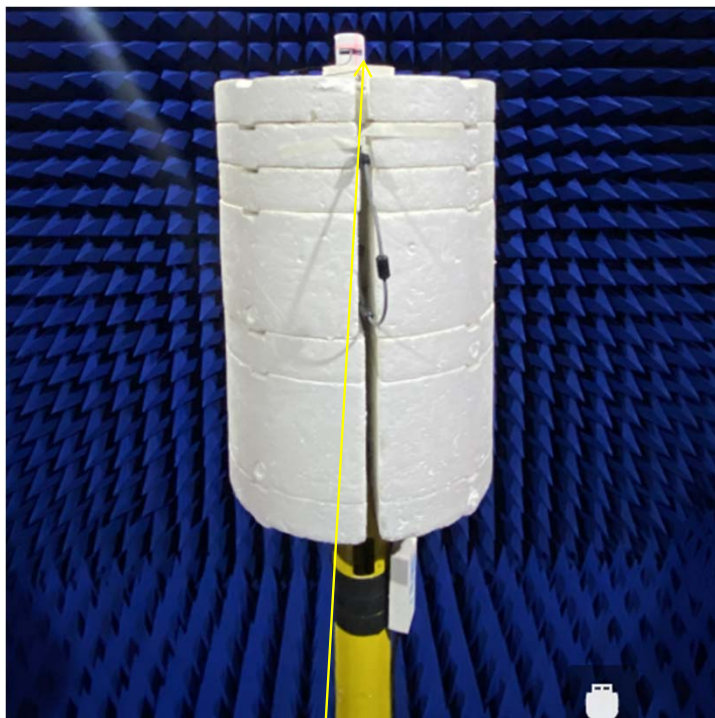


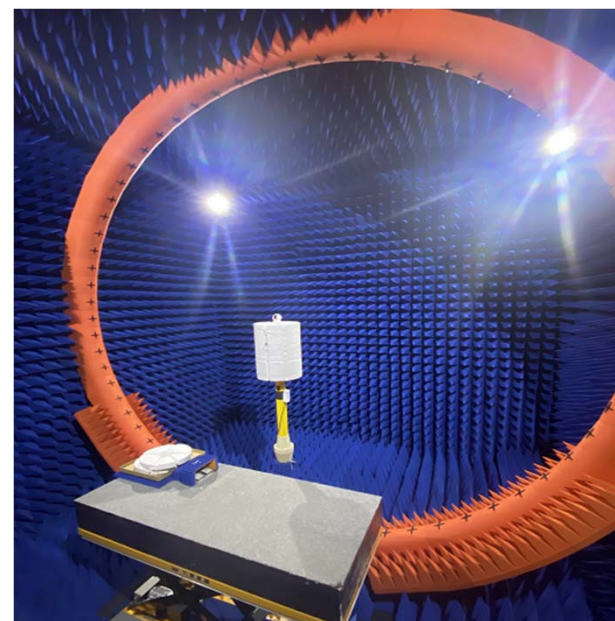
Antenna Study

- **Client Name: Eccel Technology Limited**
- **Project Name: wifi antenna**
- **Debugging frequency band: 2.4G**
- **Valuation date: 2023.07.13**

