# LAST-A-FOAM® DIELECTRIC MATERIALS

General Plastics offers a wide range of LAST-A-FOAM® products for use as dielectric material in radome and antenna applications. These high-performance, closed-cell polyurethane foams do not absorb water and may be provided in custom densities to satisfy customers' specific dielectric performance requirements. The materials exhibit ideal dielectric properties, structural strength, durability and chemical inertness.

Our products display non-dispersive and low-loss properties, where dielectric performance can be guaranteed at every frequency range. Certificates of performance can be supplied upon request.

The following tables list the dielectric properties of LAST-A-FOAM® products that may be used for your dielectric applications. For more information on each product and additional densities, please contact us at (866) 825-1378 or email us at sales@generalplastics.com.

## DIELECTRIC PROPERTIES OF LAST-A-FOAM® RF-2200

| PROPERTIES | RF-2203 | RF-2204 | RF-2206 |
|---|---|---|---|
| **Density (lbs./ft3)** | 3 | 4 | 6 |
| **Dielectric Constant (2-20 GHz)** | 1.068 | 1.082 | 1.114 |
| **Loss Tangent** | 0.001 | 0.001 | 0.0013 |

**RF-2200 Features:**

- Available in custom densities engineered to specified dielectric performance
- Processing temperature up to 350°F
- Resistant to water uptake

## DIELECTRIC PROPERTIES OF LAST-A-FOAM® FR-3700

| PROPERTIES | FR-3703 | FR-3706 | FR-3720 |
|---|---|---|---|
| **Density (lbs./ft3)** | 3 | 6 | 20 |
| **Dielectric Constant (2-20 GHz)** | 1.062 | 1.117 | 1.380 |
| **Loss Tangent** | 0.0004 | 0.001 | 0.0045 |

**FR-3700 Features:**

- Flame-retardant PU foam available in 3 to 40 pcf
- Processing temperature up to 260°F
- High strength-to-weight ratio

## DIELECTRIC PROPERTIES OF LAST-A-FOAM® FR-7100

| PROPERTIES | FR-7106 | FR-7112 | FR-7120 |
|---|---|---|---|
| **Density (lbs./ft3)** | 6 | 12 | 20 |
| **Dielectric Constant (2-20 GHz)** | 1.119 | 1.238 | 1.420 |
| **Loss Tangent** | 0.0017 | 0.0029 | 0.0049 |

**FR-7100 Features:**

- Available in 3 to 40 pcf
- Processing temperature up to 175°F
- Fine cell structure supports smooth finishes

