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# Specification

## Requirements of Antenna Design

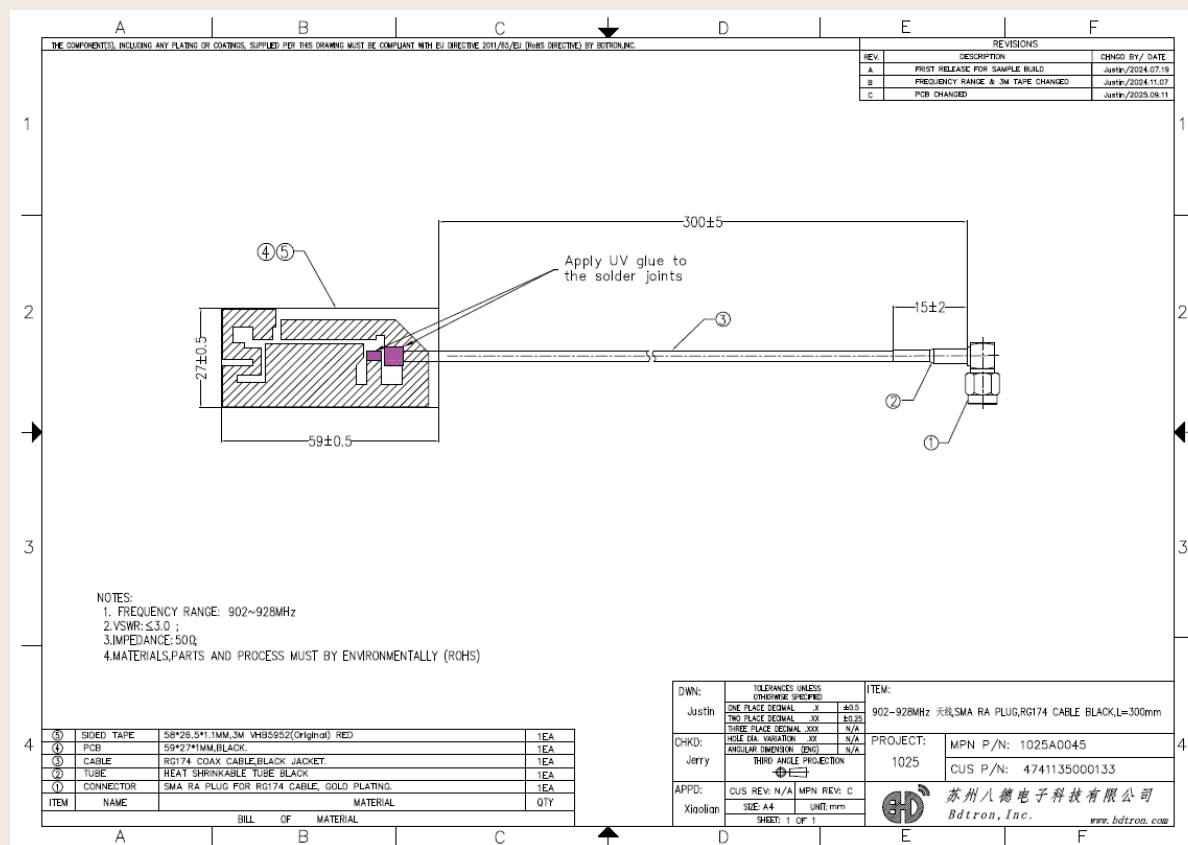
| RF Function | Number of ANT | Frequency Band | Remark |
|-------------|---------------|----------------|--------|
| 902~928MHz  | 1             |                |        |

## Requirements of Measurement

| Test Item  | Specification | Remark |
|------------|---------------|--------|
| VSWR       | <3.0          |        |
| Peak gain  | 0.84dBi       |        |
| Efficiency | >35%          |        |

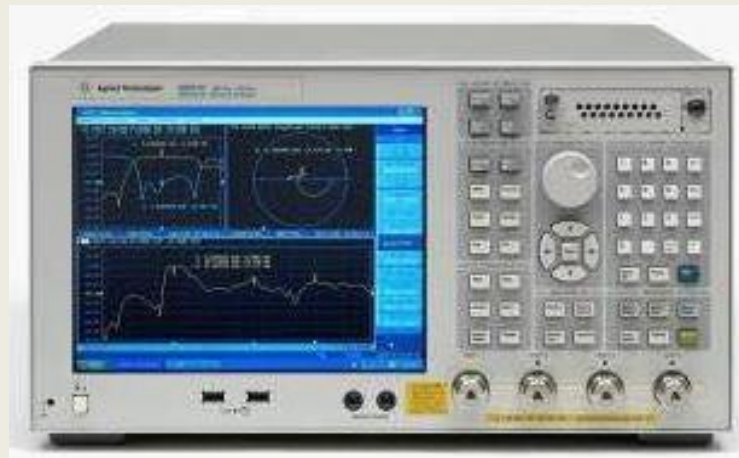
Manufacturer: Bdtron, Inc.  
No.168 Bin Jiang S. Rd, Zhang Pu, Kunshan,  
Jiangsu, 215321, P.R. China

