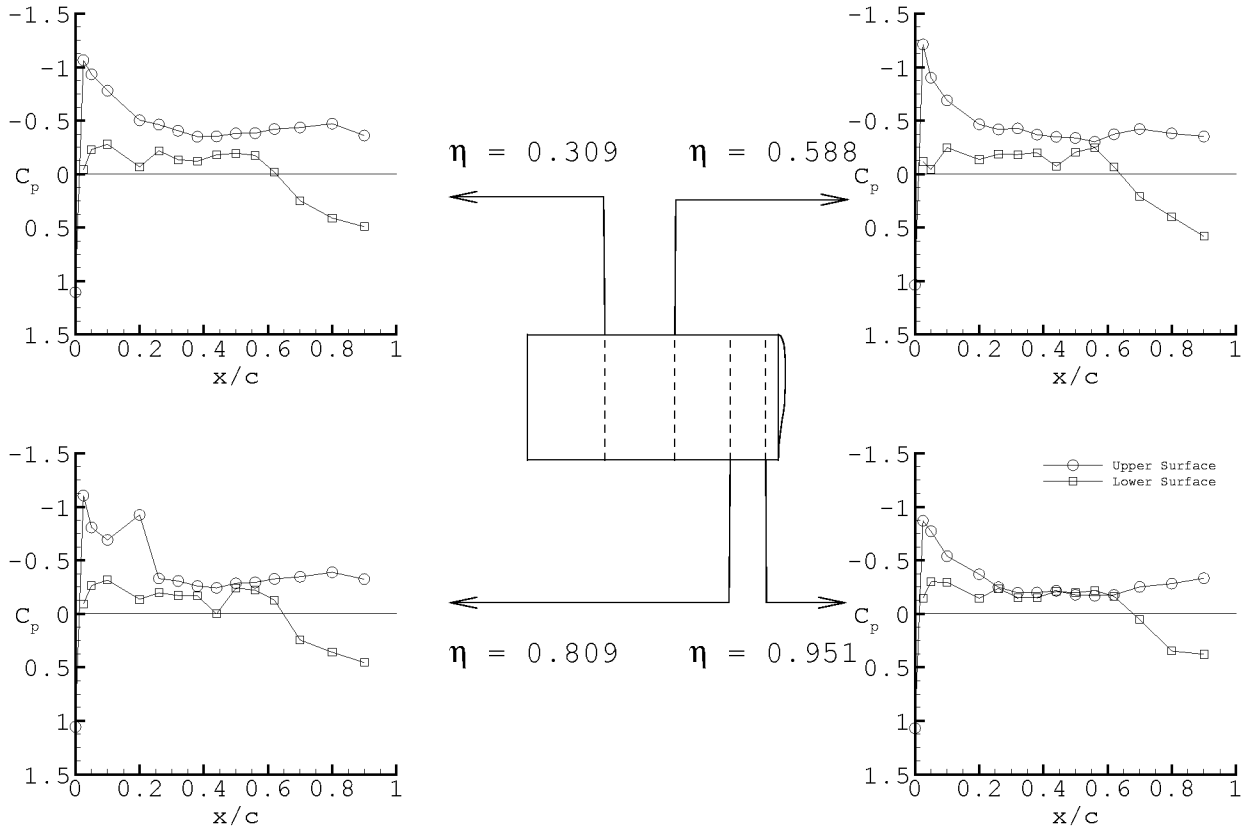
q	H	V	Rn	gamma	Cp*				
111.6	1322.4	203.9	.804E+07	1.135	-3.961				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	0.988		0.956		0.984		1.011		
.025	-1.055	-0.001	-1.135	-0.060	-1.004	-0.055	-0.814	-0.119	
.050	-0.867	-0.148	-0.838	-0.057	-0.751	-0.202	-0.706	-0.235	
.100	-0.718	-0.188	-0.628	-0.201	-0.613	-0.245	-0.489	-0.243	
.200	-0.496	-0.218	-0.458	-0.259	-0.479	-0.238	-0.336	-0.244	
.260	-0.409	-0.147	-0.357	-0.127	-0.270	-0.141	-0.203	-0.133	
.320	-0.353	-0.106	-0.376	-0.150	-0.279	-0.123	-0.153	-0.093	
.380	-0.307	-0.082	-0.323	-0.146	-0.218	-0.124	-0.177	-0.111	
.440	-0.414	-0.127	-0.297	-0.029	-0.202	0.000	-0.178	-0.187	
.500	-0.323	-0.124	-0.291	-0.149	-0.235	-0.166	-0.141	-0.158	
.560	-0.325	-0.122	-0.250	-0.124	-0.266	-0.362	-0.151	-0.166	
.620	-0.347	-0.054	-0.308	-0.009	-0.254	-0.105	-0.120	-0.116	
.700	-0.387	0.218	-0.390	0.197	-0.320	0.209	-0.223	0.081	
.800	-0.419	0.367	-0.349	0.361	-0.346	0.340	-0.259	0.294	
.900	-0.337	0.438	-0.323	0.489	-0.305	0.424	-0.289	0.344	



(a) Test case 6E1 (point 212).
Figure 8. Static test cases.

Point Number = 394 Mach Number = 0.604 Alpha = 2.00, deg.

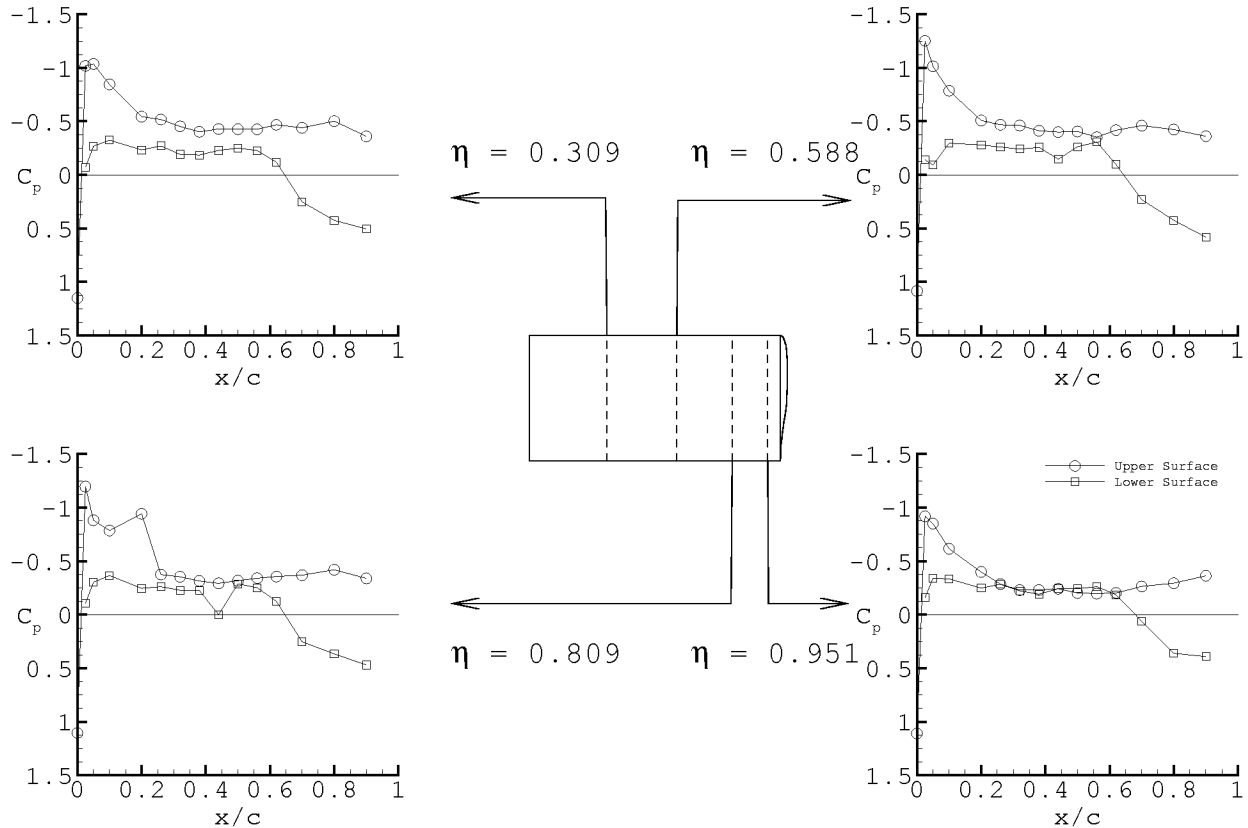
q	H	V	Rn	gamma	Cp*				
81.3	482.6	303.9	.403E+07	1.131	-1.410				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.104		1.035		1.056		1.069		
.025	-1.065	-0.043	-1.212	-0.118	-1.106	-0.093	-0.870	-0.146	
.050	-0.933	-0.229	-0.901	-0.045	-0.808	-0.265	-0.773	-0.300	
.100	-0.779	-0.279	-0.689	-0.247	-0.691	-0.316	-0.539	-0.294	
.200	-0.504	-0.067	-0.465	-0.136	-0.925	-0.135	-0.370	-0.146	
.260	-0.463	-0.218	-0.418	-0.185	-0.331	-0.197	-0.249	-0.237	
.320	-0.405	-0.135	-0.427	-0.183	-0.307	-0.172	-0.197	-0.152	
.380	-0.350	-0.121	-0.369	-0.201	-0.260	-0.168	-0.199	-0.152	
.440	-0.353	-0.179	-0.348	-0.073	-0.243	0.000	-0.216	-0.209	
.500	-0.381	-0.194	-0.338	-0.205	-0.285	-0.241	-0.178	-0.197	
.560	-0.383	-0.176	-0.302	-0.247	-0.294	-0.221	-0.169	-0.218	
.620	-0.421	-0.018	-0.372	-0.067	-0.327	-0.129	-0.177	-0.164	
.700	-0.436	0.248	-0.422	0.210	-0.346	0.244	-0.252	0.054	
.800	-0.471	0.411	-0.381	0.398	-0.388	0.359	-0.282	0.347	
.900	-0.360	0.491	-0.351	0.581	-0.325	0.455	-0.333	0.378	



(b) Test case 6E2 (point 394).
Figure 8. Continued.

Point Number = 364 Mach Number = 0.701 Alpha = 2.00, deg.

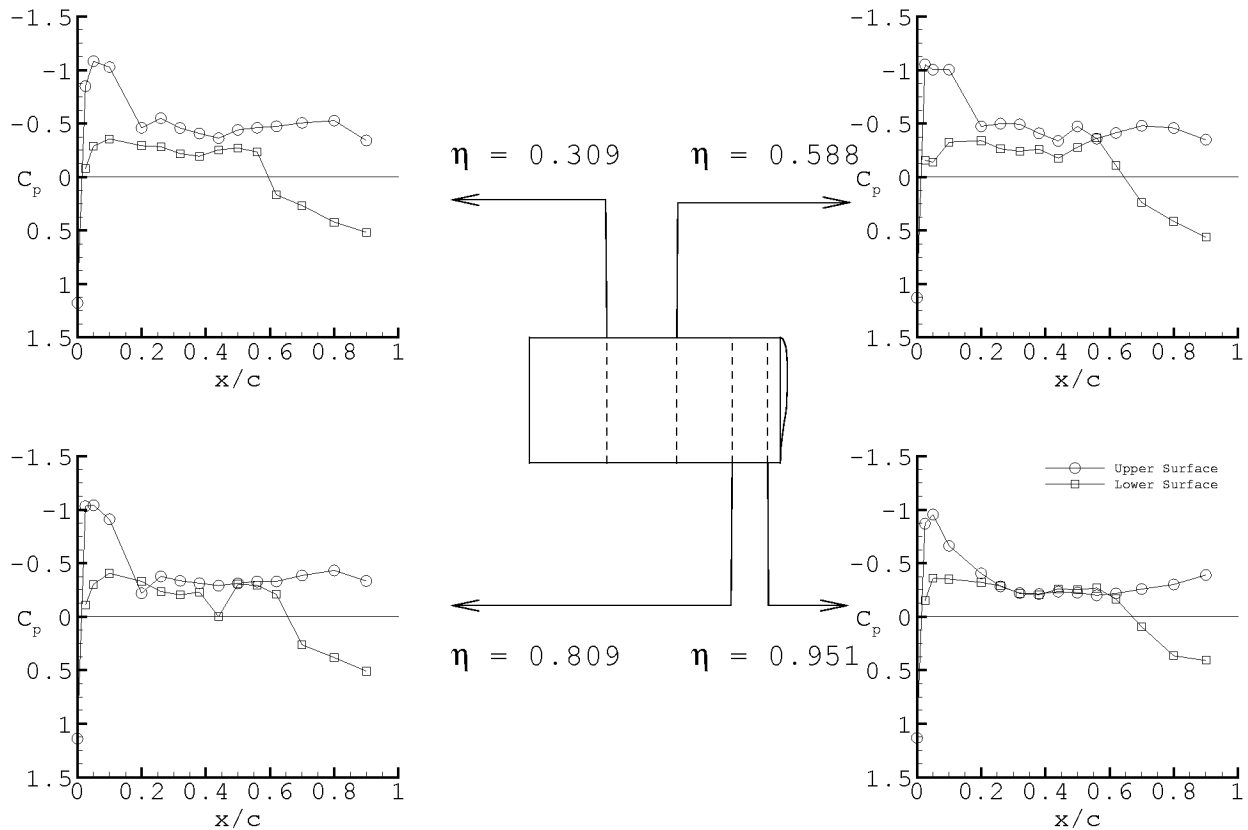
q	H	V	Rn	gamma	Cp*				
92.7	438.2	351.1	.402E+07	1.131	-0.863				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.151		1.085		1.106		1.111		
.025	-1.019	-0.070	-1.252	-0.140	-1.197	-0.106	-0.920	-0.158	
.050	-1.036	-0.267	-1.015	-0.093	-0.882	-0.304	-0.851	-0.340	
.100	-0.845	-0.325	-0.786	-0.296	-0.786	-0.366	-0.615	-0.334	
.200	-0.544	-0.234	-0.509	-0.280	-0.942	-0.246	-0.399	-0.248	
.260	-0.518	-0.271	-0.469	-0.261	-0.375	-0.261	-0.285	-0.283	
.320	-0.454	-0.192	-0.462	-0.242	-0.354	-0.228	-0.229	-0.222	
.380	-0.403	-0.185	-0.413	-0.258	-0.315	-0.225	-0.230	-0.190	
.440	-0.429	-0.229	-0.400	-0.146	-0.293	0.000	-0.241	-0.244	
.500	-0.427	-0.250	-0.405	-0.263	-0.317	-0.288	-0.202	-0.244	
.560	-0.426	-0.228	-0.353	-0.308	-0.341	-0.252	-0.196	-0.261	
.620	-0.468	-0.119	-0.418	-0.098	-0.356	-0.124	-0.203	-0.186	
.700	-0.439	0.253	-0.460	0.231	-0.369	0.253	-0.263	0.062	
.800	-0.503	0.424	-0.424	0.424	-0.420	0.367	-0.294	0.360	
.900	-0.360	0.505	-0.361	0.581	-0.339	0.471	-0.362	0.392	



(c) Test case 6E3 (point 364).
Figure 8. Continued.

Point Number = 331 Mach Number = 0.753 Alpha = 2.05, deg.

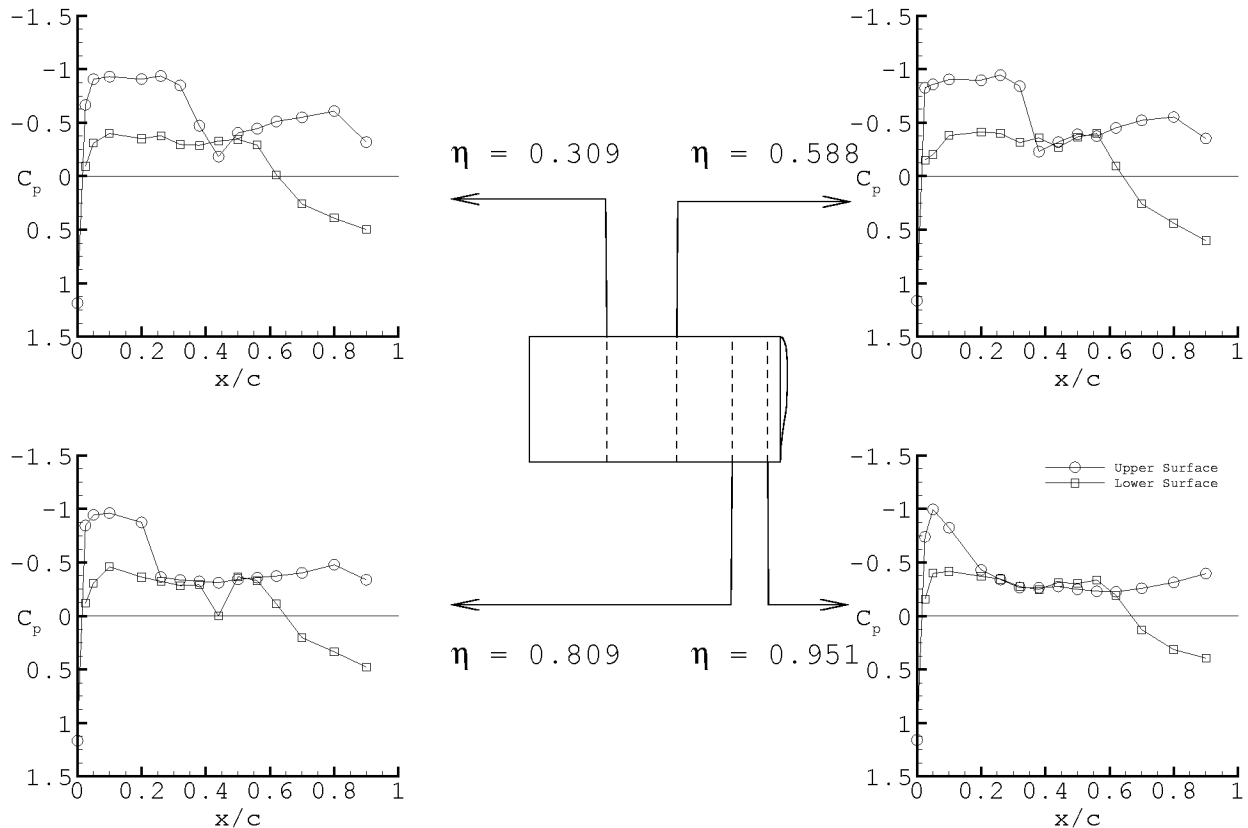
q	H	V	Rn	gamma	Cp*				
101.3	432.8	380.5	.400E+07	1.131	-0.648				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.177		1.129		1.140		1.133		
.025	-0.849	-0.078	-1.051	-0.156	-1.033	-0.111	-0.869	-0.150	
.050	-1.082	-0.288	-1.003	-0.138	-1.042	-0.302	-0.954	-0.360	
.100	-1.027	-0.356	-1.003	-0.324	-0.912	-0.406	-0.663	-0.352	
.200	-0.459	-0.292	-0.473	-0.339	-0.219	-0.330	-0.405	-0.321	
.260	-0.549	-0.283	-0.498	-0.263	-0.377	-0.236	-0.283	-0.288	
.320	-0.458	-0.218	-0.493	-0.239	-0.336	-0.205	-0.221	-0.218	
.380	-0.407	-0.193	-0.409	-0.261	-0.313	-0.230	-0.213	-0.204	
.440	-0.363	-0.253	-0.337	-0.176	-0.290	-0.001	-0.234	-0.260	
.500	-0.440	-0.271	-0.473	-0.278	-0.312	-0.304	-0.225	-0.253	
.560	-0.460	-0.233	-0.358	-0.364	-0.329	-0.294	-0.200	-0.268	
.620	-0.474	0.167	-0.412	-0.106	-0.330	-0.209	-0.218	-0.166	
.700	-0.506	0.267	-0.478	0.240	-0.385	0.262	-0.259	0.096	
.800	-0.526	0.422	-0.458	0.415	-0.433	0.383	-0.301	0.365	
.900	-0.342	0.517	-0.348	0.563	-0.334	0.510	-0.389	0.408	



(d) Test case 6E4 (point 331).
Figure 8. Continued.

Point Number = 152 Mach Number = 0.802 Alpha = 2.00, deg.

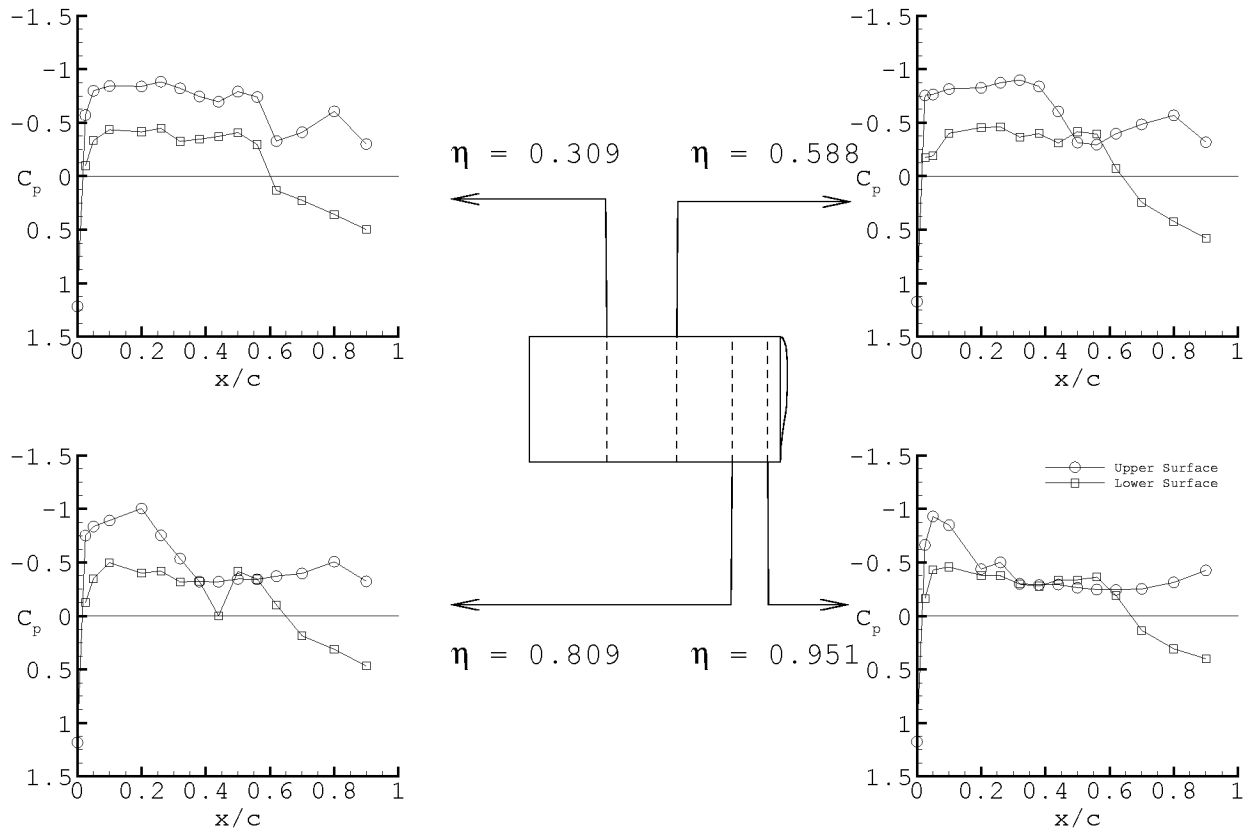
q	H	V	Rn	gamma	Cp*				
106.1	415.9	403.5	.401E+07	1.133	-0.479				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.187		1.164		1.166		1.159		
.025	-0.666	-0.092	-0.826	-0.151	-0.845	-0.117	-0.739	-0.156	
.050	-0.906	-0.310	-0.857	-0.201	-0.944	-0.307	-0.995	-0.398	
.100	-0.930	-0.399	-0.904	-0.381	-0.961	-0.460	-0.824	-0.416	
.200	-0.907	-0.350	-0.897	-0.414	-0.874	-0.362	-0.429	-0.370	
.260	-0.936	-0.378	-0.945	-0.399	-0.362	-0.324	-0.340	-0.345	
.320	-0.849	-0.296	-0.841	-0.314	-0.336	-0.283	-0.265	-0.274	
.380	-0.471	-0.289	-0.230	-0.359	-0.323	-0.292	-0.263	-0.247	
.440	-0.183	-0.329	-0.318	-0.269	-0.310	0.000	-0.275	-0.313	
.500	-0.404	-0.344	-0.391	-0.366	-0.342	-0.366	-0.249	-0.303	
.560	-0.444	-0.291	-0.374	-0.398	-0.358	-0.331	-0.230	-0.335	
.620	-0.511	-0.013	-0.451	-0.093	-0.373	-0.113	-0.226	-0.193	
.700	-0.550	0.260	-0.522	0.258	-0.402	0.204	-0.258	0.130	
.800	-0.608	0.392	-0.553	0.440	-0.478	0.335	-0.313	0.314	
.900	-0.319	0.499	-0.353	0.602	-0.338	0.478	-0.396	0.393	



(e) Test case 6E5 (point 152).
Figure 8. Continued.

Point Number = 462 Mach Number = 0.828 Alpha = 2.00, deg.

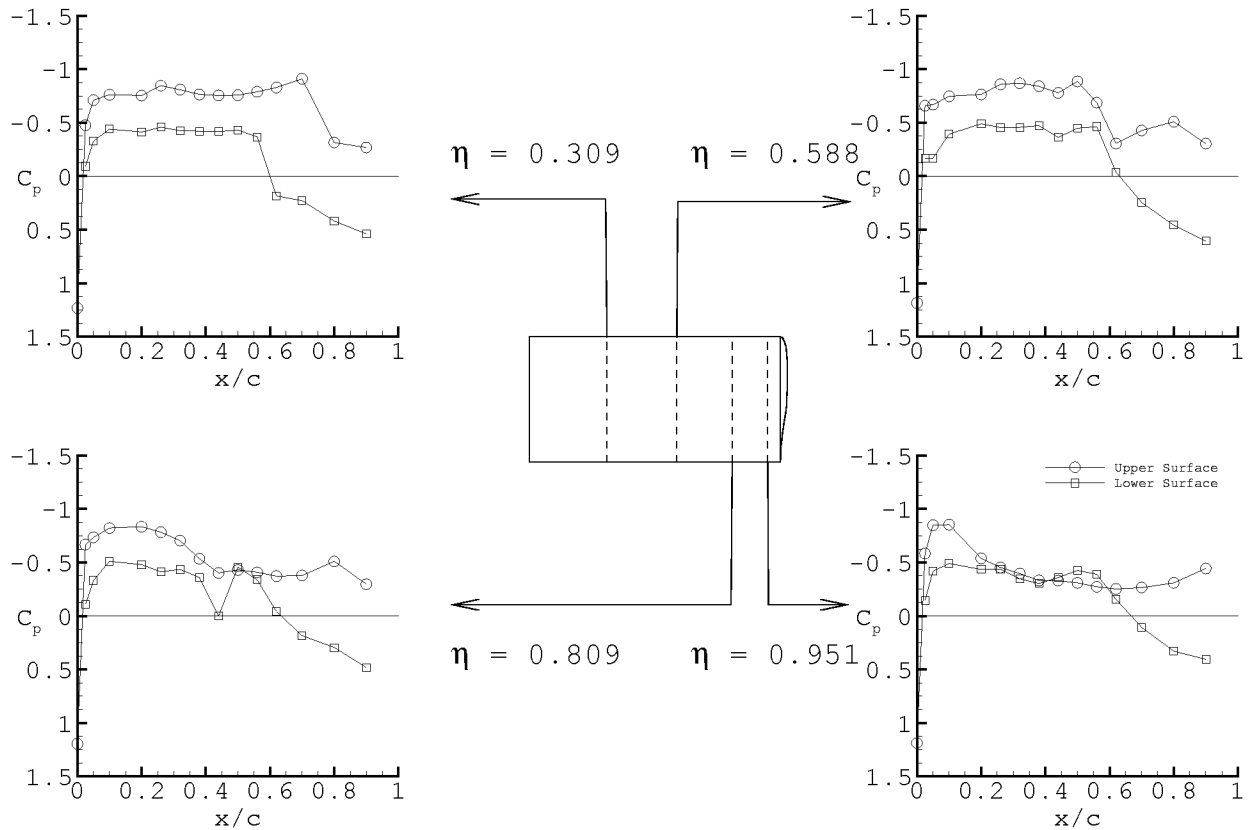
q	H	V	Rn	gamma	Cp*				
108.0	406.5	414.0	.400E+07	1.132	-0.400				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.217		1.172		1.183		1.175		
.025	-0.571	-0.098	-0.755	-0.174	-0.751	-0.124	-0.664	-0.164	
.050	-0.798	-0.333	-0.764	-0.190	-0.835	-0.349	-0.929	-0.429	
.100	-0.842	-0.434	-0.815	-0.402	-0.892	-0.498	-0.848	-0.458	
.200	-0.839	-0.415	-0.825	-0.455	-1.004	-0.400	-0.438	-0.379	
.260	-0.883	-0.447	-0.873	-0.459	-0.754	-0.420	-0.501	-0.375	
.320	-0.821	-0.325	-0.898	-0.365	-0.536	-0.317	-0.300	-0.297	
.380	-0.745	-0.345	-0.839	-0.398	-0.321	-0.323	-0.290	-0.279	
.440	-0.696	-0.371	-0.605	-0.309	-0.320	-0.001	-0.293	-0.336	
.500	-0.790	-0.406	-0.315	-0.416	-0.345	-0.416	-0.263	-0.337	
.560	-0.740	-0.296	-0.294	-0.393	-0.342	-0.345	-0.246	-0.363	
.620	-0.328	0.133	-0.397	-0.073	-0.372	-0.103	-0.243	-0.191	
.700	-0.410	0.226	-0.484	0.244	-0.397	0.186	-0.253	0.136	
.800	-0.606	0.357	-0.569	0.423	-0.507	0.312	-0.314	0.307	
.900	-0.300	0.498	-0.318	0.579	-0.323	0.469	-0.426	0.400	



(f) Test case 6E6 (point 462).
Figure 8. Continued.

Point Number = 276 Mach Number = 0.850 Alpha = 2.01, deg.

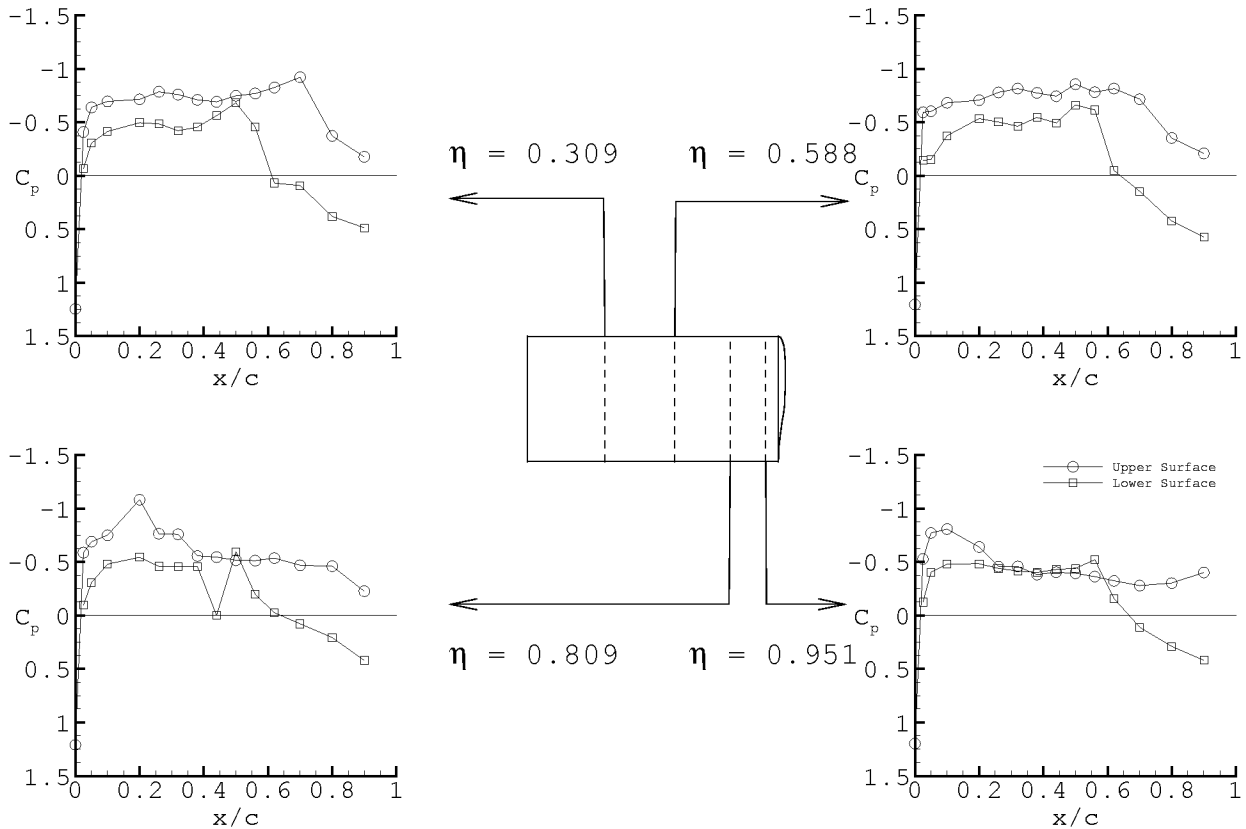
q	H	V	Rn	gamma	Cp*				
112.6	410.3	427.6	.400E+07	1.131	-0.338				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.232		1.186		1.196		1.188		
.025	-0.476	-0.092	-0.659	-0.167	-0.667	-0.108	-0.585	-0.145	
.050	-0.711	-0.328	-0.669	-0.167	-0.734	-0.332	-0.848	-0.419	
.100	-0.762	-0.440	-0.747	-0.394	-0.821	-0.510	-0.853	-0.490	
.200	-0.753	-0.412	-0.764	-0.490	-0.834	-0.480	-0.538	-0.435	
.260	-0.846	-0.458	-0.858	-0.455	-0.783	-0.412	-0.453	-0.438	
.320	-0.808	-0.425	-0.869	-0.456	-0.704	-0.434	-0.396	-0.347	
.380	-0.764	-0.420	-0.841	-0.474	-0.535	-0.360	-0.332	-0.303	
.440	-0.754	-0.417	-0.779	-0.363	-0.402	0.000	-0.330	-0.358	
.500	-0.757	-0.430	-0.885	-0.449	-0.429	-0.457	-0.309	-0.426	
.560	-0.789	-0.367	-0.687	-0.463	-0.407	-0.338	-0.273	-0.388	
.620	-0.829	0.186	-0.305	-0.037	-0.372	-0.042	-0.252	-0.155	
.700	-0.910	0.228	-0.427	0.247	-0.378	0.185	-0.265	0.109	
.800	-0.315	0.420	-0.509	0.458	-0.510	0.296	-0.309	0.330	
.900	-0.268	0.540	-0.304	0.607	-0.296	0.483	-0.443	0.406	



(g) Test case 6E7 (point 276).
Figure 8. Continued.

Point Number = 423 Mach Number = 0.876 Alpha = 2.00, deg.
 ρ H V Rn gamma Cp*
 115.0 404.0 438.6 .401E+07 1.132 -0.269

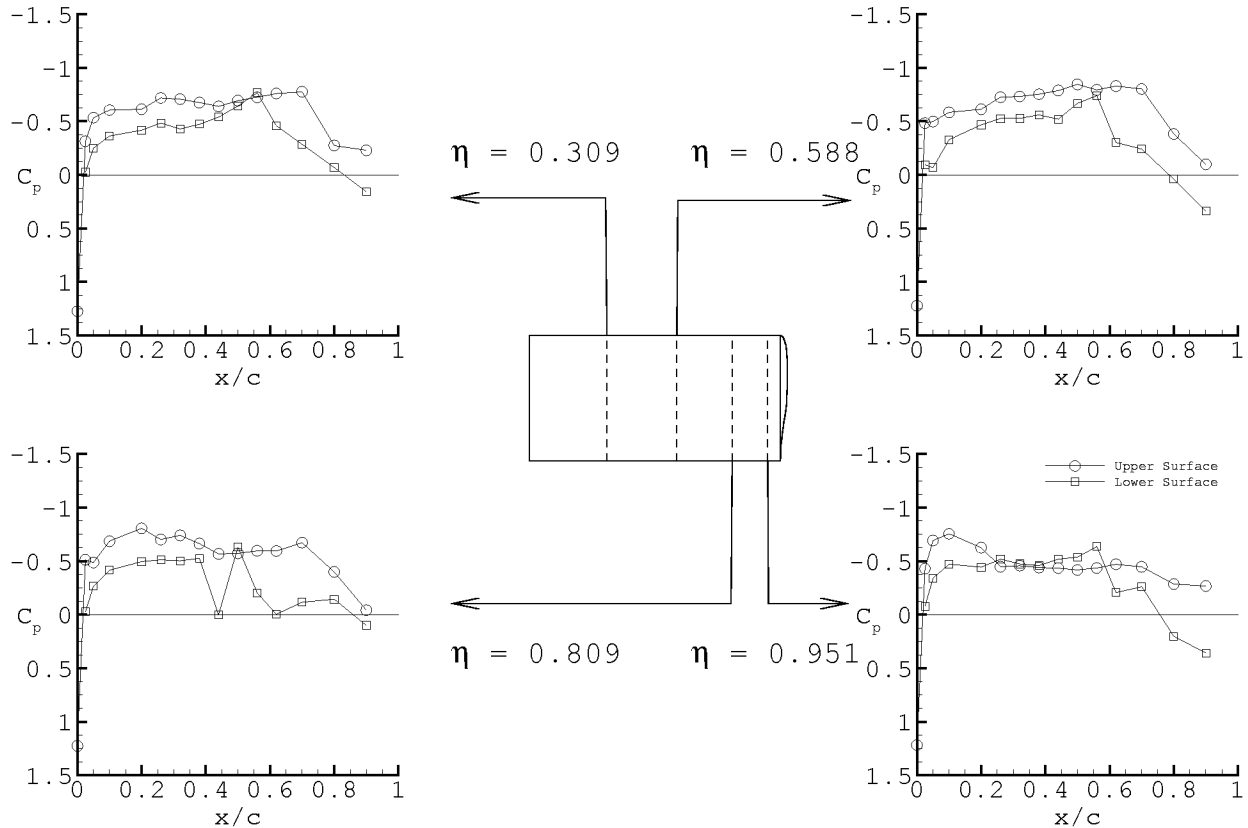
x/c	$\eta = 0.309$		$\eta = 0.588$		$\eta = 0.809$		$\eta = 0.951$	
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl
.000	1.246		1.203		1.209		1.197	
.025	-0.409	-0.066	-0.593	-0.144	-0.587	-0.096	-0.527	-0.125
.050	-0.638	-0.305	-0.602	-0.151	-0.689	-0.306	-0.771	-0.403
.100	-0.695	-0.414	-0.681	-0.374	-0.750	-0.479	-0.807	-0.481
.200	-0.714	-0.496	-0.706	-0.535	-1.082	-0.544	-0.640	-0.483
.260	-0.784	-0.484	-0.779	-0.501	-0.764	-0.459	-0.456	-0.439
.320	-0.758	-0.421	-0.814	-0.462	-0.758	-0.455	-0.458	-0.415
.380	-0.709	-0.454	-0.774	-0.545	-0.556	-0.458	-0.382	-0.401
.440	-0.691	-0.562	-0.743	-0.494	-0.545	-0.001	-0.404	-0.429
.500	-0.747	-0.680	-0.856	-0.660	-0.516	-0.595	-0.394	-0.440
.560	-0.768	-0.456	-0.780	-0.615	-0.512	-0.198	-0.363	-0.521
.620	-0.824	0.068	-0.814	-0.049	-0.536	-0.026	-0.323	-0.157
.700	-0.921	0.093	-0.715	0.147	-0.469	0.079	-0.279	0.111
.800	-0.371	0.381	-0.352	0.424	-0.460	0.207	-0.302	0.290
.900	-0.177	0.488	-0.209	0.574	-0.227	0.420	-0.401	0.419



(h) Test case 6E8 (point 423).
 Figure 8. Continued.

Point Number = 251 Mach Number = 0.907 Alpha = 2.00, deg.

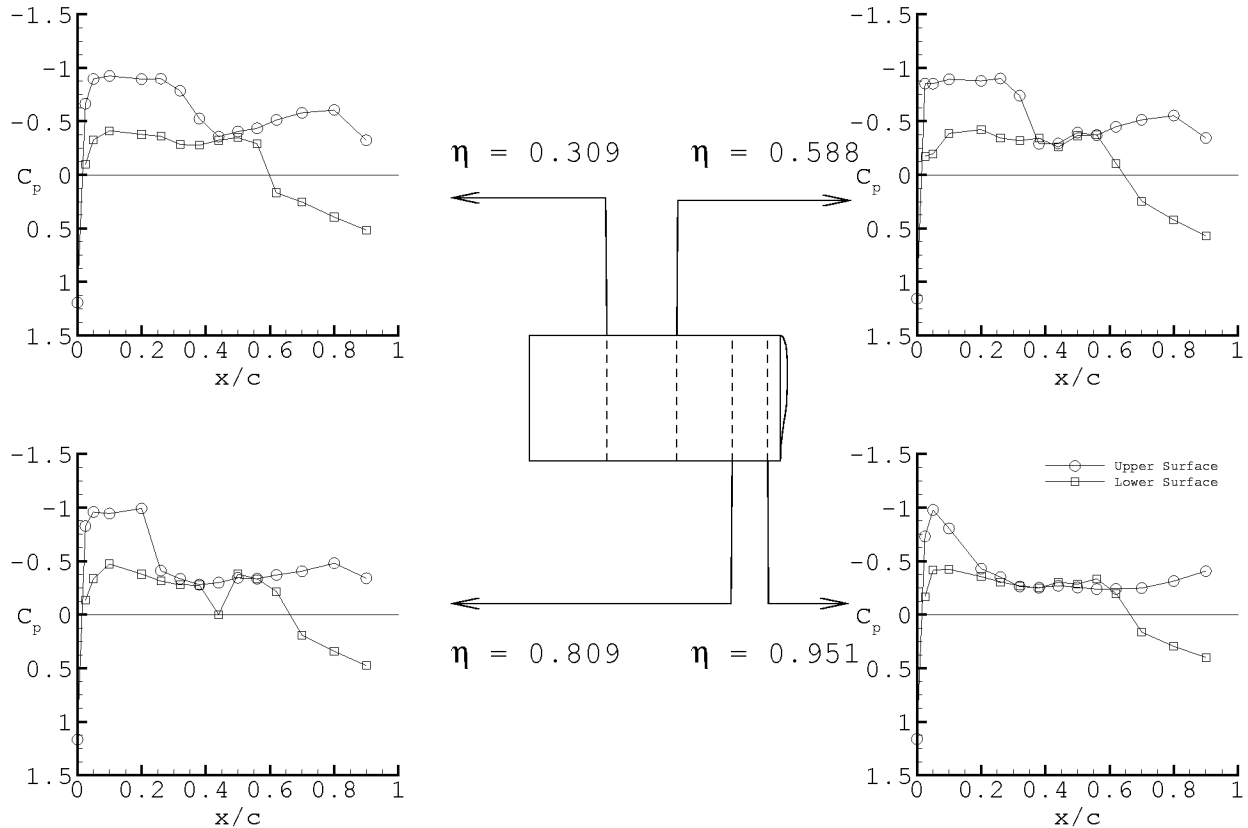
q	H	V	Rn	gamma	Cp*				
117.7	397.5	452.3	.401E+07	1.133	-0.194				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.274		1.223		1.226		1.218		
.025	-0.315	-0.025	-0.485	-0.095	-0.512	-0.027	-0.430	-0.078	
.050	-0.535	-0.250	-0.499	-0.067	-0.487	-0.267	-0.693	-0.341	
.100	-0.606	-0.364	-0.585	-0.329	-0.687	-0.415	-0.756	-0.472	
.200	-0.614	-0.417	-0.614	-0.468	-0.807	-0.495	-0.626	-0.443	
.260	-0.719	-0.484	-0.726	-0.527	-0.702	-0.512	-0.448	-0.517	
.320	-0.708	-0.430	-0.733	-0.528	-0.741	-0.503	-0.457	-0.474	
.380	-0.676	-0.474	-0.754	-0.560	-0.664	-0.526	-0.440	-0.459	
.440	-0.640	-0.540	-0.789	-0.520	-0.568	0.002	-0.435	-0.518	
.500	-0.695	-0.645	-0.846	-0.669	-0.573	-0.632	-0.417	-0.538	
.560	-0.725	-0.768	-0.795	-0.741	-0.597	-0.204	-0.436	-0.637	
.620	-0.761	-0.459	-0.830	-0.302	-0.595	-0.005	-0.471	-0.206	
.700	-0.777	-0.285	-0.803	-0.242	-0.673	-0.116	-0.447	-0.261	
.800	-0.275	-0.069	-0.383	0.039	-0.399	-0.145	-0.286	0.202	
.900	-0.230	0.157	-0.099	0.337	-0.042	0.100	-0.267	0.358	



(i) Test case 6E9 (point 251).
Figure 8. Continued.

Point Number = 489 Mach Number = 0.803 Alpha = 1.99, deg.

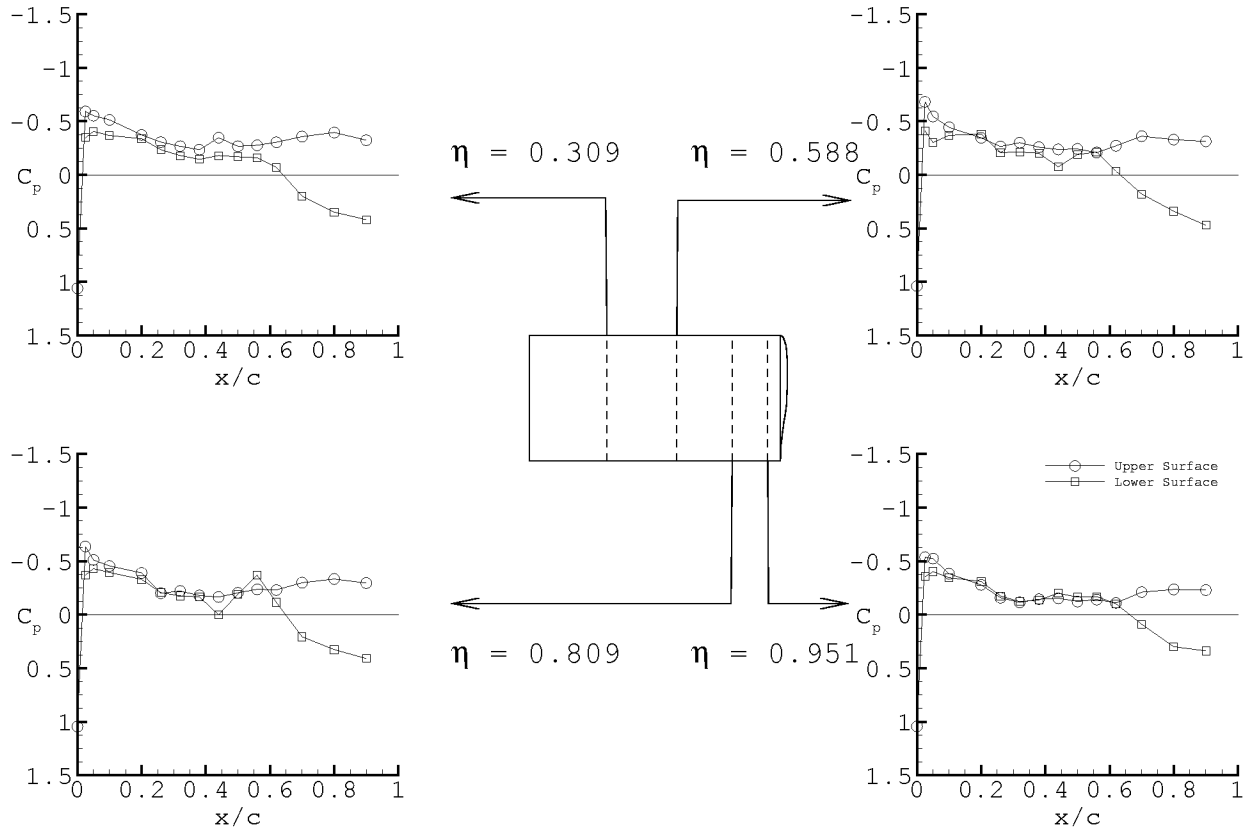
q	H	V	Rn	gamma	Cp*				
105.8	414.7	402.7	.400E+07	1.132	-0.476				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.193		1.157		1.168		1.163		
.025	-0.665	-0.099	-0.852	-0.174	-0.828	-0.134	-0.731	-0.168	
.050	-0.897	-0.327	-0.852	-0.196	-0.959	-0.336	-0.979	-0.416	
.100	-0.924	-0.413	-0.894	-0.388	-0.945	-0.474	-0.806	-0.424	
.200	-0.896	-0.378	-0.879	-0.424	-0.992	-0.379	-0.429	-0.355	
.260	-0.899	-0.361	-0.901	-0.344	-0.411	-0.314	-0.351	-0.306	
.320	-0.786	-0.284	-0.740	-0.320	-0.335	-0.277	-0.262	-0.270	
.380	-0.526	-0.277	-0.290	-0.343	-0.280	-0.276	-0.252	-0.249	
.440	-0.357	-0.324	-0.294	-0.261	-0.299	-0.001	-0.270	-0.304	
.500	-0.405	-0.349	-0.395	-0.366	-0.344	-0.380	-0.255	-0.285	
.560	-0.436	-0.290	-0.371	-0.373	-0.336	-0.333	-0.239	-0.335	
.620	-0.514	0.167	-0.450	-0.108	-0.371	-0.217	-0.241	-0.198	
.700	-0.580	0.254	-0.515	0.246	-0.406	0.193	-0.248	0.164	
.800	-0.607	0.394	-0.554	0.422	-0.481	0.342	-0.313	0.297	
.900	-0.324	0.515	-0.345	0.571	-0.340	0.475	-0.407	0.400	



(j) Test case 6E10 (point 489).
Figure 8. Continued.

