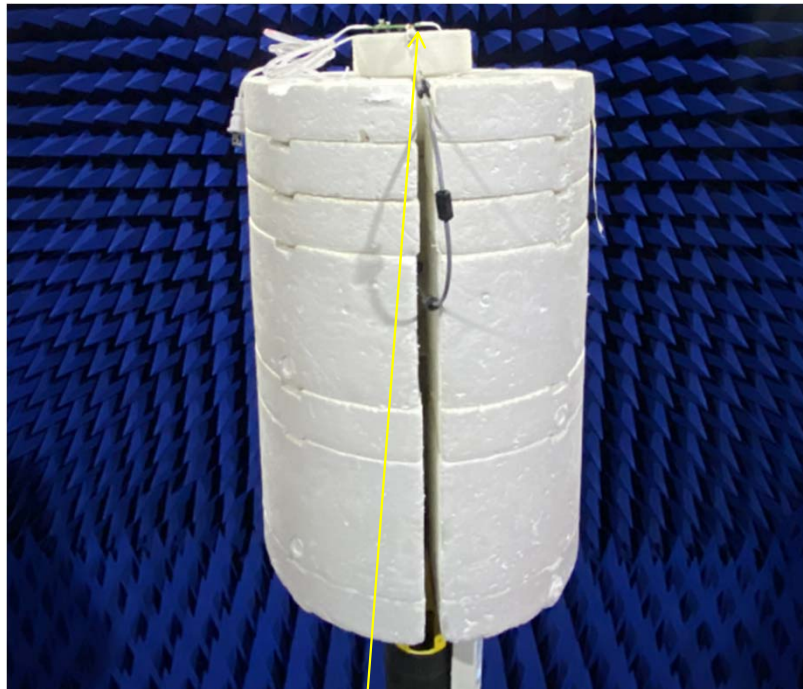


Antenna Study

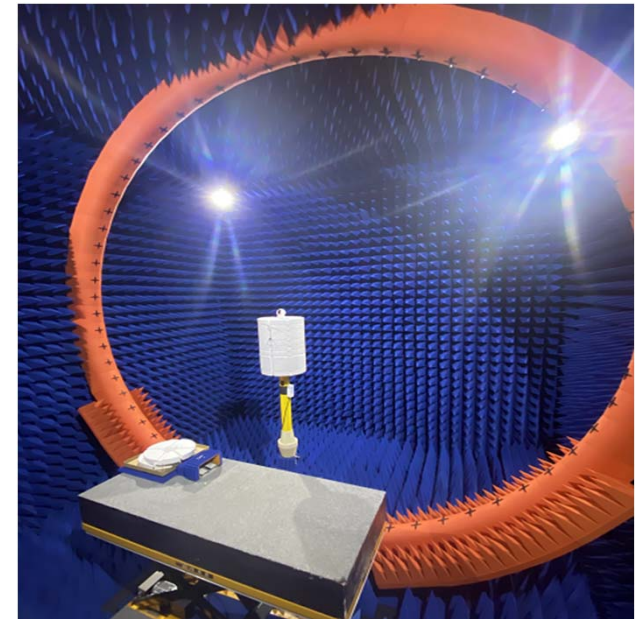
- **Client Name: ZHONGSHAN KEMI LIGHTING CO.,LTD**
- **Project Name:TYRLD-1**
- **Debugging frequency band: 2.4G**
- **Valuation date: 2023.07.19**

PCB Antenna

Dongguan UB Electronics Co., Ltd



Testing environment



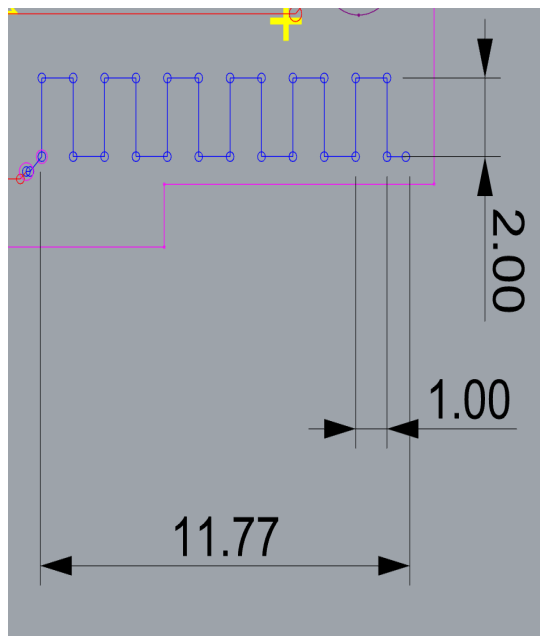
Testing 3D microwave darkroom(6m*6m*6m)

