

Spherical Near-Field Range

In contrast to the far-field systems discussed previously, measurements in a near field chamber are not restricted by the far-field distance criterion. In a near-field range the entire field across a defined coordinate system is carefully measured. Then, extensive post-processing is used to calculate the far-field effects and extrapolate the measurement results.

MI Technologies offers a series of positioners, probes and antennas to provide a complete solution for spherical nearfield measurements. Primarily this includes the MI-350 Advanced Microwave Measurement System, with the MI-3046 Spherical Near-Field software. The example Spherical Near-Field Measurement System shown below provides a number of advantages to users with special measurement needs. The test antenna is scanned in one angular axis and stepped in an orthogonal angular axis while the probe is fixed in space.

Turn-key Spherical Near-Field Systems can be provided with shielded chambers and absorber products as well as the measurement and positioning equipment. MI Technologies' program management and system engineering capabilities provide the project management and technical skills needed to insure the success of complex projects.