Point Number = 214 Mach Number = 0.403 Alpha = 0.21, deg.

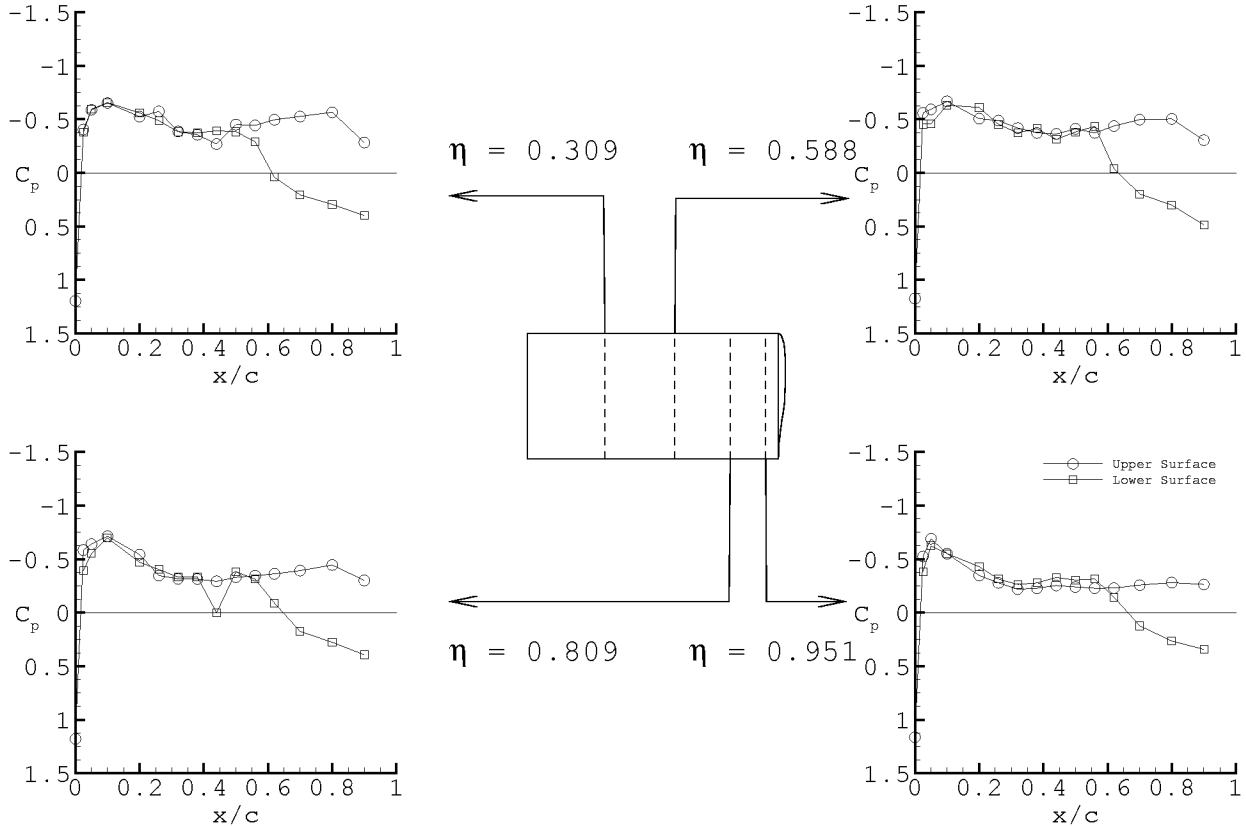
q	H	V	Rn	gamma	Cp*				
111.1	1322.8	203.4	.802E+07	1.135	-3.983				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.060		1.039		1.046		1.044		
.025	-0.593	-0.348	-0.683	-0.411	-0.637	-0.370	-0.537	-0.355	
.050	-0.553	-0.407	-0.547	-0.303	-0.511	-0.429	-0.524	-0.402	
.100	-0.515	-0.368	-0.444	-0.370	-0.455	-0.394	-0.382	-0.345	
.200	-0.373	-0.338	-0.346	-0.382	-0.389	-0.329	-0.278	-0.311	
.260	-0.306	-0.236	-0.265	-0.208	-0.200	-0.206	-0.157	-0.174	
.320	-0.268	-0.180	-0.301	-0.215	-0.221	-0.175	-0.115	-0.122	
.380	-0.236	-0.145	-0.259	-0.202	-0.179	-0.166	-0.145	-0.136	
.440	-0.348	-0.180	-0.238	-0.076	-0.165	0.000	-0.153	-0.200	
.500	-0.268	-0.170	-0.243	-0.190	-0.204	-0.192	-0.123	-0.164	
.560	-0.277	-0.160	-0.209	-0.214	-0.237	-0.369	-0.141	-0.168	
.620	-0.305	-0.070	-0.272	-0.034	-0.230	-0.115	-0.110	-0.101	
.700	-0.358	0.198	-0.362	0.179	-0.299	0.207	-0.211	0.090	
.800	-0.396	0.348	-0.330	0.340	-0.333	0.327	-0.235	0.299	
.900	-0.324	0.418	-0.313	0.470	-0.295	0.410	-0.229	0.339	



(k) Test case 6E11 (point 214).
Figure 8. Continued.

Point Number = 154 Mach Number = 0.801 Alpha = 0.03, deg.

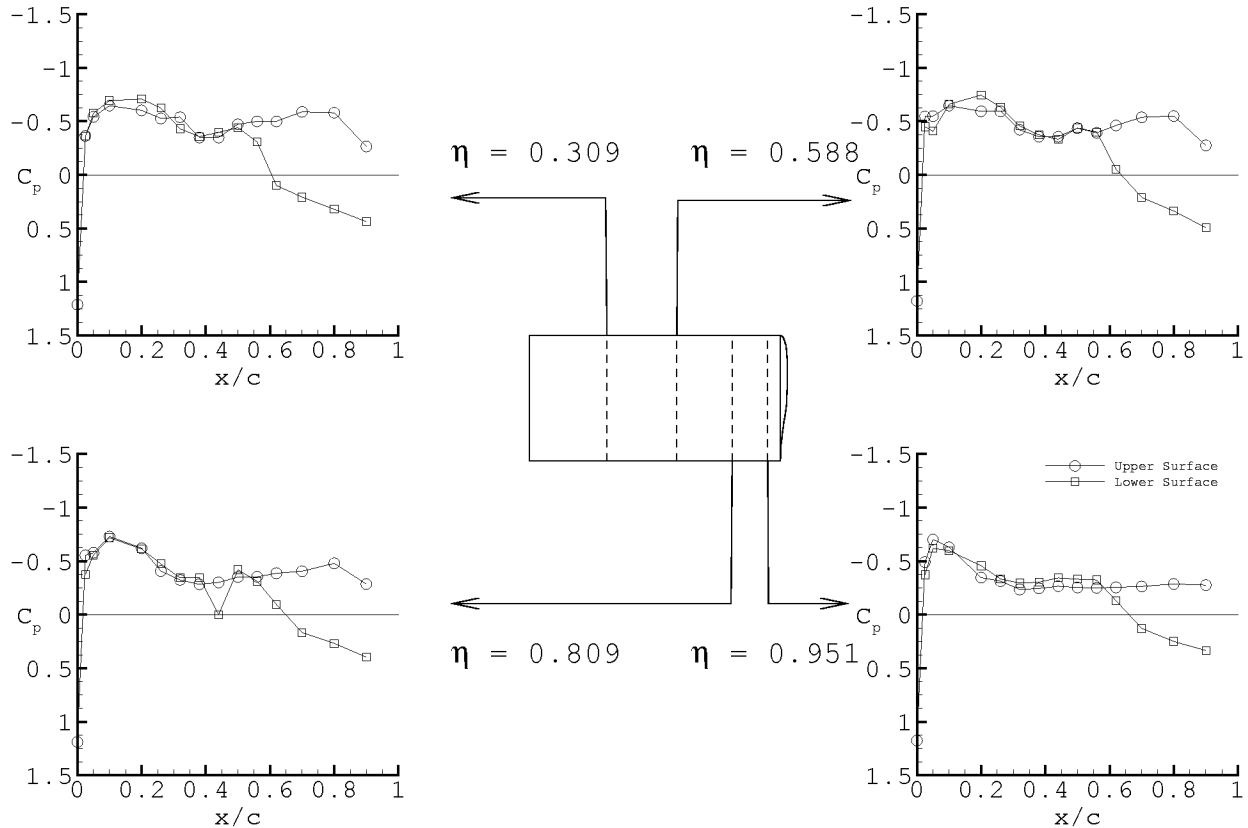
	q		H	V	Rn	γ	Cp^*	
	106.0		416.2	403.1	.401E+07	1.133	-0.482	
x/c	$y/s = 0.309$		$y/s = 0.588$		$y/s = 0.809$		$y/s = 0.951$	
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl
.000	1.197		1.174		1.180		1.165	
.025	-0.405	-0.381	-0.560	-0.456	-0.586	-0.393	-0.525	-0.384
.050	-0.589	-0.595	-0.593	-0.459	-0.641	-0.554	-0.691	-0.624
.100	-0.653	-0.657	-0.669	-0.632	-0.714	-0.698	-0.550	-0.550
.200	-0.526	-0.562	-0.507	-0.611	-0.542	-0.471	-0.348	-0.431
.260	-0.575	-0.487	-0.489	-0.453	-0.346	-0.404	-0.278	-0.314
.320	-0.388	-0.384	-0.419	-0.375	-0.316	-0.333	-0.220	-0.263
.380	-0.356	-0.373	-0.373	-0.415	-0.314	-0.333	-0.228	-0.277
.440	-0.270	-0.393	-0.364	-0.314	-0.293	0.000	-0.254	-0.328
.500	-0.451	-0.384	-0.411	-0.383	-0.331	-0.381	-0.240	-0.305
.560	-0.444	-0.292	-0.374	-0.436	-0.345	-0.314	-0.228	-0.315
.620	-0.497	0.040	-0.438	-0.039	-0.362	-0.090	-0.229	-0.144
.700	-0.527	0.206	-0.498	0.197	-0.393	0.176	-0.257	0.124
.800	-0.566	0.295	-0.504	0.301	-0.445	0.278	-0.281	0.265
.900	-0.284	0.399	-0.306	0.485	-0.301	0.393	-0.263	0.342



(I) Test case 6E12 (point 154).
Figure 8. Continued.

Point Number = 464 Mach Number = 0.821 Alpha = -0.01, deg.

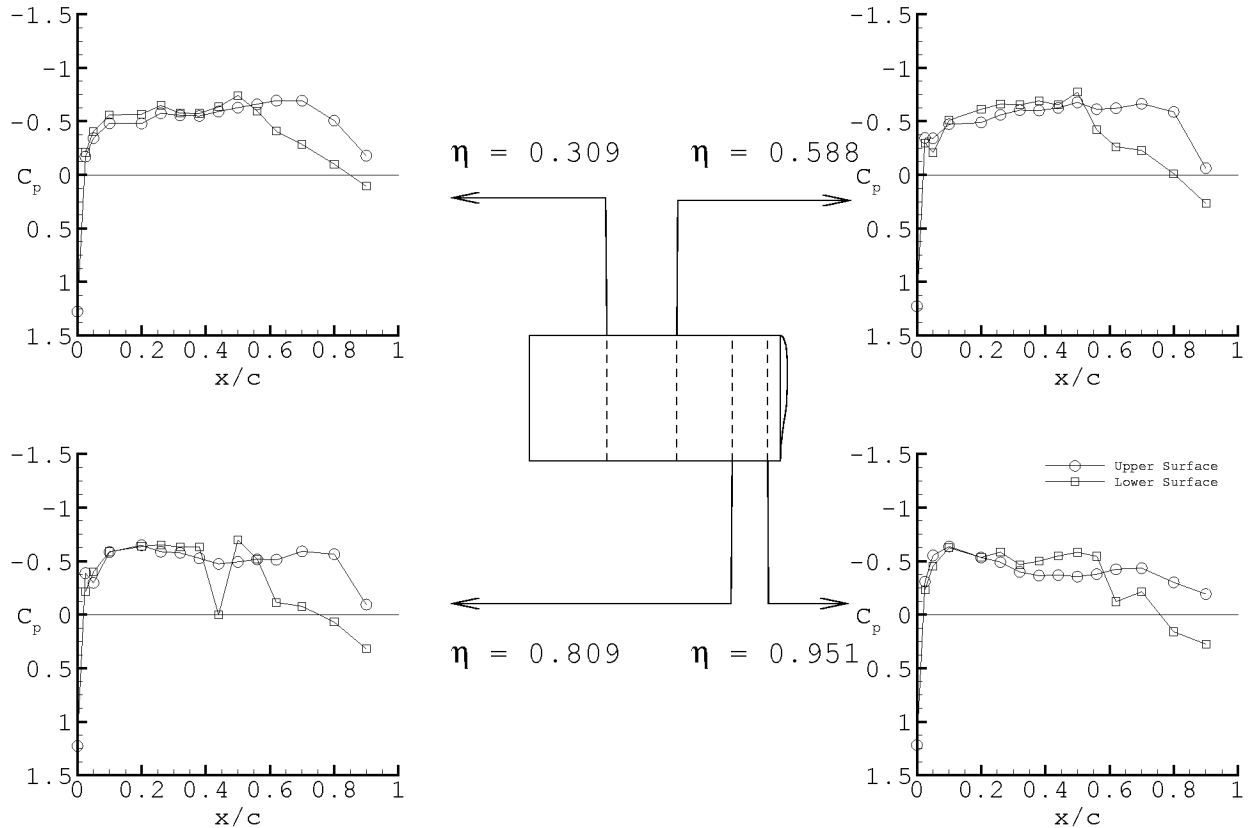
q	H	V	Rn	gamma	Cp*				
106.8	406.3	410.6	.398E+07	1.132	-0.420				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.213		1.179		1.190		1.177		
.025	-0.365	-0.360	-0.546	-0.450	-0.555	-0.377	-0.492	-0.373	
.050	-0.543	-0.577	-0.549	-0.408	-0.578	-0.557	-0.703	-0.620	
.100	-0.647	-0.695	-0.647	-0.661	-0.730	-0.719	-0.630	-0.598	
.200	-0.603	-0.709	-0.594	-0.747	-0.621	-0.614	-0.346	-0.456	
.260	-0.527	-0.625	-0.595	-0.634	-0.408	-0.475	-0.313	-0.333	
.320	-0.539	-0.431	-0.421	-0.458	-0.324	-0.344	-0.235	-0.295	
.380	-0.349	-0.357	-0.357	-0.375	-0.284	-0.346	-0.245	-0.304	
.440	-0.350	-0.398	-0.357	-0.332	-0.301	-0.001	-0.266	-0.343	
.500	-0.473	-0.442	-0.437	-0.438	-0.351	-0.420	-0.254	-0.332	
.560	-0.500	-0.309	-0.393	-0.401	-0.354	-0.312	-0.250	-0.325	
.620	-0.500	0.099	-0.462	-0.052	-0.387	-0.096	-0.255	-0.132	
.700	-0.589	0.208	-0.538	0.210	-0.406	0.169	-0.263	0.130	
.800	-0.581	0.321	-0.550	0.337	-0.480	0.269	-0.287	0.250	
.900	-0.266	0.436	-0.276	0.494	-0.286	0.397	-0.276	0.336	



(m) Test case 6E13 (point 464).
Figure 8. Continued.

Point Number = 253 Mach Number = 0.901 Alpha = 0.00, deg.

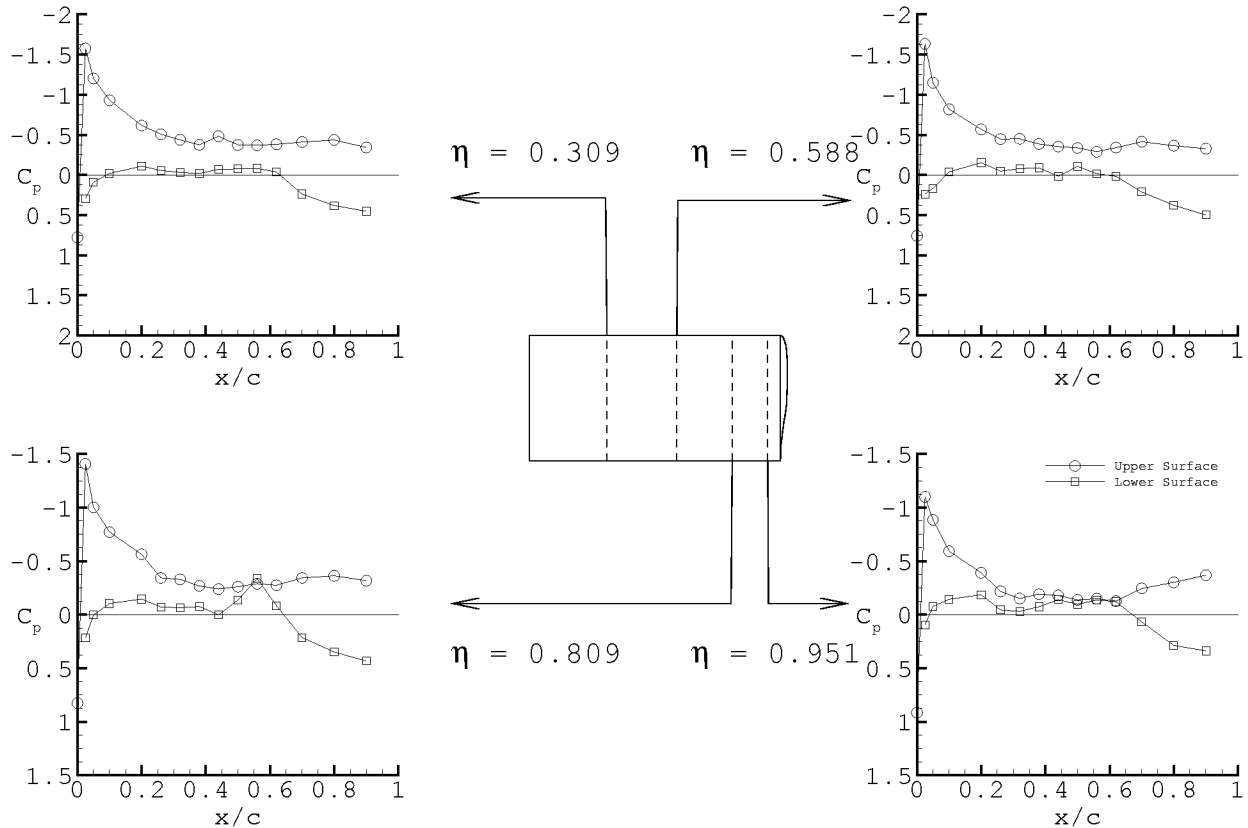
	q		H	V	Rn	γ	Cp^*	
	116.9	397.5	449.9	.400E+07	1.133	-0.208		
x/c	$y/s = 0.309$		$y/s = 0.588$		$y/s = 0.809$		$y/s = 0.951$	
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl
.000	1.276		1.227		1.227		1.218	
.025	-0.171	-0.210	-0.347	-0.299	-0.388	-0.216	-0.308	-0.234
.050	-0.343	-0.406	-0.342	-0.207	-0.296	-0.399	-0.554	-0.454
.100	-0.483	-0.561	-0.474	-0.511	-0.586	-0.588	-0.637	-0.626
.200	-0.480	-0.568	-0.490	-0.614	-0.648	-0.636	-0.534	-0.535
.260	-0.576	-0.649	-0.561	-0.662	-0.588	-0.653	-0.490	-0.585
.320	-0.556	-0.576	-0.605	-0.654	-0.577	-0.632	-0.399	-0.467
.380	-0.551	-0.575	-0.602	-0.691	-0.527	-0.630	-0.365	-0.500
.440	-0.592	-0.636	-0.626	-0.654	-0.474	0.001	-0.370	-0.548
.500	-0.628	-0.742	-0.677	-0.774	-0.493	-0.698	-0.355	-0.582
.560	-0.660	-0.597	-0.614	-0.420	-0.517	-0.521	-0.378	-0.546
.620	-0.695	-0.408	-0.623	-0.263	-0.513	-0.114	-0.424	-0.121
.700	-0.693	-0.284	-0.665	-0.229	-0.592	-0.078	-0.434	-0.215
.800	-0.507	-0.100	-0.588	-0.011	-0.565	0.069	-0.301	0.160
.900	-0.179	0.105	-0.063	0.265	-0.094	0.320	-0.193	0.275



(n) Test case 6E14 (point 253).
Figure 8. Continued.

Point Number = 210 Mach Number = 0.403 Alpha = 4.20, deg.

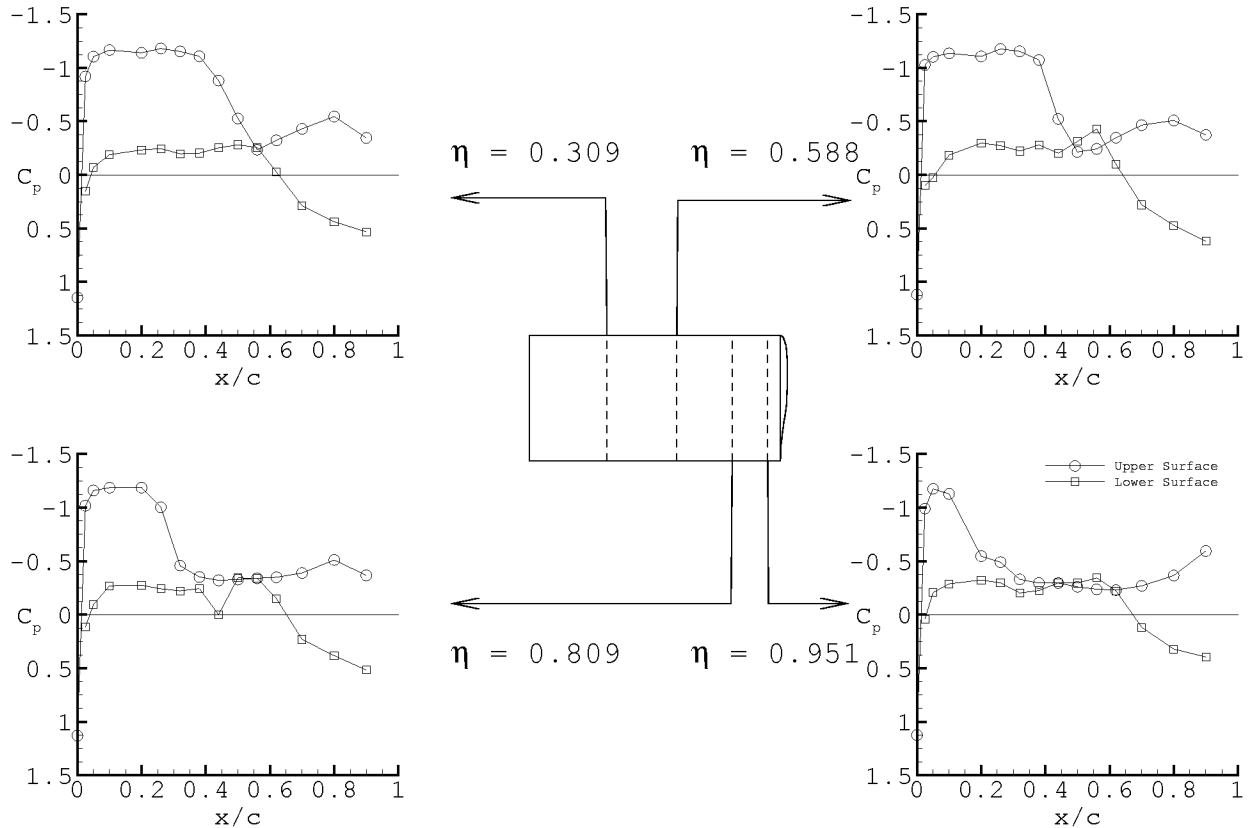
q	H	V	Rn	gamma	Cp*				
111.0	1321.4	203.3	.803E+07	1.135	-3.983				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	0.778		0.761		0.827		0.916		
.025	-1.576	0.296	-1.634	0.239	-1.409	0.216	-1.101	0.097	
.050	-1.202	0.090	-1.147	0.168	-1.003	0.004	-0.886	-0.078	
.100	-0.931	-0.018	-0.818	-0.038	-0.772	-0.103	-0.593	-0.143	
.200	-0.616	-0.108	-0.567	-0.153	-0.564	-0.146	-0.392	-0.186	
.260	-0.507	-0.056	-0.447	-0.046	-0.343	-0.072	-0.218	-0.044	
.320	-0.437	-0.030	-0.449	-0.079	-0.329	-0.065	-0.151	-0.030	
.380	-0.376	-0.018	-0.385	-0.088	-0.269	-0.075	-0.192	-0.074	
.440	-0.481	-0.070	-0.353	0.019	-0.240	0.000	-0.179	-0.140	
.500	-0.372	-0.074	-0.336	-0.106	-0.261	-0.135	-0.139	-0.096	
.560	-0.369	-0.081	-0.289	-0.015	-0.289	-0.337	-0.149	-0.138	
.620	-0.382	-0.036	-0.340	0.019	-0.275	-0.085	-0.127	-0.121	
.700	-0.409	0.238	-0.413	0.213	-0.343	0.214	-0.245	0.067	
.800	-0.435	0.382	-0.363	0.377	-0.362	0.348	-0.301	0.287	
.900	-0.341	0.453	-0.327	0.500	-0.317	0.434	-0.369	0.339	



(o) Test case 6E15 (point 210).
Figure 8. Continued.

Point Number = 150 Mach Number = 0.803 Alpha = 3.99, deg.

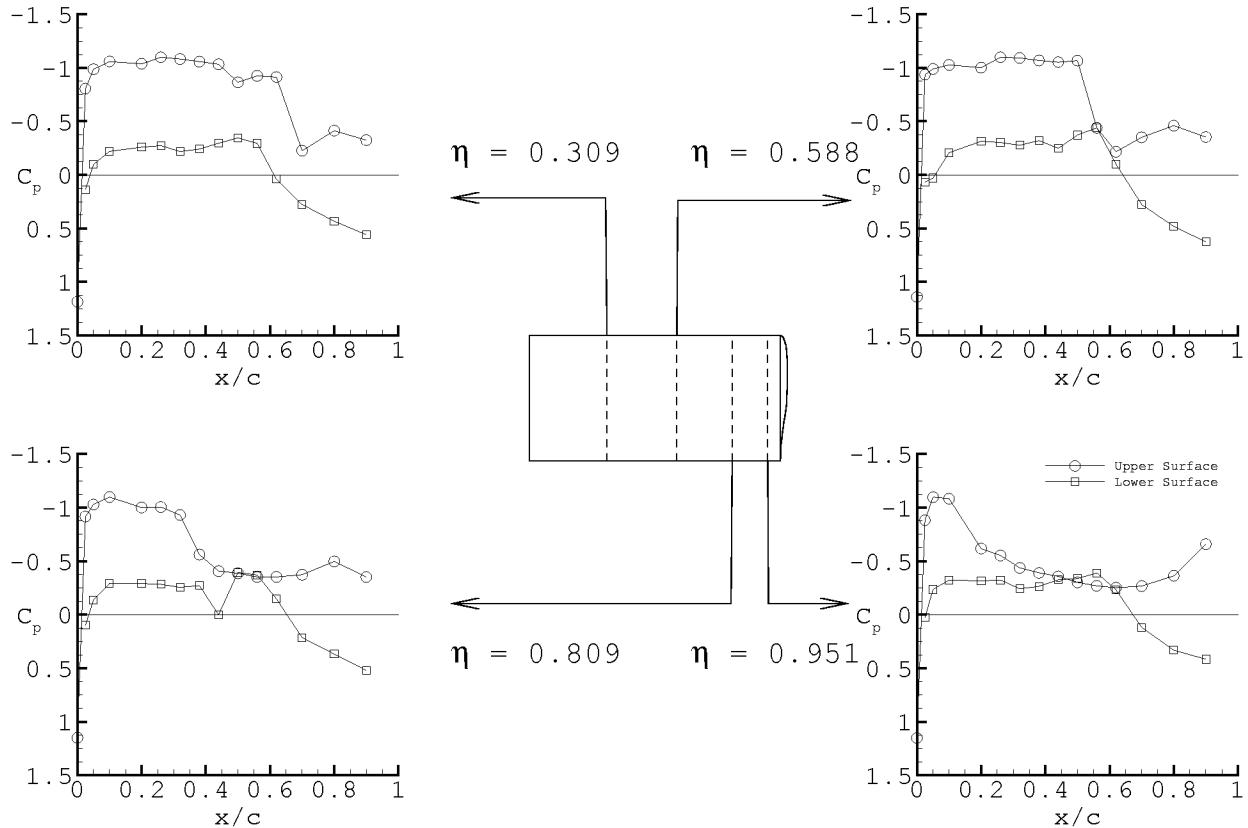
Q	H	V	Rn	gamma	Cp*				
106.2	415.5	403.7	.401E+07	1.133	-0.476				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.147		1.119		1.131		1.125		
.025	-0.920	0.152	-1.028	0.099	-1.019	0.115	-0.990	0.041	
.050	-1.105	-0.070	-1.103	0.024	-1.160	-0.094	-1.176	-0.206	
.100	-1.167	-0.189	-1.136	-0.185	-1.186	-0.270	-1.128	-0.288	
.200	-1.141	-0.233	-1.107	-0.298	-1.187	-0.275	-0.547	-0.323	
.260	-1.182	-0.245	-1.177	-0.273	-1.004	-0.242	-0.491	-0.298	
.320	-1.154	-0.197	-1.155	-0.223	-0.458	-0.222	-0.330	-0.202	
.380	-1.109	-0.204	-1.073	-0.281	-0.352	-0.243	-0.295	-0.224	
.440	-0.882	-0.254	-0.522	-0.203	-0.321	0.000	-0.295	-0.297	
.500	-0.527	-0.282	-0.215	-0.314	-0.328	-0.344	-0.260	-0.295	
.560	-0.235	-0.256	-0.243	-0.429	-0.340	-0.340	-0.237	-0.343	
.620	-0.323	-0.029	-0.347	-0.099	-0.349	-0.151	-0.230	-0.222	
.700	-0.431	0.289	-0.465	0.280	-0.389	0.232	-0.269	0.119	
.800	-0.546	0.437	-0.509	0.473	-0.511	0.384	-0.366	0.322	
.900	-0.345	0.533	-0.373	0.620	-0.367	0.518	-0.594	0.396	



(p) Test case 6E16 (point 150).
Figure 8. Continued.

Point Number = 460 Mach Number = 0.828 Alpha = 4.00, deg.

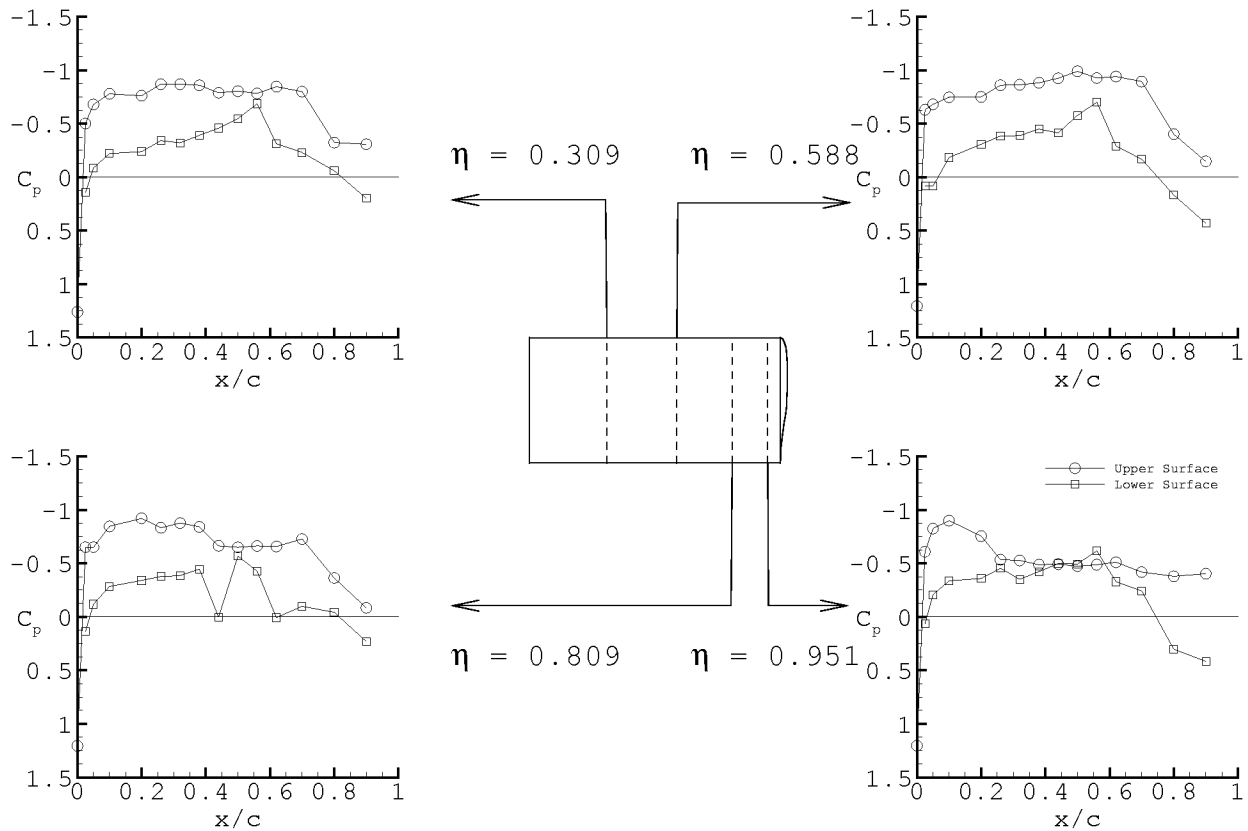
Q	H	V	Rn	gamma	Cp*				
107.9	406.3	413.7	.401E+07	1.132	-0.400				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.186		1.140		1.151		1.152		
.025	-0.806	0.137	-0.938	0.069	-0.917	0.099	-0.883	0.027	
.050	-0.988	-0.098	-0.990	0.029	-1.029	-0.136	-1.098	-0.235	
.100	-1.060	-0.221	-1.028	-0.207	-1.099	-0.292	-1.083	-0.323	
.200	-1.038	-0.259	-1.002	-0.315	-1.001	-0.291	-0.618	-0.315	
.260	-1.100	-0.274	-1.100	-0.302	-1.006	-0.284	-0.553	-0.324	
.320	-1.083	-0.218	-1.093	-0.277	-0.931	-0.255	-0.437	-0.242	
.380	-1.058	-0.242	-1.069	-0.320	-0.561	-0.272	-0.390	-0.263	
.440	-1.034	-0.297	-1.054	-0.249	-0.407	0.000	-0.358	-0.326	
.500	-0.866	-0.345	-1.068	-0.372	-0.387	-0.394	-0.301	-0.338	
.560	-0.925	-0.295	-0.439	-0.439	-0.352	-0.370	-0.269	-0.389	
.620	-0.914	0.040	-0.217	-0.101	-0.353	-0.149	-0.252	-0.230	
.700	-0.226	0.276	-0.351	0.277	-0.373	0.214	-0.267	0.120	
.800	-0.414	0.434	-0.460	0.481	-0.497	0.369	-0.363	0.332	
.900	-0.325	0.558	-0.354	0.625	-0.352	0.521	-0.659	0.417	



(q) Test case 6E17 (point 460).
Figure 8. Continued.

Point Number = 249 Mach Number = 0.903 Alpha = 4.00, deg.

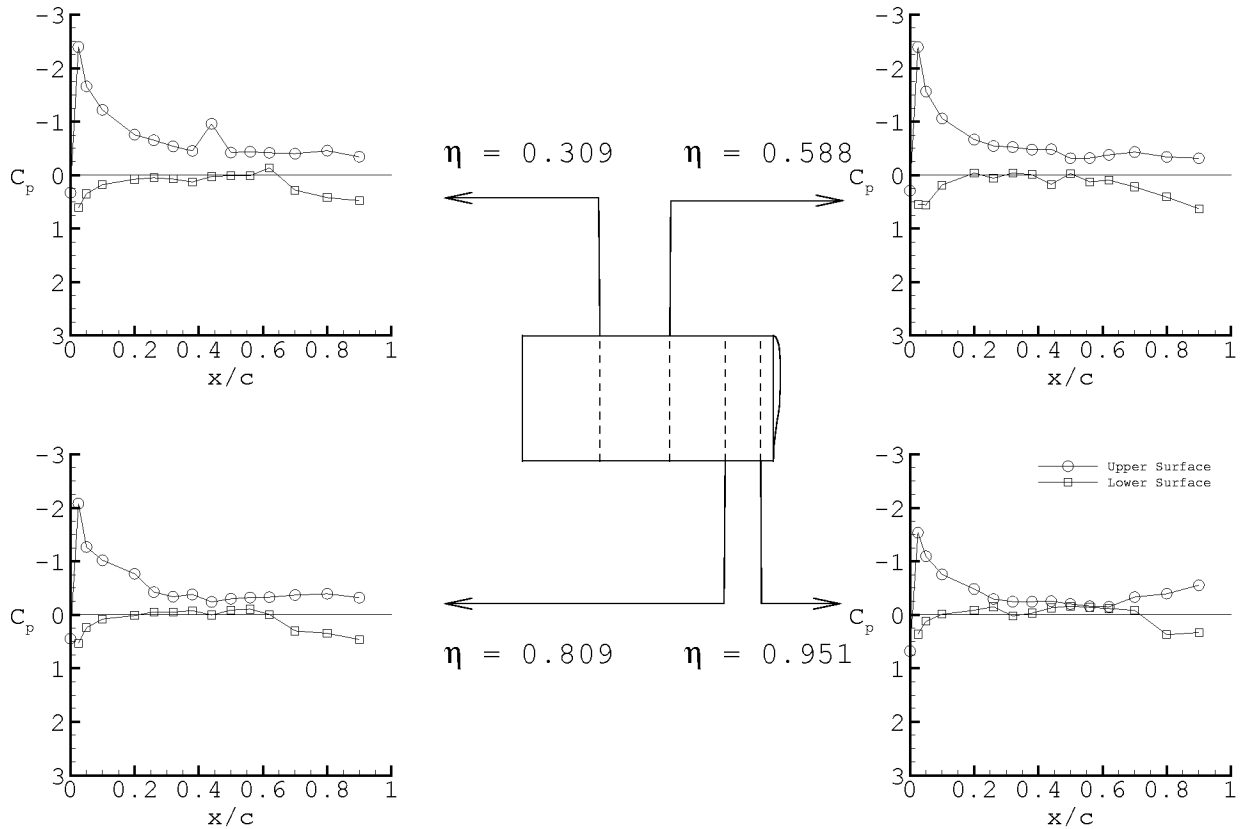
q	H	V	Rn	gamma	Cp*				
116.9	396.6	450.3	.400E+07	1.133	-0.203				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.260		1.204		1.206		1.204		
.025	-0.501	0.145	-0.629	0.084	-0.651	0.138	-0.609	0.065	
.050	-0.679	-0.085	-0.680	0.084	-0.651	-0.119	-0.825	-0.207	
.100	-0.778	-0.221	-0.746	-0.184	-0.846	-0.283	-0.899	-0.338	
.200	-0.761	-0.238	-0.750	-0.308	-0.921	-0.340	-0.754	-0.358	
.260	-0.869	-0.342	-0.858	-0.385	-0.832	-0.376	-0.534	-0.454	
.320	-0.869	-0.320	-0.863	-0.388	-0.877	-0.386	-0.527	-0.350	
.380	-0.858	-0.390	-0.881	-0.449	-0.841	-0.445	-0.487	-0.422	
.440	-0.788	-0.458	-0.924	-0.414	-0.664	0.002	-0.493	-0.498	
.500	-0.803	-0.548	-0.989	-0.577	-0.650	-0.568	-0.474	-0.494	
.560	-0.782	-0.685	-0.926	-0.700	-0.663	-0.427	-0.487	-0.616	
.620	-0.845	-0.311	-0.940	-0.290	-0.658	0.007	-0.510	-0.328	
.700	-0.799	-0.230	-0.892	-0.166	-0.727	-0.099	-0.418	-0.242	
.800	-0.323	-0.059	-0.402	0.167	-0.363	-0.042	-0.379	0.302	
.900	-0.308	0.199	-0.147	0.432	-0.084	0.231	-0.403	0.416	



(r) Test case 6E18 (point 249).
Figure 8. Continued.

Point Number = 604 Mach Number = 0.400 Alpha = 7.01, deg.

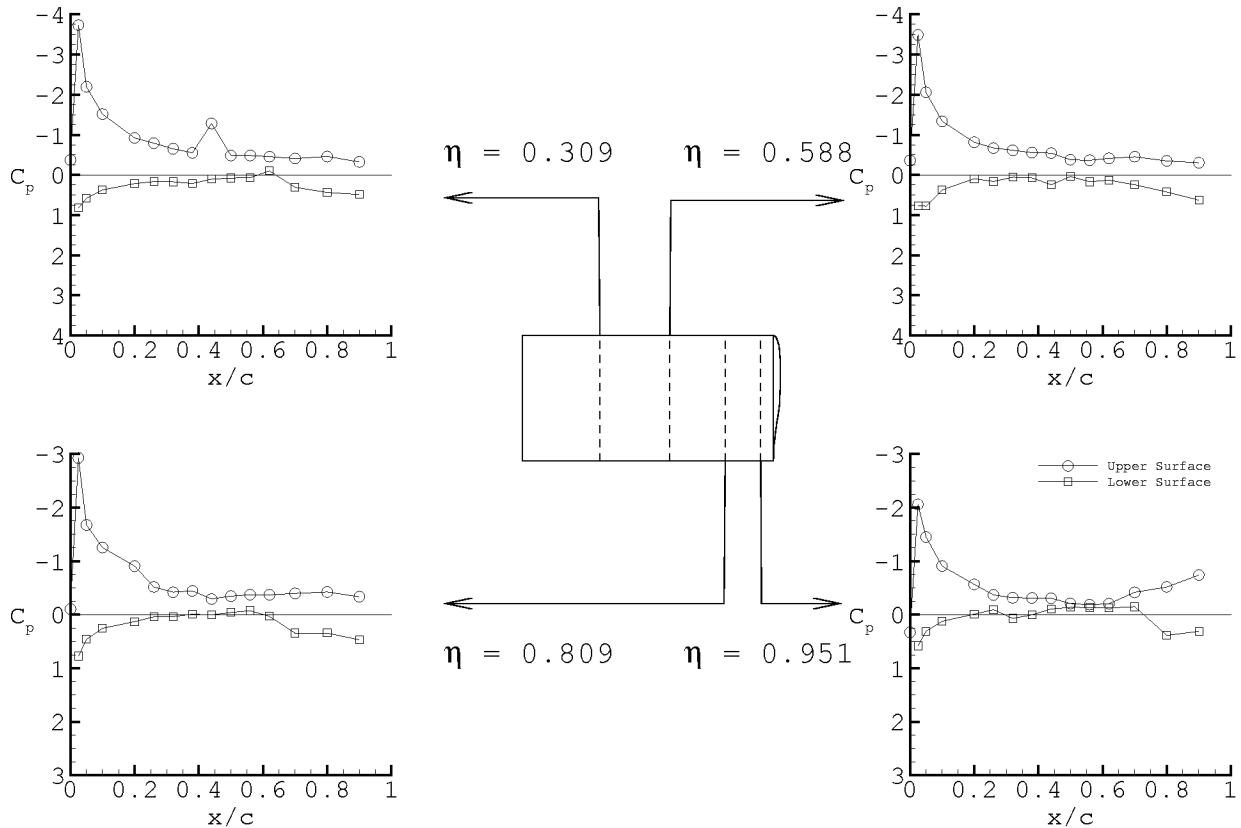
q	H	V	Rn	gamma	Cp*				
54.1	652.8	201.8	.400E+07	1.132	-4.058				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	0.328		0.291		0.446		0.678		
.025	-2.396	0.610	-2.393	0.544	-2.081	0.532	-1.536	0.361	
.050	-1.659	0.350	-1.560	0.558	-1.268	0.240	-1.094	0.121	
.100	-1.218	0.177	-1.059	0.184	-1.021	0.078	-0.756	-0.011	
.200	-0.755	0.076	-0.665	-0.040	-0.766	0.011	-0.484	-0.086	
.260	-0.653	0.050	-0.544	0.057	-0.426	-0.055	-0.295	-0.153	
.320	-0.538	0.074	-0.523	-0.038	-0.337	-0.048	-0.247	-0.022	
.380	-0.452	0.129	-0.476	-0.009	-0.381	-0.080	-0.246	-0.032	
.440	-0.957	0.028	-0.485	0.174	-0.242	0.002	-0.256	-0.129	
.500	-0.421	0.009	-0.315	-0.030	-0.299	-0.090	-0.202	-0.162	
.560	-0.435	0.010	-0.319	0.125	-0.324	-0.106	-0.162	-0.141	
.620	-0.417	-0.136	-0.378	0.096	-0.331	-0.006	-0.150	-0.117	
.700	-0.400	0.281	-0.432	0.221	-0.369	0.301	-0.333	-0.083	
.800	-0.456	0.420	-0.339	0.410	-0.394	0.344	-0.396	0.373	
.900	-0.343	0.476	-0.315	0.627	-0.322	0.462	-0.554	0.330	



(s) Test case 6E19 (point 604).
Figure 8. Continued.

Point Number = 607 Mach Number = 0.400 Alpha = 9.97, deg.

