



好天线 · 优比造

东莞市优比电子有限公司

Dongguan UB Electronics Co., Ltd

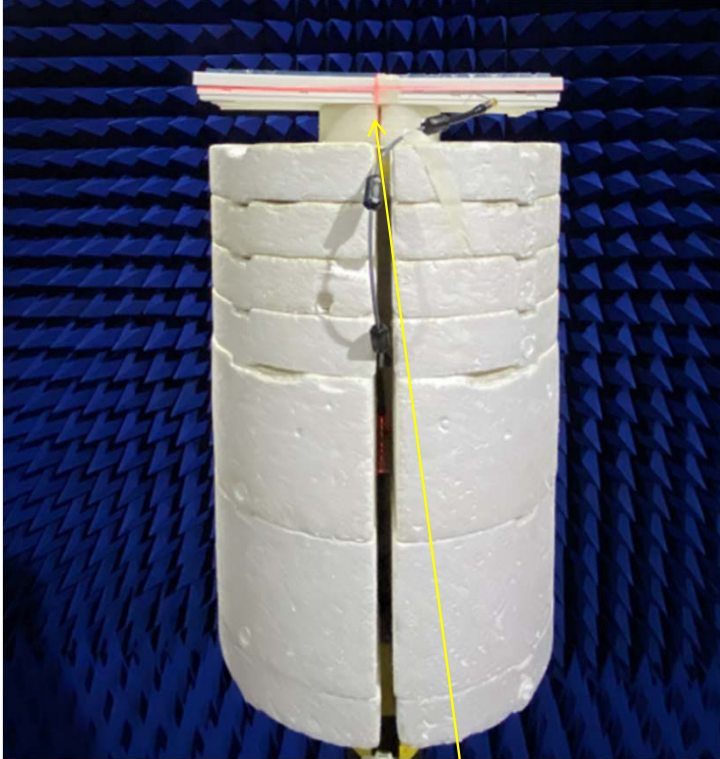
Room 101, Building 2, No. 9 Xinfu Road, Lincun, Tangxia Town, Dongguan City, Guangdong, China

Antenna Study

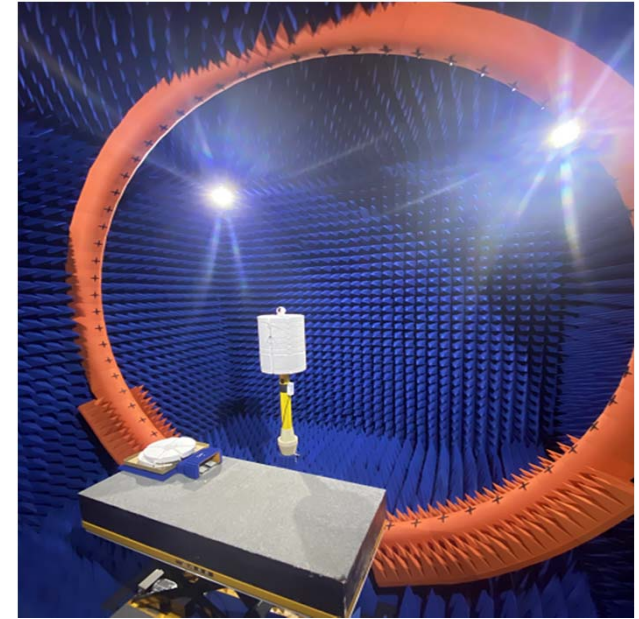
- **Client Name: DONGGUAN FL ESPORTS ELECTRONICS CO., LTD.**
- **Project Name : FL980**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2024.08.17**
- **Linkman contacts: he hai ping 13686295193**

PCB Antenna

Dongguan UB Electronics Co., Ltd



Testing environment



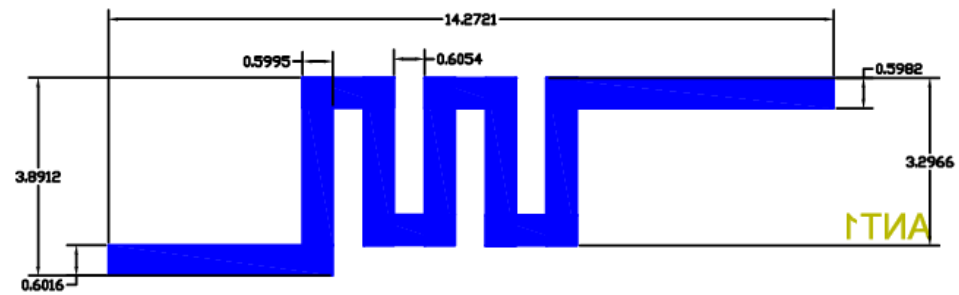
Testing 3D microwave darkroom(6m*6m*6m)

