



Edge-fed Rectangular Microstrip Patch Antenna

An example of how a rectangular microstrip patch may be fed at an edge.

This example models the rectangular microstrip patch antenna that was analyzed by Wu *et al* [1]. It consists of a simple rectangular microstrip antenna with the reference plane for the feed define on the edge of the patch itself. The model is presented in Figure 1. Figure 1 also depicts how the rectangular patch was divided into sub elements to facilitate the placement of a strip line feed element at the proper reference plane for the simulation. S_{11} was computed for this configuration over a wide frequency band. Figure 2 presents the results for this computation which compare well with the published results [1, Figure 2].

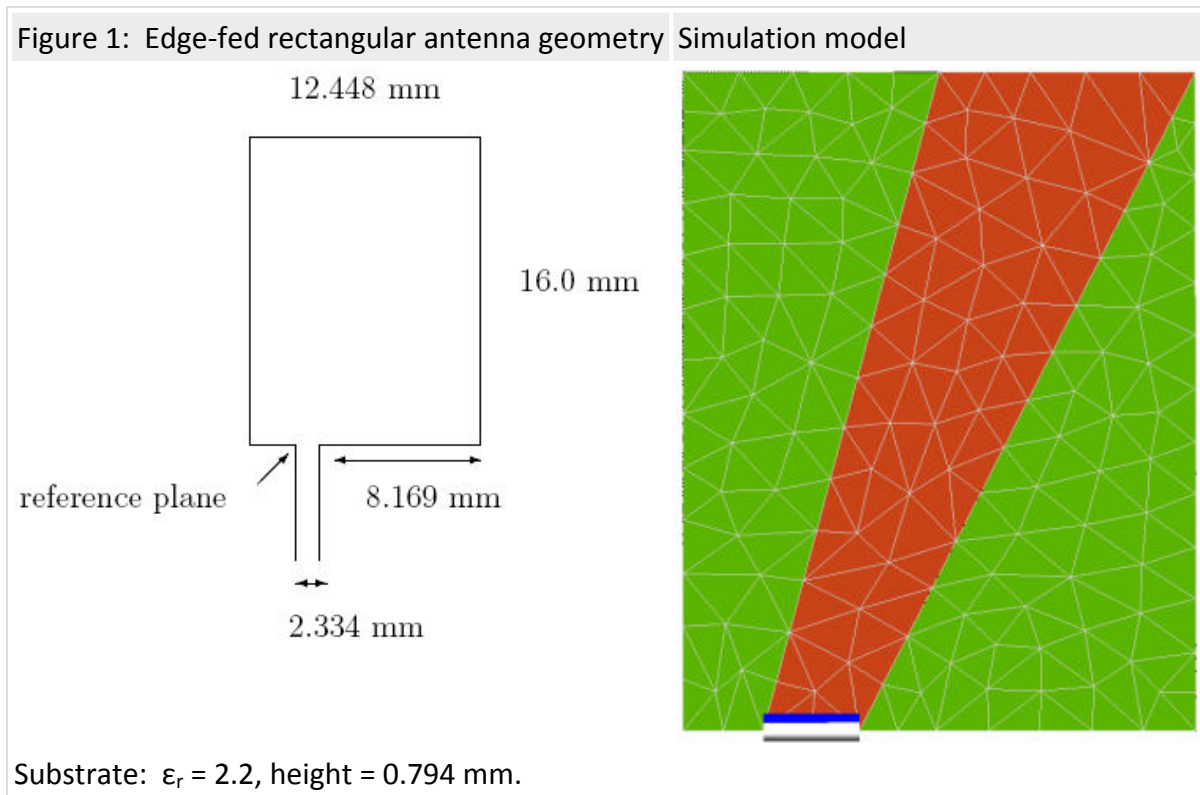
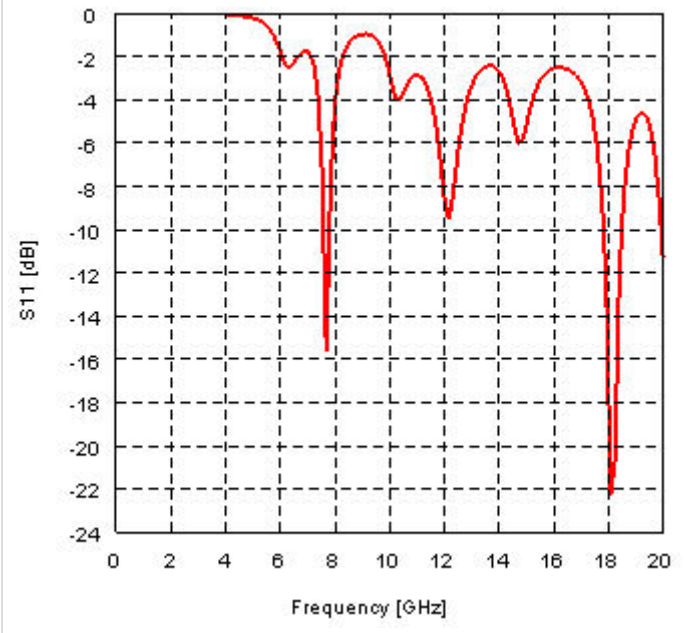


Figure 2: S11 for edge-fed microstrip antenna



[1] S. C. Wu, N. G. Alexopoulos, and O. Fordham, "Feeding structure contribution to radiation by patch antennas with rectangular boundaries," IEEE Trans. on Antennas and Propagation, vol. 40, pp. 1245–1249, Oct. 1992.



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