

东莞市思博通讯有限公司

Dongguan Sibocommunication Co., Ltd

规格承认书

SPECIFICATION FOR APPROVAL

日期 2025/07/16
Date

编号 25071601
File No

版本 1.0
Revision

客户 深圳市亘强科技有限公司
CUSTOMER:

客户料号 05.16.112

品名 WIFI Antenna
PART NAME:

供方料号 S-GQ250628-A01
SUPPLIER NO:

送样日期Date:2025-6-27 送样数量Q “TY:6PCS

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR
供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
Hunter	Luo	Liu

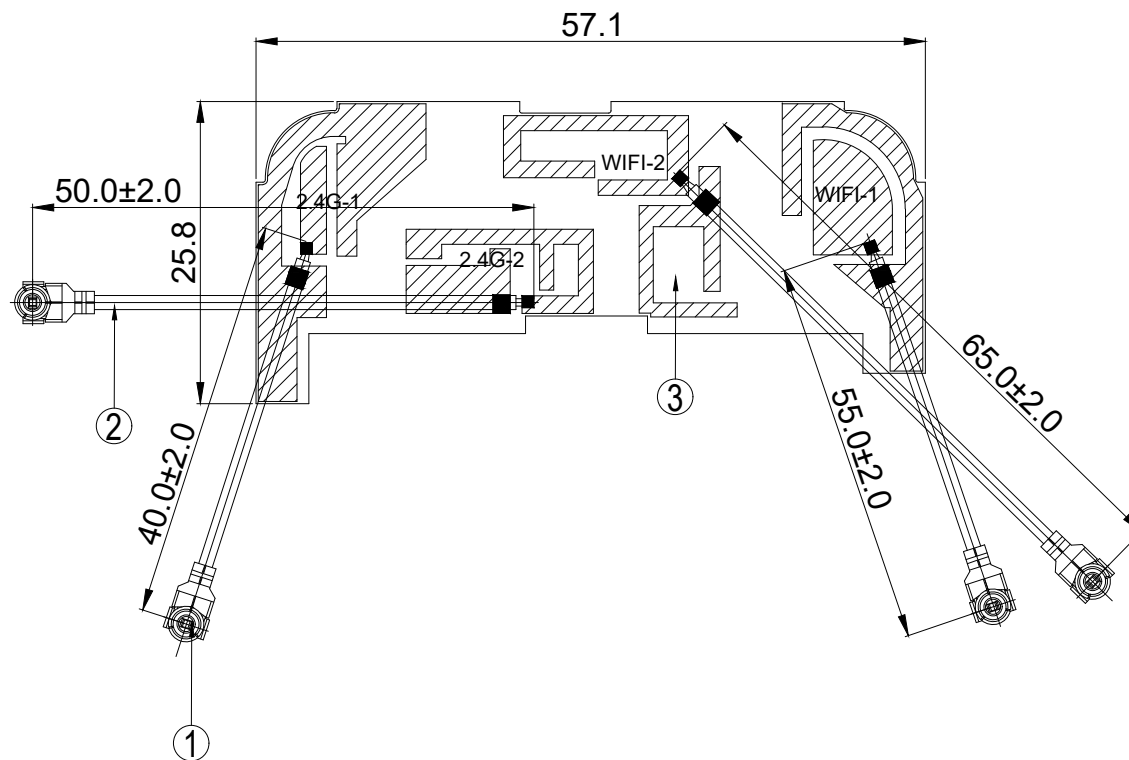
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10	N/A	N/A	N/A
11	-	-	-
12	-	-	-

RoHS

Compatible

REV.	DESCRIPTION	DATE
A	首次发行	2025.06.28



SIGBRO 东莞市思博通讯有限公司
Dongguan Sibo Communication Co., Ltd

PART NAME: WIFI Antenna			DATE: 2025-06-28	
PART NO.: S-GQ250628-A01				
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
				X.X ±0.50
				X.XX±0.15
			UNITS: mm	X° ±3°
			SCALE: 1/1	
			REVISION: A	

3	FPCB	57.1*25.8*T0.2MM	FPCB	FPC00XX.V01	1
2	Coaxial Cable	O.D.0.81 Black	O.D.0.81	CAB0081.V01	4
1	Mini Connector	Au Plated 1代	Cu	MET0XD2.V01	4
NO	PART NAME	DESCRIPTION	Material	Part	Q.TY

天线规格2.4G-1

Antenna Specification

Electrical Properties	
Frequency	2.4GHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.5(Max)
Return Loss	≤-10(Max)
Radiation	Omni-directional
Gain (Peak)	≤2.79dBi(Max)
Polarization	Linear
Connector	IPEX-1代
Physical Properties	
Antenna Material	FPC
Cable Type	O.D 0.81//L=40mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	black

天线规格2.4G-2

Antenna Specification

Electrical Properties	
Frequency	2.4GHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.6(Max)
Return Loss	≤-10(Max)
Radiation	Omni-directional
Gain (Peak)	≤3.66dBi(Max)
Polarization	Linear
Connector	IPEX-1代
Physical Properties	
Antenna Material	FPC
Cable Type	O.D 0.81//L=50mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	black

