

Item 2: Explain how the design of the EUT is such that any attempts to modify the equipment to receive transmissions from the Cellular Radiotelephone Service likely will render the receiver inoperable.

The microprocessor is mask programmed and can not be made to tune the Cellular band. Mask programmed means that the processor is founded at the semiconductor fabricator to contain only that code which the manufacturer specifies. The microprocessor and phase locked loop (PLL) are surface mount devices and in most likelihood would be destroyed when removed. This is likely because the skill level for doing this is beyond that of most of the general public and amateur radio operators that this EUT is intended for. The PLL is only designed to work to 550MHz and becomes inoperative above this frequency because of the design limits of the semiconductor process used to founder it, therefore cannot be made to function in the Cellular Service Band. The voltage controlled oscillator (VCO) that forms the local oscillator is designed for the VHF band and will cease to operate above it. The VCO is further tamper resistant by the fact that it is enclosed in metal shield. The input RF amplifier filters are designed for VHF only and any attempt at Cellular Band Service reception will not be in the pass band of them. Modification of the radio again would render the radio inoperable as this also is composed of mostly surface mount components.