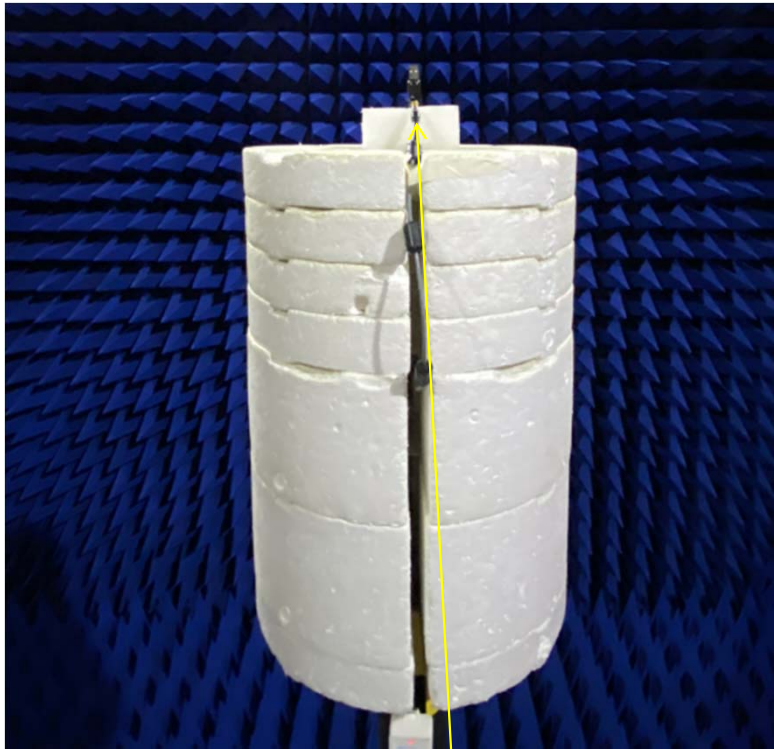


Antenna Study

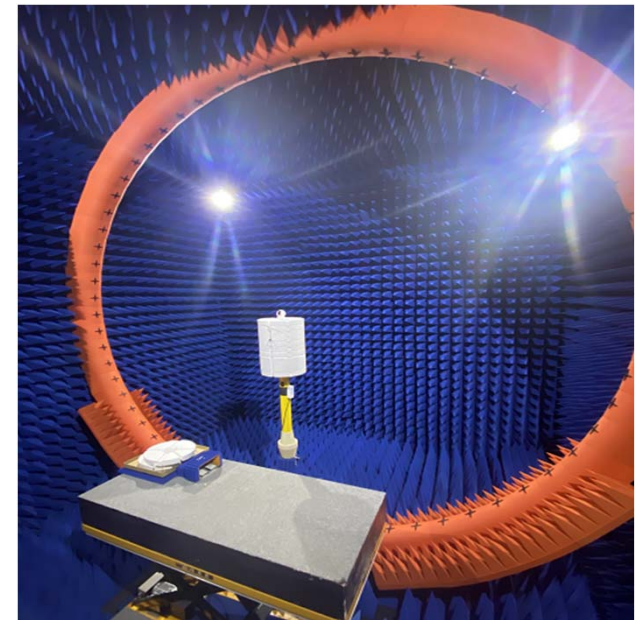
- **Client Name: Linhai Daqi Lighting Technology Co., Ltd**
- **Address: Datian Street, Linhai City, Taizhou City, Zhejiang Province**
- **Project Name : Colored leather wire light**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2024.08.17**