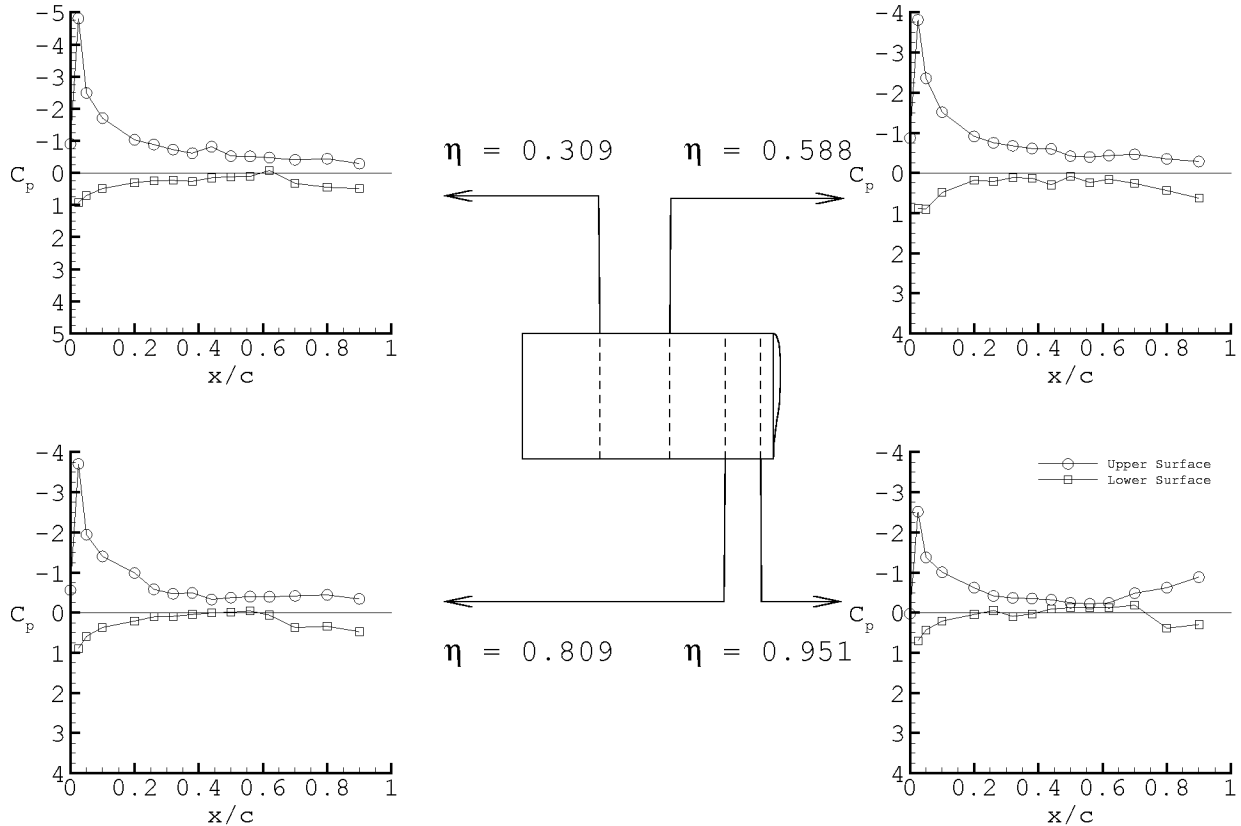
	q		H	V	Rn	gamma	Cp*	
54.1	652.8	201.8	.401E+07	1.132	-4.058			
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951	
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl
.000	-0.372		-0.358		-0.104		0.329	
.025	-3.734	0.826	-3.490	0.772	-2.929	0.774	-2.060	0.584
.050	-2.195	0.583	-2.059	0.779	-1.678	0.463	-1.452	0.313
.100	-1.516	0.373	-1.337	0.373	-1.254	0.257	-0.909	0.122
.200	-0.922	0.217	-0.813	0.096	-0.908	0.129	-0.566	-0.008
.260	-0.790	0.167	-0.668	0.162	-0.518	0.040	-0.369	-0.094
.320	-0.650	0.172	-0.614	0.057	-0.420	0.038	-0.315	0.069
.380	-0.549	0.215	-0.556	0.074	-0.444	-0.010	-0.312	0.006
.440	-1.281	0.106	-0.543	0.248	-0.293	0.002	-0.307	-0.107
.500	-0.482	0.077	-0.376	0.041	-0.346	-0.043	-0.210	-0.137
.560	-0.484	0.070	-0.366	0.171	-0.373	-0.075	-0.186	-0.134
.620	-0.455	-0.100	-0.413	0.131	-0.370	0.030	-0.204	-0.124
.700	-0.410	0.310	-0.454	0.246	-0.397	0.344	-0.416	-0.148
.800	-0.458	0.437	-0.351	0.427	-0.423	0.343	-0.518	0.386
.900	-0.324	0.488	-0.303	0.629	-0.335	0.472	-0.742	0.312



(t) Test case 6E20 (point 607).
Figure 8. Continued.

Point Number = 609 Mach Number = 0.401 Alpha = 12.00, deg.

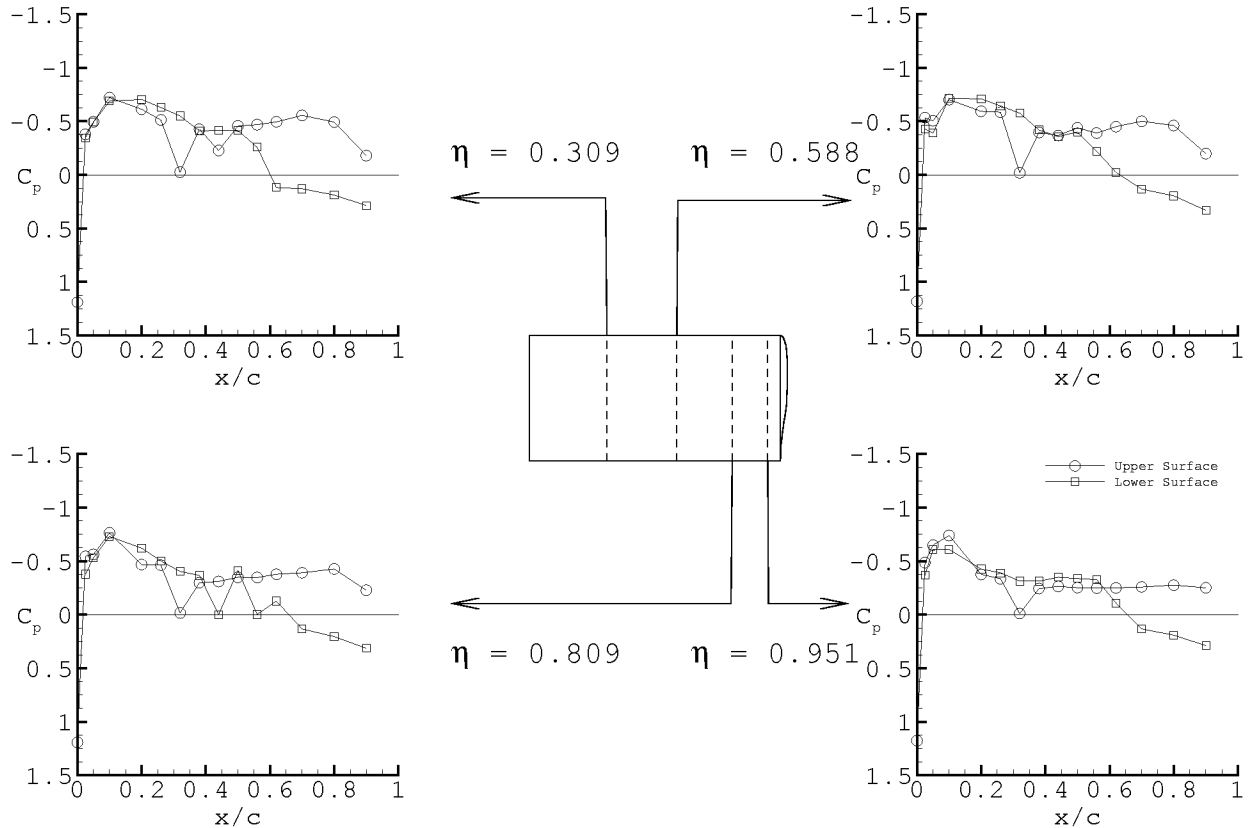
q	H	V	Rn	gamma	Cp*				
54.2	652.8	202.0	.401E+07	1.132	-4.034				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	-0.903		-0.869		-0.563		0.027		
.025	-4.813	0.922	-3.814	0.879	-3.708	0.892	-2.514	0.700	
.050	-2.490	0.705	-2.358	0.905	-1.941	0.589	-1.377	0.431	
.100	-1.707	0.487	-1.514	0.487	-1.402	0.366	-1.007	0.207	
.200	-1.030	0.304	-0.910	0.183	-0.990	0.206	-0.622	0.044	
.260	-0.885	0.241	-0.750	0.214	-0.580	0.105	-0.416	-0.054	
.320	-0.725	0.232	-0.674	0.119	-0.471	0.095	-0.368	0.095	
.380	-0.614	0.267	-0.608	0.130	-0.491	0.044	-0.349	0.031	
.440	-0.816	0.156	-0.597	0.300	-0.328	0.002	-0.323	-0.091	
.500	-0.523	0.122	-0.417	0.082	-0.374	-0.009	-0.245	-0.125	
.560	-0.515	0.109	-0.396	0.245	-0.398	-0.041	-0.220	-0.126	
.620	-0.475	-0.074	-0.432	0.157	-0.395	0.059	-0.245	-0.121	
.700	-0.406	0.327	-0.461	0.263	-0.418	0.373	-0.485	-0.187	
.800	-0.442	0.447	-0.348	0.439	-0.442	0.341	-0.622	0.388	
.900	-0.290	0.494	-0.284	0.630	-0.343	0.475	-0.884	0.298	



(u) Test case 6E21 (point 609).
Figure 8. Continued.

Point Number = 628 Mach Number = 0.826 Alpha = 0.00, deg.

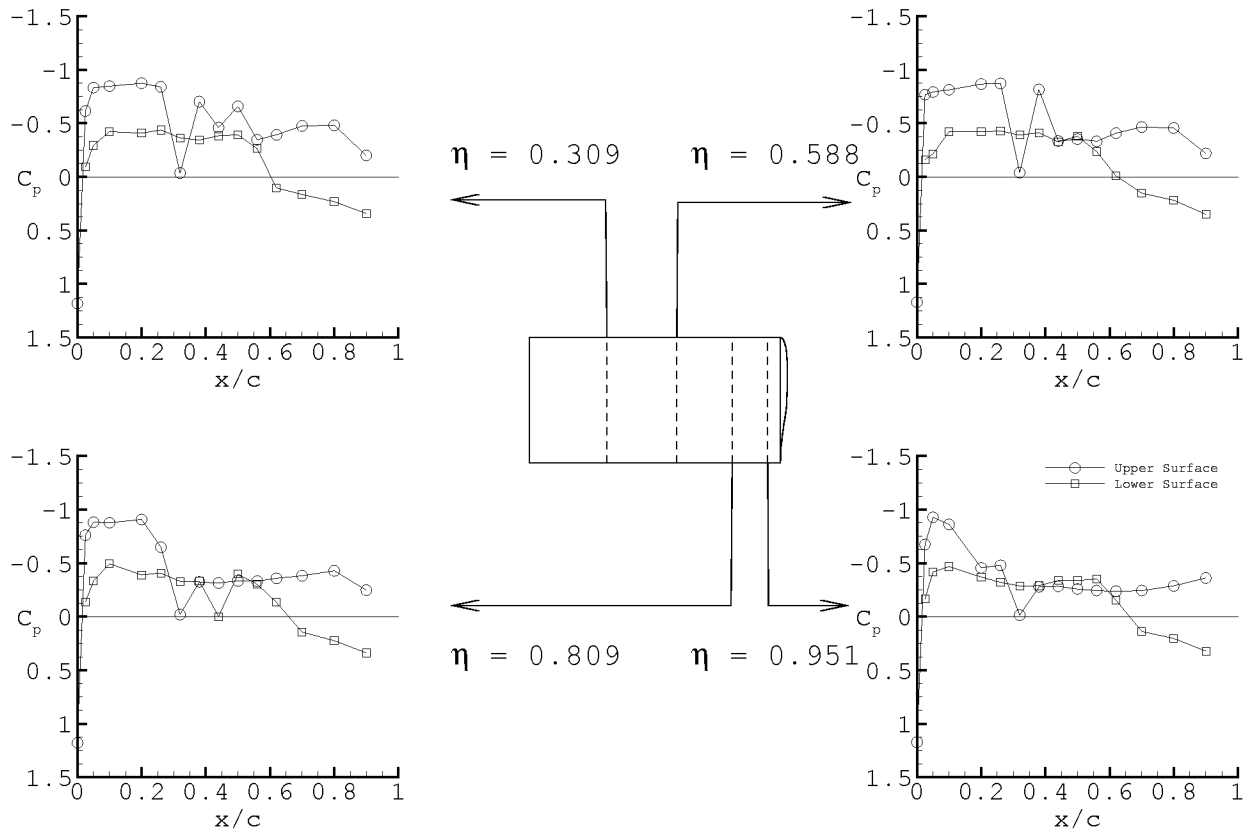
q	H	V	Rn	gamma	Cp*				
108.6	410.3	413.8	.401E+07	1.132	-0.406				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.189		1.182		1.193		1.178		
.025	-0.380	-0.346	-0.535	-0.427	-0.545	-0.379	-0.487	-0.368	
.050	-0.496	-0.492	-0.506	-0.391	-0.563	-0.530	-0.650	-0.609	
.100	-0.722	-0.690	-0.703	-0.717	-0.764	-0.731	-0.740	-0.609	
.200	-0.614	-0.705	-0.594	-0.711	-0.468	-0.621	-0.376	-0.426	
.260	-0.514	-0.630	-0.586	-0.644	-0.463	-0.503	-0.336	-0.390	
.320	-0.025	-0.551	-0.019	-0.578	-0.016	-0.403	-0.011	-0.313	
.380	-0.427	-0.413	-0.397	-0.421	-0.298	-0.367	-0.244	-0.313	
.440	-0.228	-0.415	-0.368	-0.358	-0.310	-0.001	-0.264	-0.349	
.500	-0.457	-0.416	-0.439	-0.401	-0.349	-0.412	-0.253	-0.338	
.560	-0.470	-0.259	-0.391	-0.221	-0.347	-0.002	-0.249	-0.327	
.620	-0.496	0.117	-0.451	-0.023	-0.377	-0.127	-0.250	-0.108	
.700	-0.556	0.130	-0.502	0.132	-0.391	0.133	-0.259	0.134	
.800	-0.493	0.188	-0.462	0.196	-0.427	0.205	-0.276	0.192	
.900	-0.180	0.287	-0.199	0.331	-0.228	0.314	-0.251	0.288	



(v) Test case 6E22 (point 628).
Figure 8. Continued.

Point Number = 626 Mach Number = 0.825 Alpha = 2.00, deg.

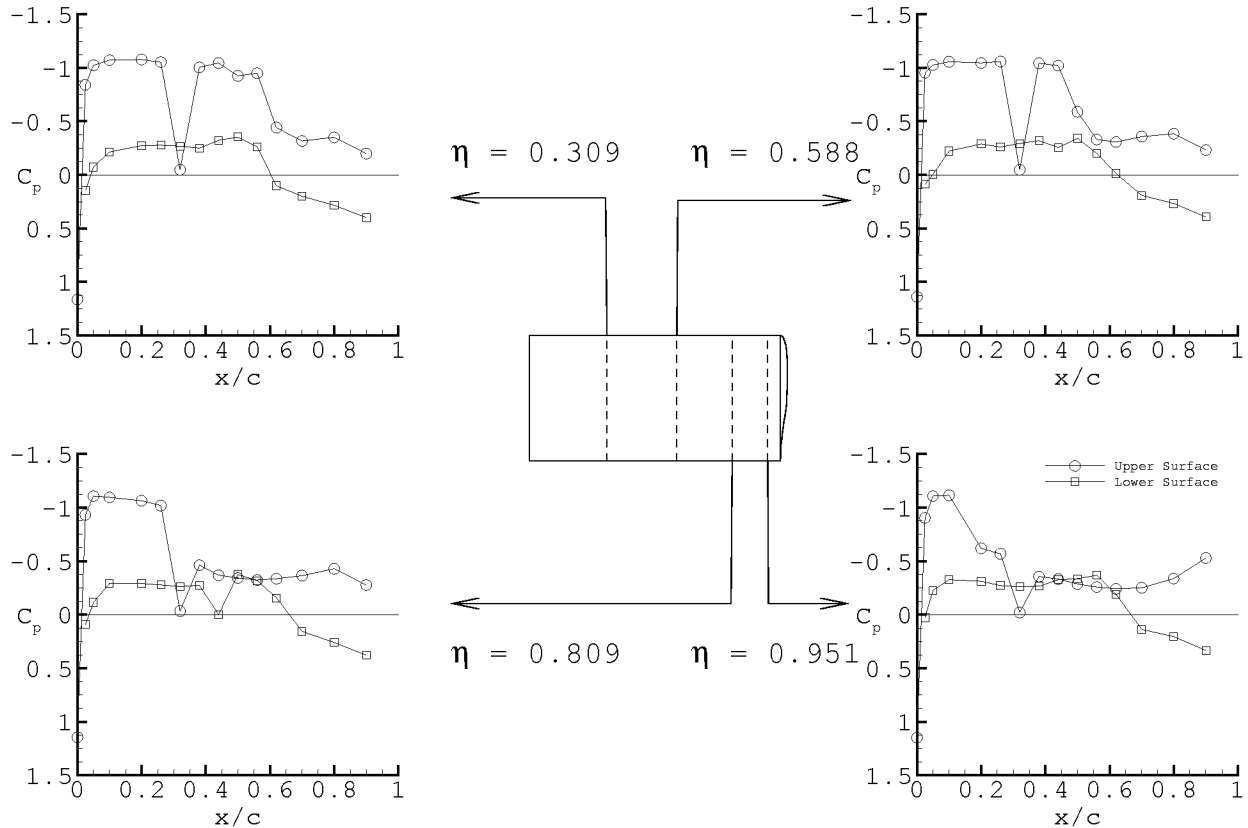
q	H	V	Rn	gamma	Cp*				
108.5	410.1	413.4	.401E+07	1.132	-0.409				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.184		1.171		1.180		1.173		
.025	-0.616	-0.092	-0.768	-0.160	-0.761	-0.136	-0.675	-0.165	
.050	-0.834	-0.295	-0.793	-0.213	-0.883	-0.333	-0.928	-0.419	
.100	-0.849	-0.424	-0.814	-0.424	-0.877	-0.494	-0.862	-0.468	
.200	-0.875	-0.409	-0.868	-0.420	-0.908	-0.389	-0.456	-0.370	
.260	-0.841	-0.438	-0.873	-0.429	-0.649	-0.407	-0.479	-0.321	
.320	-0.036	-0.365	-0.040	-0.391	-0.020	-0.329	-0.014	-0.287	
.380	-0.703	-0.344	-0.817	-0.413	-0.325	-0.331	-0.278	-0.289	
.440	-0.460	-0.384	-0.336	-0.327	-0.314	-0.001	-0.283	-0.337	
.500	-0.659	-0.393	-0.353	-0.381	-0.335	-0.398	-0.258	-0.338	
.560	-0.347	-0.265	-0.333	-0.236	-0.332	-0.302	-0.244	-0.352	
.620	-0.393	0.103	-0.409	-0.009	-0.358	-0.134	-0.238	-0.153	
.700	-0.476	0.164	-0.466	0.153	-0.382	0.144	-0.244	0.138	
.800	-0.483	0.231	-0.456	0.218	-0.428	0.225	-0.288	0.204	
.900	-0.201	0.342	-0.220	0.349	-0.248	0.339	-0.361	0.322	



(w) Test case 6E23 (point 628).
Figure 8. Continued.

Point Number = 624 Mach Number = 0.826 Alpha = 4.01, deg.

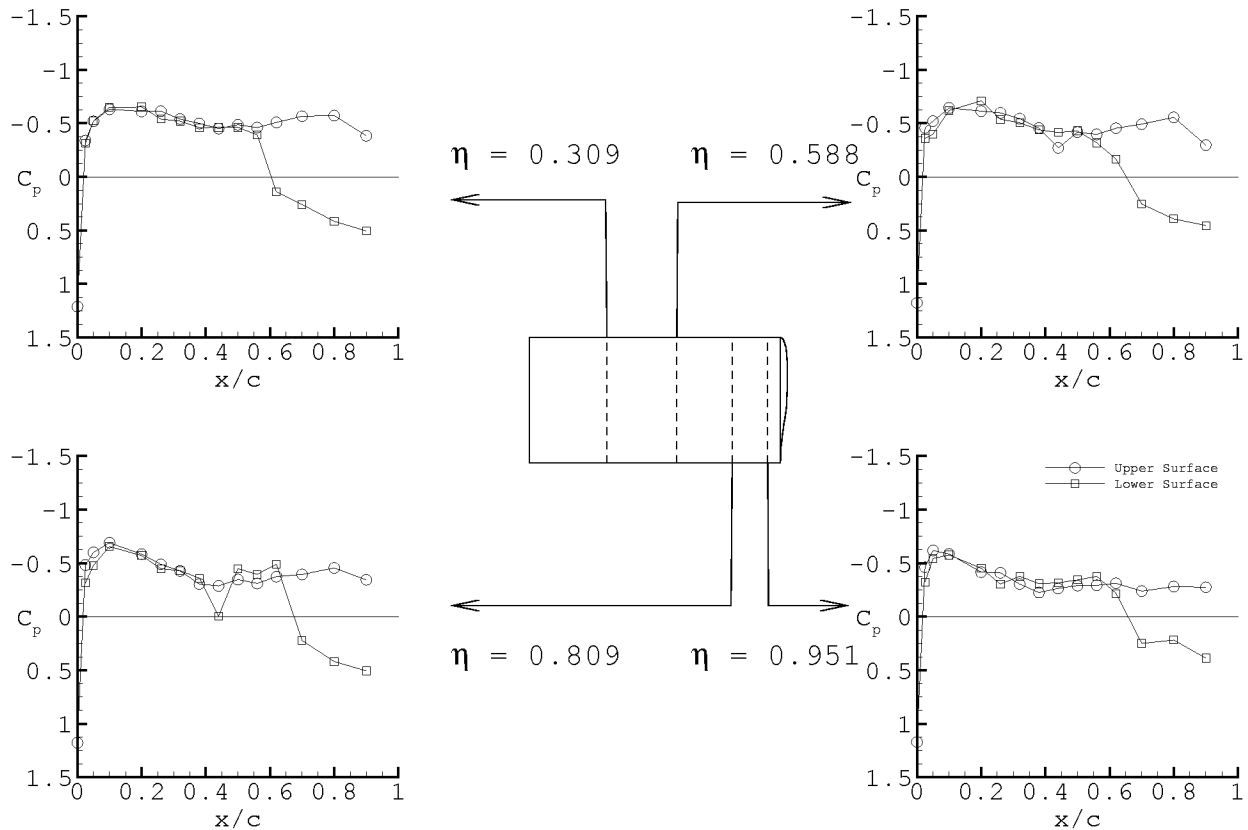
q	H	V	Rn	gamma	Cp*				
108.5	409.8	413.7	.401E+07	1.132	-0.406				
x/c	y/s =0.309		y/s =0.588		y/s =0.809		y/s =0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.164		1.139		1.146		1.150		
.025	-0.841	0.144	-0.956	0.088	-0.934	0.092	-0.904	0.028	
.050	-1.024	-0.073	-1.028	-0.005	-1.108	-0.115	-1.108	-0.227	
.100	-1.072	-0.213	-1.057	-0.223	-1.096	-0.290	-1.115	-0.327	
.200	-1.078	-0.274	-1.046	-0.289	-1.065	-0.290	-0.620	-0.312	
.260	-1.054	-0.277	-1.060	-0.260	-1.019	-0.277	-0.568	-0.272	
.320	-0.048	-0.268	-0.048	-0.293	-0.034	-0.262	-0.020	-0.260	
.380	-1.005	-0.250	-1.044	-0.320	-0.463	-0.274	-0.356	-0.266	
.440	-1.045	-0.323	-1.021	-0.256	-0.368	-0.001	-0.333	-0.326	
.500	-0.925	-0.354	-0.590	-0.342	-0.343	-0.374	-0.286	-0.335	
.560	-0.950	-0.263	-0.331	-0.201	-0.323	-0.318	-0.258	-0.369	
.620	-0.442	0.101	-0.308	-0.013	-0.336	-0.157	-0.241	-0.189	
.700	-0.317	0.200	-0.358	0.191	-0.365	0.156	-0.251	0.138	
.800	-0.351	0.284	-0.384	0.268	-0.428	0.260	-0.337	0.205	
.900	-0.199	0.400	-0.233	0.393	-0.277	0.379	-0.528	0.334	



(x) Test case 6E24 (point 624).
Figure 8. Continued.

Point Number = 52 Mach Number = 0.802 Alpha = -0.05, deg.

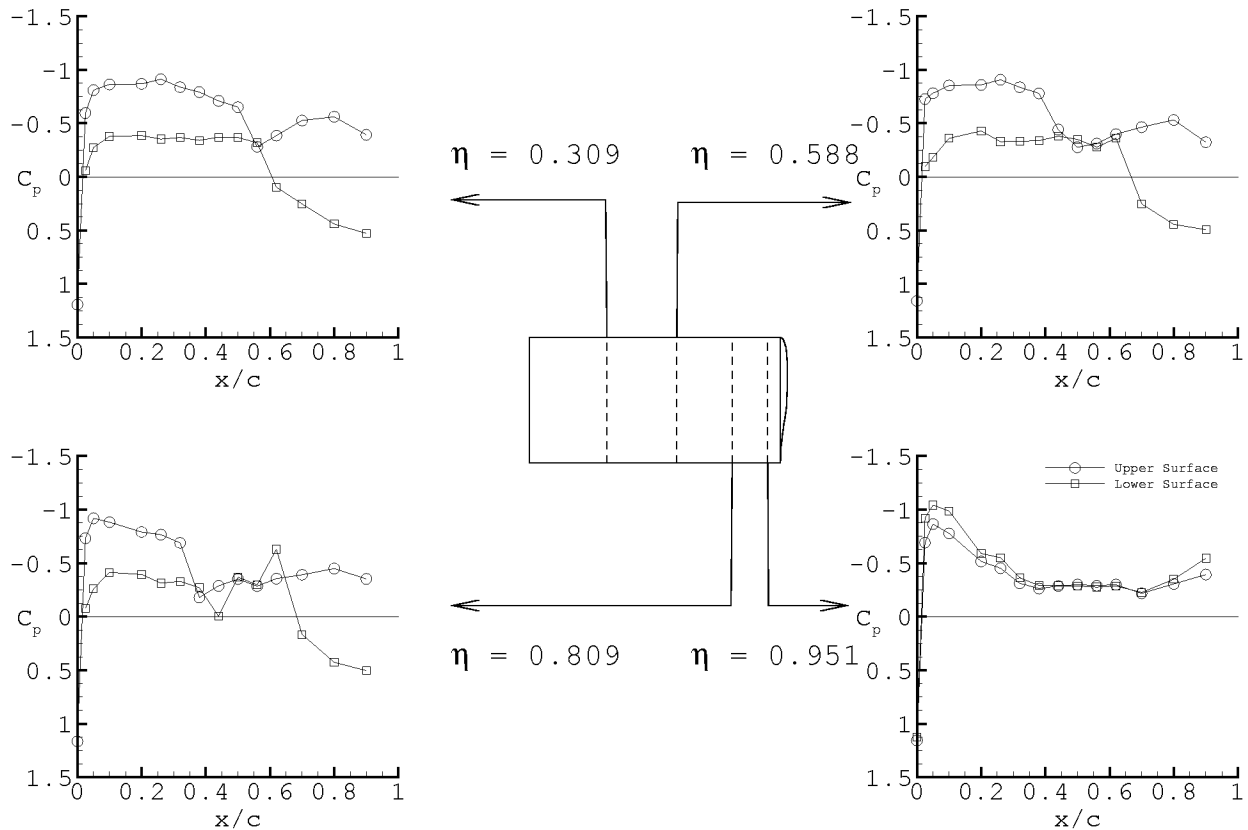
q	H	V	Rn	gamma	Cp*				
93.2	315.9	878.4	.117E+07	1.400	-0.429				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.211		1.178		1.179		1.172		
.025	-0.339	-0.316	-0.458	-0.359	-0.482	-0.315	-0.462	-0.324	
.050	-0.520	-0.523	-0.521	-0.399	-0.601	-0.479	-0.619	-0.544	
.100	-0.632	-0.650	-0.645	-0.620	-0.691	-0.655	-0.586	-0.576	
.200	-0.612	-0.654	-0.615	-0.711	-0.584	-0.571	-0.416	-0.453	
.260	-0.615	-0.541	-0.598	-0.538	-0.490	-0.448	-0.409	-0.305	
.320	-0.541	-0.522	-0.544	-0.506	-0.427	-0.431	-0.305	-0.377	
.380	-0.499	-0.460	-0.457	-0.441	-0.305	-0.360	-0.226	-0.307	
.440	-0.451	-0.462	-0.271	-0.415	-0.288	-0.003	-0.263	-0.316	
.500	-0.487	-0.462	-0.418	-0.431	-0.347	-0.448	-0.290	-0.343	
.560	-0.461	-0.393	-0.398	-0.318	-0.310	-0.395	-0.293	-0.376	
.620	-0.509	0.138	-0.455	-0.166	-0.374	-0.490	-0.312	-0.217	
.700	-0.567	0.258	-0.493	0.254	-0.394	0.224	-0.239	0.250	
.800	-0.573	0.416	-0.557	0.393	-0.455	0.419	-0.281	0.219	
.900	-0.384	0.504	-0.298	0.455	-0.344	0.507	-0.275	0.387	



(y) Test case 6E25 (point 52).
Figure 8. Continued.

Point Number = 53 Mach Number = 0.802 Alpha = 2.01, deg.

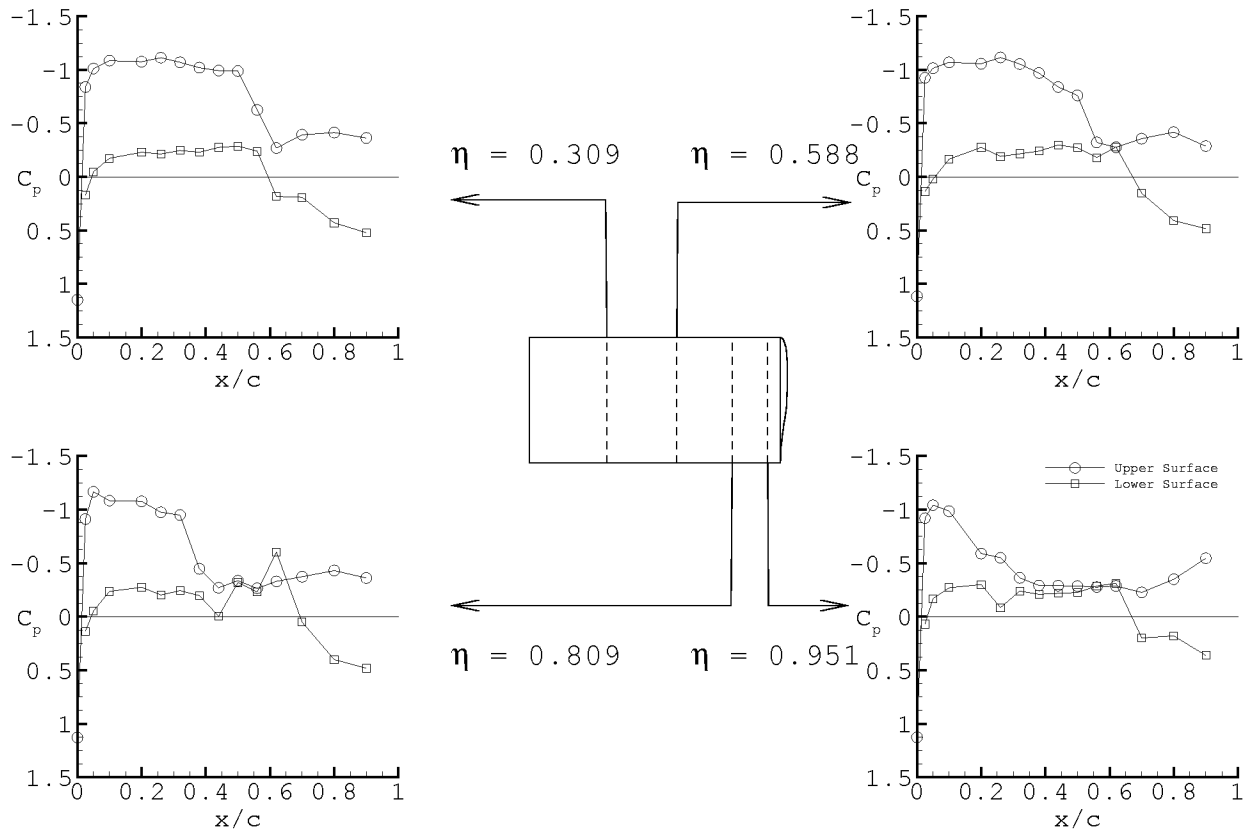
q	H	V	Rn	gamma	Cp*				
93.2	315.9	878.4	.117E+07	1.400	-0.429				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.193		1.159		1.165		1.157		
.025	-0.597	-0.059	-0.727	-0.097	-0.733	-0.077	-0.691	-0.117	
.050	-0.811	-0.274	-0.782	-0.182	-0.919	-0.260	-0.865	-0.344	
.100	-0.864	-0.378	-0.855	-0.360	-0.883	-0.413	-0.777	-0.401	
.200	-0.869	-0.386	-0.859	-0.429	-0.791	-0.394	-0.516	-0.366	
.260	-0.913	-0.353	-0.908	-0.330	-0.766	-0.313	-0.453	-0.210	
.320	-0.839	-0.367	-0.838	-0.334	-0.690	-0.329	-0.312	-0.313	
.380	-0.792	-0.340	-0.780	-0.338	-0.179	-0.271	-0.262	-0.277	
.440	-0.710	-0.371	-0.442	-0.381	-0.288	-0.004	-0.286	-0.281	
.500	-0.652	-0.369	-0.277	-0.350	-0.351	-0.369	-0.299	-0.313	
.560	-0.281	-0.319	-0.311	-0.278	-0.285	-0.298	-0.290	-0.355	
.620	-0.386	0.096	-0.399	-0.360	-0.355	-0.629	-0.299	-0.319	
.700	-0.527	0.253	-0.465	0.252	-0.391	0.167	-0.218	0.265	
.800	-0.562	0.441	-0.532	0.444	-0.449	0.427	-0.306	0.206	
.900	-0.393	0.528	-0.324	0.494	-0.353	0.504	-0.393	0.413	



(z) Test case 6E26 (point 53).
Figure 8. Continued.

Point Number = 54 Mach Number = 0.801 Alpha = 4.01, deg.

Q	H	V	Rn	gamma	Cp*				
93.4	317.4	879.8	.117E+07	1.400	-0.432				
x/c	y/s = 0.309		y/s = 0.588		y/s = 0.809		y/s = 0.951		
	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	Cpu	Cpl	
.000	1.149		1.116		1.130		1.127		
.025	-0.840	0.172	-0.927	0.136	-0.912	0.136	-0.921	0.070	
.050	-1.012	-0.048	-1.016	0.022	-1.167	-0.054	-1.042	-0.168	
.100	-1.086	-0.173	-1.071	-0.166	-1.084	-0.235	-0.986	-0.271	
.200	-1.077	-0.230	-1.057	-0.276	-1.078	-0.274	-0.589	-0.300	
.260	-1.114	-0.214	-1.116	-0.191	-0.975	-0.202	-0.550	-0.084	
.320	-1.071	-0.248	-1.055	-0.216	-0.950	-0.243	-0.362	-0.239	
.380	-1.021	-0.231	-0.971	-0.241	-0.447	-0.197	-0.291	-0.209	
.440	-0.994	-0.276	-0.840	-0.298	-0.270	-0.004	-0.289	-0.218	
.500	-0.989	-0.287	-0.762	-0.272	-0.336	-0.319	-0.286	-0.226	
.560	-0.626	-0.240	-0.322	-0.180	-0.265	-0.231	-0.276	-0.287	
.620	-0.270	0.182	-0.277	-0.281	-0.329	-0.604	-0.287	-0.310	
.700	-0.394	0.191	-0.357	0.154	-0.373	0.051	-0.227	0.200	
.800	-0.415	0.429	-0.419	0.408	-0.431	0.401	-0.349	0.180	
.900	-0.364	0.521	-0.288	0.483	-0.361	0.483	-0.546	0.362	



(aa) Test case 6E27 (point 54).
Figure 8. Continued.

Point Number = 514 Mach Number = 0.402 Alpha = 1.97, deg.

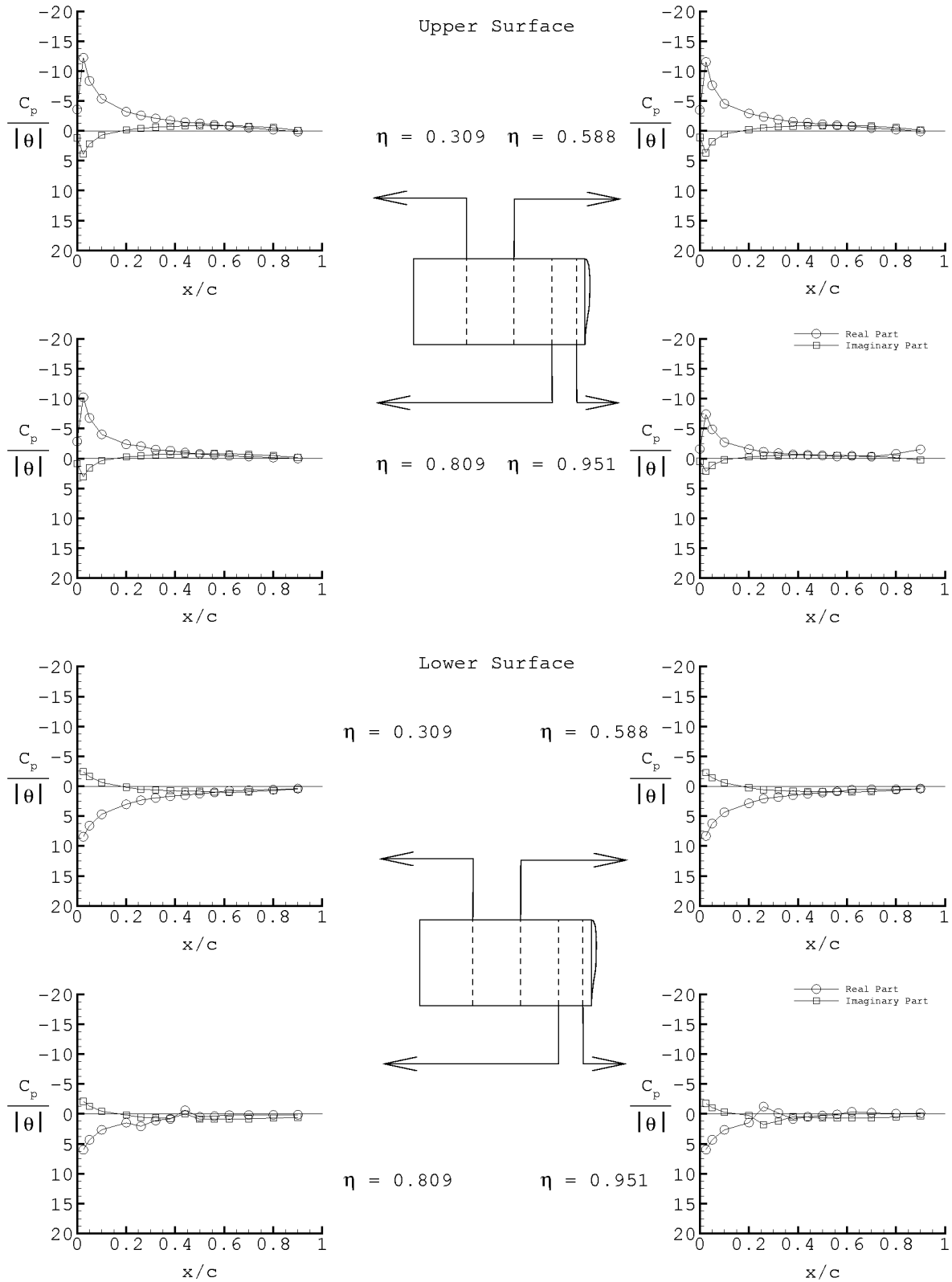
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.8 655.0 203.1 .403E+07 1.132 10.00 0.309 1.003

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-3.584	1.171			-3.489	1.093		
.025	-12.245	3.908	8.456	-2.425	-11.537	3.682	8.324	-2.262
.050	-8.347	2.174	6.599	-1.633	-7.610	1.827	6.241	-1.407
.100	-5.382	0.699	4.702	-0.611	-4.541	0.517	4.365	-0.544
.200	-3.196	-0.134	3.022	0.180	-2.907	-0.193	2.845	0.249
.260	-2.592	-0.434	2.335	0.552	-2.345	-0.507	2.083	0.609
.320	-2.078	-0.627	1.961	0.618	-1.884	-0.671	1.805	0.718
.380	-1.734	-0.740	1.671	0.741	-1.527	-0.778	1.500	0.828
.440	-1.436	-0.826	1.500	0.828	-1.341	-0.871	1.270	0.876
.500	-1.260	-0.889	1.221	0.846	-1.083	-0.840	1.075	0.941
.560	-0.996	-0.857	1.043	0.976	-0.943	-0.831	0.876	0.901
.620	-0.812	-0.883	0.765	1.068	-0.763	-0.850	0.594	0.976
.700	-0.504	-0.762	0.665	0.929	-0.461	-0.789	0.500	0.898
.800	-0.194	-0.537	0.578	0.708	-0.214	-0.530	0.538	0.667
.900	0.144	-0.093	0.399	0.486	0.104	-0.137	0.397	0.411

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-2.848	0.844			-1.592	0.459		
.025	-10.232	3.070	6.003	-2.124	-7.402	2.164	5.976	-1.748
.050	-6.788	1.580	4.345	-1.316	-4.892	1.156	4.331	-1.048
.100	-4.042	0.339	2.667	-0.453	-2.736	0.186	2.670	-0.285
.200	-2.384	-0.272	1.481	0.193	-1.578	-0.258	1.466	0.240
.260	-2.069	-0.432	2.060	0.559	-1.117	-0.438	-1.214	1.800
.320	-1.461	-0.651	1.107	0.639	-0.898	-0.500	-0.132	1.192
.380	-1.305	-0.709	0.833	0.763	-0.699	-0.589	0.846	0.477
.440	-1.001	-0.760	-0.612	0.000	-0.632	-0.579	0.488	0.560
.500	-0.765	-0.770	0.499	0.889	-0.526	-0.524	0.278	0.689
.560	-0.607	-0.830	0.359	0.876	-0.342	-0.527	0.079	0.681
.620	-0.467	-0.786	0.213	0.875	-0.450	-0.438	-0.353	0.653
.700	-0.330	-0.665	0.198	0.820	-0.309	-0.411	-0.182	0.661
.800	-0.148	-0.492	0.164	0.704	-0.789	-0.129	-0.036	0.513
.900	0.000	-0.171	0.140	0.574	-1.523	0.244	-0.106	0.326

(a-1) Tabulated data for test case 6E28 (point 514)
 Figure 9. Dynamic test cases.

Point 514



(a-2) Plot of data for test case 6E28 (point 514)
Figure 9. Continued.

Point Number = 344 Mach Number = 0.750 Alpha = 2.05, deg.

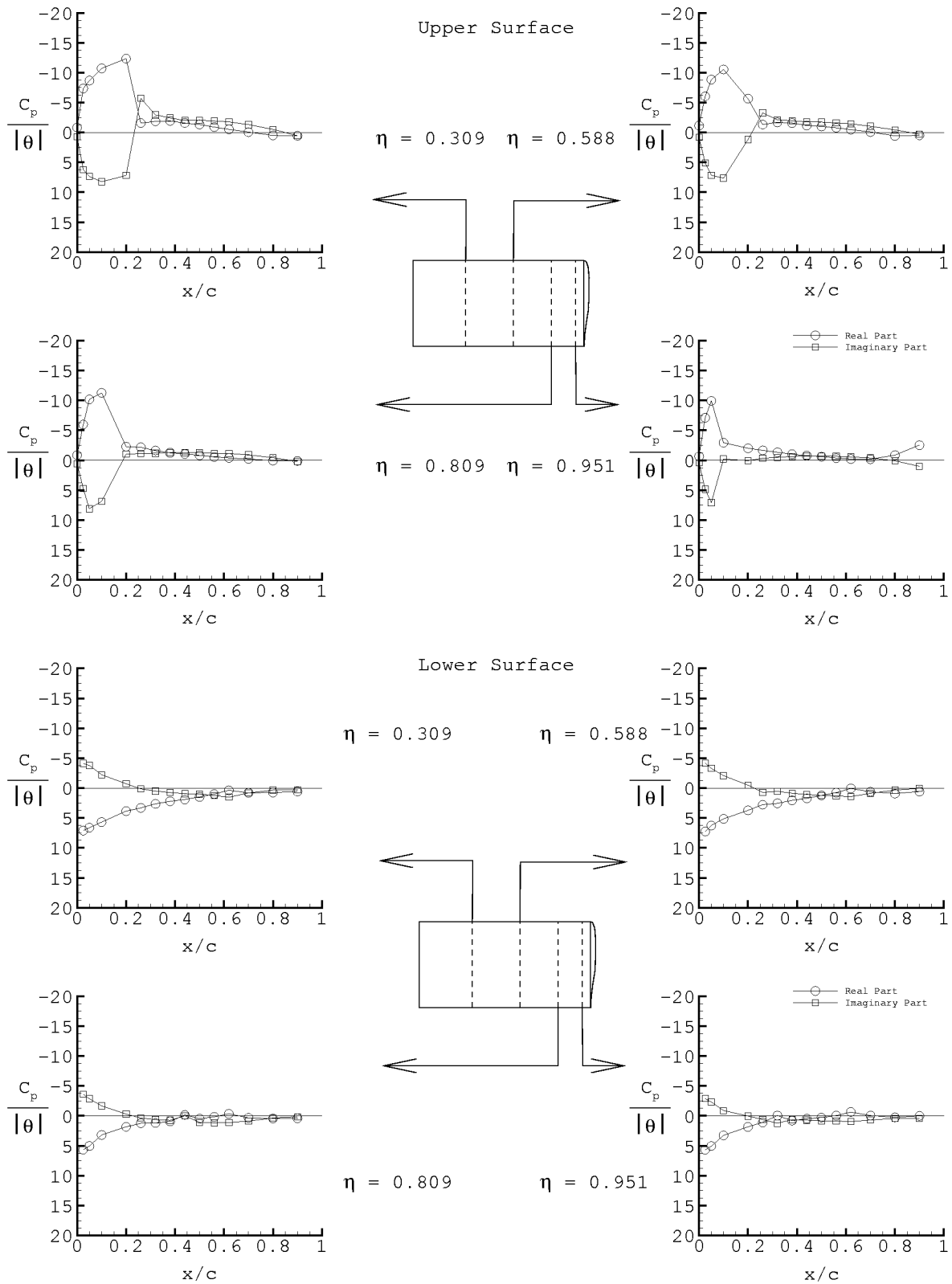
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 100.8 432.8 378.9 .400E+07 1.131 14.99 0.249 1.052

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.817	0.720			-1.153	0.822		
.025	-7.352	6.235	7.115	-4.124	-6.050	5.076	7.278	-4.168
.050	-8.681	7.362	6.623	-3.778	-8.846	7.163	6.257	-3.313
.100	-10.716	8.223	5.683	-2.216	-10.544	7.633	5.151	-2.081
.200	-12.333	7.178	3.853	-0.728	-5.649	1.190	3.726	-0.491
.260	-1.576	-5.723	3.319	0.145	-1.320	-3.285	2.787	0.752
.320	-1.857	-2.950	2.621	0.500	-1.703	-2.125	2.557	0.544
.380	-1.937	-2.426	2.217	0.755	-1.573	-1.950	2.055	0.873
.440	-1.587	-2.009	1.907	0.934	-1.179	-1.767	1.722	1.047
.500	-1.328	-2.060	1.474	1.028	-1.014	-1.742	1.235	1.230
.560	-0.904	-1.922	0.994	1.227	-0.796	-1.611	0.762	1.321
.620	-0.532	-1.774	0.387	1.531	-0.481	-1.447	0.069	1.414
.700	-0.059	-1.306	0.799	0.819	-0.081	-1.032	0.628	0.890
.800	0.491	-0.510	0.749	0.326	0.567	-0.424	0.925	0.326
.900	0.551	0.527	0.583	0.296	0.473	0.270	0.596	0.057

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.854	0.585			-0.639	0.416		
.025	-5.976	4.736	5.637	-3.607	-7.109	4.849	5.678	-2.893
.050	-10.187	8.103	5.039	-2.866	-9.932	7.084	5.051	-2.313
.100	-11.262	6.847	3.195	-1.676	-2.933	-0.221	3.260	-0.880
.200	-2.283	-1.031	1.843	-0.287	-2.014	0.060	1.851	0.036
.260	-2.176	-1.128	1.238	0.362	-1.654	-0.337	1.095	0.609
.320	-1.628	-1.187	1.187	0.646	-1.341	-0.456	-0.044	1.252
.380	-1.258	-1.284	0.930	0.740	-1.011	-0.644	0.806	0.648
.440	-1.048	-1.253	-0.159	0.000	-0.780	-0.680	0.489	0.722
.500	-0.822	-1.285	0.475	1.096	-0.603	-0.703	0.285	0.823
.560	-0.543	-1.129	0.180	1.172	-0.371	-0.666	-0.052	0.870
.620	-0.390	-1.133	-0.342	1.143	-0.205	-0.563	-0.643	0.946
.700	-0.215	-0.901	0.333	0.865	-0.167	-0.402	-0.049	0.706
.800	0.060	-0.432	0.439	0.365	-0.867	0.085	0.259	0.416
.900	0.109	0.189	0.419	0.151	-2.530	1.007	0.010	0.436

(b-1) Tabulated data for test case 6E29 (point 344)
 Figure 9. Continued.

Point 344



(b-2) Plot of data for test case 6E29 (point 344)
Figure 9. Continued.

