

Elimination of multipath signals in antenna measurement systems by Software Gating Algorithms

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Abstract: Measurement results of antenna patterns, which have not been done in an anechoic chamber, are influenced by multipath effects. In this work, an automated system for antenna measurement taking the advantage of software gating algorithms has been built. The role of software gating algorithms for rejecting of multipath signals so as to improve the measurement results has been analyzed and accessed. As an application, antenna patterns of a half-wavelength and a threehalf-wavelength dipole have been measured. Measurement results before and after applying gating algorithms have been compared. © 2008 IEEE.

Index Keywords: Algorithms; Antennas; Antenna measurements; Antenna patterns; Automated systems; Before and after; Measurement results; Multi-path effects; Multipath signals; Role of softwares; Directional patterns (antenna)

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