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Small Hot Jet Acoustic Rig Validation

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April 2006

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Small Hot Jet Acoustic Rig Validation

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Abstract

The Small Hot Jet Acoustic Rig (SHJAR), located in the Aeroacoustic Propulsion Laboratory (AAPL) at the NASA Glenn Research Center in Cleveland, Ohio, was commissioned in 2001 to test jet noise reduction concepts at low technology readiness levels (TRL 1-3) and develop advanced measurement techniques. The first series of tests on the SHJAR were designed to prove its capabilities and establish the quality of the jet noise data produced. Towards this goal, a methodology was employed dividing all noise sources into three categories: background noise, jet noise, and rig noise. Background noise was directly measured. Jet noise and rig noise were separated by using the distance and velocity scaling properties of jet noise. Effectively, any noise source that did not follow these rules of jet noise was labeled as rig noise. This method led to the identification of a high frequency noise source related to the Reynolds number. Experiments using boundary layer treatment and hot wire probes documented this noise source and its removal, allowing clean testing of low Reynolds number jets. Other tests performed characterized the amplitude and frequency of the valve noise, confirmed the location of the acoustic far field, and documented the background noise levels under several conditions. Finally, a set of baseline data was acquired using a test matrix developed by Tanna et al. This paper contains the methodology and test results used to verify the quality of the SHJAR rig.

1. About the Small Hot Jet Acoustic Rig

The Small Hot Jet Acoustic Rig (SHJAR), located in the Aeroacoustic Propulsion Laboratory (AAPL) at the NASA Glenn Research Center in Cleveland, Ohio, was developed to test jet noise reduction concepts at a low technology readiness level (TRL 1-3) and develop advanced measurement techniques. As a jet noise testing rig, the SHJAR was designed minimize rig noise sources, incorporating the work of Viswanathan (ref. 1) and Ahuja (ref. 2) to achieve this goal. The rig is a single flow jet rig which uses 150-psi air supplied by several remotely located compressors. The maximum mass flow rate is 6 lbm/s and the maximum temperature air is 1300 °F. A hydrogen burning combustor, permitting a large range of temperatures, provides the heat. The air passes through a baffled muffler and settling chamber before reaching the nozzle. Two valves, a large main valve and a small vernier valve, control the rate of airflow, providing fine control over the entire range of operating conditions. Nozzles sizes from 1- to 3-in. in diameter are supported. Although acoustic testing is most common, SHJAR can be reconfigured to perform thrust measurements up to 100 lbf. The AAPL, which houses the SHJAR, is a geodesic dome (60-ft radius) lined with sound absorbing wedges which reduce sound reflection at all frequencies above 200 Hz. The jet exhaust is directed outside through a large door.

Acoustic measurements on SHJAR are recorded by an array of 24 microphones placed on an arc with a radius of 100 in. at 5° intervals from 50° to 165° (fig. 1). To minimize reflection from the microphone stands, six stands, each holding four microphones, are used. Another computer, called ESCORT, records other variables such as rig temperatures, pressures, and mass flows as well as ambient temperature, pressure, and humidity. ESCORT averages the data over the same time that the acoustic record is recorded, giving one value per variable per acoustic data point. A DataMAX Instrumentation Recorder (RC Electronics), simultaneously records data from all microphones, using a 90 kHz low-pass filter to limit the bandwidth (at 200 kHz sample rate). Bruel & Kjaer Nexus™ amplifiers provide the signal conditionings. Eight seconds of data are recorded at each point. The high frequency response of the Nexus amplifiers and DataMAX recorder has been documented using a white noise generator. When a 100 kHz

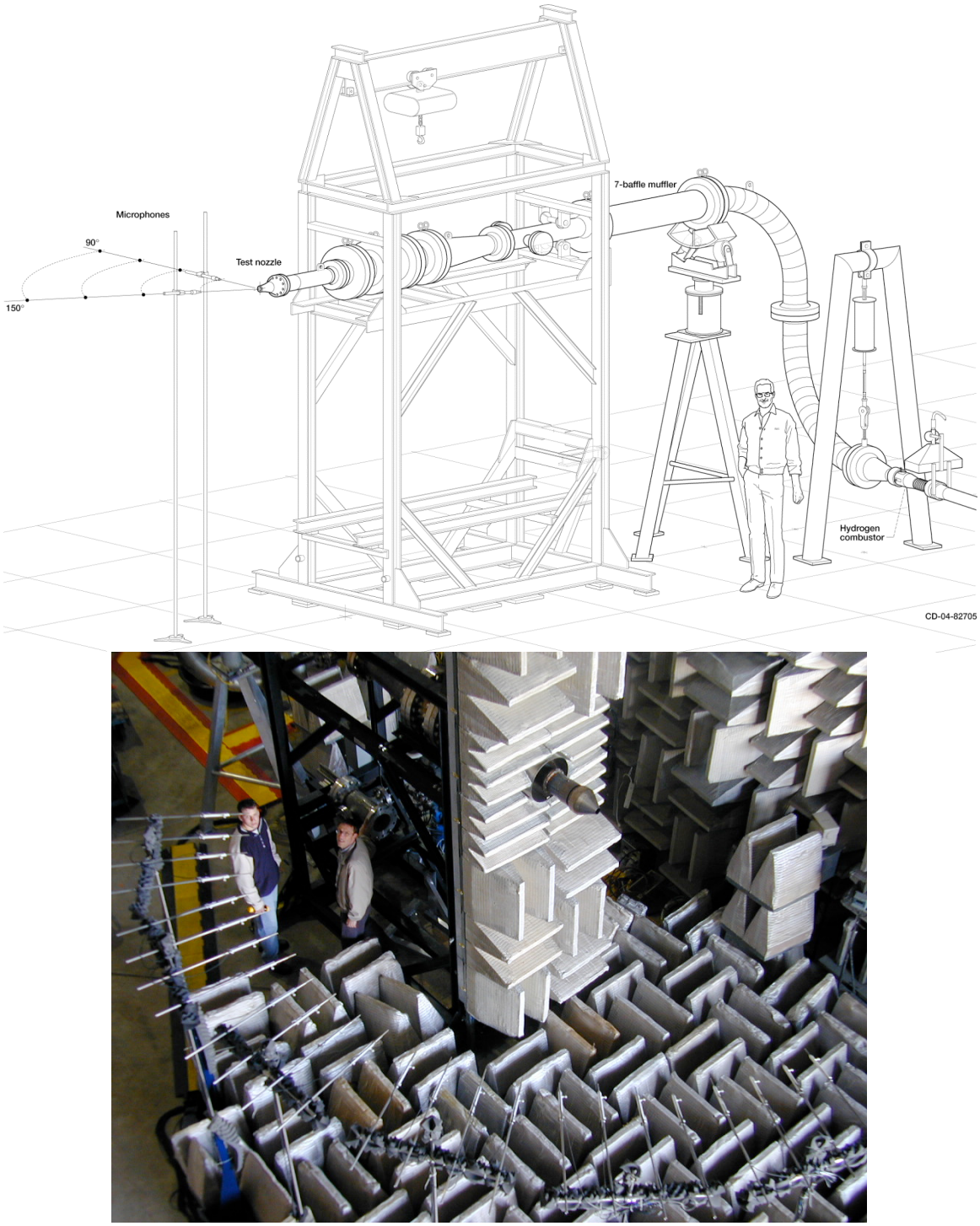

Figure 1.—A drawing of the SHJAR depicting the piping from the combustor to the nozzle and the microphone location viewed from the side (top). Acoustic wedges are not included so that the piping and components may be clearly shown. The SHJAR in acoustic configuration, viewed from above (side opposite that in top view) (bottom). The 24-microphone array is located on a 100-in. radius from covering angles from 50° to 165°. The nozzle and microphones are 10 ft above the ground (8 ft above the wedge tips).

signal from a white noise generator is directly input into the DataMAX the recorded signal has a 1 dB down point at 63 kHz compared to 70 kHz for the signal generator itself (fig. 2, top). When the white noise first passes through the Nexus amplifier, the recorded signal is further decreased above 74 kHz (fig. 2, bottom). In practice, the trusted bandwidth is closer to 75 kHz than the 90 kHz set on the recorder itself.

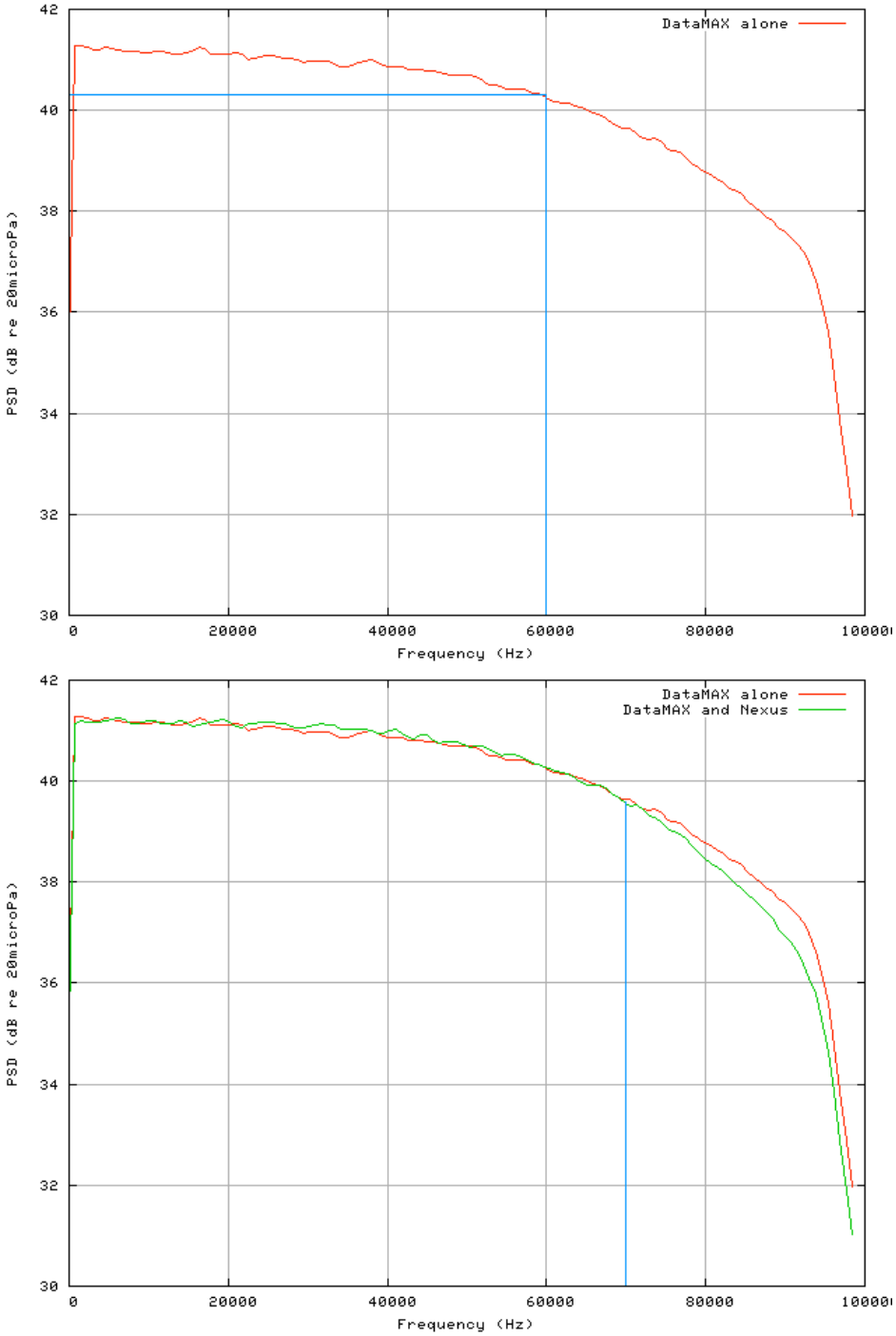

Figure 2.—A 100 kHz white noise signal input directly into the DataMAX (set to 90 kHz bandwidth) (top) and the same signal first input into the Nexus signal conditioning amplifier and then into the DataMAX. The 1 dB down point for the direct input (top) is at 60 kHz for the direct input compared to the 70 kHz for the signal generator. Adding the Nexus amplifier to the system (bottom) reduces response above 70 kHz.

One other note of the rig condition should be made in this section as it concerns the data presented in this paper. The pressure sensor used when setting the nozzle pressure ratio (NPR) is located in the settling chamber where the flow velocity is low and any disturbance is sufficiently far from the nozzle that it will not create problems in the acoustic field. A screen was also added downstream of the settling chamber to remove any unusual flow characteristics, ensuring that the flow is smooth before the nozzle. This screen, however, created a drop in pressure that was not accounted for when setting the NPR. Thus, all points were set slightly low based on NPR. When this error was finally determined, a model for the pressure change based on mass flow rate was created. Although the adjustment is small, all acoustic spectra presented here, unless otherwise noted, has been adjusted to the correct NPR using the model for pressure change and standard acoustic scaling laws.

2. Verification Methodology

A specific methodology to verify a jet rig is free of excess noise sources and, therefore, ensure quality data, was adopted. This method assumes that there are three possible noise sources in the acoustic arena. The first is background noise. Background noise is always present and typically remains at a near constant level. The second noise source is the jet itself. The jet noise level depends on jet condition (nozzle pressure ratio, temperature ratio, etc.) and can be scaled according to some basic rules (i.e. velocity[8]). All noise sources that are not either background noise or jet noise are considered rig noise. All rig noise must be examined, explained, and, if possible, eliminated.

The verification methodology includes a procedure for isolating the rig noise. First, background noise is measured before flow is introduced to the rig. Because the background noise is nearly constant (a microphone is maintained at the jet exit door to monitor changes in the background levels such as low flying aircraft), the measured background is subtracted, on a frequency basis, from each data point. After the background noise is removed, the data is scaled to a set distance based on a constant number of nozzle diameters using standard distance scaling defined as $(D_{new}/D_{old})^2$. The spectra are now independent of nozzle size and, therefore, data from round nozzles of all diameters should collapse onto one curve in the absence of any non-jet noise source. Any aspects of the spectra that do not collapse onto the common curve do not follow jet noise scaling laws and, thus, are not considered jet noise. An example of this decomposition is shown in figure 3. The background noise does not change with nozzle size and the jet noise matches exactly when scaled to a common nozzle size. The rig noise, however, does not change and only translates relative to the Strouhal frequency. This creates a difference in the total noise, attributed to the rig noise, allowing the rig noise to be decomposed from the other noise sources. Using this technique, excess noise sources can be identified and, if possible, eliminated.

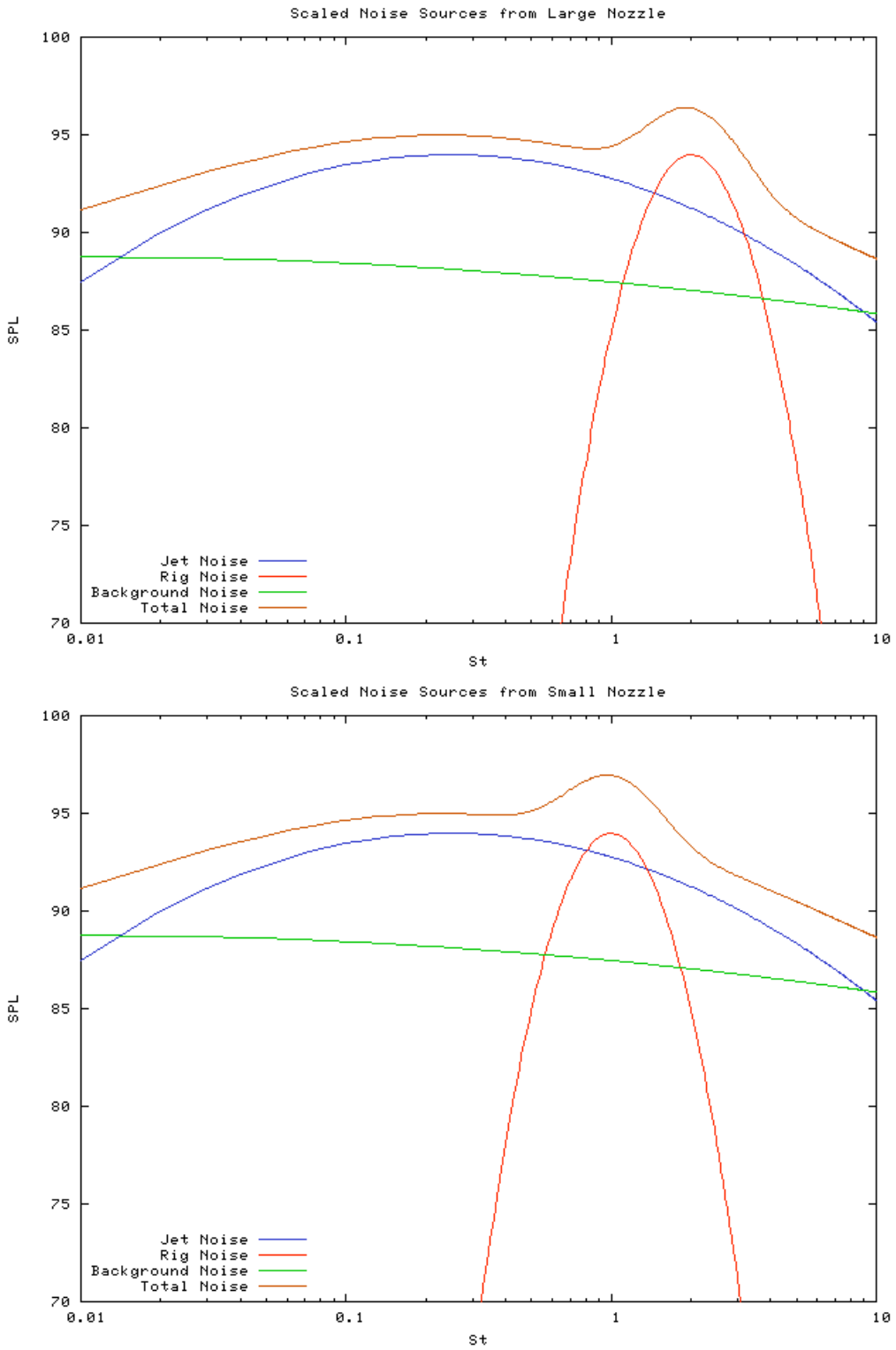

Figure 3.—Background noise, jet noise, rig noise and total noise scaled by nozzle size and plotted as a function of Strouhal number. The rig noise source does not change in shape or level, only Strouhal number, when the different sized nozzles are used. This property of the rig noise allows the jet noise and rig noise to be decomposed.

3. Acoustic Data

3.1 Background Noise Levels

The background noise level is often the limiting factor (rig noise being the other) when testing particularly quiet jet conditions. The overall background noise level depends on several noise sources. Some sources are very consistent and repeatable throughout a day (or many days), such as the AAPL vent fan or the power substation next door, while others, like airplane traffic, appear sporadically. The repeatable background noise is measured and subtracted, on a frequency basis, from each test point. Sporadic changes to the measured background are monitored via a microphone placed at the AAPL exhaust door so that data is not recorded during these events. The most problematic background noise source at the AAPL is the neighboring 9x15 wind tunnel whose air inlet doors are located opposite the AAPL exhaust door. When operating, the noise sources (tunnel noise, model noise, and drive motor noise) are neither constant nor a sporadic noise sources. The noise level, which changes with the tunnel operating condition, varies every 15 to 25 minutes. Generally, the only solution to the problem of wind tunnel background noise is to run at jet conditions at sufficiently high Mach number such that the jet noise far exceeds the background level until the wind tunnel ceases operation. Additionally, frequent background readings are recorded (one at every model change) for reference during data analysis. Figure 4 shows background spectra recorded on several days over the duration of a test program. The variation between readings is due to other activity around the lab (primarily dependent on the time of day the data were recorded) including activity in the 9x15 wind tunnel. All data in figure 4 were recorded under test conditions (jet exhaust door open, vent fan on).

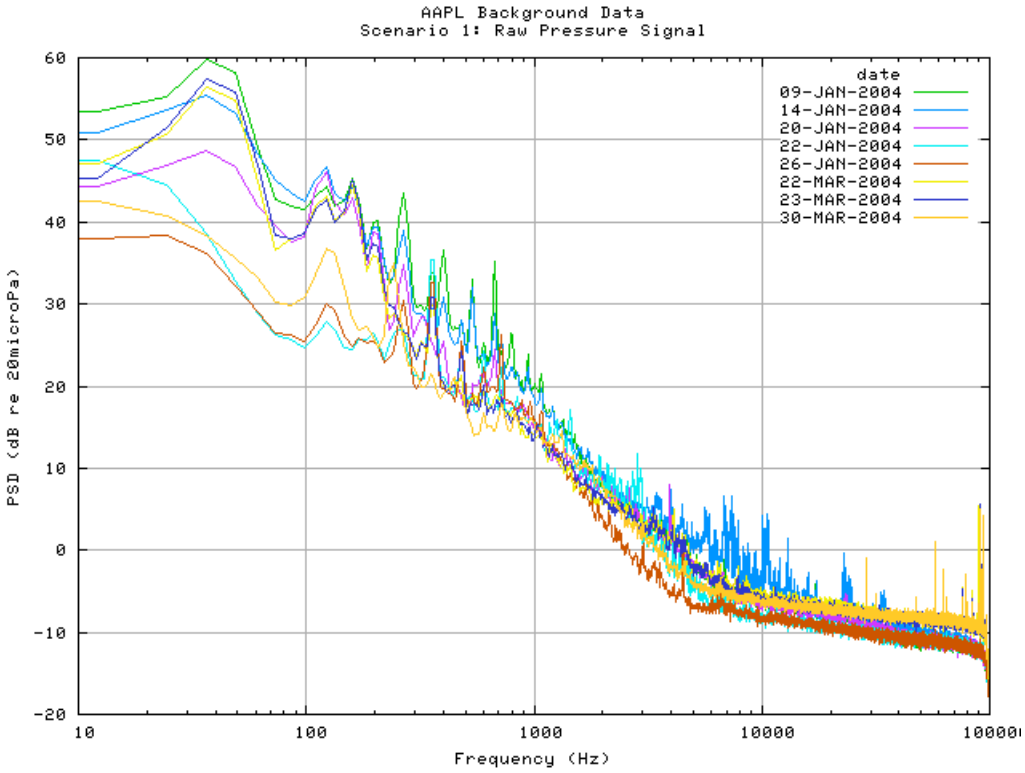

Figure 4.—Background spectra recorded under test conditions (vent fan on, AAPL jet exhaust door open) on several days through the duration of the test. The variations are due to other lab activity (dependent on time of day) including the 9x15 wind tunnel.

The background acoustic spectra are composed of several sound sources. Data presented in figure 5 provides some insight into how these sources contribute to the total sound spectra. The AAPL vent fan has the largest impact on the background level. Figure 5 shows the background level, with the vent fan on, is 10 dB above the level measured when the fan is off. While the fan may be turned off when testing cold jets, it is required whenever the combustor is used. The 9x15 wind tunnel, which ran a range of conditions on the day shown, is a secondary noise source, contributing the small variations in background level when the vent fan is off. Background sound level does not change significantly when the jet exhaust door is closed and the vent fan is on, again showing the dominance of the vent fan.

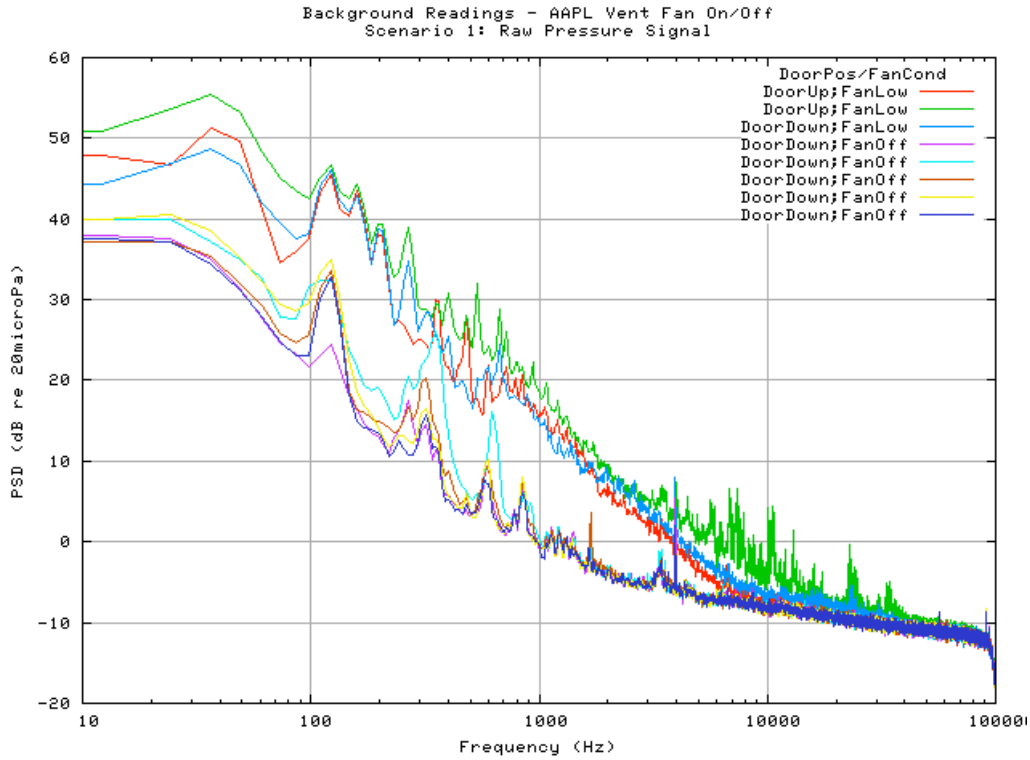

Figure 5.—Background spectra recorded during one day. Combinations of AAPL vent fan status and jet exhaust door position are shown. The AAPL vent fan is the largest source of background noise, increasing the background sound level by approximately 10 dB compared to the door down, fan off condition. Additionally, the door down fan on case aligns closely with the door up fan on case.

3.2 Acoustic Test Matrix

The acoustic test matrix was based on work done in the early and mid 1970's at the Lockheed-Georgia Company by Tanna et al. (refs. 3 and 4). The "Tanna" matrix defines the jet condition by temperature ratio $\left(T_r = \frac{T_{jet}}{T_{amb}}\right)$ and acoustic Mach number ($M_a = \frac{V_{jet}}{C_{amb}}$, where C_{amb} is the speed of sound at the ambient temperature). Each jet condition (combination of T_r and M_a) is assigned a set point number for easy identification. For the SHJAR baseline test, additional set points at constant gas dynamic Mach numbers ($M_j = \frac{V_{jet}}{C_{jet}}$, where C_{jet} is the speed of sound at the jet temperature) were added to the original Tanna matrix. Figure 6 shows the complete acoustic test matrix (both original Tanna matrix points and the added points). The temperature and pressure limits of the SHJAR rig are also identified. The set points and corresponding jet conditions are identified numerically in appendix A.

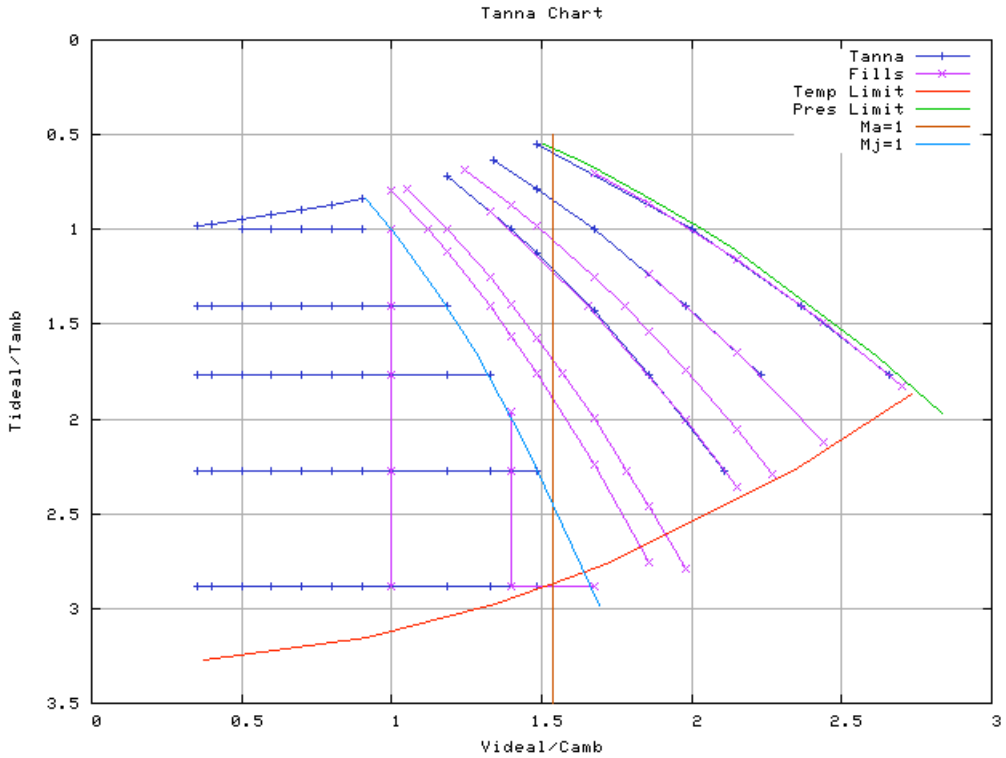

Figure 6.—The set point matrix defined by Tanna et al. (refs. 3 and 4) with some additional points defined for the SHJAR baseline test. Each set point defines a jet condition by temperature ratio (T_r) and acoustic Mach number (M_a). Horizontal lines on the matrix define points with a constant temperature ratio and vertical lines on the matrix define points with a constant acoustic Mach number. The maximum temperature and maximum pressure limits for the SHJAR are also shown.

3.3 Acoustic Data Processing

Acoustic data are acquired from 24 microphones and digitized onto a computer using a 200 kHz sample rate. The time domain data are then transformed to frequency domain using a window-averaged Fourier transform. All data processing is done using the narrowband spectra. The data processing procedure, which begins with the Fourier transform, is standardized until the data are transformed into a one-foot lossless condition. First under this procedure, the background noise, measured immediately before the data set is acquired, is subtracted and any frequency band within 3 dB of the background is flagged and is not considered in future processing and final plotting. Next, data are corrected for microphone spectral response characteristics based on the manufacturer's documentation of each individual microphone obtained during calibration performed within one year of the test. Once these corrections are applied, the data are converted to a one-foot lossless condition using the ANSI standard atmospheric corrections (ANSI S1.26-1995). At this point, further processing is particular to the test requirements. Most of the data presented here has been scaled by distance, in a lossless manner, by adding $20\log_{10}\left(\frac{D_{current}}{D_{new}}\right)$, to normalize the sound spectra amplitude based on nozzle diameter. Note that scaling the sound amplitude to a distance based on a constant number of nozzle diameters is mathematically identical to scaling the data to a common nozzle size. Strouhal frequency scaling, obtained by multiplying frequency by (nozzle diameter)/(jet velocity) and dividing amplitude by this same factor, normalizes the spectra from the different nozzles with respect to frequency. Finally, data may also be transformed into One-third octave band spectra, using a method consistent with IEC 1260:1995—specifically an ideal third-octave filter, for plotting and comparison.

3.4 Acoustic Reference Nozzles

The rig verification methodology requires that spectra from different size nozzles all collapse to one spectrum when scaled to a common nozzle size. To facilitate this pursuit, three Acoustic Reference Nozzles (ARN) were designed with some common characteristics. The common characteristics: overall length, final straight section length, lip thickness, external nozzle angle, and cubic contraction profile also make the nozzles easy to define for study by computational fluid dynamics (CFD). The nozzle family consists of a 1-in. diameter nozzle (ARN1), a 2-in. diameter nozzle (ARN2), and a 3-in. diameter nozzle (ARN3). It is important to note that, because the nozzles have the same contraction profile and overall length but different exit areas, the rate of contraction is not the same. At the time of design CFD for these nozzles was not yet available and, therefore, no attempt was made to match flow characteristics such as boundary layer thickness or initial turbulence levels between the nozzles. Testing has shown that the flow characteristics, which appear very dependent on rate of contraction, are more important than the other geometric characteristics when trying to match the scaled acoustics. Figure 7 shows the design drawings for ARN1, ARN2, and ARN3.

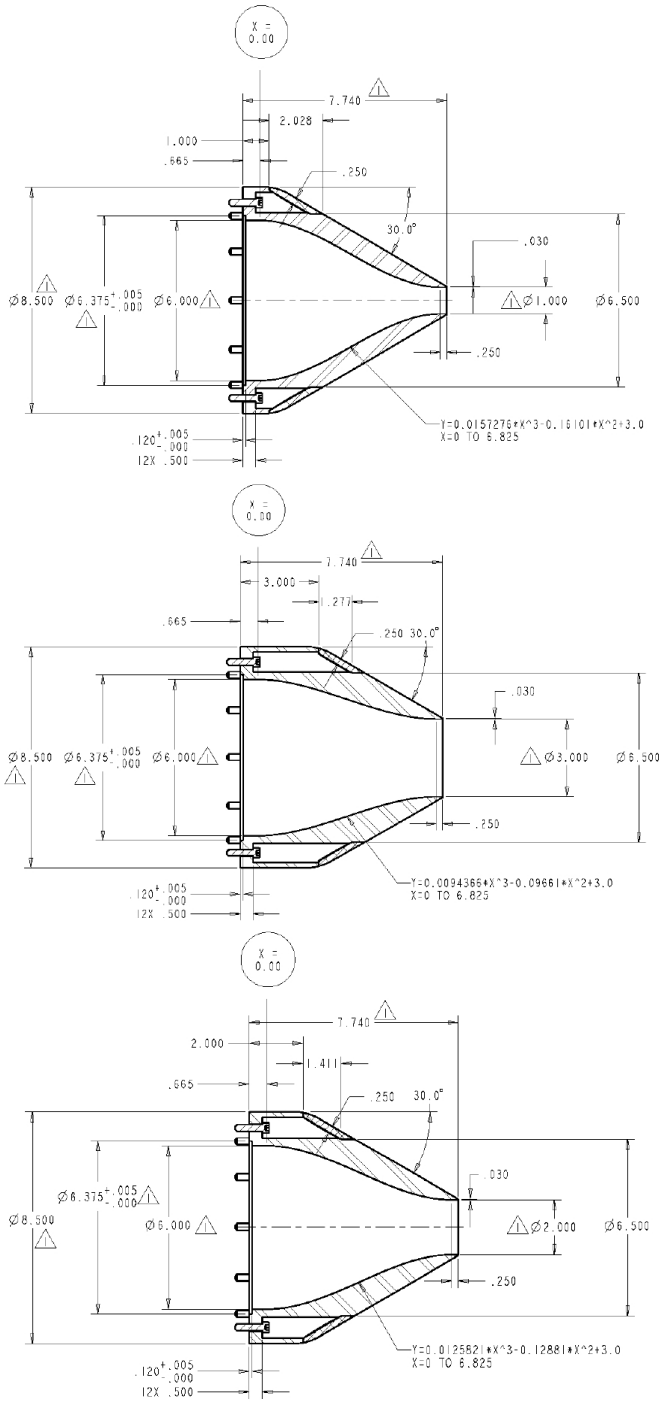

Figure 7.—The 1-in. Acoustic Reference Nozzle (ARN1, top), 2-in. Acoustic Reference Nozzle (ARN2, middle), and the 3-in. Acoustic Reference Nozzle (ARN3, bottom). The ARN family of nozzles was designed to have a common overall length, final straight section, lip thickness, external nozzle angle, and cubic contraction. Flow characteristics such as boundary layer thickness and initial turbulence levels were not considered in the design.

3.5 Initial Rig Checkout

The initial rig checkout began in October 2001. The 24-microphone far field array was not yet complete so the data were acquired from two microphones, one at 60° and one at 90° relative to the jet axis. The data were recorded on an Ono-Sokki data analyzer providing Overall Sound Pressure Level (OASPL) data for each microphone. No muffler was installed during the first test in order to assess the noise created by each of the two control valves. The main valve, designated AC083, is a high flow, low noise control valve for setting the approximate flow rate. A small vernier valve, designated AC083A, provides fine control and accuracy for setting the precise flow condition. To determine the level of noise generated by each valve independently, jet condition was first set using the main valve only (vernier remained closed) and then set using both valves together with the ARN2 and ARN3 nozzles. It is not possible to achieve the mass flow rates shown with the vernier alone and it is very difficult to set lower mass flow rates with the larger main valve alone. The valve noise is reduced by using both valves to set the jet condition (fig. 8), indicating that the vernier valve produces less noise than the main control valve. Furthermore, figure 8 shows that the measured data collapses to the level predicted by (jet velocity)^8 when the jet velocity reaches approximately 300 m/s. This value is well above the operational criteria of the SHJAR rig and, therefore, a muffler was installed to reduce the valve noise propagating out the nozzle exit before the next test. Note that the data in this section has not been corrected for the screens downstream of the settling chamber.

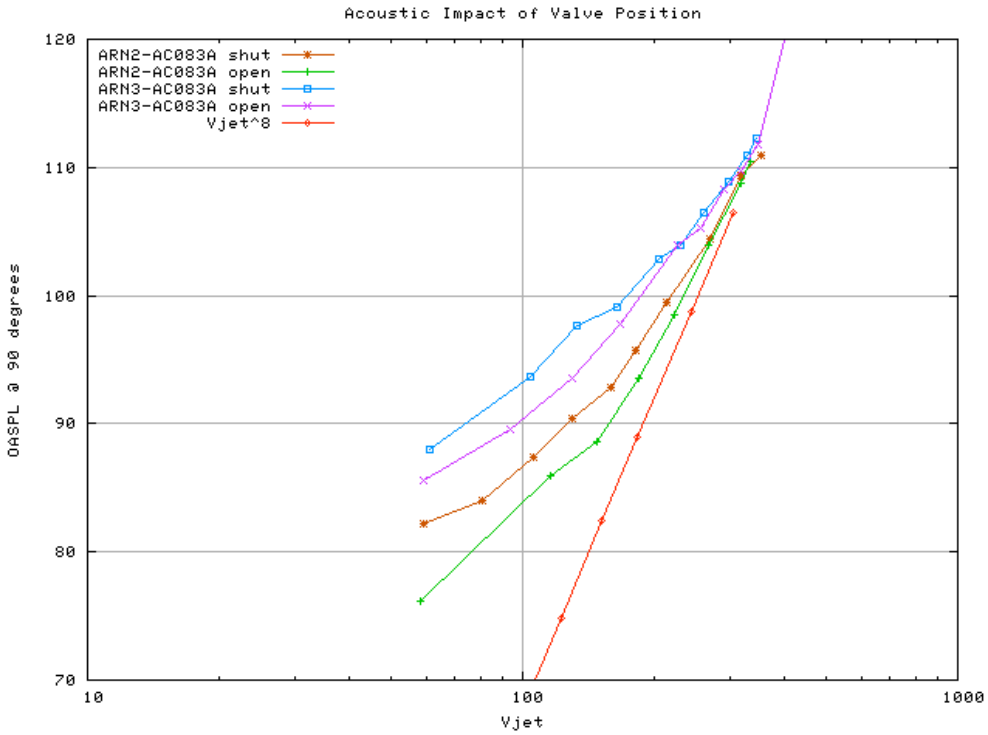

Figure 8.—OASPL at the 90° microphone location plotted as a function of jet velocity where the jet condition was set using different valve combinations to determine the noise created from each valve. Data from both the ARN2 and ARN3 nozzle is shown. The data falls closer to the expected level, based on (jet velocity)^8 when the jet condition is set using both control valves (AC083A open cases) indicating that the main control valve (AC083) generates more rig noise than the smaller vernier valve (AC083A). It is not possible to reach these mass flow rates using the vernier valve alone preventing a direct comparison of the rig noise generated by each valve. Note that neither a muffler nor the combustor was installed during this test.

A muffler was installed before the second test to improve the operational range of the rig. The first muffler was a straight section of pipe with an acoustic lining placed immediately before the settling chamber. Figure 9 shows the improvement in operational range given by the lined muffler. The data now collapses to the expected jet noise data at a jet velocity of approximately 200 m/s (compared to 300 m/s without the muffler). Next, the combustor was installed. The combustor further reduced the valve and pipe noise by creating a partial blockage at the injector plate, reflecting some of the sound back upstream. Figure 10 shows that installing the combustor with the lined muffler, lowers the total noise by approximately 4 dB compared to the lined muffler alone. To again extend the capabilities of the rig to lower jet velocities, baffles were added to the muffler creating the final rig configuration. The baffled muffler consists of a series of lined, offset, half-moon shaped openings that require the air to wind back and forth through the openings. With the baffled muffler and combustor in place, the combination of rig and background noise is minimized allowing quality data down to a jet velocity of approximately 125 ft/s (fig. 11).

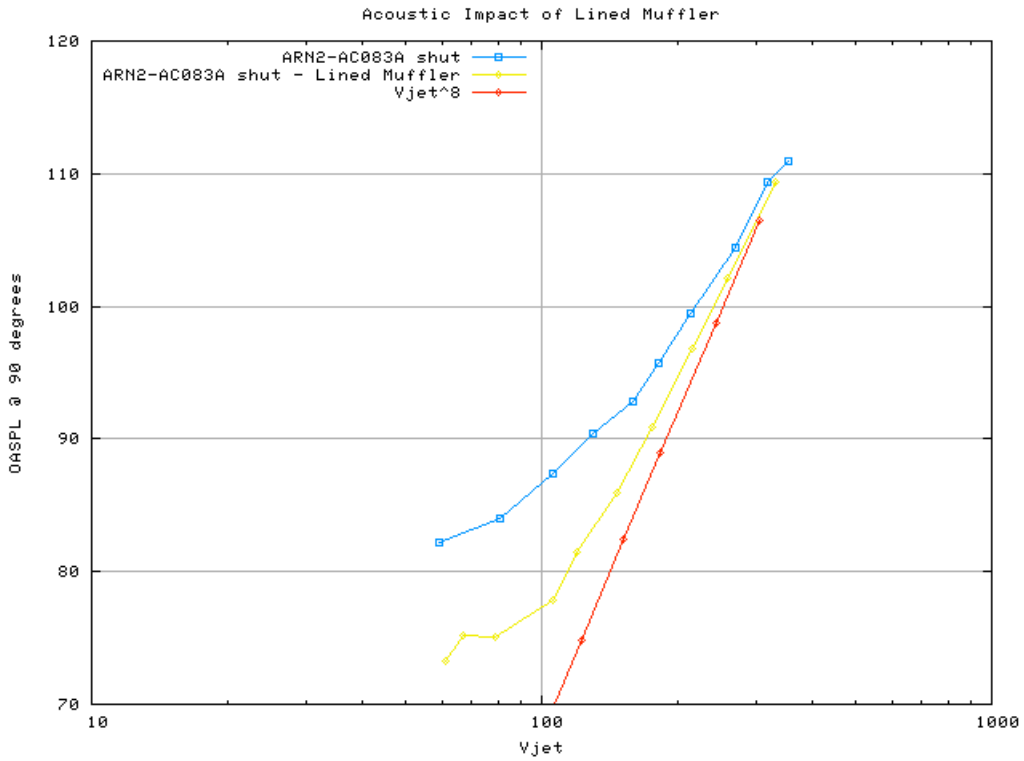

Figure 9.—OASPL at the 90° microphone location plotted as a function of jet velocity from the no muffler configuration and the straight, lined muffler case. Both configurations are compared against the expected result. This muffler expanded the operational range, where the measured level approaches the expected level (based on (jet velocity)^8, down to a jet velocity of approximately 200 m/s (from 300 m/s in the no muffler case).

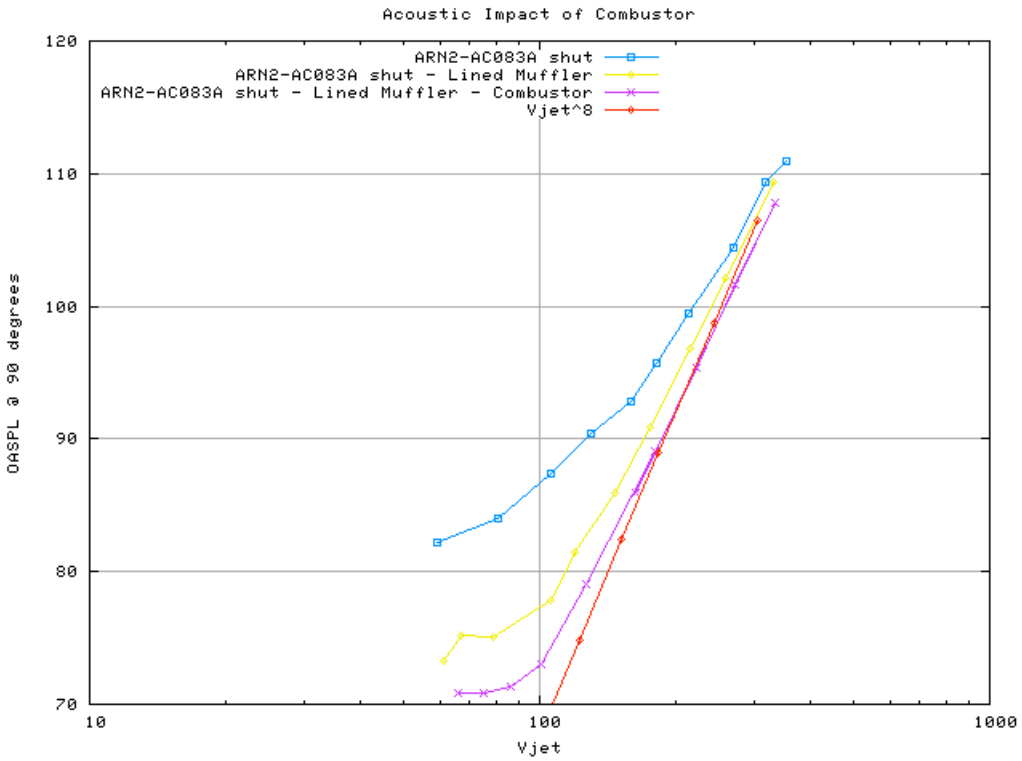

Figure 10.—OASPL at the 90° microphone plotted as a function of jet velocity for the no muffler, straight lined muffler, and the straight lined muffler with combustor configurations. The jet noise expected based on (jet velocity)^8 is also plotted. The combustor reduces the sound level by 3 to 4 dB compared to the lined muffler alone.

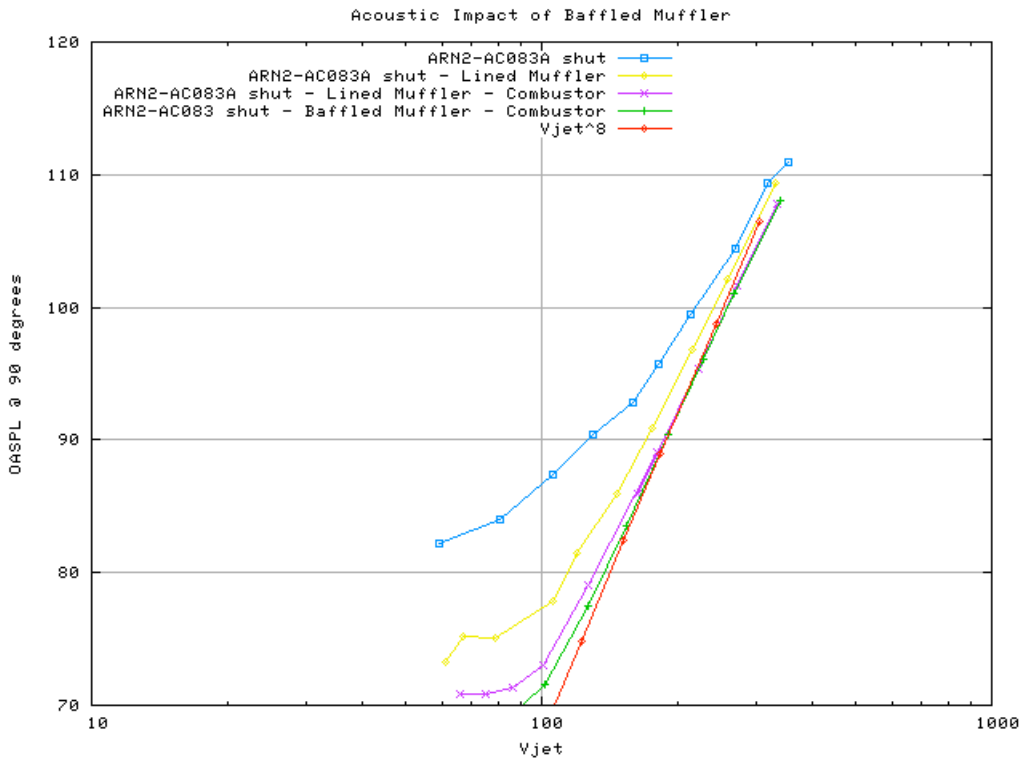

Figure 11.—OASPL at the 90° microphone plotted as a function of jet velocity for the no muffler, straight lined muffler, straight lined muffler with combustor, and baffled muffler with combustor configurations. The expected jet noise, based on (jet velocity)^8 is also shown. The baffled muffler configuration is the final rig configuration. In the configuration, quality data may be acquired down to a jet velocity of approximately 125 m/s.

3.6 Characterizing Valve Noise

The SHJAR uses two valves to control the flow rate of the air. A large low noise valve (AC083) sets the approximate flow rate and a smaller vernier valve (AC083A) dials in the precise flow rate. Each valve contributes a different noise level, with different spectral characteristics, to the total rig noise. During the rig verification process, jet conditions were run to identify the valve noise level spectral range. This data set provides a reference for future tests to identify valve noise contamination of the jet noise data. Note that this data has not been corrected for the small nozzle pressure ratios (NPR) differences created by the screens downstream of the settling chamber (see sec. 1).

TABLE 1.—MASS FLOW RATES AND CORRESPONDING ACOUSTIC MACH NUMBERS FOR THE ARN3, ARN2, AND ARN1 NOZZLES AND APPROXIMATE VALUES FOR THE NO NOZZLE CASE. ALL FLOWS WERE UNHEATED.

Mass Flow Rate lbm/s	M_a No Nozzle	M_a ARN3	M_a ARN2	M_a ARN1
0.30	~0.034	0.070	0.16	0.63
0.35	~0.037	0.086	0.20	0.75
0.41	~0.042	0.11	0.23	0.84
0.49	~0.056	0.13	0.27	0.95
0.19				0.38
0.14				0.28
0.11				0.20

A test matrix was setup to run the rig at a set of mass flow rates with each valve independently to find the spectral shape and level of the valve noise. Mass flow rates from 0.30 lbm/s to 0.50, in increments of 0.05 lbm/s (table 1), were chosen. The lowest flow rate, 0.30 lbm/s, was based on the lowest repeatable mass flow rate for the large valve alone. The highest mass flow rate, 0.50 lbm/s, represents the maximum subsonic flow rate when using the 1-in. diameter nozzle. As shown in table 1 three points a lower mass flow rates were added to the matrix for the ARN1 nozzle only to further examine the lower limits with this nozzle. Nozzle diameter will impact the valve noise because the smaller nozzles will reflect more rig noise back into the rig than the larger nozzles. In addition, the smaller nozzles will create higher external flow velocities for a given mass flow rate creating more jet noise, which masks the valve noise. Therefore, each ARN nozzle (ARN1, ARN2, and ARN3) was tested. The matrix was also run with no nozzle one the rig to represent the worst-case scenario (no noise reflection and lowest external velocity).

The SHJAR was run at several mass flow rates for each ARN nozzle and with no nozzle to study the spectral characteristics of the noise generated by the control valves. For each nozzle and flow rate, each control valve was also run independently. Spectra from no nozzle data (fig. 12) presents a good picture of the valve noise. In these spectra, the valve noise appears in a broad range between 1 and 30 kHz. The maximum sound level is 10 dB higher when the small control valve is used exclusively to set the flow rate compared to the sound levels when the large control valve is used to set the flow rate. Additionally, when the small valve is used alone, the spectra have more pronounced tones than spectra produced when the large control valve is used to set the flow rate. Sound levels do not vary greatly as the mass flow rate through the small control valve increases. Conversely, the sound levels increase as mass flow through the large control valve increase. The acoustic Mach number corresponding to the highest flow rate is only around 0.05 and well below the minimum threshold for acquiring data not contaminated by valve noise. The ARN3 nozzle, when installed on the rig, raised the maximum acoustic Mach number to approximately 0.125 at a mass flow rate of 0.49 lbm/s) but had little impact on the spectra when compared to the no nozzle case (fig. 13).

The first spectral changes occur with the AR2R nozzle (ARN2 nozzle with a reticulated foam metal (RFM) boundary layer treatment, fig. 25). The spectra (fig. 14) now contain some characteristics of jet noise where only valve noise existed in the ARN3 nozzle data, particularly when the large control valve is used exclusively. Noise from the small control valve (fig. 14, bottom) continues to have a serious impact on the spectra from 2 to 20 kHz at all mass flow rates. This is a decrease in frequency range compared to the 1 to 30 kHz range observed in the ARN3 nozzle data. Noise from the large control valve only slightly appears in the 10 to 20 kHz range at the highest mass flow rate, corresponding to an acoustic Mach number of 0.27. From this data, it is concluded that acoustic Mach 0.3 with a 2-in. diameter nozzle is the lower limit for acquiring quality jet noise (if the large valve alone is used) before the valve noise contaminates some parts of the spectra. At this level, however, background noise represents an equal challenge to valve noise.

Finally, the AR1R nozzle (ARN1 nozzle with RFM insert, fig. 25) was tested. Figure 15 shows that the valve noise is below the jet noise at all the previously tested mass flow rates. Because the lowest mass flow rate was chosen based on the minimum flow capabilities of the large valve, its valve noise appears below an acoustic Mach number of 0.6 (acoustic Mach number at 0.30 lbm/s) for a 1-in. diameter nozzle. Therefore, to find the valve noise limit of the SHJAR with a 1-in. diameter nozzle, three lower mass flows were added to the small valve matrix (table 1). Figure 15 (bottom) shows the valve noise begins to appear around a mass flow rate of 0.14 lbm/s or corresponding to an acoustic Mach number of 0.28. This places the valve noise limit at approximately 0.30 acoustic Mach number, the same limit found with the ARN2 nozzle (although the ARN2 nozzle limit was using the quieter large valve). Again, background noise at this sound level is also a challenge.

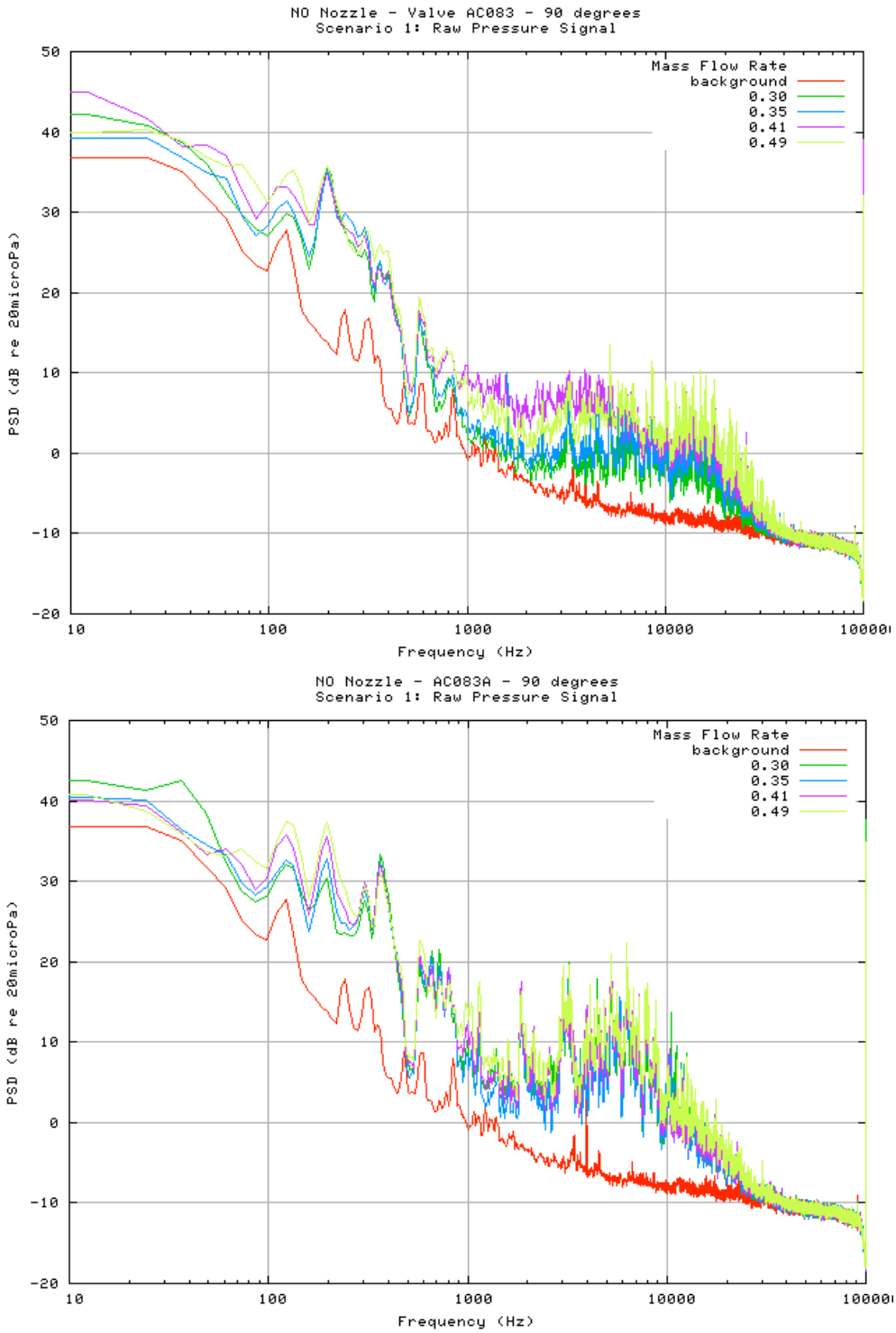

Figure 12.—Spectra, as measured at the 90° microphone location, from the SHJAR run with no nozzle (straight pipe at exit) at several mass flow rates. The background spectrum is also shown. The large control valve (AC083, top) is considerably quieter than the small control valve (AC083A, bottom). The noise generated by the control valves appears in a very broad frequency range (1 to 30 kHz). The acoustic Mach number of the highest flow rate (approximately 0.05) is far below the minimum necessary to acquire quality, uncontaminated jet noise data.

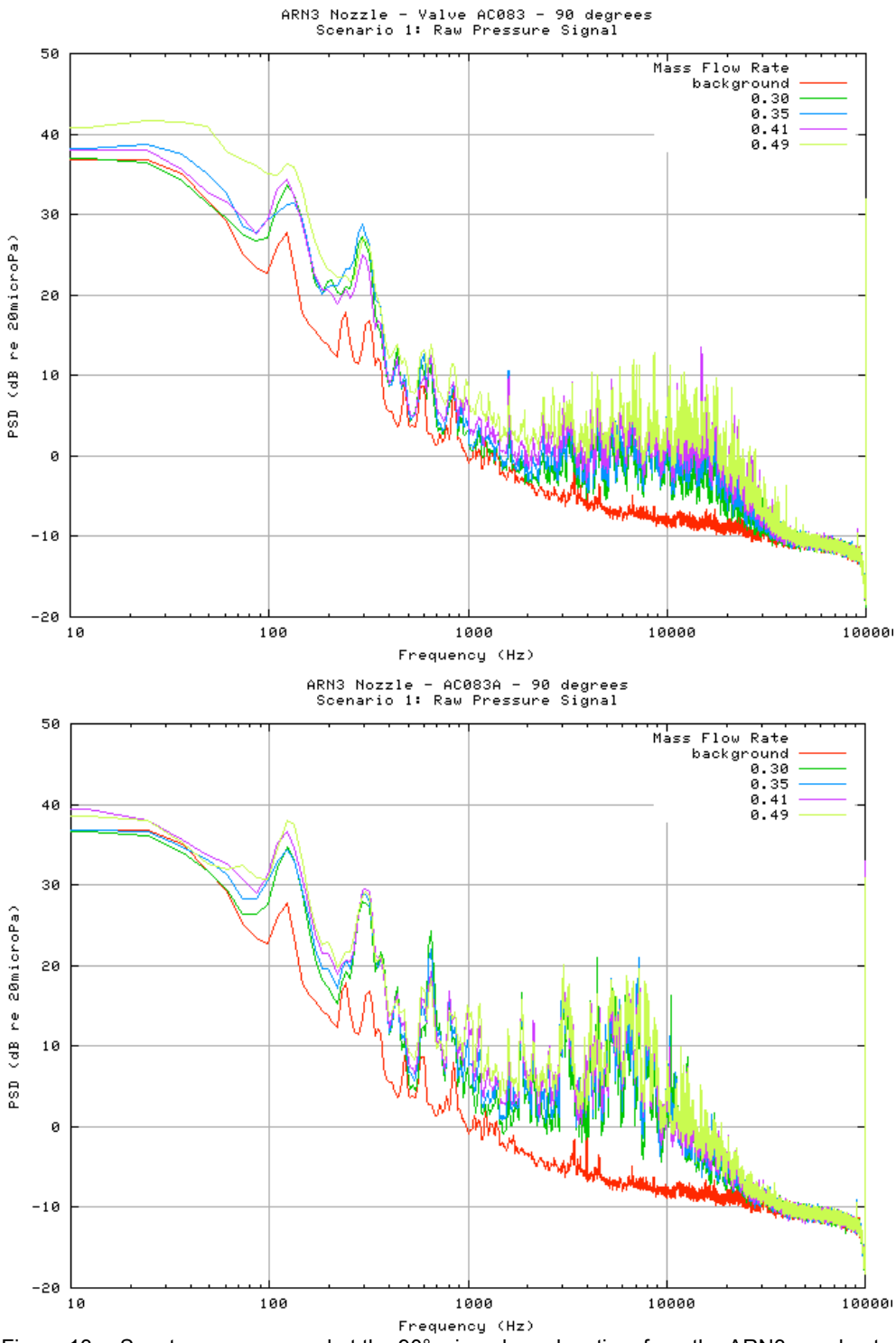

Figure 13.—Spectra, as measured at the 90° microphone location, from the ARN3 nozzle at several mass flow rates set using the large control valve (top) and the small control valve (bottom) independently. The background spectrum is also shown. The spectra are similar to the test where no nozzle was run in both sound level and frequency content. The highest flow rate corresponds to an acoustic Mach number of 0.125, well below the minimum required to acquire quality jet noise data from the 3-in. diameter nozzle.

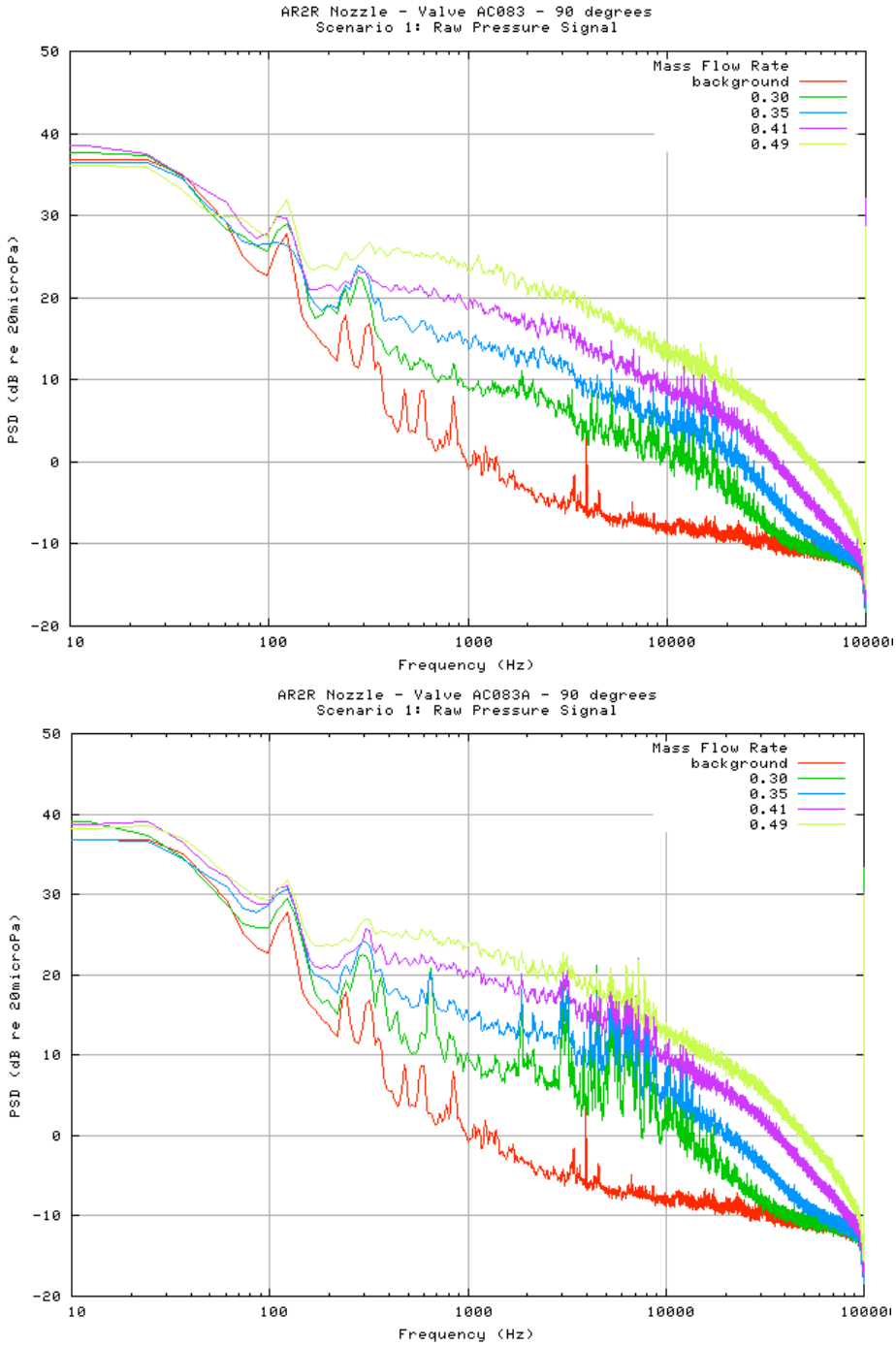

Figure 14.—Spectra, as measured at the 90° microphone location, from the ARN2 nozzle (with RFM insert) at several mass flow rates set using the large control valve (top) and the small control valve (bottom) independently. The background spectrum is also shown. Spectra from the ARN2 nozzle show more characteristics of jet noise compared to the spectra from the ARN3 nozzle (fig. 13). The valve noise impacts a smaller frequency range, compared to the ARN3 case, as the jet noise increases to mask it. If the large control valve is used alone, the valve noise at the highest mass flow rate (M_a=0.27) is minimal. Based on this observation, quality data may be acquired around an acoustic Mach number of 0.30 with a 2-in. diameter nozzle from the perspective of valve noise.

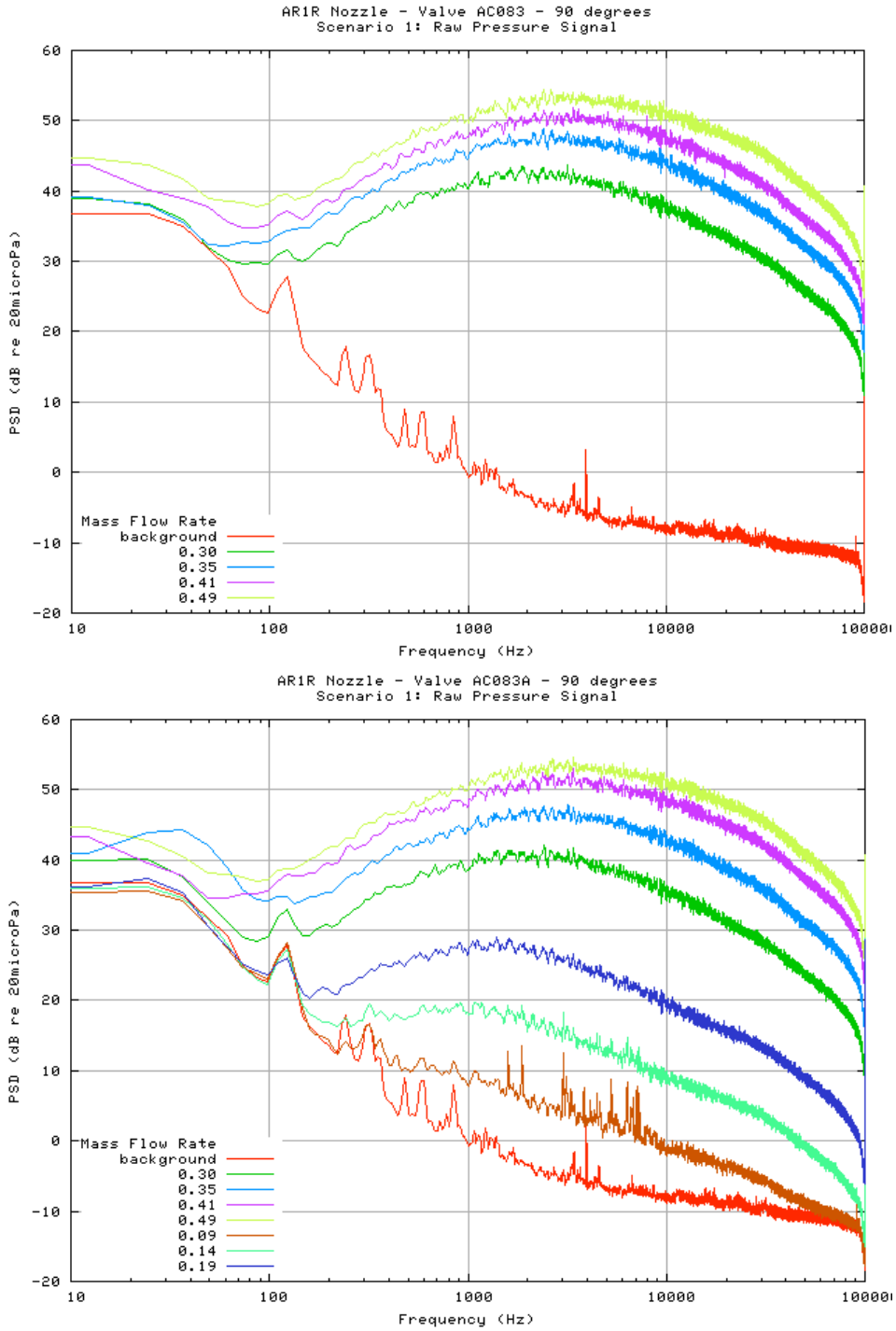

Figure 15.—Spectra, as measured at the 90° microphone location, from the ARN1 nozzle (with RFM insert) at several mass flow rates set using the large control valve (AC083, top) and the small control valve (AC083A, bottom) independently. The background spectrum is also shown. The spectrum at the lowest repeatable mass flow rate using the large control valve, corresponding to an acoustic Mach number of 0.6, is free of valve noise. The spectra begin to show valve noise at a mass flow rate of 0.14 lbm/s (Ma=0.28) when the small control valve is used alone.

3.7 Data Repeatability and Uncertainty

The procedure established to identify and eliminate external and background noise sources addresses the issue of data accuracy. This section will address the precision of the measured jet noise data using two methods. First, direct analysis of the primary sources of precision error, using manufacturers specifications, gives the worst-case error band. Second, data points recorded during different test programs but using the same nozzle and jet condition are considered to establish the actual precision observed under complete test conditions.

Consider four sources of uncertainty. First is the uncertainty in the calibration of the microphones, which for the Bruel & Kjaer 4220 pistonphone is given as 0.15 dB at 250 Hz. The spectral response calibration done by the manufacturer is guaranteed to within 0.25 dB across the useable spectra. The second uncertainty considered is in measuring atmospheric conditions which feed the calculation of atmospheric attenuation. This turns out to be rather small, ~0.1 dB, given the measurement uncertainty of 1 °F, 2% relative humidity, and it only impacts the very highest frequencies, e.g. the last few One-third-octave bands. The third source of uncertainty is in setting the jet flow conditions. We maintain a 0.5% tolerance on the jet velocity as part of our test procedure and have calibrated transducers that assure us that we are within that error band. This translates into an uncertainty of ±0.17 dB. The fourth uncertainty considered is that of the averaging of the spectral data. Using chi-square analysis on One-third-octave bands, which are the result of many narrowband estimates of power spectral density, the biggest uncertainty comes at the low frequency end where there are relatively few narrowbands being integrated over to obtain the statistic. Here, at a 90% confidence interval, the uncertainty for the roughly 450 sample measurement (5 narrowbands with 90 ensembles each) is ±0.33 dB. As each One-third-octave band picks up 1.25 times as many samples as the previous band, within a decade the value is ±0.1 dB. Summing these uncertainties, we see that at the lowest bands we have 0.35 + 0.17 + 0.33 = 0.85 dB uncertainty. This reduces to below 0.5 dB by mid frequency and then increases at the highest bands up to 0.35 + 0.1 + 0.17 + 0.03 = 0.65 dB on the last band.

A few jet conditions have been repeated during each test program to establish the actual precision of the data under test conditions. These tests, which were conducted in a variety of weather conditions over a span of 2 years using the ARN1 and ARN2 nozzles, establish a better precision compared to the worst-case values considered above. Data from the ARN1 nozzle, at set point 3 (M_a=0.5, cold) (fig. 16) shows that the sound levels at the peak frequency repeat within 0.5 dB at the 90° and at the150° microphone locations. The spread is greater at higher frequencies but these levels are influenced by the boundary layer effects examined in section 3.9 (repeatability with the RFM insert has not been established). Data from the ARN2 nozzle (fig. 17), also recorded at set point 3 (M_a=0.5, cold), shows that the data also repeats within the 0.5 dB range. Additionally, data from the ARN2 nozzle at set point 7 (M_a=0.9, cold) were acquired. Finally, figure 18 shows that the 0.5 dB repeatability, observed in the set point 3 (M_a=0.5, cold) cases, is also valid at this set point 7 (M_a=0.9, cold). These experiments establish a typical repeatability range of approximately 0.5 dB in One-third octave band spectra.

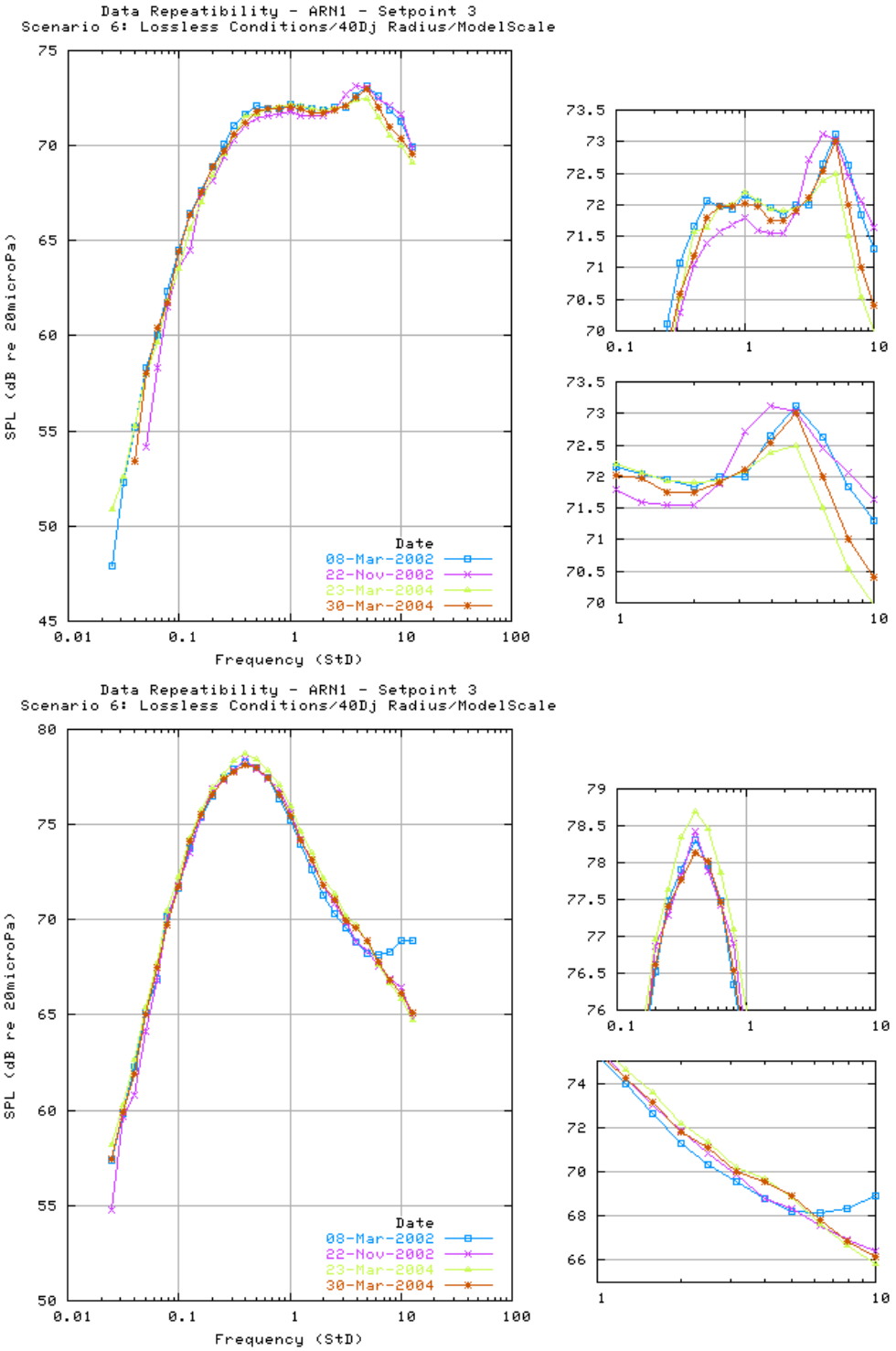

Figure 16.—Data repeatability for the ARN1 nozzle at set point 3 (M_a=0.5, cold) at the 90° (top) and 150° (bottom) microphone locations. Spectral details at critical frequency ranges are shown in the side plots. The data is scaled to a distance of 40×(jet diameter) in a lossless condition. Strouhal frequency scaling is also applied. These data were acquired during tests from 2002 to 2004.

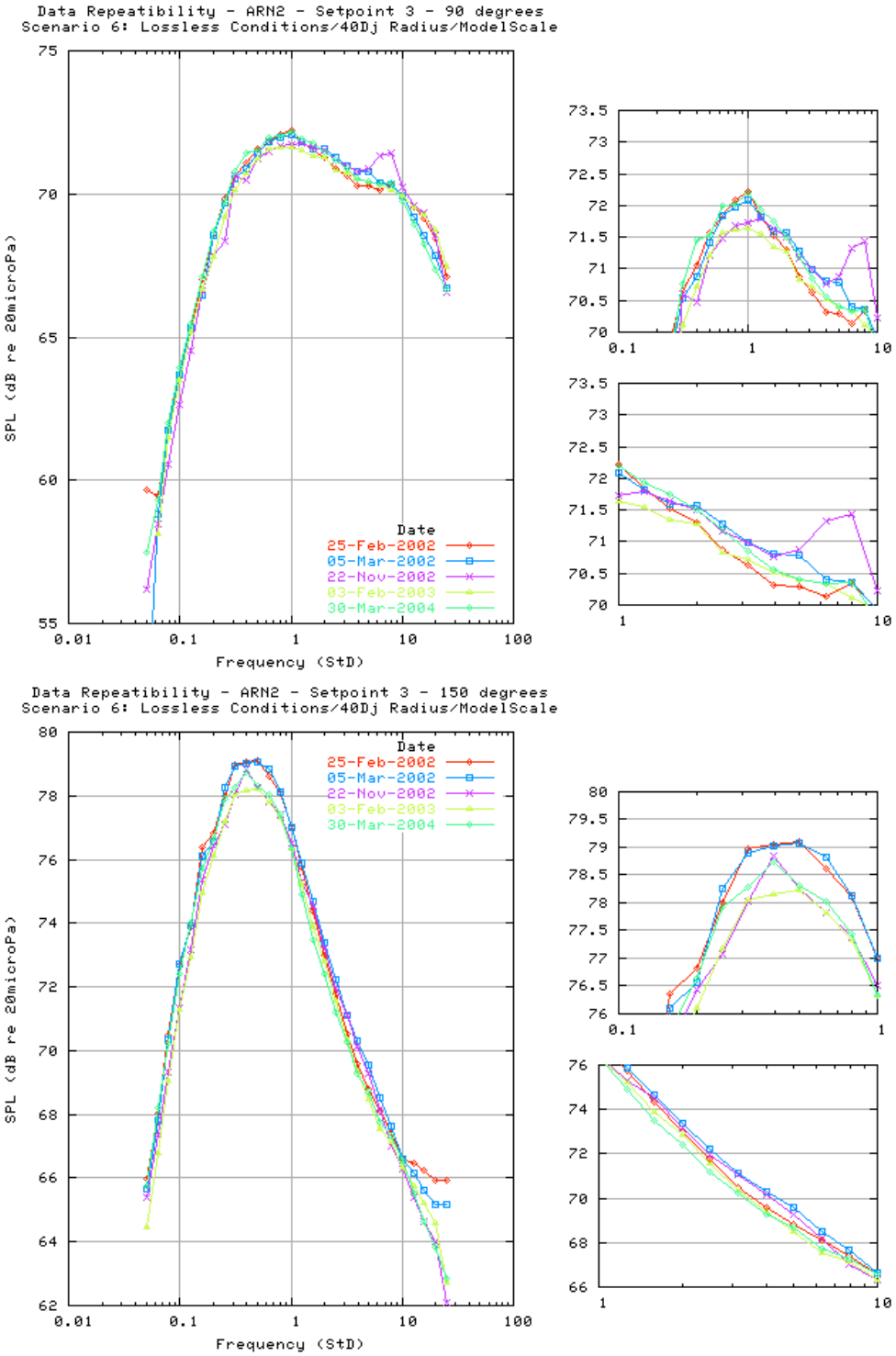

Figure 17.—Data repeatability for the ARN2 nozzle at set point 3 ((M_a=0.5, cold)) at the 90° (top) and 150° (bottom) microphone locations. Spectral details at critical frequency ranges are shown in the side plots. The data is scaled to a distance of 40×(jet diameter) in a lossless condition. Strouhal frequency scaling is also applied. These data were acquired during tests from 2002 to 2004.

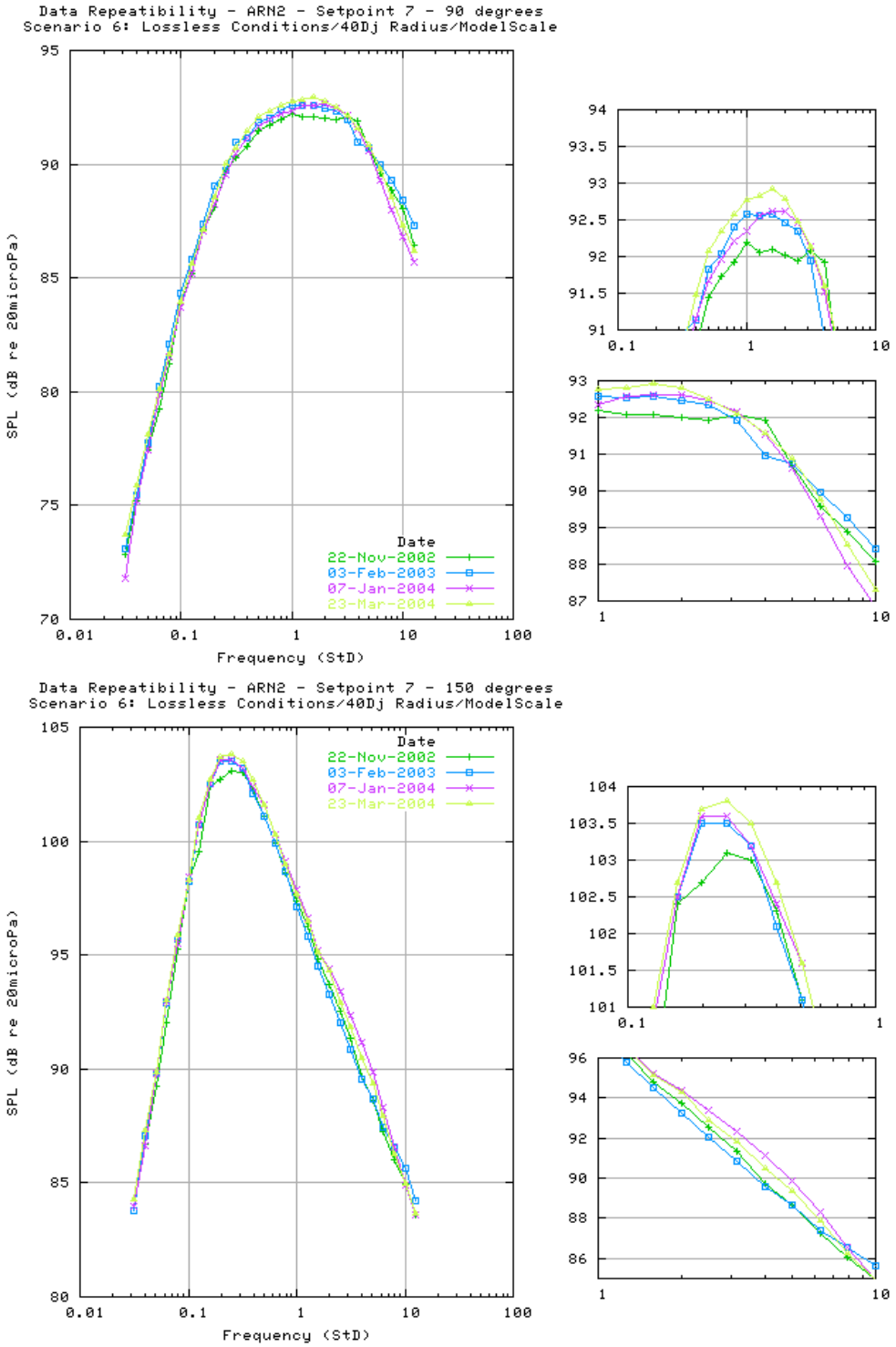

Figure 18.—Data repeatability for the ARN2 nozzle at set point 7 (M_a=0.9, cold) at the 90° (top) and 150° (bottom) microphone locations. Spectral details at critical frequency ranges are shown in the side plots. The data is scaled to a distance of 40×(jet diameter) in a lossless condition. Strouhal frequency scaling is also applied. These data were acquired during tests from 2002 to 2004.

3.8 Defining SHJAR Geometric Far Field

Fundamental to the rig checkout methodology, defined in section 2, is the assumption that acoustic data may be accurately scaled to any distance desired. This assumption will only hold true if the microphones are located in the geometric far field of the jet. The geometric far field is defined as a distance sufficiently far from a noise source that the noise source appears as a point source and a linear sound propagation model is valid. During the design phase, it was determined that an arc with a 100-in. radius would be in the geometric far field, yet also be close enough to the jet axis to prevent excessive atmospheric attenuation of the high frequency components of the jet noise. Using this radius, a 24-microphone array was designed using 6 microphone stands. Each stand uses a cross bar to hold 4 microphones at 5° increments from 50° to 165° to the jet axis. The array was finished in February 2002 and used for the second phase of the rig checkout.

Data was acquired on a 100-in. radius from the end of the nozzle for the ARN1, ARN2, and ARN3 nozzles. According to the rig checkout methodology, the spectra from all three nozzles, when scaled to a distance of 40×(jet diameter), should collapse onto one. Figure19 shows that the data does collapse at the 90° angle (within the limits of set point repeatability) but not at the 150° angle. Data in the peak jet noise region from the ARN3 nozzle is 1 dB higher than the data from the ARN1 nozzle. The 100-in. radius used for the microphone array corresponds to 100, 50 and 33.3 nozzle diameters for the ARN1, ARN2 and ARN3 nozzle respectively. If the geometric far field is a function of nozzle diameter, then the microphones may not be in the far field for all three nozzles creating the discrepancy between the ARN1 and ARN3 nozzles. Therefore, an experiment was performed to determine the minimum distance required for the microphone array to be in the geometric far field for each nozzle.

If a microphone is in the geometric far field relative to the noise source, then the linear acoustic scaling laws for a point source are valid. Employing this principle, two microphones, one at 90° to the jet axis and one at 150° to the jet axis, were placed at various distances, ranging from 8 to 100 times the jet diameter (table 2), from the jet exit. Data were acquired at four set points (3 – M_a= 0.5, 7 – M_a= 0.9, 101 – M_a= 1.049, and 116 – M_a= 1.245, all cold) and were scaled using the linear jet noise scaling laws so that when the data collapses, the microphone is in the geometric far field. Figure 20 shows that the 2-in. diameter (ARN2) nozzle has a geometric far field around 50 jet diameters from the jet exit. At this radius, the data is collapsed to within 0.5 dB at the peak jet noise frequencies at both the 90° and 150° locations. Data acquired for the ARN3 nozzle (fig. 21) shows a similar result. The minimum distance for collapse to within 0.5 dB (data repeatability range established in section 3.7) at the peak jet noise frequencies is approximately 50 nozzle diameters. In both data sets, ARN2 and ARN3, 50 nozzle diameters represents the minimum distance to achieve 0.5 dB error (which represents the maximum error due to set point) and slightly better results may be obtained at the 63 and 80 jet diameter locations, particularly at higher frequencies. Finally, figure 22 shows data from the ARN1, ARN2 and ARN3 nozzles where the ARN2 and ARN3 data was acquired at a distance of 50 jet diameters (ARN1 was acquired at 100 jet diameters). This shows the collapse expected at the minimum geometric far field location.

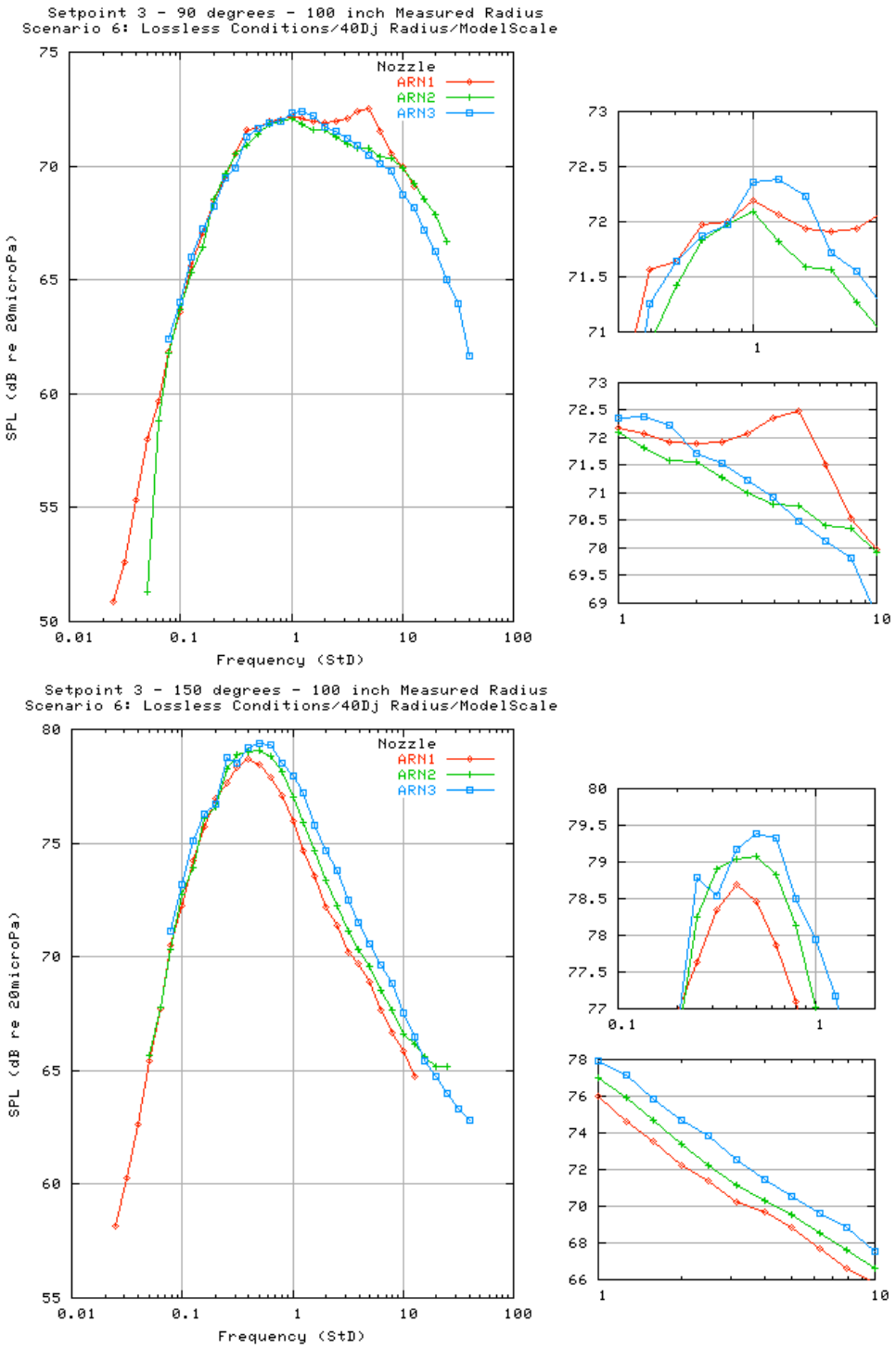

Figure 19.—Data acquired from the ARN1, ARN2, and ARN3 nozzles acquired at 100-in. from the jet exit at set point 3 (M_a=0.5, cold). Data has been scaled to a distance of 40 jet diameters. At the 90° location (top) the data collapse to within 0.5 dB with the exception of the low Reynold's number noise in the ARN1 data. However, at the 150° location (bottom) the ARN1 and ARN3 data are separated by 1 dB at the peak jet noise frequencies. Based on repeatability studies, a maximum discrepancy of 0.5 dB is expected.

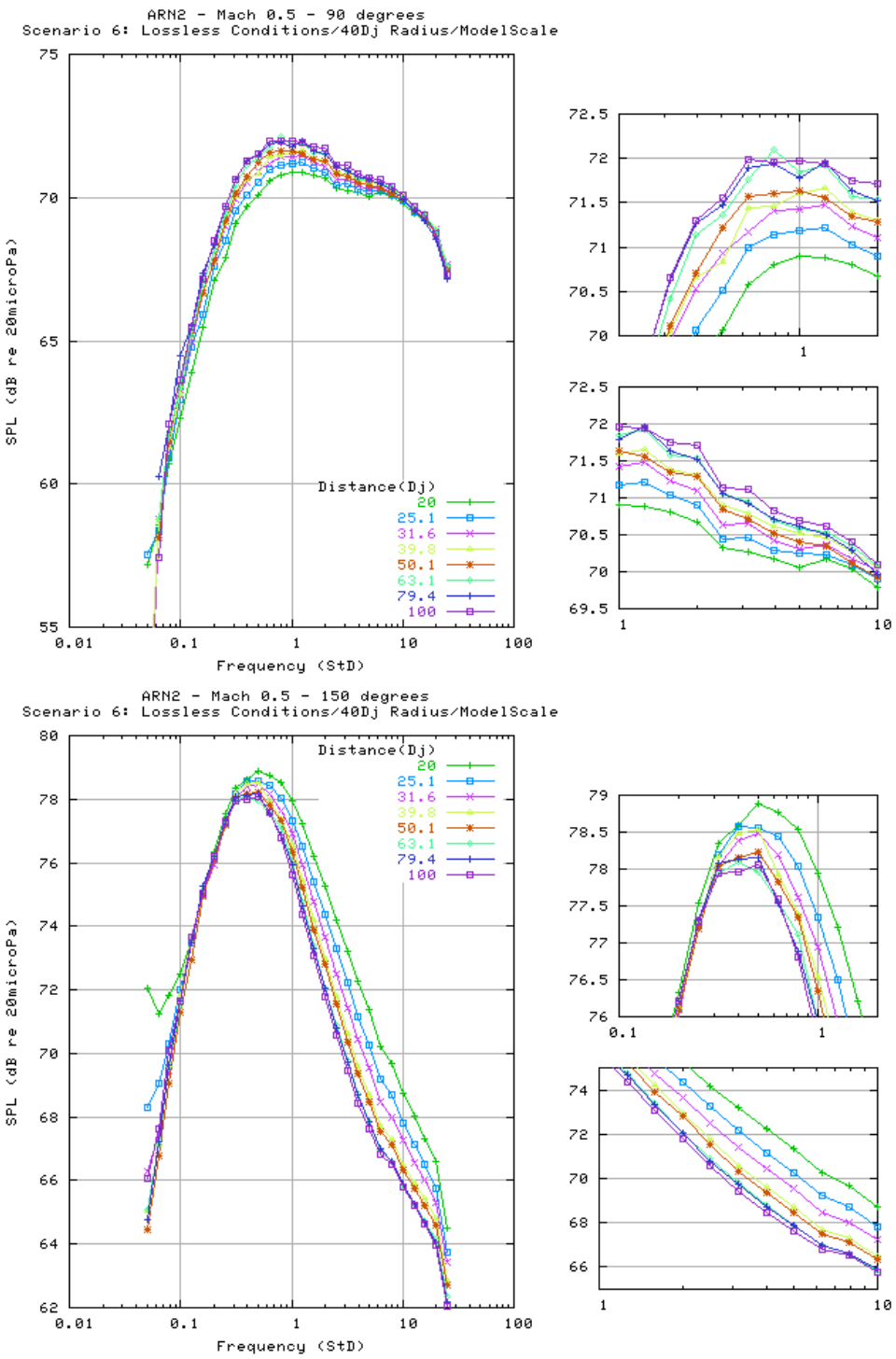

Figure 20.—Data acquired at distances varying from 20 to 100 jet diameters from the jet exit for the 2-in. diameter (ARN2) nozzle at set point 3 (M_a=0.5, cold). Data has been scaled to a distance of 40 times the jet diameter. The collapse at the peak jet noise frequencies (top right plots) represents the location of the geometric far field. Given the repeatability margin of 0.5 dB, this collapse first occurs around 50 jet diameters.

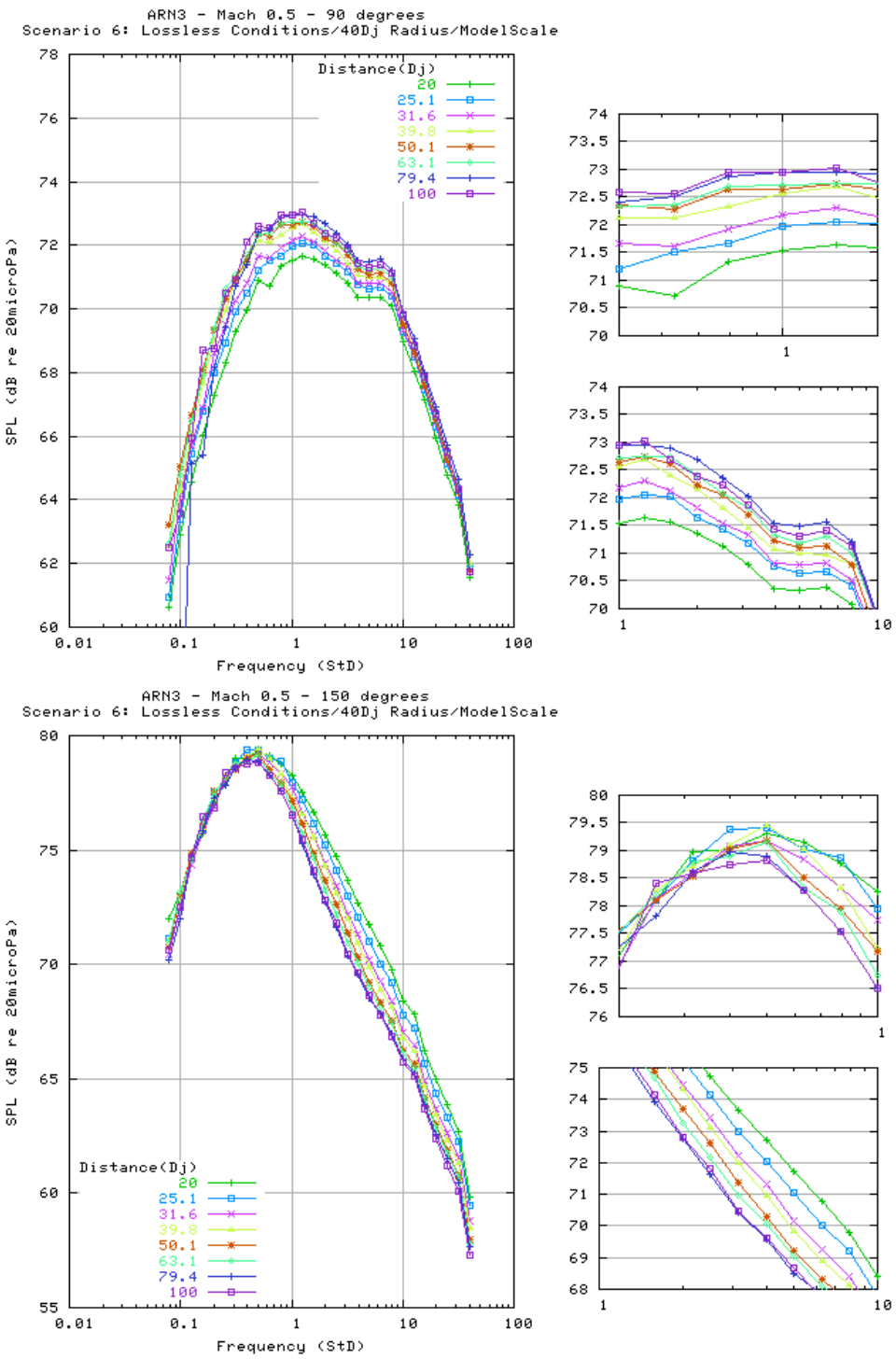

Figure 21.—Data acquired at distances varying from 20 to 100 jet diameters from the jet exit for the 3-in. diameter (ARN3) nozzle at set point 3 (M_a=0.5, cold). Data has been scaled to a distance of 40 jet diameters. The collapse at the peak jet noise frequencies first occurs around 50 jet diameters with improved results further away from the nozzle.

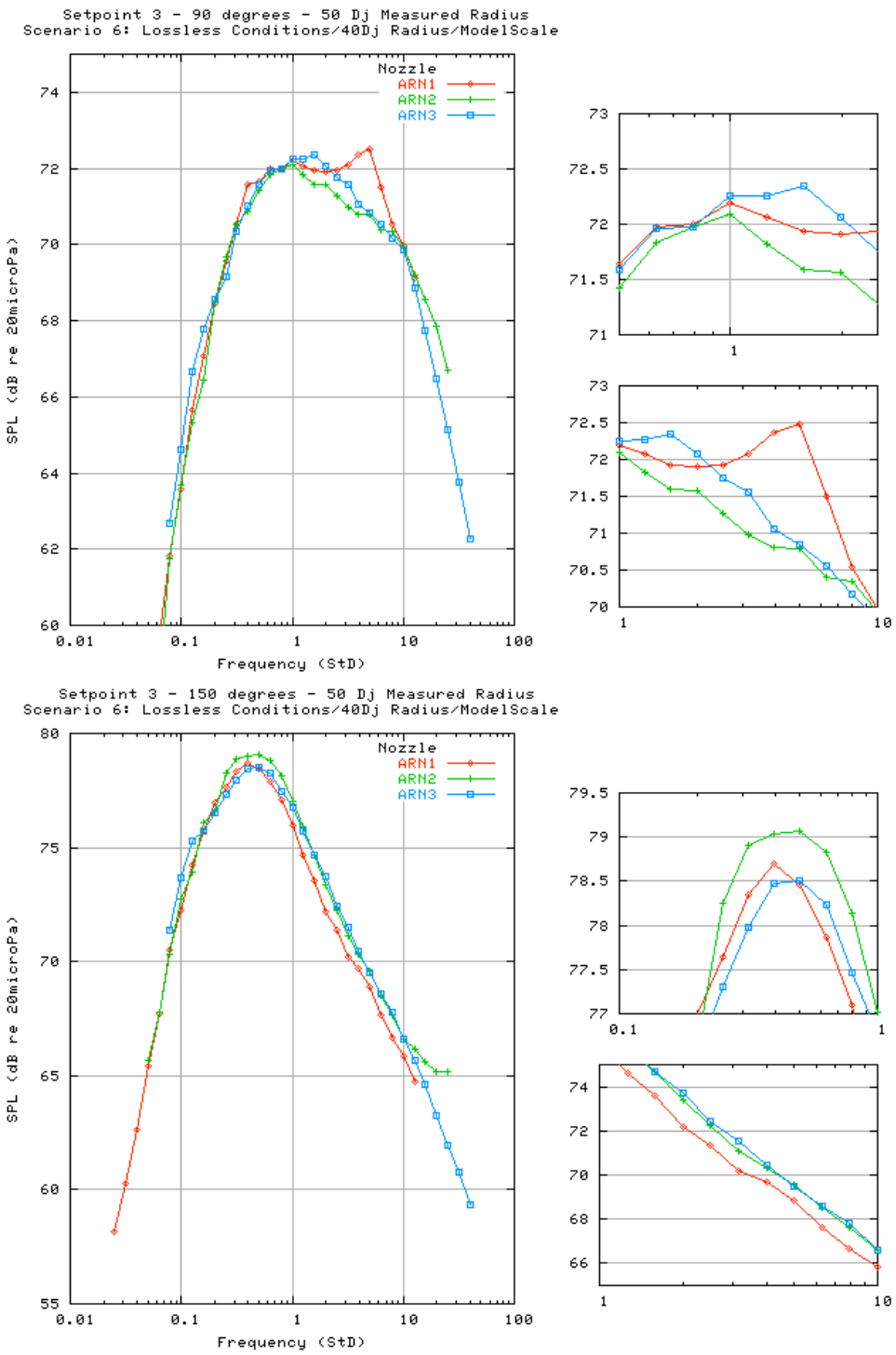

Figure 22.—Data acquired from the ARN1, ARN2, and ARN3 nozzles at set point 3 (M_a=0.5, cold). The ARN2 and ARN3 data was recorded at 50 jet diameters and the ARN1 data was recorded at 100 jet diameters. The 50×(jet diameter) distance represents the minimum distance required for collapse (within the 0.5 dB maximum set point error) and, therefore, marks the beginning of the geometric far field.

TABLE 2.—MICROPHONE LOCATIONS USED FOR THE SHJAR GEOMETRIC FAR FIELD INVESTIGATION. TWO MICROPHONES WERE USED AT EACH DISTANCE, ONE AT 90° TO THE JET AXIS AND ANOTHER AT 150° TO THE JET AXIS. A THIRD STATIONARY REFERENCE MICROPHONE WAS ALSO USED

Position	Distance (jet diameters)	Distance (in., ARN2)	Distance (in., ARN3)
1	7.9	15.8	23.7
2	10.0	20.0	30.0
3	12.6	25.2	37.8
4	15.8	31.6	47.4
5	20.0	40.0	60.0
6	25.1	50.2	75.3
7	31.6	63.2	94.8
8	39.8	79.6	119.4
9	50.1	100.2	150.3
10	63.1	126.2	189.2
11	79.4	148.8	238.2
12	100.0	200.0	300.0

3.9 Low Reynolds Number Effects

When testing small diameter nozzles, the boundary layer in the model may not accurately recreate the boundary layer present in the full sized system. In the small-scale nozzle, laminar boundary layer effects may become important to the noise generated. These effects, however, do not exist in the highly turbulent full-scale system, and, therefore, prevent valid scaling from model scale data to full-scale data. Under the rig checkout methodology, features of the spectra from different nozzles that do not collapse onto one curve are considered rig noise and must be identified and eliminated. Spectra from the 1-in. diameter Acoustic Reference Nozzle (ARN1), scaled to a distance of 40 nozzle diameters (fig. 23) for a 0.5 acoustic Mach number, unheated jet (set point 305, $Re_d \approx 3\times10^5$, where Re_d is the Reynolds number based on nozzle diameter), shows a high frequency noise source that does not collapse to the scaled spectra from the 2-in. diameter Acoustic Reference Nozzle (ARN2). Previous work by Zaman (ref. 5) showed that small jets often had a nominally laminar initial shear layer and exhibited high frequency sources which were not present in larger nozzles or in nozzles where the initial shear layer was nominally turbulent. In this case, the Reynolds number is too low to maintain a fully, or even nominally, turbulent boundary layer through the nozzle contraction causing the boundary layer to remain or become laminar.

For a closer examination of this noise source, figure 24 shows spectra from the ARN1 nozzle for various Mach numbers. The frequency of the spectral hump varies as the jet velocity squared rather than linearly with jet velocity as a noise source from a fixed geometric dimension would. As Laufer and Yen (ref. 6) noted, for small lab jets the momentum thickness typically varies as square root of Reynolds number. The connection, therefore, between this noise source and the initial shear layer thickness is suspected. To reinforce this theory, the estimated momentum boundary layer thickness is calculated based on the Reynolds number. Then the Strouhal number, based on the estimated boundary layer thickness is calculated ($St_{\delta 2} = \frac{f\delta_2}{U}$, where δ_2 is the momentum boundary layer thickness and U is the jet velocity).

The peak of the noise source in question is at approximately $St_{\delta 2} \approx 0.007$ for each Mach number from 0.1 to 0.5 (see fig. 24). This corresponds to the pairing frequency of the most amplified frequency for two-dimensional laminar shear layers (ref. 5) indicating that the noise source is generated by the vortex pairing of the laminar shear layer.

The boundary layer must be fully (or at least nominally) turbulent to eliminate these boundary layer effects that do not accurately reflect the full-scale conditions. This is normally accomplished by raising the Reynolds number (larger jet diameter or higher jet velocity) or by physically forcing a turbulent boundary layer (roughing the flow surface). Because the SHJAR is a small jet facility, the Reynolds number is limited, and the only option is to physically force a turbulent boundary layer. For this task, a thin layer of reticulated foam metal (RFM) was wrapped around the inside of the nozzle to trip the boundary layer (fig. 25). High temperature copper RFM material was used to allow testing of both hot and cold jet conditions.

The acoustic results verify boundary layer tripping, via RFM, as a solution to the boundary layer problem. Spectra from the ARN1 nozzle with the RFM insert (AR1R, fig. 25), such as the Mach 0.5 cold jet (set point 305) shown in figure 26, show that the RFM insert succeeds in removing the high frequency noise source associated with the laminar boundary layer. The insert does, however, create some additional noise at the peak jet frequencies when used with the ARN1 nozzle.

