



好天线 · 优比造

东莞市优比电子有限公司

Dongguan UB Electronics Co., Ltd

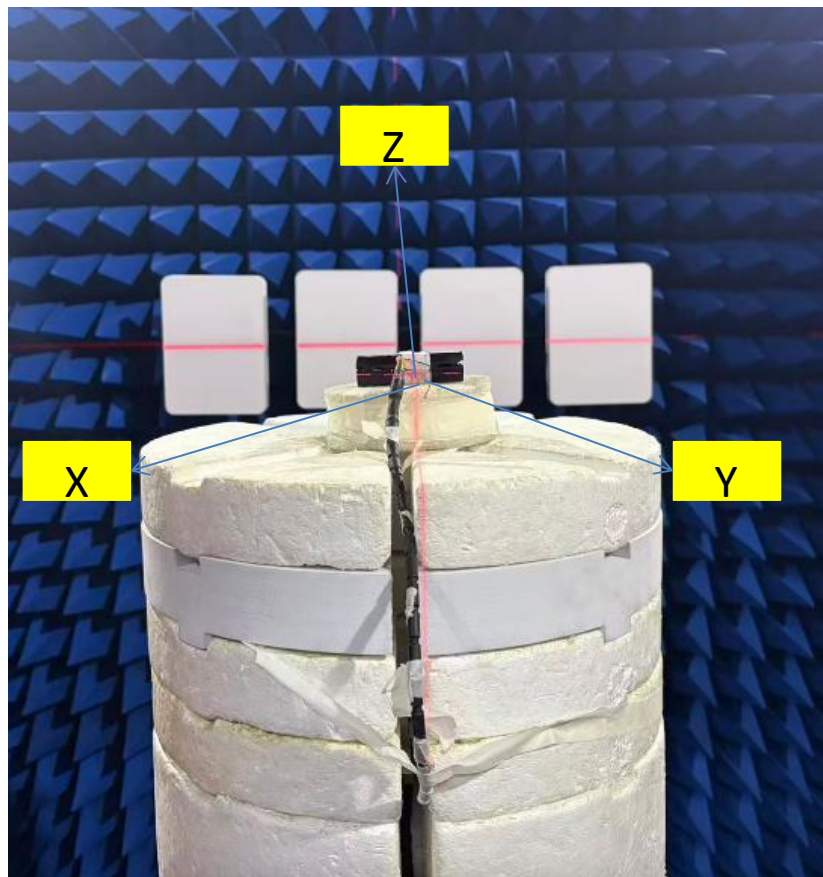
Antenna Study

- **Client Name: ERM ELECTRONIC SYSTEMS LTD**
- **Project Name: ASSET 4G**
- **Model: ASSET 4G iRF**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2026.06.30**

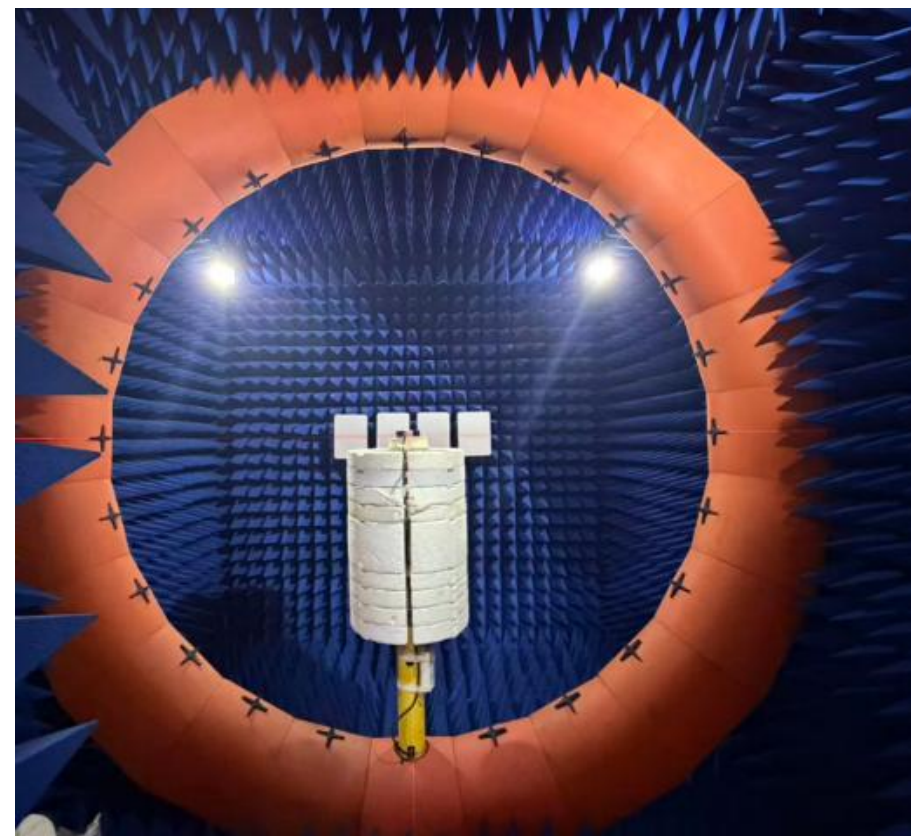
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Testing environment



