

## **NEAR FIELD RANGE**

## **Antenna Measurement Services**

Eravant is one of the very few millimeter wave antenna manufacturing companies in the United States that can design, manufacture, and test large aperture microwave and millimeter wave antennas up to 110 GHz. In particular, Eravant has experience in production testing of large aperture Cassegain reflector antennas up to 2.4 m in diameter for Q/V-Band LEO/ GEO ground station applications.

Eravant's i-house planar near-field test range accomodates antenna sizes up to 2.4 m (96") in diameter and payloads up to 450 lbs. Eravant's near-field test range is well stocked with test equipment for measuring antennas from 8 GHz to 110 GHz and supporting equipment such as 1-ton capacity gantry crane and forklift for loading/unloading antennas onto the range in a safe and timely manner.

## **Measurement Capabilities**

- Gain
- 2D and 3D radiation patterns
- Beamwidth
- Sidelobe Levels

Specifications	
Scanner Configuration	Vertical
Scanner Plane Size	11.5' x 11.5' [3.5 m x 3.5 m]
Chamber Internal Dimensions	23' x 20' x 18' [7 m x 6 m x 5.5 m]
Absorber Size	12" [300 mm]
Frequency Range	8 – 110 GHz
Max AUT Size (Ø)	96" (2.4 m)
Max AUT Weight	450 lb [200 kg]
Scan Range*	Up to ±70° Pattern Coverage

<sup>\*</sup>Max scan range coverage depends on AUT size and frequency.

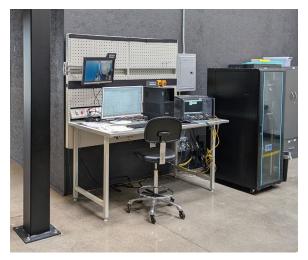








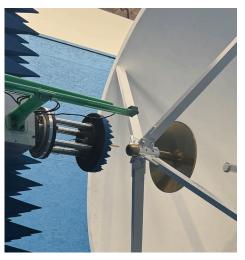




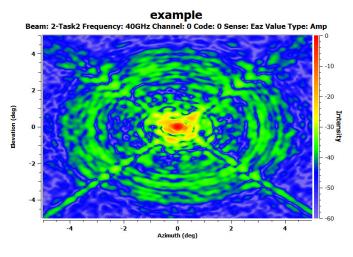




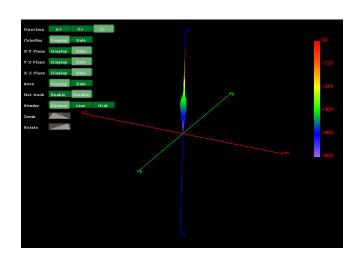
96" Cassegrain Antenna Being Loaded onto Near-Field Range



Near-Field Range Probe Centered at the Antenna Boresight



2D Heat Map Plot



3D Pattern Plot