Point Number = 316 Mach Number = 0.802 Alpha = 2.08, deg.

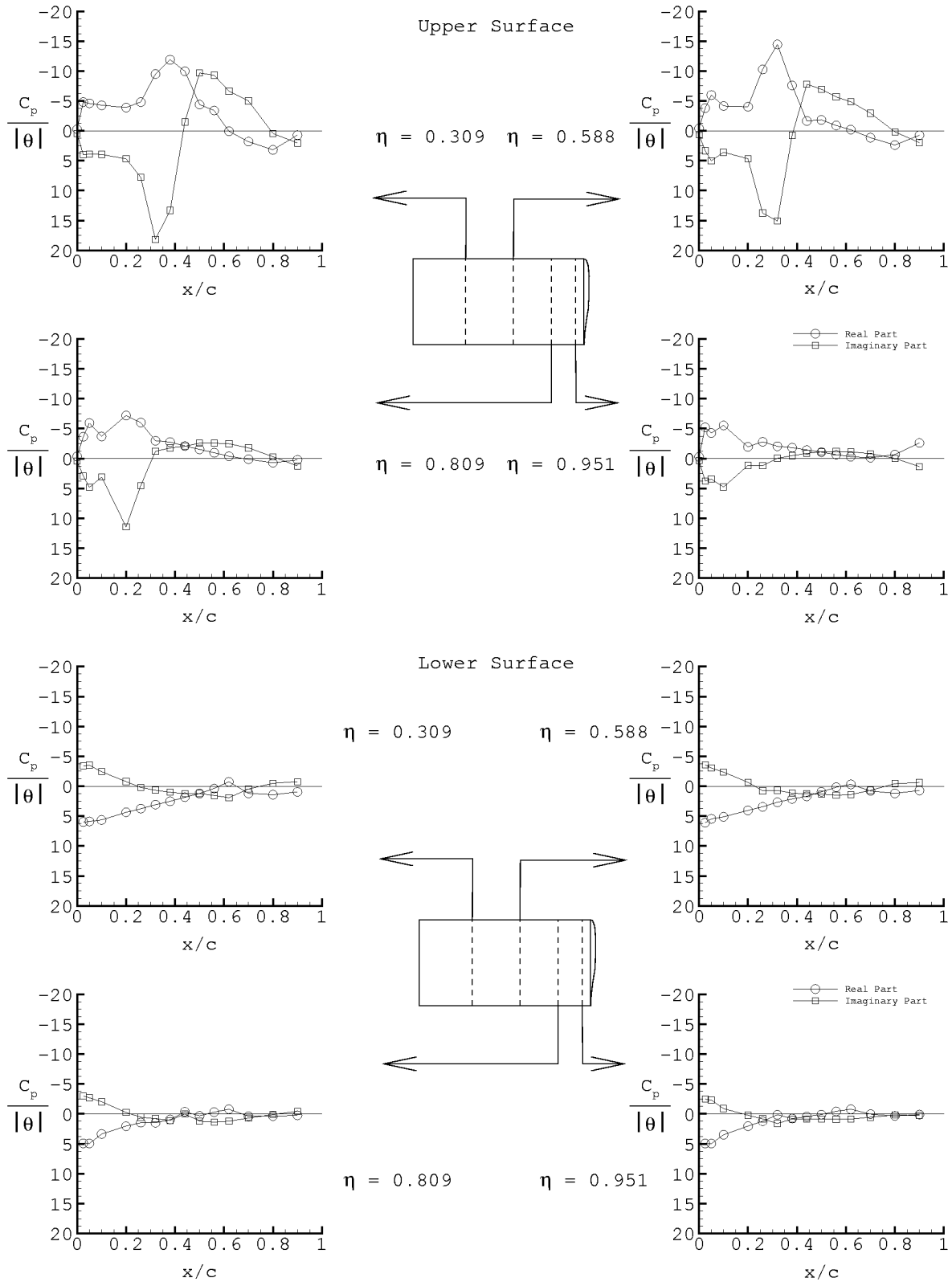
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.6 422.0 404.9 .401E+07 1.131 15.03 0.233 1.035

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.282	0.476			-0.397	0.600		
.025	-4.813	3.996	5.969	-3.391	-3.796	3.312	6.105	-3.596
.050	-4.595	3.911	5.896	-3.515	-5.988	5.007	5.455	-3.061
.100	-4.272	3.942	5.648	-2.421	-4.149	3.581	5.126	-2.368
.200	-3.898	4.678	4.361	-0.769	-4.031	4.638	4.044	-0.655
.260	-4.813	7.763	3.759	0.197	-10.280	13.741	3.459	0.767
.320	-9.489	18.152	3.084	0.667	-14.445	15.063	2.679	0.698
.380	-11.881	13.288	2.517	1.012	-7.603	0.745	2.132	1.177
.440	-9.965	-1.489	1.846	1.222	-1.657	-7.797	1.691	1.251
.500	-4.391	-9.679	1.218	1.209	-1.826	-6.961	0.932	1.307
.560	-3.405	-9.306	0.388	1.558	-0.891	-5.688	0.177	1.484
.620	0.070	-6.643	-0.737	1.911	-0.196	-4.868	-0.309	1.406
.700	1.809	-4.997	1.189	0.454	1.141	-2.942	0.789	0.696
.800	3.179	0.452	1.415	-0.482	2.375	0.166	1.196	-0.435
.900	0.706	2.040	0.958	-0.751	0.737	1.970	0.712	-0.615

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.362	0.419			-0.283	0.341		
.025	-3.634	2.901	4.928	-3.001	-5.221	3.738	4.946	-2.487
.050	-5.929	4.818	4.947	-2.693	-4.265	3.442	4.967	-2.316
.100	-3.700	3.083	3.368	-2.026	-5.540	4.765	3.487	-0.889
.200	-7.198	11.430	2.042	-0.241	-1.952	1.159	2.037	0.218
.260	-6.005	4.541	1.466	0.553	-2.803	1.190	1.239	0.836
.320	-2.975	-1.208	1.490	0.805	-2.048	-0.050	0.148	1.599
.380	-2.755	-1.755	0.945	1.096	-1.820	-0.481	0.776	0.865
.440	-2.100	-2.049	-0.367	0.000	-1.422	-0.858	0.454	0.887
.500	-1.531	-2.568	0.329	1.234	-1.069	-1.122	0.111	0.879
.560	-0.969	-2.593	-0.301	1.372	-0.646	-1.161	-0.421	0.903
.620	-0.381	-2.462	-0.782	1.228	-0.307	-1.121	-0.772	0.869
.700	0.117	-1.768	0.375	0.692	-0.136	-0.819	0.036	0.552
.800	0.718	-0.293	0.386	0.103	-0.664	-0.015	0.339	0.187
.900	0.230	1.252	0.250	-0.426	-2.607	1.346	0.105	0.256

(c-1) Tabulated of data for test case 6E30 (point 316)
 Figure 9. Continued.

Point 316



(c-3) Plot of data for test case 6E30 (point 316)
Figure 9. Continued.

Point Number = 475 Mach Number = 0.826 Alpha = 1.97, deg.

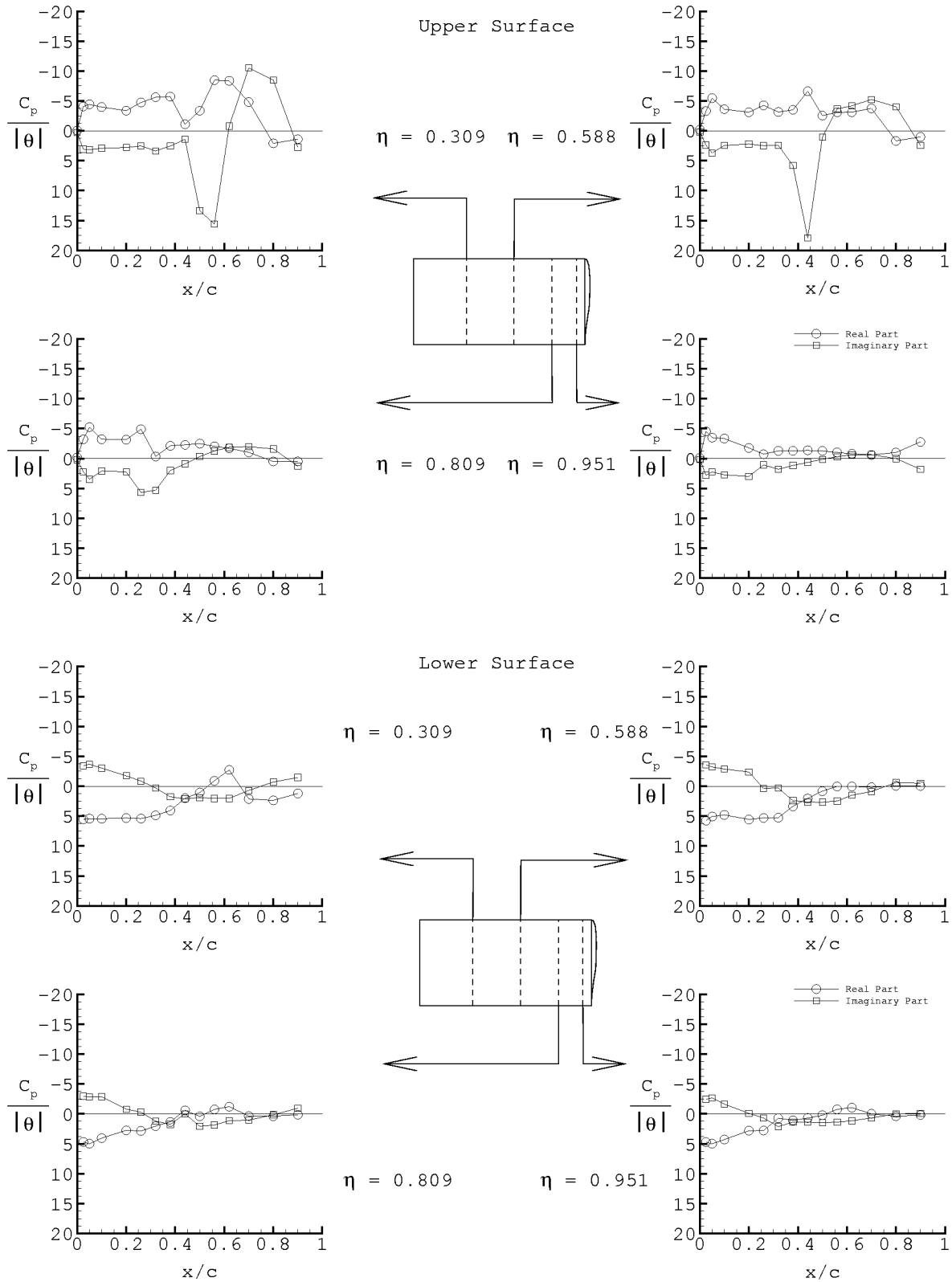
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.1 408.1 413.8 .400E+07 1.132 15.01 0.228 1.023

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.056	0.274			-0.187	0.208		
.025	-4.081	3.053	5.528	-3.414	-3.324	2.380	5.753	-3.581
.050	-4.417	3.163	5.420	-3.683	-5.466	3.715	5.065	-3.202
.100	-3.967	2.925	5.432	-3.023	-3.630	2.430	4.801	-2.885
.200	-3.376	2.773	5.321	-1.749	-3.104	2.206	5.564	-2.373
.260	-4.747	2.524	5.424	-0.840	-4.255	2.487	5.308	0.371
.320	-5.623	3.365	4.865	0.272	-3.159	2.415	5.255	0.312
.380	-5.735	2.541	4.055	1.771	-3.511	5.797	3.370	2.413
.440	-1.101	1.414	2.012	2.106	-6.626	17.912	2.060	2.655
.500	-3.356	13.363	1.066	1.907	-2.543	1.033	0.828	2.675
.560	-8.472	15.603	-0.904	2.050	-3.103	-3.684	0.030	2.464
.620	-8.364	-0.791	-2.732	2.051	-3.113	-4.176	0.034	1.512
.700	-4.826	-10.541	2.128	0.700	-3.749	-5.237	0.177	0.878
.800	2.084	-8.485	2.362	-0.704	1.679	-4.033	-0.068	-0.612
.900	1.389	2.750	1.209	-1.471	1.016	2.428	-0.040	-0.503

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.193	0.203			-0.106	0.130		
.025	-3.235	2.215	4.698	-2.945	-4.527	2.796	4.715	-2.465
.050	-5.231	3.462	4.985	-2.832	-3.495	2.227	4.985	-2.673
.100	-3.245	2.099	4.055	-2.866	-3.332	2.737	4.293	-1.631
.200	-3.158	2.228	2.741	-0.802	-1.778	2.983	2.799	-0.078
.260	-4.904	5.681	2.852	-0.288	-0.715	1.072	2.774	0.681
.320	-0.343	5.310	2.034	1.222	-1.275	1.774	0.729	2.118
.380	-2.116	2.001	1.334	1.757	-1.300	1.150	1.067	1.370
.440	-2.293	0.903	-0.598	0.000	-1.369	0.641	0.692	1.407
.500	-2.498	-0.333	0.409	2.049	-1.282	0.130	0.226	1.495
.560	-2.047	-1.269	-0.751	1.869	-1.021	-0.299	-0.755	1.374
.620	-1.699	-1.861	-1.198	1.121	-0.799	-0.615	-1.053	1.162
.700	-1.034	-1.987	0.357	1.044	-0.597	-0.668	-0.014	0.672
.800	0.494	-1.606	0.389	0.138	-1.008	0.019	0.392	-0.008
.900	0.482	1.255	0.133	-0.948	-2.787	1.775	0.200	-0.101

(d-1) Tabulated of data for test case 6E31 (point 475)
 Figure 9. Continued.

Point 475



(d-2) Plot of data for test case 6E31 (point 475)
Figure 9. Continued.

Point Number = 289 Mach Number = 0.854 Alpha = 1.99, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 113.7 412.1 430.0 .401E+07 1.131 14.96 0.219 1.006

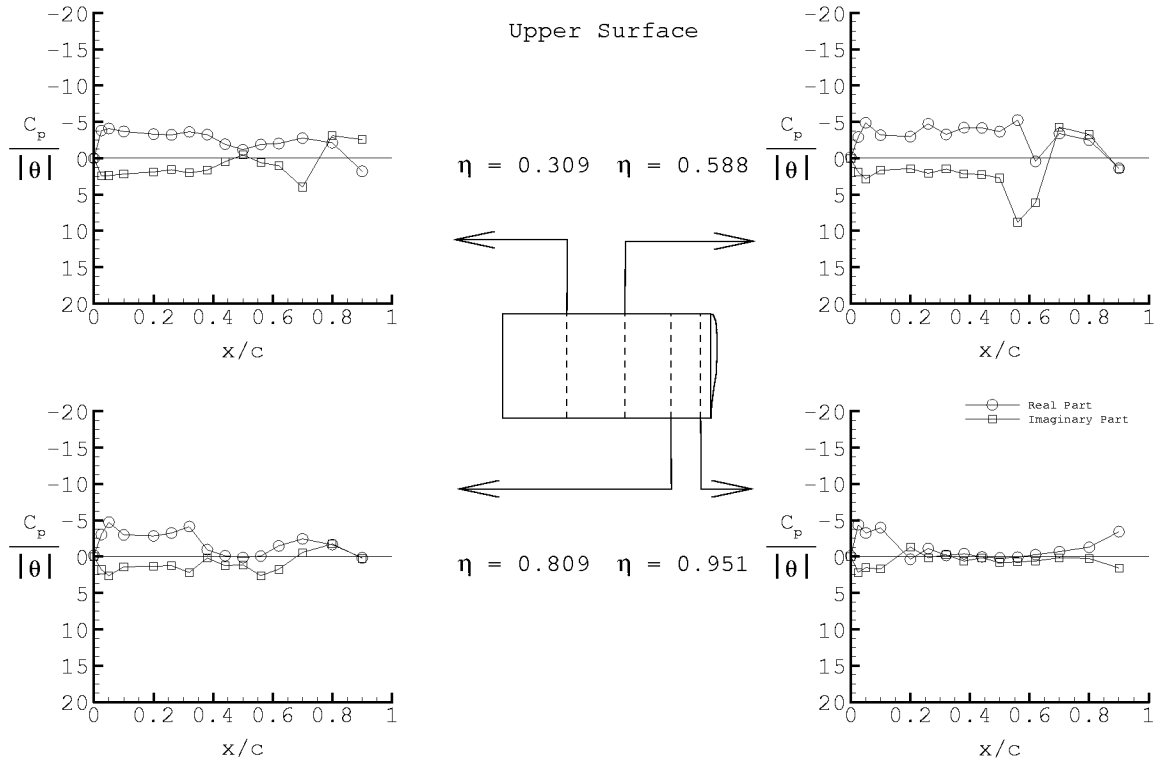
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.000	0.000			-0.164	0.047		
.025	-3.803	2.404	4.601	-2.954	-2.914	1.892	4.553	-3.129
.050	-4.086	2.378	4.259	-3.244	-4.873	2.836	3.718	-2.731
.100	-3.677	2.174	4.004	-2.721	-3.183	1.657	3.684	-2.776
.200	-3.315	1.891	5.371	-5.097	-2.979	1.427	4.411	-5.220
.260	-3.222	1.579	3.390	-3.129	-4.742	2.092	3.846	-3.475
.320	-3.633	2.022	5.111	-3.319	-3.265	1.488	5.199	-4.347
.380	-3.248	1.655	6.370	-2.916	-4.216	2.139	6.342	-3.107
.440	-1.932	0.489	9.116	-2.038	-4.166	2.234	8.489	-1.375
.500	-1.163	-0.467	9.328	4.389	-3.653	2.723	8.619	5.118
.560	-1.897	0.613	-6.697	9.424	-5.249	8.806	-2.928	8.750
.620	-2.028	1.038	-4.022	1.260	0.429	6.136	-1.634	-0.670
.700	-2.770	3.970	4.327	2.529	-3.404	-4.279	1.696	3.671
.800	-2.113	-3.109	2.560	0.783	-2.491	-3.258	-0.004	2.164
.900	1.792	-2.569	1.553	0.562	1.367	1.451	0.300	1.450

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.170	0.013			-0.112	-0.018		
.025	-3.033	1.808	3.809	-2.568	-4.383	2.185	3.775	-2.232
.050	-4.732	2.623	3.616	-2.398	-3.247	1.528	3.486	-2.369
.100	-2.984	1.417	2.880	-2.325	-3.973	1.719	2.835	-2.008
.200	-2.841	1.319	2.674	-5.340	0.365	-1.317	2.819	-2.899
.260	-3.243	1.245	1.377	-1.552	-1.128	0.160	1.543	-0.402
.320	-4.131	2.178	2.900	-1.873	-0.159	-0.236	2.902	-1.323
.380	-0.947	0.201	2.999	-2.376	-0.390	0.629	3.240	-0.198
.440	-0.127	1.247	-2.743	0.000	0.042	0.166	2.657	1.025
.500	0.131	1.132	2.253	4.268	0.189	0.833	2.235	2.509
.560	-0.064	2.619	-2.210	5.465	0.092	0.735	-0.851	3.133
.620	-1.467	1.743	-0.873	1.432	-0.267	0.629	-0.824	0.610
.700	-2.443	-0.559	0.686	1.905	-0.664	0.162	0.464	0.914
.800	-1.637	-1.744	1.285	0.737	-1.285	0.257	0.796	1.111
.900	0.164	0.233	1.068	-0.596	-3.418	1.565	0.297	1.100

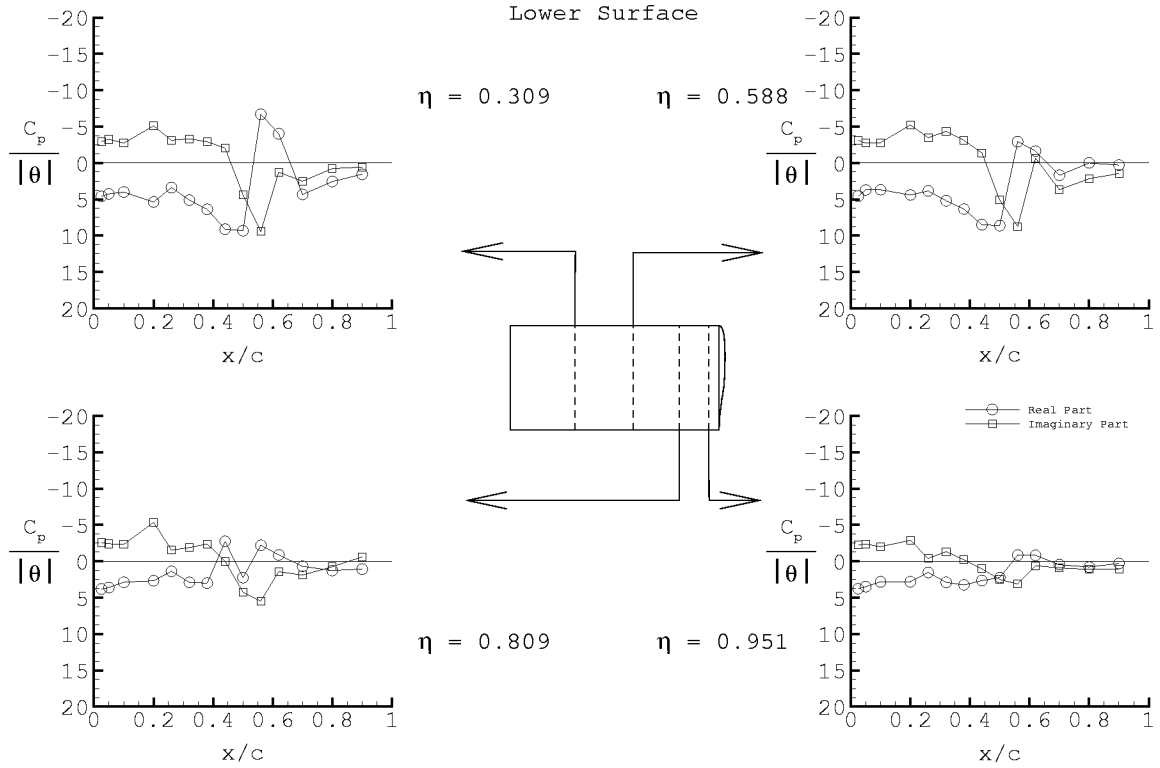
(e-1) Tabulated data for test case 6E32 (point 289)
 Figure 9. Continued.

Point 289

Upper Surface



Lower Surface



(e-2) Plot of data for test case 6E32 (point 289)
Figure 9. Continued.

Point Number = 435 Mach Number = 0.876 Alpha = 1.96, deg.

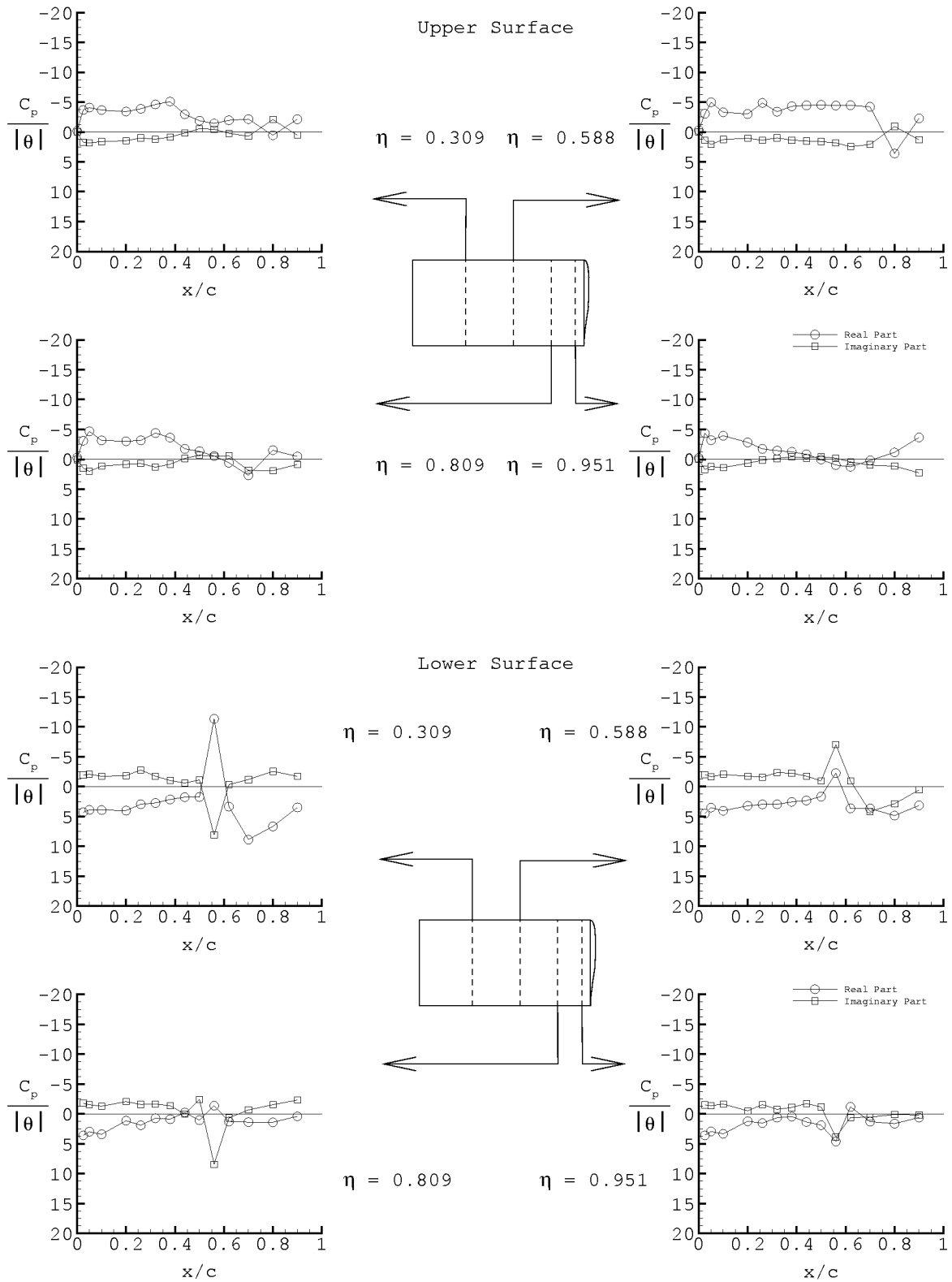
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 115.2 405.3 438.8 .401E+07 1.132 14.99 0.215 0.987

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.174	0.014			-0.290	-0.010		
.025	-3.683	1.717	4.279	-1.950	-3.073	1.375	4.501	-2.023
.050	-4.093	1.797	3.895	-2.071	-4.977	2.092	3.516	-1.662
.100	-3.668	1.610	3.933	-1.727	-3.310	1.257	4.042	-2.042
.200	-3.417	1.458	4.005	-1.851	-3.013	1.055	3.214	-1.745
.260	-3.878	1.003	2.957	-2.787	-4.862	1.367	2.970	-1.586
.320	-4.609	1.192	2.748	-1.737	-3.400	0.988	2.965	-2.333
.380	-5.097	0.844	2.148	-1.025	-4.311	1.384	2.553	-2.283
.440	-2.955	0.181	1.766	-0.577	-4.456	1.500	2.318	-1.747
.500	-1.899	-0.537	1.749	-1.144	-4.545	1.600	1.656	-0.964
.560	-1.436	-0.464	-11.356	8.071	-4.410	1.791	-2.266	-7.016
.620	-1.961	0.220	3.347	-0.364	-4.485	2.445	3.646	-0.970
.700	-2.149	0.711	8.863	-1.167	-4.212	2.091	3.678	4.187
.800	0.538	-2.079	6.661	-2.570	3.599	-0.924	4.842	2.875
.900	-2.140	0.534	3.484	-1.729	-2.269	1.294	3.144	0.554

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.287	0.045			-0.232	-0.011		
.025	-3.107	1.442	3.585	-1.800	-4.387	1.693	3.580	-1.520
.050	-4.695	2.012	2.988	-1.532	-3.206	1.205	2.934	-1.400
.100	-3.166	1.146	3.397	-1.317	-3.945	1.381	3.325	-1.658
.200	-3.025	0.822	1.124	-2.070	-2.828	0.653	1.228	-0.524
.260	-3.171	0.715	1.893	-1.580	-1.736	0.137	1.543	-1.576
.320	-4.395	1.310	0.726	-1.650	-1.445	-0.134	0.621	-0.767
.380	-3.624	0.817	0.883	-1.395	-1.265	-0.428	0.433	-1.077
.440	-1.737	-0.131	-0.246	0.000	-0.842	-0.221	1.352	-1.743
.500	-1.347	-0.681	1.042	-2.456	0.044	-0.462	1.867	-1.175
.560	-0.557	-0.509	-1.379	8.421	0.970	-0.180	4.618	3.889
.620	0.578	-0.572	1.266	0.663	1.256	0.452	-1.191	0.604
.700	2.676	1.846	1.369	-0.674	0.190	0.968	1.288	0.531
.800	-1.524	1.903	1.402	-1.528	-1.161	1.137	1.623	0.096
.900	-0.465	0.871	0.405	-2.333	-3.639	2.283	0.612	0.181

(f-1) Tabulated data for test case 6E33 (point 435)
 Figure 9. Continued.

Point 435



(f-2) Plot of data for test case 6E33 (point 435)
Figure 9. Continued.

Point Number = 264 Mach Number = 0.894 Alpha = 2.01, deg.

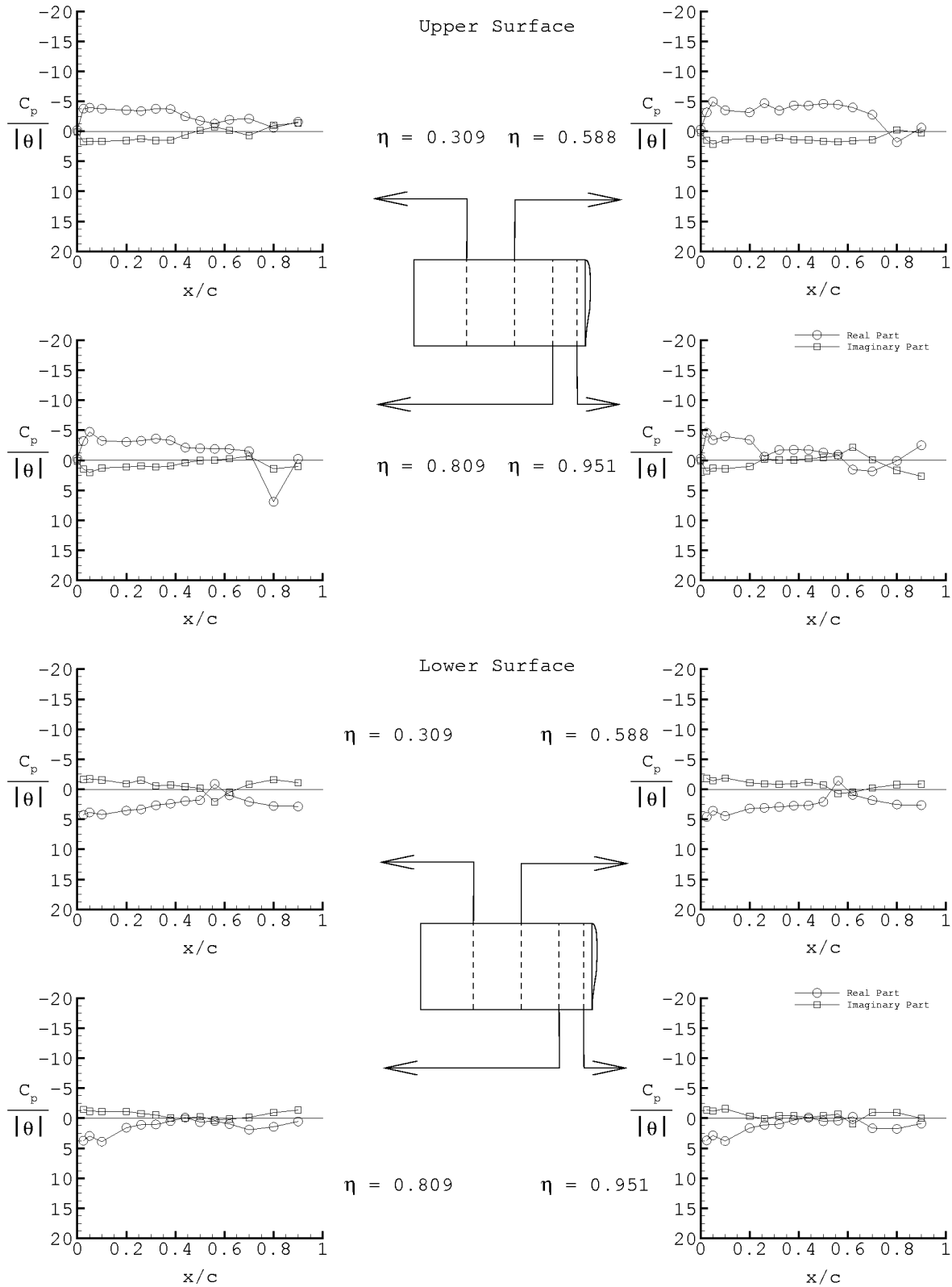
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 116.8 401.3 448.2 .398E+07 1.132 14.99 0.210 1.032

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.186	0.121			-0.290	0.165		
.025	-3.783	1.740	4.253	-1.624	-3.160	1.500	4.597	-1.811
.050	-3.932	1.677	3.849	-1.730	-4.950	2.122	3.562	-1.410
.100	-3.759	1.658	4.215	-1.568	-3.503	1.408	4.453	-1.872
.200	-3.516	1.521	3.543	-0.936	-3.164	1.208	3.208	-1.086
.260	-3.391	1.234	3.337	-1.514	-4.682	1.396	3.094	-0.893
.320	-3.755	1.525	2.665	-0.547	-3.445	1.073	2.938	-0.831
.380	-3.701	1.510	2.393	-0.718	-4.330	1.407	2.738	-0.916
.440	-2.487	0.579	1.952	-0.429	-4.315	1.452	2.696	-1.178
.500	-1.770	-0.155	1.822	-0.188	-4.603	1.639	2.096	-0.734
.560	-1.288	-0.768	-0.886	2.097	-4.442	1.750	-1.427	0.746
.620	-1.937	-0.152	0.990	0.502	-3.966	1.595	0.924	0.508
.700	-2.113	0.683	2.068	-0.810	-2.765	1.421	1.818	-0.226
.800	-0.597	-1.001	2.789	-1.610	1.816	-0.245	2.548	-0.779
.900	-1.578	-1.401	2.853	-1.089	-0.613	0.260	2.636	-0.872

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.249	0.123			-0.273	0.052		
.025	-3.238	1.462	3.736	-1.470	-4.601	1.803	3.683	-1.406
.050	-4.746	2.034	2.952	-1.168	-3.374	1.281	2.872	-1.190
.100	-3.259	1.271	3.894	-1.133	-3.980	1.402	3.798	-1.566
.200	-3.074	1.131	1.566	-1.134	-3.409	1.003	1.626	-0.360
.260	-3.262	0.911	1.075	-0.787	-0.622	-0.239	1.105	0.114
.320	-3.606	1.116	1.032	-0.550	-1.720	-0.051	0.981	-0.387
.380	-3.306	0.960	0.499	-0.048	-1.775	-0.068	0.310	-0.392
.440	-2.125	0.417	-0.113	0.000	-1.755	-0.275	-0.141	-0.089
.500	-1.998	0.035	0.641	-0.270	-1.304	-0.475	0.500	-0.441
.560	-1.888	-0.010	0.472	0.309	-0.936	-0.785	0.386	-0.674
.620	-1.871	-0.253	0.975	0.134	1.536	-2.178	-0.243	0.969
.700	-1.514	-0.693	1.914	-0.134	1.828	-0.128	1.673	-0.989
.800	6.909	1.406	1.428	-0.932	0.084	1.663	1.771	-0.926
.900	-0.241	1.027	0.543	-1.362	-2.518	2.662	0.888	0.017

(g-1) Tabulated data for test case 6E34 (point 264)
 Figure 9. Continued.

Point 264



(g-2) Plot of data for test case 6E34 (point 264)
Figure 9. Continued.

Point Number = 513 Mach Number = 0.402 Alpha = 1.97, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.7 654.9 202.9 .402E+07 1.132 5.02 0.155 1.008

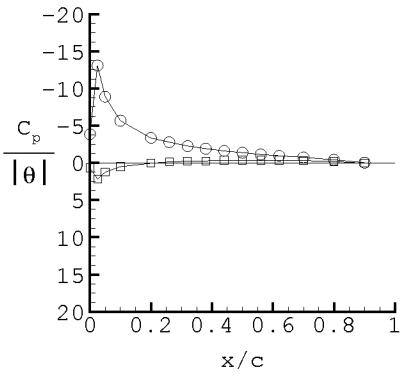
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-3.864	0.674			-3.757	0.622		
.025	-13.066	2.163	8.889	-1.281	-12.393	2.052	8.727	-1.211
.050	-8.893	1.250	6.933	-0.900	-8.062	1.033	6.492	-0.763
.100	-5.662	0.495	4.873	-0.392	-4.821	0.320	4.480	-0.305
.200	-3.353	0.047	3.069	0.027	-3.069	-0.037	2.841	0.079
.260	-2.782	-0.131	2.372	0.274	-2.493	-0.196	2.142	0.278
.320	-2.262	-0.230	2.017	0.345	-2.022	-0.313	1.900	0.352
.380	-1.916	-0.249	1.661	0.386	-1.670	-0.343	1.542	0.396
.440	-1.610	-0.354	1.530	0.439	-1.434	-0.358	1.297	0.424
.500	-1.374	-0.363	1.288	0.449	-1.258	-0.356	1.154	0.483
.560	-1.138	-0.361	1.104	0.453	-1.142	-0.349	0.901	0.596
.620	-0.958	-0.358	0.786	0.563	-0.911	-0.323	0.676	0.520
.700	-0.736	-0.303	0.648	0.462	-0.612	-0.301	0.561	0.481
.800	-0.415	-0.186	0.708	0.363	-0.370	-0.145	0.661	0.331
.900	-0.032	0.047	0.630	0.261	-0.103	0.048	0.575	0.246

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-2.973	0.487			-1.684	0.270		
.025	-10.779	1.707	6.242	-1.187	-7.585	1.161	6.248	-0.878
.050	-7.048	0.903	4.511	-0.755	-4.960	0.644	4.519	-0.507
.100	-4.198	0.264	2.778	-0.284	-2.724	0.152	2.783	-0.117
.200	-2.609	-0.178	1.534	0.070	-1.533	-0.075	1.527	0.150
.260	-2.157	-0.121	1.520	0.237	-1.125	-0.160	-1.309	0.802
.320	-1.509	-0.277	0.722	0.327	-0.891	-0.184	-0.323	0.665
.380	-1.334	-0.284	0.877	0.375	-0.709	-0.209	0.864	0.283
.440	-1.154	-0.307	-0.606	0.000	-0.698	-0.243	0.508	0.365
.500	-0.845	-0.336	0.398	0.438	-0.580	-0.234	0.284	0.355
.560	-0.708	-0.363	0.307	0.471	-0.457	-0.229	0.070	0.392
.620	-0.601	-0.323	0.263	0.487	-0.605	-0.159	-0.353	0.370
.700	-0.434	-0.270	0.230	0.441	-0.431	-0.145	-0.235	0.389
.800	-0.307	-0.150	0.175	0.358	-0.966	0.022	-0.044	0.281
.900	-0.170	0.018	0.134	0.281	-1.803	0.237	0.039	0.166

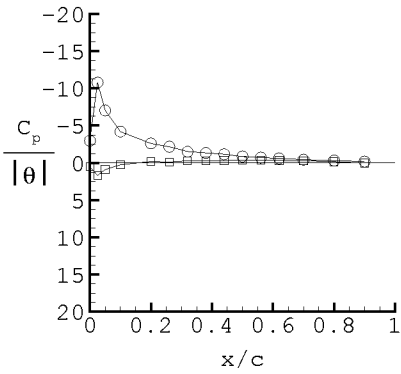
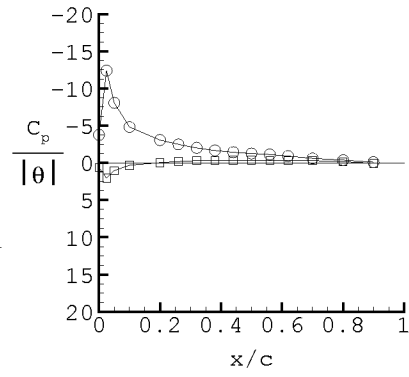
(h-1) Tabulated data for test case 6E35 (point 513)
 Figure 9. Continued.

Point 513

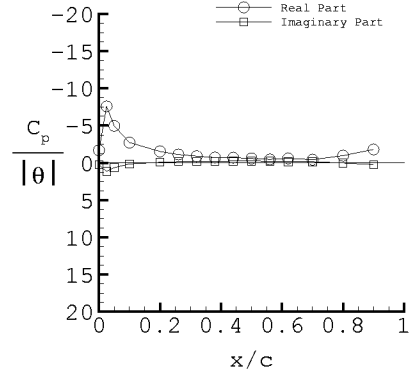
Upper Surface



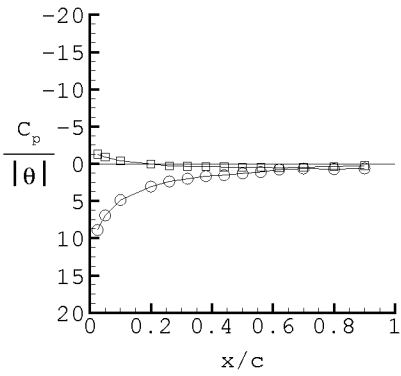
$\eta = 0.309$ $\eta = 0.588$



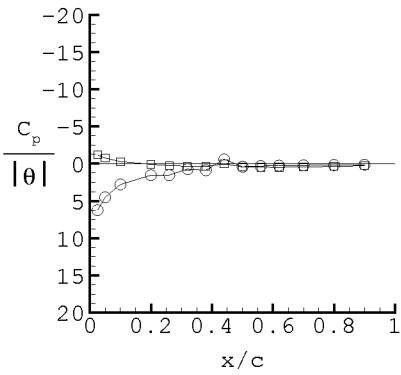
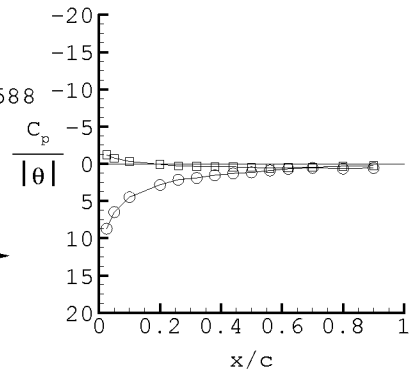
$\eta = 0.809$ $\eta = 0.951$



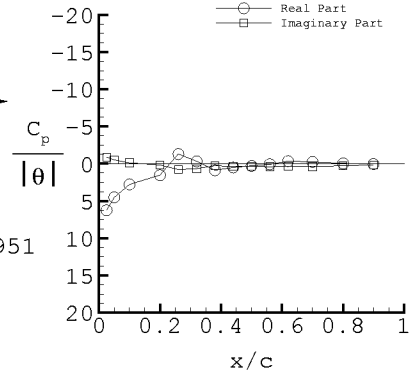
Lower Surface



$\eta = 0.309$ $\eta = 0.588$



$\eta = 0.809$ $\eta = 0.951$



(h-2) Plot of data for test case 6E35 (point 513)
Figure 9. Continued.

Point Number = 515 Mach Number = 0.402 Alpha = 1.98, deg.

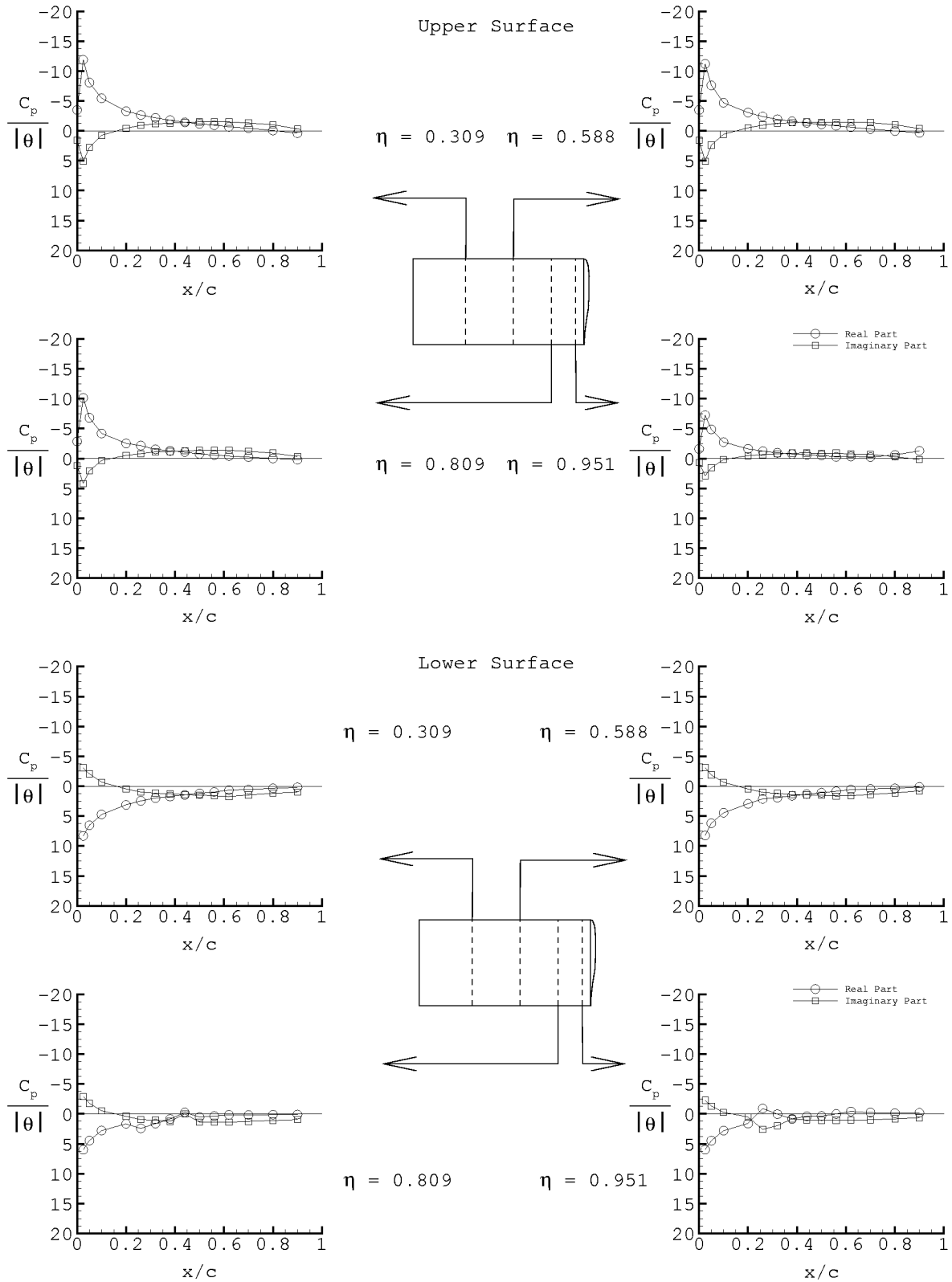
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.7 654.9 202.9 .402E+07 1.132 15.06 0.466 1.020

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-3.492	1.548			-3.481	1.572		
.025	-11.884	5.069	8.319	-3.094	-11.203	5.082	8.250	-3.117
.050	-8.073	2.780	6.532	-2.072	-7.607	2.399	6.181	-1.878
.100	-5.454	0.747	4.727	-0.673	-4.684	0.567	4.447	-0.649
.200	-3.287	-0.421	3.112	0.460	-3.050	-0.494	2.940	0.466
.260	-2.656	-0.914	2.453	0.976	-2.396	-0.968	2.131	1.012
.320	-2.180	-1.164	1.990	1.158	-1.934	-1.251	1.895	1.207
.380	-1.781	-1.275	1.707	1.282	-1.585	-1.344	1.606	1.406
.440	-1.425	-1.435	1.450	1.410	-1.318	-1.459	1.326	1.452
.500	-1.178	-1.503	1.199	1.486	-1.064	-1.449	1.082	1.505
.560	-0.939	-1.533	0.960	1.586	-0.845	-1.458	0.844	1.650
.620	-0.673	-1.484	0.661	1.732	-0.609	-1.450	0.568	1.587
.700	-0.441	-1.333	0.559	1.470	-0.290	-1.374	0.444	1.391
.800	-0.042	-1.010	0.347	1.186	0.021	-1.011	0.355	1.125
.900	0.387	-0.325	0.186	0.994	0.337	-0.377	0.127	0.776

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-2.850	1.192			-1.598	0.692		
.025	-10.127	4.174	5.986	-2.912	-7.255	2.887	5.990	-2.264
.050	-6.833	2.050	4.456	-1.767	-4.872	1.546	4.473	-1.316
.100	-4.201	0.316	2.782	-0.540	-2.747	0.173	2.796	-0.264
.200	-2.533	-0.511	1.664	0.404	-1.617	-0.473	1.608	0.504
.260	-2.157	-0.807	2.430	0.949	-1.232	-0.674	-0.905	2.599
.320	-1.541	-1.128	1.628	1.039	-0.960	-0.778	0.041	1.966
.380	-1.292	-1.167	0.853	1.242	-0.738	-0.921	0.833	0.836
.440	-1.076	-1.297	-0.249	0.000	-0.640	-0.924	0.390	1.054
.500	-0.750	-1.382	0.527	1.389	-0.513	-0.871	0.349	1.068
.560	-0.580	-1.401	0.342	1.383	-0.276	-0.914	0.020	1.067
.620	-0.407	-1.402	0.162	1.390	-0.360	-0.762	-0.404	1.048
.700	-0.236	-1.213	0.186	1.270	-0.233	-0.692	-0.229	0.985
.800	-0.011	-0.899	0.127	1.111	-0.600	-0.307	-0.139	0.831
.900	0.180	-0.350	0.100	0.944	-1.282	0.157	-0.191	0.646

(i-1) Tabulated data for test case 6E36 (point 515)
 Figure 9. Continued.

