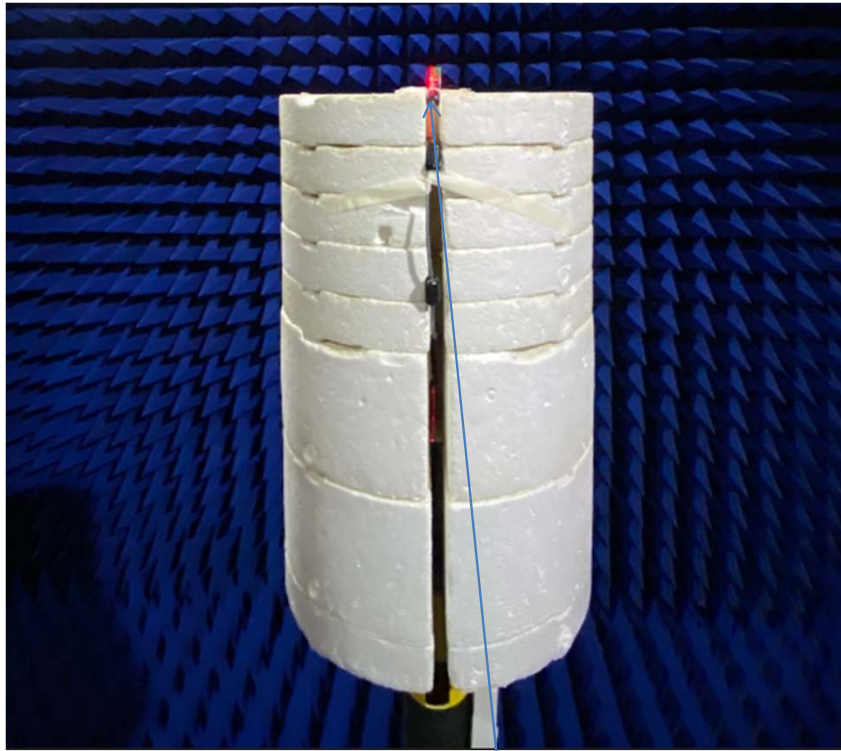


Antenna Study

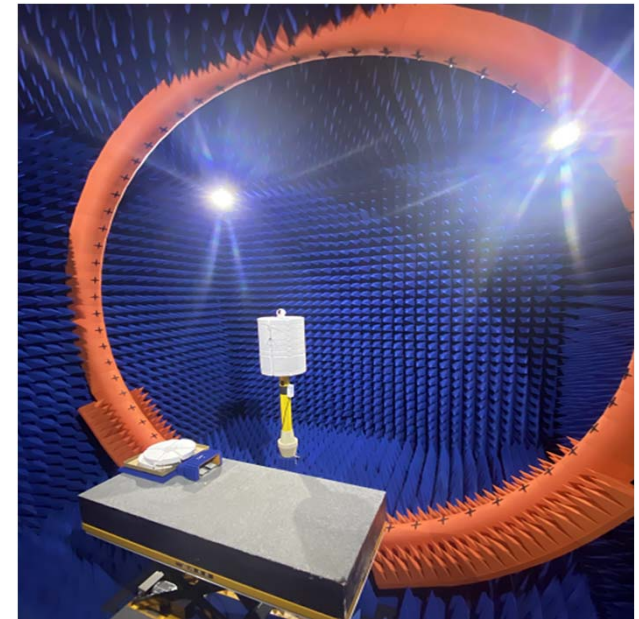
- **Client Name:**
- **Project Name : 2.4G**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2025.10.28**

