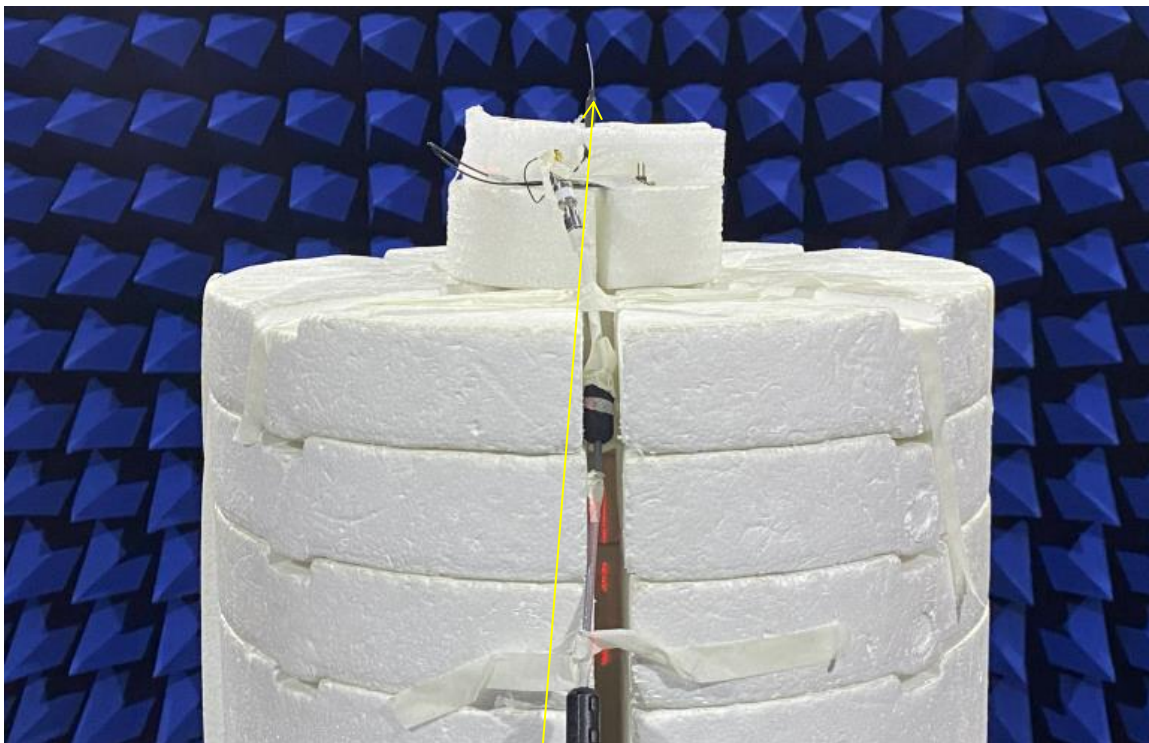


2# Antenna Study

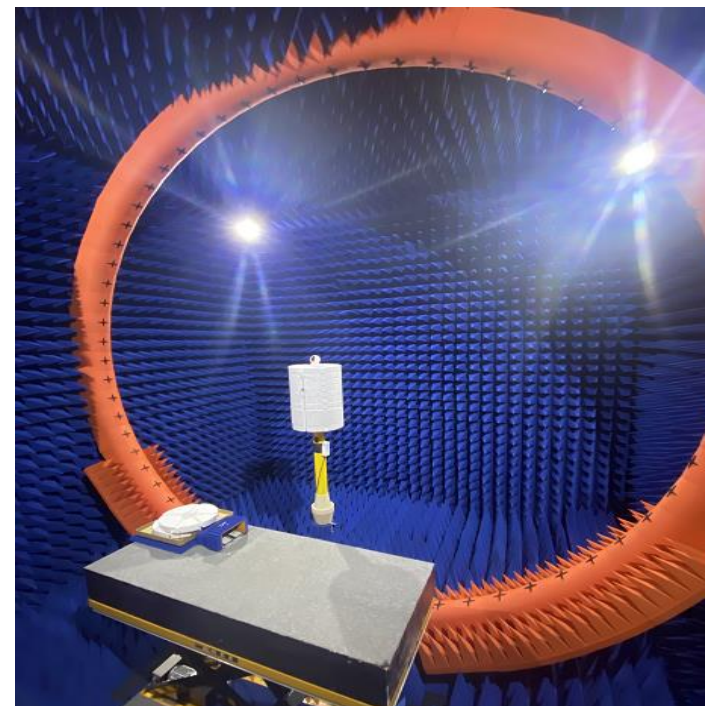
- **Client Name:立讯检测**
- **Project Name:2#**
- **Debugging frequency band: 2400-2500MHz**
- **Valuation date: 2022.11.21**

