



SAUSALITOAUDIO

# Audax TWO25 Measurement Data



The Audax TWO25 is a 1" fabric dome tweeter. It has been in production for over 20 years and is the tweeter that is used in the Sausalito Audio 6" two-way concept prototype. The tweeter has a reasonably low resonance of 900Hz and a large ferrite magnet. It is somewhat novel in that the shape of the dome is elliptical rather than spherical giving the dome an "egg" shape.

The tweeter was mounted off-center in a 26" square piece of cardboard to simulate infinite baffle mounting. Data was collected above 500Hz only. It should be noted that this type of mounting, while traditional for characterizing tweeters, is not representative of the response curves one sees when a tweeter is mounted in the typical manner in a real-world speaker baffle. The small baffle size and cabinet edges will cause significant anomalies.

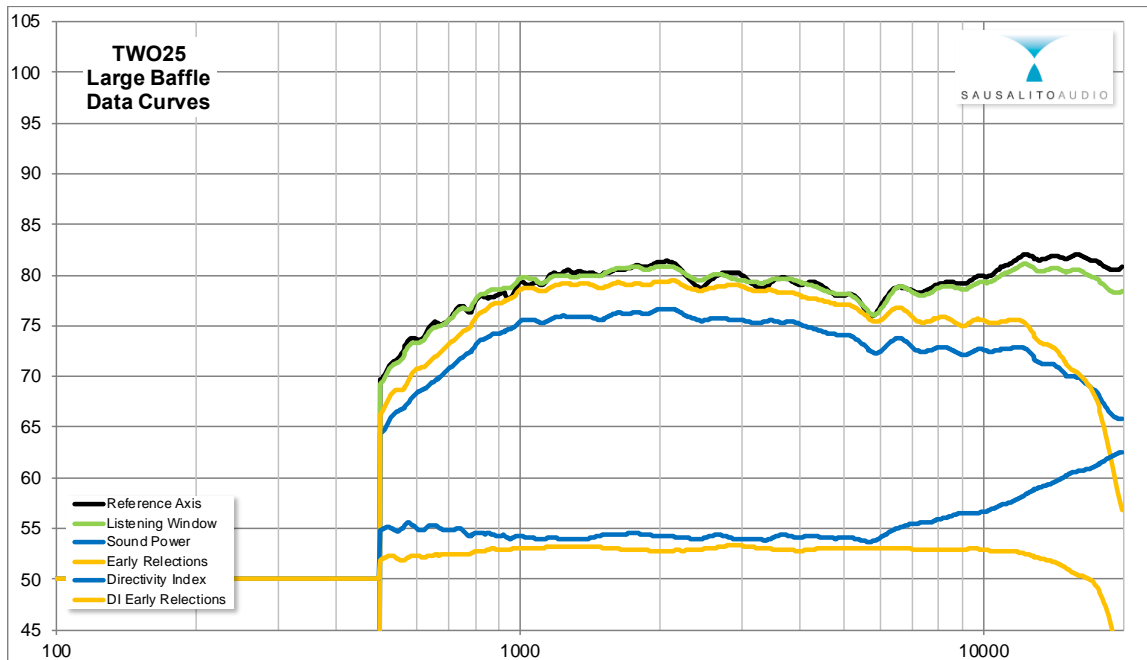


Figure 1: Spinorama chart for the Audax TWO25 dome tweeter. For information on how to interpret this chart, please see "Interpreting Spinorama Charts" on the SA web site.