Although the boundary layer instability problem was less noticeable in the ARN2 nozzle, figure 27 shows that the RFM insert, in the ARN2 nozzle (AR2R), eliminates the high frequency noise that was present. Unlike the AR1R spectra, the RFM in the ARN2 nozzle lowers sound levels at the peak jet frequencies. This effect was the expected result for both nozzles as the RFM decreases the discharge coefficient slightly and, therefore, lowers the sound levels. Because the sound at peak frequencies actually increased slightly in the AR1R nozzle, more investigation was required into the effect the RFM insert has on the boundary layer.

Reticulated foam metal was added to the 1- and 2-in. diameter nozzles to eliminate a high frequency noise source created by the unstable boundary layer. Although the associated high frequency noise source was eliminated, the RFM caused some changes to the sound level around the peak jet noise frequencies. To further investigate these changes, a hot wire probe was employed to document the alterations on the boundary layer profile and initial turbulence levels of the jet. Two calculations were used to quantify the state of the initial boundary layer. First, the initial turbulence intensity $\left(\frac{u'}{U_{exit}}\right)$ gives a direct measure of the boundary layer turbulence and type (laminar or turbulent). Second, the boundary layer shape, determined by the shape factor, changes as the flow transitions from fully laminar to fully turbulent. The shape factor, defined as $H_{12} = \frac{\delta_1}{\delta_2}$ where δ_1 is the displacement thickness and δ_2 is the momentum thickness, varies from 2.59 for a fully laminar flow to approximately 1.4 for a fully turbulent flow (ref. 7). While in the transition region between 2.59 and 1.4, the flow may exhibit characteristics of both a laminar flow and a turbulent flow. Data were acquired at set points 301, 302, 303, 304, and 305 on the ARN1 and AR1R nozzles and at set points 301, 302, and 303 on the ARN2 and AR2R nozzles (table 3). For consistency, set points 301 to 305 were defined to have a constant exit velocity rather than a constant acoustic Mach number.

Hot wire probe data from the ARN1 nozzle (fig. 29) shows laminar characteristics at all set points tested. Initial turbulence intensities are less than 0.02 and the shape factor is very much toward the laminar end of the scale at H_{12}=2.17 (set point 305, $Re_D \approx 2.9 \times 10^5$). This supports the theory that the laminar characteristics of the boundary layer created the high frequency noise source identified above. The addition of the RFM insert removed the high frequency noise source. As figure 29 shows, the RFM insert increases the initial turbulence intensity to approximately 0.045, or roughly twice the levels in the ARN1 nozzle without the insert. The shape factor with the RFM insert decreases to H_{12}=1.85. Both

measurements show that the boundary layer is in the transition region. However, the nozzle with the RFM insert exhibits more characteristics of a turbulent boundary layer than the ARN1 nozzle alone. This transitional state is turbulent enough to eliminate the high frequency acoustic source in figure 26 but, due to its transitional nature, may create some of the other issues shown in figure 28.

The hot wire probe was also used to collect data from the ARN2 nozzle fig. 30). Although the high frequency acoustic source was not as prominent compared to the ARN1 nozzle, it was present (figs. 27 and 31). At set point 303 ($Re_D \approx 3.7 \times 10^5$) the ARN2 boundary layer had a shape factor of $H_{12}=2.29$, indicating a very laminar type transitional state (even more so than the ARN1 nozzle at set point 305 studied above). This state is supported by peak turbulence intensity in the range of 0.03. With the addition of the RFM insert, the boundary layer changes from a laminar transitional state to a turbulent transitional state. The shape factor changes to a more turbulent $H_{12}=1.65$ and the peak turbulence intensity rises to approximately 0.08. At these values the flow is approaching the fully turbulent state and exhibits mostly turbulent characteristics. The acoustic anomalies raising the sound level around the peak jet noise frequency, present in the data from the AR1R nozzle, do not appear in the AR2R nozzle data (figs. 27 and 31) indicating that the phenomena observed in the AR1R data may be boundary layer related. While these subtle differences make simple scaling from small jets difficult, it is not unreasonable to expect small differences in nozzle design to alter the initial shear layer in ways which impact the acoustic spectra. Many noise reduction ideas are based on this idea. More investigation is needed, however, to understand the effect of model design on the initial shear layer and, thus, the data when scaled to the full-sized application.

TABLE 3.—SET POINTS USED FOR THE BOUNDARY LAYER INVESTIGATION VIA HOT WIRE PROBE. JET CONDITION WAS DEFINED FOR A CONSTANT JET EXIT VELOCITY CORRESPONDING TO AN ACOUSTIC MACH NUMBER UNDER STANDARD DAY CONDITIONS RATHER THAN THE NORMAL DEFINITION OF ACOUSTIC MACH NUMBER UNDER TEST DAY CONDITIONS.

Set point	NPR	Standard Day Acoustic Mach Number
301	1.007	0.1
302	1.028	0.2
303	1.064	0.3
304	1.117	0.4
305	1.186	0.5

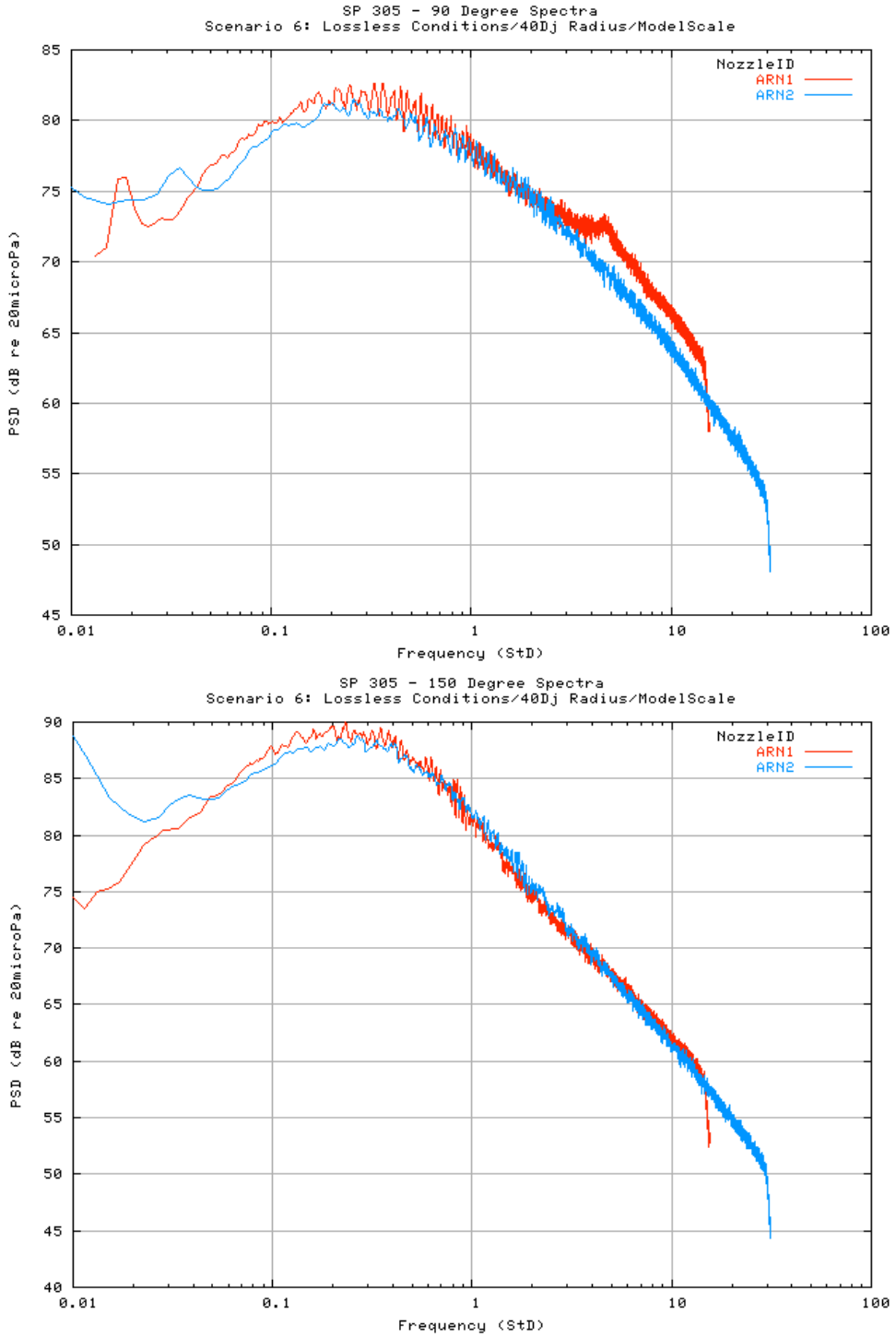

Figure 23.—Spectra from the ARN1 and ARN2 nozzles scaled to a distance of 40 nozzle diameters for set point 305 (standard day acoustic Mach 0.5, cold) acquired at 90° (top) and 150° (bottom) relative to the jet axis. The high frequency (above St_d=3) noise source in the ARN1 spectra at 90° is created by the nominally laminar boundary layer present in the nozzle. This spectral characteristic is also present in the ARN2 spectra at 90° but is much smaller as the boundary layer is more turbulent compared to the ARN1 boundary layer. The boundary layer appears to have no effect on the spectra at 150°.

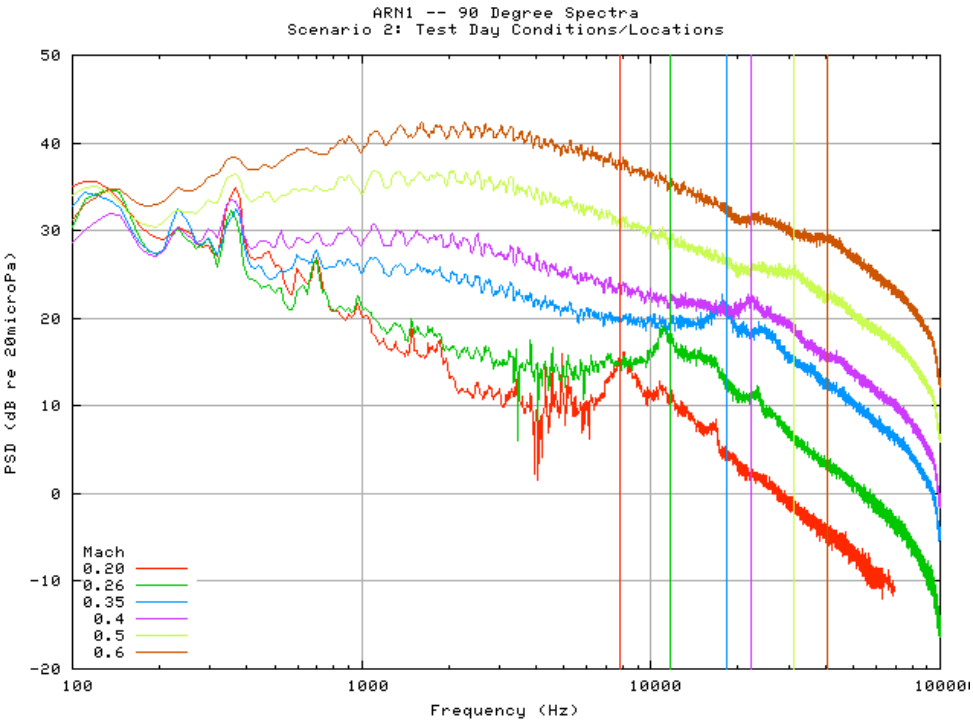

Figure 24.—Spectra acquired at the 90° microphone for the ARN1 nozzle at several acoustic Mach numbers. The vertical lines show the frequency corresponding to a Strouhal frequency, based on estimated momentum thickness, of $St_{\delta 2}$=0.007. The frequency of this rig source varies with jet velocity squared.

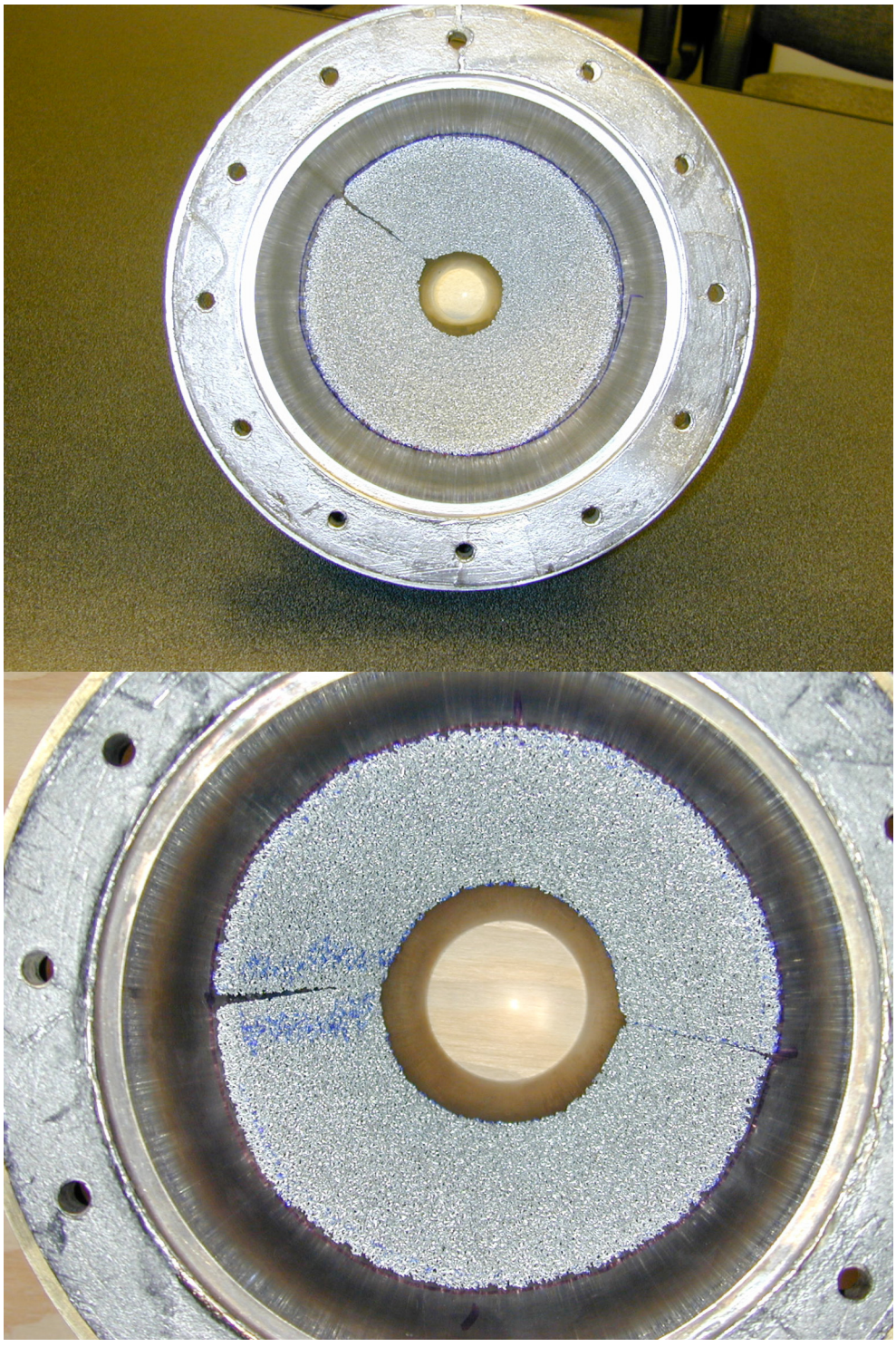

Figure 25.—The 1-in. diameter Acoustic Reference Nozzle (ARN1, top), and the 2-in. diameter Acoustic Reference Nozzle (ARN2, bottom) with reticulated foam metal inserts. The inserts are intended to physically force a fully turbulent initial boundary layer for testing small scale models at low Mach numbers.

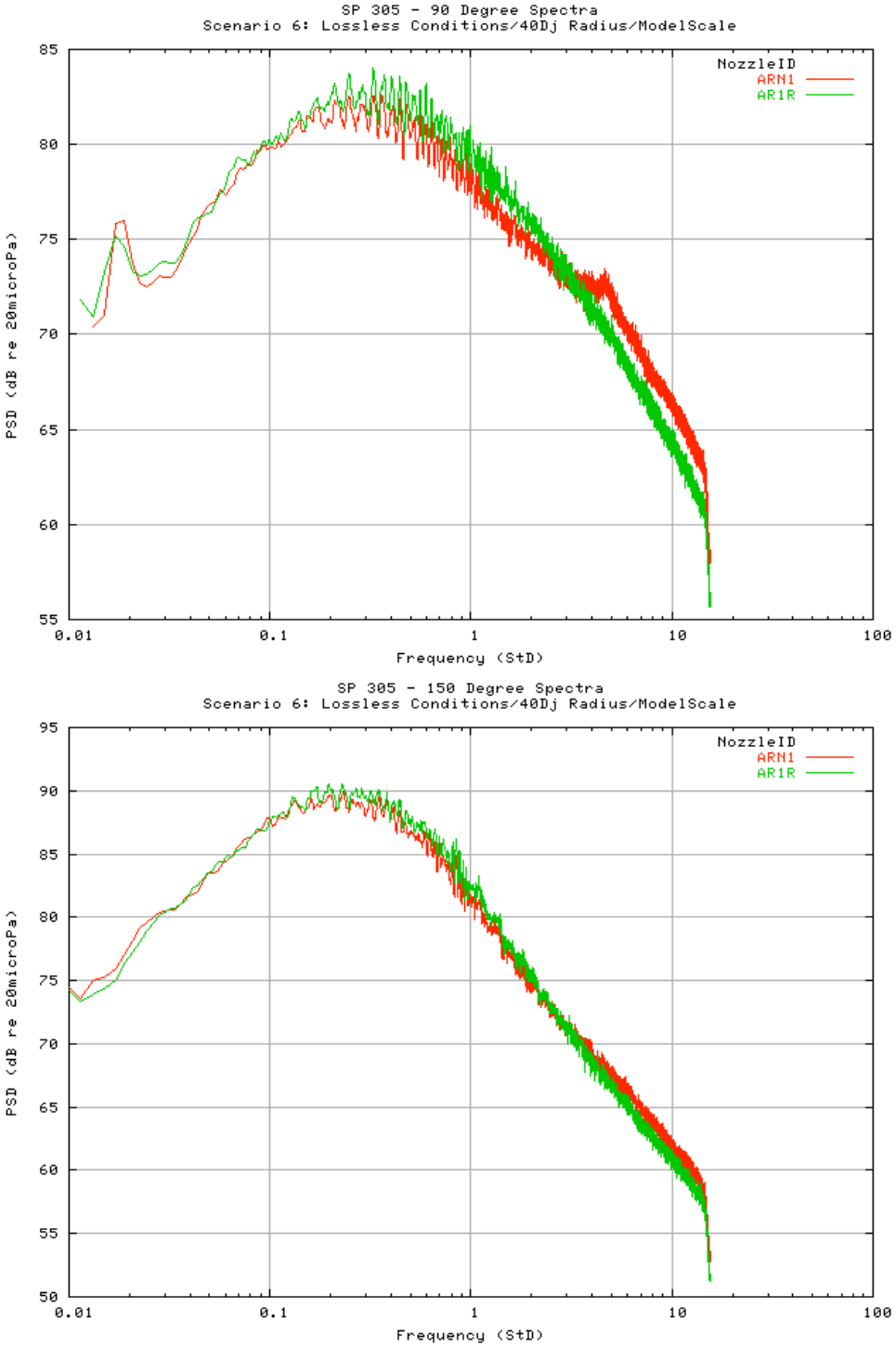

Figure 26.—Spectra from the ARN1 nozzle without boundary layer tripping and from the ARN1 nozzle with reticulated foam metal (AR1R) inserted to force a turbulent boundary layer. The data, acquired at 90° (top) and 150° (bottom) relative to the jet axis and scaled to 40 nozzle diameters, is from a 0.5 standard day acoustic Mach number cold jet. The foam metal insert eliminates the high frequency noise in the 90° spectra created by the laminar boundary layer. A 2.25 percent decrease in mass flow rate is observed in the AR1R data due to the RFM insert in the nozzle.

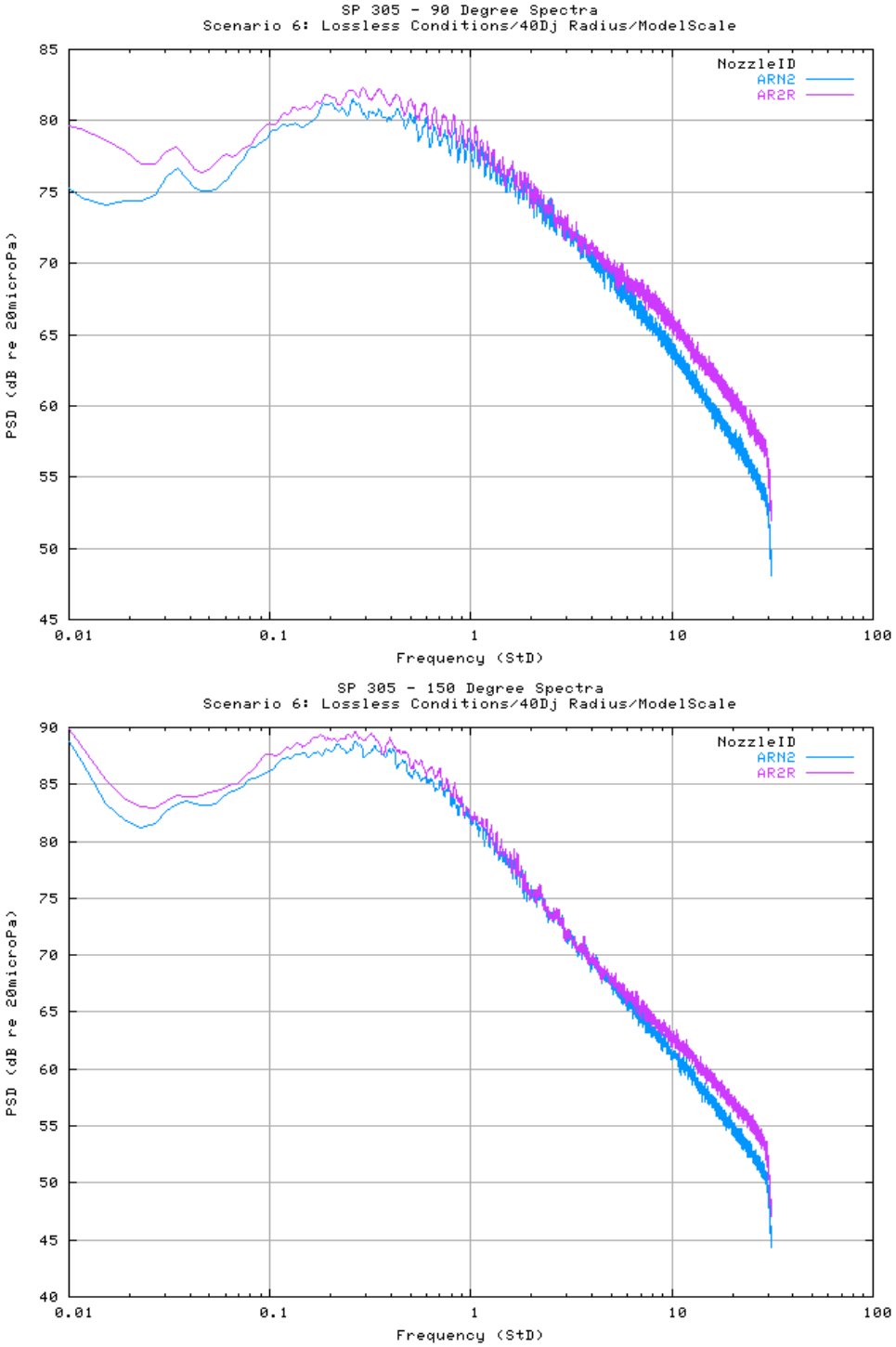

Figure 27.—Spectra, acquired at 90° (top) and 150° (bottom) relative to the jet axis, from the ARN2 nozzle without boundary layer tripping and from the ARN2 nozzle with a reticulated foam metal insert (AR2R) intended to physically force a turbulent boundary layer. Jet condition number is 305 (standard day acoustic Mach 0.5, cold). Though not as prominent compared to the data from the ARN1 nozzle, the RFM insert removes the high frequency noise created by the boundary layer. The RFM insert reduces the mass flow rate by 1.75 percent.

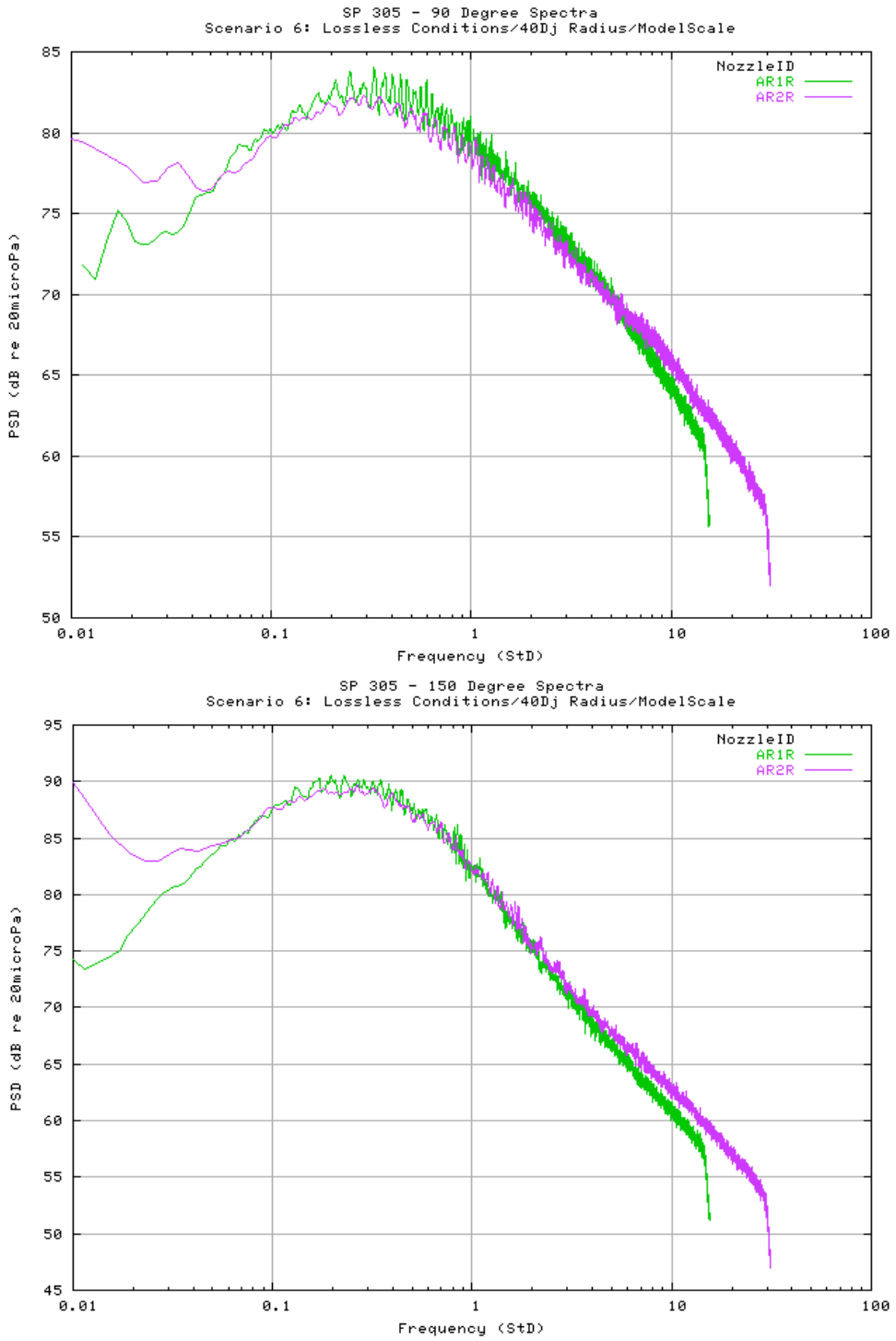

Figure 28.—Spectra, acquired at 90° (top) and 150° (bottom) relative to the jet axis and scaled to a distance of 40 nozzle diameters, from the AR1R and AR2R nozzles run at a standard day acoustic Mach number of 0.5. The RFM insert removes the high frequency noise source but the different levels of turbulence in the between the nozzles still prevents the complete spectral collapse desired.

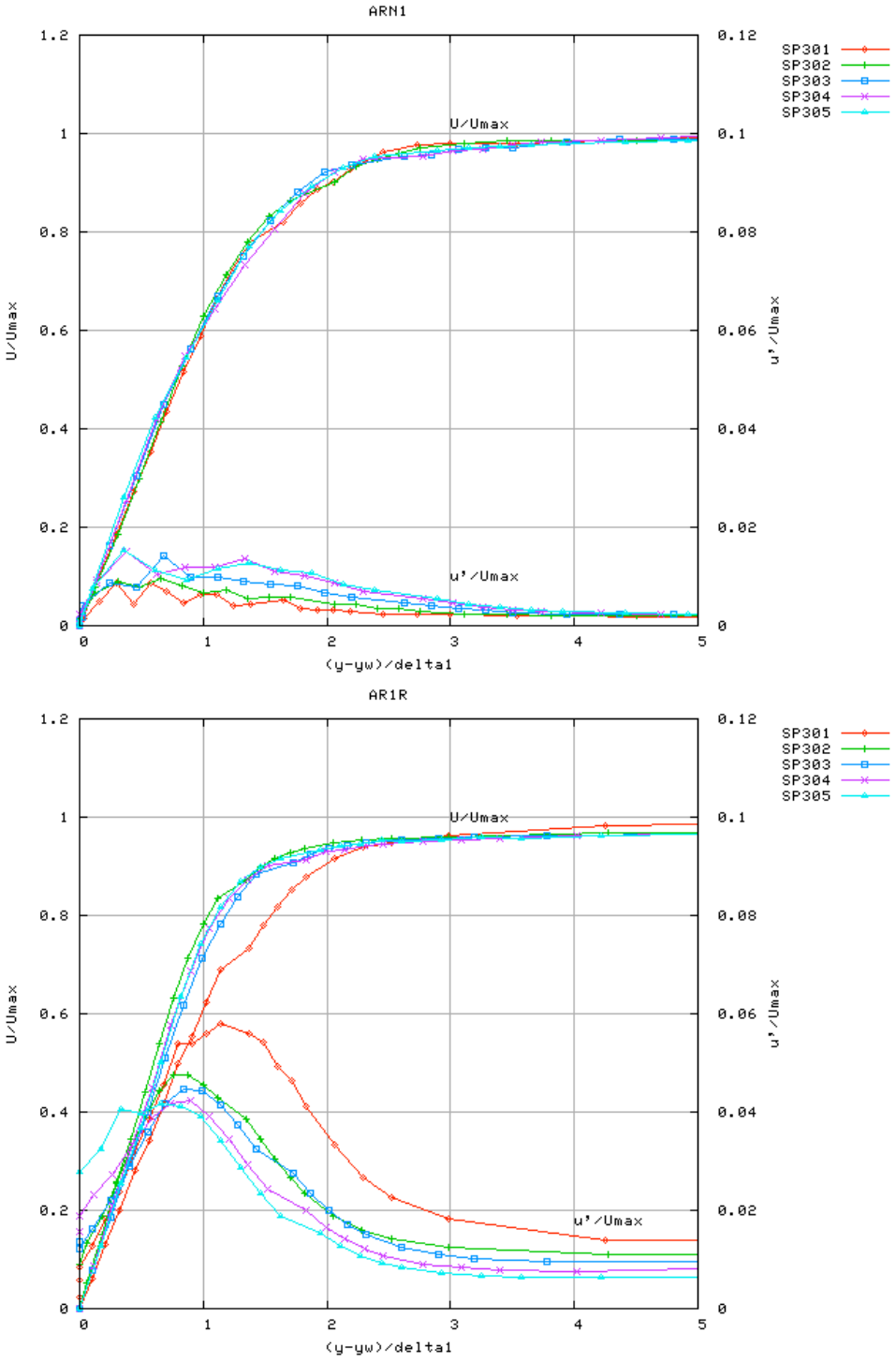

Figure 29.—Boundary layer profile (U/U_{max}, left scale) and turbulence intensity level (u'/U_{max}, right scale) for the ARN1 nozzle (top) and the AR1R nozzle (bottom). The x-axis is normalized by the displacement thickness.

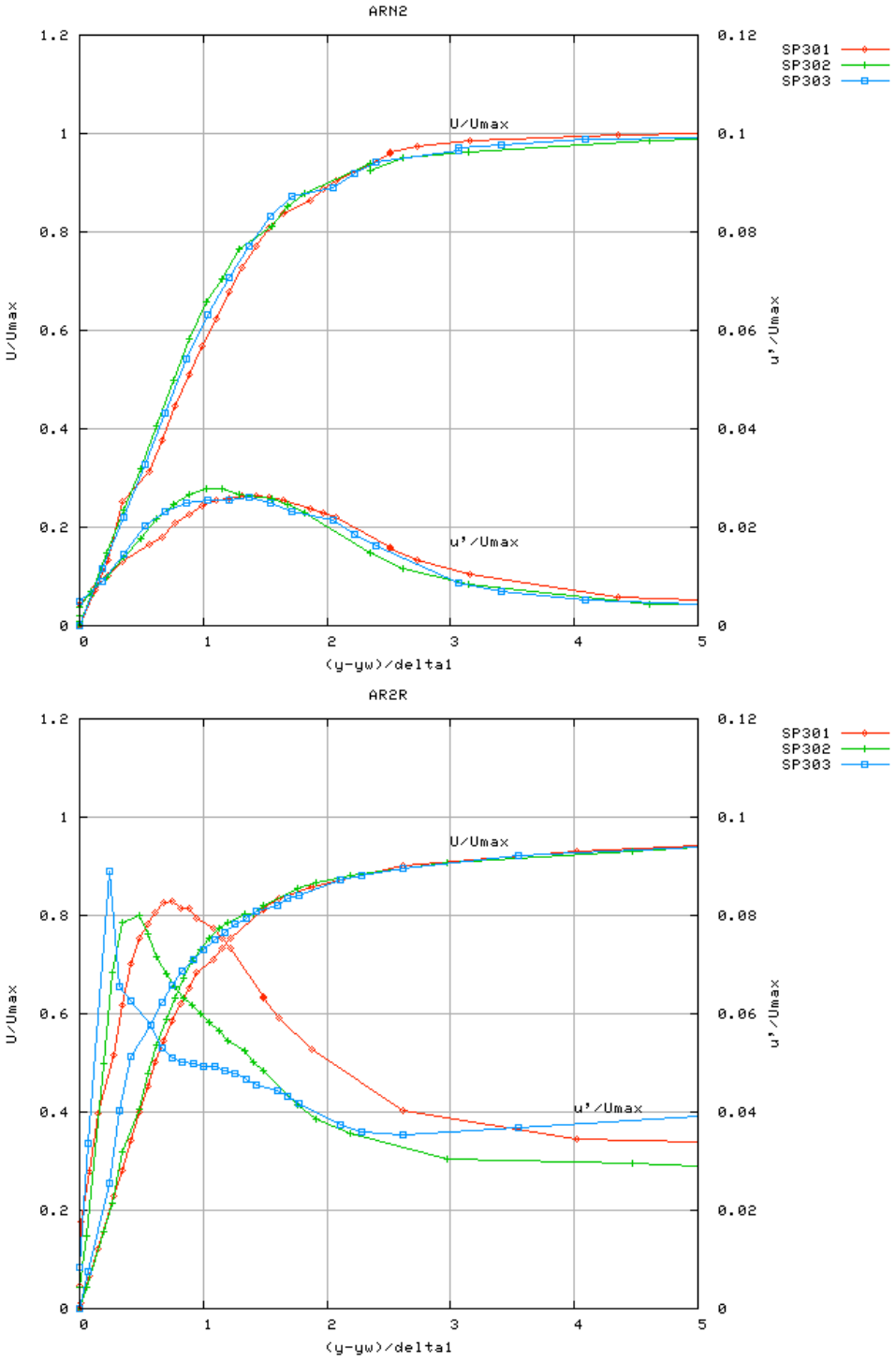

Figure 30.—Boundary layer profile (left scale) and turbulence intensity (right scale) for the ARN2 nozzle (top) and the AR2R nozzle (bottom). The x-axis is normalized by displacement thickness.

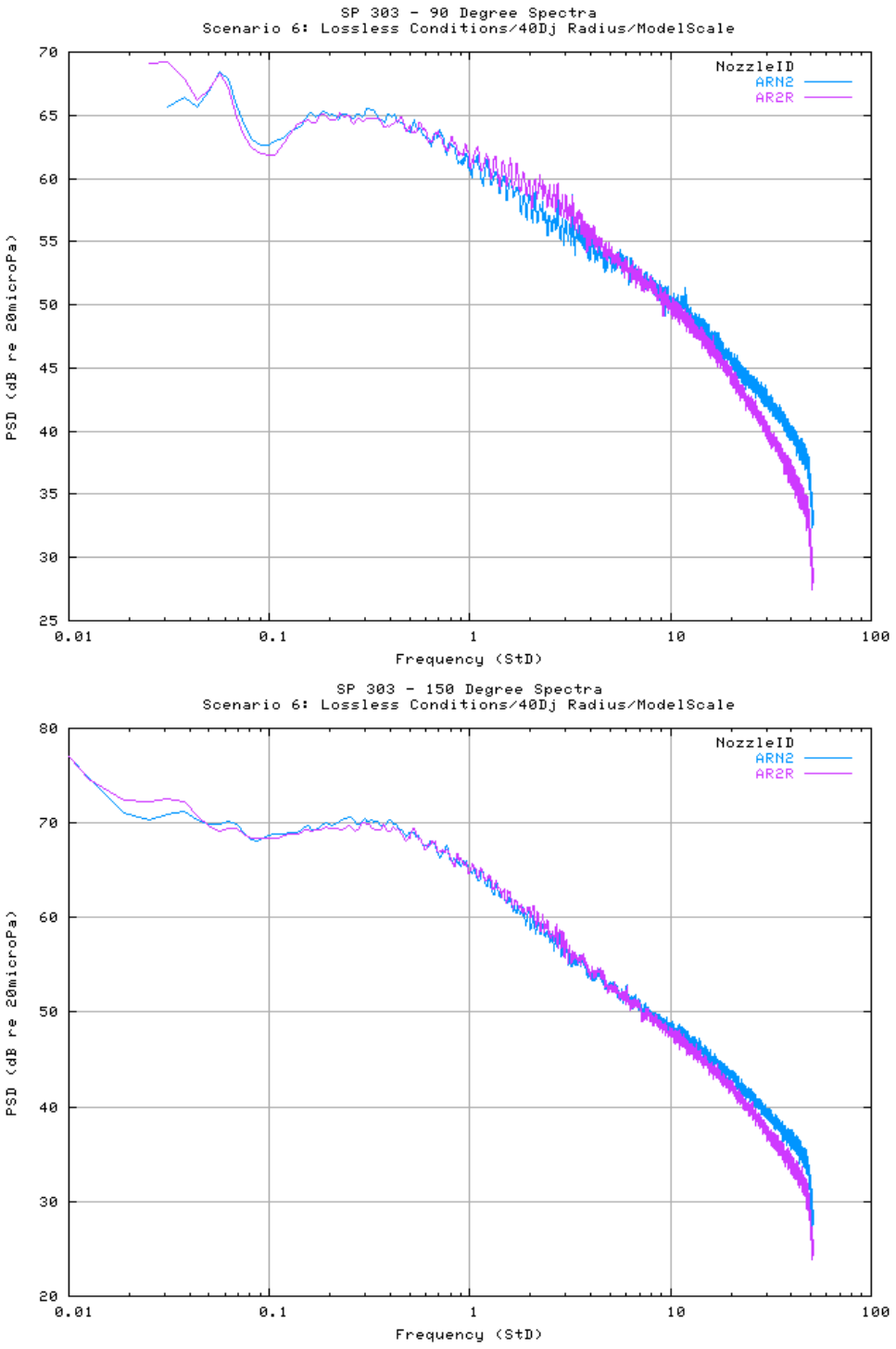

Figure 31.—Spectra from the ARN2 nozzle and the AR2R nozzle, acquired at 90° and 150° relative to the jet axis, for jet condition 303 (standard day acoustic Mach 0.3, cold). Set point 303 is the highest Mach number run with the hot wire probe with the 2-in. diameter nozzles.

3.10 Comparisons With Other Rigs

The final data quality issue to consider is rig dependence. Under ideal conditions data should be independent of the rig used to acquire the data. Therefore, having completed the checkout methodology, a comparison of data acquired on SHJAR to data from other rigs is appropriate. Of particular interest is the data of Tanna et al (ref. 3) having adopted that test matrix for the current work. These comparisons can also be found in reference 8. Figure 32 compares the data of Tanna et al, taken at Lockheed Georgia, with the SHJAR baseline data (ref. 8) using the SMC000 nozzle presented in appendix B. Observer locations at 90º and 150º are presented for two acoustic Mach numbers (M_a=0.5, 0.9) and three static temperature ratios (T_s/T_j=cold, 1.76, 2.27). Data is scaled to a lossless condition at a distance of 40 nozzle diameters. Small corrections, using simple U^8 scaling, have also been applied to correct the data to the nominal setpoint conditions. The maximum correction applied was 0.6 dB.

The comparisons in figure 32 show good agreement at the 150º observer location and for low frequencies at the 90º observer location. At peak frequencies and higher, however, the data differs significantly at the 90º location. In fact the only data that shows complete agreement at the 90º location is the highest temperature, Mach 0.9 case (setpoint 36). Referring to section 3.9, however, the differences at the 90º location are most likely created by the low Reynolds number effects which depend heavily on the specific nozzle details.

One other comparison is given in figure 33, which reproduces figure 5 from Visiwanathan's paper (ref. 9) adding the SHJAR data to his comparison with the Tanna data at 90º emission angle. In this comparison the SHJAR data falls between the Viswanathan and Tanna data but has a more rapid decrease with increasing frequency past the peak frequency values. Again, although all three data sets were acquired using 2-in. diameter nozzles, the differences are likely due to the details of the nozzle design.

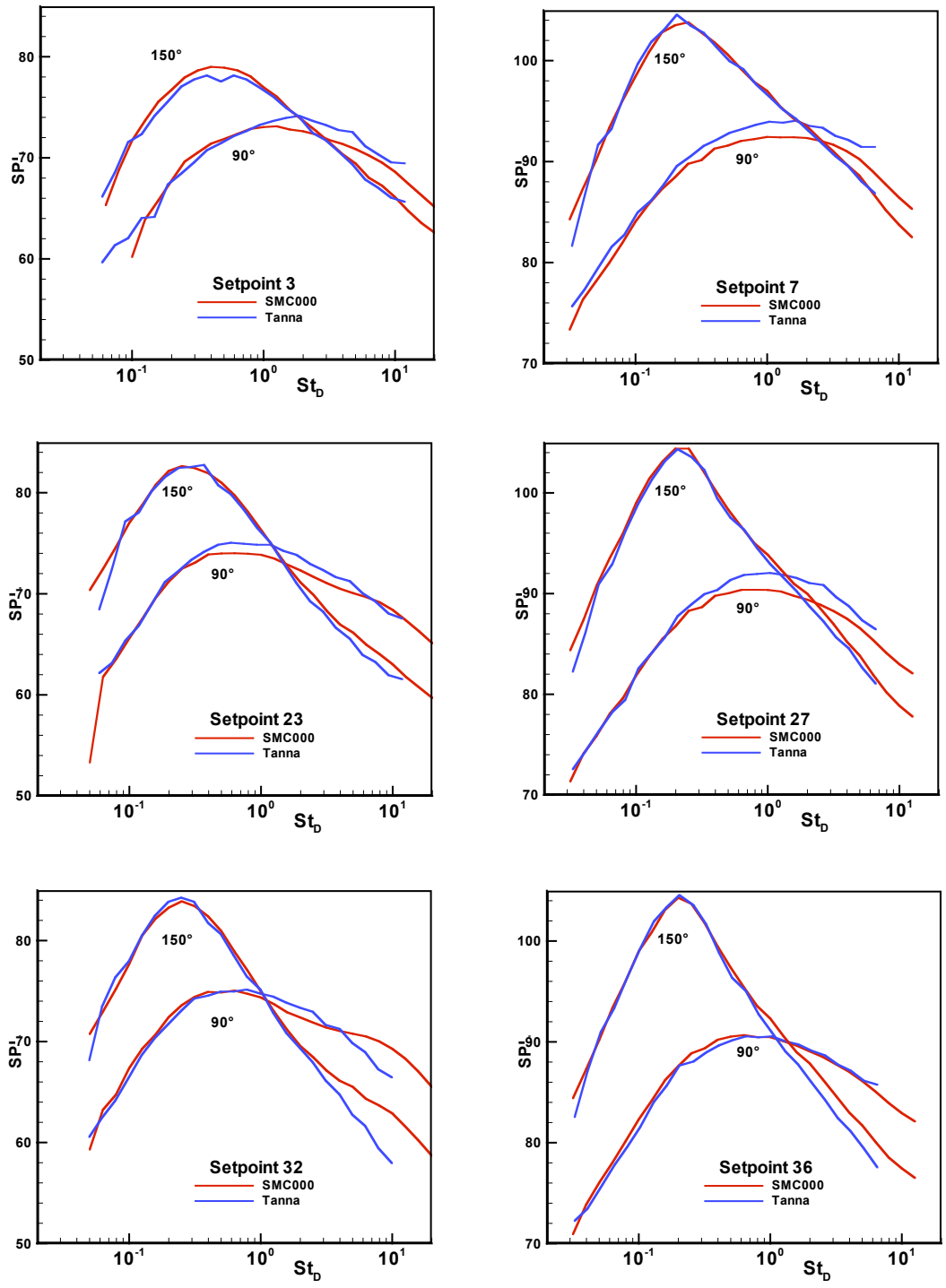

Figure 32.—Comparisons of 1/3 octave spectra from Tanna et al (ref. 3) and SHJAR (using the SMC000 nozzle) for M_a=0.5 (left column) and M_a=0.9 (right column). Each row shows a different static temperature ratio. The top row (setpoints 3 and 7) is cold, the second row (setpoints 23 and 27) is T_s/T_a=1.76, and the last row (setpoints 32 and 36) is T_s/T_a=2.27. All data is normalized to 40 jet diameters in a lossless condition. Plots republished from reference 8.

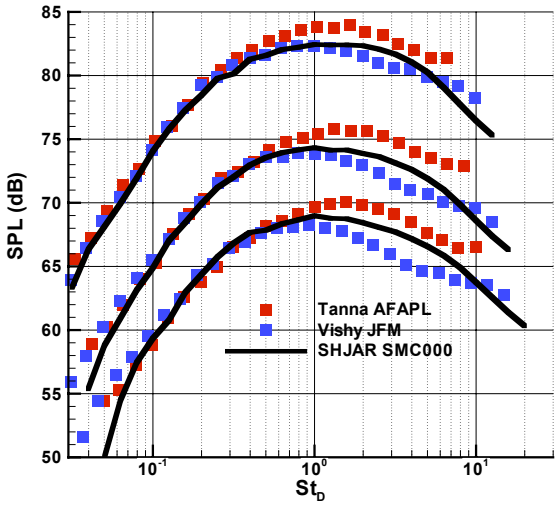

Figure 33.—Comparison for 1/3 octave spectra from Tanna (ref. 3), Viswanathan (ref. 9), and the SHJAR. Data is scaled to lossless condition and 12 ft distance from the jet (all nozzle 2-in. in diameter). Plot republished from reference (ref. 8).

4. Conclusion

The SHJAR was first commissioned at the NASA Glenn Research Center in the fall of 2001. The first task was to conduct a series of tests that would ensure the quality of future data. A specific methodology, using the scaling properties of jet noise, was applied to reach this goal. Under this method, noise sources were divided into three groups: background noise, jet noise, and rig noise. Several combinations, using different mufflers and the combustor, were then tested to establish the configuration that minimized rig noise and maximized the operating range. Then, using different sized nozzles, the sound level and spectral characteristics of the noise generated at the two control valves was examined. Acoustic Mach 0.3 to be the minimum jet velocity before both valve and background noise contaminates the jet noise data.

The next test was designed to verify that the microphone array designed for a 100-in. radius is located in the geometric far field of the jet. Again using the scaling properties of jet noise, a distance of 50 times the nozzle diameter was determined to be the minimum distance required before the array is in the geometric far field. Thus, the 100-in. radius array works for the 1- and 2-in. diameter Acoustic Reference Nozzles but is too small for the 3-in. diameter Acoustic Reference Nozzle.

During the previous tests, a high frequency noise source was noted in the ARN1 and ARN2 nozzles. This source did not follow the rules of scaling for jet noise and, therefore, was labeled as rig noise. A literature search and further investigation into the scaling properties of the noise source indicated that the properties of the initial boundary layer were at fault. This finding led to nozzle inserts that physically force a turbulent boundary layer. These inserts removed the noise source in question. The boundary layer properties from nozzles with and without boundary layer tripping were then documented using a hot wire probe. The hot wire probe data supported the theory that the laminar versus turbulent boundary layer was the cause of the unidentified noise source.

Finally, a complete set of baseline data were acquired using the 1-, 2-, and 3-in. Acoustic Reference Nozzles (and the conic SMC000 nozzle presented in appendix B). The test matrix, based on work done by Tanna et al, was designed to acquire data along lines of constant acoustic Mach number at several temperature ratios. Points were added to acquire data along lines of constant gas dynamic Mach number also at several temperature ratios. The baseline data was then compared with two respected data sets. At this point, the SHJAR rig validation was considered complete.

References

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9. Viswanathan, K., "Aeroacoustics of hot jets," *J Fluid Mech*, vol. 516, 2004, pp. 39–82.

Appendix A—The Tanna Test Matrix

The baseline acoustic test matrix was based on work done in the early and mid 1970's at the Lockheed-Georgia Company by Tanna et al. (refs. 1 and 2). The Tanna test matrix defines test points (or set points) by acoustic Mach number ($M_a = \frac{V_{jet}}{C_{amb}}$, where C_{amb} is the speed of sound at the ambient conditions) and temperature ratio ($T_r = \frac{T_{jet}}{T_{amb}}$, where T_{amb} is the ambient temperature). Particularly, the matrix lays out points along lines of constant acoustic Mach number at different temperature ratios (fig. 6). For the SHJAR baseline data set, points were added along lines of constant gas dynamic Mach number ($M_j = \frac{V_{jet}}{C_{jet}}$, where C_{jet} is the speed of sound at the gas conditions inside the jet plume) at several temperature ratios. The table below contains the numerical definitions of the Tanna matrix test points and the additional test points used for the SHJAR baseline testing. Data for points highlighted in red appear in appendix C.

Tanna Set Point	Temp. Ratio T_j/T_a	Acoustic Mach V_j/C_{amb}		Added Set Point	Temp. Ratio T_j/T_a	Acoustic Mach V_j/C_{amb}
1	0.980	0.350		101	0.783	1.049
2	0.970	0.400		102	1.000	1.185
3	0.950	0.500		103	1.255	1.327
4	0.925	0.600		104	1.396	1.400
5	0.900	0.700		105	1.570	1.485
6	0.870	0.800		106	1.757	1.571
7	0.835	0.900		107	1.999	1.675
8	1.000	0.500		108	2.270	1.785
9	1.000	0.600		109	2.462	1.860
10	1.000	0.700		110	2.792	1.980
11	1.000	0.800		111	0.903	1.330
12	1.000	0.900		112	1.400	1.656
13	1.400	0.350		113	2.000	1.980
14	1.400	0.400		114	2.357	2.150
15	1.400	0.500		115	2.357	2.150
16	1.400	0.600		116	0.689	1.245
17	1.400	0.700		117	0.871	1.400
18	1.400	0.800		118	0.980	1.485
19	1.400	0.900		119	1.247	1.675
20	1.400	1.185		120	1.400	1.775
21	1.764	0.350		121	1.538	1.860
22	1.764	0.400		122	1.743	1.980
23	1.764	0.500		123	2.055	2.150
24	1.764	0.600		124	2.290	2.270
25	1.764	0.700		125	1.232	1.860
26	1.764	0.800		126	1.645	2.150
27	1.764	0.900		127	2.120	2.440
28	1.764	1.185		128	0.701	1.675
29	1.764	1.330		129	0.865	1.860
30	2.270	0.350		130	1.157	2.150
31	2.270	0.400		131	1.488	2.440
32	2.270	0.500		132	1.823	2.700
33	2.270	0.600		133	1.000	1.000
34	2.270	0.700		134	1.400	1.000
35	2.270	0.800		135	1.765	1.000

Tanna Set Point	Temp. Ratio T_j/T_a	Acoustic Mach V_j/C_{amb}		Added Set Point	Temp. Ratio T_j/T_a	Acoustic Mach V_j/C_{amb}
36	2.270	0.900		136	2.270	1.000
37	2.270	1.185		137	2.880	1.000
38	2.270	1.330		138	1.960	1.400
39	2.270	1.485		139	2.270	1.400
40	2.880	0.350		140	2.880	1.400
41	2.880	0.400		141	2.880	1.675
42	2.880	0.500		142	0.797	1.000
43	2.880	0.600		143	1.000	1.120
44	2.880	0.700		144	1.119	1.185
45	2.880	0.800		145	1.405	1.327
46	2.880	0.900		146	1.563	1.400
47	2.880	1.185		147	1.757	1.485
48	2.880	1.330		148	2.238	1.675
49	2.880	1.485		149	2.760	1.860
50	0.716	1.185		150	2.700	1.454
51	1.000	1.400		153	1.200	0.350
52	1.125	1.485		154	1.200	0.400
53	1.431	1.675		155	1.200	0.500
54	1.764	1.860		156	1.200	0.600
55	2.270	2.110		157	1.200	0.700
56	0.636	1.340		158	1.200	0.800
57	0.787	1.485		159	1.200	0.900
58	1.000	1.675		160	1.200	1.000
59	1.400	1.983				
60	1.764	2.230				
62	0.552	1.485				
63	1.000	2.000				
64	1.400	2.367				
65	1.764	2.656				

Appendix B—The SMC Nozzle Series

Three Acoustic Reference Nozzles (ARN) were designed and built for the validation process and baseline data set when the Small Hot Jet Acoustic Rig was commissioned. These nozzles, with diameters of 1-in., (ARN1) 2-in. (ARN2), and 3-in. (ARN3) were described in section 3.4. Following these tests, a second 2-in. diameter nozzle system was designed for future tests. This system (see fig. 34) consists of a base, which mounts directly to the rig, and small nozzle cone that mounts to the end of the base using several set-screws (fig. 35). This system has some significant advantages over the acoustic reference nozzles. From an operational perspective, many small nozzle cones, each with a specific geometry (i.e. chevron pattern) can be built for the same cost as one complete nozzle. Furthermore, model changes are considerably quicker compared to removing and replacing the complete nozzle. From a data quality point of view, most of the contraction occurs in the base, removing the contraction profile as a nozzle geometry variable. The SMC nozzle system is limited to 2-in. diameter nozzle cones.

The SMC base nozzle has a different contraction profile when compared to the ARN nozzles. It is, therefore, useful to consider the boundary layer profile and initial turbulence levels. Using a hot wire probe, velocity data were acquired at the boundary layer. The results are shown in figure 36. Although the turbulence intensity is much lower than the ARN2 nozzle with the reticulated foam metal (RFM) insert, it is higher than the ARN2 nozzle without the insert and does not suffer any ill affects of the foam insert (such as decreased discharge coefficient). Additionally, the turbulence shape factor, another indicator of turbulence, decreases from 2.341 for the ARN2 nozzle to 2.147 for the SMC000 nozzle at setpoint 304 (M_a=0.4, cold). This change represents a more turbulent boundary layer in the SMC000 nozzle compared to the ARN2 nozzle.

The effect of the nozzle boundary layer on the far-field acoustics was examined in section 3.9. In particular, acoustic data analyzed from the ARN2 nozzle showed a high frequency noise source that was linked to these boundary layer effects. Flow data acquired using a hot-wire probe shows that the SMC000 nozzle has a more turbulent boundary layer when compared against the ARN2 nozzle. Thus, far-field acoustic data measured from the SMC000 nozzle show the same high frequency noise source. Figure 37 shows far-field acoustic data measured from both the SMC000 and ARN2 nozzles at setpoint 3 (M_a=0.5, cold). These data show that the boundary layer related noise source present in the ARN2 data does not exist in the SMC000 data. Because this noise source does not appear in the data from the SMC000 nozzle and because the nozzle cones are easier to build and change compared to complete nozzles, the SMC000 nozzle will be used as the baseline nozzle for most future tests.

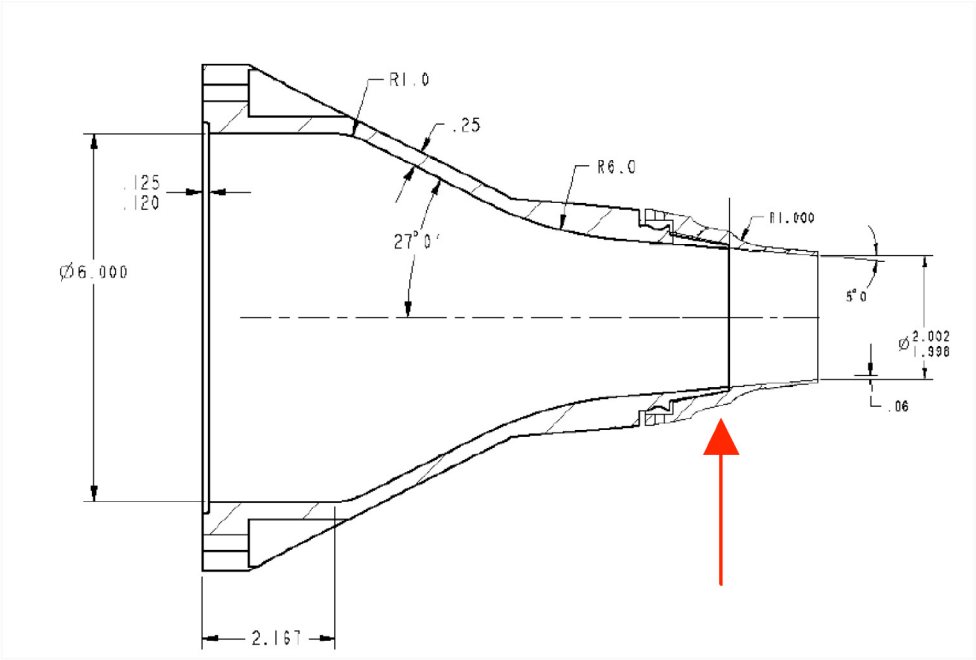


Figure 34.—Drawing of the SMC000 nozzle system. The red line shows the break between the nozzle base (left) and the small nozzle cones (right).

Figure 35.—The base nozzle with the SMC000 nozzle cone mounted (center) and a collection of chevron nozzle cones. The SMC nozzle system is far more economical, both in terms of building expense and model change time, than manufacturing a set of full nozzles.

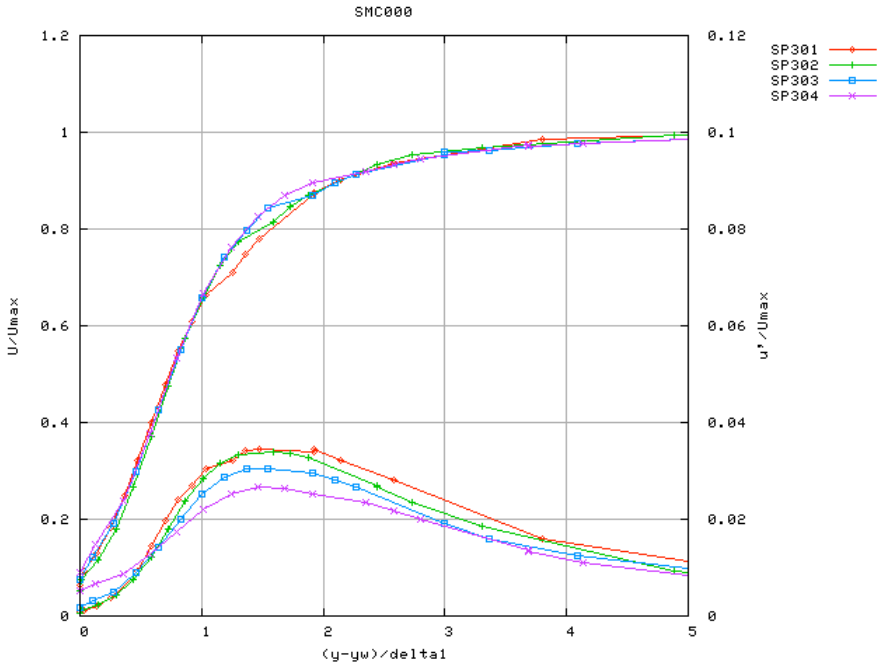


Figure 36.—Boundary layer profile and turbulence intensity for the SMC000 nozzle. The x-axis is normalized by boundary layer thickness. Setpoints 301 (M_a=0.1, cold), 302 (M_a=0.2, cold), 303 (M_a=0.3, cold), and 304 (M_a=0.4, cold) are shown. The calculated shape factor at setpoint 304 is 2.147.

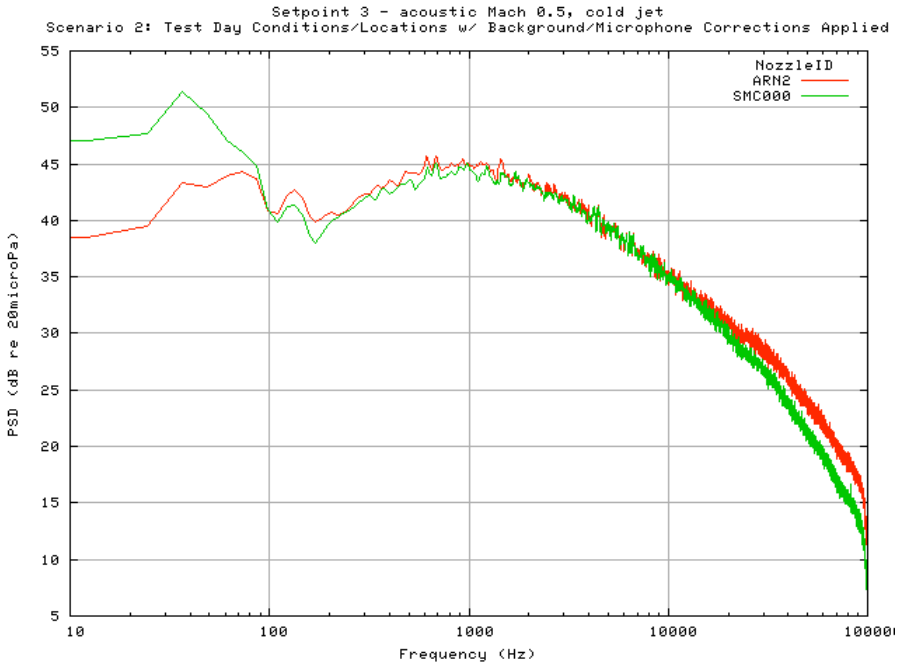
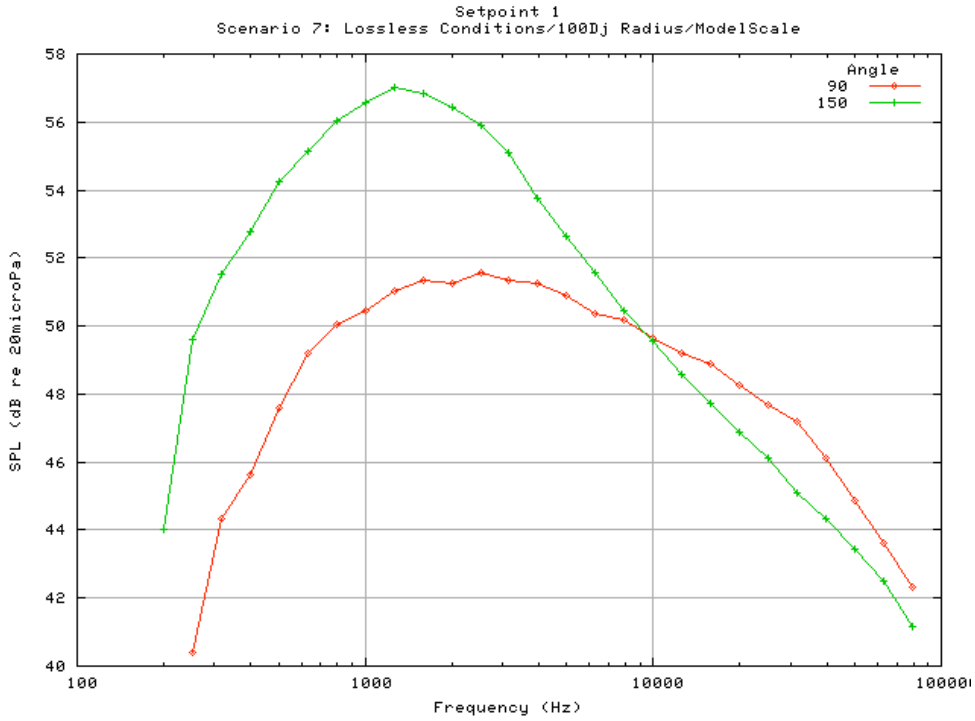


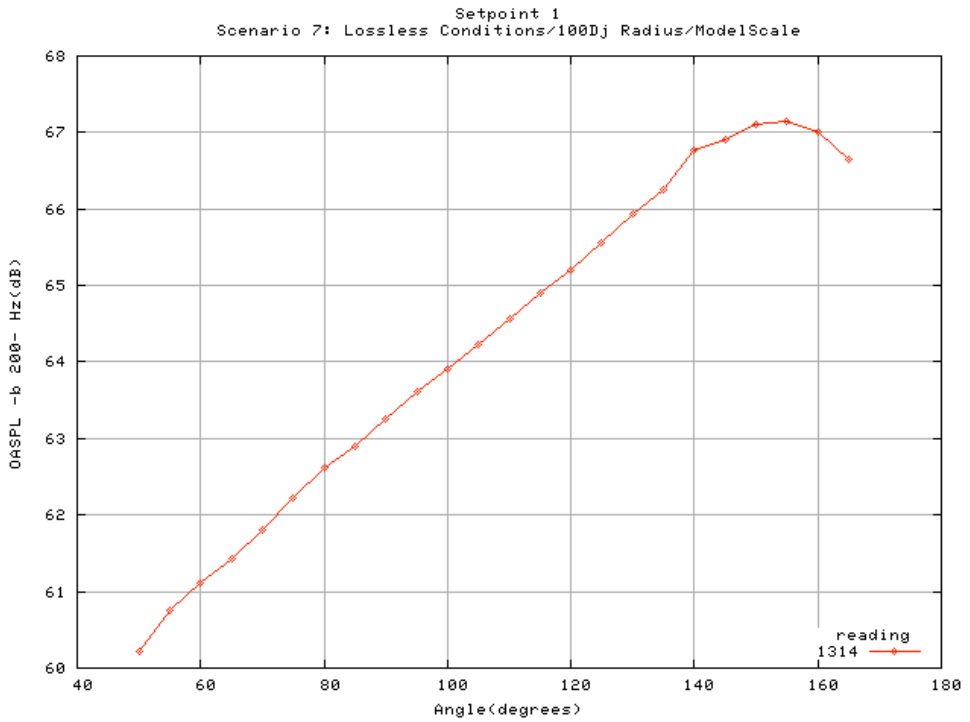
Figure 37.—Spectra measured at setpoint 3 (M_a=0.5, cold) and 90° relative to the jet axis using the ARN2 and SMC000 nozzles. The high frequency (above 25 kHz) noise source related to the nozzle boundary layer present in the ARN2 data is not present in the SMC000 data (which has a more turbulent boundary layer).

Appendix C—Tabulated Data

Data were acquired at many points defined in the baseline matrix using the SMC000 nozzle (described in app. B). This 2-in. diameter nozzle has a more turbulent boundary layer than the ARN2 nozzle without any additional treatment. Additionally, the SMC000 nozzle has been used as the baseline for most of the experiments conducted on the SHJAR rigs to date. Therefore, data from the SMC000 nozzle is presented for the baseline data set here. The data are plotted (spectra at 90º and 150º tabulated in one-third octave power spectra, normalized to a distance of 100 nozzle diameters, and transformed into a lossless condition. Frequency and angle combinations where no value is present were removed due to proximity to the background noise level.

Setpoint	1
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/c_{amb})	0.350
Ideal jet velocity (ft/s)	387.089
Temperature ratio (T_j/T_{amb})	0.980
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





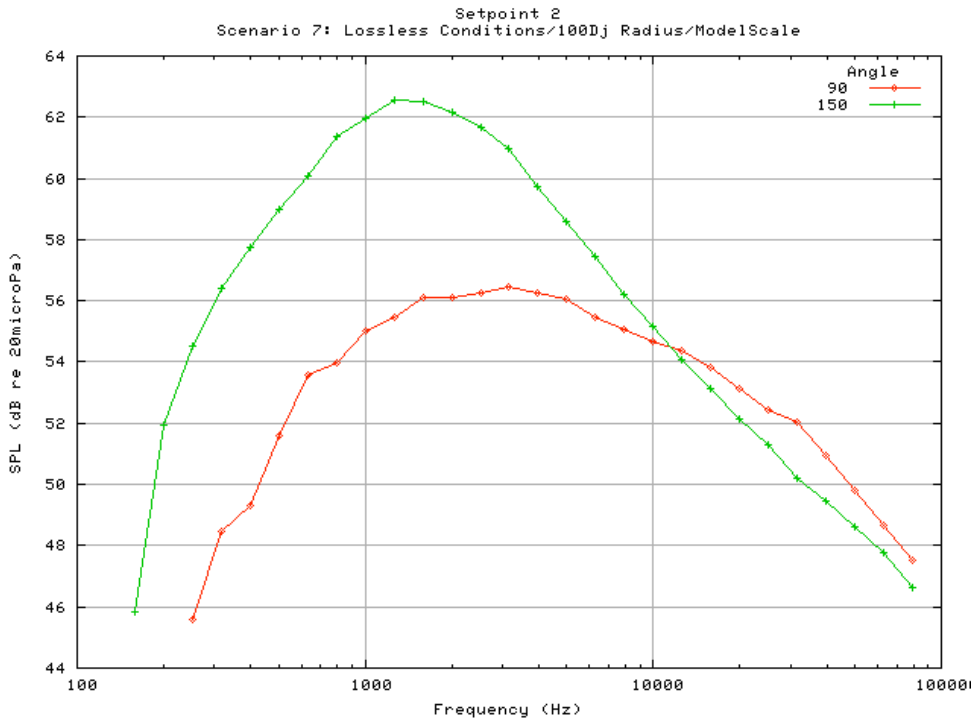
Setpoint 1 continued

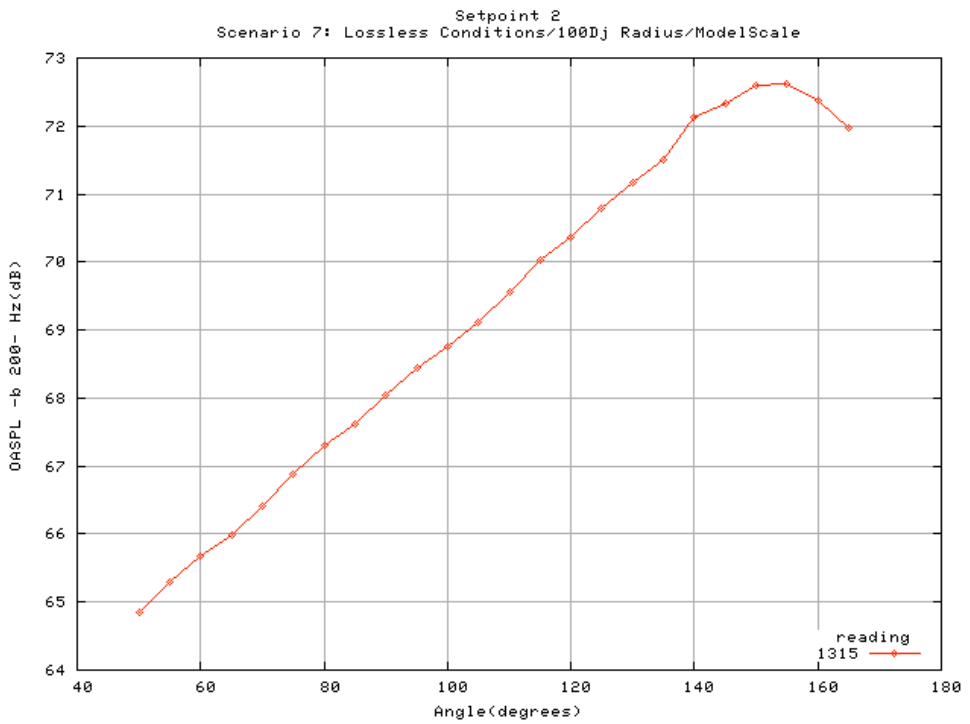
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5												
199.5												
251.2	35.2	35.4	35.4	35.8	36.2	36.8	39.4	39.9	40.4	40.4	42.1	42.5
316.2	41.0	41.1	41.3	41.9	42.4	43.2	43.9	44.2	44.3	44.7	45.2	45.7
398.1			42.4		44.5	45.0	45.5	45.7	45.6	46.5	46.8	47.2
501.2	42.9	44.2	45.3	45.8	46.0	46.5	46.9	47.2	47.6	48.1	48.3	48.6
631.0	45.0	46.0	47.0	47.6	47.8	48.1	48.4	48.5	49.2	49.2	49.4	49.8
794.3	45.7	47.0	47.8	48.2	48.8	49.1	49.4	49.9	50.0	50.4	50.6	51.0
1000.0	46.5	47.4	48.2	48.6	48.8	49.2	49.5	50.0	50.4	50.9	51.1	51.4
1258.9	47.2	48.3	49.0	49.0	49.5	49.9	50.2	50.7	51.0	51.6	51.8	52.1
1584.9	47.8	48.6	49.1	49.4	49.6	50.2	50.7	50.9	51.3	51.6	52.1	52.5
1995.3	48.0	48.7	49.0	49.2	49.7	50.1	50.5	50.8	51.3	51.8	52.1	52.5
2511.9	48.3	49.1	49.3	49.5	49.9	50.4	50.8	51.3	51.6	51.9	52.1	52.4
3162.3	48.8	49.4	49.3	49.6	50.1	50.4	50.7	51.2	51.3	51.7	52.1	52.6
3981.1	48.7	48.9	49.2	49.5	49.9	50.3	50.6	50.8	51.2	51.6	51.8	52.2
5011.9	48.1	48.5	48.8	49.2	49.4	49.8	50.1	50.4	50.9	51.1	51.5	51.9
6309.6	47.7	48.4	48.6	48.9	49.1	49.5	50.0	50.1	50.4	50.6	51.0	51.3
7943.3	47.7	48.1	48.1	48.3	48.7	49.1	49.4	49.6	50.2	50.3	50.6	50.9
10000.0	47.4	47.6	47.6	48.0	48.3	48.7	49.1	49.3	49.6	49.9	50.2	50.4
12589.3	47.2	47.1	47.3	47.7	47.9	48.3	48.6	48.7	49.2	49.5	49.8	50.0
15848.9	46.8	46.7	46.9	47.1	47.6	47.9	48.2	48.4	48.9	49.2	49.3	49.6
19952.6	46.0	46.1	46.3	46.7	47.1	47.4	47.8	47.9	48.3	48.5	49.0	49.1
25118.9	45.5	45.6	45.7	45.7	46.5	46.9	47.3	47.5	47.7	48.1	48.6	48.7
31622.8	44.7	44.8	45.1	45.3	45.7	46.2	46.6	46.8	47.2	47.5	47.9	47.9
39810.7	43.5	43.6	43.9	44.2	44.6	45.2	45.6	45.8	46.1	46.4	46.6	47.0
50118.7	41.9	42.2	42.6	42.9	43.4	44.1	44.6	44.6	44.9	45.3	45.8	45.9
63095.7	40.1	40.5	41.1	41.6	42.2	42.9	43.4	43.4	43.6	44.1	44.6	44.7
79432.8	38.3	38.8	39.5	40.1	40.7	41.4	42.0	42.1	42.3	43.0	43.2	43.4

Setpoint 1 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5												
199.5								38.7	44.0	45.5	49.5	50.7
251.2	43.1	43.6	44.0	44.4	45.0	45.4	46.9	48.2	49.6	50.8	51.9	52.8
316.2	46.4	46.8	47.3	47.8	48.1	48.7	49.6	50.5	51.5	52.4	53.3	54.2
398.1	47.8	48.0	48.1	48.5	49.1	49.8	50.8	51.7	52.8	53.8	54.8	55.5
501.2	49.1	49.5	49.9	50.2	50.8	51.5	52.5	53.3	54.3	55.1	55.9	56.5
631.0	50.2	50.6	50.9	51.4	52.0	52.5	53.4	54.1	55.1	56.0	56.6	56.9
794.3	51.2	51.6	52.0	52.5	53.2	53.8	54.6	55.3	56.0	56.6	57.1	57.3
1000.0	51.7	52.2	52.8	53.3	53.9	54.5	55.3	55.8	56.6	57.0	57.4	57.4
1258.9	52.4	52.9	53.4	53.8	54.3	54.9	55.8	56.2	57.0	57.3	57.5	56.9
1584.9	52.8	53.2	53.7	53.9	54.5	55.2	56.0	56.5	56.8	57.1	56.9	56.1
1995.3	52.8	53.2	53.5	54.0	54.4	54.8	55.5	55.8	56.4	56.3	55.9	54.5
2511.9	52.8	53.2	53.5	54.1	54.4	54.7	55.3	55.5	55.9	55.7	54.6	52.9
3162.3	52.8	53.2	53.4	53.9	54.3	54.5	54.9	55.0	55.1	54.4	53.0	50.8
3981.1	52.4	52.9	53.2	53.5	53.9	53.9	54.3	54.1	53.8	53.1	51.4	48.9
5011.9	52.1	52.5	52.8	53.0	53.1	53.4	53.7	53.4	52.7	51.6	49.4	46.9
6309.6	51.7	52.0	52.1	52.3	52.4	52.7	53.0	52.6	51.6	50.3	47.8	45.0
7943.3	51.2	51.5	51.7	51.9	52.0	52.1	52.2	51.8	50.5	48.9	46.1	43.3
10000.0	50.7	51.0	51.2	51.3	51.5	51.6	51.8	51.0	49.5	47.8	45.0	42.1
12589.3	50.3	50.7	50.7	50.9	51.1	51.2	51.2	50.5	48.6	46.8	43.8	40.9
15848.9	49.9	50.3	50.3	50.6	50.7	50.6	50.7	49.7	47.7	45.8	42.8	39.7
19952.6	49.4	49.6	49.6	50.1	50.3	50.2	50.0	49.0	46.9	45.1	41.9	38.7
25118.9	48.9	49.2	49.1	49.5	49.8	49.6	49.3	48.4	46.1	44.2	40.8	37.6
31622.8	48.3	48.5	48.6	48.7	49.1	48.9	48.7	47.6	45.1	43.2	39.7	36.3
39810.7	47.3	47.4	47.5	47.8	47.8	48.0	47.6	46.5	44.3	42.0	38.6	35.1
50118.7	46.2	46.2	46.3	46.7	46.7	46.8	46.3	45.3	43.4	40.8	37.4	33.8
63095.7	45.0	45.0	45.2	45.4	45.6	45.6	45.1	44.0	42.5	39.5	36.1	32.8
79432.8	43.8	43.9	44.0	44.2	44.4	44.3	43.5	42.7	41.2	38.2	35.2	31.9

Setpoint	2
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/c_{amb})	0.401
Ideal jet velocity (ft/s)	443.857
Temperature ratio (T_j/T_{amb})	0.972
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





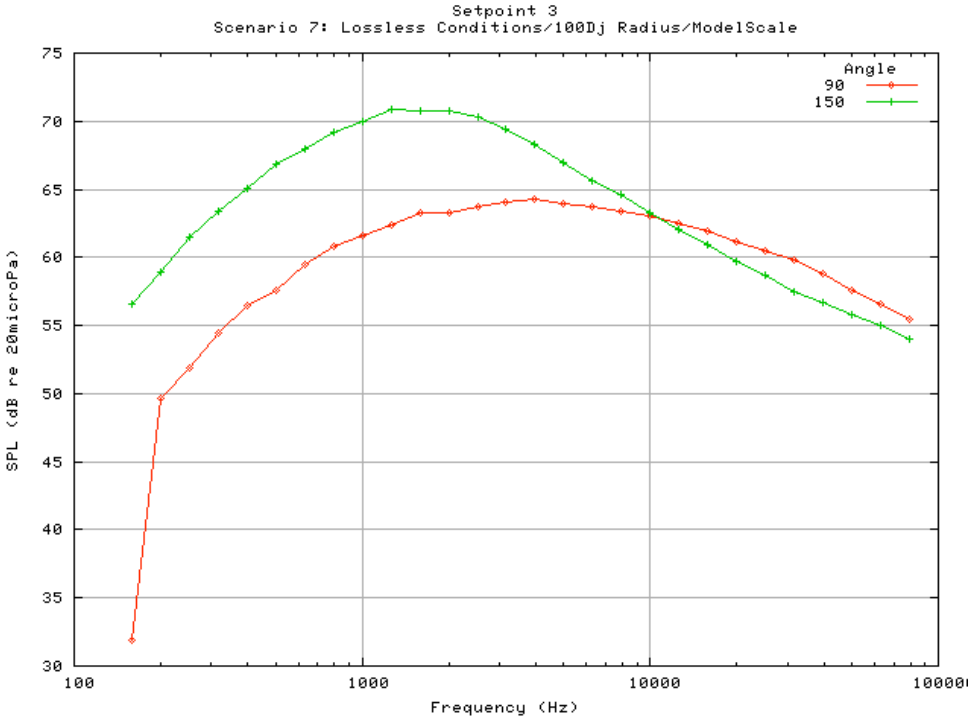
Setpoint 2 continued

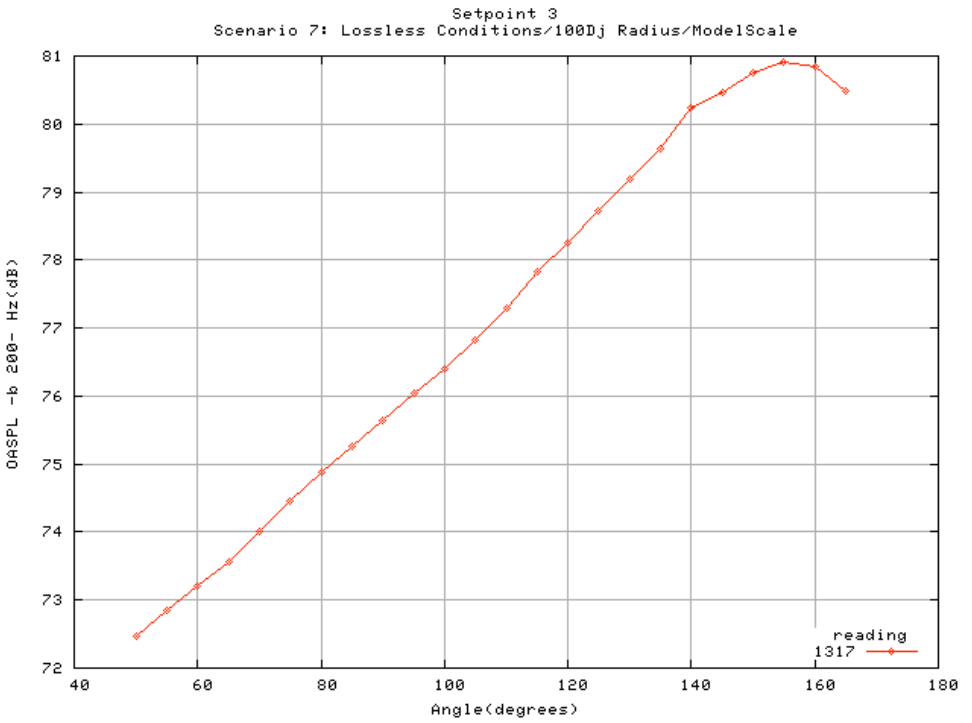
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5												
199.5											38.6	39.1
251.2	40.8	42.4	42.8	43.4	43.6	44.1	44.6	45.2	45.6	47.1	47.5	47.9
316.2	44.4	44.8	45.1	45.9	46.3	47.1	47.7	48.2	48.5	48.9	49.1	49.5
398.1	44.6	45.4	46.0	47.3	47.7	48.2	48.8	49.1	49.3	50.0	50.2	50.6
501.2	47.1	48.2	49.2	49.9	50.3	50.5	50.7	51.1	51.6	52.0	52.3	52.8
631.0	48.9	49.8	50.7	51.4	51.6	52.0	52.4	52.7	53.6	53.7	54.0	54.4
794.3	49.9	51.0	51.8	52.2	52.5	52.8	53.2	53.6	54.0	54.5	54.9	55.4
1000.0	50.3	51.2	52.1	52.7	53.0	53.5	54.0	54.4	55.0	55.5	55.7	56.2
1258.9	51.8	52.9	53.5	53.5	53.9	54.3	54.7	55.0	55.5	55.9	56.2	56.6
1584.9	52.2	52.9	53.3	53.6	53.9	54.5	55.1	55.4	56.1	56.5	56.9	57.2
1995.3	52.6	53.2	53.6	53.8	54.3	54.8	55.3	55.7	56.1	56.6	56.8	57.4
2511.9	52.9	53.6	54.0	54.2	54.7	55.2	55.5	55.9	56.2	56.7	57.0	57.4
3162.3	53.5	54.0	54.1	54.4	54.9	55.3	55.6	56.1	56.5	56.8	57.0	57.4
3981.1	53.5	53.6	53.9	54.3	54.8	55.2	55.5	55.8	56.2	56.6	57.0	57.3
5011.9	52.8	53.2	53.7	54.1	54.3	54.8	55.2	55.5	56.0	56.3	56.5	56.9
6309.6	52.5	53.1	53.4	53.6	54.0	54.5	55.0	55.2	55.5	55.8	56.2	56.6
7943.3	52.4	52.7	52.9	53.2	53.6	54.1	54.5	54.6	55.1	55.5	55.9	56.1
10000.0	52.2	52.3	52.5	52.7	53.1	53.7	54.1	54.3	54.7	55.0	55.2	55.6
12589.3	52.0	51.8	52.0	52.4	52.9	53.3	53.6	53.8	54.4	54.6	54.8	55.2
15848.9	51.5	51.3	51.5	51.8	52.3	52.7	53.1	53.3	53.8	54.2	54.3	54.6
19952.6	50.6	50.8	50.9	51.3	51.7	52.2	52.6	52.8	53.1	53.4	53.9	54.1
25118.9	50.2	50.3	50.3	50.4	51.2	51.6	52.1	52.3	52.4	52.9	53.4	53.6
31622.8	49.5	49.5	49.8	50.1	50.5	50.9	51.4	51.6	52.0	52.4	52.7	52.9
39810.7	48.3	48.5	48.7	49.0	49.5	50.0	50.5	50.6	51.0	51.4	51.5	52.0
50118.7	46.9	47.1	47.5	47.8	48.4	49.0	49.5	49.5	49.8	50.3	50.7	50.8
63095.7	45.3	45.6	46.2	46.7	47.2	47.8	48.4	48.3	48.7	49.1	49.6	49.8
79432.8	43.7	44.1	44.8	45.4	46.0	46.6	47.1	47.2	47.5	48.1	48.3	48.6

Setpoint 2 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5								31.6	45.8	47.1	52.7	53.7
199.5	42.7	43.0	43.5	44.2	45.1	47.4	48.4	50.5	52.0	53.3	54.3	55.3
251.2	48.3	48.7	49.1	49.6	50.4	51.1	52.1	53.2	54.5	55.7	56.7	57.6
316.2	50.1	50.5	50.9	51.4	52.0	52.8	54.0	55.2	56.4	57.4	58.4	59.2
398.1	51.4	51.9	52.2	52.5	53.0	53.7	55.1	56.3	57.8	58.9	59.9	60.6
501.2	53.1	53.4	53.9	54.5	55.1	55.9	57.0	57.9	59.0	59.8	60.7	61.4
631.0	54.8	55.3	55.8	56.2	56.8	57.4	58.3	59.0	60.1	61.0	61.7	62.1
794.3	55.8	56.3	56.7	57.5	58.0	58.7	59.6	60.4	61.4	62.1	62.7	63.0
1000.0	56.7	57.3	57.7	58.2	58.8	59.3	60.3	61.1	62.0	62.5	62.8	62.8
1258.9	57.2	57.7	58.3	58.7	59.3	59.9	61.1	61.7	62.5	62.9	63.0	62.4
1584.9	57.6	57.9	58.5	59.0	59.7	60.3	61.2	61.9	62.5	62.8	62.5	61.6
1995.3	57.8	58.2	58.6	59.2	59.7	60.2	61.0	61.5	62.2	62.0	61.5	60.0
2511.9	57.9	58.4	58.8	59.3	59.7	60.1	60.9	61.2	61.7	61.5	60.2	58.2
3162.3	57.9	58.5	58.9	59.3	59.6	60.0	60.7	60.9	60.9	60.2	58.6	56.3
3981.1	57.8	58.2	58.5	58.9	59.2	59.6	60.2	60.1	59.7	58.9	56.9	54.4
5011.9	57.3	57.9	58.2	58.6	58.7	58.8	59.6	59.2	58.6	57.5	55.0	52.6
6309.6	56.9	57.5	57.7	58.0	58.3	58.3	58.7	58.3	57.5	56.1	53.5	50.7
7943.3	56.5	57.0	57.3	57.5	57.7	57.8	58.0	57.6	56.2	54.7	51.9	49.0
10000.0	56.1	56.6	56.8	56.9	57.2	57.2	57.4	56.7	55.1	53.5	50.6	47.8
12589.3	55.5	56.1	56.3	56.4	56.8	56.6	56.7	55.9	54.1	52.3	49.3	46.4
15848.9	55.1	55.5	55.7	55.8	56.2	56.1	56.1	55.1	53.1	51.3	48.2	45.1
19952.6	54.5	54.7	55.1	55.4	55.7	55.5	55.3	54.2	52.1	50.3	47.1	43.8
25118.9	54.0	54.4	54.3	54.8	55.2	54.9	54.5	53.5	51.3	49.3	46.0	42.6
31622.8	53.3	53.7	53.9	54.0	54.4	54.2	53.9	52.7	50.2	48.4	44.9	41.4
39810.7	52.4	52.6	52.8	53.1	53.2	53.2	52.7	51.6	49.5	47.2	43.7	40.1
50118.7	51.2	51.5	51.8	52.0	52.1	52.1	51.4	50.3	48.6	45.9	42.5	38.6
63095.7	50.1	50.4	50.7	50.9	51.1	50.9	50.3	49.1	47.8	44.7	41.3	37.4
79432.8	49.2	49.4	49.6	49.8	50.0	49.9	48.9	47.9	46.6	43.6	40.3	36.6

Setpoint	3
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/c_{amb})	0.500
Ideal jet velocity (ft/s)	554.116
Temperature ratio (T_j/T_{amb})	0.955
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





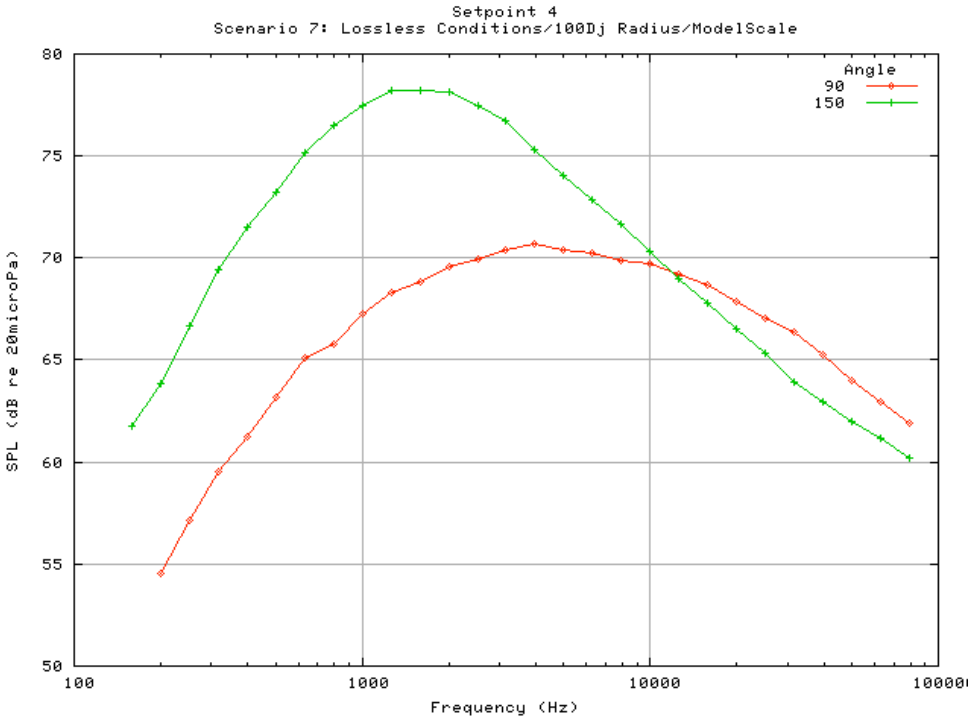
Setpoint 3 continued

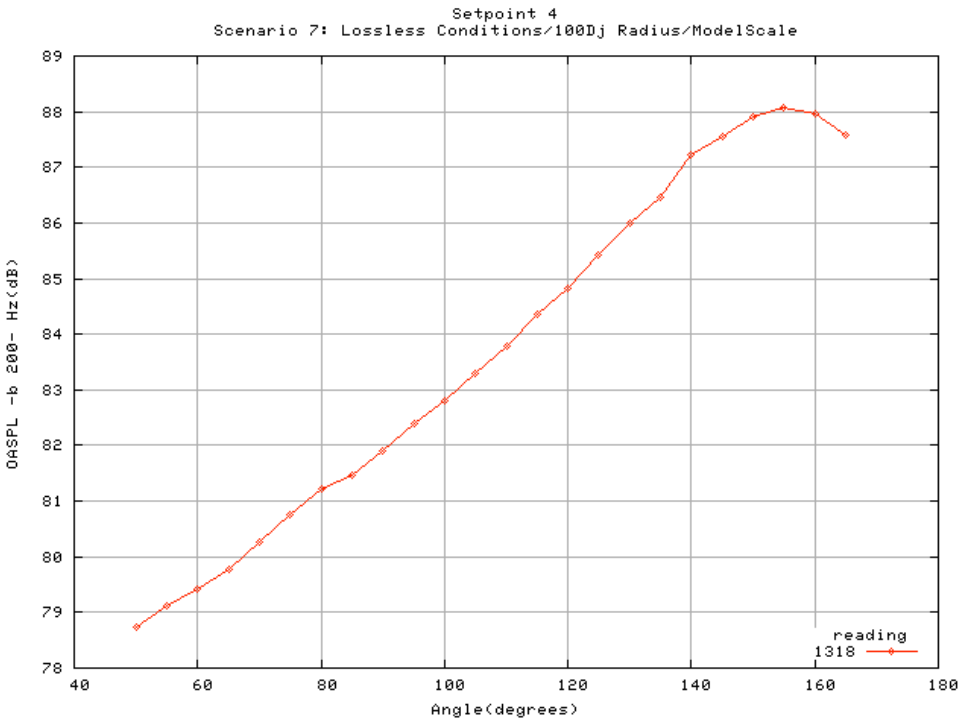
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5		30.3							31.9	32.1	32.4	44.6
199.5	44.9	47.1	46.3	46.4	46.7	47.0	47.3	47.9	49.6	50.2	50.5	51.1
251.2	47.7	48.3	48.9	49.2	49.5	50.1	50.6	51.2	51.9	52.6	53.0	53.6
316.2	50.5	50.7	51.1	51.7	52.4	53.1	53.8	54.2	54.5	54.8	55.2	55.9
398.1	52.1	52.7	53.4	53.9	54.6	55.4	56.0	56.4	56.4	56.7	57.1	57.7
501.2	52.9	54.1	55.2	55.9	56.4	56.7	57.0	57.3	57.6	58.1	58.4	59.0
631.0	55.3	56.3	57.1	57.7	58.0	58.2	58.4	58.8	59.5	59.7	60.1	60.7
794.3	56.6	57.7	58.4	58.8	59.2	59.6	60.0	60.5	60.8	61.2	61.5	61.9
1000.0	57.3	58.4	59.2	59.6	59.9	60.3	60.7	61.2	61.6	62.1	62.5	63.0
1258.9	58.3	59.5	60.0	60.2	60.8	61.3	61.8	62.0	62.4	62.9	63.3	63.9
1584.9	59.4	60.0	60.5	60.8	61.3	61.8	62.3	62.7	63.3	63.5	64.0	64.3
1995.3	59.9	60.5	60.9	61.2	61.7	62.1	62.5	62.9	63.3	63.8	64.2	64.8
2511.9	60.5	61.1	61.3	61.5	62.1	62.6	63.0	63.4	63.7	64.2	64.7	65.1
3162.3	61.2	61.7	61.7	62.2	62.6	63.0	63.4	63.8	64.1	64.5	64.9	65.3
3981.1	61.4	61.4	61.6	62.2	62.7	63.1	63.5	63.9	64.3	64.6	64.8	65.1
5011.9	60.8	61.1	61.7	62.1	62.4	62.8	63.2	63.7	64.0	64.3	64.6	65.2
6309.6	60.5	61.2	61.5	61.8	62.2	62.6	62.9	63.4	63.7	64.2	64.4	64.8
7943.3	60.4	60.9	61.0	61.4	61.7	62.2	62.6	62.9	63.4	63.8	64.1	64.5
10000.0	60.3	60.4	60.5	60.9	61.4	61.8	62.2	62.5	63.0	63.3	63.7	64.0
12589.3	60.1	59.8	60.1	60.4	60.8	61.3	61.7	62.1	62.5	63.0	63.2	63.5
15848.9	59.5	59.3	59.5	59.9	60.3	60.8	61.2	61.5	61.9	62.4	62.7	63.0
19952.6	58.6	58.7	58.8	59.2	59.7	60.1	60.5	60.9	61.2	61.5	62.1	62.3
25118.9	57.9	58.0	58.1	58.3	59.0	59.5	59.9	60.2	60.5	60.9	61.5	61.7
31622.8	57.1	57.3	57.5	57.8	58.2	58.7	59.1	59.4	59.8	60.3	60.6	60.9
39810.7	56.0	56.2	56.5	56.7	57.2	57.7	58.1	58.4	58.8	59.2	59.3	59.9
50118.7	54.7	54.9	55.3	55.6	56.2	56.7	57.1	57.3	57.6	58.2	58.5	58.8
63095.7	53.3	53.6	54.0	54.5	55.0	55.5	56.0	56.1	56.6	57.1	57.4	57.7
79432.8	51.9	52.2	52.8	53.3	53.9	54.3	54.7	55.1	55.5	56.1	56.2	56.7

Setpoint 3 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	45.2	45.6	48.9	49.5	50.3	51.0	52.2	55.0	56.6	57.8	59.1	60.1
199.5	51.6	52.1	52.5	53.1	53.8	54.7	56.0	57.3	59.0	60.4	61.7	62.7
251.2	54.1	54.5	54.9	55.3	56.1	57.0	58.4	59.8	61.5	63.0	64.3	65.3
316.2	56.5	56.9	57.3	57.7	58.3	59.0	60.3	61.7	63.4	64.7	66.1	67.1
398.1	58.1	58.5	58.9	59.3	60.0	60.8	62.0	63.4	65.1	66.5	67.7	68.6
501.2	59.5	59.9	60.4	61.0	61.7	62.5	63.9	65.3	66.8	68.1	69.3	70.1
631.0	61.3	61.9	62.4	62.9	63.4	64.2	65.3	66.4	68.0	69.3	70.4	71.0
794.3	62.3	62.9	63.4	64.0	64.7	65.5	66.7	67.9	69.2	70.3	71.2	71.6
1000.0	63.6	64.2	64.8	65.3	66.0	66.7	67.9	68.9	70.0	70.9	71.5	71.5
1258.9	64.5	65.1	65.8	66.3	67.1	67.9	69.1	69.7	70.9	71.4	71.8	71.2
1584.9	64.9	65.6	66.2	66.7	67.3	68.1	69.1	70.0	70.8	71.3	71.1	70.0
1995.3	65.3	65.8	66.4	67.1	67.8	68.5	69.3	69.9	70.7	70.7	70.2	68.5
2511.9	65.6	66.3	66.8	67.4	67.9	68.6	69.5	69.9	70.3	69.8	68.6	66.6
3162.3	65.7	66.4	66.8	67.3	67.9	68.5	69.2	69.5	69.5	68.6	66.9	64.6
3981.1	65.7	66.3	66.8	67.2	67.6	68.2	68.9	68.8	68.3	67.2	65.1	62.7
5011.9	65.5	66.2	66.6	67.0	67.2	67.6	68.1	67.9	67.0	65.9	63.6	61.1
6309.6	65.2	65.6	66.0	66.5	66.8	67.2	67.6	67.2	65.6	64.3	61.9	59.2
7943.3	64.8	65.3	65.7	66.2	66.4	66.6	66.9	66.2	64.6	62.9	60.2	57.5
10000.0	64.4	64.9	65.4	65.6	66.0	66.0	66.0	65.1	63.3	61.6	58.9	56.3
12589.3	64.0	64.5	64.7	65.0	65.4	65.3	65.2	64.2	62.1	60.3	57.6	54.9
15848.9	63.4	64.0	64.2	64.5	64.9	64.7	64.5	63.3	60.9	59.2	56.3	53.3
19952.6	62.8	63.1	63.4	63.9	64.2	64.0	63.3	62.0	59.7	57.9	55.2	51.9
25118.9	62.1	62.6	62.6	63.2	63.5	63.3	62.4	61.2	58.7	56.8	53.7	50.6
31622.8	61.3	61.8	61.9	62.3	62.7	62.4	61.6	60.1	57.4	55.6	52.4	49.1
39810.7	60.4	60.8	60.8	61.2	61.3	61.3	60.3	58.8	56.6	54.4	51.1	47.7
50118.7	59.2	59.5	59.7	60.1	60.2	60.2	59.0	57.6	55.8	53.1	49.8	46.2
63095.7	58.2	58.5	58.6	58.9	59.2	58.9	57.9	56.5	55.0	52.0	48.6	45.0
79432.8	57.2	57.5	57.6	57.8	58.1	57.9	56.5	55.3	54.0	51.1	47.6	44.1

Setpoint	4
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/c_{amb})	0.601
Ideal jet velocity (ft/s)	665.504
Temperature ratio (T_j/T_{amb})	0.932
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





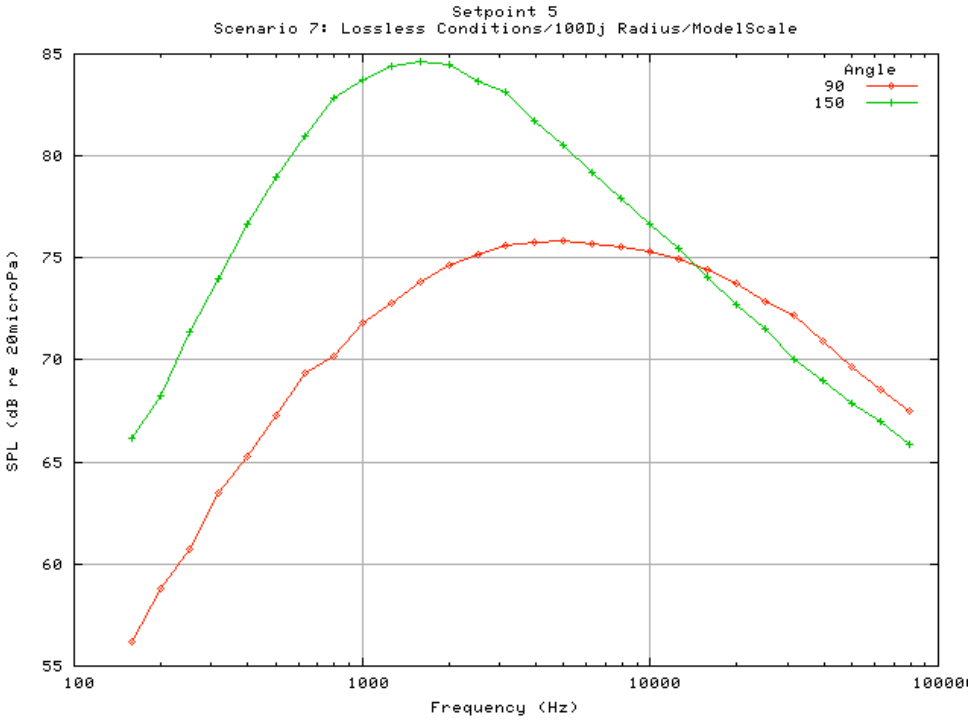
Setpoint 4 continued

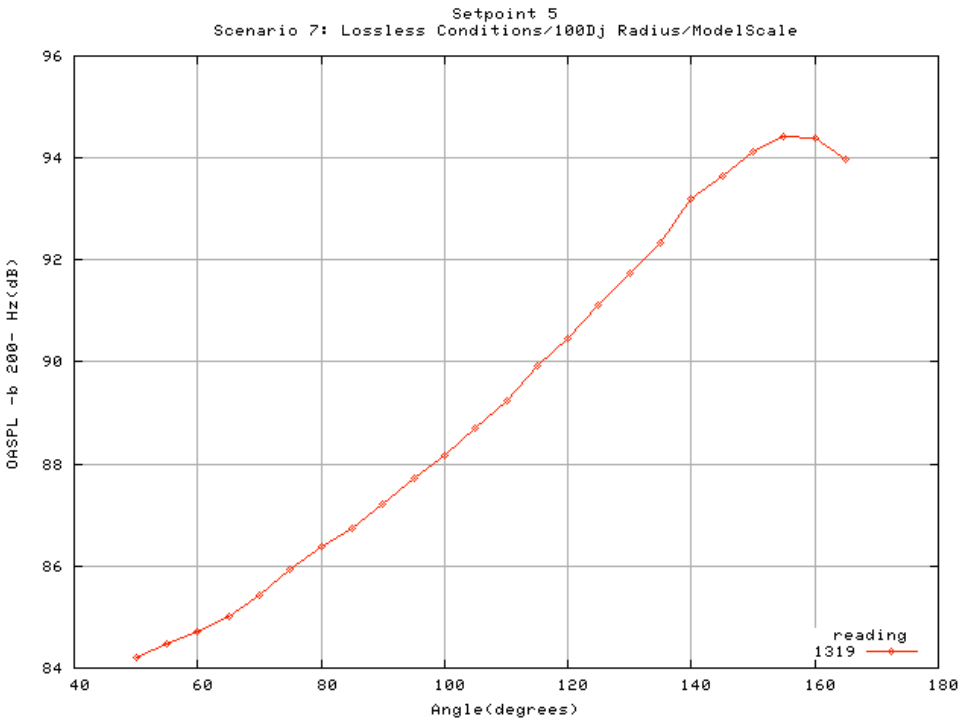
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	44.3	44.9	45.5	46.2	46.7	47.1	50.1	50.6			53.6	54.2
199.5	50.4	51.0	51.7	52.2	52.6	53.0	53.4	53.9	54.5	55.2	55.6	56.1
251.2	53.1	53.7	54.1	54.4	54.7	55.3	55.8	56.5	57.1	57.8	58.0	58.4
316.2	54.9	55.2	55.9	56.6	57.4	58.1	58.7	59.2	59.5	59.9	60.2	60.6
398.1	56.2	57.0	58.0	58.7	59.5	60.1	60.6	60.9	61.2	61.7	62.2	62.7
501.2	57.7	58.9	60.1	60.9	61.5	61.9	62.3	62.7	63.2	63.7	64.0	64.4
631.0	59.9	60.9	61.8	62.4	62.8	63.3	63.7	64.2	65.1	65.2	65.7	66.2
794.3	61.5	62.6	63.3	63.8	64.2	64.6	64.9	65.4	65.8	66.3	66.8	67.4
1000.0	62.7	63.6	64.4	64.9	65.2	65.7	66.2	66.6	67.3	67.8	68.2	68.7
1258.9	64.2	65.3	65.9	65.9	66.4	67.0	67.5	67.8	68.3	68.9	69.2	69.7
1584.9	65.3	65.9	66.4	66.7	67.2	67.6	68.0	68.3	68.9	69.2	69.9	70.4
1995.3	65.9	66.5	66.9	67.2	67.8	68.3	68.8	69.1	69.6	70.2	70.5	70.9
2511.9	66.8	67.3	67.4	67.7	68.2	68.8	69.3	69.7	70.0	70.5	70.7	71.3
3162.3	67.6	68.2	68.2	68.4	68.9	69.4	69.8	70.2	70.4	70.7	71.2	72.0
3981.1	67.7	67.8	68.1	68.5	69.0	69.5	69.9	70.1	70.7	71.1	71.3	71.8
5011.9	67.3	67.5	68.1	68.6	68.9	69.3	69.7	69.9	70.4	70.8	71.2	71.8
6309.6	67.1	67.6	67.9	68.3	68.7	69.2	69.7	69.8	70.3	70.7	71.1	71.7
7943.3	67.2	67.5	67.7	67.9	68.5	68.9	69.3	69.5	69.9	70.4	70.8	71.3
10000.0	67.1	67.2	67.2	67.4	68.1	68.6	69.1	69.3	69.7	70.2	70.6	71.0
12589.3	66.7	66.7	66.7	67.1	67.6	68.1	68.6	68.7	69.2	69.8	70.1	70.6
15848.9	66.2	66.0	66.2	66.5	67.0	67.5	67.9	68.2	68.7	69.2	69.6	70.0
19952.6	65.2	65.5	65.5	65.8	66.3	66.8	67.3	67.5	67.9	68.3	69.0	69.3
25118.9	64.3	64.7	64.8	64.9	65.6	66.1	66.6	66.8	67.0	67.6	68.3	68.7
31622.8	63.5	63.8	64.1	64.3	64.8	65.2	65.7	66.0	66.4	66.9	67.5	67.8
39810.7	62.3	62.6	62.9	63.2	63.7	64.3	64.8	64.9	65.3	65.8	66.1	66.7
50118.7	61.0	61.4	61.7	62.0	62.5	63.2	63.7	63.7	64.0	64.7	65.2	65.6
63095.7	59.7	60.1	60.6	60.8	61.4	62.0	62.6	62.6	63.0	63.5	64.1	64.5
79432.8	58.5	58.9	59.4	59.7	60.2	60.8	61.4	61.6	61.9	62.6	63.0	63.4