PCB Antenna

Dongguan UB Electronics Co., Ltd

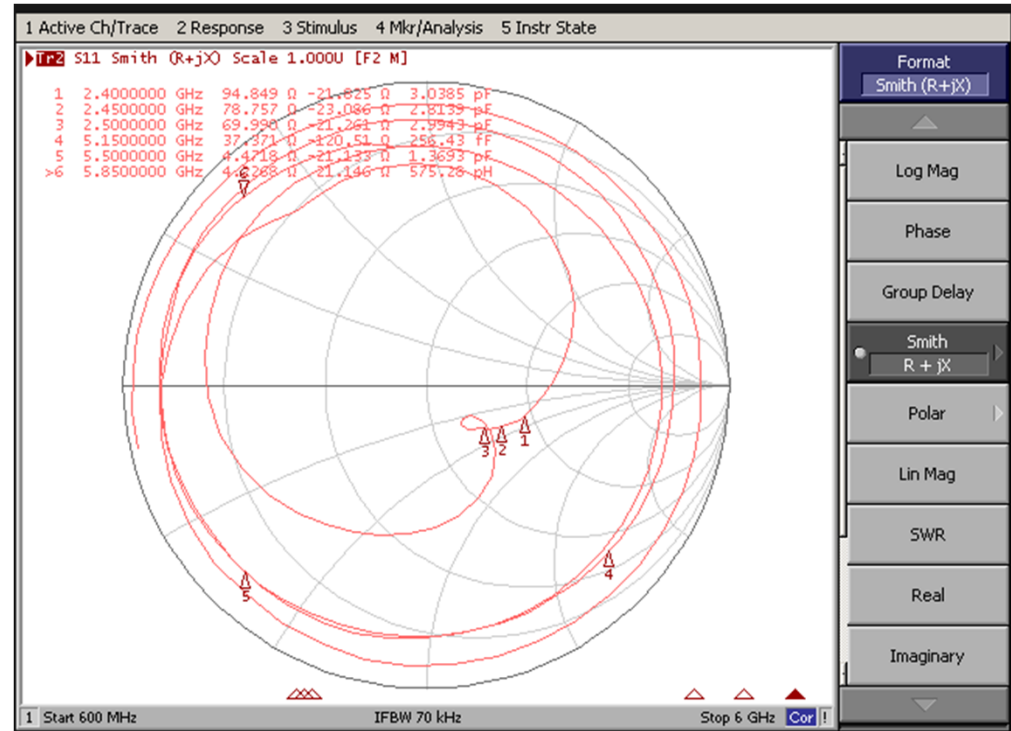
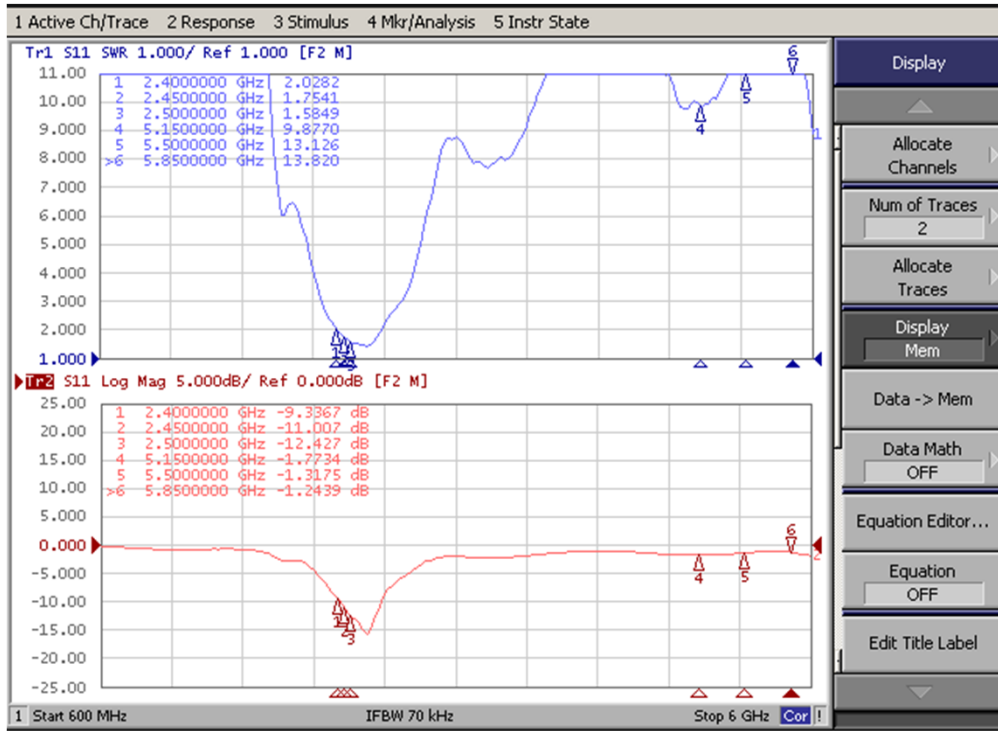