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

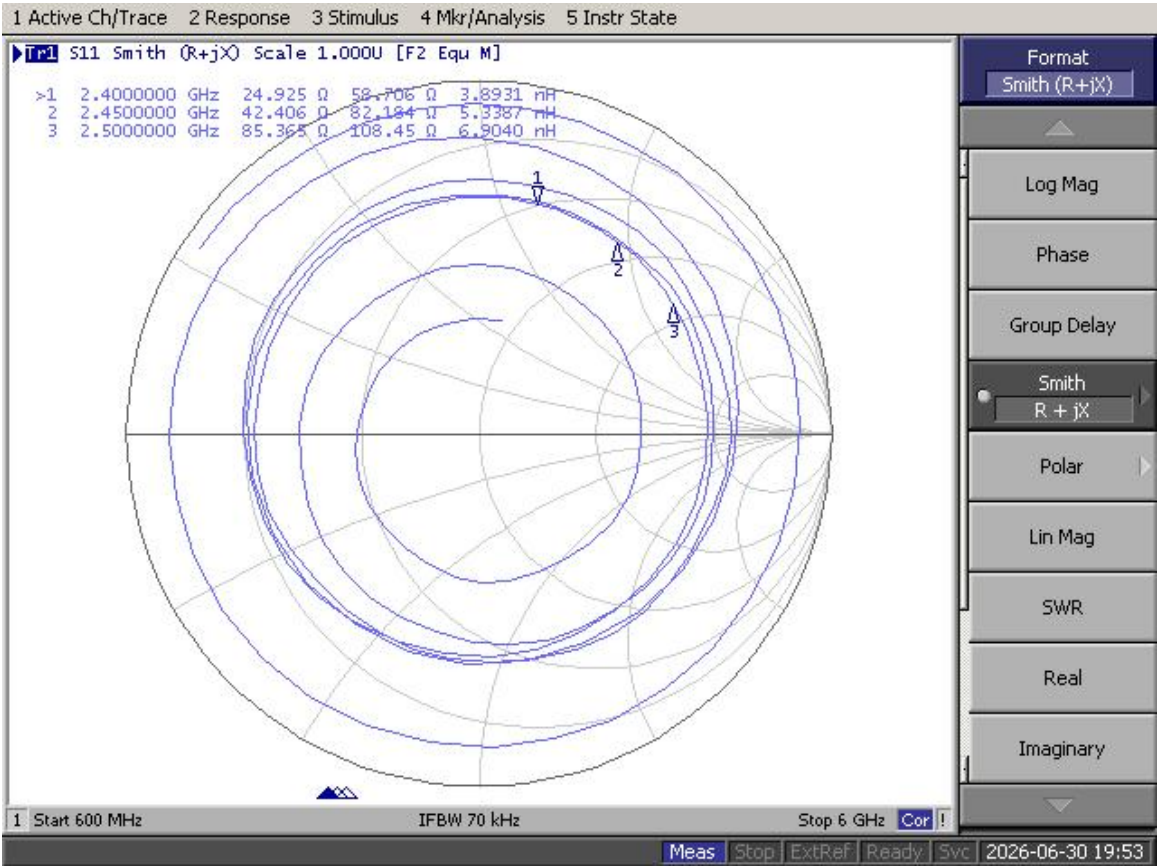


Antenna

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

