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(57) Abstract :
The Electromagnetic Compatibility (EMC) is an essential part in todayâ€™s society and there are more products around us that emit electromagnetic waves than ever before. To make sure that all these products function properly under all circumstances EMC testing is needed. One test that is conducted is radiated immunity testing. A susceptibility antenna is needed to perform immunity testing. The present invention disclosed here in is a 20-180MHz Frequency Band Electrically Tuneable Antenna for Radiation Immunity Testing comprising of: Signal Generator (101); Power Amplifier (102); Directional Coupler (103), and Anechoic Chamber (104); to test the different Electrically Tuneable Antennas in 20-180MHz Frequency Band. The invention presented here aims to show that a tuneable antenna could be used for immunity testing in the frequency band 20-180 MHz and in the future replace the current antenna, which is not tuneable, used at SAAB Support and Services EMC. A method called EZNEC+ was used on different antennas that were tested in the semi-anechoic chamber. Two antenna types showed better efficiency and reached lower in frequency than current antenna available. These antennas were a bowtie antenna and an x-shaped antenna, both extending in only two special directions instead of the normal three. The present invention provides strong E-field and a low VSWR to a bowtie antenna and an X-shaped antenna.

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