

AAR Mobility Systems produces mobile shelters mostly for the military. Some of these shelters are required to have their insides shielded from external or from emitting internal RF. A number of tests can be performed in order to prove this shielding capability. They all consist of transmitting a known power and frequency and comparing the received power through air and through the shelter's shielding envelope.

AAR performs ASTM E 1851 testing as called out in ASTM E 1925, the general specification for mobile shelters. IEEE 299 is an alternative method which may use the same or other frequencies. These tests are performed with the transmission of unmodulated RF at constant power and may last for hours at a time at the same frequency.

For shelters requiring HEMP testing are tested IAW MIL-STD-188-125-2 Appendix A. This test is automated with the transmitter stepping through hundreds of unmodulated test frequencies with a duration of 10 seconds per frequency.

Future shelters may be required to receive TEMPEST ratings which will required similar but different testing.