PCB Antenna

Dongguan UB Electronics Co., Ltd



Testing environment



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

PCB Antenna

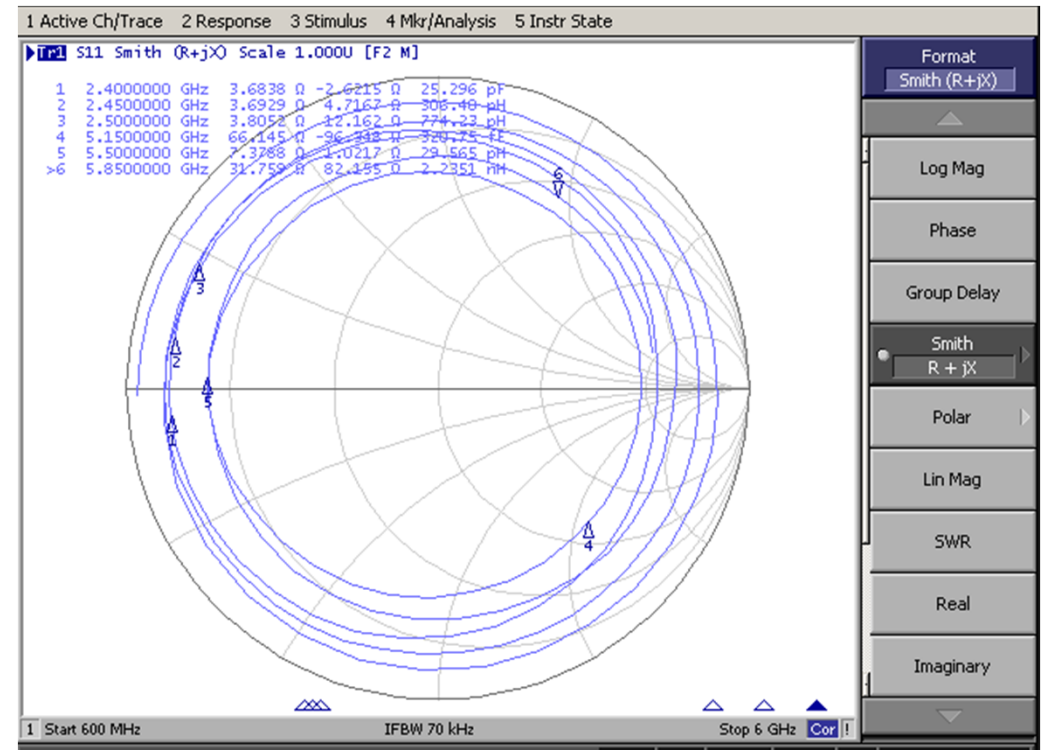
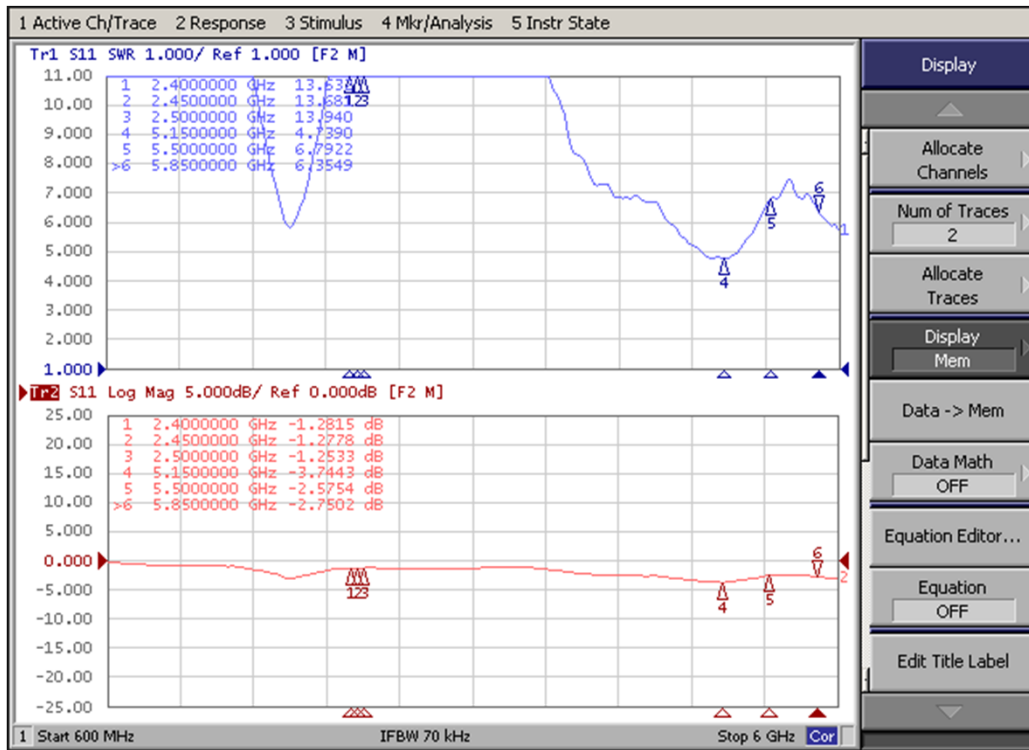
Dongguan UB Electronics Co., Ltd