Point 515



(i-2) Plot of data for test case 6E36 (point 515)
Figure 9. Continued.

Point Number = 516 Mach Number = 0.402 Alpha = 1.98, deg.

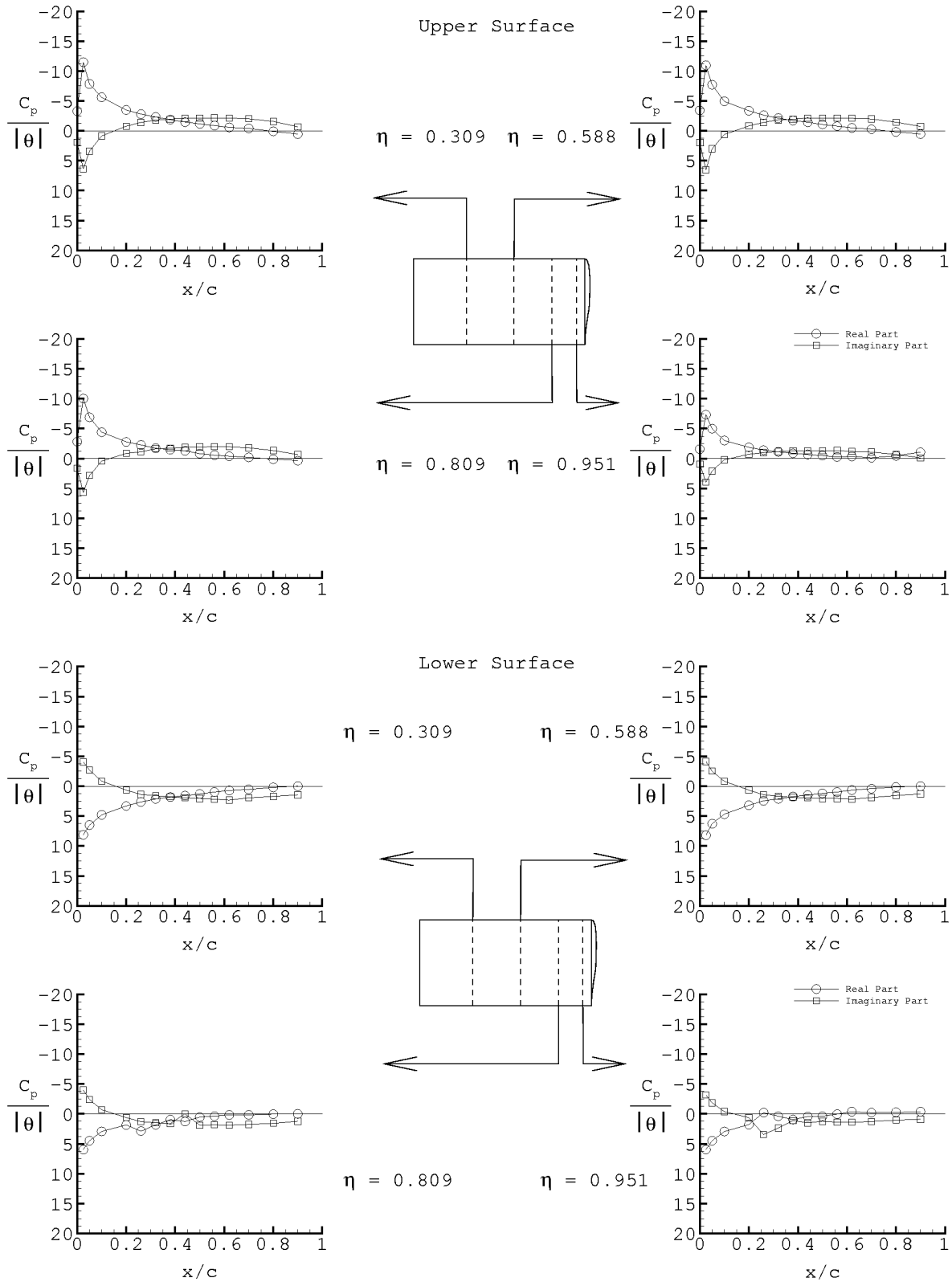
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.8 654.9 203.2 .403E+07 1.132 19.97 0.617 1.060

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-3.313	1.936			-3.427	1.955		
.025	-11.488	6.368	8.127	-4.052	-10.957	6.532	8.202	-4.143
.050	-7.832	3.405	6.492	-2.689	-7.705	3.004	6.273	-2.509
.100	-5.612	0.849	4.792	-0.836	-4.934	0.623	4.686	-0.818
.200	-3.484	-0.766	3.290	0.639	-3.358	-0.831	3.176	0.658
.260	-2.796	-1.418	2.630	1.387	-2.627	-1.391	2.432	1.410
.320	-2.306	-1.789	2.129	1.575	-2.137	-1.825	2.121	1.675
.380	-1.864	-1.957	1.818	1.774	-1.719	-1.943	1.726	1.864
.440	-1.457	-2.081	1.565	1.932	-1.455	-2.148	1.481	1.930
.500	-1.168	-2.134	1.289	2.063	-1.076	-2.121	1.186	2.062
.560	-0.878	-2.152	0.967	2.173	-0.784	-2.131	0.967	2.054
.620	-0.577	-2.140	0.703	2.329	-0.497	-2.104	0.641	2.178
.700	-0.392	-2.016	0.514	1.933	-0.265	-1.982	0.405	1.903
.800	0.093	-1.565	0.190	1.719	0.173	-1.449	0.139	1.561
.900	0.543	-0.673	-0.013	1.459	0.544	-0.741	-0.020	1.297

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-2.814	1.612			-1.587	0.927		
.025	-10.021	5.669	5.977	-3.983	-7.329	3.946	5.966	-3.172
.050	-6.896	2.843	4.491	-2.410	-4.983	2.095	4.494	-1.862
.100	-4.410	0.440	2.930	-0.699	-3.020	0.206	2.947	-0.393
.200	-2.787	-0.868	1.850	0.601	-1.871	-0.707	1.779	0.644
.260	-2.279	-1.122	2.878	1.290	-1.410	-1.002	-0.205	3.453
.320	-1.731	-1.631	1.817	1.465	-1.120	-1.172	0.388	2.346
.380	-1.483	-1.719	0.969	1.617	-0.886	-1.293	0.950	1.108
.440	-1.299	-1.862	1.273	0.000	-0.669	-1.297	0.456	1.500
.500	-0.830	-1.938	0.526	1.878	-0.492	-1.316	0.381	1.240
.560	-0.570	-1.973	0.368	1.826	-0.253	-1.327	0.039	1.405
.620	-0.388	-1.962	0.173	1.879	-0.339	-1.196	-0.378	1.410
.700	-0.196	-1.773	0.163	1.770	-0.132	-1.073	-0.210	1.280
.800	0.111	-1.347	0.040	1.566	-0.442	-0.680	-0.273	1.046
.900	0.344	-0.674	0.007	1.243	-1.077	-0.096	-0.374	0.898

(j-1) Tabulated data for test case 6E37 (point 516)
 Figure 9. Continued.

Point 516



(j-2) Plot of data for test case 6E37 (point 516)
Figure 9. Continued.

Point Number = 494 Mach Number = 0.803 Alphao = 2.19, deg.

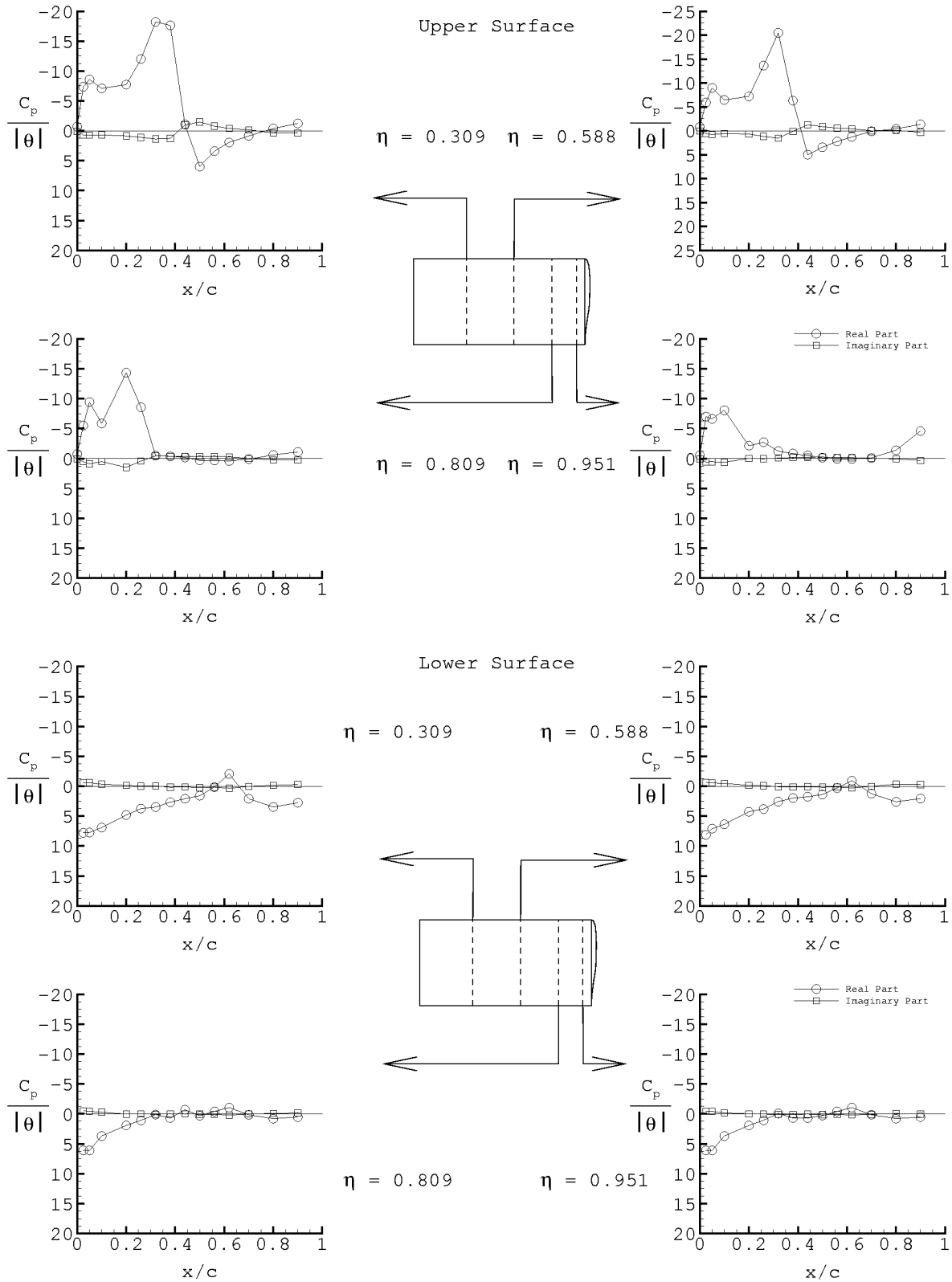
q,psf H,psf V, fps Rn gamma freq,Hz k theta,deg
 106.1 415.4 403.2 .401E+07 1.132 1.98 0.031 1.069

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.687	0.116			-0.802	0.057		
.025	-7.365	0.683	7.805	-0.559	-5.924	0.550	8.123	-0.625
.050	-8.598	0.737	7.749	-0.596	-8.970	0.785	7.107	-0.547
.100	-7.097	0.671	6.905	-0.350	-6.463	0.543	6.362	-0.456
.200	-7.725	0.853	4.822	-0.143	-7.204	0.681	4.285	-0.150
.260	-12.010	1.093	3.752	-0.020	-13.617	1.167	3.804	-0.093
.320	-18.225	1.370	3.484	-0.030	-20.473	1.503	2.571	0.094
.380	-17.642	1.265	2.674	0.173	-6.324	0.099	1.979	0.125
.440	-1.069	-0.976	2.086	0.128	4.993	-1.245	1.767	0.086
.500	5.978	-1.502	1.588	0.252	3.429	-0.868	1.383	0.175
.560	3.397	-0.772	0.147	0.156	2.231	-0.577	0.293	0.132
.620	1.942	-0.402	-2.060	0.352	1.269	-0.430	-0.922	0.285
.700	0.842	-0.164	2.090	0.036	0.104	-0.025	1.233	0.011
.800	-0.388	0.370	3.482	-0.128	-0.408	-0.133	2.604	-0.338
.900	-1.239	0.346	2.772	-0.286	-1.362	0.294	2.073	-0.269

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.745	0.089			-0.533	0.056		
.025	-5.495	0.529	6.097	-0.490	-7.000	0.551	6.095	-0.426
.050	-9.446	0.876	6.098	-0.438	-6.624	0.545	6.097	-0.405
.100	-5.872	0.524	3.694	-0.292	-8.069	0.621	3.693	-0.187
.200	-14.341	1.482	1.929	0.044	-2.144	-0.019	1.929	0.007
.260	-8.565	0.419	1.072	0.000	-2.733	0.033	1.071	0.043
.320	-0.482	-0.425	0.107	0.075	-1.230	-0.075	-0.082	0.069
.380	-0.372	-0.386	0.697	-0.024	-0.841	-0.170	0.692	0.081
.440	-0.184	-0.387	-0.696	0.000	-0.488	-0.222	0.696	0.039
.500	0.297	-0.380	0.320	0.047	-0.131	-0.234	0.289	0.140
.560	0.308	-0.371	-0.411	0.061	0.049	-0.153	-0.416	0.103
.620	0.399	-0.270	-1.060	0.206	0.066	-0.147	-1.061	0.153
.700	0.105	-0.020	0.161	0.018	-0.093	-0.054	0.137	0.085
.800	-0.601	0.228	0.803	-0.059	-1.393	0.051	0.803	-0.045
.900	-1.100	0.238	0.534	-0.151	-4.598	0.330	0.535	0.031

(k-1) Tabulated data for test case 6E38 (point 494)
 Figure 9. Continued.

Point 494



(k-2) Plot of data for test case 6E38 (point 494)
Figure 9. Continued.

Point Number = 493 Mach Number = 0.802 Alpha = 1.89, deg.

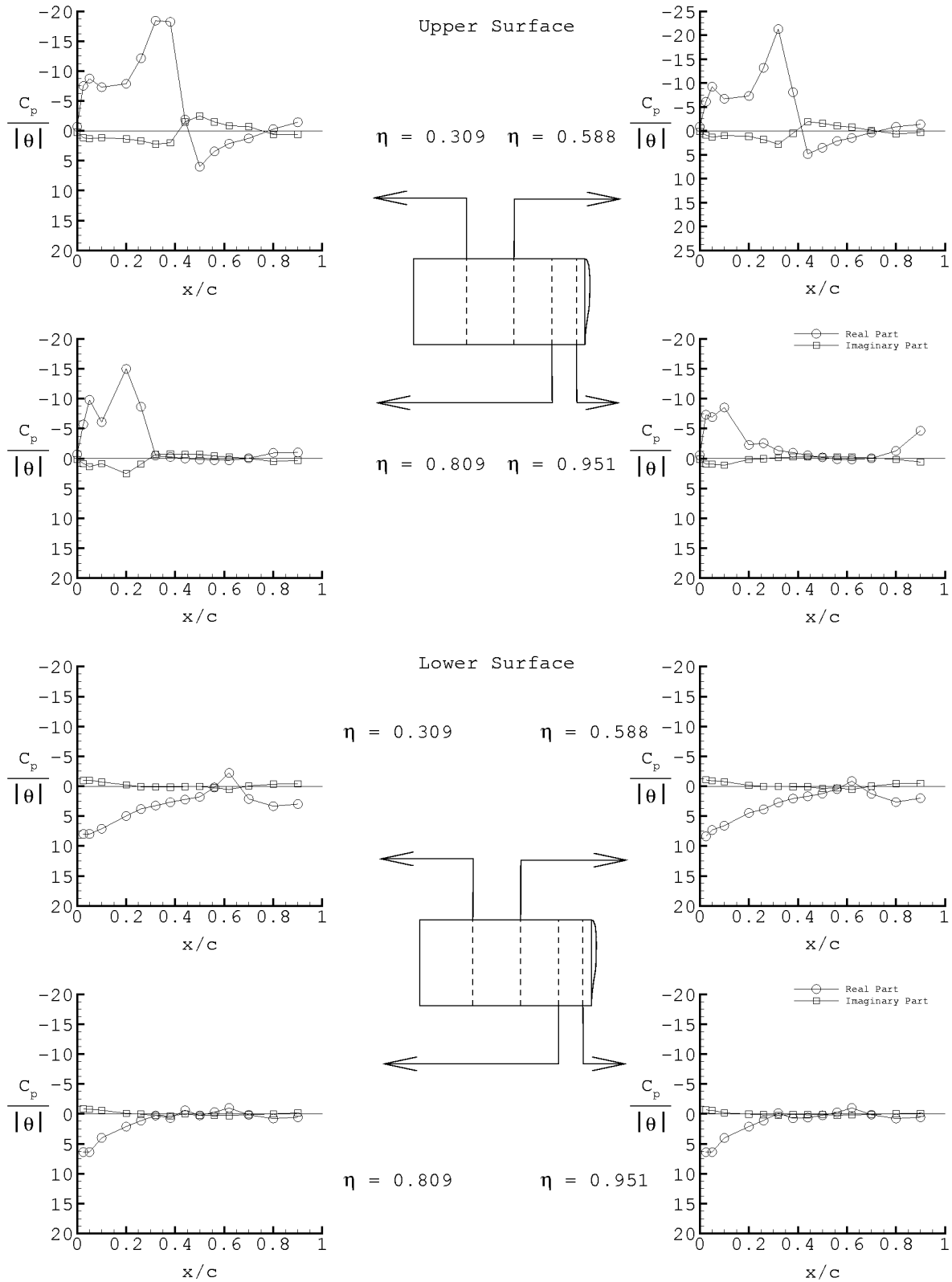
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 105.8 415.2 402.4 .400E+07 1.132 3.00 0.047 1.025

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.690	0.227			-0.830	0.120		
.025	-7.517	1.137	7.991	-0.967	-6.081	0.909	8.374	-1.058
.050	-8.735	1.305	7.988	-0.995	-9.237	1.348	7.322	-0.912
.100	-7.290	1.142	7.121	-0.698	-6.693	0.976	6.608	-0.765
.200	-7.877	1.361	4.971	-0.208	-7.288	1.154	4.469	-0.148
.260	-12.126	1.683	3.800	0.086	-13.181	1.806	3.857	0.027
.320	-18.424	2.230	3.240	0.107	-21.281	2.802	2.739	0.043
.380	-18.227	1.980	2.678	0.159	-8.089	0.509	2.066	0.087
.440	-1.884	-1.493	2.235	0.070	4.833	-1.914	1.675	0.085
.500	5.986	-2.492	1.788	0.059	3.524	-1.569	1.228	0.380
.560	3.429	-1.505	0.205	0.266	2.108	-1.033	0.480	0.286
.620	2.132	-0.840	-2.229	0.531	1.479	-0.790	-0.856	0.529
.700	1.265	-0.716	2.124	-0.037	0.373	-0.118	1.286	-0.002
.800	-0.292	0.604	3.336	-0.351	-0.843	0.647	2.649	-0.424
.900	-1.450	0.589	2.992	-0.399	-1.355	0.343	2.009	-0.490

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.706	0.172			-0.547	0.116		
.025	-5.699	0.821	6.389	-0.840	-7.317	0.950	6.394	-0.661
.050	-9.800	1.360	6.392	-0.772	-6.924	0.936	6.398	-0.627
.100	-6.093	0.824	4.008	-0.603	-8.537	1.109	4.021	-0.169
.200	-14.991	2.536	2.123	-0.099	-2.287	0.148	2.124	0.037
.260	-8.667	0.957	1.118	0.050	-2.571	0.040	1.109	0.140
.320	-0.481	-0.687	0.277	0.234	-1.325	-0.208	-0.123	0.251
.380	-0.260	-0.738	0.705	0.365	-0.975	-0.247	0.724	0.062
.440	-0.015	-0.727	-0.615	0.000	-0.539	-0.295	0.598	0.145
.500	0.166	-0.707	0.265	0.251	-0.198	-0.271	0.257	0.110
.560	0.263	-0.429	-0.286	0.262	0.108	-0.258	-0.234	0.240
.620	0.293	-0.259	-0.985	0.297	0.141	-0.241	-0.993	0.164
.700	-0.046	-0.032	0.165	0.133	-0.037	-0.106	0.133	0.102
.800	-0.938	0.499	0.783	-0.019	-1.275	0.166	0.782	-0.036
.900	-1.019	0.300	0.556	-0.182	-4.660	0.572	0.552	-0.086

(I-1) Tabulated data for test case 6E39 (point 493)
 Figure 9. Continued.

Point 493



(I-2) Plot of data for test case 6E39 (point 493)
Figure 9. Continued.

Point Number = 495 Mach Number = 0.803 Alpha = 1.84, deg.

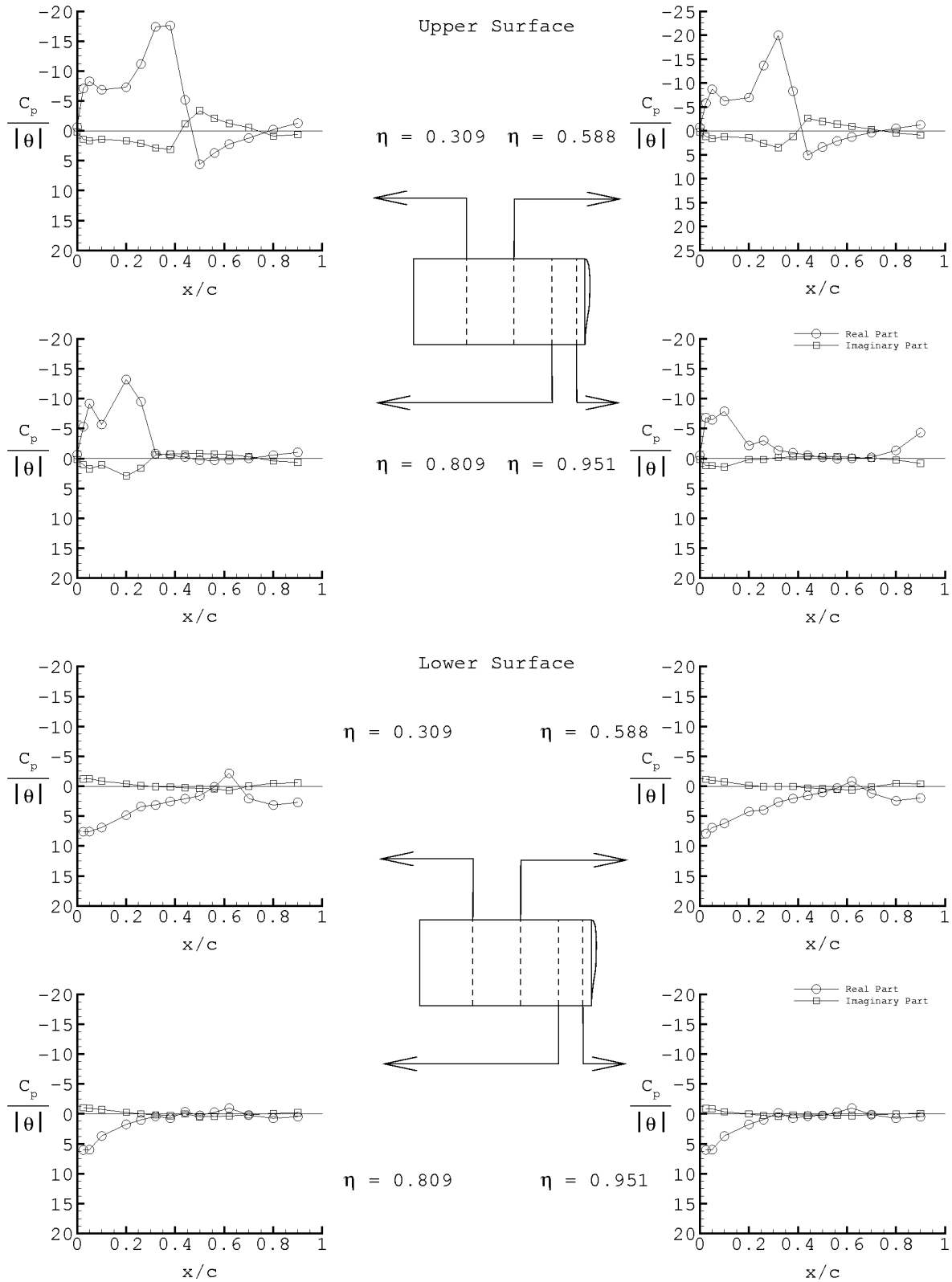
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 106.1 415.6 403.2 .401E+07 1.132 3.95 0.062 1.080

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.615	0.164			-0.723	0.170		
.025	-7.078	1.401	7.600	-1.190	-5.777	1.144	7.925	-1.170
.050	-8.275	1.638	7.589	-1.256	-8.703	1.660	6.933	-0.987
.100	-6.862	1.396	6.896	-0.859	-6.251	1.204	6.216	-0.741
.200	-7.291	1.670	4.863	-0.417	-6.951	1.490	4.242	-0.148
.260	-11.156	2.108	3.394	-0.089	-13.653	2.605	3.978	0.069
.320	-17.382	2.846	3.129	0.076	-19.958	3.519	2.653	0.009
.380	-17.607	3.105	2.544	0.120	-8.296	1.196	2.069	0.025
.440	-5.175	-1.166	2.106	0.259	5.096	-2.619	1.568	0.274
.500	5.587	-3.371	1.603	0.367	3.390	-1.981	1.033	0.417
.560	3.698	-2.083	0.123	0.461	2.111	-1.424	0.306	0.558
.620	2.227	-1.235	-2.160	0.735	1.281	-0.944	-0.836	0.653
.700	1.209	-0.546	2.069	0.007	0.354	-0.321	1.159	0.134
.800	-0.198	0.880	3.142	-0.509	-0.515	0.459	2.442	-0.506
.900	-1.289	0.626	2.708	-0.526	-1.259	0.885	1.973	-0.416

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.665	0.183			-0.513	0.136		
.025	-5.312	1.033	6.040	-1.024	-6.842	1.219	6.035	-0.891
.050	-9.172	1.750	5.990	-0.948	-6.466	1.210	5.988	-0.852
.100	-5.684	1.064	3.687	-0.746	-7.884	1.419	3.698	-0.337
.200	-13.207	2.928	1.745	-0.247	-2.168	0.174	1.750	0.027
.260	-9.520	1.610	1.008	-0.005	-3.020	0.153	0.966	0.286
.320	-0.822	-0.584	0.423	0.152	-1.367	-0.182	-0.161	0.393
.380	-0.588	-0.752	0.722	0.312	-0.974	-0.259	0.720	0.183
.440	-0.227	-0.818	-0.354	0.000	-0.550	-0.320	0.365	0.217
.500	0.285	-0.856	0.253	0.484	-0.193	-0.378	0.265	0.177
.560	0.297	-0.738	-0.279	0.419	0.039	-0.316	-0.254	0.271
.620	0.223	-0.652	-0.970	0.373	-0.023	-0.211	-0.964	0.293
.700	-0.023	-0.317	0.208	0.154	-0.202	-0.064	0.128	0.169
.800	-0.554	0.410	0.742	-0.083	-1.359	0.237	0.743	-0.016
.900	-1.039	0.639	0.474	-0.207	-4.327	0.818	0.473	-0.066

(m-1) Tabulated data for test case 6E40 (point 495)
 Figure 9. Continued.

Point 495



(m-2) Plot of data for test case 6E40 (point 495)
Figure 9. Continued.

Point Number = 314 Mach Number = 0.803 Alpha = 2.10, deg.

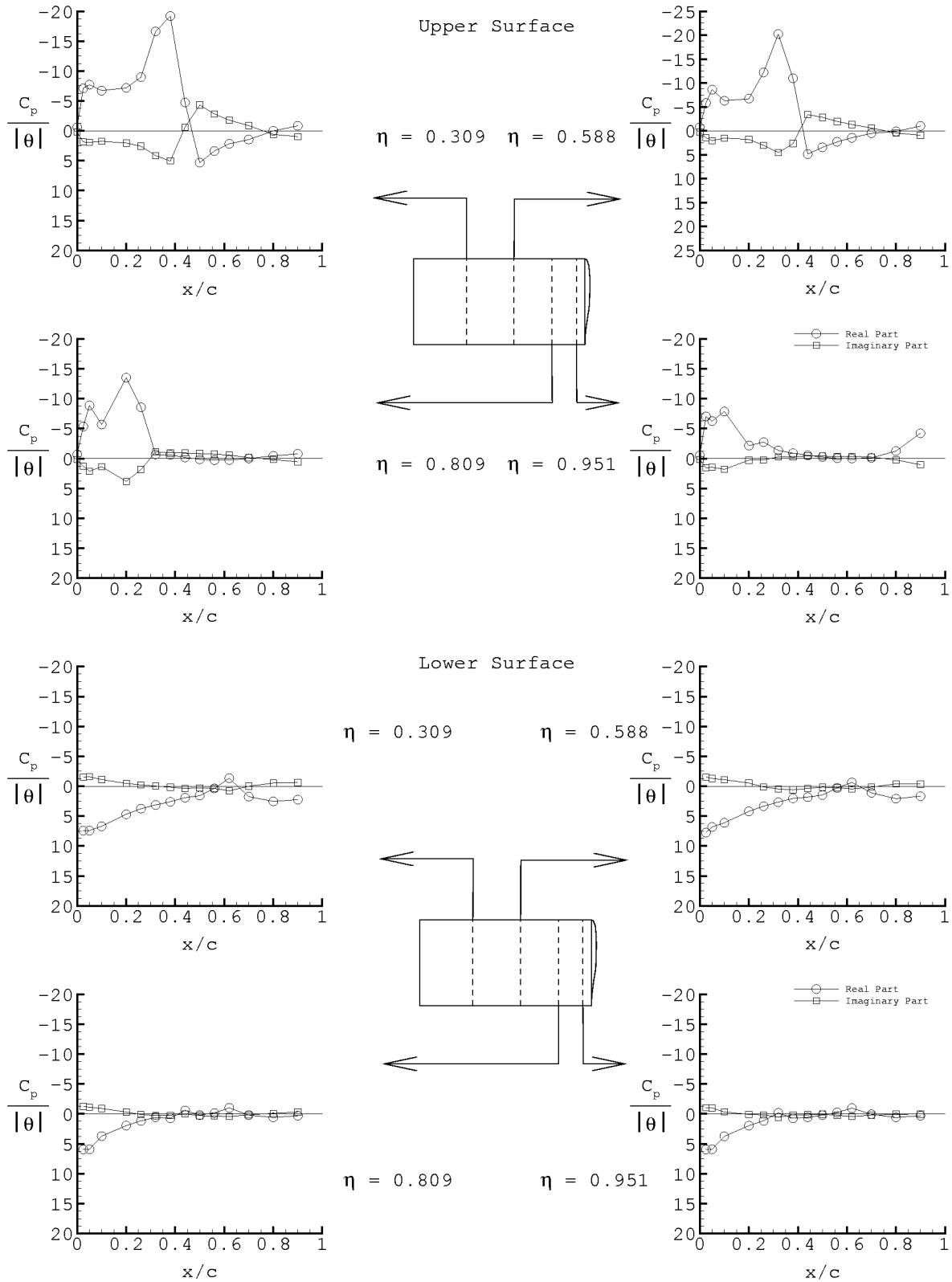
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.7 422.0 405.1 .401E+07 1.131 4.95 0.077 1.080

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.599	0.216			-0.762	0.230		
.025	-7.136	1.859	7.431	-1.525	-5.817	1.450	7.757	-1.522
.050	-7.718	1.939	7.421	-1.577	-8.618	2.053	6.824	-1.314
.100	-6.728	1.740	6.697	-1.121	-6.293	1.511	6.113	-1.078
.200	-7.198	2.037	4.699	-0.461	-6.716	1.787	4.210	-0.539
.260	-8.975	2.574	3.760	-0.230	-12.205	3.020	3.340	0.111
.320	-16.627	4.145	3.130	-0.022	-20.244	4.525	2.668	0.451
.380	-19.192	5.035	2.595	0.154	-10.979	2.676	2.036	0.599
.440	-4.739	-0.582	1.926	0.378	4.867	-3.408	1.818	0.380
.500	5.319	-4.307	1.564	0.293	3.444	-2.829	1.477	0.158
.560	3.373	-2.830	0.378	0.372	2.289	-1.976	0.279	0.245
.620	2.160	-1.800	-1.330	0.774	1.447	-1.326	-0.641	0.472
.700	1.449	-0.884	1.751	-0.006	0.513	-0.609	1.104	0.151
.800	0.004	0.584	2.546	-0.527	0.132	0.459	2.084	-0.401
.900	-0.835	0.961	2.253	-0.612	-1.012	0.937	1.660	-0.356

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.667	0.175			-0.510	0.144		
.025	-5.363	1.297	5.958	-1.240	-7.044	1.562	5.956	-1.050
.050	-8.873	2.130	5.913	-1.121	-6.255	1.444	5.911	-1.000
.100	-5.679	1.342	3.725	-0.917	-7.860	1.800	3.752	-0.328
.200	-13.528	3.828	1.953	-0.306	-2.157	0.276	1.961	0.089
.260	-8.556	1.850	1.166	0.109	-2.748	0.240	1.156	0.160
.320	-0.673	-1.143	0.576	0.302	-1.355	-0.258	-0.183	0.554
.380	-0.623	-0.924	0.731	0.268	-0.897	-0.327	0.723	0.168
.440	-0.177	-0.938	-0.581	0.000	-0.541	-0.427	0.567	0.136
.500	0.131	-0.839	0.197	0.292	-0.244	-0.410	0.205	0.053
.560	0.279	-0.745	-0.149	0.328	-0.050	-0.368	-0.225	0.225
.620	0.245	-0.588	-1.010	0.440	0.001	-0.371	-0.962	0.447
.700	-0.004	-0.159	0.208	0.174	-0.115	-0.239	0.047	0.207
.800	-0.447	0.168	0.583	-0.086	-1.252	0.234	0.581	0.055
.900	-0.782	0.548	0.311	-0.314	-4.225	1.038	0.316	0.040

(n-1) Tabulated data for test case 6E41 (point 314)
 Figure 9. Continued.

Point 314



(n-2) Plot of data for test case 6E41 (point 314)
Figure 9. Continued.

Point Number = 315 Mach Number = 0.804 Alpha = 2.08, deg.

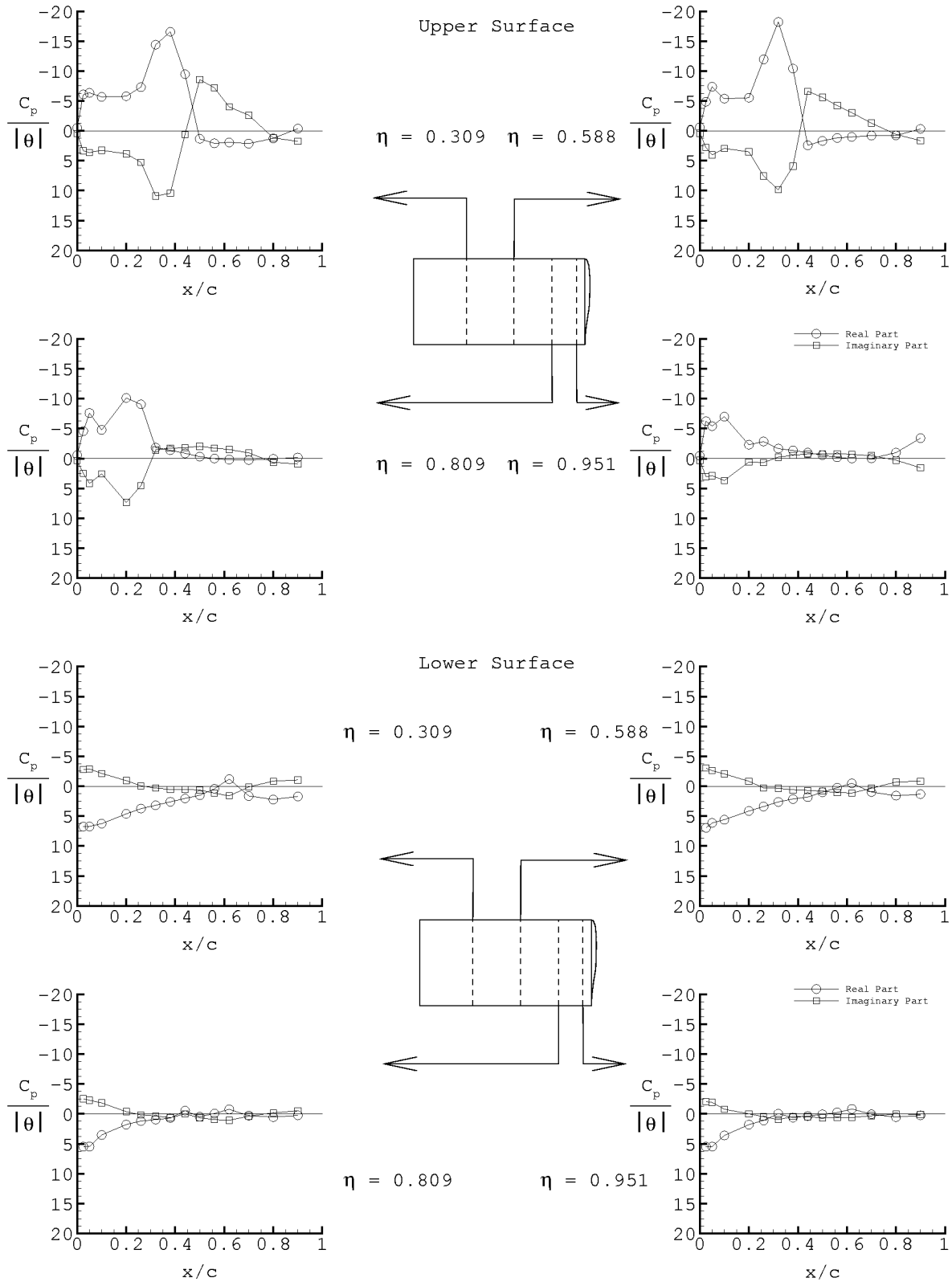
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.9 422.2 405.5 .401E+07 1.131 9.96 0.154 1.057

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.492	0.426			-0.569	0.415		
.025	-6.080	3.343	6.761	-2.800	-4.855	2.758	6.959	-3.026
.050	-6.356	3.626	6.721	-2.895	-7.377	4.022	6.142	-2.594
.100	-5.686	3.270	6.260	-2.131	-5.373	2.942	5.600	-2.049
.200	-5.786	3.830	4.620	-0.948	-5.532	3.524	4.146	-0.828
.260	-7.307	5.251	3.740	-0.059	-11.959	7.560	3.402	0.292
.320	-14.397	10.888	3.183	0.312	-18.215	9.849	2.634	0.342
.380	-16.559	10.428	2.602	0.534	-10.416	5.917	2.142	0.594
.440	-9.467	0.596	2.046	0.533	2.422	-6.618	1.822	0.699
.500	1.327	-8.571	1.499	0.630	1.672	-5.610	1.001	0.831
.560	2.087	-7.183	0.430	1.170	1.173	-4.231	0.249	1.055
.620	1.942	-3.998	-1.187	1.616	1.015	-3.033	-0.489	1.147
.700	2.124	-2.604	1.623	0.105	0.793	-1.294	0.972	0.340
.800	1.269	1.183	2.228	-0.851	0.773	0.595	1.582	-0.711
.900	-0.369	1.750	1.710	-1.048	-0.332	1.647	1.330	-0.838

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.550	0.348			-0.465	0.279		
.025	-4.582	2.467	5.469	-2.514	-6.241	3.031	5.484	-2.050
.050	-7.607	4.165	5.454	-2.269	-5.423	2.847	5.467	-1.936
.100	-4.777	2.562	3.519	-1.822	-7.007	3.679	3.604	-0.773
.200	-10.130	7.360	1.776	-0.372	-2.313	0.581	1.789	0.009
.260	-9.064	4.539	1.191	0.152	-2.847	0.678	1.096	0.470
.320	-1.827	-1.448	0.958	0.345	-1.662	-0.245	-0.027	0.975
.380	-1.387	-1.737	0.698	0.638	-1.358	-0.546	0.625	0.430
.440	-0.870	-1.807	-0.554	0.000	-0.988	-0.761	0.356	0.478
.500	-0.319	-2.035	0.463	0.647	-0.569	-0.792	0.063	0.647
.560	0.012	-1.735	-0.063	0.971	-0.210	-0.785	-0.219	0.612
.620	0.195	-1.505	-0.750	1.078	0.012	-0.705	-0.828	0.613
.700	0.253	-0.942	0.292	0.380	-0.033	-0.487	0.061	0.319
.800	0.050	0.649	0.538	-0.168	-0.990	0.286	0.542	0.012
.900	-0.179	0.904	0.249	-0.536	-3.406	1.545	0.257	0.085

(o-1) Tabulated data for test case 6E42 (point 315)
 Figure 9. Continued.

Point 315



(o-2) Plot of data for test case 6E42 (point 315)
Figure 9. Continued.

Point Number = 317 Mach Number = 0.802 Alpha = 2.07, deg.

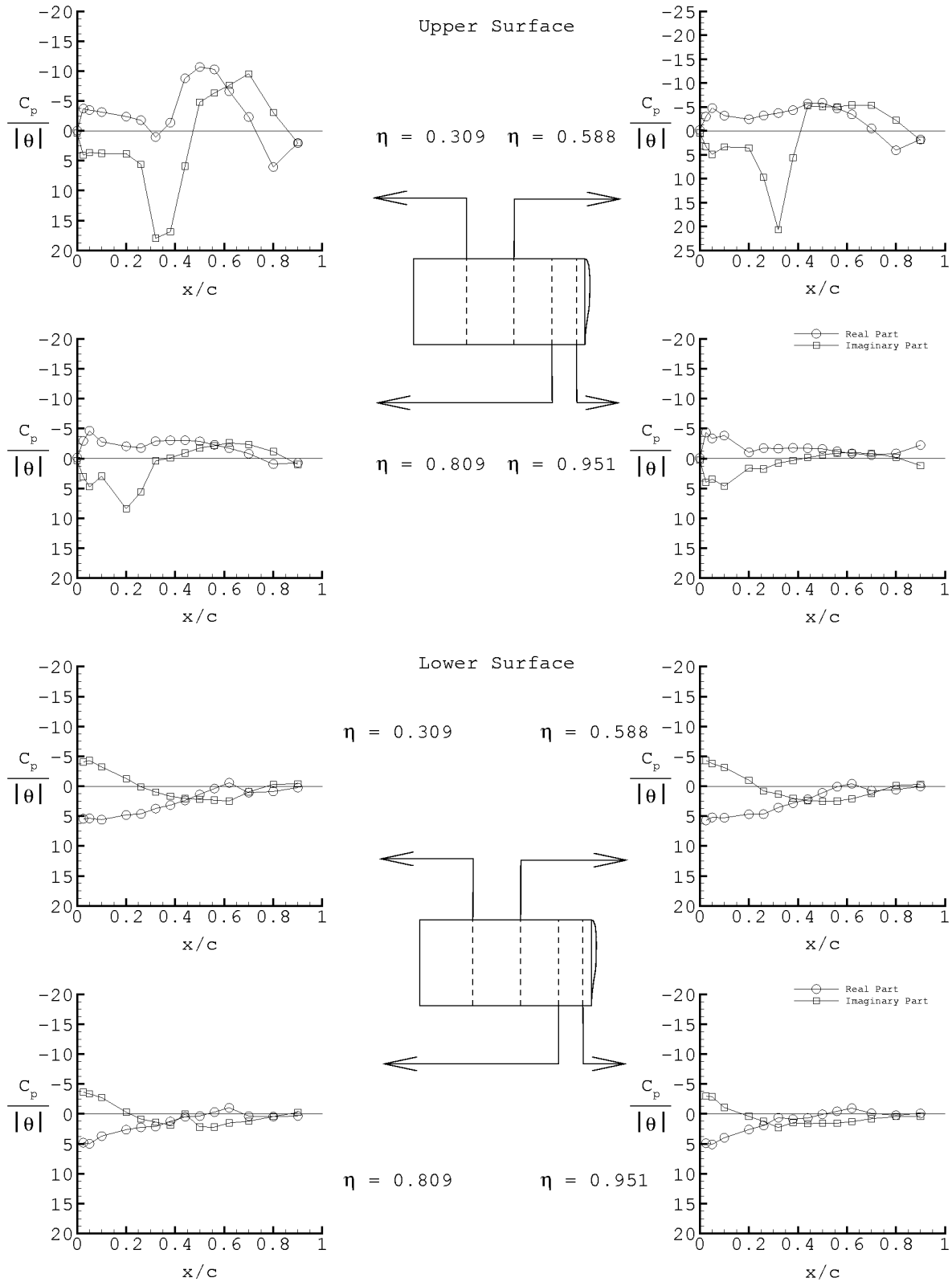
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.5 422.1 404.5 .401E+07 1.131 20.01 0.311 1.039

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.026	0.385			-0.167	0.408		
.025	-3.733	4.059	5.438	-4.054	-3.006	3.304	5.725	-4.314
.050	-3.473	3.622	5.387	-4.300	-4.776	4.894	5.213	-3.801
.100	-3.148	3.765	5.593	-3.216	-3.171	3.377	5.258	-3.134
.200	-2.390	3.839	4.798	-1.268	-2.430	3.549	4.687	-1.022
.260	-1.774	5.627	4.631	0.105	-3.220	9.680	4.675	0.799
.320	1.035	17.947	3.736	0.973	-3.721	20.678	3.571	1.314
.380	-1.358	16.875	3.159	1.694	-4.331	5.644	2.832	2.013
.440	-8.778	5.921	2.376	2.058	-5.692	-5.216	2.185	2.410
.500	-10.672	-4.774	1.373	2.198	-5.853	-5.034	1.108	2.525
.560	-10.286	-6.328	0.395	2.338	-4.692	-5.050	0.087	2.480
.620	-6.634	-7.605	-0.566	2.473	-3.446	-5.389	-0.407	2.112
.700	-2.308	-9.541	1.075	0.948	-0.509	-5.380	0.732	1.233
.800	6.054	-3.058	0.879	-0.327	4.063	-2.224	0.587	-0.152
.900	2.038	2.017	0.225	-0.379	1.792	1.948	0.043	-0.328

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.148	0.356			-0.076	0.265		
.025	-2.944	3.060	4.815	-3.654	-4.364	3.971	4.895	-2.988
.050	-4.630	4.728	5.010	-3.351	-3.351	3.434	5.098	-2.861
.100	-2.793	2.975	3.720	-2.746	-3.840	4.625	3.997	-1.063
.200	-2.050	8.411	2.639	-0.296	-1.034	1.630	2.616	0.405
.260	-1.767	5.572	2.250	0.862	-1.749	1.761	1.947	1.255
.320	-2.897	0.387	2.109	1.361	-1.645	0.778	0.630	2.286
.380	-3.031	-0.122	1.270	1.882	-1.794	0.307	0.868	1.473
.440	-3.060	-0.930	0.495	0.000	-1.702	-0.161	0.681	1.628
.500	-2.871	-1.753	0.350	2.202	-1.603	-0.593	0.073	1.542
.560	-2.306	-2.136	-0.313	2.217	-1.186	-0.900	-0.438	1.538
.620	-1.730	-2.624	-1.026	1.523	-0.847	-0.944	-0.947	1.289
.700	-0.804	-2.348	0.374	1.229	-0.561	-0.885	-0.104	0.821
.800	0.931	-1.162	0.446	0.458	-0.859	-0.201	0.228	0.441
.900	0.703	0.989	0.339	-0.237	-2.248	1.175	-0.083	0.377

(p-1) Tabulated data for test case 6E43 (point 317)
 Figure 9. Continued.