Setpoint 4 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	54.7	55.0	55.3	55.6	56.1	56.7	58.1	59.7	61.7	63.4	65.1	66.5
199.5	56.6	56.9	57.2	57.6	58.2	59.0	60.4	61.9	63.9	65.5	67.0	68.3
251.2	58.9	59.2	59.7	60.2	60.9	61.8	63.3	64.8	66.7	68.3	69.7	70.8
316.2	61.0	61.2	61.5	62.1	62.9	64.0	65.8	67.5	69.4	71.0	72.5	73.6
398.1	63.0	63.3	63.7	64.2	65.0	66.1	67.8	69.5	71.5	73.1	74.5	75.4
501.2	64.7	65.0	65.3	65.9	66.7	67.8	69.6	71.3	73.2	74.7	76.1	77.1
631.0	66.7	67.2	67.8	68.3	69.1	70.2	71.8	73.3	75.1	76.6	77.8	78.4
794.3	67.9	68.6	69.2	70.1	70.9	71.8	73.4	74.9	76.5	77.8	78.7	79.2
1000.0	69.3	69.8	70.4	71.1	72.0	73.0	74.6	76.0	77.5	78.5	79.2	79.2
1258.9	70.2	70.9	71.6	72.3	73.1	74.1	75.6	76.7	78.2	78.8	79.2	78.4
1584.9	71.0	71.7	72.5	73.1	73.8	74.7	76.1	77.3	78.3	78.7	78.3	77.0
1995.3	71.4	72.1	72.5	73.4	74.4	75.2	76.5	77.3	78.1	78.0	77.1	75.1
2511.9	71.8	72.6	73.3	74.2	74.8	75.5	76.6	77.1	77.5	77.0	75.3	73.1
3162.3	72.3	72.9	73.4	74.1	74.8	75.5	76.4	76.7	76.7	75.8	73.8	71.4
3981.1	72.4	72.9	73.4	74.0	74.7	75.4	76.2	76.1	75.3	74.1	71.9	69.4
5011.9	72.1	72.8	73.3	73.9	74.4	74.8	75.5	75.2	74.1	72.6	70.2	67.9
6309.6	72.0	72.4	73.0	73.5	74.0	74.4	74.8	74.3	72.9	71.1	68.6	66.0
7943.3	71.8	72.4	72.8	73.3	73.6	73.9	74.2	73.3	71.7	69.7	67.0	64.3
10000.0	71.5	72.1	72.4	72.8	73.3	73.3	73.4	72.3	70.4	68.4	65.7	63.2
12589.3	71.0	71.7	72.0	72.5	72.8	72.7	72.6	71.4	69.0	67.2	64.4	61.7
15848.9	70.5	71.1	71.4	71.9	72.3	72.0	71.6	70.3	67.8	65.9	63.1	60.2
19952.6	69.9	70.3	70.6	71.2	71.5	71.2	70.4	68.9	66.5	64.6	61.8	58.7
25118.9	69.1	69.7	69.7	70.4	70.8	70.2	69.3	67.9	65.4	63.4	60.3	57.3
31622.8	68.3	68.8	69.1	69.4	69.8	69.3	68.3	66.6	63.9	62.1	58.8	55.6
39810.7	67.2	67.6	67.8	68.3	68.3	68.0	66.9	65.2	63.0	60.7	57.4	54.0
50118.7	66.0	66.3	66.6	67.1	67.1	66.7	65.5	63.8	62.0	59.3	55.9	52.5
63095.7	64.9	65.2	65.5	65.9	65.9	65.4	64.3	62.6	61.2	58.1	54.6	51.4
79432.8	63.9	64.3	64.5	64.7	64.8	64.4	62.9	61.5	60.2	57.1	53.7	50.4

Setpoint	5
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.701
Ideal jet velocity (ft/s)	775.730
Temperature ratio (T_j/T_{amb})	0.906
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





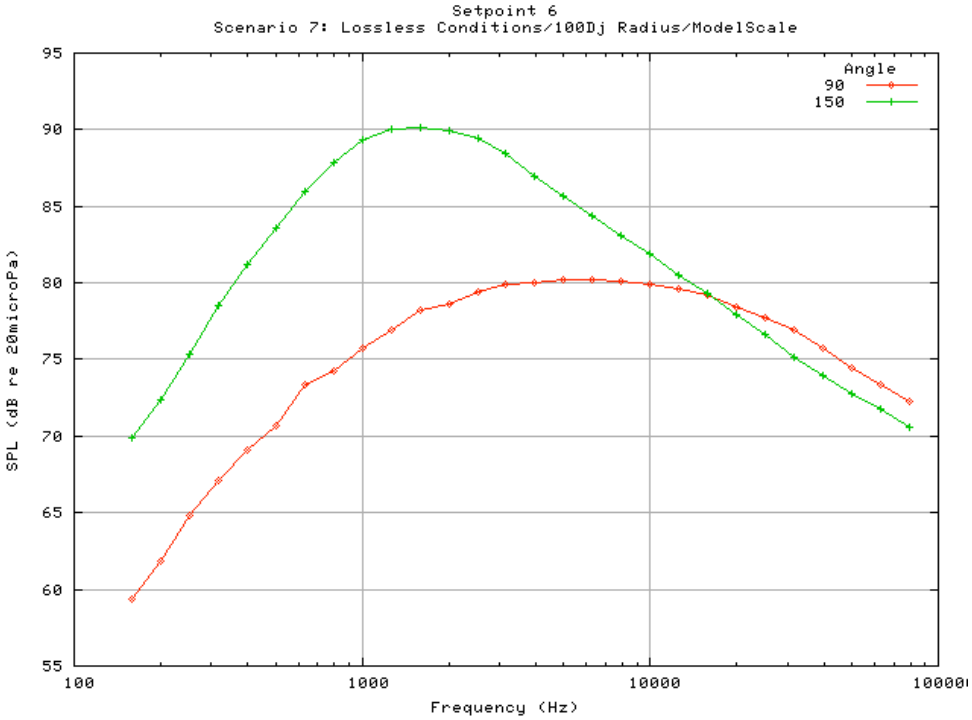
Setpoint 5 continued

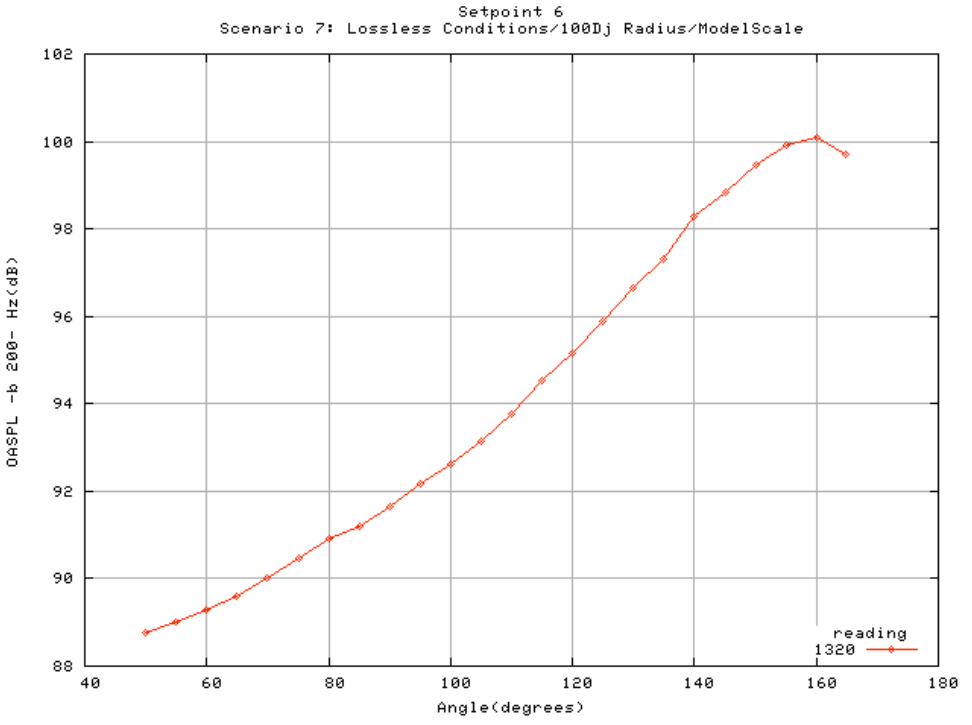
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	51.7	52.1	52.6	53.1	53.6	54.3	54.8	55.5	56.2	56.8	57.3	57.9
199.5	53.4	54.1	54.7	55.3	55.7	56.4	57.0	57.9	58.8	59.6	60.2	60.8
251.2	56.6	57.1	57.4	57.6	58.0	58.6	59.2	60.0	60.7	61.4	61.9	62.5
316.2	58.6	58.9	59.4	60.1	60.8	61.7	62.4	63.0	63.4	63.8	64.2	64.8
398.1	60.2	60.9	61.8	62.8	63.6	64.0	64.4	64.8	65.3	65.8	66.1	66.6
501.2	62.3	63.5	64.7	65.4	65.9	66.2	66.5	66.9	67.3	67.6	67.9	68.4
631.0	64.6	65.6	66.3	66.9	67.3	67.7	68.0	68.5	69.4	69.4	69.8	70.2
794.3	65.9	66.9	67.6	67.9	68.4	68.9	69.4	69.9	70.2	70.6	71.1	71.8
1000.0	67.6	68.5	69.2	69.6	69.7	70.3	70.7	71.2	71.9	72.3	72.8	73.3
1258.9	68.7	69.7	70.2	70.4	71.0	71.5	71.9	72.4	72.8	73.5	73.9	74.6
1584.9	70.3	70.7	71.1	71.4	71.9	72.4	72.8	73.3	73.8	74.4	74.9	75.3
1995.3	70.9	71.4	71.6	72.1	72.6	73.1	73.6	74.1	74.7	75.2	75.3	76.0
2511.9	72.3	72.6	72.6	72.8	73.1	73.8	74.4	74.8	75.1	75.6	76.0	76.7
3162.3	73.0	73.6	73.6	73.6	74.0	74.5	75.0	75.5	75.6	76.1	76.6	77.1
3981.1	72.9	72.9	73.2	73.6	74.1	74.5	74.9	75.3	75.7	76.4	76.8	77.3
5011.9	73.0	73.1	73.5	73.9	74.2	74.6	75.0	75.4	75.9	76.2	76.6	77.2
6309.6	72.7	73.1	73.4	73.8	74.0	74.5	74.9	75.2	75.7	76.2	76.7	77.2
7943.3	72.9	73.0	73.2	73.4	73.8	74.3	74.7	75.0	75.5	76.0	76.4	76.9
10000.0	72.9	72.9	72.8	73.1	73.4	74.0	74.5	74.8	75.3	75.9	76.2	76.8
12589.3	72.9	72.4	72.5	72.7	73.1	73.6	74.1	74.3	75.0	75.5	75.9	76.4
15848.9	72.0	71.8	72.0	72.1	72.5	73.0	73.4	73.8	74.4	75.1	75.3	75.9
19952.6	70.7	71.1	71.3	71.6	72.0	72.5	72.9	73.2	73.7	74.2	74.9	75.3
25118.9	70.0	70.3	70.5	70.7	71.4	71.8	72.2	72.5	72.9	73.4	74.3	74.5
31622.8	69.2	69.3	69.8	70.2	70.5	70.9	71.3	71.6	72.2	72.7	73.3	73.6
39810.7	67.9	68.3	68.5	68.9	69.4	69.8	70.3	70.4	71.0	71.5	71.9	72.5
50118.7	66.6	66.9	67.2	67.6	68.2	68.7	69.2	69.2	69.7	70.3	70.9	71.3
63095.7	65.2	65.5	66.0	66.4	66.9	67.5	68.0	68.0	68.6	69.2	69.8	70.1
79432.8	64.0	64.2	64.9	65.3	65.7	66.3	66.8	67.0	67.5	68.2	68.6	69.0

Setpoint 5 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	58.5	58.9	59.3	59.9	60.6	61.5	62.8	64.3	66.2	67.7	69.3	70.9
199.5	61.4	61.7	61.9	62.1	62.5	63.1	64.5	66.1	68.3	70.1	71.8	73.2
251.2	63.1	63.6	64.1	64.7	65.5	66.3	67.8	69.4	71.4	73.2	74.8	76.0
316.2	65.2	65.5	65.8	66.2	66.9	68.1	70.0	71.9	74.0	75.7	77.2	78.3
398.1	67.1	67.5	67.9	68.3	69.3	70.7	72.6	74.5	76.6	78.4	80.0	81.0
501.2	68.8	69.2	69.7	70.5	71.4	72.8	74.8	76.8	79.0	80.8	82.4	83.4
631.0	70.6	71.3	71.8	72.5	73.6	74.9	76.8	78.7	81.0	82.8	84.2	84.9
794.3	72.3	72.8	73.3	74.1	75.2	76.7	78.8	80.8	82.9	84.4	85.6	86.1
1000.0	73.9	74.5	75.2	76.0	77.0	78.2	80.1	81.8	83.7	85.1	86.0	86.0
1258.9	75.3	76.0	76.6	77.2	78.2	79.6	81.4	82.7	84.4	85.2	85.6	84.9
1584.9	76.0	76.8	77.6	78.4	79.2	80.4	82.1	83.6	84.7	85.2	84.8	83.4
1995.3	76.7	77.6	78.2	78.9	79.9	81.1	82.6	83.4	84.5	84.4	83.4	81.2
2511.9	77.2	77.9	78.6	79.4	80.3	81.4	82.7	83.2	83.7	83.2	81.7	79.4
3162.3	77.7	78.4	79.0	79.9	80.5	81.3	82.4	83.1	83.2	82.0	79.9	77.5
3981.1	77.7	78.5	79.3	79.9	80.5	81.5	82.4	82.4	81.7	80.4	78.2	75.7
5011.9	77.6	78.6	79.1	79.8	80.4	81.0	81.8	81.6	80.5	79.0	76.7	74.0
6309.6	77.7	78.4	78.9	79.6	80.3	80.7	81.2	80.5	79.2	77.7	75.1	72.4
7943.3	77.5	78.2	78.7	79.4	79.8	80.1	80.4	79.7	78.0	76.2	73.6	70.7
10000.0	77.3	78.0	78.4	78.9	79.4	79.6	79.6	78.7	76.6	75.0	72.3	69.5
12589.3	76.9	77.7	78.1	78.6	79.1	79.0	78.7	77.7	75.5	73.7	70.9	68.0
15848.9	76.5	77.2	77.6	78.1	78.5	78.3	77.8	76.5	74.1	72.4	69.6	66.5
19952.6	75.9	76.4	76.9	77.4	77.8	77.3	76.6	75.1	72.7	71.1	68.3	65.0
25118.9	75.1	75.8	75.9	76.6	77.0	76.4	75.3	74.0	71.5	69.8	66.7	63.4
31622.8	74.2	74.8	75.2	75.6	75.8	75.3	74.2	72.6	70.0	68.3	65.1	61.8
39810.7	73.1	73.6	73.9	74.3	74.3	73.9	72.6	71.1	69.0	66.7	63.5	60.0
50118.7	71.8	72.2	72.6	72.9	72.8	72.4	71.1	69.6	67.9	65.2	61.9	58.3
63095.7	70.6	71.1	71.4	71.6	71.6	71.0	69.8	68.3	67.0	63.9	60.4	56.8
79432.8	69.6	70.0	70.3	70.4	70.4	69.9	68.3	67.1	65.9	62.8	59.4	55.7

Setpoint	6
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.799
Ideal jet velocity (ft/s)	884.613
Temperature ratio (T_j/T_{amb})	0.877
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





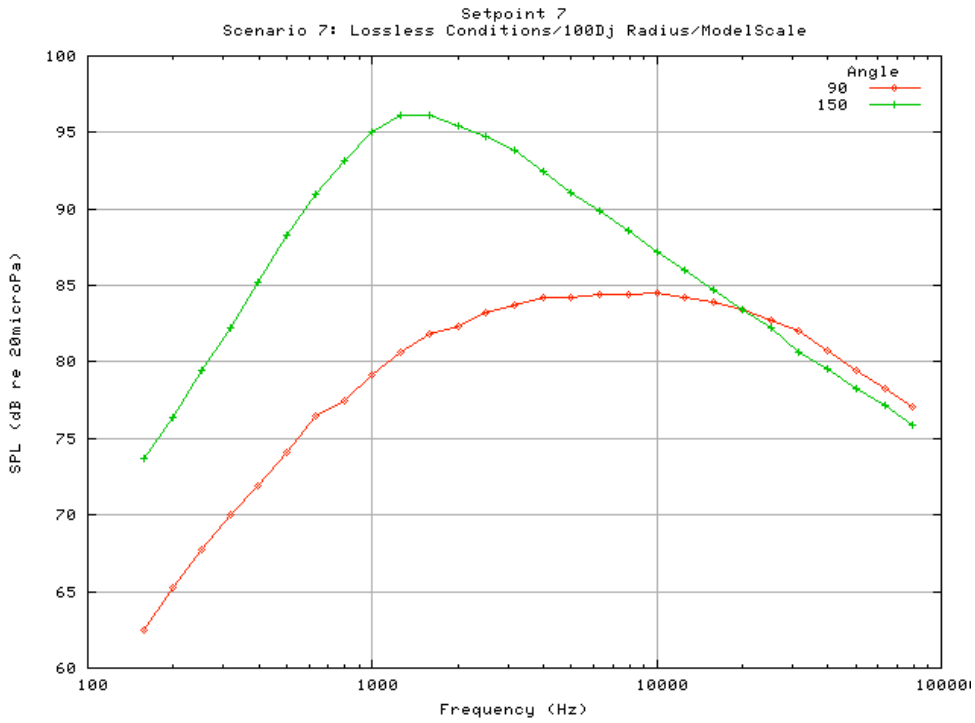
Setpoint 6 continued

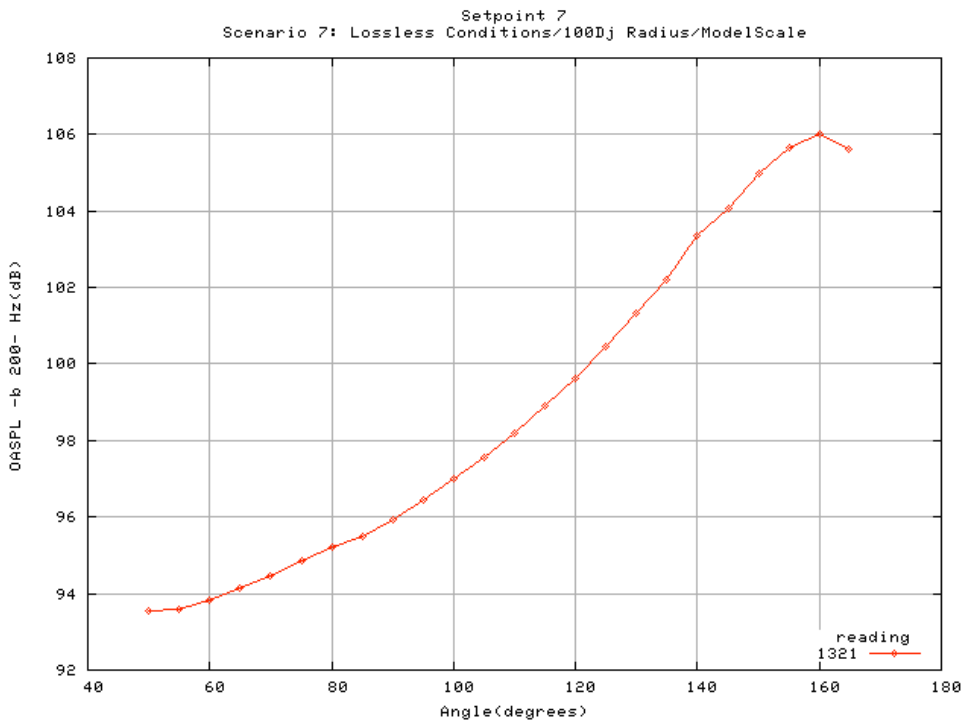
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	54.7	55.1	55.5	56.0	56.4	57.1	57.7	58.6	59.4	60.2	60.8	61.5
199.5	57.5	58.1	58.7	59.2	59.5	60.0	60.4	61.1	61.8	62.6	63.2	63.8
251.2	60.3	60.9	61.4	61.7	62.1	62.8	63.4	64.2	64.8	65.4	65.8	66.4
316.2	61.9	62.5	63.2	64.0	64.8	65.6	66.2	66.7	67.1	67.4	67.7	68.3
398.1	63.8	64.8	65.8	66.6	67.3	67.8	68.2	68.7	69.1	69.5	69.9	70.4
501.2	65.8	66.8	67.9	68.5	69.0	69.4	69.7	70.2	70.7	71.2	71.6	72.1
631.0	68.3	69.4	70.2	70.7	71.0	71.4	71.8	72.3	73.3	73.4	73.8	74.5
794.3	69.8	70.8	71.5	71.9	72.3	72.9	73.4	73.8	74.3	74.8	75.1	75.7
1000.0	71.3	72.2	72.9	73.3	73.6	74.2	74.7	75.2	75.8	76.4	76.7	77.2
1258.9	72.9	73.7	74.0	74.2	74.7	75.4	76.0	76.6	76.9	77.5	77.8	78.4
1584.9	74.4	74.8	75.2	75.3	75.8	76.4	76.9	77.4	78.2	78.7	79.2	79.7
1995.3	75.5	75.8	75.9	76.5	77.0	77.3	77.7	78.1	78.7	79.2	79.4	80.1
2511.9	76.8	77.2	77.7	77.9	78.0	78.3	78.6	79.0	79.4	80.1	80.5	80.9
3162.3	76.9	77.2	77.5	77.8	78.1	78.5	79.0	79.6	80.0	80.5	80.8	81.3
3981.1	77.4	77.4	77.6	78.0	78.6	79.0	79.4	79.7	80.0	80.8	81.0	81.5
5011.9	77.3	77.4	77.8	78.2	78.3	79.0	79.5	79.7	80.2	80.6	81.1	81.7
6309.6	77.4	77.6	77.8	78.2	78.4	79.0	79.6	79.7	80.2	80.6	81.2	81.7
7943.3	77.9	77.8	77.8	78.0	78.5	78.9	79.2	79.7	80.1	80.6	81.1	81.6
10000.0	77.8	77.7	77.8	78.0	78.2	78.8	79.3	79.4	79.9	80.5	80.9	81.4
12589.3	77.6	77.6	77.6	77.9	78.2	78.6	79.0	79.1	79.6	80.0	80.5	80.9
15848.9	76.9	77.0	77.3	77.4	77.8	78.2	78.5	78.7	79.2	79.8	80.1	80.6
19952.6	75.8	76.3	76.5	76.8	77.2	77.6	78.0	78.1	78.5	78.9	79.7	80.1
25118.9	75.1	75.4	75.6	75.8	76.6	77.0	77.3	77.4	77.7	78.2	79.0	79.4
31622.8	74.0	74.3	74.8	75.1	75.6	76.0	76.4	76.5	77.0	77.5	78.1	78.5
39810.7	72.6	73.0	73.4	73.6	74.3	74.9	75.3	75.4	75.7	76.3	76.7	77.3
50118.7	71.0	71.5	72.0	72.2	73.0	73.6	74.2	74.2	74.5	75.1	75.8	76.1
63095.7	69.5	70.1	70.6	70.9	71.6	72.3	73.0	73.0	73.3	73.9	74.6	74.9
79432.8	68.2	68.7	69.4	69.7	70.3	71.1	71.7	72.0	72.3	72.9	73.5	73.8

Setpoint 6 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	62.2	62.7	63.1	63.5	64.2	64.9	66.3	67.9	69.9	71.7	73.5	75.7
199.5	64.5	65.0	65.4	65.8	66.5	67.2	68.5	70.2	72.4	74.3	76.2	77.8
251.2	67.0	67.4	67.8	68.2	68.7	69.5	71.1	73.1	75.4	77.3	79.1	80.5
316.2	68.9	69.4	69.9	70.4	71.0	72.2	74.2	76.2	78.5	80.4	82.2	83.5
398.1	70.8	71.2	71.8	72.5	73.6	74.9	76.9	78.9	81.2	83.1	84.8	86.0
501.2	72.8	73.4	74.0	74.7	75.7	77.1	79.2	81.3	83.6	85.5	87.1	88.2
631.0	75.0	75.3	75.8	76.3	77.3	79.0	81.2	83.4	86.0	87.9	89.5	90.2
794.3	76.3	76.9	77.7	78.5	79.4	80.9	83.1	85.5	87.9	89.7	91.1	91.7
1000.0	77.8	78.4	79.2	80.1	81.4	82.7	85.0	87.1	89.3	91.0	92.1	92.2
1258.9	79.0	79.7	80.5	81.3	82.6	83.9	86.1	87.8	90.0	91.4	92.1	91.4
1584.9	80.3	80.9	81.6	82.6	83.9	85.2	86.9	88.6	90.2	91.0	90.9	89.6
1995.3	80.9	81.7	82.5	83.4	84.6	86.0	87.6	88.9	89.9	90.0	89.2	87.3
2511.9	81.5	82.2	83.0	84.0	85.0	86.3	87.9	88.8	89.5	88.9	87.3	85.3
3162.3	81.9	82.9	83.6	84.5	85.4	86.5	87.8	88.5	88.5	87.4	85.3	82.9
3981.1	82.2	83.1	83.9	84.6	85.5	86.6	87.7	87.8	87.0	85.6	83.6	81.1
5011.9	82.2	83.2	83.9	84.6	85.4	86.2	87.0	86.8	85.7	84.2	81.9	79.2
6309.6	82.4	83.0	83.7	84.5	85.4	85.9	86.5	85.9	84.4	82.7	80.3	77.6
7943.3	82.3	83.0	83.7	84.3	85.0	85.4	85.8	84.9	83.1	81.4	78.8	76.0
10000.0	82.0	82.8	83.4	84.0	84.6	84.9	84.9	83.9	81.9	80.1	77.6	74.8
12589.3	81.8	82.5	83.1	83.6	84.3	84.3	84.0	82.9	80.5	78.8	76.1	73.4
15848.9	81.3	82.1	82.6	83.2	83.8	83.6	83.0	81.6	79.3	77.5	74.9	71.9
19952.6	80.7	81.3	81.9	82.6	83.0	82.6	81.8	80.2	77.9	76.2	73.5	70.2
25118.9	80.0	80.7	81.0	81.8	82.2	81.6	80.5	79.2	76.7	74.9	71.9	68.7
31622.8	79.1	79.9	80.3	80.8	81.1	80.4	79.4	77.8	75.1	73.5	70.3	67.0
39810.7	77.9	78.6	79.0	79.4	79.4	78.9	77.7	76.1	74.0	71.8	68.6	65.1
50118.7	76.7	77.2	77.6	78.0	78.0	77.3	76.0	74.6	72.8	70.2	67.0	63.3
63095.7	75.5	76.0	76.3	76.7	76.6	75.9	74.7	73.2	71.7	68.8	65.4	61.7
79432.8	74.4	75.0	75.2	75.4	75.4	74.7	73.2	72.0	70.6	67.6	64.3	60.6

Setpoint	7
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.902
Ideal jet velocity (ft/s)	998.312
Temperature ratio (T_j/T_{amb})	0.842
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





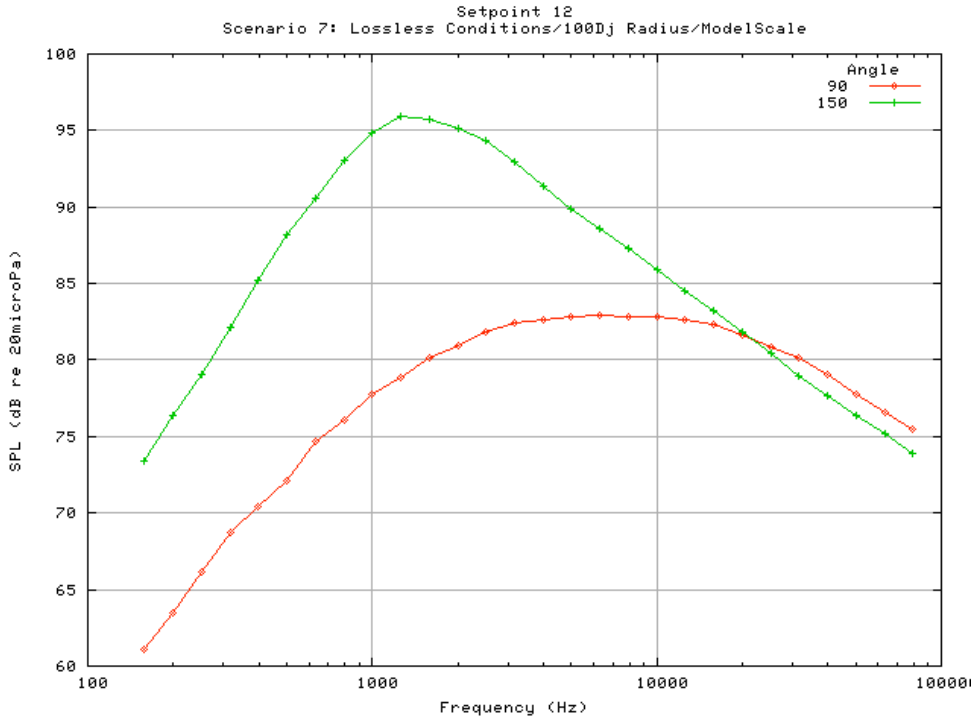
Setpoint 7 continued

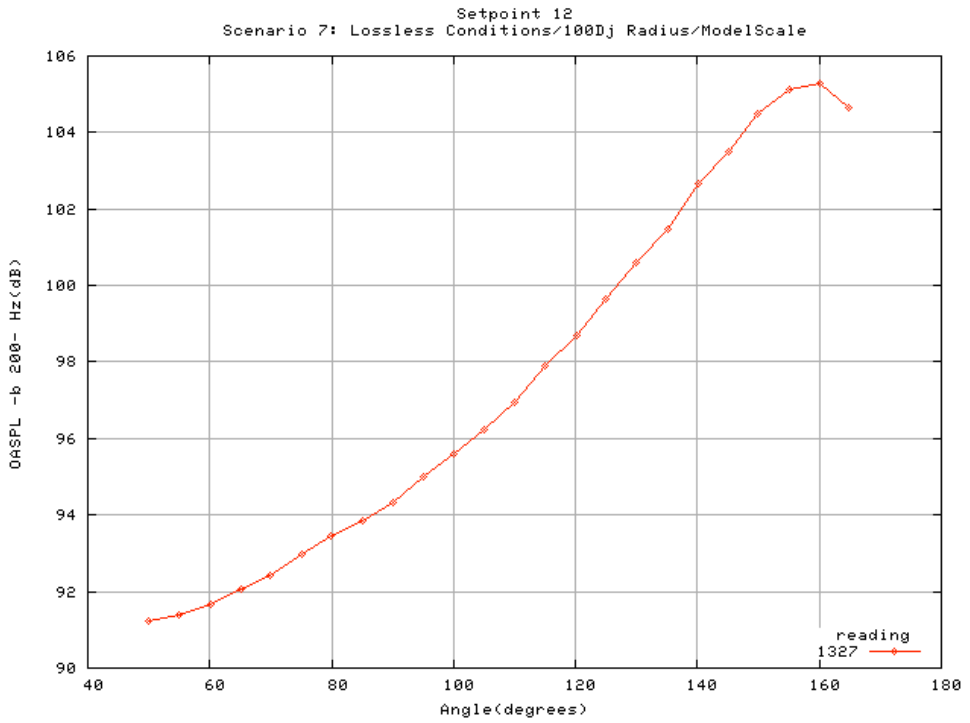
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	58.3	58.7	59.2	59.7	60.1	60.7	61.2	61.9	62.4	63.2	63.8	64.5
199.5	60.1	60.8	61.5	62.1	62.6	63.2	63.8	64.6	65.3	66.1	66.7	67.4
251.2	62.5	63.1	63.6	64.1	64.7	65.6	66.3	67.1	67.7	68.4	68.9	69.6
316.2	64.7	65.2	65.8	66.7	67.6	68.4	69.1	69.6	70.0	70.5	70.9	71.4
398.1	67.0	67.9	68.8	69.6	70.3	70.7	71.1	71.5	71.9	72.5	72.9	73.5
501.2	69.0	70.1	71.1	71.8	72.2	72.6	72.9	73.5	74.1	74.7	75.1	75.7
631.0	71.8	72.7	73.4	74.0	74.2	74.6	75.1	75.5	76.4	76.6	77.1	77.8
794.3	73.5	74.3	74.8	75.1	75.5	76.1	76.6	76.9	77.5	78.0	78.4	79.2
1000.0	74.8	75.6	76.2	76.5	76.9	77.6	78.2	78.5	79.2	79.6	80.3	81.0
1258.9	76.6	77.4	77.7	78.0	78.6	79.2	79.7	80.1	80.6	81.3	81.6	82.2
1584.9	78.3	78.3	78.6	78.9	79.5	80.1	80.6	81.1	81.8	82.3	82.8	83.4
1995.3	79.5	79.9	80.2	80.6	80.8	81.2	81.6	81.9	82.4	83.1	83.7	84.4
2511.9	80.2	80.4	80.5	80.9	81.5	82.0	82.4	82.8	83.2	83.8	84.3	84.9
3162.3	80.8	80.8	81.1	81.6	82.0	82.4	82.8	83.3	83.7	84.3	84.8	85.6
3981.1	81.5	81.3	81.6	82.0	82.5	82.8	83.2	83.6	84.2	84.9	85.3	85.9
5011.9	82.0	81.9	82.1	82.3	82.6	83.0	83.4	83.9	84.2	84.8	85.4	86.0
6309.6	82.9	82.6	82.5	82.9	82.9	83.3	83.7	84.1	84.4	85.0	85.5	86.0
7943.3	83.3	82.9	83.1	83.3	83.3	83.6	83.8	84.1	84.4	85.0	85.4	85.9
10000.0	83.5	83.2	83.2	83.3	83.5	83.8	84.0	84.0	84.5	84.9	85.5	85.9
12589.3	83.1	83.1	83.3	83.3	83.5	83.7	83.8	83.9	84.3	84.8	85.2	85.8
15848.9	82.4	82.3	82.7	82.9	83.1	83.3	83.4	83.6	83.9	84.5	84.9	85.4
19952.6	81.2	81.5	81.8	82.1	82.5	82.8	83.0	83.1	83.4	83.7	84.5	85.0
25118.9	80.1	80.5	80.7	80.9	81.7	82.0	82.3	82.4	82.7	83.2	84.0	84.3
31622.8	78.7	79.1	79.6	80.0	80.5	81.0	81.4	81.6	82.0	82.5	83.1	83.5
39810.7	77.1	77.5	78.0	78.4	79.1	79.7	80.2	80.4	80.8	81.3	81.7	82.3
50118.7	75.3	75.8	76.3	76.8	77.6	78.3	78.9	79.0	79.5	80.1	80.8	81.2
63095.7	73.7	74.1	74.8	75.3	76.1	76.9	77.5	77.8	78.3	78.9	79.6	80.0
79432.8	72.1	72.7	73.3	74.0	74.6	75.4	76.1	76.6	77.1	77.8	78.3	78.8

Setpoint 7 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	65.2	65.8	66.4	67.0	67.8	68.7	70.0	71.6	73.7	75.6	77.6	79.5
199.5	68.1	68.7	69.2	69.7	70.3	71.0	72.3	74.0	76.3	78.4	80.5	82.2
251.2	70.2	70.7	71.2	71.6	72.3	73.2	74.9	76.9	79.4	81.6	83.5	85.1
316.2	71.9	72.4	72.9	73.5	74.4	75.6	77.6	79.8	82.3	84.4	86.4	87.9
398.1	74.2	74.9	75.5	76.1	77.0	78.1	80.2	82.5	85.3	87.5	89.5	90.8
501.2	76.4	77.0	77.5	78.1	79.0	80.5	83.1	85.6	88.2	90.4	92.2	93.3
631.0	78.3	78.9	79.6	80.4	81.6	83.4	85.7	88.1	91.0	93.2	94.8	95.5
794.3	79.9	80.6	81.3	82.4	83.7	85.4	87.8	90.4	93.2	95.2	96.7	97.2
1000.0	81.8	82.2	82.9	83.8	85.2	87.0	89.8	92.3	95.0	97.0	98.2	98.2
1258.9	82.7	83.4	84.3	85.2	86.7	88.3	91.0	93.4	96.1	97.7	98.5	97.8
1584.9	84.2	84.8	85.7	86.6	87.9	89.7	92.1	94.2	96.1	97.4	97.5	96.4
1995.3	84.8	85.4	86.3	87.6	88.9	90.5	92.4	93.9	95.4	95.8	95.5	94.0
2511.9	85.5	86.4	87.2	88.4	89.5	90.9	92.8	93.9	94.7	94.4	93.2	91.4
3162.3	86.3	87.2	87.8	88.8	89.8	91.4	92.9	93.7	93.9	92.8	91.2	89.1
3981.1	86.5	87.3	88.1	89.2	90.4	91.6	93.0	93.2	92.5	91.1	89.3	86.7
5011.9	86.6	87.5	88.3	89.2	90.3	91.3	92.3	92.2	91.1	89.6	87.5	85.0
6309.6	86.8	87.4	88.2	89.3	90.1	91.1	91.8	91.3	89.9	88.2	85.9	83.3
7943.3	86.7	87.4	88.2	89.0	89.9	90.6	91.1	90.3	88.6	86.7	84.3	81.8
10000.0	86.5	87.3	88.1	88.8	89.6	90.0	90.2	89.1	87.2	85.5	83.0	80.5
12589.3	86.3	87.1	87.9	88.6	89.3	89.5	89.4	88.1	86.0	84.2	81.7	79.1
15848.9	86.0	86.8	87.4	88.1	88.8	88.7	88.4	86.9	84.7	82.9	80.4	77.5
19952.6	85.6	86.1	86.8	87.6	88.1	87.8	87.1	85.6	83.4	81.7	79.2	76.1
25118.9	85.0	85.6	86.0	86.9	87.2	86.8	85.9	84.5	82.2	80.4	77.7	74.5
31622.8	84.1	84.8	85.3	85.8	86.1	85.6	84.7	83.1	80.7	78.9	76.1	72.8
39810.7	83.0	83.5	84.0	84.5	84.4	84.1	83.0	81.5	79.5	77.3	74.5	71.0
50118.7	81.7	82.1	82.7	83.0	82.9	82.5	81.4	79.9	78.2	75.6	72.7	69.1
63095.7	80.5	80.9	81.4	81.6	81.6	81.0	80.0	78.4	77.2	74.1	71.0	67.4
79432.8	79.5	79.8	80.2	80.3	80.2	79.7	78.3	77.0	75.9	72.9	69.8	66.1

Setpoint	12
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.897
Ideal jet velocity (ft/s)	994.700
Temperature ratio (T_j/T_{amb})	0.997
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





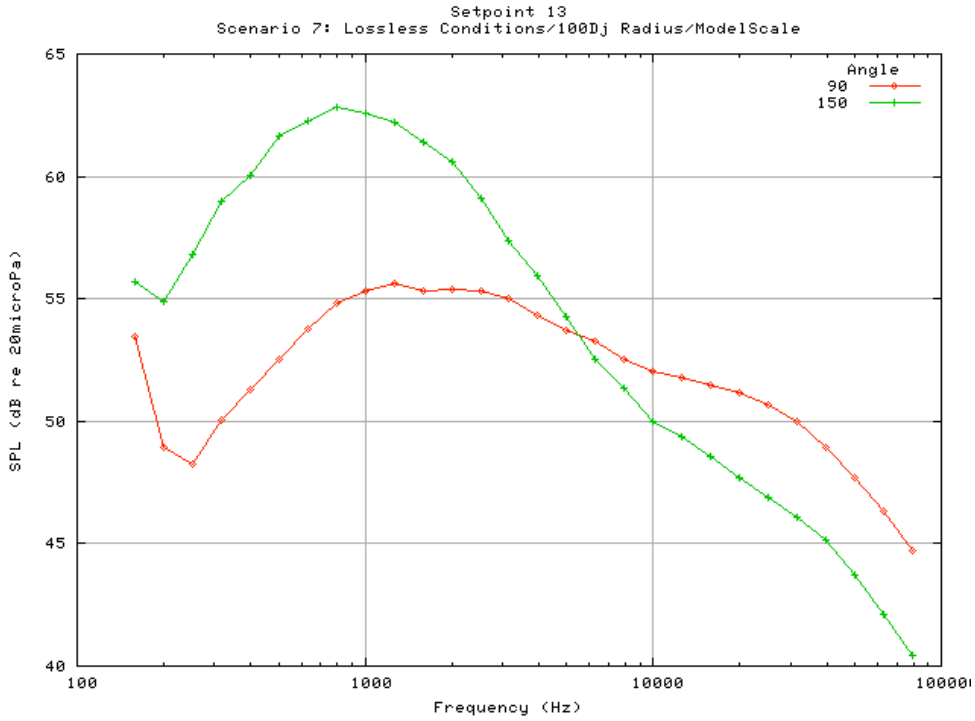
Setpoint 12 continued

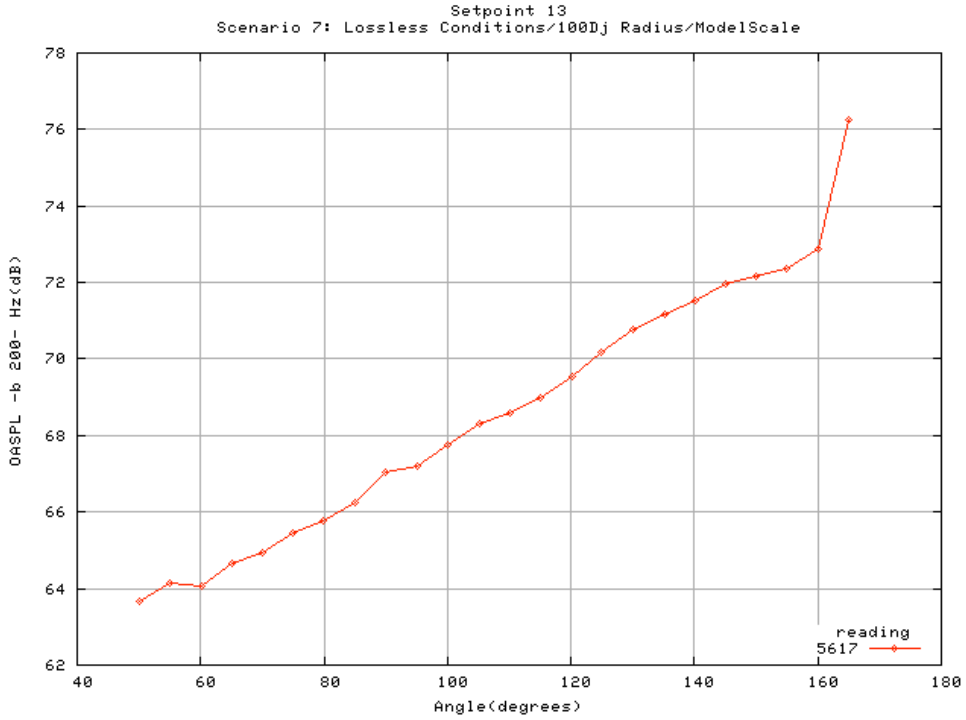
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.0	57.3	57.7	58.3	58.7	59.3	59.8	60.5	61.1	61.9	62.4	63.1
199.5	58.6	59.1	59.7	60.3	60.7	61.2	61.9	62.7	63.5	64.4	65.0	65.7
251.2	61.5	62.1	62.5	62.9	63.4	64.0	64.8	65.6	66.1	66.9	67.4	68.1
316.2	63.0	63.4	64.1	65.1	65.8	66.6	67.4	68.1	68.7	69.3	69.7	70.1
398.1	65.0	65.9	66.9	67.9	68.5	69.0	69.6	70.0	70.5	71.1	71.5	72.1
501.2	67.0	68.1	69.1	69.8	70.2	70.4	70.7	71.4	72.1	72.9	73.3	74.0
631.0	69.9	70.8	71.7	72.2	72.4	72.8	73.4	73.9	74.7	74.9	75.6	76.4
794.3	71.4	72.2	72.7	73.4	73.7	74.1	75.1	75.6	76.1	76.9	77.4	78.1
1000.0	73.1	73.9	74.3	74.9	75.3	75.8	76.7	77.1	77.8	78.5	78.9	79.6
1258.9	75.0	75.7	76.1	76.4	76.9	77.3	77.9	78.3	78.8	79.6	80.3	81.0
1584.9	76.5	76.7	77.0	77.2	77.9	78.3	79.1	79.6	80.2	80.8	81.5	82.3
1995.3	77.3	77.8	78.1	78.6	79.0	79.3	80.1	80.5	81.0	81.7	82.1	82.8
2511.9	78.7	78.8	79.0	79.5	79.8	80.2	80.8	81.3	81.9	82.7	83.0	83.8
3162.3	78.9	79.3	79.4	79.9	80.2	80.6	81.3	81.8	82.4	83.1	83.5	84.3
3981.1	79.5	79.5	79.8	80.5	80.8	81.1	81.7	82.2	82.6	83.4	83.9	84.6
5011.9	79.6	79.9	80.0	80.5	80.8	81.2	81.8	82.4	82.8	83.5	84.0	84.8
6309.6	79.9	79.9	80.3	80.8	81.0	81.5	82.1	82.5	82.9	83.6	84.2	84.9
7943.3	80.6	80.3	80.5	80.8	81.1	81.4	82.0	82.4	82.8	83.5	84.1	84.7
10000.0	80.7	80.5	80.5	80.8	81.1	81.5	82.0	82.4	82.8	83.5	84.0	84.6
12589.3	80.3	80.3	80.4	80.7	81.0	81.3	81.8	82.1	82.6	83.1	83.8	84.4
15848.9	79.9	79.9	80.1	80.4	80.6	81.1	81.4	81.7	82.3	83.0	83.4	84.0
19952.6	78.8	79.3	79.4	79.7	80.0	81.1	80.9	81.2	81.6	82.1	83.1	83.5
25118.9	77.8	78.3	78.4	78.7	79.3	80.6	80.3	80.6	80.8	81.5	82.4	82.9
31622.8	76.7	77.1	77.5	78.0	78.3	79.0	79.4	79.7	80.2	80.8	81.5	82.0
39810.7	75.2	75.7	76.1	76.5	77.1	77.8	78.3	78.5	79.0	79.6	80.2	80.9
50118.7	73.6	74.1	74.6	75.1	75.7	76.9	77.1	77.3	77.7	78.4	79.2	79.6
63095.7	72.1	72.6	73.2	73.8	74.4	75.8	75.9	76.1	76.6	77.3	78.0	78.4
79432.8	70.7	71.3	71.9	72.5	73.0	74.2	74.6	75.0	75.5	76.1	76.8	77.3

Setpoint 12 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	63.7	64.1	64.6	65.3	66.3	67.5	69.3	71.2	73.4	75.3	77.0	78.6
199.5	66.3	66.8	67.4	68.0	69.0	70.1	72.0	74.0	76.3	78.3	80.1	81.5
251.2	68.9	69.5	70.0	70.5	71.3	72.5	74.5	76.6	79.1	81.1	83.0	84.4
316.2	70.7	71.1	71.6	72.4	73.6	75.2	77.6	79.8	82.2	84.1	85.8	87.0
398.1	72.7	73.6	74.4	75.3	76.5	78.0	80.3	82.6	85.2	87.3	89.0	90.0
501.2	74.9	75.7	76.5	77.7	79.1	80.9	83.5	85.9	88.2	90.1	91.7	92.6
631.0	77.1	77.7	78.2	79.1	80.7	82.7	85.4	87.9	90.5	92.6	94.0	94.5
794.3	78.6	79.3	80.2	81.5	83.0	85.1	87.9	90.5	93.0	94.9	96.1	96.4
1000.0	80.3	81.1	82.0	83.3	84.9	87.0	89.7	92.2	94.8	96.5	97.4	97.1
1258.9	81.7	82.6	83.6	84.8	86.4	88.3	91.1	93.3	95.9	97.3	97.8	96.8
1584.9	83.1	83.8	84.9	86.2	87.7	89.5	91.8	93.9	95.8	96.9	96.8	95.3
1995.3	83.5	84.7	85.8	87.1	88.7	90.3	92.3	93.7	95.1	95.4	94.8	93.3
2511.9	84.6	85.5	86.6	87.9	89.2	90.7	92.6	93.6	94.4	93.8	92.4	90.6
3162.3	85.0	86.3	87.1	88.3	89.8	91.1	92.3	93.0	93.0	91.7	90.0	87.8
3981.1	85.4	86.6	87.4	88.4	89.6	90.8	92.0	92.1	91.4	90.0	88.2	85.6
5011.9	85.6	86.5	87.5	88.6	89.6	90.5	91.4	91.0	89.9	88.5	86.3	83.7
6309.6	85.5	86.4	87.4	88.5	89.4	90.1	90.7	90.1	88.6	86.9	84.6	82.0
7943.3	85.5	86.4	87.3	88.2	89.0	89.5	89.8	89.0	87.3	85.4	82.9	80.3
10000.0	85.3	86.3	87.1	88.0	88.8	89.0	89.0	87.7	85.9	84.2	81.5	79.0
12589.3	85.1	86.2	86.8	87.6	88.2	88.2	87.9	86.7	84.5	82.9	80.3	77.6
15848.9	84.8	85.8	86.5	87.1	87.7	87.4	86.8	85.6	83.2	81.6	78.9	76.0
19952.6	84.3	85.0	85.7	86.5	86.9	86.4	85.5	84.0	81.8	80.3	77.6	74.3
25118.9	83.7	84.5	84.9	85.7	86.0	85.3	84.2	82.9	80.5	78.9	76.0	72.7
31622.8	82.7	83.6	84.1	84.6	84.7	83.9	83.1	81.4	78.9	77.4	74.2	70.8
39810.7	81.6	82.3	82.7	83.2	83.0	82.5	81.2	79.7	77.7	75.6	72.5	68.8
50118.7	80.2	80.9	81.3	81.8	81.4	80.9	79.6	78.1	76.3	73.8	70.6	66.8
63095.7	79.0	79.6	79.9	80.3	80.0	79.4	78.1	76.5	75.2	72.2	68.7	65.0
79432.8	77.9	78.5	78.7	78.9	78.6	78.0	76.4	75.2	73.9	70.9	67.4	63.7

Setpoint	13
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.345
Ideal jet velocity (ft/s)	376.279
Temperature ratio (T_j/T_{amb})	1.447
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





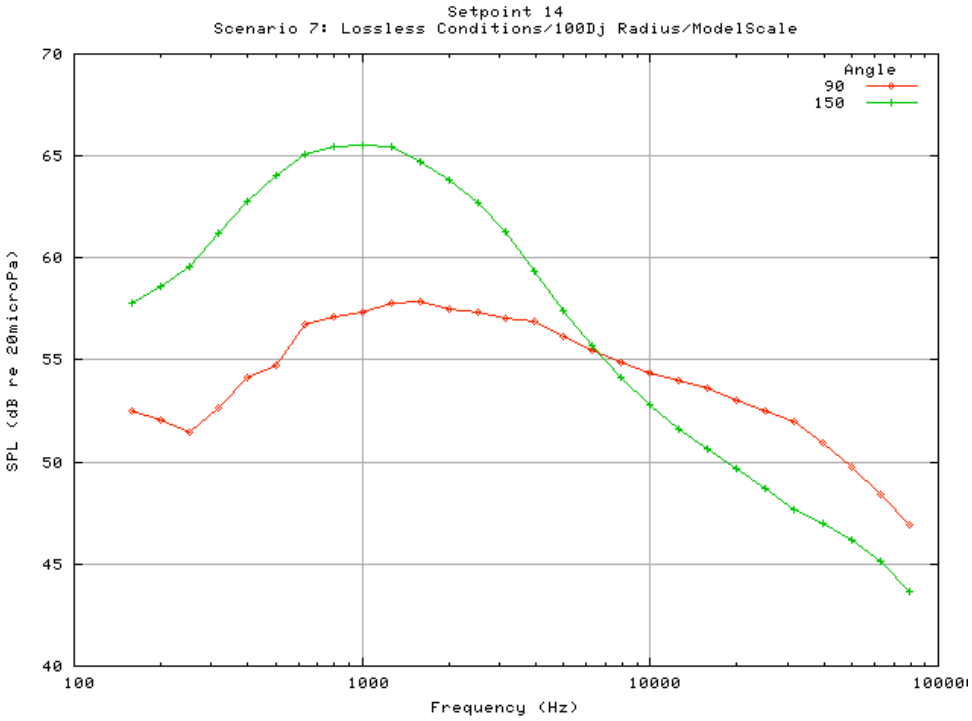
Setpoint 13 continued

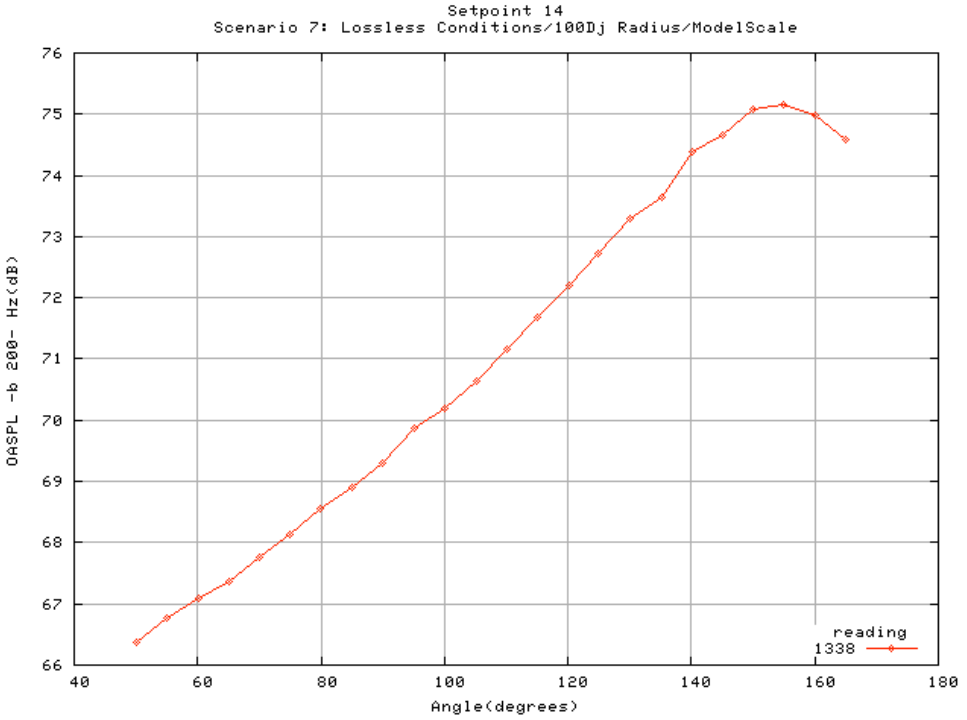
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	48.9	49.2	49.3	50.4	51.0	51.6	52.2	53.0	53.5	53.6	53.6	53.5
199.5	47.4	47.2	47.0	47.9	48.4	48.7	48.7	48.6	48.9	49.1	49.1	49.1
251.2	45.2	45.2	45.4	46.2	46.3	46.6	47.0	47.6	48.3	48.5	48.8	49.1
316.2	45.9	46.5	46.6	47.4	47.8	48.4	48.8	49.3	50.0	50.3	50.6	51.1
398.1	47.3	47.8	47.8	48.9	49.6	50.1	50.4	50.7	51.3	51.7	52.3	52.7
501.2	48.1	49.2	49.7	50.6	50.8	51.3	51.7	51.8	52.6	52.9	53.4	53.9
631.0	49.8	50.6	50.7	51.5	51.7	51.8	52.3	52.8	53.8	54.1	54.8	55.5
794.3	50.6	51.8	51.8	52.4	52.5	53.0	53.3	53.8	54.8	54.9	55.6	56.2
1000.0	51.2	52.1	52.3	53.0	53.0	53.5	54.0	54.4	55.3	55.5	56.2	56.9
1258.9	51.7	52.6	52.6	52.9	53.3	53.7	54.3	54.8	55.6	55.8	56.5	57.0
1584.9	51.9	52.7	52.3	52.7	53.0	53.8	54.3	54.6	55.3	55.8	56.4	56.9
1995.3	51.9	52.3	52.2	52.7	53.1	53.8	54.0	54.5	55.4	55.5	56.1	56.7
2511.9	51.6	52.1	51.7	52.4	52.8	53.5	54.1	54.2	55.3	55.4	56.1	56.8
3162.3	51.4	51.8	51.4	52.2	52.5	53.2	53.5	54.1	55.0	55.0	55.5	56.2
3981.1	51.1	51.1	51.1	51.8	52.0	52.5	53.0	53.4	54.3	54.6	55.1	55.5
5011.9	50.2	50.6	50.5	51.2	51.3	52.0	52.4	52.8	53.7	53.7	54.2	54.8
6309.6	49.9	50.5	50.3	50.9	50.8	51.6	52.0	52.4	53.3	53.2	53.8	54.2
7943.3	49.8	50.2	49.9	50.4	50.3	51.1	51.4	51.8	52.5	52.6	53.0	53.5
10000.0	49.7	49.9	49.6	50.2	49.9	50.8	51.0	51.4	52.1	52.0	52.4	53.1
12589.3	49.7	49.7	49.4	49.9	49.5	50.5	50.5	51.1	51.8	51.9	52.2	52.7
15848.9	49.4	49.2	49.1	49.6	49.2	50.2	50.1	50.9	51.5	51.7	51.9	52.5
19952.6	48.8	48.8	48.4	49.2	49.2	49.9	49.5	50.5	51.2	51.4	51.7	52.0
25118.9	48.0	48.3	48.0	48.6	49.1	49.5	49.0	50.1	50.7	50.8	51.2	51.5
31622.8	47.1	47.3	47.2	47.8	48.0	48.9	48.3	49.4	50.0	50.0	50.6	50.9
39810.7	46.0	45.9	46.0	46.6	47.5	48.0	47.4	48.4	48.9	48.9	49.8	49.7
50118.7	44.3	44.5	44.5	45.3	47.1	46.9	46.3	47.2	47.7	47.5	48.6	48.5
63095.7	42.7	42.8	43.2	43.8	45.9	45.5	45.2	45.9	46.3	46.2	47.1	47.2
79432.8	41.1	41.2	41.5	42.3	44.1	44.0	43.5	44.5	44.7	44.9	45.5	45.7

Setpoint 13 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	53.4	53.6	53.7	54.1	54.7	54.9	55.3	55.6	55.7	56.1	56.4	56.8
199.5	49.2	49.5	49.9	50.6	51.4	52.1	53.0	54.0	54.9	55.7	56.4	56.9
251.2	49.5	50.2	50.9	51.8	52.9	53.7	54.7	55.9	56.8	57.8	58.5	59.1
316.2	51.6	52.4	53.1	54.0	55.1	55.9	56.9	58.1	59.0	59.9	60.6	61.0
398.1	53.1	53.8	54.5	55.3	56.4	57.1	58.0	59.2	60.0	60.9	61.5	61.8
501.2	54.4	55.1	55.8	56.9	58.1	58.8	59.9	61.0	61.7	62.3	62.8	63.0
631.0	55.8	56.8	57.3	58.1	59.0	59.7	60.6	61.6	62.3	62.9	63.2	63.2
794.3	56.4	57.2	57.8	58.8	59.7	60.4	61.2	62.1	62.8	63.3	63.5	63.2
1000.0	57.2	57.9	58.5	59.5	60.2	60.8	61.4	62.0	62.6	62.8	62.7	62.0
1258.9	57.5	58.0	58.6	59.3	60.2	60.7	61.3	62.0	62.2	62.3	61.9	60.7
1584.9	57.4	58.0	58.4	59.2	59.9	60.3	60.8	61.2	61.4	61.1	60.4	58.8
1995.3	57.1	57.6	58.0	58.8	59.7	60.0	60.4	60.8	60.6	60.0	58.8	56.3
2511.9	56.8	57.3	57.8	58.4	58.9	59.1	59.4	59.5	59.1	58.0	56.4	53.6
3162.3	56.5	56.9	57.2	57.8	58.4	58.5	58.5	58.2	57.4	56.1	54.1	51.4
3981.1	55.8	56.2	56.4	57.0	57.3	57.5	57.5	56.9	55.9	54.3	52.3	49.5
5011.9	55.1	55.3	55.6	56.1	56.5	56.5	56.3	55.6	54.3	52.1	50.2	47.5
6309.6	54.5	54.7	55.0	55.5	55.6	55.4	55.1	54.1	52.6	50.5	48.4	45.1
7943.3	53.8	54.0	54.6	54.6	54.8	54.6	54.1	52.9	51.3	49.0	47.0	43.5
10000.0	53.3	53.4	53.9	54.2	54.2	54.1	53.3	52.0	50.0	47.8	45.5	42.3
12589.3	53.0	53.0	53.5	53.8	53.8	53.7	52.6	51.1	49.4	46.9	45.0	41.2
15848.9	52.6	52.6	53.3	53.6	53.3	53.2	51.9	50.3	48.5	46.1	44.2	40.1
19952.6	52.0	52.0	52.8	52.8	52.3	52.5	50.9	49.3	47.7	45.6	43.7	39.4
25118.9	51.4	51.1	52.4	52.1	51.4	51.8	50.1	48.0	46.9	45.0	43.0	38.5
31622.8	51.0	50.6	51.6	51.6	50.9	51.1	49.4	47.4	46.1	43.6	41.3	37.1
39810.7	49.7	49.5	50.5	50.5	49.7	50.0	48.2	46.1	45.1	42.8	40.3	36.6
50118.7	48.5	48.3	49.2	49.2	48.6	48.5	46.9	44.8	43.7	41.9	39.2	35.9
63095.7	47.2	47.2	47.8	47.8	47.5	46.9	45.4	43.6	42.1	40.6	38.0	34.7
79432.8	45.6	45.0	46.4	46.2	45.1	45.7	43.7	41.2	40.4	38.6	36.2	33.1

Setpoint	14
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.399
Ideal jet velocity (ft/s)	442.918
Temperature ratio (T_j/T_{amb})	1.431
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





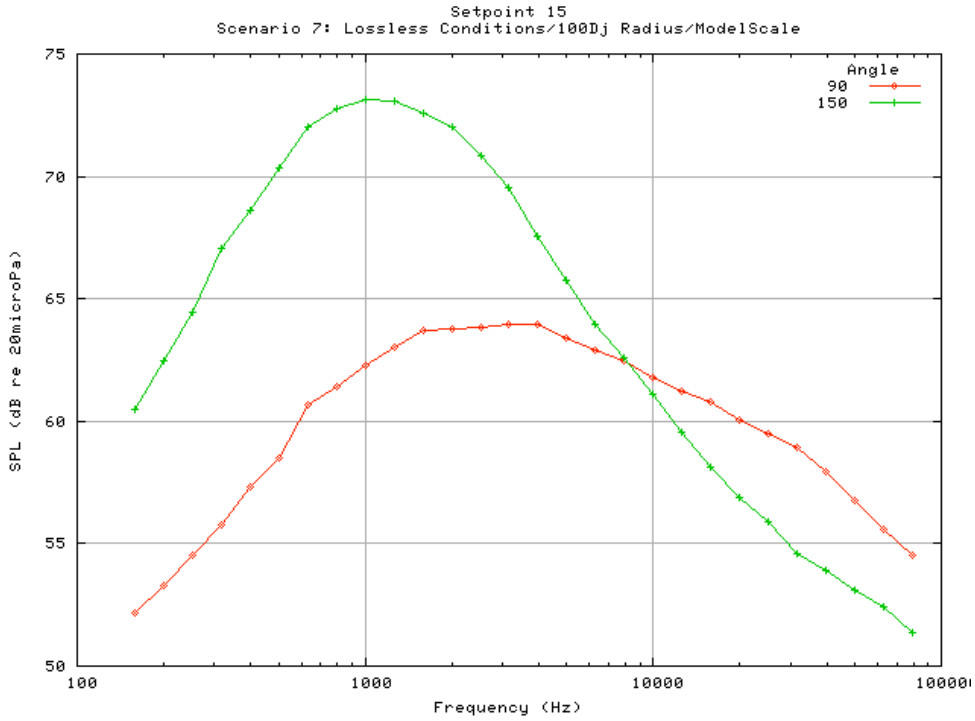
Setpoint 14 continued

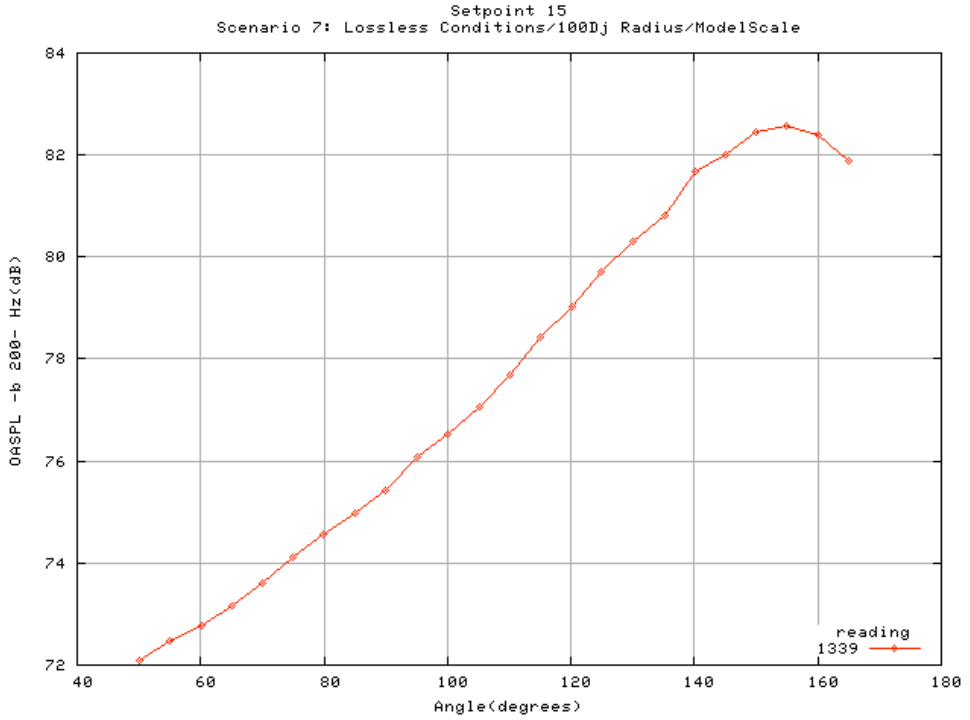
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	51.6	51.2	51.1	51.3	51.7	52.1	52.2	52.4	52.5	52.5	52.4	52.7
199.5	51.1	51.3	51.7	51.9	51.9	51.8	51.6	51.6	52.1	52.6	52.8	53.0
251.2	49.6	49.7	50.1	50.6	50.8	50.8	50.9	51.1	51.5	52.1	52.3	52.5
316.2	50.0	50.5	50.8	51.0	51.4	51.9	52.1	52.3	52.7	53.3	53.5	53.8
398.1	52.4	52.2	52.4	52.6	53.2	53.5	53.7	53.7	54.1	54.8	55.1	55.4
501.2	51.9	52.4	52.8	53.2	53.5	53.7	54.2	54.3	54.7	55.4	55.7	56.1
631.0	53.6	53.9	54.5	54.9	54.9	55.2	55.6	55.8	56.8	57.0	57.0	57.6
794.3	54.5	54.9	55.5	55.7	56.0	56.0	56.5	57.2	57.1	58.0	58.2	58.8
1000.0	54.0	54.6	55.2	55.4	55.5	55.8	56.5	57.1	57.4	58.1	58.4	59.0
1258.9	54.0	55.0	55.4	55.5	55.9	56.1	57.0	57.5	57.8	58.6	58.8	59.5
1584.9	54.2	54.9	55.2	55.5	55.8	56.4	56.9	57.2	57.9	58.3	58.8	59.2
1995.3	54.0	54.6	54.9	55.2	55.7	56.1	56.7	57.0	57.5	58.2	58.5	59.2
2511.9	54.0	54.7	54.7	54.9	55.4	56.0	56.5	57.0	57.3	58.0	58.3	58.9
3162.3	54.1	54.7	54.9	55.3	55.7	55.8	56.2	56.7	57.0	57.6	58.1	58.6
3981.1	54.1	54.3	54.7	55.0	55.4	55.6	56.1	56.3	56.9	57.5	57.8	58.2
5011.9	53.0	53.2	53.6	54.1	54.5	54.9	55.3	55.8	56.2	56.6	56.9	57.4
6309.6	52.4	53.1	53.2	53.7	53.8	54.3	54.8	55.2	55.5	55.9	56.2	56.7
7943.3	52.1	52.5	52.7	53.1	53.4	53.7	54.1	54.5	54.9	55.3	55.7	56.0
10000.0	51.9	52.2	52.2	52.5	52.9	53.3	53.9	54.0	54.4	54.8	55.2	55.4
12589.3	52.0	51.8	51.9	52.3	52.7	52.9	53.2	53.6	54.0	54.3	54.7	55.0
15848.9	51.6	51.4	51.6	51.9	52.3	52.8	52.9	53.2	53.6	54.0	54.3	54.5
19952.6	50.7	50.8	51.0	51.4	51.9	52.9	52.6	52.8	53.1	53.4	54.0	54.1
25118.9	50.0	50.2	50.2	50.4	51.2	52.4	52.0	52.3	52.5	52.9	53.5	53.6
31622.8	49.2	49.3	49.6	50.0	50.4	51.0	51.3	51.6	52.0	52.3	52.8	52.9
39810.7	48.0	48.1	48.4	48.7	49.4	50.1	50.4	50.7	51.0	51.4	51.6	52.0
50118.7	46.5	46.6	47.1	47.4	48.1	49.3	49.4	49.5	49.8	50.2	50.8	50.9
63095.7	44.6	45.0	45.6	46.0	46.8	48.1	48.1	48.2	48.4	48.9	49.5	49.5
79432.8	42.8	43.2	44.0	44.4	45.2	46.3	46.6	46.8	47.0	47.4	48.0	48.1

Setpoint 14 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	53.0	53.3	53.8	54.4	55.3	55.8	56.6	57.1	57.8	58.1	58.6	59.4
199.5	53.2	53.4	53.9	54.5	55.3	55.9	56.8	57.6	58.6	59.2	59.8	60.6
251.2	52.7	52.9	53.4	54.4	55.6	56.5	57.7	58.6	59.6	60.3	61.1	61.9
316.2	54.0	54.4	55.3	56.1	56.8	57.5	58.8	59.9	61.2	62.1	62.7	63.5
398.1	55.6	56.1	57.0	57.8	58.5	59.2	60.5	61.6	62.8	63.5	64.2	64.7
501.2	56.8	57.3	58.2	59.1	59.8	60.5	62.0	63.0	64.0	64.7	65.3	65.6
631.0	58.3	58.6	59.3	59.9	60.7	61.7	62.8	63.8	65.1	65.7	66.1	66.1
794.3	59.5	59.9	60.6	61.5	62.2	62.9	63.9	64.7	65.5	66.0	66.2	65.9
1000.0	59.5	60.2	60.8	61.5	62.4	62.9	64.1	64.8	65.5	65.8	65.9	65.2
1258.9	60.1	60.6	61.1	61.7	62.6	63.2	64.3	64.7	65.5	65.6	65.3	64.1
1584.9	59.9	60.6	61.3	61.8	62.6	63.1	63.9	64.4	64.7	64.6	63.8	62.1
1995.3	59.8	60.4	60.8	61.5	62.2	62.7	63.5	63.6	63.8	63.1	61.8	59.5
2511.9	59.5	60.0	60.6	61.3	61.7	62.0	62.7	62.7	62.7	61.7	59.7	57.3
3162.3	59.2	59.9	60.3	60.7	61.0	61.5	62.0	61.7	61.3	59.8	57.5	55.2
3981.1	58.7	59.2	59.6	60.0	60.5	60.6	61.0	60.3	59.3	57.9	55.9	53.7
5011.9	57.7	58.5	58.8	59.1	59.3	59.4	59.4	58.7	57.4	55.7	53.4	51.1
6309.6	57.1	57.6	58.0	58.3	58.5	58.4	58.5	57.4	55.7	54.0	51.4	48.8
7943.3	56.5	57.0	57.3	57.5	57.5	57.4	57.3	56.2	54.1	52.3	49.6	46.8
10000.0	55.8	56.3	56.7	56.8	57.0	56.5	56.3	54.8	52.8	50.9	48.3	45.8
12589.3	55.3	55.9	56.1	56.3	56.5	56.0	55.5	54.0	51.6	49.8	47.3	44.6
15848.9	54.9	55.4	55.8	56.0	56.2	55.3	54.7	53.1	50.6	48.8	46.0	43.0
19952.6	54.5	54.9	55.3	55.6	55.8	54.7	53.8	52.1	49.6	47.8	45.2	42.2
25118.9	54.0	54.4	54.4	54.8	55.0	54.0	52.9	51.4	48.7	46.9	43.9	40.8
31622.8	53.3	53.8	53.9	54.0	54.3	53.2	52.3	50.4	47.7	45.9	42.9	39.3
39810.7	52.4	52.8	52.8	53.0	52.9	52.1	51.0	49.3	47.0	44.9	41.9	38.3
50118.7	51.2	51.5	51.7	51.9	51.7	50.9	49.6	48.0	46.2	43.7	40.6	36.9
63095.7	50.0	50.2	50.4	50.5	50.4	49.5	48.3	46.5	45.1	42.3	39.0	35.4
79432.8	48.7	48.9	49.0	49.0	49.0	48.0	46.5	44.9	43.6	40.9	37.6	34.3

Setpoint	15
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.502
Ideal jet velocity (ft/s)	557.253
Temperature ratio (T_j/T_{amb})	1.430
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





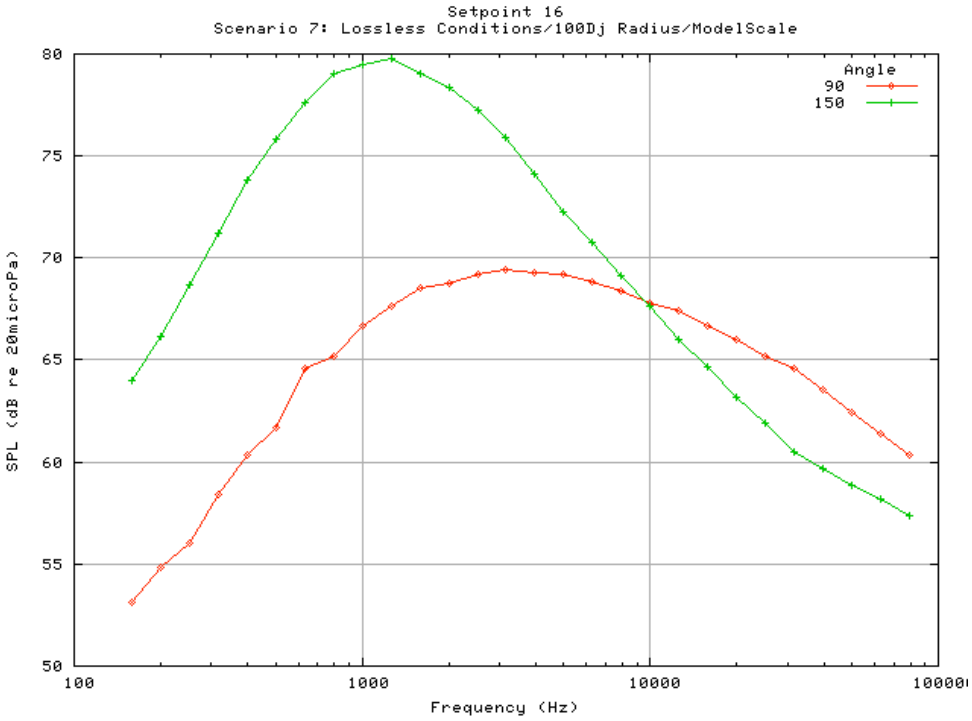
Setpoint 15 continued

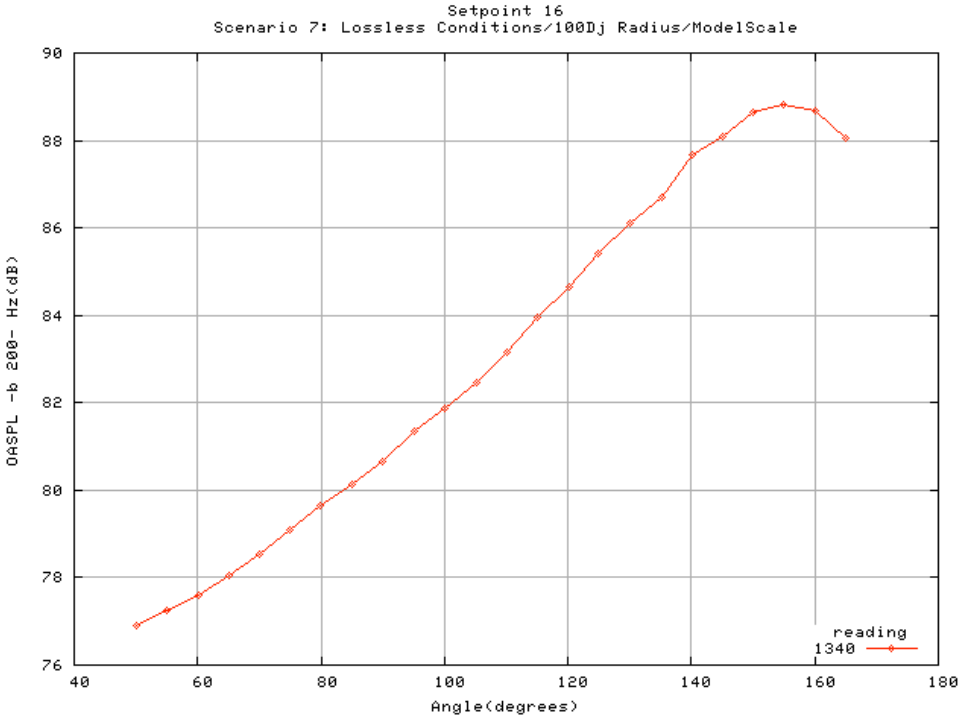
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	51.3	51.3	51.4	51.5	51.6	51.6	51.5	51.8	52.2	52.8	53.2	53.9
199.5	51.3	51.7	52.2	52.5	52.5	52.5	52.6	53.0	53.3	53.7	53.9	54.1
251.2	51.2	51.5	51.9	52.3	52.5	52.8	53.3	54.0	54.5	55.0	55.0	55.1
316.2	52.1	52.5	52.9	53.4	53.9	54.4	55.0	55.4	55.8	56.2	56.4	56.7
398.1	53.7	53.8	54.2	55.3	56.0	56.2	56.4	56.7	57.3	58.0	58.5	58.9
501.2	54.0	54.9	56.1	56.7	56.9	57.1	57.6	57.9	58.5	59.3	59.7	60.2
631.0	56.3	57.2	57.8	58.3	58.6	58.7	59.5	60.1	60.7	61.1	61.7	62.2
794.3	57.6	58.6	59.0	59.1	59.6	59.9	60.3	61.0	61.4	62.2	62.7	63.4
1000.0	58.3	59.0	59.6	60.0	60.0	60.6	61.1	61.8	62.3	63.1	63.5	64.2
1258.9	59.2	60.2	60.7	60.8	61.2	61.5	62.2	62.7	63.0	63.9	64.5	65.3
1584.9	60.1	60.6	60.8	61.1	61.5	62.0	62.6	63.0	63.7	64.4	65.0	65.6
1995.3	60.1	60.7	60.9	61.1	61.6	62.0	62.6	63.1	63.8	64.6	64.9	65.5
2511.9	60.3	60.9	61.0	61.3	61.9	62.5	63.1	63.6	63.8	64.7	65.1	65.7
3162.3	60.6	61.1	61.1	61.5	62.1	62.3	63.0	63.6	64.0	64.6	65.2	65.8
3981.1	60.6	60.8	61.0	61.4	61.9	62.4	63.0	63.4	64.0	64.6	64.9	65.4
5011.9	60.2	60.4	60.6	61.2	61.4	61.9	62.5	63.0	63.4	64.0	64.4	65.1
6309.6	59.6	60.0	60.2	60.8	61.1	61.6	62.2	62.6	62.9	63.5	63.9	64.6
7943.3	59.3	59.5	59.8	60.2	60.7	61.1	61.5	61.9	62.5	63.0	63.5	63.8
10000.0	59.0	59.2	59.3	59.8	60.2	60.7	61.2	61.4	61.8	62.4	62.8	63.3
12589.3	58.7	58.7	58.9	59.3	59.7	60.2	60.6	60.9	61.2	61.8	62.3	62.6
15848.9	58.4	58.1	58.4	58.8	59.2	59.8	60.0	60.3	60.8	61.4	61.6	62.0
19952.6	57.6	57.7	57.8	58.2	58.8	59.8	59.6	59.8	60.0	60.4	61.1	61.4
25118.9	57.0	57.1	57.2	57.4	58.2	59.4	59.0	59.2	59.5	59.9	60.7	60.8
31622.8	56.3	56.4	56.6	57.0	57.4	58.0	58.3	58.6	59.0	59.4	59.8	60.1
39810.7	55.2	55.3	55.5	55.9	56.4	57.2	57.4	57.6	57.9	58.4	58.6	59.2
50118.7	53.9	54.0	54.3	54.7	55.3	56.5	56.5	56.5	56.8	57.3	57.8	58.1
63095.7	52.3	52.6	53.0	53.5	54.2	55.6	55.4	55.4	55.6	56.2	56.7	56.9
79432.8	50.7	51.1	51.7	52.3	53.0	54.2	54.2	54.3	54.5	55.0	55.5	55.8

Setpoint 15 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	54.4	54.7	55.3	55.8	56.6	57.2	58.3	59.3	60.5	61.4	62.3	63.1
199.5	54.4	54.7	55.3	56.1	57.2	58.2	59.7	61.0	62.4	63.4	64.3	65.0
251.2	55.4	56.0	56.7	57.6	58.7	59.8	61.4	62.9	64.4	65.6	66.6	67.4
316.2	57.3	58.0	58.8	59.9	61.2	62.5	64.2	65.6	67.0	68.1	69.0	69.7
398.1	59.6	60.4	61.3	62.3	63.4	64.4	65.9	67.2	68.6	69.7	70.5	71.1
501.2	61.0	61.9	62.6	63.6	64.8	65.9	67.5	68.9	70.4	71.4	72.2	72.7
631.0	63.0	63.7	64.4	65.5	66.7	67.9	69.4	70.6	72.0	73.0	73.6	73.7
794.3	64.2	65.0	65.8	67.0	68.1	69.1	70.6	71.7	72.7	73.5	73.9	73.9
1000.0	65.0	65.9	66.8	67.9	68.8	69.9	71.2	72.2	73.1	73.6	73.7	73.1
1258.9	66.0	66.8	67.6	68.4	69.3	70.2	71.5	72.2	73.1	73.3	73.0	71.7
1584.9	66.3	67.1	68.0	68.6	69.3	70.2	71.3	72.1	72.6	72.6	71.6	69.7
1995.3	66.2	67.1	67.9	68.8	69.7	70.4	71.4	71.7	72.0	71.3	69.8	67.3
2511.9	66.4	67.2	67.9	68.8	69.4	70.0	70.8	70.8	70.8	69.8	67.8	65.2
3162.3	66.5	67.3	67.9	68.6	69.1	69.6	70.2	70.1	69.5	67.7	65.5	62.9
3981.1	66.0	66.8	67.4	68.0	68.5	68.9	69.5	68.7	67.5	66.0	63.9	61.1
5011.9	65.6	66.4	66.8	67.2	67.6	67.7	68.0	67.3	65.7	64.2	61.8	59.1
6309.6	65.0	65.6	66.1	66.6	66.9	66.8	66.9	65.8	64.0	62.3	60.0	57.1
7943.3	64.5	65.1	65.4	65.8	66.0	65.8	65.7	64.7	62.6	60.8	58.2	55.2
10000.0	63.7	64.3	64.7	65.0	65.2	64.8	64.7	63.1	61.1	59.3	56.7	53.9
12589.3	63.1	63.8	64.1	64.3	64.5	63.9	63.4	61.9	59.5	57.8	55.3	52.4
15848.9	62.5	63.1	63.4	63.6	63.7	63.0	62.3	60.7	58.1	56.4	53.7	50.4
19952.6	61.9	62.2	62.6	63.1	63.0	62.1	61.0	59.3	56.9	55.2	52.5	49.2
25118.9	61.3	61.8	61.8	62.3	62.3	61.3	60.0	58.5	55.9	54.0	51.2	47.9
31622.8	60.6	61.2	61.4	61.5	61.4	60.3	59.3	57.3	54.6	53.0	50.0	46.5
39810.7	59.6	60.0	60.1	60.4	60.0	59.2	57.9	56.1	53.9	51.7	48.9	45.2
50118.7	58.5	58.9	59.0	59.3	58.8	58.0	56.6	54.9	53.1	50.6	47.8	43.8
63095.7	57.4	57.7	57.9	58.1	57.7	56.8	55.4	53.8	52.4	49.5	46.6	42.6
79432.8	56.4	56.7	56.8	56.9	56.5	55.7	54.0	52.6	51.4	48.5	45.7	41.7

Setpoint	16
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.599
Ideal jet velocity (ft/s)	664.718
Temperature ratio (T_j/T_{amb})	1.430
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





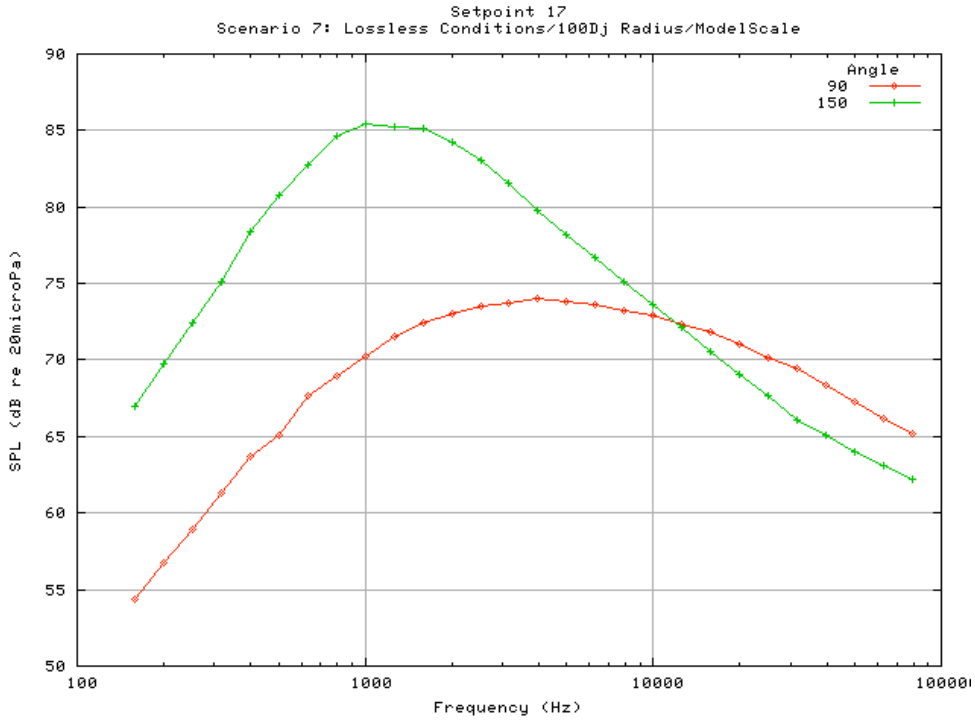
Setpoint 16 continued

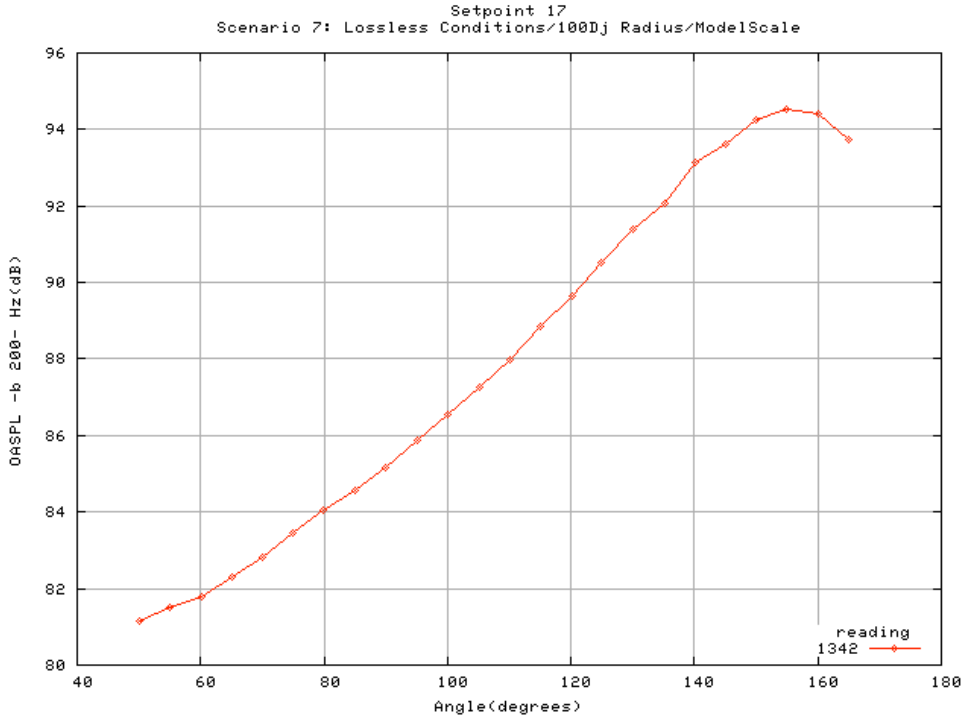
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	50.7	50.8	51.0	51.4	51.7	52.1	52.3	52.8	53.1	53.6	54.0	54.5
199.5	51.6	51.9	52.2	52.6	53.0	53.5	53.9	54.4	54.9	55.5	55.8	56.2
251.2	51.9	52.4	52.9	53.4	53.8	54.3	54.9	55.5	56.0	56.7	56.9	57.5
316.2	53.4	54.0	54.6	55.3	56.0	56.7	57.4	57.9	58.4	58.9	59.3	59.9
398.1	55.3	55.8	56.6	57.6	58.4	58.9	59.5	59.9	60.4	61.1	61.5	62.0
501.2	56.3	57.4	58.6	59.2	59.5	59.7	60.3	60.9	61.7	62.4	62.9	63.7
631.0	59.4	60.2	61.0	61.7	62.1	62.3	62.9	63.5	64.6	64.8	65.3	65.9
794.3	60.7	61.7	62.2	62.6	63.0	63.3	64.1	64.8	65.2	66.1	66.7	67.5
1000.0	62.1	63.0	63.7	64.2	64.5	65.0	65.6	66.2	66.7	67.3	67.8	68.6
1258.9	63.3	64.3	64.8	64.9	65.4	65.7	66.6	67.1	67.6	68.4	68.9	69.7
1584.9	64.2	64.9	65.1	65.5	65.9	66.6	67.2	67.7	68.5	69.2	70.0	70.6
1995.3	64.7	65.3	65.5	65.8	66.3	66.7	67.5	68.1	68.8	69.7	70.2	70.9
2511.9	65.1	65.6	65.8	66.3	66.9	67.4	68.0	68.6	69.2	70.0	70.5	71.1
3162.3	65.5	66.0	66.2	66.8	67.4	67.7	68.2	68.9	69.4	70.1	70.7	71.3
3981.1	65.8	65.9	66.2	66.8	67.4	67.7	68.3	68.6	69.3	70.1	70.5	71.2
5011.9	65.4	65.6	66.0	66.6	66.9	67.5	68.0	68.6	69.2	69.7	70.2	70.8
6309.6	64.9	65.4	65.7	66.2	66.6	67.2	68.0	68.3	68.8	69.5	69.9	70.6
7943.3	64.9	65.1	65.3	65.8	66.3	66.7	67.4	67.9	68.4	69.1	69.6	70.1
10000.0	64.5	64.6	64.9	65.4	65.8	66.3	67.1	67.4	67.8	68.5	69.0	69.5
12589.3	64.1	64.1	64.5	64.8	65.4	65.8	66.4	66.8	67.4	68.0	68.4	68.9
15848.9	63.7	63.5	63.9	64.3	64.7	65.4	65.8	66.3	66.7	67.4	67.9	68.3
19952.6	62.9	63.0	63.1	63.6	64.2	65.3	65.3	65.6	66.0	66.5	67.3	67.6
25118.9	62.3	62.4	62.5	62.8	63.6	64.8	64.7	65.0	65.2	65.8	66.6	66.9
31622.8	61.8	61.7	62.0	62.3	62.8	63.4	63.9	64.2	64.6	65.1	65.7	66.0
39810.7	60.6	60.6	61.0	61.3	61.9	62.6	62.9	63.2	63.5	64.2	64.5	65.1
50118.7	59.4	59.4	59.9	60.2	60.8	61.9	62.0	62.2	62.5	63.1	63.7	64.0
63095.7	58.0	58.2	58.7	59.1	59.7	61.0	60.9	61.1	61.4	62.1	62.6	62.9
79432.8	56.6	56.8	57.5	58.0	58.6	59.6	59.7	60.1	60.4	61.1	61.5	61.9

Setpoint 16 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	55.2	55.8	56.6	57.6	58.8	59.8	61.2	62.5	64.0	65.1	66.1	67.1
199.5	56.6	57.1	57.8	58.7	59.9	61.2	62.9	64.5	66.1	67.4	68.5	69.4
251.2	58.1	58.8	59.5	60.6	62.0	63.4	65.3	66.9	68.7	70.0	71.1	71.9
316.2	60.6	61.3	62.1	63.2	64.5	66.0	67.9	69.5	71.2	72.4	73.4	74.2
398.1	62.6	63.2	64.0	65.2	66.8	68.4	70.4	72.0	73.8	75.1	76.1	76.7
501.2	64.6	65.3	66.2	67.5	69.0	70.5	72.6	74.2	75.8	77.1	78.0	78.5
631.0	66.5	67.3	68.1	69.2	70.7	72.3	74.3	75.9	77.6	78.9	79.7	79.9
794.3	68.3	69.2	70.1	71.4	72.8	74.2	76.1	77.6	79.0	80.0	80.6	80.5
1000.0	69.4	70.4	71.3	72.6	73.9	75.2	76.9	78.2	79.5	80.2	80.4	79.8
1258.9	70.5	71.6	72.6	73.6	74.9	76.0	77.6	78.6	79.8	80.1	79.9	78.4
1584.9	71.4	72.2	73.2	74.0	75.1	76.1	77.5	78.5	79.1	79.0	78.0	75.8
1995.3	71.6	72.5	73.4	74.4	75.4	76.3	77.5	77.9	78.3	77.6	76.2	73.6
2511.9	71.9	72.8	73.5	74.5	75.4	76.2	77.2	77.2	77.3	76.1	74.1	71.4
3162.3	72.0	73.0	73.8	74.7	75.2	76.0	76.7	76.5	75.9	74.2	72.1	69.4
3981.1	72.0	72.9	73.4	74.2	74.7	75.2	75.9	75.3	74.1	72.4	70.3	67.2
5011.9	71.5	72.6	73.2	73.7	74.2	74.4	74.7	73.7	72.3	70.6	68.3	65.5
6309.6	71.2	71.9	72.6	73.1	73.5	73.6	73.6	72.5	70.8	69.0	66.8	63.8
7943.3	70.7	71.5	71.9	72.4	72.7	72.6	72.5	71.2	69.1	67.3	65.0	61.9
10000.0	70.2	70.8	71.4	71.8	71.9	71.5	71.2	69.7	67.6	65.9	63.5	60.6
12589.3	69.5	70.3	70.7	71.0	71.2	70.7	70.1	68.4	66.0	64.4	61.9	59.1
15848.9	68.9	69.5	69.9	70.2	70.3	69.6	68.8	67.1	64.7	62.9	60.3	57.1
19952.6	68.1	68.6	69.0	69.5	69.4	68.5	67.3	65.6	63.2	61.4	58.9	55.7
25118.9	67.4	68.0	68.1	68.6	68.5	67.5	66.2	64.5	61.9	60.0	57.1	54.0
31622.8	66.5	67.2	67.4	67.7	67.4	66.3	65.2	63.3	60.5	58.7	55.7	52.4
39810.7	65.6	66.1	66.2	66.5	66.0	65.1	63.7	61.9	59.7	57.4	54.4	51.0
50118.7	64.5	64.8	65.1	65.3	64.7	63.8	62.3	60.5	58.8	56.1	53.2	49.5
63095.7	63.5	63.8	64.0	64.1	63.6	62.6	61.2	59.4	58.2	55.2	52.1	48.6
79432.8	62.5	62.8	63.0	63.0	62.6	61.6	59.9	58.3	57.4	54.4	51.4	48.2

Setpoint	17
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.698
Ideal jet velocity (ft/s)	774.721
Temperature ratio (T_j/T_{amb})	1.428
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





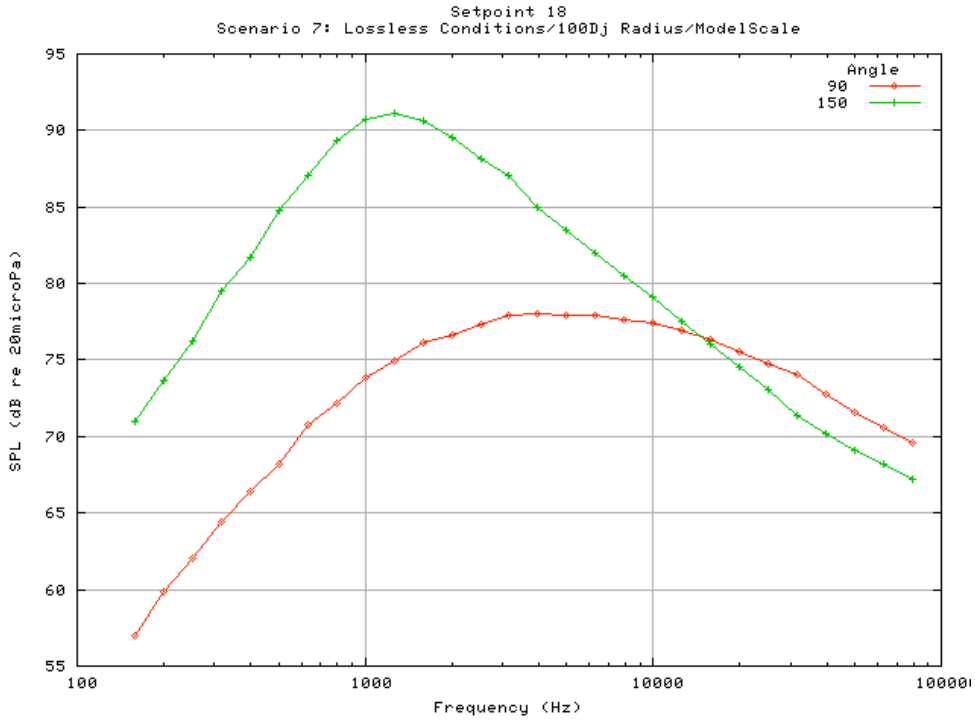
Setpoint 17 continued

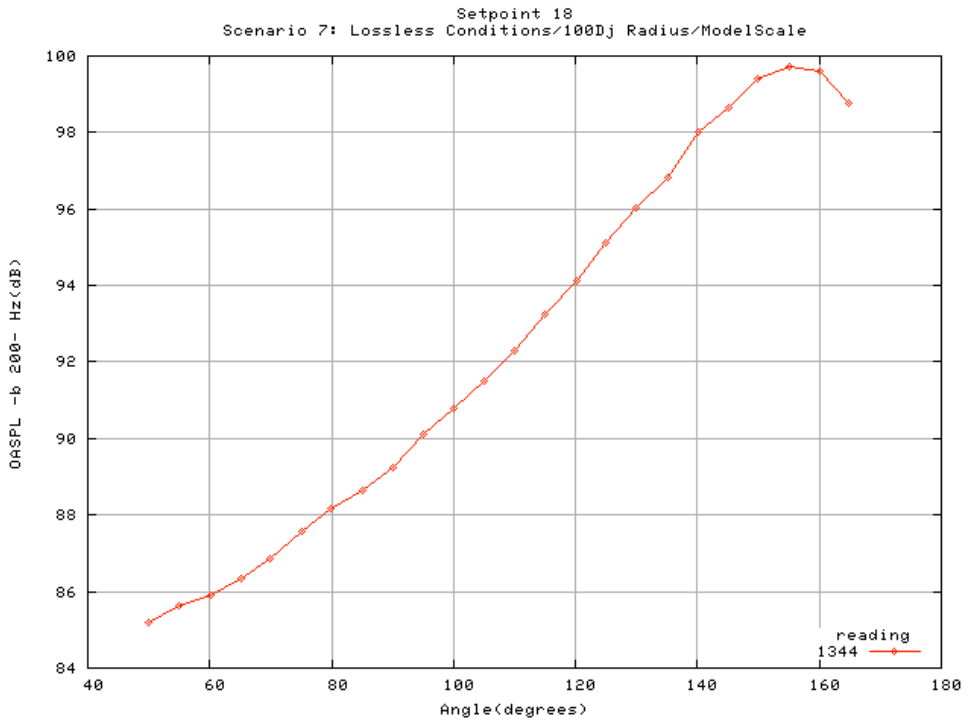
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	50.7	51.2	51.7	52.2	52.5	52.9	53.2	53.8	54.4	55.0	55.3	55.9
199.5	52.0	52.6	53.2	53.8	54.2	54.7	55.3	56.1	56.8	57.5	57.9	58.5
251.2	54.1	54.7	55.4	55.9	56.3	56.9	57.6	58.4	59.0	59.7	60.1	60.7
316.2	56.0	56.6	57.2	58.0	58.8	59.6	60.3	60.8	61.3	62.0	62.4	63.0
398.1	58.0	58.6	59.5	60.4	61.2	62.0	62.8	63.3	63.7	64.4	65.0	65.6
501.2	59.5	60.6	61.5	62.2	62.6	63.0	63.6	64.3	65.1	65.9	66.4	67.2
631.0	62.3	63.2	63.9	64.5	64.9	65.3	65.9	66.6	67.7	68.0	68.7	69.5
794.3	64.0	65.1	65.6	66.0	66.5	66.9	67.7	68.4	68.9	69.7	70.2	71.0
1000.0	65.4	66.4	66.9	67.3	67.8	68.2	69.1	69.7	70.3	71.1	71.6	72.4
1258.9	66.8	67.7	68.1	68.2	68.8	69.2	70.1	70.8	71.5	72.4	72.9	73.7
1584.9	67.9	68.4	68.7	69.1	69.8	70.4	71.1	71.6	72.4	73.2	73.9	74.5
1995.3	68.8	69.2	69.4	69.8	70.5	71.1	71.8	72.4	73.0	73.8	74.4	75.2
2511.9	69.3	69.7	69.8	70.2	70.9	71.5	72.2	73.0	73.5	74.3	74.8	75.6
3162.3	69.8	70.3	70.4	71.0	71.6	71.9	72.7	73.3	73.8	74.5	75.3	76.1
3981.1	70.0	70.2	70.6	71.1	71.7	72.1	72.8	73.3	74.0	74.8	75.3	76.0
5011.9	69.6	69.9	70.4	71.1	71.4	72.0	72.6	73.2	73.9	74.6	75.2	76.0
6309.6	69.5	70.0	70.2	71.0	71.2	71.9	72.6	73.1	73.6	74.3	74.9	75.8
7943.3	69.5	69.7	70.0	70.5	70.9	71.5	72.1	72.7	73.3	74.1	74.7	75.4
10000.0	69.2	69.4	69.6	70.0	70.6	71.1	71.8	72.2	72.9	73.6	74.2	74.8
12589.3	69.0	69.0	69.2	69.6	70.1	70.7	71.4	71.9	72.3	73.0	73.7	74.4
15848.9	68.4	68.3	68.6	69.0	69.5	70.3	70.7	71.2	71.8	72.6	73.1	73.7
19952.6	67.6	67.7	67.9	68.4	68.9	70.1	70.0	70.5	71.0	71.6	72.6	73.1
25118.9	66.9	67.2	67.1	67.4	68.2	69.5	69.4	69.7	70.2	70.8	71.9	72.3
31622.8	66.2	66.4	66.5	67.0	67.4	68.1	68.5	69.0	69.5	70.1	70.9	71.4
39810.7	65.1	65.3	65.5	65.9	66.5	67.1	67.6	67.9	68.4	69.0	69.6	70.3
50118.7	63.7	64.2	64.4	64.8	65.4	66.4	66.6	66.8	67.3	68.0	68.8	69.2
63095.7	62.4	62.9	63.3	63.8	64.3	65.5	65.5	65.7	66.2	66.9	67.7	68.1
79432.8	61.2	61.6	62.2	62.8	63.2	64.1	64.4	64.8	65.2	65.9	66.7	67.2

Setpoint 17 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	56.6	57.2	58.1	59.3	60.6	61.9	63.7	65.2	67.0	68.3	69.5	70.5
199.5	59.2	59.9	60.8	61.9	63.2	64.6	66.4	68.0	69.7	71.1	72.3	73.2
251.2	61.3	62.0	62.9	64.0	65.5	67.0	69.0	70.7	72.5	73.8	75.0	75.9
316.2	63.6	64.3	65.2	66.4	68.0	69.5	71.6	73.3	75.1	76.5	77.7	78.6
398.1	66.2	66.9	67.7	68.9	70.6	72.3	74.5	76.4	78.4	79.8	80.9	81.6
501.2	68.0	68.8	69.8	71.2	72.9	74.7	77.0	78.9	80.7	82.1	83.1	83.6
631.0	70.2	71.1	71.9	73.1	74.9	76.8	79.0	80.8	82.7	84.1	84.9	85.1
794.3	71.7	72.6	73.7	75.2	76.9	78.7	81.0	82.8	84.6	85.7	86.3	86.3
1000.0	73.2	74.2	75.2	76.6	78.1	79.7	82.0	83.7	85.4	86.5	86.9	86.4
1258.9	74.6	75.6	76.7	77.8	79.4	80.7	82.6	83.8	85.3	85.9	85.8	84.6
1584.9	75.5	76.4	77.6	78.8	80.1	81.5	83.1	84.3	85.1	85.3	84.3	82.2
1995.3	76.1	77.2	78.1	79.3	80.6	81.7	83.1	83.7	84.2	83.5	82.1	79.7
2511.9	76.6	77.6	78.5	79.6	80.8	81.7	82.8	83.1	83.1	81.9	79.9	77.5
3162.3	77.0	78.0	78.8	79.8	80.8	81.7	82.5	82.3	81.6	79.9	77.8	75.2
3981.1	76.8	77.8	78.6	79.5	80.3	81.0	81.7	81.0	79.8	78.2	76.2	73.2
5011.9	76.6	77.8	78.6	79.3	80.0	80.4	80.6	79.7	78.2	76.6	74.4	71.5
6309.6	76.4	77.2	78.1	78.8	79.4	79.5	79.6	78.4	76.7	75.1	72.7	69.8
7943.3	76.0	76.9	77.5	78.3	78.7	78.6	78.4	77.3	75.1	73.5	71.0	67.9
10000.0	75.5	76.3	77.1	77.5	78.0	77.7	77.5	75.8	73.6	71.9	69.4	66.5
12589.3	75.0	75.8	76.5	76.8	77.1	76.7	76.1	74.5	72.1	70.6	68.1	65.1
15848.9	74.3	75.1	75.8	76.1	76.3	75.5	74.8	73.0	70.5	69.0	66.4	63.0
19952.6	73.6	74.2	74.7	75.2	75.2	74.3	73.3	71.5	69.0	67.5	64.8	61.3
25118.9	72.8	73.4	73.8	74.3	74.3	73.1	71.9	70.3	67.6	65.9	63.1	59.6
31622.8	71.9	72.5	72.9	73.2	73.0	71.8	70.8	68.8	66.0	64.5	61.4	57.7
39810.7	70.8	71.3	71.6	71.9	71.4	70.5	69.2	67.3	65.0	62.9	59.9	56.0
50118.7	69.6	70.0	70.4	70.6	70.1	69.1	67.7	65.9	64.0	61.5	58.5	54.4
63095.7	68.5	68.9	69.2	69.3	68.9	67.8	66.5	64.7	63.1	60.3	57.1	53.1
79432.8	67.7	67.9	68.2	68.2	67.8	66.8	65.1	63.6	62.2	59.4	56.3	52.4

Setpoint	18
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.802
Ideal jet velocity (ft/s)	889.847
Temperature ratio (T_j/T_{amb})	1.428
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