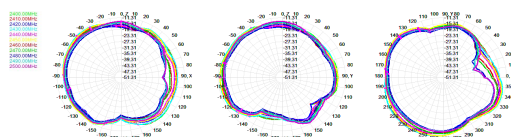
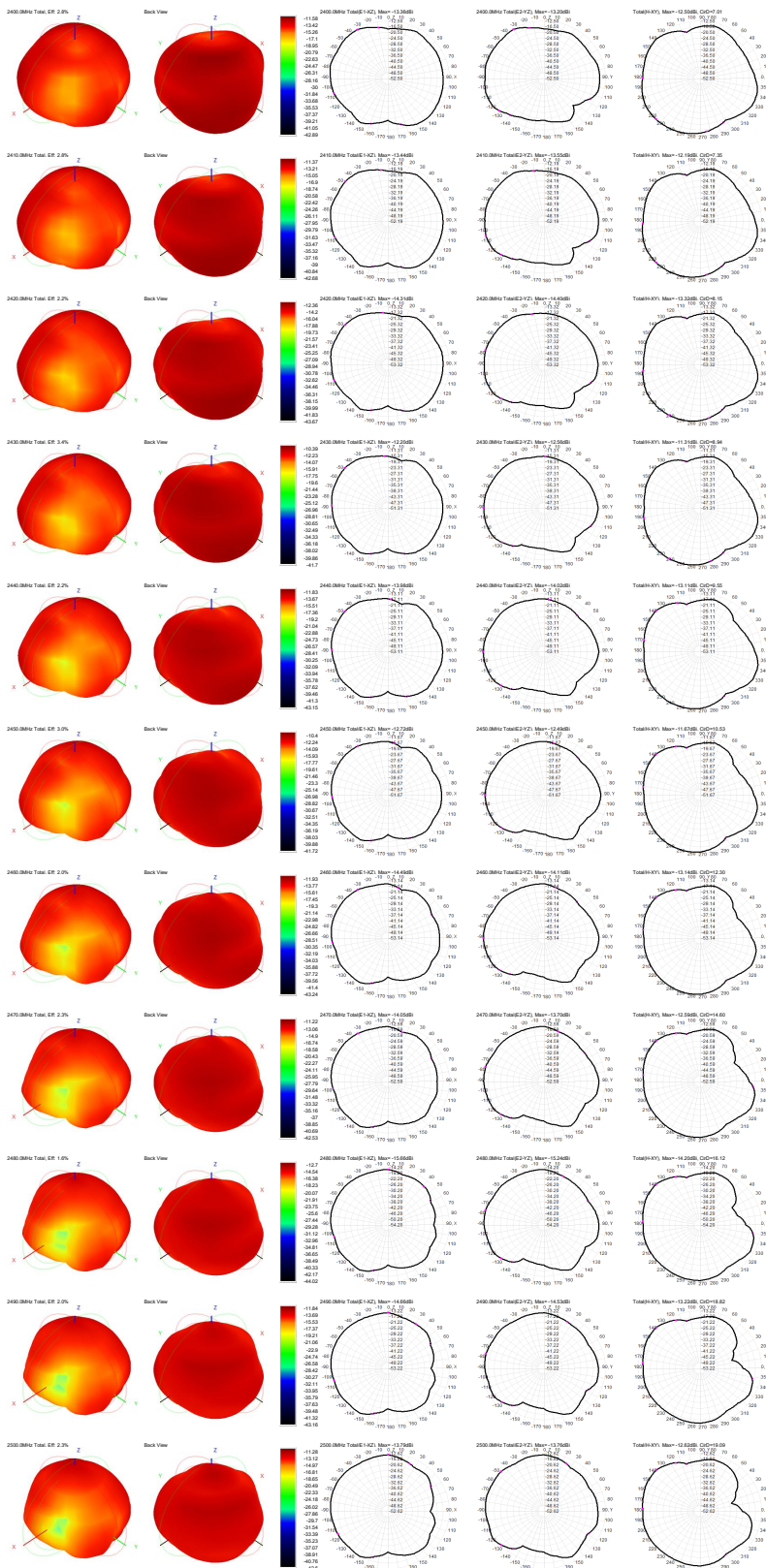
S Parameter_Return Loss&VSWR-Smith

