

This application is for a MIL-STD-188-125-1 Continuous Wave Immersion (CWI) and Shielding Effectiveness (SE) test that is required to perform MIL-STD-188-125-1 Appendix A Shielding Effectiveness testing for Systems Control.

Each “transmission” will occur for a short interval at a total number of discrete frequencies (approximately 800) distributed evenly in log (frequency) space over the range of 10 kHz to approximately 20 MHz (the “low frequency” band) and 20 MHz to 1000 MHz (the “high frequency” band). The list or set of frequencies within each band and the associated transmissions are identified as a “sweep.” For each sweep the transmissions will sequentially occur at each frequency in the list, starting with the first and progressing to the last in the list. The length of transmission at each discrete frequency will be approximately 30 milliseconds.

An individual sweep covering either the low or high frequency band will take on the order of 10 seconds. At the conclusion of the sweep data is transferred from the test equipment (an Agilent E5071C OREQ network analyzer) to the controlling laptop PC and preparations are made for the next sweep (moving measurement probes, annotating the test logbook, and so forth).

The sweep repeat rate or rate at which any individual frequency in a sweep will be revisited is thus variable.