

VLG TECHNOLOGY

VLG Communication Technology Limited

VLG Wireless Technology Co., Ltd. Antenna recognition

Client/project name	GR531			Band	WIFI 2.4G/5.8G		
VLG Part number (P/N)	V1439-060-A-01			Edition	V1.0		
RF	Tangdahua			QE	Yuhong		
		Confirmed				Confirmed	
ME	Lipenggang			PM	Hefarong		
Date							
Client project Name part number	Client project name:						
	Client project number:						
客户确认							
VLG Wireless Technology							
Research and development project customer satisfaction survey (Customers please comment on our research and development or PM management staff work, urge us to better serve you)							
RF technicians	☐ satisfaction		☐ Basic satisfaction		☐ dissatisfy		
MEtechnicians	☐ satisfaction		☐ Basic satisfaction		☐ dissatisfy		
PM	☐ satisfaction		☐ Basic satisfaction		☐ dissatisfy		
Proposed item description:							

catalogue

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1、 Finished antenna diagram



2、 antenna test environment

2.1 Antenna passive test equipment

The antenna input characteristics were tested using the Agilent E5071C vector network analyzer.

The antenna radiation characteristics were measured using ET Satimo Starlab 3D near field microwave darkroom. The test coordinate system is shown in Figure 7.

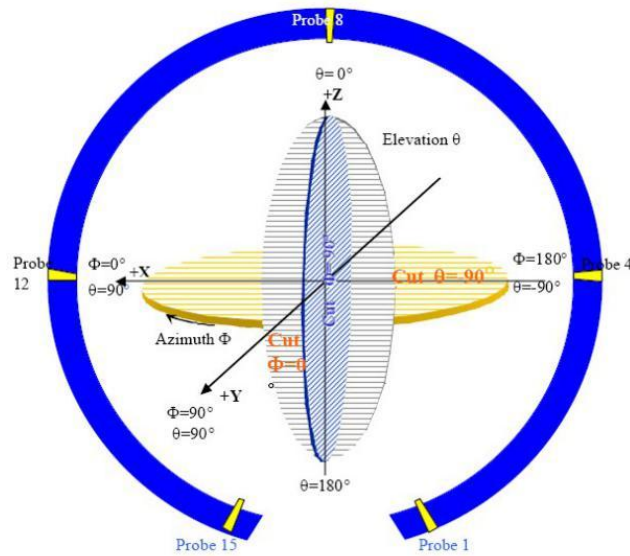


Figure 2.1.1 3D microwave darkroom test coordinate system (back view)

2.2 Antenna active test equipment

The integrated measuring instrument is the R&S CMW500.

The antenna radiation characteristics were measured using ET Satimo Starlab 3D near field microwave darkroom. The test coordinate system is shown in Figure 8.

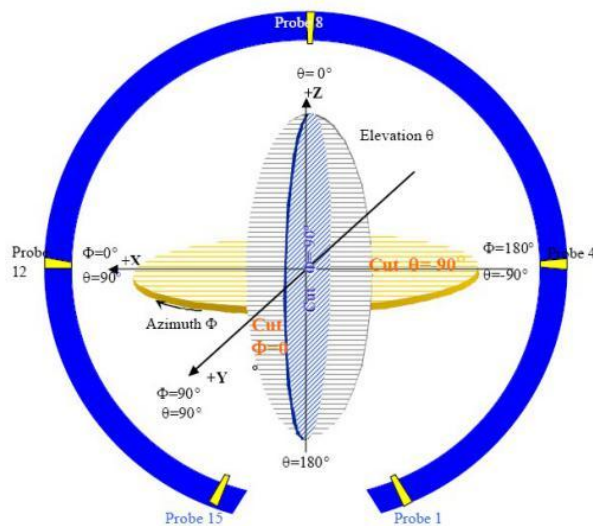


Figure 2.2.1 3D microwave darkroom test coordinate system (back view)

