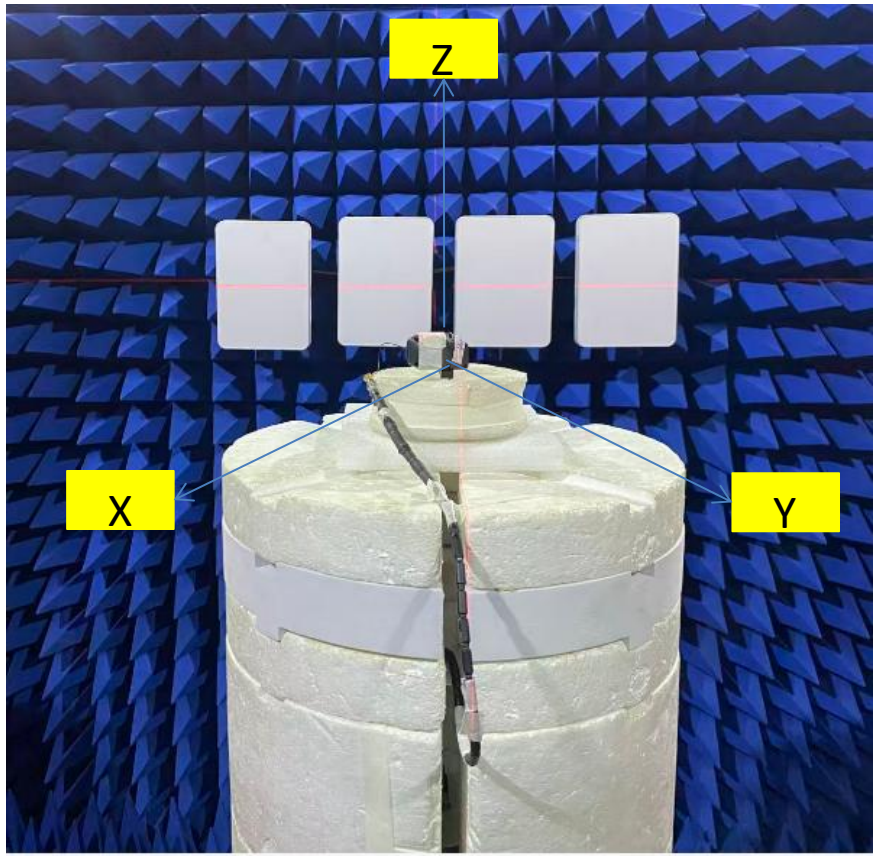
UANT®
好天线·优比造

东莞市优比电子有限公司
Dongguan UB Electronics Co.,Ltd

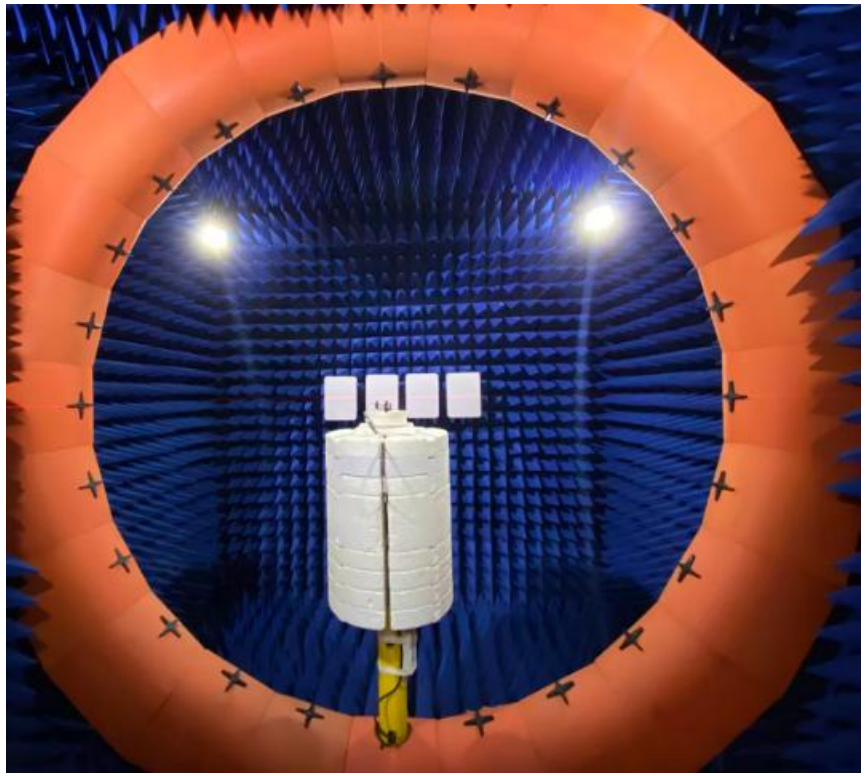
Antenna Study

- **Client Name: shenzhen lizhixin technology co,ltd**
- **Project Name：Remote controller**
- **Model：RC-01**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date：2025.11.11**

Address: Building 79, New Sun Industrial City, Lin Village Community, Tangxia Town, Dongguan (Dongguan Company) Phone: 0769-81777126