Internal Antenna

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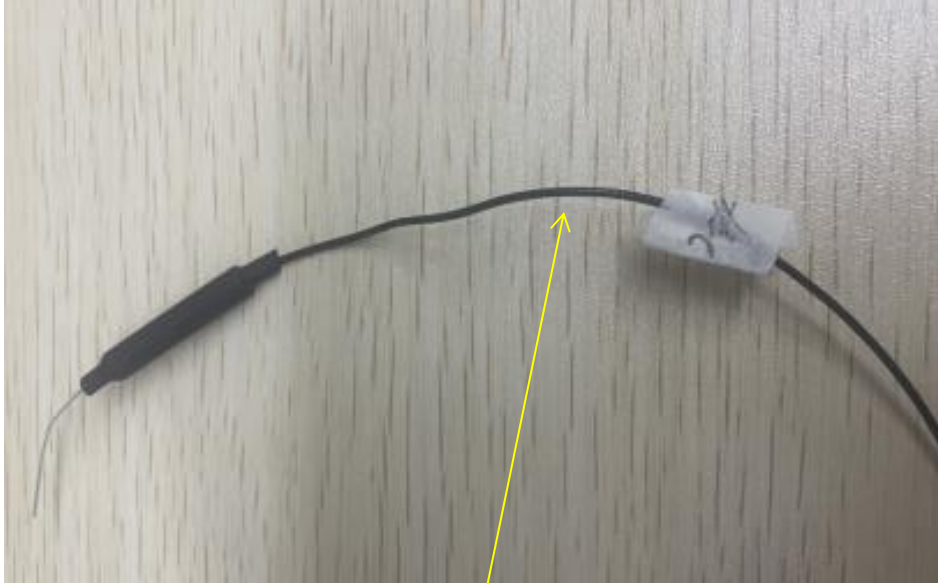
Testing environment



Testing 3D microwave darkroom(6m*6m*6m)

External Antenna

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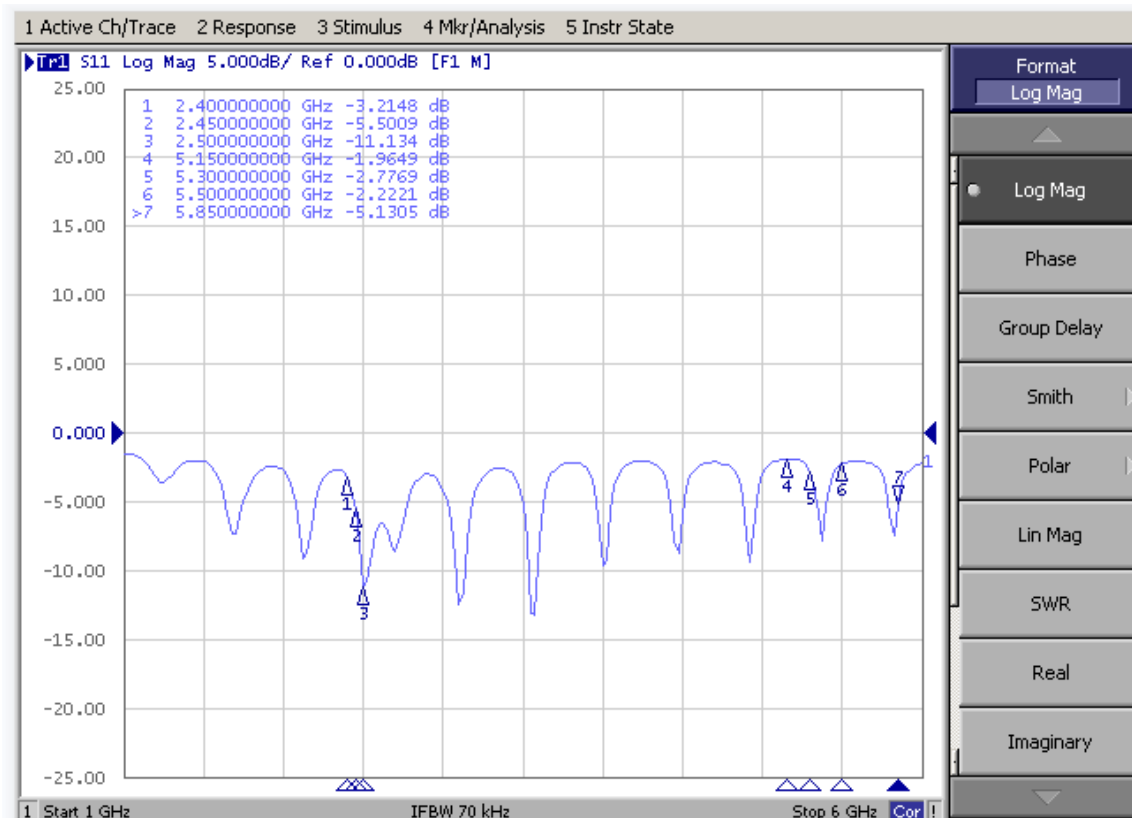
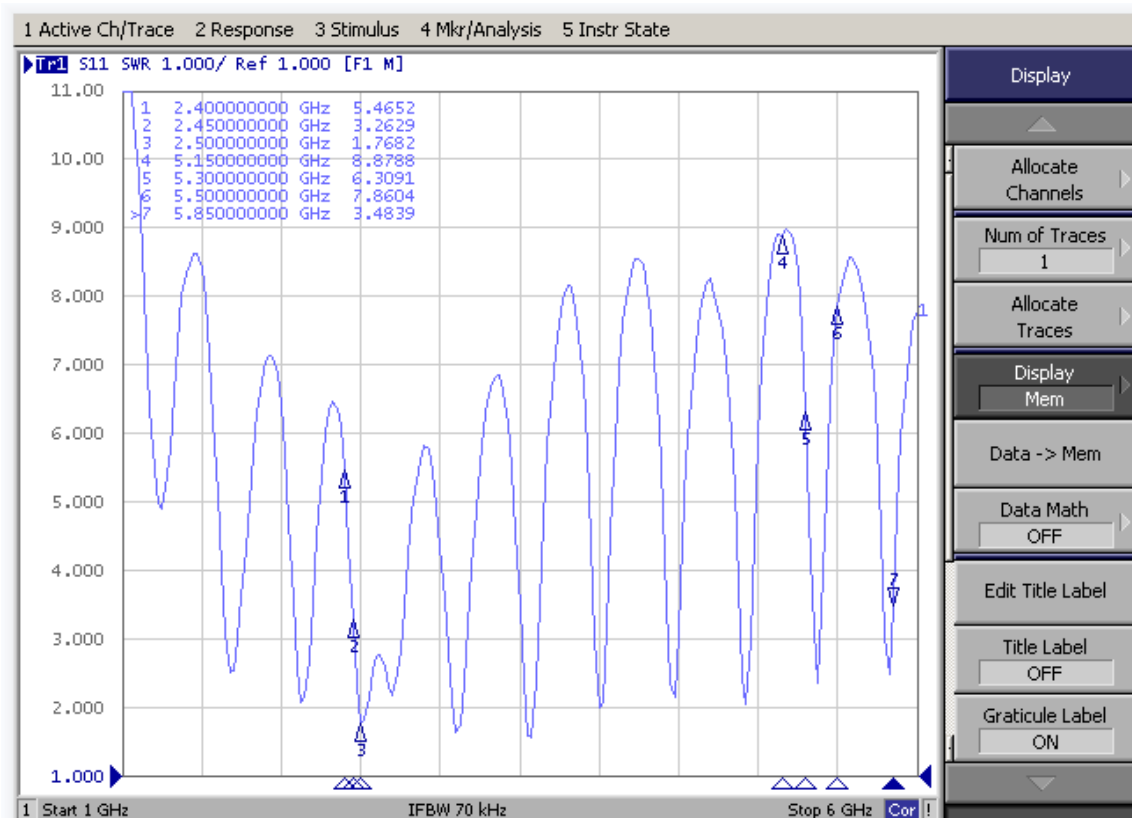


