CAPABILITY STATEMENT

MICROWAVE ANALYTICS
A division of THURSTON LABORATORIES

WHO WE ARE

We are an independent RF, microwave, semiconductor, and electromagnetic test and measurement laboratory providing engineering-grade characterization, validation, and diagnostic services. Our work supports defense and aerospace programs, commercial and industrial development, and research initiatives requiring disciplined measurement and technical rigor.

Our facility is located in a rural region of northeastern Nevada, offering a naturally low ambient RF environment conducive to sensitive conducted and radiated measurements. All testing is performed on site with devices under test received by shipment.

CORE COMPETENCIES

- RF and microwave measurement and characterization
- Pre-EMI compliance testing and electromagnetic diagnostics
- Conducted and TEM/GTEM radiated measurements
- Time, frequency, and stability verification
- Semiconductor device characterization (±200V, ±1A)
- Component, subsystem, and system-level evaluation
- Custom and non-standard test development

DIFFERENTIATORS

- Naturally low-interference RF environment
- Independent, engineering-focused measurement approach
- Custom and non-standard test capability
- Quick turnaround (2 weeks typical; 1 week rush when available)
- Precision time and frequency standards (low phase noise, ~1e-13 accuracy)

Industries Served

- Defense and Aerospace
- Commercial and Industrial Development
- Research and Academia

TECHNICAL CAPABILITIES

Frequency Coverage:

- Frequency counting and verification, RF/microwave analysis and stimulus: **DC to 40 GHz**

RF & Microwave Measurement:

- Spectrum analysis and signal characterization
- Scalar and vector network measurements
- Power, gain, and frequency verification
- CW, swept, vector, and pulsed signal stimulus

Pre-EMI Compliance & Electromagnetic Evaluation:

- Conducted emissions testing
- Radiated emissions using TEM/GTEM methods
- LISN-based conducted measurements
- Near field probing to identify emissions sources

Time, Frequency, and Stability:

- Frequency accuracy and stability assessment
- Measurements referenced to traceable and disciplined timing standards.

Electrical and Device Characterization:

- Semiconductor I-V and C-V curve generation
- Semiconductor parameter extraction
- Medium power device capable – **1 A at 200 V**
- High frequency (up to **3 GHz**) LCR measurement

776 Silver St. Elko, NV 89801
(775) 738-4611
www.microwaveanalytics.com
info@microwaveanalytics.com

NAICS CODES: 541380; 541715;
CAGE/NCAGE: 9RDG9