- Antenna name: 2.4G
- Antenna Type: PCB
- Covers : 2400/2500MHz



Antenna

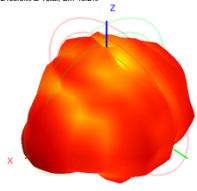
S Parameter_Return Loss&VSWR-Smith



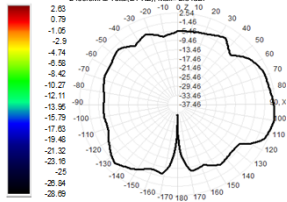
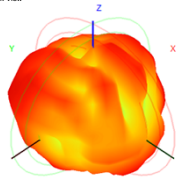
Efficiency and Gain

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)	2.63	2.96	2.69	2.70	2.81	2.87	2.95	3.14	2.97	2.74	2.35
Efficiency (%)	40.17	41.76	41.23	42.24	43.06	43.49	44.45	45.05	43.45	42.59	42.20

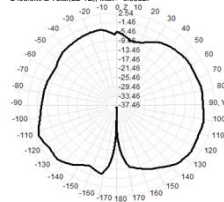
2400.0MHz Total, Eff: 40.2%



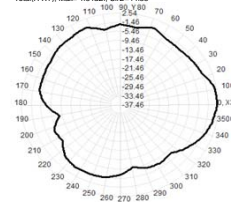
Back View



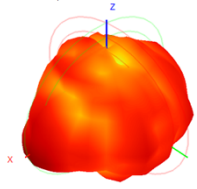
2400.0MHz Total(E2-YZ), Max= -0.96dB



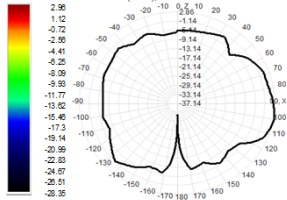
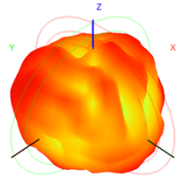
Total(H-XY), Max= 1.84dB, CrD=14.38



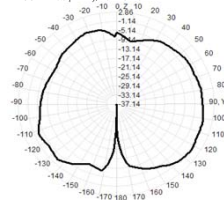
2410.0MHz Total, Eff: 41.8%



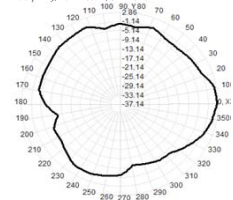
Back View



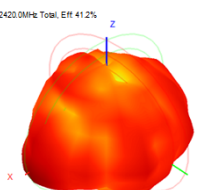
2410.0MHz Total(E2-YZ), Max= -0.77dB



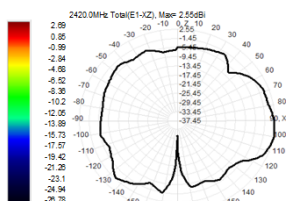
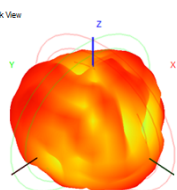
Total(H-XY), Max= 2.05dB, CrD=13.45