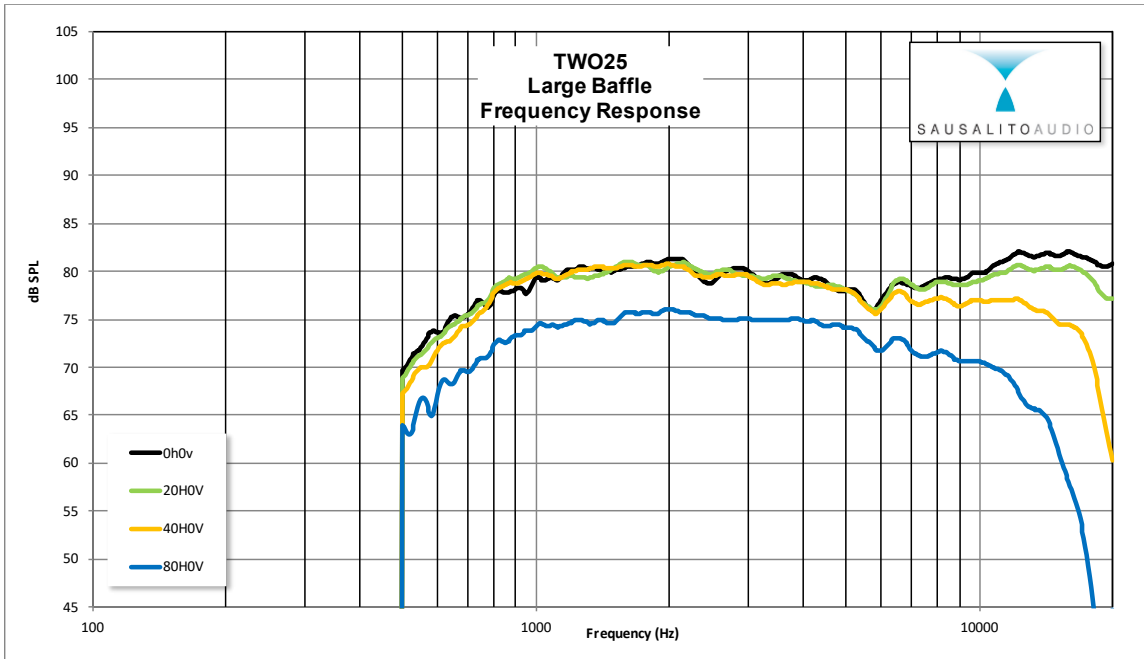


Figure 2: Frequency response curves at the referenced horizontal angles.

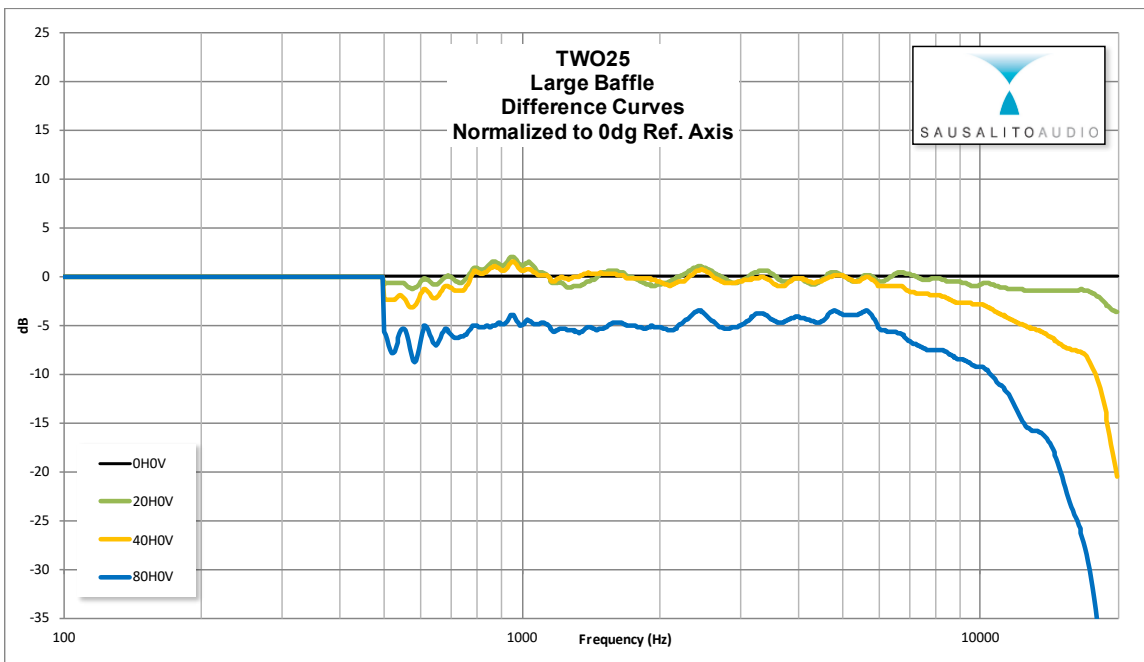


Figure 3: The data from figure 2 normalized to the reference axis of 0° horizontal, 0° vertical to more clearly show how the response of the tweeter changes as one moves off the center line.