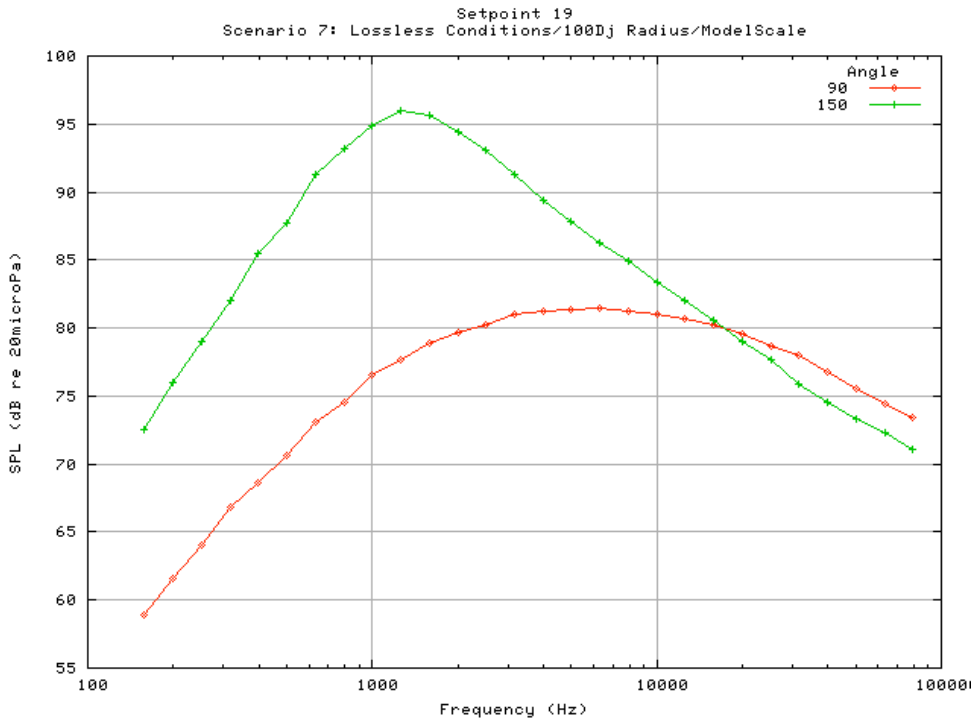
Setpoint 18 continued

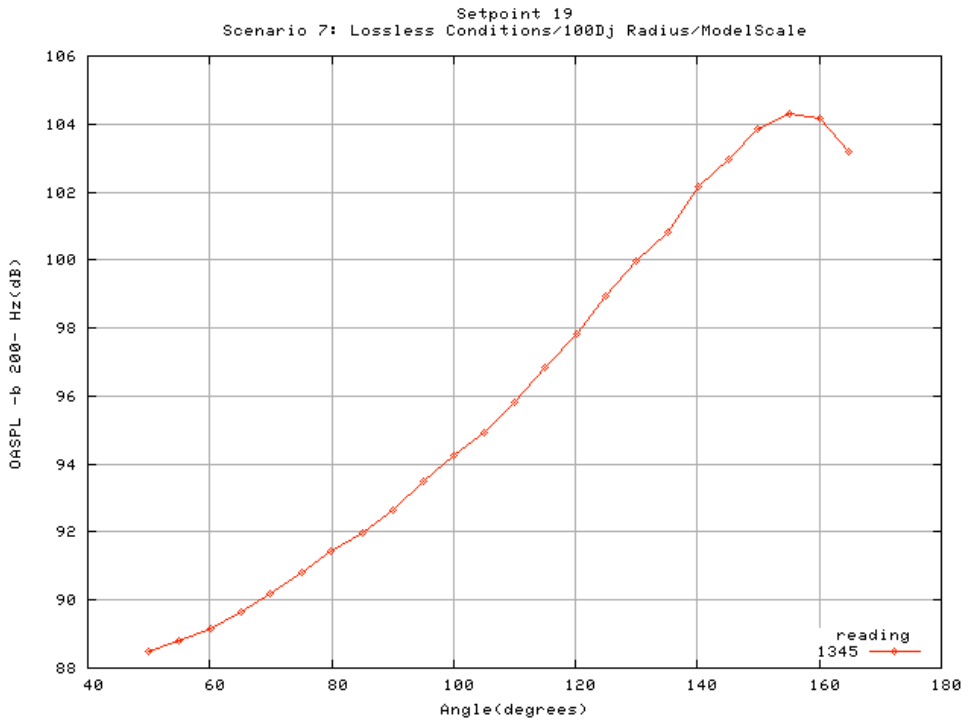
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	52.4	52.9	53.4	53.9	54.3	54.9	55.6	56.3	57.0	57.9	58.5	59.1
199.5	54.5	55.2	55.9	56.5	57.0	57.6	58.4	59.2	59.9	60.6	61.1	61.6
251.2	56.7	57.3	57.9	58.5	59.1	59.9	60.7	61.5	62.0	62.7	63.0	63.4
316.2	58.2	58.8	59.5	60.4	61.2	61.9	62.8	63.6	64.4	65.2	65.6	66.2
398.1	61.1	62.0	62.9	63.7	64.4	64.9	65.4	65.9	66.4	67.2	67.8	68.3
501.2	62.7	63.8	64.7	65.5	66.0	66.3	66.9	67.5	68.2	69.0	69.5	70.2
631.0	65.6	66.6	67.4	67.8	68.1	68.7	69.4	69.7	70.8	71.1	71.7	72.4
794.3	67.3	68.2	68.8	69.3	69.7	70.1	70.9	71.6	72.2	72.9	73.5	74.4
1000.0	68.6	69.6	70.2	70.8	71.4	72.0	72.7	73.3	73.8	74.7	75.1	76.0
1258.9	70.3	71.3	71.7	72.0	72.5	72.8	73.8	74.4	74.9	75.9	76.5	77.4
1584.9	71.6	72.1	72.4	72.8	73.3	74.0	74.7	75.2	76.2	76.9	77.7	78.3
1995.3	72.1	72.7	73.1	73.7	74.2	74.6	75.4	75.9	76.6	77.4	78.0	78.9
2511.9	73.0	73.4	73.7	74.2	74.7	75.4	76.1	76.7	77.3	78.2	78.8	79.6
3162.3	73.8	74.3	74.5	74.9	75.4	76.0	76.8	77.4	77.9	78.8	79.4	80.2
3981.1	74.2	74.3	74.6	75.0	75.6	76.1	76.9	77.4	78.1	79.1	79.6	80.4
5011.9	73.8	74.1	74.7	75.3	75.6	76.2	76.8	77.4	78.0	78.7	79.4	80.3
6309.6	73.7	74.3	74.6	75.0	75.4	76.1	76.9	77.4	77.9	78.8	79.4	80.2
7943.3	73.7	74.0	74.3	74.6	75.2	75.8	76.5	77.0	77.6	78.5	79.1	79.8
10000.0	73.6	73.9	74.1	74.5	74.9	75.6	76.4	76.7	77.4	78.2	78.9	79.6
12589.3	73.4	73.5	73.6	74.0	74.5	75.1	75.8	76.3	76.9	77.7	78.4	79.1
15848.9	72.9	72.9	73.2	73.5	74.0	74.9	75.4	75.8	76.3	77.3	77.9	78.5
19952.6	72.0	72.3	72.4	72.8	73.3	74.7	74.6	75.0	75.5	76.3	77.3	77.8
25118.9	71.3	71.6	71.6	71.8	72.7	74.1	73.9	74.3	74.7	75.6	76.6	77.1
31622.8	70.5	70.7	71.0	71.3	71.7	72.5	73.0	73.4	74.0	74.8	75.6	76.1
39810.7	69.2	69.6	69.9	70.2	70.7	71.6	72.0	72.3	72.8	73.7	74.2	75.0
50118.7	68.0	68.4	68.8	69.0	69.6	70.9	71.0	71.2	71.6	72.6	73.4	73.8
63095.7	66.7	67.1	67.6	68.0	68.5	70.0	70.0	70.0	70.6	71.5	72.3	72.7
79432.8	65.5	66.0	66.6	67.0	67.4	68.6	68.9	69.2	69.6	70.5	71.2	71.7

Setpoint 18 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	59.8	60.4	61.2	62.3	63.8	65.3	67.3	69.1	71.0	72.5	73.8	75.0
199.5	62.1	62.6	63.4	64.5	66.1	67.7	69.8	71.7	73.6	75.1	76.4	77.4
251.2	64.1	64.7	65.7	66.9	68.6	70.4	72.5	74.4	76.3	77.8	79.0	80.0
316.2	66.7	67.4	68.3	69.6	71.3	73.1	75.5	77.5	79.6	81.1	82.3	83.3
398.1	68.9	69.8	70.8	72.1	73.8	75.5	77.7	79.7	81.7	83.3	84.5	85.2
501.2	70.9	71.7	72.7	74.3	76.2	78.2	80.7	82.8	84.7	86.2	87.2	87.7
631.0	73.3	74.2	75.2	76.5	78.4	80.5	82.9	84.9	87.1	88.6	89.5	89.6
794.3	75.2	76.0	77.2	78.8	80.7	82.8	85.3	87.5	89.4	90.7	91.3	91.1
1000.0	76.8	77.9	79.1	80.6	82.4	84.3	86.9	88.8	90.7	91.9	92.2	91.5
1258.9	78.3	79.4	80.6	81.8	83.4	85.2	87.6	89.3	91.1	91.9	91.9	90.4
1584.9	79.4	80.5	81.8	83.0	84.5	86.0	88.1	89.6	90.7	91.0	90.3	88.4
1995.3	79.9	81.1	82.0	83.5	85.0	86.4	88.1	88.9	89.6	88.9	87.6	85.3
2511.9	80.6	81.7	82.9	84.3	85.5	86.4	87.8	88.0	88.2	87.0	85.2	82.8
3162.3	80.9	82.2	83.1	84.3	85.4	86.5	87.7	87.7	87.1	85.4	83.2	80.5
3981.1	81.3	82.2	83.3	84.3	85.3	86.0	86.9	86.2	85.0	83.4	81.2	78.1
5011.9	81.0	82.2	83.2	84.1	85.0	85.4	85.8	85.0	83.5	81.9	79.4	76.5
6309.6	81.0	81.9	82.8	83.8	84.4	84.7	84.8	83.7	82.0	80.3	77.7	74.8
7943.3	80.6	81.6	82.4	83.4	83.8	83.8	83.7	82.4	80.5	78.8	76.1	73.0
10000.0	80.2	81.3	81.9	82.6	83.0	82.8	82.6	81.0	79.1	77.4	74.6	71.5
12589.3	79.8	80.7	81.3	81.9	82.2	81.8	81.2	79.7	77.5	75.9	73.1	70.1
15848.9	79.3	80.1	80.8	81.2	81.4	80.7	80.0	78.4	76.1	74.4	71.5	68.0
19952.6	78.6	79.2	79.8	80.3	80.5	79.6	78.5	76.7	74.5	72.9	70.1	66.4
25118.9	77.8	78.4	78.7	79.3	79.3	78.3	77.0	75.5	73.1	71.3	68.2	64.6
31622.8	76.8	77.5	77.8	78.1	78.1	76.9	75.8	74.0	71.4	69.7	66.5	62.6
39810.7	75.7	76.3	76.5	76.7	76.3	75.4	74.0	72.3	70.2	68.0	64.8	60.7
50118.7	74.4	74.9	75.1	75.3	74.8	73.9	72.4	70.8	69.1	66.5	63.3	59.2
63095.7	73.3	73.7	74.0	73.9	73.6	72.5	71.2	69.5	68.2	65.2	61.9	57.9
79432.8	72.4	72.7	72.9	72.8	72.4	71.4	69.7	68.3	67.2	64.2	61.0	57.3

Setpoint	19
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.897
Ideal jet velocity (ft/s)	995.526
Temperature ratio (T_j/T_{amb})	1.428
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





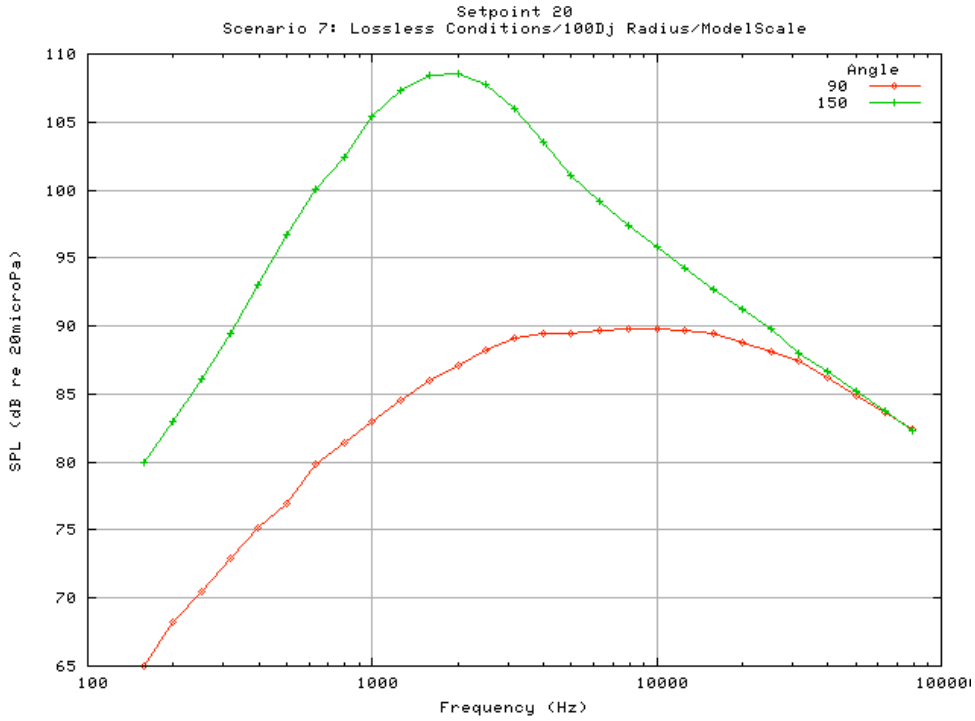
Setpoint 19 continued

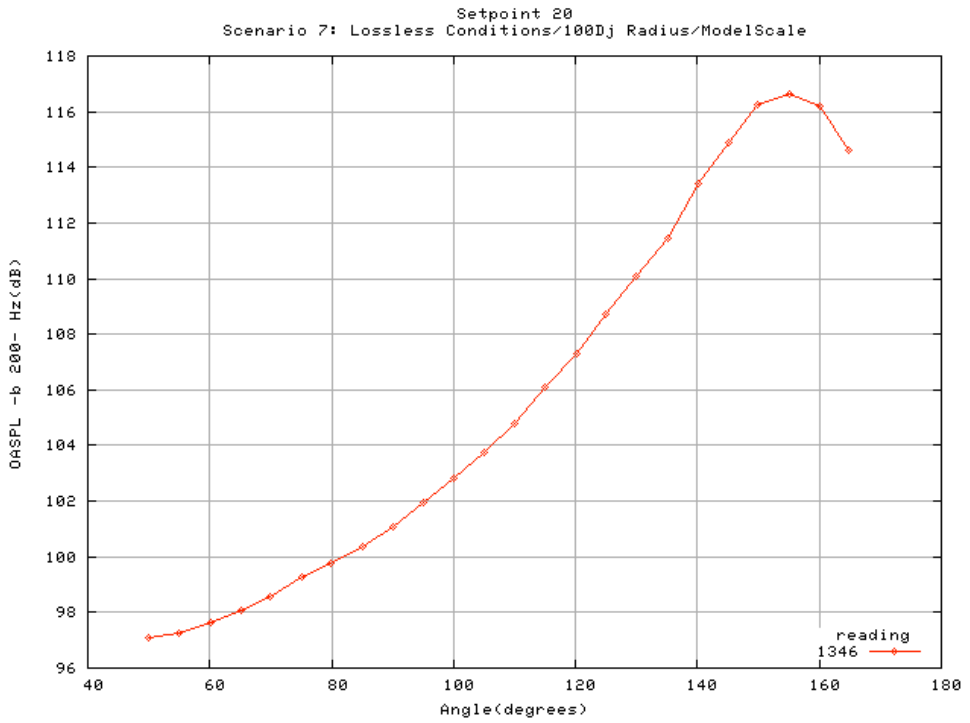
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	54.2	54.7	55.2	55.7	56.2	56.8	57.4	58.2	58.9	59.8	60.2	60.7
199.5	56.3	57.0	57.7	58.4	58.9	59.6	60.2	61.0	61.6	62.3	62.7	63.2
251.2	58.5	59.1	59.8	60.5	61.1	61.9	62.7	63.5	64.0	64.7	65.0	65.6
316.2	61.0	61.4	62.0	62.9	63.7	64.6	65.5	66.2	66.8	67.4	67.9	68.5
398.1	62.8	63.5	64.4	65.5	66.2	66.7	67.4	68.0	68.7	69.4	69.9	70.5
501.2	64.6	65.7	66.8	67.5	67.9	68.3	69.0	69.8	70.6	71.4	71.8	72.4
631.0	67.7	68.7	69.4	69.8	70.2	70.8	71.4	72.0	73.1	73.5	74.2	75.1
794.3	69.7	70.5	71.2	71.7	72.1	72.5	73.4	73.9	74.5	75.2	75.9	76.8
1000.0	71.5	72.3	72.9	73.5	73.7	74.4	75.2	75.8	76.5	77.3	77.8	78.6
1258.9	73.1	74.1	74.4	74.8	75.3	75.6	76.5	77.1	77.7	78.6	79.2	80.1
1584.9	74.6	74.8	75.2	75.6	76.1	76.7	77.5	78.1	78.9	79.6	80.5	81.3
1995.3	75.1	75.6	75.8	76.5	77.1	77.6	78.6	79.1	79.7	80.5	81.1	82.1
2511.9	76.1	76.4	76.7	77.3	77.8	78.4	79.1	79.7	80.2	81.3	82.0	82.7
3162.3	77.1	77.5	77.7	78.0	78.5	79.0	79.9	80.5	81.1	81.9	82.8	83.6
3981.1	77.4	77.7	78.0	78.5	79.0	79.5	80.0	80.6	81.3	82.4	83.0	83.6
5011.9	77.2	77.4	78.0	78.6	79.0	79.5	80.0	80.6	81.4	82.2	82.8	83.7
6309.6	77.1	77.6	77.8	78.4	78.9	79.4	80.2	80.8	81.4	82.1	83.0	83.8
7943.3	77.3	77.5	77.8	78.3	78.8	79.2	79.9	80.6	81.3	82.1	82.8	83.5
10000.0	77.1	77.3	77.5	78.0	78.6	79.1	79.9	80.3	81.1	81.8	82.6	83.2
12589.3	77.0	77.0	77.2	77.6	78.2	78.7	79.5	80.0	80.7	81.5	82.2	82.9
15848.9	76.4	76.4	76.7	77.2	77.7	78.4	79.0	79.5	80.3	81.2	81.8	82.4
19952.6	75.5	75.8	76.0	76.5	77.1	78.3	78.4	78.9	79.5	80.2	81.2	81.8
25118.9	74.8	75.1	75.1	75.5	76.4	77.8	77.7	78.2	78.7	79.5	80.6	81.1
31622.8	73.8	74.1	74.5	75.0	75.5	76.2	76.8	77.2	78.0	78.7	79.6	80.1
39810.7	72.6	72.9	73.3	73.8	74.4	75.2	75.7	76.1	76.8	77.6	78.2	79.0
50118.7	71.2	71.7	72.2	72.6	73.2	74.4	74.7	75.0	75.6	76.4	77.3	77.7
63095.7	69.9	70.4	70.9	71.5	72.1	73.5	73.6	73.9	74.5	75.2	76.2	76.5
79432.8	68.8	69.2	69.8	70.4	70.9	72.1	72.4	72.9	73.5	74.1	75.1	75.5

Setpoint 19 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	61.4	61.9	62.7	63.8	65.3	66.7	68.8	70.6	72.6	74.1	75.5	76.8
199.5	63.7	64.2	64.9	66.1	67.9	69.7	72.0	74.0	76.0	77.6	79.0	80.1
251.2	66.2	66.8	67.6	68.9	70.7	72.6	75.0	77.0	79.1	80.6	81.9	82.9
316.2	69.2	69.8	70.6	71.6	73.3	75.1	77.7	79.8	82.0	83.7	85.1	86.0
398.1	71.3	72.2	73.1	74.5	76.5	78.6	81.2	83.3	85.4	87.0	88.2	88.9
501.2	73.2	74.0	75.0	76.5	78.5	80.7	83.5	85.7	87.8	89.3	90.4	91.0
631.0	75.8	76.8	77.9	79.5	81.7	84.1	86.9	89.1	91.3	92.8	93.7	93.8
794.3	77.5	78.5	79.8	81.6	83.7	86.0	88.9	91.1	93.1	94.5	95.2	94.9
1000.0	79.6	80.6	81.8	83.3	85.3	87.6	90.5	92.8	94.8	96.0	96.4	95.6
1258.9	81.1	82.2	83.5	85.0	87.0	89.0	91.8	93.9	96.0	96.9	96.9	95.4
1584.9	82.3	83.4	84.8	86.1	87.8	89.8	92.2	94.2	95.7	96.3	95.7	93.9
1995.3	83.1	84.2	85.3	87.0	88.7	90.4	92.4	93.6	94.5	94.2	93.3	91.4
2511.9	83.7	84.9	86.1	87.8	89.2	90.5	92.1	92.6	93.0	92.2	90.8	88.8
3162.3	84.5	85.7	86.7	88.1	89.4	90.7	91.8	91.8	91.3	89.9	88.1	85.6
3981.1	84.6	85.7	86.9	88.2	89.3	90.2	91.1	90.5	89.4	88.0	86.1	83.1
5011.9	84.5	85.9	87.0	88.1	89.0	89.6	90.1	89.3	87.8	86.5	84.3	81.3
6309.6	84.5	85.6	86.7	87.9	88.6	88.9	89.1	88.2	86.3	84.7	82.6	79.6
7943.3	84.4	85.5	86.3	87.4	88.0	88.2	88.0	86.8	84.9	83.2	80.8	77.8
10000.0	84.2	85.2	86.1	86.9	87.4	87.3	86.9	85.4	83.4	81.8	79.4	76.4
12589.3	83.8	84.8	85.6	86.4	86.9	86.3	85.7	84.2	82.0	80.5	78.0	75.1
15848.9	83.3	84.3	85.0	85.7	86.0	85.2	84.6	82.9	80.6	79.0	76.4	73.1
19952.6	82.7	83.4	84.1	84.8	84.9	84.1	83.1	81.4	79.1	77.6	75.0	71.5
25118.9	81.8	82.7	83.0	83.8	83.7	82.8	81.5	80.1	77.7	76.0	73.2	69.6
31622.8	80.9	81.8	82.1	82.5	82.5	81.3	80.2	78.4	75.9	74.4	71.4	67.6
39810.7	79.7	80.4	80.6	81.0	80.7	79.7	78.3	76.7	74.6	72.5	69.5	65.6
50118.7	78.4	78.9	79.2	79.5	79.0	78.1	76.6	75.0	73.3	70.8	67.8	63.7
63095.7	77.1	77.7	77.9	78.0	77.7	76.6	75.3	73.6	72.3	69.5	66.3	62.2
79432.8	76.2	76.7	76.8	76.8	76.4	75.4	73.8	72.4	71.1	68.4	65.2	61.3

Setpoint	20
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.185
Ideal jet velocity (ft/s)	1315.040
Temperature ratio (T_j/T_{amb})	1.426
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





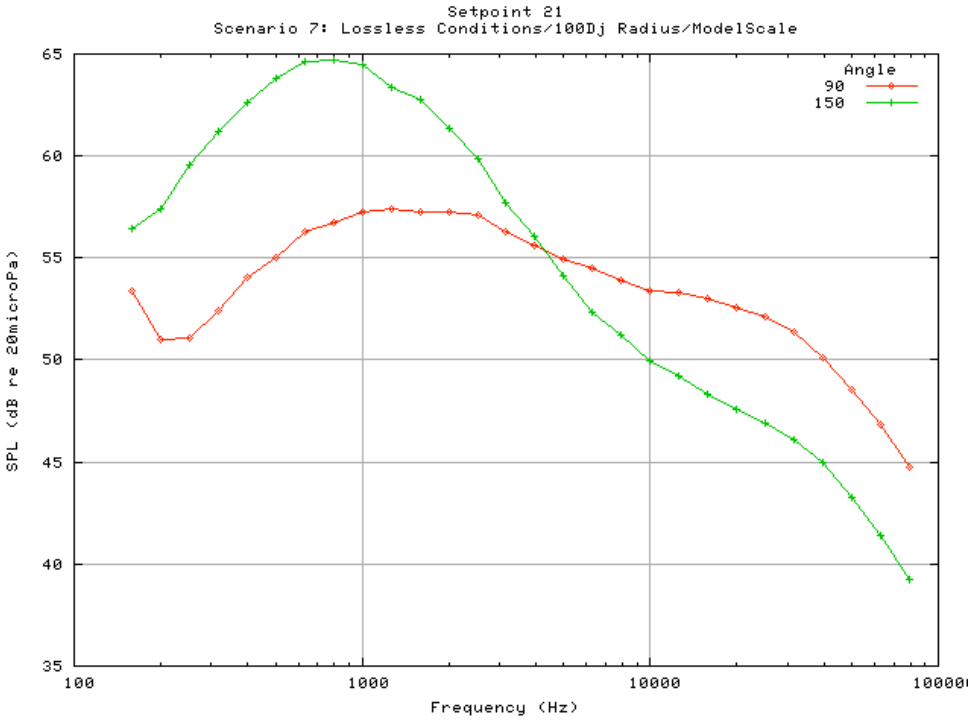
Setpoint 20 continued

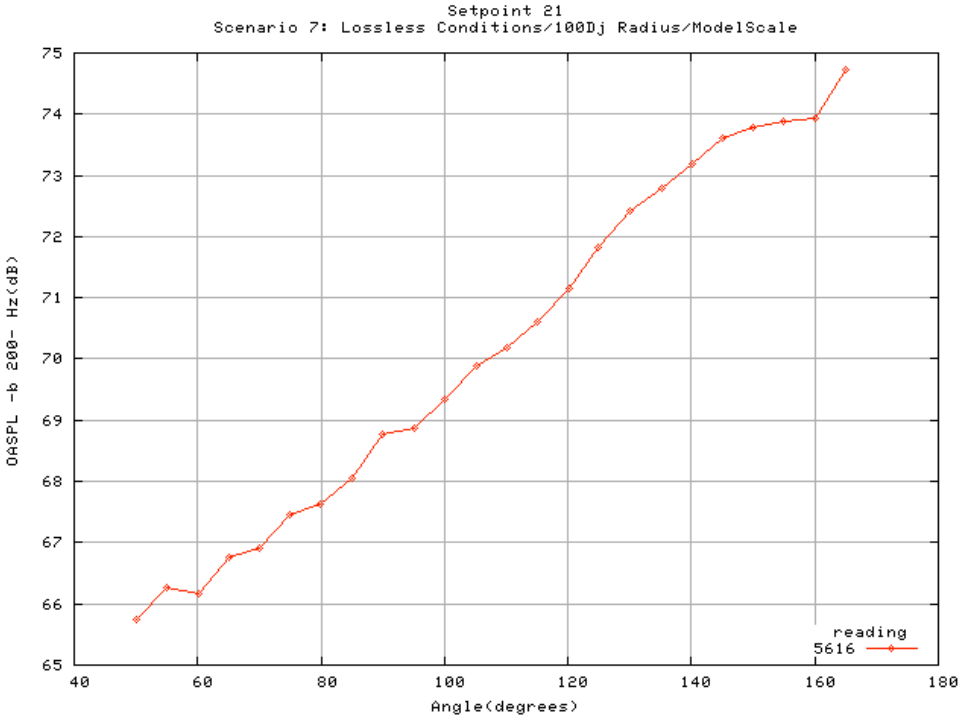
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	59.9	60.5	61.2	61.9	62.4	63.0	63.6	64.3	65.0	65.8	66.4	67.0
199.5	62.2	63.0	63.7	64.4	65.0	65.8	66.6	67.5	68.2	69.1	69.6	70.1
251.2	65.1	65.6	66.2	66.9	67.6	68.5	69.3	70.0	70.5	71.1	71.4	72.0
316.2	66.9	67.3	68.1	69.1	70.0	70.8	71.6	72.4	72.9	73.4	73.8	74.4
398.1	69.4	70.2	71.2	72.1	72.8	73.4	74.0	74.6	75.2	75.9	76.4	77.2
501.2	71.3	72.3	73.2	73.9	74.4	74.7	75.4	76.2	77.0	77.8	78.5	79.3
631.0	75.1	75.7	76.3	76.8	77.0	77.5	78.3	78.8	79.8	80.4	81.0	81.8
794.3	76.9	77.6	77.8	78.1	78.8	79.2	79.9	80.7	81.4	82.1	82.8	83.7
1000.0	78.7	79.4	79.8	80.1	80.5	81.0	81.8	82.4	83.0	84.0	84.5	85.5
1258.9	80.7	81.1	81.4	81.7	82.4	82.7	83.4	84.0	84.5	85.4	86.1	87.1
1584.9	82.3	82.3	82.4	82.9	83.7	84.1	84.9	85.5	86.0	86.8	87.6	88.4
1995.3	82.9	83.3	83.7	84.3	84.7	85.1	85.8	86.3	87.1	88.1	88.8	89.9
2511.9	84.3	84.3	84.5	85.0	85.6	86.0	86.8	87.5	88.3	89.2	89.8	90.7
3162.3	85.2	85.5	85.8	86.3	86.7	87.2	87.9	88.5	89.1	90.1	90.9	91.8
3981.1	86.1	86.4	86.7	87.1	87.5	87.8	88.2	88.7	89.4	90.5	91.3	92.2
5011.9	85.5	85.5	86.0	86.6	87.1	87.6	88.2	88.8	89.4	90.4	91.2	92.3
6309.6	85.7	85.8	86.1	86.7	87.0	87.7	88.4	88.8	89.6	90.5	91.4	92.5
7943.3	86.4	86.4	86.6	86.9	87.4	87.9	88.5	89.1	89.7	90.7	91.6	92.4
10000.0	86.6	86.5	86.8	87.1	87.5	88.0	88.6	89.1	89.8	90.6	91.5	92.4
12589.3	86.3	86.3	86.5	86.9	87.3	87.8	88.5	88.9	89.7	90.5	91.3	92.2
15848.9	85.8	85.8	86.1	86.4	87.0	87.6	88.1	88.7	89.4	90.3	91.1	91.9
19952.6	84.5	85.0	85.3	85.8	86.4	87.6	87.6	88.2	88.8	89.5	90.7	91.6
25118.9	83.5	84.0	84.3	84.7	85.5	87.0	86.9	87.5	88.1	89.0	90.3	90.9
31622.8	82.3	82.7	83.3	84.0	84.5	85.4	86.0	86.7	87.4	88.3	89.3	90.1
39810.7	80.8	81.3	81.9	82.5	83.3	84.2	84.9	85.5	86.2	87.2	88.0	88.9
50118.7	79.2	79.8	80.4	81.0	81.9	83.3	83.7	84.2	84.9	85.9	87.0	87.6
63095.7	77.7	78.3	79.0	79.7	80.6	82.2	82.4	82.9	83.7	84.6	85.7	86.3
79432.8	76.4	77.0	77.8	78.5	79.2	80.6	81.2	81.8	82.5	83.4	84.5	85.1

Setpoint 20 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	67.8	68.4	69.2	70.2	71.7	73.2	75.5	77.6	80.0	81.9	83.6	85.1
199.5	70.8	71.3	72.0	72.9	74.4	76.0	78.4	80.6	83.0	84.9	86.6	88.0
251.2	72.7	73.4	74.3	75.6	77.3	79.2	81.6	83.8	86.1	87.9	89.5	90.6
316.2	75.2	76.0	77.0	78.3	80.0	82.0	84.7	87.0	89.5	91.3	92.9	94.0
398.1	77.9	78.7	79.7	81.1	83.0	85.2	88.0	90.5	93.1	94.9	96.4	97.2
501.2	80.2	81.0	82.1	83.8	85.8	88.4	91.7	94.3	96.7	98.4	99.7	100.3
631.0	82.6	83.6	84.7	86.4	88.9	91.7	94.9	97.5	100.1	101.8	102.7	102.6
794.3	84.4	85.4	86.6	88.8	91.5	94.3	97.6	100.1	102.4	103.7	104.2	103.7
1000.0	86.5	87.6	89.0	91.3	94.1	97.2	100.7	103.2	105.4	106.3	106.2	104.8
1258.9	88.0	89.2	90.9	93.0	96.0	99.1	102.8	105.1	107.3	107.7	107.0	104.8
1584.9	89.4	90.6	92.3	94.6	97.3	100.6	104.1	106.7	108.4	108.5	107.4	105.3
1995.3	90.9	92.2	93.5	95.6	98.3	101.2	104.7	106.9	108.5	108.3	107.4	105.4
2511.9	91.8	93.2	94.8	96.8	99.0	101.3	104.3	106.3	107.8	107.9	107.4	105.6
3162.3	92.9	94.5	95.7	97.7	99.5	101.3	103.4	104.9	106.0	106.3	106.0	104.2
3981.1	93.4	94.8	96.3	97.9	99.7	101.1	102.7	102.9	103.5	104.2	104.2	102.2
5011.9	93.3	95.0	96.5	98.1	99.4	100.4	101.4	101.3	101.1	101.5	101.3	99.5
6309.6	93.5	95.0	96.3	97.9	99.2	99.8	100.3	99.7	99.1	99.2	98.7	96.9
7943.3	93.6	95.0	96.3	97.8	98.7	99.1	99.2	98.4	97.4	97.1	96.2	94.2
10000.0	93.5	94.9	96.2	97.4	98.2	98.2	98.2	97.1	95.8	95.3	94.2	92.1
12589.3	93.4	94.8	96.0	96.9	97.6	97.3	96.9	95.8	94.3	93.8	92.4	90.2
15848.9	93.1	94.4	95.4	96.4	96.8	96.3	95.7	94.5	92.7	92.3	90.7	88.1
19952.6	92.6	93.7	94.7	95.6	95.9	95.0	94.3	92.9	91.2	90.6	89.0	86.2
25118.9	92.1	93.1	93.7	94.6	94.8	93.8	92.8	91.7	89.8	89.1	87.2	84.2
31622.8	91.1	92.2	92.9	93.3	93.4	92.4	91.5	90.1	88.0	87.3	85.2	82.1
39810.7	90.0	90.9	91.3	91.8	91.5	90.7	89.6	88.2	86.6	85.4	83.3	80.0
50118.7	88.6	89.3	89.8	90.1	89.8	88.9	87.7	86.4	85.2	83.5	81.2	77.7
63095.7	87.2	87.9	88.3	88.4	88.2	87.2	86.0	84.6	83.8	81.6	79.2	75.8
79432.8	86.1	86.6	86.9	86.9	86.6	85.7	84.2	83.0	82.3	80.1	77.6	74.2

Setpoint	21
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.346
Ideal jet velocity (ft/s)	376.878
Temperature ratio (T_j/T_{amb})	1.769
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





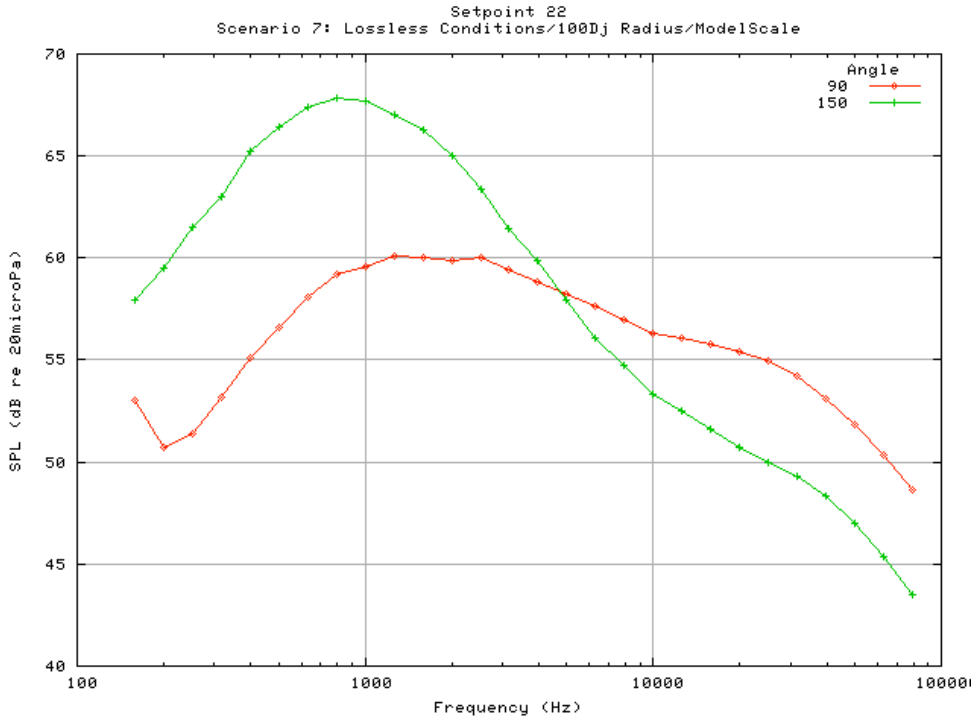
Setpoint 21 continued

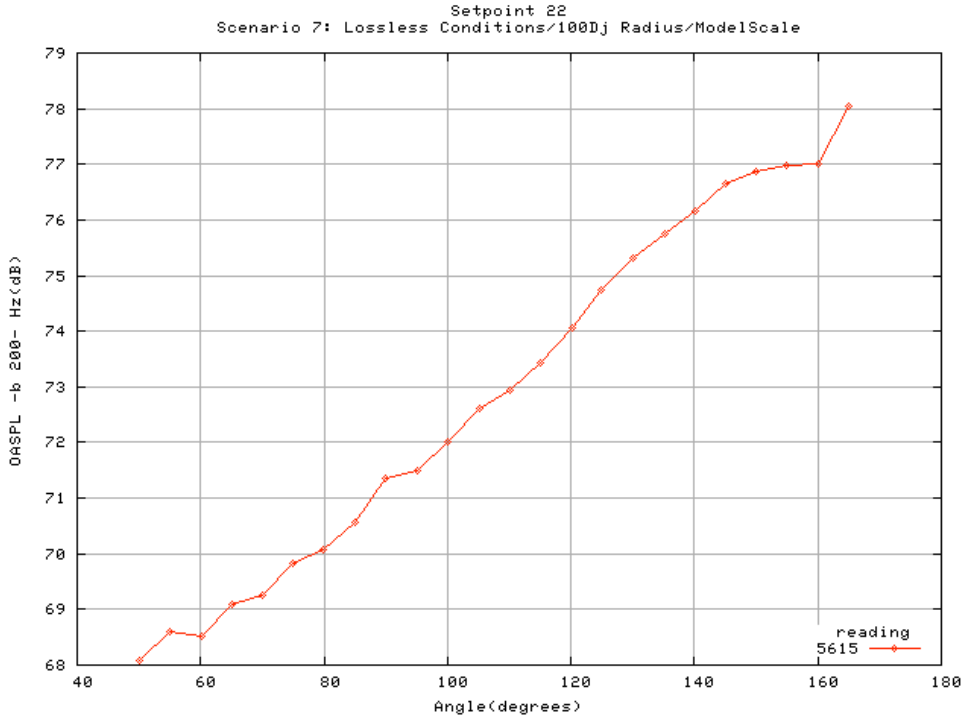
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	50.8	50.7	50.3	51.1	51.5	52.0	52.5	53.0	53.4	53.5	53.7	53.7
199.5	50.0	49.8	49.4	50.2	50.5	50.8	50.8	50.7	51.0	51.3	51.5	51.5
251.2	49.2	49.0	48.7	49.1	49.1	49.5	50.1	50.7	51.1	50.8	50.9	51.3
316.2	49.2	49.7	49.7	50.4	50.8	51.5	51.9	52.0	52.4	52.7	53.1	53.4
398.1	50.9	51.2	51.3	52.4	53.0	53.4	53.6	53.7	54.1	54.1	54.6	55.1
501.2	51.3	52.3	52.8	53.8	54.0	54.3	54.4	54.5	55.0	55.2	55.7	56.2
631.0	52.8	53.7	54.0	54.7	54.7	55.0	55.1	55.3	56.3	56.4	57.0	57.8
794.3	53.3	54.3	54.6	55.0	55.1	55.5	55.6	56.0	56.7	56.9	57.5	58.1
1000.0	53.5	54.4	54.7	55.3	55.3	55.5	56.0	56.4	57.3	57.4	58.1	58.6
1258.9	53.8	55.0	55.0	55.2	55.3	55.7	56.3	56.7	57.4	57.6	58.1	58.6
1584.9	53.9	54.8	54.4	54.7	54.8	55.6	56.0	56.4	57.2	57.6	58.1	58.5
1995.3	53.8	54.2	54.0	54.5	54.8	55.5	55.9	56.4	57.2	57.2	57.7	58.3
2511.9	53.8	54.5	53.8	54.5	55.1	56.0	55.7	56.0	57.1	57.0	57.6	58.3
3162.3	53.2	53.7	53.1	53.8	54.2	54.8	55.1	55.6	56.3	56.3	56.8	57.6
3981.1	52.9	52.8	52.7	53.6	53.7	54.2	54.6	54.8	55.6	55.8	56.3	56.9
5011.9	51.9	52.3	52.2	52.9	52.9	53.5	53.9	54.1	55.0	55.0	55.3	55.9
6309.6	51.4	52.2	51.8	52.5	52.5	53.1	53.3	53.7	54.5	54.4	54.9	55.4
7943.3	51.5	52.0	51.5	52.0	51.7	52.6	52.8	53.2	53.9	53.9	54.3	54.8
10000.0	51.5	51.8	51.4	51.8	51.4	52.2	52.5	52.8	53.4	53.3	53.8	54.4
12589.3	51.4	51.2	50.9	51.5	51.0	52.0	52.0	52.5	53.3	53.2	53.5	54.1
15848.9	51.0	50.7	50.6	51.1	50.7	51.8	51.6	52.3	53.0	53.1	53.3	53.9
19952.6	50.2	50.2	49.8	50.6	50.7	51.4	50.9	52.0	52.6	52.8	53.0	53.4
25118.9	49.6	49.7	49.3	50.1	50.5	51.0	50.5	51.6	52.1	52.3	52.6	52.9
31622.8	48.5	48.7	48.6	49.1	49.3	50.3	49.7	50.9	51.4	51.5	51.9	52.2
39810.7	47.3	47.2	47.1	47.8	48.8	49.3	48.7	49.7	50.1	50.2	50.9	50.9
50118.7	45.5	45.6	45.5	46.2	48.1	47.9	47.3	48.3	48.6	48.6	49.4	49.4
63095.7	43.6	43.8	43.8	44.4	46.6	46.2	45.9	46.6	46.8	46.9	47.6	47.7
79432.8	41.6	41.9	41.7	42.4	44.3	44.1	43.6	44.8	44.7	45.1	45.5	45.8

Setpoint 21 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	53.8	54.1	54.2	54.7	55.2	55.5	55.8	56.2	56.4	56.8	57.2	57.5
199.5	51.6	52.1	52.7	53.4	54.3	54.9	55.7	56.6	57.4	58.2	58.7	59.2
251.2	51.7	52.6	53.5	54.5	55.7	56.6	57.6	58.7	59.5	60.3	60.8	61.2
316.2	53.7	54.3	55.1	56.1	57.2	58.1	59.1	60.3	61.2	62.0	62.6	63.0
398.1	55.4	56.0	56.7	57.7	58.9	59.8	60.7	61.8	62.6	63.4	63.8	64.0
501.2	56.6	57.4	58.2	59.3	60.4	61.2	62.2	63.2	63.8	64.4	64.8	64.9
631.0	58.1	58.9	59.8	60.7	61.5	62.4	63.2	64.0	64.6	65.1	65.3	65.1
794.3	58.3	59.2	59.8	60.8	61.8	62.5	63.2	64.1	64.7	65.1	65.1	64.6
1000.0	59.0	59.6	60.3	61.2	62.1	62.7	63.5	64.1	64.5	64.6	64.3	63.3
1258.9	59.1	59.6	60.2	60.9	61.8	62.3	62.8	63.3	63.3	63.3	62.6	61.2
1584.9	59.0	59.6	60.0	60.8	61.5	61.9	62.4	62.8	62.7	62.2	61.1	59.1
1995.3	58.8	59.2	59.7	60.4	61.1	61.3	61.6	61.8	61.4	60.5	58.9	56.2
2511.9	58.4	58.9	59.2	59.8	60.3	60.5	60.7	60.5	59.8	58.3	56.4	53.6
3162.3	57.9	58.2	58.6	59.1	59.6	59.7	59.5	59.0	57.7	56.2	54.0	51.3
3981.1	57.2	57.4	57.7	58.0	58.3	58.4	58.2	57.4	56.0	54.1	51.9	49.1
5011.9	56.2	56.5	56.8	57.2	57.4	57.2	56.7	55.8	54.2	51.8	49.9	47.0
6309.6	55.7	55.8	56.2	56.6	56.7	56.2	55.5	54.3	52.4	50.2	48.2	45.0
7943.3	55.0	55.2	55.7	55.8	55.7	55.2	54.4	53.0	51.2	48.8	46.9	43.2
10000.0	54.7	54.7	55.1	55.4	55.3	54.7	53.6	52.0	50.0	47.7	45.6	42.2
12589.3	54.4	54.4	54.8	55.1	54.7	54.2	52.7	51.1	49.2	46.8	45.0	41.0
15848.9	54.0	53.8	54.5	54.7	53.8	53.5	51.9	50.2	48.3	45.9	44.1	39.7
19952.6	53.4	53.3	54.0	53.9	52.9	52.8	51.0	49.1	47.6	45.7	43.9	39.2
25118.9	52.7	52.3	53.4	53.1	52.0	52.1	50.1	48.0	46.9	45.2	43.3	38.4
31622.8	52.2	51.8	52.7	52.7	51.4	51.3	49.4	47.3	46.1	43.6	41.6	37.0
39810.7	50.9	50.6	51.4	51.4	50.1	50.0	48.0	45.8	45.0	42.6	40.3	36.1
50118.7	49.4	49.2	49.8	49.8	48.8	48.2	46.4	44.3	43.3	41.5	38.9	35.2
63095.7	47.8	47.7	48.0	48.1	47.3	46.4	44.6	43.1	41.4	39.8	37.3	34.1
79432.8	45.7	45.1	46.2	46.2	44.6	44.6	42.4	40.0	39.3	37.6	35.4	32.6

Setpoint	22
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.391
Ideal jet velocity (ft/s)	426.258
Temperature ratio (T_j/T_{amb})	1.765
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





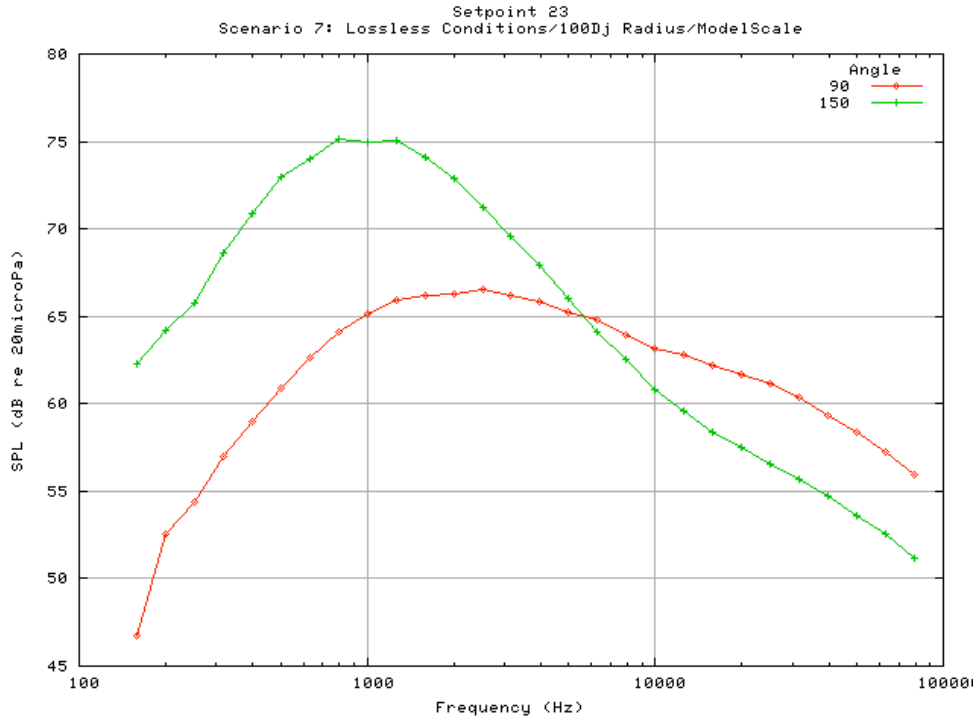
Setpoint 22 continued

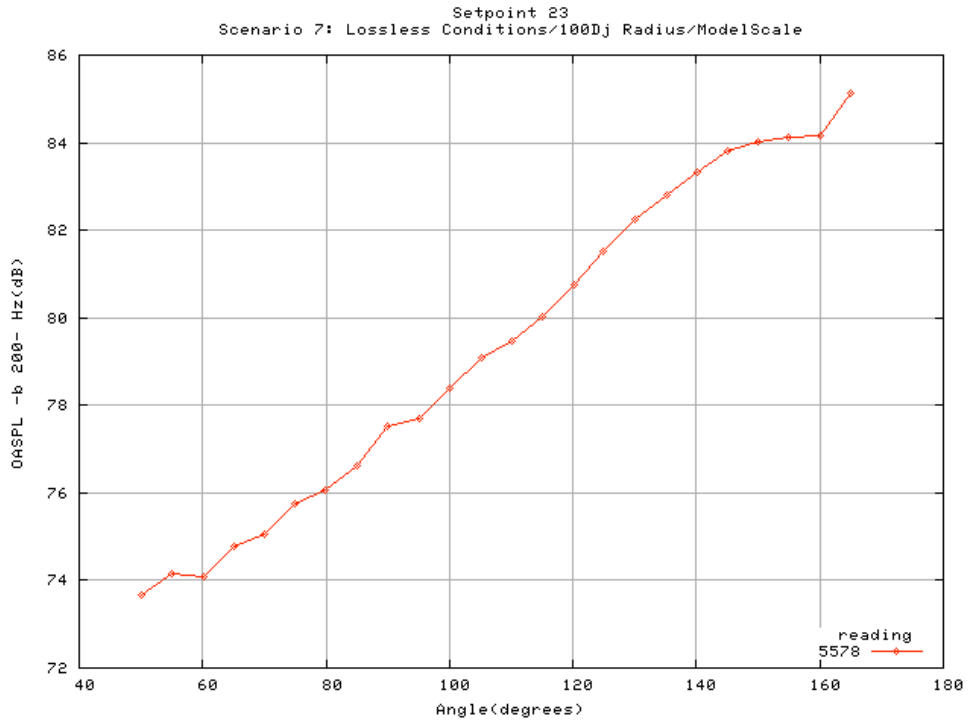
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	48.9	49.2	49.4	50.6	51.2	51.8	52.2	52.8	53.0	53.0	53.0	52.9
199.5	49.2	49.3	49.2	50.3	50.8	51.1	50.9	50.6	50.7	51.0	51.2	51.4
251.2	48.1	48.6	48.8	49.6	49.7	49.8	50.1	50.5	51.4	51.7	51.9	52.1
316.2	49.4	50.1	50.2	50.9	51.2	51.9	52.5	52.8	53.2	53.3	53.8	54.3
398.1	51.4	51.9	52.0	53.2	53.8	54.4	54.6	54.6	55.1	55.3	55.9	56.5
501.2	52.4	53.6	54.2	55.1	55.2	55.6	55.9	55.9	56.6	56.9	57.3	57.9
631.0	54.3	55.1	55.4	56.3	56.4	56.5	56.8	57.3	58.1	58.4	59.0	59.7
794.3	55.3	56.5	56.7	57.1	57.2	57.6	57.8	58.2	59.2	59.3	59.9	60.6
1000.0	55.9	56.8	57.1	57.7	57.6	58.0	58.3	58.7	59.6	59.8	60.5	61.1
1258.9	56.4	57.4	57.4	57.7	57.8	58.3	58.8	59.4	60.1	60.3	60.8	61.3
1584.9	56.6	57.3	56.9	57.2	57.4	58.2	58.8	59.2	60.0	60.4	60.9	61.5
1995.3	56.5	56.9	56.7	57.1	57.3	58.0	58.4	59.0	59.9	59.9	60.5	61.3
2511.9	56.7	57.4	57.0	57.4	57.6	58.3	58.8	59.0	60.1	60.0	60.5	61.2
3162.3	56.0	56.5	55.9	56.6	57.0	57.7	58.0	58.7	59.4	59.5	60.1	60.8
3981.1	55.7	55.6	55.5	56.4	56.5	57.0	57.4	57.8	58.8	59.0	59.5	60.1
5011.9	54.8	55.2	55.1	55.8	55.8	56.5	56.8	57.2	58.2	58.2	58.6	59.3
6309.6	54.2	54.9	54.6	55.3	55.3	56.0	56.3	56.7	57.6	57.6	58.1	58.6
7943.3	54.1	54.5	54.2	54.8	54.6	55.3	55.7	56.2	56.9	57.0	57.4	57.9
10000.0	54.0	54.2	53.9	54.4	54.1	55.0	55.3	55.7	56.3	56.3	56.8	57.3
12589.3	54.0	54.0	53.8	54.2	53.8	54.8	54.7	55.3	56.0	56.1	56.5	57.0
15848.9	53.6	53.4	53.3	53.8	53.5	54.5	54.3	55.1	55.8	55.9	56.2	56.8
19952.6	53.0	53.0	52.6	53.4	53.5	54.1	53.6	54.7	55.4	55.5	55.9	56.3
25118.9	52.2	52.4	52.2	52.8	53.3	53.7	53.2	54.3	54.9	55.1	55.4	55.8
31622.8	51.3	51.5	51.4	52.0	52.2	53.1	52.5	53.7	54.2	54.4	54.9	55.1
39810.7	50.2	50.2	50.1	50.9	51.8	52.3	51.6	52.7	53.1	53.2	54.0	54.0
50118.7	48.5	48.7	48.7	49.5	51.3	51.0	50.4	51.4	51.9	51.8	52.7	52.8
63095.7	46.8	47.1	47.2	47.9	49.9	49.6	49.3	50.0	50.4	50.5	51.3	51.4
79432.8	45.0	45.4	45.4	46.2	48.0	47.8	47.4	48.5	48.6	49.0	49.5	49.8

Setpoint 22 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	52.9	53.3	53.6	54.3	55.2	55.9	56.6	57.3	58.0	58.6	59.1	59.6
199.5	51.6	52.1	52.8	53.8	55.0	56.1	57.3	58.5	59.5	60.4	61.1	61.5
251.2	52.4	53.2	54.0	55.3	56.8	58.0	59.2	60.5	61.5	62.4	63.0	63.5
316.2	54.8	55.5	56.3	57.5	58.8	59.7	60.8	62.0	63.0	63.9	64.6	65.0
398.1	57.0	57.8	58.6	59.7	61.1	62.1	63.1	64.3	65.2	66.0	66.5	66.7
501.2	58.4	59.1	59.8	61.0	62.3	63.3	64.4	65.7	66.4	67.1	67.6	67.8
631.0	60.2	61.1	61.8	62.8	63.8	64.7	65.6	66.6	67.4	68.0	68.3	68.1
794.3	60.9	61.6	62.4	63.6	64.6	65.4	66.2	67.2	67.9	68.3	68.3	67.8
1000.0	61.5	62.2	62.9	64.0	64.9	65.6	66.4	67.2	67.7	67.9	67.6	66.6
1258.9	61.8	62.4	63.1	64.0	65.0	65.6	66.3	66.9	67.0	67.0	66.4	64.7
1584.9	62.0	62.7	63.1	63.9	64.6	65.1	65.6	66.2	66.2	65.8	64.7	62.6
1995.3	61.8	62.4	62.8	63.6	64.2	64.5	65.0	65.4	65.0	64.1	62.4	59.7
2511.9	61.4	62.1	62.7	63.4	63.9	64.0	64.1	64.0	63.4	61.9	60.0	57.1
3162.3	61.2	61.5	62.0	62.5	63.0	63.1	63.1	62.6	61.4	59.9	57.7	54.9
3981.1	60.4	60.8	61.2	61.7	62.1	62.1	61.9	61.2	59.9	58.0	55.9	52.8
5011.9	59.7	60.0	60.3	60.7	61.1	61.0	60.4	59.6	57.9	55.7	53.8	50.8
6309.6	59.0	59.2	59.7	60.1	60.1	59.8	59.1	57.9	56.1	53.9	51.9	48.5
7943.3	58.2	58.6	59.2	59.2	59.1	58.8	57.9	56.5	54.7	52.4	50.3	46.7
10000.0	57.7	57.8	58.4	58.6	58.4	58.0	56.8	55.4	53.3	51.1	48.8	45.4
12589.3	57.3	57.4	58.1	58.4	57.8	57.4	56.0	54.4	52.5	50.0	48.2	44.2
15848.9	57.0	57.0	57.8	58.1	57.0	56.7	55.2	53.5	51.6	49.2	47.3	43.0
19952.6	56.3	56.3	57.3	57.3	55.9	55.9	54.0	52.4	50.7	48.8	46.9	42.4
25118.9	55.7	55.3	56.7	56.3	55.1	55.2	53.2	51.2	50.0	48.2	46.2	41.5
31622.8	55.2	54.8	56.0	55.9	54.6	54.5	52.6	50.6	49.3	46.8	44.5	40.2
39810.7	54.1	53.8	54.8	54.8	53.4	53.3	51.3	49.3	48.4	45.9	43.4	39.4
50118.7	52.8	52.6	53.4	53.4	52.3	51.8	49.9	48.0	47.0	45.0	42.2	38.7
63095.7	51.5	51.3	51.9	51.9	51.1	50.2	48.5	46.8	45.4	43.6	40.8	37.3
79432.8	49.7	49.1	50.5	50.3	48.7	48.8	46.5	44.2	43.5	41.5	38.8	35.5

Setpoint	23
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.492
Ideal jet velocity (ft/s)	536.814
Temperature ratio (T_j/T_{amb})	1.767
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





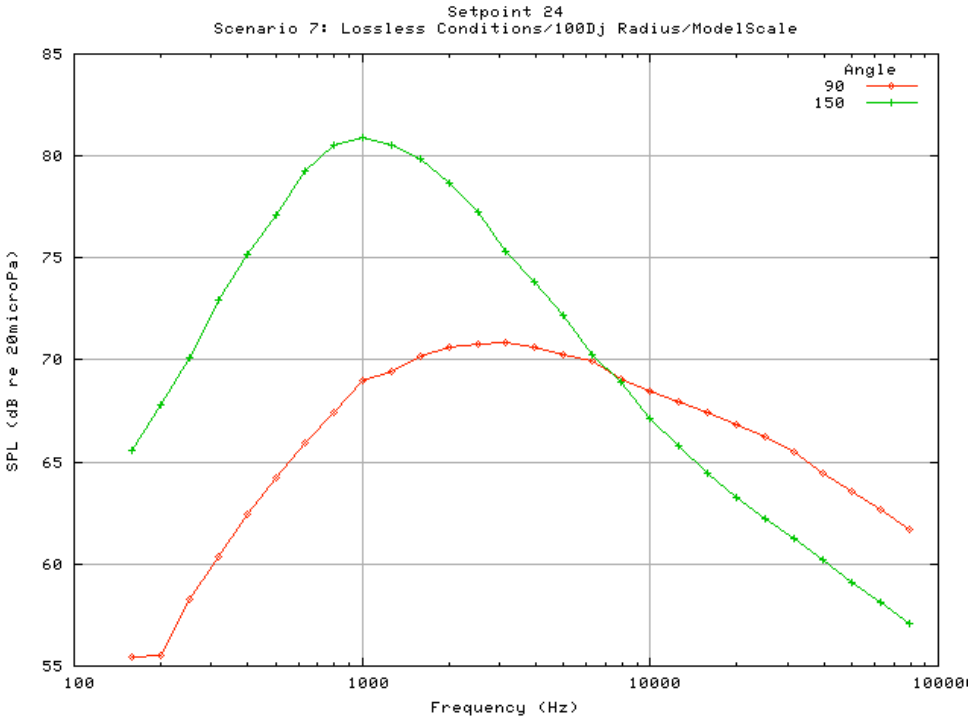
Setpoint 23 continued

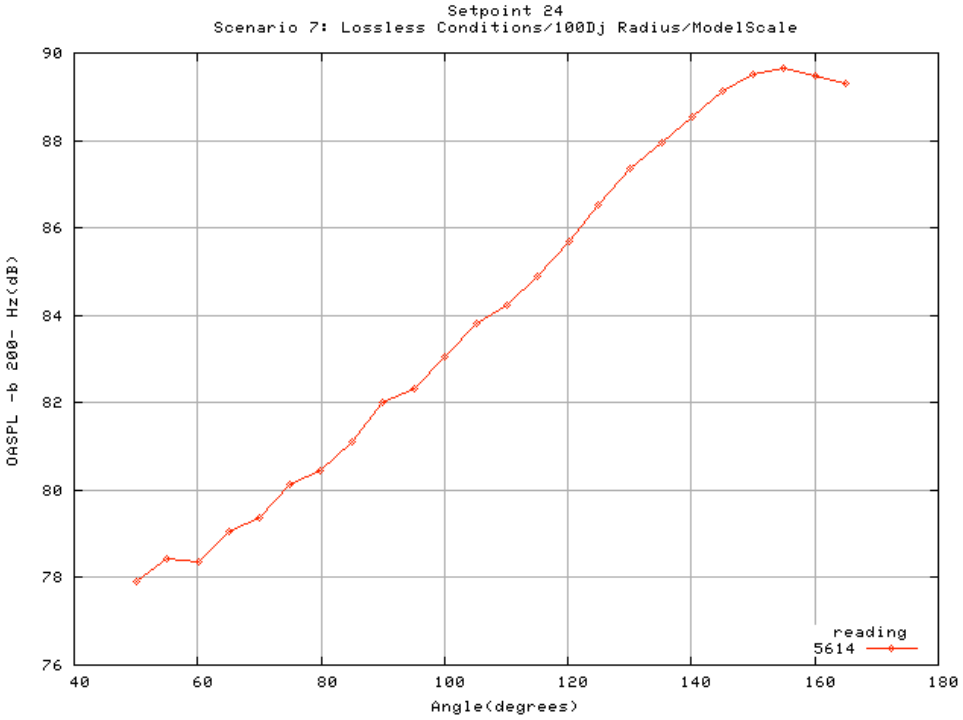
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5				31.7	44.5	45.1	33.3	45.8	46.7	47.2	50.3	50.8
199.5	44.8	47.1	47.5	49.8	50.4	51.0	51.5	51.8	52.6	52.9	53.4	53.9
251.2		46.4	47.1	48.0	50.7	52.3	52.7	53.2	54.4	54.7	54.7	55.0
316.2	52.9	52.6	52.7	53.7	54.9	55.7	56.1	56.4	57.0	57.2	57.7	58.2
398.1	54.3	55.1	55.6	56.7	57.2	57.7	58.1	58.3	59.0	59.3	59.9	60.6
501.2	56.7	58.0	58.5	59.5	59.6	59.9	60.1	60.2	60.9	61.1	61.7	62.4
631.0	58.3	59.3	59.7	60.5	60.6	61.0	61.2	61.7	62.7	63.0	63.6	64.4
794.3	59.8	60.9	61.0	61.6	61.8	62.2	62.5	63.1	64.1	64.4	65.2	66.0
1000.0	60.9	61.7	62.0	62.6	62.7	63.2	63.7	64.1	65.2	65.4	66.2	66.9
1258.9	61.8	62.9	62.9	63.3	63.5	64.0	64.6	65.1	65.9	66.1	66.8	67.5
1584.9	62.3	63.0	62.6	63.1	63.4	64.3	64.9	65.3	66.2	66.6	67.2	67.9
1995.3	62.4	62.8	62.6	63.2	63.6	64.5	64.9	65.4	66.3	66.5	67.2	68.1
2511.9	62.4	62.9	62.5	63.4	63.8	64.4	65.0	65.3	66.5	66.6	67.3	68.1
3162.3	62.3	62.7	62.2	63.1	63.5	64.3	64.8	65.4	66.2	66.4	67.1	67.9
3981.1	62.2	62.0	62.1	62.8	63.0	63.8	64.2	64.8	65.9	66.0	66.7	67.4
5011.9	61.1	61.6	61.6	62.4	62.5	63.4	63.8	64.1	65.2	65.4	66.0	66.9
6309.6	60.5	61.3	61.1	61.9	61.9	62.8	63.3	63.8	64.8	64.7	65.5	66.3
7943.3	60.3	60.8	60.6	61.3	61.2	62.3	62.5	63.0	63.9	64.1	64.7	65.4
10000.0	60.1	60.1	60.2	60.8	60.5	61.7	61.9	62.4	63.2	63.4	63.9	64.6
12589.3	59.8	59.8	59.6	60.3	59.9	61.1	61.2	61.9	62.8	62.9	63.4	64.1
15848.9	59.4	59.3	59.3	59.9	59.6	60.6	60.6	61.4	62.2	62.4	62.8	63.6
19952.6	58.8	59.0	58.6	59.5	59.6	60.3	59.9	61.0	61.7	61.9	62.4	63.0
25118.9	58.2	58.4	58.2	58.9	59.3	59.8	59.4	60.5	61.2	61.4	61.9	62.3
31622.8	57.3	57.6	57.5	58.1	58.2	59.2	58.6	59.8	60.4	60.6	61.2	61.6
39810.7	56.3	56.3	56.2	56.9	57.9	58.3	57.7	58.8	59.4	59.5	60.5	60.6
50118.7	54.8	55.0	55.1	55.8	57.5	57.3	56.8	57.8	58.3	58.4	59.4	59.6
63095.7	53.3	53.6	53.9	54.5	56.6	56.3	56.0	56.7	57.2	57.4	58.3	58.6
79432.8	51.8	52.2	52.5	53.2	55.0	55.0	54.5	55.6	55.9	56.3	57.0	57.5

Setpoint 23 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	51.2	52.1	54.3	55.4	56.9	58.2	59.5	61.0	62.3	63.4	64.2	64.9
199.5	54.4	55.2	56.2	57.4	59.0	60.3	61.7	63.1	64.2	65.3	66.1	66.7
251.2	55.7	56.6	57.3	58.6	60.5	61.9	63.3	64.7	65.8	66.8	67.6	68.1
316.2	58.7	59.6	60.6	61.8	63.4	64.7	66.1	67.5	68.7	69.7	70.4	70.9
398.1	61.1	62.1	63.0	64.2	65.8	67.0	68.4	69.8	70.9	71.9	72.6	72.9
501.2	63.0	63.9	64.8	66.2	67.9	69.1	70.5	72.0	72.9	73.8	74.4	74.6
631.0	64.9	65.8	66.7	67.9	69.2	70.3	71.6	73.0	74.0	74.9	75.4	75.2
794.3	66.3	67.2	68.1	69.4	70.7	71.8	72.9	74.1	75.1	75.7	75.9	75.4
1000.0	67.2	68.1	68.9	70.1	71.2	72.2	73.2	74.2	75.0	75.3	75.2	74.2
1258.9	68.0	68.7	69.6	70.7	72.0	72.9	73.9	74.7	75.0	75.0	74.3	72.6
1584.9	68.6	69.3	69.9	70.9	71.9	72.7	73.4	74.0	74.1	73.5	72.3	70.0
1995.3	68.7	69.3	69.9	70.9	71.9	72.5	73.0	73.3	72.9	71.9	70.2	67.4
2511.9	68.5	69.3	70.0	70.8	71.6	72.0	72.2	72.0	71.2	69.6	67.7	64.7
3162.3	68.3	68.9	69.4	70.1	70.9	71.2	71.3	70.8	69.6	68.0	65.8	62.9
3981.1	67.7	68.4	68.8	69.5	70.1	70.3	70.1	69.4	67.9	66.1	63.8	60.7
5011.9	67.2	67.7	68.1	68.7	69.1	69.1	68.7	67.7	66.0	63.9	61.9	58.8
6309.6	66.5	66.9	67.5	68.0	68.3	67.9	67.3	66.0	64.1	62.0	60.0	56.5
7943.3	65.7	66.1	66.8	67.0	67.0	66.6	65.7	64.3	62.6	60.3	58.3	54.5
10000.0	65.0	65.2	65.9	66.1	66.1	65.6	64.5	62.8	60.8	58.6	56.4	52.8
12589.3	64.4	64.5	65.2	65.4	64.9	64.5	63.2	61.5	59.6	57.2	55.1	51.2
15848.9	63.8	63.8	64.6	64.8	63.9	63.8	62.0	60.3	58.4	56.0	54.0	49.7
19952.6	63.1	63.1	64.1	64.1	63.0	62.8	60.9	59.1	57.5	55.5	53.7	49.1
25118.9	62.3	62.1	63.5	63.1	61.9	61.9	59.9	57.7	56.5	54.7	52.7	48.0
31622.8	61.7	61.5	62.5	62.4	61.1	61.1	59.0	57.0	55.7	53.1	50.9	46.4
39810.7	60.6	60.5	61.5	61.3	60.0	59.8	57.8	55.7	54.7	52.3	49.7	45.8
50118.7	59.6	59.6	60.3	60.1	59.0	58.6	56.7	54.7	53.6	51.8	48.9	45.2
63095.7	58.6	58.7	59.2	59.1	58.2	57.3	55.6	53.9	52.5	50.8	47.9	44.1
79432.8	57.3	56.9	58.2	57.9	56.2	56.5	54.2	52.0	51.2	49.2	46.4	42.5

Setpoint	24
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.591
Ideal jet velocity (ft/s)	644.972
Temperature ratio (T_j/T_{amb})	1.761
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





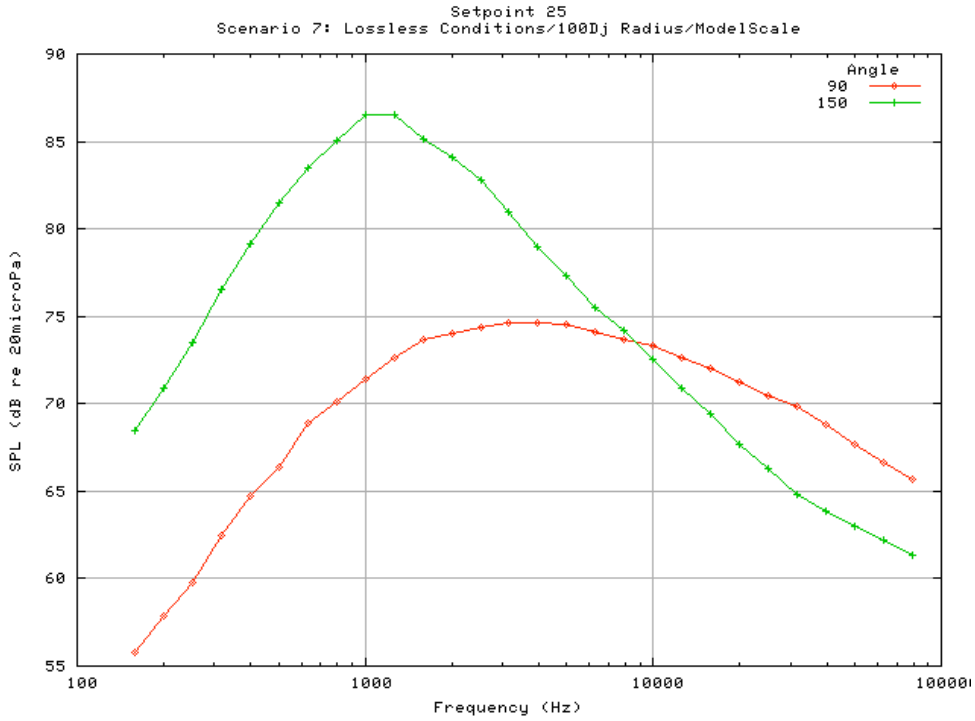
Setpoint 24 continued

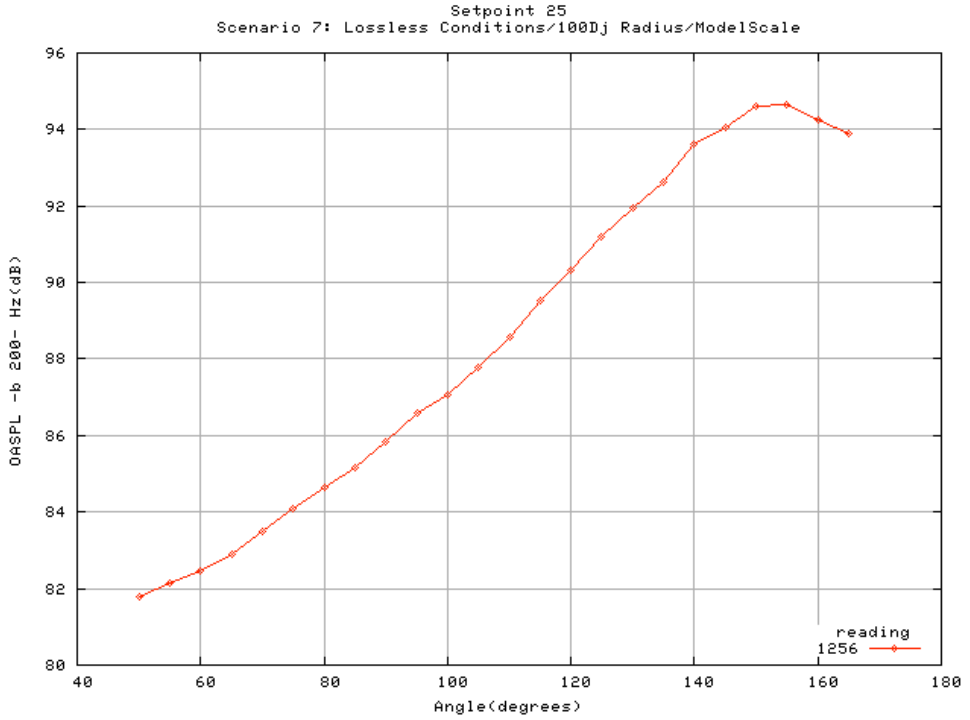
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	51.7	52.0	51.9	52.8	53.2	53.7	54.2	54.7	55.4	55.8	56.2	56.5
199.5	52.1	52.6	52.7	53.7	54.0	54.4	54.7	54.9	55.5	55.9	56.3	56.8
251.2	53.6	54.2	54.3	55.2	55.6	56.3	56.9	57.5	58.3	58.5	58.8	59.2
316.2	55.5	56.3	56.5	57.6	58.1	58.8	59.3	59.7	60.4	60.7	61.2	61.8
398.1	57.3	58.1	58.5	59.7	60.4	61.0	61.4	61.7	62.4	62.7	63.3	64.0
501.2	59.3	60.5	61.0	62.1	62.4	62.8	63.1	63.4	64.2	64.4	65.0	65.7
631.0	61.3	62.2	62.5	63.4	63.6	64.0	64.5	65.1	66.0	66.4	67.0	67.7
794.3	62.8	64.1	64.1	64.7	64.9	65.4	65.9	66.5	67.4	67.8	68.4	69.3
1000.0	64.4	65.3	65.4	66.1	66.2	66.7	67.4	67.8	69.0	69.3	70.2	71.0
1258.9	65.0	66.1	65.9	66.5	66.8	67.4	68.1	68.7	69.5	69.8	70.6	71.4
1584.9	66.2	66.9	66.6	67.0	67.5	68.4	68.9	69.4	70.2	70.6	71.4	72.1
1995.3	66.3	66.7	66.7	67.4	67.9	68.7	69.1	69.7	70.7	70.8	71.6	72.4
2511.9	66.4	66.9	66.7	67.5	68.0	68.6	69.1	69.6	70.8	71.0	71.9	72.8
3162.3	66.5	67.0	66.6	67.5	68.0	68.8	69.2	70.0	70.9	71.1	71.9	72.8
3981.1	66.5	66.5	66.6	67.4	67.7	68.5	69.1	69.5	70.6	71.0	71.8	72.5
5011.9	65.8	66.3	66.3	67.0	67.1	68.1	68.7	69.2	70.3	70.5	71.2	72.1
6309.6	65.4	66.1	66.0	66.7	66.9	67.8	68.2	68.8	69.9	70.0	70.9	71.6
7943.3	65.3	65.7	65.6	66.2	66.2	67.2	67.5	68.1	69.1	69.5	70.1	70.9
10000.0	64.9	65.2	65.0	65.6	65.5	66.7	67.1	67.7	68.5	68.8	69.5	70.3
12589.3	64.4	64.7	64.5	65.2	64.9	66.2	66.4	67.1	68.0	68.4	68.9	69.6
15848.9	64.1	64.3	64.1	64.7	64.5	65.7	65.7	66.6	67.4	67.8	68.2	69.1
19952.6	63.6	63.9	63.5	64.2	64.5	65.2	64.9	66.1	66.8	67.2	67.7	68.4
25118.9	63.1	63.4	63.2	63.8	64.2	64.8	64.4	65.6	66.2	66.7	67.1	67.7
31622.8	62.2	62.5	62.5	63.0	63.2	64.2	63.7	64.9	65.5	65.9	66.5	66.9
39810.7	61.3	61.4	61.4	62.0	62.9	63.5	62.9	64.0	64.5	64.8	65.7	65.9
50118.7	59.9	60.2	60.2	60.9	62.6	62.5	62.0	63.1	63.6	63.8	64.7	65.0
63095.7	58.6	59.0	59.3	59.9	61.9	61.6	61.3	62.1	62.7	62.9	63.7	64.1
79432.8	57.4	57.9	58.1	58.8	60.6	60.7	60.0	61.3	61.7	62.1	62.8	63.3

Setpoint 24 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	56.9	57.6	58.2	59.2	60.6	61.8	63.1	64.4	65.6	66.6	67.4	68.0
199.5	57.3	58.1	59.0	60.3	62.0	63.4	65.0	66.6	67.8	69.0	69.9	70.5
251.2	59.7	60.6	61.5	62.9	64.6	66.0	67.4	68.9	70.1	71.2	72.0	72.6
316.2	62.2	63.0	64.0	65.3	67.0	68.4	70.0	71.6	72.9	74.1	74.9	75.5
398.1	64.4	65.3	66.1	67.3	69.0	70.5	72.1	73.8	75.2	76.4	77.2	77.6
501.2	66.2	67.1	67.9	69.3	71.1	72.6	74.2	75.9	77.1	78.2	78.9	79.2
631.0	68.2	69.4	70.3	71.7	73.3	74.8	76.3	78.0	79.3	80.3	80.8	80.8
794.3	69.7	70.7	71.8	73.3	74.9	76.2	77.7	79.2	80.5	81.4	81.7	81.3
1000.0	71.4	72.3	73.2	74.6	76.0	77.3	78.6	79.9	80.9	81.5	81.4	80.5
1258.9	72.1	73.0	73.9	75.2	76.6	77.7	78.9	80.0	80.6	80.8	80.1	78.4
1584.9	72.7	73.7	74.4	75.7	76.9	77.9	78.8	79.6	79.9	79.4	78.1	75.9
1995.3	73.1	73.8	74.6	75.7	76.9	77.7	78.4	78.9	78.7	77.7	75.9	73.2
2511.9	73.2	74.2	75.0	75.9	76.8	77.3	77.8	77.8	77.2	75.7	73.7	70.8
3162.3	73.3	74.1	74.8	75.6	76.5	76.8	76.9	76.5	75.3	73.9	71.7	68.8
3981.1	72.9	73.6	74.4	75.2	75.8	76.0	75.9	75.2	73.8	72.0	69.9	66.8
5011.9	72.6	73.1	73.6	74.4	75.0	75.0	74.6	73.7	72.2	70.0	67.9	64.7
6309.6	72.1	72.5	73.2	73.9	74.2	74.0	73.4	72.1	70.3	68.2	66.1	62.6
7943.3	71.3	71.9	72.6	73.0	73.1	72.8	71.9	70.5	68.9	66.6	64.6	60.7
10000.0	70.7	71.0	71.7	72.2	72.1	71.7	70.7	69.0	67.1	65.0	62.6	58.8
12589.3	70.0	70.2	70.9	71.2	71.0	70.6	69.3	67.6	65.8	63.3	61.2	57.2
15848.9	69.3	69.5	70.3	70.6	69.8	69.5	67.9	66.2	64.4	62.1	60.0	55.7
19952.6	68.6	68.7	69.7	69.6	68.6	68.4	66.6	64.9	63.3	61.4	59.3	54.7
25118.9	67.7	67.6	69.1	68.6	67.5	67.4	65.4	63.4	62.2	60.6	58.4	53.7
31622.8	67.2	67.0	68.2	67.9	66.6	66.4	64.5	62.5	61.2	58.9	56.5	52.1
39810.7	66.0	66.0	67.0	66.7	65.4	65.3	63.3	61.2	60.2	57.9	55.2	51.3
50118.7	65.0	65.0	65.8	65.6	64.4	63.9	62.2	60.1	59.1	57.4	54.4	50.9
63095.7	64.2	64.3	64.8	64.5	63.7	62.8	61.2	59.5	58.1	56.6	53.6	50.0
79432.8	63.1	62.7	64.0	63.6	61.9	62.1	60.1	57.7	57.1	55.3	52.3	48.7

Setpoint	25
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.698
Ideal jet velocity (ft/s)	770.415
Temperature ratio (T_j/T_{amb})	1.764
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





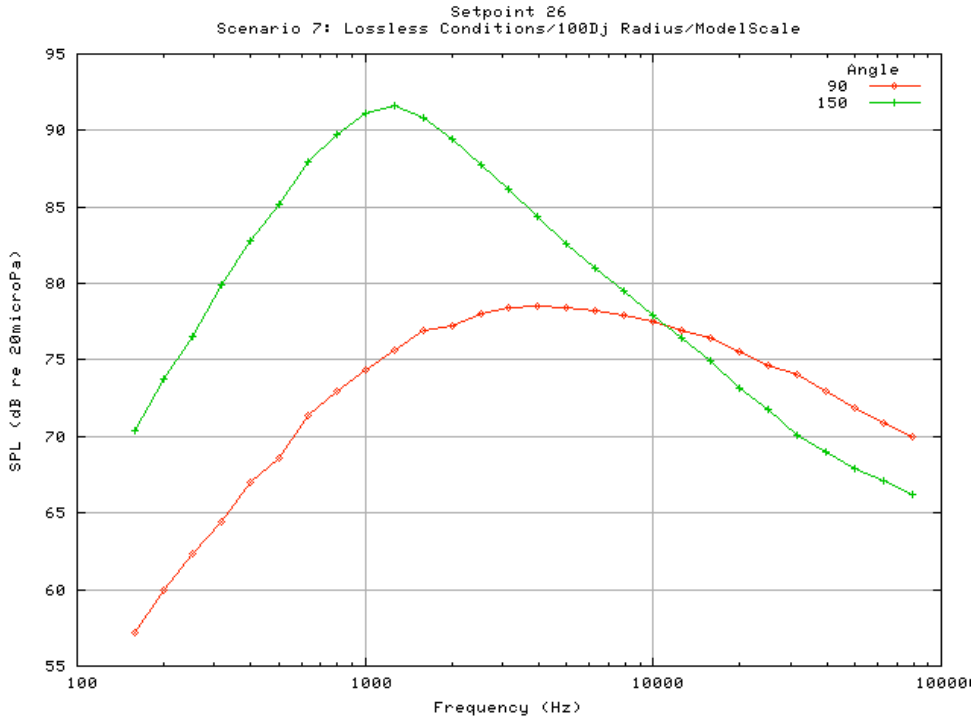
Setpoint 25 continued

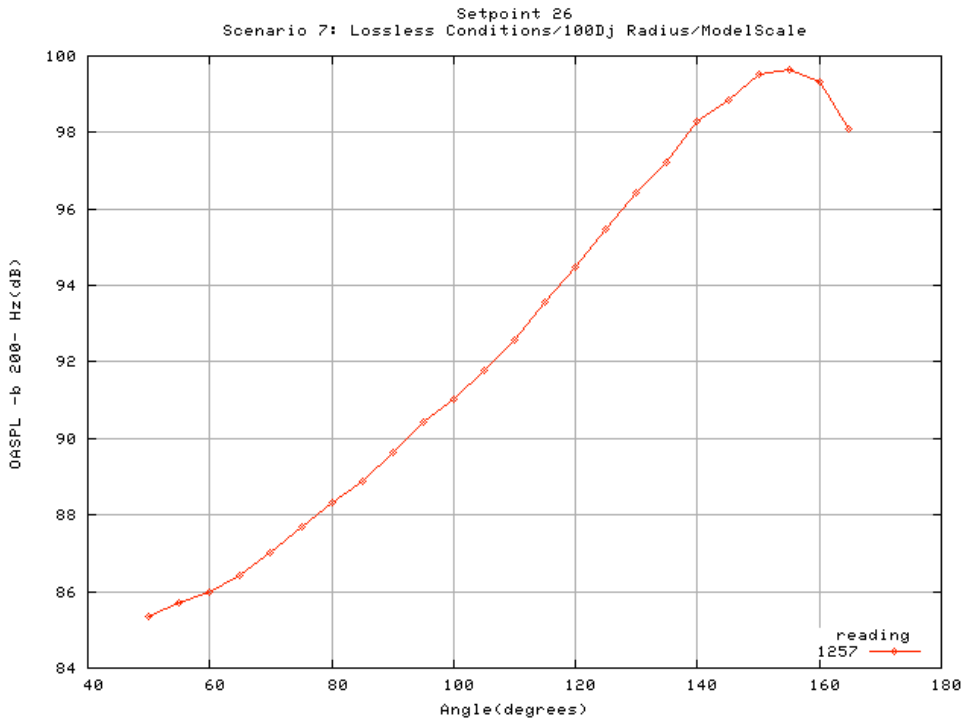
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	52.6						54.5	55.0	55.7	56.2	56.4	56.9
199.5	53.9	54.2	54.7	55.1	55.4	55.9	56.3	57.0	57.9	58.8	59.3	60.0
251.2	55.3	55.9	56.4	56.9	57.4	58.0	58.6	59.2	59.7	60.4	60.7	61.2
316.2	57.0	57.6	58.2	59.0	59.9	60.8	61.5	62.0	62.5	62.9	63.1	63.6
398.1	58.5	59.4	60.5	61.4	62.3	62.9	63.5	64.1	64.7	65.3	65.5	66.3
501.2	60.9	62.0	63.0	63.8	64.3	64.6	64.9	65.5	66.4	67.1	67.3	68.1
631.0	64.2	64.9	65.5	66.1	66.3	66.8	67.2	67.7	68.9	69.1	69.5	70.4
794.3	65.2	66.2	66.7	67.0	67.4	68.0	68.6	69.4	70.1	70.9	71.4	72.3
1000.0	67.0	67.8	68.4	68.8	69.0	69.6	70.1	70.7	71.4	72.2	72.6	73.4
1258.9	68.3	69.3	69.6	69.7	70.2	70.9	71.5	72.1	72.7	73.6	74.1	75.0
1584.9	69.4	69.9	70.1	70.3	70.8	71.6	72.3	72.9	73.7	74.3	75.0	75.7
1995.3	69.8	70.2	70.4	70.8	71.4	72.1	72.7	73.3	74.0	74.9	75.3	76.2
2511.9	70.2	70.8	71.1	71.5	72.1	72.7	73.2	73.9	74.3	75.2	75.7	76.7
3162.3	70.7	71.2	71.2	71.9	72.4	73.0	73.4	74.1	74.6	75.5	76.0	76.9
3981.1	70.9	70.8	71.3	71.8	72.4	72.9	73.4	73.9	74.6	75.4	75.8	76.6
5011.9	70.2	70.5	70.9	71.3	71.9	72.6	73.2	73.7	74.5	75.1	75.6	76.4
6309.6	69.8	70.3	70.6	71.2	71.7	72.4	73.0	73.5	74.1	74.8	75.4	76.0
7943.3	69.7	69.9	70.1	70.7	71.3	72.0	72.6	73.0	73.7	74.4	74.9	75.5
10000.0	69.5	69.4	69.8	70.3	70.8	71.5	72.1	72.6	73.3	73.9	74.3	75.0
12589.3	68.9	68.9	69.2	69.8	70.3	70.9	71.4	71.9	72.6	73.3	73.7	74.3
15848.9	68.5	68.2	68.6	69.2	69.7	70.3	70.8	71.3	72.0	72.8	73.1	73.7
19952.6	67.7	67.8	67.8	68.4	69.1	69.7	70.2	70.6	71.2	71.7	72.5	73.0
25118.9	67.2	67.2	67.2	67.5	68.5	69.0	69.5	70.0	70.4	71.1	71.8	72.2
31622.8	66.5	66.5	66.7	67.2	67.7	68.3	68.8	69.2	69.8	70.4	70.9	71.4
39810.7	65.3	65.4	65.7	66.1	66.7	67.3	67.8	68.3	68.8	69.5	69.7	70.5
50118.7	64.0	64.2	64.6	65.0	65.7	66.4	67.0	67.2	67.7	68.4	68.9	69.4
63095.7	62.6	63.1	63.5	64.0	64.7	65.3	65.9	66.2	66.7	67.4	67.9	68.4
79432.8	61.4	61.9	62.5	63.0	63.7	64.3	64.8	65.3	65.7	66.5	66.9	67.5

Setpoint 25 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	57.5	58.2	59.1	61.0	61.9	63.5	65.2	66.7	68.5	69.6	75.4	84.6
199.5	60.6	61.2	62.0	63.2	64.6	66.0	67.7	69.2	70.9	71.9	75.7	83.9
251.2	61.9	62.7	63.8	65.1	66.6	68.2	70.1	71.7	73.5	74.7	76.9	82.9
316.2	64.2	65.0	66.1	67.7	69.4	71.2	73.2	74.8	76.5	77.6	78.9	82.9
398.1	67.1	67.9	68.9	70.3	72.2	73.9	75.9	77.4	79.2	80.3	81.1	83.0
501.2	68.9	69.7	70.9	72.4	74.1	75.9	78.1	79.8	81.5	82.5	83.2	84.2
631.0	71.3	72.3	73.4	74.7	76.4	78.1	80.2	81.7	83.5	84.6	85.1	85.1
794.3	73.0	74.1	75.2	76.8	78.4	80.0	82.0	83.5	85.1	85.9	86.0	85.6
1000.0	74.3	75.3	76.6	78.1	79.8	81.4	83.6	85.0	86.5	87.1	86.9	85.5
1258.9	75.9	76.9	78.0	79.2	80.7	82.3	84.2	85.3	86.5	86.7	86.0	83.6
1584.9	76.6	77.6	78.8	80.0	81.3	82.5	83.9	84.8	85.2	84.8	83.2	80.1
1995.3	77.1	78.1	79.0	80.3	81.6	82.6	83.8	84.1	84.1	83.0	81.0	77.3
2511.9	77.6	78.7	79.7	80.8	81.7	82.4	83.4	83.3	82.8	81.2	79.0	75.0
3162.3	77.7	78.9	79.6	80.6	81.2	81.9	82.5	82.0	80.9	79.1	76.9	72.5
3981.1	77.6	78.7	79.4	80.2	80.8	81.2	81.5	80.4	78.9	77.3	75.1	70.2
5011.9	77.2	78.3	79.0	79.8	80.1	80.2	80.3	79.0	77.3	75.5	73.2	68.3
6309.6	76.8	77.7	78.5	79.1	79.5	79.4	79.1	77.6	75.5	73.9	71.5	66.7
7943.3	76.3	77.2	77.8	78.4	78.7	78.3	77.7	76.2	74.2	72.4	69.9	64.8
10000.0	75.8	76.7	77.3	77.7	77.6	77.1	76.3	74.6	72.5	70.8	68.4	63.2
12589.3	75.1	76.0	76.4	76.7	76.6	75.9	74.9	73.2	70.8	69.1	66.7	61.8
15848.9	74.3	75.2	75.6	75.8	75.7	74.6	73.5	71.8	69.4	67.6	65.0	59.5
19952.6	73.6	74.2	74.6	74.8	74.5	73.4	72.0	70.1	67.7	66.1	63.5	57.9
25118.9	72.7	73.5	73.6	73.8	73.4	72.2	70.5	68.8	66.3	64.5	61.8	56.4
31622.8	71.9	72.6	72.8	72.6	72.2	70.9	69.4	67.4	64.8	63.1	60.3	54.6
39810.7	70.9	71.4	71.5	71.4	70.6	69.4	67.9	66.0	63.9	61.7	58.9	53.3
50118.7	69.8	70.2	70.4	70.1	69.2	68.1	66.5	64.6	63.0	60.4	57.5	51.9
63095.7	68.7	69.1	69.2	68.9	68.1	66.9	65.4	63.5	62.2	59.3	56.3	50.7
79432.8	67.8	68.2	68.2	67.9	67.1	66.0	64.2	62.5	61.4	58.5	55.5	49.8

Setpoint	26
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.801
Ideal jet velocity (ft/s)	883.680
Temperature ratio (T_j/T_{amb})	1.768
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





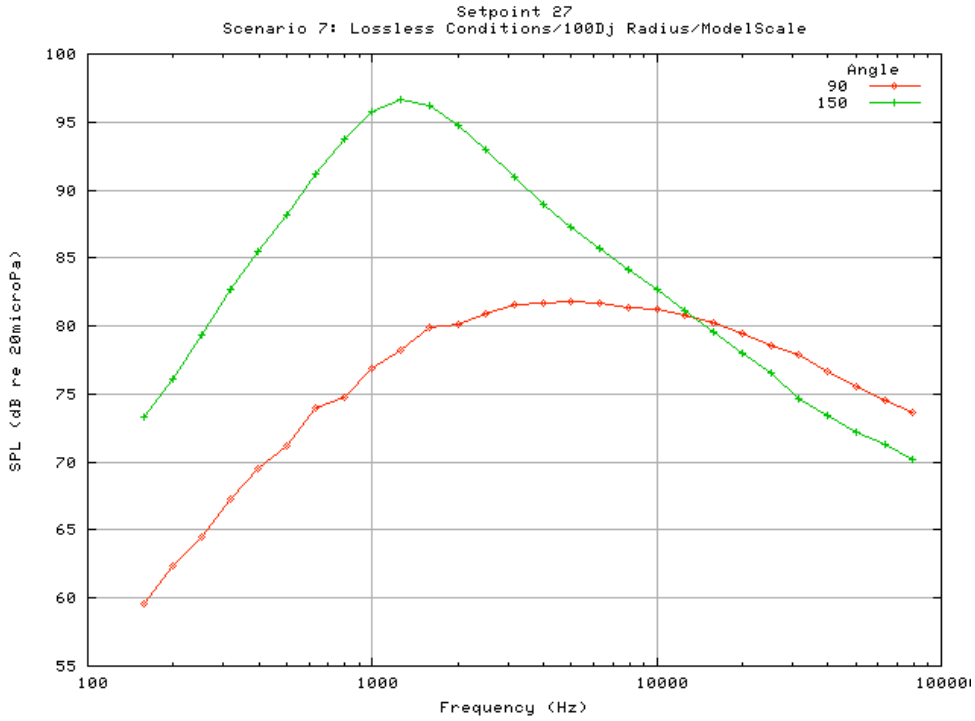
Setpoint 26 continued

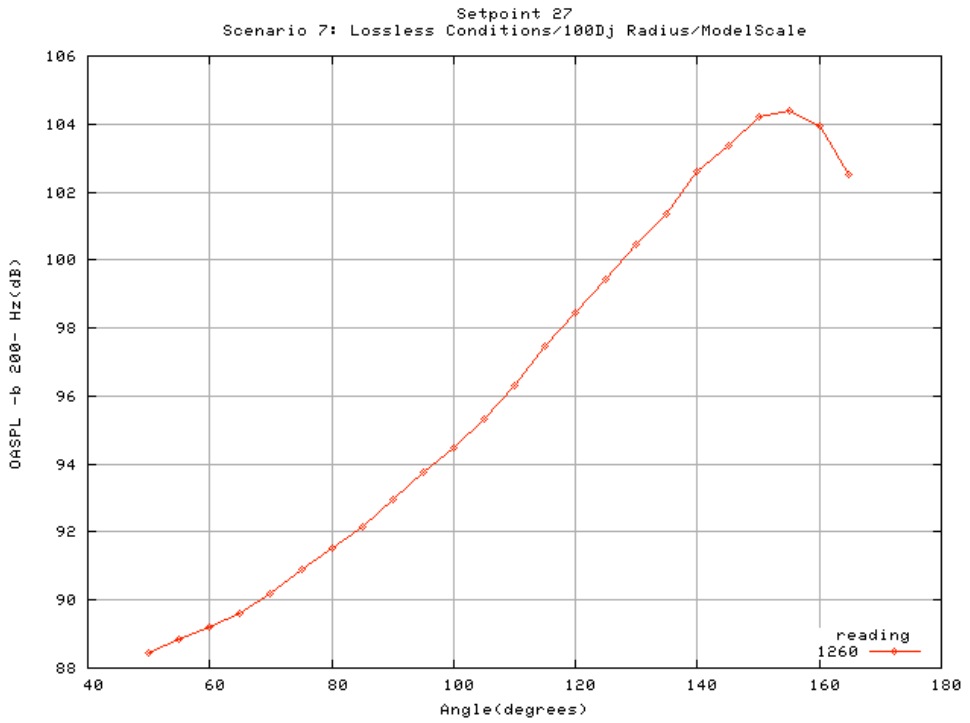
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	53.2	53.9	54.5	54.7	55.1	55.6	56.0	56.6	57.2	57.7	58.0	58.5
199.5	55.5	56.1	56.8	57.3	57.8	58.3	58.9	59.5	59.9	60.4	60.5	60.9
251.2	57.4	58.1	58.8	59.3	59.8	60.5	61.1	61.8	62.4	62.8	62.8	63.1
316.2	59.5	60.0	60.7	61.3	62.0	62.8	63.5	64.0	64.4	64.8	65.1	65.7
398.1	61.4	61.9	62.8	63.9	64.8	65.5	66.0	66.4	67.0	67.7	68.2	68.8
501.2	63.6	64.8	65.8	66.4	66.8	67.2	67.5	68.0	68.6	69.4	69.8	70.4
631.0	66.3	67.1	67.7	68.4	68.7	69.2	69.7	70.1	71.3	71.7	72.0	72.7
794.3	68.2	69.0	69.4	70.0	70.4	71.1	71.6	72.5	73.0	73.8	74.3	75.1
1000.0	69.6	70.2	71.0	71.4	71.7	72.4	73.0	73.5	74.3	75.1	75.5	76.3
1258.9	70.9	71.8	72.3	72.2	73.0	73.7	74.3	74.9	75.6	76.5	77.1	77.9
1584.9	72.3	72.7	73.0	73.3	74.0	74.8	75.5	76.1	76.9	77.7	78.3	79.1
1995.3	72.8	73.3	73.6	74.1	74.7	75.5	76.1	76.6	77.3	78.3	78.9	79.8
2511.9	73.4	73.9	74.1	74.4	75.1	76.0	76.7	77.4	78.1	78.9	79.3	80.2
3162.3	74.1	74.6	74.6	75.2	75.8	76.4	77.0	77.6	78.4	79.3	79.9	80.7
3981.1	74.5	74.5	74.8	75.3	75.7	76.5	77.1	77.7	78.5	79.5	79.9	80.7
5011.9	74.1	74.4	74.7	75.2	75.8	76.4	76.9	77.5	78.4	79.1	79.8	80.6
6309.6	73.6	74.2	74.5	75.0	75.4	76.2	76.9	77.5	78.2	79.0	79.6	80.4
7943.3	73.6	74.0	74.1	74.7	75.2	75.9	76.5	77.1	78.0	78.6	79.4	80.1
10000.0	73.5	73.4	73.9	74.2	74.8	75.6	76.3	76.8	77.5	78.4	78.9	79.6
12589.3	73.0	72.9	73.2	73.7	74.4	75.1	75.6	76.1	77.0	77.8	78.3	79.0
15848.9	72.4	72.4	72.7	73.2	73.8	74.4	75.0	75.6	76.4	77.2	77.7	78.4
19952.6	71.6	71.9	72.0	72.6	73.1	73.8	74.3	74.9	75.5	76.2	77.1	77.6
25118.9	71.0	71.2	71.3	71.6	72.4	73.1	73.6	74.2	74.7	75.4	76.3	76.8
31622.8	70.2	70.6	70.7	71.2	71.6	72.2	72.8	73.3	74.0	74.7	75.4	75.9
39810.7	69.1	69.5	69.7	70.1	70.6	71.3	71.9	72.3	72.9	73.6	74.0	74.8
50118.7	67.9	68.3	68.7	69.0	69.5	70.3	70.9	71.2	71.8	72.6	73.2	73.7
63095.7	66.6	67.2	67.6	68.1	68.6	69.3	69.9	70.2	70.9	71.5	72.2	72.7
79432.8	65.4	66.1	66.7	67.2	67.6	68.3	68.9	69.4	70.0	70.7	71.2	71.7

Setpoint 26 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	59.1	59.7	60.6	61.8	63.4	64.9	66.9	68.5	70.4	71.7	72.9	75.0
199.5	61.4	62.2	63.3	64.8	66.5	68.2	70.3	71.9	73.8	75.1	76.3	77.7
251.2	63.7	64.6	65.9	67.6	69.4	71.1	73.1	74.7	76.6	77.8	78.9	80.0
316.2	66.5	67.5	68.8	70.5	72.3	74.2	76.3	78.0	79.9	81.1	82.2	82.9
398.1	69.3	70.1	71.4	73.0	74.9	76.8	79.1	80.9	82.8	84.1	85.0	85.5
501.2	71.1	72.0	73.5	75.3	77.0	79.0	81.5	83.3	85.1	86.3	87.2	87.5
631.0	73.7	74.7	75.8	77.5	79.5	81.7	84.1	86.0	87.9	89.1	89.8	89.6
794.3	75.9	77.0	78.2	80.1	82.0	84.0	86.3	88.0	89.7	90.6	90.9	90.3
1000.0	77.3	78.4	79.8	81.6	83.5	85.4	87.8	89.5	91.1	91.8	91.8	90.5
1258.9	78.8	80.0	81.3	82.7	84.6	86.4	88.6	90.0	91.7	92.1	91.7	89.7
1584.9	80.1	81.1	82.4	83.7	85.3	86.8	88.7	90.0	90.8	90.9	89.7	87.3
1995.3	80.7	81.8	83.1	84.5	86.0	87.3	88.6	89.2	89.5	88.5	87.0	84.2
2511.9	81.2	82.4	83.5	84.8	86.0	87.0	88.1	88.0	87.8	86.5	84.6	81.7
3162.3	81.5	82.7	83.6	84.9	85.9	86.8	87.5	87.1	86.2	84.4	82.3	78.9
3981.1	81.7	82.7	83.7	84.7	85.7	86.2	86.7	85.7	84.4	82.7	80.6	76.8
5011.9	81.3	82.6	83.6	84.5	85.1	85.2	85.3	84.2	82.6	80.8	78.6	74.9
6309.6	81.2	82.1	83.1	83.9	84.4	84.5	84.1	83.0	81.0	79.2	77.0	73.2
7943.3	80.8	81.9	82.6	83.3	83.7	83.5	82.9	81.6	79.6	77.6	75.1	71.3
10000.0	80.4	81.3	82.1	82.5	82.9	82.3	81.7	79.9	77.9	76.0	73.6	69.8
12589.3	79.8	80.7	81.4	81.8	81.9	81.2	80.3	78.6	76.4	74.5	72.0	68.4
15848.9	79.2	80.1	80.6	80.9	81.0	79.9	79.0	77.2	74.9	73.0	70.3	66.4
19952.6	78.4	79.0	79.6	79.9	79.7	78.6	77.3	75.4	73.2	71.4	68.8	64.6
25118.9	77.6	78.3	78.5	78.6	78.5	77.3	75.7	74.1	71.8	69.8	66.8	63.0
31622.8	76.6	77.3	77.6	77.5	77.1	75.8	74.5	72.5	70.0	68.2	65.1	61.1
39810.7	75.4	76.0	76.1	76.0	75.4	74.3	72.8	70.9	69.0	66.5	63.5	59.5
50118.7	74.2	74.6	74.8	74.6	73.9	72.8	71.2	69.4	67.9	65.2	62.2	58.0
63095.7	73.1	73.5	73.5	73.3	72.7	71.4	70.0	68.2	67.1	64.0	60.8	56.8
79432.8	72.2	72.7	72.5	72.3	71.6	70.4	68.7	67.2	66.2	63.1	60.1	56.1

Setpoint	27
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.901
Ideal jet velocity (ft/s)	993.526
Temperature ratio (T_j/T_{amb})	1.770
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





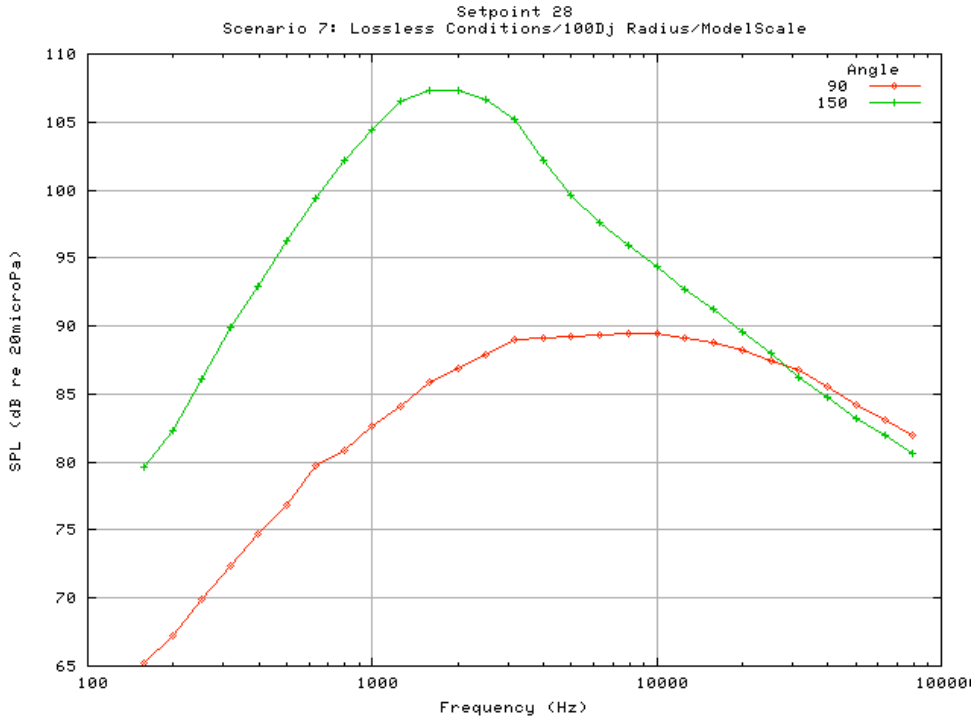
Setpoint 27 continued

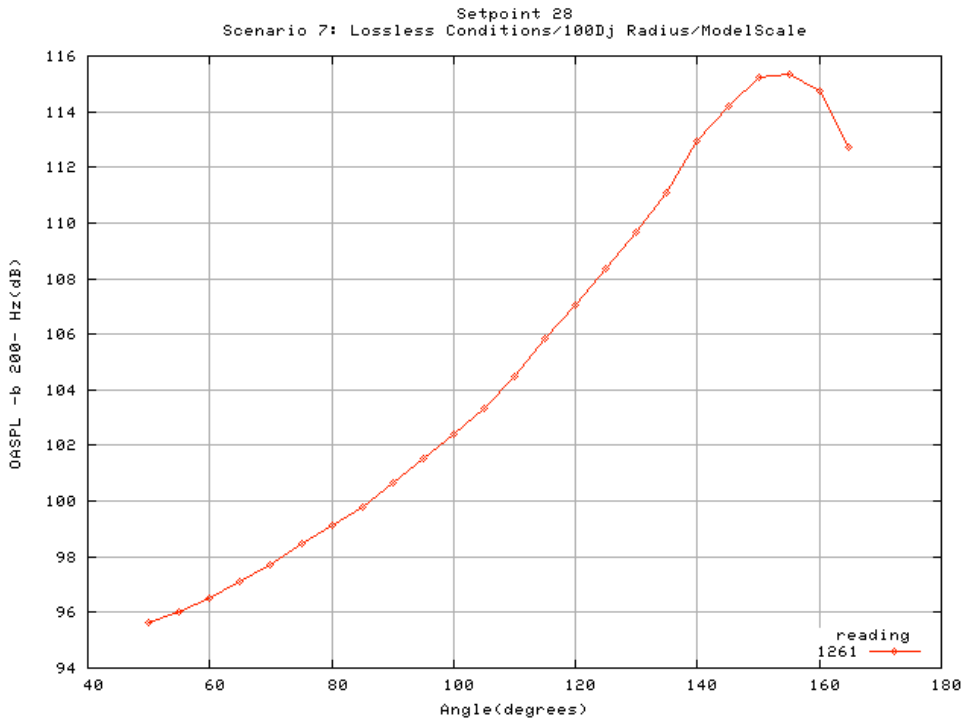
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	55.1	55.7	56.3	57.0	57.6	58.1	58.6	59.1	59.6	60.2	60.6	61.1
199.5	57.2	58.0	58.8	59.5	60.0	60.6	61.2	61.8	62.3	62.9	63.2	63.6
251.2	59.1	59.8	60.6	61.3	61.9	62.7	63.3	63.9	64.5	65.2	65.5	65.9
316.2	61.2	62.2	63.0	63.9	64.5	65.2	65.8	66.5	67.3	67.9	68.3	68.5
398.1	63.8	64.6	65.5	66.5	67.3	67.8	68.3	68.9	69.5	70.2	70.6	71.2
501.2	65.5	66.6	67.6	68.4	69.0	69.5	69.9	70.5	71.2	71.9	72.4	73.0
631.0	68.5	69.3	70.1	70.7	70.9	71.5	72.1	72.8	73.9	74.2	74.8	75.5
794.3	70.7	71.5	71.8	72.4	72.6	73.2	73.7	74.2	74.7	75.5	76.1	77.1
1000.0	72.0	72.7	73.2	73.7	74.0	74.8	75.5	76.1	76.9	77.7	78.5	79.3
1258.9	73.8	74.7	74.9	75.2	75.7	76.4	77.0	77.6	78.2	79.3	80.0	80.9
1584.9	75.3	75.8	76.0	76.2	76.8	77.6	78.2	78.8	79.9	80.6	81.5	82.2
1995.3	75.6	76.1	76.3	76.8	77.3	78.0	78.7	79.4	80.1	81.1	81.8	82.8
2511.9	76.4	76.9	77.2	77.5	78.1	78.7	79.3	80.2	81.0	82.0	82.6	83.6
3162.3	77.1	77.6	77.8	78.3	78.8	79.6	80.2	80.9	81.6	82.4	83.2	84.1
3981.1	77.7	77.7	78.2	78.6	79.2	79.8	80.4	81.0	81.7	82.7	83.4	84.3
5011.9	77.0	77.5	78.1	78.5	78.9	79.7	80.3	81.0	81.8	82.6	83.3	84.3
6309.6	76.8	77.5	78.0	78.4	78.9	79.7	80.4	81.0	81.7	82.4	83.3	84.1
7943.3	76.9	77.3	77.6	78.1	78.6	79.3	80.0	80.7	81.4	82.2	82.9	83.9
10000.0	76.8	76.9	77.4	77.7	78.3	79.1	79.8	80.3	81.2	81.9	82.6	83.4
12589.3	76.4	76.4	76.8	77.3	77.9	78.7	79.3	79.8	80.8	81.6	82.1	83.0
15848.9	75.9	75.8	76.4	76.7	77.3	78.0	78.6	79.3	80.2	81.0	81.5	82.4
19952.6	75.1	75.2	75.5	76.0	76.6	77.3	78.0	78.7	79.4	80.0	80.9	81.7
25118.9	74.4	74.6	74.8	75.1	76.0	76.7	77.3	77.9	78.6	79.3	80.2	80.9
31622.8	73.6	73.8	74.2	74.6	75.0	75.8	76.4	77.0	77.9	78.5	79.2	80.0
39810.7	72.4	72.8	73.1	73.4	74.0	74.8	75.4	75.9	76.7	77.4	77.8	78.8
50118.7	71.1	71.6	72.1	72.4	73.0	73.8	74.4	74.8	75.5	76.3	76.9	77.6
63095.7	69.8	70.4	71.1	71.4	71.9	72.7	73.3	73.7	74.5	75.3	75.8	76.4
79432.8	68.8	69.4	70.2	70.6	71.0	71.7	72.4	72.8	73.6	74.4	74.8	75.5