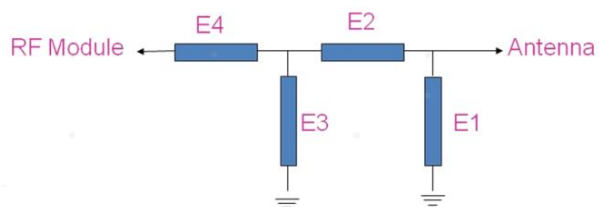
Antenna test equipment physical picture



Figure 2.2.2 Physical picture of the darkroom

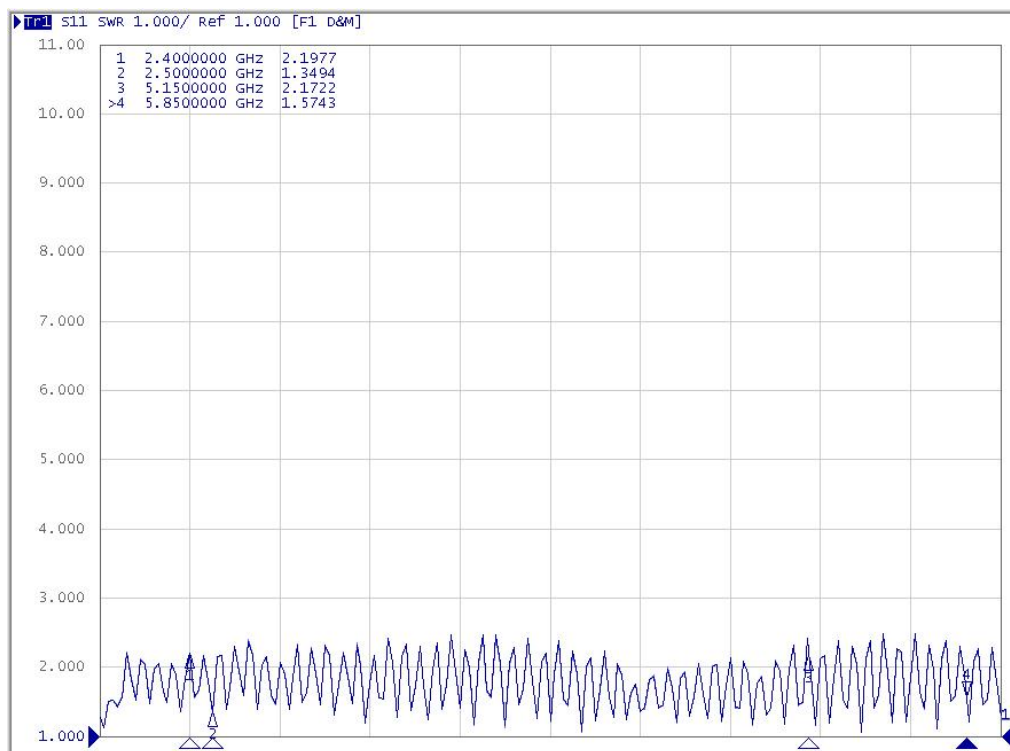
3、Performance parameter

3.1、Matching circuit



Element	Value
E1(0201)	NA
E2(0201)	0Ω
E3(0201)	NA
E4(0201)	0Ω

3.2、S11



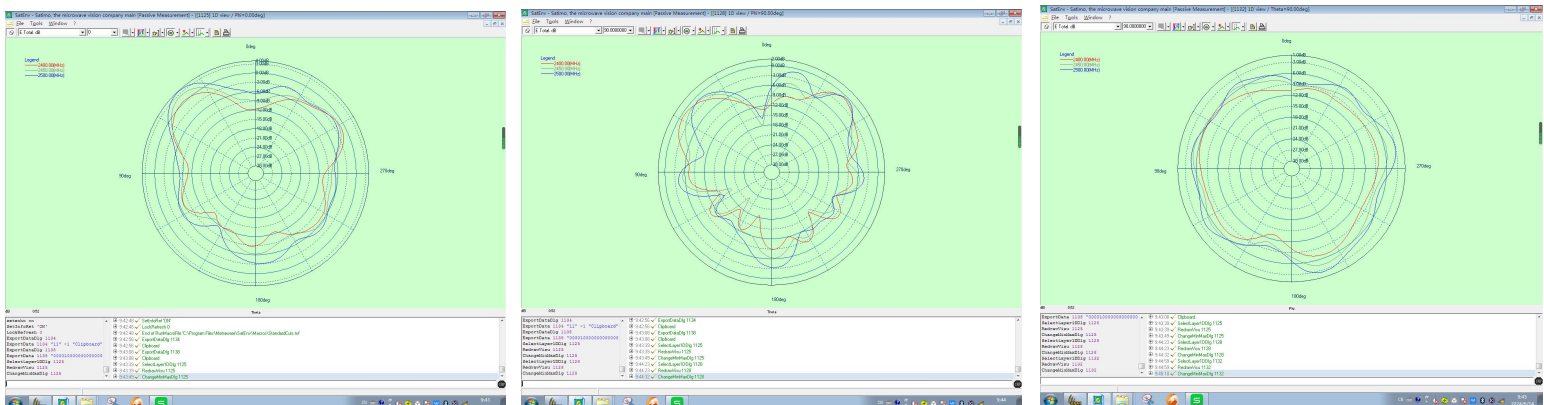
S11 figure

3.3、Passive efficiency

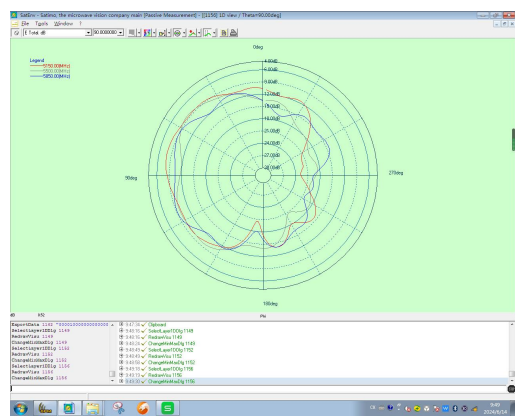
Frequency	Efficiency	Gain
2400000000	36%	1.23
2410000000	37%	1.35
2420000000	39%	1.65
2430000000	40%	1.94
2440000000	39%	2.15
2450000000	38%	2.23
2460000000	38%	2.43
2470000000	38%	2.77
2480000000	40%	3.18
2490000000	42%	3.61
2500000000	43%	3.76
5150000000	25%	0.71
5200000000	24%	0.26

5250000000	25%	0.45
5300000000	25%	0.85
5350000000	24%	0.22
5400000000	24%	-0.25
5450000000	25%	-0.23
5500000000	24%	-0.59
5550000000	24%	-0.75
5600000000	24%	-0.22
5650000000	25%	-0.08
5700000000	24%	0.21
5750000000	24%	0.84
5800000000	26%	1.16
5850000000	27%	1.26

3.4、 Directional diagram



2.4G WIFI



4、Structural drawing