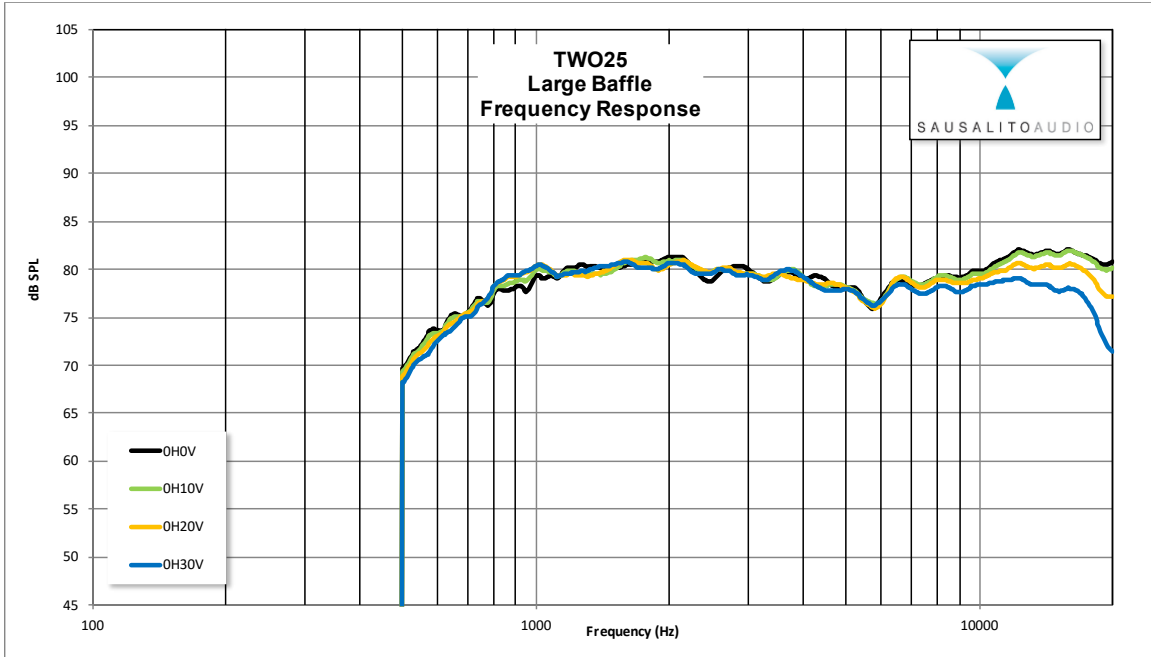


Figure 4: Response curves for 10°, 20° & 30° above (and below) the 0° reference.