Antenna

- Antenna name: 2.4G
- Antenna Type: PIFA
- Covers : 2400-2500MHz

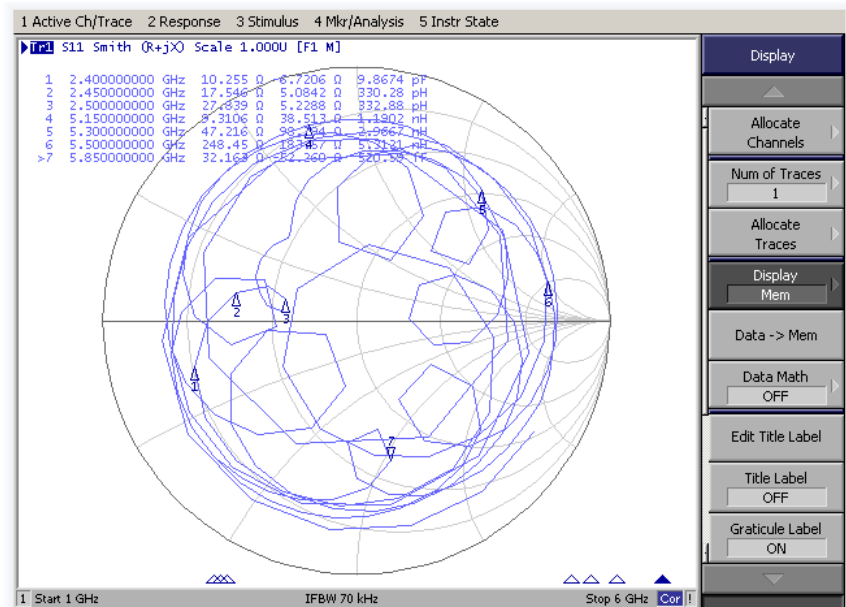
S Parameter_Return Loss&VSWR

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Efficiency and Gain-Smith

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Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-3.78	-3.22	-3.43	-2.77	-2.18	-1.68	-0.69	-0.39	-0.87	-1.17	-0.95
Efficiency (%)	21.59	24.03	26.15	30.17	34.60	38.64	44.82	47.46	46.75	47.26	48.10

Freespace Environment Performance – WIFI

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