# Antenna Placement & Solution



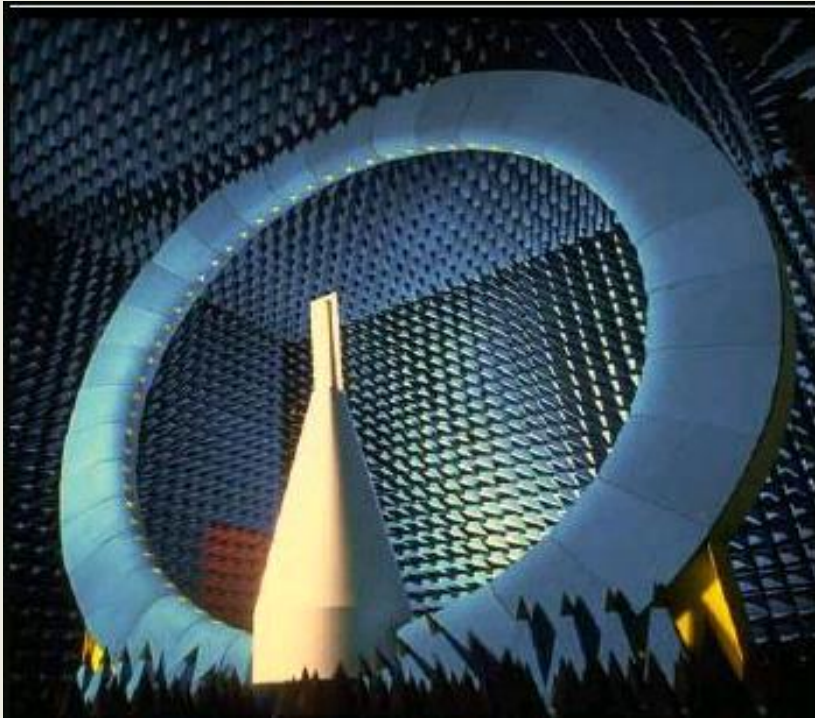
| Antenna    | ANT Type | Size (L * W * H) | Cable Length (mm) | Cable Type |
|------------|----------|------------------|-------------------|------------|
| 902~928MHz | PCB      | 59*27*1          | L=300             | RG174      |