wifi antenna



Testing environment



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

wifi antenna

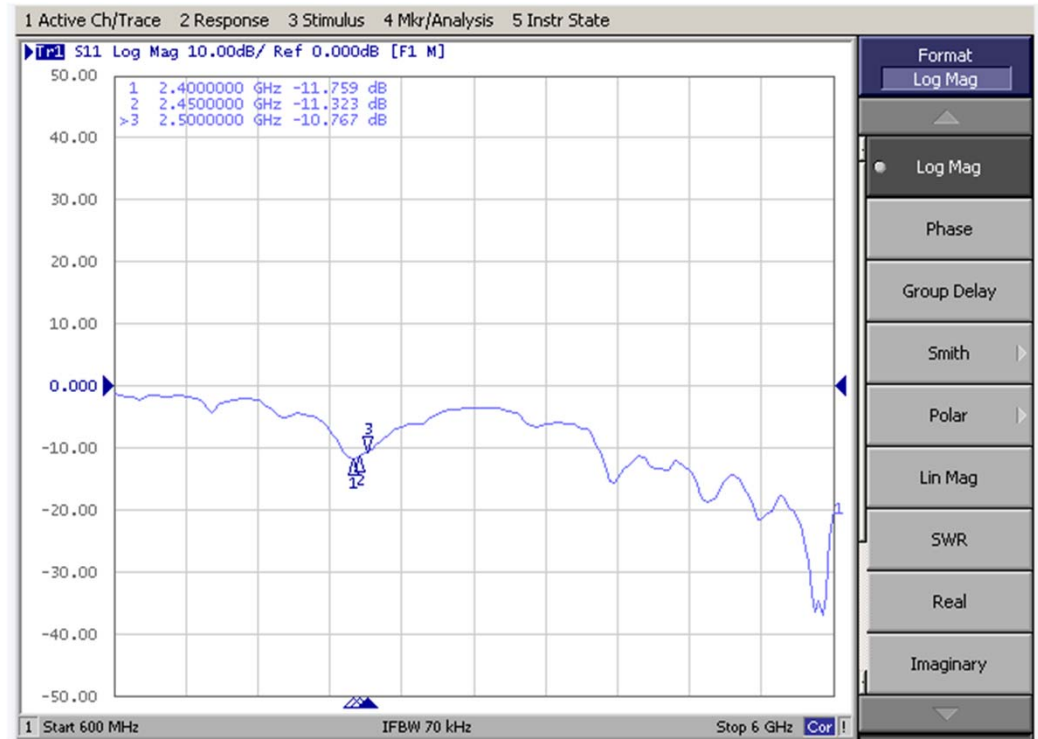
Dongguan UB Electronics Co., Ltd



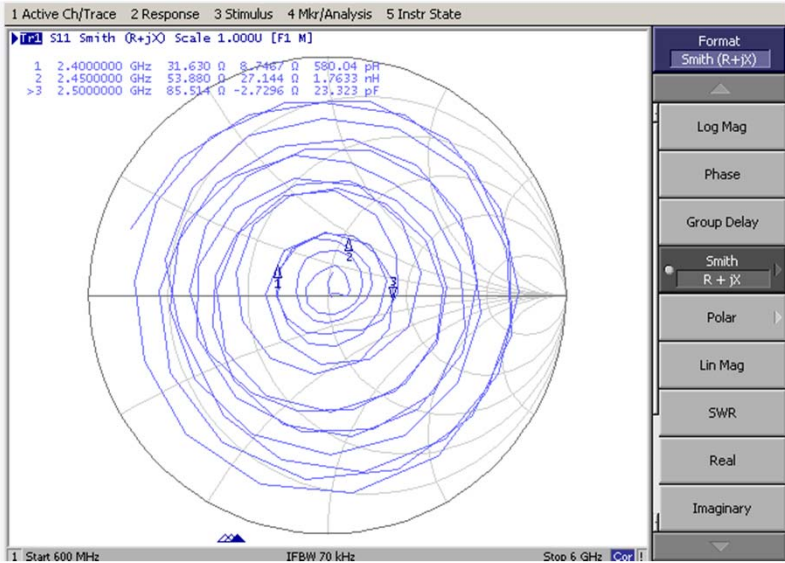
Antenna

- Antenna name: 2.4G
- Antenna Type: PIFA
- Covers : 2.4G

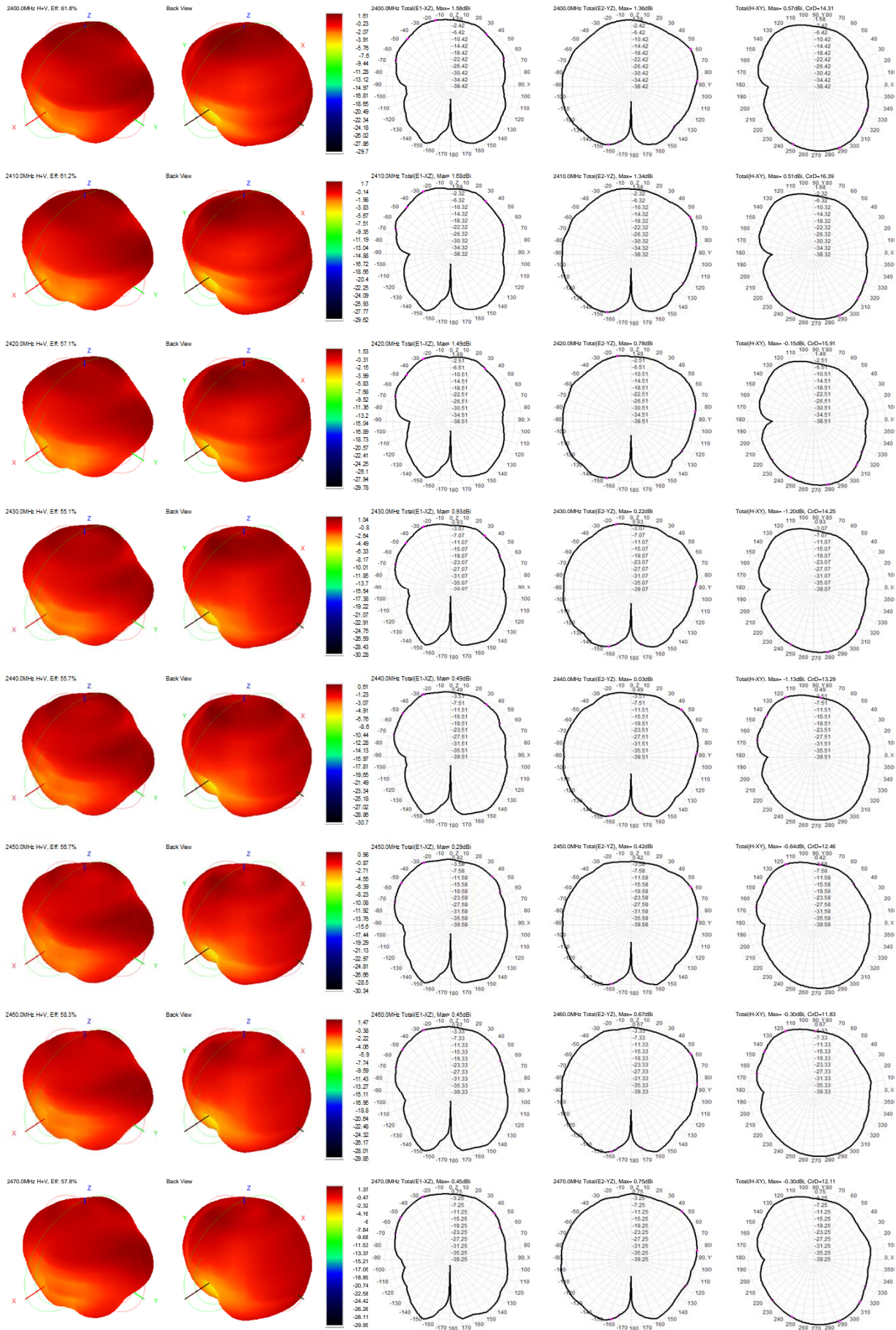
S Parameter_Return Loss&VSWR



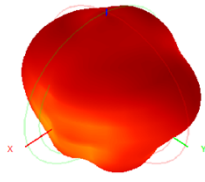
Efficiency and Gain-Smith



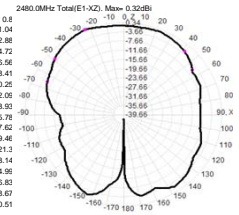
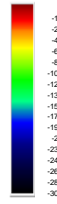
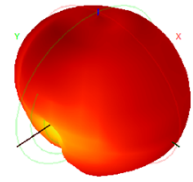
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	1.61	1.70	1.53	1.04	0.61	0.98	1.47	1.37	0.80	0.55	0.78
Efficiency (%)	61.80	61.18	57.07	55.09	55.70	56.65	58.26	57.79	54.45	53.58	52.65



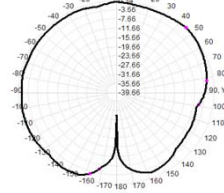
2480.0MHz H+V, Eff: 54.5%



