



好天线 · 优比造

东莞市优比电子有限公司

Dongguan UB Electronics Co., Ltd

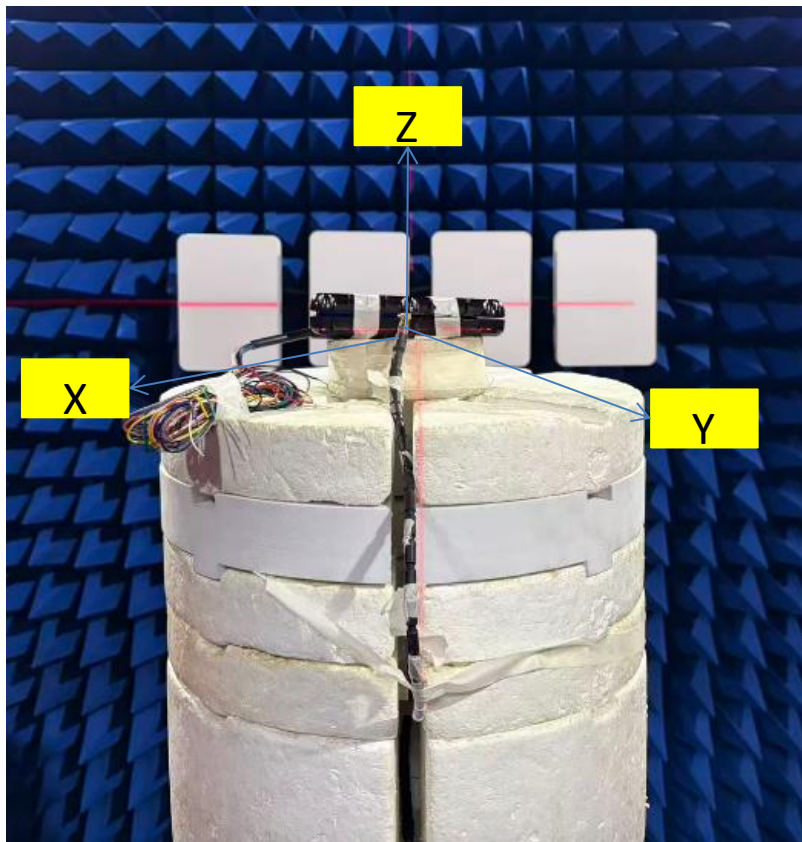
Antenna Study

- **Client Name: ERM ELECTRONIC SYSTEMS LTD**
- **Project Name: SCOUT 4G iRF cat1**
 - **Model: SCOUT 4G iRF cat1**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2026.06.30**

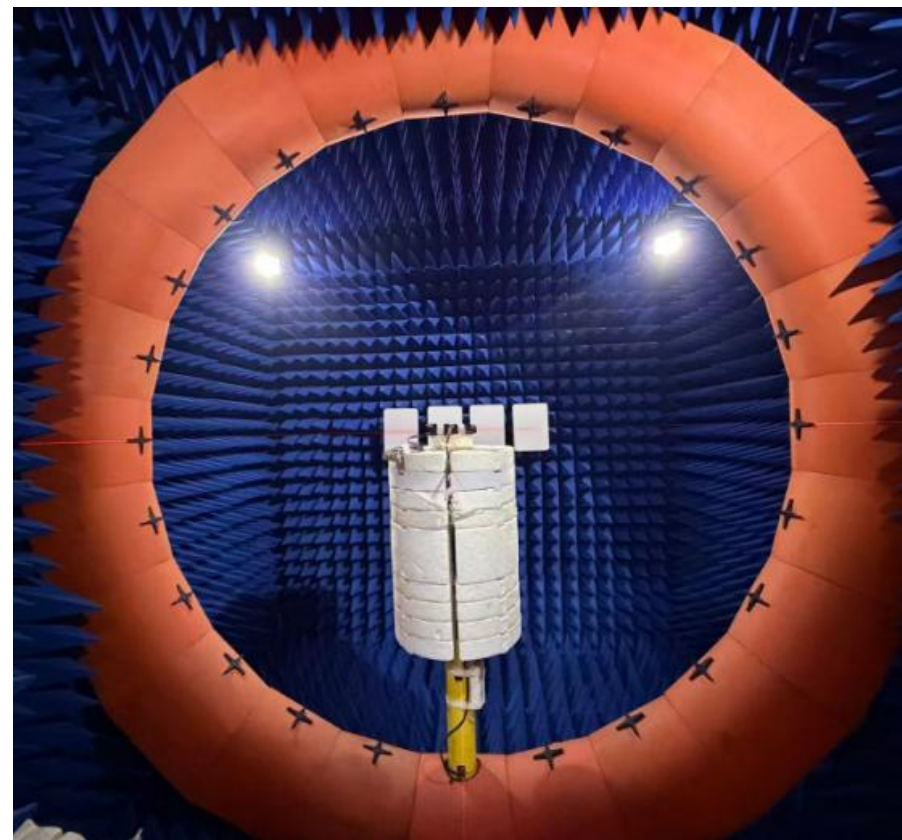
Address: Building 79, New Sun Industrial City, Lin Village Community, Tangxia Town, Dongguan (Dongguan Company) Phone: 0769-81777126