Testing environment

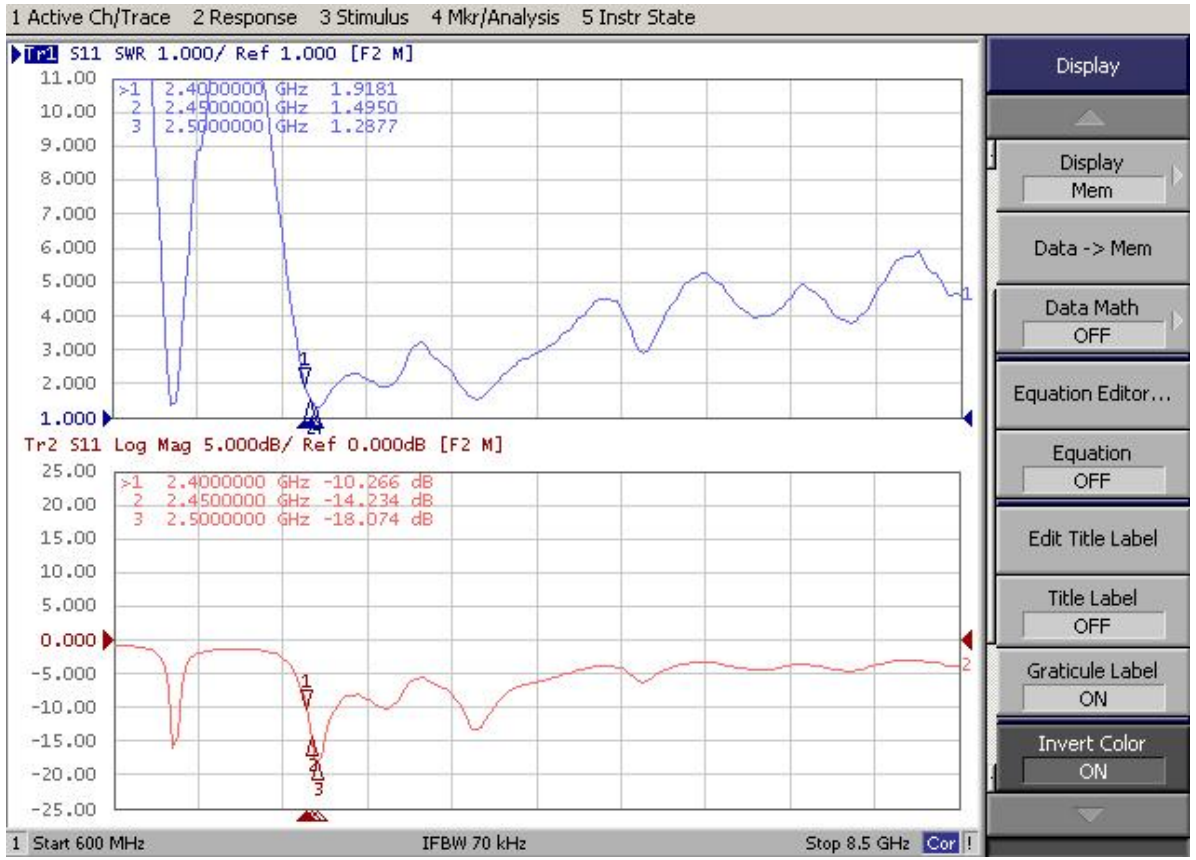


