

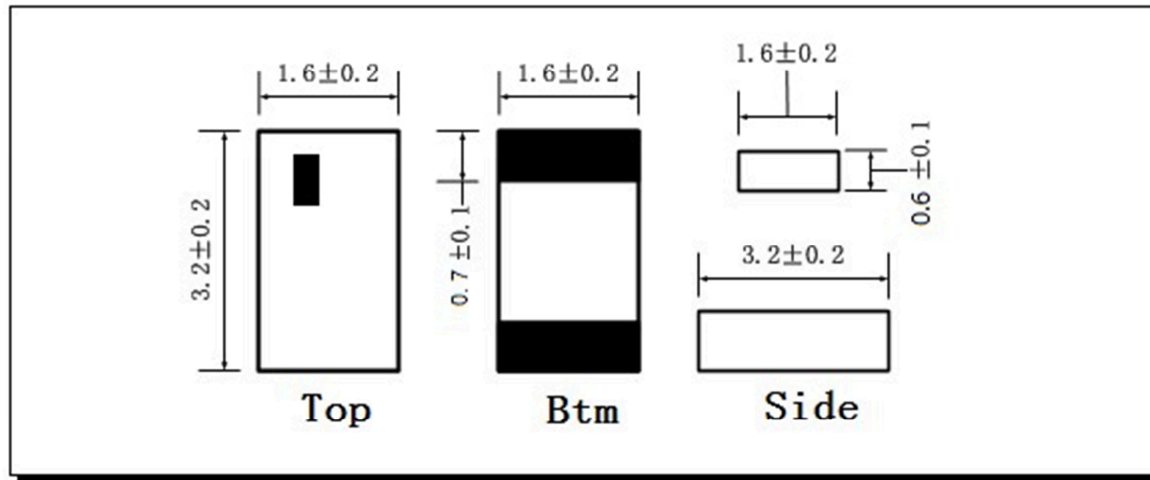
# 2.4G Chip Antenna Measurement

# Project Information:

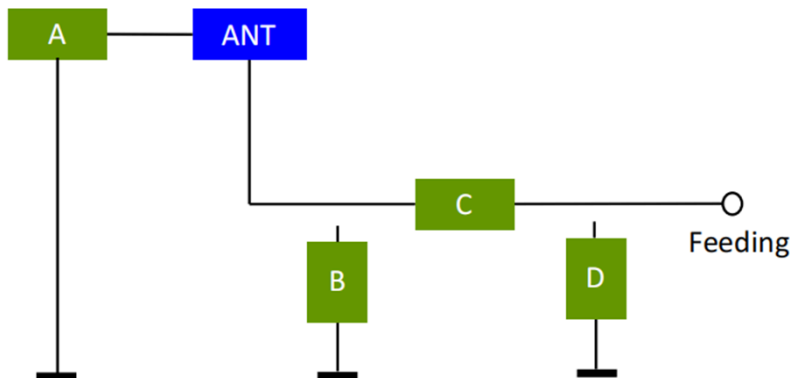
- Customer : Listan GmbH
- Project Name : Chip Antenna
- Antenna model: LA31H2450\_A27
- Antenna size : 3.2x1.6x0.6 mm