Room 106, Building 3, Lenton Technology Park, No. 500 Qiuyi Road, Binjiang District, Hangzhou (Hangzhou Branch) Fax: 0769-81777125

Room 106, Liuxian Second Road No. 47, LiuXian New Industrial Park, Bao'an District, Shenzhen (Shenzhen Company) Website: www.ubuant.com



Testing environment



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

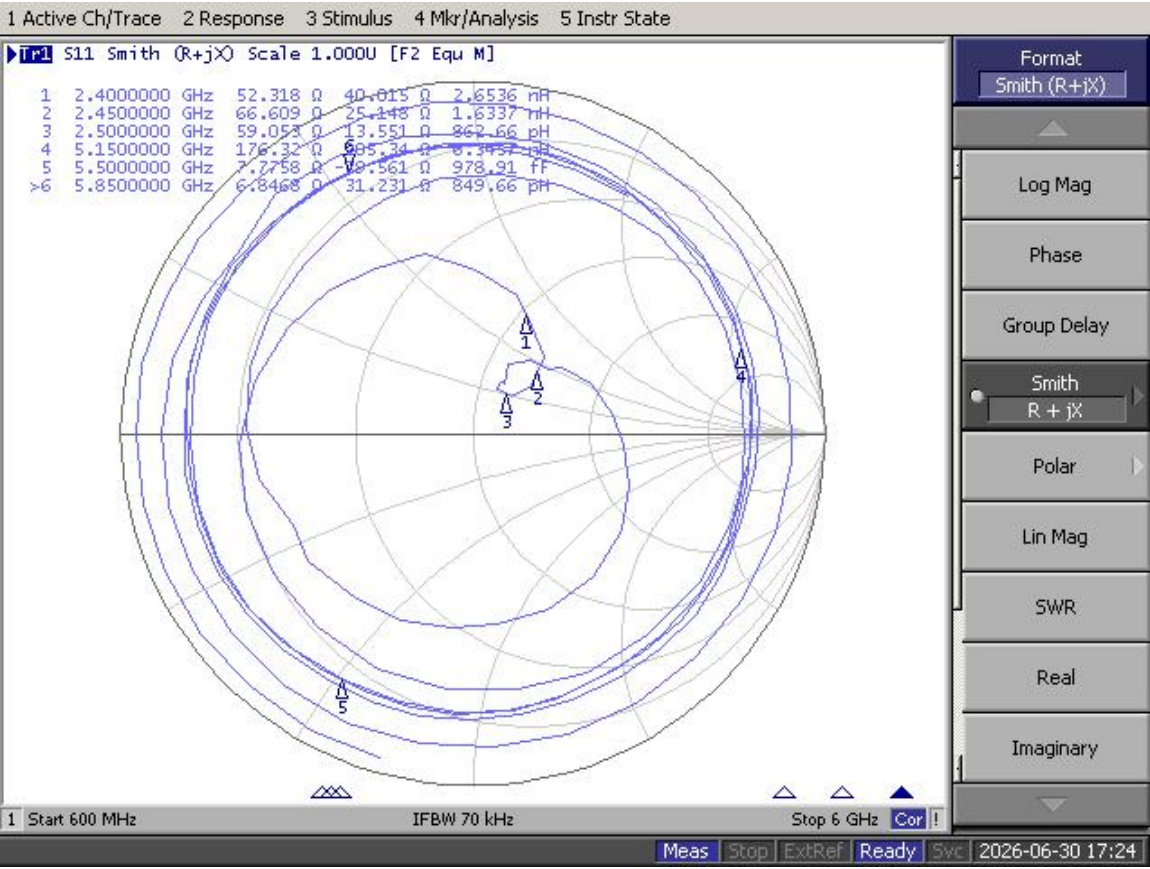
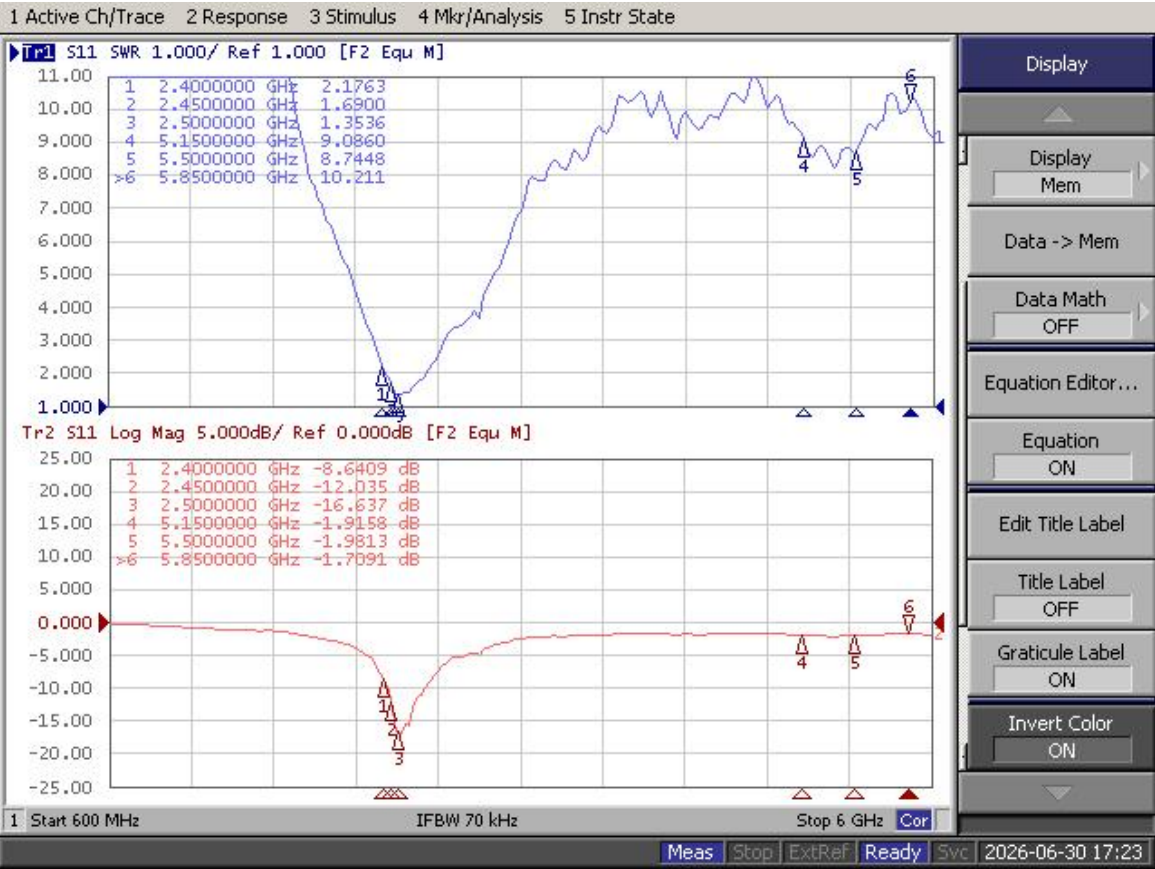
- Antenna name: 2.4G
- Covers : 2400/2500MHz



