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THARADOL KOMOLMIS : A STUDY OF ELECTROMAGNETIC INTERFERENCE IN
BANGKOK METROPOLITAN AREA. THESIS ADVISOR : ASSO. PROF. DR.NARONG
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This thesis report studies and designs to set up an EMI measuring system for the frequency range of 30-230 MHz. The system is composed of a spectrum analyzer, a fixed length monopole antenna and all autorecordings are controlled via a microcomputer. Fifteen places throughout Bangkok area were chosen to be data recording stations. All the data can be retrieved to display on the screen to show the variation of EMI on frequencies, on time and on places. A conversion curve from calibration with a standard half wave dipole has been made to convert the measuring data to the appropriate values. The study shows that the EMI distribution exists throughout Bangkok area. The magnitude of the interference varies with locations, frequency ranges, and time in each day. Some places where the EMI magnitude are substantially high are also specified.