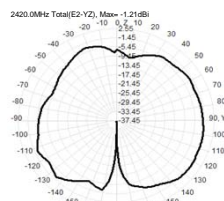
2420.0MHz Total, Eff: 41.2%



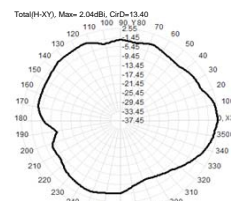
Back View



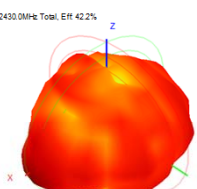
2420.0MHz Total(E2-YZ), Max= -1.21dB



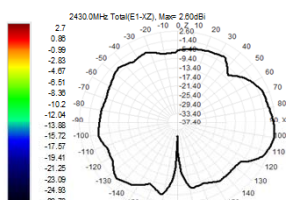
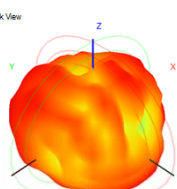
Total(H-XY), Max= 2.04dB, CrD=13.40



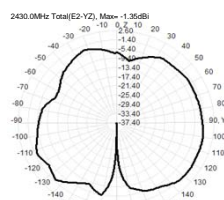
2430.0MHz Total, Eff: 42.2%



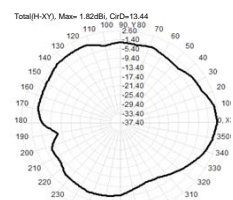
Back View



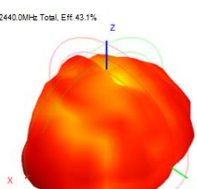
2430.0MHz Total(E2-YZ), Max= -1.35dB



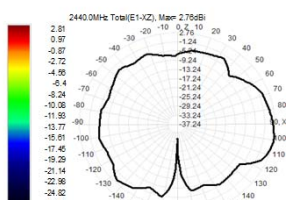
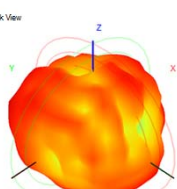
Total(H-XY), Max= 1.82dB, CrD=13.44



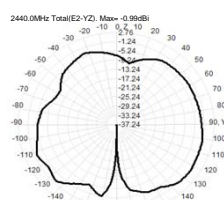
2440.0MHz Total, Eff: 43.1%



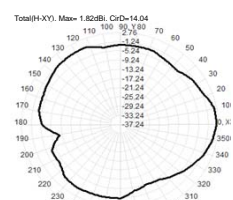
Back View



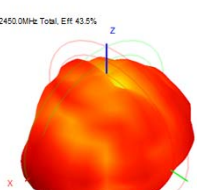
2440.0MHz Total(E2-YZ), Max= -0.99dB



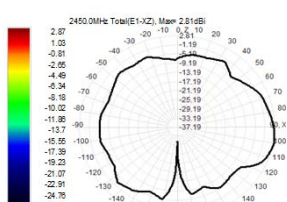
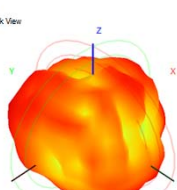
Total(H-XY), Max= 1.82dB, CrD=14.04



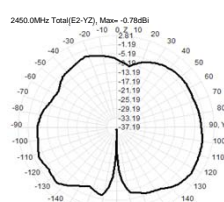
2450.0MHz Total, Eff: 43.5%



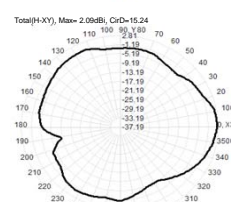
Back View



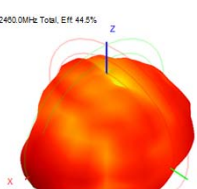
2450.0MHz Total(E2-YZ), Max= -0.78dB



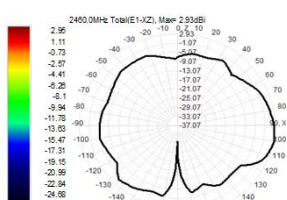
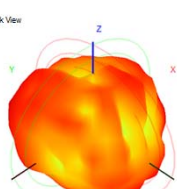
Total(H-XY), Max= 2.09dB, CrD=15.24



