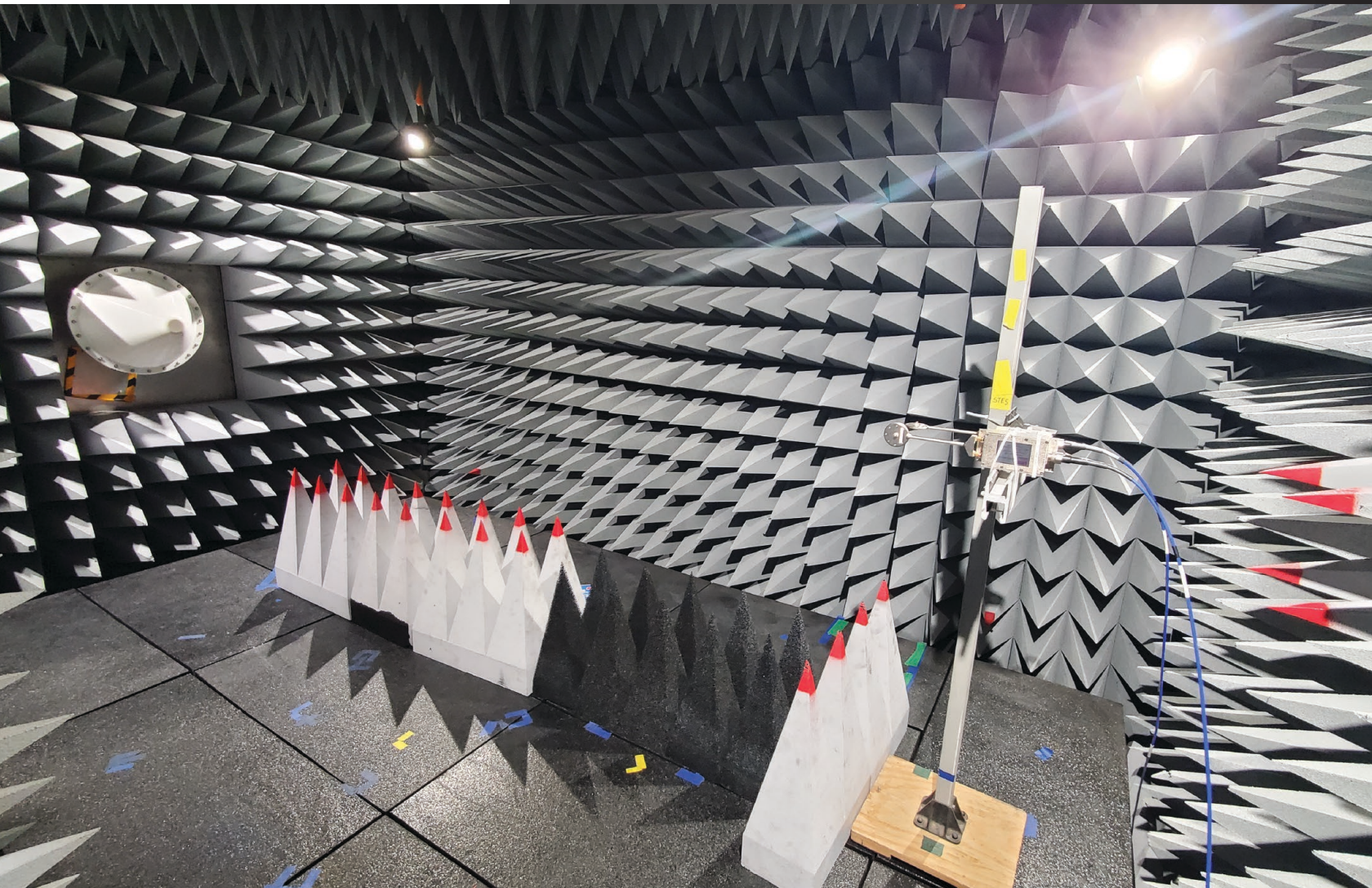


VERUS[®]
RESEARCH

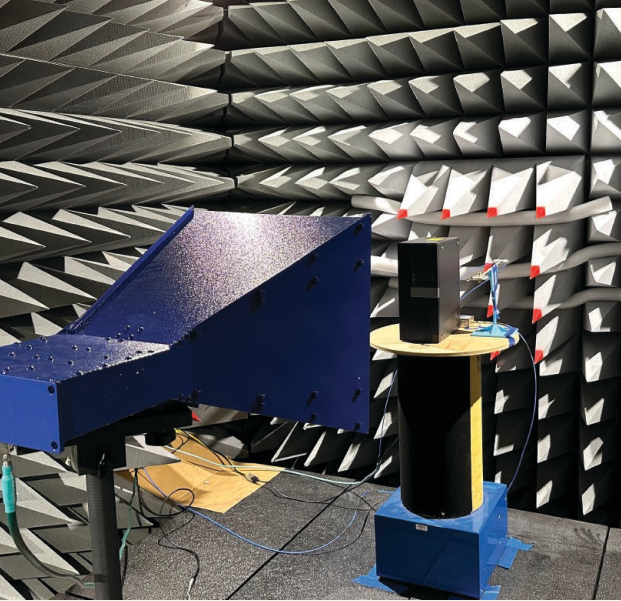
ACE

Anechoic Chamber at EMLab

HPM SOURCE SYSTEM ASSESSMENT AND RF SENSOR ANALYSIS



CREATING SOLUTIONS THAT MATTER



ACE

Anechoic Chamber at EMLab

HPM SOURCE SYSTEM ASSESSMENT AND RF SENSOR ANALYSIS

KEY FEATURES

- Interior LED illumination for working inside the chamber
- Fire detection & suppression system
- Accepts flanged mounting of HPM external waveguide to be fed through to an interior transmit antenna
- Interior 120 VAC outlets to power electronic system
- Shielded patch-panel for external instrumentation

SYSTEM USE CASES

ACE is ideally suited for rf system characterization and analysis. This includes antenna gain, sensor bandwidth, and a host of other rf characteristics while minimizing any type of reflective or outside noise.

Uniquely, it also provides a passthrough for HPM systems to radiate directly into the chamber, mitigating the need for spectrum clearance for high power testing.

CONTACT INFORMATION

J. Mark DelGrande, Ph.D.
j.mark.delgrande@verusresearch.net

Located at our ElectroMagnetics Laboratory (EMLab), the Verus Research anechoic chamber and adjacent shielding crypt provide an integrated capability for a variety of low power and high power rf testing. HPM sources can directly feed into the ACE for HPM system characterization. Sensitive electronics can be assessed across a broad band of frequencies. The chamber's excellent shielding effectiveness ensures that intense rf radiation is well contained, or that sensitive measurements are not corrupted by outside interference.

KEY PERFORMANCE SPECIFICATIONS

SPECIFICATIONS	VALUE
Primary design range	1-18 GHz
Possible performance range	300 MHz- 40 GHz
Size of ACE	18 ft L x 12 ft W x 12 ft H
Pyramidal absorbers	24 inch deep
Interior working volume between absorber tips	8 ft W x 14 ft L x 7.5 ft H
Interior range separation between transmit and receive antennas	4.2 m
EMI shielding effectiveness	100 dB between 1-18 GHz