Antenna

S Parameter_Return Loss&VSWR-Smith

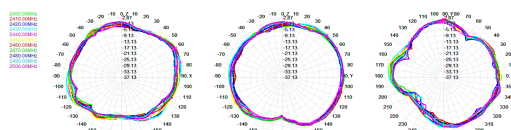
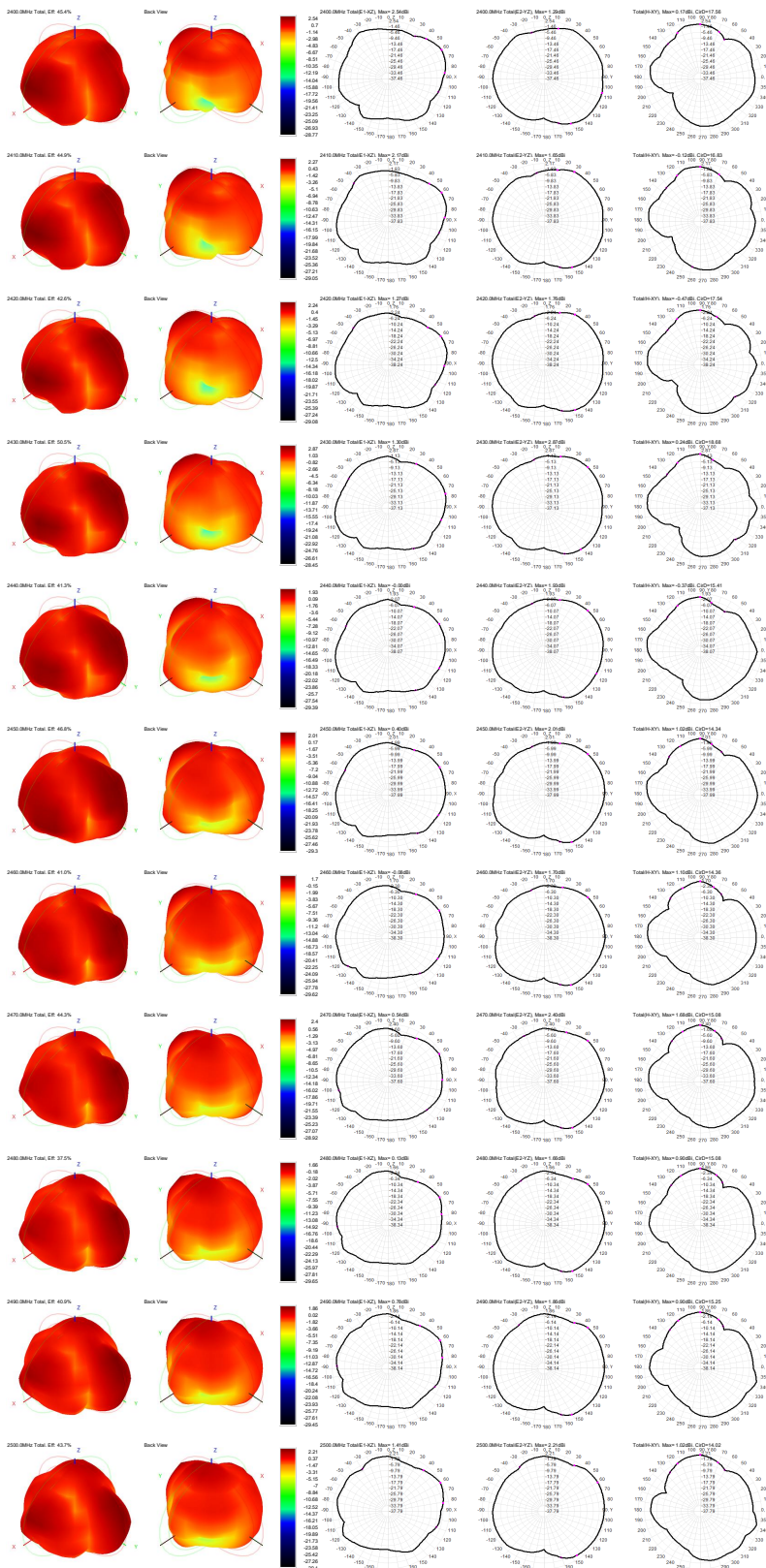
Dongguan UB Electronics Co., Ltd



Efficiency and Gain

Dongguan UB Electronics Co., Ltd

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)	2.54	2.27	2.24	2.87	1.93	2.01	1.70	2.40	1.66	1.86	2.21
效率 (%)	45.42	44.93	42.56	50.50	41.34	46.77	40.98	44.31	37.45	40.88	43.75





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: GBTCHLC1E2
3. RF module/chip: STM32WB10CCU
4. Antenna description

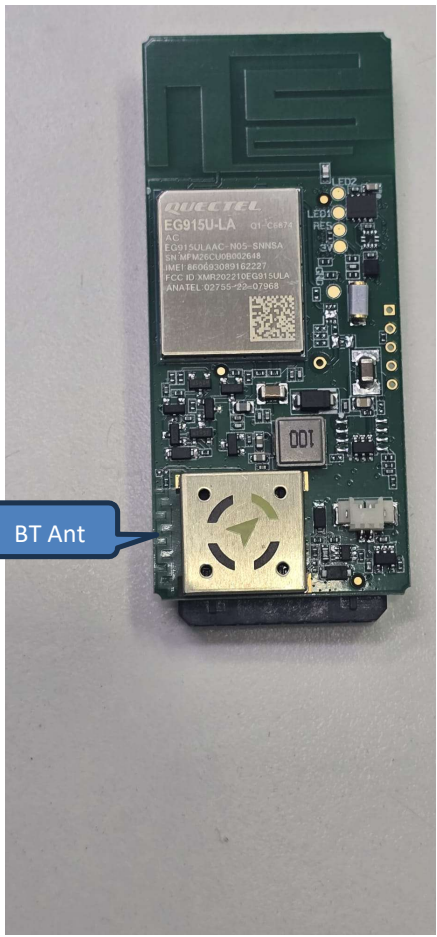
Antenna type	Inverted L Printed Antenna
Antenna manufacturer	
Antenna Datasheet	
Frequency range	2402-2480MHz
Modulation	
Antenna gain max (peak)	2.87dBi
Cable loss	
Connector type	

5. Antenna layout



REGULATORY TESTING FROM THE START TO CERTIFICATE

6. Antenna photo - example

PCB antenna	UFL antenna	Coax antenna
		
explanation	explanation	explanation