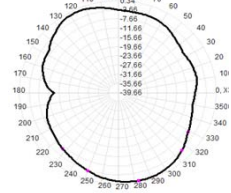
Back View



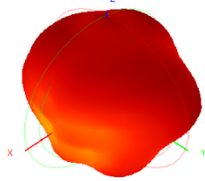
2480.0MHz Total(E1-XZ), Max= 0.32dB



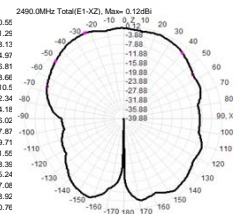
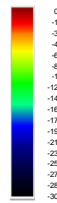
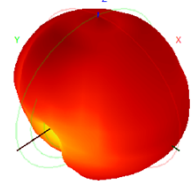
Total(H-XY), Max= -0.98dB, ClD=-13.23



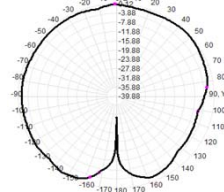
2490.0MHz H+V, Eff: 53.6%



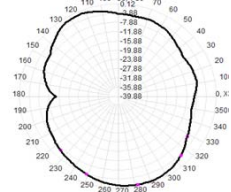
Back View



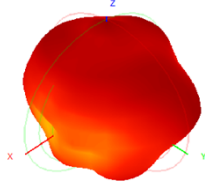
2490.0MHz Total(E2-YZ), Max= 0.04dB



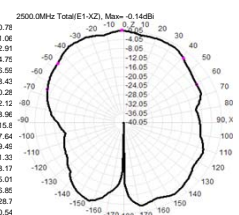
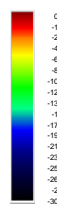
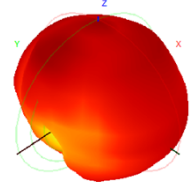
Total(H-XY), Max= -0.87dB, ClD=-13.95



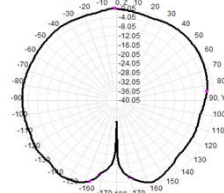
2500.0MHz H+V, Eff: 52.7%



Back View



2500.0MHz Total(E2-YZ), Max= -0.05dB



Total(H-XY), Max= -1.27dB, ClD=-12.21