Setpoint 27 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	61.9	62.8	63.8	65.1	66.7	68.1	69.9	71.5	73.3	74.5	75.8	77.0
199.5	64.2	64.8	65.7	67.0	68.7	70.3	72.4	74.2	76.1	77.5	78.8	79.9
251.2	66.5	67.2	68.3	69.7	71.5	73.3	75.4	77.3	79.3	80.7	82.0	83.0
316.2	69.0	69.7	70.8	72.4	74.4	76.4	78.8	80.7	82.6	84.0	85.1	85.9
398.1	71.9	72.7	73.8	75.4	77.3	79.3	81.7	83.5	85.5	86.8	87.8	88.3
501.2	73.8	74.8	76.2	77.9	79.8	81.9	84.3	86.3	88.2	89.4	90.3	90.6
631.0	76.4	77.6	78.9	80.6	82.7	84.8	87.2	89.1	91.1	92.3	93.0	92.8
794.3	78.1	79.2	80.7	82.6	84.9	87.2	89.9	91.9	93.8	94.8	95.1	94.4
1000.0	80.2	81.5	82.8	84.7	87.1	89.4	92.1	93.9	95.7	96.5	96.4	95.0
1258.9	81.9	83.1	84.5	86.2	88.4	90.6	93.3	94.9	96.7	97.1	96.7	94.6
1584.9	83.3	84.4	85.7	87.2	89.0	91.1	93.4	95.1	96.3	96.5	95.5	93.2
1995.3	83.8	85.0	86.4	88.0	89.8	91.3	93.1	94.0	94.7	94.2	93.2	90.9
2511.9	84.8	86.0	87.2	88.7	90.2	91.4	92.6	92.8	92.9	91.9	90.5	88.0
3162.3	85.1	86.6	87.7	88.8	90.0	91.1	91.8	91.6	90.9	89.6	87.9	84.8
3981.1	85.3	86.6	87.9	88.9	89.9	90.5	91.0	90.1	88.9	87.5	85.6	82.0
5011.9	85.3	86.7	87.6	88.6	89.4	89.7	89.9	88.8	87.3	85.8	83.6	80.0
6309.6	85.1	86.2	87.4	88.2	88.8	88.8	88.5	87.5	85.7	84.1	81.9	78.3
7943.3	84.8	86.1	87.0	87.7	88.2	87.8	87.4	86.1	84.2	82.4	79.9	76.3
10000.0	84.5	85.7	86.5	87.1	87.3	86.8	86.3	84.7	82.7	81.0	78.6	74.8
12589.3	83.9	85.2	85.9	86.3	86.4	85.6	84.7	83.3	81.2	79.5	77.1	73.6
15848.9	83.3	84.6	85.0	85.5	85.5	84.4	83.4	81.8	79.6	77.9	75.4	71.5
19952.6	82.7	83.5	84.0	84.4	84.3	83.1	81.8	80.1	78.0	76.3	73.8	69.7
25118.9	81.8	82.7	82.8	83.3	83.0	81.7	80.2	78.8	76.5	74.8	72.1	68.1
31622.8	80.8	81.7	81.9	82.0	81.6	80.3	79.0	77.2	74.7	73.1	70.3	66.1
39810.7	79.5	80.3	80.3	80.4	79.7	78.6	77.0	75.4	73.4	71.3	68.5	64.3
50118.7	78.3	78.9	79.0	78.9	78.2	77.0	75.4	73.8	72.2	69.7	66.9	62.6
63095.7	77.1	77.6	77.7	77.4	76.9	75.6	74.1	72.4	71.3	68.4	65.4	61.3
79432.8	76.2	76.7	76.6	76.3	75.8	74.5	72.8	71.3	70.2	67.4	64.5	60.3

Setpoint	28
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.184
Ideal jet velocity (ft/s)	1306.220
Temperature ratio (T_j/T_{amb})	1.771
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





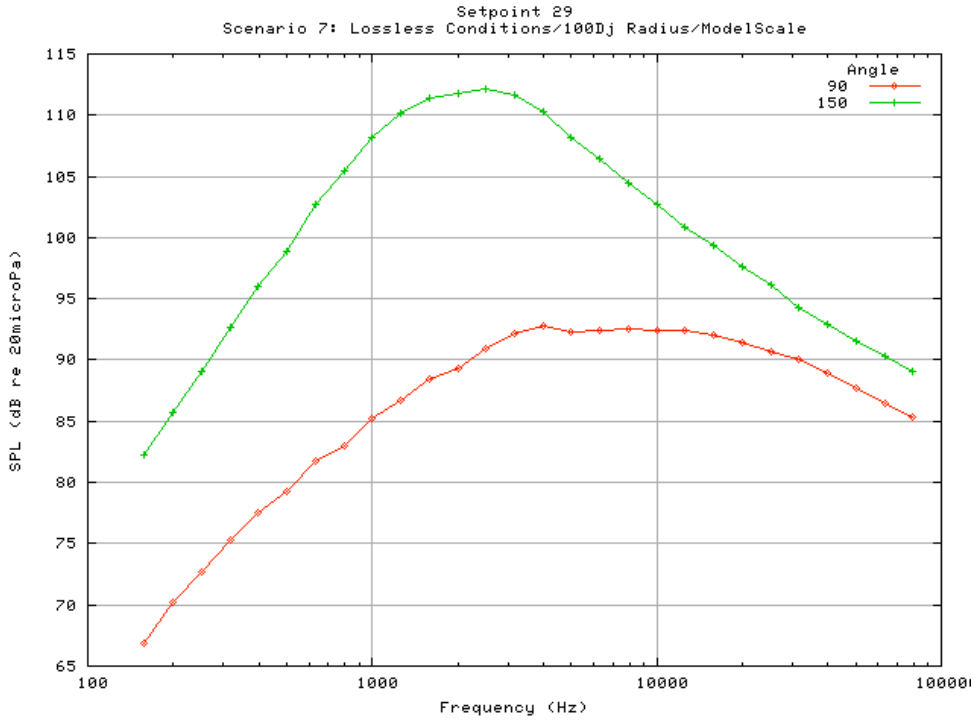
Setpoint 28 continued

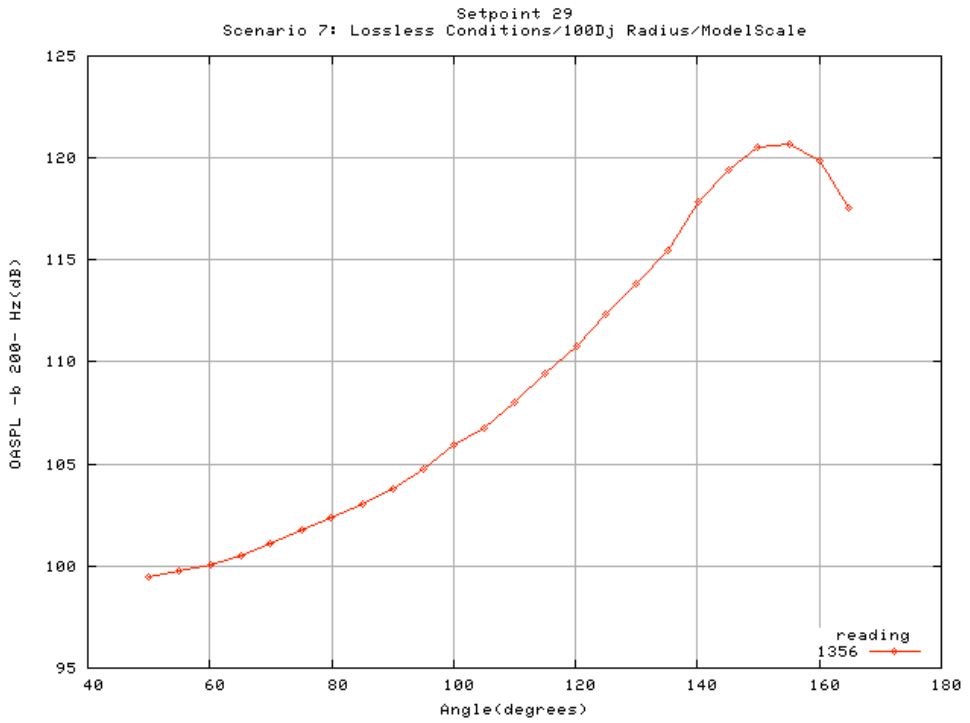
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	60.1	60.7	61.3	61.9	62.5	63.2	63.8	64.5	65.2	66.1	66.8	67.5
199.5	62.1	62.9	63.6	64.2	64.7	65.4	66.0	66.7	67.3	67.9	68.3	68.8
251.2	64.4	65.0	65.8	66.5	67.1	68.0	68.6	69.3	69.9	70.5	70.9	71.2
316.2	67.1	67.8	68.6	69.4	70.0	70.6	71.2	71.8	72.4	73.1	73.8	74.4
398.1	69.1	69.8	70.7	71.6	72.5	73.0	73.5	74.1	74.7	75.5	76.0	76.5
501.2	71.0	72.2	73.3	73.9	74.3	74.8	75.2	76.0	76.8	77.5	77.9	78.4
631.0	74.5	75.1	75.6	76.0	76.4	77.3	78.0	78.5	79.7	80.2	80.9	81.4
794.3	76.3	77.2	77.6	78.0	78.5	79.1	79.6	80.2	80.9	81.8	82.5	83.2
1000.0	78.1	78.6	79.0	79.2	79.7	80.4	81.0	81.7	82.6	83.5	84.2	85.2
1258.9	80.3	80.9	81.1	81.1	81.9	82.5	83.0	83.5	84.1	85.1	86.0	86.9
1584.9	81.8	81.8	82.2	82.6	83.0	83.8	84.4	85.0	85.9	86.5	87.5	88.1
1995.3	82.6	82.8	82.9	83.6	84.3	85.0	85.5	86.1	86.9	87.9	88.6	89.6
2511.9	83.3	83.7	84.0	84.5	85.2	85.9	86.5	87.2	87.9	88.7	89.5	90.6
3162.3	84.7	85.3	85.5	85.9	86.4	87.0	87.6	88.3	89.0	89.8	90.8	91.6
3981.1	84.9	85.0	85.7	86.3	86.7	87.3	87.8	88.3	89.2	90.2	90.9	91.9
5011.9	84.4	84.6	85.1	85.8	86.4	87.0	87.5	88.3	89.2	90.1	91.0	91.9
6309.6	84.1	84.5	85.1	85.7	86.3	87.1	87.8	88.6	89.3	90.3	91.2	92.2
7943.3	84.4	84.6	85.1	85.7	86.4	87.1	87.8	88.6	89.4	90.4	91.3	92.2
10000.0	84.5	84.5	85.2	85.7	86.4	87.2	87.8	88.5	89.4	90.2	91.3	92.1
12589.3	84.0	84.1	84.8	85.5	86.1	86.8	87.5	88.2	89.2	90.1	90.8	91.9
15848.9	83.6	83.8	84.5	85.0	85.6	86.4	87.0	87.8	88.8	89.8	90.5	91.5
19952.6	82.6	83.1	83.7	84.4	85.0	85.8	86.5	87.4	88.2	89.0	90.0	91.0
25118.9	81.8	82.4	82.8	83.4	84.3	85.2	85.9	86.6	87.5	88.3	89.4	90.3
31622.8	80.7	81.3	82.1	82.8	83.4	84.3	85.1	85.8	86.7	87.7	88.4	89.2
39810.7	79.3	80.0	80.8	81.4	82.2	83.2	83.9	84.7	85.5	86.5	87.0	88.0
50118.7	77.9	78.6	79.5	80.1	80.9	82.0	82.8	83.4	84.3	85.2	86.0	86.7
63095.7	76.5	77.3	78.2	78.9	79.7	80.8	81.6	82.2	83.1	84.0	84.8	85.4
79432.8	75.3	76.1	77.1	77.8	78.7	79.7	80.5	81.2	82.0	83.0	83.5	84.2

Setpoint 28 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	68.5	69.2	69.9	70.9	72.3	73.8	75.6	77.5	79.6	81.1	82.8	86.0
199.5	69.6	70.3	71.2	72.5	74.2	76.0	78.1	80.1	82.3	83.9	85.5	86.9
251.2	72.0	72.8	74.1	75.5	77.5	79.4	81.8	83.8	86.1	87.6	89.0	90.2
316.2	75.2	76.0	77.1	78.6	80.6	82.8	85.4	87.6	89.9	91.5	92.8	93.8
398.1	77.3	78.2	79.4	81.1	83.4	85.7	88.4	90.6	92.9	94.4	95.6	96.1
501.2	79.2	80.1	81.5	83.6	86.1	88.7	91.7	94.0	96.2	97.6	98.6	98.8
631.0	82.1	83.1	84.5	86.6	89.3	92.0	94.8	97.1	99.4	100.7	101.3	100.9
794.3	83.9	85.1	86.6	89.2	92.0	94.7	97.8	100.1	102.2	103.1	103.4	102.4
1000.0	86.3	87.5	89.0	91.4	94.2	97.3	100.4	102.6	104.4	105.0	104.6	102.8
1258.9	88.2	89.2	90.9	93.3	96.4	99.4	102.8	104.7	106.5	106.5	105.6	103.0
1584.9	89.6	90.9	92.6	94.9	97.8	100.9	104.1	106.1	107.3	107.0	105.7	103.4
1995.3	90.9	92.3	93.8	96.0	98.6	101.5	104.6	106.4	107.3	106.8	105.8	103.3
2511.9	91.9	93.4	95.0	97.2	99.2	101.5	104.1	105.7	106.7	106.6	105.8	103.4
3162.3	93.0	94.7	96.0	97.7	99.4	101.2	103.0	104.2	105.2	105.5	105.1	102.6
3981.1	93.1	94.5	96.2	97.7	99.2	100.4	101.6	101.9	102.2	102.5	102.2	99.6
5011.9	93.0	94.7	96.2	97.7	98.9	99.6	100.3	99.8	99.6	99.8	99.2	96.4
6309.6	93.4	94.9	96.3	97.6	98.7	99.0	99.1	98.3	97.6	97.4	96.7	94.0
7943.3	93.4	94.9	96.2	97.3	98.0	98.2	97.7	96.8	95.9	95.4	94.3	91.4
10000.0	93.3	94.8	95.9	96.8	97.4	97.2	96.7	95.5	94.3	93.6	92.3	89.3
12589.3	93.1	94.5	95.4	96.2	96.6	96.1	95.4	94.2	92.7	91.9	90.4	87.3
15848.9	92.7	94.1	94.9	95.5	95.7	95.0	94.3	92.9	91.2	90.3	88.7	85.3
19952.6	92.1	93.1	94.0	94.6	94.5	93.7	92.6	91.1	89.6	88.7	87.1	83.2
25118.9	91.4	92.6	92.9	93.4	93.2	92.4	91.1	89.8	88.0	87.0	85.3	81.4
31622.8	90.4	91.5	91.9	92.1	91.8	90.8	89.8	88.1	86.2	85.3	83.3	79.6
39810.7	89.0	90.0	90.3	90.4	89.8	89.0	87.7	86.2	84.8	83.4	81.4	77.6
50118.7	87.6	88.4	88.7	88.7	88.0	87.2	85.8	84.3	83.2	81.4	79.3	75.7
63095.7	86.2	86.9	87.1	87.1	86.4	85.5	84.2	82.6	81.9	79.7	77.5	74.1
79432.8	85.1	85.8	85.8	85.6	84.9	84.1	82.5	81.1	80.6	78.3	76.3	72.9

Setpoint	29
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.330
Ideal jet velocity (ft/s)	1477.640
Temperature ratio (T_j/T_{amb})	1.759
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





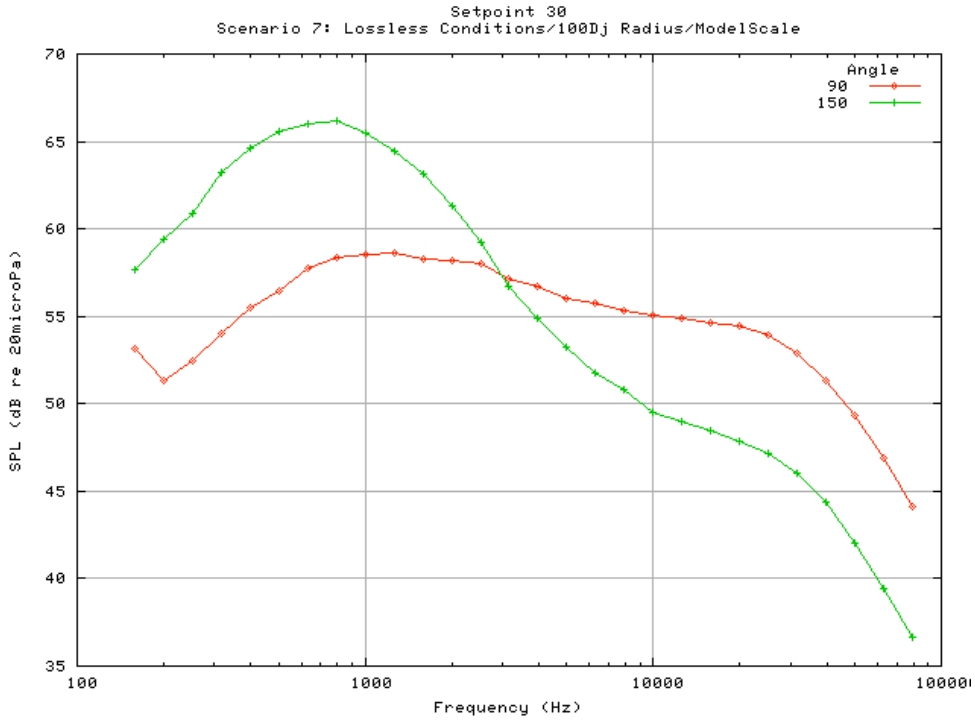
Setpoint 29 continued

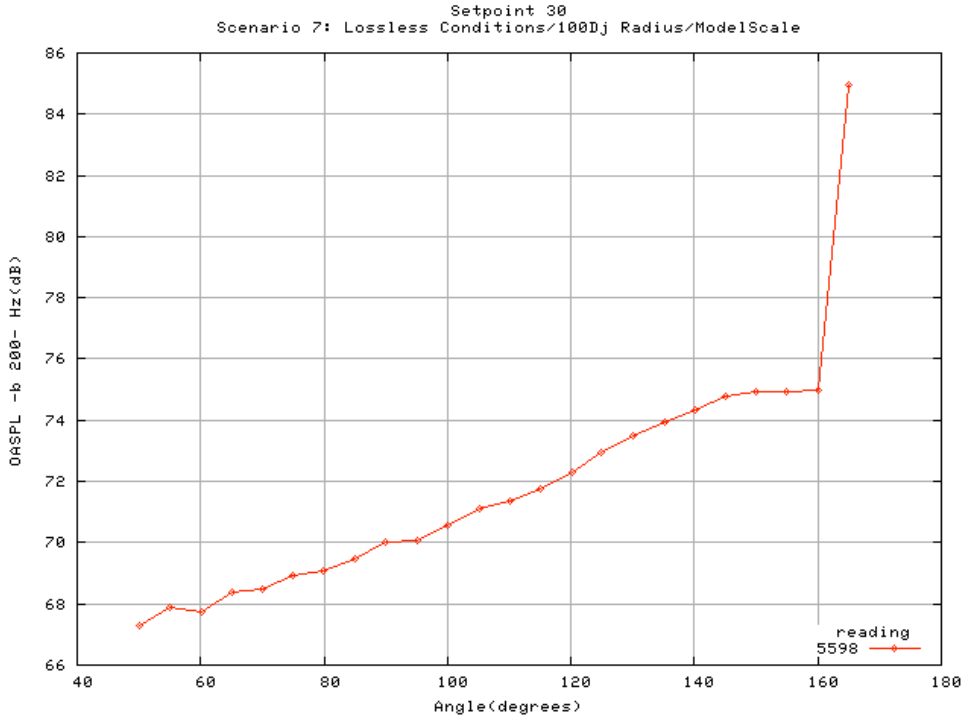
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	62.4	63.0	63.7	64.4	64.8	65.4	65.8	66.4	66.9	67.5	68.3	68.7
199.5	64.2	64.9	65.7	66.5	67.1	67.8	68.6	69.5	70.2	70.9	71.7	71.9
251.2	67.1	67.6	68.3	68.9	69.5	70.3	71.2	72.1	72.7	73.4	73.9	74.2
316.2	69.3	70.1	70.9	71.9	72.5	73.3	74.1	74.7	75.3	75.8	76.5	76.8
398.1	71.8	72.6	73.6	74.5	75.1	75.7	76.3	76.9	77.5	78.1	78.9	79.2
501.2	73.5	74.4	75.2	76.0	76.5	76.9	77.6	78.5	79.3	80.1	80.9	81.3
631.0	77.2	77.8	78.3	78.9	79.2	79.6	80.2	80.8	81.8	82.2	83.3	83.8
794.3	79.1	79.8	80.1	80.2	80.6	80.9	81.7	82.2	83.0	84.0	85.0	85.7
1000.0	80.8	81.6	81.7	82.0	82.7	83.1	83.7	84.5	85.2	86.3	87.2	87.9
1258.9	82.8	83.3	83.4	83.7	84.2	84.6	85.4	86.1	86.7	87.9	88.8	89.7
1584.9	84.5	84.5	84.9	85.3	85.9	86.5	87.1	87.7	88.4	89.2	90.2	91.0
1995.3	85.6	86.1	86.3	86.8	87.2	87.6	88.0	88.6	89.3	90.4	91.4	92.4
2511.9	86.9	87.0	87.2	87.9	88.2	88.8	89.4	90.1	90.9	91.8	92.8	93.7
3162.3	88.7	88.9	89.3	89.5	90.0	90.4	91.2	91.7	92.1	93.2	94.2	95.0
3981.1	89.9	90.4	90.6	90.9	90.9	91.0	91.5	92.0	92.7	93.6	94.7	95.4
5011.9	88.5	88.6	88.8	89.5	89.9	90.4	90.9	91.6	92.3	93.3	94.4	95.3
6309.6	88.1	88.3	88.6	89.1	89.7	90.2	91.0	91.6	92.4	93.4	94.7	95.7
7943.3	88.3	88.7	89.0	89.3	89.8	90.3	91.1	91.7	92.6	93.6	94.7	95.6
10000.0	88.4	88.4	88.8	89.3	89.8	90.3	91.2	91.8	92.5	93.5	94.6	95.5
12589.3	87.9	88.1	88.4	89.0	89.6	90.1	90.9	91.5	92.4	93.3	94.5	95.4
15848.9	87.3	87.5	87.9	88.4	89.1	89.9	90.5	91.2	92.0	93.1	94.3	95.2
19952.6	86.3	86.7	87.0	87.7	88.5	89.8	90.0	90.7	91.4	92.3	93.9	94.7
25118.9	85.3	85.8	86.1	86.6	87.7	89.2	89.3	90.0	90.7	91.7	93.4	94.1
31622.8	84.2	84.7	85.2	85.9	86.8	87.7	88.4	89.2	90.1	91.0	92.5	93.3
39810.7	82.8	83.3	83.9	84.6	85.6	86.6	87.3	88.1	88.9	89.9	91.1	92.1
50118.7	81.3	82.0	82.6	83.2	84.2	85.8	86.2	86.9	87.7	88.7	90.1	90.8
63095.7	80.0	80.6	81.3	82.1	83.0	84.8	85.1	85.7	86.5	87.5	89.0	89.6
79432.8	78.9	79.5	80.3	81.0	81.9	83.3	83.9	84.7	85.4	86.4	87.8	88.3

Setpoint 29 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	69.5	70.3	71.2	72.5	74.2	75.8	78.0	80.0	82.3	84.1	85.7	87.2
199.5	72.4	72.9	73.6	74.8	76.5	78.4	80.9	83.2	85.7	87.6	89.2	90.5
251.2	74.7	75.3	76.2	77.6	79.6	81.6	84.3	86.6	89.0	90.9	92.4	93.6
316.2	77.3	78.0	79.2	81.0	83.0	85.3	88.1	90.3	92.7	94.4	95.8	96.7
398.1	79.8	80.5	81.5	83.2	85.6	88.1	91.1	93.5	96.0	97.8	99.0	99.7
501.2	81.9	82.6	83.8	85.8	88.3	91.0	94.1	96.5	98.8	100.4	101.5	101.9
631.0	84.6	85.7	87.2	89.2	92.0	94.8	97.8	100.2	102.7	104.1	104.7	104.3
794.3	86.6	87.7	89.1	91.6	94.5	97.6	100.9	103.3	105.4	106.4	106.6	105.5
1000.0	88.7	89.9	91.6	94.3	97.4	100.7	104.0	106.4	108.2	108.8	108.2	106.2
1258.9	90.7	92.1	93.9	96.3	99.8	103.1	106.7	108.6	110.2	110.1	108.9	106.3
1584.9	92.3	93.4	95.3	98.0	101.2	104.9	108.4	110.5	111.4	110.9	109.3	106.9
1995.3	93.4	94.9	96.7	99.3	102.5	106.0	109.4	111.0	111.8	111.0	109.8	107.4
2511.9	94.9	96.5	98.1	100.6	103.2	106.1	109.5	111.2	112.1	111.8	110.6	108.3
3162.3	96.3	97.9	99.3	101.3	103.5	105.9	108.7	110.5	111.6	111.6	110.7	108.1
3981.1	96.6	98.0	99.9	101.9	103.5	105.0	107.5	108.9	110.3	110.9	110.2	107.4
5011.9	96.6	98.3	100.0	101.8	103.2	104.2	105.8	106.9	108.2	109.1	108.4	105.6
6309.6	96.8	98.3	100.1	101.7	102.8	103.5	104.5	105.2	106.4	107.4	106.9	104.0
7943.3	96.9	98.5	100.0	101.5	102.3	102.7	103.1	103.6	104.5	105.3	104.6	101.7
10000.0	96.8	98.4	99.9	101.1	101.9	101.8	102.1	102.0	102.7	103.4	102.6	99.8
12589.3	96.8	98.3	99.6	100.6	101.0	100.7	100.8	100.7	100.9	101.7	100.8	97.8
15848.9	96.4	97.9	99.0	100.0	100.2	99.7	99.5	99.3	99.3	100.0	99.0	95.9
19952.6	96.0	97.2	98.2	99.1	99.2	98.4	98.0	97.7	97.6	98.3	97.4	94.0
25118.9	95.4	96.6	97.3	97.9	98.0	97.2	96.5	96.3	96.2	96.6	95.5	92.1
31622.8	94.6	95.8	96.4	96.7	96.6	95.7	95.2	94.8	94.3	94.9	93.6	90.3
39810.7	93.3	94.4	94.8	95.1	94.7	94.0	93.4	93.0	93.0	92.9	91.8	88.4
50118.7	92.0	92.8	93.2	93.4	92.9	92.3	91.5	91.2	91.6	91.2	89.9	86.5
63095.7	90.6	91.3	91.7	91.8	91.4	90.6	90.0	89.6	90.4	89.6	88.1	84.9
79432.8	89.4	90.1	90.3	90.3	90.0	89.2	88.3	88.2	89.1	88.2	86.9	83.7

Setpoint	30
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.342
Ideal jet velocity (ft/s)	373.595
Temperature ratio (T_j/T_{amb})	2.287
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





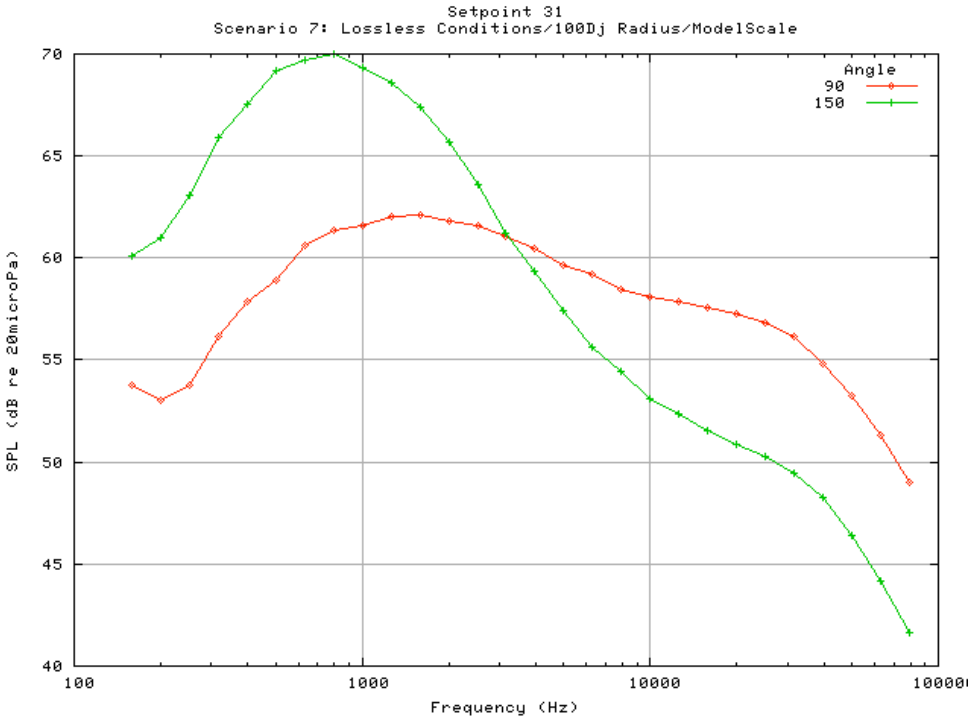
Setpoint 30 continued

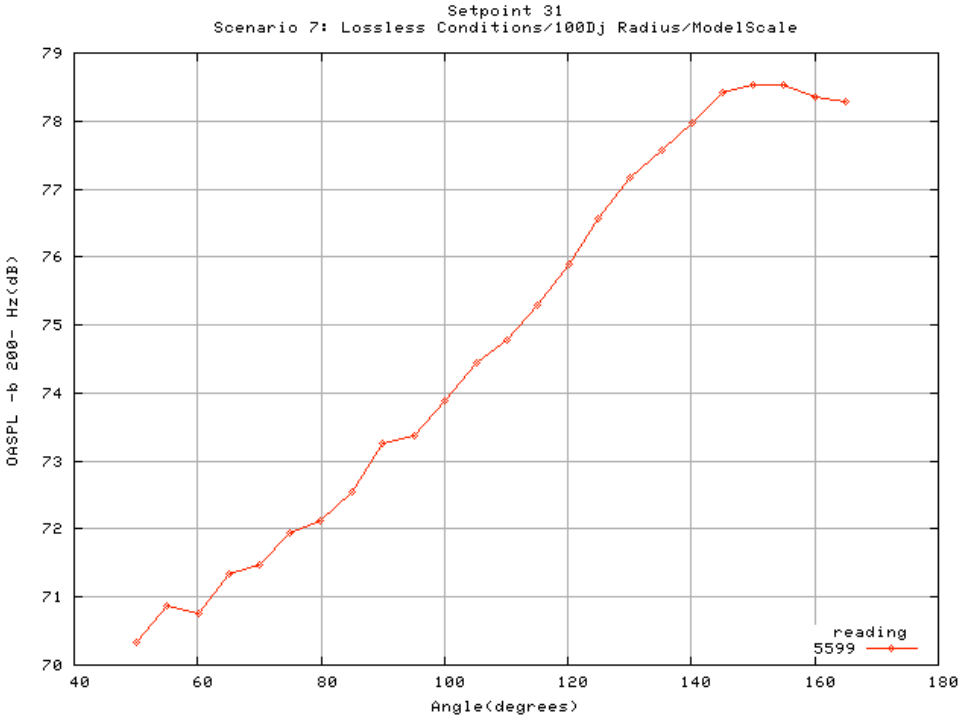
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	49.8	50.2	50.1	51.1	51.4	51.8	51.9	52.8	53.1	53.2	53.3	53.3
199.5	49.4	49.9	49.9	50.6	50.8	50.9	50.9	50.9	51.3	51.6	52.0	52.5
251.2	49.5	50.1	50.1	50.8	51.0	51.3	51.6	51.9	52.5	52.6	52.9	53.2
316.2	51.1	51.8	51.8	52.6	52.9	53.4	53.9	53.9	54.0	53.8	54.0	54.4
398.1	52.0	52.8	53.0	54.0	54.5	55.0	55.3	55.3	55.5	55.5	56.0	56.5
501.2	53.3	54.4	54.9	55.9	56.1	56.2	56.2	56.0	56.4	56.5	57.0	57.6
631.0	54.8	55.7	55.9	56.7	56.8	56.8	56.8	57.0	57.7	57.9	58.3	58.9
794.3	55.2	56.5	56.6	57.0	57.0	57.2	57.2	57.6	58.4	58.5	59.0	59.7
1000.0	55.3	56.2	56.4	57.2	57.0	57.2	57.5	57.8	58.5	58.6	59.2	59.8
1258.9	55.5	56.7	56.8	56.9	56.9	57.1	57.5	58.0	58.6	58.8	59.3	59.9
1584.9	55.9	56.7	56.1	56.4	56.4	57.1	57.4	57.6	58.2	58.5	59.2	59.6
1995.3	55.3	55.7	55.4	55.8	56.1	56.8	57.0	57.5	58.2	58.2	58.8	59.4
2511.9	55.0	55.5	54.9	55.7	55.9	56.4	56.8	57.1	58.0	57.8	58.4	59.1
3162.3	54.5	55.0	54.4	55.0	55.4	56.0	56.2	56.6	57.2	57.1	57.8	58.5
3981.1	54.5	54.2	54.0	54.8	55.0	55.5	55.7	56.0	56.7	56.6	57.3	57.6
5011.9	53.5	53.7	53.7	54.5	54.4	55.0	55.1	55.3	56.0	55.8	56.3	57.0
6309.6	53.2	53.9	53.5	54.3	54.2	54.6	54.8	55.0	55.7	55.4	56.0	56.6
7943.3	53.4	53.7	53.4	54.0	53.7	54.4	54.4	54.7	55.3	55.1	55.6	56.2
10000.0	53.4	53.2	53.0	53.6	53.2	54.1	54.2	54.6	55.1	54.9	55.4	55.9
12589.3	52.8	52.6	52.5	53.2	52.7	53.7	53.7	54.4	54.9	54.8	55.2	55.6
15848.9	52.5	52.2	52.1	52.9	52.5	53.6	53.3	54.2	54.7	54.7	55.0	55.5
19952.6	51.9	51.9	51.5	52.5	52.6	53.3	52.8	54.1	54.4	54.5	54.8	55.2
25118.9	51.1	51.3	51.0	51.9	52.4	52.9	52.3	53.7	53.9	54.0	54.2	54.5
31622.8	50.0	50.3	50.0	50.8	51.1	52.1	51.4	52.8	52.9	53.0	53.4	53.6
39810.7	48.5	48.7	48.2	49.3	50.1	50.7	50.0	51.4	51.3	51.3	52.1	52.0
50118.7	46.3	46.7	46.1	47.3	48.9	48.8	48.2	49.4	49.3	49.3	50.2	50.1
63095.7	43.8	44.2	43.8	45.0	46.8	46.5	46.2	47.2	46.9	47.1	47.9	47.9
79432.8	41.3	41.6	41.3	42.4	43.8	43.8	43.3	44.7	44.1	44.7	45.3	45.4

Setpoint 30 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	53.4	53.8	54.1	54.7	55.4	56.0	56.6	57.2	57.6	58.2	58.6	63.7
199.5	52.8	53.5	54.2	55.1	56.2	57.0	57.8	58.7	59.4	60.0	60.5	63.7
251.2	53.5	54.2	54.9	56.0	57.3	58.2	59.2	60.2	60.9	61.5	61.9	63.8
316.2	54.8	55.6	56.5	57.7	59.1	60.1	61.2	62.4	63.2	63.9	64.3	64.6
398.1	56.9	57.7	58.6	59.6	60.9	61.8	62.8	63.9	64.7	65.3	65.6	65.6
501.2	58.1	58.9	59.7	60.8	62.1	63.0	64.0	65.0	65.5	66.0	66.1	65.8
631.0	59.2	60.1	60.7	61.7	62.7	63.6	64.5	65.4	66.0	66.4	66.3	65.3
794.3	60.0	60.7	61.3	62.3	63.4	64.0	64.8	65.6	66.2	66.4	65.9	64.4
1000.0	60.1	60.8	61.5	62.6	63.4	64.0	64.7	65.2	65.5	65.3	64.4	62.0
1258.9	60.3	60.8	61.5	62.3	63.1	63.6	64.2	64.6	64.4	64.0	62.6	59.3
1584.9	60.1	60.6	61.0	61.8	62.6	63.0	63.3	63.5	63.1	62.0	60.1	56.2
1995.3	59.7	60.1	60.6	61.3	61.9	62.2	62.3	62.3	61.3	59.7	57.5	53.1
2511.9	59.2	59.6	60.0	60.6	61.0	61.0	61.0	60.4	59.2	57.2	55.0	50.4
3162.3	58.7	59.0	59.4	59.7	60.1	60.0	59.5	58.5	56.7	54.9	52.5	47.7
3981.1	57.7	58.1	58.5	58.8	58.9	58.6	57.9	56.6	54.9	53.0	50.8	45.5
5011.9	57.1	57.3	57.6	58.0	58.0	57.4	56.4	55.0	53.2	51.1	49.2	44.0
6309.6	56.8	56.9	57.3	57.6	57.3	56.5	55.2	53.7	51.7	49.8	47.9	42.4
7943.3	56.4	56.5	57.1	57.0	56.5	55.6	54.2	52.4	50.8	48.6	47.0	41.0
10000.0	56.1	56.1	56.4	56.4	55.6	54.7	53.3	51.5	49.5	47.6	45.6	40.0
12589.3	55.8	55.8	56.1	55.8	54.8	54.2	52.4	50.6	49.0	46.7	45.2	38.6
15848.9	55.6	55.4	55.9	55.5	54.2	53.7	51.8	50.0	48.4	46.3	44.9	38.1
19952.6	55.1	54.9	55.5	55.0	53.4	53.1	50.9	49.3	47.9	46.2	44.8	37.8
25118.9	54.4	53.9	54.9	54.1	52.5	52.4	50.1	48.0	47.2	45.7	44.0	37.1
31622.8	53.7	53.1	53.9	53.3	51.6	51.5	49.1	47.1	46.0	43.7	41.9	35.4
39810.7	52.1	51.7	52.3	51.7	50.1	49.8	47.3	45.2	44.4	42.1	40.1	34.6
50118.7	50.2	49.9	50.3	49.8	48.2	47.6	45.2	42.9	42.0	40.3	38.0	33.6
63095.7	47.9	47.9	48.0	47.5	46.1	45.0	42.9	41.2	39.4	38.0	35.9	32.7
79432.8	45.3	44.8	45.7	44.8	42.8	42.7	40.1	37.4	36.7	35.3	33.7	31.5

Setpoint	31
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.391
Ideal jet velocity (ft/s)	427.386
Temperature ratio (T_j/T_{amb})	2.277
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





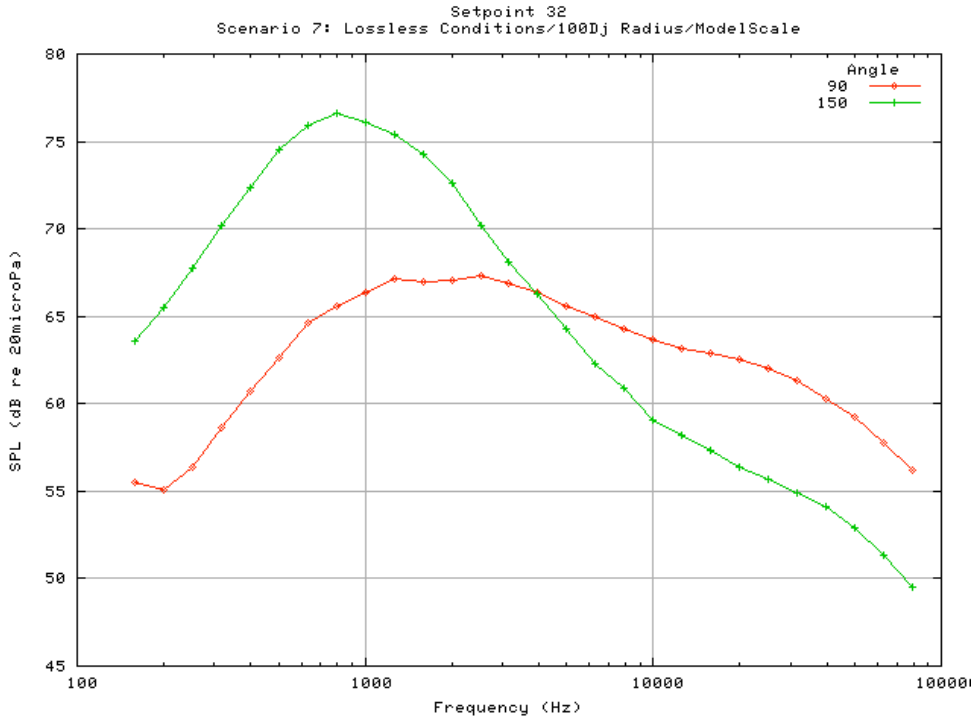
Setpoint 31 continued

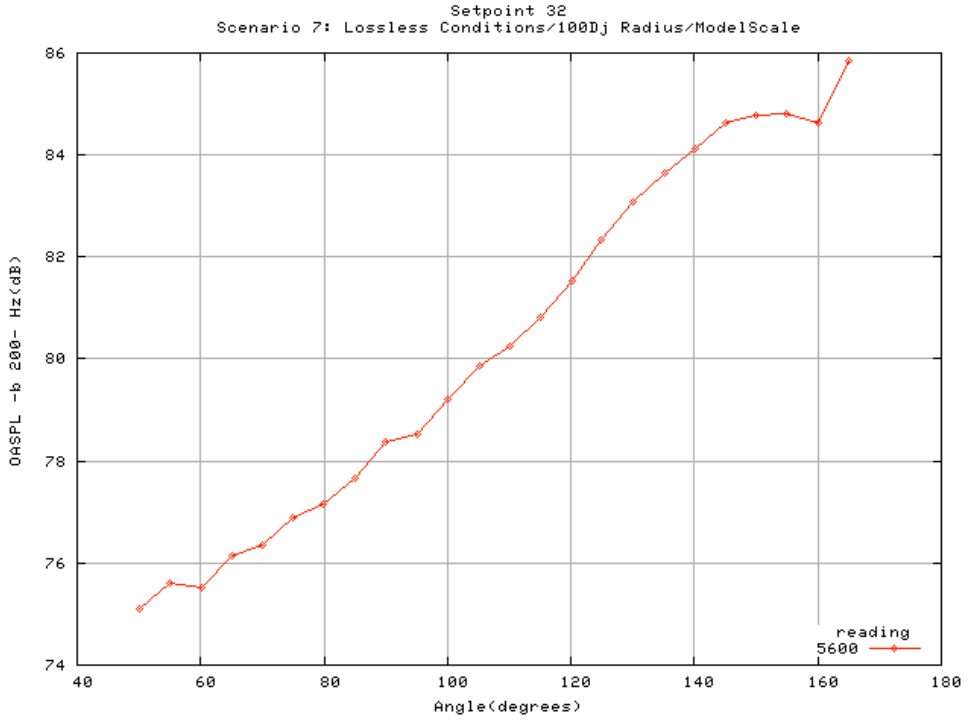
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	50.5	50.8	50.7	51.7	52.0	52.4	52.6	53.4	53.8	53.9	54.1	54.3
199.5	50.5	51.0	51.0	51.9	52.1	52.4	52.6	52.7	53.0	53.1	53.4	53.7
251.2	51.1	51.6	51.7	52.4	52.5	52.6	52.8	53.1	53.8	53.9	54.1	54.4
316.2	52.7	53.4	53.5	54.4	54.8	55.2	55.6	55.8	56.2	56.2	56.5	57.0
398.1	54.2	55.0	55.3	56.4	56.9	57.4	57.5	57.5	57.9	57.9	58.3	58.8
501.2	55.5	56.6	57.2	58.3	58.4	58.5	58.6	58.6	58.9	59.0	59.5	60.2
631.0	57.2	58.2	58.5	59.3	59.4	59.5	59.5	59.9	60.6	60.8	61.4	62.1
794.3	57.9	59.2	59.4	59.9	59.9	60.1	60.2	60.5	61.3	61.5	62.0	62.8
1000.0	58.4	59.2	59.4	60.1	59.9	60.0	60.4	60.8	61.6	61.8	62.4	63.1
1258.9	58.9	60.0	60.1	60.2	60.1	60.5	60.9	61.3	62.0	62.3	62.8	63.5
1584.9	59.0	60.0	59.4	59.7	59.8	60.5	61.0	61.3	62.1	62.4	62.9	63.5
1995.3	58.9	59.2	58.9	59.2	59.5	60.2	60.5	61.0	61.8	61.9	62.5	63.1
2511.9	58.5	58.9	58.3	59.0	59.4	59.9	60.4	60.6	61.6	61.6	62.2	62.9
3162.3	58.2	58.5	57.8	58.6	59.0	59.6	59.9	60.4	61.1	61.2	61.7	62.4
3981.1	57.8	57.5	57.4	58.2	58.3	58.8	59.2	59.5	60.5	60.5	61.1	61.5
5011.9	56.5	56.8	56.9	57.5	57.6	58.1	58.4	58.7	59.7	59.7	60.1	60.7
6309.6	56.1	56.8	56.5	57.2	57.1	57.7	57.8	58.2	59.2	59.0	59.6	60.0
7943.3	56.1	56.6	56.3	56.8	56.5	57.3	57.3	57.8	58.5	58.5	58.9	59.4
10000.0	56.1	56.3	56.0	56.4	56.1	56.9	57.2	57.5	58.1	58.1	58.4	58.9
12589.3	55.8	55.8	55.5	56.1	55.7	56.6	56.6	57.2	57.9	57.8	58.2	58.7
15848.9	55.6	55.2	55.1	55.7	55.3	56.4	56.2	56.9	57.6	57.7	57.9	58.5
19952.6	55.0	54.9	54.6	55.3	55.5	56.1	55.6	56.7	57.3	57.5	57.7	58.1
25118.9	54.4	54.4	54.1	54.8	55.3	55.7	55.3	56.3	56.9	57.0	57.3	57.6
31622.8	53.5	53.5	53.4	54.0	54.2	55.1	54.5	55.7	56.1	56.2	56.7	56.8
39810.7	52.3	52.0	52.0	52.7	53.6	54.0	53.4	54.4	54.8	54.8	55.7	55.6
50118.7	50.6	50.3	50.3	51.0	52.8	52.5	51.9	52.9	53.2	53.1	54.2	54.0
63095.7	48.3	48.3	48.5	49.0	51.0	50.6	50.3	51.0	51.3	51.4	52.2	52.2
79432.8	46.1	46.2	46.3	46.9	48.5	48.3	47.8	48.9	49.0	49.4	50.0	50.2

Setpoint 31 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	54.5	55.1	55.6	56.3	57.2	57.9	58.7	59.5	60.1	60.8	61.2	61.6
199.5	53.9	54.6	55.2	56.1	57.2	58.1	59.1	60.2	61.0	61.8	62.3	62.7
251.2	54.8	55.5	56.3	57.4	58.8	59.9	61.1	62.2	63.1	63.9	64.4	64.8
316.2	57.5	58.3	59.2	60.4	61.8	62.8	63.9	65.1	65.9	66.6	67.1	67.3
398.1	59.3	60.1	61.0	62.1	63.4	64.5	65.6	66.7	67.5	68.3	68.8	68.9
501.2	60.8	61.7	62.6	63.9	65.4	66.3	67.4	68.5	69.2	69.7	70.0	70.0
631.0	62.6	63.6	64.3	65.3	66.4	67.2	68.1	69.0	69.7	70.2	70.3	69.9
794.3	63.1	64.0	64.8	66.0	67.1	67.8	68.6	69.5	70.0	70.2	70.1	69.2
1000.0	63.5	64.3	65.1	66.1	67.0	67.6	68.4	69.0	69.3	69.3	68.8	67.4
1258.9	63.9	64.6	65.3	66.2	67.2	67.7	68.3	68.7	68.5	68.1	67.0	65.0
1584.9	64.0	64.7	65.1	65.9	66.5	67.0	67.4	67.6	67.4	66.4	65.0	62.5
1995.3	63.6	64.0	64.4	65.3	66.0	66.2	66.4	66.5	65.7	64.3	62.3	59.5
2511.9	63.1	63.7	64.1	64.7	65.1	65.3	65.3	64.8	63.6	61.6	59.6	56.7
3162.3	62.7	63.1	63.5	63.9	64.3	64.2	63.8	62.9	61.2	59.4	57.3	54.3
3981.1	61.7	62.2	62.6	63.0	63.1	63.0	62.4	61.1	59.4	57.5	55.4	52.1
5011.9	60.9	61.2	61.5	61.9	61.9	61.4	60.5	59.3	57.4	55.2	53.3	50.1
6309.6	60.3	60.5	60.9	61.3	61.0	60.3	59.2	57.7	55.6	53.5	51.7	48.0
7943.3	59.7	59.9	60.6	60.5	59.9	59.2	58.0	56.2	54.4	52.1	50.4	46.3
10000.0	59.3	59.4	59.9	59.9	59.2	58.4	57.0	55.3	53.1	51.1	49.0	45.3
12589.3	59.0	59.0	59.5	59.3	58.3	57.5	55.9	54.1	52.4	50.0	48.2	44.0
15848.9	58.7	58.5	59.1	58.8	57.5	56.9	55.1	53.3	51.5	49.2	47.5	43.1
19952.6	58.0	58.0	58.7	58.2	56.6	56.2	54.1	52.4	50.9	49.1	47.4	42.6
25118.9	57.5	57.0	58.1	57.3	55.8	55.5	53.3	51.3	50.3	48.6	46.7	41.7
31622.8	57.0	56.4	57.3	56.7	55.1	54.7	52.6	50.7	49.5	47.0	44.9	40.4
39810.7	55.6	55.3	56.1	55.4	53.8	53.3	51.2	49.2	48.3	45.9	43.6	39.5
50118.7	54.1	53.8	54.4	53.8	52.3	51.5	49.5	47.4	46.4	44.6	41.9	38.4
63095.7	52.3	52.2	52.5	52.0	50.6	49.4	47.5	45.8	44.2	42.6	40.0	36.8
79432.8	50.1	49.5	50.6	49.8	47.6	47.3	45.0	42.6	41.6	39.9	37.6	34.7

Setpoint	32
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.491
Ideal jet velocity (ft/s)	535.982
Temperature ratio (T_j/T_{amb})	2.268
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





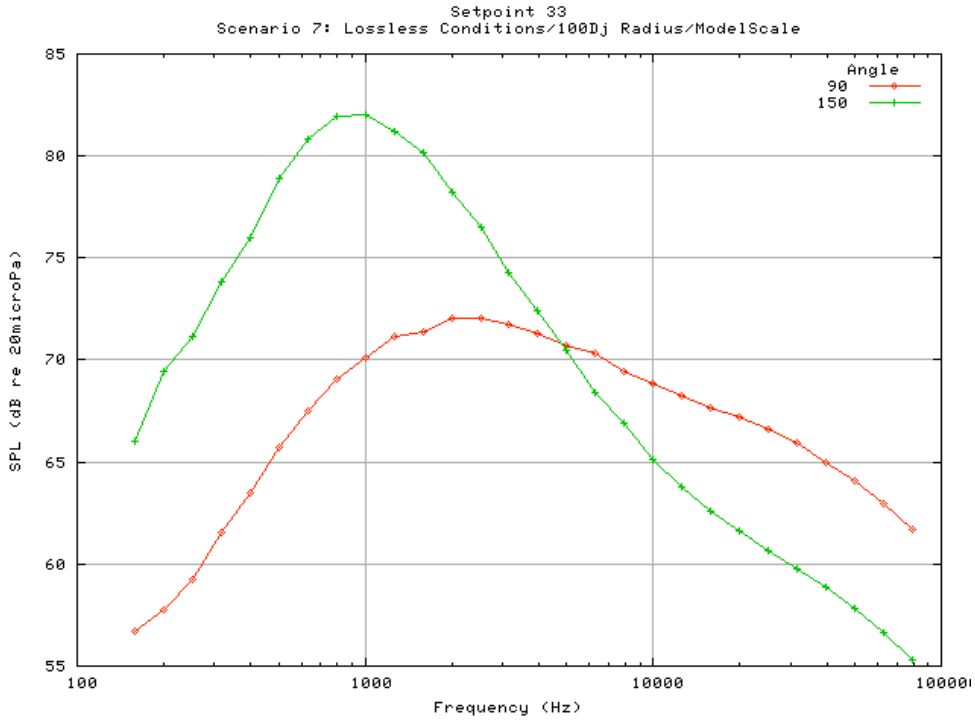
Setpoint 32 continued

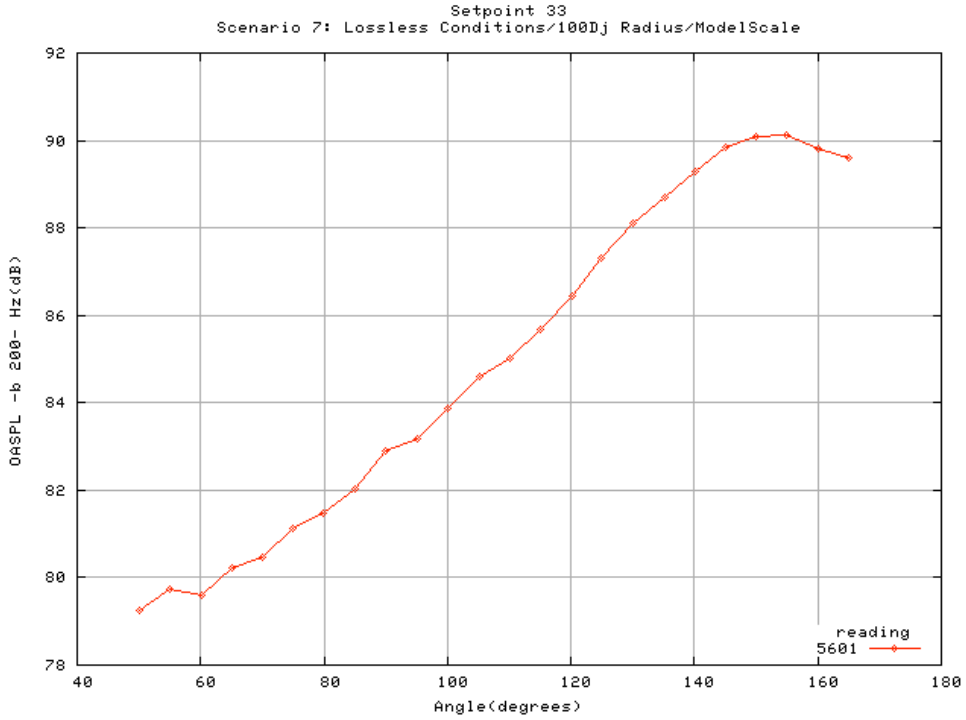
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	52.4	52.7	52.6	53.5	53.7	54.1	54.5	55.0	55.5	55.7	56.0	56.2
199.5	52.9	53.3	53.3	54.1	54.2	54.4	54.6	54.6	55.1	55.3	55.7	56.2
251.2	53.6	54.1	54.2	55.0	55.2	55.4	55.7	55.9	56.3	56.4	56.5	57.0
316.2	55.3	56.0	56.1	56.9	57.2	57.8	58.2	58.4	58.6	58.6	59.0	59.6
398.1	57.1	57.9	58.1	59.2	59.8	60.3	60.4	60.4	60.8	60.9	61.3	62.0
501.2	58.9	60.0	60.5	61.5	61.7	62.0	62.1	62.1	62.7	62.8	63.2	63.7
631.0	61.0	61.8	62.1	62.9	63.1	63.2	63.3	63.8	64.6	64.8	65.5	66.2
794.3	62.0	63.3	63.4	63.8	63.9	64.2	64.3	64.7	65.6	65.8	66.5	67.4
1000.0	62.7	63.6	63.9	64.7	64.6	64.8	65.3	65.6	66.4	66.5	67.2	68.0
1258.9	63.5	64.6	64.7	64.9	65.0	65.3	65.9	66.4	67.2	67.4	68.1	68.7
1584.9	63.9	64.7	64.2	64.6	64.7	65.5	66.0	66.3	67.0	67.3	68.0	68.7
1995.3	63.9	64.3	64.1	64.6	64.8	65.5	65.7	66.2	67.0	67.2	68.1	68.9
2511.9	63.6	64.1	63.6	64.4	64.9	65.4	66.0	66.3	67.3	67.4	68.1	68.9
3162.3	63.4	63.8	63.3	64.1	64.5	65.1	65.6	66.2	66.9	67.0	67.7	68.6
3981.1	63.2	63.0	63.1	63.8	63.9	64.5	65.1	65.5	66.3	66.6	67.3	67.9
5011.9	61.8	62.2	62.3	63.0	63.3	64.0	64.3	64.7	65.6	65.7	66.3	67.2
6309.6	61.3	62.1	61.9	62.7	62.7	63.4	63.7	64.3	65.0	65.1	65.9	66.5
7943.3	61.1	61.6	61.3	62.1	62.0	62.9	63.1	63.6	64.3	64.5	65.1	65.6
10000.0	61.0	61.2	61.0	61.5	61.3	62.3	62.6	63.2	63.7	63.7	64.5	65.0
12589.3	60.8	61.0	60.6	61.2	60.9	62.0	61.9	62.6	63.2	63.3	63.9	64.4
15848.9	60.4	60.4	60.3	60.8	60.5	61.6	61.5	62.3	62.9	63.0	63.4	64.1
19952.6	59.9	60.0	59.6	60.4	60.6	61.2	60.8	62.0	62.5	62.6	63.2	63.6
25118.9	59.3	59.4	59.3	59.8	60.4	60.8	60.4	61.5	62.0	62.1	62.7	62.9
31622.8	58.5	58.7	58.6	59.1	59.4	60.3	59.7	60.9	61.3	61.5	62.1	62.3
39810.7	57.6	57.4	57.4	58.1	59.1	59.5	58.9	60.0	60.3	60.3	61.3	61.3
50118.7	56.1	56.0	56.1	56.9	58.7	58.4	57.9	58.8	59.2	59.1	60.3	60.1
63095.7	54.5	54.4	54.8	55.4	57.5	57.1	56.8	57.5	57.8	57.8	58.8	58.9
79432.8	52.7	52.9	53.1	53.9	55.7	55.4	54.9	56.1	56.2	56.5	57.2	57.4

Setpoint 32 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	56.5	57.1	57.7	58.6	59.8	60.7	61.7	62.8	63.6	64.3	64.9	66.8
199.5	56.6	57.5	58.3	59.4	60.8	62.0	63.3	64.5	65.5	66.4	67.1	68.4
251.2	57.5	58.7	59.9	61.4	63.1	64.3	65.6	66.9	67.8	68.6	69.1	69.7
316.2	60.1	61.2	62.2	63.6	65.3	66.5	67.8	69.2	70.1	71.0	71.6	71.8
398.1	62.6	63.7	64.7	66.0	67.6	68.8	70.1	71.4	72.4	73.2	73.7	73.7
501.2	64.3	65.3	66.3	67.8	69.6	70.9	72.3	73.7	74.5	75.2	75.6	75.4
631.0	66.5	67.6	68.5	69.7	71.2	72.4	73.7	75.0	76.0	76.6	76.8	76.2
794.3	67.8	68.8	69.8	71.1	72.5	73.5	74.7	75.8	76.6	77.0	76.9	75.8
1000.0	68.4	69.3	70.3	71.7	72.8	73.8	74.8	75.6	76.1	76.2	75.6	73.8
1258.9	69.3	70.0	71.0	72.0	73.2	74.0	74.8	75.4	75.4	75.1	74.0	71.3
1584.9	69.3	70.1	70.7	71.8	72.8	73.5	74.2	74.6	74.3	73.3	71.6	68.5
1995.3	69.4	70.0	70.7	71.7	72.6	73.1	73.4	73.5	72.6	71.2	69.1	65.6
2511.9	69.1	69.7	70.4	71.2	71.9	72.1	72.0	71.4	70.2	68.2	66.2	62.5
3162.3	69.0	69.6	70.1	70.7	71.3	71.3	70.9	69.9	68.1	66.4	64.2	60.2
3981.1	68.2	68.7	69.2	69.8	70.2	70.0	69.4	68.0	66.3	64.4	62.3	58.0
5011.9	67.6	67.9	68.3	68.9	69.1	68.7	67.5	66.1	64.2	62.1	60.0	55.8
6309.6	66.8	67.1	67.5	68.0	67.9	67.2	66.0	64.4	62.3	60.2	58.3	53.6
7943.3	65.9	66.4	66.9	66.9	66.7	66.0	64.7	62.7	60.9	58.5	56.7	51.6
10000.0	65.4	65.5	66.0	66.2	65.8	64.8	63.3	61.3	59.1	57.1	54.9	50.1
12589.3	64.9	65.0	65.5	65.4	64.7	63.9	62.1	60.1	58.2	55.8	54.0	48.7
15848.9	64.4	64.4	64.9	64.9	63.7	63.1	61.1	59.1	57.3	55.0	53.2	47.7
19952.6	63.7	63.7	64.4	63.9	62.6	62.1	59.9	57.9	56.4	54.5	52.9	47.0
25118.9	63.0	62.7	63.6	63.0	61.6	61.3	59.1	56.7	55.6	53.9	52.1	45.8
31622.8	62.5	62.2	62.9	62.4	61.0	60.7	58.4	56.1	54.9	52.4	50.5	44.3
39810.7	61.3	61.3	61.9	61.4	59.9	59.5	57.4	55.0	54.1	51.7	49.4	43.7
50118.7	60.2	60.2	60.6	60.1	58.9	58.2	56.2	53.9	52.9	50.9	48.3	43.0
63095.7	59.0	59.1	59.2	58.8	57.8	56.6	54.9	52.8	51.3	49.6	47.0	41.6
79432.8	57.3	57.0	57.8	57.2	55.4	55.3	53.0	50.3	49.5	47.4	44.9	39.6

Setpoint	33
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.590
Ideal jet velocity (ft/s)	643.889
Temperature ratio (T_j/T_{amb})	2.266
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





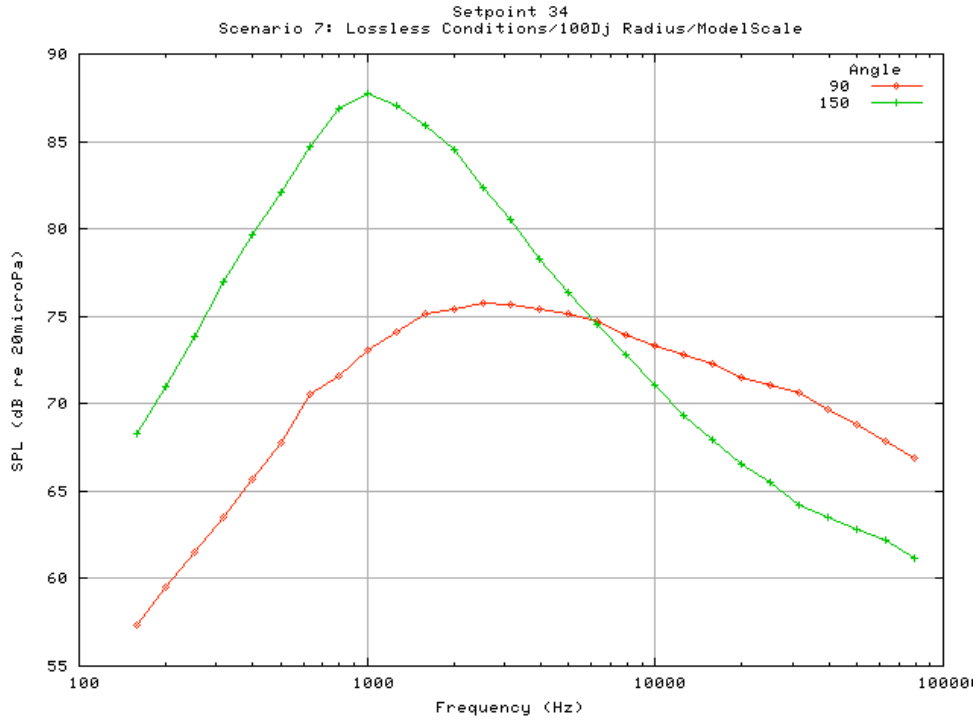
Setpoint 33 continued

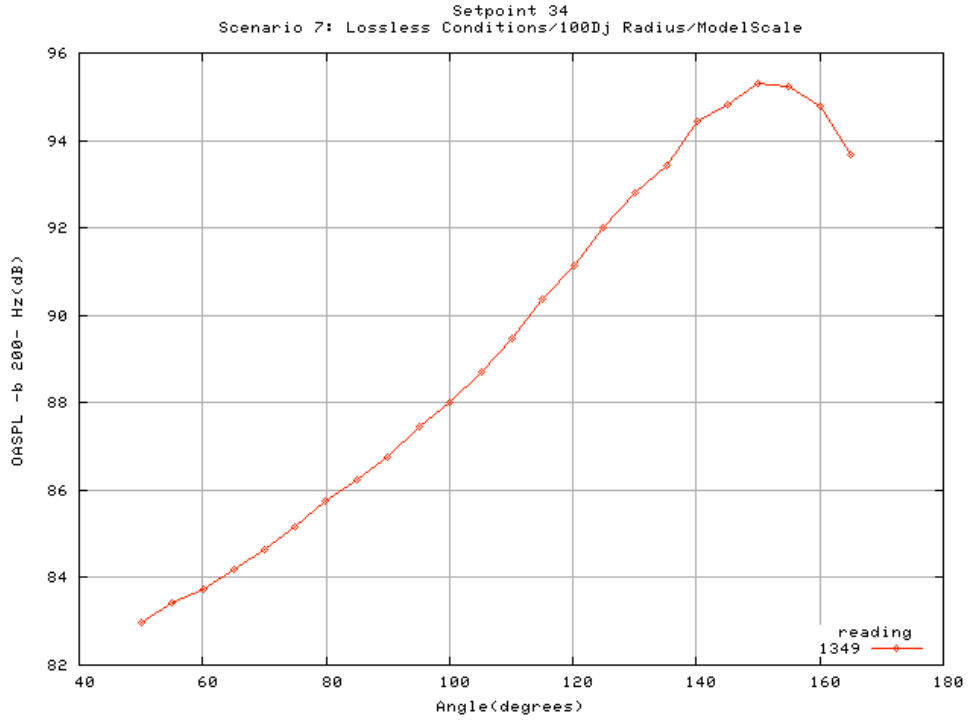
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	53.5	53.9	53.8	54.7	54.9	55.3	55.6	56.2	56.7	57.0	57.4	57.7
199.5	54.6	55.1	55.1	55.9	56.2	56.5	56.7	57.1	57.8	58.2	58.7	59.3
251.2	55.8	56.4	56.5	57.3	57.6	58.0	58.3	58.7	59.2	59.3	59.6	59.9
316.2	58.1	58.7	58.8	59.8	60.3	60.8	61.1	61.3	61.5	61.5	61.9	62.4
398.1	59.6	60.4	60.7	61.9	62.4	62.8	62.9	63.0	63.5	63.7	64.1	64.6
501.2	61.7	62.8	63.3	64.3	64.6	64.9	65.1	65.1	65.7	65.8	66.2	66.9
631.0	63.9	64.7	64.9	65.8	65.9	66.1	66.3	66.7	67.5	67.7	68.2	69.0
794.3	65.1	66.2	66.4	66.9	67.0	67.5	67.6	68.2	69.1	69.3	70.0	70.9
1000.0	66.3	67.2	67.4	68.1	68.0	68.4	68.8	69.2	70.1	70.5	71.3	72.2
1258.9	67.3	68.3	68.2	68.5	68.6	69.1	69.8	70.3	71.1	71.4	72.2	73.0
1584.9	68.0	68.8	68.3	68.6	68.8	69.7	70.1	70.5	71.4	71.9	72.7	73.4
1995.3	68.0	68.3	68.1	68.6	69.0	69.8	70.3	70.9	72.0	72.1	72.8	73.6
2511.9	68.0	68.4	67.9	68.8	69.2	69.8	70.5	70.8	72.1	72.2	73.0	73.8
3162.3	68.0	68.4	67.9	68.7	69.1	69.9	70.3	70.9	71.8	72.0	72.8	73.6
3981.1	67.8	67.6	67.6	68.3	68.5	69.2	69.8	70.4	71.3	71.6	72.5	73.2
5011.9	66.6	67.1	67.1	67.7	67.9	68.7	69.3	69.8	70.7	71.0	71.7	72.6
6309.6	66.1	66.9	66.6	67.3	67.4	68.4	68.8	69.3	70.3	70.3	71.2	72.0
7943.3	65.9	66.3	66.1	66.8	66.8	67.7	68.1	68.7	69.5	69.7	70.4	71.2
10000.0	65.5	65.7	65.7	66.2	66.1	67.0	67.5	68.1	68.9	69.1	69.8	70.4
12589.3	65.2	65.4	65.2	65.8	65.5	66.6	66.7	67.4	68.2	68.5	69.1	69.8
15848.9	64.8	65.0	64.8	65.3	65.0	66.2	66.1	67.0	67.7	68.1	68.5	69.3
19952.6	64.5	64.7	64.2	65.0	65.2	65.8	65.3	66.6	67.2	67.6	68.1	68.7
25118.9	63.7	64.0	63.8	64.5	64.9	65.3	64.9	66.1	66.6	67.1	67.6	68.1
31622.8	62.9	63.2	63.2	63.7	63.9	64.7	64.2	65.4	66.0	66.3	67.0	67.3
39810.7	62.0	62.0	62.0	62.7	63.6	64.0	63.4	64.6	65.0	65.3	66.3	66.3
50118.7	60.6	60.7	60.8	61.5	63.3	63.0	62.5	63.6	64.0	64.2	65.4	65.4
63095.7	59.2	59.3	59.6	60.3	62.4	62.0	61.7	62.5	62.9	63.2	64.3	64.4
79432.8	57.7	58.0	58.3	59.1	60.8	60.7	60.2	61.4	61.7	62.2	63.1	63.3

Setpoint 33 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	58.1	58.8	59.4	60.4	61.6	62.6	63.8	65.0	66.0	67.0	67.7	68.3
199.5	59.8	60.7	61.6	62.8	64.3	65.6	66.9	68.3	69.4	70.5	71.2	71.7
251.2	60.4	61.3	62.3	63.8	65.6	67.0	68.5	70.0	71.2	72.2	72.9	73.4
316.2	63.0	64.0	65.1	66.5	68.3	69.7	71.2	72.7	73.9	74.9	75.6	75.9
398.1	65.1	66.2	67.3	68.7	70.5	71.9	73.3	74.8	76.0	77.0	77.5	77.6
501.2	67.6	68.6	69.7	71.4	73.3	74.8	76.4	77.9	78.9	79.7	80.1	79.9
631.0	69.6	70.8	72.0	73.5	75.2	76.7	78.2	79.7	80.8	81.6	81.8	81.2
794.3	71.3	72.3	73.6	75.1	76.7	78.0	79.5	80.9	82.0	82.5	82.5	81.4
1000.0	72.7	73.8	74.9	76.4	77.8	78.9	80.1	81.2	82.0	82.2	81.8	80.1
1258.9	73.6	74.5	75.5	76.8	78.2	79.1	80.2	81.0	81.2	81.0	79.9	77.2
1584.9	74.1	74.9	75.7	76.9	78.1	79.0	79.8	80.3	80.2	79.2	77.6	74.6
1995.3	74.2	74.8	75.6	76.7	77.8	78.3	78.9	79.0	78.2	76.8	74.8	71.5
2511.9	74.1	74.9	75.6	76.6	77.4	77.8	78.0	77.6	76.5	74.5	72.6	68.9
3162.3	74.0	74.9	75.5	76.1	76.8	77.0	76.8	75.9	74.3	72.6	70.5	66.6
3981.1	73.5	74.2	74.8	75.5	76.0	75.9	75.4	74.1	72.4	70.5	68.5	64.2
5011.9	73.1	73.6	74.1	74.7	75.0	74.7	73.7	72.3	70.5	68.3	66.3	61.9
6309.6	72.4	72.8	73.5	74.0	74.0	73.3	72.1	70.4	68.4	66.3	64.5	59.6
7943.3	71.5	71.9	72.7	72.9	72.6	71.9	70.5	68.6	66.9	64.6	62.8	57.7
10000.0	70.8	71.1	71.7	71.9	71.4	70.6	69.2	67.3	65.1	63.0	60.9	56.0
12589.3	70.2	70.4	70.9	70.8	70.1	69.4	67.6	65.7	63.8	61.4	59.6	54.4
15848.9	69.5	69.6	70.2	70.1	69.0	68.4	66.5	64.5	62.6	60.3	58.6	53.3
19952.6	68.7	68.9	69.7	69.2	67.7	67.3	65.2	63.3	61.6	59.8	58.1	52.5
25118.9	68.0	67.7	68.9	68.0	66.5	66.2	64.1	61.9	60.7	59.0	57.1	51.4
31622.8	67.5	67.1	68.0	67.4	65.7	65.4	63.4	61.2	59.8	57.3	55.3	50.0
39810.7	66.4	66.2	66.9	66.3	64.6	64.3	62.3	60.0	58.9	56.6	54.2	49.1
50118.7	65.4	65.2	65.8	65.1	63.7	63.2	61.3	59.1	57.8	56.0	53.4	48.7
63095.7	64.4	64.3	64.7	64.0	62.9	61.9	60.3	58.4	56.6	55.0	52.4	47.6
79432.8	63.0	62.6	63.6	62.8	60.9	61.1	58.9	56.4	55.3	53.4	50.8	46.0

Setpoint	34
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.699
Ideal jet velocity (ft/s)	775.643
Temperature ratio (T_j/T_{amb})	2.267
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





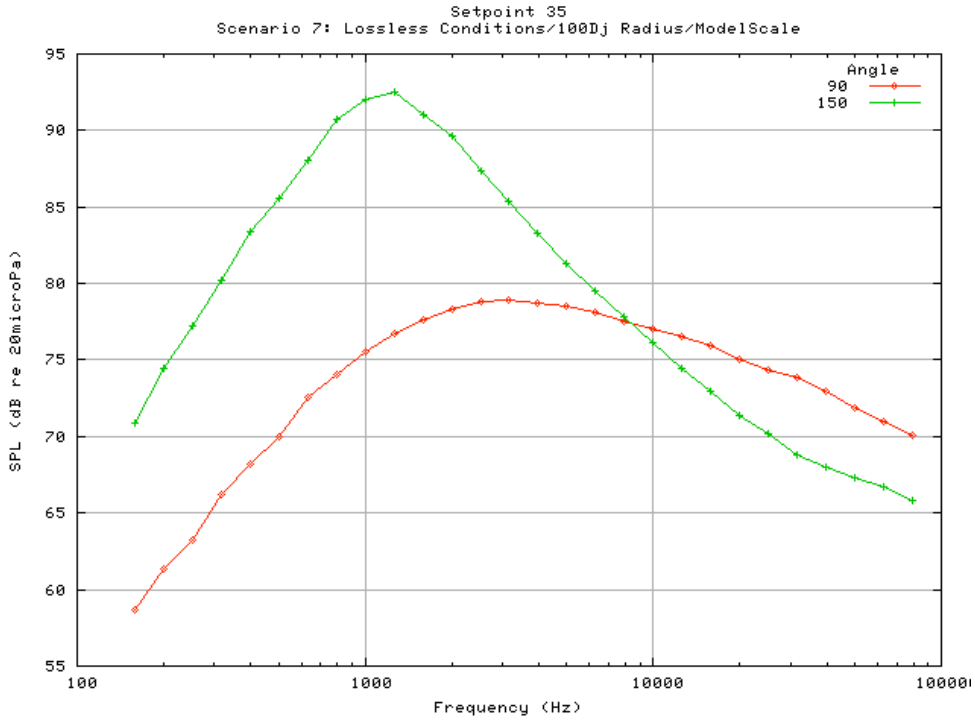
Setpoint 34 continued

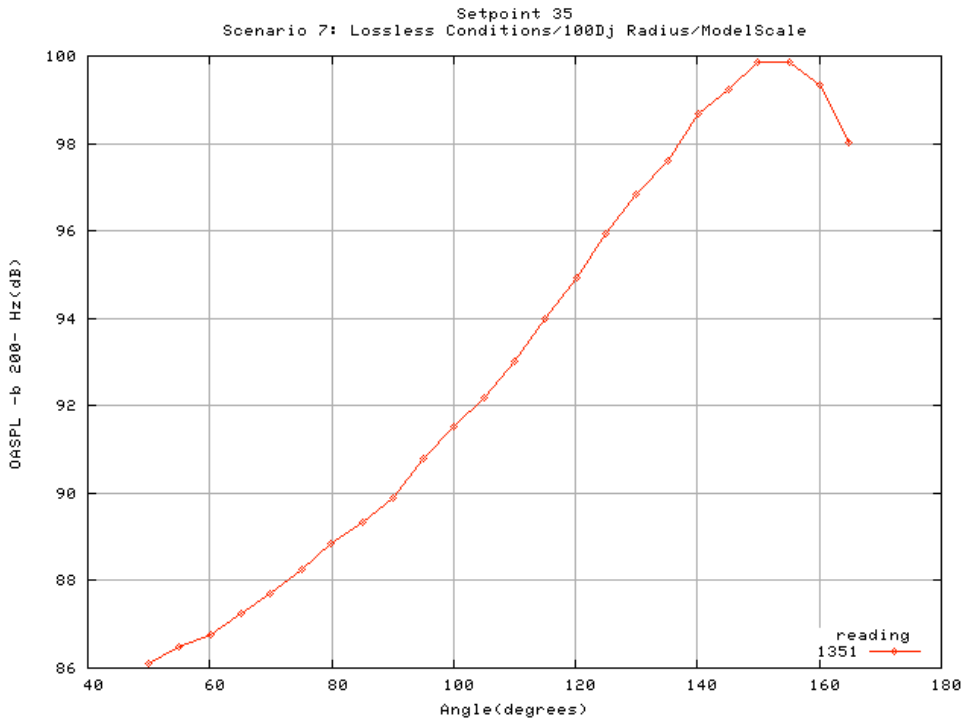
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	55.6	56.0	56.4	56.8	57.0	57.2	57.1	57.1	57.4	57.5	57.8	58.3
199.5	56.5	56.8	57.3	57.7	58.0	58.3	58.7	59.1	59.5	60.0	60.4	60.8
251.2	58.0	58.5	58.9	59.4	59.8	60.2	60.7	61.1	61.5	62.0	62.3	62.7
316.2	59.8	60.5	61.2	61.8	62.2	62.6	63.0	63.3	63.5	63.7	63.8	64.2
398.1	61.9	62.6	63.4	64.1	64.7	65.2	65.5	65.5	65.7	66.0	66.2	66.8
501.2	63.3	64.4	65.6	66.3	66.7	66.8	67.2	67.5	67.8	68.2	68.5	69.1
631.0	66.3	67.1	67.9	68.4	68.7	69.0	69.3	69.6	70.5	70.8	71.2	71.9
794.3	67.5	68.6	69.3	69.7	70.1	70.2	70.7	71.3	71.6	72.4	72.8	73.6
1000.0	69.1	70.0	70.8	71.1	71.1	71.5	72.0	72.6	73.1	73.8	74.3	75.1
1258.9	70.5	71.5	72.0	71.7	72.1	72.3	73.1	73.6	74.1	75.0	75.5	76.4
1584.9	71.5	72.1	72.4	72.5	72.8	73.4	74.0	74.3	75.1	75.7	76.4	77.0
1995.3	71.4	72.0	72.3	72.5	73.1	73.6	74.4	74.9	75.4	76.2	76.6	77.4
2511.9	71.5	72.2	72.4	72.9	73.3	73.9	74.5	75.2	75.8	76.5	77.0	77.7
3162.3	71.9	72.4	72.4	73.0	73.5	74.0	74.6	75.3	75.7	76.4	77.1	77.9
3981.1	71.6	71.8	72.1	72.6	73.2	73.7	74.3	74.8	75.4	76.3	76.9	77.7
5011.9	71.1	71.3	71.6	72.4	72.8	73.2	73.9	74.5	75.2	75.8	76.4	77.2
6309.6	70.6	71.1	71.3	71.9	72.2	72.8	73.5	74.2	74.7	75.3	75.9	76.8
7943.3	70.2	70.4	70.6	71.3	71.7	72.2	72.9	73.4	74.0	74.7	75.3	76.0
10000.0	69.9	69.9	70.2	70.7	71.2	71.7	72.5	72.9	73.3	74.1	74.8	75.3
12589.3	69.4	69.5	69.7	70.1	70.7	71.1	71.8	72.3	72.8	73.5	74.0	74.6
15848.9	69.1	69.0	69.1	69.7	70.2	70.7	71.2	71.7	72.3	72.9	73.5	74.0
19952.6	68.4	68.7	68.7	69.2	69.8	70.8	70.8	71.2	71.5	72.0	72.9	73.3
25118.9	67.9	68.2	68.0	68.5	69.4	70.5	70.3	70.7	71.0	71.6	72.5	72.8
31622.8	67.1	67.4	67.6	68.1	68.6	69.2	69.7	70.1	70.6	71.1	71.7	72.1
39810.7	66.1	66.5	66.6	67.2	67.8	68.4	68.9	69.2	69.7	70.3	70.7	71.3
50118.7	65.0	65.3	65.5	66.1	66.8	67.9	68.1	68.2	68.8	69.3	70.0	70.3
63095.7	63.5	64.0	64.4	65.1	65.8	67.1	67.2	67.2	67.9	68.4	69.1	69.4
79432.8	62.2	62.7	63.3	64.0	64.7	65.7	66.1	66.3	66.9	67.4	68.1	68.5

Setpoint 34 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	59.0	59.7	60.7	61.8	63.1	64.2	65.7	66.9	68.3	69.2	70.1	71.4
199.5	61.4	62.0	62.9	64.0	65.4	66.6	68.3	69.6	71.0	72.0	72.9	73.9
251.2	63.4	64.2	65.3	66.6	68.1	69.4	71.1	72.4	73.8	74.9	75.7	76.5
316.2	64.8	65.9	67.3	68.9	70.7	72.2	74.1	75.6	77.0	78.0	78.8	79.4
398.1	67.7	68.9	70.1	71.7	73.4	74.9	76.8	78.2	79.7	80.7	81.4	81.6
501.2	69.9	70.9	72.3	74.1	75.8	77.4	79.4	80.8	82.1	83.0	83.5	83.6
631.0	72.8	73.9	75.2	76.7	78.5	80.1	82.0	83.3	84.7	85.6	85.9	85.5
794.3	74.4	75.5	76.8	78.8	80.5	82.2	84.2	85.6	86.8	87.4	87.4	86.7
1000.0	76.0	77.2	78.5	80.1	81.8	83.4	85.4	86.6	87.7	88.1	87.9	86.5
1258.9	77.2	78.4	79.7	81.0	82.5	83.7	85.4	86.1	87.0	87.0	86.2	84.1
1584.9	78.0	79.0	80.3	81.4	82.6	83.8	85.1	85.8	85.9	85.3	83.7	81.1
1995.3	78.0	79.1	80.2	81.4	82.7	83.7	84.7	84.7	84.5	83.0	80.9	78.2
2511.9	78.6	79.5	80.4	81.6	82.4	82.9	83.5	83.1	82.3	80.7	78.4	75.4
3162.3	78.7	79.8	80.6	81.3	81.9	82.5	82.7	81.8	80.5	78.6	76.2	72.8
3981.1	78.5	79.5	80.2	80.9	81.4	81.3	81.4	80.0	78.3	76.5	74.1	70.5
5011.9	77.9	78.9	79.7	80.3	80.4	80.2	79.9	78.2	76.4	74.6	72.0	68.6
6309.6	77.4	78.1	78.8	79.4	79.4	78.8	78.1	76.6	74.5	72.8	70.3	66.9
7943.3	76.8	77.5	78.0	78.4	78.2	77.4	76.6	75.0	72.8	71.0	68.2	64.7
10000.0	76.0	76.8	77.2	77.3	77.0	76.0	75.2	73.2	71.1	69.4	66.7	63.2
12589.3	75.3	76.1	76.4	76.3	76.0	74.7	73.6	71.7	69.4	67.7	65.1	62.1
15848.9	74.7	75.4	75.5	75.4	74.9	73.4	72.2	70.4	67.9	66.4	63.4	60.0
19952.6	74.0	74.4	74.4	74.4	73.8	72.2	70.8	68.9	66.6	65.1	62.3	58.9
25118.9	73.3	73.9	73.5	73.4	72.7	71.1	69.6	67.9	65.5	64.0	60.9	57.6
31622.8	72.6	73.2	72.9	72.4	71.6	70.0	68.7	66.8	64.2	63.0	59.8	55.9
39810.7	71.8	72.1	71.7	71.3	70.2	68.9	67.4	65.6	63.5	61.8	58.6	54.6
50118.7	70.8	70.9	70.6	70.1	69.0	67.8	66.2	64.5	62.8	60.6	57.4	53.1
63095.7	69.8	70.0	69.6	69.1	68.1	66.7	65.3	63.5	62.2	59.6	56.1	51.9
79432.8	69.0	69.1	68.7	68.0	67.0	65.6	63.9	62.4	61.1	58.5	55.1	50.9

Setpoint	35
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.801
Ideal jet velocity (ft/s)	888.794
Temperature ratio (T_j/T_{amb})	2.272
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





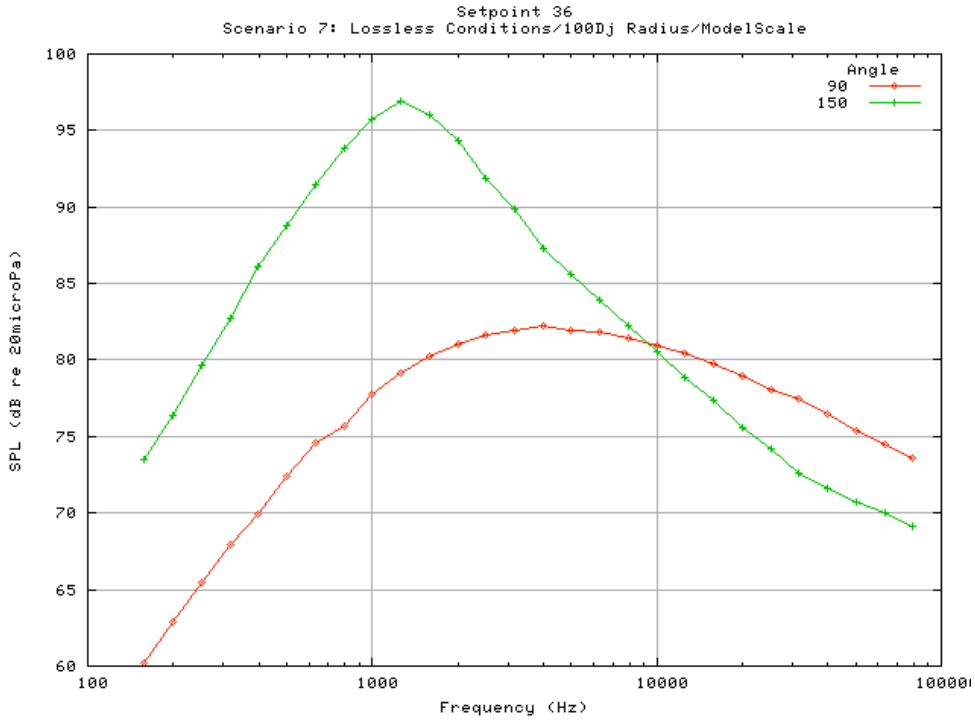
Setpoint 35 continued

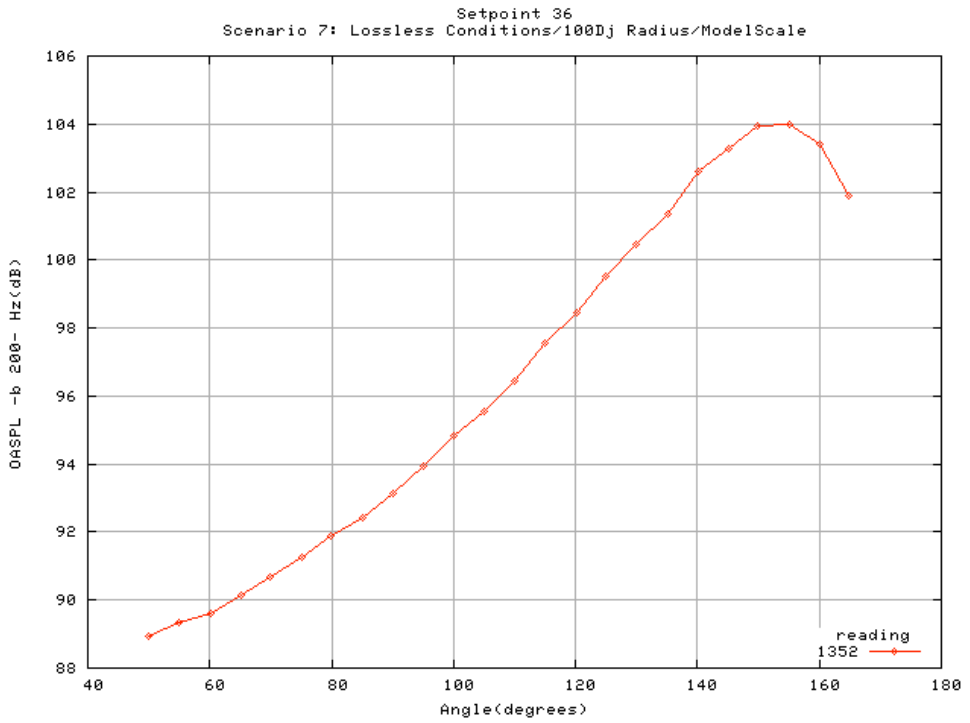
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	56.2	56.7	57.2	57.7	58.0	58.2	58.3	58.5	58.7	58.9	59.1	59.5
199.5	57.9	58.4	58.9	59.4	59.7	60.2	60.6	61.0	61.3	61.7	61.8	62.0
251.2	59.3	59.7	60.3	60.9	61.3	61.8	62.4	62.9	63.2	63.7	63.8	64.2
316.2	61.8	62.4	63.1	63.8	64.4	64.9	65.6	66.0	66.2	66.4	66.5	66.8
398.1	63.9	64.5	65.3	66.2	66.9	67.4	67.8	68.0	68.2	68.7	69.0	69.5
501.2	65.2	66.3	67.5	68.3	68.7	68.9	69.2	69.6	69.9	70.5	70.9	71.5
631.0	68.2	68.9	69.6	70.3	70.5	70.5	71.0	71.5	72.6	72.8	73.4	74.1
794.3	69.7	70.6	71.2	71.6	71.9	72.1	73.0	73.7	74.0	74.8	75.4	76.0
1000.0	71.4	72.3	72.7	73.2	73.4	73.6	74.5	74.9	75.6	76.4	76.9	77.8
1258.9	73.0	74.0	74.3	74.2	74.6	74.7	75.6	76.0	76.7	77.6	78.4	79.2
1584.9	74.1	74.5	74.6	74.9	75.2	75.8	76.4	76.9	77.6	78.5	79.2	79.9
1995.3	74.4	75.0	75.1	75.5	76.1	76.5	77.2	77.7	78.3	79.3	79.9	80.8
2511.9	74.7	75.2	75.2	75.7	76.3	76.9	77.6	78.2	78.8	79.8	80.4	81.2
3162.3	75.1	75.5	75.5	76.1	76.7	77.2	77.6	78.3	78.9	79.9	80.6	81.3
3981.1	75.2	75.2	75.5	75.9	76.5	77.0	77.7	78.0	78.8	79.9	80.5	81.1
5011.9	74.5	74.8	75.2	76.0	76.2	76.7	77.3	78.0	78.5	79.4	80.2	81.0
6309.6	74.1	74.4	74.7	75.4	75.7	76.3	77.2	77.7	78.1	79.2	79.9	80.6
7943.3	73.8	74.1	74.3	74.9	75.4	75.9	76.5	76.9	77.5	78.6	79.4	80.0
10000.0	73.5	73.5	73.9	74.3	74.9	75.4	76.2	76.6	77.1	77.9	78.8	79.5
12589.3	73.0	73.0	73.3	73.8	74.4	74.8	75.5	75.9	76.5	77.3	78.2	78.7
15848.9	72.5	72.3	72.8	73.2	73.7	74.4	74.8	75.3	75.9	76.7	77.5	78.0
19952.6	71.6	71.9	72.1	72.5	73.1	74.3	74.2	74.6	75.1	75.8	77.0	77.3
25118.9	71.1	71.5	71.5	71.8	72.6	73.9	73.6	74.0	74.4	75.2	76.3	76.7
31622.8	70.5	70.8	71.2	71.6	71.9	72.6	73.0	73.4	73.9	74.5	75.4	75.8
39810.7	69.4	69.8	70.1	70.5	71.0	71.8	72.1	72.5	73.0	73.7	74.3	74.9
50118.7	68.2	68.7	69.1	69.5	70.0	71.3	71.3	71.6	71.9	72.7	73.6	73.9
63095.7	66.9	67.4	68.0	68.4	68.9	70.5	70.4	70.6	71.0	71.8	72.6	73.0
79432.8	65.5	66.2	66.9	67.5	68.0	69.2	69.4	69.8	70.1	70.8	71.7	72.2

Setpoint 35 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	60.2	60.8	61.8	63.0	64.5	66.0	67.8	69.3	70.9	72.1	73.1	73.9
199.5	62.5	63.2	64.4	65.9	67.6	69.2	71.2	72.8	74.5	75.7	76.6	77.3
251.2	64.9	65.8	67.0	68.7	70.5	72.1	74.1	75.6	77.2	78.3	79.2	79.8
316.2	67.5	68.4	69.7	71.3	73.2	75.0	77.0	78.6	80.2	81.3	82.1	82.6
398.1	70.3	71.4	72.8	74.4	76.4	78.1	80.2	81.7	83.4	84.5	85.3	85.6
501.2	72.2	73.3	74.8	76.5	78.4	80.2	82.4	84.1	85.6	86.5	87.1	87.2
631.0	75.1	76.2	77.4	79.0	80.9	82.8	84.9	86.5	88.1	89.1	89.5	89.1
794.3	76.9	78.0	79.6	81.6	83.6	85.5	87.8	89.4	90.8	91.5	91.5	90.7
1000.0	78.7	79.9	81.3	83.0	84.9	86.8	89.1	90.6	92.1	92.6	92.3	90.8
1258.9	80.1	81.3	82.7	84.3	86.1	87.9	90.0	91.3	92.5	92.6	91.9	89.7
1584.9	81.1	82.3	83.7	85.0	86.5	87.9	89.5	90.6	91.0	90.7	89.4	87.0
1995.3	81.6	82.8	83.9	85.4	86.9	88.1	89.4	89.6	89.6	88.3	86.5	83.9
2511.9	82.2	83.1	84.2	85.6	86.8	87.5	88.3	88.0	87.4	85.9	83.9	80.9
3162.3	82.1	83.5	84.4	85.6	86.4	86.9	87.1	86.4	85.3	83.6	81.5	78.0
3981.1	82.0	83.1	84.1	85.2	85.9	86.1	86.1	84.7	83.3	81.6	79.4	75.4
5011.9	81.8	82.8	83.9	84.7	85.0	84.9	84.5	83.0	81.3	79.7	77.3	73.4
6309.6	81.3	82.2	83.2	84.0	84.1	83.7	83.0	81.5	79.5	77.7	75.4	71.5
7943.3	80.9	81.9	82.5	83.0	83.1	82.3	81.5	79.9	77.9	76.0	73.5	69.5
10000.0	80.2	81.2	81.8	82.0	82.0	81.0	80.1	78.3	76.1	74.4	71.8	68.0
12589.3	79.5	80.3	80.8	80.9	80.8	79.7	78.4	76.7	74.5	72.8	70.3	66.7
15848.9	78.7	79.6	80.0	79.9	79.6	78.3	76.9	75.3	73.0	71.2	68.5	64.5
19952.6	78.0	78.6	78.9	78.9	78.4	77.0	75.3	73.6	71.4	69.7	67.2	63.2
25118.9	77.3	77.9	77.7	77.8	77.2	75.8	73.9	72.5	70.1	68.4	65.5	61.7
31622.8	76.4	77.1	77.0	76.6	76.0	74.6	72.9	71.2	68.8	67.1	64.2	60.0
39810.7	75.5	76.0	75.7	75.3	74.5	73.3	71.5	69.9	68.0	65.9	63.0	58.5
50118.7	74.5	74.8	74.6	74.1	73.2	72.1	70.2	68.8	67.3	64.7	61.8	57.2
63095.7	73.4	73.7	73.5	73.0	72.3	71.1	69.2	67.8	66.7	63.7	60.7	56.3
79432.8	72.6	72.9	72.7	72.1	71.3	70.2	68.1	66.9	65.8	62.9	59.9	55.8

Setpoint	36
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.899
Ideal jet velocity (ft/s)	998.480
Temperature ratio (T_j/T_{amb})	2.269
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





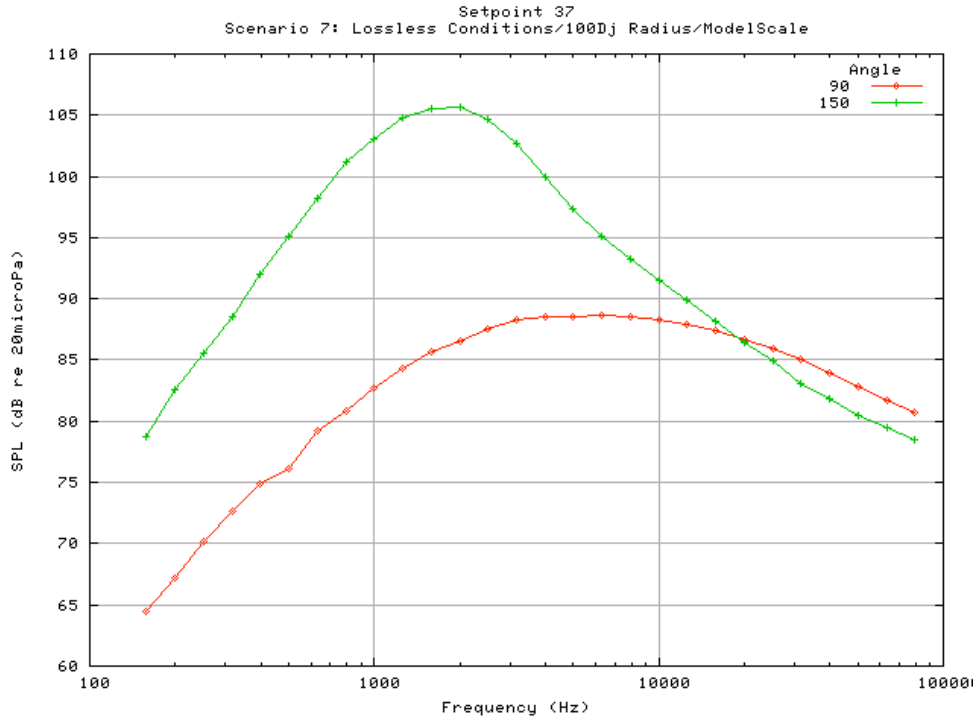
Setpoint 36 continued

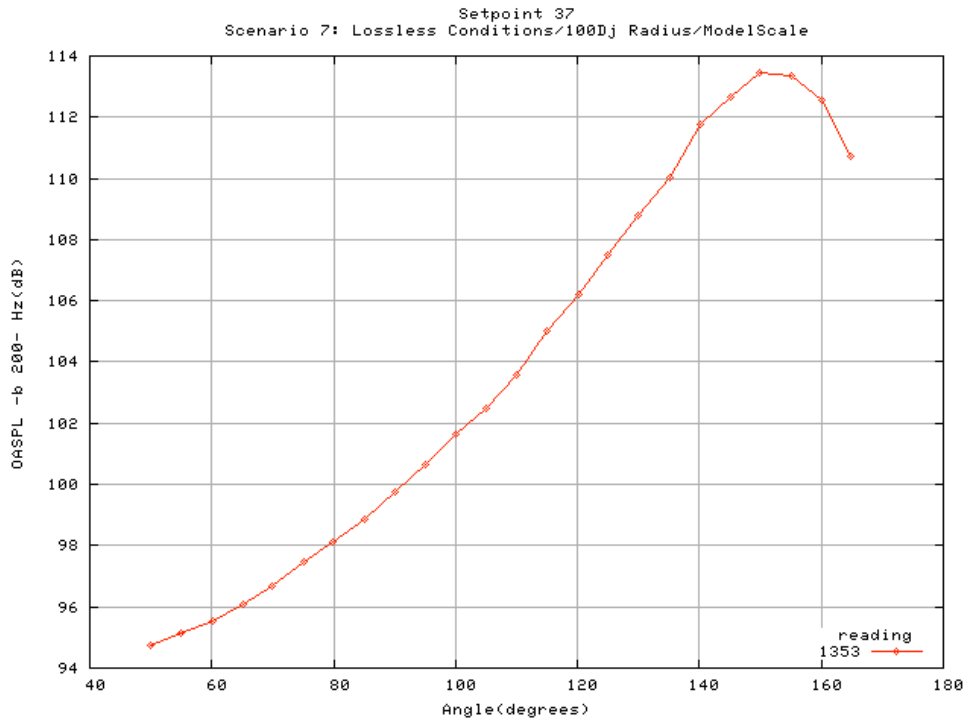
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.9	58.4	58.9	59.4	59.7	59.9	60.0	60.1	60.2	60.5	60.8	61.4
199.5	59.6	60.1	60.6	61.2	61.5	61.8	62.1	62.5	62.9	63.4	63.8	64.2
251.2	61.9	62.3	63.0	63.6	64.1	64.6	65.0	65.3	65.5	65.8	66.0	66.4
316.2	63.4	64.0	64.9	65.8	66.4	66.9	67.5	67.8	67.9	68.1	68.1	68.5
398.1	65.5	66.2	66.9	67.8	68.6	69.0	69.3	69.5	69.9	70.4	70.8	71.4
501.2	67.3	68.5	69.6	70.3	70.7	70.8	71.3	71.8	72.4	73.0	73.3	73.8
631.0	69.9	70.9	71.6	72.2	72.3	72.4	73.0	73.5	74.6	74.6	75.0	75.9
794.3	71.6	72.6	73.1	73.4	73.7	73.8	74.5	75.3	75.7	76.5	77.2	78.1
1000.0	73.5	74.1	74.9	75.2	75.4	75.9	76.6	77.2	77.8	78.6	79.2	80.0
1258.9	75.2	76.1	76.4	76.3	76.8	77.2	77.9	78.6	79.2	80.0	80.7	81.5
1584.9	76.5	76.9	77.1	77.5	77.9	78.6	79.0	79.4	80.3	81.1	82.0	82.7
1995.3	76.8	77.3	77.5	78.0	78.6	79.0	79.8	80.3	81.1	82.0	82.7	83.6
2511.9	77.5	78.0	78.1	78.6	79.1	79.6	80.3	81.0	81.7	82.6	83.2	84.1
3162.3	78.0	78.5	78.5	79.1	79.6	80.0	80.5	81.2	81.9	82.9	83.7	84.6
3981.1	78.1	78.2	78.5	79.0	79.7	80.2	81.0	81.5	82.2	83.2	84.1	84.7
5011.9	77.7	77.9	78.3	79.1	79.4	79.8	80.6	81.2	81.9	82.7	83.6	84.4
6309.6	77.3	77.7	78.0	78.6	79.1	79.6	80.5	81.1	81.8	82.5	83.5	84.2
7943.3	77.0	77.2	77.5	78.2	78.8	79.3	80.0	80.5	81.4	82.1	83.1	83.7
10000.0	76.6	76.8	77.1	77.8	78.4	78.9	79.7	80.2	80.9	81.7	82.6	83.4
12589.3	76.2	76.3	76.5	77.1	77.9	78.3	79.1	79.5	80.4	81.2	82.2	82.7
15848.9	75.7	75.7	75.9	76.5	77.1	77.8	78.3	78.9	79.7	80.6	81.4	82.0
19952.6	74.7	75.2	75.3	75.8	76.6	77.7	77.7	78.2	78.9	79.5	80.8	81.3
25118.9	74.1	74.5	74.5	74.9	75.9	77.2	77.0	77.5	78.1	78.8	80.1	80.5
31622.8	73.4	73.7	74.1	74.6	75.2	75.8	76.3	76.9	77.5	78.1	79.2	79.6
39810.7	72.3	72.8	73.1	73.6	74.3	75.0	75.5	75.9	76.4	77.1	77.9	78.6
50118.7	71.1	71.6	72.0	72.5	73.3	74.5	74.6	74.9	75.4	76.2	77.2	77.5
63095.7	69.7	70.4	70.9	71.6	72.3	73.7	73.6	73.9	74.5	75.2	76.3	76.5
79432.8	68.5	69.3	69.9	70.6	71.3	72.4	72.6	73.1	73.6	74.3	75.3	75.6

Setpoint 36 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	62.2	63.0	64.1	65.5	67.1	68.5	70.3	71.9	73.5	74.7	75.7	77.9
199.5	64.8	65.6	66.6	67.9	69.6	71.1	73.1	74.7	76.4	77.7	78.7	80.4
251.2	67.2	68.2	69.5	71.1	72.9	74.6	76.5	78.0	79.6	80.8	81.8	82.8
316.2	69.2	70.1	71.5	73.4	75.4	77.2	79.4	81.1	82.8	84.0	84.9	85.5
398.1	72.2	73.2	74.7	76.5	78.6	80.4	82.6	84.4	86.1	87.3	88.2	88.5
501.2	74.4	75.3	76.8	78.8	80.9	83.0	85.4	87.2	88.8	89.9	90.5	90.7
631.0	76.8	78.0	79.6	81.5	83.8	85.9	88.1	89.8	91.5	92.5	92.9	92.4
794.3	79.0	80.2	81.8	83.9	86.1	88.2	90.6	92.3	93.8	94.5	94.5	93.6
1000.0	81.1	82.4	84.0	85.9	88.2	90.3	92.8	94.3	95.7	96.2	95.8	94.1
1258.9	82.5	83.9	85.5	87.3	89.4	91.5	94.0	95.5	96.9	97.1	96.2	93.9
1584.9	83.8	85.0	86.4	88.0	89.9	91.8	93.8	95.3	96.0	96.0	94.8	92.5
1995.3	84.6	85.9	87.2	88.8	90.4	91.8	93.4	93.9	94.3	93.6	92.5	90.2
2511.9	85.1	86.4	87.8	89.3	90.4	91.3	92.3	92.2	91.8	90.8	89.4	86.8
3162.3	85.5	86.9	87.9	89.2	90.2	91.0	91.4	90.8	89.9	88.4	86.5	83.4
3981.1	85.7	87.0	88.0	89.1	89.8	90.0	90.1	88.8	87.3	86.0	84.0	80.4
5011.9	85.5	86.7	87.7	88.6	89.0	88.9	88.8	87.4	85.6	84.2	81.7	78.2
6309.6	85.2	86.3	87.2	87.9	88.2	87.8	87.3	85.9	84.0	82.4	80.0	76.4
7943.3	84.7	85.8	86.6	87.2	87.2	86.6	85.8	84.3	82.2	80.5	78.0	74.2
10000.0	84.2	85.3	85.9	86.3	86.2	85.3	84.5	82.7	80.6	79.0	76.5	72.7
12589.3	83.6	84.7	85.1	85.3	85.1	84.0	82.9	81.2	78.9	77.4	74.9	71.5
15848.9	83.0	83.9	84.2	84.2	83.8	82.5	81.4	79.7	77.4	75.8	73.1	69.3
19952.6	82.1	82.9	83.1	83.1	82.6	81.1	79.7	77.9	75.6	74.1	71.5	67.7
25118.9	81.3	82.0	81.9	81.9	81.2	79.8	78.2	76.7	74.2	72.7	69.8	66.1
31622.8	80.4	81.1	80.8	80.5	79.8	78.4	77.0	75.3	72.6	71.2	68.3	64.3
39810.7	79.3	79.9	79.5	79.1	78.1	77.0	75.4	73.8	71.6	69.7	67.0	62.7
50118.7	78.1	78.6	78.2	77.8	76.7	75.5	74.0	72.4	70.7	68.4	65.7	61.3
63095.7	77.0	77.5	77.0	76.5	75.6	74.3	72.9	71.3	70.0	67.4	64.4	60.3
79432.8	76.2	76.6	76.1	75.5	74.6	73.4	71.7	70.3	69.2	66.5	63.6	59.5

Setpoint	37
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.158
Ideal jet velocity (ft/s)	1285.690
Temperature ratio (T_j/T_{amb})	2.270
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