Address: Wilhelm-Bergner-Strasse 11c, 21509 Glinde, Germany

# Antenna Placement:

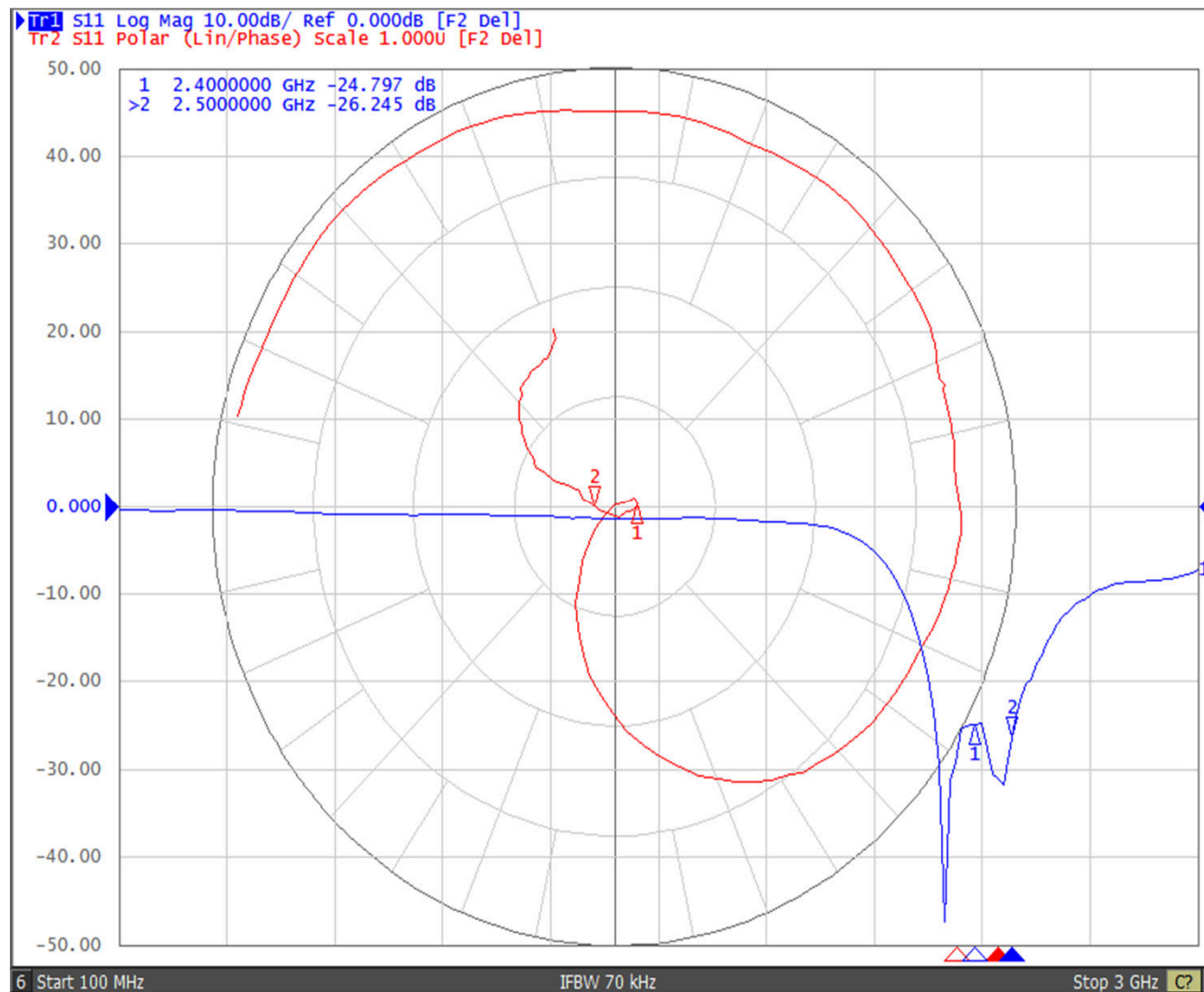


# Matching Circuit:

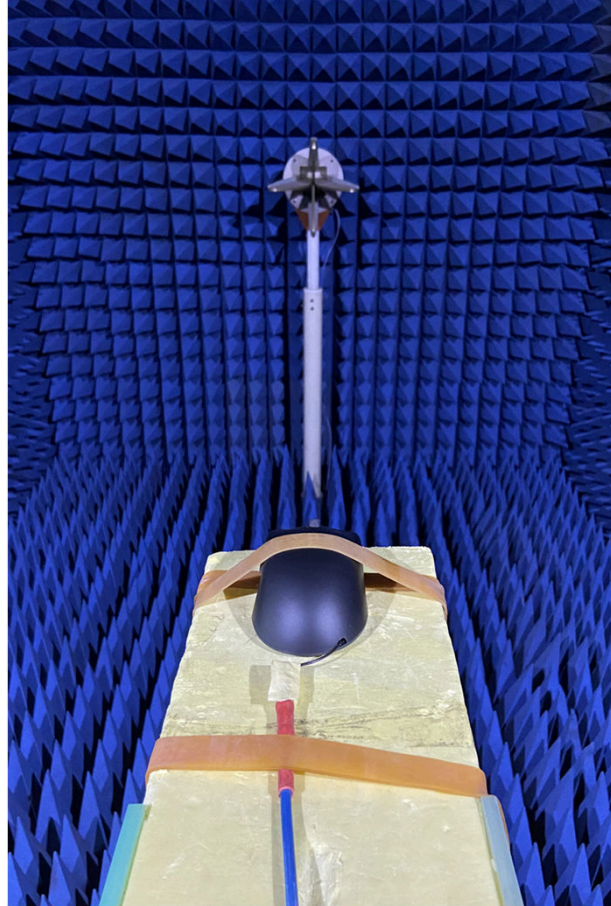


|   | Component | Supplier | Value  | PN |
|---|-----------|----------|--------|----|
| A | 0402      |          | 0. 5pF |    |
| B | 0402      |          | 1pF    |    |
| C | 0402      |          | 3.3nH  |    |
| D |           |          | NC     |    |

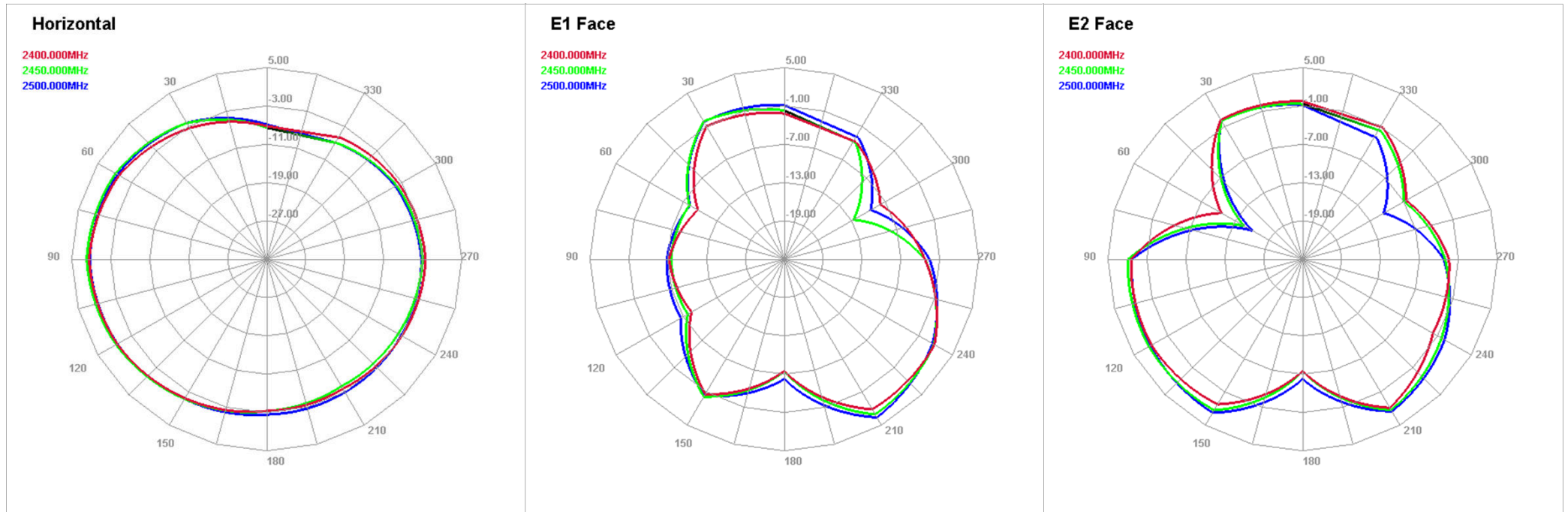
# Measurement Data: Return Loss



# Measurement Configuration:



# Radiation Pattern (2D):



# Efficiency and Gain

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 62.5        | -2.0         | -1.5          |
| 2410          | 61.2        | -2.1         | -1.3          |
| 2420          | 61.5        | -2.1         | -1.2          |
| 2430          | 63.1        | -2.0         | -1.1          |
| 2440          | 62.5        | -2.0         | -1.0          |
| 2450          | 64.7        | -1.9         | -1.0          |
| 2460          | 64.6        | -1.9         | -1.1          |
| 2470          | 63.2        | -2.0         | -1.1          |
| 2480          | 64.9        | -1.9         | -1.0          |
| 2490          | 66.4        | -1.8         | -1.0          |
| 2500          | 65.5        | -1.8         | -0.9          |
| AVE           | 63.6        | -2.0         | -1.1          |