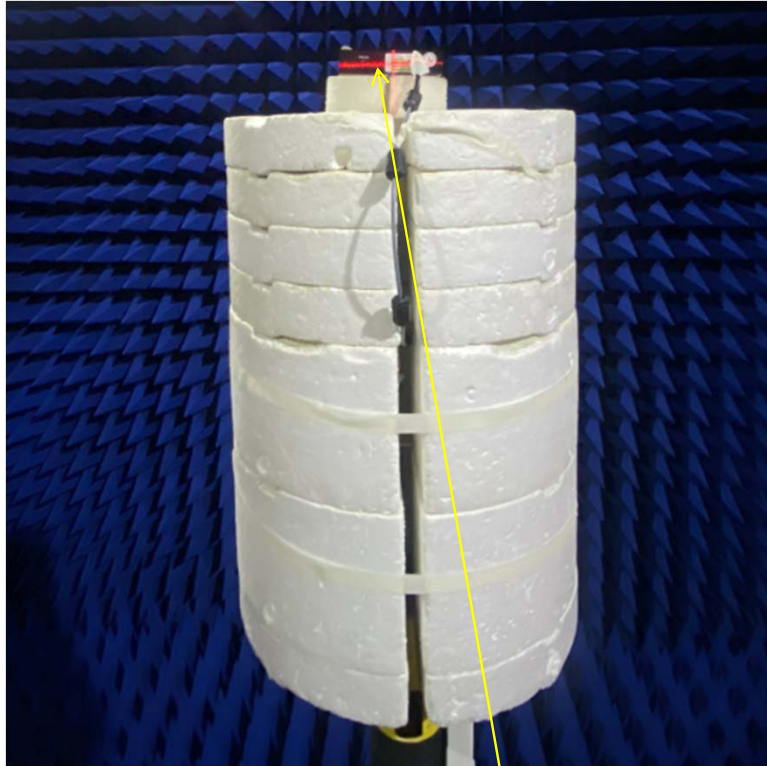


Antenna Study

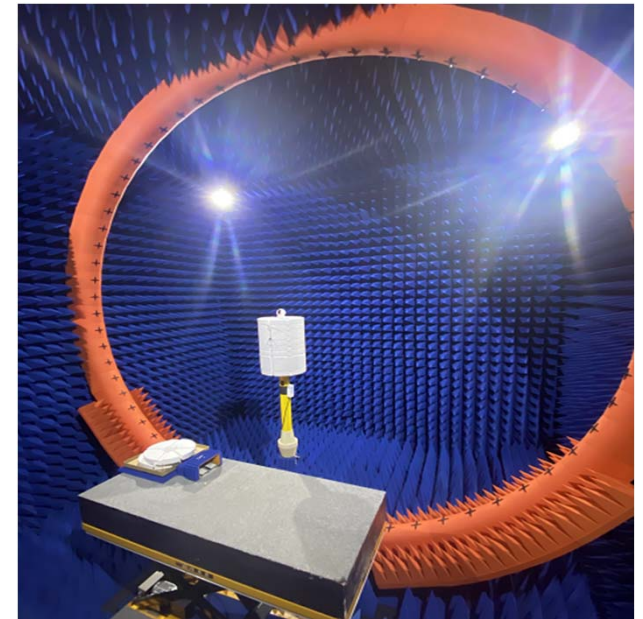
- **Client Name:**Bird Home Automation GmbH
- **Address :** Uhlandstr. 165, 10719 Berlin, Germany
- **Debugging frequency band:** 2400-2500HMz
- **Valuation date:** 2024.10.15
- **Linkman contacts:** he hai ping 13686295193