PCB Antenna

Dongguan UB Electronics Co., Ltd



Testing environment

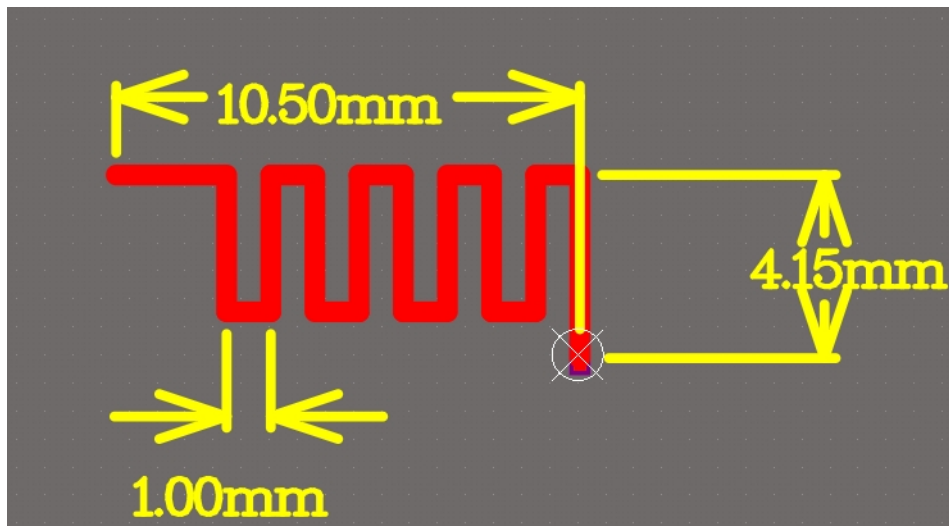


Testing 3D microwave darkroom(6m*6m*6m)

PCB Antenna

Dongguan UB Electronics Co., Ltd

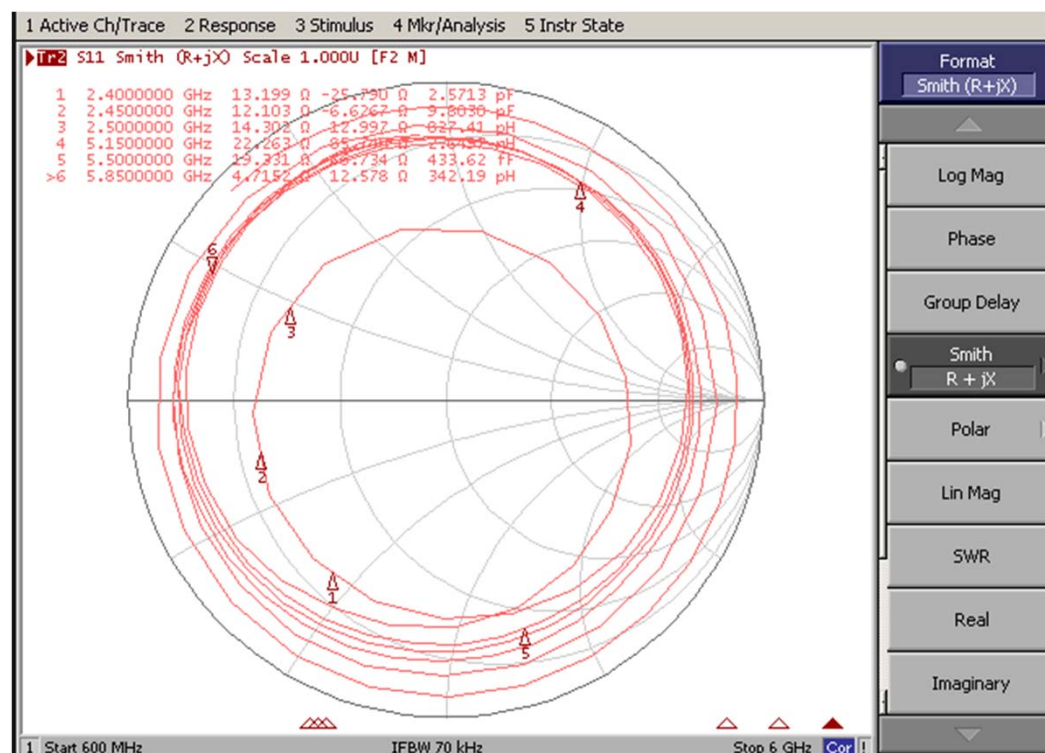
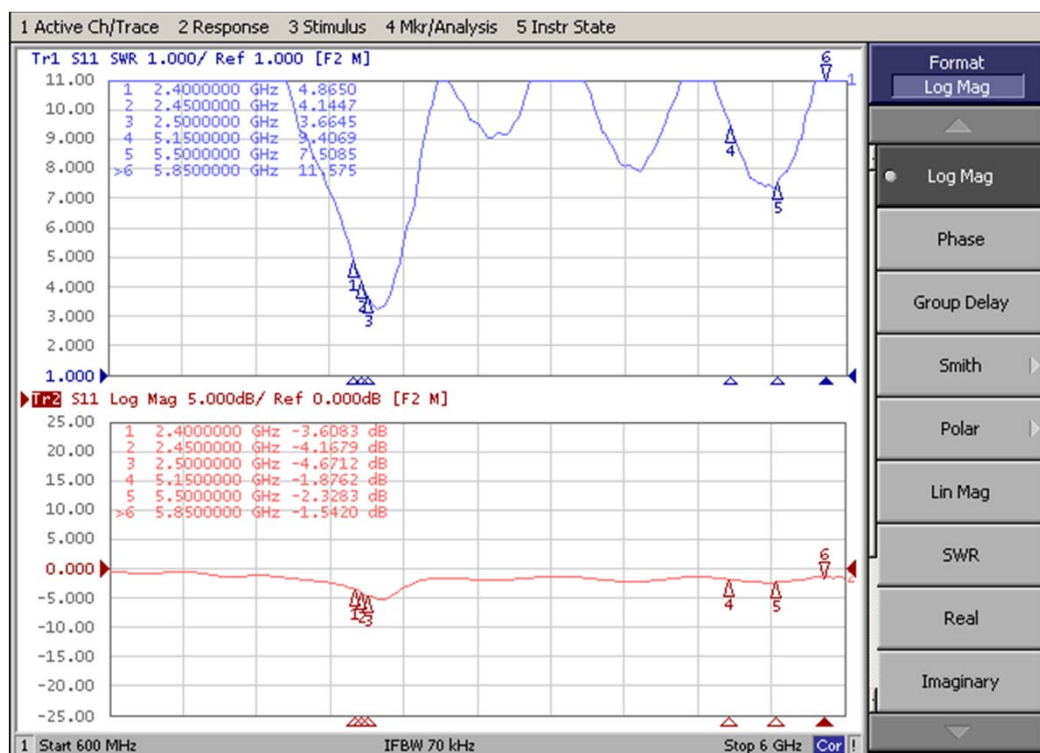
- Antenna name: 2.4G
- Antenna Type: PCB Antenna
- Covers : 2400/2500MHz



