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)

Year: 2008

Source title: Proceedings - 2008 International Conference on Advanced Technologies for Communications, ATC 2008, Held in Conjunction with REV Meeting

Art. No.: 4760574

Page : 274-277

Link: Scorpus Link

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Conference name: 2008 International Conference on Advanced Technologies for Communications, ATC 2008

Conference date: 6 October 2008 through 9 October 2008

Conference location: Hanoi

Conference code: 75765

ISBN: 9.78E+12

DOI: 10.1109/ATC.2008.4760574

Language of Original Document: English

Abbreviated Source Title: Proceedings - 2008 International Conference on Advanced Technologies for Communications, ATC 2008, Held in Conjunction with REV Meeting

Document Type: Conference Paper

Source: Scopus

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