Point 317



(p-2) Plot of data for test case 6E43 (point 317)
Figure 9. Continued.

Point Number = 473 Mach Number = 0.825 Alpha = 1.98, deg.

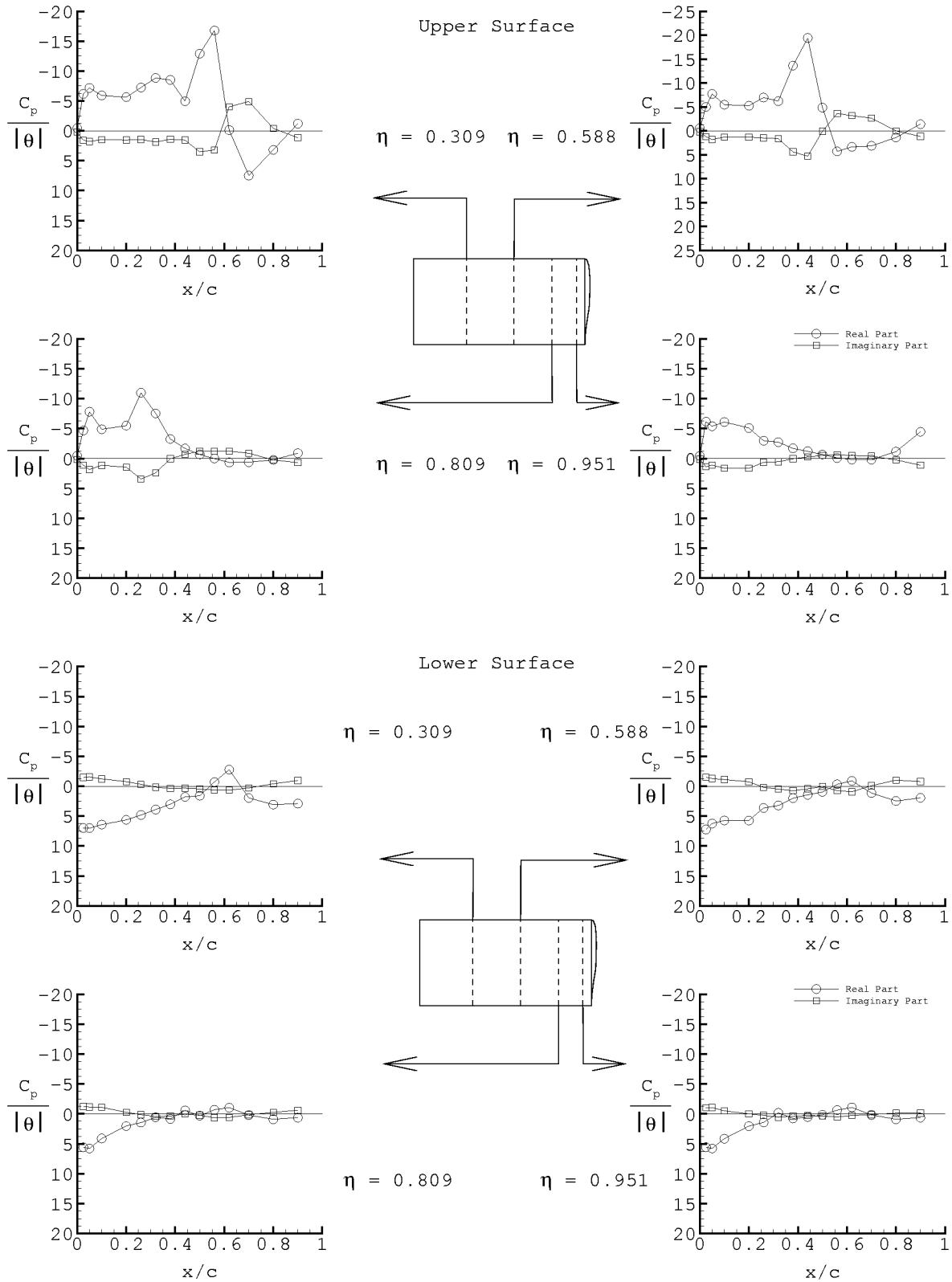
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.8 407.9 413.0 .399E+07 1.132 4.97 0.076 1.070

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.445	0.185			-0.555	0.198		
.025	-6.180	1.552	6.974	-1.444	-4.990	1.235	7.233	-1.511
.050	-7.173	1.775	7.003	-1.565	-7.716	1.810	6.240	-1.292
.100	-5.923	1.477	6.417	-1.224	-5.472	1.293	5.727	-1.124
.200	-5.630	1.540	5.626	-0.751	-5.243	1.327	5.735	-0.745
.260	-7.246	1.448	4.810	-0.303	-6.964	1.493	3.636	0.191
.320	-8.855	1.866	3.906	0.157	-6.218	1.620	3.231	0.477
.380	-8.503	1.423	3.027	0.388	-13.605	4.394	2.005	0.754
.440	-4.962	1.536	1.789	0.338	-19.420	5.313	1.436	0.431
.500	-12.919	3.510	1.600	0.444	-4.872	0.094	0.962	0.061
.560	-16.779	3.201	-0.697	0.666	4.282	-3.644	-0.332	0.731
.620	-0.119	-4.014	-2.766	0.634	3.346	-3.164	-0.888	0.929
.700	7.474	-4.910	1.962	0.276	3.145	-2.667	1.121	-0.086
.800	3.186	-0.414	3.078	-0.411	1.392	-0.005	2.474	-1.025
.900	-1.202	1.145	2.896	-0.963	-1.399	1.165	1.942	-0.769

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.454	0.162			-0.409	0.127		
.025	-4.688	1.117	5.581	-1.239	-6.169	1.368	5.579	-1.044
.050	-7.820	1.834	5.793	-1.150	-5.401	1.118	5.792	-1.073
.100	-4.902	1.141	4.109	-1.111	-6.112	1.603	4.143	-0.531
.200	-5.490	1.440	2.029	-0.261	-5.101	1.628	2.035	-0.007
.260	-10.986	3.443	1.445	0.118	-2.986	0.635	1.428	0.229
.320	-7.550	2.409	0.572	0.440	-2.733	0.531	-0.175	0.562
.380	-3.266	0.029	0.832	0.345	-1.713	0.036	0.761	0.393
.440	-1.687	-0.685	-0.584	0.000	-1.206	-0.252	0.528	0.262
.500	-0.675	-1.218	0.316	0.230	-0.665	-0.540	0.154	0.342
.560	0.013	-1.232	-0.683	0.647	-0.097	-0.635	-0.633	0.495
.620	0.647	-1.233	-1.047	0.586	0.159	-0.511	-1.089	0.280
.700	0.613	-0.878	0.210	0.141	0.176	-0.391	0.174	0.124
.800	0.232	0.223	0.901	-0.258	-1.154	0.237	0.901	-0.128
.900	-0.891	0.686	0.620	-0.608	-4.466	1.122	0.627	-0.141

(q-1) Tabulated data for test case 6E44 (point 473)
 Figure 9. Continued.

Point 473



(q-2) Plot of data for test case 6E44 (point 473)
Figure 9. Continued.

Point Number = 474 Mach Number = 0.825 Alpha = 1.97, deg.

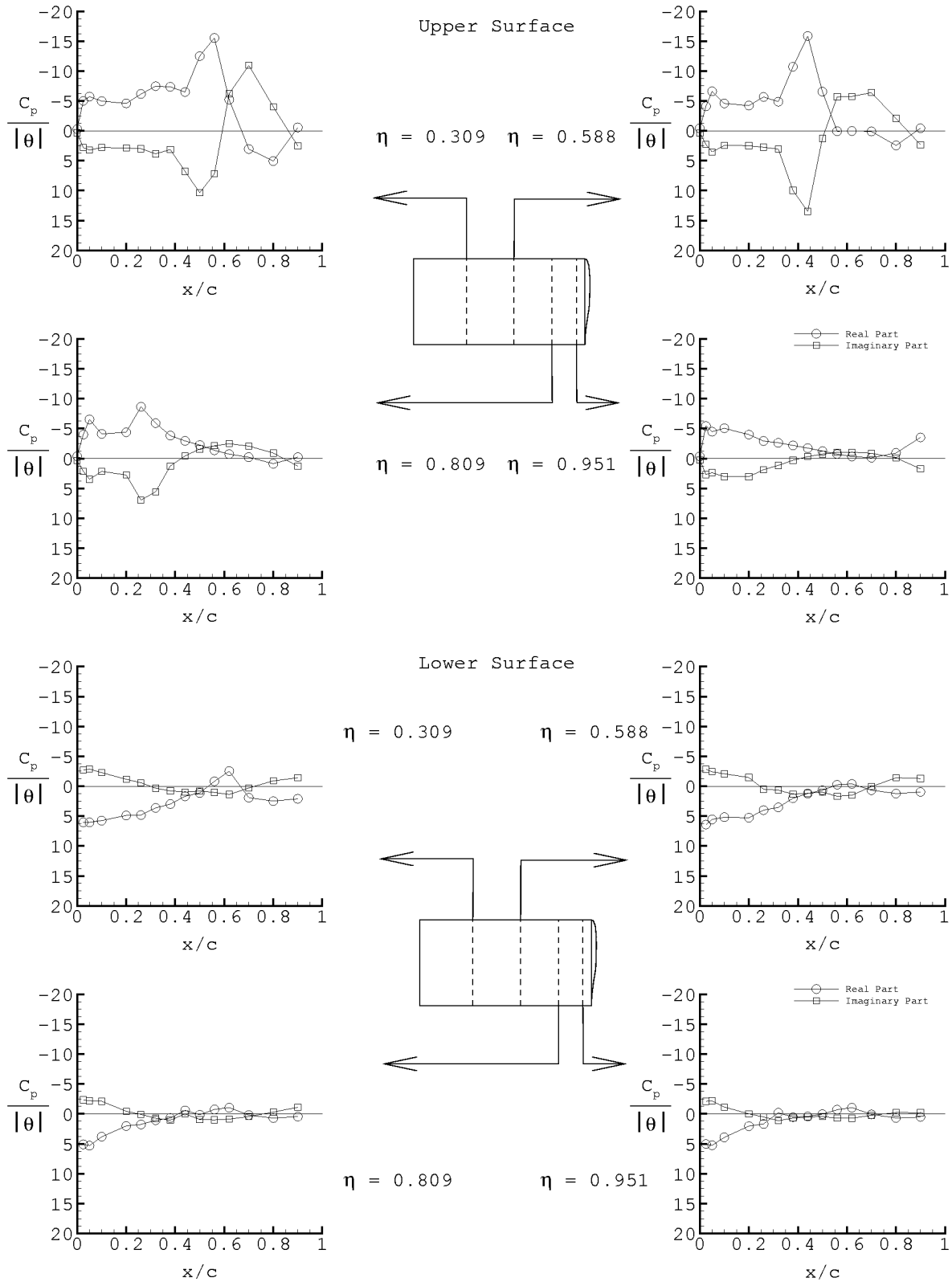
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.8 408.0 413.0 .399E+07 1.132 9.96 0.152 1.038

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.291	0.332			-0.428	0.348		
.025	-5.011	2.801	6.051	-2.694	-4.108	2.267	6.414	-2.829
.050	-5.734	3.205	6.028	-2.875	-6.616	3.547	5.564	-2.431
.100	-4.963	2.774	5.748	-2.276	-4.581	2.436	5.173	-2.079
.200	-4.592	2.859	4.888	-1.156	-4.233	2.493	5.263	-1.470
.260	-6.162	2.979	4.823	-0.575	-5.665	2.739	3.998	0.505
.320	-7.462	3.835	3.629	0.324	-4.874	3.034	3.531	0.635
.380	-7.367	3.127	2.993	0.774	-10.715	9.957	2.018	1.351
.440	-6.495	6.773	1.675	0.963	-15.847	13.487	1.218	1.201
.500	-12.504	10.344	1.125	0.799	-6.558	1.263	0.676	1.009
.560	-15.533	7.177	-0.817	1.042	0.069	-5.685	-0.250	1.693
.620	-5.216	-6.216	-2.513	1.387	0.020	-5.741	-0.379	1.498
.700	3.039	-10.957	1.913	0.272	0.101	-6.402	0.659	0.063
.800	5.061	-4.011	2.494	-0.893	2.438	-2.075	1.234	-1.414
.900	-0.566	2.532	2.110	-1.413	-0.437	2.333	0.963	-1.278

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.381	0.319			-0.375	0.233		
.025	-4.000	2.118	5.091	-2.346	-5.448	2.681	5.052	-2.082
.050	-6.531	3.472	5.308	-2.196	-4.496	2.361	5.253	-2.176
.100	-4.113	2.141	3.828	-2.097	-5.063	3.042	3.922	-1.140
.200	-4.400	2.750	2.025	-0.447	-3.996	3.044	2.042	-0.021
.260	-8.659	6.937	1.766	0.076	-2.933	1.868	1.691	0.511
.320	-5.915	5.555	1.065	0.721	-2.632	1.145	-0.197	1.142
.380	-3.830	1.252	0.685	1.044	-2.189	0.292	0.543	0.697
.440	-2.949	-0.430	-0.580	0.000	-1.734	-0.334	0.424	0.509
.500	-2.258	-1.587	0.147	0.937	-1.235	-0.731	0.041	0.440
.560	-1.375	-2.134	-0.740	0.995	-0.746	-1.027	-0.714	0.691
.620	-0.737	-2.487	-1.054	0.862	-0.343	-1.049	-1.042	0.725
.700	-0.223	-2.086	0.201	0.454	-0.134	-0.873	0.078	0.265
.800	0.863	-0.932	0.694	-0.310	-0.932	-0.106	0.681	-0.227
.900	-0.232	1.304	0.446	-1.106	-3.525	1.712	0.513	-0.205

(r-1) Tabulated data for test case 6E45 (point 474)
 Figure 9. Continued.

Point 474



(r-2) Plot of data for test case 6E45 (point 474)
Figure 9. Continued.

Point Number = 476 Mach Number = 0.825 Alpha = 1.97, deg.

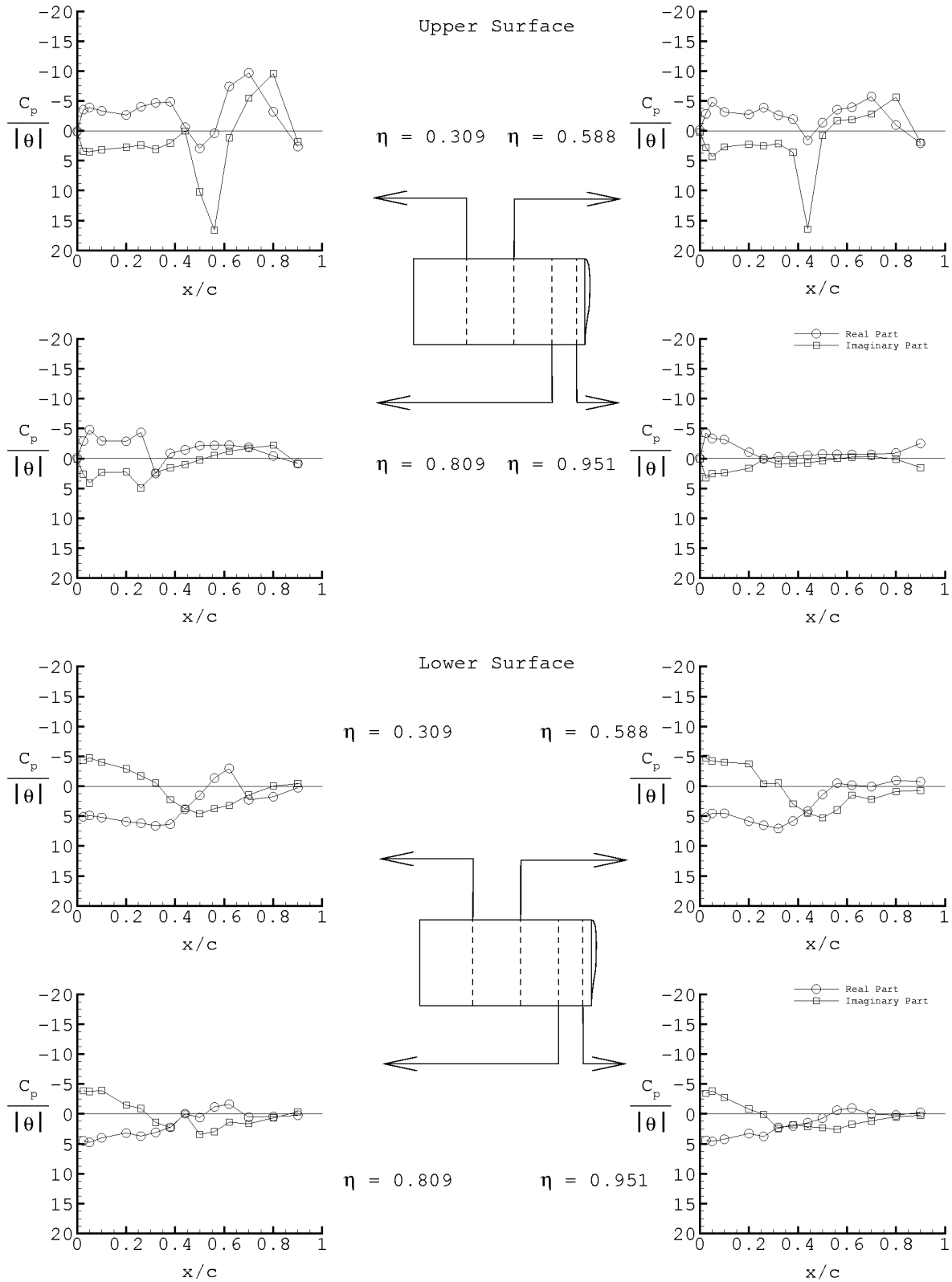
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.0 408.2 413.4 .399E+07 1.132 20.07 0.305 1.035

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.047	0.159			-0.122	0.185		
.025	-3.526	3.441	5.116	-4.323	-2.862	2.774	5.184	-4.667
.050	-3.920	3.505	4.906	-4.721	-4.843	4.300	4.534	-4.228
.100	-3.349	3.145	5.219	-4.019	-3.162	2.691	4.519	-3.998
.200	-2.653	2.748	5.906	-2.919	-2.738	2.249	5.870	-3.768
.260	-4.046	2.402	6.185	-1.727	-3.895	2.539	6.519	-0.422
.320	-4.679	3.062	6.617	-0.591	-2.624	2.125	7.066	-0.531
.380	-4.848	2.038	6.354	2.288	-1.974	3.590	5.815	2.976
.440	-0.609	-0.003	3.843	3.750	1.581	16.421	4.183	4.501
.500	2.930	10.217	1.546	4.620	-1.361	0.742	1.400	5.299
.560	0.406	16.603	-1.370	3.743	-3.536	-1.717	-0.506	3.953
.620	-7.436	1.178	-2.966	3.214	-3.951	-1.876	-0.174	1.484
.700	-9.675	-5.496	2.278	1.473	-5.717	-2.801	0.062	2.213
.800	-3.197	-9.555	1.771	-0.022	-0.971	-5.619	-0.987	0.889
.900	2.630	1.842	0.239	-0.437	2.072	1.918	-0.774	0.712

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.126	0.109			-0.102	0.044		
.025	-2.921	2.630	4.489	-3.862	-4.266	3.261	4.412	-3.435
.050	-4.820	4.073	4.762	-3.749	-3.356	2.538	4.587	-3.835
.100	-2.970	2.312	4.002	-3.900	-3.166	2.421	4.230	-2.736
.200	-2.883	2.244	3.202	-1.440	-1.061	1.621	3.277	-0.817
.260	-4.374	4.926	3.718	-0.918	0.036	0.162	3.763	0.085
.320	2.498	2.354	3.109	1.422	-0.273	0.958	2.240	2.453
.380	-0.886	1.534	2.238	2.314	-0.332	0.761	2.041	1.787
.440	-1.444	1.026	-0.027	0.000	-0.526	0.713	1.485	2.136
.500	-2.147	0.226	0.602	3.433	-0.735	0.387	0.741	2.320
.560	-2.204	-0.541	-1.165	2.985	-0.720	0.013	-0.620	2.584
.620	-2.238	-1.215	-1.624	1.379	-0.678	-0.240	-0.969	1.741
.700	-1.880	-1.717	0.551	1.657	-0.684	-0.365	0.018	1.162
.800	-0.418	-2.231	0.432	0.662	-0.933	0.126	0.187	0.462
.900	0.832	0.889	0.249	-0.366	-2.515	1.511	-0.227	0.242

(s-1) Tabulated data for test case 6E46 (point 476)
 Figure 9. Continued.

Point 476



(s-2) Plot of data for test case 6E46 (point 476)
Figure 9. Continued.

Point Number = 262 Mach Number = 0.896 Alpha = 2.00, deg.

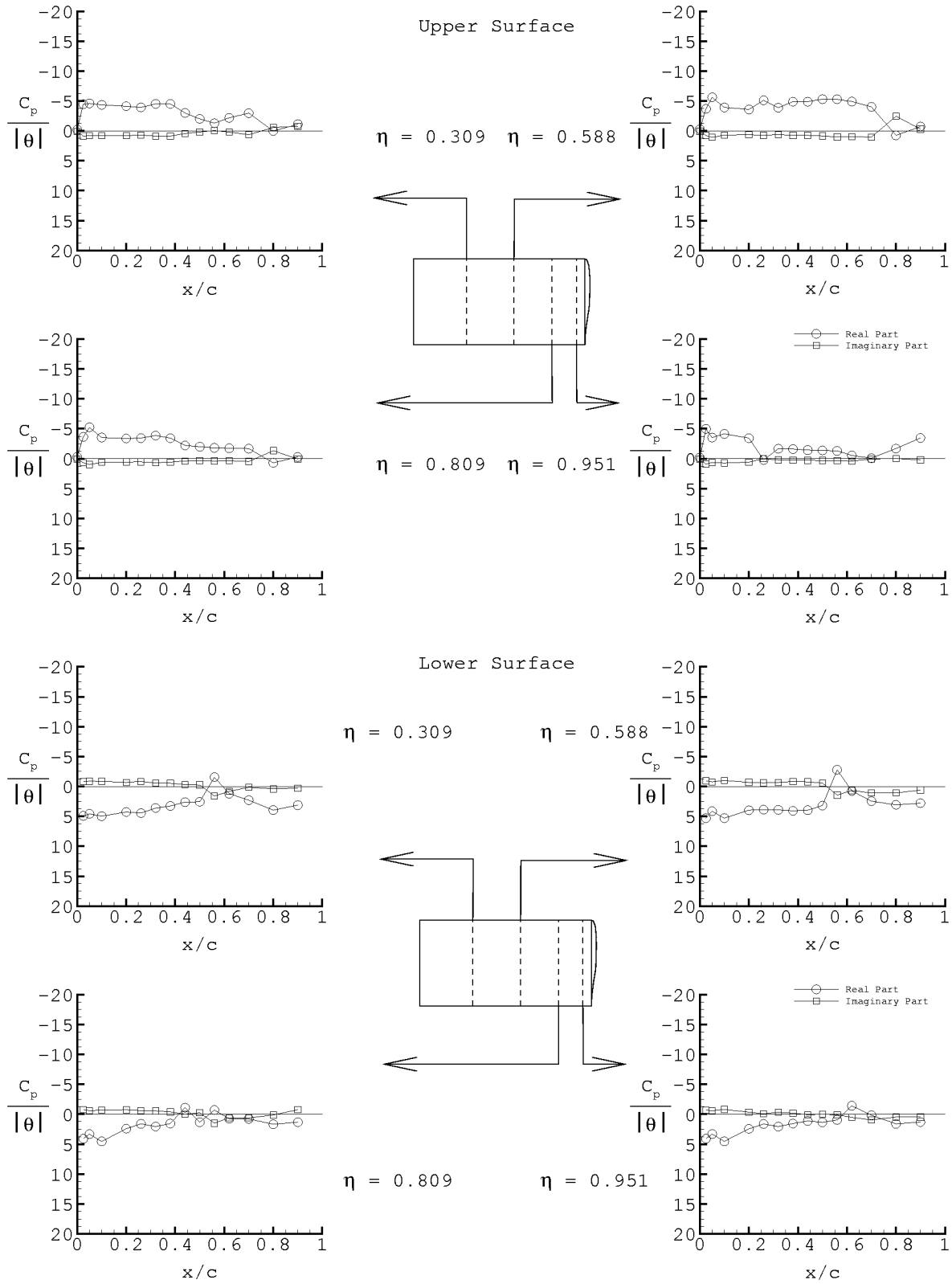
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 117.1 401.1 449.2 .398E+07 1.132 4.96 0.069 1.022

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.210	0.078			-0.275	0.053		
.025	-4.462	0.843	4.920	-0.832	-3.678	0.762	5.295	-0.962
.050	-4.580	0.824	4.569	-0.880	-5.615	1.081	4.136	-0.759
.100	-4.352	0.822	4.972	-0.859	-3.916	0.712	5.288	-0.999
.200	-4.130	0.788	4.264	-0.675	-3.589	0.633	3.978	-0.687
.260	-3.921	0.684	4.462	-0.843	-5.104	0.745	3.877	-0.607
.320	-4.516	0.861	3.603	-0.545	-3.876	0.614	3.925	-0.664
.380	-4.511	0.885	3.265	-0.529	-4.877	0.746	4.067	-0.820
.440	-2.993	0.453	2.616	-0.317	-4.877	0.746	3.961	-0.777
.500	-2.009	0.190	2.567	-0.252	-5.314	0.851	3.203	-0.559
.560	-1.289	-0.045	-1.558	1.613	-5.287	1.008	-2.780	1.459
.620	-2.176	0.213	1.193	0.838	-4.898	0.952	0.752	0.673
.700	-2.958	0.645	2.295	0.136	-4.016	1.039	2.460	1.090
.800	0.010	-0.561	3.958	0.423	0.741	-2.470	3.067	1.080
.900	-1.105	-0.768	3.126	0.290	-0.730	-0.288	2.794	0.609

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.276	0.046			-0.205	0.092		
.025	-3.633	0.700	4.099	-0.763	-4.966	0.894	4.092	-0.685
.050	-5.235	0.980	3.323	-0.624	-3.531	0.635	3.313	-0.584
.100	-3.535	0.617	4.534	-0.666	-4.142	0.723	4.526	-0.806
.200	-3.374	0.559	2.425	-0.736	-3.427	0.580	2.443	-0.339
.260	-3.433	0.544	1.606	-0.607	0.224	-0.002	1.625	-0.065
.320	-3.869	0.654	2.049	-0.561	-1.669	0.205	2.049	-0.321
.380	-3.425	0.592	1.553	-0.397	-1.606	0.254	1.558	-0.194
.440	-2.208	0.389	-1.112	0.000	-1.430	0.281	1.119	0.065
.500	-1.995	0.305	1.336	-0.235	-1.372	0.287	1.345	0.019
.560	-1.812	0.375	-0.708	1.501	-1.311	0.303	0.951	0.065
.620	-1.761	0.342	0.745	0.586	-0.529	0.416	-1.413	0.542
.700	-1.674	0.467	0.784	0.605	-0.084	0.074	0.172	0.937
.800	0.694	-1.345	1.680	0.117	-1.682	-0.032	1.614	0.472
.900	-0.273	0.062	1.323	-0.760	-3.469	0.212	1.321	0.468

(t-1) Tabulated data for test case 6E47 (point 262)
 Figure 9. Continued.

Point 262



(t-2) Plot of data for test case 6E47 (point 262)
Figure 9. Continued.

Point Number = 263 Mach Number = 0.896 Alpha = 2.00, deg.

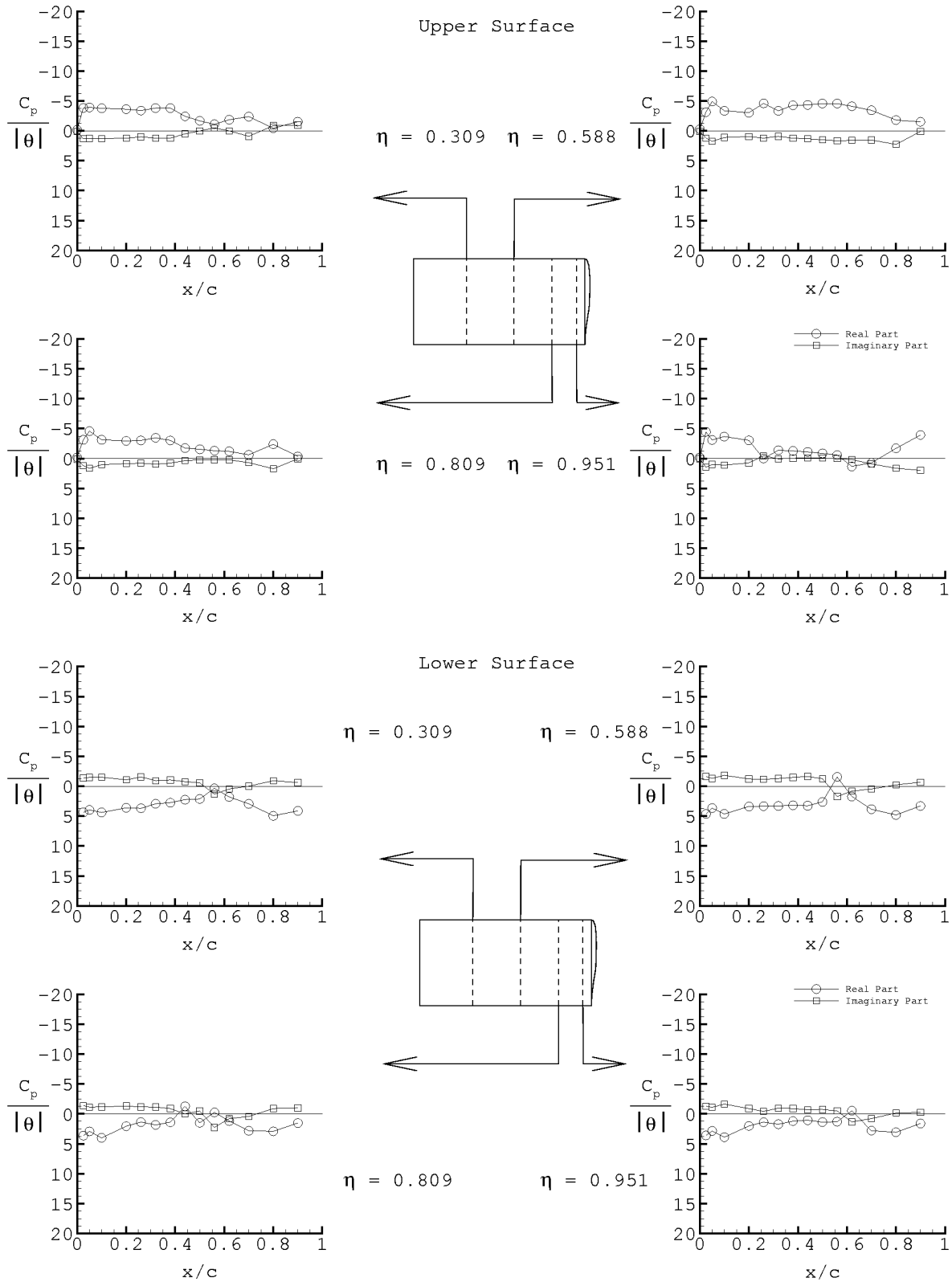
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 117.1 401.2 449.2 .398E+07 1.132 9.95 0.139 0.989

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.150	0.088			-0.271	0.102		
.025	-3.837	1.314	4.365	-1.376	-3.133	1.215	4.648	-1.628
.050	-3.910	1.278	3.964	-1.474	-4.909	1.758	3.654	-1.308
.100	-3.782	1.295	4.387	-1.494	-3.357	1.104	4.642	-1.810
.200	-3.620	1.232	3.609	-1.076	-3.039	0.958	3.380	-1.217
.260	-3.390	0.998	3.690	-1.536	-4.593	1.213	3.337	-1.162
.320	-3.812	1.202	2.928	-0.923	-3.353	0.917	3.295	-1.278
.380	-3.810	1.209	2.760	-1.054	-4.284	1.245	3.205	-1.488
.440	-2.439	0.505	2.253	-0.754	-4.324	1.314	3.266	-1.629
.500	-1.680	0.009	2.125	-0.573	-4.576	1.478	2.612	-1.252
.560	-1.111	-0.497	0.355	1.344	-4.573	1.664	-1.548	1.725
.620	-1.854	-0.006	1.792	0.474	-4.116	1.564	1.718	0.838
.700	-2.378	0.918	2.955	-0.021	-3.437	1.538	3.853	0.466
.800	-0.436	-0.883	4.957	-0.910	-1.803	2.267	4.802	-0.243
.900	-1.528	-0.944	4.124	-0.624	-1.503	0.100	3.295	-0.658

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.197	0.122			-0.173	0.016		
.025	-3.143	1.188	3.641	-1.399	-4.455	1.473	3.602	-1.283
.050	-4.582	1.640	2.925	-1.145	-3.091	0.986	2.867	-1.100
.100	-3.142	1.015	4.003	-1.176	-3.666	1.086	3.902	-1.632
.200	-2.946	0.867	2.050	-1.332	-3.042	0.730	2.011	-0.895
.260	-3.030	0.778	1.364	-1.172	0.012	-0.463	1.389	-0.409
.320	-3.463	0.954	1.835	-1.157	-1.390	0.046	1.728	-0.946
.380	-3.029	0.783	1.407	-0.889	-1.274	-0.044	1.209	-0.898
.440	-1.763	0.343	-1.274	0.000	-1.094	-0.125	1.058	-0.711
.500	-1.548	0.226	1.495	-0.477	-0.866	-0.074	1.375	-0.746
.560	-1.316	0.206	-0.251	2.279	-0.579	0.004	1.298	-0.498
.620	-1.197	0.215	1.198	0.782	1.321	0.174	-0.540	1.344
.700	-0.620	0.689	2.818	0.416	0.731	0.899	2.790	0.779
.800	-2.396	1.728	2.913	-0.896	-1.711	1.647	3.066	-0.161
.900	-0.346	0.036	1.528	-0.991	-3.940	1.965	1.605	-0.237

(u-1) Tabulated data for test case 6E48 (point 263)
 Figure 9. Continued.

Point 263



(u-2) Plot of data for test case 6E48 (point 263)
Figure 9. Continued.

Point Number = 265 Mach Number = 0.902 Alpha = 2.01, deg.

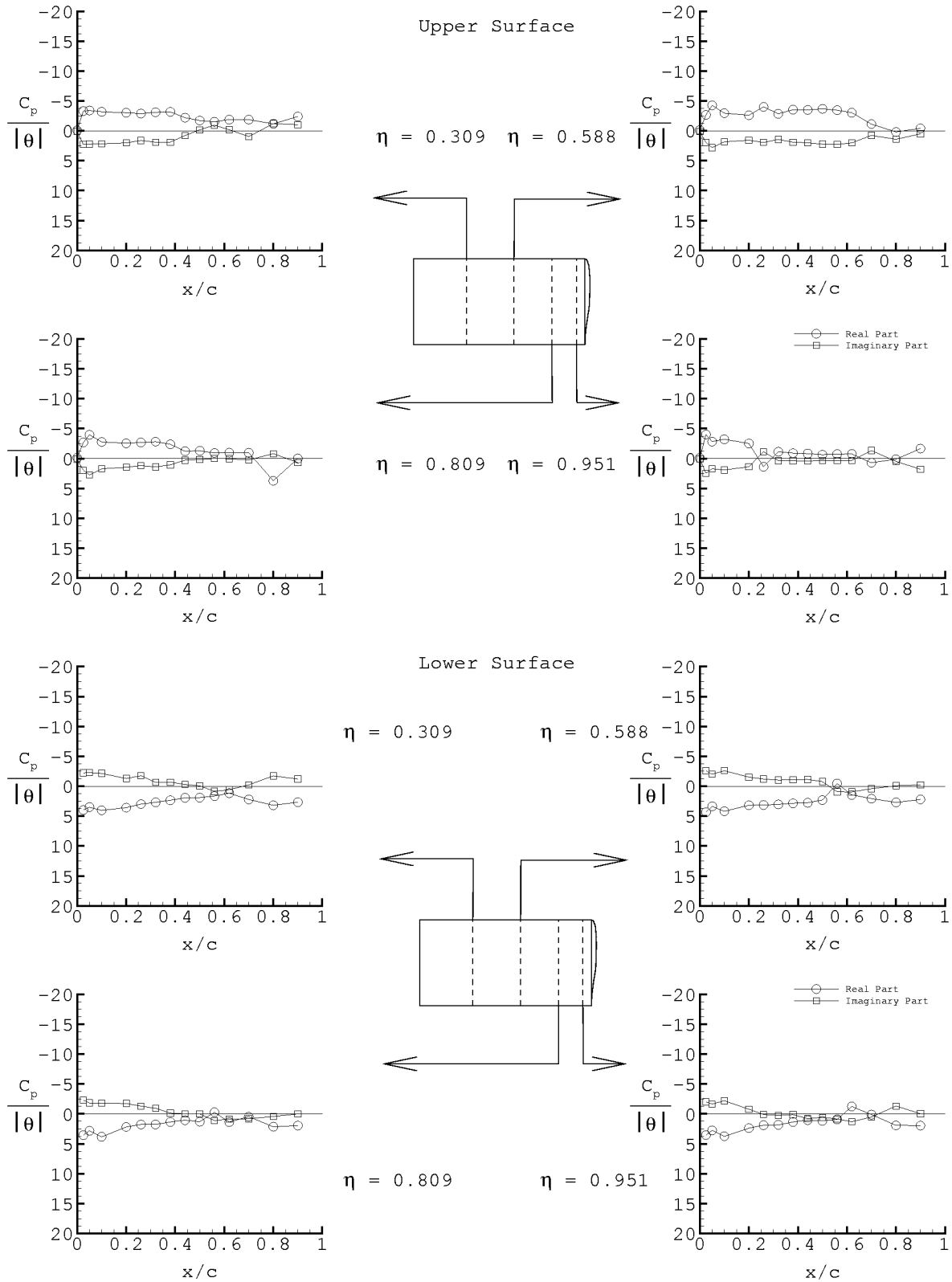
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 118.3 402.1 452.2 .400E+07 1.132 19.99 0.278 1.055

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.083	0.070			-0.123	0.107		
.025	-3.312	2.276	3.982	-2.226	-2.680	1.947	4.343	-2.579
.050	-3.408	2.230	3.503	-2.284	-4.262	2.810	3.355	-2.008
.100	-3.189	2.167	4.032	-2.135	-2.957	1.826	4.196	-2.612
.200	-3.020	2.029	3.579	-1.282	-2.612	1.557	3.189	-1.514
.260	-2.897	1.606	2.995	-1.764	-4.006	1.945	3.146	-1.201
.320	-3.102	1.901	2.697	-0.632	-2.863	1.440	3.031	-1.038
.380	-3.172	1.891	2.349	-0.674	-3.542	1.899	2.845	-1.075
.440	-2.204	0.772	1.933	-0.296	-3.494	1.985	2.764	-1.133
.500	-1.729	-0.179	1.900	-0.070	-3.670	2.223	2.318	-0.775
.560	-1.515	-0.958	1.639	0.850	-3.454	2.260	-0.444	0.931
.620	-1.891	-0.189	1.159	0.596	-3.034	2.008	1.451	0.957
.700	-1.882	0.971	2.215	-0.225	-1.128	0.755	2.076	0.422
.800	-1.176	-1.205	3.195	-1.742	0.189	1.399	2.714	-0.081
.900	-2.400	-1.019	2.673	-1.207	-0.419	0.499	2.214	-0.233

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.129	0.100			-0.095	0.052		
.025	-2.680	1.947	3.562	-2.317	-4.024	2.476	3.549	-2.000
.050	-3.979	2.745	2.819	-1.834	-2.822	1.736	2.749	-1.645
.100	-2.772	1.712	3.836	-1.785	-3.222	1.913	3.740	-2.212
.200	-2.550	1.449	2.183	-1.743	-2.522	1.387	2.377	-0.768
.260	-2.683	1.183	1.769	-1.294	1.381	-1.142	1.898	0.099
.320	-2.819	1.405	1.762	-0.926	-1.139	0.361	1.831	0.238
.380	-2.383	1.056	1.355	-0.134	-0.906	0.366	1.352	0.121
.440	-1.217	0.283	1.056	0.000	-0.825	0.415	1.041	0.784
.500	-1.292	0.172	1.303	0.011	-0.634	0.311	1.167	0.580
.560	-0.923	-0.002	-0.277	1.112	-0.741	0.338	0.922	0.842
.620	-0.977	0.036	1.355	0.889	-0.753	0.312	-1.243	1.291
.700	-0.953	0.218	0.475	0.816	0.707	-1.346	0.105	0.533
.800	3.716	-0.803	2.151	0.423	0.111	0.476	1.927	-1.319
.900	0.001	0.652	1.955	0.018	-1.660	1.793	1.955	-0.041

(v-1) Tabulated data for test case 6E49 (point 265)
 Figure 9. Continued.

Point 265



(v-2) Plot of data for test case 6E49 (point 265)
Figure 9. Continued.

Point Number = 481 Mach Number = 0.823 Alpha = -0.03, deg.

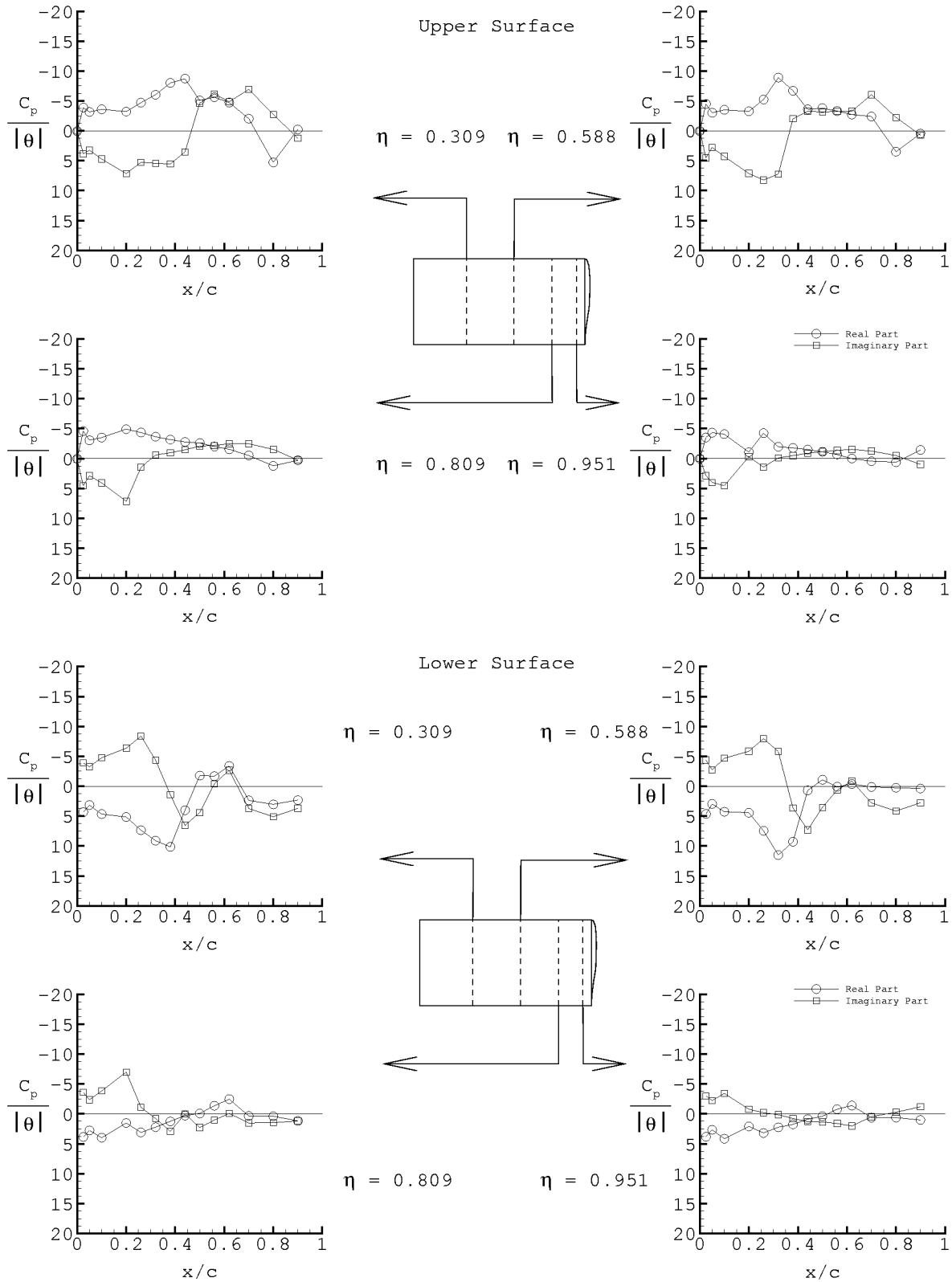
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.6 408.3 412.4 .399E+07 1.132 15.01 0.229 1.023

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.056	0.005			0.042	0.038		
.025	-3.888	3.874	4.322	-3.905	-4.491	4.538	4.647	-4.379
.050	-3.163	3.252	3.157	-3.258	-3.014	2.762	2.968	-2.730
.100	-3.606	4.716	4.663	-4.762	-3.527	4.278	4.259	-4.681
.200	-3.214	7.152	5.146	-6.355	-3.264	7.129	4.446	-5.836
.260	-4.713	5.253	7.356	-8.373	-5.236	8.219	7.462	-7.974
.320	-6.035	5.434	9.107	-4.324	-8.910	7.241	11.508	-5.788
.380	-8.012	5.548	10.150	1.426	-6.706	-2.012	9.288	3.621
.440	-8.718	3.540	4.021	6.535	-3.604	-3.279	0.690	7.304
.500	-5.087	-4.645	-1.768	4.420	-3.792	-3.148	-1.068	3.539
.560	-5.616	-6.172	-1.692	-0.388	-3.310	-3.264	0.088	0.666
.620	-4.725	-4.858	-3.380	-2.679	-2.719	-3.275	-0.347	-0.886
.700	-2.028	-6.935	2.358	3.744	-2.413	-6.032	0.127	2.797
.800	5.266	-2.741	3.040	5.099	3.492	-2.233	0.253	4.137
.900	-0.235	1.210	2.321	3.701	0.439	0.716	0.395	2.772

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.023	0.110			0.048	-0.029		
.025	-4.586	4.522	3.861	-3.588	-3.516	2.867	3.824	-3.020
.050	-3.062	2.875	2.759	-2.381	-4.315	3.996	2.668	-2.223
.100	-3.506	4.076	3.983	-3.837	-4.077	4.544	4.143	-3.427
.200	-4.917	7.154	1.514	-6.979	-1.075	-0.316	2.094	-0.796
.260	-4.353	1.465	3.109	-1.104	-4.247	1.429	3.185	-0.212
.320	-3.647	-0.604	2.216	0.803	-1.957	-0.120	2.236	0.137
.380	-3.162	-0.961	1.252	2.912	-1.780	-0.497	1.744	0.765
.440	-2.774	-1.463	0.280	0.000	-1.494	-0.884	0.884	1.295
.500	-2.582	-2.062	-0.078	2.293	-1.120	-1.176	0.402	1.341
.560	-2.013	-2.182	-1.363	1.018	-0.670	-1.356	-0.783	1.612
.620	-1.556	-2.462	-2.463	-0.060	0.011	-1.512	-1.396	2.031
.700	-0.494	-2.471	0.341	1.513	0.458	-1.264	0.624	0.475
.800	1.234	-1.523	0.388	1.463	0.601	-0.504	0.606	-0.290
.900	0.295	0.258	1.184	1.176	-1.434	0.978	1.014	-1.196

(w-1) Tabulated data for test case 6E50 (point 481)
 Figure 9. Continued.

Point 481



(w-2) Plot of data for test case 6E50 (point 481)
Figure 9. Continued.

Point Number = 469 Mach Number = 0.822 Alpha = 3.99, deg.