# Test Setup for S-parameter Measurement

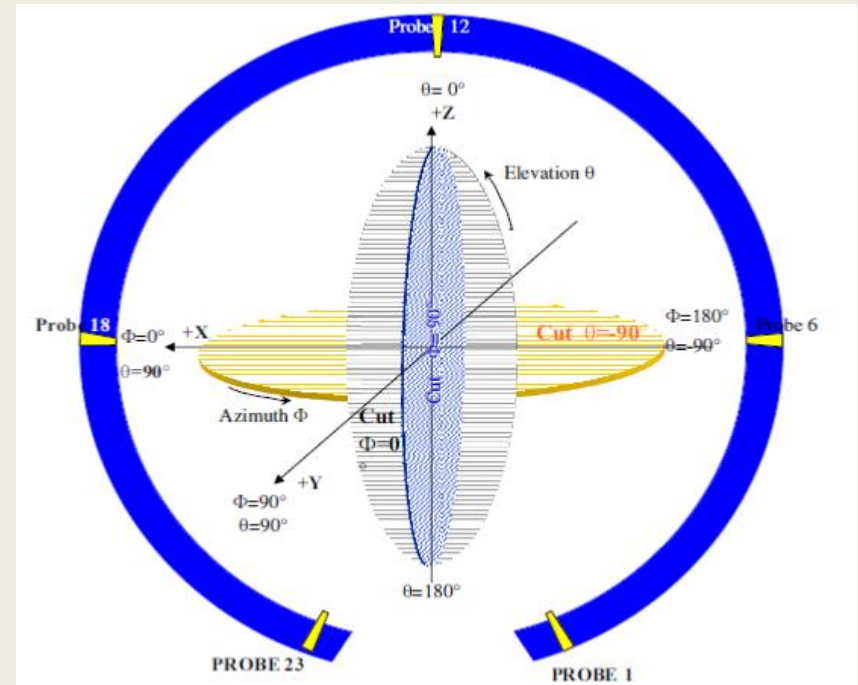


| Equipment        | Brand    | Model  | S/N        | Correction date | Validity period |
|------------------|----------|--------|------------|-----------------|-----------------|
| Network Analyzer | Keysight | E5071C | MY46107744 | 2025.4.18       | 1 year          |

# Chamber Information



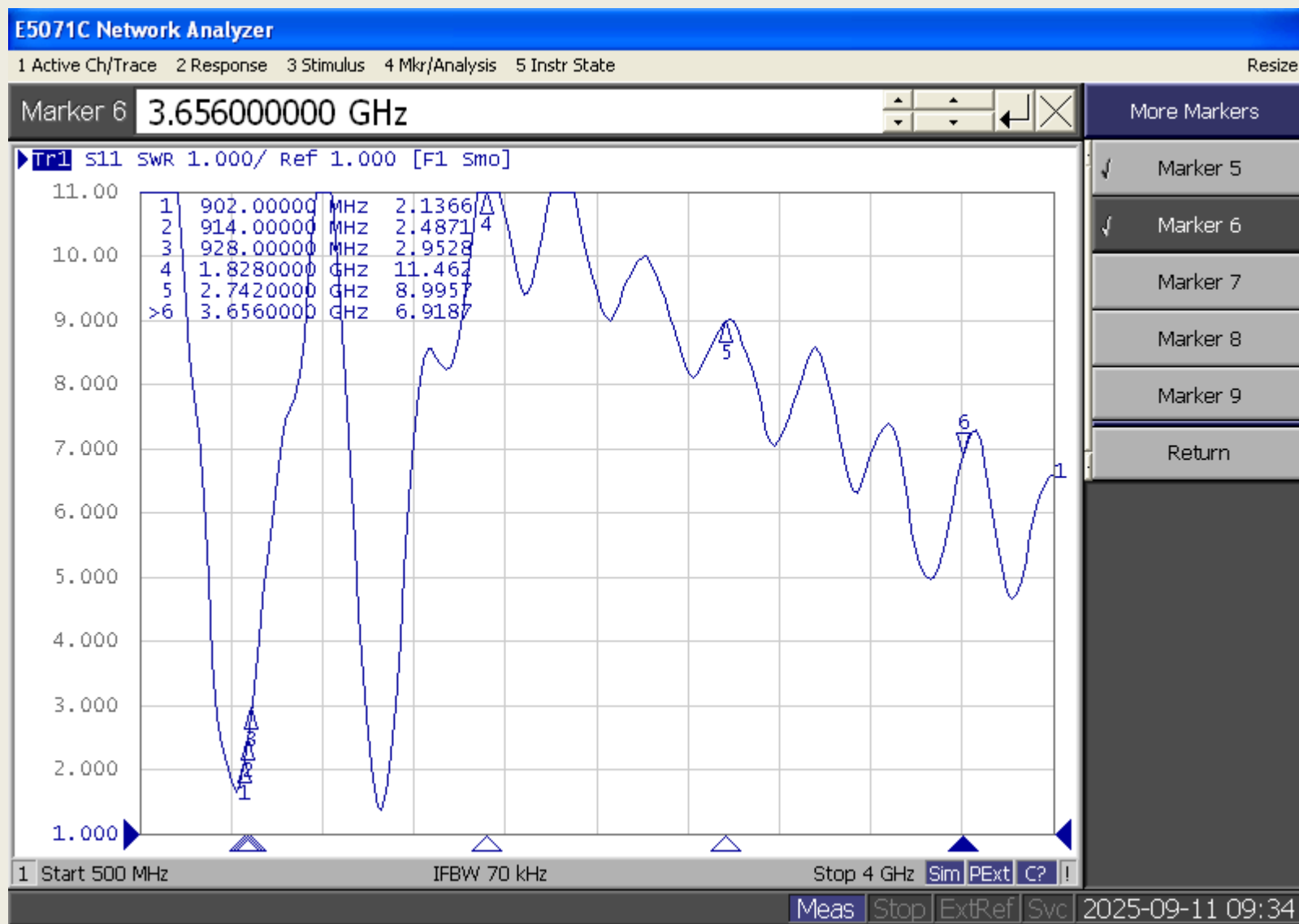
| Chamber | Brand      | Model | Correcti<br>on date | Validity<br>period |
|---------|------------|-------|---------------------|--------------------|
| SATIMO  | SATIM<br>O | SG-32 | 2025.4.1<br>8       | 2 year             |



