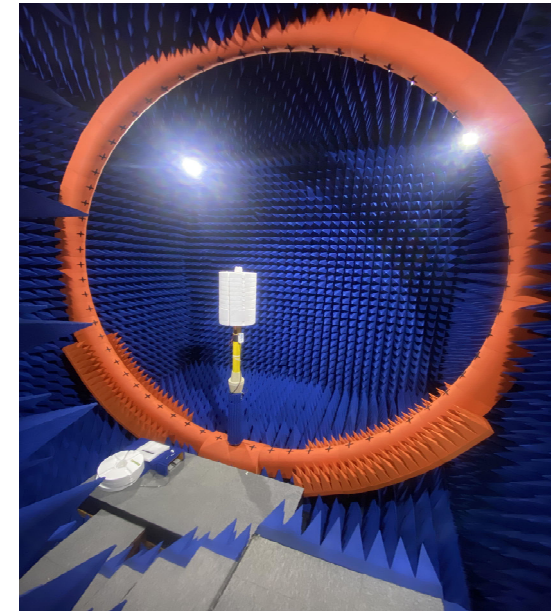
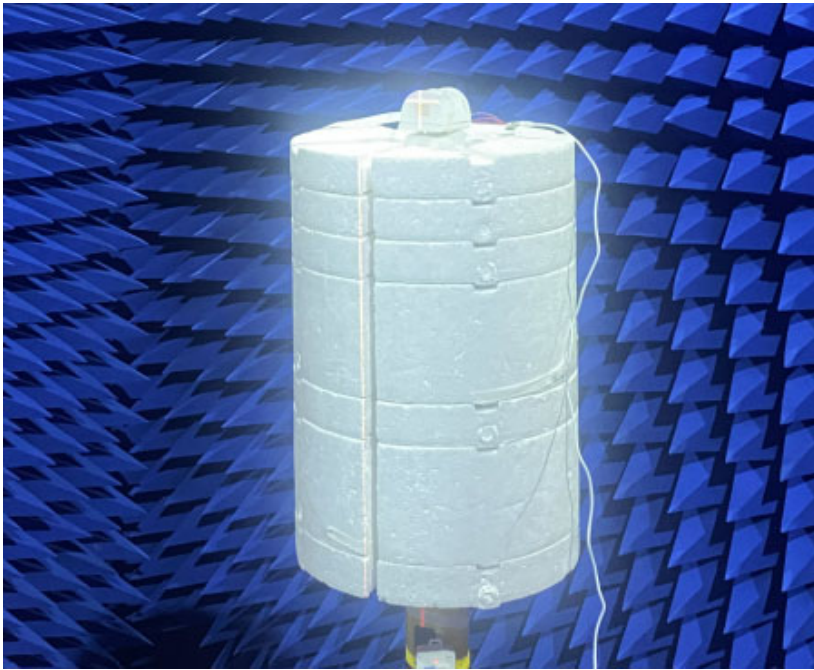


E97PJAF Antenna Study

- **Client Name: 奥尼**
- **Project Name:E97PJAF**
- **Debugging frequency band: 2400-2500MHz**
- **Valuation date: 2023.09.23**

Internal Antenna

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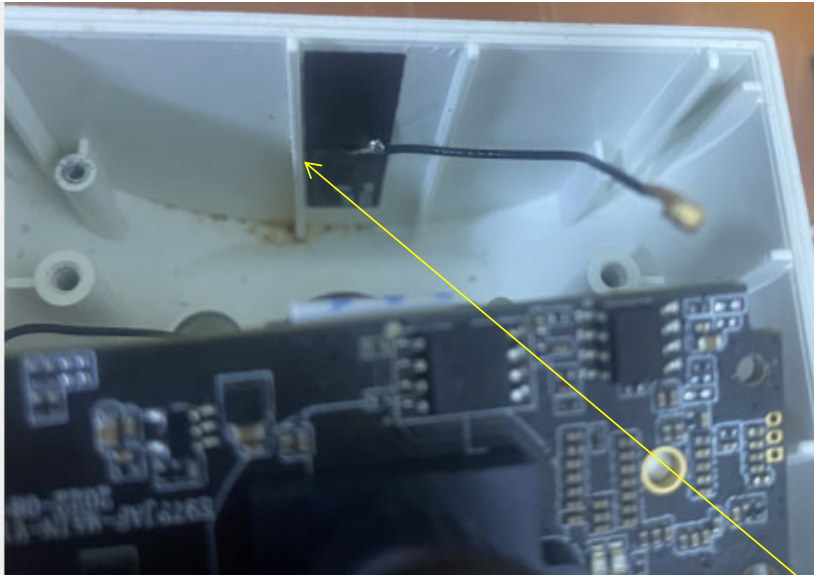


Testing 3D microwave darkroom(6m*6m*6m)

