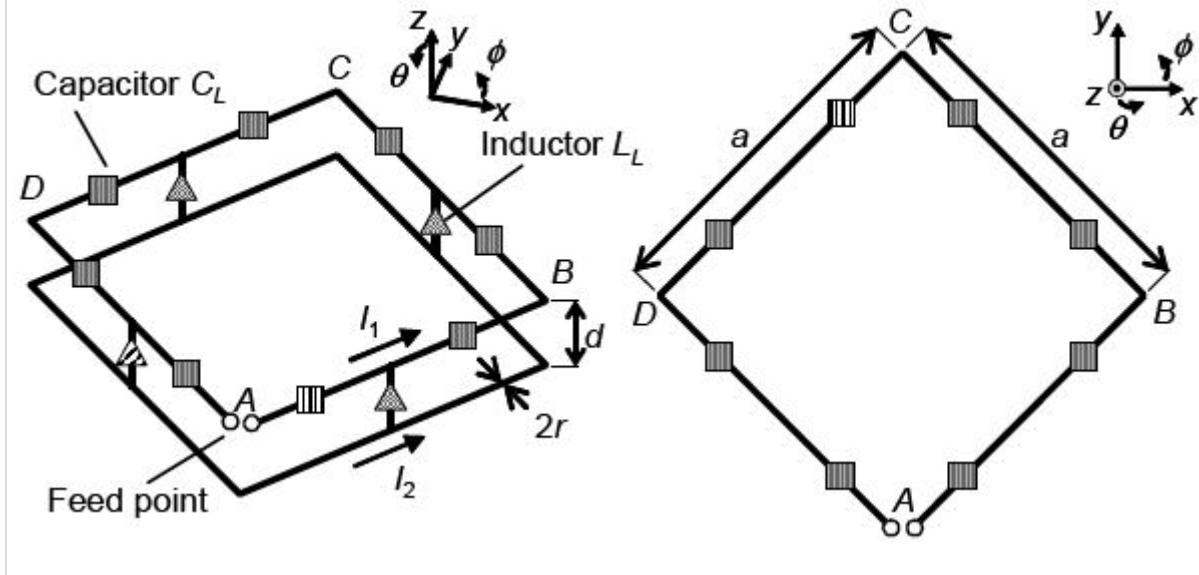




Impedance Loaded Omni-directional Left-handed Loop Antenna

An omni-directional left-handed loop antenna was proposed by Iizuka and Hall in [1]. The antenna consists of wires and LC lumped elements to load the wires appropriately. Figure 1 shows the geometry of this antenna.

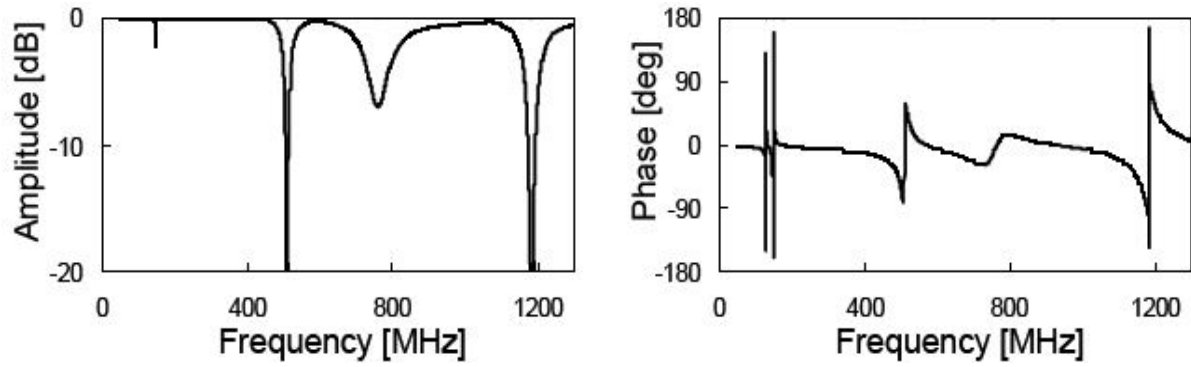
Figure 1: Configuration of antenna



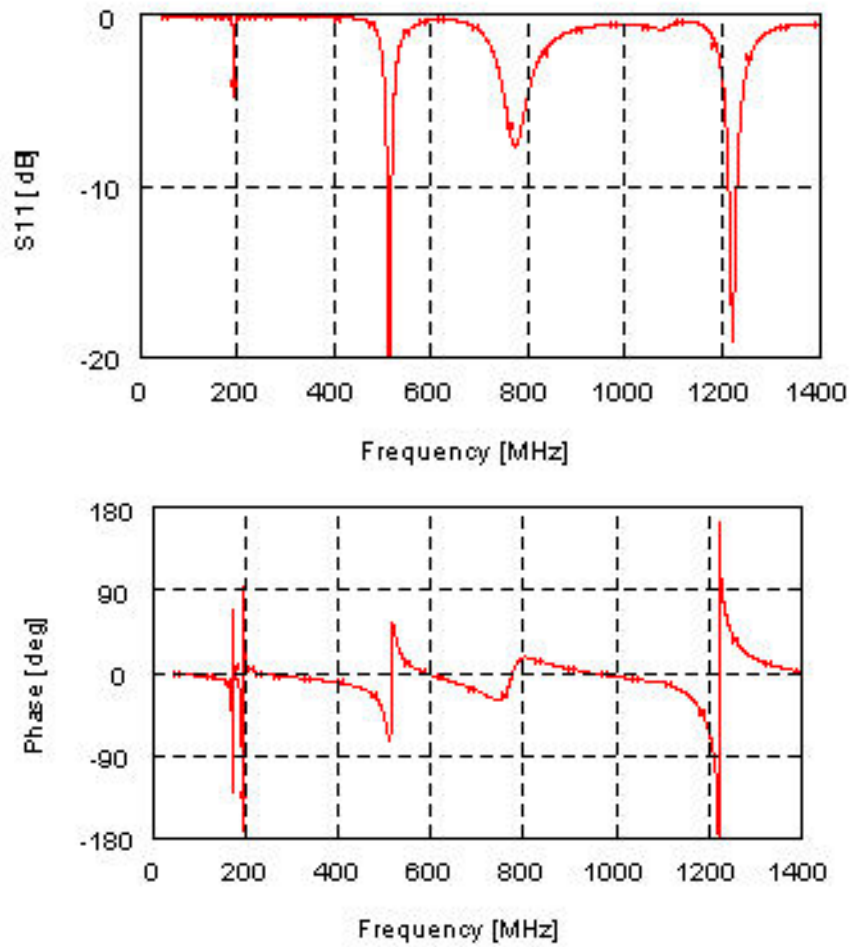
The loop antenna was simulated with LC loads placed as indicated to compute the S-parameters for the antenna. Figure 2 draws a comparison between the published and computed results for S-parameters.

Figure 2: S-parameter comparison

(a) Published results [1]



(b) Simulated results



References

- [1] H. Iizuka, P.S. Hall, "Omnidirectional Left-Handed Loop Antenna," IEEE Antennas and Propagation Society International Symposium, July 2006.



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