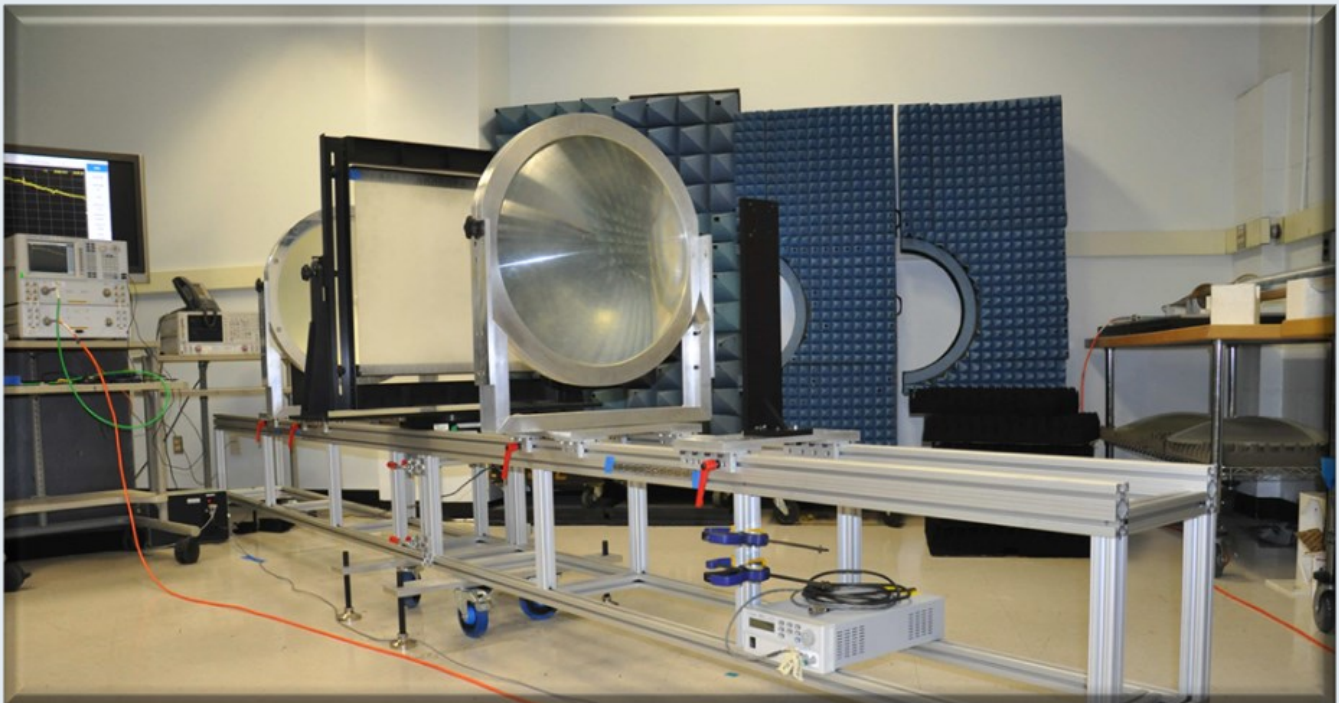




## NEW ARC TESTING CAPABILITIES: Focus Beam Testing

Staying ahead of today's technologies, ARC Technologies Inc. has expanded its' electromagnetic test capabilities up to 110 GHz with the addition of a focused beam system. Measuring a material's permittivity ( $\epsilon$ ) and permeability ( $\mu$ ) is critical in the design and development of high frequency materials and systems. The ARC Technologies Inc. focused beam system allows for non-destructive, accurate measurements of these material parameters, including reflection and transmission loss, from 2-40 GHz and 75-110 GHz.



- ◇ Used to characterize dielectric and magnetic properties from 2- 40 GHz and 75 – 110 GHz.
- ◇ Accurate measurements of reflection and transmission loss.
- ◇ Most sheet samples can be tested non-destructively.
- ◇ Off angle reflectivity measurements from 25° to 65°.



### Solutions for Interference Control

ARC Technologies Inc. ▪ 37 South Hunt Road ▪ Amesbury, MA 01913  
978-388-2993 ▪ Fax: 978-388-6866 ▪ [www.arc-tech.com](http://www.arc-tech.com)



## **TESTING CAPABILITIES:**

### **Electrical Testing**

Reflection Loss via NRL arch , 0.6 - 40 GHz

(TM-001, TM-002, TM-003, ASTM D5568)

Characterization of Permittivity and Permeability, 0.5 - 40 GHz, 75-110 GHz

(ASTM D7449, ASTM D5568, TM-004, ASTM D257)

### **Analytical Testing**

Solution Viscosity (ASTM D2196)

SEM and Optical Microscopy

BET Surface Area Measurements (ASTM B922)

Skeletal Density via Pycnometer (ASTM B923)

Density (ASTM D792)

Particle Size Analysis via Laser Diffraction (ASTM B822)

Melt Index (ASTM D1238)

### **Environmental Testing**

Accelerated Weathering (ASTM G155)

Weatherometer (ASTM G154)

Hydrostatic Test (ASTM D2837)

Salt Fog Testing (ASTM B117)

Fluid Soaks, Weight Gain, and Volume Swell after Fluids (ASTM D471)

Steam Autoclave Exposures (TM-005)

Acetone Extraction Testing (ASTM D494)

### **Mechanical Testing, -95°F - 500°F**

Durometer and Compression Testing (ASTM D2240, ASTM D395)

Tensile Testing (ASTM D638, ASTM D412)

Flatwise Testing (ASTM C297)

180 Peel (ASTM D903)

Roller Peel (ASTM D3167)

Flexural Testing (ASTM D790-10)

Lap Shear (ASTM D494)

### **Thermal Testing**

Dynamic Mechanical Analysis (DMA) (ASTM D5026)

Coefficient of Thermal Expansion (CTE) (ASTM D696)

### **Optical Testing**

Color Measurement (CIELAB)

Haze and Optical Light Transmission (ASTM D1003)

Scan this QR code to download a complete list of our testing capabilities and pricing estimates:



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