



DESCRIPTION

NSI-MI Technologies' Cylindrical Near-Field Analysis software 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 NIST developed algorithms; and
3. Final output processing can be performed on the far-field data to provide data in various coordinate systems and polarization conventions

Features of this software assist with performing high accuracy cylindrical near-field measurements, include: correction for the pattern, input characteristics, and gain of the probe used in the measurement. Probe data may be acquired with 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.

Antenna aperture diagnostic support is also included in the Cylindrical Near-Field Analysis software. The user can choose to back-transform the far-field data to the aperture plane of the antenna under test or to an arbitrary plane in front of the antenna. For antenna arrays where the antenna element patterns are known, the user can choose to remove the element pattern from the data for the best estimate of the array element excitations.

COMPATIBILITY

- Windows® 7, 10
- Arena Data Acquisition Software

STANDARD COMPONENTS

- Cylindrical Near-Field Analysis Software
- Software Manual