

Figure 1: The HH ($\sigma_{\phi\phi, \text{dB}}$, left) and VV ($\sigma_{\theta\theta, \text{dB}}$, right) polarized RCS for the zero-thickness PEC plate of width $W = 4$ in at frequency $f = 10$ MHz.

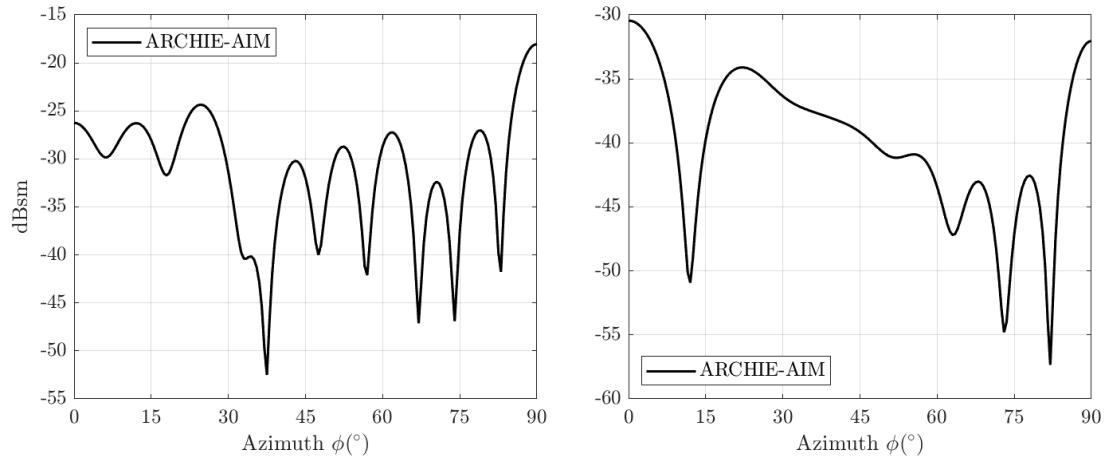


Figure 2: The HH ($\sigma_{\phi\phi, \text{dB}}$, left) and VV ($\sigma_{\theta\theta, \text{dB}}$, right) polarized RCS for the zero-thickness PEC plate of width $W = 4$ in at frequency $f = 5.12$ GHz.

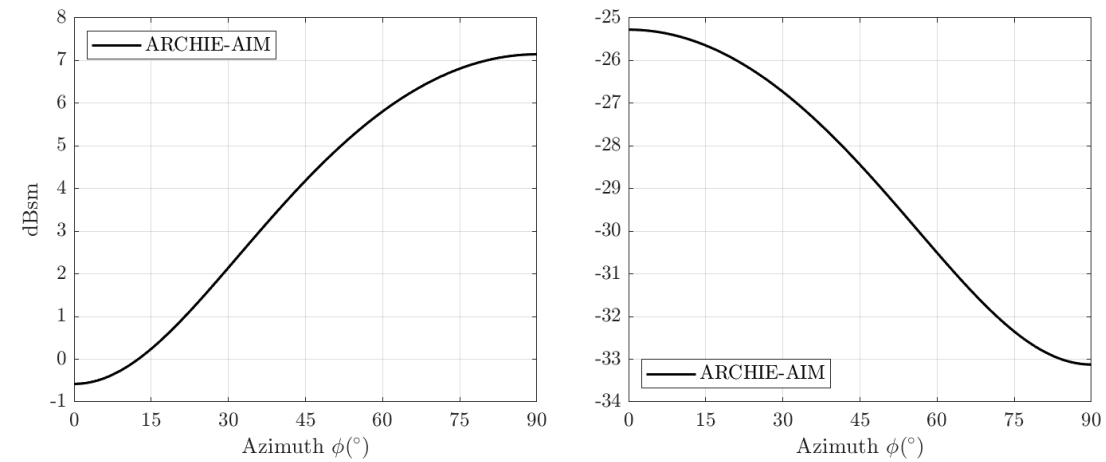


Figure 3: The HH ($\sigma_{\phi\phi, \text{dB}}$, left) and VV ($\sigma_{\theta\theta, \text{dB}}$, right) polarized RCS for the zero-thickness PEC plate of width $W = 128$ in at frequency $f = 10$ MHz.

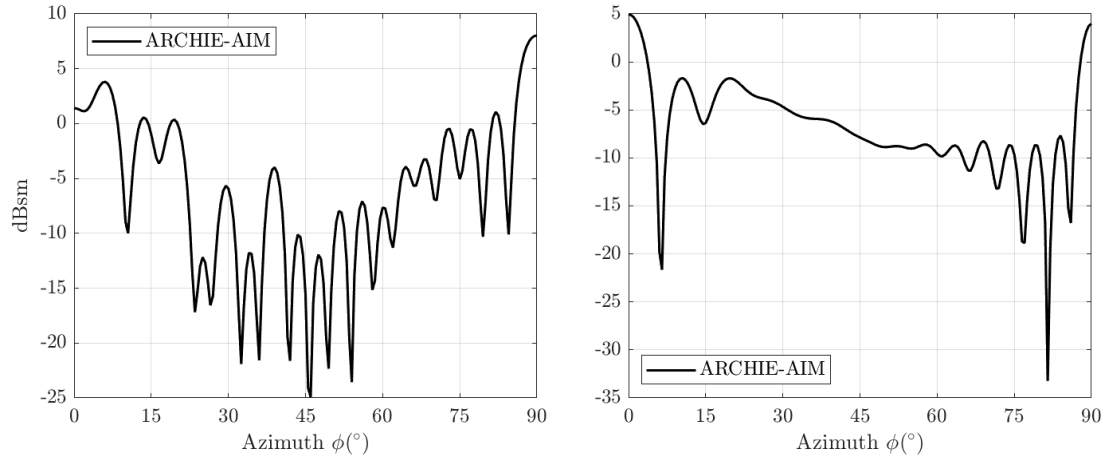


Figure 4: The HH ($\sigma_{\phi\phi}$, dB, left) and VV ($\sigma_{\theta\theta}$, dB, right) polarized RCS for the zero-thickness PEC plate of width $W = 128$ in at frequency $f = 320$ MHz.

These RCS results were calculated by using the ARCHIE-AIM code, a frequency-domain FFT-accelerated integral-equation solver developed at UT Austin [1]-[3].

References

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- [2] F. Wei and A. E. Yilmaz, "A more scalable and efficient parallelization of the adaptive integral method part I: algorithm," *IEEE Trans. Antennas Propag.*, vol. 62, no. 2, pp. 714-726, Feb. 2014.
- [3] J. W. Massey, V. Subramanian, C. Liu, and A. E. Yilmaz, "Analyzing UHF band antennas near humans with a fast integral-equation method," in *Proc. EUCAP*, Apr. 2016.