GENERALPLASTICS MANUFACTURING COMPANY

General Plastics Manufacturing Company
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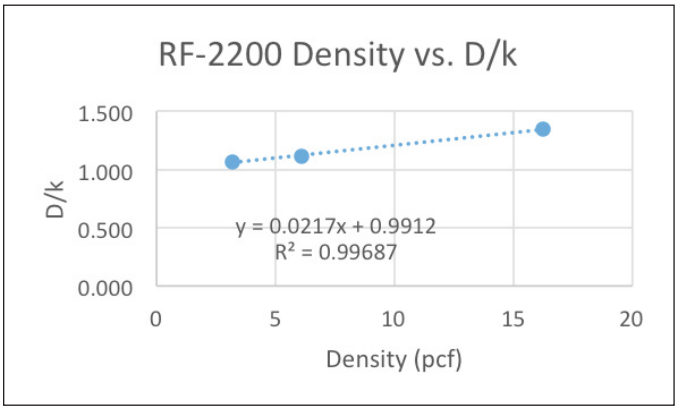
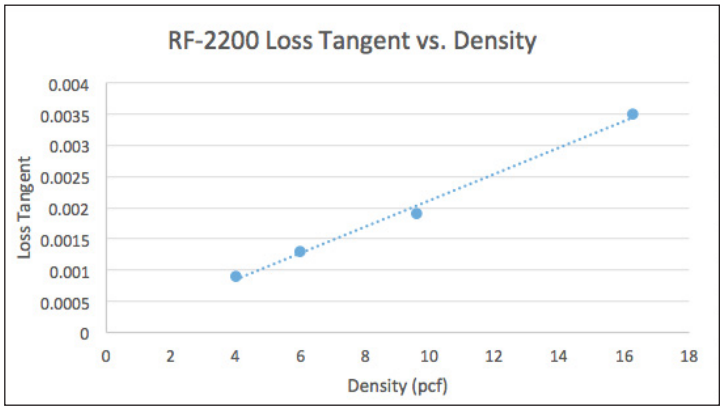
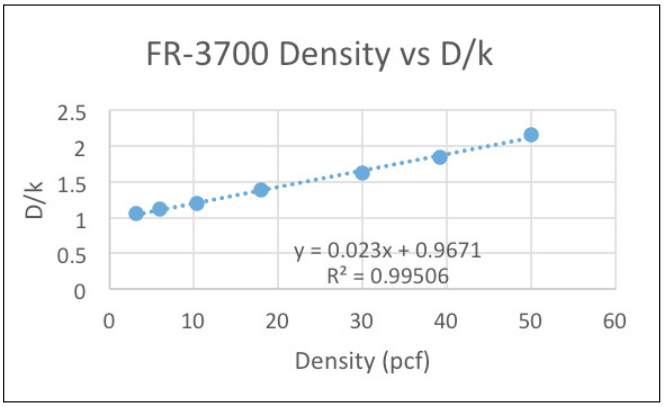
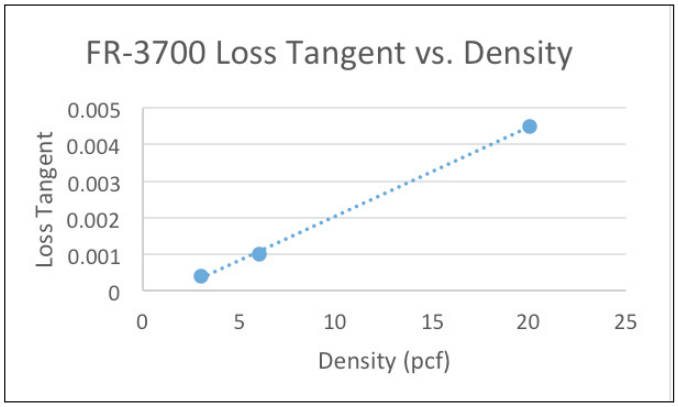
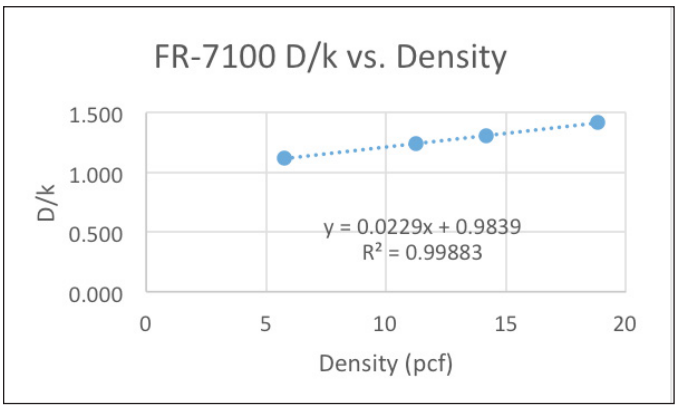
# LINEAR DATA TREND FOR DIELECTRIC CONSTANT & LOSS TANGENT WITH RESPECT TO DENSITY

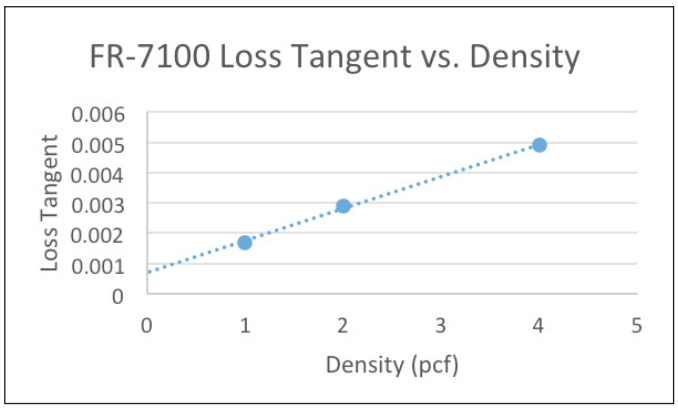



**Test Method: Vector Electromagnetics Free Space Network Analyzer**

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