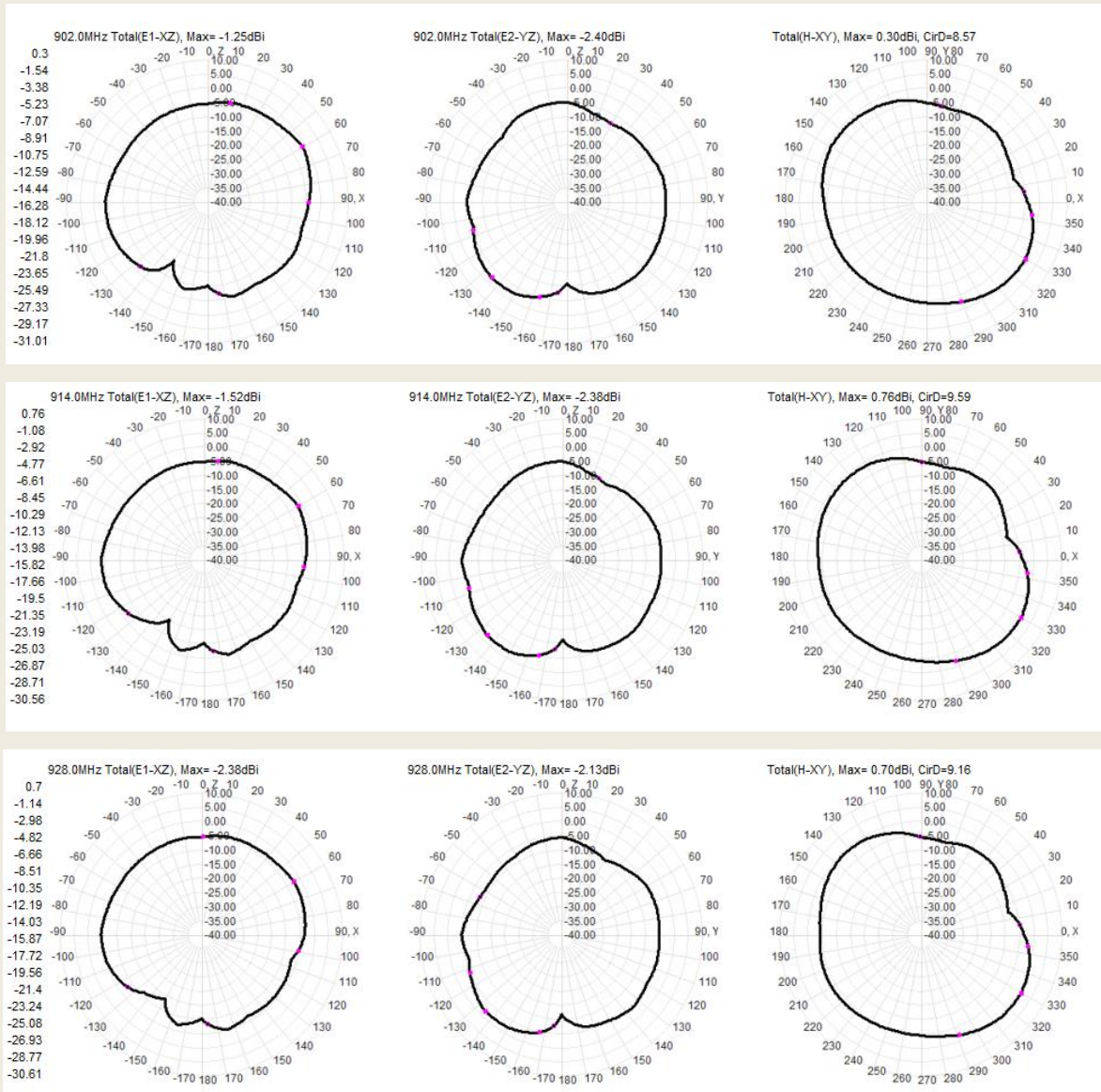
|                                  | $\theta$ | $\phi$ |
|----------------------------------|----------|--------|
| Total angle                      | 175°     | 360°   |
| How many angle<br>scan one point | 5°       | 5°     |
| Total scan point                 | 36       | 73     |