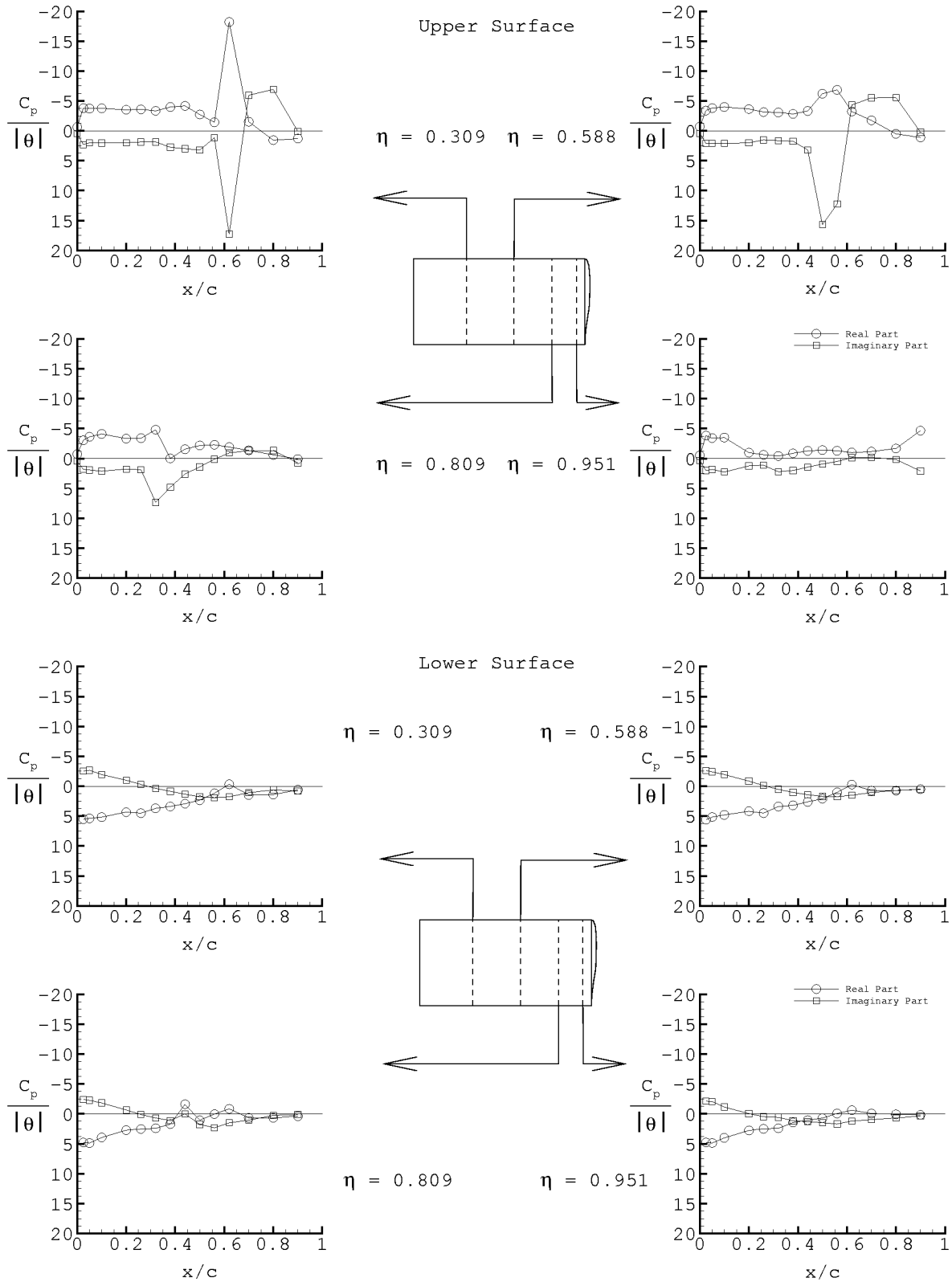
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.2 407.4 411.4 .399E+07 1.132 15.04 0.230 1.018

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.633	0.469			-0.715	0.449		
.025	-3.791	2.323	5.513	-2.559	-3.396	2.106	5.602	-2.636
.050	-3.724	1.988	5.394	-2.678	-3.805	2.075	5.156	-2.393
.100	-3.763	2.034	5.163	-1.941	-3.987	2.093	4.798	-1.948
.200	-3.527	1.995	4.334	-0.993	-3.650	2.006	4.189	-0.867
.260	-3.594	1.871	4.493	-0.291	-3.142	1.519	4.501	-0.118
.320	-3.338	1.873	3.696	0.375	-3.084	1.633	3.395	0.513
.380	-3.989	2.742	3.386	0.844	-2.834	1.730	3.212	1.044
.440	-4.175	2.967	2.922	1.325	-3.331	3.194	2.614	1.437
.500	-2.730	3.219	2.337	1.761	-6.216	15.699	2.094	1.707
.560	-1.450	1.161	1.166	1.926	-6.837	12.233	1.022	1.749
.620	-18.208	17.279	-0.325	1.771	-3.237	-4.326	-0.266	1.496
.700	-1.515	-5.945	1.453	1.064	-1.753	-5.526	0.739	1.063
.800	1.559	-6.918	1.393	0.608	0.505	-5.549	0.736	0.696
.900	1.292	0.084	0.603	0.814	1.102	0.230	0.480	0.552

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.735	0.416			-0.523	0.331		
.025	-3.061	1.789	4.793	-2.421	-3.834	2.021	4.782	-2.129
.050	-3.634	1.916	4.874	-2.256	-3.423	1.835	4.866	-2.076
.100	-4.105	2.110	3.931	-1.842	-3.501	2.256	4.004	-1.148
.200	-3.330	1.770	2.716	-0.655	-0.981	1.233	2.758	-0.043
.260	-3.403	1.871	2.532	0.105	-0.628	1.132	2.488	0.475
.320	-4.820	7.338	2.415	0.673	-0.414	2.213	2.410	0.570
.380	-0.017	4.784	1.712	1.112	-0.886	2.008	1.447	1.164
.440	-1.570	2.602	-1.610	0.000	-1.273	1.429	1.051	1.321
.500	-2.179	1.399	1.049	1.768	-1.418	0.917	0.716	1.467
.560	-2.305	0.109	0.029	2.307	-1.311	0.511	-0.068	1.687
.620	-1.922	-0.938	-0.850	1.487	-1.002	-0.148	-0.630	1.195
.700	-1.367	-1.339	0.665	1.053	-1.166	-0.193	-0.073	0.954
.800	-0.614	-1.328	0.663	0.255	-1.680	0.174	0.071	0.672
.900	0.094	0.726	0.386	0.116	-4.675	2.091	0.148	0.365

(x-1) Tabulated data for test case 6E51 (point 469)
 Figure 9. Continued.

Point 469



(x-2) Plot of data for test case 6E51 (point 469)
Figure 9. Continued.

Point Number = 269 Mach Number = 0.901 Alpha = -0.03, deg.

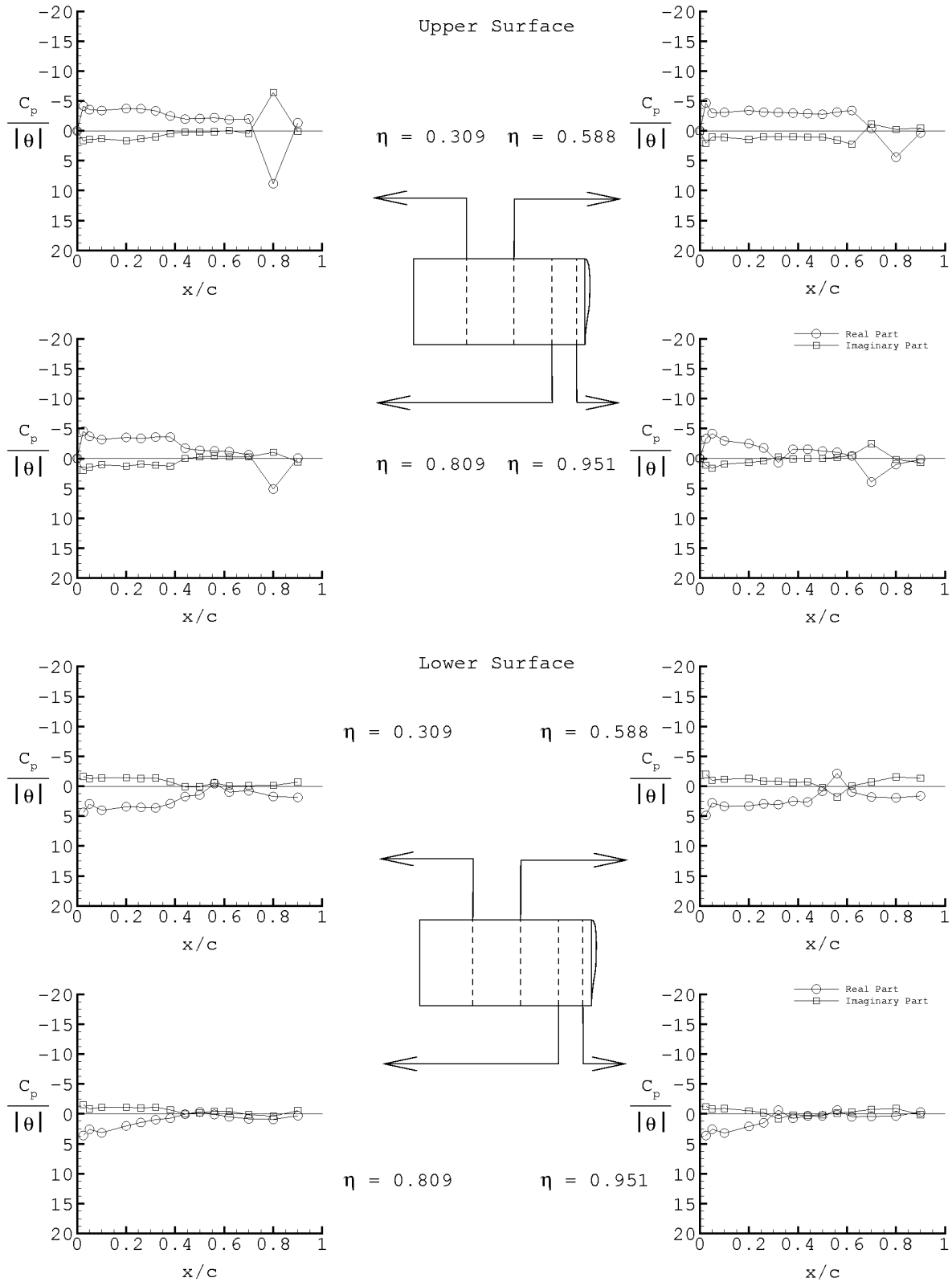
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 118.2 402.4 451.8 .399E+07 1.132 14.98 0.208 1.065

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.000	0.000			-0.023	0.049		
.025	-4.140	1.673	4.387	-1.631	-4.662	2.095	4.878	-2.001
.050	-3.554	1.400	2.969	-1.266	-2.947	1.026	2.794	-0.973
.100	-3.406	1.335	4.016	-1.391	-3.095	1.090	3.351	-1.174
.200	-3.726	1.683	3.430	-1.421	-3.417	1.450	3.310	-1.284
.260	-3.693	1.337	3.532	-1.307	-3.132	0.981	2.945	-0.856
.320	-3.346	1.017	3.623	-1.369	-3.080	0.965	3.066	-0.822
.380	-2.485	0.469	2.925	-0.724	-2.968	0.964	2.508	-0.616
.440	-1.979	0.215	1.719	0.093	-2.885	1.039	2.640	-0.747
.500	-2.036	0.189	1.450	0.086	-2.762	1.060	0.831	0.224
.560	-2.202	0.135	-0.432	-0.550	-3.138	1.544	-2.140	1.802
.620	-1.882	-0.072	0.968	-0.041	-3.410	2.257	0.965	-0.076
.700	-1.999	0.429	0.749	-0.083	-0.395	-1.116	1.804	-0.704
.800	8.847	-6.404	1.717	-0.120	4.405	-0.239	1.929	-1.551
.900	-1.340	0.115	1.866	-0.694	0.372	-0.460	1.617	-1.337

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.046	0.029			0.000	0.000		
.025	-4.546	1.958	3.614	-1.551	-3.310	1.127	3.618	-1.225
.050	-3.717	1.427	2.578	-0.815	-4.169	1.600	2.563	-0.818
.100	-3.167	1.047	3.163	-1.110	-2.979	0.928	3.208	-0.914
.200	-3.537	1.294	2.006	-1.128	-2.491	0.681	2.083	-0.539
.260	-3.365	0.952	1.442	-0.995	-1.778	0.430	1.490	-0.223
.320	-3.594	1.126	0.970	-1.115	0.692	-0.297	-0.628	0.807
.380	-3.592	1.300	0.726	-0.671	-1.560	0.044	0.736	0.160
.440	-1.722	0.003	0.049	0.000	-1.560	-0.022	0.326	0.281
.500	-1.376	-0.250	-0.340	-0.185	-1.237	-0.043	0.335	0.172
.560	-1.275	-0.429	0.090	-0.426	-1.057	-0.200	-0.636	-0.113
.620	-1.147	-0.292	0.494	-0.444	-0.429	-0.553	0.497	-0.321
.700	-0.633	-0.298	0.834	0.145	3.919	-2.459	0.416	-0.754
.800	5.114	-1.040	0.925	0.384	1.010	0.160	0.328	-0.911
.900	-0.069	0.534	0.306	-0.552	0.117	0.690	-0.289	0.145

(y-1) Tabulated data for test case 6E52 (point 269)
 Figure 9. Continued.

Point 269



(y-2) Plot of data for test case 6E52 (point 269)
Figure 9. Continued.

Point Number = 258 Mach Number = 0.900 Alpha = 4.03, deg.

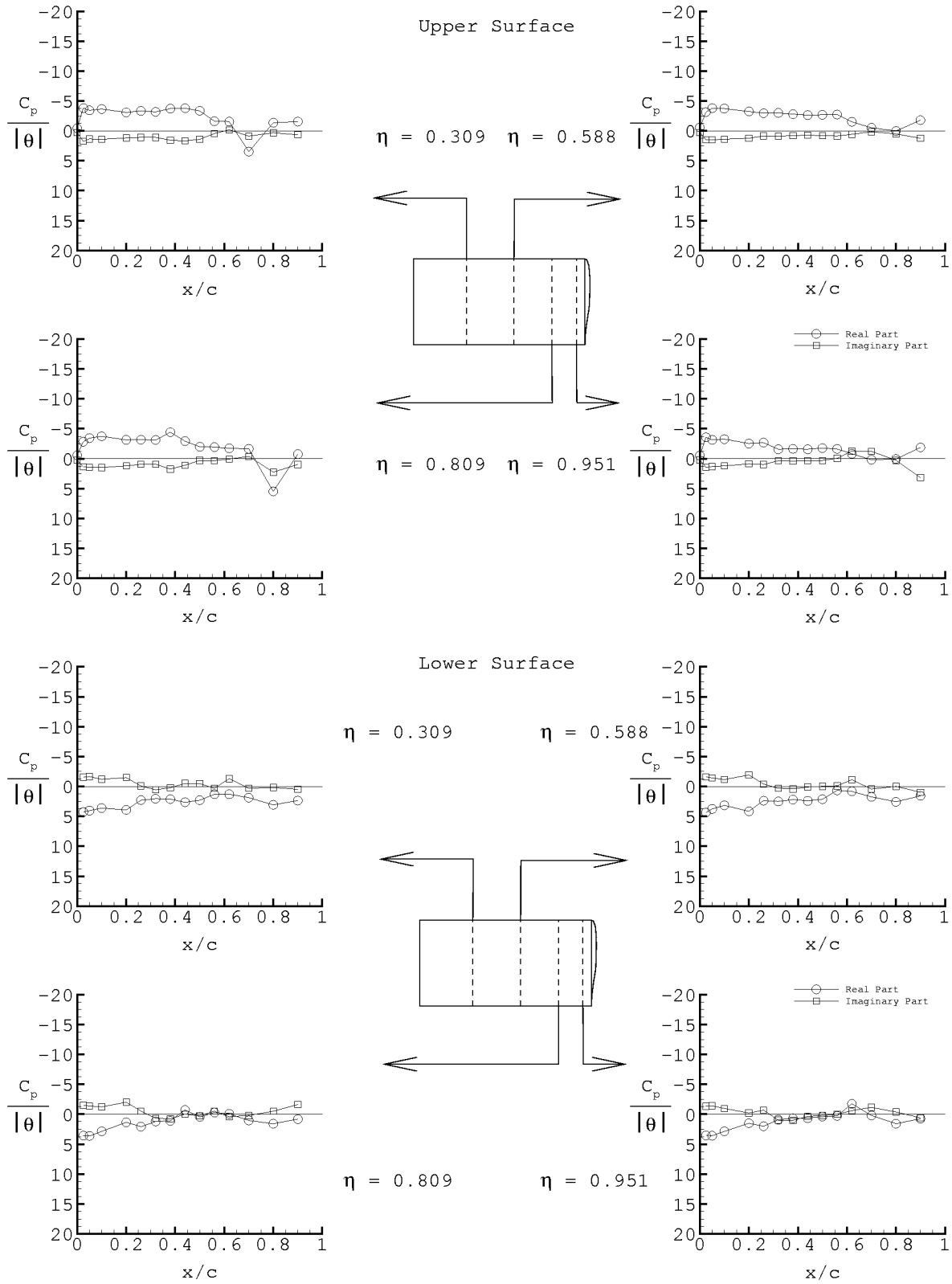
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 117.8 401.1 451.1 .399E+07 1.132 14.95 0.208 1.024

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.436	0.252			-0.553	0.271		
.025	-3.813	1.754	4.267	-1.528	-3.147	1.461	4.361	-1.596
.050	-3.438	1.347	4.041	-1.649	-3.800	1.497	3.769	-1.424
.100	-3.654	1.410	3.612	-1.195	-3.723	1.385	3.155	-1.148
.200	-3.084	1.178	3.923	-1.490	-3.247	1.221	4.165	-1.925
.260	-3.351	1.095	2.292	-0.092	-2.958	0.848	2.374	-0.393
.320	-3.174	1.093	2.058	0.532	-3.000	0.906	2.499	0.311
.380	-3.717	1.555	2.115	0.219	-2.798	0.797	2.198	0.419
.440	-3.791	1.664	2.636	-0.512	-2.643	0.728	2.404	0.088
.500	-3.353	1.409	2.301	-0.477	-2.688	0.776	2.126	-0.011
.560	-1.618	0.446	1.305	0.316	-2.725	0.849	0.665	-0.096
.620	-1.556	-0.180	1.299	-1.312	-1.516	0.579	0.808	-1.142
.700	3.475	0.866	1.877	0.311	-0.541	0.143	1.739	0.427
.800	-1.365	0.308	3.072	0.177	0.011	0.503	2.574	-0.018
.900	-1.547	0.650	2.355	0.492	-1.788	1.252	1.568	0.976

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.558	0.259			-0.524	0.197		
.025	-2.828	1.349	3.580	-1.497	-3.567	1.477	3.562	-1.339
.050	-3.446	1.477	3.635	-1.377	-3.151	1.312	3.592	-1.415
.100	-3.746	1.483	2.860	-1.244	-3.258	1.192	2.864	-0.964
.200	-3.136	1.198	1.352	-1.997	-2.539	0.874	1.496	-0.208
.260	-3.167	0.932	2.077	-0.513	-2.676	0.990	2.003	-0.713
.320	-3.110	0.927	1.213	0.672	-1.586	0.343	0.902	0.995
.380	-4.425	1.743	1.109	0.801	-1.636	0.378	0.694	1.017
.440	-2.935	1.097	-0.719	0.000	-1.585	0.346	0.637	0.352
.500	-1.993	0.291	0.441	0.240	-1.765	0.302	0.392	0.217
.560	-1.932	0.320	-0.278	-0.493	-1.621	-0.062	0.279	-0.012
.620	-1.733	0.076	-0.064	0.391	-0.812	-1.274	-1.744	-0.607
.700	-1.634	-0.383	1.040	0.208	0.167	-1.220	0.210	-1.156
.800	5.480	2.270	1.570	-0.494	0.049	0.276	1.577	-0.382
.900	-0.760	0.969	0.808	-1.626	-1.869	3.185	0.749	0.587

(z-1) Tabulated data for test case 6E53 (point 258)
 Figure 9. Continued.

Point 258



(z-2) Plot of data for test case 6E53 (point 258)
Figure 9. Continued.

Point Number = 632 Mach Number = 0.825 Alpha = 1.98, deg.

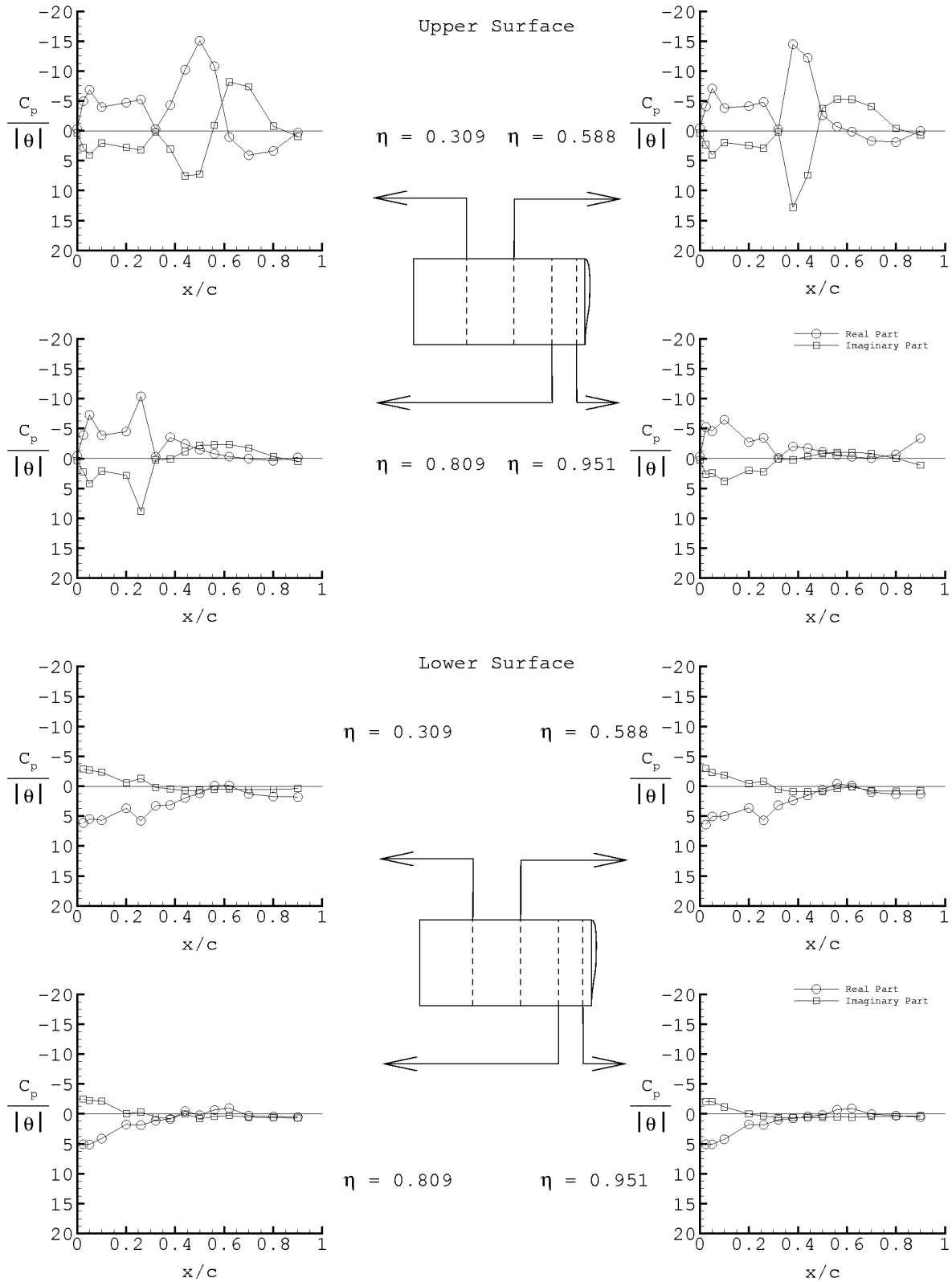
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.7 410.9 413.7 .401E+07 1.132 10.03 0.152 1.014

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.315	0.324			-0.424	0.374		
.025	-4.957	2.828	6.145	-2.866	-4.078	2.317	6.412	-2.963
.050	-6.858	4.056	5.476	-2.694	-7.082	4.007	5.059	-2.252
.100	-3.974	2.033	5.694	-2.347	-3.826	1.950	4.975	-1.860
.200	-4.708	2.806	3.684	-0.577	-4.134	2.445	3.648	-0.429
.260	-5.251	3.218	5.786	-1.314	-4.838	2.919	5.702	-0.842
.320	-0.277	0.196	3.272	0.194	-0.269	0.206	3.176	0.537
.380	-4.289	3.037	3.133	0.446	-14.473	12.805	2.371	0.920
.440	-10.220	7.562	1.948	0.759	-12.228	7.406	1.560	0.915
.500	-15.071	7.253	1.172	0.682	-2.619	-3.754	0.566	0.912
.560	-10.809	-0.927	-0.083	0.502	-0.710	-5.321	-0.404	0.395
.620	1.063	-8.181	-0.111	0.496	0.138	-5.253	-0.095	0.140
.700	4.069	-7.371	1.297	0.559	1.694	-4.069	0.991	0.750
.800	3.353	-0.799	1.725	0.541	1.879	-0.399	1.340	0.841
.900	0.303	0.911	1.822	0.397	0.003	0.735	1.324	0.758

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.459	0.329			-0.311	0.245		
.025	-3.938	2.219	5.071	-2.509	-5.264	2.613	5.078	-2.062
.050	-7.291	4.210	5.096	-2.226	-4.581	2.457	5.085	-2.044
.100	-3.881	2.089	4.128	-2.157	-6.482	3.803	4.251	-1.163
.200	-4.509	2.807	1.751	-0.054	-2.760	1.969	1.752	0.015
.260	-10.386	8.808	1.861	-0.310	-3.463	2.241	1.827	0.375
.320	-0.277	0.195	1.134	0.535	-0.107	0.036	0.994	0.648
.380	-3.559	0.062	0.846	0.777	-2.025	0.191	0.758	0.590
.440	-2.438	-1.189	-0.448	0.000	-1.716	-0.349	0.420	0.602
.500	-1.470	-2.212	0.199	0.803	-1.133	-0.844	0.185	0.593
.560	-0.807	-2.292	-0.646	0.439	-0.609	-1.018	-0.688	0.495
.620	-0.318	-2.352	-0.961	0.277	-0.278	-1.037	-0.905	0.577
.700	0.028	-1.751	0.292	0.560	-0.053	-0.846	0.029	0.451
.800	0.380	-0.338	0.435	0.585	-0.678	-0.015	0.283	0.423
.900	-0.195	0.470	0.530	0.709	-3.380	1.118	0.549	0.292

(aa-1) Tabulated data for test case 6E54 (point 632)
 Figure 9. Continued.

Point 632



(aa-2) Plot of data for test case 6E54 (point 632)
Figure 9. Continued.

Point Number = 633 Mach Number = 0.826 Alpha = 1.98, deg.

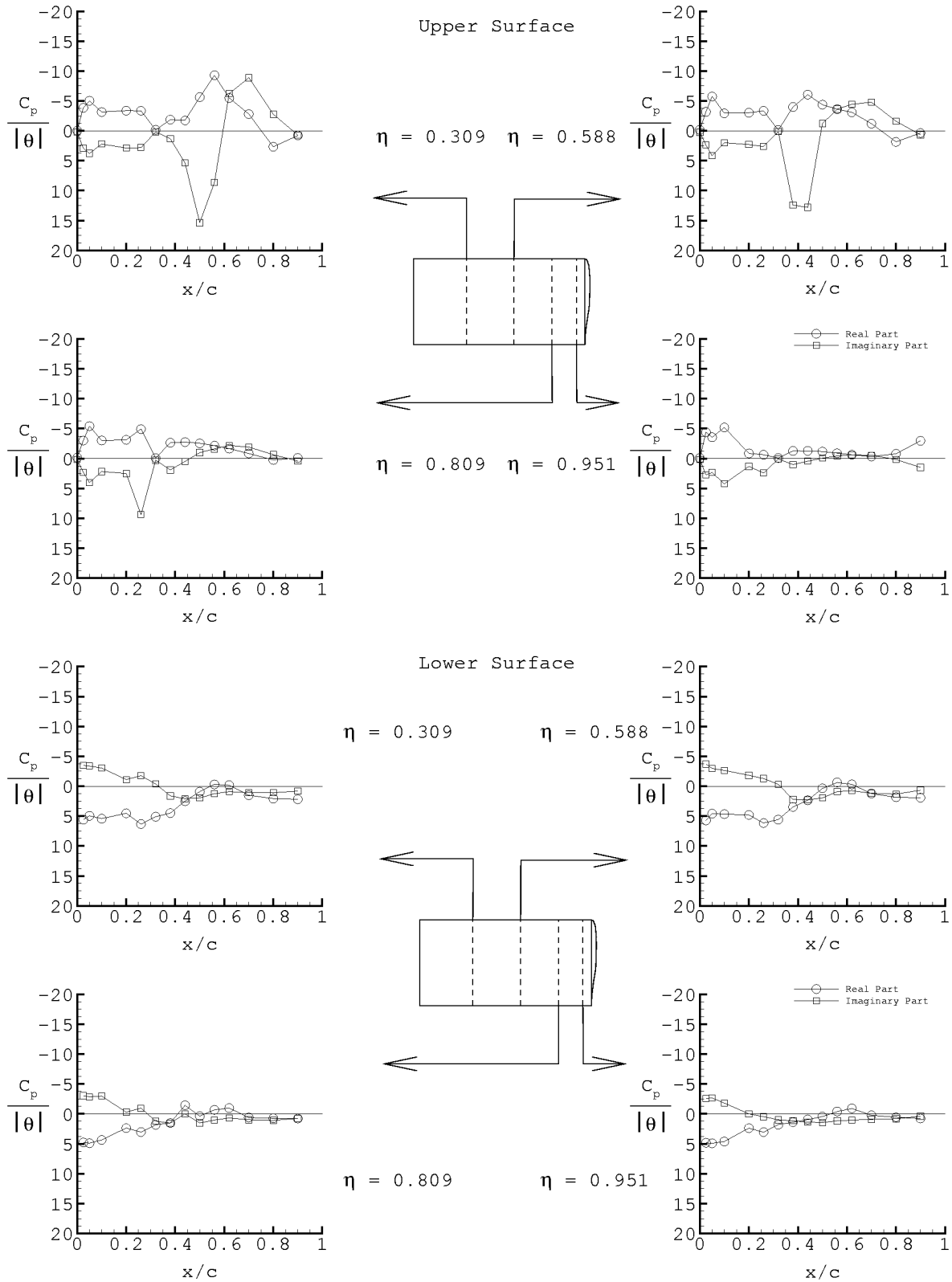
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.9 411.1 414.1 .401E+07 1.132 15.03 0.228 0.984

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.020	0.174			-0.167	0.238		
.025	-3.850	2.922	5.580	-3.487	-3.175	2.366	5.714	-3.710
.050	-5.022	3.785	4.960	-3.371	-5.754	4.165	4.590	-2.981
.100	-3.148	2.204	5.428	-3.058	-2.945	1.986	4.667	-2.630
.200	-3.375	2.862	4.524	-1.111	-3.019	2.283	4.793	-1.811
.260	-3.355	2.795	6.340	-1.758	-3.350	2.617	6.153	-1.297
.320	-0.156	0.173	5.110	-0.384	-0.114	0.132	5.581	-0.312
.380	-1.869	1.289	4.487	1.633	-3.987	12.419	3.479	2.233
.440	-1.736	5.375	2.502	2.092	-6.047	12.792	2.350	2.261
.500	-5.623	15.365	0.917	1.949	-4.377	-1.214	0.357	1.947
.560	-9.299	8.641	-0.303	1.245	-3.623	-3.623	-0.620	0.916
.620	-5.506	-6.246	-0.175	0.915	-3.098	-4.441	-0.309	0.754
.700	-2.801	-8.885	1.517	1.082	-1.206	-4.800	1.221	1.167
.800	2.655	-2.778	2.068	1.072	1.848	-1.601	1.846	1.322
.900	0.773	0.708	2.183	0.812	0.364	0.664	1.921	0.680

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.149	0.179			-0.071	0.160		
.025	-3.011	2.294	4.782	-3.058	-4.404	2.731	4.837	-2.561
.050	-5.415	4.037	4.894	-2.842	-3.557	2.327	4.908	-2.676
.100	-3.022	2.180	4.358	-2.981	-5.197	4.223	4.608	-1.806
.200	-3.122	2.528	2.375	-0.288	-0.863	1.314	2.387	-0.004
.260	-4.926	9.383	3.044	-0.961	-0.640	2.421	3.050	0.472
.320	-0.065	0.284	1.821	1.230	-0.083	0.082	1.784	0.985
.380	-2.641	1.912	1.510	1.530	-1.283	1.006	1.391	1.151
.440	-2.748	0.509	-1.437	0.000	-1.264	0.443	0.952	1.395
.500	-2.546	-1.003	0.359	1.527	-1.162	-0.075	0.440	1.449
.560	-2.148	-1.601	-0.677	1.018	-0.891	-0.431	-0.392	1.158
.620	-1.651	-2.183	-0.976	0.667	-0.642	-0.592	-0.915	1.056
.700	-0.849	-1.916	0.600	0.980	-0.333	-0.547	0.224	0.904
.800	0.239	-0.657	0.740	1.082	-0.798	0.168	0.561	0.816
.900	-0.103	0.394	0.785	0.766	-2.965	1.491	0.776	0.401

(bb-1) Tabulated data for test case 6E55 (point 633)
 Figure 9. Continued.

Point 633



(bb-2) Plot of data for test case 6E55 (point 633)
Figure 9. Continued.

Point Number = 634 Mach Number = 0.826 Alpha = 1.98, deg.

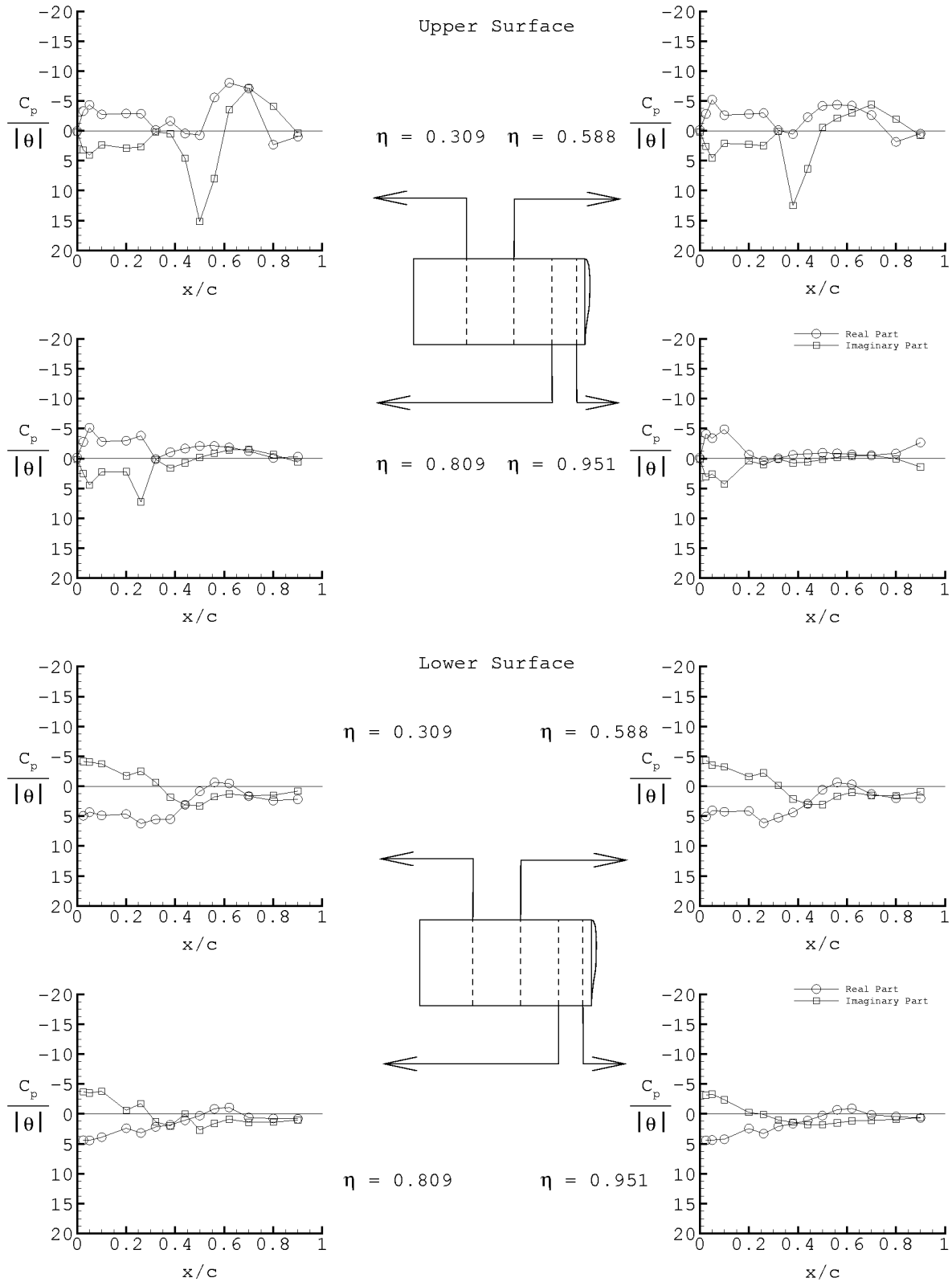
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.9 411.1 414.1 .401E+07 1.132 20.09 0.305 1.005

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	0.030	0.168			-0.135	0.184		
.025	-3.311	3.219	4.942	-4.132	-2.849	2.629	5.057	-4.350
.050	-4.336	4.044	4.336	-4.044	-5.198	4.535	4.038	-3.523
.100	-2.735	2.328	4.891	-3.740	-2.632	2.094	4.269	-3.240
.200	-2.903	2.903	4.658	-1.705	-2.807	2.241	4.154	-1.586
.260	-2.872	2.688	6.246	-2.498	-2.970	2.492	6.165	-2.232
.320	-0.137	0.182	5.548	-0.662	-0.108	0.133	5.243	-0.137
.380	-1.639	0.489	5.511	1.855	0.545	12.473	4.399	-2.165
.440	0.435	4.597	3.099	3.109	-2.268	6.334	2.936	3.030
.500	0.714	15.148	0.862	3.310	-4.179	-0.580	0.593	3.079
.560	-5.578	7.996	-0.628	1.773	-4.363	-2.109	-0.616	1.656
.620	-8.027	-3.557	-0.450	1.292	-4.218	-3.020	-0.320	1.035
.700	-7.085	-7.185	1.660	1.564	-2.643	-4.398	1.333	1.561
.800	2.308	-4.131	2.407	1.527	1.844	-1.944	2.013	1.590
.900	0.951	0.384	2.191	0.815	0.457	0.789	2.015	0.940

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.170	0.152			-0.127	0.114		
.025	-2.796	2.518	4.404	-3.717	-4.114	3.066	4.415	-3.137
.050	-5.136	4.433	4.428	-3.485	-3.406	2.585	4.371	-3.294
.100	-2.823	2.221	3.895	-3.798	-4.890	4.281	4.226	-2.372
.200	-2.983	2.199	2.406	-0.626	-0.634	0.384	2.439	-0.248
.260	-3.816	7.269	3.175	-1.718	0.351	1.025	3.306	0.069
.320	0.089	0.146	2.175	1.337	-0.028	0.050	2.101	1.025
.380	-1.053	1.627	1.817	2.018	-0.629	0.737	1.645	1.410
.440	-1.673	0.727	1.064	0.000	-0.768	0.591	1.099	1.800
.500	-2.103	-0.162	0.289	2.702	-0.954	0.170	0.276	1.803
.560	-2.114	-0.854	-0.854	1.611	-0.884	-0.224	-0.680	1.507
.620	-1.859	-1.416	-1.084	0.894	-0.692	-0.398	-0.913	1.168
.700	-1.248	-1.557	0.599	1.425	-0.538	-0.509	0.164	1.071
.800	-0.107	-0.676	0.773	1.387	-0.854	0.045	0.432	0.931
.900	-0.317	0.606	0.804	1.051	-2.675	1.405	0.675	0.614

(cc-1) Tabulated data for test case 6E56 (point 634)
 Figure 9. Continued.

Point 634



(cc-2) Plot of data for test case 6E56 (point 634)
Figure 9. Continued.

Point Number = 180 Mach Number = 0.802 Alpha = 3.30, deg.

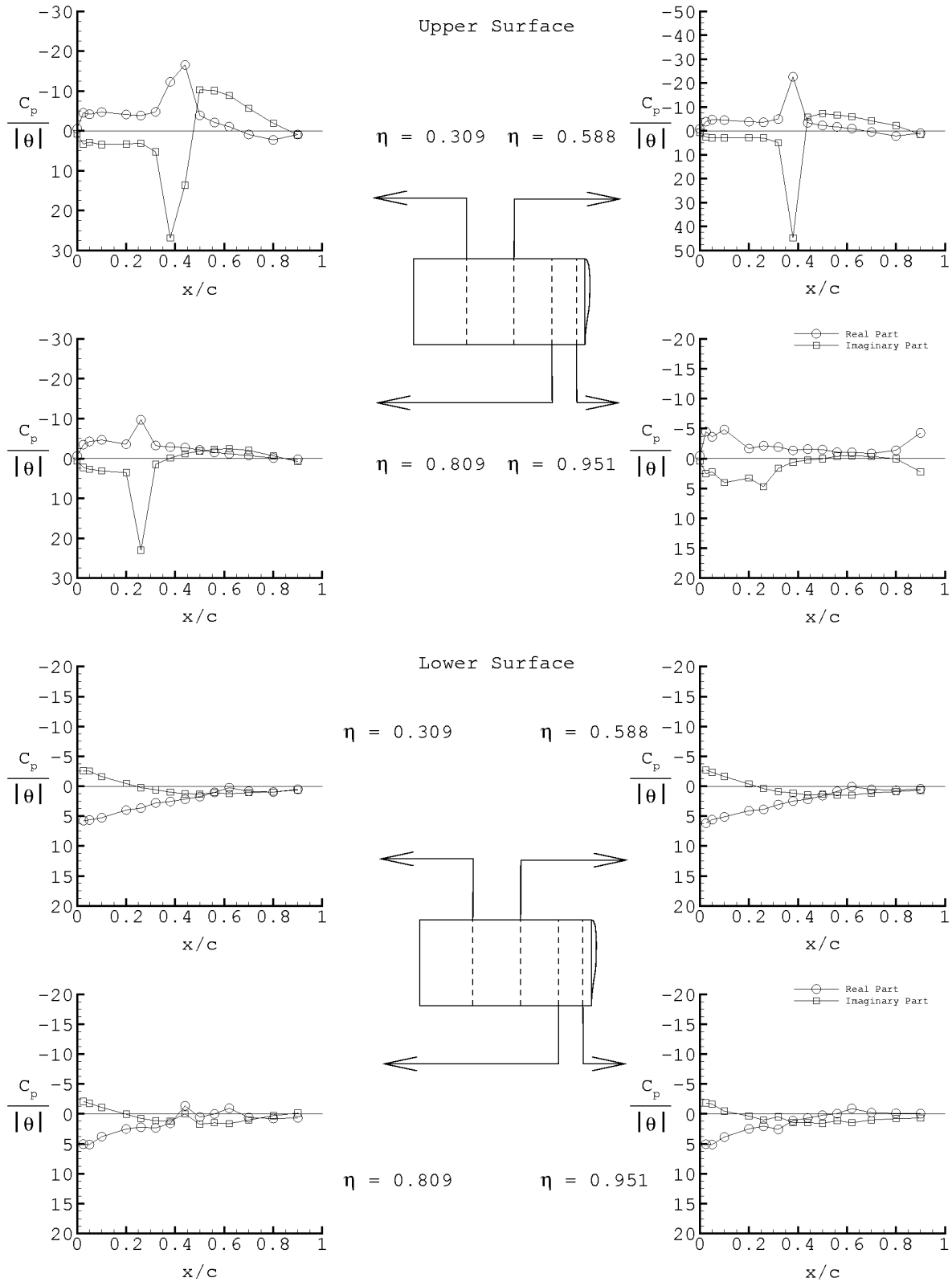
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.0 423.1 405.4 .404E+07 1.133 15.12 0.234 0.500

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.539	0.742			-0.724	0.562		
.025	-4.508	3.348	5.758	-2.563	-3.849	2.695	6.186	-2.728
.050	-4.165	2.841	5.653	-2.517	-4.649	2.939	5.607	-2.334
.100	-4.722	3.443	5.260	-1.608	-4.507	2.949	5.131	-1.637
.200	-4.091	3.324	3.985	-0.454	-3.777	2.795	4.109	-0.367
.260	-3.835	3.094	3.658	0.249	-3.625	2.988	3.875	0.407
.320	-4.754	5.280	2.802	0.596	-4.943	4.943	3.073	0.922
.380	-12.307	26.881	2.561	1.003	-22.578	44.698	2.499	1.149
.440	-16.535	13.630	2.168	1.287	-3.343	-5.744	2.185	1.474
.500	-3.889	-10.291	1.743	1.304	-2.249	-7.221	1.589	1.315
.560	-2.091	-10.099	1.033	1.073	-1.647	-6.557	0.859	1.489
.620	-1.058	-8.875	0.243	1.237	-0.950	-5.999	0.078	1.488
.700	0.916	-5.656	0.841	1.088	0.451	-4.216	0.555	1.132
.800	2.282	-1.915	0.972	0.972	2.180	-2.195	0.685	0.919
.900	0.929	1.014	0.519	0.612	0.961	1.425	0.430	0.677

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.656	0.640			-0.411	0.399		
.025	-3.475	2.223	5.058	-2.087	-4.493	2.531	5.064	-1.833
.050	-4.271	2.679	5.122	-1.771	-3.623	2.203	5.134	-1.629
.100	-4.666	3.124	3.810	-1.081	-4.835	4.043	3.869	-0.461
.200	-3.578	3.553	2.521	0.056	-1.659	3.270	2.498	0.342
.260	-9.721	23.012	2.218	0.751	-2.138	4.692	2.055	1.015
.320	-3.243	1.451	2.344	1.152	-1.931	1.620	2.591	0.480
.380	-2.862	-0.115	1.568	1.187	-1.356	0.618	1.121	1.451
.440	-2.736	-1.178	-1.349	0.000	-1.588	0.226	0.688	1.449
.500	-2.156	-1.887	0.520	1.735	-1.489	0.042	0.229	1.588
.560	-1.534	-2.283	0.016	1.490	-1.073	-0.403	-0.042	1.145
.620	-1.193	-2.478	-0.949	1.624	-1.039	-0.484	-0.898	1.466
.700	-0.738	-2.049	0.609	1.017	-0.849	-0.346	-0.197	1.012
.800	-0.136	-0.674	0.776	0.293	-1.375	0.029	-0.098	0.796
.900	0.178	0.782	0.667	-0.140	-4.277	2.207	-0.047	0.686

(dd-1) Tabulated data for test case 6E57 (point 180)
 Figure 9. Continued.

Point 180



(dd-2) Plot of data for test case 6E57 (point 180)
Figure 9. Continued.