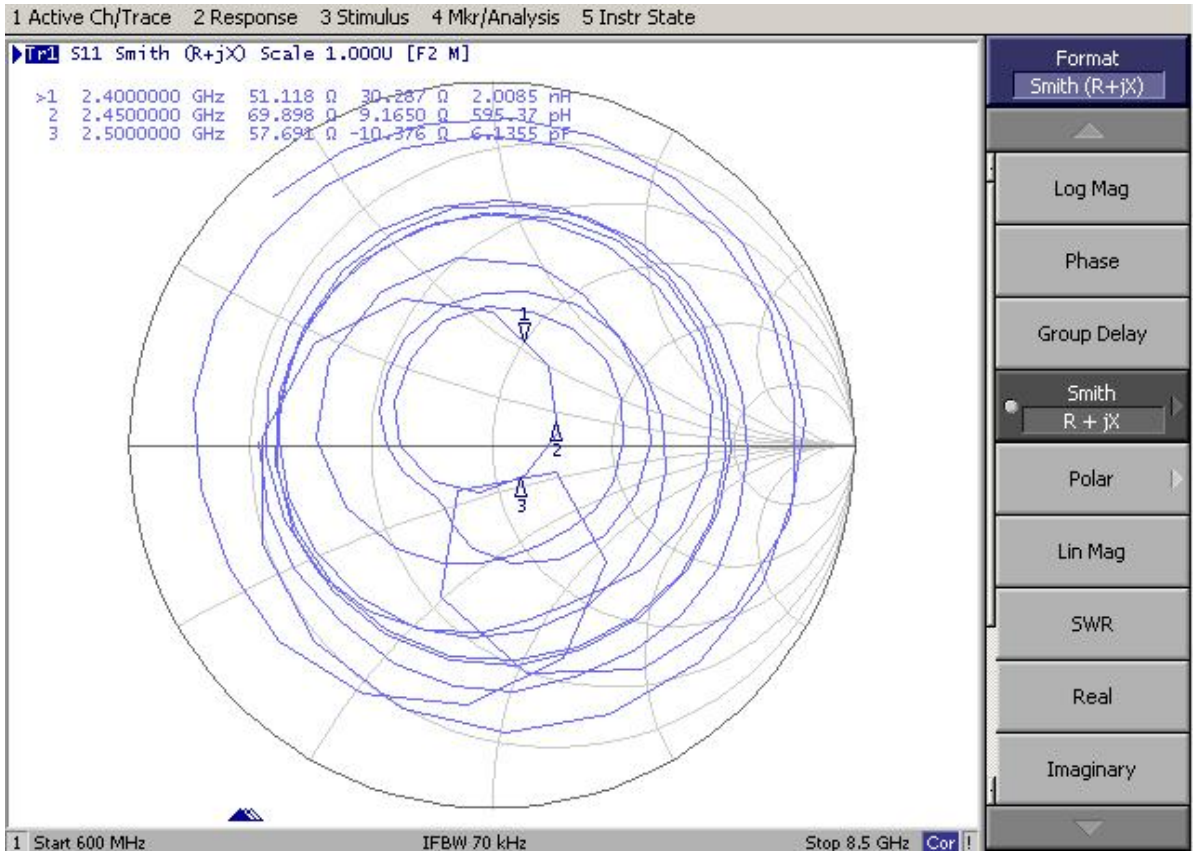
Testing 3D microwave darkroom(3m*3m*3m)