Antenna

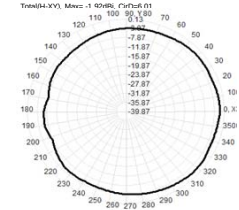
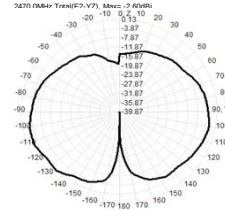
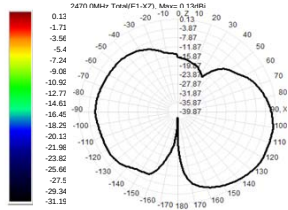
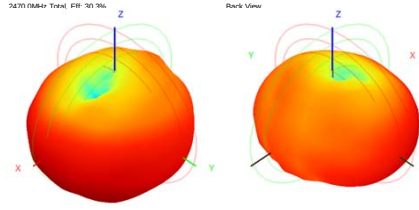
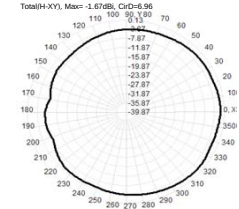
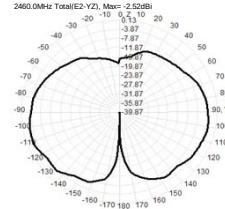
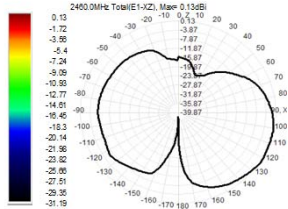
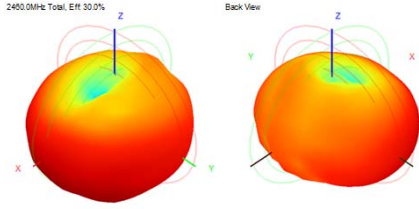
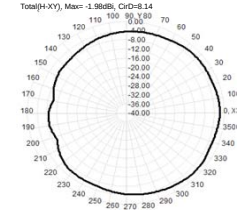
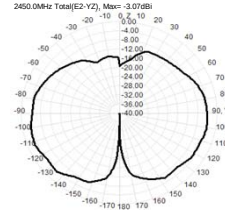
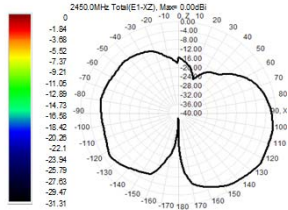
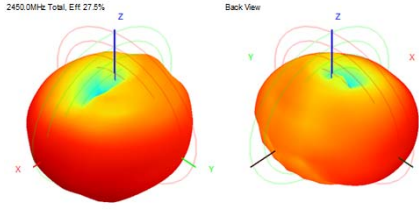
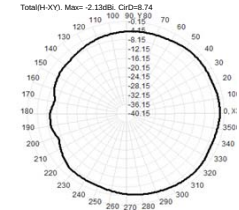
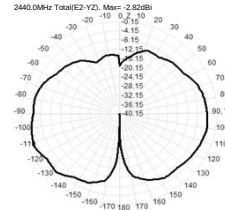
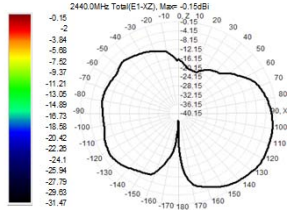
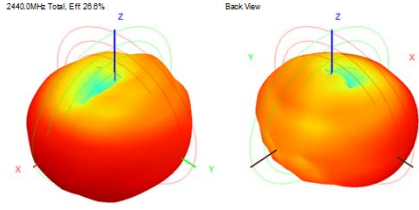
