



好天线 · 优比造

东莞市优比电子有限公司

Dongguan UB Electronics Co., Ltd

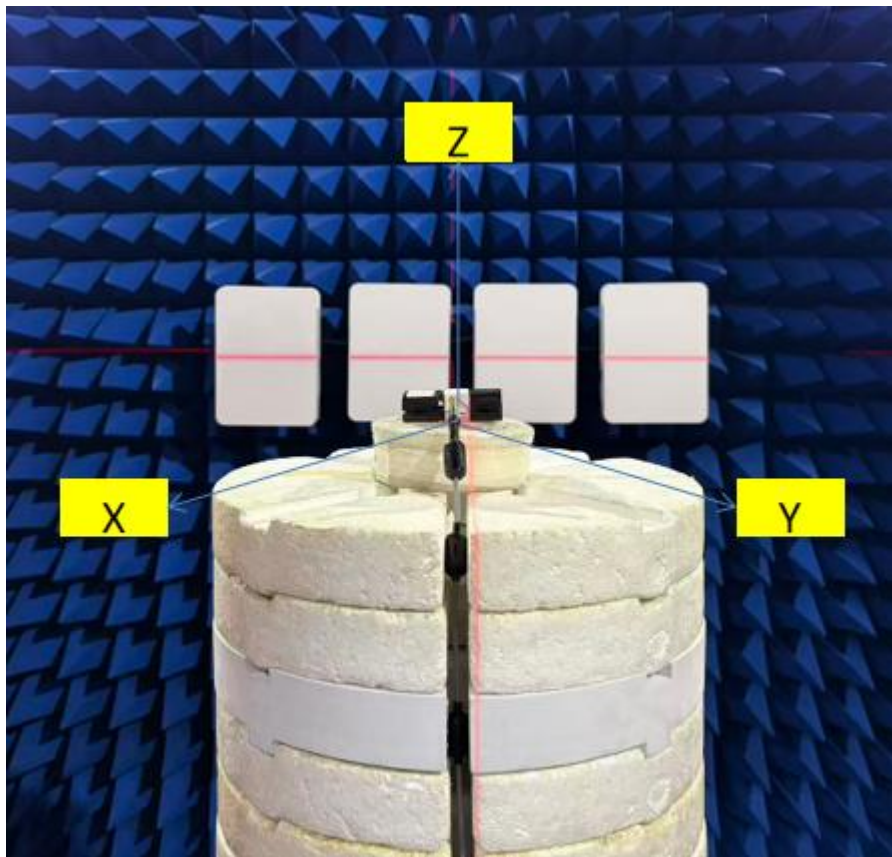
Antenna Study

- **Client Name: ERM ELECTRONIC SYSTEMS LTD**
- **Project Name: GPS 4G SCOUT CatM (iRF)**
- **Model: GPS 4G SCOUT CatM**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2026.07.20**

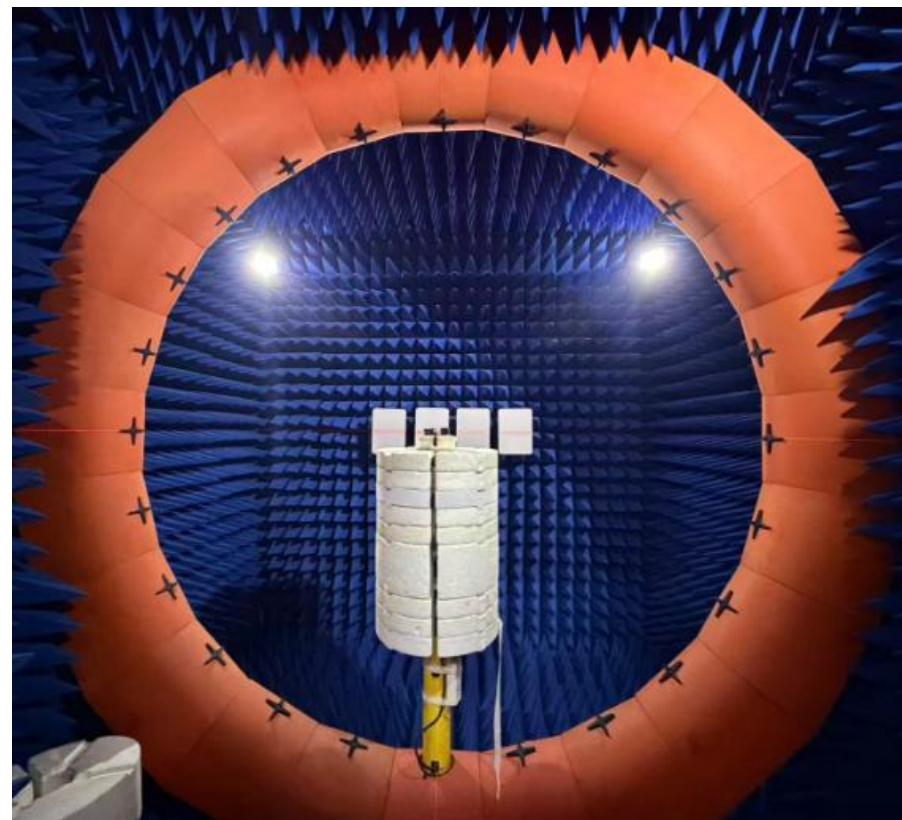
Address: Building 79, New Sun Industrial City, Lin Village Community, Tangxia Town, Dongguan (Dongguan Company) Phone: 0769-81777126