Antenna

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

S Parameter_Return Loss&VSWR-Smith

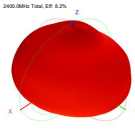




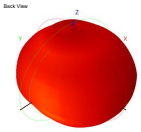
Efficiency and Gain

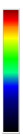
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-6.90	-6.43	-6.44	-6.05	-6.24	-6.07	-6.19	-5.99	-6.12	-5.87	-5.82
Efficiency (%)	8.21	8.98	8.98	10.13	10.30	11.29	11.32	11.86	11.49	12.04	11.97

2400.0MHz Total, Eff: 8.2%

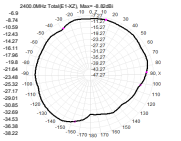


Back View

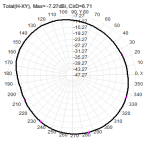




2400.0MHz Total(E1-XZ), Max=-8.92dBi

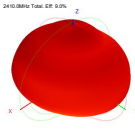


2400.0MHz Total(E2-YZ), Max=-7.47dBi

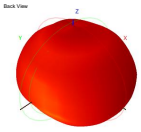


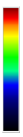
Total(H-XY), Max=-7.27dBi, CiD=5.71

2410.0MHz Total, Eff: 9.0%

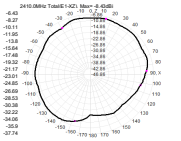


Back View

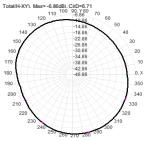




2410.0MHz Total(E1-XZ), Max=-8.40dBi

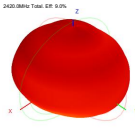


2410.0MHz Total(E2-YZ), Max=-6.96dBi

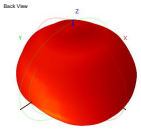


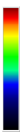
Total(H-XY), Max=-6.88dBi, CiD=5.71

2420.0MHz Total, Eff: 9.0%

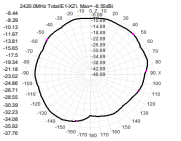


Back View

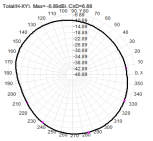




2420.0MHz Total(E1-XZ), Max=-8.55dBi

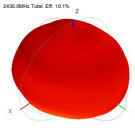


2420.0MHz Total(E2-YZ), Max=-6.96dBi

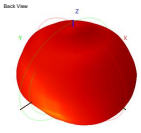


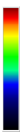
Total(H-XY), Max=-6.85dBi, CiD=5.88

2430.0MHz Total, Eff: 10.1%

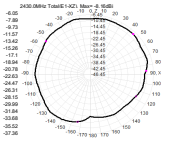


Back View

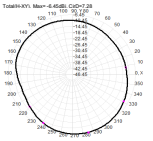




2430.0MHz Total(E1-XZ), Max=-8.16dBi

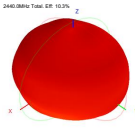


2430.0MHz Total(E2-YZ), Max=-6.49dBi

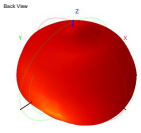


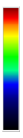
Total(H-XY), Max=-6.45dBi, CiD=7.28

2440.0MHz Total, Eff: 10.3%

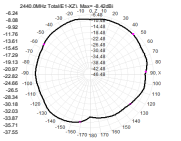


Back View

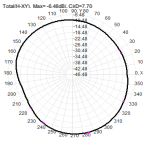




2440.0MHz Total(E1-XZ), Max=-8.49dBi

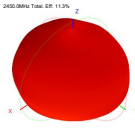


2440.0MHz Total(E2-YZ), Max=-6.63dBi

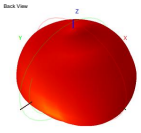


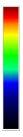