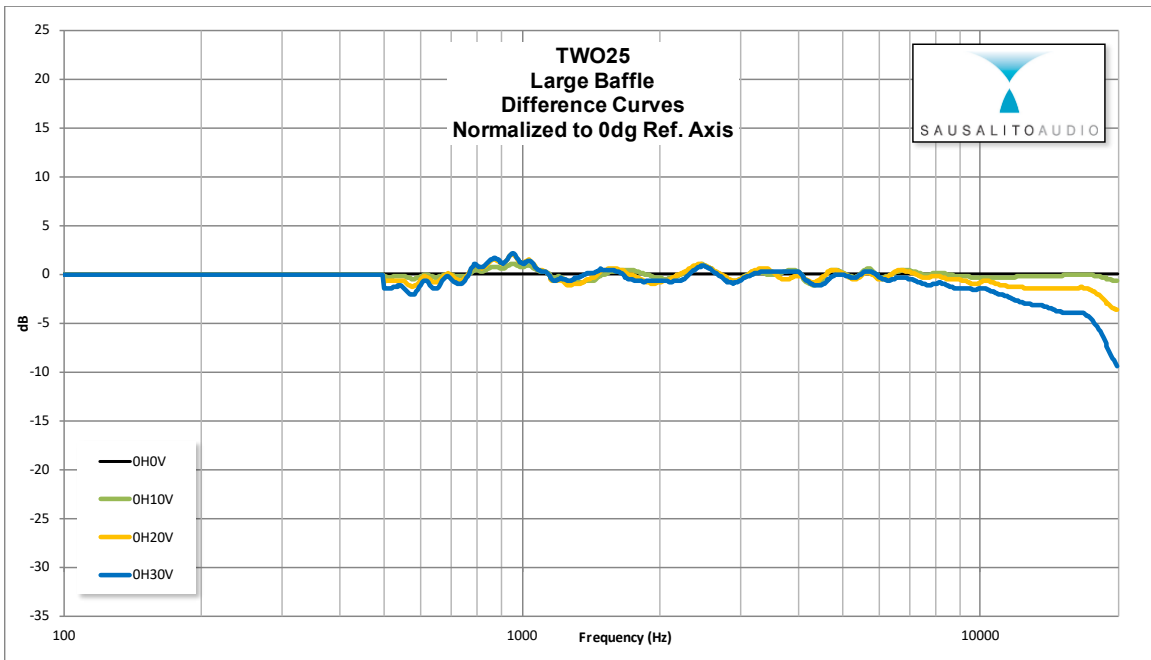


Figure 5: Difference curves for the reference angles normalized to 0° on axis.

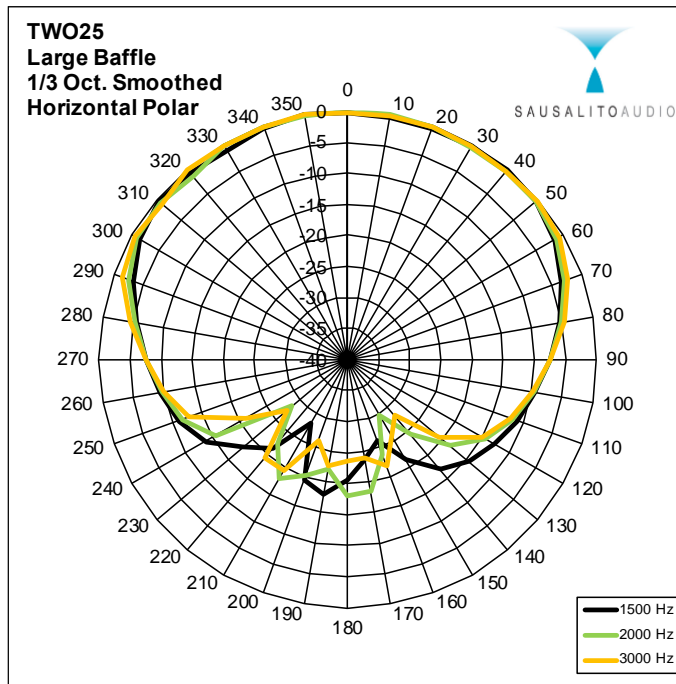


Figure 5: Horizontal polar response at the indicated frequency. Data is normalized to 0dB and smoothed to 1/3 octave per the convention for polar plots.

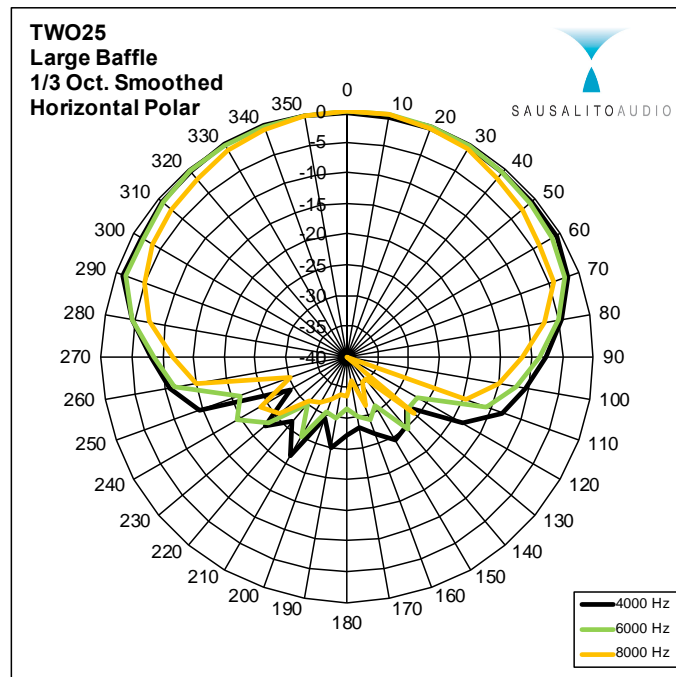


Figure 6: Horizontal polar response at the indicated frequency. Data is normalized to 0dB and smoothed to 1/3 octave per the convention for polar plots.