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

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Testing environment



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

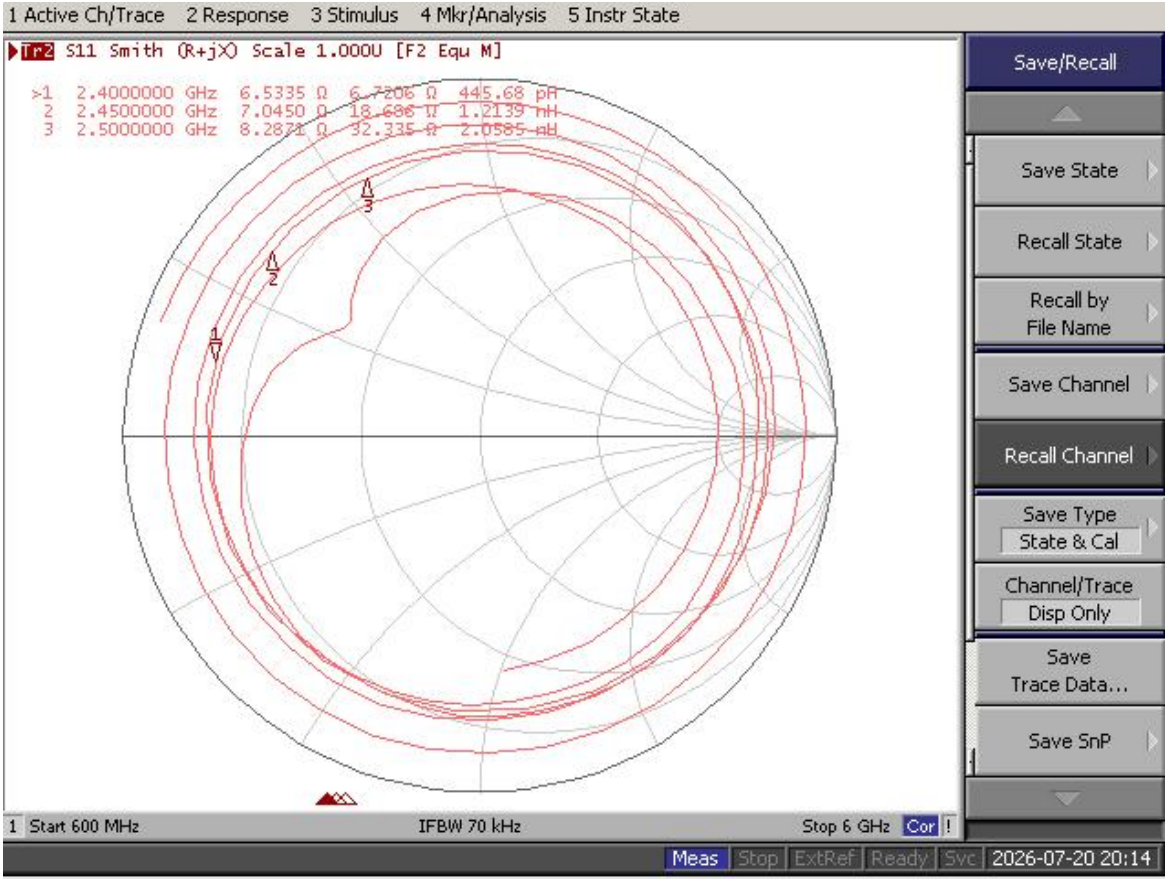
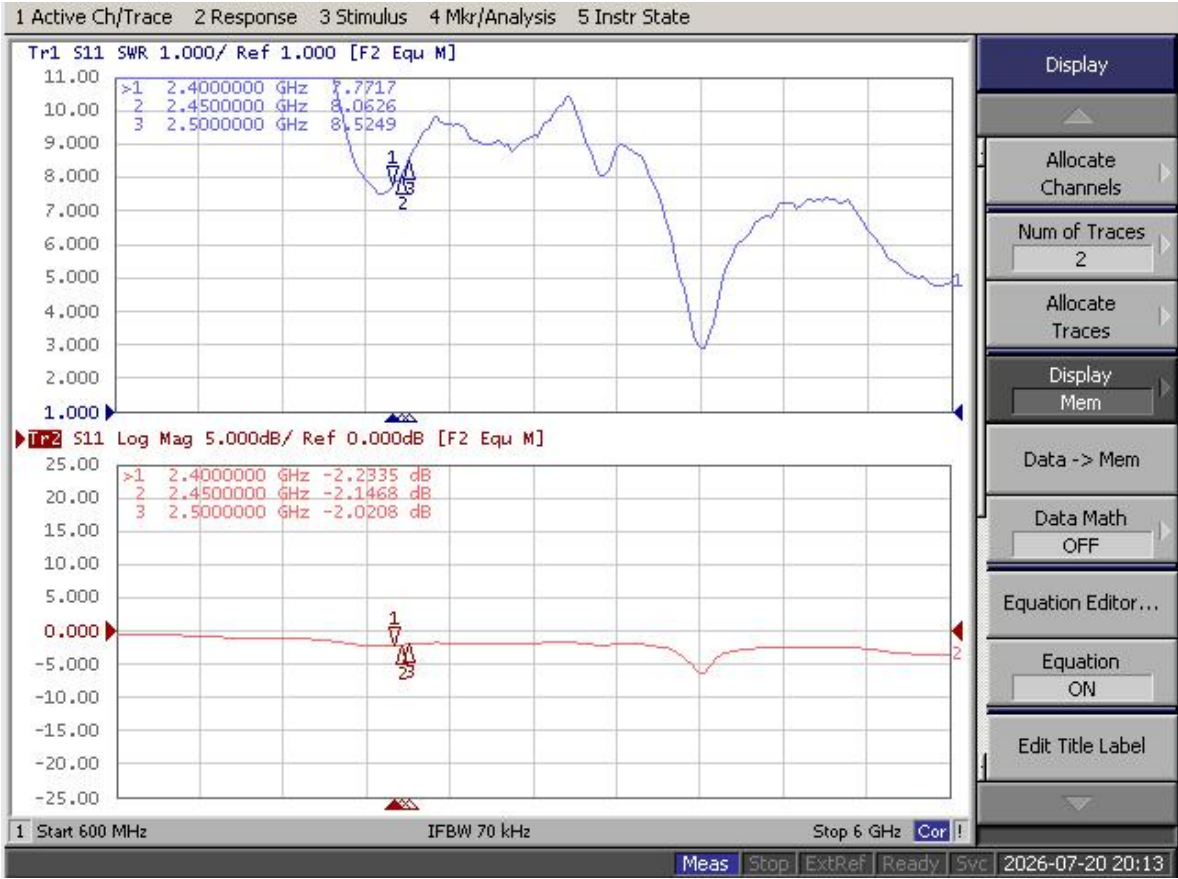
- Antenna name: 2.4G
- Covers : 2400/2500MHz



Antenna

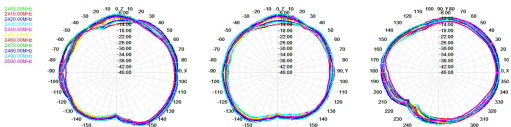
S Parameter_Return Loss&VSWR-Smith

Dongguan UB Electronics Co., Ltd



Efficiency and Gain

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)	-6.85	-7.05	-5.86	-7.42	-6.12	-7.16	-6.76	-6.99	-6.80	-6.10	-7.85
效率 (%)	8.25	7.47	9.93	6.65	8.66	6.93	7.83	7.63	8.17	9.68	6.78





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.