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



Antenna

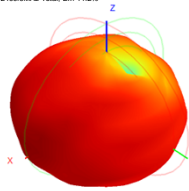
S Parameter_Return Loss&VSWR-Smith



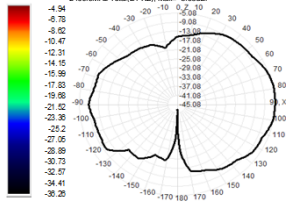
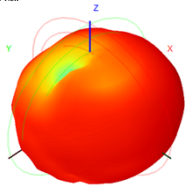
Efficiency and Gain

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)	-4.94	-5.17	-6.02	-6.55	-6.72	-6.73	-5.24	-5.33	-4.56	-4.01	-6.93
Efficiency (%)	11.20	10.79	10.13	9.28	8.94	8.68	8.76	8.49	7.97	8.17	7.71

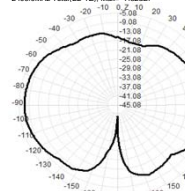
2400.0MHz Total, Eff: 11.2%



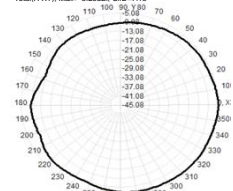
Back View



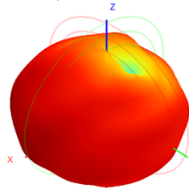
2400.0MHz Total(E2-YZ), Max: -7.32dBi



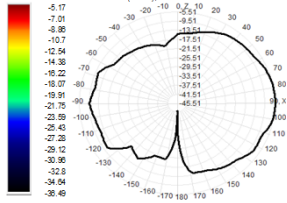
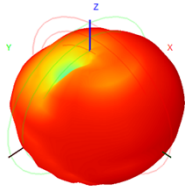
Total(H-XY), Max: -5.26dBi, C/D: 7.15



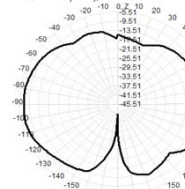
2410.0MHz Total, Eff: 10.8%



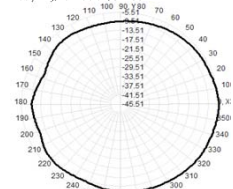
Back View



2410.0MHz Total(E2-YZ), Max: -7.32dBi



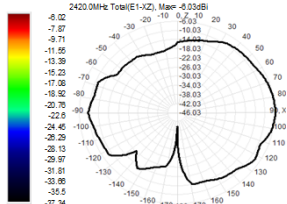
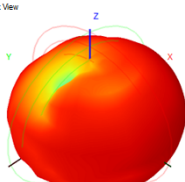
Total(H-XY), Max: -5.51dBi, C/D: 6.82



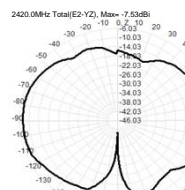
2420.0MHz Total, Eff: 10.1%



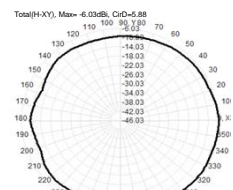
Back View



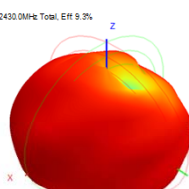
2420.0MHz Total(E2-YZ), Max: -7.53dBi



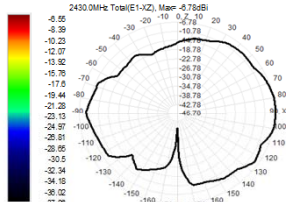
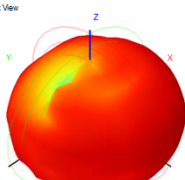
Total(H-XY), Max: -6.03dBi, C/D: 6.88