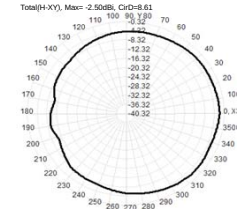
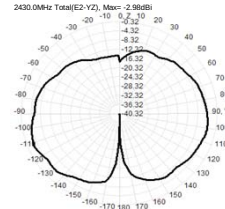
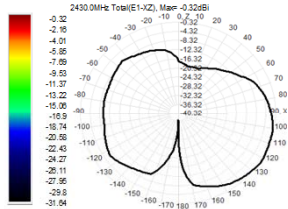
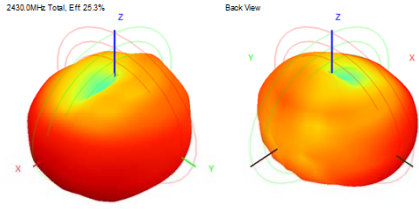
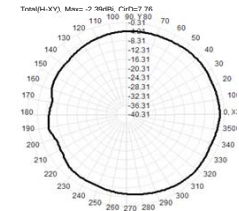
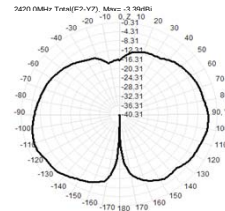
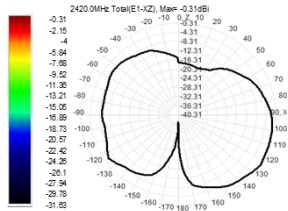
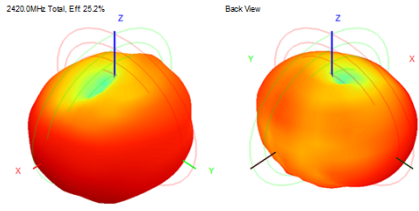
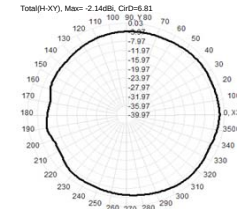
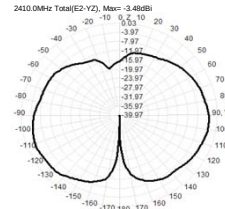
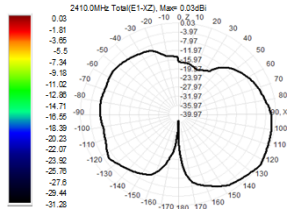
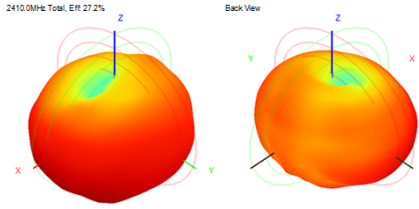
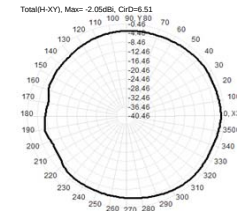
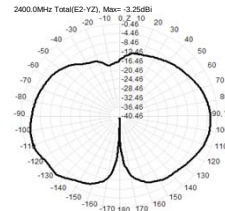
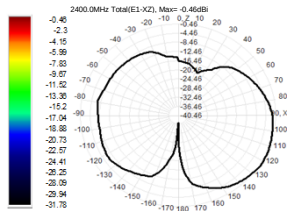
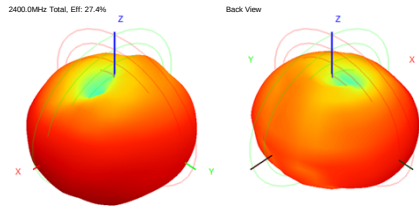
S Parameter_Return Loss&VSWR-Smith

