



DESCRIPTION

NSI-MI Technologies' Spherical Near-Field Analysis software accessory seamlessly processes raw near-field data acquired with Arena Data Acquisition software. The processing consists of:

1. Correction for system errors associated with thermal drift, and system losses;
2. Transformation of the corrected near-field data to the far-field using industry standard TICRA software; and
3. Computation of the field at points equidistantly spaced in theta and phi coordinates. This field can be computed for the far-field or at any other radius about the test antenna where the field is desired.

Spherical Near-Field Analysis software allows the far-field results to be presented in a variety of spherical coordinate systems and polarization bases. Correction for the pattern, input characteristics, and gain of the probe used in the measurement is supported by this transformation software. Probe data may be acquired using Arena software on a far-field range; single and dual-ported probe data may be imported from ASCII or Microsoft Excel®; or probe data may be simulated for open-ended rectangular waveguide probes such as the ANT-WGP Waveguide Probes.

The Spherical Near-Field Analysis software features the IsoFilter™ procedure and algorithm. This technique leverages capabilities in spherical near-field processing to spatially filter certain sources of radiation and reflection allowing for more precise characterization of device elements within a system or to reject clutter in the test area.

Antenna aperture diagnostic support is also included in the software. The user can choose to back-transform the far-field data to the aperture plane of the antenna under test or to any arbitrary plane about the antenna.

COMPATIBILITY

- Windows® 7, 10
- Arena Data Acquisition Software

STANDARD COMPONENTS

- Spherical Near-Field Analysis Software
- Software Manual