

Figure 1: The HH ($\sigma_{\phi\phi,dB}$, left) and VV ($\sigma_{\theta\theta,dB}$, right) polarized RCS for the open tail-coated almond of length L= 9.936 in at frequency f = 2.58 GHz.

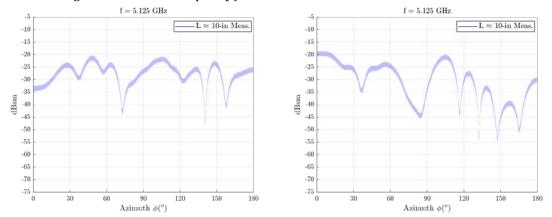


Figure 2: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the open tail-coated almond of length L= 9.936 in at frequency f = 5.125 GHz.

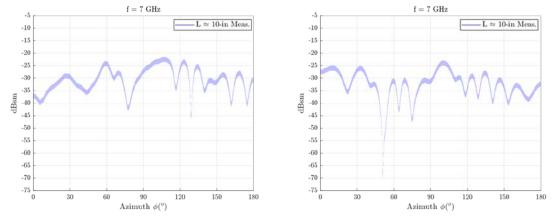


Figure 3: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the open tail-coated almond of length L= 9.936 in at frequency f = 7 GHz.

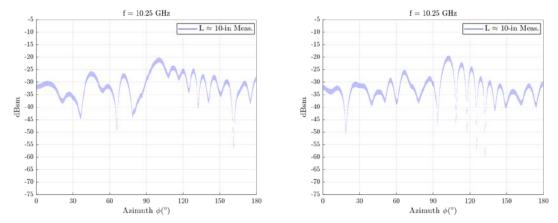


Figure 4: The HH ($\sigma_{\phi\phi,dB}$, left) and VV ($\sigma_{\theta\theta,dB}$, right) polarized RCS for the open tail-coated almond of length L= 9.936 in at frequency f = 10.25 GHz.

The above RCS results are that of the reference measurement data in the benchmark suite. The measurement data in the suite are the same as that shown in [1] and are plotted within a ∓ 1 dB window to represent the measurement uncertainties. Simulation results are currently not available for this problem; thus, until they are corroborated by simulations, the measurement data for this problem set should be considered less reliable than for the others in the benchmark suite.

Notes

1. The measurement data are provided at every 0.5° in the azimuthal range.

References

[1] J. T. Kelley, A. E. Yilmaz, D. A. Chamulak, and C. C. Courtney, "Measurements of non-metallic targets for the Austin RCS benchmark suite," in *Proc. Ant. Meas. Tech. Assoc. (AMTA) Symp.*, Oct. 2019.