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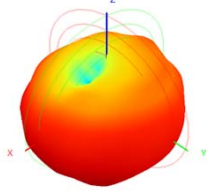


Efficiency and Gain

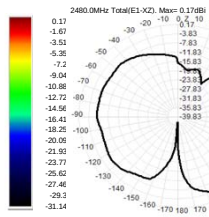
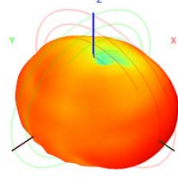
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-0.46	0.03	-0.31	-0.32	-0.15	0.00	0.13	0.13	0.17	0.39	0.43
Efficiency (%)	27.44	27.20	25.18	25.35	26.65	27.47	29.99	30.30	27.76	26.91	27.00



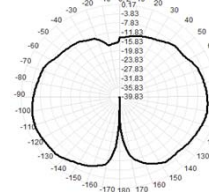
2480.0MHz Total, Eff: 27.8%



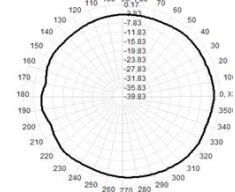
Back View



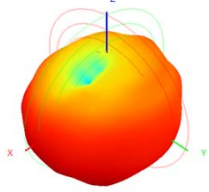
2480.0MHz Total(E2-YZ), Max= -3.25dB



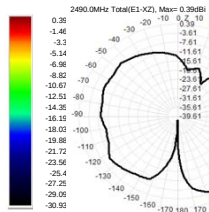
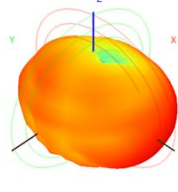
Total(H-XY), Max= -2.61dB, Crd=5.98



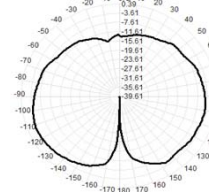
2490.0MHz Total, Eff: 26.9%



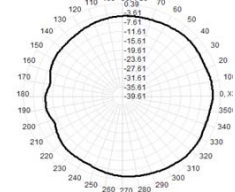
Back View



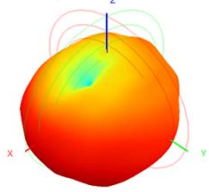
2490.0MHz Total(E2-YZ), Max= -3.03dB



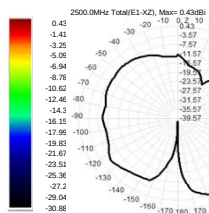
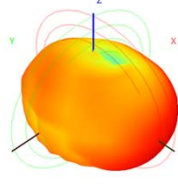
Total(H-XY), Max= -2.93dB, Crd=7.20



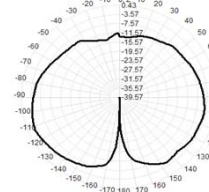
2500.0MHz Total, Eff: 27.0%



Back View



2500.0MHz Total(E2-YZ), Max= -2.55dB



Total(H-XY), Max= -2.55dB, Crd=8.56