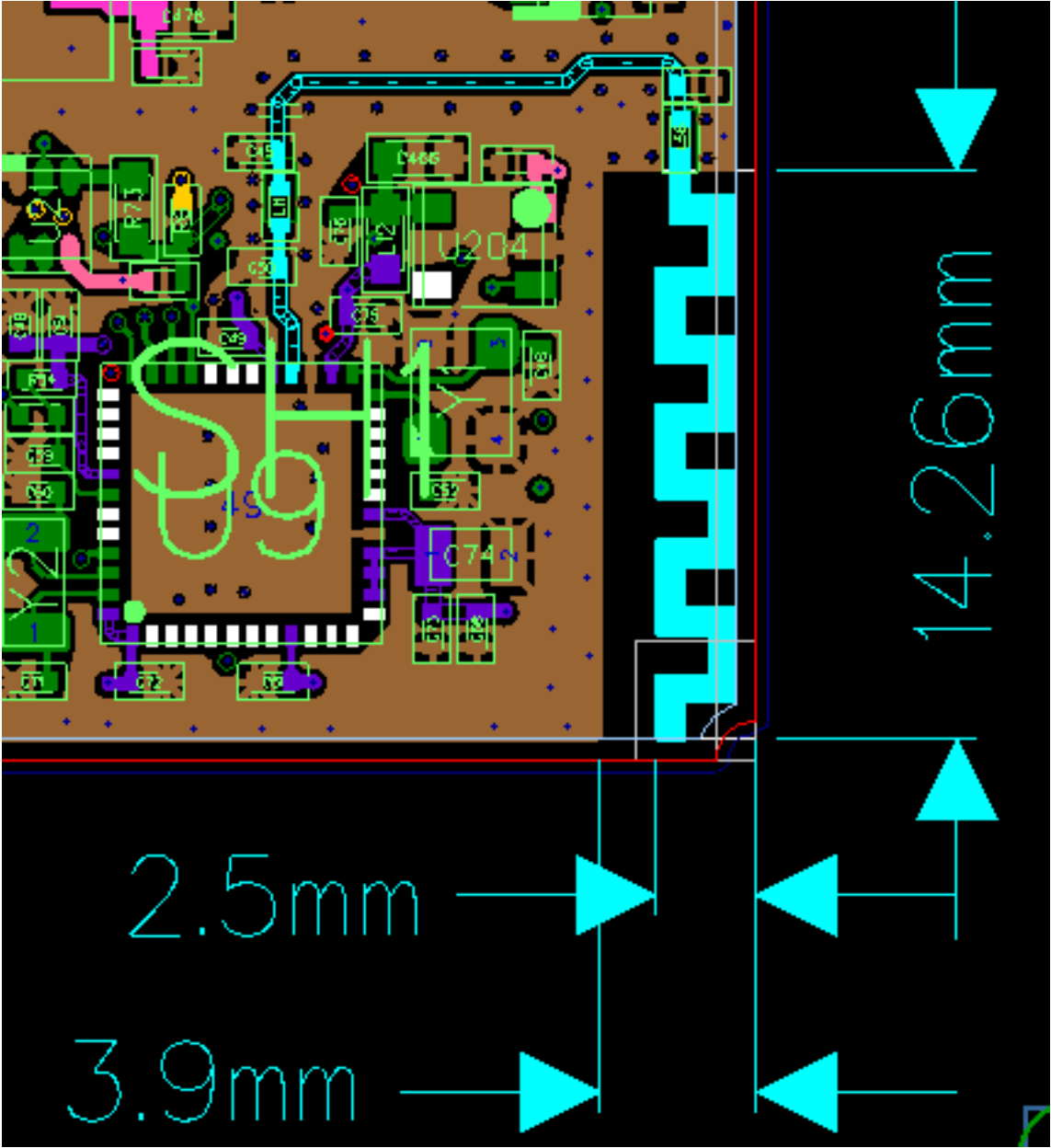
Product name: GTPMLC1E1
3.

RF module/chip: STM32WB10CCU5
4.

Antenna description

Antenna type	PCB ANT
Antenna manufacturer	ERM Electronic Systems Ltd 16 Hasar Shapira St. Rishon Le'Zion Israel
Antenna Datasheet	
Frequency range	2402-2480MHz
Modulation	GFSK
Antenna gain max (peak)	-5.86 dBi
Connector type	-

5. Antenna layout



GTPMLC1E1

REGULATORY TESTING FROM THE START
TO CERTIFICATE

6. Antenna photo - example

PCB antenna	UFL antenna	Coax antenna
		
explanation	explanation	explanation