

2. Metallic Simple Ogive

- Model :
The model was created from the analytic expression to create a curve and revolved to create a surface.
The total length is 0.254 m (10 inches)
- Simulation parameters :
The Monostatic RCS is computed at 2 frequencies : 1.18 and 9 GHz
For both Vertical and Horizontal polarization
The RCS is plotted in dBm² as function of azimuth angle from 0 to 180°. Zero degrees azimuth corresponds to incidence on the tip. The elevation angle is zero.
- Solver :
Method of Moment method was used with MSCBD solver and EFIE equations.

	1.18 GHz	9 GHz
Mesh size	Lambda/50	Lambda/20
Number of unknowns	3 648	34 968
Total time	1 second	1 min 12 s

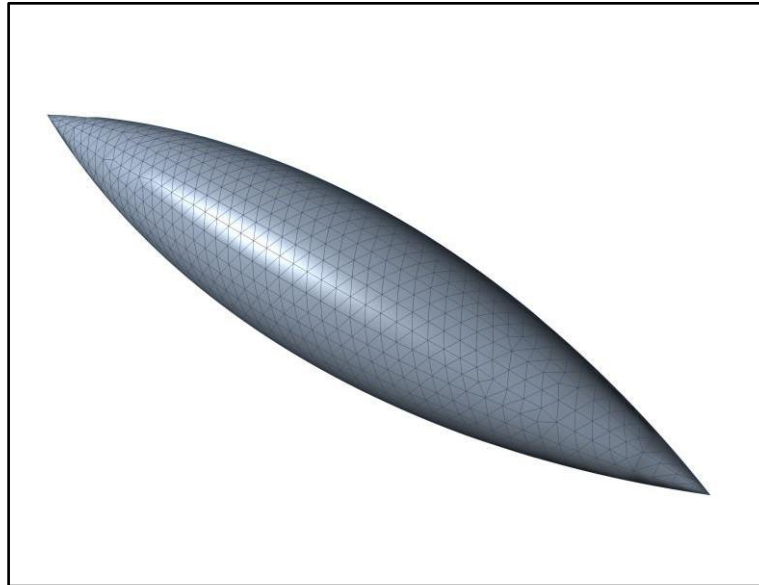


Figure 6 - Metallic Simple Ogive mesh model

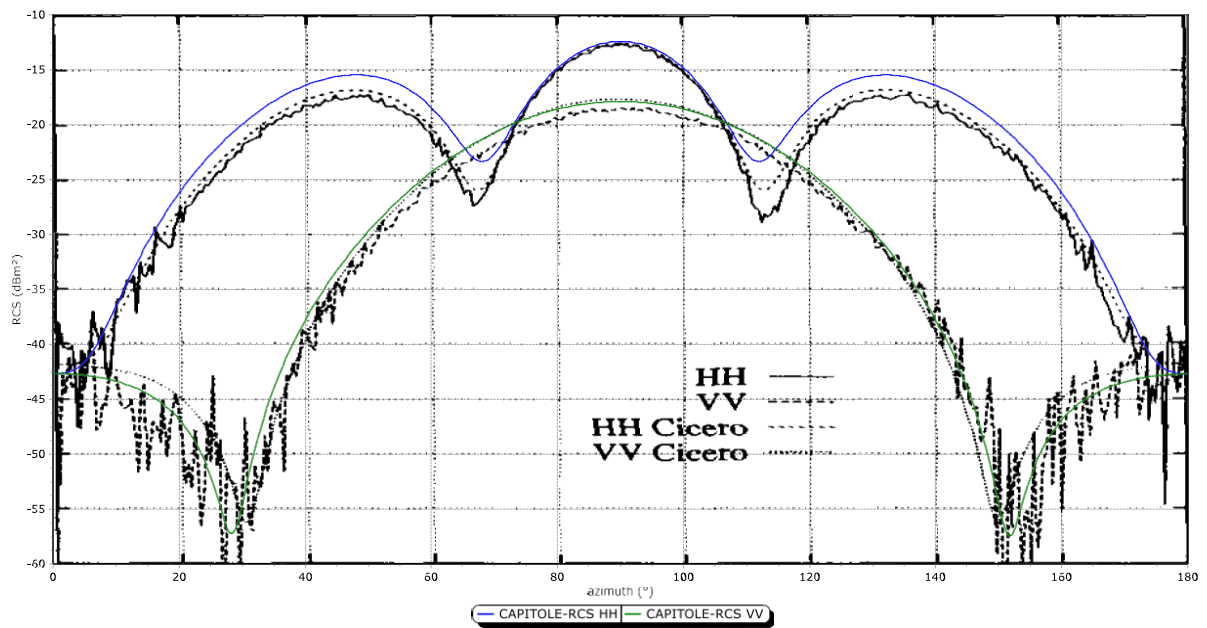


Figure 7 - Metallic Simple Ogive RCS @1.18GHz CAPITOLE-RCS vs measurement

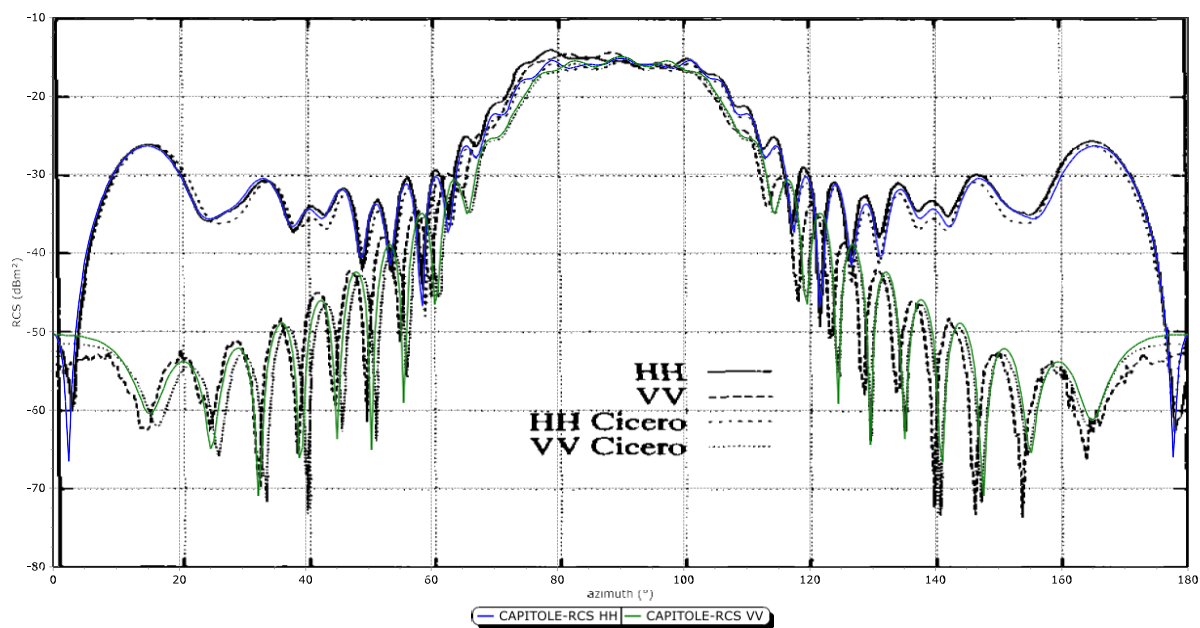


Figure 8 - Metallic Simple Ogive RCS @9GHz CAPITOLE-RCS vs measurement