# S Parameter Results

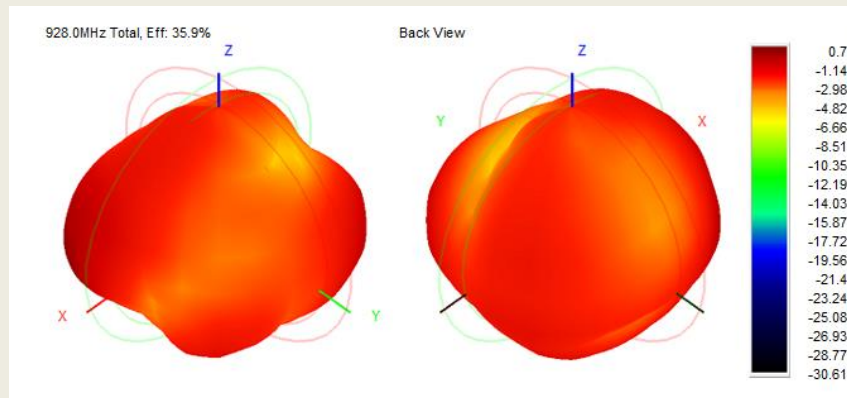
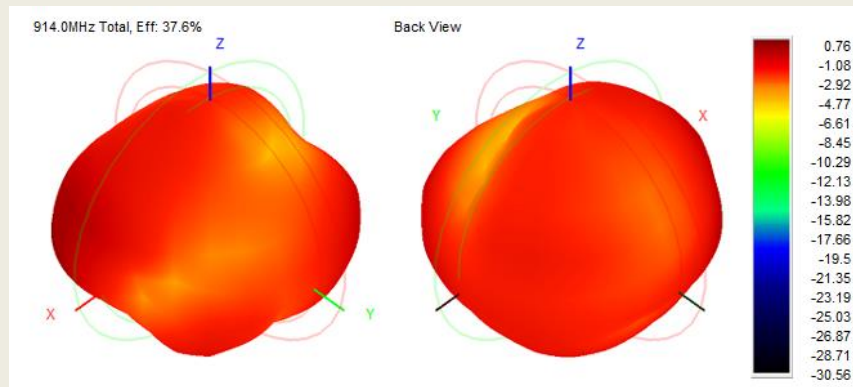
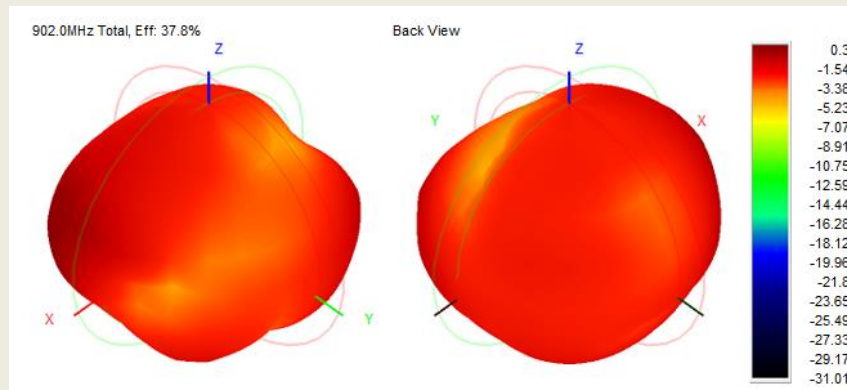
## VSWR



# 2D Radiation Pattern Results



# 3D Radiation Pattern Results



# Results Summary (peak gain, efficiency )

| Frequency<br>(MHz) | Peak gain<br>(dBi) | Efficiency<br>(%) |
|--------------------|--------------------|-------------------|
| 902.0              | 0.30               | 37.79             |
| 904.0              | 0.31               | 37.08             |
| 906.0              | 0.34               | 36.51             |
| 908.0              | 0.41               | 36.40             |
| 910.0              | 0.53               | 36.91             |
| 912.0              | 0.67               | 37.45             |
| 914.0              | 0.76               | 37.64             |
| 915.0              | 0.78               | 37.56             |
| 918.0              | 0.71               | 36.46             |
| 920.0              | 0.74               | 36.17             |
| 922.0              | 0.84               | 36.65             |
| 924.0              | 0.84               | 36.70             |
| 926.0              | 0.78               | 36.31             |
| 928.0              | 0.70               | 35.91             |