Point Number = 184 Mach Number = 0.801 Alpha = 3.30, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 107.8 423.4 404.9 .404E+07 1.133 15.03 0.233 0.983

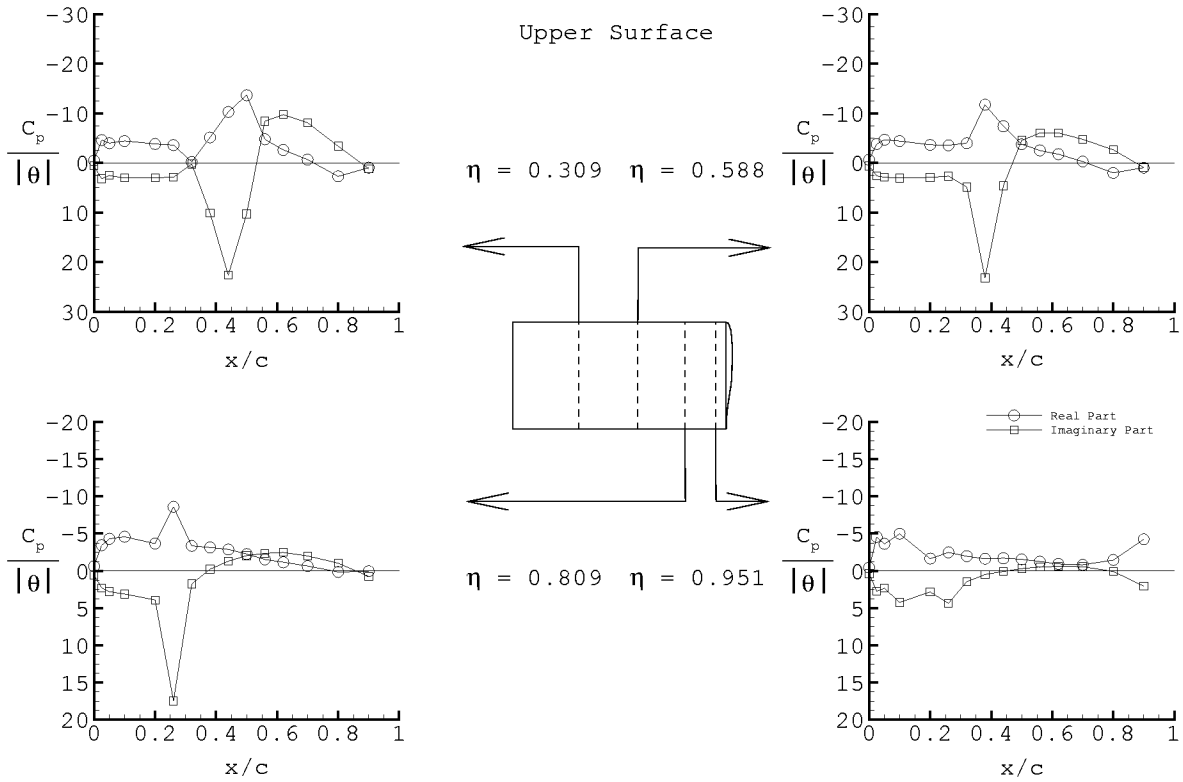
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.478	0.588			-0.633	0.603		
.025	-4.589	3.201	5.880	-2.557	-3.795	2.608	6.098	-2.639
.050	-3.986	2.530	5.751	-2.560	-4.651	2.895	5.551	-2.288
.100	-4.414	3.045	5.392	-1.700	-4.409	3.053	5.114	-1.612
.200	-3.807	2.985	4.218	-0.563	-3.634	2.922	4.066	-0.341
.260	-3.594	2.879	4.011	0.295	-3.538	2.666	3.972	0.629
.320	-0.192	0.219	3.124	0.721	-3.996	4.864	2.954	0.903
.380	-5.116	10.084	2.721	1.044	-11.721	23.204	2.504	1.248
.440	-10.257	22.612	2.276	1.304	-7.373	4.589	1.942	1.490
.500	-13.639	10.278	1.799	1.390	-3.768	-4.523	1.409	1.554
.560	-4.764	-8.421	0.839	1.332	-2.509	-6.027	0.595	1.457
.620	-2.610	-9.740	0.158	1.272	-1.756	-6.045	-0.110	1.395
.700	-0.664	-8.075	0.818	1.062	-0.275	-4.772	0.531	1.103
.800	2.709	-3.357	0.940	0.784	2.018	-2.639	0.654	0.665
.900	0.964	1.169	0.518	0.705	0.969	0.926	0.514	0.557

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.615	0.536			-0.435	0.388		
.025	-3.447	2.290	4.996	-2.244	-4.542	2.740	5.026	-1.869
.050	-4.297	2.801	5.009	-1.917	-3.630	2.330	5.042	-1.648
.100	-4.580	3.112	3.733	-1.283	-4.971	4.231	3.816	-0.489
.200	-3.664	3.915	2.390	-0.012	-1.637	2.824	2.313	0.602
.260	-8.595	17.468	2.111	0.632	-2.484	4.354	1.935	0.952
.320	-3.357	1.755	2.151	0.922	-1.960	1.466	2.270	0.532
.380	-3.139	-0.225	1.302	1.212	-1.616	0.497	0.866	1.314
.440	-2.873	-1.285	-1.443	0.000	-1.688	0.091	0.460	1.383
.500	-2.252	-2.028	0.689	1.490	-1.544	-0.303	0.362	1.411
.560	-1.524	-2.346	-0.056	1.456	-1.237	-0.517	-0.425	1.333
.620	-1.153	-2.485	-0.891	1.430	-0.927	-0.606	-0.962	1.095
.700	-0.645	-1.997	0.432	1.014	-0.810	-0.571	-0.179	0.856
.800	0.150	-1.038	0.664	0.348	-1.454	0.091	-0.022	0.699
.900	0.046	0.756	0.523	-0.044	-4.247	2.062	-0.100	0.515

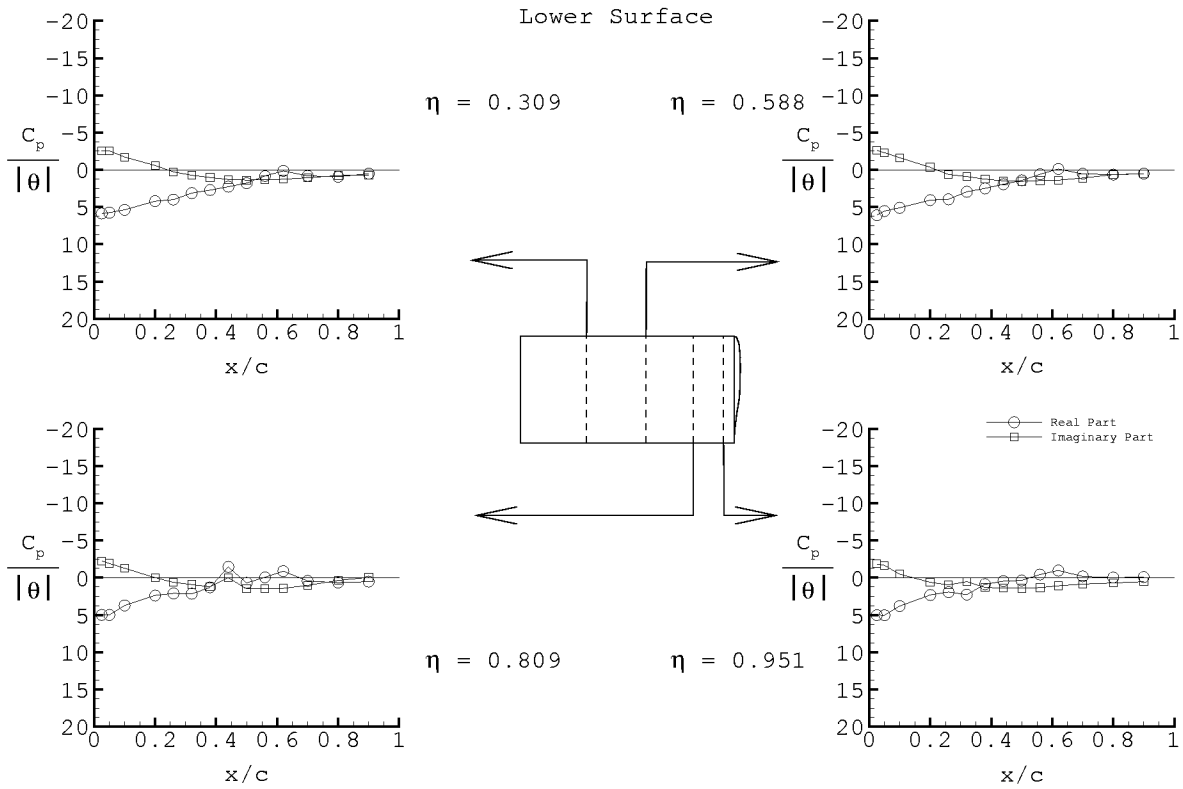
(ee-1) Tabulated data for test case 6E58 (point 184)
 Figure 9. Continued.

Point 184

Upper Surface



Lower Surface



(ee-2) Plot of data for test case 6E58 (point 184)
Figure 9. Continued.

Point Number = 189 Mach Number = 0.802 Alpha = 3.29, deg.

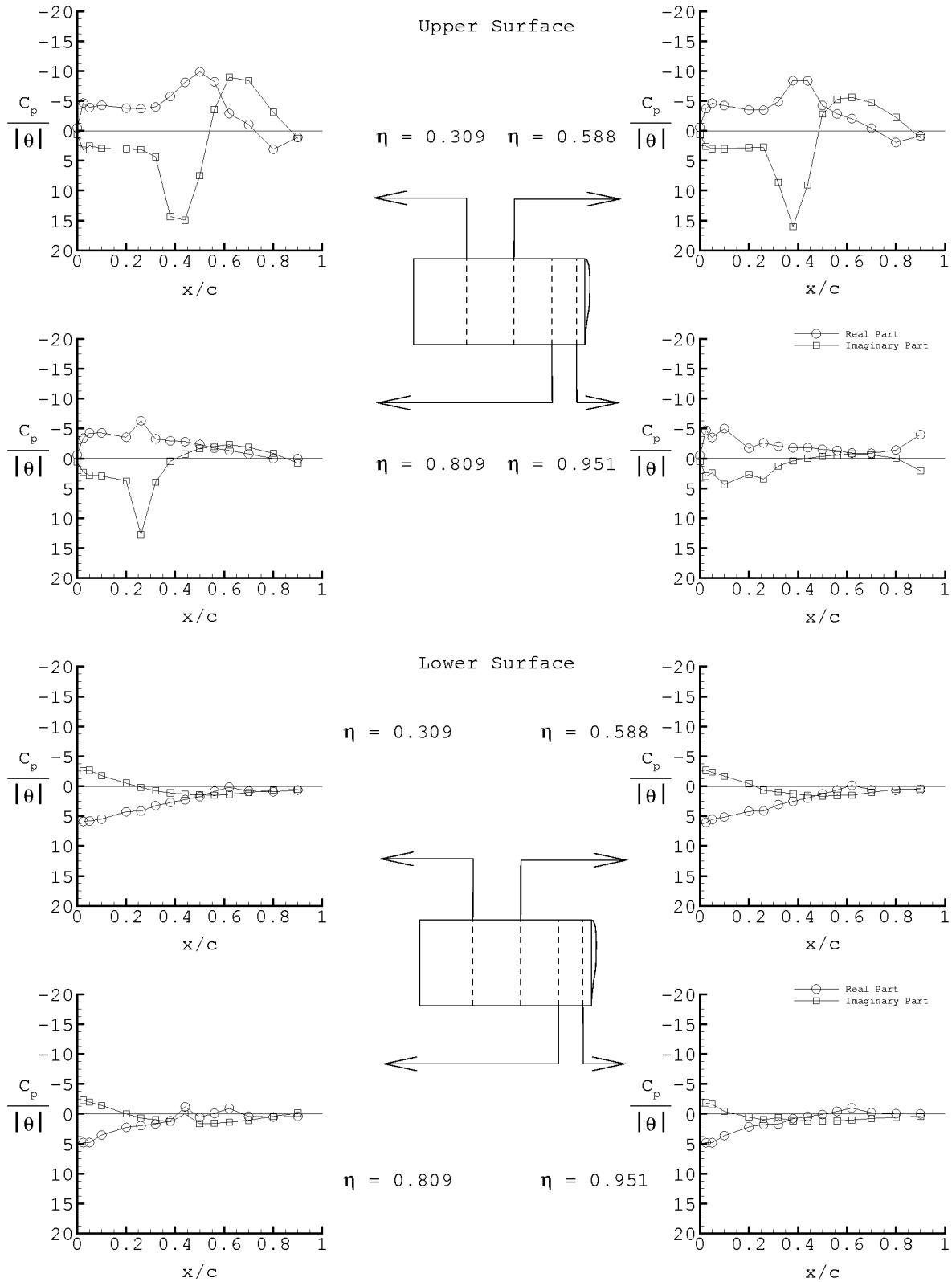
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 108.2 424.3 405.4 .404E+07 1.133 14.99 0.232 1.531

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.490	0.566			-0.595	0.622		
.025	-4.652	3.209	5.894	-2.587	-3.709	2.597	6.056	-2.684
.050	-3.909	2.500	5.823	-2.654	-4.629	2.972	5.550	-2.345
.100	-4.282	2.954	5.490	-1.752	-4.225	2.970	5.155	-1.695
.200	-3.802	3.035	4.272	-0.524	-3.485	2.832	4.205	-0.449
.260	-3.693	3.110	4.148	0.217	-3.461	2.743	4.138	0.670
.320	-4.010	4.346	3.239	0.778	-4.868	8.640	3.068	0.973
.380	-5.765	14.341	2.733	1.127	-8.402	16.004	2.541	1.278
.440	-8.107	14.931	2.250	1.341	-8.381	9.019	1.973	1.486
.500	-9.867	7.489	1.738	1.422	-4.249	-2.802	1.310	1.683
.560	-8.209	-3.552	0.845	1.500	-2.830	-5.277	0.639	1.558
.620	-2.899	-8.974	0.169	1.374	-2.035	-5.592	-0.136	1.528
.700	-1.045	-8.393	0.831	1.060	-0.456	-4.731	0.595	1.039
.800	3.085	-3.107	0.927	0.633	1.932	-2.238	0.697	0.505
.900	1.078	1.245	0.642	0.574	0.834	1.152	0.571	0.424

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-0.615	0.548			-0.498	0.453		
.025	-3.417	2.296	4.812	-2.270	-4.724	2.963	4.825	-1.842
.050	-4.259	2.787	4.804	-1.979	-3.524	2.404	4.829	-1.607
.100	-4.277	2.895	3.546	-1.405	-5.007	4.337	3.640	-0.447
.200	-3.548	3.752	2.245	-0.006	-1.712	2.636	2.178	0.547
.260	-6.323	12.738	1.972	0.710	-2.596	3.433	1.774	0.967
.320	-3.282	3.939	1.690	0.986	-2.056	1.300	1.712	0.657
.380	-2.956	0.474	1.159	1.344	-1.787	0.409	0.787	1.184
.440	-2.822	-0.746	-1.172	0.000	-1.833	-0.054	0.426	1.159
.500	-2.346	-1.673	0.553	1.640	-1.532	-0.354	0.097	1.231
.560	-1.733	-2.014	-0.103	1.566	-1.344	-0.570	-0.416	1.163
.620	-1.333	-2.299	-0.912	1.378	-0.917	-0.770	-0.986	1.025
.700	-0.754	-1.875	0.397	1.066	-0.886	-0.627	-0.202	0.759
.800	0.000	-0.861	0.528	0.406	-1.421	-0.045	-0.026	0.561
.900	0.047	0.785	0.405	-0.117	-4.005	2.032	-0.007	0.412

(ff-1) Tabulated data for test case 6E59 (point 189)
 Figure 9. Continued.

Point 189



(ff-2) Plot of data for test case 6E59 (point 189)
Figure 9. Continued.

Point Number = 613 Mach Number = 0.402 Alpha = 11.99, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.4 652.8 202.4 .402E+07 1.132 5.00 0.155 1.004

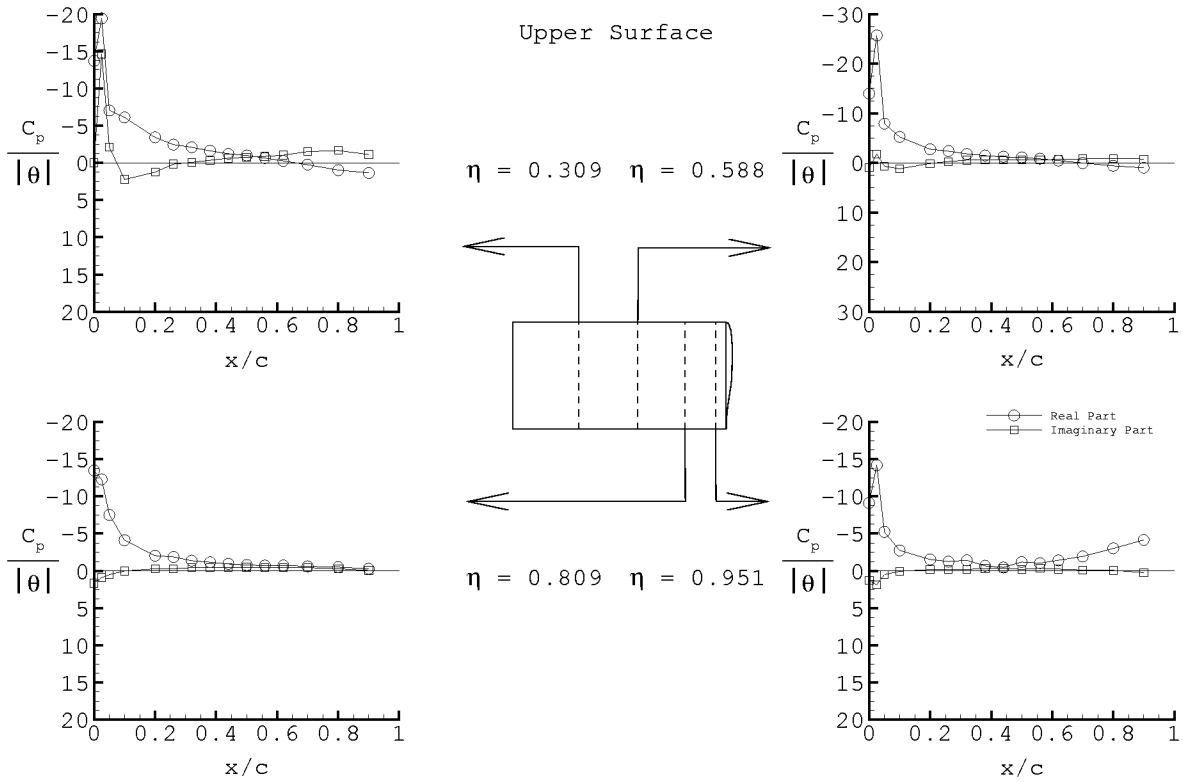
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-13.696	-0.024			-13.949	0.951		
.025	-19.415	-14.631	2.054	0.036	-25.675	-1.795	2.452	-0.086
.050	-7.048	-2.128	2.796	0.024	-7.906	0.650	3.195	-0.089
.100	-6.113	2.225	3.023	0.100	-5.237	1.161	3.025	0.021
.200	-3.432	1.249	2.379	0.292	-2.737	0.119	2.385	0.238
.260	-2.449	0.158	2.012	0.417	-2.383	-0.255	1.604	0.409
.320	-2.111	-0.059	1.762	0.479	-1.797	-0.563	1.780	0.408
.380	-1.619	-0.341	1.564	0.542	-1.471	-0.624	1.578	0.498
.440	-1.217	-0.628	1.367	0.577	-1.223	-0.618	1.441	0.545
.500	-0.997	-0.763	1.217	0.628	-1.112	-0.584	1.197	0.538
.560	-0.657	-0.863	1.125	0.676	-0.830	-0.605	0.892	0.382
.620	-0.264	-1.052	0.853	0.758	-0.452	-0.727	0.766	0.596
.700	0.236	-1.523	0.466	0.718	0.028	-0.798	0.451	0.589
.800	0.973	-1.679	0.238	0.703	0.597	-0.905	0.302	0.550
.900	1.355	-1.137	0.133	0.672	0.978	-0.787	0.172	0.484

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-13.478	1.679			-9.101	1.263		
.025	-12.293	0.903	3.016	-0.218	-14.201	1.870	3.007	-0.327
.050	-7.515	0.525	3.190	-0.197	-5.224	0.521	3.183	-0.284
.100	-4.109	0.014	2.397	-0.026	-2.738	0.067	2.396	-0.050
.200	-2.036	-0.272	1.534	0.208	-1.531	-0.172	1.532	0.169
.260	-1.863	-0.278	1.183	0.298	-1.240	-0.194	1.168	0.268
.320	-1.363	-0.422	0.723	0.375	-1.414	-0.191	0.668	0.322
.380	-1.162	-0.474	0.789	0.237	-0.671	-0.316	0.728	0.329
.440	-0.926	-0.445	-0.690	0.000	-0.456	-0.343	0.628	0.395
.500	-0.778	-0.478	0.450	0.522	-1.181	-0.204	0.327	0.396
.560	-0.713	-0.474	0.378	0.545	-1.026	-0.351	0.248	0.383
.620	-0.727	-0.452	0.303	0.521	-1.407	-0.235	-0.045	0.397
.700	-0.608	-0.426	0.277	0.528	-1.936	-0.122	-0.298	0.419
.800	-0.500	-0.276	0.232	0.488	-3.024	-0.069	-0.604	0.431
.900	-0.282	-0.044	0.196	0.375	-4.159	0.240	-0.455	0.344

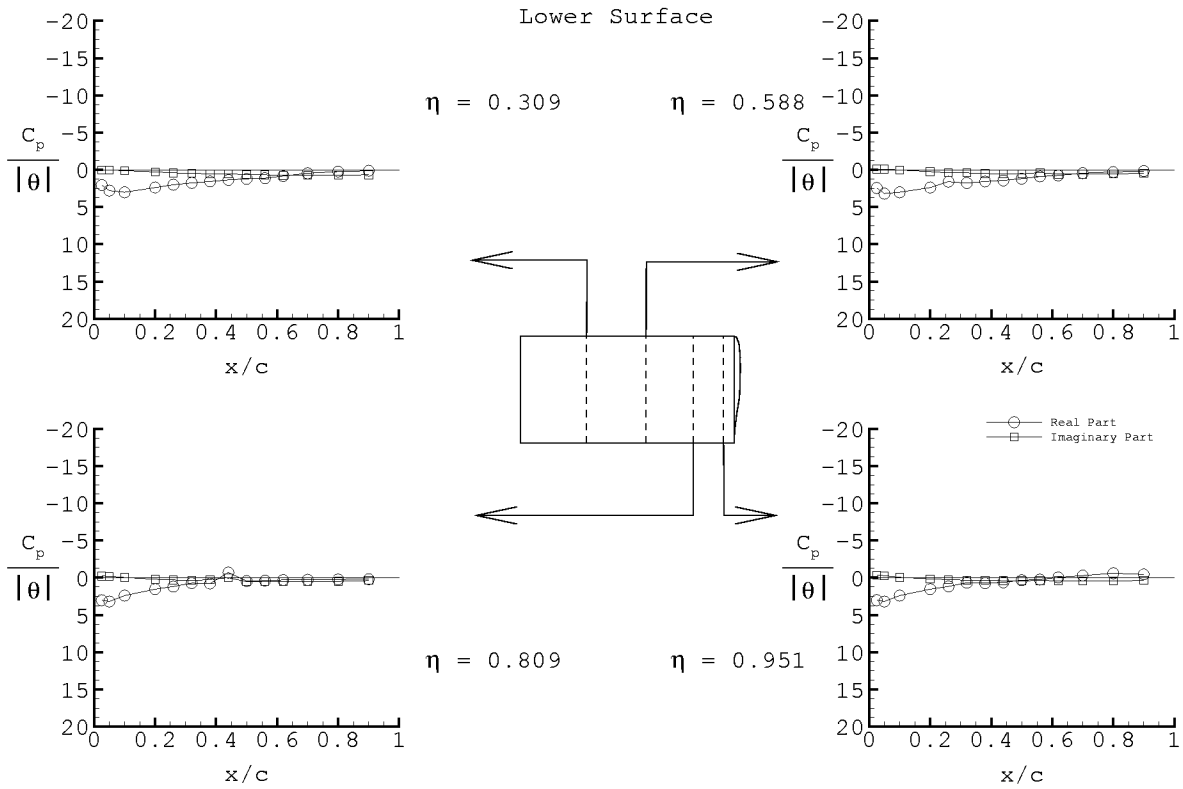
(gg-1) Tabulated data for test case 6E60 (point 613)
 Figure 9. Continued.

Point 613

Upper Surface



Lower Surface



(gg-2) Plot of data for test case 6E60 (point 613)
Figure 9. Continued.

Point Number = 614 Mach Number = 0.401 Alpha = 12.00, deg.

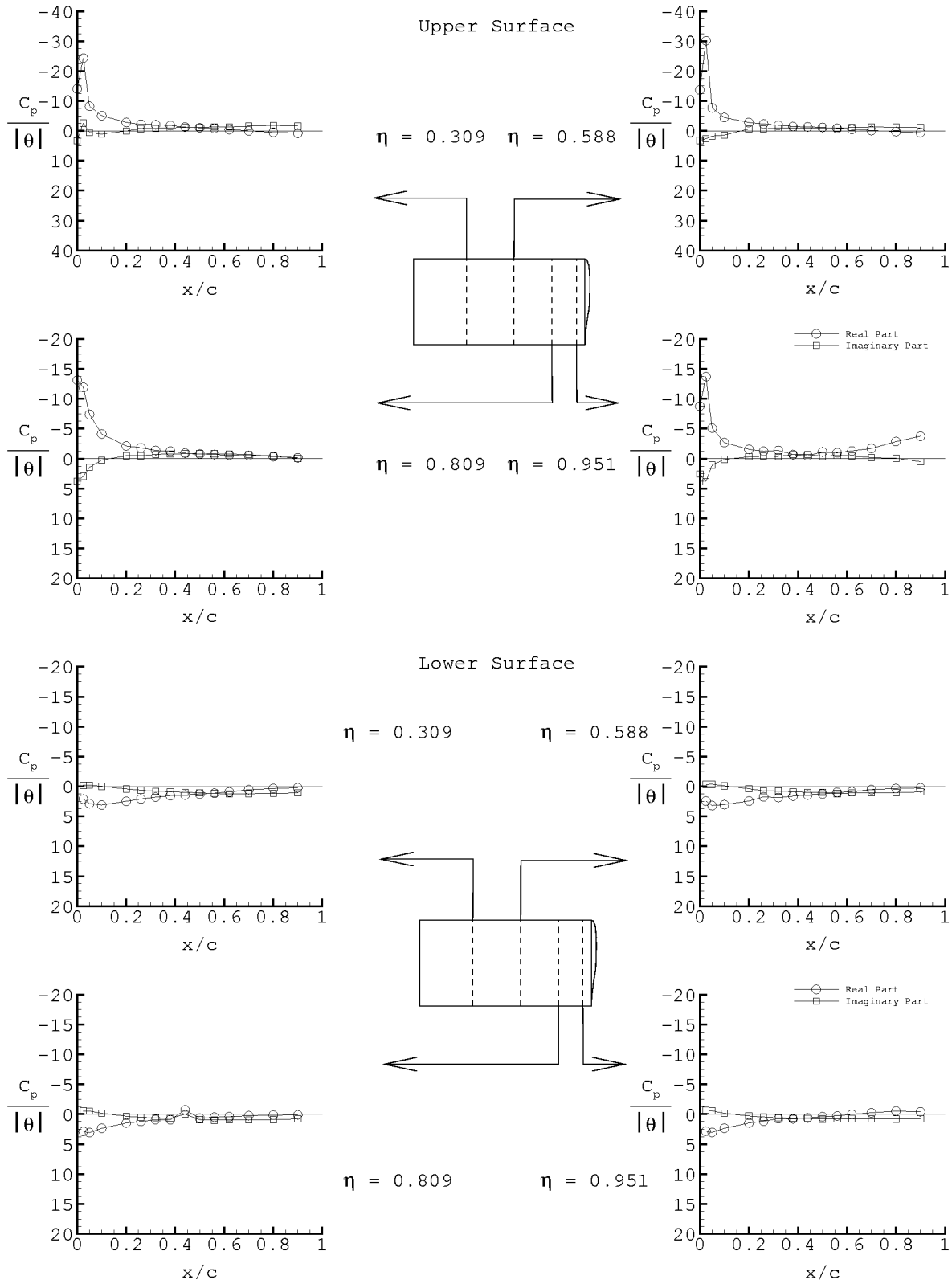
q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.2 652.9 202.1 .401E+07 1.132 10.02 0.312 0.998

x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-14.035	3.266			-13.688	3.236		
.025	-24.314	-2.641	2.116	-0.185	-30.145	2.584	2.445	-0.344
.050	-8.252	0.505	2.861	-0.235	-7.726	1.755	3.194	-0.364
.100	-5.063	1.030	3.100	-0.016	-4.495	1.400	3.041	-0.101
.200	-2.870	0.025	2.492	0.413	-2.794	-0.660	2.442	0.361
.260	-2.175	-0.736	2.092	0.620	-2.328	-0.628	1.741	0.746
.320	-2.059	-0.878	1.780	0.800	-1.881	-0.987	1.854	0.775
.380	-1.808	-1.002	1.543	0.887	-1.472	-1.000	1.616	0.874
.440	-1.264	-1.170	1.430	0.961	-1.330	-1.002	1.430	0.961
.500	-1.049	-1.141	1.279	1.066	-1.135	-0.969	1.255	1.005
.560	-0.819	-1.316	1.121	1.152	-0.852	-0.933	0.990	1.193
.620	-0.465	-1.358	0.915	1.251	-0.520	-1.151	0.867	1.071
.700	-0.017	-1.607	0.545	1.203	-0.121	-1.257	0.521	1.087
.800	0.478	-1.833	0.340	1.157	0.245	-1.239	0.346	1.034
.900	0.758	-1.610	0.208	1.071	0.584	-1.054	0.221	0.892

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-13.141	3.743			-8.761	2.562		
.025	-11.921	2.972	2.877	-0.544	-13.707	3.853	2.845	-0.693
.050	-7.383	1.435	3.066	-0.518	-5.116	1.059	3.047	-0.570
.100	-4.127	0.238	2.351	-0.159	-2.696	0.122	2.349	-0.148
.200	-2.126	-0.491	1.476	0.331	-1.572	-0.334	1.462	0.300
.260	-1.827	-0.500	1.219	0.527	-1.251	-0.423	1.174	0.467
.320	-1.381	-0.704	0.914	0.606	-1.383	-0.384	0.751	0.623
.380	-1.260	-0.800	0.940	0.693	-0.689	-0.691	0.785	0.673
.440	-0.936	-0.848	-0.726	0.000	-0.479	-0.716	0.613	0.684
.500	-0.795	-0.829	0.665	0.911	-1.140	-0.393	0.416	0.819
.560	-0.694	-0.842	0.503	0.986	-1.004	-0.557	0.284	0.752
.620	-0.595	-0.773	0.398	0.972	-1.304	-0.446	0.020	0.746
.700	-0.528	-0.680	0.258	0.979	-1.713	-0.180	-0.232	0.769
.800	-0.358	-0.449	0.154	0.907	-2.870	-0.070	-0.527	0.821
.900	-0.165	-0.048	0.097	0.799	-3.756	0.501	-0.398	0.764

(hh-1) Tabulated data for test case 6E61 (point 614)
 Figure 9. Continued.

Point 614



(hh-2) Plot of data for test case 6E61 (point 614)
Figure 9. Continued.

Point Number = 615 Mach Number = 0.401 Alpha = 12.01, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.2 652.8 202.0 .401E+07 1.132 14.99 0.466 1.012

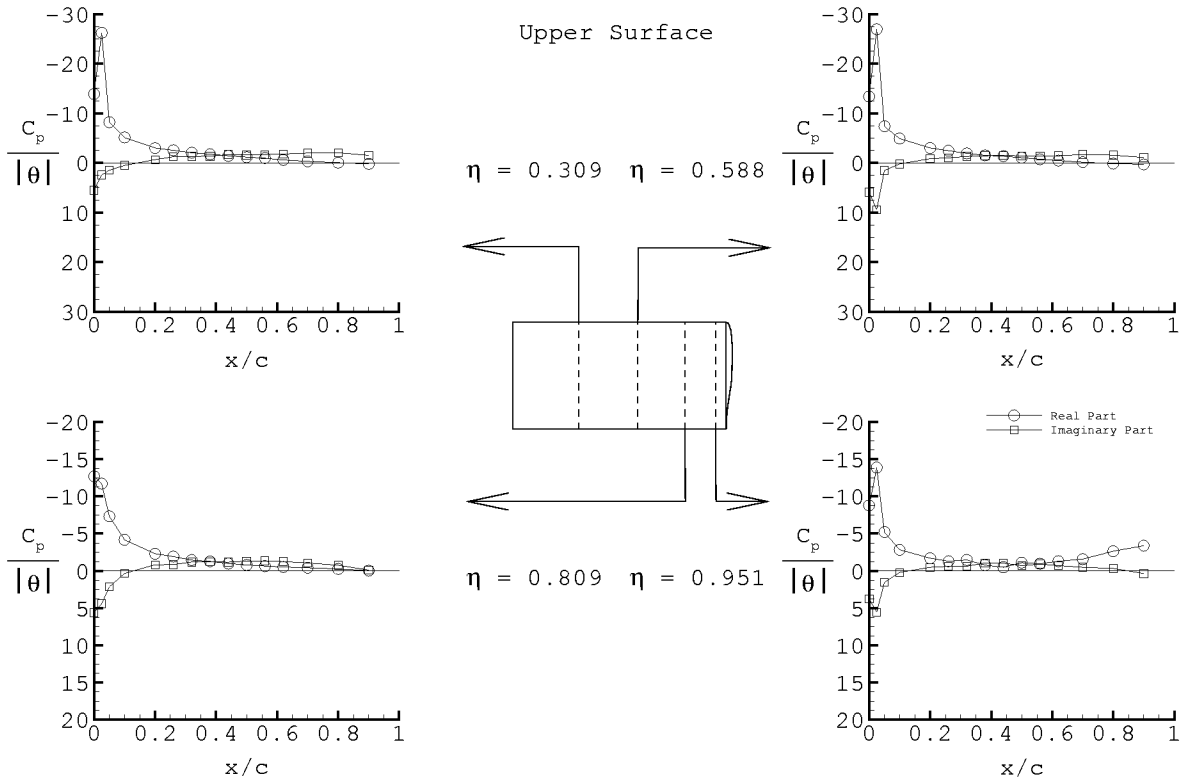
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-13.887	5.527			-13.375	5.871		
.025	-26.214	2.432	2.177	-0.368	-26.931	9.431	2.478	-0.590
.050	-8.191	1.474	2.962	-0.480	-7.371	1.540	3.222	-0.632
.100	-5.128	0.503	3.225	-0.113	-4.921	0.223	3.107	-0.212
.200	-2.989	-0.641	2.608	0.526	-2.995	-0.853	2.561	0.475
.260	-2.542	-1.245	2.264	0.896	-2.462	-1.010	1.871	1.063
.320	-2.051	-1.312	1.943	1.163	-1.911	-1.318	1.904	1.117
.380	-1.747	-1.350	1.671	1.264	-1.530	-1.431	1.718	1.295
.440	-1.419	-1.691	1.527	1.351	-1.348	-1.529	1.488	1.393
.500	-1.156	-1.609	1.359	1.519	-1.064	-1.396	1.295	1.500
.560	-0.960	-1.669	1.215	1.636	-0.739	-1.402	1.122	1.633
.620	-0.580	-1.776	0.939	1.680	-0.462	-1.457	0.853	1.598
.700	-0.296	-1.959	0.705	1.669	-0.142	-1.693	0.592	1.592
.800	-0.036	-2.038	0.514	1.619	0.138	-1.579	0.450	1.579
.900	0.210	-1.514	0.424	1.528	0.297	-1.093	0.275	1.273

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-12.682	5.620			-8.794	3.769		
.025	-11.704	4.423	3.055	-0.802	-13.878	5.551	3.003	-1.017
.050	-7.336	2.145	3.257	-0.778	-5.209	1.553	3.231	-0.848
.100	-4.176	0.343	2.539	-0.255	-2.822	0.217	2.538	-0.226
.200	-2.296	-0.809	1.722	0.462	-1.691	-0.469	1.705	0.416
.260	-1.921	-0.835	1.369	0.792	-1.284	-0.596	1.289	0.711
.320	-1.448	-1.181	1.093	0.952	-1.457	-0.624	0.827	0.931
.380	-1.267	-1.215	1.061	1.082	-0.775	-1.047	0.870	0.969
.440	-0.981	-1.173	-0.894	0.000	-0.479	-1.026	0.656	1.059
.500	-0.790	-1.309	0.776	1.409	-1.099	-0.698	0.561	1.175
.560	-0.638	-1.326	0.558	1.429	-0.949	-0.891	0.291	1.094
.620	-0.524	-1.254	0.430	1.467	-1.294	-0.702	-0.032	1.132
.700	-0.411	-1.055	0.303	1.418	-1.568	-0.486	-0.210	1.113
.800	-0.258	-0.749	0.182	1.344	-2.641	-0.324	-0.469	1.154
.900	-0.021	-0.111	0.136	1.180	-3.376	0.373	-0.340	1.080

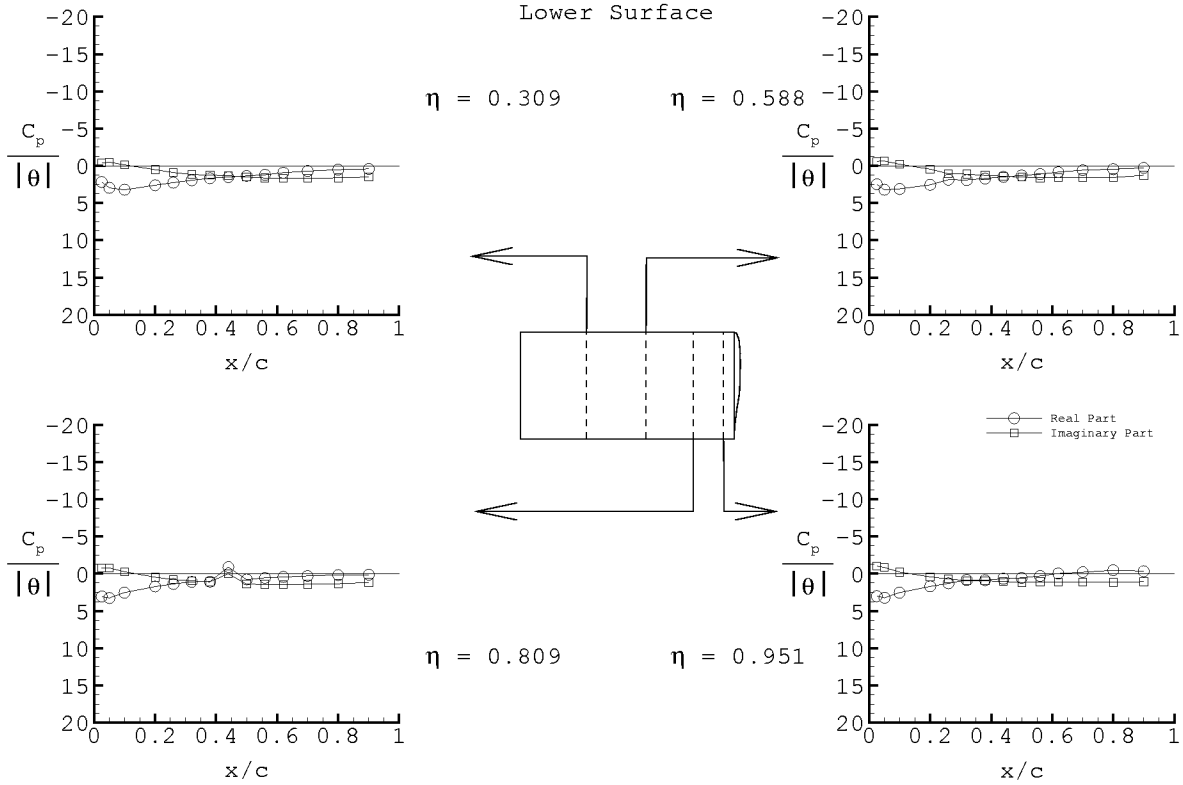
(ii-1) Tabulated data for test case 6E62 (point 615)
 Figure 9. Continued.

Point 615

Upper Surface



Lower Surface



(ii-2) Plot of data for test case 6E62 (point 615)
Figure 9. Continued.

Point Number = 616 Mach Number = 0.401 Alpha = 12.02, deg.

q, psf H, psf V, fps Rn gamma freq, Hz k theta, deg
 54.3 652.7 202.2 .402E+07 1.132 19.99 0.621 1.055

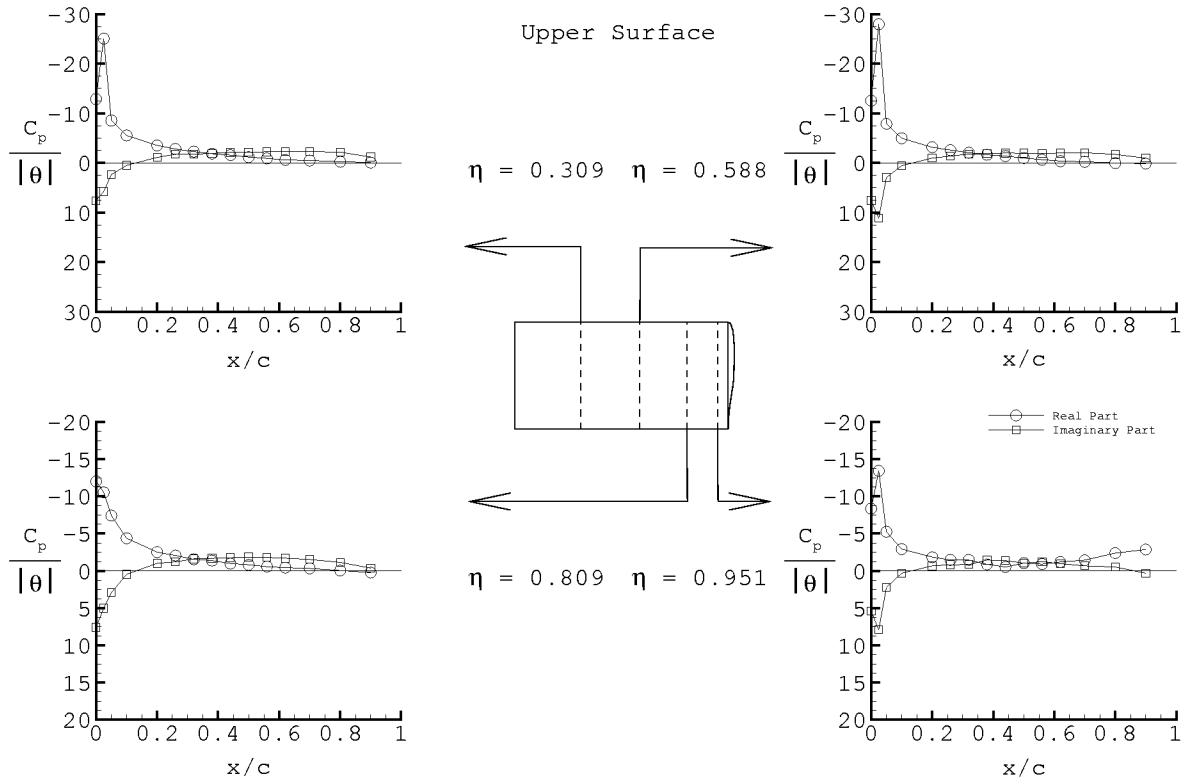
x/c	y/s = 0.309				y/s = 0.588			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-12.855	7.602			-12.556	7.574		
.025	-25.030	5.779	2.307	-0.622	-27.955	11.125	2.625	-0.883
.050	-8.539	2.336	3.050	-0.789	-7.880	2.962	3.349	-0.929
.100	-5.517	0.502	3.354	-0.299	-4.962	0.583	3.291	-0.381
.200	-3.524	-1.104	2.824	0.559	-3.166	-0.974	2.825	0.549
.260	-2.803	-1.765	2.423	1.099	-2.587	-1.381	2.055	1.220
.320	-2.274	-1.764	2.126	1.413	-2.052	-1.778	2.184	1.424
.380	-1.852	-1.911	1.869	1.574	-1.632	-1.891	1.914	1.606
.440	-1.558	-2.090	1.660	1.719	-1.367	-1.960	1.639	1.739
.500	-1.159	-2.152	1.541	1.966	-0.983	-1.937	1.481	1.875
.560	-0.899	-2.214	1.294	2.009	-0.641	-1.904	1.335	2.047
.620	-0.589	-2.260	1.036	2.153	-0.359	-1.977	0.971	2.064
.700	-0.482	-2.285	0.805	2.076	-0.223	-2.052	0.736	2.044
.800	-0.235	-2.160	0.596	1.976	0.024	-1.738	0.571	1.927
.900	-0.081	-1.192	0.465	1.787	0.146	-0.967	0.433	1.627

x/c	y/s = 0.809				y/s = 0.951			
	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t	ReCpu/t	ImCpu/t	ReCpl/t	ImCpl/t
.000	-12.027	7.603			-8.354	5.384		
.025	-10.539	5.027	3.080	-1.160	-13.430	7.911	2.962	-1.483
.050	-7.433	2.913	3.308	-1.135	-5.249	2.228	3.243	-1.251
.100	-4.374	0.467	2.637	-0.437	-2.916	0.312	2.633	-0.389
.200	-2.516	-1.022	1.862	0.535	-1.838	-0.665	1.833	0.505
.260	-2.063	-1.206	1.525	1.037	-1.467	-0.826	1.443	0.867
.320	-1.550	-1.599	1.267	1.292	-1.452	-0.852	0.998	1.148
.380	-1.379	-1.679	1.210	1.460	-0.870	-1.442	0.987	1.227
.440	-0.974	-1.757	1.263	0.000	-0.521	-1.371	0.854	1.388
.500	-0.801	-1.843	0.799	1.822	-1.040	-1.033	0.494	1.381
.560	-0.575	-1.812	0.667	1.855	-0.913	-1.216	0.345	1.481
.620	-0.426	-1.685	0.528	1.885	-1.182	-0.957	0.003	1.521
.700	-0.327	-1.541	0.399	1.934	-1.422	-0.678	-0.130	1.461
.800	-0.042	-1.140	0.265	1.767	-2.390	-0.512	-0.373	1.530
.900	0.235	-0.365	0.170	1.563	-2.860	0.326	-0.308	1.322

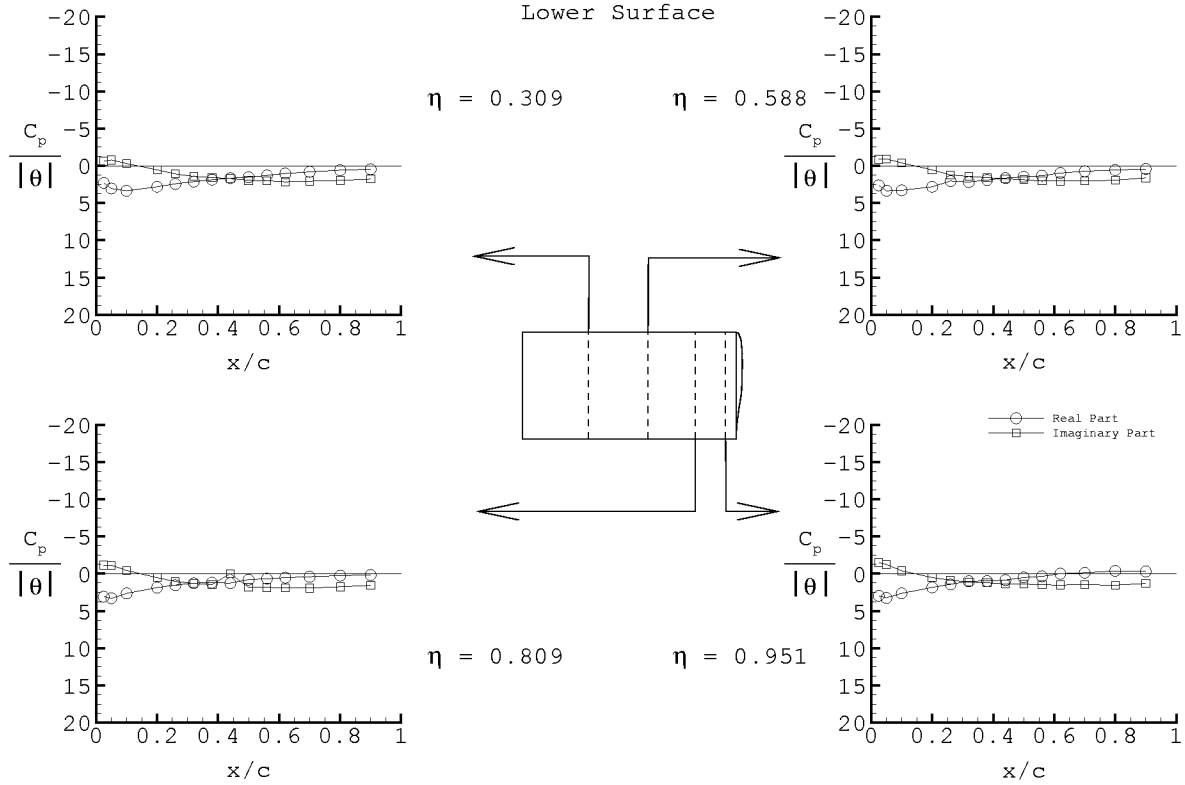
(jj-1) Tabulated data for test case 6E63 (point 616)
 Figure 9. Continued.

Point 616

Upper Surface



Lower Surface



(jj-2) Plot of data for test case 6E63 (point 616)
Figure 9. Concluded.

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