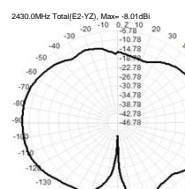
2430.0MHz Total, Eff: 9.5%



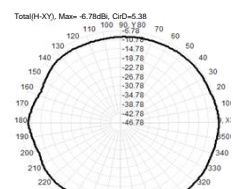
Back View



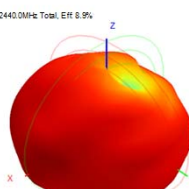
2430.0MHz Total(E2-YZ), Max: -8.01dBi



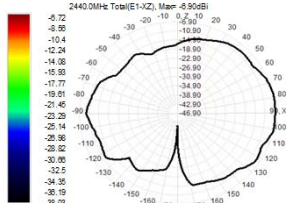
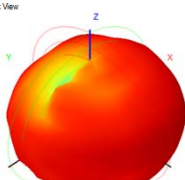
Total(H-XY), Max: -6.78dBi, C/D: 6.38



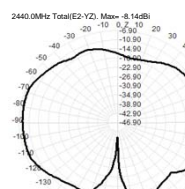
2440.0MHz Total, Eff: 8.9%



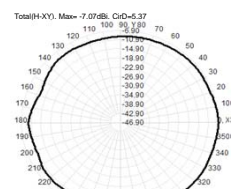
Back View



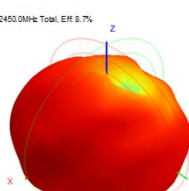
2440.0MHz Total(E2-YZ), Max: -8.14dBi



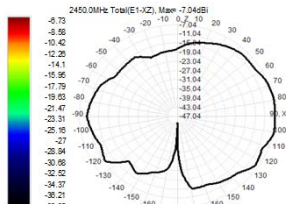
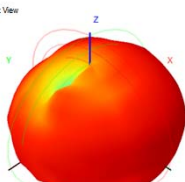
Total(H-XY), Max: -7.07dBi, C/D: 6.37



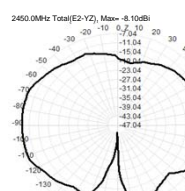
2450.0MHz Total, Eff: 8.7%



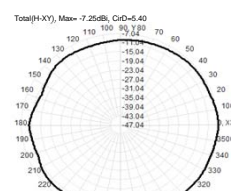
Back View



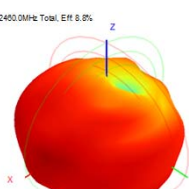
2450.0MHz Total(E2-YZ), Max: -8.10dBi



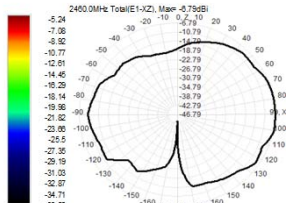
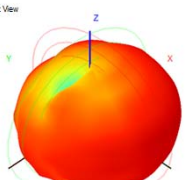
Total(H-XY), Max: -7.25dBi, C/D: 6.40



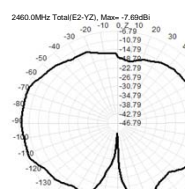
2460.0MHz Total, Eff: 8.2%



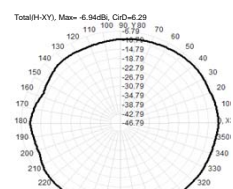
Back View



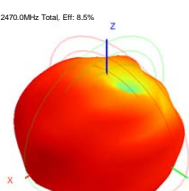
2460.0MHz Total(E2-YZ), Max: -7.69dBi



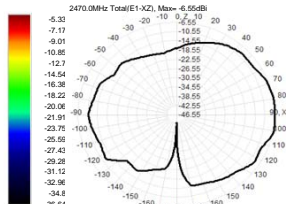
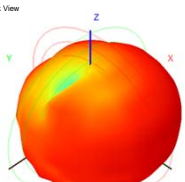
Total(H-XY), Max: -6.94dBi, C/D: 6.29