Testing environment

External Antenna

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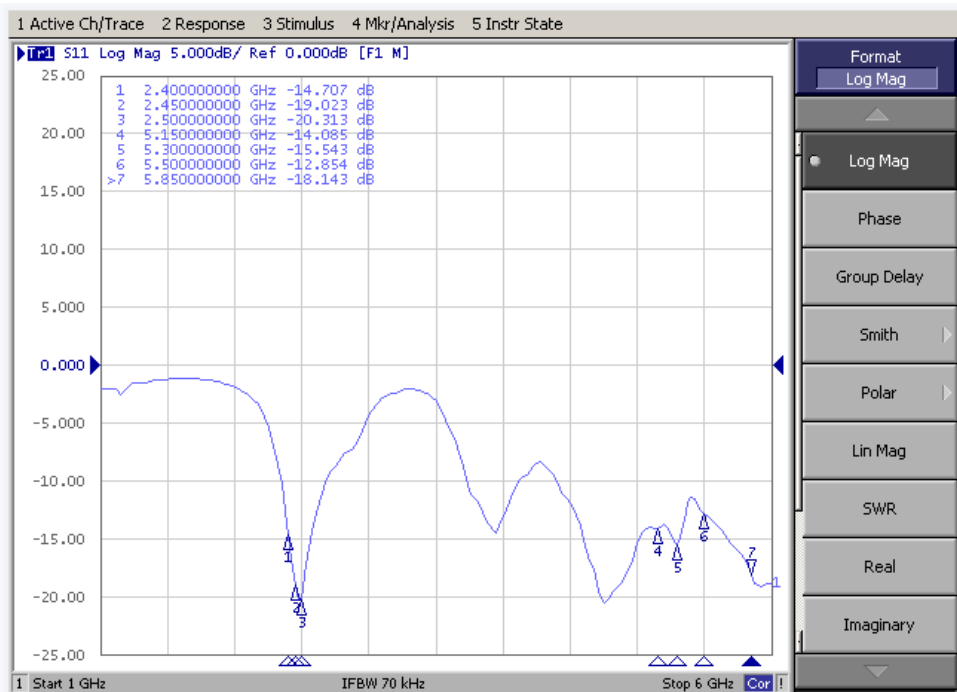
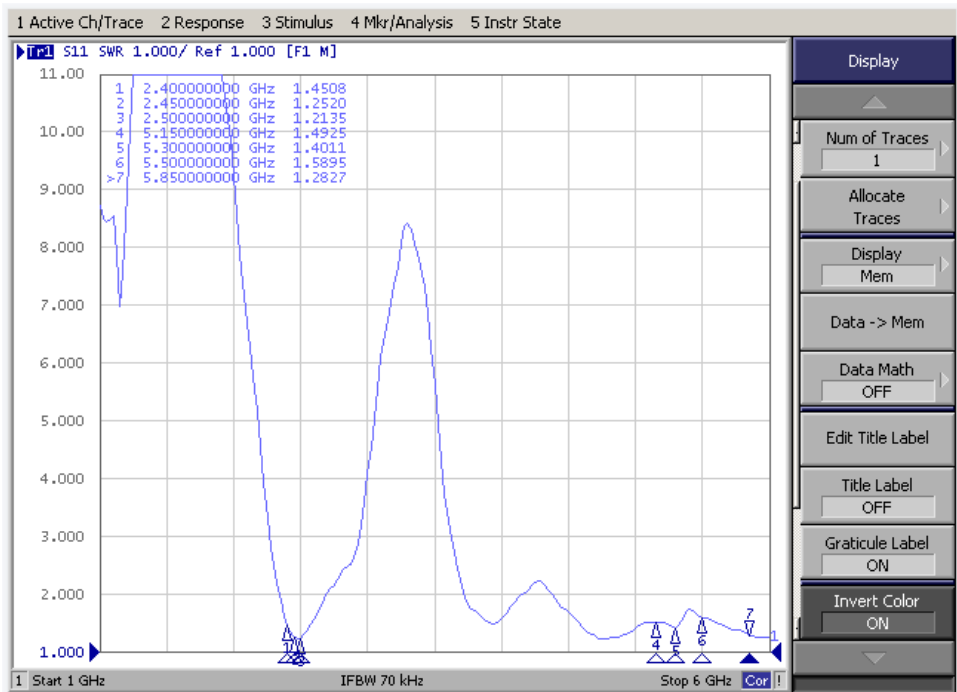


Antenna

- Antenna name: WIFI
- Size: 35.2mm*8mm(FPC)
- Antenna Type: Monopole
- Covers : 2.4G
- P/N: UB01C50F2D3a08A
- Coaxial cable: 50mm

