

3. Metallic Double Ogive

- Model :
The model was created from the analytic expression to create a curve and revolved to create a surface.
The total length is 0.191 m (7.5 inches)
- Simulation parameters :
The Monostatic RCS is computed at 2 frequencies : 1.57 and 9 GHz
For both Vertical and Horizontal polarization
The RCS is plotted in dBm^2 as function of azimuth angle from 0 to 180° . The elevation angle is zero.
- Solver :
Method of Moment method was used with MSCBD solver and EFIE equations.

	1.57 GHz	9 GHz
Mesh size	Lambda/40	Lambda/15
Number of unknowns	3 288	15 096
Total time	1 second	13 seconds

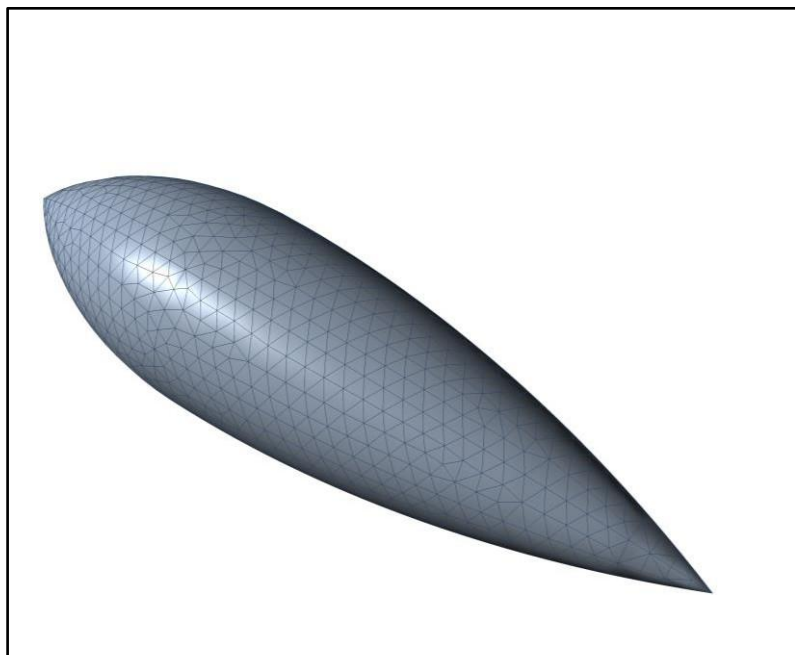


Figure 9 - Metallic Double Ogive mesh model

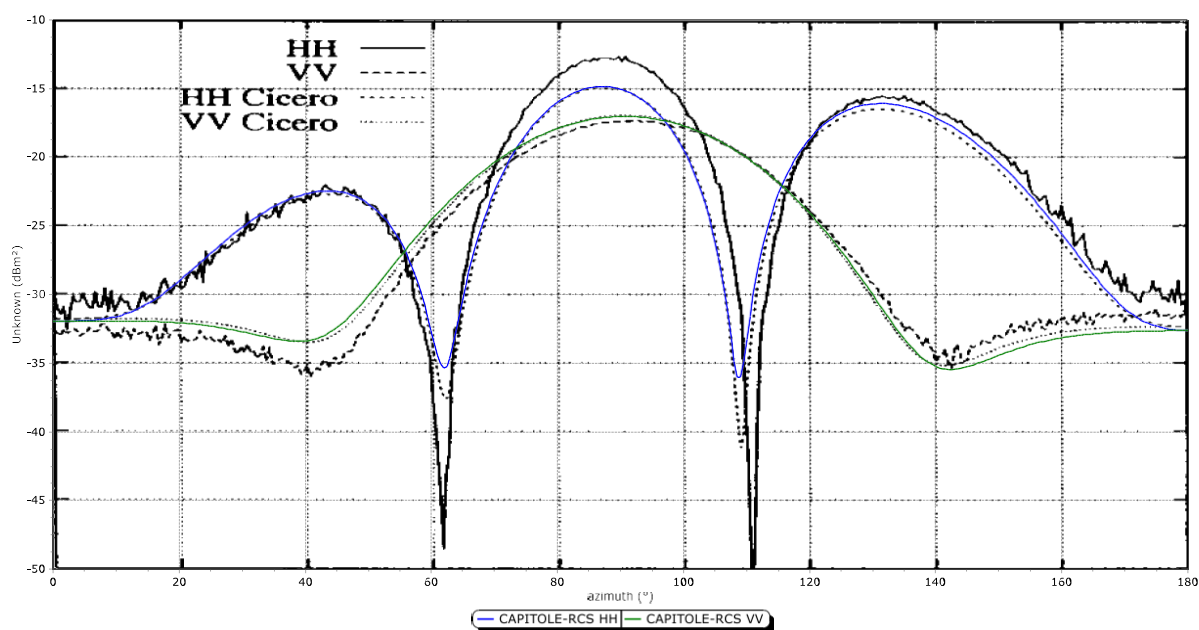


Figure 10 - Metallic Double Ogive RCS @1.57GHz CAPITOLE-RCS vs measurement

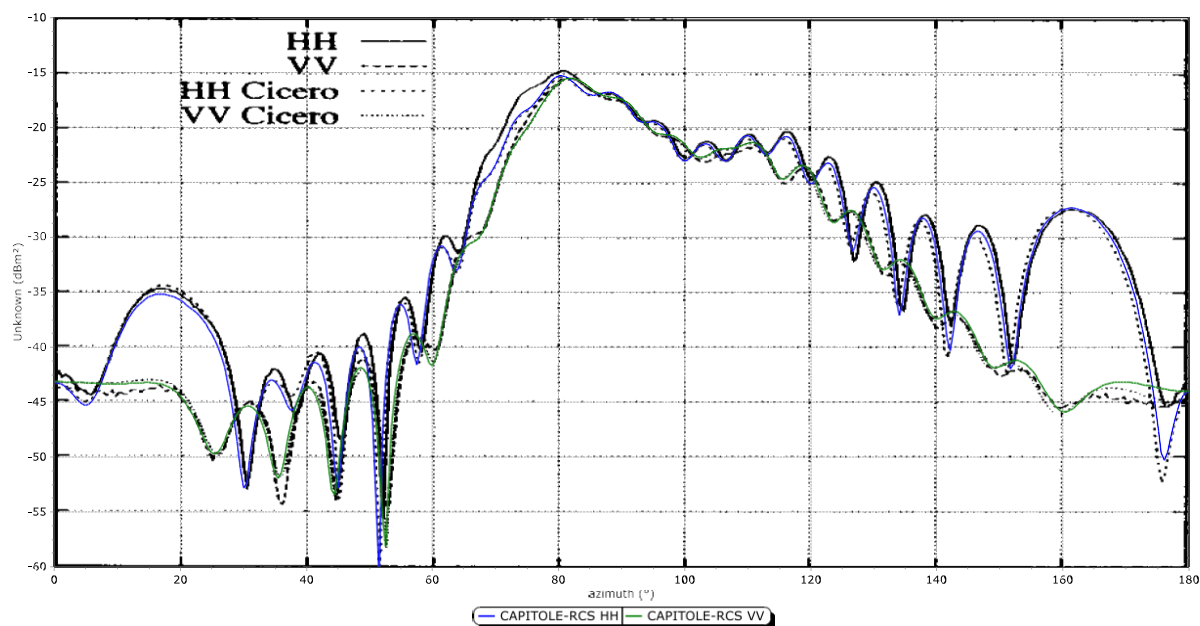


Figure 11 - Metallic Double Ogive RCS @9GHz CAPITOLE-RCS vs measurement