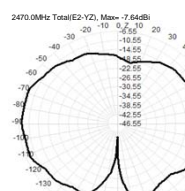
2470.0MHz Total, Eff: 8.5%



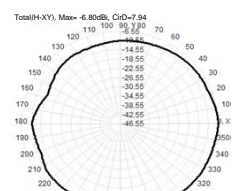
Back View

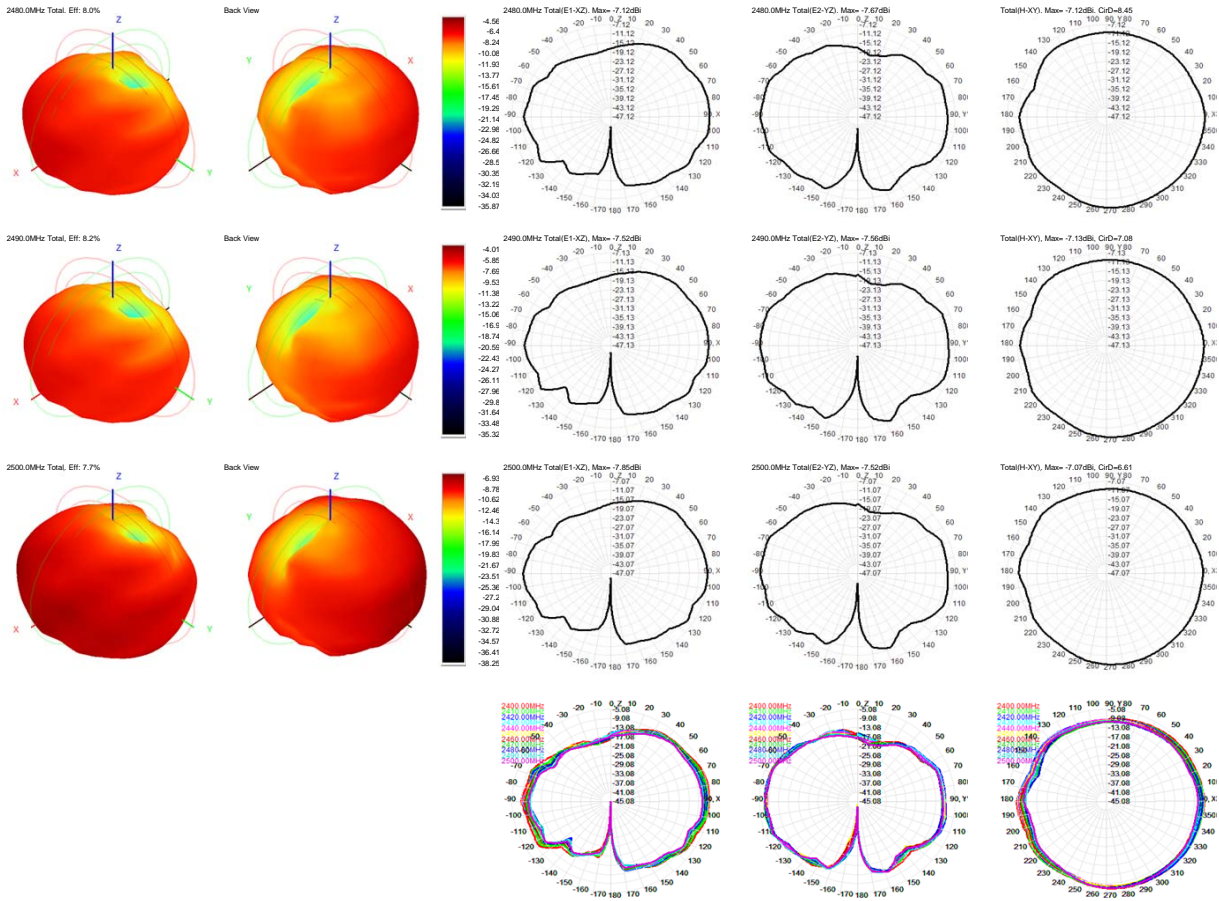


2470.0MHz Total(E2-YZ), Max: -7.68dBi



Total(H-XY), Max: -6.88dBi, C/D: 7.04





Antenna Photo & Length