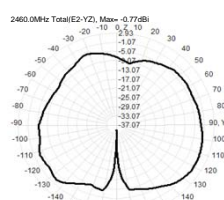
2460.0MHz Total, Eff: 44.5%



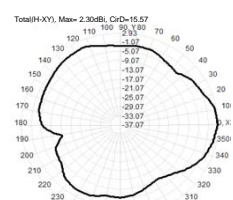
Back View



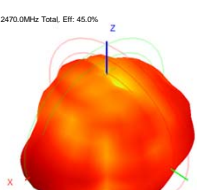
2460.0MHz Total(E2-YZ), Max= -0.77dB



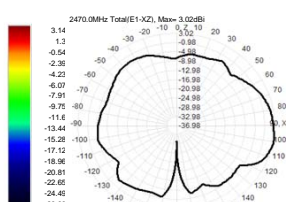
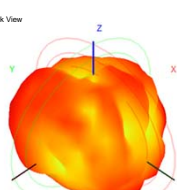
Total(H-XY), Max= 2.30dB, CrD=15.57



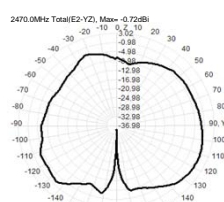
2470.0MHz Total, Eff: 45.0%



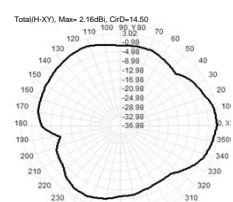
Back View



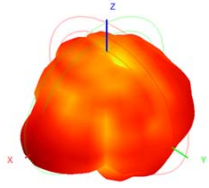
2470.0MHz Total(E2-YZ), Max= -0.72dB



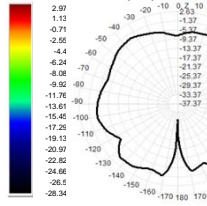
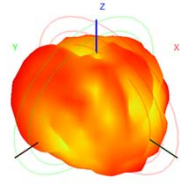
Total(H-XY), Max= 2.16dB, CrD=14.50



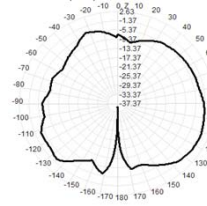
2480.0MHz Total Eff: 43.4%



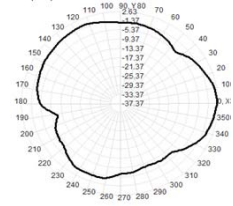
Back View



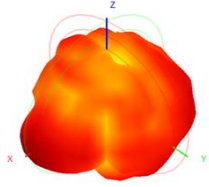
2480.0MHz Total(E2-YZ), Max= -0.82dB



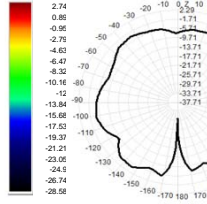
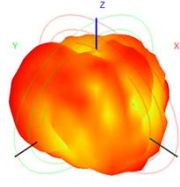
Total(H-XY), Max= 1.92dB, CrD=13.59



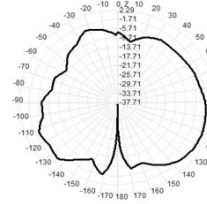
2490.0MHz Total Eff: 42.6%



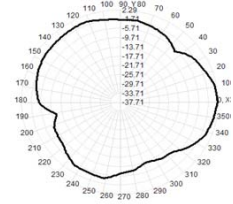
Back View



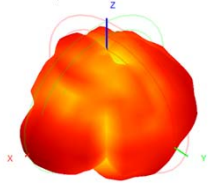
2490.0MHz Total(E2-YZ), Max= -0.75dB



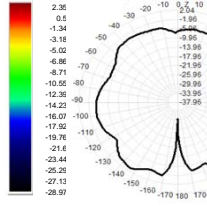
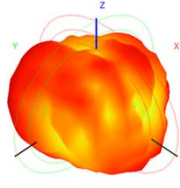
Total(H-XY), Max= 1.71dB, CrD=13.22



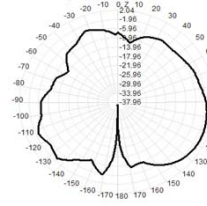
2500.0MHz Total Eff: 42.2%



Back View



2500.0MHz Total(E2-YZ), Max= -0.53dB



Total(H-XY), Max= 1.56dB, CrD=13.32

