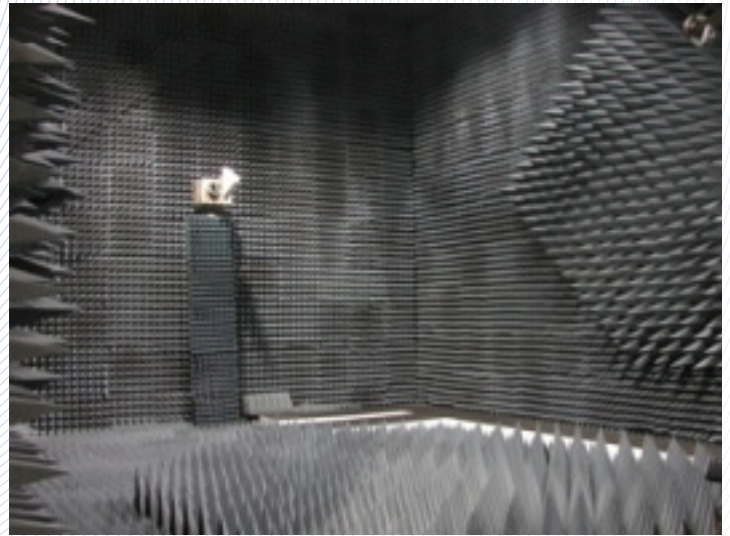


Indoor Far-Field Range

An indoor far-field anechoic chamber has the same basic design criteria as an outdoor range except that the surfaces of the room are covered with RF absorbing material. Testing indoors offers many advantages to conventional outdoor ranges including improved security, avoiding unwanted surveillance and improved productivity due to less time lost because of weather and other environmentally related factors.



Indoor Far-Field Facility

Description

Indoor far-field ranges are instrumented essentially the same way as outdoor ranges with the primary difference being a limited range length. The size of the anechoic chamber defines this range length limit and therefore limits the size and frequency range of the antenna. The receiver front end is typically positioned near the test positioner with the mixer connected directly to the test antenna port. The source is located near the source antenna. The control room is generally centrally located and connected to both ends of the range via cables or digital links. Since these systems are located indoors, special enclosures for the receiver front end, position control, and signal source subsystems are not required.

Typically the source antenna requires only polarization control. This, as well as the short range length, usually allows a single position control unit to be used to control all the range axes.