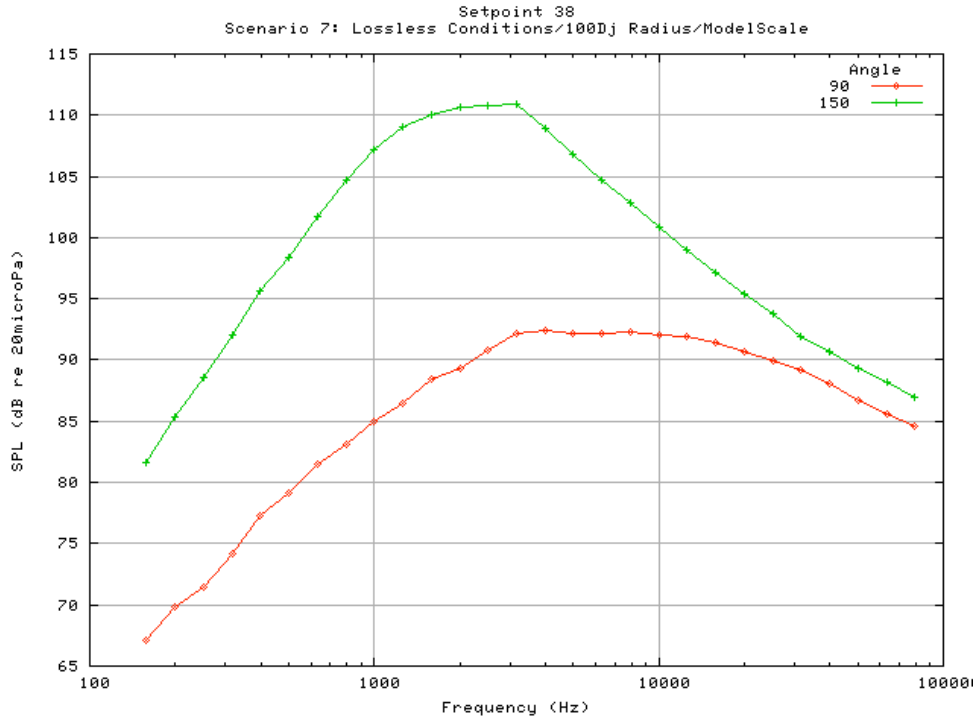
Setpoint 37 continued

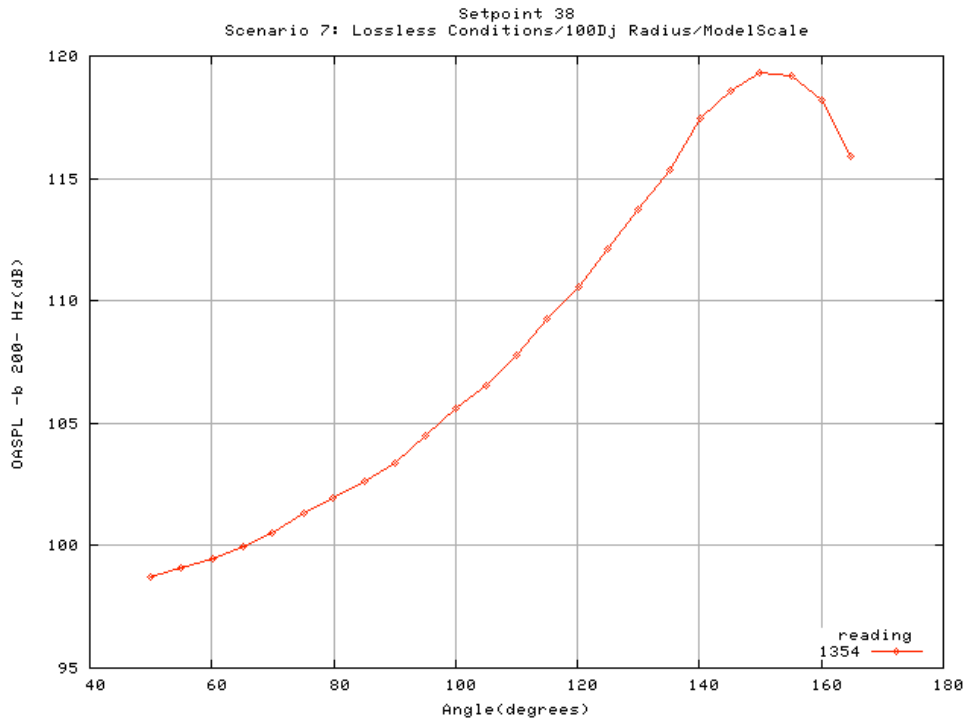
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	61.6	62.1	62.6	63.1	63.3	63.6	63.9	64.2	64.5	64.9	65.4	65.7
199.5	63.4	64.0	64.6	65.1	65.5	65.8	66.3	66.8	67.2	67.7	68.2	68.3
251.2	65.9	66.5	67.1	67.7	68.1	68.7	69.3	69.8	70.2	70.6	70.9	70.9
316.2	67.6	68.3	68.8	69.4	69.9	70.7	71.6	72.3	72.7	73.1	73.4	73.6
398.1	70.0	70.7	71.5	72.3	72.9	73.5	74.0	74.4	74.9	75.4	76.0	76.3
501.2	71.1	72.2	73.3	74.0	74.4	74.6	75.1	75.7	76.2	76.9	77.6	78.3
631.0	74.6	75.3	75.8	76.3	76.4	77.0	77.8	78.4	79.3	79.6	80.3	80.7
794.3	76.5	77.3	77.8	78.1	78.6	78.9	79.7	80.3	80.8	81.4	82.1	82.8
1000.0	77.9	78.6	79.1	79.3	79.9	80.5	81.3	82.2	82.7	83.5	84.4	85.1
1258.9	79.9	80.5	80.7	80.9	81.3	82.0	82.7	83.5	84.3	85.2	86.2	86.9
1584.9	81.5	81.6	82.0	82.3	83.0	83.5	84.2	84.9	85.7	86.3	87.3	88.0
1995.3	82.3	82.5	82.8	83.4	84.0	84.4	84.9	85.7	86.5	87.5	88.4	89.3
2511.9	83.1	83.6	83.7	84.3	84.8	85.3	86.0	86.9	87.6	88.4	89.3	90.3
3162.3	83.9	84.4	84.6	85.2	85.6	86.2	86.9	87.6	88.3	89.2	90.1	91.2
3981.1	84.5	84.6	84.9	85.3	85.9	86.4	87.1	87.8	88.5	89.7	90.6	91.3
5011.9	83.4	83.8	84.3	85.0	85.4	86.2	86.8	87.7	88.5	89.5	90.4	91.4
6309.6	83.3	83.7	84.0	84.7	85.4	86.1	87.0	87.7	88.7	89.6	90.5	91.4
7943.3	83.1	83.5	84.1	84.5	85.2	85.9	86.7	87.5	88.5	89.4	90.5	91.3
10000.0	83.0	83.3	83.7	84.3	84.9	85.6	86.5	87.3	88.2	89.1	90.2	91.1
12589.3	82.5	82.8	83.3	83.9	84.5	85.2	86.2	86.9	87.9	88.8	89.8	90.7
15848.9	82.0	82.2	82.7	83.2	83.8	84.9	85.6	86.3	87.4	88.3	89.3	90.2
19952.6	81.1	81.6	81.9	82.5	83.2	84.7	84.9	85.7	86.7	87.5	88.8	89.6
25118.9	80.3	80.9	81.0	81.5	82.5	84.1	84.2	85.0	85.9	86.8	88.1	88.8
31622.8	79.3	79.9	80.4	80.9	81.5	82.6	83.3	84.0	85.1	86.0	87.1	87.8
39810.7	78.1	78.8	79.2	79.8	80.5	81.6	82.3	82.9	83.9	84.9	85.7	86.6
50118.7	76.8	77.6	78.1	78.7	79.3	80.9	81.2	81.8	82.8	83.7	84.7	85.3
63095.7	75.3	76.3	76.9	77.5	78.2	80.0	80.1	80.7	81.7	82.6	83.6	84.2
79432.8	74.2	75.2	75.9	76.6	77.2	78.5	79.1	79.7	80.7	81.5	82.5	83.1

Setpoint 37 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	66.4	67.2	68.2	69.6	71.3	72.9	75.0	76.8	78.7	80.2	81.4	82.4
199.5	68.9	69.7	70.9	72.6	74.7	76.5	78.8	80.6	82.6	84.0	85.2	86.2
251.2	71.4	72.1	73.4	75.2	77.3	79.3	81.7	83.6	85.6	87.1	88.3	89.1
316.2	74.1	74.7	75.9	77.7	79.8	82.1	84.6	86.6	88.6	90.0	91.1	91.8
398.1	77.0	77.8	79.1	81.0	83.3	85.5	88.0	90.0	92.1	93.4	94.4	94.8
501.2	79.2	80.2	81.8	84.1	86.4	88.7	91.3	93.2	95.1	96.3	97.0	97.1
631.0	81.7	83.0	84.6	86.8	89.4	91.8	94.4	96.3	98.2	99.3	99.6	99.1
794.3	83.7	85.0	86.8	89.5	92.1	94.8	97.6	99.6	101.2	101.9	101.9	100.8
1000.0	86.1	87.5	89.2	91.8	94.5	97.1	99.8	101.6	103.1	103.4	102.8	100.9
1258.9	88.0	89.5	91.3	93.8	96.7	99.1	102.0	103.5	104.8	104.7	103.5	101.1
1584.9	89.4	90.7	92.8	95.1	97.8	100.5	103.2	104.8	105.5	105.1	103.7	101.5
1995.3	90.3	91.8	93.6	96.0	98.6	101.0	103.7	104.9	105.6	104.9	104.0	101.8
2511.9	91.7	93.1	94.7	96.7	98.7	100.6	102.8	103.8	104.7	104.5	103.6	101.5
3162.3	92.2	94.0	95.4	97.2	98.8	100.4	101.7	102.3	102.7	102.6	101.9	99.6
3981.1	92.5	94.1	95.6	97.2	98.5	99.2	100.2	99.9	100.0	100.1	99.5	97.1
5011.9	92.6	94.2	95.7	97.0	97.9	98.2	98.4	97.8	97.3	97.1	96.1	93.5
6309.6	92.6	94.1	95.5	96.6	97.3	97.2	97.1	96.1	95.1	94.5	93.2	90.4
7943.3	92.6	94.0	95.2	96.1	96.5	96.1	95.6	94.5	93.3	92.5	90.7	87.6
10000.0	92.2	93.7	94.7	95.5	95.5	94.9	94.3	93.0	91.6	90.5	88.7	85.4
12589.3	91.8	93.4	94.2	94.6	94.7	93.6	92.9	91.5	89.9	88.9	87.0	83.6
15848.9	91.3	92.7	93.4	93.6	93.5	92.4	91.5	89.9	88.1	87.1	85.1	81.4
19952.6	90.6	91.8	92.4	92.5	92.4	91.0	89.8	88.2	86.4	85.4	83.4	79.5
25118.9	89.7	91.0	91.2	91.3	90.9	89.6	88.3	86.9	84.9	83.9	81.7	77.6
31622.8	88.6	89.9	90.1	89.9	89.4	88.0	86.8	85.2	83.0	82.2	79.9	75.7
39810.7	87.4	88.4	88.5	88.3	87.5	86.3	85.0	83.5	81.8	80.4	78.1	73.9
50118.7	86.0	86.9	87.0	86.6	85.8	84.6	83.2	81.8	80.5	78.8	76.5	72.3
63095.7	84.8	85.4	85.5	85.1	84.4	83.2	81.8	80.4	79.5	77.4	75.0	71.0
79432.8	83.8	84.4	84.3	83.8	83.1	82.0	80.4	79.2	78.5	76.5	74.0	70.3

Setpoint	38
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.329
Ideal jet velocity (ft/s)	1475.530
Temperature ratio (T_j/T_{amb})	2.263
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





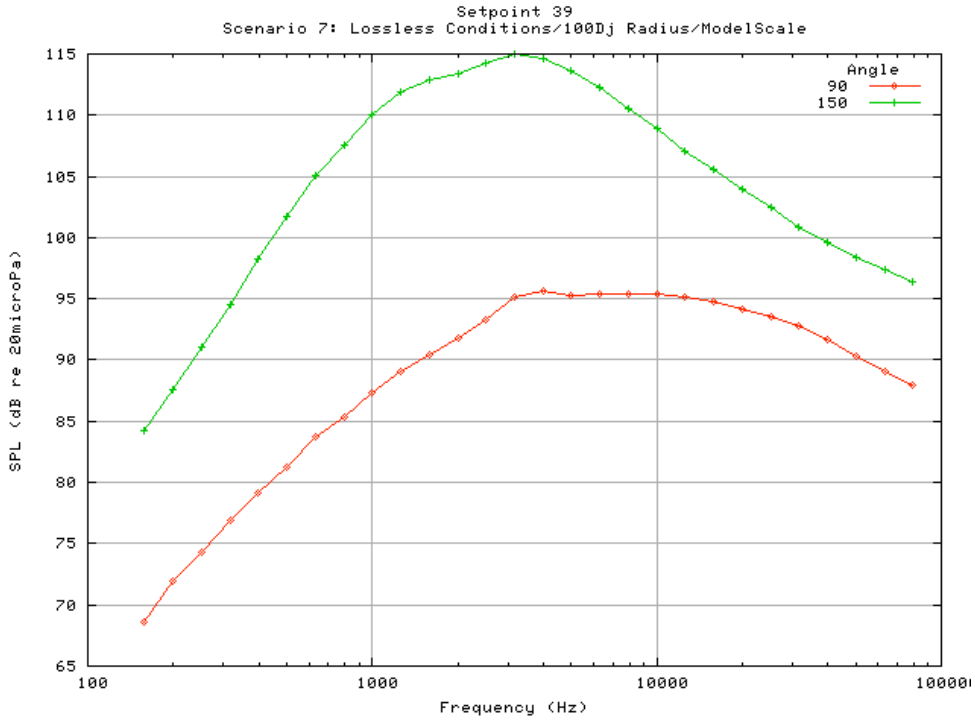
Setpoint 38 continued

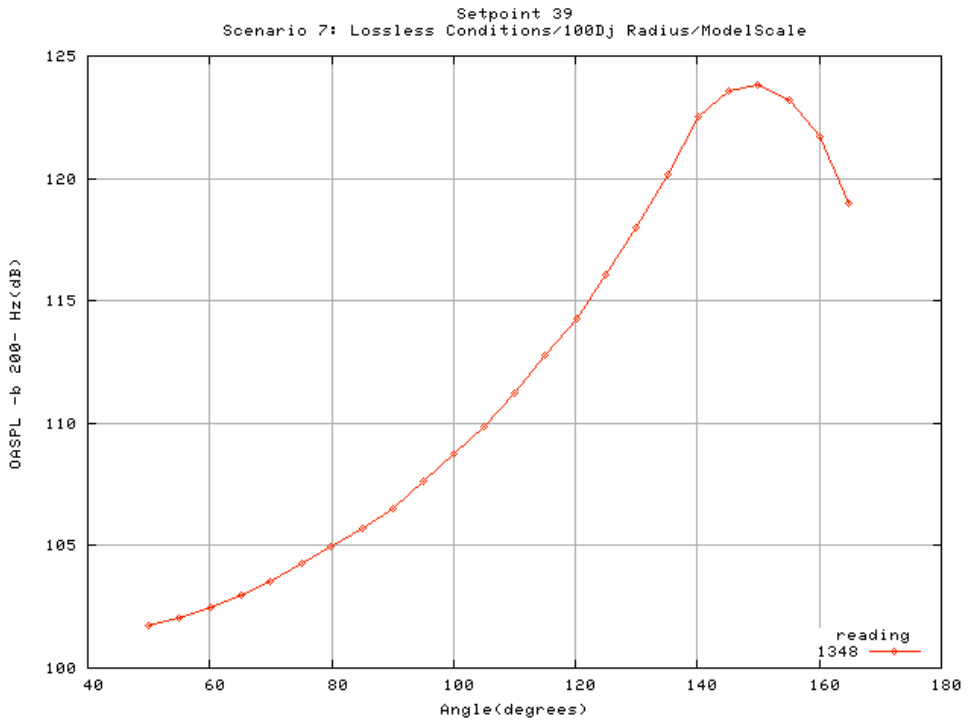
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	63.5	64.0	64.5	65.0	65.4	65.7	66.2	66.7	67.1	67.7	68.4	68.7
199.5	65.8	66.5	67.1	67.7	68.0	68.3	68.8	69.4	69.9	70.5	71.0	71.1
251.2	67.2	67.7	68.3	68.8	69.2	69.7	70.4	71.0	71.4	72.1	72.7	73.0
316.2	69.2	70.0	70.8	71.6	72.0	72.2	72.8	73.5	74.2	74.8	75.4	75.7
398.1	71.8	72.6	73.7	74.7	75.4	75.8	76.2	76.7	77.3	78.0	78.6	78.7
501.2	73.7	74.7	75.7	76.5	76.9	77.3	77.9	78.5	79.1	79.8	80.5	80.8
631.0	77.1	77.7	78.1	78.5	78.7	79.2	79.8	80.5	81.5	82.1	83.0	83.5
794.3	79.1	80.0	80.3	80.2	80.7	81.2	81.8	82.6	83.1	83.8	84.7	85.2
1000.0	80.5	81.0	81.5	81.8	82.3	83.1	83.6	84.4	85.0	85.8	86.7	87.3
1258.9	82.5	83.2	83.4	83.4	84.2	84.5	85.2	85.8	86.5	87.6	88.6	89.4
1584.9	84.5	84.7	84.8	85.2	86.0	86.4	87.2	87.6	88.5	89.2	90.3	90.8
1995.3	85.2	85.7	86.0	86.5	87.1	87.4	88.0	88.7	89.4	90.4	91.5	92.2
2511.9	86.4	86.7	86.7	87.3	87.9	88.5	89.2	90.2	90.8	91.8	92.8	93.6
3162.3	88.5	88.9	89.1	89.1	89.6	90.4	90.9	91.6	92.2	93.2	94.2	95.0
3981.1	89.3	89.6	90.0	90.2	90.4	90.5	91.2	91.7	92.4	93.5	94.6	95.3
5011.9	88.1	88.1	88.4	89.1	89.4	90.3	90.8	91.4	92.2	93.2	94.2	95.3
6309.6	87.4	87.6	87.9	88.6	89.1	89.8	90.7	91.4	92.1	93.4	94.6	95.6
7943.3	87.2	87.6	88.1	88.6	89.1	89.9	90.6	91.4	92.2	93.4	94.5	95.4
10000.0	87.0	87.3	87.8	88.4	89.1	89.8	90.6	91.3	92.1	93.2	94.5	95.4
12589.3	86.6	86.9	87.4	88.0	88.6	89.3	90.2	90.9	91.9	93.0	94.1	95.2
15848.9	86.0	86.3	86.9	87.5	88.1	89.0	89.8	90.5	91.4	92.7	93.7	94.8
19952.6	85.1	85.7	86.2	86.8	87.6	89.0	89.2	90.0	90.7	91.9	93.3	94.3
25118.9	84.3	84.8	85.3	85.8	86.8	88.5	88.6	89.3	89.9	91.1	92.6	93.6
31622.8	83.3	83.9	84.6	85.2	85.9	86.9	87.7	88.4	89.2	90.5	91.6	92.7
39810.7	82.0	82.6	83.3	84.0	84.8	85.9	86.7	87.3	88.1	89.3	90.2	91.5
50118.7	80.6	81.3	82.1	82.9	83.6	85.2	85.6	86.2	86.8	88.2	89.3	90.1
63095.7	79.2	80.0	80.9	81.7	82.5	84.2	84.5	85.0	85.6	87.0	88.0	88.9
79432.8	78.0	78.9	79.9	80.7	81.4	82.8	83.4	84.1	84.6	85.9	86.9	87.7

Setpoint 38 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	69.4	70.0	70.8	72.1	73.7	75.3	77.5	79.4	81.6	83.2	84.6	85.7
199.5	71.6	72.1	73.0	74.5	76.5	78.6	81.1	83.2	85.4	86.9	88.3	89.3
251.2	73.7	74.6	75.9	77.8	80.0	82.1	84.5	86.5	88.5	90.0	91.2	92.1
316.2	76.6	77.5	78.9	80.7	83.0	85.2	87.8	90.0	92.1	93.6	94.7	95.5
398.1	79.3	80.2	81.7	83.8	86.3	88.5	91.2	93.4	95.6	97.1	98.1	98.5
501.2	81.6	82.7	84.4	86.6	89.0	91.5	94.3	96.4	98.4	99.7	100.5	100.6
631.0	84.2	85.3	87.0	89.2	92.0	94.7	97.6	99.7	101.7	102.9	103.3	102.7
794.3	86.2	87.6	89.4	92.2	95.1	97.9	100.9	103.0	104.7	105.5	105.3	104.1
1000.0	88.3	89.7	92.0	95.0	98.1	101.0	104.0	105.8	107.2	107.4	106.6	104.5
1258.9	90.5	92.0	94.2	97.0	100.4	103.3	106.3	107.8	109.0	108.6	107.2	104.6
1584.9	92.1	93.6	96.1	99.2	102.3	105.4	108.1	109.6	110.0	109.2	107.6	105.2
1995.3	93.4	95.1	97.3	100.4	103.7	106.6	109.3	110.4	110.6	109.6	108.4	105.8
2511.9	94.9	96.5	98.4	101.2	103.9	106.6	109.3	110.2	110.8	110.4	109.2	106.7
3162.3	96.3	98.2	99.7	101.8	103.9	106.3	108.8	110.0	110.9	110.8	109.8	107.3
3981.1	96.6	98.3	99.9	101.8	103.6	105.0	106.9	107.9	108.9	109.2	108.4	105.6
5011.9	96.6	98.2	100.0	101.7	102.9	103.8	105.0	105.9	106.8	107.3	106.3	103.7
6309.6	96.9	98.4	99.9	101.4	102.4	102.7	103.5	104.0	104.7	105.2	104.2	101.6
7943.3	96.8	98.5	99.9	101.0	101.6	101.6	102.0	102.3	102.8	103.2	101.9	99.1
10000.0	96.7	98.3	99.6	100.4	100.9	100.4	100.6	100.6	100.9	101.2	99.8	96.9
12589.3	96.6	98.1	99.0	99.6	99.9	99.3	99.2	99.1	98.9	99.2	97.8	94.8
15848.9	96.1	97.5	98.3	98.8	98.9	98.0	97.8	97.7	97.1	97.2	95.9	92.5
19952.6	95.5	96.7	97.4	97.8	97.7	96.8	96.2	95.8	95.4	95.5	94.1	90.5
25118.9	94.7	96.0	96.2	96.6	96.4	95.3	94.7	94.5	93.8	93.8	92.2	88.5
31622.8	93.8	94.9	95.2	95.1	94.9	93.7	93.3	92.8	92.0	92.1	90.1	86.5
39810.7	92.5	93.4	93.5	93.5	92.9	92.0	91.4	91.0	90.7	90.4	88.4	84.6
50118.7	91.1	91.8	91.9	91.8	91.1	90.2	89.5	89.2	89.3	88.7	86.7	82.8
63095.7	89.7	90.3	90.3	90.1	89.6	88.6	87.9	87.6	88.2	87.3	85.1	81.4
79432.8	88.6	89.2	88.9	88.7	88.2	87.3	86.4	86.3	87.0	86.3	84.3	80.7

Setpoint	39
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.483
Ideal jet velocity (ft/s)	1646.200
Temperature ratio (T_j/T_{amb})	2.277
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





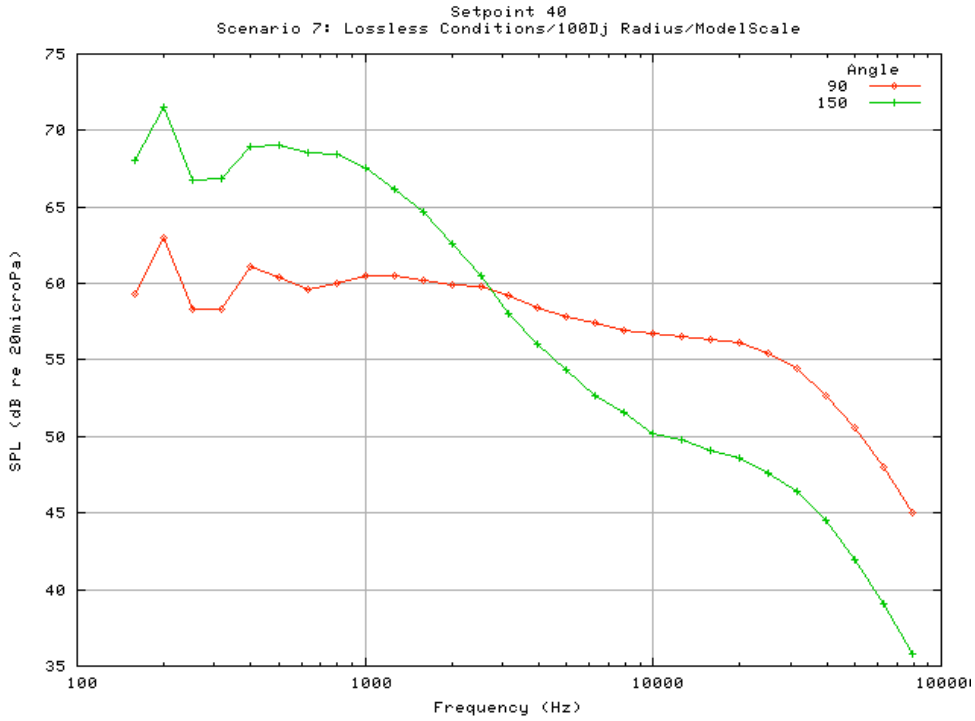
Setpoint 39 continued

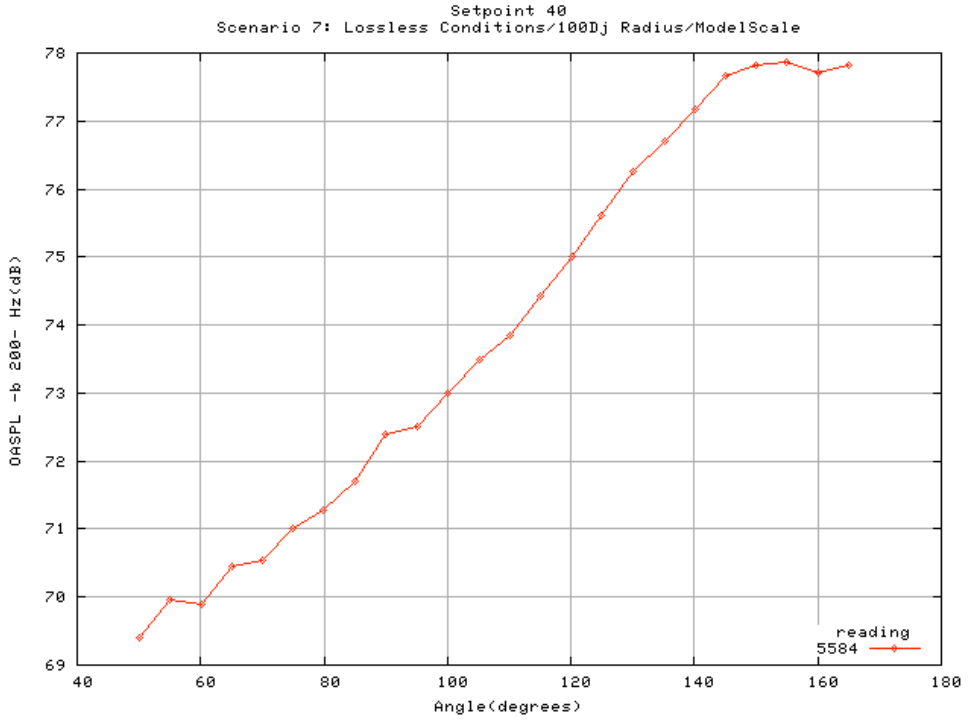
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	65.0	65.5	66.0	66.5	66.8	67.2	67.6	68.2	68.6	69.3	69.7	70.3
199.5	67.5	68.2	68.9	69.4	69.8	70.2	70.8	71.4	72.0	72.6	72.9	73.2
251.2	69.6	70.2	70.8	71.4	71.9	72.5	73.2	73.9	74.3	74.9	75.1	75.6
316.2	71.6	72.2	72.9	73.8	74.4	75.0	75.7	76.4	76.9	77.4	77.9	78.4
398.1	74.0	74.6	75.4	76.3	77.0	77.6	78.2	78.7	79.2	79.6	80.0	80.6
501.2	75.6	76.7	77.5	78.0	78.6	79.1	79.9	80.6	81.3	82.0	82.5	83.2
631.0	79.4	80.0	80.5	80.7	81.1	81.8	82.3	82.6	83.7	84.2	84.8	85.7
794.3	81.3	81.9	82.2	82.3	82.7	83.1	84.0	84.7	85.4	86.2	86.6	87.6
1000.0	82.7	83.3	83.5	83.7	84.5	84.9	85.8	86.4	87.3	88.2	88.9	89.8
1258.9	85.2	85.8	85.7	86.1	86.6	86.9	87.5	88.3	89.0	90.1	90.9	92.0
1584.9	87.0	86.7	86.9	87.4	87.9	88.7	89.1	89.7	90.4	91.3	92.2	93.3
1995.3	87.7	88.1	88.4	88.9	89.3	89.8	90.5	91.1	91.9	92.8	93.5	94.6
2511.9	89.0	89.1	89.2	90.0	90.7	91.2	92.1	92.7	93.3	94.3	95.1	96.4
3162.3	91.2	91.6	91.9	92.3	92.8	93.1	94.0	94.5	95.1	96.0	96.9	98.0
3981.1	92.7	93.1	93.4	93.6	93.8	93.8	94.3	95.0	95.7	96.7	97.6	98.5
5011.9	91.4	91.6	91.6	92.2	92.7	93.1	93.8	94.6	95.3	96.2	97.2	98.6
6309.6	90.5	90.6	91.1	91.7	92.2	92.9	93.8	94.5	95.4	96.5	97.6	98.9
7943.3	90.6	90.9	91.4	91.7	92.3	92.9	93.8	94.6	95.4	96.6	97.8	98.9
10000.0	90.4	90.5	91.0	91.5	92.2	92.9	93.8	94.6	95.4	96.5	97.7	98.8
12589.3	89.8	90.1	90.7	91.2	91.8	92.4	93.4	94.1	95.2	96.4	97.4	98.8
15848.9	89.3	89.5	90.1	90.6	91.3	92.2	92.9	93.8	94.7	96.1	97.2	98.4
19952.6	88.3	88.8	89.2	90.0	90.8	92.2	92.4	93.3	94.2	95.3	96.8	98.0
25118.9	87.4	88.0	88.4	88.9	90.0	91.6	91.8	92.6	93.5	94.8	96.3	97.4
31622.8	86.3	86.9	87.6	88.3	89.1	90.0	90.9	91.8	92.8	94.0	95.4	96.5
39810.7	85.0	85.6	86.3	87.0	87.9	89.0	89.8	90.6	91.6	93.0	93.9	95.3
50118.7	83.5	84.2	85.0	85.6	86.7	88.1	88.7	89.4	90.3	91.6	92.9	93.9
63095.7	82.1	82.9	83.8	84.5	85.4	87.1	87.5	88.2	89.1	90.4	91.6	92.6
79432.8	81.0	81.7	82.6	83.4	84.3	85.6	86.3	87.2	88.0	89.2	90.4	91.3

Setpoint 39 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	71.0	71.7	72.7	74.2	76.0	77.7	80.0	82.0	84.2	85.9	87.5	88.8
199.5	73.8	74.4	75.6	77.1	79.1	81.0	83.4	85.4	87.6	89.3	90.8	92.0
251.2	76.3	77.3	78.6	80.3	82.3	84.3	86.7	88.8	91.0	92.7	94.1	95.1
316.2	79.1	79.9	81.2	83.1	85.3	87.5	90.2	92.3	94.5	96.1	97.4	98.2
398.1	81.4	82.4	83.8	85.9	88.5	91.0	93.7	95.9	98.2	99.8	100.9	101.4
501.2	84.0	85.0	86.8	89.1	91.6	94.3	97.3	99.5	101.7	103.0	103.9	104.0
631.0	86.6	87.9	89.7	92.0	95.0	7.8	100.7	102.9	105.1	106.2	106.6	105.8
794.3	88.4	89.8	92.0	95.0	98.1	100.9	103.8	105.9	107.6	108.2	108.0	106.5
1000.0	90.8	92.2	94.2	97.4	100.7	103.7	106.8	108.6	110.0	110.2	109.1	106.7
1258.9	93.0	94.6	97.1	100.1	103.7	106.6	109.5	110.9	111.9	111.3	109.6	106.8
1584.9	94.5	96.2	98.8	102.3	105.8	109.0	111.7	112.9	112.9	111.8	110.1	107.5
1995.3	96.0	97.9	100.4	103.9	107.5	110.5	113.0	113.6	113.4	112.1	110.8	107.9
2511.9	97.8	99.4	101.6	104.9	108.5	111.5	113.9	114.3	114.3	113.3	111.7	108.8
3162.3	99.3	101.1	102.7	105.4	108.3	111.5	113.9	114.8	115.0	114.1	112.5	109.5
3981.1	99.8	101.6	103.5	105.7	108.1	110.7	113.3	114.3	114.6	114.0	112.4	109.1
5011.9	99.9	101.7	103.8	105.7	107.4	109.2	111.8	113.2	113.6	113.1	111.4	108.1
6309.6	100.2	102.0	103.7	105.4	106.6	108.0	110.5	112.0	112.3	111.7	110.0	106.8
7943.3	100.4	102.0	103.7	105.2	106.1	107.0	109.0	110.5	110.5	109.9	108.0	104.8
10000.0	100.3	102.1	103.5	104.6	105.4	105.9	107.8	109.0	108.9	108.2	106.3	103.0
12589.3	100.2	101.9	103.1	103.9	104.6	104.9	106.5	107.5	107.1	106.5	104.5	101.2
15848.9	99.9	101.4	102.5	103.2	103.7	103.7	105.1	106.1	105.6	105.1	103.0	99.5
19952.6	99.4	100.7	101.6	102.2	102.5	102.5	103.6	104.3	104.0	103.5	101.5	97.6
25118.9	98.7	100.0	100.5	101.2	101.3	101.2	102.0	103.0	102.5	102.1	99.8	95.8
31622.8	97.7	99.0	99.5	99.8	99.9	99.7	100.7	101.5	100.8	100.5	98.0	94.1
39810.7	96.5	97.6	97.9	98.2	98.0	98.1	98.9	99.8	99.6	98.9	96.3	92.3
50118.7	95.1	96.0	96.3	96.4	96.3	96.4	97.2	98.2	98.3	97.2	94.5	90.5
63095.7	93.6	94.4	94.7	94.8	94.8	94.8	95.7	96.8	97.4	95.8	92.8	88.9
79432.8	92.5	93.1	93.3	93.3	93.4	93.5	94.2	95.7	96.4	94.9	91.8	87.9

Setpoint	40
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.345
Ideal jet velocity (ft/s)	376.016
Temperature ratio (T_j/T_{amb})	2.676
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





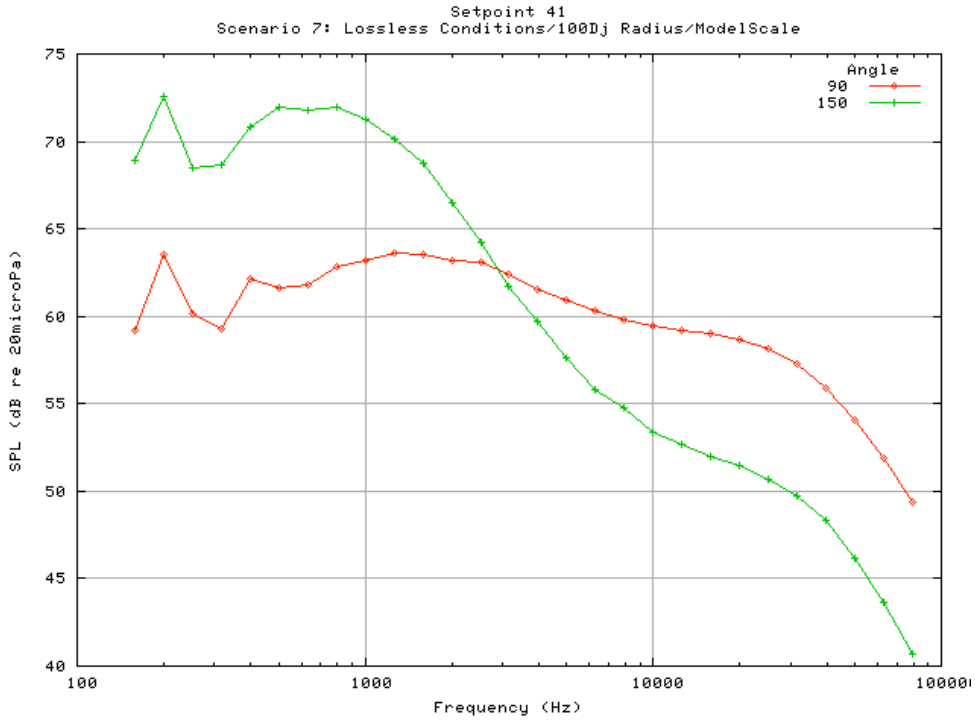
Setpoint 40 continued

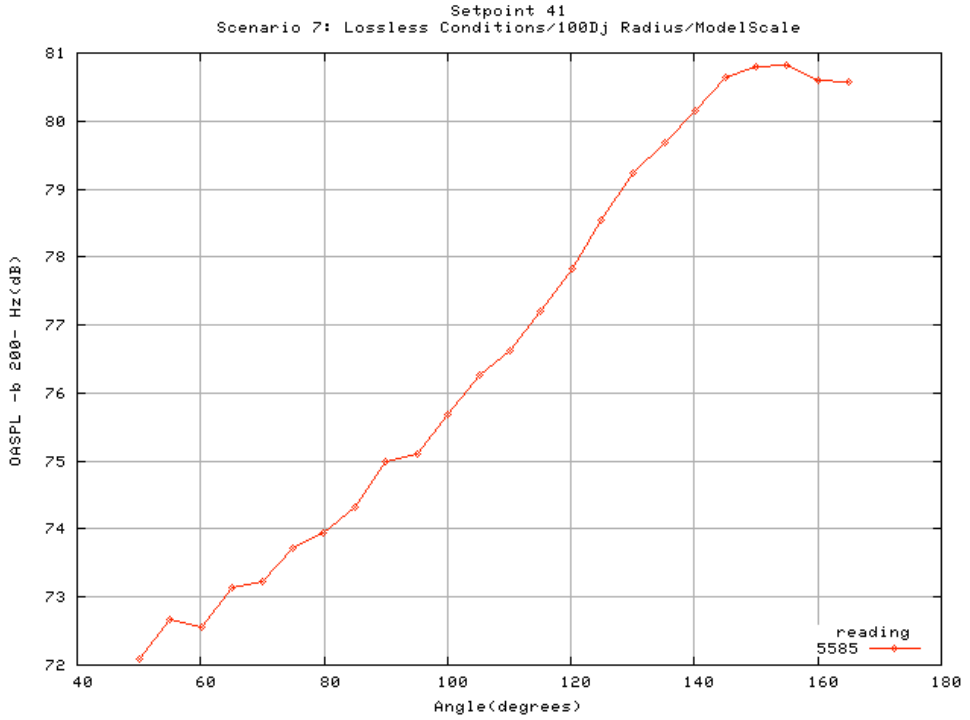
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	55.4	56.0	56.0	56.8	57.1	57.4	58.0	58.4	59.3	60.2	60.5	61.0
199.5	58.7	59.5	59.6	60.4	60.6	60.9	61.3	61.9	63.0	64.2	64.6	65.4
251.2	50.1	53.4	53.9	54.8	55.4	56.2	56.8	57.4	58.3	58.6	59.3	60.2
316.2	54.2	54.6	54.9	55.9	56.2	56.9	57.5	57.9	58.3	58.4	58.9	59.6
398.1	55.7	56.5	57.3	58.4	58.6	59.1	59.9	60.6	61.1	61.1	61.4	62.0
501.2	56.2	57.4	58.1	59.2	59.3	59.6	59.9	60.0	60.4	60.7	61.1	61.5
631.0	56.8	57.5	57.9	58.7	58.7	58.7	58.8	58.9	59.6	59.9	60.4	61.2
794.3	57.2	58.6	58.7	59.0	59.0	59.1	59.1	59.3	60.0	60.2	60.7	61.5
1000.0	57.2	58.2	58.4	59.1	58.9	59.0	59.4	59.6	60.5	60.6	61.2	61.8
1258.9	57.7	58.8	58.8	58.8	58.8	59.1	59.6	60.0	60.5	60.7	61.2	61.6
1584.9	57.8	58.7	58.0	58.1	58.2	58.8	59.2	59.5	60.2	60.4	60.9	61.5
1995.3	57.3	57.7	57.4	57.7	57.9	58.5	58.8	59.1	60.0	60.0	60.5	61.2
2511.9	56.8	57.2	56.7	57.3	57.6	58.2	58.6	58.8	59.9	59.8	60.4	60.9
3162.3	56.5	56.9	56.1	56.7	57.0	57.6	57.9	58.4	59.2	59.2	59.6	60.0
3981.1	56.4	55.9	55.7	56.3	56.4	56.8	57.2	57.6	58.5	58.5	59.1	59.4
5011.9	55.5	55.5	55.5	56.0	55.9	56.4	56.7	57.0	57.8	57.8	58.1	58.7
6309.6	54.9	55.8	55.3	55.9	55.6	56.0	56.3	56.6	57.4	57.2	57.8	58.1
7943.3	54.9	55.4	54.9	55.3	55.0	55.7	55.8	56.2	56.9	56.8	57.2	57.6
10000.0	55.0	55.0	54.7	55.0	54.6	55.5	55.7	56.1	56.7	56.6	57.1	57.4
12589.3	54.7	54.5	54.1	54.6	54.1	55.1	55.1	55.7	56.5	56.5	56.9	57.2
15848.9	54.5	54.0	53.9	54.3	53.9	55.0	54.8	55.7	56.4	56.4	56.7	57.0
19952.6	54.0	53.7	53.3	53.9	54.1	54.7	54.2	55.4	56.1	56.1	56.5	56.6
25118.9	53.3	53.0	52.8	53.3	53.7	54.2	53.7	54.8	55.5	55.5	55.9	55.9
31622.8	52.1	51.9	51.8	52.1	52.3	53.2	52.7	53.8	54.4	54.4	54.9	54.8
39810.7	50.7	50.0	49.9	50.3	51.3	51.8	51.2	52.2	52.7	52.5	53.5	53.1
50118.7	48.5	47.9	47.7	48.1	49.9	49.7	49.2	50.0	50.5	50.3	51.4	51.1
63095.7	45.6	45.2	45.3	45.5	47.5	47.2	46.9	47.6	48.0	47.9	48.9	48.7
79432.8	42.6	42.3	42.2	42.5	44.2	44.1	43.7	44.8	45.0	45.3	46.0	46.0

Setpoint 40 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	62.6	63.3	64.4	65.2	65.9	66.4	66.9	67.6	68.0	68.5	68.8	68.9
199.5	66.3	67.1	67.9	68.6	69.4	69.9	70.5	71.1	71.5	71.9	72.1	72.2
251.2	60.9	61.8	62.3	62.9	63.8	64.5	65.4	66.2	66.7	67.2	67.4	67.5
316.2	60.1	60.9	61.5	62.3	63.4	64.2	65.2	66.2	66.9	67.4	67.7	67.8
398.1	62.4	63.2	63.9	64.8	65.9	66.6	67.4	68.3	68.9	69.5	69.7	69.6
501.2	62.2	63.5	64.1	65.0	66.2	66.9	67.8	68.7	69.1	69.4	69.4	69.2
631.0	61.7	62.6	63.4	64.4	65.5	66.2	67.1	68.0	68.5	68.8	68.8	68.0
794.3	61.8	62.6	63.5	64.6	65.7	66.4	67.2	68.0	68.4	68.6	68.2	67.1
1000.0	62.1	62.8	63.5	64.6	65.4	66.1	66.8	67.3	67.6	67.3	66.6	64.8
1258.9	62.0	62.6	63.2	64.1	65.0	65.5	66.0	66.4	66.2	65.6	64.3	61.8
1584.9	61.9	62.6	63.0	63.8	64.4	64.8	65.1	65.2	64.7	63.6	61.8	58.9
1995.3	61.7	62.1	62.5	63.2	63.7	63.8	63.9	63.7	62.6	61.0	58.9	55.7
2511.9	61.0	61.4	61.8	62.3	62.7	62.7	62.6	61.8	60.5	58.3	56.3	53.1
3162.3	60.4	60.9	61.3	61.7	62.0	61.7	61.1	60.0	58.1	56.2	54.1	50.8
3981.1	59.5	59.9	60.2	60.6	60.7	60.2	59.4	57.9	56.0	54.1	52.0	48.7
5011.9	58.8	59.0	59.2	59.6	59.5	58.8	57.6	56.2	54.3	52.1	50.2	46.9
6309.6	58.3	58.6	59.0	59.0	58.5	57.6	56.4	54.7	52.6	50.5	48.8	45.0
7943.3	57.8	58.1	58.5	58.2	57.5	56.6	55.1	53.3	51.6	49.3	47.5	43.4
10000.0	57.6	57.5	57.8	57.5	56.6	55.6	54.2	52.4	50.2	48.2	46.1	42.3
12589.3	57.3	57.2	57.4	57.0	55.9	55.1	53.3	51.6	49.8	47.4	45.4	41.2
15848.9	57.0	56.8	57.1	56.6	55.2	54.6	52.6	50.9	49.1	46.9	45.0	40.7
19952.6	56.4	56.2	56.7	55.9	54.3	53.8	51.7	50.0	48.6	46.7	44.8	40.1
25118.9	55.6	55.1	56.0	54.9	53.2	53.0	50.7	48.8	47.6	46.1	43.9	39.1
31622.8	54.7	54.3	54.9	54.0	52.1	51.8	49.7	47.7	46.4	43.9	41.6	37.3
39810.7	53.0	52.7	53.2	52.3	50.3	49.9	47.6	45.6	44.5	42.1	39.6	35.9
50118.7	50.9	50.8	51.1	50.0	48.3	47.4	45.3	43.2	42.0	40.1	37.4	34.4
63095.7	48.6	48.6	48.7	47.5	45.9	44.6	42.6	40.9	39.0	37.4	34.8	32.3
79432.8	45.7	45.4	46.2	44.7	42.2	41.9	39.3	36.9	35.8	34.1	32.0	30.0

Setpoint	41
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.396
Ideal jet velocity (ft/s)	432.264
Temperature ratio (T_j/T_{amb})	2.705
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





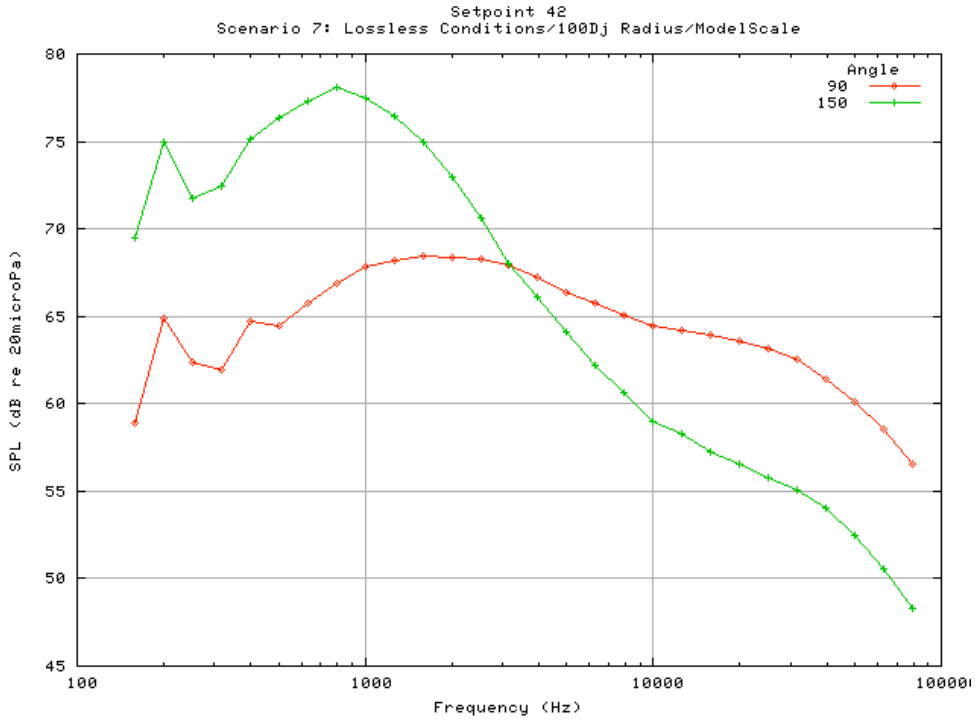
Setpoint 41 continued

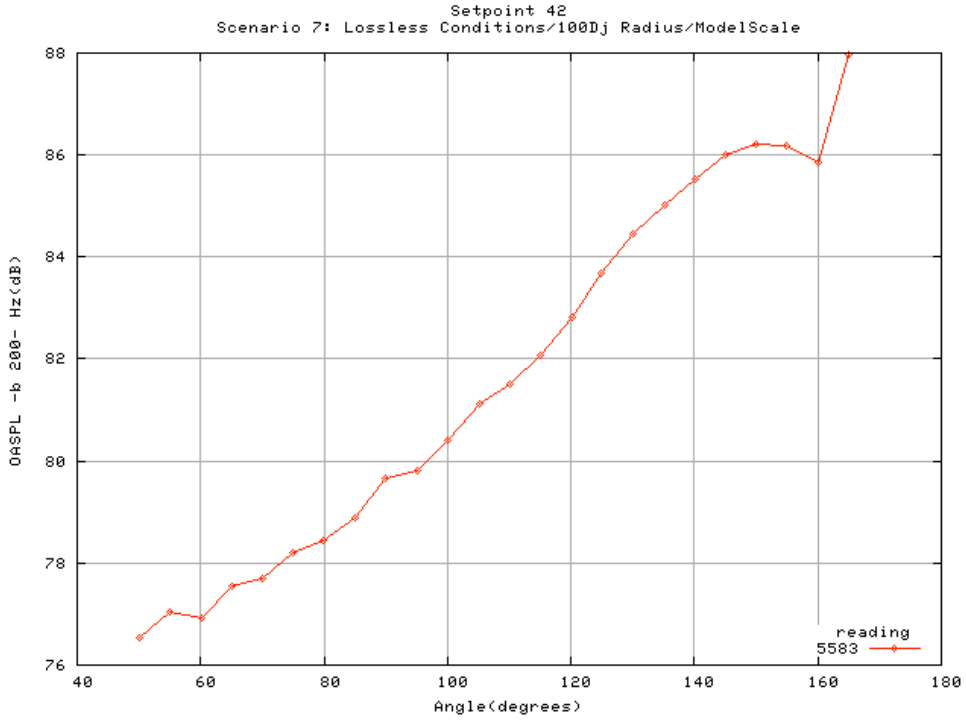
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.0	57.4	57.1	57.7	57.8	58.4	59.2	58.2	59.2	59.8	61.5	62.4
199.5	59.8	60.3	60.3	61.0	61.3	61.8	62.5	62.5	63.5	64.3	65.5	66.5
251.2	53.8	55.7	56.0	56.9	57.4	58.1	58.8	59.3	60.1	60.2	60.5	61.2
316.2	55.0	56.2	56.4	57.3	57.5	57.9	58.4	58.8	59.3	59.3	59.6	60.3
398.1	57.2	58.0	58.7	60.0	60.4	60.8	61.1	61.5	62.1	62.2	62.6	63.1
501.2	58.3	59.3	59.9	60.9	61.1	61.1	61.3	61.4	61.6	61.8	62.6	63.2
631.0	59.3	60.1	60.3	61.1	61.1	61.0	60.9	61.2	61.8	62.2	62.8	63.6
794.3	59.9	61.2	61.3	61.7	61.6	61.7	61.7	62.1	62.9	63.0	63.6	64.3
1000.0	60.4	61.3	61.5	62.2	61.9	61.9	62.2	62.5	63.2	63.4	64.0	64.7
1258.9	60.6	61.8	61.8	61.9	61.9	62.2	62.6	63.0	63.6	63.8	64.4	65.0
1584.9	60.7	61.6	61.0	61.2	61.2	62.1	62.6	62.9	63.5	63.8	64.3	64.9
1995.3	60.5	60.9	60.5	60.8	61.0	61.7	62.0	62.3	63.2	63.2	63.9	64.6
2511.9	60.0	60.3	59.6	60.3	60.7	61.3	61.8	62.1	63.1	63.0	63.7	64.4
3162.3	59.5	59.9	59.3	59.9	60.3	60.9	61.2	61.7	62.4	62.5	63.0	63.7
3981.1	59.1	58.9	58.7	59.5	59.6	60.2	60.7	60.9	61.6	61.8	62.4	62.8
5011.9	58.3	58.3	58.3	58.9	58.9	59.7	59.9	60.2	60.9	60.9	61.4	62.2
6309.6	57.6	58.3	58.0	58.6	58.4	59.1	59.4	59.6	60.4	60.3	60.9	61.3
7943.3	57.4	58.0	57.7	58.1	57.8	58.6	58.8	59.2	59.8	59.8	60.2	60.7
10000.0	57.5	57.6	57.4	57.7	57.4	58.3	58.6	58.9	59.4	59.4	59.8	60.3
12589.3	57.4	57.3	57.0	57.5	57.0	58.1	58.1	58.5	59.2	59.2	59.7	60.1
15848.9	57.0	56.8	56.6	57.0	56.7	57.8	57.7	58.3	59.0	59.1	59.3	59.8
19952.6	56.6	56.5	56.1	56.8	56.9	57.5	57.1	58.2	58.7	58.8	59.2	59.4
25118.9	56.0	55.9	55.6	56.1	56.6	57.2	56.7	57.7	58.2	58.3	58.7	58.9
31622.8	54.9	54.9	54.7	55.2	55.4	56.4	55.8	56.9	57.3	57.3	58.0	58.0
39810.7	53.7	53.4	53.2	53.8	54.6	55.2	54.6	55.6	55.9	55.8	56.8	56.7
50118.7	51.7	51.5	51.4	51.9	53.6	53.4	52.9	53.9	54.1	54.0	55.1	54.9
63095.7	49.3	49.3	49.3	49.8	51.7	51.3	51.1	51.8	51.9	52.0	52.9	52.9
79432.8	46.9	46.9	46.8	47.3	48.8	48.7	48.4	49.5	49.4	49.8	50.4	50.6

Setpoint 41 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	63.1	64.0	64.8	65.6	66.5	67.1	67.7	68.4	68.9	69.4	69.6	69.7
199.5	67.1	68.0	68.7	69.4	70.3	70.8	71.4	72.1	72.6	73.0	73.3	73.4
251.2	61.8	62.8	63.5	64.3	65.4	66.2	67.0	67.9	68.5	69.0	69.4	69.5
316.2	61.0	62.0	62.9	63.9	65.0	65.9	66.9	68.0	68.7	69.3	69.6	69.7
398.1	63.6	64.7	65.5	66.4	67.4	68.2	69.1	70.1	70.8	71.5	71.8	71.7
501.2	63.7	64.9	65.9	67.1	68.4	69.3	70.4	71.4	71.9	72.4	72.6	72.3
631.0	64.1	65.2	66.0	67.2	68.3	69.2	70.2	71.2	71.8	72.3	72.3	71.6
794.3	64.6	65.5	66.4	67.6	68.8	69.6	70.5	71.4	71.9	72.1	71.7	70.5
1000.0	65.1	65.9	66.7	67.8	68.9	69.7	70.4	71.0	71.3	71.1	70.2	68.4
1258.9	65.5	66.2	67.0	68.0	68.9	69.4	70.0	70.3	70.1	69.5	68.1	65.4
1584.9	65.5	66.2	66.7	67.6	68.4	68.9	69.2	69.3	68.7	67.4	65.4	62.4
1995.3	65.1	65.5	66.0	66.8	67.4	67.6	67.7	67.6	66.5	64.8	62.6	59.4
2511.9	64.5	65.1	65.5	66.1	66.6	66.6	66.4	65.6	64.2	62.0	60.0	56.6
3162.3	64.0	64.4	64.7	65.2	65.6	65.4	64.8	63.6	61.7	59.9	57.7	54.2
3981.1	63.1	63.5	63.8	64.2	64.3	63.9	63.0	61.5	59.7	57.6	55.4	51.8
5011.9	62.5	62.7	62.8	63.2	63.1	62.3	61.1	59.6	57.7	55.4	53.3	49.7
6309.6	61.6	61.9	62.1	62.4	61.9	60.9	59.6	57.8	55.8	53.6	51.8	47.8
7943.3	61.0	61.3	61.6	61.5	60.8	59.8	58.2	56.4	54.8	52.4	50.6	46.2
10000.0	60.6	60.7	60.9	60.7	59.8	58.8	57.1	55.4	53.4	51.4	49.1	45.2
12589.3	60.3	60.3	60.5	60.1	59.0	58.1	56.2	54.4	52.7	50.4	48.4	44.0
15848.9	59.9	59.8	60.0	59.5	58.1	57.5	55.4	53.6	52.0	49.8	47.9	43.5
19952.6	59.4	59.2	59.7	58.9	57.3	56.7	54.5	52.8	51.5	49.7	47.8	42.9
25118.9	58.7	58.3	59.1	58.0	56.3	56.0	53.7	51.6	50.7	49.1	47.0	41.8
31622.8	58.1	57.7	58.2	57.3	55.4	55.1	52.9	50.9	49.8	47.3	45.0	40.4
39810.7	56.6	56.3	56.8	55.9	54.0	53.6	51.4	49.1	48.3	45.9	43.5	39.3
50118.7	55.0	54.7	55.0	54.1	52.3	51.5	49.4	47.2	46.2	44.3	41.6	38.0
63095.7	52.9	52.8	52.9	52.0	50.4	49.1	47.1	45.2	43.7	41.9	39.2	36.1
79432.8	50.4	49.9	50.7	49.5	47.1	46.7	44.2	41.6	40.7	38.7	36.3	33.6

Setpoint	42
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.489
Ideal jet velocity (ft/s)	533.643
Temperature ratio (T_j/T_{amb})	2.704
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





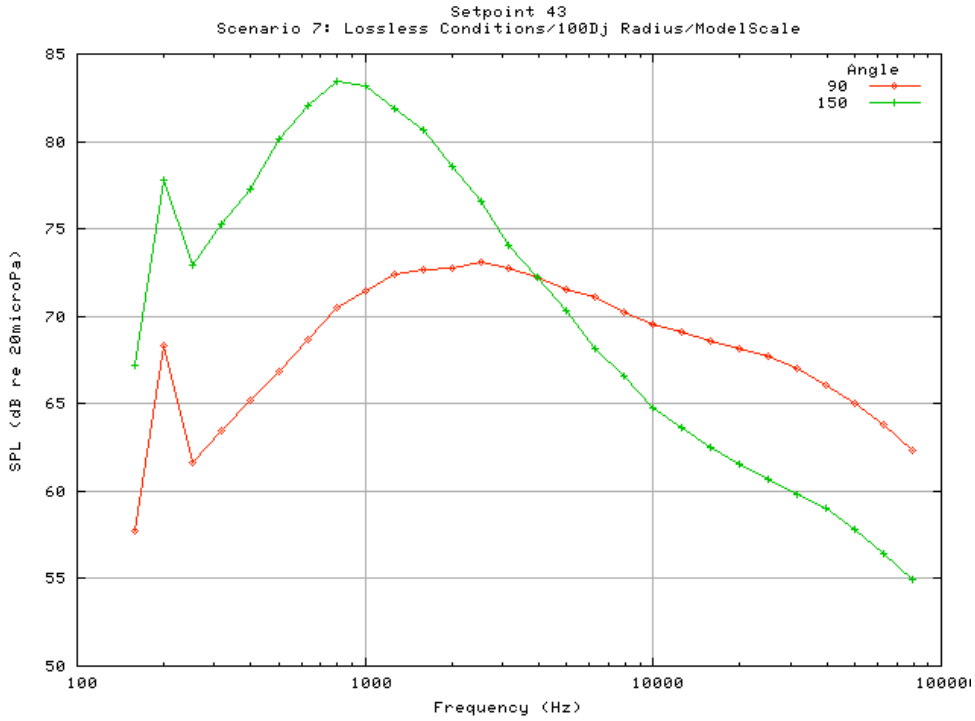
Setpoint 42 continued

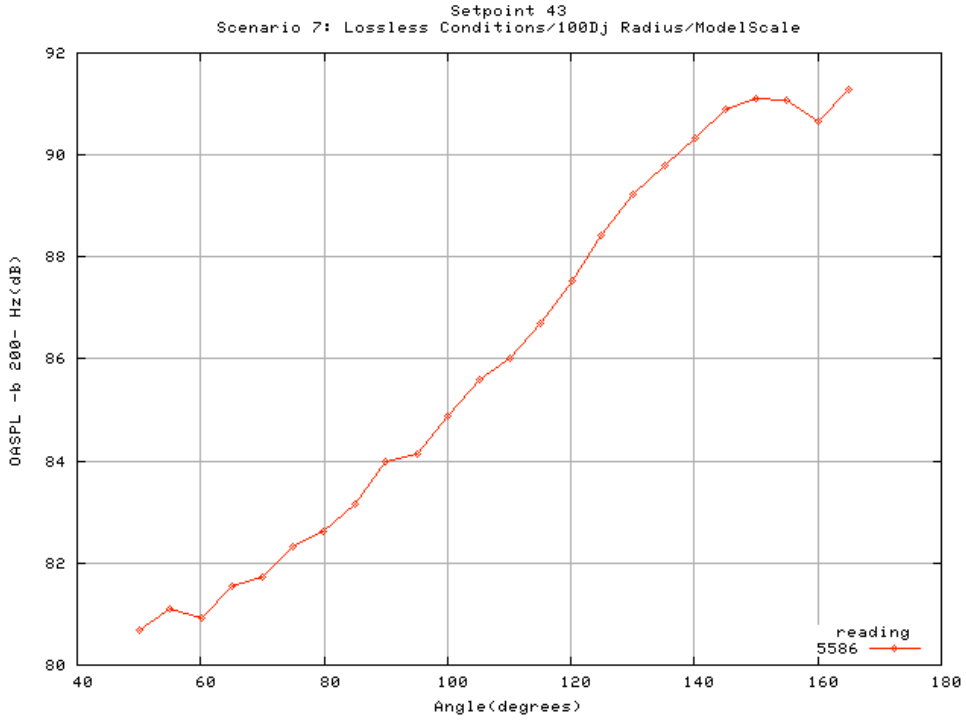
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	55.8	56.0	55.8	56.6	56.9	57.4	58.1	58.2	58.9	59.5	60.7	61.7
199.5	61.2	61.3	61.3	62.1	62.6	63.2	64.3	64.2	64.9	65.6	66.7	67.9
251.2	56.1	57.4	57.7	58.5	58.8	59.6	60.4	61.3	62.4	62.7	63.2	63.9
316.2	57.9	58.8	59.0	59.9	60.2	60.6	61.1	61.4	61.9	61.9	62.1	62.7
398.1	60.2	60.6	61.0	62.5	63.2	63.5	63.7	64.0	64.7	64.9	65.4	66.1
501.2	61.1	62.3	62.8	63.9	64.2	64.3	64.3	64.2	64.5	64.5	64.9	65.6
631.0	62.6	63.5	63.8	64.7	64.7	64.8	64.9	65.2	65.8	66.0	66.6	67.4
794.3	63.8	65.0	65.1	65.5	65.5	65.7	65.7	66.0	66.9	67.0	67.6	68.4
1000.0	64.7	65.6	65.8	66.5	66.2	66.3	66.7	67.0	67.8	68.0	68.7	69.6
1258.9	65.2	66.3	66.3	66.4	66.4	66.7	67.1	67.5	68.2	68.5	69.1	69.9
1584.9	65.4	66.2	65.7	66.0	66.2	67.0	67.5	67.7	68.4	68.7	69.3	69.9
1995.3	65.1	65.5	65.3	65.7	66.0	66.6	66.9	67.4	68.3	68.4	69.2	69.9
2511.9	64.9	65.4	64.8	65.6	65.9	66.4	66.9	67.1	68.3	68.4	69.1	70.0
3162.3	64.7	65.1	64.4	65.1	65.5	66.2	66.6	67.2	68.0	68.0	68.6	69.5
3981.1	64.1	63.9	63.9	64.6	64.8	65.4	65.9	66.3	67.2	67.4	68.0	68.7
5011.9	63.0	63.3	63.3	63.9	64.0	64.7	65.1	65.4	66.4	66.5	67.0	68.0
6309.6	62.3	63.1	62.8	63.6	63.5	64.2	64.6	64.9	65.8	65.8	66.5	67.2
7943.3	62.3	62.7	62.3	63.0	62.8	63.6	63.8	64.4	65.1	65.2	65.7	66.4
10000.0	62.3	62.3	62.2	62.6	62.3	63.2	63.4	64.0	64.5	64.6	65.1	65.8
12589.3	62.2	62.1	61.8	62.4	61.9	62.9	62.9	63.5	64.2	64.2	64.8	65.5
15848.9	61.8	61.5	61.5	62.0	61.6	62.6	62.5	63.3	63.9	64.1	64.4	65.1
19952.6	61.2	61.2	60.9	61.6	61.7	62.3	61.9	63.0	63.6	63.8	64.2	64.7
25118.9	60.6	60.6	60.5	61.1	61.4	61.8	61.5	62.6	63.1	63.4	63.8	64.1
31622.8	59.7	59.8	59.8	60.3	60.5	61.3	60.9	62.1	62.5	62.7	63.2	63.5
39810.7	58.7	58.4	58.5	59.1	60.1	60.4	60.0	61.0	61.4	61.5	62.4	62.4
50118.7	57.1	56.9	57.0	57.7	59.4	59.1	58.8	59.8	60.1	60.0	61.1	61.1
63095.7	55.2	55.1	55.5	56.0	58.0	57.5	57.6	58.2	58.5	58.5	59.5	59.6
79432.8	53.3	53.3	53.5	54.1	55.7	55.5	55.5	56.5	56.6	56.9	57.6	57.8

Setpoint 42 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	63.0	64.3	65.2	66.0	66.9	67.5	68.1	68.9	69.5	70.1	70.5	75.3
199.5	68.8	70.0	70.9	71.7	72.6	73.1	73.7	74.4	74.9	75.4	75.8	77.9
251.2	64.6	65.8	66.6	67.6	68.7	69.5	70.3	71.2	71.8	72.4	72.7	75.5
316.2	63.4	64.5	65.5	66.7	68.2	69.2	70.4	71.6	72.5	73.2	73.6	74.7
398.1	66.7	67.8	68.7	69.7	71.1	72.0	73.1	74.3	75.1	75.8	76.1	76.3
501.2	66.3	67.3	68.5	70.2	71.9	73.1	74.3	75.6	76.3	76.9	77.0	76.7
631.0	67.9	69.0	70.1	71.4	72.9	74.1	75.3	76.5	77.4	77.9	77.8	76.9
794.3	68.9	70.0	71.1	72.6	74.1	75.2	76.3	77.3	78.0	78.3	77.9	76.4
1000.0	70.1	70.9	72.0	73.3	74.6	75.5	76.4	77.2	77.5	77.3	76.4	74.0
1258.9	70.4	71.2	72.1	73.3	74.5	75.3	76.0	76.5	76.4	75.8	74.3	70.9
1584.9	70.5	71.2	71.9	73.1	74.1	74.7	75.2	75.5	75.0	73.6	71.6	67.8
1995.3	70.4	70.9	71.6	72.7	73.6	74.0	74.3	74.1	73.0	71.2	69.0	64.8
2511.9	70.2	70.9	71.6	72.4	73.0	73.1	72.9	72.1	70.7	68.6	66.6	61.9
3162.3	69.8	70.4	70.9	71.5	72.0	72.0	71.3	70.0	68.0	66.4	64.1	59.3
3981.1	69.0	69.4	70.0	70.6	70.8	70.4	69.6	68.0	66.1	64.2	62.0	56.8
5011.9	68.3	68.6	69.0	69.4	69.4	68.7	67.6	66.0	64.1	61.8	59.8	54.4
6309.6	67.5	67.8	68.3	68.5	68.1	67.3	65.9	64.1	62.2	60.0	58.2	52.5
7943.3	66.8	67.0	67.5	67.4	66.8	65.9	64.3	62.4	60.6	58.3	56.6	50.7
10000.0	66.1	66.2	66.6	66.4	65.7	64.7	63.0	61.2	59.0	57.1	55.0	49.7
12589.3	65.7	65.6	66.0	65.7	64.6	63.8	62.0	60.1	58.3	55.9	54.2	48.4
15848.9	65.2	65.1	65.4	65.1	63.7	63.0	61.0	59.1	57.3	55.1	53.6	47.5
19952.6	64.7	64.5	64.9	64.2	62.6	62.2	60.0	58.1	56.5	54.8	53.3	46.8
25118.9	64.0	63.4	64.3	63.3	61.7	61.4	59.2	56.9	55.8	54.3	52.6	45.9
31622.8	63.5	62.9	63.5	62.7	61.1	60.7	58.6	56.3	55.0	52.7	50.9	44.5
39810.7	62.4	61.9	62.3	61.5	59.9	59.5	57.4	55.0	54.0	51.8	49.7	43.9
50118.7	61.1	60.7	60.8	60.1	58.6	57.9	56.0	53.6	52.5	50.7	48.3	43.0
63095.7	59.6	59.4	59.3	58.4	57.2	56.1	54.3	52.2	50.6	48.9	46.6	41.4
79432.8	57.7	57.0	57.6	56.5	54.5	54.5	52.0	49.3	48.3	46.3	44.0	39.2

Setpoint	43
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.590
Ideal jet velocity (ft/s)	643.284
Temperature ratio (T_j/T_{amb})	2.711
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





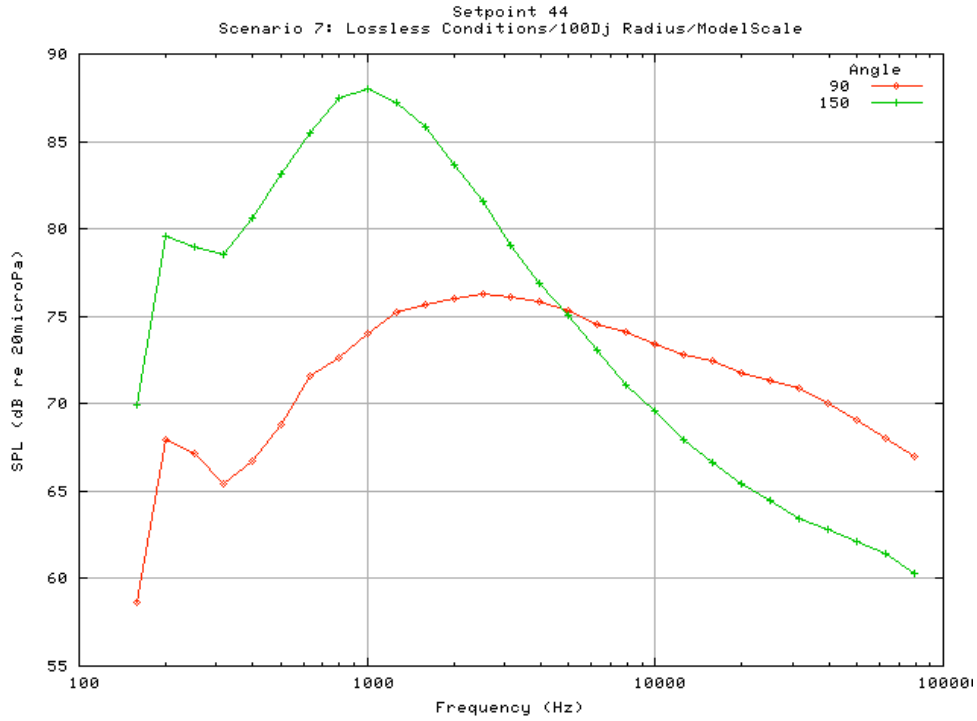
Setpoint 43 continued

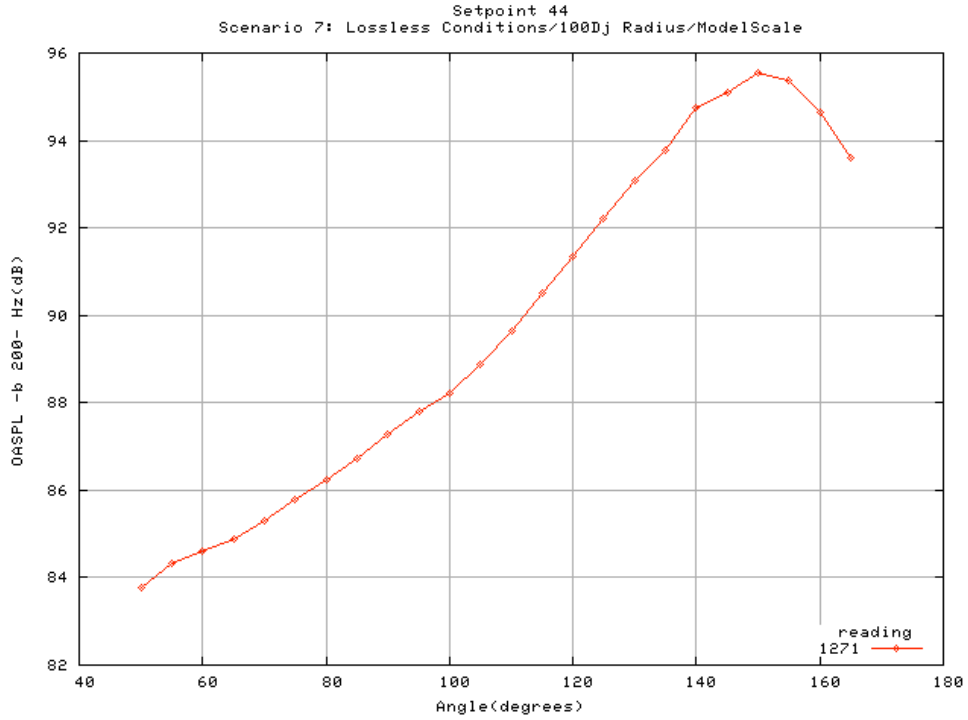
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	55.2	55.4	55.3	56.0	56.2	56.5	56.8	57.2	57.7	57.9	58.2	58.6
199.5	62.2	62.7	62.4	63.4	64.2	65.5	66.7	67.6	68.4	68.5	68.9	69.5
251.2	58.2	58.7	58.8	59.6	59.9	60.3	60.7	61.1	61.7	61.7	61.9	62.4
316.2	59.9	60.6	60.8	61.7	62.1	62.7	63.2	63.3	63.4	63.4	63.8	64.4
398.1	61.5	62.3	62.7	63.9	64.3	64.7	64.8	64.9	65.2	65.3	65.7	66.2
501.2	63.5	64.7	65.3	66.3	66.4	66.5	66.6	66.5	66.8	66.9	67.5	68.3
631.0	65.6	66.3	66.7	67.5	67.5	67.6	67.7	68.0	68.7	68.9	69.6	70.4
794.3	66.8	68.1	68.3	68.7	68.8	69.1	69.2	69.6	70.5	70.7	71.3	72.2
1000.0	68.0	68.8	69.0	69.7	69.6	69.9	70.2	70.6	71.4	71.6	72.3	73.2
1258.9	69.0	70.1	70.1	70.3	70.3	70.6	71.2	71.6	72.4	72.6	73.4	74.2
1584.9	69.3	70.1	69.6	70.0	70.2	71.0	71.6	71.9	72.7	73.1	73.8	74.6
1995.3	69.5	69.9	69.6	70.1	70.3	71.0	71.4	71.9	72.7	72.9	73.7	74.5
2511.9	69.4	69.9	69.3	70.0	70.5	71.1	71.7	72.0	73.1	73.3	74.1	75.0
3162.3	69.4	69.7	69.0	69.8	70.2	70.9	71.4	72.0	72.7	72.9	73.6	74.5
3981.1	69.3	68.9	68.6	69.4	69.5	70.3	70.8	71.3	72.3	72.4	73.3	74.1
5011.9	68.2	68.2	68.0	68.9	69.1	69.8	70.1	70.6	71.6	71.7	72.4	73.3
6309.6	67.4	67.7	67.4	68.2	68.3	69.1	69.5	70.0	71.1	71.0	71.9	72.6
7943.3	67.0	67.1	66.8	67.6	67.4	68.5	68.7	69.5	70.3	70.3	71.1	71.8
10000.0	66.6	66.6	66.5	67.1	66.8	67.8	68.2	68.8	69.6	69.6	70.4	71.1
12589.3	66.3	66.3	66.1	66.7	66.2	67.3	67.4	68.2	69.1	69.1	69.8	70.4
15848.9	66.2	66.0	65.8	66.4	66.0	67.0	67.0	67.8	68.6	68.7	69.3	70.0
19952.6	65.5	65.6	65.1	65.9	66.0	66.6	66.2	67.4	68.1	68.3	68.9	69.4
25118.9	64.8	65.1	64.8	65.5	65.8	66.3	65.8	66.9	67.7	67.8	68.4	68.7
31622.8	63.9	64.2	64.1	64.6	64.8	65.7	65.1	66.3	67.0	67.0	67.9	68.0
39810.7	63.0	63.1	62.9	63.6	64.5	64.9	64.3	65.5	66.0	66.1	67.2	67.0
50118.7	61.6	61.7	61.6	62.4	64.1	63.9	63.3	64.4	65.0	64.9	66.1	66.0
63095.7	60.1	60.3	60.4	61.1	63.0	62.7	62.4	63.3	63.8	63.8	64.9	64.8
79432.8	58.6	58.9	58.9	59.7	61.3	61.2	60.8	62.0	62.4	62.6	63.6	63.7

Setpoint 43 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	59.0	59.8	60.6	61.6	62.9	64.0	65.1	66.2	67.2	68.0	68.6	71.1
199.5	70.2	71.6	72.8	74.1	75.4	76.3	76.9	77.5	77.8	78.0	78.3	78.6
251.2	62.9	64.0	65.1	66.5	68.1	69.4	70.6	71.9	72.9	73.8	74.3	75.1
316.2	65.0	66.0	67.1	68.6	70.4	71.7	73.0	74.3	75.3	76.1	76.6	76.8
398.1	66.7	67.7	68.8	70.2	71.9	73.3	74.7	76.1	77.2	78.2	78.6	78.8
501.2	68.9	70.1	71.4	73.1	75.0	76.4	77.8	79.3	80.1	80.8	81.0	80.7
631.0	70.9	72.3	73.5	75.1	76.8	78.3	79.7	81.1	82.1	82.7	82.7	81.8
794.3	72.5	73.6	74.9	76.6	78.3	79.7	81.1	82.4	83.4	83.9	83.7	82.2
1000.0	73.7	74.8	76.0	77.7	79.1	80.3	81.5	82.6	83.2	83.2	82.5	80.4
1258.9	74.8	75.6	76.7	78.0	79.3	80.2	81.1	81.8	81.9	81.5	80.2	77.2
1584.9	75.3	76.2	77.0	78.3	79.4	80.2	80.8	81.1	80.6	79.5	77.6	74.4
1995.3	75.1	75.9	76.8	78.0	78.9	79.3	79.5	79.5	78.5	77.0	75.0	71.4
2511.9	75.3	76.0	76.8	77.7	78.4	78.7	78.5	77.9	76.5	74.5	72.7	68.5
3162.3	75.0	75.7	76.4	77.2	77.9	77.8	77.2	75.9	74.1	72.5	70.3	65.9
3981.1	74.5	75.1	75.8	76.5	76.7	76.3	75.5	74.0	72.2	70.4	68.2	63.6
5011.9	73.7	74.4	74.9	75.4	75.4	74.8	73.5	72.0	70.3	68.1	65.9	61.1
6309.6	73.0	73.5	74.1	74.5	74.1	73.2	71.9	70.2	68.1	66.1	64.0	58.9
7943.3	72.2	72.5	73.3	73.1	72.5	71.7	70.2	68.4	66.6	64.2	62.4	56.9
10000.0	71.5	71.7	72.3	72.1	71.3	70.3	68.7	66.9	64.7	62.7	60.5	55.4
12589.3	70.8	71.0	71.4	71.2	70.0	68.9	67.2	65.4	63.6	61.1	59.4	53.9
15848.9	70.3	70.2	70.7	70.3	68.8	68.0	66.0	64.3	62.5	60.1	58.4	52.8
19952.6	69.5	69.5	70.0	69.3	67.5	66.9	64.8	63.0	61.5	59.6	57.8	52.0
25118.9	68.7	68.4	69.3	68.2	66.4	66.0	63.8	61.7	60.6	58.9	56.9	50.9
31622.8	68.1	67.7	68.3	67.6	65.7	65.2	63.1	61.1	59.8	57.3	55.1	49.3
39810.7	67.0	66.7	67.3	66.5	64.6	64.1	62.0	59.9	59.0	56.7	54.1	48.9
50118.7	65.9	65.6	66.0	65.3	63.7	62.8	61.0	58.8	57.8	56.0	53.1	48.3
63095.7	64.8	64.6	64.8	64.1	62.7	61.4	59.9	57.9	56.4	54.8	51.9	47.1
79432.8	63.3	62.6	63.6	62.7	60.6	60.3	58.3	55.7	54.9	52.9	50.1	45.3

Setpoint	44
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.700
Ideal jet velocity (ft/s)	772.342
Temperature ratio (T_j/T_{amb})	2.707
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





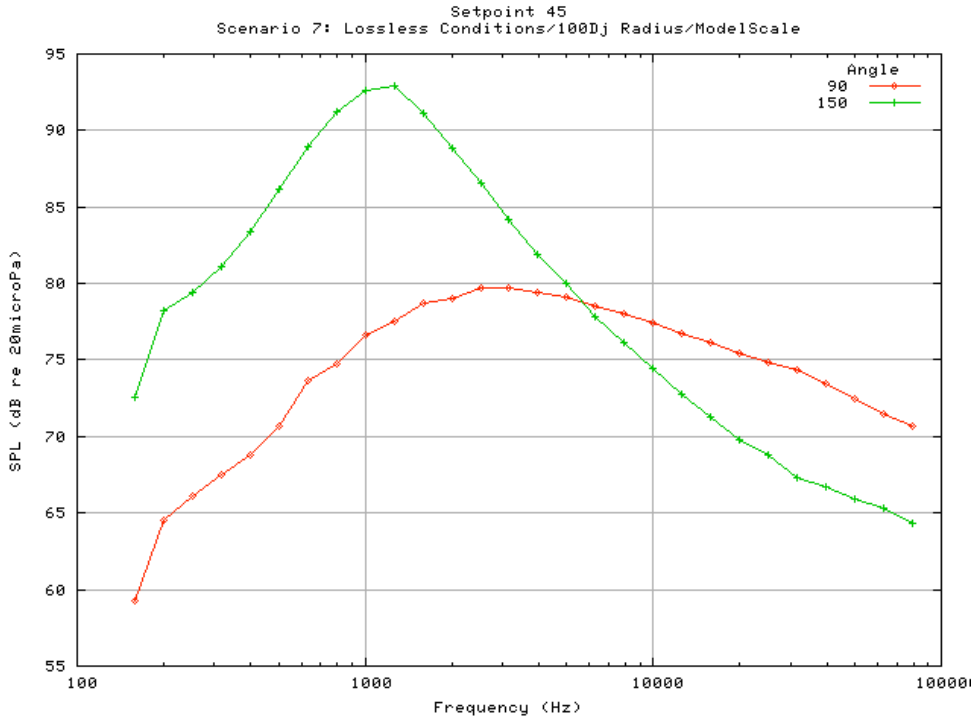
Setpoint 44 continued

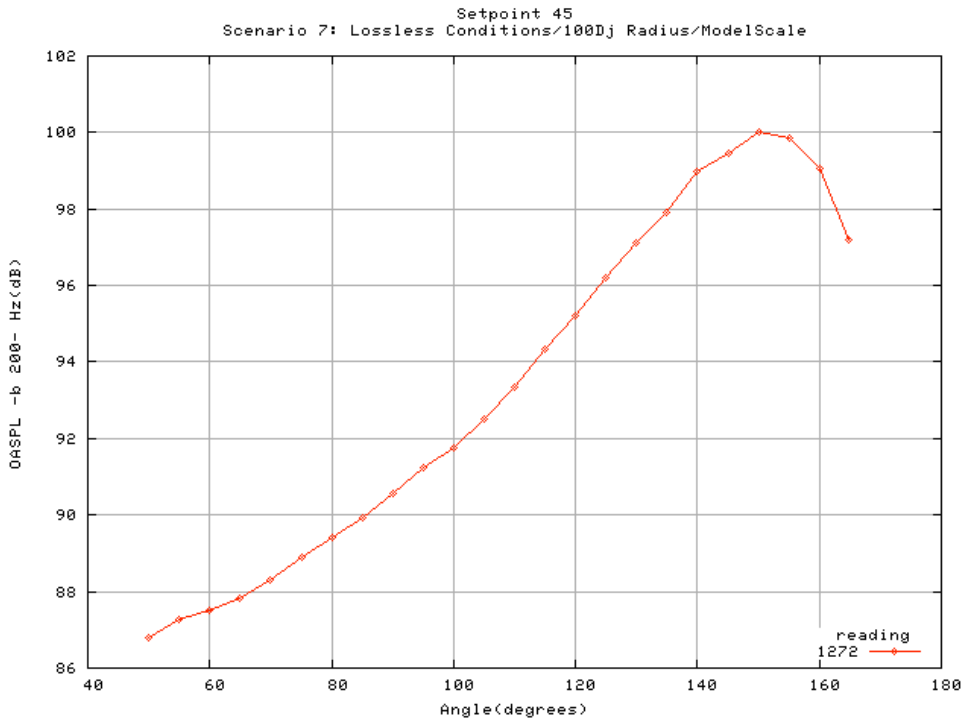
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	56.0	56.5	57.2	57.6	57.8	57.9	58.0	58.2	58.6	59.5	59.4	60.4
199.5	63.7	64.2	64.8	65.3	65.8	66.2	66.7	67.2	67.9	69.0	69.7	70.9
251.2	62.3	62.6	63.0	63.5	64.1	64.8	65.5	66.3	67.1	67.9	68.3	69.1
316.2	61.6	62.4	63.0	63.5	63.9	64.5	65.0	65.2	65.4	65.8	66.3	67.2
398.1	63.5	64.2	65.0	65.8	66.4	66.6	66.8	66.8	66.7	66.9	67.1	67.8
501.2	65.0	66.1	67.2	68.0	68.2	68.3	68.4	68.5	68.8	69.4	69.7	70.6
631.0	67.8	68.6	69.5	70.1	70.3	70.4	70.4	70.6	71.6	71.7	71.9	72.8
794.3	68.8	70.0	70.8	71.2	71.4	71.6	71.8	72.3	72.6	73.3	73.6	74.3
1000.0	70.1	71.0	71.8	72.2	72.2	72.6	73.0	73.4	74.0	74.5	74.8	75.5
1258.9	71.4	72.5	73.2	73.0	73.2	73.7	74.2	74.6	75.2	75.8	76.3	77.1
1584.9	72.5	73.2	73.5	73.5	73.7	74.2	74.6	75.0	75.7	76.2	76.7	77.3
1995.3	72.7	73.2	73.3	73.5	73.8	74.4	74.9	75.3	76.1	76.8	77.1	77.8
2511.9	72.8	73.5	73.4	73.5	74.1	74.6	75.0	75.8	76.3	76.9	77.2	78.0
3162.3	72.9	73.4	73.1	73.6	74.0	74.5	74.9	75.5	76.1	76.8	77.2	77.9
3981.1	72.8	72.8	72.8	73.3	73.8	74.3	74.7	75.1	75.8	76.5	76.8	77.5
5011.9	71.8	72.0	72.4	72.7	73.2	73.7	74.1	74.5	75.3	75.8	76.2	76.9
6309.6	71.0	71.5	71.8	72.1	72.6	73.2	73.7	74.2	74.6	75.2	75.8	76.4
7943.3	70.5	71.0	71.0	71.4	72.0	72.5	73.0	73.5	74.1	74.7	75.1	75.7
10000.0	70.1	70.4	70.6	70.8	71.5	72.0	72.4	72.9	73.4	73.9	74.4	74.9
12589.3	69.6	69.8	70.1	70.4	70.9	71.4	71.8	72.4	72.8	73.3	73.7	74.3
15848.9	69.4	69.4	69.7	70.0	70.4	70.9	71.4	71.9	72.4	72.8	73.2	73.6
19952.6	68.6	69.1	69.2	69.5	70.1	70.5	71.0	71.4	71.8	72.0	72.8	73.2
25118.9	67.9	68.3	68.5	68.6	69.5	70.1	70.6	71.1	71.3	71.6	72.4	72.6
31622.8	67.1	67.6	68.0	68.3	68.9	69.5	70.0	70.5	70.9	71.1	71.7	72.0
39810.7	66.0	66.5	67.0	67.3	68.0	68.6	69.1	69.7	70.0	70.2	70.6	71.1
50118.7	64.7	65.4	65.9	66.3	66.9	67.7	68.4	68.8	69.0	69.3	69.9	70.1
63095.7	63.3	64.1	64.7	65.2	65.8	66.7	67.4	67.8	68.0	68.3	68.9	69.1
79432.8	61.9	62.7	63.4	64.1	64.6	65.4	66.1	66.7	67.0	67.3	67.8	68.0

Setpoint 44 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	61.3	62.1	63.0	64.0	65.2	66.2	67.5	68.6	69.9	70.7	71.8	80.7
199.5	72.1	73.1	74.2	75.2	76.3	77.1	78.0	78.7	79.6	80.0	80.5	83.8
251.2	70.0	71.0	72.3	73.6	74.9	75.9	77.1	77.9	78.9	79.5	80.0	82.4
316.2	68.2	69.1	70.2	71.7	73.2	74.5	76.1	77.2	78.5	79.3	79.8	81.4
398.1	68.8	70.0	71.5	73.1	74.8	76.3	78.0	79.2	80.6	81.4	81.8	82.4
501.2	71.6	72.7	74.1	75.7	77.3	78.8	80.6	81.9	83.1	83.8	84.1	84.8
631.0	73.8	74.9	76.3	77.8	79.4	81.1	82.9	84.1	85.4	86.1	86.1	85.5
794.3	75.2	76.3	77.7	79.4	81.3	83.0	85.0	86.3	87.5	87.8	87.4	86.0
1000.0	76.4	77.5	79.0	80.6	82.4	84.0	85.9	87.0	88.0	88.1	87.2	84.9
1258.9	77.9	79.0	80.2	81.7	83.1	84.4	85.9	86.6	87.2	86.9	85.5	82.1
1584.9	78.3	79.4	80.6	81.8	83.2	84.3	85.6	86.0	85.9	84.8	82.6	78.8
1995.3	78.6	79.5	80.6	81.8	83.0	83.9	84.7	84.4	83.7	81.8	79.5	75.1
2511.9	78.8	79.7	80.7	81.9	82.7	83.1	83.5	82.7	81.5	79.6	77.1	72.1
3162.3	78.8	79.7	80.5	81.2	81.8	82.1	81.9	80.7	79.1	77.1	74.4	69.1
3981.1	78.2	79.1	79.9	80.6	81.1	81.0	80.5	78.7	76.9	75.0	72.3	66.4
5011.9	77.6	78.7	79.4	80.0	79.9	79.3	78.6	76.9	75.1	73.1	70.3	64.5
6309.6	77.0	77.9	78.6	78.7	78.6	77.7	76.7	75.1	73.1	71.2	68.5	63.0
7943.3	76.3	77.1	77.6	77.7	77.2	76.3	75.0	73.2	71.1	69.3	66.5	60.9
10000.0	75.6	76.4	76.7	76.6	76.1	74.8	73.6	71.6	69.5	67.7	65.2	59.9
12589.3	75.0	75.7	75.7	75.5	74.9	73.4	72.0	70.1	68.0	66.2	63.7	59.1
15848.9	74.4	75.0	75.0	74.6	73.8	72.2	70.7	68.8	66.6	64.9	62.3	57.0
19952.6	73.8	74.1	74.0	73.6	72.7	71.1	69.5	67.5	65.4	63.7	61.4	56.1
25118.9	73.2	73.6	73.0	72.6	71.8	70.1	68.3	66.6	64.4	62.7	60.1	55.2
31622.8	72.5	72.9	72.4	71.6	70.8	69.1	67.6	65.7	63.4	61.8	59.0	53.6
39810.7	71.5	71.8	71.2	70.5	69.5	68.1	66.3	64.6	62.8	60.6	58.0	52.7
50118.7	70.5	70.7	70.2	69.4	68.4	67.1	65.1	63.4	62.1	59.5	56.9	51.4
63095.7	69.4	69.7	69.2	68.4	67.5	65.9	64.2	62.4	61.5	58.4	55.7	50.2
79432.8	68.4	68.7	68.1	67.3	66.4	64.8	62.8	61.2	60.3	57.2	54.5	49.1

Setpoint	45
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.800
Ideal jet velocity (ft/s)	882.753
Temperature ratio (T_j/T_{amb})	2.699
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





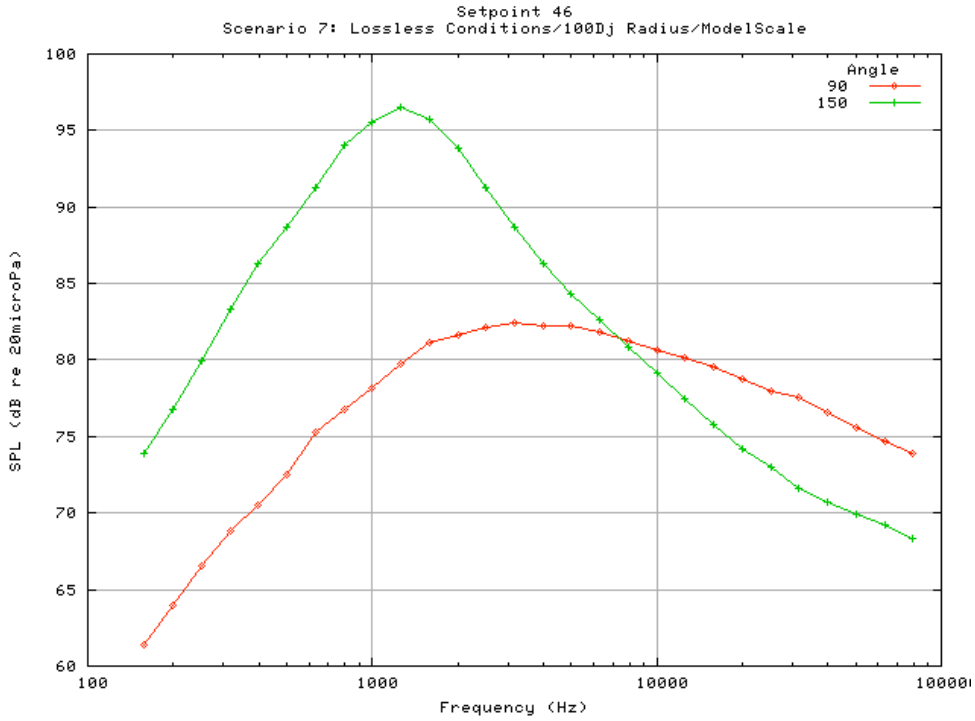
Setpoint 45 continued

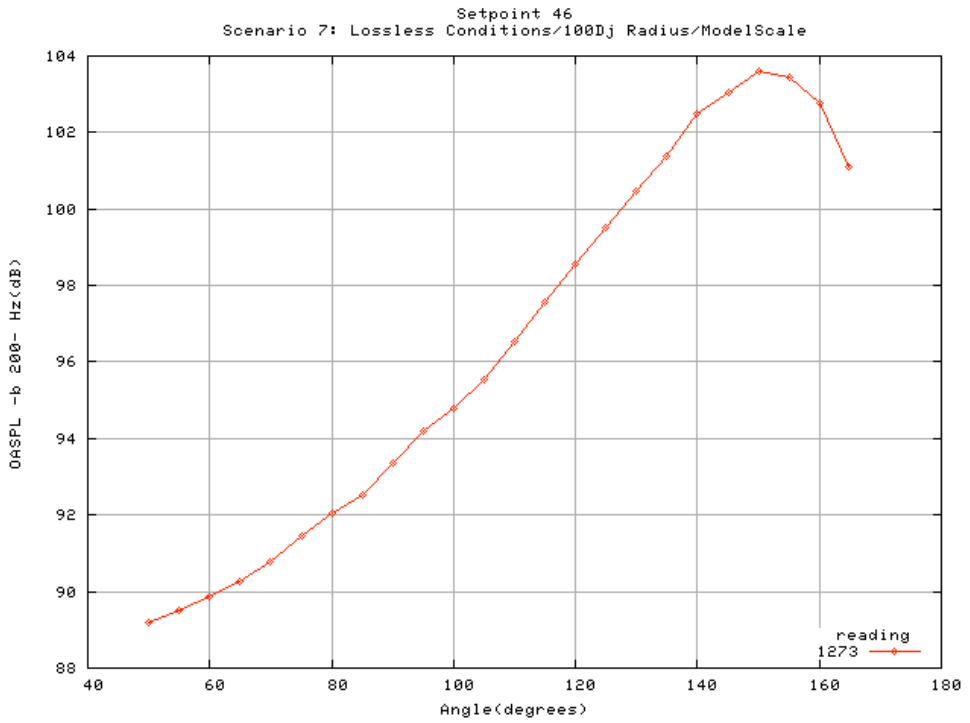
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	57.8	58.0	58.4	58.7	58.9	59.2	59.4	59.5	59.3	59.7	60.6	61.2
199.5	61.3	62.0	62.7	63.4	63.9	64.1	64.3	64.3	64.5	65.4	66.3	67.8
251.2	61.5	62.2	63.0	63.8	64.5	65.0	65.5	65.8	66.1	66.8	67.4	68.4
316.2	63.1	63.9	64.8	65.6	66.1	66.4	66.7	67.1	67.5	67.9	68.1	68.7
398.1	65.0	65.9	66.7	67.5	68.1	68.4	68.7	68.7	68.8	69.1	69.3	69.8
501.2	66.6	67.7	68.7	69.4	69.8	70.0	70.2	70.4	70.6	71.1	71.3	71.9
631.0	70.0	70.8	71.3	71.9	72.1	72.3	72.4	72.7	73.6	73.6	73.9	74.6
794.3	71.1	72.3	72.9	73.1	73.4	73.7	74.0	74.5	74.8	75.5	75.9	76.9
1000.0	72.7	73.5	74.1	74.5	74.4	74.9	75.4	76.0	76.6	77.3	77.8	78.5
1258.9	74.2	75.2	75.6	75.5	75.7	76.2	76.6	77.0	77.5	78.2	78.8	79.7
1584.9	75.2	75.7	75.8	75.9	76.1	76.8	77.4	77.9	78.8	79.3	79.9	80.6
1995.3	75.4	75.9	76.1	76.2	76.7	77.3	77.8	78.4	79.0	79.8	80.3	81.4
2511.9	75.6	76.2	76.2	76.5	77.2	77.8	78.3	79.1	79.7	80.5	80.8	81.6
3162.3	75.7	76.2	76.2	76.6	77.2	77.8	78.3	79.0	79.7	80.5	81.0	81.8
3981.1	75.8	75.7	75.9	76.5	76.9	77.6	78.2	78.7	79.5	80.2	80.6	81.5
5011.9	75.1	75.3	75.6	76.0	76.4	77.1	77.7	78.3	79.1	79.9	80.4	81.1
6309.6	74.4	74.9	75.1	75.6	76.1	76.8	77.3	78.0	78.5	79.4	80.0	80.6
7943.3	74.2	74.4	74.5	75.0	75.6	76.2	76.8	77.3	78.0	78.7	79.2	79.9
10000.0	73.8	73.9	74.1	74.6	75.0	75.7	76.2	76.6	77.4	78.1	78.8	79.3
12589.3	73.4	73.3	73.5	73.8	74.4	75.0	75.6	76.0	76.7	77.5	78.0	78.7
15848.9	72.9	73.0	73.1	73.5	74.0	74.5	75.0	75.6	76.2	76.8	77.3	77.9
19952.6	72.2	72.6	72.4	72.9	73.5	74.0	74.4	75.0	75.5	75.9	76.7	77.2
25118.9	71.6	72.2	71.9	72.3	73.0	73.5	74.0	74.4	74.8	75.3	76.2	76.6
31622.8	70.8	71.3	71.4	71.9	72.3	72.8	73.3	73.8	74.3	74.9	75.4	75.9
39810.7	69.7	70.3	70.4	71.0	71.4	72.0	72.5	73.0	73.5	73.9	74.3	74.9
50118.7	68.4	69.1	69.4	69.9	70.5	71.1	71.7	72.0	72.5	73.0	73.6	74.0
63095.7	67.0	67.8	68.4	68.9	69.5	70.2	70.8	71.1	71.5	72.0	72.6	73.0
79432.8	65.7	66.5	67.4	67.9	68.5	69.2	69.8	70.3	70.7	71.1	71.6	72.2

Setpoint 45 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	62.3	63.4	64.6	65.9	67.3	68.5	70.0	71.1	72.6	73.5	74.4	77.4
199.5	69.2	70.5	71.6	72.7	73.8	74.7	76.0	77.0	78.3	79.0	79.7	80.8
251.2	69.5	70.5	71.6	72.7	73.9	75.1	76.7	78.0	79.4	80.3	81.0	81.7
316.2	69.5	70.4	71.7	73.3	74.9	76.4	78.2	79.6	81.1	82.1	82.8	83.2
398.1	70.7	71.8	73.2	74.9	76.8	78.5	80.4	81.8	83.4	84.4	85.0	85.0
501.2	72.7	73.9	75.5	77.4	79.3	81.1	83.2	84.7	86.1	86.9	87.3	87.0
631.0	75.6	76.9	78.3	80.1	82.1	84.0	86.0	87.4	89.0	89.7	89.7	88.8
794.3	78.0	79.4	81.0	83.0	84.9	86.7	88.7	90.0	91.2	91.6	91.2	89.7
1000.0	79.5	80.7	82.4	84.3	86.4	88.2	90.3	91.5	92.6	92.8	91.9	89.6
1258.9	80.8	82.2	83.7	85.3	87.2	89.0	91.0	91.9	92.9	92.7	91.4	88.4
1584.9	81.6	82.9	84.4	85.8	87.3	88.6	90.1	90.9	91.1	90.5	88.8	85.6
1995.3	82.4	83.5	84.7	86.0	87.2	88.3	89.2	89.2	88.9	87.4	85.7	82.1
2511.9	82.5	83.5	84.6	86.0	87.0	87.6	88.1	87.4	86.6	84.9	82.7	78.5
3162.3	82.7	83.9	84.7	85.7	86.4	86.8	86.7	85.6	84.2	82.5	79.9	75.1
3981.1	82.3	83.6	84.4	85.2	85.8	85.6	85.2	83.6	81.9	80.1	77.6	72.2
5011.9	81.9	83.0	83.8	84.5	84.6	84.0	83.4	81.6	80.0	78.3	75.5	70.1
6309.6	81.5	82.4	83.0	83.4	83.4	82.6	81.7	80.0	77.9	76.1	73.4	68.3
7943.3	80.8	81.8	82.2	82.5	82.2	81.2	80.1	78.3	76.2	74.4	71.6	66.5
10000.0	80.1	80.9	81.3	81.4	80.8	79.6	78.5	76.5	74.5	72.8	70.2	64.8
12589.3	79.4	80.2	80.2	80.1	79.5	78.2	76.9	75.0	72.8	71.1	68.6	64.0
15848.9	78.6	79.2	79.3	79.0	78.2	76.8	75.4	73.5	71.2	69.5	66.9	61.8
19952.6	77.9	78.3	78.2	77.9	77.0	75.4	73.9	71.9	69.8	68.2	65.7	60.6
25118.9	77.1	77.7	77.0	76.8	75.8	74.3	72.6	70.9	68.8	67.2	64.5	59.6
31622.8	76.3	76.7	76.2	75.6	74.6	73.1	71.7	69.7	67.3	66.0	63.2	57.9
39810.7	75.4	75.5	75.0	74.3	73.1	71.8	70.3	68.4	66.7	64.9	62.2	56.8
50118.7	74.4	74.3	73.8	73.2	71.9	70.7	69.1	67.3	65.9	63.7	61.1	55.5
63095.7	73.4	73.3	72.8	72.2	70.9	69.6	68.2	66.3	65.4	62.7	60.0	54.7
79432.8	72.6	72.5	71.9	71.3	69.9	68.6	67.0	65.3	64.4	61.7	59.1	54.0

Setpoint	46
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.901
Ideal jet velocity (ft/s)	993.661
Temperature ratio (T_j/T_{amb})	2.702
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





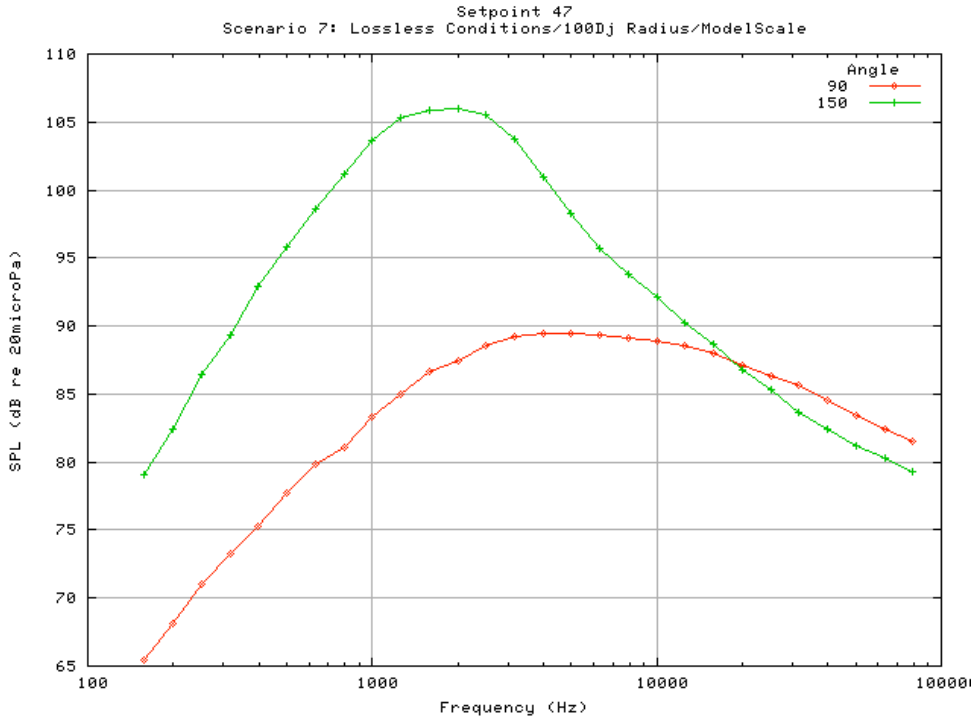
Setpoint 46 continued

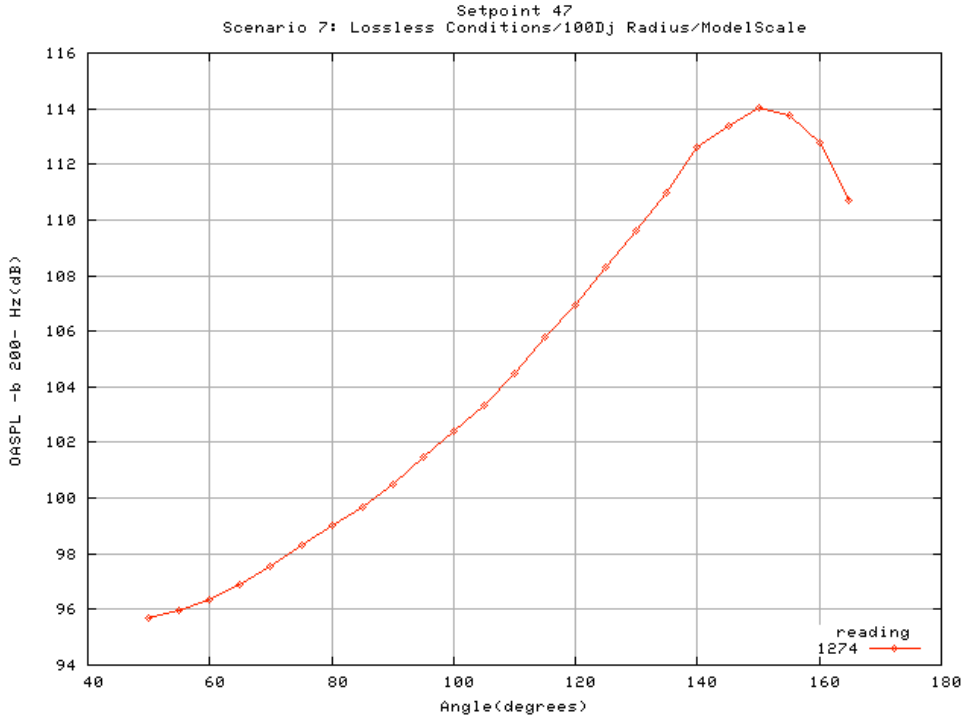
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	59.0	59.5	60.0	60.4	60.7	61.0	61.2	61.4	61.4	61.7	62.0	62.4
199.5	60.6	61.1	61.7	62.2	62.6	63.0	63.4	63.8	64.0	64.3	64.5	64.9
251.2	63.0	63.5	64.0	64.4	64.9	65.4	65.9	66.3	66.6	67.0	67.1	67.7
316.2	65.0	65.6	66.2	66.8	67.5	68.0	68.4	68.7	68.8	69.0	69.0	69.4
398.1	66.7	67.4	68.3	69.1	69.8	70.0	70.2	70.3	70.6	70.8	71.0	71.5
501.2	68.4	69.5	70.6	71.2	71.5	71.7	71.9	72.1	72.5	73.0	73.4	74.1
631.0	71.3	72.0	72.6	73.2	73.4	73.8	74.1	74.3	75.3	75.6	75.9	76.5
794.3	73.0	74.0	74.4	74.5	74.9	75.2	75.5	76.1	76.7	77.2	77.6	78.4
1000.0	74.3	74.9	75.5	75.9	76.0	76.5	76.9	77.5	78.2	79.0	79.4	80.2
1258.9	76.1	77.0	77.3	77.2	77.7	78.3	78.8	79.1	79.8	80.5	81.2	82.0
1584.9	77.3	77.8	77.9	77.8	78.2	79.0	79.6	80.1	81.2	81.9	82.5	83.2
1995.3	77.6	78.1	78.2	78.5	79.0	79.7	80.3	80.8	81.6	82.6	83.1	84.0
2511.9	77.9	78.4	78.4	78.8	79.5	80.1	80.6	81.2	82.1	83.1	83.5	84.5
3162.3	78.3	78.7	78.7	79.1	79.7	80.4	81.0	81.6	82.4	83.3	83.8	84.7
3981.1	78.3	78.2	78.6	79.3	79.8	80.5	81.1	81.3	82.3	83.2	83.8	84.8
5011.9	77.5	77.8	78.3	78.8	79.3	80.1	80.7	81.2	82.2	83.0	83.6	84.4
6309.6	77.0	77.6	77.8	78.3	79.0	79.8	80.4	80.9	81.9	82.7	83.4	84.2
7943.3	76.9	77.0	77.3	77.9	78.4	79.2	79.8	80.3	81.2	82.1	82.8	83.6
10000.0	76.5	76.5	77.0	77.3	77.9	78.8	79.4	79.8	80.7	81.7	82.2	83.0
12589.3	76.0	75.8	76.3	76.8	77.4	78.2	78.9	79.2	80.2	81.0	81.6	82.4
15848.9	75.5	75.3	75.8	76.2	76.7	77.5	78.1	78.6	79.5	80.4	81.0	81.7
19952.6	74.7	74.9	75.1	75.6	76.3	77.0	77.6	78.1	78.8	79.4	80.3	80.9
25118.9	74.2	74.3	74.5	74.8	75.7	76.4	77.0	77.4	78.0	78.8	79.7	80.2
31622.8	73.6	73.7	74.2	74.6	75.1	75.8	76.3	76.8	77.5	78.3	78.9	79.4
39810.7	72.5	72.6	73.1	73.6	74.2	74.9	75.5	75.9	76.6	77.4	77.7	78.4
50118.7	71.3	71.6	72.1	72.6	73.2	74.0	74.7	75.0	75.6	76.5	77.0	77.4
63095.7	70.0	70.4	71.0	71.7	72.2	73.1	73.8	74.1	74.7	75.6	76.2	76.5
79432.8	68.9	69.4	70.1	70.8	71.4	72.2	72.9	73.3	73.9	74.8	75.3	75.7