Total(H-XY), Max=-6.48dBi, CiD=7.70

2450.0MHz Total, Eff: 11.3%

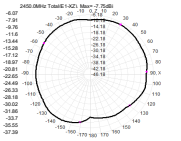


Back View

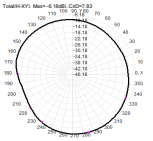




2450.0MHz Total(E1-XZ), Max=-7.75dBi

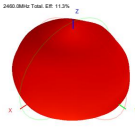


2450.0MHz Total(E2-YZ), Max=-6.42dBi

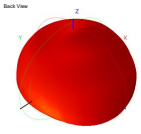


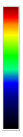
Total(H-XY), Max=-6.16dBi, CiD=7.83

2460.0MHz Total, Eff: 11.3%

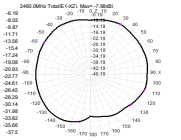


Back View

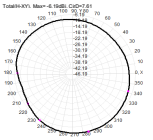




2460.0MHz Total(E1-XZ), Max=-7.68dBi

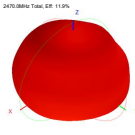


2460.0MHz Total(E2-YZ), Max=-6.47dBi

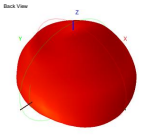


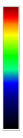
Total(H-XY), Max=-6.16dBi, CiD=7.61

2470.0MHz Total, Eff: 11.9%

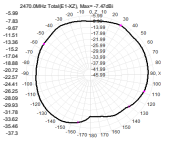


Back View

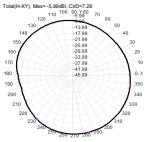




2470.0MHz Total(E1-XZ), Max=-7.47dBi

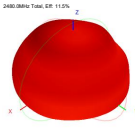


2470.0MHz Total(E2-YZ), Max=-6.26dBi

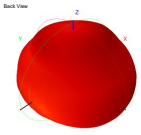


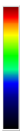
Total(H-XY), Max=-5.98dBi, CiD=7.28

2480.0MHz Total, Eff: 11.5%

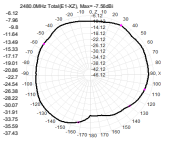


Back View

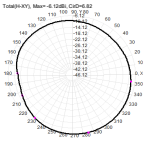




2480.0MHz Total(E1-XZ), Max=-7.56dBi

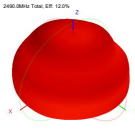


2480.0MHz Total(E2-YZ), Max=-6.40dBi

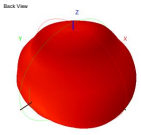


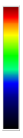
Total(H-XY), Max=-6.12dBi, CiD=6.82

2490.0MHz Total, Eff: 12.0%

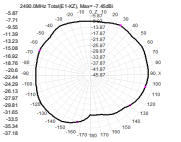


Back View

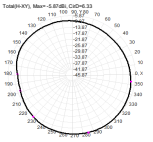




2490.0MHz Total(E1-XZ), Max=-7.45dBi

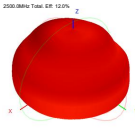


2490.0MHz Total(E2-YZ), Max=-6.17dBi

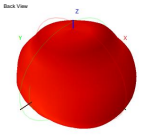


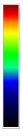
Total(H-XY), Max=-5.87dBi, CiD=6.33

2500.0MHz Total, Eff: 12.0%

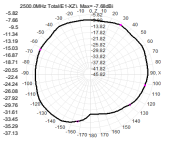


Back View

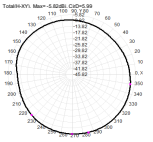
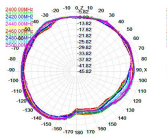
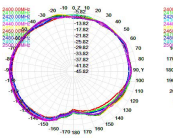
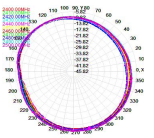




2500.0MHz Total(E1-XZ), Max=-7.68dBi



2500.0MHz Total(E2-YZ), Max=-6.06dBi



Total(H-XY), Max=-5.82dBi, CiD=5.99