Dongguan UB Electronics Co., Ltd



Efficiency and Gain

序号	1	2	3	4	5	6	7	8	9	10	11
频率(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
增益 (dBi)	-11.58	-11.37	-12.36	-10.39	-11.83	-10.40	-11.93	-11.22	-12.70	-11.84	-11.28
效率 (%)	2.77	2.82	2.22	3.38	2.25	3.00	2.04	2.30	1.61	1.97	2.29
方向性(dB)	4.00	4.12	4.18	4.32	4.66	4.82	4.98	5.17	5.23	5.21	5.12





REGULATORY TESTING FROM THE START TO CERTIFICATE

Intro

Antenna gain documentation required for all FCC Part 15 devices. Must provide either an antenna datasheet/ specification or a test report with gain measurements and plots. This Information cannot be held confidential. Additionally, proprietary information of the design itself can remain confidential in either the ' operational description' or 'schematic'.

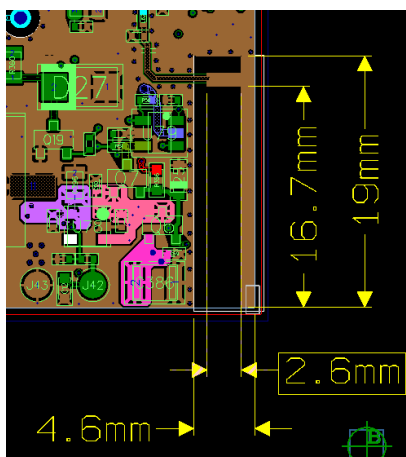
REGULATORY TESTING FROM THE START TO CERTIFICATE

Antenna specification:

1. Company: ERM Ltd.
2. Product name: GAS91E3A
3. RF module/chip: STM32WB
4. Antenna description

Antenna type	Inverted F Printed Antenna
Antenna manufacturer	
Antenna Datasheet	
Frequency range	2402-2480MHz
Modulation	
Antenna gain max (peak)	
Cable loss	
Connector type	

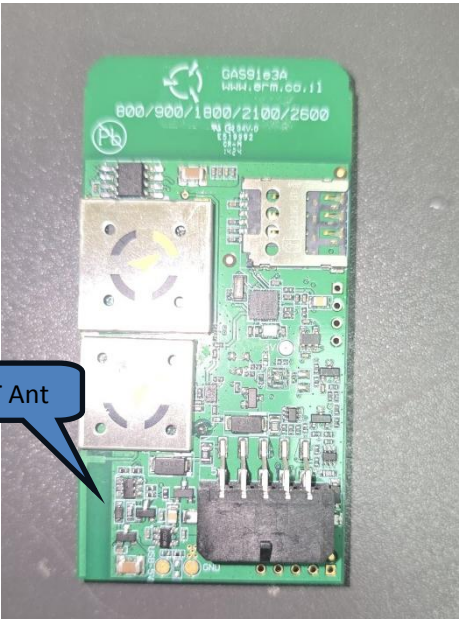
5. Antenna layout



GAS91E3A

REGULATORY TESTING FROM THE START TO CERTIFICATE

6. Antenna photo - example

PCB antenna	UFL antenna	Coax antenna
		
explanation	explanation	explanation