Setpoint 46 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	63.2	64.0	65.0	66.3	67.8	69.2	70.9	72.3	73.9	74.9	75.9	76.8
199.5	65.6	66.4	67.5	68.8	70.3	71.8	73.6	75.1	76.8	77.9	78.9	79.6
251.2	68.5	69.5	70.7	72.1	73.6	75.1	76.9	78.3	80.0	81.0	81.9	82.5
316.2	70.0	71.0	72.4	74.3	76.2	78.0	80.1	81.7	83.3	84.4	85.2	85.7
398.1	72.2	73.4	75.1	77.0	79.1	80.9	83.0	84.6	86.3	87.3	88.0	88.1
501.2	75.0	76.1	77.7	79.6	81.4	83.3	85.5	87.1	88.7	89.6	90.2	90.1
631.0	77.4	78.6	80.2	82.0	84.0	86.0	88.1	89.6	91.3	92.2	92.5	91.8
794.3	79.4	80.7	82.5	84.8	86.9	88.9	91.1	92.7	94.0	94.6	94.4	93.2
1000.0	81.2	82.7	84.4	86.5	88.7	90.7	93.0	94.3	95.5	95.8	95.1	93.1
1258.9	83.2	84.5	86.2	88.1	90.1	92.1	94.3	95.4	96.5	96.3	95.3	92.8
1584.9	84.4	85.6	87.2	88.8	90.6	92.4	94.2	95.2	95.7	95.3	94.0	91.7
1995.3	84.9	86.1	87.5	89.1	90.6	92.0	93.3	93.7	93.8	92.8	91.7	89.3
2511.9	85.6	86.8	87.9	89.4	90.6	91.5	92.2	91.8	91.3	90.0	88.4	85.7
3162.3	85.7	87.0	88.0	89.2	90.0	90.6	90.6	89.8	88.7	87.3	85.3	82.1
3981.1	85.7	86.9	88.0	88.9	89.6	89.7	89.4	87.9	86.3	84.7	82.5	78.9
5011.9	85.5	86.7	87.7	88.4	88.7	88.3	87.7	86.0	84.3	82.6	80.1	76.4
6309.6	85.1	86.2	87.2	87.7	87.6	87.0	86.3	84.6	82.6	80.9	78.4	74.6
7943.3	84.6	85.6	86.4	86.7	86.5	85.7	84.7	83.0	80.8	79.0	76.4	72.5
10000.0	84.0	84.9	85.7	85.7	85.3	84.4	83.2	81.3	79.2	77.4	75.0	70.9
12589.3	83.3	84.3	84.6	84.6	84.1	82.9	81.6	79.8	77.5	75.8	73.3	69.5
15848.9	82.6	83.5	83.8	83.4	82.8	81.5	80.2	78.3	75.8	74.2	71.6	67.3
19952.6	81.8	82.3	82.4	82.1	81.4	80.1	78.5	76.6	74.2	72.8	70.3	65.9
25118.9	81.0	81.5	81.2	80.9	80.1	78.8	77.0	75.4	73.0	71.4	68.7	64.5
31622.8	80.1	80.6	80.3	79.5	78.8	77.5	75.9	74.1	71.6	70.2	67.4	62.7
39810.7	79.1	79.3	78.9	78.2	77.1	76.0	74.4	72.8	70.7	68.8	66.2	61.4
50118.7	78.0	78.1	77.7	76.9	75.8	74.8	73.1	71.5	69.9	67.7	65.0	60.0
63095.7	77.0	77.0	76.6	75.7	74.8	73.6	72.1	70.4	69.3	66.6	63.7	58.8
79432.8	76.2	76.3	75.8	74.8	73.8	72.8	71.0	69.5	68.3	65.7	62.6	57.7

Setpoint	47
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.187
Ideal jet velocity (ft/s)	1309.780
Temperature ratio (T_j/T_{amb})	2.695
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





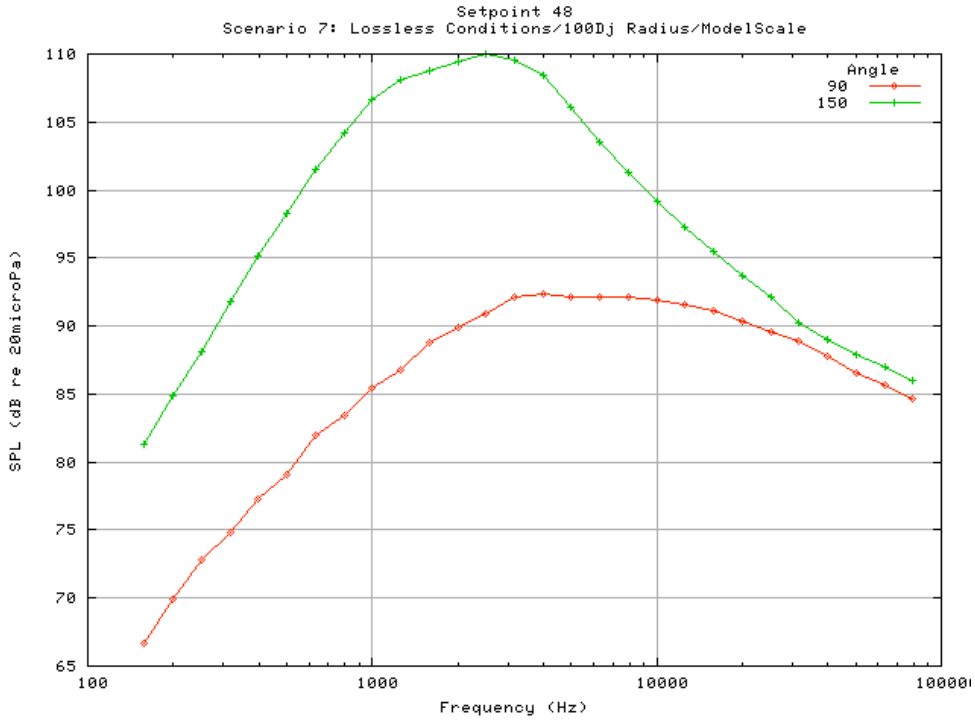
Setpoint 47 continued

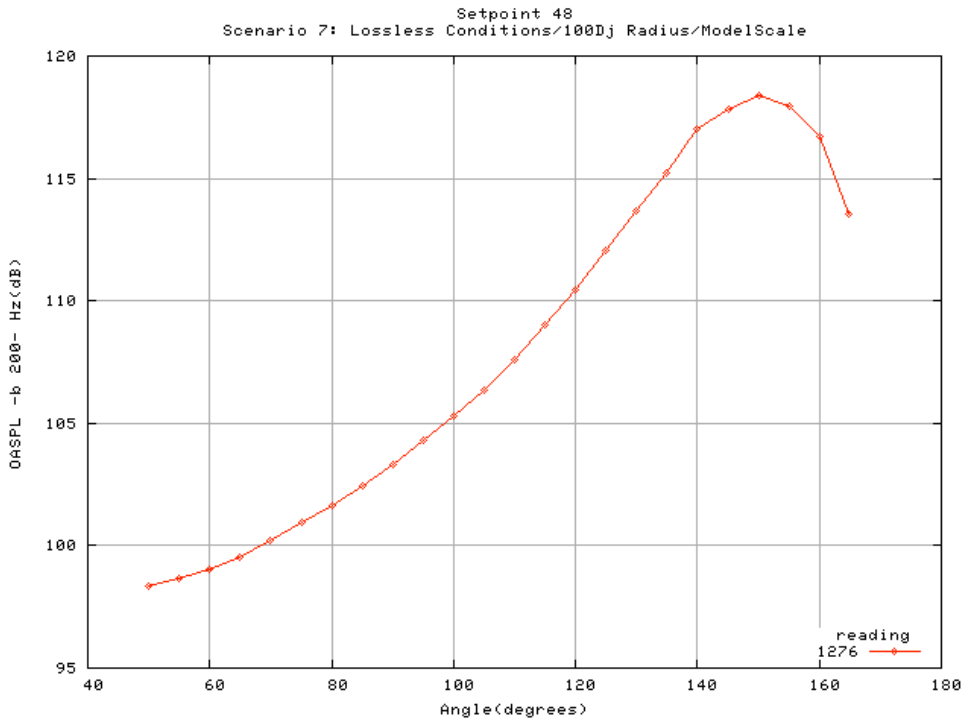
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	62.3	62.8	63.4	63.9	64.2	64.4	64.7	65.0	65.4	65.9	66.3	66.8
199.5	64.5	65.1	65.7	66.1	66.5	66.9	67.2	67.7	68.2	68.6	69.0	69.2
251.2	66.7	67.3	68.0	68.5	69.0	69.6	70.1	70.6	71.0	71.5	71.6	71.8
316.2	68.9	69.7	70.5	71.1	71.7	72.2	72.7	73.1	73.3	73.5	73.7	74.0
398.1	71.3	71.9	72.8	73.7	74.3	74.6	74.8	75.0	75.3	75.8	76.3	76.6
501.2	72.5	73.5	74.6	75.3	75.7	76.0	76.3	76.9	77.7	78.4	78.8	79.3
631.0	75.7	76.4	77.0	77.5	77.7	78.1	78.5	78.8	79.8	80.3	80.6	81.1
794.3	77.2	78.1	78.4	78.7	79.1	79.6	80.0	80.5	81.1	81.9	82.4	83.1
1000.0	78.8	79.4	79.9	80.3	80.5	81.3	82.0	82.6	83.3	84.0	84.8	85.4
1258.9	80.7	81.6	81.8	82.0	82.6	83.2	83.8	84.4	84.9	85.8	86.7	87.4
1584.9	82.5	82.9	83.2	83.4	83.9	84.6	85.2	85.7	86.6	87.3	88.4	88.9
1995.3	83.3	83.6	83.9	84.5	85.1	85.7	86.2	86.7	87.4	88.5	89.3	90.2
2511.9	84.2	84.5	84.6	85.1	85.8	86.5	87.1	87.8	88.5	89.7	90.5	91.3
3162.3	85.0	85.4	85.7	86.2	86.6	87.3	87.9	88.5	89.2	90.2	91.1	92.1
3981.1	85.4	85.4	85.8	86.4	86.8	87.5	88.1	88.6	89.4	90.6	91.4	92.4
5011.9	84.5	84.7	85.2	85.7	86.2	87.1	87.8	88.5	89.5	90.4	91.3	92.4
6309.6	84.0	84.5	84.9	85.5	86.3	87.1	87.8	88.4	89.3	90.4	91.4	92.3
7943.3	83.9	84.1	84.6	85.2	86.0	86.8	87.5	88.3	89.2	90.2	91.2	92.3
10000.0	83.8	83.8	84.2	85.0	85.6	86.5	87.3	88.1	88.9	90.0	91.0	91.9
12589.3	83.3	83.3	83.7	84.4	85.2	86.0	86.8	87.6	88.5	89.5	90.4	91.5
15848.9	82.8	82.7	83.1	83.8	84.5	85.4	86.2	87.0	88.0	89.1	89.9	91.0
19952.6	81.9	82.1	82.4	83.0	83.9	84.8	85.5	86.3	87.1	88.0	89.2	90.3
25118.9	81.2	81.5	81.6	82.1	83.2	84.1	84.8	85.6	86.3	87.3	88.6	89.5
31622.8	80.4	80.6	81.1	81.7	82.4	83.3	84.0	84.8	85.6	86.5	87.5	88.5
39810.7	79.4	79.7	80.1	80.6	81.5	82.3	83.0	83.8	84.5	85.4	86.1	87.3
50118.7	78.2	78.6	79.1	79.5	80.4	81.4	82.1	82.7	83.4	84.3	85.2	86.1
63095.7	77.0	77.5	78.0	78.6	79.5	80.4	81.1	81.7	82.4	83.4	84.2	85.0
79432.8	76.0	76.5	77.2	77.7	78.5	79.4	80.2	80.9	81.6	82.5	83.2	84.0

Setpoint 47 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	67.5	68.2	69.3	70.6	72.2	73.7	75.6	77.2	79.1	80.3	81.6	82.5
199.5	69.8	70.6	71.8	73.3	75.0	76.7	78.8	80.5	82.4	83.7	84.9	85.7
251.2	72.3	73.2	74.6	76.5	78.6	80.5	82.7	84.5	86.4	87.7	88.8	89.6
316.2	74.6	75.6	77.1	79.0	81.2	83.3	85.6	87.4	89.3	90.5	91.5	92.1
398.1	77.4	78.7	80.4	82.5	84.8	87.0	89.3	91.0	93.0	94.1	94.9	95.1
501.2	80.1	81.2	83.0	85.3	87.5	89.7	92.2	94.1	95.9	96.8	97.4	97.4
631.0	82.1	83.5	85.3	87.7	90.3	92.6	95.1	96.8	98.6	99.5	99.7	99.0
794.3	84.1	85.6	87.7	90.4	93.0	95.4	98.0	99.7	101.2	101.7	101.5	100.1
1000.0	86.4	87.9	90.0	92.7	95.5	98.0	100.7	102.3	103.6	103.7	102.7	100.6
1258.9	88.7	90.2	92.5	95.1	98.1	100.6	103.2	104.3	105.3	104.8	103.4	100.9
1584.9	90.2	91.8	93.9	96.5	99.3	102.0	104.4	105.6	105.9	105.0	103.5	101.2
1995.3	91.4	92.9	94.8	97.3	100.1	102.5	104.8	105.6	106.0	105.2	104.1	101.6
2511.9	92.5	93.8	95.5	97.8	100.0	102.0	104.1	104.9	105.5	105.3	104.2	101.8
3162.3	93.3	94.9	96.3	98.1	99.6	101.1	102.4	103.0	103.7	103.6	102.7	100.1
3981.1	93.7	95.1	96.6	98.1	99.2	99.9	100.6	100.4	100.9	100.9	100.1	97.3
5011.9	93.6	95.2	96.6	97.7	98.4	98.6	98.8	98.4	98.3	98.2	97.2	94.0
6309.6	93.6	95.0	96.3	97.3	97.7	97.5	97.2	96.5	95.7	95.2	93.9	90.6
7943.3	93.5	94.9	96.0	96.8	96.8	96.4	95.9	94.8	93.8	93.0	91.4	87.7
10000.0	93.1	94.5	95.4	95.8	95.8	95.0	94.4	93.2	92.1	91.2	89.3	85.5
12589.3	92.7	94.0	94.7	95.0	94.7	93.8	92.9	91.6	90.3	89.3	87.3	83.5
15848.9	92.1	93.3	93.8	93.9	93.5	92.5	91.4	90.2	88.6	87.6	85.5	81.2
19952.6	91.3	92.2	92.6	92.6	92.1	90.9	89.6	88.2	86.8	85.9	83.8	79.2
25118.9	90.4	91.3	91.2	91.3	90.7	89.4	88.0	86.8	85.3	84.4	82.0	77.5
31622.8	89.4	90.2	90.1	89.8	89.1	87.8	86.6	85.2	83.6	82.7	80.3	75.8
39810.7	88.1	88.6	88.4	88.1	87.2	86.1	84.7	83.4	82.4	81.1	78.8	74.1
50118.7	86.8	87.1	86.9	86.5	85.5	84.4	83.0	81.9	81.2	79.6	77.3	72.5
63095.7	85.6	85.8	85.4	85.0	84.2	83.0	81.8	80.5	80.3	78.4	75.9	71.4
79432.8	84.7	84.8	84.3	83.8	83.0	81.9	80.5	79.4	79.2	77.4	74.8	70.3

Setpoint	48
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.329
Ideal jet velocity (ft/s)	1466.780
Temperature ratio (T_j/T_{amb})	2.704
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





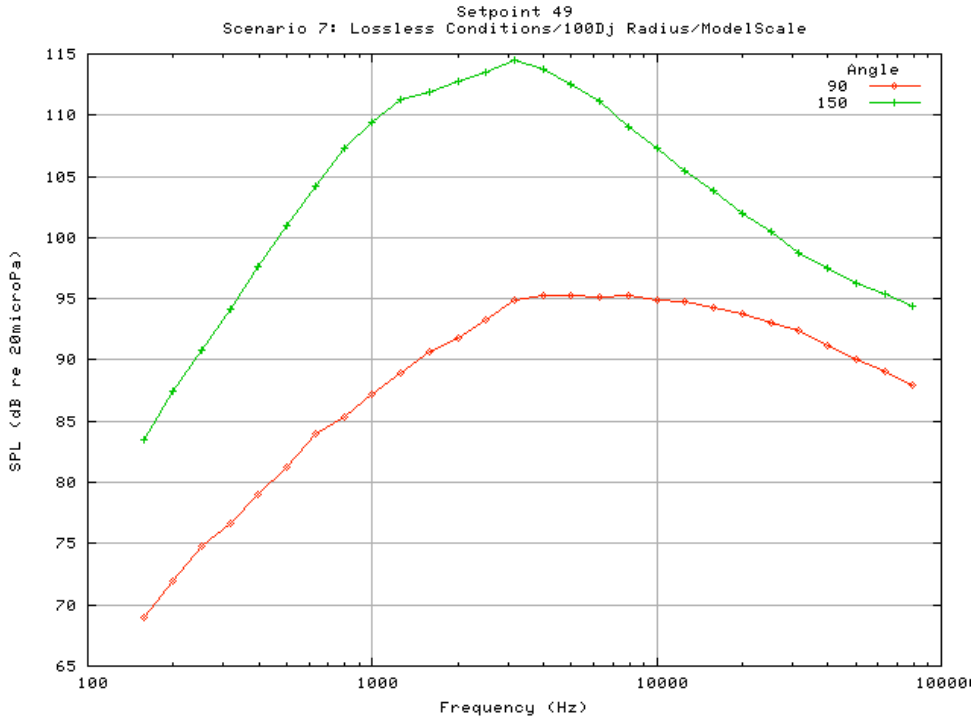
Setpoint 48 continued

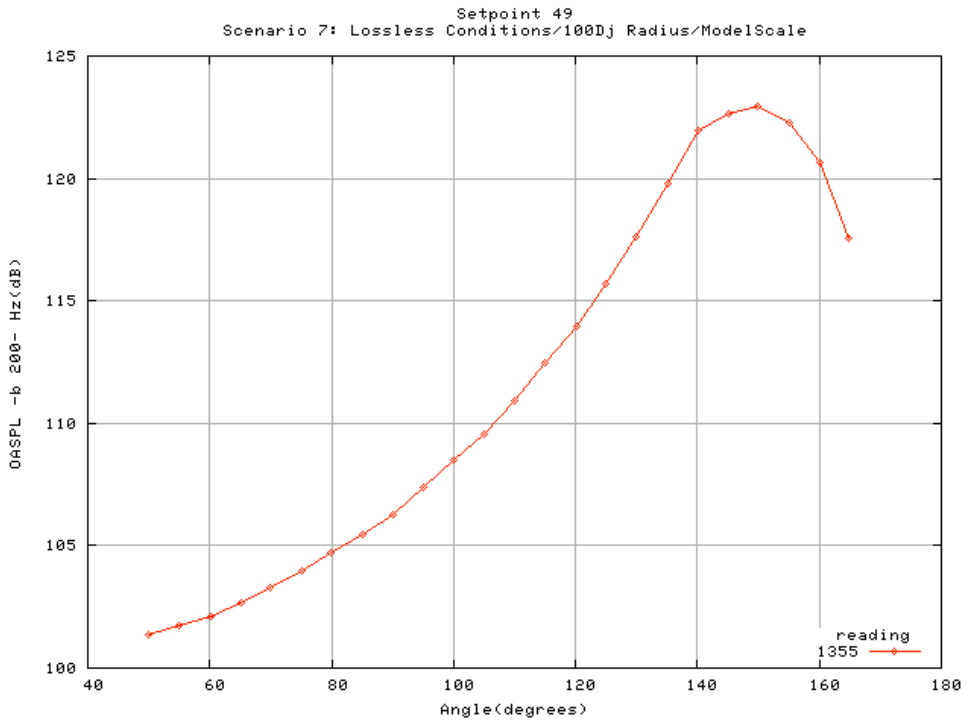
Frequency	Angle											
	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0
158.5	63.4	64.0	64.6	65.1	65.4	65.7	66.0	66.4	66.7	67.1	67.5	67.9
199.5	66.3	66.8	67.3	67.7	68.0	68.5	68.9	69.4	69.9	70.3	70.5	70.6
251.2	68.3	68.9	69.6	70.2	70.6	71.2	71.8	72.4	72.9	73.4	73.7	73.8
316.2	70.1	71.0	71.8	72.5	73.1	73.5	74.0	74.4	74.8	75.2	75.7	76.1
398.1	72.3	72.9	73.7	74.6	75.3	75.9	76.4	76.8	77.3	77.8	78.3	78.8
501.2	73.9	75.1	76.2	76.8	77.2	77.6	78.0	78.5	79.0	79.6	80.2	80.8
631.0	77.4	78.1	78.6	79.0	79.4	79.8	80.2	80.9	82.0	82.2	82.9	83.5
794.3	79.2	80.0	80.3	80.5	80.8	81.5	82.0	82.7	83.4	84.1	84.8	85.6
1000.0	80.7	81.2	81.5	81.8	82.4	83.3	83.9	84.7	85.4	86.2	87.0	87.7
1258.9	83.1	83.6	83.8	83.9	84.4	85.1	85.7	86.3	86.8	87.7	88.6	89.6
1584.9	84.6	84.7	85.0	85.2	85.9	86.7	87.4	87.9	88.8	89.3	90.5	91.1
1995.3	85.3	85.7	85.8	86.4	87.3	87.9	88.5	89.0	89.9	91.0	91.8	92.7
2511.9	86.5	86.8	86.9	87.6	88.3	88.9	89.4	90.1	90.9	91.9	92.8	93.8
3162.3	88.1	88.5	88.6	88.8	89.3	90.0	90.6	91.4	92.1	93.0	94.0	95.0
3981.1	88.8	89.0	89.3	89.7	89.9	90.4	90.9	91.7	92.4	93.5	94.3	95.3
5011.9	87.4	87.7	88.1	88.5	89.1	89.8	90.4	91.3	92.2	93.2	94.2	95.3
6309.6	86.7	87.1	87.6	88.2	88.9	89.7	90.4	91.3	92.2	93.3	94.3	95.5
7943.3	86.6	86.8	87.3	88.0	88.8	89.5	90.2	91.2	92.1	93.2	94.3	95.4
10000.0	86.5	86.5	87.1	87.7	88.5	89.4	90.2	90.9	91.9	93.0	94.0	95.1
12589.3	85.9	86.1	86.7	87.2	88.1	88.9	89.7	90.4	91.6	92.7	93.7	94.9
15848.9	85.5	85.5	86.0	86.7	87.5	88.4	89.1	90.0	91.1	92.2	93.2	94.4
19952.6	84.6	84.9	85.4	86.0	86.8	87.7	88.5	89.4	90.4	91.3	92.6	93.7
25118.9	83.8	84.3	84.6	85.0	86.2	87.1	87.8	88.6	89.6	90.6	91.9	92.9
31622.8	83.0	83.4	84.0	84.5	85.3	86.2	86.9	87.8	88.9	89.9	91.0	92.0
39810.7	82.0	82.4	82.9	83.4	84.3	85.2	85.9	86.7	87.7	88.8	89.6	90.7
50118.7	80.8	81.4	81.9	82.4	83.3	84.2	84.9	85.6	86.6	87.7	88.6	89.5
63095.7	79.6	80.3	80.9	81.3	82.2	83.2	84.0	84.5	85.6	86.5	87.5	88.2
79432.8	78.7	79.3	80.0	80.5	81.3	82.2	83.0	83.7	84.7	85.7	86.5	87.2

Setpoint 48 continued

Frequency	Angle											
	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	164.9
158.5	68.7	69.5	70.6	72.0	73.8	75.5	77.5	79.3	81.3	82.7	84.3	90.7
199.5	71.1	71.9	73.2	74.9	76.9	78.8	81.0	82.8	84.8	86.2	87.5	91.3
251.2	74.3	75.0	76.2	78.0	80.1	82.0	84.2	86.1	88.1	89.4	90.6	92.2
316.2	76.8	77.9	79.4	81.3	83.4	85.5	87.9	89.8	91.8	93.1	94.1	94.9
398.1	79.6	80.6	82.1	84.2	86.5	88.6	91.0	93.0	95.1	96.4	97.3	97.5
501.2	81.6	82.6	84.6	87.0	89.4	91.9	94.5	96.5	98.3	99.4	100.0	99.7
631.0	84.4	85.9	87.9	90.3	93.0	95.4	97.9	99.6	101.5	102.3	102.5	101.4
794.3	86.3	87.9	89.9	92.9	95.7	98.4	101.0	102.7	104.2	104.6	104.0	102.1
1000.0	88.6	90.3	92.7	95.6	98.6	101.1	103.9	105.4	106.6	106.4	105.1	102.4
1258.9	90.7	92.5	94.9	98.0	101.1	103.7	106.3	107.4	108.1	107.3	105.5	102.3
1584.9	92.4	94.1	96.6	99.8	102.9	105.5	107.8	108.8	108.8	107.7	105.9	102.9
1995.3	93.8	95.4	97.8	100.9	104.2	106.8	109.0	109.5	109.4	108.4	106.9	103.5
2511.9	95.0	96.7	98.9	101.7	104.3	106.7	108.9	109.6	110.0	109.4	107.9	104.5
3162.3	96.2	98.0	99.7	102.0	104.0	106.2	108.0	109.0	109.6	109.2	107.9	104.1
3981.1	96.6	98.2	100.2	102.0	103.6	105.0	106.7	107.5	108.4	108.4	107.2	103.2
5011.9	96.7	98.4	100.0	101.6	102.8	103.4	104.5	105.3	106.1	106.2	105.1	100.7
6309.6	96.9	98.3	99.8	101.1	101.9	101.9	102.6	103.0	103.5	103.6	102.4	98.0
7943.3	96.8	98.3	99.7	100.7	101.0	100.7	101.1	101.2	101.3	101.1	99.7	95.1
10000.0	96.6	98.0	99.2	99.9	100.1	99.5	99.5	99.3	99.2	99.0	97.4	92.6
12589.3	96.2	97.7	98.6	99.0	99.1	98.3	98.1	97.8	97.3	96.9	95.2	90.4
15848.9	95.7	97.1	97.8	98.1	98.1	97.0	96.6	96.2	95.5	95.1	93.2	88.1
19952.6	95.0	96.0	96.7	96.8	96.6	95.6	94.8	94.4	93.7	93.3	91.5	85.9
25118.9	94.1	95.2	95.4	95.6	95.3	94.2	93.1	93.0	92.1	91.6	89.6	84.1
31622.8	93.0	94.0	94.1	94.0	93.7	92.6	91.8	91.3	90.3	89.9	87.8	82.2
39810.7	91.8	92.4	92.4	92.3	91.7	90.9	89.8	89.6	89.1	88.1	86.2	80.7
50118.7	90.3	90.8	90.8	90.6	89.9	89.2	88.0	87.9	87.9	86.7	84.8	79.4
63095.7	89.0	89.3	89.3	89.0	88.4	87.7	86.6	86.5	87.0	85.5	83.4	78.4
79432.8	88.0	88.3	88.1	87.7	87.1	86.5	85.3	85.3	85.9	84.5	82.5	77.6

Setpoint	49
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.480
Ideal jet velocity (ft/s)	1643.910
Temperature ratio (T_j/T_{amb})	2.702
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





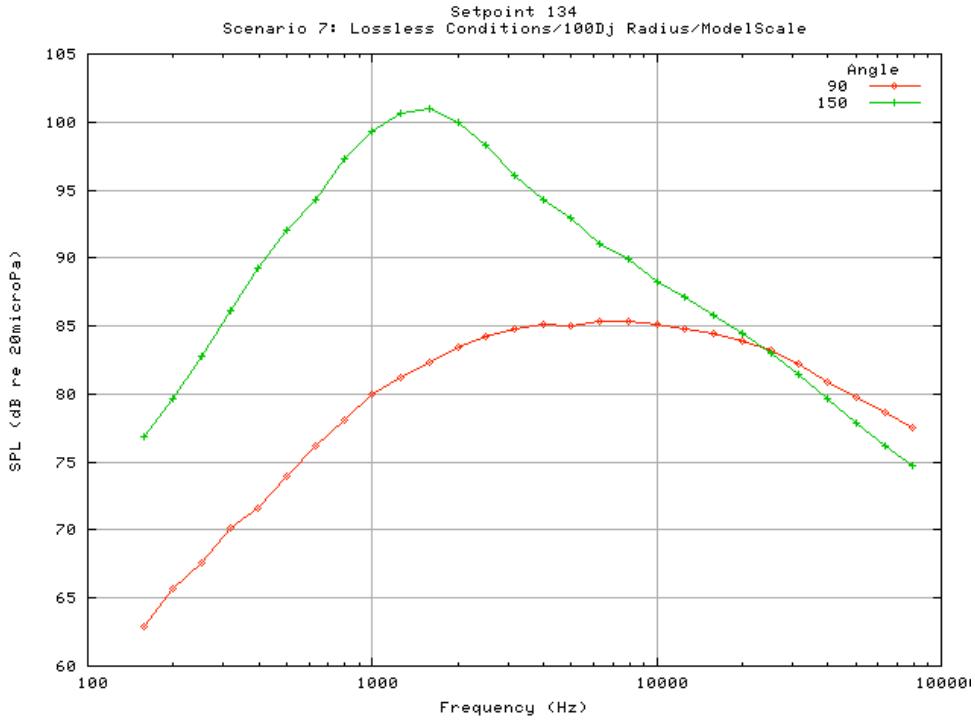
Setpoint 49 continued

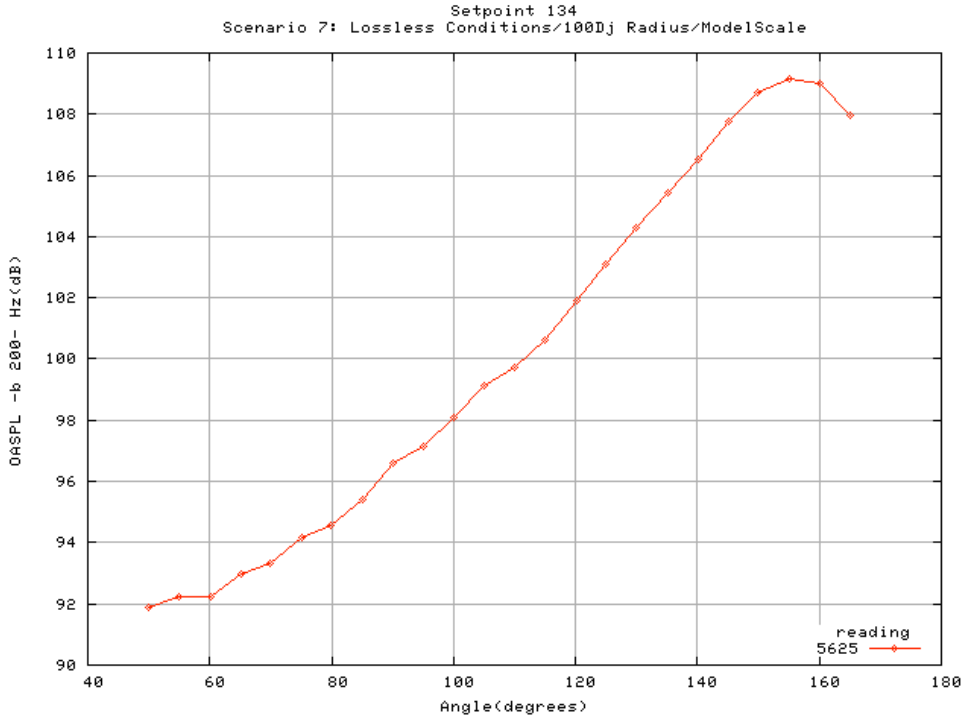
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	66.3	66.7	67.1	67.4	67.5	67.8	68.0	68.5	68.9	69.7	70.5	70.9
199.5	67.6	68.3	68.9	69.5	69.8	70.2	70.8	71.4	71.9	72.5	73.0	73.1
251.2	70.3	70.7	71.3	71.9	72.4	73.0	73.8	74.4	74.8	75.2	75.5	75.6
316.2	71.9	72.5	73.1	73.8	74.4	75.1	75.8	76.4	76.7	77.1	77.8	78.1
398.1	74.2	74.9	75.7	76.6	77.3	77.9	78.3	78.6	79.0	79.6	80.2	80.4
501.2	76.2	77.3	78.4	79.0	79.2	79.6	80.1	80.6	81.2	81.8	82.3	82.5
631.0	79.4	80.0	80.6	81.2	81.5	81.9	82.5	83.0	84.0	84.3	84.8	85.0
794.3	81.2	81.8	82.2	82.4	83.0	83.4	84.0	84.8	85.3	86.2	86.8	87.3
1000.0	82.6	83.3	83.4	83.9	84.4	85.1	85.8	86.5	87.2	88.1	89.0	89.7
1258.9	85.0	85.5	85.6	85.8	86.5	87.0	87.7	88.2	89.0	89.9	91.1	91.7
1584.9	86.9	86.8	87.1	87.8	88.1	88.8	89.4	89.9	90.7	91.5	92.6	93.3
1995.3	87.4	88.0	88.0	88.9	89.5	89.9	90.6	91.0	91.8	92.7	93.9	94.9
2511.9	88.8	89.1	89.3	89.9	90.6	91.1	91.8	92.6	93.3	94.4	95.5	96.4
3162.3	91.1	91.6	91.7	92.1	92.5	93.2	93.9	94.3	94.9	96.0	96.9	97.9
3981.1	92.2	92.7	93.0	93.2	93.4	93.6	94.2	94.7	95.3	96.4	97.6	98.4
5011.9	91.1	91.3	91.3	92.0	92.3	93.0	93.7	94.4	95.3	96.2	97.2	98.4
6309.6	90.2	90.2	90.8	91.5	92.0	92.6	93.6	94.3	95.2	96.3	97.5	98.7
7943.3	90.2	90.4	90.8	91.3	92.0	92.6	93.5	94.3	95.2	96.4	97.5	98.6
10000.0	89.7	89.9	90.4	91.0	91.8	92.4	93.4	94.1	95.0	96.2	97.4	98.5
12589.3	89.1	89.3	90.0	90.6	91.3	92.0	92.9	93.8	94.7	96.0	97.1	98.3
15848.9	88.5	88.7	89.4	90.0	90.8	91.7	92.4	93.4	94.3	95.6	96.6	97.9
19952.6	87.6	88.0	88.5	89.3	90.2	91.6	91.9	92.8	93.7	94.9	96.2	97.4
25118.9	86.8	87.3	87.8	88.3	89.5	91.0	91.2	92.2	93.0	94.3	95.7	96.7
31622.8	85.9	86.4	87.0	87.7	88.6	89.5	90.4	91.4	92.4	93.6	94.7	95.9
39810.7	84.6	85.2	85.9	86.6	87.5	88.6	89.4	90.2	91.2	92.5	93.3	94.6
50118.7	83.4	84.1	84.8	85.4	86.4	87.8	88.4	89.1	90.0	91.4	92.4	93.4
63095.7	82.1	82.9	83.7	84.4	85.3	86.9	87.3	88.0	89.0	90.2	91.2	92.1
79432.8	81.0	81.8	82.7	83.5	84.4	85.5	86.3	87.1	88.0	89.1	90.0	90.9

Setpoint 49 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	71.6	72.2	73.0	74.2	75.8	77.4	79.5	81.4	83.5	85.1	86.6	87.8
199.5	73.7	74.3	75.3	76.8	78.8	80.7	83.1	85.2	87.4	89.0	90.5	91.5
251.2	76.3	77.3	78.6	80.3	82.3	84.2	86.6	88.6	90.8	92.3	93.6	94.5
316.2	78.9	79.9	81.2	83.0	85.2	87.3	89.9	92.0	94.1	95.6	96.7	97.4
398.1	80.9	81.9	83.4	85.7	88.3	90.7	93.3	95.5	97.6	99.1	100.0	100.2
501.2	83.4	84.7	86.7	89.2	91.8	94.2	97.0	99.1	101.0	102.2	102.9	102.8
631.0	86.1	87.3	89.2	91.8	94.8	97.5	100.2	102.2	104.2	105.2	105.3	104.3
794.3	88.2	89.6	92.1	95.5	98.5	101.1	103.9	105.8	107.3	107.7	107.2	105.3
1000.0	90.6	92.1	94.4	97.6	100.9	103.7	106.6	108.2	109.4	109.3	107.9	105.1
1258.9	92.8	94.4	97.3	100.5	104.1	106.9	109.5	110.7	111.3	110.3	108.4	105.6
1584.9	94.6	96.2	99.2	102.8	106.2	109.0	111.3	112.0	111.9	110.6	108.8	105.9
1995.3	96.3	98.2	100.6	104.2	107.6	110.4	112.6	112.9	112.8	111.5	109.9	106.8
2511.9	97.8	99.4	101.6	105.1	108.4	111.2	113.2	113.4	113.5	112.7	110.9	107.8
3162.3	99.4	101.1	102.9	105.7	108.5	111.5	113.6	114.2	114.5	113.7	111.9	108.5
3981.1	99.8	101.4	103.4	105.6	107.9	110.5	112.8	113.5	113.8	113.1	111.6	107.6
5011.9	99.8	101.6	103.5	105.3	106.9	108.7	111.0	112.1	112.5	112.0	110.2	106.3
6309.6	100.0	101.9	103.5	104.9	106.1	107.3	109.6	110.8	111.1	110.6	109.0	105.0
7943.3	100.1	101.8	103.3	104.6	105.2	106.2	108.0	109.1	109.1	108.5	106.7	102.5
10000.0	100.0	101.8	103.0	103.7	104.3	104.8	106.8	107.4	107.3	106.7	104.7	100.5
12589.3	99.8	101.4	102.5	103.1	103.4	103.7	105.2	105.8	105.4	104.9	102.8	98.5
15848.9	99.5	101.0	101.8	102.2	102.4	102.4	103.8	104.3	103.8	103.3	101.1	96.6
19952.6	98.9	100.0	100.8	101.1	101.0	101.1	102.1	102.4	102.0	101.7	99.4	94.5
25118.9	98.1	99.2	99.6	99.9	99.8	99.7	100.5	101.1	100.5	100.1	97.6	92.7
31622.8	97.1	98.2	98.5	98.5	98.3	98.2	99.1	99.5	98.7	98.5	95.9	90.9
39810.7	95.8	96.6	96.9	96.9	96.4	96.4	97.3	97.8	97.5	96.7	94.1	89.0
50118.7	94.4	95.0	95.3	95.2	94.6	94.8	95.6	96.3	96.3	95.1	92.5	87.4
63095.7	93.0	93.4	93.8	93.6	93.2	93.2	94.2	94.9	95.3	93.8	91.0	86.2
79432.8	91.8	92.2	92.5	92.2	91.8	91.9	92.8	93.9	94.4	92.8	90.0	85.5

Setpoint	134
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.997
Ideal jet velocity (ft/s)	1087.760
Temperature ratio (T_j/T_{amb})	1.429
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





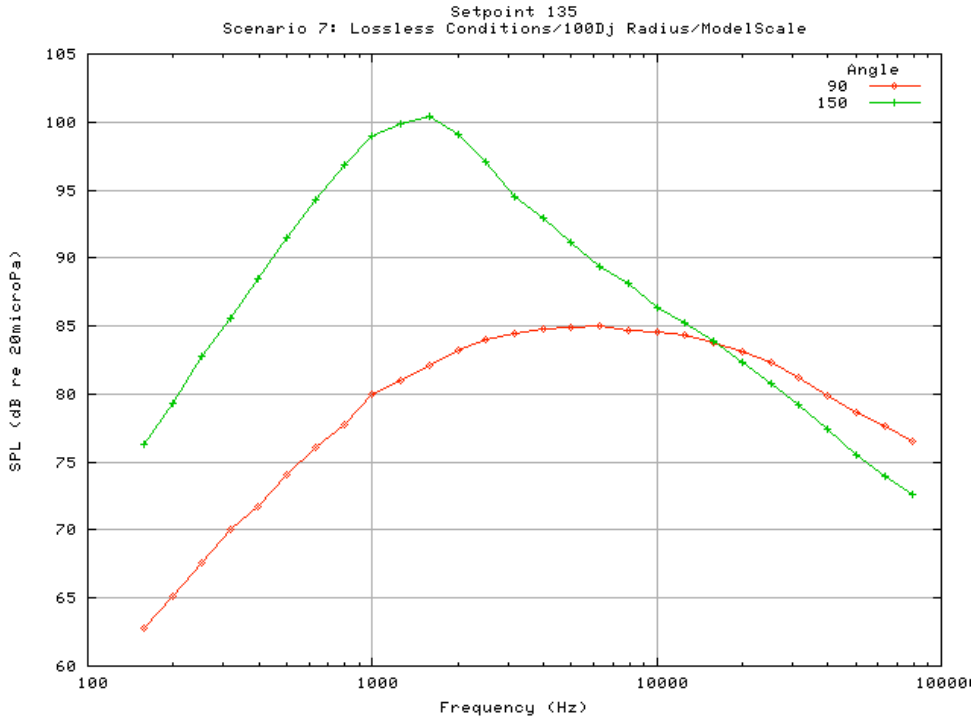
Setpoint 134 continued

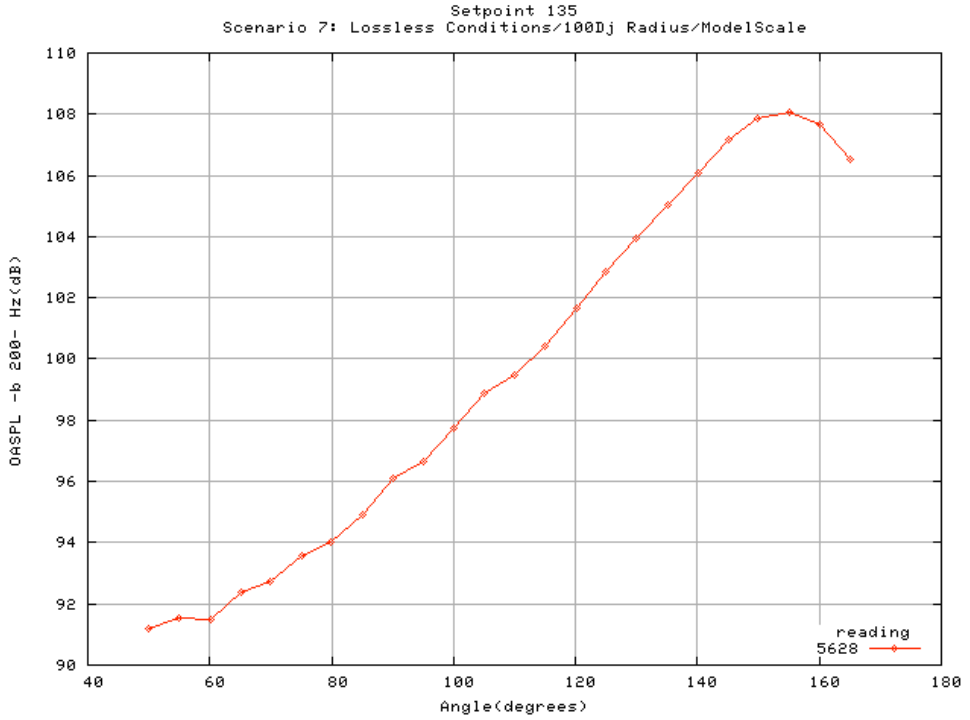
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.8	58.2	58.4	59.4	60.0	60.7	61.6	62.0	62.9	63.4	63.8	64.2
199.5	60.1	60.7	61.0	62.0	62.5	63.2	64.0	64.7	65.7	66.1	66.6	67.1
251.2	62.0	62.7	62.9	63.9	64.4	65.1	65.9	66.6	67.6	67.9	68.4	68.8
316.2	65.1	65.7	65.9	67.0	67.7	68.5	69.0	69.3	70.1	70.6	71.3	71.9
398.1	66.1	66.7	67.1	68.5	69.3	69.9	70.3	70.7	71.7	72.4	73.3	73.9
501.2	68.6	69.7	70.3	71.3	71.6	72.2	72.8	73.2	74.0	74.5	75.1	75.8
631.0	70.7	71.4	71.7	72.4	72.8	73.7	74.4	75.1	76.2	76.6	77.4	78.3
794.3	73.2	73.8	73.8	74.7	75.0	75.6	76.4	77.0	78.1	78.7	79.5	80.4
1000.0	75.7	76.0	75.7	76.8	77.3	77.7	78.2	78.9	80.0	80.3	81.3	82.0
1258.9	76.0	77.1	76.7	77.6	78.1	78.6	79.6	80.2	81.3	81.8	82.9	83.7
1584.9	77.7	78.0	77.7	78.6	79.1	80.0	80.6	81.3	82.4	83.1	84.0	85.1
1995.3	78.5	78.8	78.9	79.8	80.1	80.8	81.3	82.1	83.5	83.9	84.8	85.8
2511.9	79.3	79.6	79.5	80.3	80.7	81.5	82.4	83.0	84.2	84.6	85.7	87.1
3162.3	80.2	80.6	80.5	81.1	81.4	82.4	83.0	83.7	84.8	85.3	86.2	87.4
3981.1	80.3	80.5	80.6	81.4	81.7	82.5	83.1	83.8	85.2	85.5	86.6	87.7
5011.9	80.4	80.7	80.7	81.5	81.8	82.8	83.3	83.9	85.0	85.7	86.7	87.8
6309.6	80.4	80.9	80.9	81.6	81.9	82.9	83.3	84.1	85.4	85.7	86.9	88.0
7943.3	80.8	81.0	80.9	81.7	81.7	82.8	83.3	84.0	85.3	85.8	86.8	87.9
10000.0	80.6	80.8	80.9	81.6	81.4	82.7	83.1	83.9	85.1	85.6	86.5	87.7
12589.3	80.3	80.7	80.5	81.3	81.1	82.3	82.7	83.6	84.8	85.4	86.3	87.5
15848.9	80.0	80.2	80.2	80.8	80.7	81.9	82.2	83.3	84.5	85.1	85.9	87.1
19952.6	79.4	79.8	79.4	80.4	80.6	81.5	81.3	82.8	83.9	84.6	85.5	86.5
25118.9	78.5	79.0	78.9	79.7	80.2	80.8	80.6	82.1	83.2	83.9	84.8	85.6
31622.8	77.4	77.9	78.0	78.7	79.0	80.0	79.7	81.1	82.2	82.8	83.9	84.6
39810.7	76.2	76.5	76.6	77.5	78.4	79.0	78.5	79.9	80.9	81.4	82.8	83.3
50118.7	74.8	75.0	75.2	76.1	78.0	77.8	77.4	78.6	79.7	80.1	81.5	81.9
63095.7	73.5	73.7	74.1	74.9	77.0	76.6	76.5	77.5	78.6	79.0	80.2	80.8
79432.8	72.4	72.7	73.0	73.8	75.6	75.4	75.1	76.7	77.6	78.1	79.1	79.7

Setpoint 134 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	64.6	65.3	66.1	67.4	69.3	71.0	73.0	75.0	76.9	78.6	79.8	80.9
199.5	67.6	68.3	69.0	70.0	71.7	73.4	75.4	77.7	79.7	81.5	82.9	84.0
251.2	69.2	69.9	70.7	72.1	74.3	76.3	78.5	80.8	82.8	84.6	86.0	87.0
316.2	72.4	73.1	74.0	75.4	77.5	79.4	81.7	84.1	86.1	87.9	89.1	90.0
398.1	74.4	75.3	76.3	77.8	80.1	82.3	84.7	87.2	89.3	91.1	92.3	93.0
501.2	76.4	77.4	78.5	80.3	82.8	85.2	87.7	90.2	92.1	93.7	94.8	95.3
631.0	78.9	80.0	81.1	82.6	85.0	87.2	89.7	92.2	94.3	95.9	96.8	96.9
794.3	80.8	81.7	82.9	84.7	87.4	89.8	92.5	95.1	97.3	98.7	99.3	98.9
1000.0	82.6	83.7	84.8	86.8	89.4	91.9	94.8	97.3	99.3	100.4	100.6	99.5
1258.9	84.3	85.4	86.7	88.7	91.4	93.8	96.6	99.0	100.7	101.6	101.3	99.6
1584.9	85.7	87.0	88.3	90.2	92.3	94.6	97.1	99.5	101.0	101.5	100.9	99.3
1995.3	86.7	87.9	89.2	90.9	93.1	94.8	96.8	98.8	100.0	100.4	99.8	98.1
2511.9	87.5	88.7	90.0	91.8	93.6	95.3	96.7	97.8	98.2	97.9	97.4	95.6
3162.3	88.1	89.4	90.6	92.1	94.0	95.3	96.1	96.5	96.1	95.8	94.9	93.1
3981.1	88.4	89.5	90.9	92.4	93.8	94.8	95.4	95.3	94.3	93.2	91.9	89.5
5011.9	88.5	89.7	90.8	92.2	93.5	94.3	94.3	93.9	92.9	91.2	89.6	86.7
6309.6	88.6	89.7	91.0	92.2	93.2	93.6	93.4	92.6	91.1	89.5	87.7	84.4
7943.3	88.6	89.6	91.0	91.8	92.5	92.8	92.3	91.3	89.9	87.9	86.1	82.6
10000.0	88.4	89.2	90.4	91.4	92.1	92.0	91.3	90.0	88.3	86.4	84.4	80.8
12589.3	88.2	88.9	90.1	90.9	91.1	91.2	90.1	88.6	87.1	85.0	83.2	79.1
15848.9	87.7	88.3	89.6	90.3	90.1	90.1	88.8	87.3	85.8	83.7	81.8	77.5
19952.6	86.9	87.5	88.9	89.3	88.7	88.8	87.3	85.7	84.4	82.8	80.9	76.2
25118.9	85.9	86.2	87.9	88.0	87.3	87.5	85.8	83.8	83.0	81.4	79.4	74.6
31622.8	85.1	85.3	86.7	86.9	86.0	86.1	84.4	82.5	81.4	79.0	76.8	72.3
39810.7	83.5	83.9	85.2	85.2	84.3	84.3	82.5	80.5	79.7	77.3	74.6	70.6
50118.7	82.1	82.5	83.5	83.5	82.7	82.4	80.8	78.8	77.8	75.9	72.9	69.2
63095.7	80.9	81.3	82.0	82.0	81.4	80.6	79.2	77.5	76.2	74.4	71.2	67.5
79432.8	79.5	79.4	80.9	80.6	79.2	79.6	77.6	75.4	74.8	72.6	69.6	65.7

Setpoint	135
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.992
Ideal jet velocity (ft/s)	1081.580
Temperature ratio (T_j/T_{amb})	1.770
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





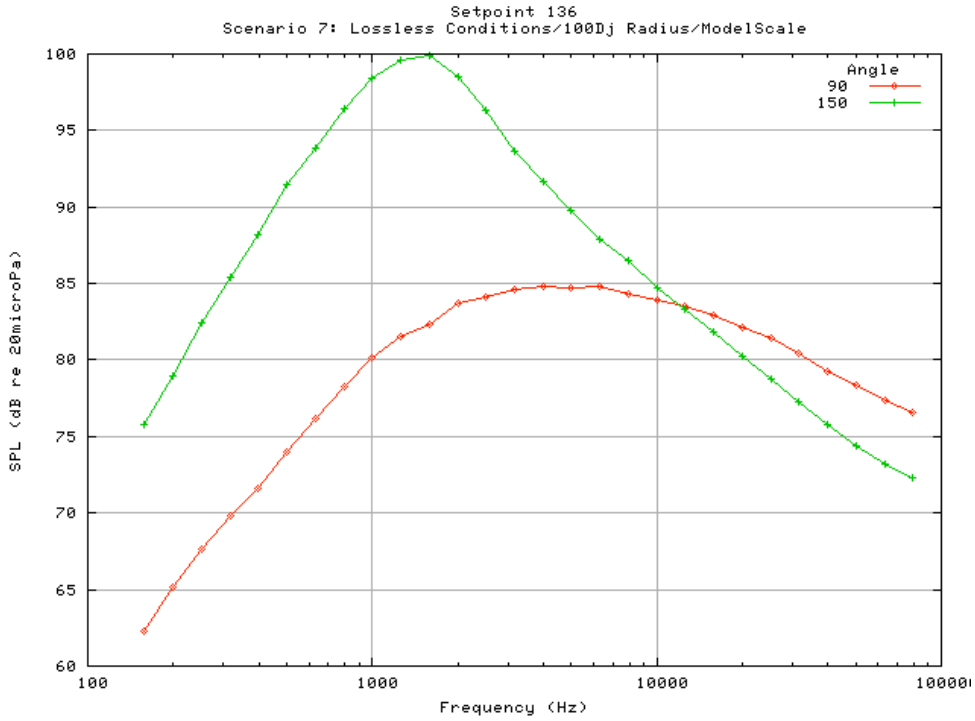
Setpoint 135 continued

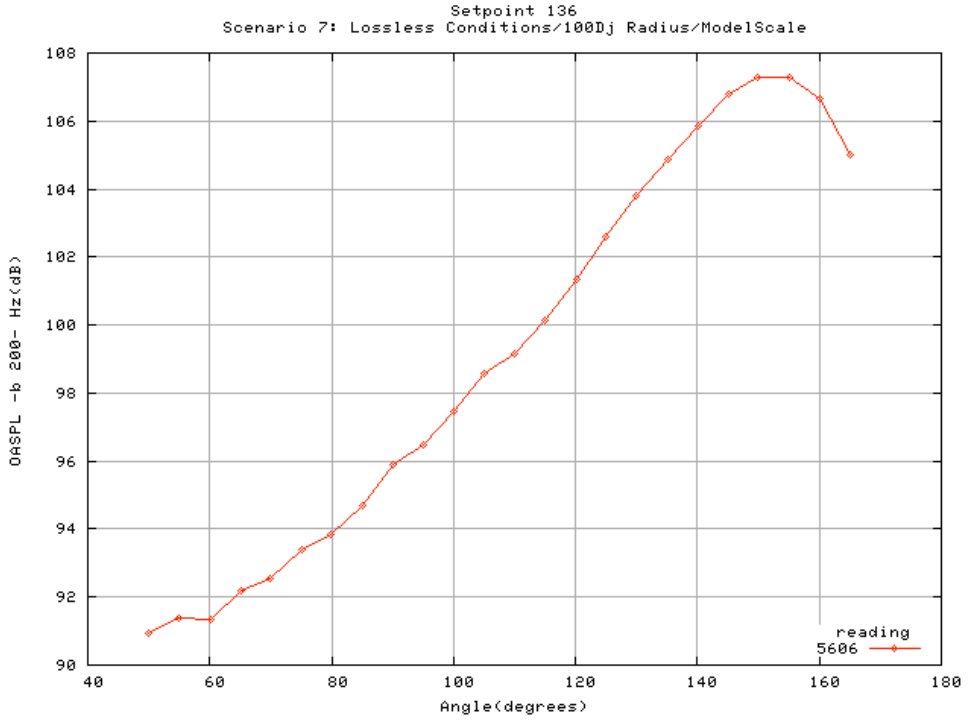
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.8	58.2	58.4	59.4	59.9	60.5	61.2	61.9	62.8	63.3	63.8	64.1
199.5	60.7	61.2	61.4	62.3	62.6	63.1	63.6	64.2	65.2	65.7	66.2	66.6
251.2	62.3	63.0	63.3	64.3	64.8	65.5	66.2	66.8	67.6	67.9	68.3	68.7
316.2	64.7	65.5	65.7	66.7	67.2	67.9	68.6	69.2	70.1	70.4	70.7	71.1
398.1	66.0	66.7	67.2	68.6	69.1	69.6	70.1	70.7	71.7	72.2	72.9	73.4
501.2	68.4	69.5	69.9	71.0	71.4	72.0	72.4	73.0	74.1	74.5	75.0	75.7
631.0	71.1	71.6	71.7	72.4	72.6	73.4	74.2	74.9	76.1	76.6	77.3	78.2
794.3	73.0	73.9	73.9	74.4	74.7	75.5	76.1	76.7	77.8	78.4	79.2	80.2
1000.0	75.5	75.6	75.6	76.6	77.0	77.5	78.0	78.7	80.0	80.3	81.2	82.0
1258.9	76.1	76.9	76.4	77.2	77.7	78.4	79.3	80.0	81.0	81.7	82.8	83.7
1584.9	77.8	77.8	77.7	78.5	78.9	79.9	80.5	81.1	82.2	82.9	83.8	84.9
1995.3	78.2	78.5	78.5	79.5	79.9	80.7	81.3	82.1	83.2	83.6	84.7	86.0
2511.9	79.0	79.2	79.1	80.2	80.6	81.2	82.1	82.6	84.0	84.4	85.6	86.9
3162.3	79.7	79.9	79.8	80.6	81.0	81.9	82.5	83.2	84.5	85.1	86.0	87.3
3981.1	80.0	80.1	80.0	81.0	81.3	82.1	82.7	83.5	84.8	85.5	86.6	87.6
5011.9	79.5	80.0	80.0	81.0	81.3	82.2	82.8	83.6	84.9	85.4	86.5	87.8
6309.6	79.7	80.2	80.2	81.1	81.4	82.3	82.8	83.7	85.0	85.4	86.6	87.9
7943.3	79.9	80.0	80.1	81.0	81.1	82.1	82.7	83.6	84.7	85.3	86.4	87.6
10000.0	79.6	79.9	79.9	80.7	80.7	81.9	82.5	83.3	84.5	84.9	86.2	87.3
12589.3	79.2	79.7	79.6	80.4	80.2	81.6	82.0	82.9	84.3	84.8	85.8	87.0
15848.9	78.8	79.2	79.2	79.9	79.7	81.1	81.4	82.5	83.7	84.5	85.3	86.7
19952.6	78.1	78.6	78.3	79.3	79.6	80.6	80.4	81.9	83.1	83.8	84.8	86.0
25118.9	77.4	77.9	77.7	78.6	79.2	79.9	79.7	81.2	82.3	83.0	83.9	85.0
31622.8	76.4	76.9	76.9	77.6	77.9	78.9	78.7	80.2	81.2	81.9	83.0	83.9
39810.7	75.2	75.5	75.6	76.3	77.3	78.0	77.6	78.9	79.9	80.4	81.9	82.5
50118.7	73.8	74.2	74.3	75.0	76.9	76.7	76.4	77.7	78.7	79.1	80.5	81.1
63095.7	72.5	72.9	73.2	73.9	76.0	75.6	75.6	76.6	77.6	77.9	79.2	79.9
79432.8	71.4	71.9	72.1	72.8	74.6	74.4	74.2	75.7	76.5	77.0	78.2	78.9

Setpoint 135 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	64.4	65.0	65.6	66.6	68.4	70.2	72.3	74.5	76.3	78.0	79.2	80.7
199.5	66.9	67.5	68.3	69.7	71.7	73.5	75.5	77.5	79.3	80.9	82.1	83.2
251.2	69.1	69.9	70.9	72.6	74.9	76.9	78.9	81.0	82.7	84.3	85.4	86.5
316.2	71.6	72.7	73.9	75.5	77.7	79.6	81.7	83.9	85.6	87.1	88.1	88.8
398.1	73.9	75.0	76.1	77.8	80.1	82.2	84.4	86.7	88.5	90.0	91.0	91.5
501.2	76.3	77.3	78.6	80.6	83.1	85.3	87.7	89.9	91.5	92.8	93.7	93.9
631.0	78.8	80.0	81.3	83.2	85.6	87.9	90.2	92.5	94.3	95.6	96.2	95.9
794.3	80.6	81.8	83.3	85.4	87.9	90.2	92.7	95.0	96.9	97.9	98.2	97.4
1000.0	82.5	83.7	85.2	87.6	90.2	92.6	95.0	97.2	98.9	99.7	99.6	98.2
1258.9	84.4	85.5	86.8	88.9	91.7	94.1	96.6	98.6	99.9	100.4	99.8	97.7
1584.9	85.6	86.9	88.2	90.3	92.6	95.0	97.3	99.4	100.4	100.4	99.6	97.7
1995.3	86.8	88.0	89.3	91.1	93.2	94.9	96.7	98.3	99.0	99.0	98.2	96.4
2511.9	87.5	88.6	90.0	91.9	93.7	95.1	96.2	97.0	97.1	96.6	95.9	93.8
3162.3	88.1	89.4	90.6	92.0	93.7	94.8	95.5	95.5	94.5	93.9	92.7	90.5
3981.1	88.2	89.5	90.9	92.2	93.5	94.1	94.3	94.0	92.9	91.7	90.1	87.4
5011.9	88.5	89.5	90.7	92.0	93.1	93.5	93.2	92.3	91.1	89.3	87.7	84.5
6309.6	88.5	89.5	90.9	92.1	92.6	92.6	92.1	91.1	89.4	87.7	85.8	82.4
7943.3	88.3	89.3	90.6	91.4	91.8	91.7	90.9	89.6	88.1	86.0	84.2	80.5
10000.0	88.1	89.0	90.0	90.9	91.1	90.8	89.7	88.3	86.4	84.5	82.4	78.6
12589.3	87.7	88.5	89.6	90.2	90.1	89.8	88.5	86.8	85.2	82.9	81.1	76.8
15848.9	87.2	87.8	89.0	89.5	88.9	88.7	87.1	85.5	83.9	81.7	79.7	75.3
19952.6	86.3	86.9	88.1	88.3	87.4	87.3	85.5	83.8	82.4	80.5	78.6	73.9
25118.9	85.2	85.5	87.1	86.9	85.8	85.9	83.9	81.9	80.8	79.1	77.0	72.3
31622.8	84.3	84.5	85.8	85.8	84.5	84.5	82.5	80.5	79.2	76.6	74.2	69.8
39810.7	82.8	83.0	84.1	84.1	82.7	82.5	80.6	78.5	77.5	74.9	72.1	68.2
50118.7	81.4	81.6	82.4	82.3	81.2	80.7	78.8	76.7	75.6	73.5	70.4	66.9
63095.7	80.0	80.3	80.9	80.8	79.9	79.0	77.3	75.5	74.0	72.2	69.0	65.3
79432.8	78.7	78.4	79.7	79.4	77.7	78.0	75.8	73.5	72.7	70.6	67.4	63.7

Setpoint	136
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.987
Ideal jet velocity (ft/s)	1077.220
Temperature ratio (T_j/T_{amb})	2.272
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





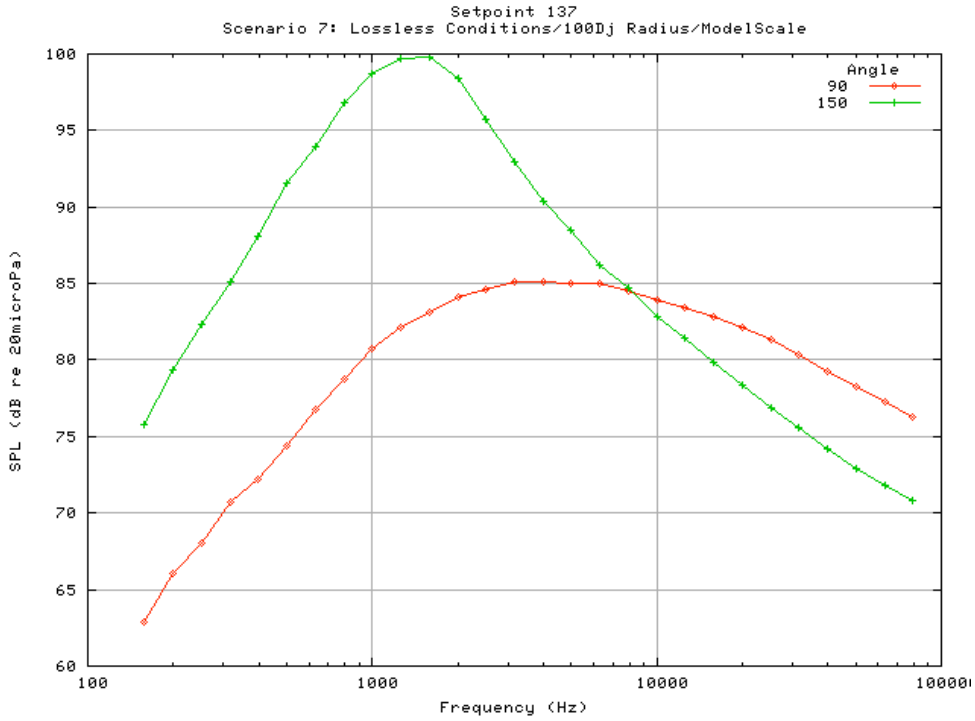
Setpoint 136 continued

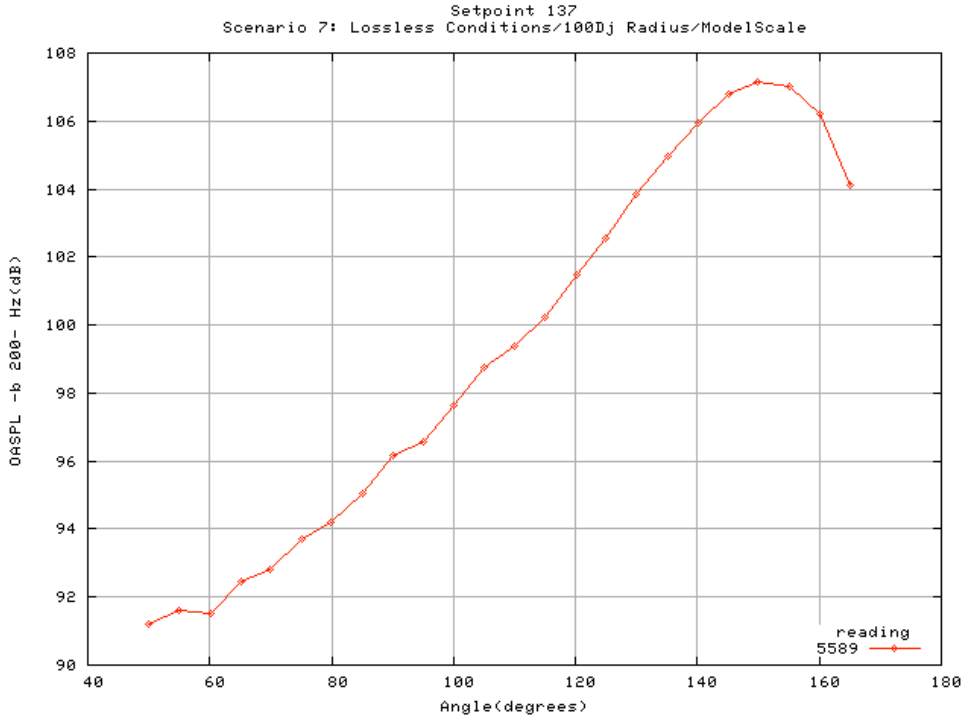
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	59.0	59.4	59.2	60.0	60.2	60.6	61.1	61.5	62.3	62.6	63.1	63.6
199.5	60.4	61.1	61.3	62.3	62.8	63.3	63.9	64.4	65.2	65.4	65.8	66.1
251.2	62.7	63.5	63.7	64.7	65.2	65.9	66.5	67.0	67.7	67.8	68.3	68.8
316.2	65.4	66.2	66.2	67.2	67.8	68.6	69.1	69.4	69.9	70.1	70.7	71.2
398.1	67.0	67.5	67.8	69.1	69.8	70.2	70.4	70.7	71.6	72.1	72.7	73.4
501.2	69.3	70.4	71.0	71.9	72.1	72.5	73.0	73.3	74.0	74.3	75.0	75.8
631.0	71.5	72.2	72.4	73.1	73.2	73.8	74.5	75.1	76.1	76.5	77.1	78.0
794.3	73.2	74.4	74.3	75.0	75.4	75.9	76.5	77.2	78.2	78.6	79.4	80.3
1000.0	75.8	76.2	76.2	77.0	77.3	78.0	78.3	78.9	80.2	80.6	81.4	82.3
1258.9	76.7	77.7	77.4	78.1	78.5	79.0	79.8	80.4	81.5	82.0	83.0	83.9
1584.9	78.2	78.5	78.3	79.0	79.6	80.5	81.0	81.4	82.4	83.0	83.9	85.0
1995.3	78.8	79.2	79.2	79.9	80.3	81.1	81.6	82.5	83.7	84.1	85.2	86.3
2511.9	79.4	79.7	79.5	80.4	80.9	81.6	82.2	82.8	84.2	84.6	85.7	87.2
3162.3	79.7	80.1	80.0	80.9	81.2	82.1	82.9	83.5	84.7	85.2	86.2	87.6
3981.1	80.1	80.1	80.1	80.8	81.2	82.2	82.9	83.5	84.8	85.4	86.6	87.8
5011.9	79.4	80.0	80.0	80.8	81.1	82.1	82.7	83.4	84.7	85.3	86.3	87.5
6309.6	79.1	79.8	79.8	80.8	81.0	81.9	82.6	83.3	84.8	85.2	86.3	87.5
7943.3	79.2	79.6	79.6	80.5	80.5	81.6	82.2	83.1	84.3	84.8	85.9	87.2
10000.0	78.8	79.2	79.3	80.0	80.0	81.2	81.8	82.7	83.9	84.5	85.5	86.7
12589.3	78.3	78.8	78.7	79.6	79.5	80.8	81.2	82.1	83.5	84.1	85.0	86.2
15848.9	77.7	78.2	78.3	79.0	78.9	80.1	80.5	81.6	83.0	83.6	84.4	85.7
19952.6	77.2	77.6	77.4	78.4	78.7	79.6	79.5	81.0	82.2	82.9	83.7	84.9
25118.9	76.4	77.0	76.9	77.7	78.3	79.0	78.8	80.3	81.4	82.1	82.9	83.9
31622.8	75.6	76.1	76.1	76.9	77.2	78.2	77.9	79.4	80.5	81.2	82.0	82.9
39810.7	74.6	74.9	75.0	75.8	76.9	77.5	77.0	78.3	79.3	79.9	81.1	81.6
50118.7	73.3	73.7	73.9	74.7	76.6	76.4	76.1	77.3	78.3	78.8	80.0	80.5
63095.7	72.2	72.6	73.0	73.8	75.9	75.5	75.4	76.4	77.4	77.8	78.9	79.5
79432.8	71.1	71.6	72.0	72.8	74.6	74.5	74.2	75.7	76.5	77.2	78.0	78.6

Setpoint 136 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	64.0	64.9	65.8	67.2	69.0	70.6	72.4	74.2	75.8	77.2	78.3	79.1
199.5	66.4	67.2	68.2	69.7	71.7	73.5	75.4	77.4	79.0	80.5	81.5	82.4
251.2	69.3	70.4	71.5	73.2	75.3	77.1	79.0	80.9	82.4	83.8	84.8	85.5
316.2	71.6	72.5	73.7	75.4	77.8	79.8	81.8	83.9	85.4	86.8	87.7	88.2
398.1	73.9	74.9	76.1	77.8	80.3	82.3	84.4	86.5	88.2	89.6	90.4	90.6
501.2	76.4	77.3	78.7	80.9	83.7	85.8	87.9	90.0	91.5	92.7	93.3	93.2
631.0	78.6	79.9	81.4	83.4	85.9	88.2	90.3	92.3	93.8	94.8	95.1	94.5
794.3	80.8	82.1	83.8	86.0	88.6	90.8	93.0	95.0	96.5	97.2	97.2	95.9
1000.0	82.8	84.2	85.7	88.1	90.7	93.0	95.2	97.1	98.4	98.8	98.3	96.3
1258.9	84.7	85.9	87.7	90.0	92.8	95.0	97.2	98.8	99.6	99.7	98.6	96.1
1584.9	85.8	87.2	88.7	90.9	93.2	95.4	97.5	99.2	99.9	99.6	98.5	96.2
1995.3	87.1	88.3	89.7	91.6	93.8	95.4	96.9	98.2	98.5	98.2	97.3	94.9
2511.9	87.8	89.1	90.4	92.1	93.9	95.1	96.0	96.5	96.4	95.8	94.9	92.2
3162.3	88.3	89.5	90.7	92.2	93.7	94.5	94.9	94.6	93.6	93.1	91.7	88.7
3981.1	88.4	89.5	90.8	92.2	93.3	93.7	93.5	92.8	91.7	90.4	88.8	85.2
5011.9	88.2	89.4	90.5	91.7	92.6	92.7	92.1	91.2	89.8	88.0	86.2	82.3
6309.6	88.2	89.2	90.4	91.5	92.0	91.7	90.8	89.6	87.9	86.2	84.3	80.2
7943.3	87.8	88.9	90.1	90.7	91.0	90.6	89.4	88.0	86.5	84.5	82.7	78.1
10000.0	87.5	88.3	89.3	90.0	89.9	89.4	88.0	86.6	84.7	82.8	80.8	76.2
12589.3	87.0	87.6	88.6	89.0	88.7	88.1	86.6	84.9	83.3	81.1	79.4	74.5
15848.9	86.2	86.8	87.8	88.0	87.2	86.9	85.0	83.5	81.8	79.6	77.9	72.8
19952.6	85.3	85.7	86.8	86.7	85.6	85.4	83.2	81.7	80.3	78.4	76.8	71.6
25118.9	84.0	84.2	85.7	85.1	84.0	83.9	81.6	79.7	78.8	77.0	75.3	70.1
31622.8	83.3	83.3	84.4	84.0	82.6	82.5	80.3	78.4	77.3	74.8	72.9	67.9
39810.7	81.8	81.9	82.9	82.4	81.0	80.8	78.7	76.7	75.8	73.4	71.1	66.8
50118.7	80.6	80.7	81.3	80.8	79.6	79.1	77.2	75.3	74.4	72.6	70.0	66.1
63095.7	79.5	79.7	80.1	79.6	78.6	77.8	76.1	74.5	73.2	71.6	69.1	65.1
79432.8	78.4	78.0	79.2	78.5	76.7	77.1	74.9	72.9	72.3	70.3	67.9	63.8

Setpoint	137
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.992
Ideal jet velocity (ft/s)	1082.520
Temperature ratio (T_j/T_{amb})	2.695
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





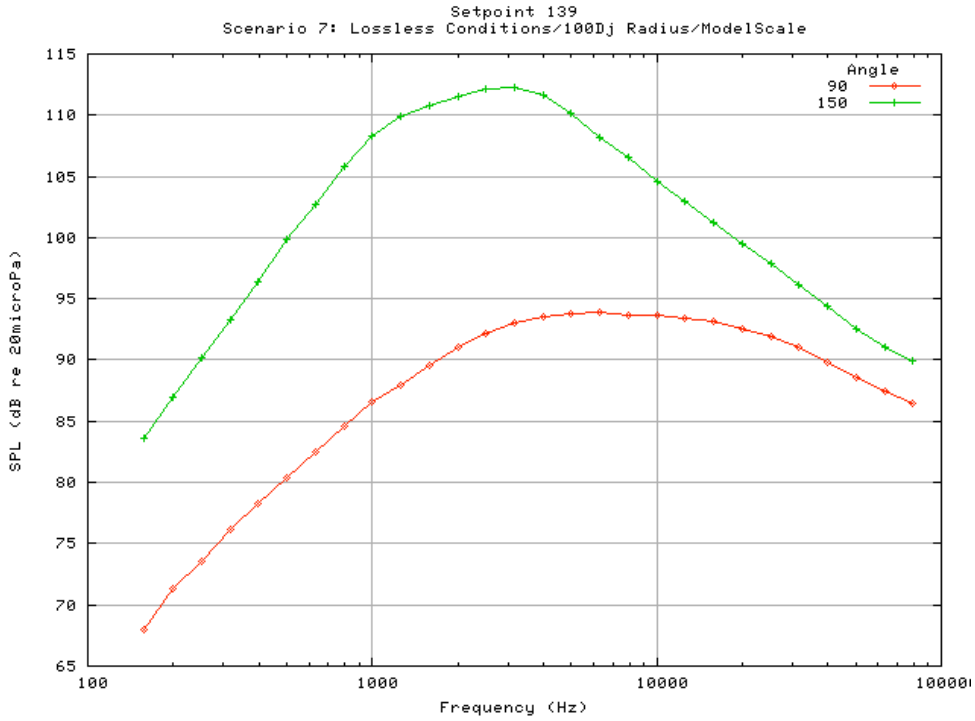
Setpoint 137 continued

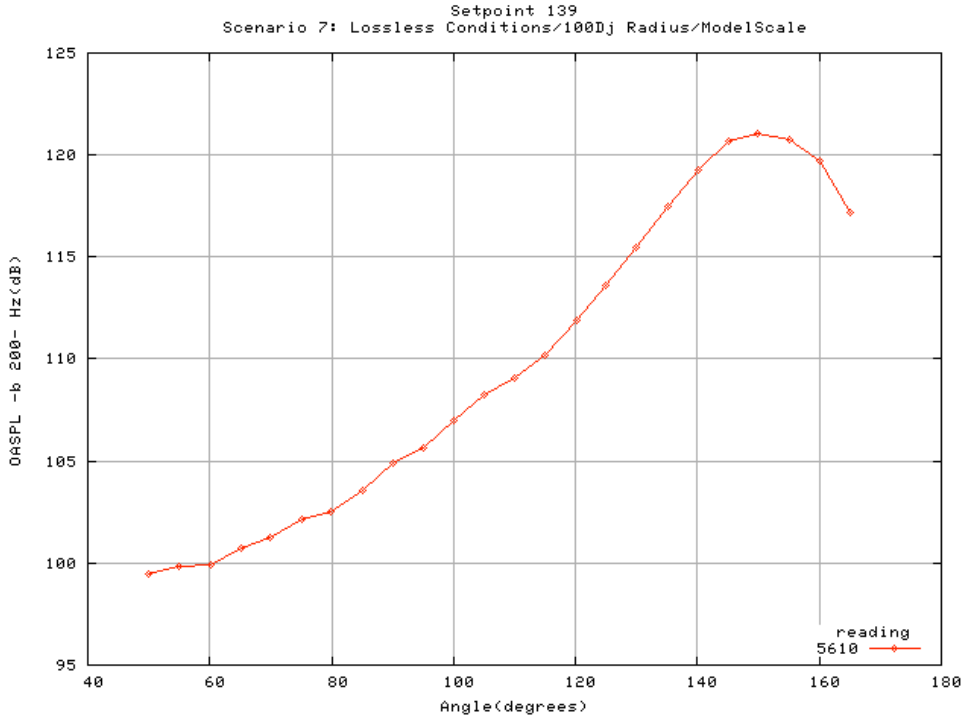
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	59.9	60.3	60.2	61.0	61.2	61.5	62.0	62.2	62.8	63.1	63.5	63.8
199.5	62.3	62.8	62.9	63.7	64.1	64.6	65.1	65.5	66.1	66.2	66.3	66.5
251.2	63.8	64.4	64.6	65.4	65.8	66.4	66.9	67.4	68.0	68.1	68.4	68.9
316.2	66.3	67.1	67.2	68.1	68.6	69.4	70.0	70.3	70.8	70.8	71.1	71.6
398.1	67.9	68.6	68.9	70.2	70.8	71.4	71.6	71.7	72.2	72.5	73.0	73.6
501.2	69.8	71.0	71.6	72.6	72.9	73.4	73.7	73.8	74.4	74.4	74.9	75.6
631.0	72.3	73.1	73.4	74.2	74.3	74.7	75.1	75.7	76.7	77.0	77.6	78.5
794.3	74.2	75.4	75.2	75.8	76.1	76.7	77.1	77.7	78.8	79.1	80.0	80.8
1000.0	76.7	76.9	77.0	77.8	78.0	78.6	79.0	79.7	80.8	81.1	81.9	82.7
1258.9	77.4	78.5	78.2	78.7	79.0	79.5	80.4	81.0	82.1	82.7	83.6	84.6
1584.9	79.0	79.3	79.0	79.7	80.3	81.2	81.8	82.2	83.1	83.7	84.6	85.7
1995.3	79.8	80.1	79.8	80.6	81.1	81.9	82.4	83.0	84.1	84.4	85.5	86.6
2511.9	80.1	80.4	80.0	81.0	81.5	82.3	82.9	83.4	84.6	85.0	86.2	87.5
3162.3	80.3	80.6	80.3	81.3	81.8	82.7	83.3	84.0	85.1	85.6	86.5	87.9
3981.1	80.5	80.4	80.4	81.2	81.7	82.6	83.3	84.1	85.1	85.7	86.8	87.9
5011.9	79.7	80.1	80.2	81.1	81.5	82.5	83.1	83.9	85.0	85.5	86.6	87.8
6309.6	79.5	79.9	80.0	80.9	81.3	82.4	83.0	83.7	85.0	85.3	86.5	87.8
7943.3	79.3	79.5	79.7	80.6	80.7	81.9	82.4	83.2	84.5	85.0	86.1	87.2
10000.0	78.7	79.0	79.2	80.1	80.0	81.3	82.0	82.8	83.9	84.4	85.5	86.7
12589.3	78.0	78.6	78.6	79.5	79.3	80.7	81.2	82.3	83.5	83.9	85.0	86.2
15848.9	77.4	78.0	78.0	78.9	78.6	80.1	80.5	81.7	82.8	83.3	84.4	85.6
19952.6	76.7	77.3	77.0	78.2	78.4	79.4	79.5	81.2	82.2	82.6	83.6	84.8
25118.9	76.0	76.5	76.3	77.5	78.0	78.8	78.8	80.3	81.3	81.8	82.7	83.8
31622.8	75.1	75.6	75.5	76.6	76.9	78.0	77.9	79.4	80.4	80.8	81.8	82.8
39810.7	74.0	74.3	74.3	75.5	76.6	77.2	77.0	78.3	79.3	79.5	80.9	81.5
50118.7	72.6	73.0	73.1	74.3	76.3	76.0	76.0	77.2	78.3	78.4	79.8	80.3
63095.7	71.4	71.8	72.1	73.2	75.5	75.1	75.2	76.2	77.2	77.4	78.8	79.3
79432.8	70.3	70.8	70.9	72.2	74.2	73.9	73.9	75.4	76.3	76.6	77.8	78.4

Setpoint 137 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	64.2	64.9	65.8	67.1	69.0	70.7	72.5	74.3	75.8	77.2	78.2	78.9
199.5	66.8	67.6	68.7	70.3	72.4	74.2	76.0	77.9	79.3	80.6	81.6	82.2
251.2	69.4	70.4	71.6	73.3	75.5	77.4	79.2	81.0	82.4	83.6	84.4	84.9
316.2	72.1	73.0	74.2	75.9	78.1	79.9	81.8	83.7	85.1	86.3	87.1	87.4
398.1	74.2	75.5	76.9	78.7	81.0	82.9	84.8	86.7	88.1	89.3	90.0	90.0
501.2	76.2	77.4	79.0	81.4	84.1	86.2	88.3	90.3	91.5	92.5	92.9	92.5
631.0	79.1	80.4	82.0	84.1	86.6	88.7	90.7	92.6	93.9	94.8	94.9	93.9
794.3	81.4	82.8	84.6	87.0	89.6	91.8	93.7	95.6	96.9	97.4	97.1	95.3
1000.0	83.3	84.7	86.6	89.2	91.9	94.2	96.1	97.7	98.7	98.8	97.9	95.3
1258.9	85.2	86.5	88.4	90.8	93.6	95.8	97.7	99.2	99.7	99.5	98.1	95.1
1584.9	86.5	87.7	89.3	91.5	93.9	96.2	98.0	99.4	99.8	99.2	98.0	95.2
1995.3	87.4	88.5	90.1	92.1	94.3	96.0	97.4	98.4	98.4	98.1	97.1	93.9
2511.9	88.1	89.2	90.6	92.3	93.9	95.1	95.8	96.1	95.8	95.2	94.3	90.7
3162.3	88.7	89.9	91.0	92.2	93.7	94.3	94.5	93.8	92.9	92.4	91.0	87.1
3981.1	88.6	89.7	91.0	92.1	93.0	93.2	92.7	91.6	90.4	89.3	87.6	83.2
5011.9	88.5	89.5	90.6	91.5	92.2	92.0	91.0	89.9	88.5	86.7	84.9	80.0
6309.6	88.4	89.2	90.4	91.2	91.4	90.6	89.5	88.0	86.2	84.6	82.6	77.5
7943.3	88.0	88.9	90.0	90.1	90.0	89.4	88.1	86.3	84.7	82.8	80.8	75.1
10000.0	87.5	88.1	89.1	89.3	88.9	88.1	86.6	84.8	82.8	81.0	78.9	73.2
12589.3	86.9	87.3	88.2	88.2	87.5	86.8	85.0	83.1	81.4	79.3	77.4	71.4
15848.9	86.1	86.4	87.3	87.1	85.9	85.4	83.5	81.6	79.9	77.8	76.1	69.8
19952.6	85.0	85.3	86.3	85.7	84.3	83.8	81.8	79.8	78.4	76.8	75.1	68.6
25118.9	84.0	83.8	85.1	84.0	82.6	82.3	80.2	77.8	76.9	75.4	73.6	67.0
31622.8	83.1	82.9	83.7	83.0	81.4	81.0	78.9	76.6	75.5	73.3	71.4	65.2
39810.7	81.7	81.6	82.1	81.3	79.8	79.5	77.4	75.0	74.2	72.1	70.0	64.3
50118.7	80.4	80.3	80.6	79.8	78.6	78.0	76.0	73.8	72.9	71.3	69.0	63.7
63095.7	79.4	79.4	79.4	78.6	77.6	76.7	74.9	73.0	71.8	70.3	68.0	62.7
79432.8	78.2	77.8	78.6	77.5	75.8	76.0	73.8	71.4	70.8	68.9	66.7	61.2

Setpoint	139
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.396
Ideal jet velocity (ft/s)	1525.180
Temperature ratio (T_j/T_{amb})	2.268
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





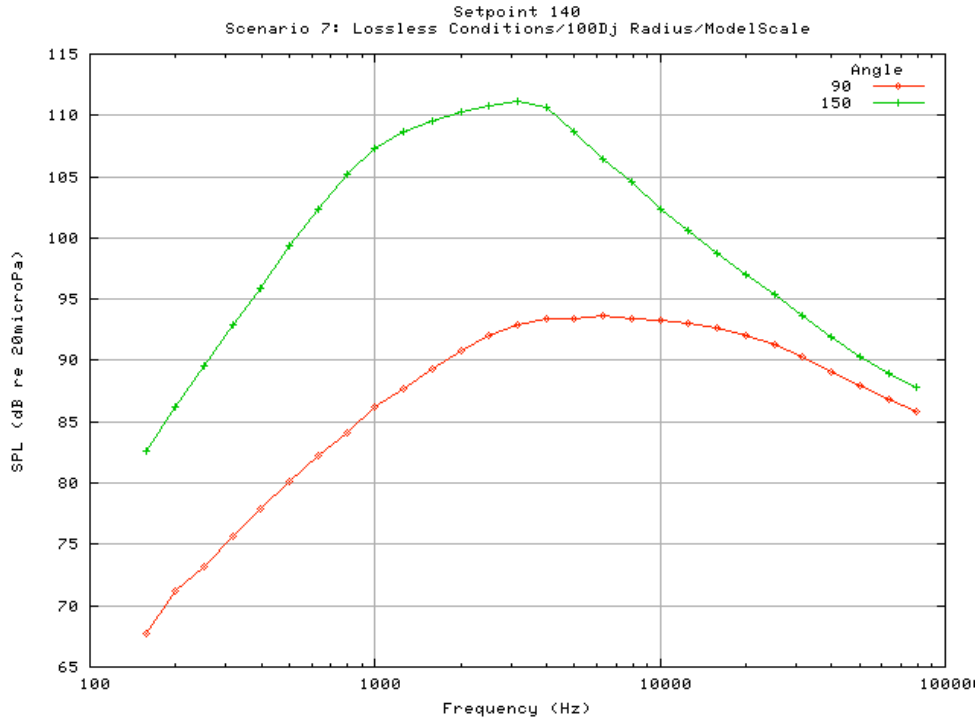
Setpoint 139 continued

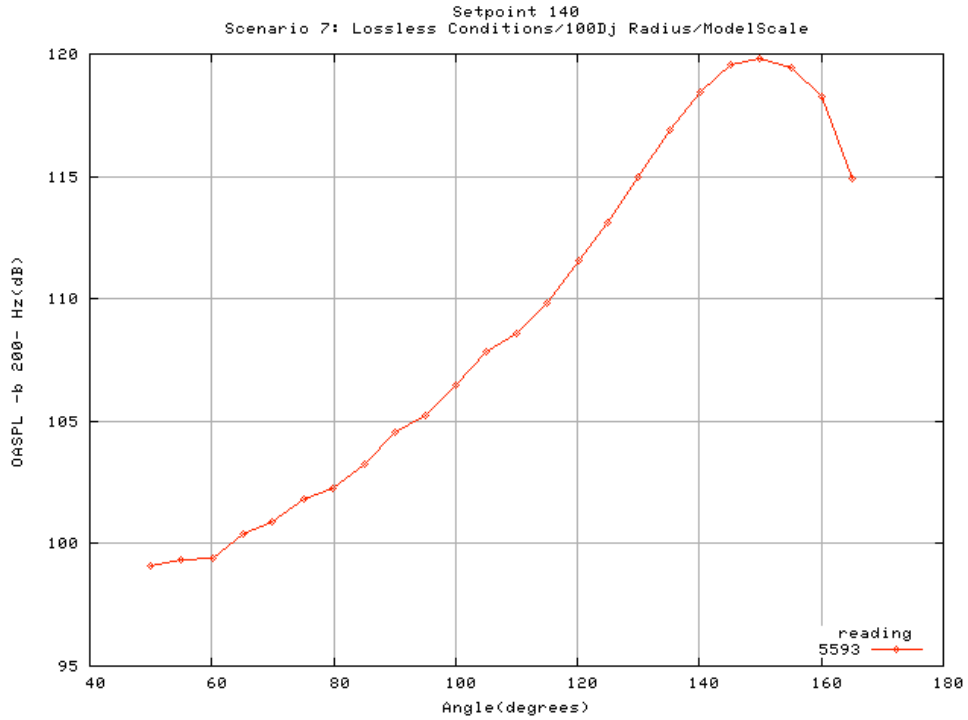
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	63.6	64.1	64.1	64.9	65.3	65.8	66.5	67.0	68.0	68.6	69.1	69.6
199.5	65.8	66.6	66.9	67.9	68.4	69.1	69.8	70.3	71.3	71.8	72.2	72.6
251.2	68.2	69.0	69.4	70.4	71.0	71.7	72.4	72.9	73.6	73.7	74.0	74.5
316.2	70.8	71.7	72.0	73.1	73.6	74.3	74.9	75.3	76.1	76.5	76.9	77.3
398.1	72.4	73.3	74.0	75.3	75.8	76.2	76.6	77.2	78.3	78.7	79.3	79.8
501.2	75.0	76.2	76.8	77.7	77.9	78.4	78.9	79.4	80.3	80.8	81.5	82.1
631.0	77.8	78.3	78.4	79.1	79.6	80.3	80.8	81.5	82.5	82.8	83.6	84.4
794.3	79.8	80.6	80.4	81.0	81.5	82.3	82.9	83.5	84.6	85.0	85.9	86.6
1000.0	82.7	82.4	82.0	83.4	83.7	84.2	84.4	85.5	86.6	87.1	88.0	88.7
1258.9	83.3	83.9	83.6	84.5	84.7	85.4	86.3	86.9	87.9	88.6	89.8	90.7
1584.9	85.2	85.1	85.2	86.1	86.7	87.5	87.8	88.4	89.5	90.3	91.4	92.5
1995.3	86.6	86.8	86.5	87.4	87.7	88.8	89.1	89.9	91.0	91.4	92.6	93.8
2511.9	87.7	87.8	87.8	88.5	89.0	89.4	90.0	90.6	92.1	92.6	93.8	95.5
3162.3	88.1	88.4	88.5	89.2	89.6	90.7	91.4	92.0	93.1	93.7	94.8	96.2
3981.1	88.8	89.0	89.1	89.9	90.2	90.9	91.5	92.2	93.5	94.3	95.6	96.9
5011.9	88.4	88.6	88.6	89.5	89.7	90.7	91.4	92.2	93.8	94.3	95.5	96.9
6309.6	88.2	88.6	88.6	89.6	89.9	90.9	91.4	92.3	93.9	94.4	96.0	97.5
7943.3	88.4	88.6	88.7	89.6	89.8	90.9	91.3	92.4	93.7	94.5	95.8	97.2
10000.0	88.0	88.3	88.5	89.2	89.4	90.7	91.3	92.3	93.7	94.4	95.7	97.2
12589.3	87.6	88.2	88.2	89.1	89.0	90.4	90.8	92.0	93.4	94.3	95.6	97.1
15848.9	87.0	87.7	87.8	88.6	88.5	89.9	90.3	91.7	93.2	94.1	95.3	96.8
19952.6	86.4	87.1	87.0	88.0	88.5	89.5	89.5	91.2	92.6	93.6	94.9	96.3
25118.9	85.5	86.3	86.4	87.3	88.1	88.9	88.9	90.5	91.9	93.0	94.2	95.4
31622.8	84.4	85.2	85.5	86.3	86.9	88.1	88.0	89.6	91.0	92.0	93.3	94.5
39810.7	83.2	83.9	84.1	85.1	86.4	87.1	86.9	88.4	89.8	90.7	92.3	93.2
50118.7	81.8	82.5	82.8	83.8	85.9	85.9	85.8	87.2	88.6	89.3	91.0	91.8
63095.7	80.5	81.2	81.8	82.7	85.0	84.8	84.9	86.1	87.5	88.2	89.8	90.5
79432.8	79.4	80.2	80.7	81.6	83.7	83.7	83.6	85.2	86.4	87.4	88.7	89.5

Setpoint 139 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	70.1	70.8	71.7	73.1	75.2	77.2	79.4	81.6	83.6	85.4	86.8	87.9
199.5	72.9	73.7	74.5	76.1	78.3	80.4	82.7	85.0	87.0	88.7	90.1	91.1
251.2	74.9	75.8	76.8	78.6	81.1	83.5	85.8	88.2	90.2	92.0	93.3	94.2
316.2	77.6	78.4	79.6	81.6	84.2	86.6	89.0	91.3	93.3	94.9	96.1	96.8
398.1	80.2	81.1	82.3	84.3	87.2	89.6	92.0	94.5	96.4	98.0	99.0	99.3
501.2	82.6	83.7	85.3	87.8	90.8	93.4	95.8	98.2	99.9	101.3	102.0	102.0
631.0	85.0	86.3	87.9	90.2	93.1	95.8	98.4	100.8	102.7	103.9	104.3	103.5
794.3	87.0	88.2	90.0	93.0	96.4	99.3	101.8	104.2	105.8	106.6	106.5	104.9
1000.0	89.3	90.8	92.9	96.2	99.6	102.5	105.1	107.1	108.3	108.5	107.5	105.1
1258.9	91.6	92.9	95.2	98.4	102.2	105.1	107.7	109.3	109.9	109.4	107.9	105.2
1584.9	93.3	94.9	97.0	100.5	104.1	107.2	109.5	110.9	110.8	109.7	108.3	106.0
1995.3	94.9	96.3	98.4	101.6	105.5	108.4	110.7	111.9	111.5	110.6	109.4	106.8
2511.9	96.0	97.4	99.5	102.4	105.8	108.9	111.0	112.1	112.1	111.3	110.1	107.3
3162.3	97.0	98.7	100.5	102.8	105.9	108.7	110.8	112.0	112.3	112.2	110.9	108.1
3981.1	97.7	99.1	100.9	103.0	105.3	107.3	109.2	110.9	111.6	111.5	110.4	107.4
5011.9	97.9	99.3	101.1	102.9	104.7	106.0	107.3	109.2	110.2	109.8	108.8	105.7
6309.6	98.3	99.5	101.2	103.1	104.3	105.0	105.9	107.4	108.2	108.1	107.1	103.9
7943.3	98.2	99.6	101.3	102.6	103.4	103.9	104.5	105.7	106.6	106.2	105.3	101.7
10000.0	98.2	99.4	100.9	102.2	102.6	102.9	103.0	104.1	104.6	104.3	103.3	99.7
12589.3	98.1	99.2	100.6	101.6	101.5	101.8	101.8	102.4	103.0	102.4	101.6	97.6
15848.9	97.6	98.6	100.1	100.8	100.4	100.7	100.4	100.9	101.2	100.7	99.9	95.6
19952.6	96.9	97.8	99.2	99.7	98.9	99.3	98.7	99.1	99.5	99.4	98.5	94.0
25118.9	95.9	96.4	98.2	98.2	97.3	97.8	97.1	97.0	97.8	97.8	96.8	92.3
31622.8	95.1	95.5	96.8	97.1	96.0	96.5	95.7	95.5	96.1	95.3	94.2	90.1
39810.7	93.6	94.1	95.2	95.3	94.3	94.6	93.8	93.6	94.4	93.7	92.1	88.5
50118.7	92.2	92.6	93.5	93.6	92.7	92.7	92.1	91.9	92.6	92.4	90.5	87.5
63095.7	90.9	91.3	92.0	92.1	91.4	90.9	90.6	90.7	91.1	91.1	89.1	86.2
79432.8	89.5	89.3	90.8	90.6	89.2	89.9	89.0	88.8	89.9	89.8	87.9	84.8

Setpoint	140
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.385
Ideal jet velocity (ft/s)	1513.490
Temperature ratio (T_j/T_{amb})	2.703
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





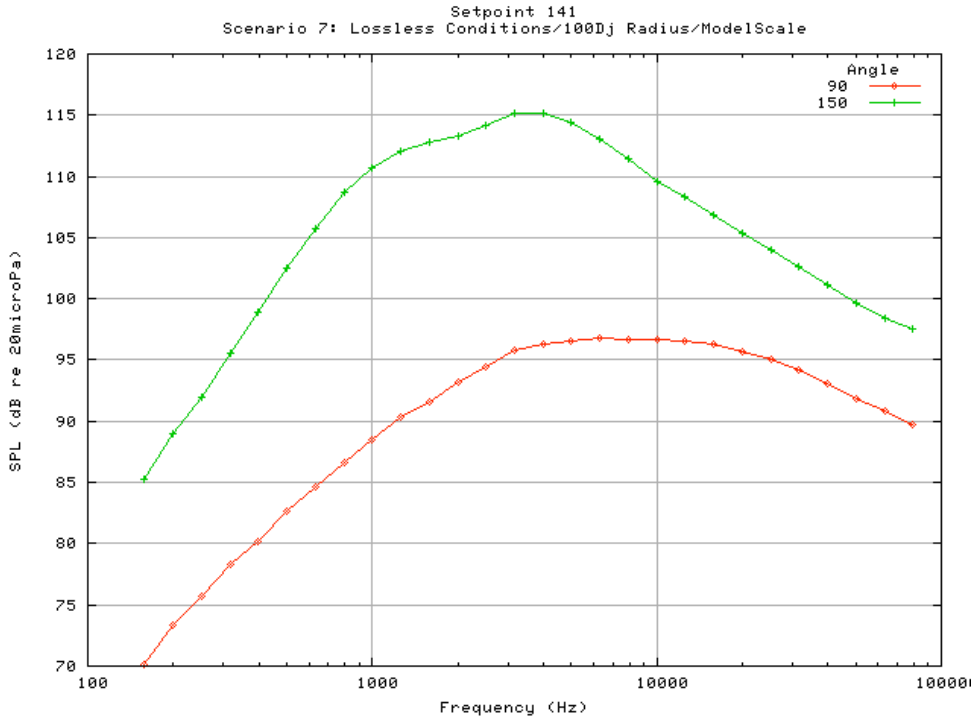
Setpoint 140 continued

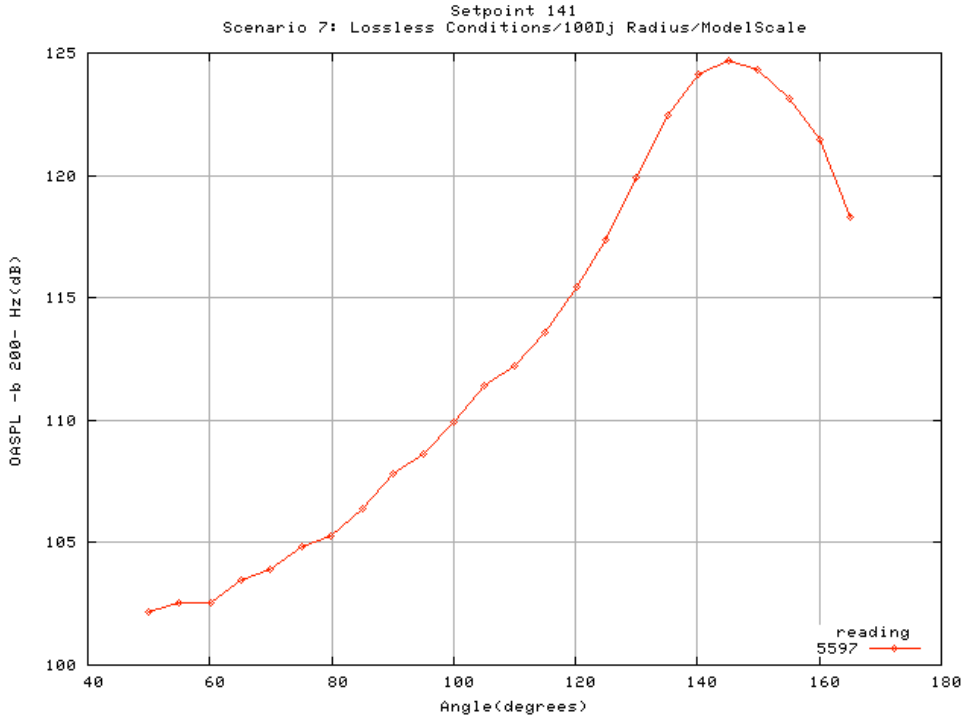
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	64.3	64.7	64.6	65.4	65.6	66.0	66.5	67.0	67.8	68.2	68.7	69.3
199.5	66.7	67.3	67.4	68.4	68.8	69.3	69.9	70.4	71.2	71.5	71.8	72.2
251.2	68.6	69.4	69.7	70.7	71.1	71.6	72.1	72.5	73.2	73.4	73.9	74.4
316.2	71.4	72.2	72.5	73.3	73.7	74.3	74.8	75.1	75.7	75.9	76.4	76.9
398.1	72.8	73.5	74.0	75.3	75.9	76.3	76.6	77.0	77.9	78.3	79.0	79.7
501.2	75.4	76.5	77.0	77.9	78.2	78.7	79.0	79.4	80.1	80.3	80.8	81.6
631.0	77.8	78.3	78.4	79.2	79.6	80.2	80.7	81.3	82.3	82.6	83.4	84.2
794.3	80.0	80.8	80.5	81.1	81.6	82.0	82.6	83.2	84.1	84.4	85.2	86.0
1000.0	82.5	82.3	82.2	83.1	83.4	83.9	84.2	85.1	86.2	86.7	87.4	88.5
1258.9	83.3	84.1	83.7	84.6	84.8	85.3	86.1	86.7	87.7	88.6	89.3	90.3
1584.9	85.2	85.2	84.9	85.7	86.4	87.3	87.8	88.2	89.3	89.9	90.9	92.2
1995.3	86.5	86.8	86.4	87.4	87.7	88.6	89.1	89.8	90.8	91.2	92.4	93.6
2511.9	87.5	87.4	87.6	88.5	88.9	89.4	90.1	90.7	92.1	92.5	93.6	95.2
3162.3	88.1	88.3	88.2	89.1	89.6	90.7	91.2	91.8	92.9	93.6	94.5	96.1
3981.1	88.6	88.6	88.8	89.8	90.2	90.8	91.3	92.1	93.4	94.1	95.3	96.7
5011.9	87.9	88.0	88.2	89.3	89.6	90.6	91.3	92.0	93.4	94.1	95.4	96.7
6309.6	87.9	88.3	88.2	89.2	89.6	90.7	91.3	92.2	93.6	94.2	95.6	97.1
7943.3	87.8	87.9	88.1	89.1	89.3	90.6	91.1	92.0	93.4	94.0	95.4	96.9
10000.0	87.3	87.5	87.7	88.8	88.9	90.3	91.0	91.9	93.3	93.9	95.2	96.8
12589.3	86.9	87.3	87.3	88.3	88.4	89.9	90.4	91.5	93.0	93.7	95.0	96.6
15848.9	86.3	86.7	86.9	87.8	88.0	89.4	89.9	91.1	92.7	93.5	94.6	96.2
19952.6	85.6	86.2	86.0	87.3	87.8	88.9	89.0	90.6	92.1	92.8	94.1	95.5
25118.9	84.8	85.5	85.4	86.5	87.4	88.3	88.4	89.9	91.3	92.1	93.4	94.7
31622.8	83.8	84.4	84.5	85.6	86.2	87.5	87.4	89.1	90.3	91.1	92.5	93.6
39810.7	82.7	83.1	83.3	84.4	85.7	86.5	86.4	87.9	89.1	89.8	91.4	92.2
50118.7	81.4	81.8	82.2	83.2	85.4	85.3	85.4	86.8	88.0	88.5	90.1	90.8
63095.7	80.1	80.7	81.2	82.1	84.5	84.3	84.6	85.8	86.9	87.4	88.9	89.6
79432.8	79.1	79.8	80.2	81.1	83.3	83.3	83.3	85.1	85.9	86.6	87.9	88.6

Setpoint 140 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	69.8	70.7	71.6	73.0	74.9	76.7	78.7	80.8	82.6	84.3	85.6	86.8
199.5	72.5	73.4	74.4	76.0	78.2	80.2	82.3	84.5	86.3	87.9	89.1	90.0
251.2	75.0	76.0	77.3	79.2	81.6	83.6	85.7	87.8	89.5	91.1	92.2	93.0
316.2	77.3	78.3	79.7	81.8	84.4	86.7	88.9	91.2	92.9	94.5	95.5	96.0
398.1	80.3	81.4	82.7	84.6	87.2	89.4	91.7	94.0	95.8	97.3	98.1	98.3
501.2	82.3	83.7	85.4	88.0	90.9	93.2	95.6	97.8	99.3	100.5	101.0	100.7
631.0	84.7	86.1	88.0	90.5	93.5	96.2	98.5	100.7	102.3	103.3	103.4	102.2
794.3	86.4	88.1	90.5	93.5	96.7	99.4	101.7	103.8	105.2	105.7	105.2	103.1
1000.0	89.2	90.8	93.0	96.2	99.4	102.1	104.5	106.3	107.3	107.2	105.9	103.0
1258.9	91.3	92.8	95.3	98.6	102.2	104.9	107.1	108.4	108.7	107.9	106.2	103.1
1584.9	93.0	94.9	97.2	100.5	104.0	106.8	108.7	109.9	109.5	108.3	106.8	104.0
1995.3	94.6	96.3	98.7	102.0	105.7	108.3	110.1	110.9	110.3	109.4	108.0	104.6
2511.9	95.9	97.4	99.5	102.5	105.7	108.5	110.3	111.0	110.8	110.1	108.8	105.2
3162.3	96.9	98.6	100.5	102.8	105.7	108.2	110.1	111.0	111.2	111.0	109.7	105.9
3981.1	97.5	99.1	100.9	102.8	105.0	106.9	108.5	110.0	110.7	110.6	109.4	105.3
5011.9	97.6	99.2	100.9	102.6	104.1	105.2	106.3	107.9	108.7	108.2	107.2	102.7
6309.6	97.9	99.4	101.1	102.6	103.4	103.9	104.7	105.9	106.5	106.4	105.4	100.5
7943.3	97.8	99.3	101.1	101.9	102.3	102.6	103.1	104.0	104.6	104.2	103.2	97.6
10000.0	97.8	99.1	100.6	101.3	101.5	101.5	101.7	102.4	102.3	101.9	100.8	95.0
12589.3	97.5	98.6	100.0	100.5	100.3	100.3	100.2	100.4	100.6	99.9	98.9	92.5
15848.9	97.0	97.9	99.2	99.7	99.0	99.1	98.7	98.8	98.7	98.0	97.1	90.3
19952.6	96.3	97.0	98.3	98.4	97.4	97.6	96.9	96.9	97.0	96.6	95.7	88.7
25118.9	95.2	95.6	97.2	96.9	95.7	96.0	95.2	94.8	95.4	95.0	94.0	87.2
31622.8	94.3	94.5	95.8	95.6	94.4	94.5	93.7	93.3	93.6	92.5	91.4	84.8
39810.7	92.7	93.0	94.1	93.9	92.5	92.6	91.8	91.4	92.0	90.9	89.4	83.4
50118.7	91.3	91.5	92.2	92.1	90.9	90.8	90.0	89.8	90.3	89.8	88.1	82.7
63095.7	89.9	90.3	90.7	90.6	89.7	89.2	88.6	88.6	88.9	88.6	87.1	81.6
79432.8	88.6	88.4	89.6	89.3	87.6	88.3	87.2	86.8	87.9	87.2	85.9	80.4

Setpoint	141
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.578
Ideal jet velocity (ft/s)	1724.940
Temperature ratio (T_j/T_{amb})	2.707
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