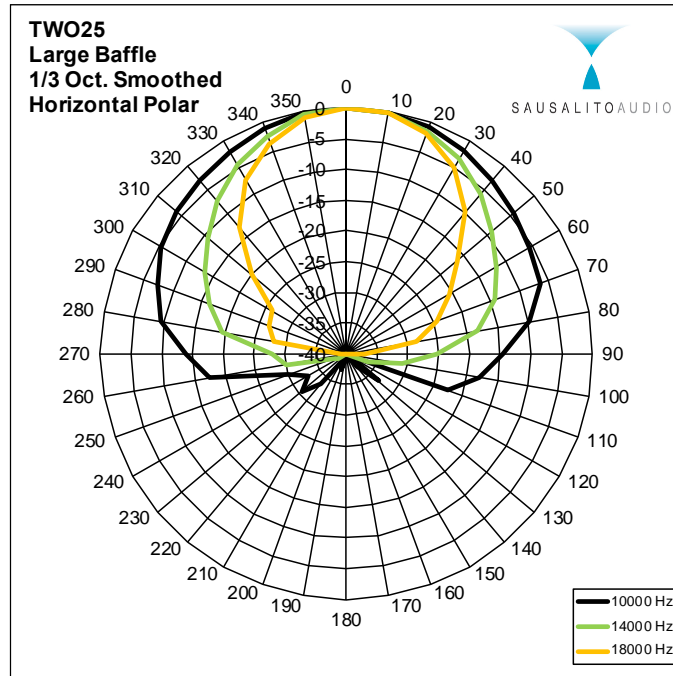


Figure 7: Horizontal polar response at the indicated frequency. Data is normalized to 0dB and smoothed to 1/3 octave per the convention for polar plots.

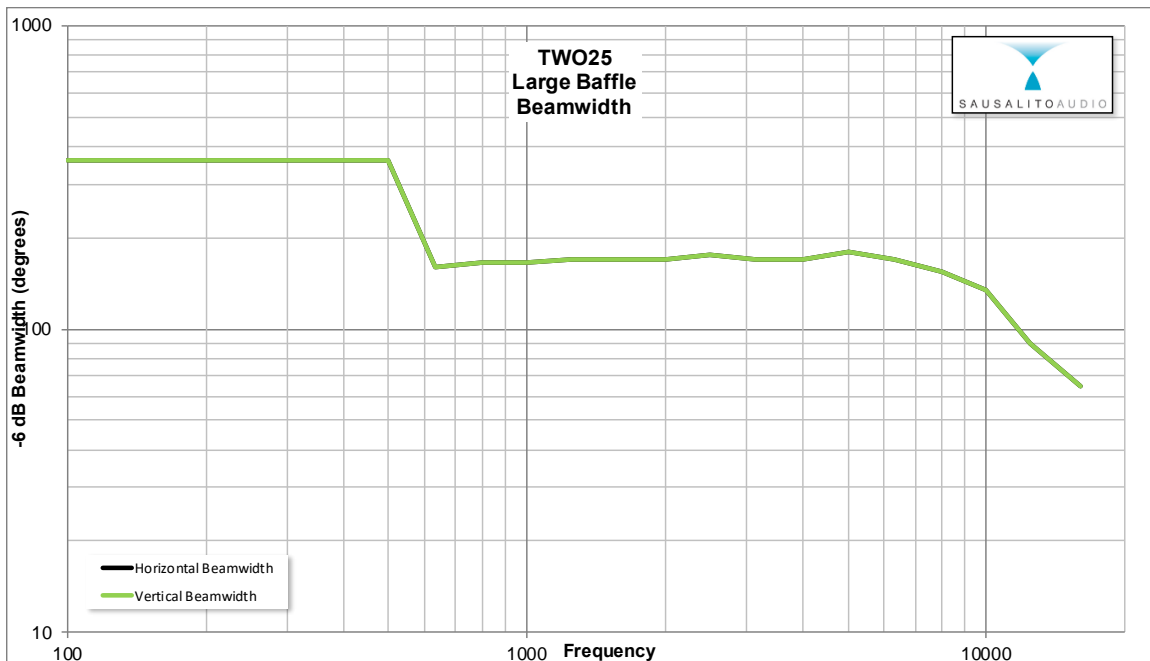


Figure 8: The chart shows the -6dB point as a function of frequency and coverage angle. In this case, the vertical and horizontal beamwidth plots are identical.