Internal Antenna

Dongguan UB Electronics Co., Ltd



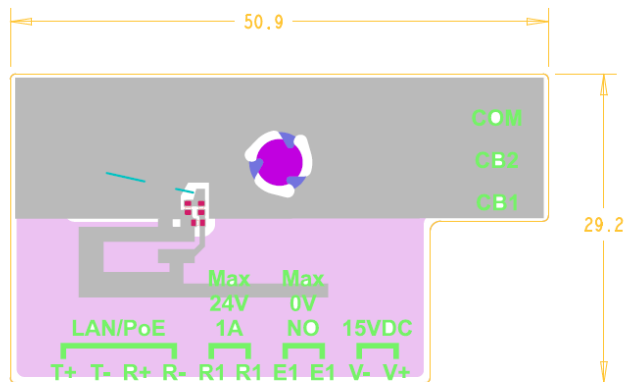
Testing environment



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

Internal Antenna

Dongguan UB Electronics Co., Ltd

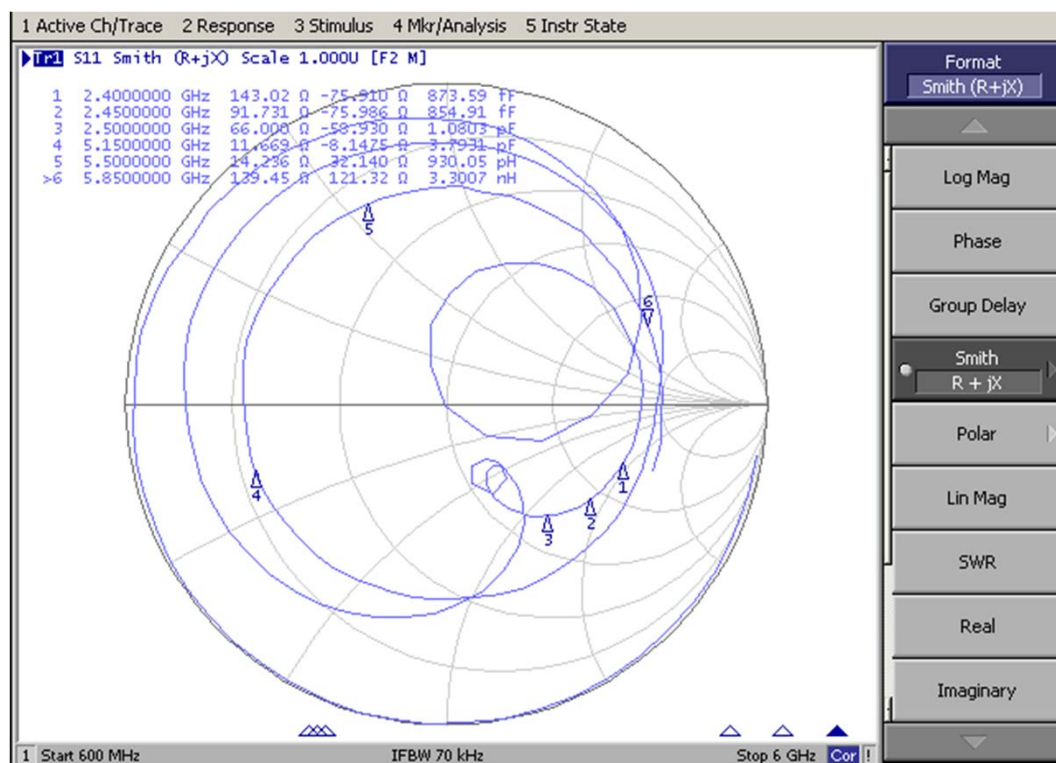
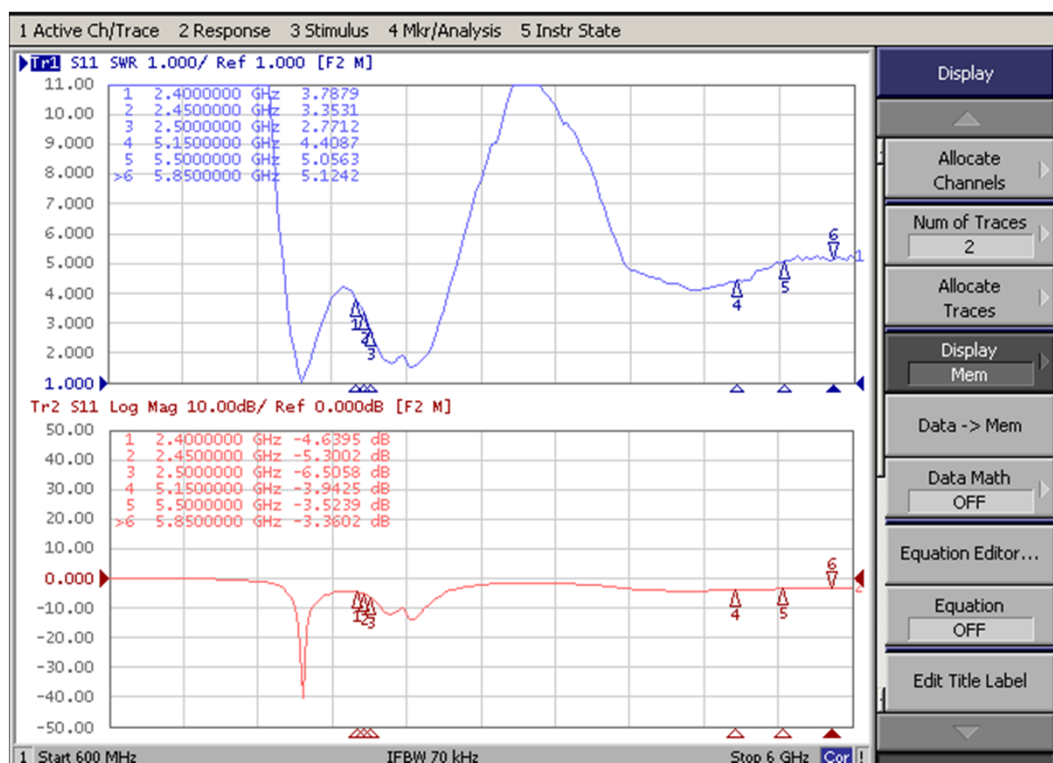


- Antenna name: 2.4G
- Antenna Type: Internal Antenna
- Covers : 2400/2500MHz

Antenna

S Parameter_Return Loss&VSWR-Smith

Dongguan UB Electronics Co., Ltd



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)	1.31	1.72	1.74	1.77	1.63	1.88	1.92	2.15	2.17	1.96	2.16
Efficiency (%)	30.94	32.38	32.31	33.64	34.25	34.60	35.12	35.97	35.56	35.70	36.62

