

Preliminary Measurements of the Electromagnetic Interference in a Hospital Environment

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Abstract— Thanks to advances in digital technology many hospitals are becoming populated with wireless medical applications to control life critical functions. Electromagnetic interference can cause severe performance degradations on these wireless applications. Several accidents have been reported which calls for a more thorough characterization of these interferences in areas where critical wireless applications are used. In this paper the results of electromagnetic interference measurements performed in a hospital are presented. These measurements are considered to be a first effort to characterize the 20 MHz -3 GHz band in hospitals

Key words: wireless communications, electromagnetic interference, industrial applications.