S Parameter_Return Loss&VSWR

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Efficiency and Gain

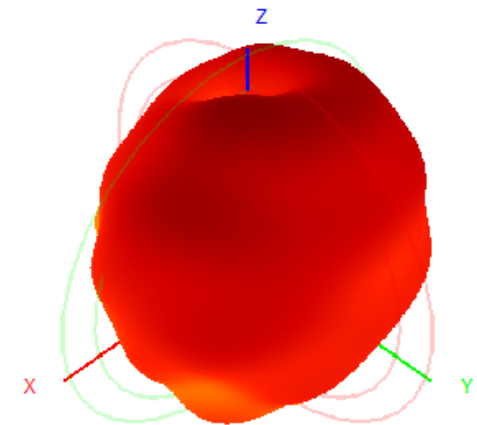
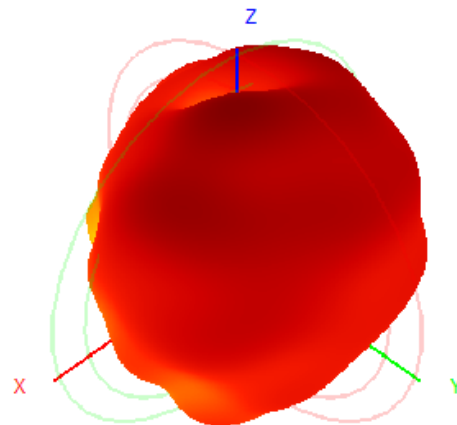
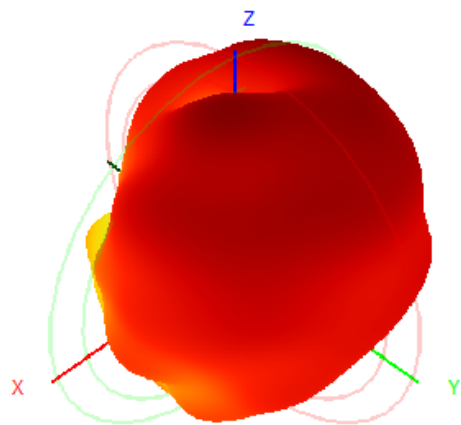
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Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.73	2.76	2.91	3.48	3.63	3.36	3.18	3.09	3.31	3.37	3.39
Efficiency (%)	61.91	62.30	61.95	64.31	63.94	64.11	65.10	65.86	65.17	64.19	65.48

Item	Measurement	Total
1	TRP	18.72
2	TRP	19.05
3	TRP	17.23
4	TIS(EIRP)	-87.25
5	TIS(EIRP)	-87.09
6	TIS(EIRP)	-87.16

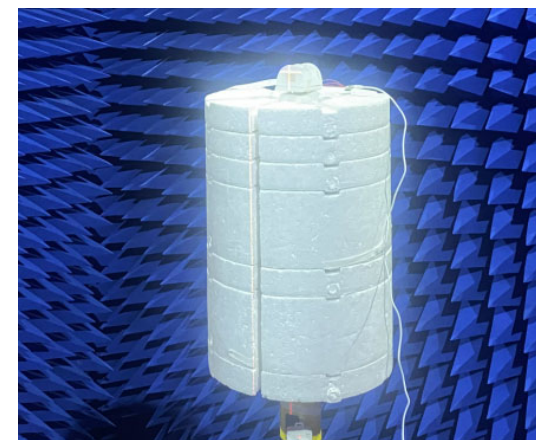
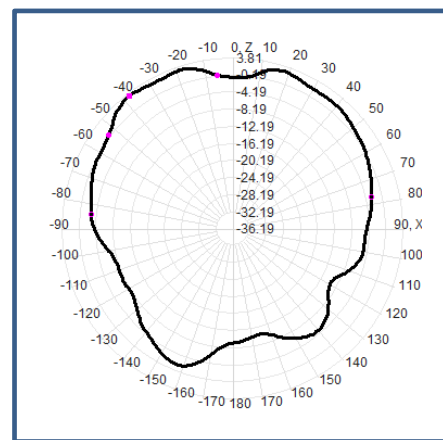
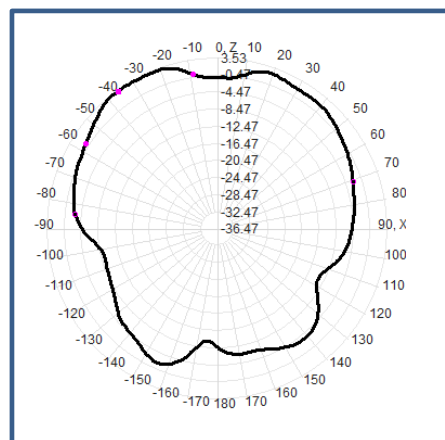
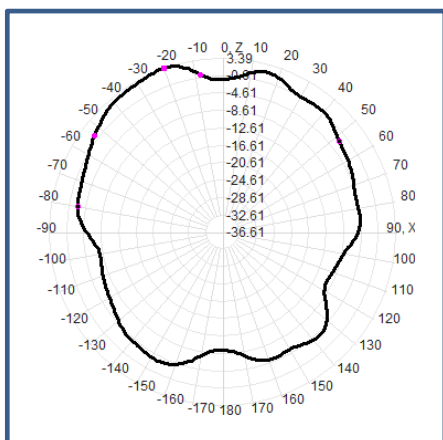
Freespace Environment Performance – WIFI

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Freespace Environment Performance – WIFI

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Conclusion

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- Antenna covers 2.4G.
- Test shows excellent performance, VSWR match < 2.0in working band.
- Antenna is small: = 35.2mm*8mm (FPC)