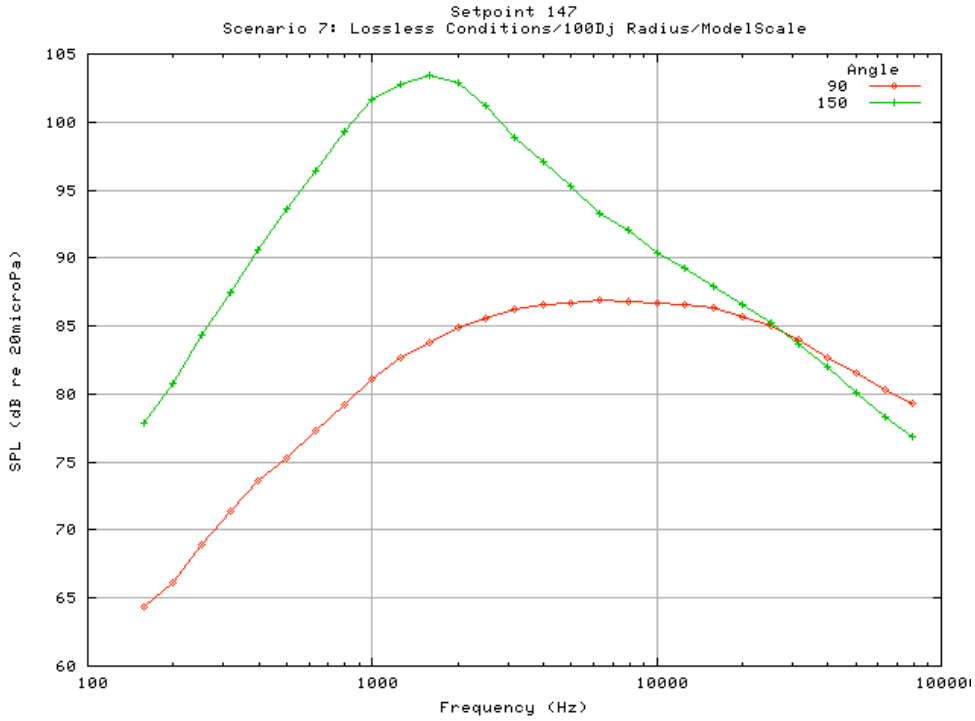
Setpoint 141 continued

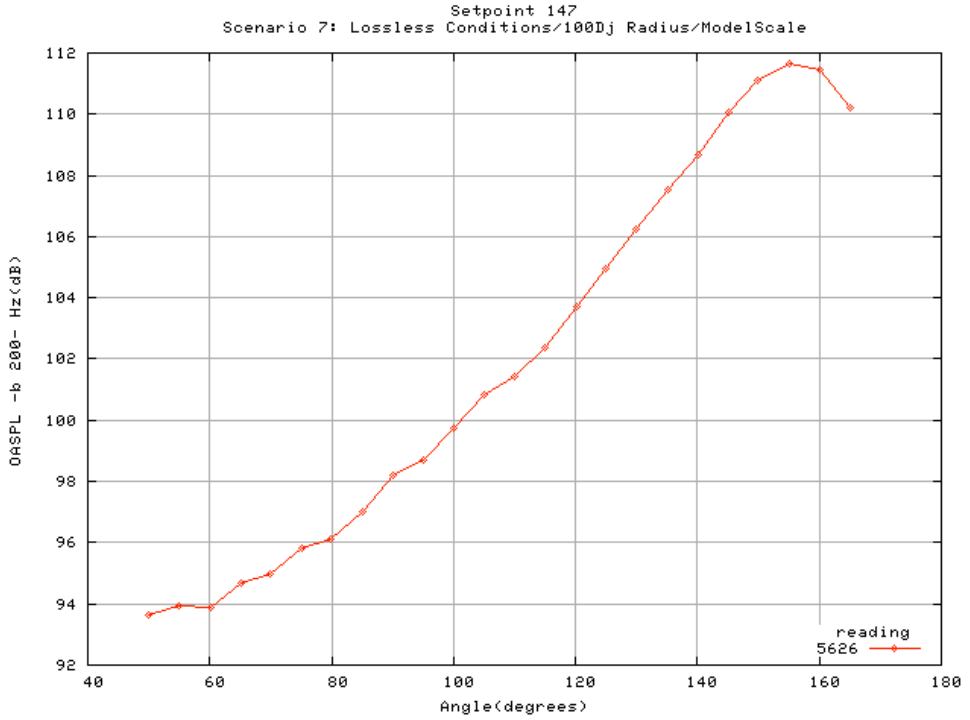
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	66.5	66.9	66.9	67.7	67.9	68.3	68.8	69.3	70.1	70.6	71.1	71.5
199.5	68.5	69.2	69.4	70.3	70.7	71.3	71.9	72.5	73.3	73.7	74.2	74.6
251.2	70.6	71.5	71.9	72.8	73.3	73.9	74.5	75.0	75.7	75.9	76.3	76.8
316.2	73.7	74.6	74.9	75.7	76.0	76.6	77.0	77.5	78.3	78.7	79.2	79.7
398.1	75.3	76.0	76.6	77.7	78.1	78.5	78.9	79.3	80.2	80.5	81.0	81.6
501.2	77.5	78.6	79.1	79.9	80.1	80.7	81.3	81.9	82.7	82.9	83.4	84.0
631.0	80.1	80.6	80.5	81.3	81.9	82.6	83.0	83.8	84.7	85.0	85.8	86.4
794.3	82.2	82.9	82.5	83.1	83.4	84.4	85.0	85.4	86.7	87.0	88.0	88.7
1000.0	84.7	84.5	84.2	85.4	85.7	86.3	86.5	87.6	88.4	89.2	89.9	90.9
1258.9	85.6	86.5	85.9	86.9	87.2	87.7	88.4	89.3	90.3	91.1	91.9	92.8
1584.9	87.7	87.6	87.6	88.4	88.9	89.9	90.1	90.6	91.6	92.4	93.4	94.5
1995.3	88.8	89.2	88.8	89.7	90.0	90.9	91.4	92.0	93.3	93.7	95.1	96.3
2511.9	90.2	90.2	90.2	91.0	91.4	91.8	92.5	93.2	94.4	95.2	96.3	98.0
3162.3	90.9	91.2	91.1	91.9	92.3	93.4	93.9	94.6	95.8	96.4	97.4	99.1
3981.1	91.7	91.9	91.9	92.7	92.9	93.6	94.2	95.0	96.3	97.1	98.4	99.8
5011.9	91.4	91.4	91.5	92.3	92.5	93.6	94.3	95.1	96.6	97.3	98.4	100.0
6309.6	91.2	91.6	91.6	92.4	92.6	93.8	94.3	95.3	96.8	97.5	99.1	100.6
7943.3	91.3	91.4	91.5	92.4	92.5	93.6	94.3	95.4	96.7	97.5	99.0	100.6
10000.0	90.9	91.1	91.3	92.2	92.3	93.6	94.2	95.3	96.7	97.5	98.9	100.5
12589.3	90.3	90.9	90.9	91.8	91.7	93.1	93.7	95.0	96.5	97.4	98.7	100.4
15848.9	89.7	90.4	90.5	91.3	91.3	92.7	93.1	94.6	96.3	97.2	98.5	100.2
19952.6	89.1	89.7	89.6	90.8	91.2	92.2	92.3	94.2	95.7	96.7	98.1	99.7
25118.9	88.2	88.9	89.0	90.0	90.8	91.7	91.7	93.6	95.0	96.1	97.5	98.9
31622.8	87.2	87.9	88.1	89.1	89.6	90.9	90.8	92.7	94.2	95.2	96.7	97.9
39810.7	86.0	86.5	86.8	87.9	89.1	89.9	89.8	91.5	93.0	93.9	95.6	96.5
50118.7	84.7	85.2	85.6	86.6	88.8	88.8	88.7	90.4	91.9	92.6	94.3	95.2
63095.7	83.5	84.0	84.6	85.5	87.9	87.7	87.9	89.3	90.8	91.5	93.1	94.0
79432.8	82.4	83.0	83.5	84.5	86.6	86.6	86.5	88.5	89.7	90.6	92.0	92.9

Setpoint 141 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	71.9	72.6	73.5	74.9	77.0	79.0	81.1	83.3	85.2	87.0	88.4	89.6
199.5	75.0	75.8	76.8	78.4	80.6	82.6	84.7	87.0	89.0	90.8	92.1	93.2
251.2	77.3	78.2	79.3	81.1	83.4	85.5	87.7	90.0	92.0	93.7	95.0	95.8
316.2	80.1	81.1	82.3	84.1	86.6	88.9	91.3	93.7	95.6	97.3	98.4	99.0
398.1	82.2	83.5	85.0	87.1	89.9	92.3	94.7	97.1	98.9	100.5	101.4	101.5
501.2	84.5	85.5	87.3	90.2	93.4	96.0	98.5	100.9	102.5	103.7	104.3	103.9
631.0	87.0	88.5	90.4	93.0	96.3	99.1	101.6	104.0	105.7	106.7	106.8	105.7
794.3	89.1	90.7	92.9	96.3	99.8	102.7	105.1	107.3	108.7	109.1	108.4	106.2
1000.0	91.4	93.0	95.4	99.0	102.5	105.4	107.9	109.7	110.7	110.4	109.0	106.1
1258.9	93.6	95.3	97.9	101.8	105.7	108.4	110.6	111.9	112.1	111.1	109.1	106.4
1584.9	95.5	97.3	100.0	104.0	107.7	110.6	112.4	113.4	112.8	111.3	109.7	107.1
1995.3	97.3	99.1	101.8	105.6	109.8	112.4	113.9	114.2	113.3	112.2	110.5	107.4
2511.9	98.7	100.5	103.0	106.7	110.7	113.4	114.8	114.8	114.2	113.0	111.3	107.9
3162.3	99.9	101.8	104.0	107.0	111.1	114.1	115.5	115.7	115.1	114.1	112.2	108.6
3981.1	100.7	102.4	104.5	107.1	110.4	113.4	115.1	115.6	115.2	113.9	112.0	108.2
5011.9	101.0	102.7	104.6	106.9	109.5	112.0	113.9	114.8	114.4	112.7	110.8	106.7
6309.6	101.6	103.2	105.0	106.7	108.7	110.9	112.9	113.8	113.0	111.5	109.6	105.4
7943.3	101.6	103.2	105.0	106.3	107.6	109.5	111.5	112.2	111.5	109.8	107.9	103.4
10000.0	101.7	103.0	104.6	105.8	106.6	108.4	110.2	110.6	109.6	107.9	105.9	101.4
12589.3	101.4	102.7	104.2	105.1	105.6	107.4	108.8	108.9	108.3	106.4	104.5	99.6
15848.9	101.1	102.2	103.7	104.3	104.4	106.2	107.3	107.5	106.8	105.0	103.1	97.9
19952.6	100.4	101.3	102.9	103.1	103.0	104.9	105.7	105.9	105.4	104.0	102.1	96.6
25118.9	99.5	100.0	101.8	101.7	101.4	103.4	104.2	103.9	104.0	102.7	100.6	95.2
31622.8	98.6	99.0	100.5	100.5	100.2	102.1	102.9	102.7	102.6	100.4	98.2	92.9
39810.7	97.0	97.5	98.9	98.8	98.4	100.4	101.2	100.9	101.2	99.0	96.3	91.5
50118.7	95.6	96.1	97.2	97.1	96.9	98.6	99.7	99.5	99.6	98.0	94.9	90.5
63095.7	94.2	94.9	95.7	95.6	95.7	97.0	98.4	98.5	98.4	96.8	93.7	89.3
79432.8	92.8	92.9	94.6	94.3	93.7	96.2	97.3	97.0	97.5	95.7	92.6	88.1

Setpoint	147
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.060
Ideal jet velocity (ft/s)	1156.740
Temperature ratio (T_j/T_{amb})	1.435
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





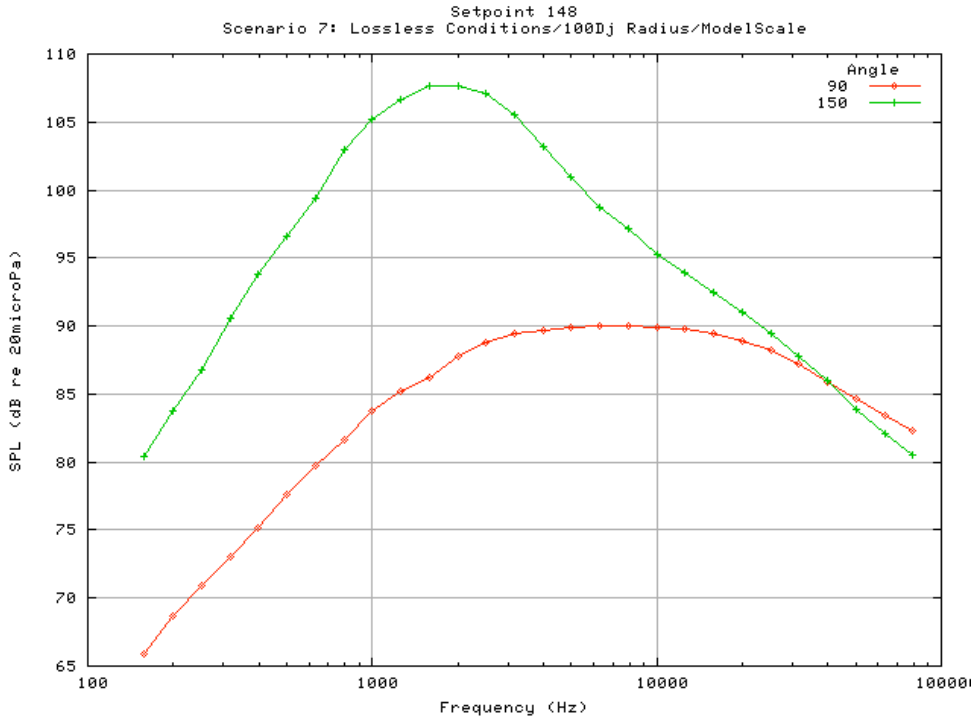
Setpoint 147 continued

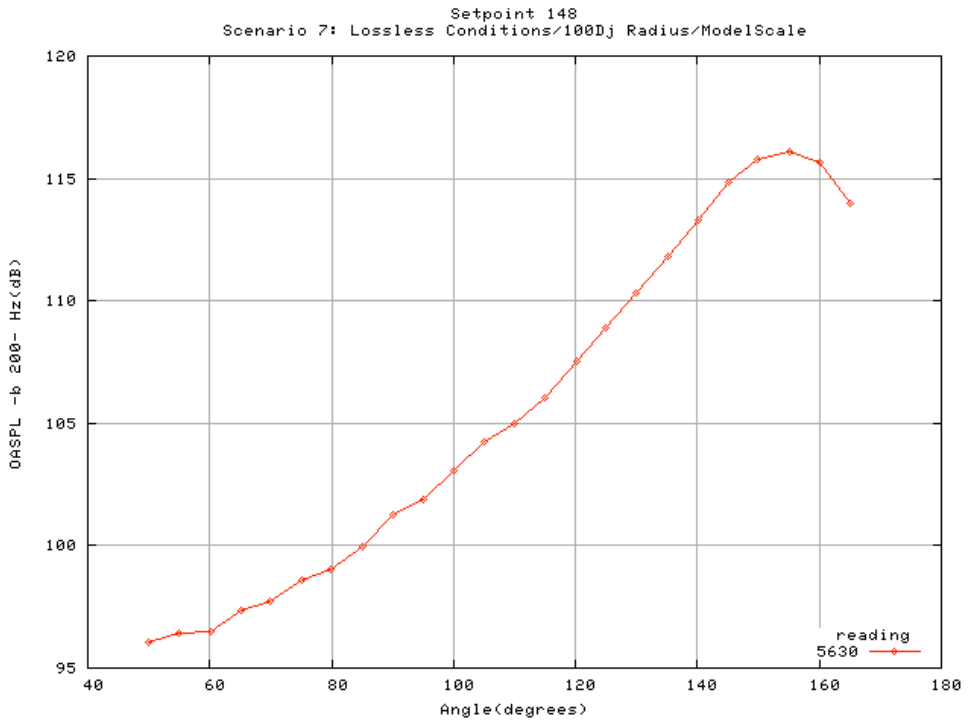
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	58.8	59.3	59.4	60.5	61.1	61.8	62.8	63.3	64.3	64.9	65.5	66.0
199.5	60.7	61.4	61.7	62.8	63.2	63.8	64.5	65.1	66.1	66.7	67.4	68.0
251.2	63.2	64.0	64.3	65.3	65.7	66.5	67.3	68.0	68.9	69.4	69.9	70.5
316.2	66.1	66.7	67.0	68.0	68.5	69.2	69.7	70.2	71.4	72.1	72.7	73.1
398.1	66.9	67.7	68.3	69.7	70.2	70.9	71.5	72.3	73.6	74.1	74.6	75.1
501.2	69.6	70.5	71.1	72.1	72.4	73.0	73.6	74.3	75.3	75.9	76.7	77.6
631.0	72.0	72.6	72.9	73.7	74.2	74.9	75.5	76.2	77.4	77.8	78.6	79.6
794.3	74.3	75.0	74.8	75.9	76.5	77.0	77.5	78.2	79.2	79.8	80.7	81.5
1000.0	77.1	77.2	76.7	77.9	78.4	78.6	79.1	79.7	81.1	81.8	82.6	83.7
1258.9	77.7	78.4	78.3	78.9	79.3	80.1	80.8	81.7	82.7	83.3	84.2	85.0
1584.9	79.5	79.4	79.2	80.2	80.7	81.5	82.0	82.7	83.8	84.5	85.4	86.6
1995.3	80.2	80.6	80.4	81.4	81.7	82.5	83.1	83.8	84.9	85.4	86.4	87.5
2511.9	81.2	81.4	81.4	82.3	82.6	83.1	83.8	84.4	85.6	85.9	87.1	88.6
3162.3	81.5	81.7	81.6	82.4	82.8	83.7	84.2	85.0	86.2	86.7	87.6	88.9
3981.1	82.0	82.1	82.0	82.9	83.2	84.1	84.6	85.2	86.6	87.1	88.2	89.4
5011.9	82.0	82.3	82.2	83.1	83.3	84.2	84.8	85.5	86.6	87.2	88.2	89.3
6309.6	82.2	82.6	82.6	83.3	83.5	84.4	84.9	85.7	86.9	87.3	88.5	89.7
7943.3	82.6	82.7	82.7	83.6	83.4	84.5	84.9	85.6	86.8	87.4	88.4	89.5
10000.0	82.7	82.6	82.7	83.3	83.2	84.3	84.8	85.6	86.7	87.2	88.2	89.4
12589.3	82.4	82.7	82.4	83.2	83.0	84.1	84.4	85.3	86.6	87.1	88.1	89.2
15848.9	82.0	82.3	82.2	82.8	82.5	83.8	84.0	85.0	86.3	86.8	87.7	89.0
19952.6	81.3	81.7	81.4	82.3	82.5	83.4	83.1	84.5	85.7	86.4	87.2	88.4
25118.9	80.3	80.9	80.8	81.6	82.0	82.7	82.5	83.9	85.0	85.6	86.6	87.6
31622.8	79.2	79.7	79.8	80.6	80.8	81.9	81.5	82.9	84.0	84.6	85.8	86.5
39810.7	78.0	78.2	78.4	79.2	80.2	80.8	80.4	81.6	82.7	83.3	84.7	85.2
50118.7	76.4	76.8	77.0	77.9	79.7	79.6	79.2	80.4	81.5	82.0	83.4	83.9
63095.7	75.1	75.4	75.8	76.6	78.7	78.4	78.2	79.3	80.4	80.8	82.1	82.7
79432.8	74.0	74.4	74.6	75.5	77.2	77.1	76.8	78.3	79.3	80.0	81.0	81.6

Setpoint 147 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	66.4	67.1	67.7	68.6	70.1	71.7	73.7	75.9	77.9	79.8	81.2	82.4
199.5	68.6	69.4	70.2	71.4	73.1	74.7	76.7	78.9	80.8	82.6	84.1	85.2
251.2	71.0	71.8	72.5	73.8	75.7	77.6	79.8	82.3	84.4	86.3	87.7	88.8
316.2	73.5	74.2	75.0	76.4	78.6	80.7	83.0	85.5	87.5	89.3	90.7	91.6
398.1	75.6	76.3	77.1	78.5	81.0	83.3	85.8	88.4	90.5	92.4	93.7	94.4
501.2	78.1	78.9	79.9	81.6	84.1	86.3	88.9	91.6	93.6	95.3	96.4	96.9
631.0	80.1	81.1	82.2	83.9	86.5	89.0	91.6	94.3	96.4	98.1	99.0	99.0
794.3	82.0	83.1	84.4	86.3	88.9	91.6	94.4	97.1	99.3	100.8	101.4	100.8
1000.0	84.2	85.1	86.2	88.4	91.1	93.9	96.8	99.5	101.6	102.7	102.8	101.6
1258.9	85.7	86.7	88.1	90.1	93.0	95.7	98.6	101.2	102.8	103.7	103.2	101.3
1584.9	87.3	88.5	89.6	91.6	94.1	96.7	99.4	102.0	103.4	103.8	103.2	101.4
1995.3	88.2	89.4	90.7	92.7	95.1	97.1	99.4	101.7	102.9	103.2	102.6	100.9
2511.9	89.1	90.2	91.7	93.6	95.6	97.2	98.7	100.4	101.2	101.3	101.1	99.4
3162.3	89.6	90.9	92.3	93.9	95.8	97.3	98.4	98.9	98.8	99.0	98.6	96.9
3981.1	89.9	91.3	92.7	94.2	95.8	96.9	97.5	97.6	97.0	96.3	95.6	93.4
5011.9	90.1	91.4	92.6	94.1	95.5	96.3	96.6	96.1	95.3	93.9	92.8	90.2
6309.6	90.3	91.4	92.9	94.3	95.4	95.8	95.5	94.8	93.3	92.0	90.6	87.7
7943.3	90.3	91.3	92.7	93.8	94.6	95.0	94.6	93.4	92.1	90.3	88.8	85.5
10000.0	90.2	91.0	92.3	93.4	94.1	94.2	93.4	92.2	90.4	88.7	86.9	83.7
12589.3	90.0	90.7	91.9	92.9	93.3	93.3	92.2	90.8	89.3	87.2	85.7	81.9
15848.9	89.6	90.2	91.5	92.3	92.2	92.4	91.0	89.5	88.0	85.9	84.4	80.2
19952.6	88.8	89.4	90.9	91.3	90.9	91.1	89.5	88.0	86.6	84.9	83.4	79.0
25118.9	87.8	88.2	90.0	90.1	89.5	89.7	87.9	86.0	85.2	83.6	81.9	77.4
31622.8	87.1	87.3	88.8	89.0	88.2	88.4	86.5	84.7	83.7	81.3	79.3	75.0
39810.7	85.5	85.9	87.2	87.4	86.5	86.6	84.7	82.8	81.9	79.6	77.2	73.4
50118.7	84.1	84.5	85.6	85.7	84.9	84.7	82.9	81.1	80.1	78.1	75.4	71.9
63095.7	82.8	83.3	84.1	84.2	83.6	82.9	81.4	79.7	78.3	76.6	73.7	70.2
79432.8	81.4	81.3	82.9	82.7	81.3	81.8	79.7	77.6	76.8	74.7	71.9	68.2

Setpoint	148
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.195
Ideal jet velocity (ft/s)	1302.940
Temperature ratio (T_j/T_{amb})	1.763
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





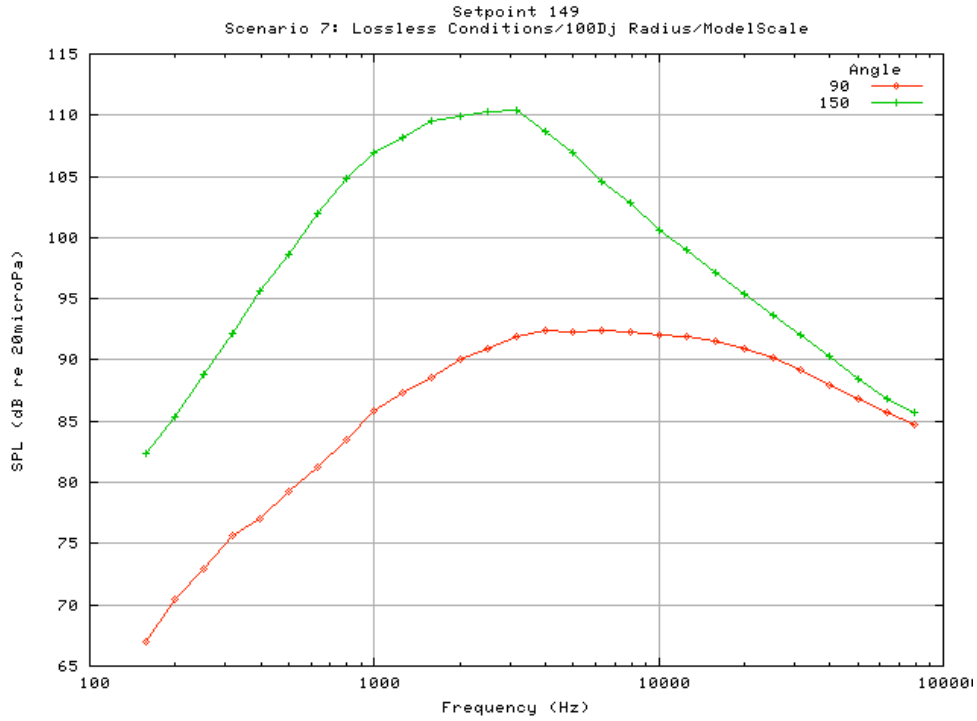
Setpoint 148 continued

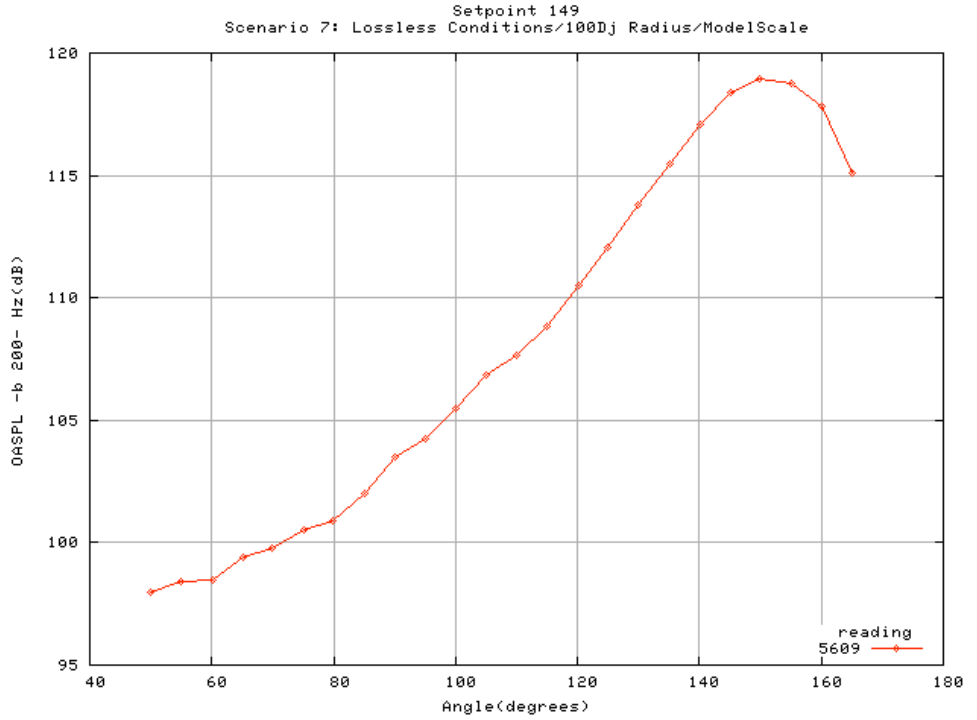
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	60.2	60.7	60.9	62.0	62.6	63.3	64.3	64.7	65.9	66.5	67.1	67.7
199.5	62.5	63.4	63.9	65.1	65.7	66.4	67.1	67.7	68.6	69.1	69.7	70.2
251.2	64.9	65.7	65.9	67.0	67.6	68.5	69.3	70.0	71.0	71.4	72.0	72.5
316.2	68.3	69.0	69.1	70.1	70.7	71.5	72.1	72.4	73.1	73.4	74.2	75.0
398.1	69.5	70.3	70.8	72.2	72.7	73.2	73.5	74.0	75.1	75.8	76.4	77.0
501.2	72.3	73.3	73.7	74.6	74.8	75.3	76.0	76.6	77.6	78.0	78.5	79.2
631.0	74.4	74.9	74.9	75.6	75.9	76.8	77.7	78.4	79.7	80.3	81.0	82.0
794.3	76.6	77.5	77.5	78.1	78.6	79.2	79.9	80.6	81.6	82.1	83.0	83.9
1000.0	79.6	79.7	79.2	80.4	80.8	81.4	81.7	82.5	83.8	84.3	85.4	86.1
1258.9	80.4	81.1	80.7	81.7	82.2	82.6	83.6	84.3	85.2	85.8	86.7	87.7
1584.9	81.9	82.0	81.9	83.0	83.5	84.2	84.8	85.2	86.3	87.1	88.1	89.4
1995.3	83.1	83.5	83.4	84.3	84.5	85.1	85.8	86.5	87.8	88.2	89.4	90.6
2511.9	83.9	84.0	84.2	85.0	85.5	85.9	86.8	87.4	88.8	89.2	90.3	91.8
3162.3	84.2	84.5	84.5	85.4	85.9	86.9	87.5	88.2	89.4	90.0	91.0	92.4
3981.1	84.5	84.8	85.0	85.9	86.2	87.0	87.7	88.3	89.6	90.3	91.6	92.9
5011.9	84.3	84.7	84.9	85.8	86.1	87.0	87.7	88.5	89.9	90.5	91.6	92.9
6309.6	84.7	85.2	85.2	86.0	86.3	87.3	87.9	88.6	90.0	90.6	91.9	93.2
7943.3	85.0	85.2	85.2	86.1	86.1	87.3	87.8	88.6	90.0	90.6	91.8	93.1
10000.0	84.7	85.0	85.2	86.0	85.8	87.2	87.8	88.7	89.9	90.5	91.7	93.0
12589.3	84.5	85.0	85.0	85.8	85.5	87.0	87.3	88.4	89.8	90.4	91.5	92.9
15848.9	84.2	84.6	84.7	85.4	85.2	86.5	86.9	88.1	89.5	90.2	91.2	92.6
19952.6	83.5	84.0	83.8	84.9	85.1	86.0	86.0	87.6	88.9	89.8	90.8	92.0
25118.9	82.6	83.2	83.2	84.1	84.7	85.4	85.4	86.9	88.2	89.0	90.1	91.2
31622.8	81.5	82.0	82.3	83.1	83.4	84.6	84.4	85.9	87.2	88.0	89.2	90.1
39810.7	80.2	80.6	80.8	81.8	82.8	83.5	83.2	84.7	85.9	86.6	88.1	88.7
50118.7	78.7	79.1	79.4	80.4	82.3	82.2	82.0	83.4	84.6	85.2	86.7	87.3
63095.7	77.4	77.8	78.3	79.1	81.2	81.0	81.1	82.2	83.4	84.1	85.3	86.0
79432.8	76.3	76.7	77.1	78.0	79.8	79.8	79.7	81.3	82.3	83.1	84.2	84.9

Setpoint 148 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	68.2	69.1	69.9	71.1	72.8	74.5	76.4	78.5	80.4	82.2	83.6	84.8
199.5	70.7	71.5	72.3	73.6	75.6	77.5	79.6	81.8	83.8	85.6	86.9	88.0
251.2	72.9	73.6	74.3	75.8	78.0	80.2	82.4	84.8	86.8	88.6	89.9	90.9
316.2	75.5	76.3	77.3	78.9	81.2	83.5	86.0	88.5	90.5	92.3	93.6	94.4
398.1	77.5	78.6	79.7	81.7	84.4	86.7	89.2	91.7	93.8	95.5	96.6	97.2
501.2	79.8	80.9	82.3	84.6	87.3	89.6	92.2	94.8	96.6	98.2	99.1	99.4
631.0	82.7	83.8	85.1	87.0	89.6	92.1	94.8	97.4	99.4	100.9	101.6	101.4
794.3	84.4	85.6	87.2	89.8	92.9	95.7	98.4	101.0	103.0	104.1	104.4	103.4
1000.0	86.6	87.8	89.3	92.2	95.3	98.2	101.1	103.5	105.2	105.9	105.6	103.8
1258.9	88.5	89.6	91.3	93.9	97.2	100.2	103.0	105.3	106.6	107.0	106.1	103.9
1584.9	90.1	91.6	93.1	95.5	98.6	101.7	104.4	106.7	107.7	107.4	106.4	104.5
1995.3	91.3	92.7	94.2	96.5	99.4	102.1	104.8	106.9	107.7	107.5	106.7	104.8
2511.9	92.5	93.9	95.4	97.6	99.9	102.2	104.4	106.3	107.1	107.1	106.7	104.7
3162.3	93.1	94.6	96.1	98.1	100.2	101.9	103.5	104.7	105.5	106.4	106.1	104.3
3981.1	93.6	94.8	96.4	98.2	99.9	101.1	101.9	102.6	103.2	103.8	103.6	101.7
5011.9	93.8	95.1	96.5	98.2	99.6	100.4	100.7	100.7	101.0	101.0	100.8	98.7
6309.6	94.1	95.2	96.8	98.3	99.3	99.6	99.5	99.1	98.7	98.7	98.4	96.1
7943.3	94.0	95.2	96.9	97.8	98.6	98.8	98.4	97.6	97.2	96.6	96.1	93.3
10000.0	93.9	95.0	96.4	97.5	98.0	97.9	97.2	96.2	95.2	94.6	93.9	91.0
12589.3	93.7	94.7	96.0	96.9	97.0	97.0	95.9	94.7	94.0	92.8	92.1	88.7
15848.9	93.3	94.2	95.5	96.3	95.9	95.9	94.6	93.3	92.5	91.3	90.5	86.7
19952.6	92.6	93.3	94.8	95.1	94.5	94.6	93.1	91.7	91.0	90.1	89.3	85.2
25118.9	91.7	92.0	93.8	93.7	92.9	93.1	91.6	89.7	89.5	88.5	87.5	83.4
31622.8	90.8	91.1	92.5	92.6	91.6	91.7	90.1	88.3	87.7	86.1	84.8	80.9
39810.7	89.2	89.6	90.8	90.8	89.8	89.8	88.2	86.3	86.0	84.4	82.5	79.2
50118.7	87.7	88.1	89.1	89.0	88.1	87.8	86.3	84.5	83.9	82.9	80.7	77.7
63095.7	86.4	86.8	87.5	87.4	86.7	86.0	84.7	83.1	82.1	81.3	79.0	76.0
79432.8	84.9	84.8	86.2	85.9	84.4	84.8	83.0	80.9	80.5	79.4	77.3	74.1

Setpoint	149
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.331
Ideal jet velocity (ft/s)	1453.850
Temperature ratio (T_j/T_{amb})	2.282
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





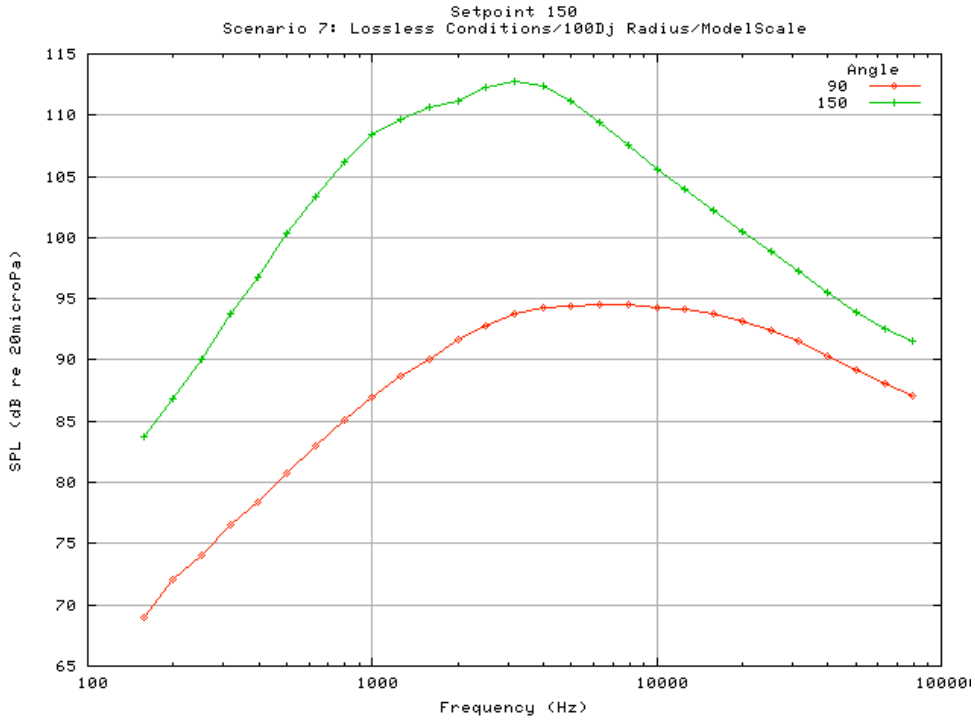
Setpoint 149 continued

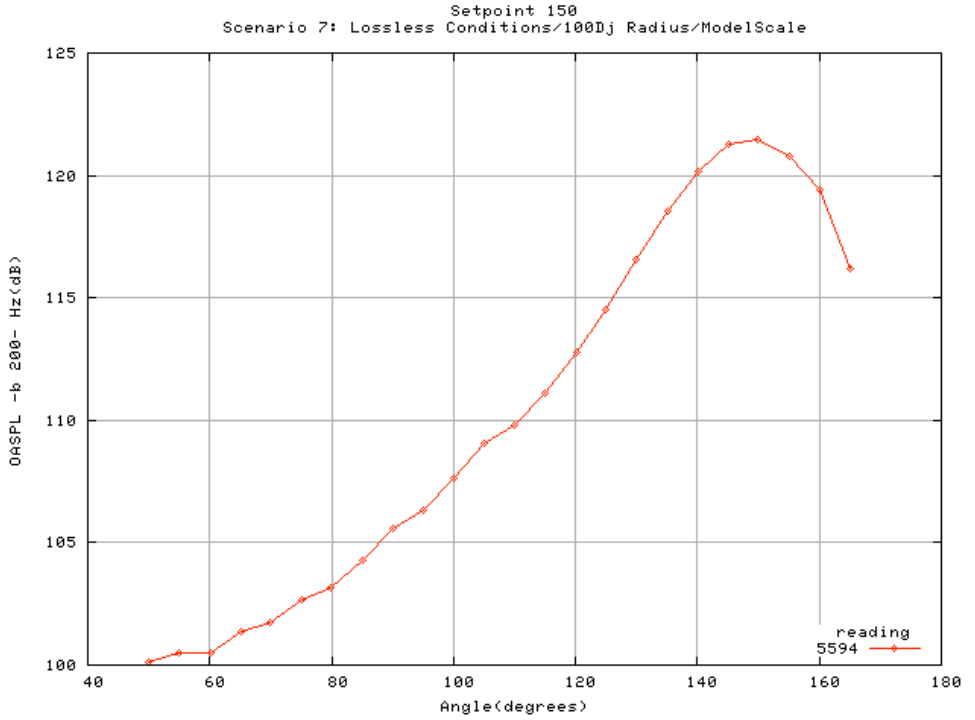
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	63.3	63.7	63.6	64.4	64.6	65.0	66.0	66.1	67.0	67.5	68.2	68.8
199.5	65.6	66.3	66.5	67.4	67.9	68.5	69.1	69.6	70.5	70.8	71.3	71.7
251.2	67.8	68.5	68.8	69.8	70.3	71.0	71.7	72.2	72.9	73.1	73.5	74.0
316.2	70.7	71.5	71.6	72.5	73.1	73.9	74.5	74.9	75.6	75.9	76.4	76.8
398.1	71.7	72.5	72.9	74.2	74.7	75.3	75.7	76.1	77.1	77.5	78.0	78.6
501.2	74.1	75.1	75.8	76.9	77.0	77.4	77.9	78.5	79.3	79.6	80.3	81.1
631.0	77.1	77.6	77.5	78.3	78.5	79.1	79.7	80.4	81.3	81.8	82.6	83.6
794.3	78.8	79.6	79.6	80.4	80.6	81.3	81.9	82.3	83.5	83.8	84.9	85.7
1000.0	81.7	81.3	81.1	82.4	82.9	83.2	83.7	84.4	85.8	86.2	87.1	87.8
1258.9	82.1	83.0	82.4	83.5	83.7	84.5	85.4	86.0	87.4	88.1	89.0	89.8
1584.9	84.3	84.1	84.1	84.8	85.4	86.4	86.6	87.4	88.5	89.3	90.3	91.5
1995.3	85.5	85.8	85.4	86.4	86.7	87.5	87.9	88.8	90.1	90.6	91.7	92.9
2511.9	86.5	86.5	86.4	87.4	87.7	88.1	88.8	89.5	91.0	91.5	92.7	94.3
3162.3	87.0	87.3	87.3	88.0	88.4	89.2	89.9	90.8	91.9	92.4	93.5	95.1
3981.1	87.1	87.5	87.6	88.2	88.6	89.3	89.9	90.8	92.4	93.1	94.3	95.6
5011.9	86.9	87.1	87.1	88.0	88.3	89.1	89.8	90.7	92.3	93.1	94.1	95.7
6309.6	86.6	87.2	87.3	88.1	88.4	89.3	89.8	90.7	92.4	93.1	94.5	96.0
7943.3	86.6	87.0	87.3	88.1	88.2	89.2	89.7	90.7	92.3	93.1	94.4	95.9
10000.0	86.2	86.7	86.9	87.8	87.9	89.0	89.5	90.5	92.0	92.8	94.1	95.7
12589.3	85.7	86.5	86.5	87.6	87.4	88.6	89.0	90.1	91.9	92.7	93.9	95.5
15848.9	85.2	86.0	86.3	87.1	86.9	88.2	88.4	89.8	91.5	92.4	93.6	95.2
19952.6	84.6	85.3	85.4	86.5	86.8	87.7	87.5	89.2	90.9	91.9	93.1	94.5
25118.9	83.7	84.6	84.8	85.8	86.4	87.0	86.9	88.5	90.2	91.1	92.4	93.7
31622.8	82.7	83.6	83.8	84.8	85.1	86.2	85.9	87.6	89.2	90.1	91.5	92.6
39810.7	81.6	82.2	82.6	83.5	84.6	85.2	84.8	86.4	88.0	88.8	90.4	91.3
50118.7	80.2	80.9	81.3	82.3	84.2	83.9	83.7	85.2	86.8	87.5	89.1	89.9
63095.7	79.0	79.6	80.2	81.2	83.2	82.9	82.8	84.2	85.7	86.4	87.8	88.7
79432.8	78.0	78.7	79.1	80.1	81.9	81.8	81.5	83.3	84.7	85.5	86.7	87.6

Setpoint 149 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	69.3	70.3	71.3	72.8	74.7	76.6	78.5	80.6	82.4	84.0	85.3	86.3
199.5	72.0	72.8	73.7	75.1	77.2	79.1	81.2	83.4	85.3	87.0	88.3	89.3
251.2	74.5	75.4	76.5	78.3	80.6	82.6	84.8	87.0	88.8	90.5	91.7	92.6
316.2	77.2	78.1	79.3	81.2	83.7	85.9	88.1	90.4	92.2	93.7	94.8	95.4
398.1	79.1	80.3	81.8	83.9	86.7	89.0	91.3	93.7	95.6	97.1	98.0	98.3
501.2	81.7	82.9	84.4	87.0	89.9	92.4	94.8	97.1	98.7	99.9	100.6	100.4
631.0	84.3	85.7	87.4	89.8	92.8	95.5	97.9	100.3	102.0	103.1	103.3	102.4
794.3	86.2	87.6	89.6	92.5	95.7	98.4	100.9	103.2	104.8	105.4	105.1	103.4
1000.0	88.4	89.8	91.8	95.1	98.2	101.0	103.6	105.6	106.9	107.1	106.1	103.5
1258.9	90.6	92.0	94.1	97.2	100.8	103.5	106.0	107.6	108.2	107.8	106.2	103.4
1584.9	92.3	94.0	96.1	99.2	102.6	105.6	107.8	109.3	109.5	108.5	107.1	104.6
1995.3	93.7	95.3	97.3	100.2	103.9	106.7	108.9	110.1	109.9	109.1	107.9	105.0
2511.9	95.0	96.4	98.3	101.1	104.1	106.8	109.0	110.1	110.3	109.8	108.6	105.5
3162.3	95.9	97.5	99.4	101.5	104.1	106.4	108.5	109.8	110.4	110.5	109.4	106.3
3981.1	96.3	97.8	99.7	101.7	103.5	105.0	106.3	107.8	108.7	108.9	107.9	104.5
5011.9	96.6	98.1	99.7	101.5	103.0	103.8	104.4	105.8	106.9	106.8	106.1	102.5
6309.6	96.9	98.3	99.9	101.4	102.5	102.7	102.9	103.8	104.6	104.9	104.1	100.1
7943.3	96.9	98.3	99.9	100.9	101.7	101.6	101.5	101.9	102.8	102.7	102.1	97.5
10000.0	96.8	97.9	99.5	100.5	100.8	100.6	100.1	100.2	100.6	100.5	99.9	95.2
12589.3	96.5	97.6	99.1	99.7	99.7	99.5	98.6	98.5	99.0	98.5	98.0	92.9
15848.9	96.1	97.0	98.4	99.0	98.5	98.3	97.3	97.0	97.1	96.6	96.2	90.8
19952.6	95.3	96.2	97.7	97.8	97.0	96.9	95.6	95.2	95.4	95.2	94.8	89.2
25118.9	94.3	94.8	96.6	96.3	95.5	95.6	94.0	93.1	93.7	93.5	93.0	87.5
31622.8	93.4	93.8	95.3	95.2	94.2	94.2	92.5	91.7	92.0	91.0	90.2	85.2
39810.7	91.8	92.3	93.6	93.4	92.4	92.4	90.7	89.7	90.3	89.3	88.1	83.8
50118.7	90.4	90.8	91.8	91.7	90.9	90.5	89.0	88.1	88.5	88.0	86.5	82.9
63095.7	89.1	89.6	90.3	90.1	89.6	88.8	87.5	86.9	86.9	86.7	85.2	81.8
79432.8	87.7	87.6	89.1	88.7	87.4	87.8	86.0	84.9	85.7	85.2	84.0	80.6

Setpoint	150
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.441
Ideal jet velocity (ft/s)	1574.420
Temperature ratio (T_j/T_{amb})	2.718
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





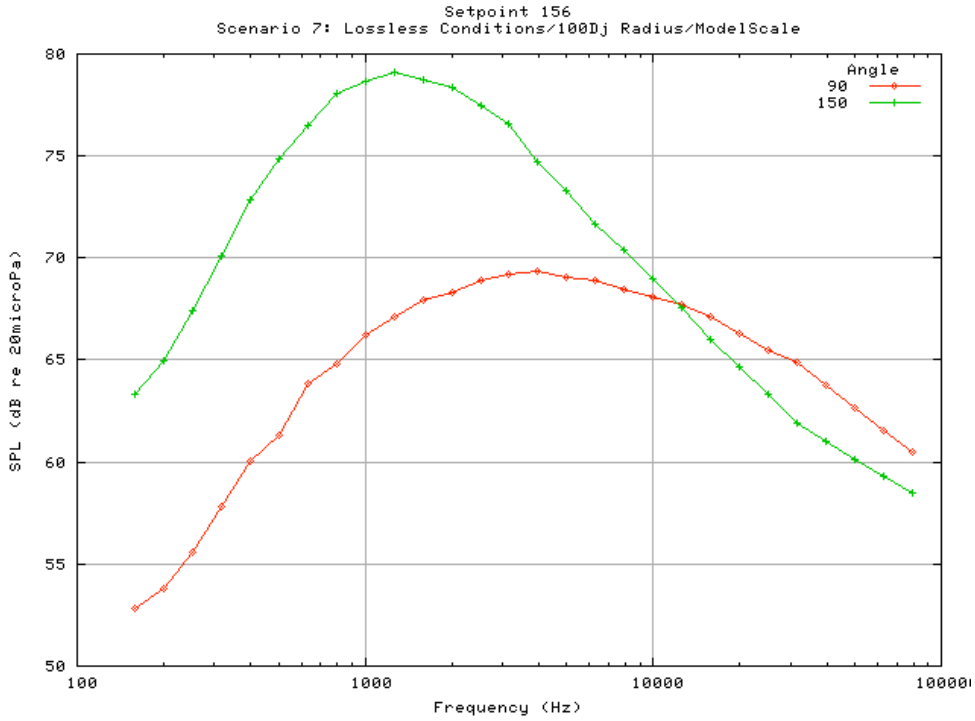
Setpoint 150 continued

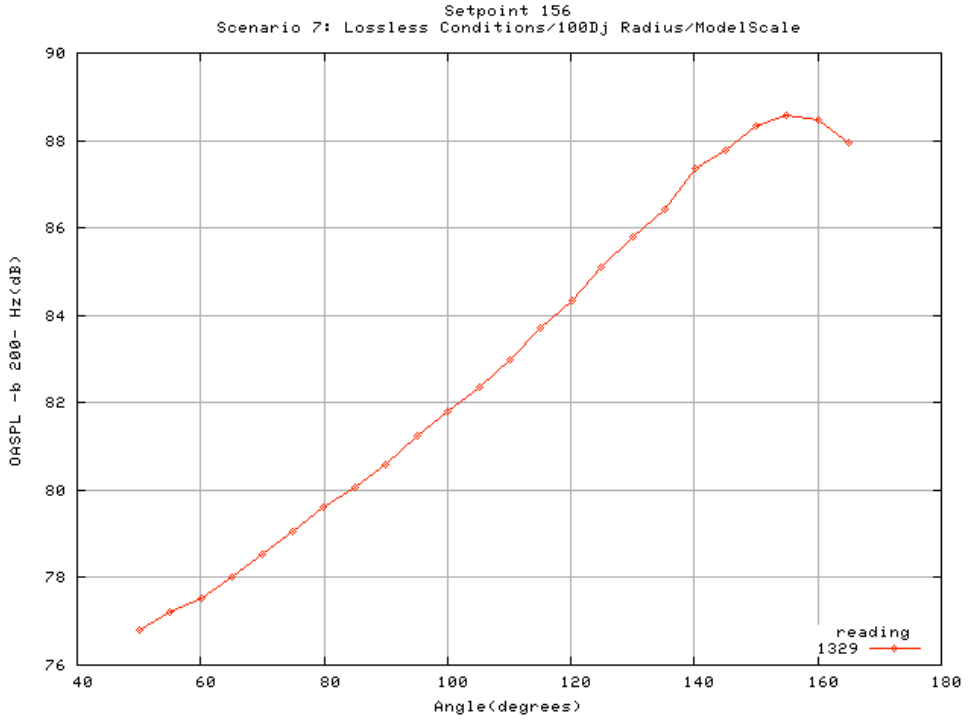
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	65.1	65.5	65.4	66.2	66.5	67.0	67.6	68.1	69.0	69.4	69.8	70.3
199.5	67.5	68.2	68.5	69.4	69.8	70.4	70.9	71.4	72.1	72.4	72.8	73.1
251.2	69.4	70.2	70.4	71.4	71.7	72.3	72.9	73.4	74.1	74.3	74.7	75.2
316.2	72.1	72.9	73.1	74.1	74.5	75.1	75.6	75.9	76.6	76.8	77.3	77.8
398.1	73.7	74.4	74.9	76.1	76.7	77.2	77.5	77.7	78.3	78.7	79.4	80.1
501.2	76.0	77.2	77.7	78.6	78.8	79.2	79.6	79.9	80.8	81.1	81.7	82.3
631.0	78.8	79.2	79.3	79.9	80.2	80.9	81.4	82.1	83.0	83.2	84.0	84.6
794.3	80.6	81.3	81.3	81.7	82.0	82.7	83.4	84.1	85.1	85.4	86.0	87.1
1000.0	83.4	83.1	82.8	83.9	84.0	84.6	84.9	85.8	86.9	87.5	88.2	89.2
1258.9	83.9	84.6	84.3	85.1	85.6	86.2	86.8	87.5	88.7	89.2	90.3	90.9
1584.9	86.0	85.9	85.8	86.6	87.3	88.2	88.5	89.1	90.1	90.9	91.8	93.0
1995.3	87.2	87.5	87.1	88.0	88.2	89.1	89.6	90.5	91.7	92.1	93.3	94.5
2511.9	88.4	88.3	88.4	89.1	89.7	90.1	90.8	91.5	92.8	93.4	94.6	96.2
3162.3	89.3	89.5	89.2	90.1	90.6	91.5	92.2	92.9	93.8	94.4	95.6	97.1
3981.1	89.7	89.8	89.9	90.6	90.8	91.5	92.2	93.0	94.3	95.1	96.4	97.8
5011.9	89.0	89.2	89.4	90.2	90.3	91.4	92.2	93.0	94.4	95.2	96.3	97.8
6309.6	89.0	89.5	89.4	90.2	90.4	91.6	92.2	93.1	94.5	95.3	96.8	98.3
7943.3	89.0	89.2	89.4	90.1	90.3	91.3	92.0	92.9	94.5	95.2	96.6	98.1
10000.0	88.4	88.7	88.9	89.9	89.9	91.1	92.0	92.9	94.3	95.1	96.5	98.1
12589.3	88.0	88.5	88.5	89.5	89.4	90.8	91.3	92.6	94.1	95.0	96.3	97.9
15848.9	87.5	88.0	88.2	89.1	88.9	90.3	90.8	92.3	93.8	94.7	95.9	97.7
19952.6	86.9	87.4	87.2	88.5	88.8	89.8	90.0	91.8	93.2	94.2	95.5	97.0
25118.9	86.0	86.8	86.7	87.8	88.4	89.2	89.4	91.1	92.5	93.5	94.8	96.1
31622.8	85.1	85.7	85.9	86.8	87.2	88.4	88.4	90.2	91.5	92.5	94.0	95.1
39810.7	84.1	84.5	84.6	85.6	86.7	87.5	87.4	89.1	90.3	91.2	92.9	93.7
50118.7	82.7	83.2	83.4	84.5	86.4	86.4	86.4	87.9	89.2	89.9	91.6	92.3
63095.7	81.5	82.0	82.4	83.3	85.6	85.4	85.6	86.9	88.1	88.8	90.4	91.2
79432.8	80.5	81.1	81.4	82.4	84.3	84.3	84.4	86.2	87.1	88.0	89.4	90.1

Setpoint 150 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	165.1
158.5	70.7	71.5	72.4	73.8	75.9	77.8	79.8	81.9	83.8	85.5	86.7	87.8
199.5	73.5	74.2	75.1	76.6	78.7	80.7	82.8	84.9	86.8	88.5	89.7	90.7
251.2	75.7	76.7	77.8	79.6	81.9	83.9	86.0	88.2	90.0	91.6	92.8	93.6
316.2	78.2	79.2	80.5	82.5	85.1	87.4	89.7	92.0	93.8	95.3	96.4	96.9
398.1	80.7	81.8	83.3	85.4	88.2	90.5	92.7	95.0	96.8	98.2	99.0	99.1
501.2	82.9	84.1	85.9	88.5	91.5	94.0	96.4	98.7	100.3	101.5	102.0	101.6
631.0	85.2	86.8	88.8	91.4	94.4	97.1	99.4	101.7	103.3	104.2	104.3	103.1
794.3	87.5	89.0	91.4	94.3	97.6	100.3	102.7	104.8	106.2	106.6	106.1	104.0
1000.0	89.8	91.5	93.9	97.2	100.5	103.2	105.6	107.4	108.4	108.2	106.9	104.0
1258.9	91.9	93.5	96.2	99.7	103.3	105.9	108.1	109.5	109.7	108.8	107.0	104.1
1584.9	93.8	95.6	98.2	101.8	105.3	108.0	110.0	111.1	110.7	109.4	107.9	105.2
1995.3	95.5	97.2	99.5	103.0	106.9	109.4	111.1	111.8	111.2	110.1	108.6	105.5
2511.9	96.8	98.4	100.7	104.1	107.6	110.3	112.0	112.5	112.3	111.3	109.8	106.3
3162.3	97.9	99.6	101.7	104.3	107.6	110.1	111.9	112.8	112.8	112.3	110.7	107.1
3981.1	98.6	100.3	102.0	104.1	106.6	108.7	110.6	112.0	112.4	111.8	110.3	106.4
5011.9	98.8	100.3	102.1	103.9	105.8	107.3	108.8	110.5	111.1	110.2	108.8	104.7
6309.6	99.2	100.6	102.3	103.9	105.1	105.8	107.3	108.9	109.4	108.8	107.5	103.1
7943.3	99.1	100.6	102.3	103.4	103.9	104.7	105.7	107.0	107.6	106.6	105.0	100.1
10000.0	99.0	100.5	101.8	102.7	103.1	103.4	104.2	105.4	105.6	104.6	102.9	97.7
12589.3	98.9	100.0	101.3	102.1	101.9	102.3	102.6	103.5	104.0	102.8	101.2	95.4
15848.9	98.5	99.4	100.7	101.2	100.6	101.0	101.1	101.8	102.2	101.0	99.4	93.4
19952.6	97.6	98.5	99.8	99.9	99.1	99.6	99.3	99.8	100.5	99.8	98.2	91.8
25118.9	96.6	97.1	98.6	98.4	97.4	98.0	97.6	97.7	98.9	98.2	96.5	90.0
31622.8	95.7	96.0	97.3	97.2	96.0	96.6	96.1	96.2	97.2	95.8	93.9	87.7
39810.7	94.0	94.5	95.6	95.4	94.2	94.7	94.3	94.3	95.6	94.2	91.8	86.4
50118.7	92.7	93.1	93.8	93.7	92.6	92.8	92.6	92.7	93.8	93.1	90.5	85.7
63095.7	91.4	91.8	92.3	92.1	91.4	91.2	91.1	91.6	92.5	92.0	89.4	84.9
79432.8	90.1	89.9	91.2	90.7	89.3	90.2	89.8	89.9	91.5	90.8	88.3	83.8

Setpoint	156
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.599
Ideal jet velocity (ft/s)	664.812
Temperature ratio (T_j/T_{amb})	1.202
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





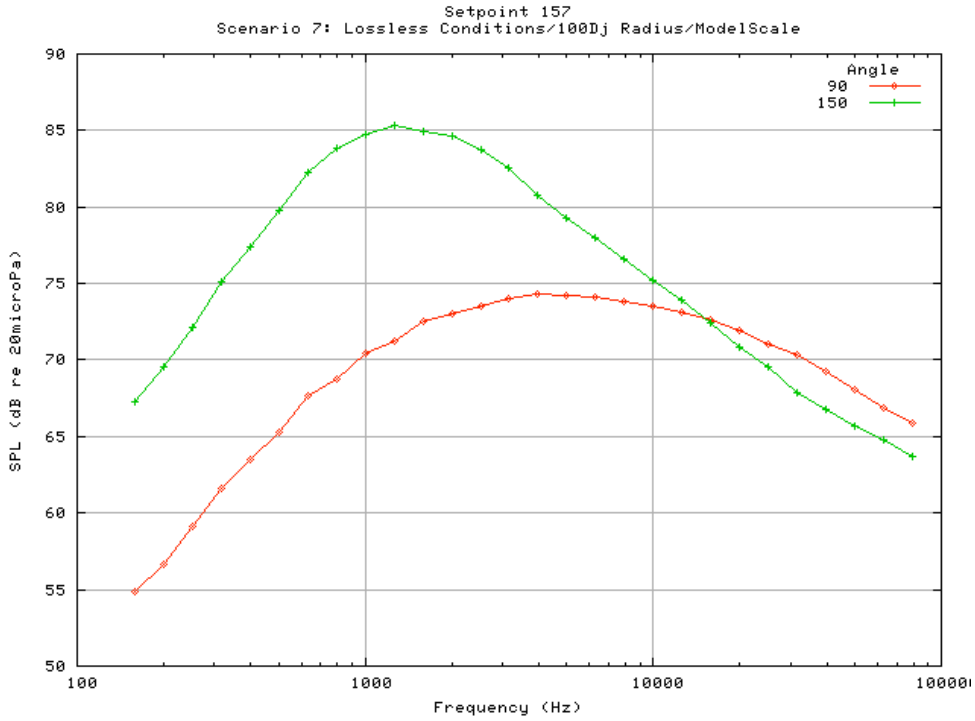
Setpoint 156 continued

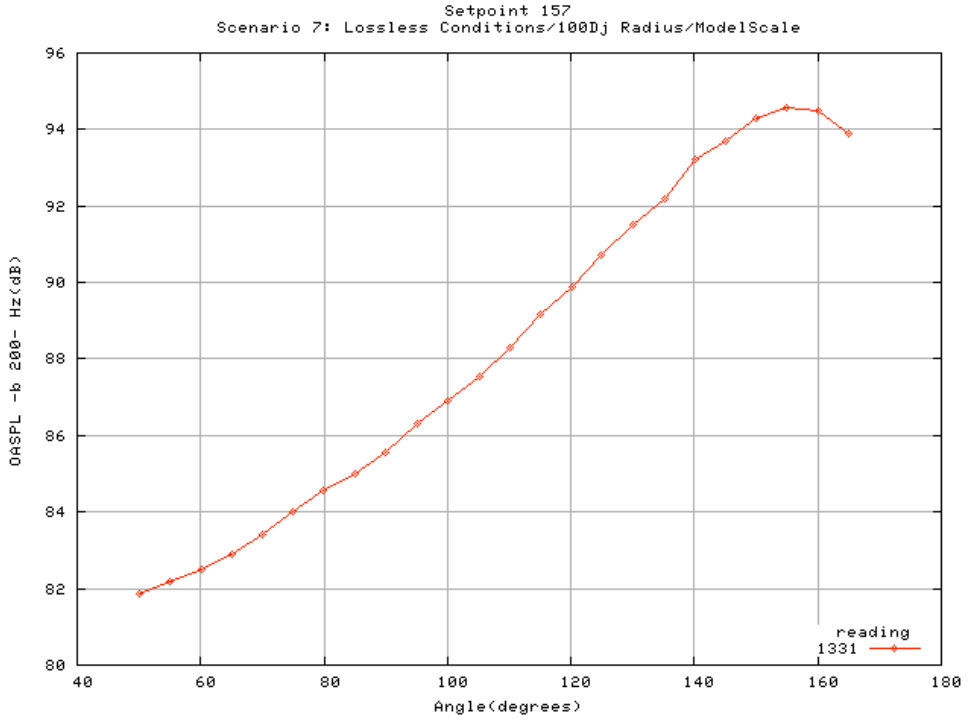
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	49.5	49.4	49.3			50.9	51.5	52.3	52.8	53.2	53.3	53.7
199.5	50.8	50.9	51.1	50.8	51.1	52.0	52.5	53.2	53.8	54.4	54.7	55.0
251.2	51.2	51.7	52.2	52.6	52.9	53.5	54.2	55.0	55.6	56.3	56.6	57.1
316.2	52.8	53.3	53.9	54.6	55.2	55.8	56.5	57.2	57.8	58.5	59.0	59.6
398.1	54.6	55.2	56.2	57.1	57.8	58.3	59.0	59.5	60.1	60.8	61.1	61.6
501.2	55.7	56.6	57.7	58.6	59.2	59.5	60.1	60.6	61.3	62.2	62.6	63.3
631.0	58.6	59.5	60.2	60.8	61.2	61.8	62.3	62.8	63.9	64.1	64.4	65.0
794.3	59.9	61.0	61.6	62.0	62.6	63.0	63.7	64.4	64.8	65.5	66.0	66.8
1000.0	61.2	62.0	62.8	63.4	63.8	64.4	65.1	65.6	66.2	66.9	67.4	68.0
1258.9	62.6	63.6	64.0	64.4	64.9	65.2	66.0	66.6	67.1	68.0	68.5	69.2
1584.9	63.8	64.2	64.6	65.0	65.5	66.2	66.8	67.3	68.0	68.6	69.3	69.9
1995.3	64.1	64.6	64.9	65.4	66.2	66.6	67.2	67.7	68.3	69.2	69.7	70.5
2511.9	64.8	65.4	65.7	66.2	66.8	67.2	67.8	68.4	68.9	69.7	70.2	70.8
3162.3	65.4	65.9	66.1	66.6	67.1	67.5	68.1	68.7	69.2	69.8	70.4	71.1
3981.1	65.7	65.9	66.2	66.8	67.4	67.6	68.3	68.7	69.3	70.1	70.6	71.1
5011.9	65.3	65.6	66.1	66.6	67.1	67.5	68.1	68.5	69.1	69.6	70.2	70.7
6309.6	65.0	65.6	65.9	66.5	66.8	67.3	68.1	68.4	68.9	69.6	70.1	70.7
7943.3	64.9	65.4	65.7	66.0	66.6	66.9	67.5	68.0	68.5	69.2	69.7	70.1
10000.0	64.8	65.0	65.2	65.7	66.2	66.5	67.3	67.6	68.1	68.7	69.3	69.7
12589.3	64.5	64.5	64.8	65.2	65.8	66.1	66.8	67.2	67.7	68.2	68.7	69.2
15848.9	63.9	63.8	64.2	64.6	65.3	65.8	66.1	66.6	67.1	67.8	68.2	68.6
19952.6	63.2	63.4	63.5	64.0	64.5	65.6	65.6	65.9	66.3	66.9	67.6	68.0
25118.9	62.5	62.8	62.8	63.1	63.9	65.1	64.9	65.2	65.5	66.2	67.0	67.3
31622.8	61.8	62.1	62.3	62.7	63.1	63.6	64.0	64.4	64.9	65.4	66.0	66.4
39810.7	60.7	61.0	61.2	61.6	62.1	62.7	63.0	63.3	63.8	64.4	64.7	65.4
50118.7	59.3	59.8	60.1	60.4	61.0	62.1	62.0	62.2	62.6	63.3	63.9	64.3
63095.7	58.1	58.5	59.0	59.4	59.9	61.2	61.0	61.1	61.5	62.2	62.8	63.3
79432.8	56.8	57.2	57.8	58.4	58.8	59.7	59.9	60.2	60.5	61.1	61.8	62.3

Setpoint 156 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	54.2	54.7	55.5	56.5	57.7	58.8	60.3	61.7	63.3	64.6	65.8	66.7
199.5	55.4	55.9	56.5	57.5	58.8	60.1	61.7	63.3	65.0	66.3	67.5	68.4
251.2	57.6	58.1	58.7	59.5	60.7	62.0	63.8	65.5	67.4	68.9	70.1	71.1
316.2	60.3	60.8	61.4	62.1	63.2	64.5	66.5	68.2	70.1	71.5	72.7	73.6
398.1	62.2	62.9	63.5	64.3	65.7	67.2	69.2	70.9	72.8	74.3	75.5	76.3
501.2	64.0	64.7	65.4	66.4	67.7	69.2	71.4	73.1	74.9	76.2	77.3	77.9
631.0	65.8	66.7	67.5	68.5	69.7	71.2	73.0	74.6	76.5	77.9	78.8	79.2
794.3	67.4	68.2	69.0	70.2	71.4	72.8	74.7	76.3	78.0	79.2	80.0	80.1
1000.0	68.8	69.7	70.5	71.5	72.7	74.0	75.8	77.1	78.6	79.7	80.2	79.9
1258.9	70.0	70.7	71.6	72.5	73.8	75.1	76.7	77.7	79.1	79.7	79.8	78.8
1584.9	70.8	71.6	72.5	73.4	74.5	75.7	77.0	78.1	78.8	78.9	78.2	76.4
1995.3	71.2	72.1	72.8	73.8	74.8	75.8	77.1	77.7	78.4	77.9	76.7	74.5
2511.9	71.6	72.3	73.1	74.1	74.9	75.8	77.0	77.3	77.5	76.7	74.9	72.5
3162.3	71.7	72.6	73.3	74.2	74.9	75.6	76.5	76.7	76.6	75.2	73.1	70.6
3981.1	71.7	72.6	73.3	74.0	74.7	75.3	76.1	75.6	74.7	73.3	71.2	68.6
5011.9	71.4	72.3	73.1	73.8	74.1	74.5	75.0	74.5	73.3	71.8	69.5	66.9
6309.6	71.2	71.9	72.4	73.0	73.6	73.9	74.2	73.3	71.7	70.2	67.9	65.3
7943.3	70.8	71.5	71.9	72.6	72.9	73.1	73.2	72.2	70.4	68.6	66.3	63.5
10000.0	70.3	70.9	71.4	71.9	72.4	72.4	72.3	71.0	69.0	67.3	64.8	62.0
12589.3	69.8	70.5	70.9	71.3	71.7	71.4	71.1	69.7	67.6	65.9	63.2	60.5
15848.9	69.2	69.9	70.1	70.7	70.9	70.5	69.9	68.5	66.0	64.4	61.6	58.6
19952.6	68.5	68.9	69.4	69.9	70.1	69.5	68.6	66.9	64.7	63.0	60.3	57.0
25118.9	67.8	68.3	68.4	69.0	69.3	68.5	67.4	65.8	63.3	61.6	58.6	55.4
31622.8	66.9	67.4	67.7	68.1	68.2	67.5	66.4	64.6	61.9	60.2	57.0	53.6
39810.7	65.8	66.3	66.5	66.9	66.8	66.2	65.0	63.3	61.0	58.8	55.7	52.1
50118.7	64.7	65.1	65.4	65.7	65.4	64.9	63.6	61.9	60.1	57.5	54.3	50.7
63095.7	63.7	63.9	64.2	64.5	64.4	63.7	62.4	60.7	59.3	56.4	53.1	49.6
79432.8	62.8	63.0	63.2	63.5	63.3	62.7	61.1	59.7	58.4	55.5	52.4	49.1

Setpoint	157
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.701
Ideal jet velocity (ft/s)	777.543
Temperature ratio (T_j/T_{amb})	1.198
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





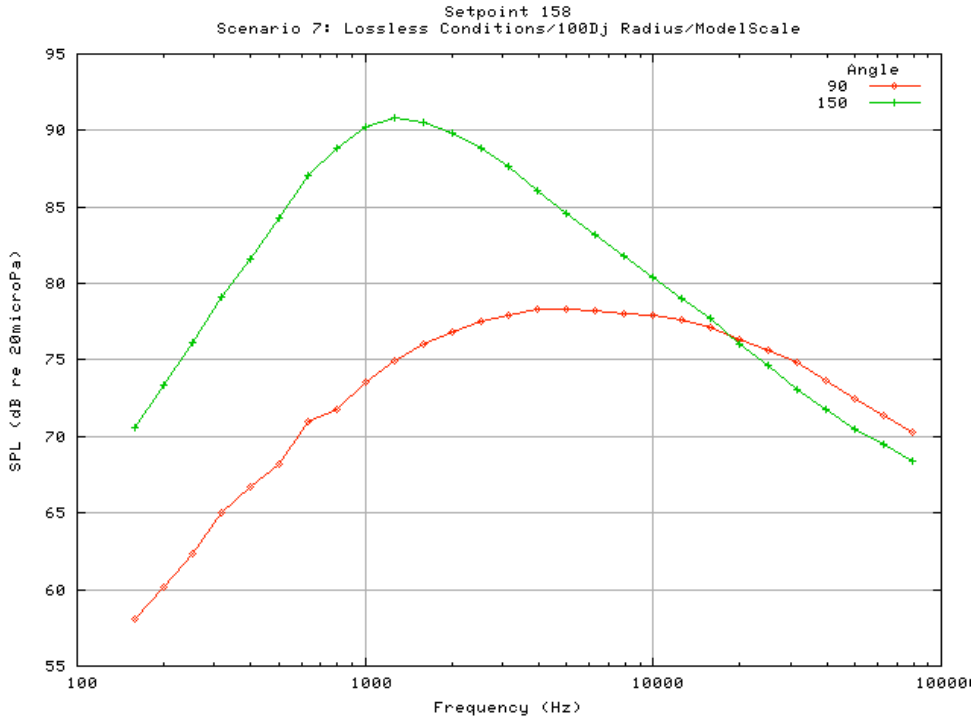
Setpoint 157 continued

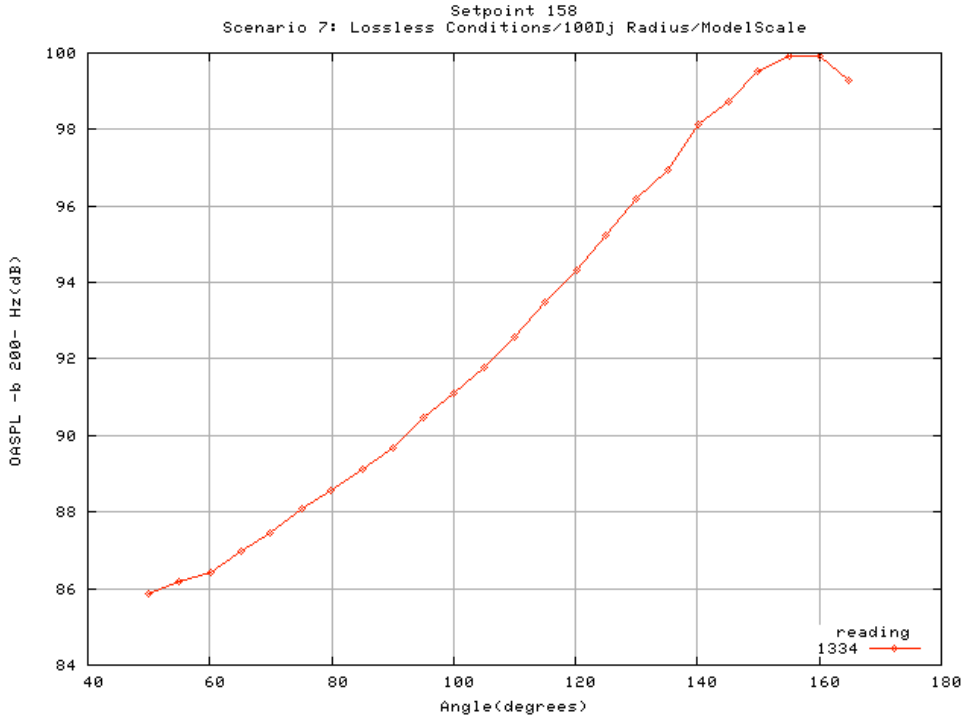
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	51.2	51.4	51.8	52.4	53.0	53.6	54.0	54.5	54.8	55.4	55.7	56.2
199.5	52.5	53.2	53.8	54.3	54.7	55.1	55.6	56.2	56.7	57.3	57.8	58.4
251.2	54.5	55.1	55.6	56.1	56.5	57.1	57.8	58.6	59.2	59.9	60.3	60.9
316.2	56.2	56.7	57.4	58.2	58.9	59.6	60.4	61.0	61.6	62.1	62.6	63.1
398.1	58.4	58.9	59.8	60.7	61.4	62.0	62.5	62.9	63.5	64.1	64.5	65.1
501.2	59.7	60.5	61.4	62.2	62.8	63.2	63.8	64.5	65.3	66.0	66.5	67.1
631.0	62.4	63.2	63.9	64.5	64.7	65.1	65.8	66.4	67.6	68.0	68.5	69.2
794.3	63.8	64.9	65.6	66.1	66.4	66.8	67.7	68.2	68.8	69.5	70.2	71.1
1000.0	65.4	66.3	67.1	67.4	67.9	68.6	69.3	69.8	70.5	71.2	71.7	72.3
1258.9	66.6	67.6	68.1	68.4	69.1	69.5	70.3	70.9	71.3	72.2	72.7	73.4
1584.9	68.1	68.4	68.7	69.1	69.7	70.5	71.3	71.8	72.5	73.2	73.9	74.6
1995.3	68.8	69.4	69.6	70.0	70.6	71.2	71.9	72.4	73.0	73.8	74.2	75.0
2511.9	69.6	70.0	70.3	70.7	71.2	71.8	72.4	73.1	73.5	74.4	74.9	75.7
3162.3	70.3	70.8	71.1	71.5	71.8	72.3	72.9	73.4	74.1	74.8	75.5	76.3
3981.1	70.9	71.1	71.3	71.7	72.2	72.7	73.3	73.6	74.3	75.1	75.5	76.3
5011.9	70.4	70.7	71.1	71.7	72.1	72.6	73.1	73.6	74.2	75.0	75.5	76.2
6309.6	70.3	70.8	71.1	71.6	71.9	72.4	73.2	73.6	74.1	74.7	75.4	76.1
7943.3	70.3	70.6	71.1	71.3	71.8	72.2	72.8	73.2	73.8	74.6	75.2	75.7
10000.0	70.3	70.4	70.6	71.0	71.4	72.0	72.7	73.1	73.5	74.3	75.0	75.4
12589.3	70.1	70.0	70.1	70.7	71.1	71.5	72.2	72.5	73.1	73.8	74.5	75.0
15848.9	69.6	69.4	69.6	69.9	70.6	71.3	71.6	72.0	72.6	73.4	74.0	74.4
19952.6	68.7	68.9	68.9	69.3	70.0	71.1	70.9	71.4	71.9	72.4	73.4	73.8
25118.9	67.9	68.3	68.1	68.4	69.2	70.5	70.3	70.7	71.1	71.8	72.7	73.1
31622.8	67.2	67.4	67.6	67.9	68.4	68.9	69.4	69.8	70.4	71.0	71.8	72.2
39810.7	65.9	66.3	66.4	66.8	67.3	68.0	68.3	68.7	69.2	69.9	70.4	71.0
50118.7	64.6	65.0	65.3	65.6	66.2	67.2	67.4	67.5	68.0	68.7	69.5	69.8
63095.7	63.3	63.8	64.1	64.6	65.1	66.4	66.3	66.4	66.9	67.6	68.4	68.7
79432.8	62.1	62.6	63.0	63.5	64.0	64.9	65.1	65.4	65.9	66.6	67.3	67.6

Setpoint 157 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	56.8	57.4	58.1	59.1	60.6	61.9	63.8	65.4	67.3	68.7	70.0	71.2
199.5	59.1	59.7	60.4	61.4	62.7	64.1	65.9	67.6	69.5	71.0	72.3	73.4
251.2	61.6	62.2	62.9	63.8	65.0	66.4	68.3	70.1	72.1	73.6	74.9	76.0
316.2	63.8	64.5	65.2	66.2	67.5	69.1	71.3	73.1	75.1	76.6	77.9	78.8
398.1	65.8	66.7	67.4	68.2	69.5	71.1	73.3	75.3	77.4	79.0	80.3	81.1
501.2	67.8	68.5	69.3	70.5	71.8	73.4	75.7	77.7	79.7	81.3	82.6	83.3
631.0	70.0	70.7	71.7	72.7	74.1	75.9	78.1	80.1	82.3	83.8	84.9	85.3
794.3	71.8	72.7	73.6	74.8	76.1	77.8	80.0	81.9	83.8	85.2	86.0	86.2
1000.0	73.2	74.1	75.1	76.5	78.0	79.5	81.5	83.1	84.8	85.9	86.5	86.1
1258.9	74.1	75.2	76.3	77.2	78.7	80.2	82.3	83.6	85.3	86.1	86.2	85.0
1584.9	75.5	76.5	77.4	78.4	79.7	81.1	82.8	84.0	84.9	85.2	84.5	82.7
1995.3	75.9	77.1	78.1	79.1	80.3	81.6	83.0	83.8	84.6	84.1	82.8	80.4
2511.9	76.5	77.3	78.3	79.5	80.8	81.7	83.0	83.4	83.7	82.9	80.9	78.6
3162.3	77.0	78.1	78.8	79.7	80.7	81.6	82.6	82.8	82.5	81.0	78.9	76.4
3981.1	77.1	77.9	78.7	79.7	80.6	81.3	82.3	81.8	80.8	79.3	77.3	74.4
5011.9	76.9	78.0	78.7	79.6	80.1	80.7	81.3	80.6	79.3	77.8	75.4	72.8
6309.6	76.8	77.5	78.4	79.2	79.8	80.1	80.4	79.5	78.0	76.3	73.8	71.1
7943.3	76.6	77.4	78.0	78.7	79.2	79.4	79.5	78.4	76.6	74.9	72.3	69.3
10000.0	76.2	77.1	77.7	78.1	78.6	78.6	78.6	77.1	75.2	73.6	71.0	68.2
12589.3	75.6	76.6	77.1	77.5	78.0	77.7	77.3	76.0	73.9	72.2	69.6	66.7
15848.9	75.2	76.1	76.5	76.9	77.3	76.8	76.3	74.7	72.4	70.8	68.0	64.8
19952.6	74.6	75.1	75.7	76.1	76.4	75.8	74.8	73.2	70.9	69.3	66.5	63.3
25118.9	73.7	74.5	74.6	75.3	75.4	74.7	73.5	72.0	69.5	67.8	64.8	61.4
31622.8	72.8	73.6	73.8	74.1	74.2	73.4	72.4	70.6	67.9	66.3	63.0	59.5
39810.7	71.7	72.3	72.6	72.8	72.6	72.0	70.7	69.0	66.8	64.7	61.3	57.7
50118.7	70.5	71.0	71.2	71.5	71.2	70.5	69.2	67.5	65.7	63.1	59.7	55.9
63095.7	69.4	69.8	70.0	70.1	69.9	69.2	67.9	66.1	64.8	61.8	58.3	54.5
79432.8	68.4	68.8	69.0	69.0	68.8	68.1	66.5	65.0	63.7	60.8	57.3	53.7

Setpoint	158
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.799
Ideal jet velocity (ft/s)	886.290
Temperature ratio (T_j/T_{amb})	1.204
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





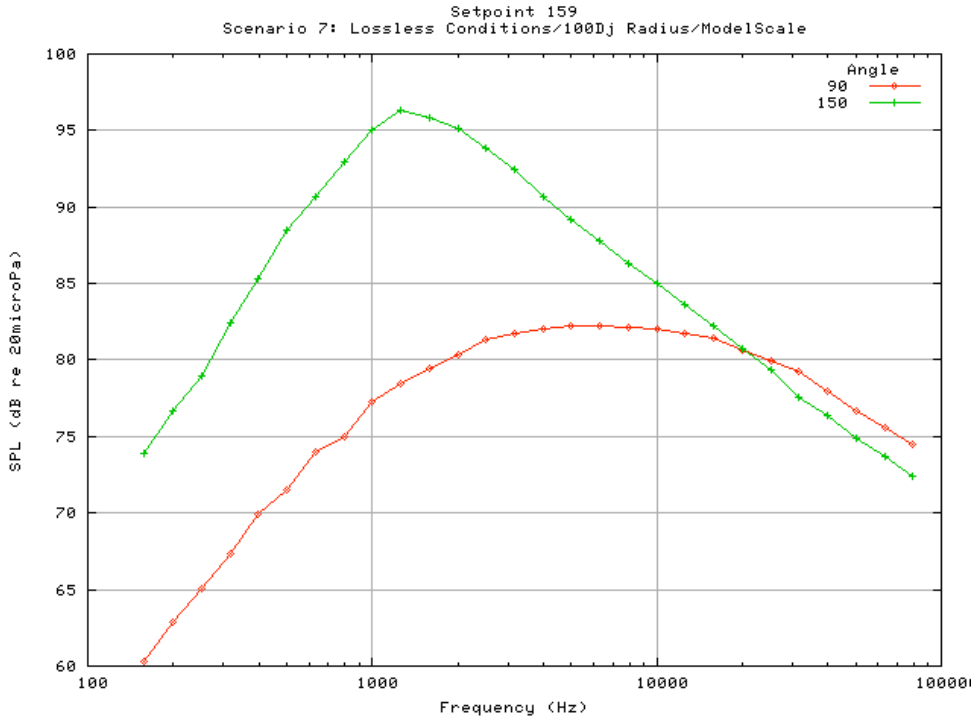
Setpoint 158 continued

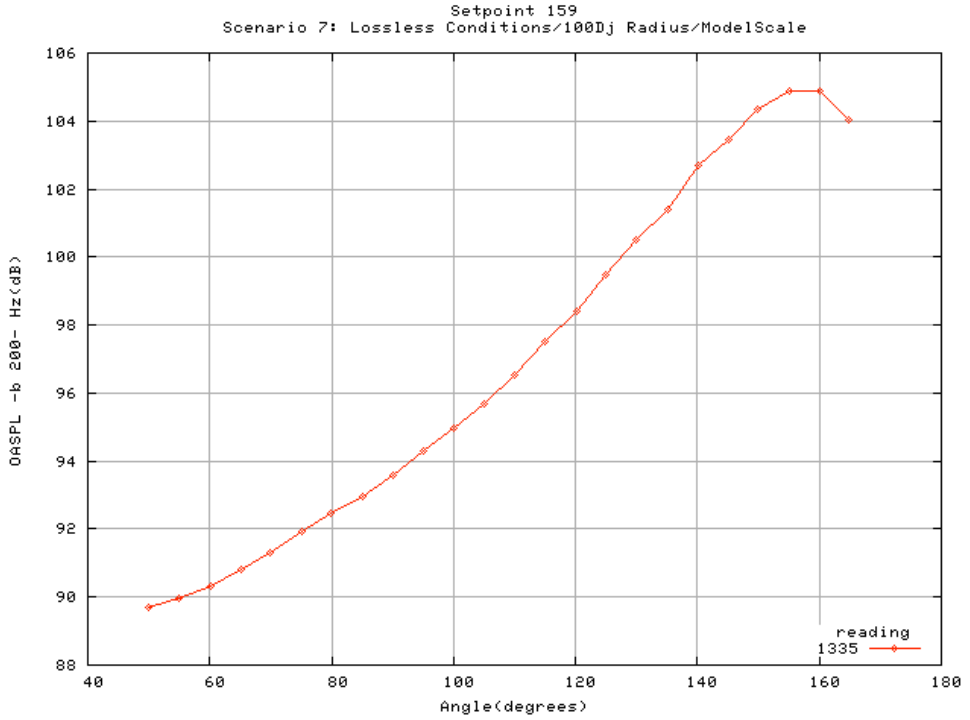
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	52.9	53.0	53.3	53.9	54.7	55.6	56.5	57.4	58.0	58.8	59.1	59.5
199.5	54.4	55.0	55.7	56.4	57.1	57.8	58.6	59.5	60.2	61.0	61.4	61.9
251.2	56.9	57.5	58.1	58.7	59.3	60.0	60.8	61.7	62.3	63.2	63.6	64.3
316.2	58.9	59.6	60.4	61.1	61.8	62.5	63.5	64.4	65.0	65.6	66.0	66.6
398.1	61.0	61.9	63.0	64.1	64.7	65.1	65.6	66.1	66.7	67.3	67.9	68.6
501.2	62.9	64.0	65.0	65.7	66.2	66.6	67.2	67.6	68.2	69.1	69.6	70.4
631.0	65.7	66.6	67.4	68.0	68.3	68.6	69.3	70.0	71.0	71.4	72.1	72.8
794.3	67.3	68.2	68.6	69.2	69.7	70.1	70.8	71.4	71.8	72.6	73.1	74.0
1000.0	68.8	69.6	70.4	70.9	71.1	71.8	72.5	73.0	73.6	74.4	74.9	75.8
1258.9	70.1	71.0	71.4	71.6	72.4	72.8	73.7	74.4	74.9	75.9	76.5	77.5
1584.9	71.8	72.1	72.3	72.6	73.2	74.1	74.7	75.3	76.1	76.7	77.3	78.0
1995.3	72.4	73.0	73.2	73.9	74.5	74.9	75.6	76.1	76.8	77.8	78.3	79.1
2511.9	73.3	73.7	73.9	74.4	75.1	75.6	76.5	76.9	77.5	78.3	78.8	79.6
3162.3	74.6	75.0	75.1	75.5	75.9	76.5	77.0	77.5	77.9	78.8	79.4	80.3
3981.1	74.7	74.9	75.1	75.7	76.3	76.8	77.3	77.7	78.3	79.2	79.8	80.4
5011.9	74.4	74.8	75.1	75.8	76.2	76.6	77.1	77.8	78.4	79.0	79.5	80.5
6309.6	74.3	75.0	75.3	75.8	76.2	76.6	77.2	77.9	78.2	79.1	79.7	80.5
7943.3	74.5	74.8	75.1	75.6	75.9	76.4	76.9	77.6	78.1	78.9	79.6	80.2
10000.0	74.5	74.7	74.8	75.3	75.8	76.3	76.9	77.4	77.9	78.7	79.5	79.9
12589.3	74.4	74.2	74.5	74.9	75.4	75.9	76.5	77.0	77.6	78.4	79.0	79.7
15848.9	73.9	73.8	73.9	74.4	74.9	75.7	76.1	76.5	77.2	78.1	78.6	79.0
19952.6	73.0	73.1	73.2	73.8	74.4	75.5	75.4	76.0	76.4	77.2	78.0	78.5
25118.9	72.1	72.4	72.4	72.8	73.6	74.9	74.7	75.2	75.7	76.5	77.4	77.8
31622.8	71.2	71.5	71.8	72.3	72.7	73.4	73.9	74.3	74.9	75.6	76.4	76.9
39810.7	70.0	70.2	70.6	71.1	71.6	72.4	72.8	73.2	73.7	74.5	75.0	75.7
50118.7	68.6	69.0	69.4	70.0	70.5	71.7	71.7	72.0	72.5	73.3	74.0	74.5
63095.7	67.3	67.7	68.3	68.8	69.3	70.7	70.6	70.9	71.3	72.1	72.9	73.3
79432.8	66.1	66.6	67.1	67.7	68.2	69.2	69.5	69.9	70.3	71.0	71.8	72.2

Setpoint 158 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	60.0	60.5	61.2	62.2	63.5	64.9	66.8	68.6	70.6	72.2	73.6	74.9
199.5	62.4	62.9	63.4	64.3	65.6	67.2	69.3	71.3	73.4	75.1	76.5	77.7
251.2	65.0	65.6	66.2	67.0	68.3	69.8	72.0	74.0	76.1	77.8	79.2	80.3
316.2	67.3	68.0	68.6	69.5	70.8	72.5	74.8	76.9	79.1	80.8	82.2	83.2
398.1	69.2	69.9	70.8	71.8	73.2	74.9	77.2	79.3	81.6	83.3	84.7	85.5
501.2	71.3	72.1	72.9	74.1	75.6	77.4	80.0	82.1	84.3	85.9	87.1	87.8
631.0	73.5	74.2	74.9	76.1	77.9	80.0	82.6	84.7	87.0	88.7	89.8	90.2
794.3	74.8	75.7	76.7	78.2	79.9	81.9	84.5	86.7	88.9	90.4	91.3	91.5
1000.0	76.6	77.5	78.7	80.1	81.8	83.7	86.2	88.3	90.3	91.6	92.3	91.9
1258.9	78.4	79.4	80.4	81.5	82.9	84.6	87.0	88.7	90.8	91.8	92.2	91.1
1584.9	79.0	80.2	81.3	82.5	84.0	85.7	87.7	89.2	90.5	91.1	90.7	89.0
1995.3	79.8	80.8	81.8	83.2	84.6	86.1	88.0	89.0	89.9	89.5	88.3	86.2
2511.9	80.5	81.5	82.6	83.9	85.1	86.2	87.8	88.4	88.9	87.9	86.1	83.9
3162.3	81.0	82.2	83.1	84.4	85.5	86.6	87.7	87.9	87.7	86.2	84.2	81.7
3981.1	81.3	82.3	83.2	84.3	85.3	86.3	87.4	87.0	86.1	84.5	82.5	79.6
5011.9	81.3	82.3	83.3	84.2	85.1	85.7	86.5	85.8	84.5	83.1	80.9	78.0
6309.6	81.2	82.0	83.0	83.9	84.8	85.2	85.6	84.7	83.2	81.5	79.2	76.4
7943.3	81.0	82.0	82.8	83.6	84.3	84.5	84.6	83.5	81.8	80.1	77.5	74.5
10000.0	80.7	81.7	82.4	83.0	83.7	83.8	83.7	82.3	80.4	78.7	76.1	73.3
12589.3	80.4	81.4	82.0	82.6	83.2	82.9	82.5	81.2	79.0	77.3	74.6	71.8
15848.9	79.9	80.9	81.5	81.9	82.4	82.0	81.4	79.9	77.7	76.0	73.2	70.0
19952.6	79.4	80.0	80.6	81.2	81.5	80.8	80.0	78.3	76.1	74.4	71.7	68.3
25118.9	78.6	79.3	79.6	80.2	80.5	79.7	78.6	77.1	74.7	73.0	69.9	66.5
31622.8	77.7	78.3	78.8	79.0	79.1	78.3	77.4	75.6	73.0	71.3	68.1	64.5
39810.7	76.5	77.1	77.3	77.7	77.4	76.8	75.6	74.0	71.8	69.5	66.2	62.4
50118.7	75.2	75.6	76.0	76.2	75.9	75.2	73.8	72.3	70.5	67.8	64.4	60.6
63095.7	74.0	74.4	74.6	74.8	74.6	73.8	72.5	70.9	69.5	66.4	62.9	59.1
79432.8	72.9	73.4	73.5	73.6	73.3	72.6	71.0	69.6	68.4	65.3	61.9	58.3

Setpoint	159
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	0.903
Ideal jet velocity (ft/s)	1001.490
Temperature ratio (T_j/T_{amb})	1.199
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





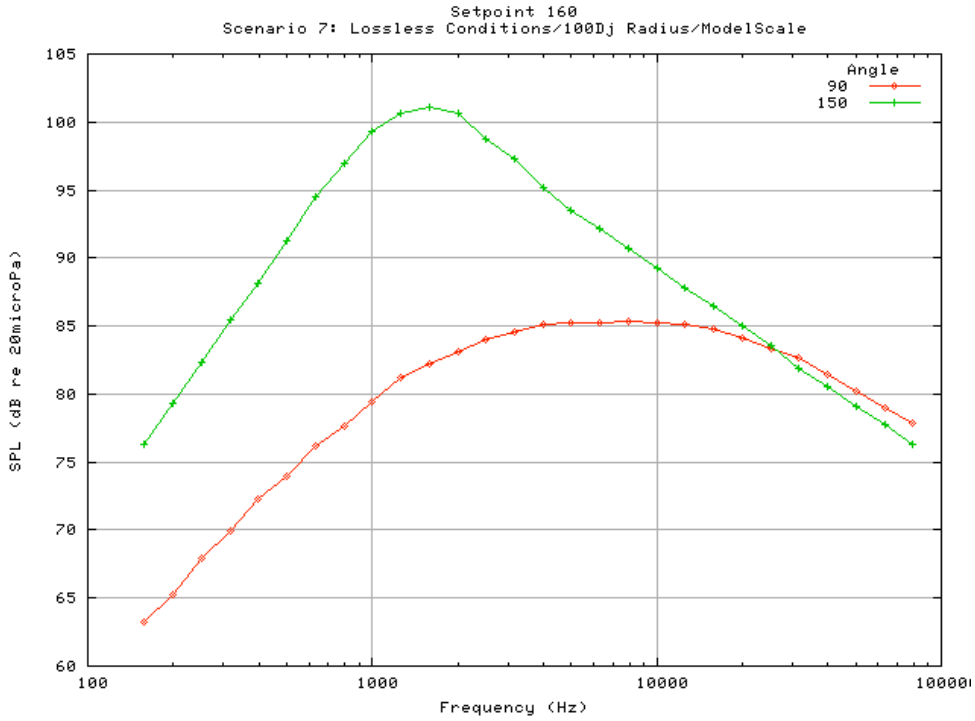
Setpoint 159 continued

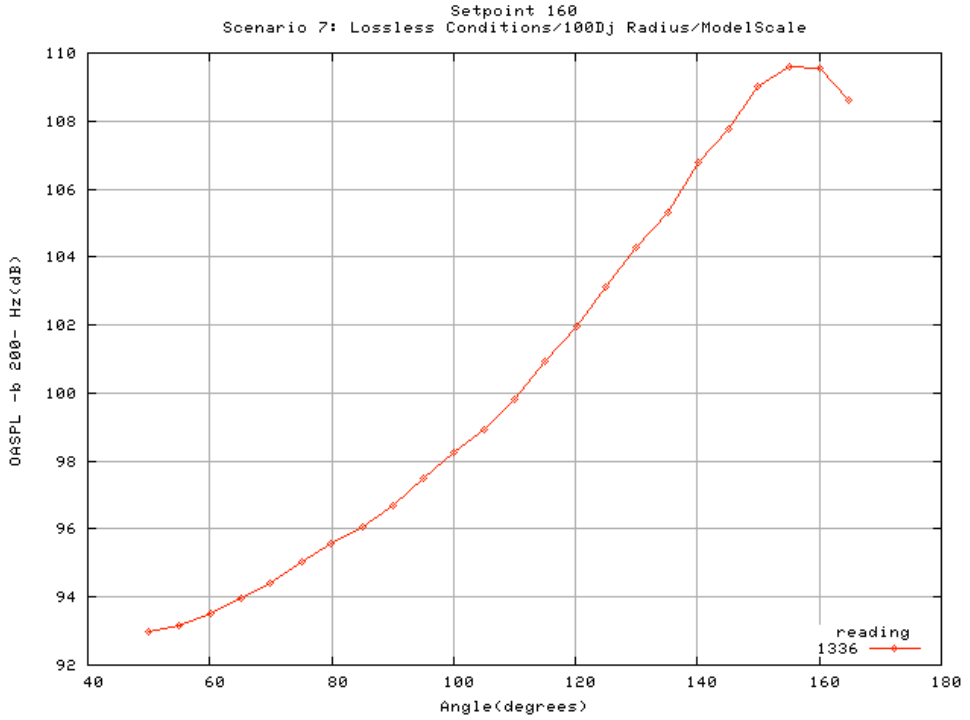
Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	56.1	56.4	56.8	57.4	57.8	58.4	59.0	59.7	60.3	61.0	61.5	62.1
199.5	57.2	57.9	58.7	59.4	60.1	60.7	61.5	62.3	62.9	63.7	64.1	64.6
251.2	60.1	60.6	61.1	61.7	62.2	62.9	63.6	64.4	65.1	65.9	66.4	67.1
316.2	62.3	62.8	63.5	64.2	65.0	65.7	66.4	66.9	67.4	68.0	68.5	69.2
398.1	64.4	65.0	65.8	66.7	67.5	68.1	68.7	69.3	69.9	70.7	71.3	71.9
501.2	65.8	67.0	68.1	68.9	69.3	69.7	70.3	70.9	71.5	72.1	72.5	73.0
631.0	68.6	69.6	70.4	71.0	71.3	71.7	72.4	72.9	74.0	74.2	74.8	75.6
794.3	70.8	71.5	71.9	72.4	72.7	73.0	73.7	74.4	75.0	75.9	76.6	77.5
1000.0	72.3	73.3	73.7	73.9	74.6	74.9	75.9	76.4	77.2	77.9	78.6	79.3
1258.9	73.5	74.6	74.8	75.2	75.8	76.3	77.2	77.9	78.5	79.4	79.8	80.6
1584.9	75.2	75.5	75.9	76.5	77.1	77.7	78.3	78.7	79.5	80.2	80.9	81.7
1995.3	76.1	76.5	76.7	77.1	77.8	78.3	79.0	79.7	80.3	81.1	81.7	82.6
2511.9	77.3	77.7	77.9	78.3	78.7	79.2	80.0	80.7	81.3	82.0	82.5	83.3
3162.3	78.4	78.8	79.0	79.3	79.5	80.1	80.7	81.2	81.8	82.5	83.1	83.8
3981.1	78.4	78.4	78.9	79.3	79.8	80.3	81.0	81.4	82.0	83.0	83.5	84.2
5011.9	78.5	78.7	79.0	79.6	80.0	80.5	81.0	81.5	82.2	82.9	83.2	84.3
6309.6	78.4	78.6	79.0	79.7	80.1	80.5	81.2	81.7	82.2	83.0	83.5	84.4
7943.3	78.5	78.6	78.9	79.4	80.0	80.4	81.0	81.6	82.2	82.8	83.6	84.2
10000.0	78.5	78.5	78.8	79.2	79.8	80.2	81.0	81.5	82.0	82.7	83.4	84.1
12589.3	78.5	78.2	78.6	79.1	79.6	80.0	80.8	81.1	81.8	82.4	83.1	83.7
15848.9	77.8	77.9	78.1	78.5	79.0	79.8	80.2	80.7	81.5	82.1	82.8	83.3
19952.6	77.0	77.3	77.5	78.0	78.6	79.7	79.7	80.2	80.7	81.3	82.2	82.9
25118.9	76.1	76.5	76.7	77.1	77.8	79.2	79.1	79.5	80.0	80.6	81.7	82.2
31622.8	75.1	75.4	75.9	76.4	76.9	77.6	78.1	78.6	79.2	79.8	80.6	81.2
39810.7	73.8	74.1	74.7	75.2	75.8	76.6	77.0	77.4	78.0	78.8	79.2	80.0
50118.7	72.3	72.8	73.3	73.9	74.5	75.7	75.9	76.2	76.7	77.5	78.2	78.8
63095.7	70.9	71.3	72.1	72.6	73.3	74.7	74.7	75.0	75.6	76.3	77.1	77.5
79432.8	69.6	70.1	70.9	71.5	72.1	73.2	73.5	74.0	74.5	75.2	75.9	76.4

Setpoint 159 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	62.7	63.2	63.9	64.9	66.3	67.8	69.9	71.8	73.8	75.5	77.0	78.5
199.5	65.2	65.7	66.2	67.1	68.5	70.2	72.4	74.5	76.7	78.4	79.9	81.2
251.2	67.8	68.5	69.1	69.9	71.1	72.6	74.8	76.8	79.0	80.8	82.3	83.5
316.2	69.8	70.4	71.1	72.3	73.8	75.6	78.0	80.2	82.4	84.2	85.7	86.7
398.1	72.6	73.2	73.9	74.8	76.4	78.2	80.7	82.9	85.3	87.2	88.7	89.6
501.2	73.7	74.4	75.2	76.5	78.4	80.7	83.7	86.2	88.5	90.2	91.5	92.2
631.0	76.4	77.3	78.1	79.2	81.0	83.2	85.9	88.2	90.7	92.4	93.6	94.0
794.3	78.3	79.1	80.1	81.5	83.2	85.4	88.2	90.7	93.0	94.6	95.6	95.6
1000.0	80.1	81.1	82.1	83.5	85.3	87.4	90.4	92.8	95.0	96.5	97.0	96.5
1258.9	81.5	82.4	83.6	84.9	86.9	89.1	92.0	94.0	96.3	97.4	97.6	96.3
1584.9	82.7	83.7	85.0	86.4	88.1	90.0	92.3	94.3	95.8	96.7	96.4	94.8
1995.3	83.4	84.5	85.5	86.9	88.6	90.5	92.6	93.9	95.1	95.1	94.4	92.6
2511.9	84.2	85.2	86.4	88.0	89.4	90.9	92.7	93.3	93.9	93.2	91.8	90.0
3162.3	84.8	86.0	87.0	88.3	89.7	91.1	92.5	92.7	92.5	91.2	89.4	87.1
3981.1	85.1	86.2	87.3	88.6	89.8	90.9	92.1	91.8	90.7	89.3	87.4	84.6
5011.9	85.3	86.4	87.4	88.6	89.6	90.3	91.1	90.6	89.2	87.8	85.5	82.8
6309.6	85.2	86.2	87.2	88.3	89.3	89.7	90.2	89.3	87.8	86.2	83.9	81.1
7943.3	85.2	86.1	87.1	88.0	88.9	89.2	89.3	88.1	86.3	84.7	82.2	79.2
10000.0	85.0	85.9	86.8	87.8	88.4	88.4	88.3	87.0	85.0	83.4	80.9	78.1
12589.3	84.6	85.6	86.5	87.2	87.8	87.5	87.2	85.7	83.6	82.0	79.4	76.7
15848.9	84.2	85.1	85.9	86.7	87.0	86.6	86.0	84.5	82.2	80.7	78.0	75.0
19952.6	83.7	84.4	85.2	85.9	86.2	85.6	84.6	82.9	80.8	79.2	76.6	73.3
25118.9	83.0	83.9	84.1	85.0	85.2	84.4	83.2	81.7	79.4	77.8	74.9	71.5
31622.8	82.0	82.8	83.3	83.8	83.9	83.0	81.9	80.1	77.6	76.1	73.1	69.5
39810.7	80.9	81.5	81.9	82.3	82.1	81.4	80.2	78.4	76.3	74.2	71.2	67.4
50118.7	79.5	80.1	80.5	80.7	80.5	79.7	78.3	76.7	74.9	72.4	69.3	65.3
63095.7	78.2	78.7	79.1	79.2	79.0	78.1	76.9	75.2	73.7	70.8	67.4	63.5
79432.8	77.1	77.6	77.9	77.9	77.7	76.9	75.3	73.8	72.4	69.5	66.1	62.3

Setpoint	160
Nozzle ID	SMC000
Nozzle area	3.142
Acoustic Mach number (V_j/C_{amb})	1.001
Ideal jet velocity (ft/s)	1110.680
Temperature ratio (T_j/T_{amb})	1.198
Data processing condition	One-third octave power spectra at 100*(nozzle diameter) distance in a lossless condition





Setpoint 160 continued

Frequency	Angle											
	50.0	55.0	60.1	65.1	70.0	75.0	79.9	85.1	90.0	95.0	100.1	105.1
158.5	57.0	57.5	58.2	59.1	59.9	60.8	61.7	62.6	63.3	64.1	64.6	65.2
199.5	59.1	59.8	60.7	61.5	62.2	62.9	63.7	64.5	65.3	66.1	66.7	67.3
251.2	62.3	62.9	63.5	64.1	64.7	65.4	66.3	67.2	67.9	68.9	69.4	70.0
316.2	64.4	64.9	65.7	66.6	67.5	68.2	68.9	69.5	70.0	70.6	71.0	71.6
398.1	66.1	66.8	67.8	68.7	69.5	70.0	70.8	71.6	72.2	72.9	73.5	74.2
501.2	67.9	69.1	70.0	70.7	71.2	71.7	72.4	73.2	74.0	74.8	75.4	76.1
631.0	71.4	72.2	73.0	73.4	73.5	73.8	74.6	75.3	76.2	76.7	77.3	78.0
794.3	73.3	74.1	74.5	74.8	75.4	75.7	76.3	77.1	77.6	78.6	79.1	79.9
1000.0	75.0	75.8	76.4	76.7	77.3	77.8	78.3	78.8	79.4	80.3	80.8	81.7
1258.9	76.6	77.5	77.6	78.1	78.6	79.0	80.0	80.4	81.2	81.8	82.5	83.3
1584.9	78.2	78.2	78.5	79.0	79.7	80.4	81.0	81.6	82.2	82.9	83.7	84.4
1995.3	78.8	79.3	79.6	80.2	80.5	81.1	81.9	82.6	83.1	83.8	84.5	85.3
2511.9	80.1	80.4	80.7	81.0	81.6	81.9	82.6	83.4	84.0	84.8	85.4	86.4
3162.3	80.8	81.0	81.4	82.0	82.3	82.8	83.4	84.1	84.5	85.5	86.2	87.1
3981.1	81.3	81.3	81.8	82.5	82.9	83.4	84.0	84.4	85.2	86.0	86.6	87.3
5011.9	81.5	81.6	82.0	82.5	82.7	83.4	84.0	84.5	85.2	86.1	86.7	87.5
6309.6	81.6	81.9	82.1	82.7	83.0	83.6	84.3	84.7	85.3	86.1	86.8	87.5
7943.3	82.2	82.0	82.4	82.8	83.3	83.6	84.1	84.7	85.3	86.1	86.9	87.5
10000.0	82.5	82.2	82.5	82.9	83.2	83.6	84.3	84.7	85.2	86.1	86.8	87.5
12589.3	82.3	82.0	82.3	82.7	83.1	83.5	84.1	84.4	85.1	85.9	86.6	87.3
15848.9	81.8	81.7	82.0	82.3	82.7	83.3	83.7	84.1	84.8	85.6	86.3	86.8
19952.6	80.6	81.0	81.2	81.7	82.1	83.2	83.1	83.6	84.1	84.8	85.9	86.5
25118.9	79.7	80.1	80.3	80.6	81.4	82.6	82.5	82.9	83.4	84.2	85.4	85.8
31622.8	78.6	78.9	79.4	79.9	80.4	81.0	81.5	82.1	82.7	83.5	84.4	84.9
39810.7	77.0	77.4	77.9	78.6	79.1	79.9	80.4	80.9	81.5	82.4	83.0	83.7
50118.7	75.5	75.8	76.5	77.1	77.7	79.0	79.3	79.6	80.2	81.2	82.1	82.5
63095.7	74.0	74.4	75.1	75.8	76.4	77.9	78.0	78.4	79.0	79.9	80.9	81.2
79432.8	72.6	73.1	73.9	74.6	75.1	76.3	76.8	77.4	77.9	78.8	79.6	80.0

Setpoint 160 continued

Frequency	Angle											
	110.1	115.1	120.1	125.0	130.0	135.1	140.1	145.1	149.9	155.0	160.0	164.9
158.5	65.8	66.3	66.8	67.6	68.7	70.0	72.0	74.0	76.3	78.2	80.0	81.5
199.5	67.9	68.5	69.1	70.0	71.3	72.8	74.9	77.0	79.4	81.3	82.9	84.2
251.2	70.6	71.0	71.5	72.2	73.5	75.2	77.6	79.9	82.3	84.2	85.8	87.0
316.2	72.2	72.8	73.5	74.6	76.1	78.1	80.7	83.1	85.4	87.3	88.8	89.9
398.1	74.9	75.6	76.3	77.4	79.0	80.9	83.4	85.7	88.1	90.1	91.6	92.5
501.2	76.9	77.8	78.6	79.8	81.4	83.4	86.3	88.8	91.3	93.2	94.6	95.4
631.0	78.7	79.6	80.5	81.9	84.0	86.4	89.4	91.9	94.5	96.4	97.6	97.9
794.3	80.7	81.5	82.5	84.2	86.3	88.9	92.1	94.6	97.0	98.6	99.5	99.4
1000.0	82.5	83.5	84.6	86.2	88.5	91.1	94.4	97.0	99.3	100.7	101.2	100.5
1258.9	84.2	85.3	86.5	88.1	90.3	92.8	96.0	98.3	100.7	101.8	101.9	100.5
1584.9	85.5	86.6	87.9	89.4	91.3	93.7	96.6	99.1	101.1	102.1	101.8	100.2
1995.3	86.2	87.5	88.8	90.5	92.5	94.6	97.1	98.9	100.6	101.0	100.6	99.1
2511.9	87.3	88.6	89.8	91.3	93.0	94.7	96.7	97.7	98.8	98.8	98.1	96.9
3162.3	88.0	89.3	90.3	91.8	93.3	94.9	96.5	97.1	97.3	96.4	95.4	93.6
3981.1	88.3	89.8	91.0	92.3	93.7	94.9	96.1	95.9	95.2	94.1	92.7	90.4
5011.9	88.3	89.7	90.9	92.4	93.4	94.4	95.2	94.6	93.5	92.4	90.5	88.0
6309.6	88.4	89.7	90.9	92.1	93.2	93.9	94.5	93.5	92.1	90.7	88.7	86.1
7943.3	88.5	89.6	90.8	91.9	92.9	93.3	93.4	92.4	90.7	89.2	86.9	84.2
10000.0	88.4	89.5	90.5	91.6	92.4	92.4	92.5	91.1	89.3	87.8	85.5	82.8
12589.3	88.1	89.4	90.3	91.2	91.9	91.7	91.3	89.9	87.8	86.3	83.9	81.3
15848.9	87.8	89.0	89.8	90.6	91.2	90.8	90.1	88.7	86.5	84.9	82.5	79.6
19952.6	87.3	88.2	89.1	89.9	90.3	89.7	88.7	87.0	85.0	83.6	81.2	78.1
25118.9	86.5	87.6	88.1	89.0	89.2	88.5	87.3	85.9	83.6	82.0	79.5	76.2
31622.8	85.7	86.7	87.3	87.8	87.9	87.0	86.0	84.4	81.9	80.4	77.6	74.3
39810.7	84.5	85.3	85.8	86.3	86.1	85.4	84.2	82.6	80.5	78.5	75.7	72.2
50118.7	83.1	83.8	84.4	84.7	84.4	83.7	82.3	80.8	79.1	76.6	73.8	70.0
63095.7	81.8	82.4	82.9	83.1	82.9	82.0	80.7	79.1	77.8	75.0	71.8	68.0
79432.8	80.7	81.3	81.6	81.7	81.4	80.7	79.0	77.6	76.3	73.5	70.3	66.5

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13. ABSTRACT ***(Maximum 200 words)***

The Small Hot Jet Acoustic Rig (SHJAR), located in the Aeroacoustic Propulsion Laboratory (AAPL) at the NASA Glenn Research Center in Cleveland, Ohio, was commissioned in 2001 to test jet noise reduction concepts at low technology readiness levels (TRL 1–3) and develop advanced measurement techniques. The first series of tests on the SHJAR were designed to prove its capabilities and establish the quality of the jet noise data produced. Towards this goal, a methodology was employed dividing all noise sources into three categories: background noise, jet noise, and rig noise. Background noise was directly measured. Jet noise and rig noise were separated by using the distance and velocity scaling properties of jet noise. Effectively, any noise source that did not follow these rules of jet noise was labeled as rig noise. This method led to the identification of a high frequency noise source related to the Reynolds number. Experiments using boundary layer treatment and hot wire probes documented this noise source and its removal, allowing clean testing of low Reynolds number jets. Other tests performed characterized the amplitude and frequency of the valve noise, confirmed the location of the acoustic far field, and documented the background noise levels under several conditions. Finally, a full set of baseline data was acquired. This paper contains the methodology and test results used to verify the quality of the SHJAR rig.

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