PCB Antenna

Dongguan UB Electronics Co., Ltd



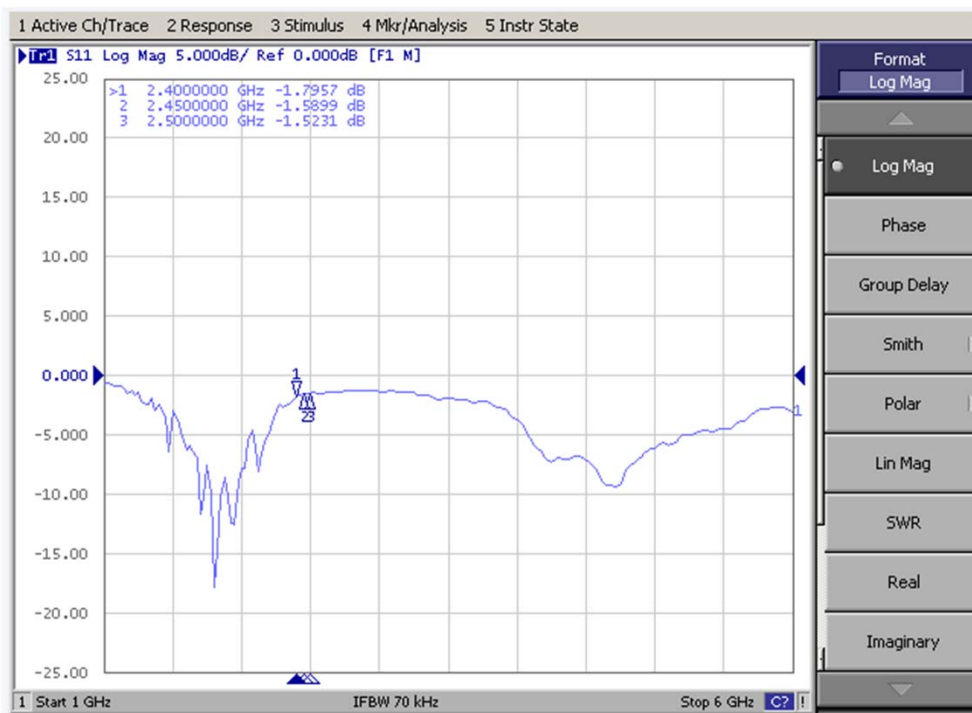
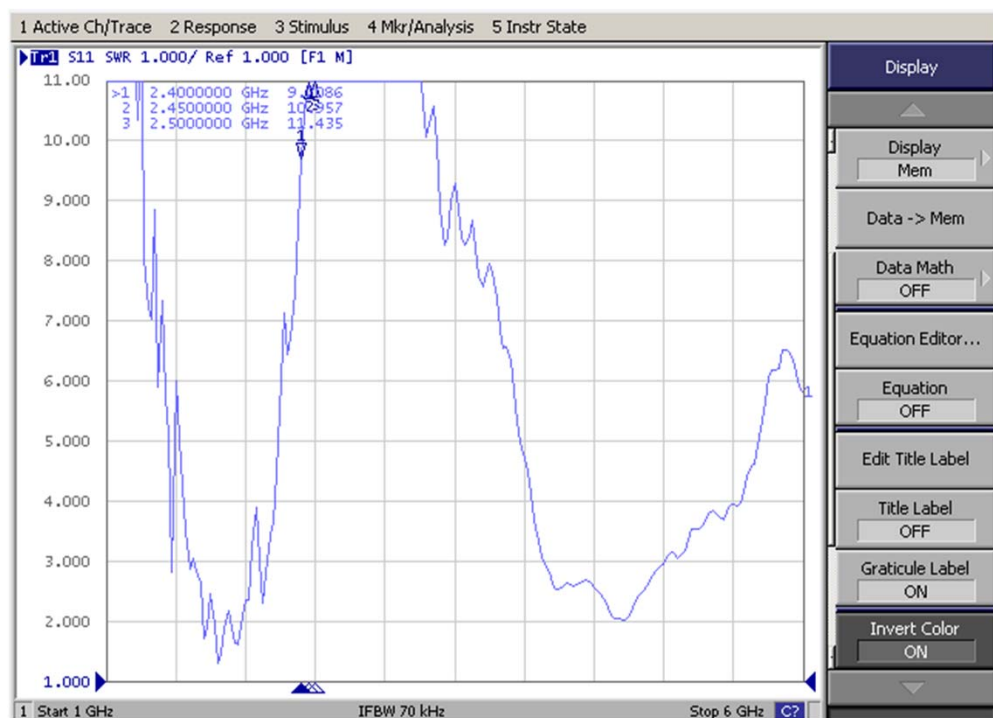
Antenna



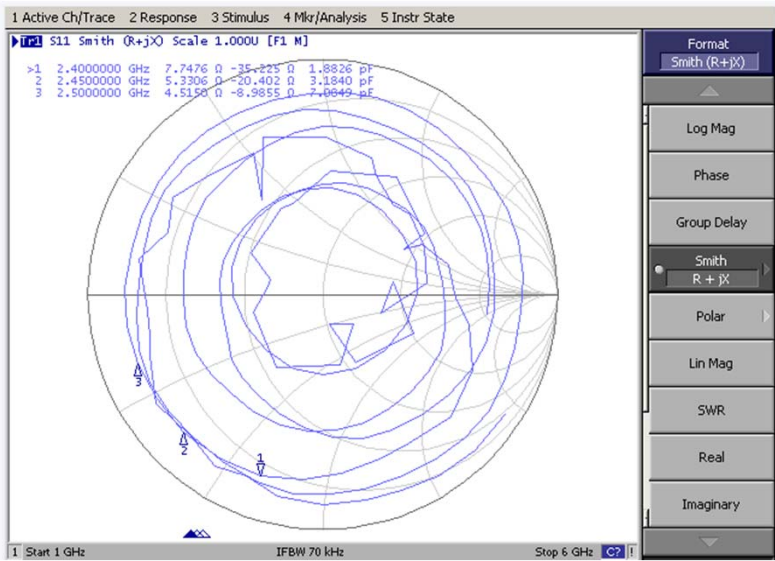
- Antenna name: 2.4G
- Antenna Type: PCB
- Covers : 2.4G

S Parameter_Return Loss&VSWR

Dongguan UB Electronics Co., Ltd



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)	-4.78	-5.09	-4.97	-5.46	-5.70	-5.58	-5.23	-5.02	-5.08	-5.44	-5.49
Efficiency (%)	10.68	10.12	10.03	9.56	9.35	9.70	9.98	10.57	10.73	10.06	10.01