天线规格WIFI-1

Antenna Specification

Electrical Properties	
Frequency	2300MHz~6000MHz
Impedance	50 Ohm Nominal
V.S.W.R	≤2.2(Max)
Return Loss	≤-10(Max)
Radiation	Omni-directional
Gain (Peak)	≤4.51dBi(Max)
Polarization	Linear
Connector	IPEX-1代
Physical Properties	
Antenna Material	FPC
Cable Type	O.D 0.81//L=55mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	black

天线规格

WIFI-2

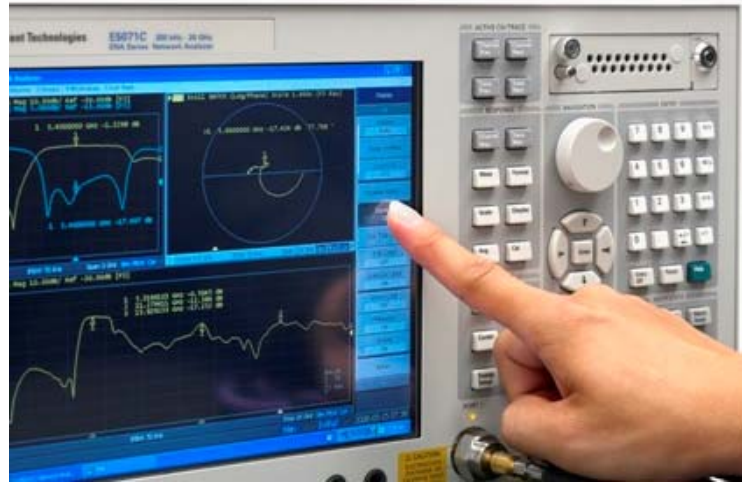
Antenna Specification

Electrical Properties	
Frequency	2300MHz~6000MHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.6(Max)
Return Loss	≤-10(Max)
Radiation	Omni-directional
Gain (Peak)	≤3.66dBi(Max)
Polarization	Linear
Connector	IPEX-1代
Physical Properties	
Antenna Material	FPC
Cable Type	O.D 0.81//L=65mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	black

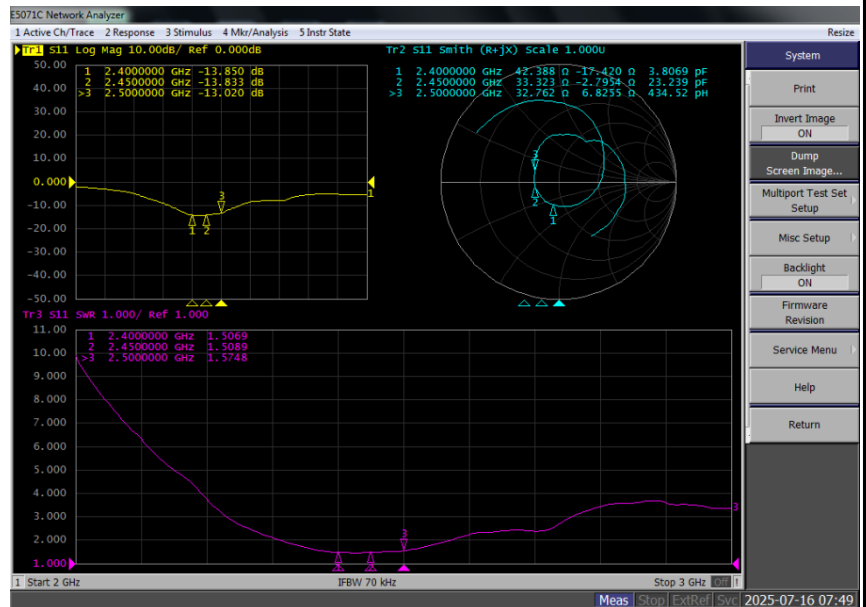
2.4G-1

Antenna Performance Test

**Agilent
E5071C**



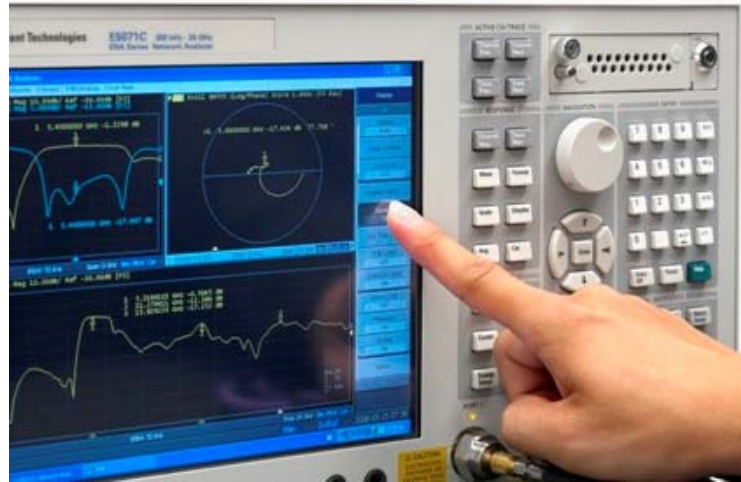
**S
Parameter
Test //
WIFI**



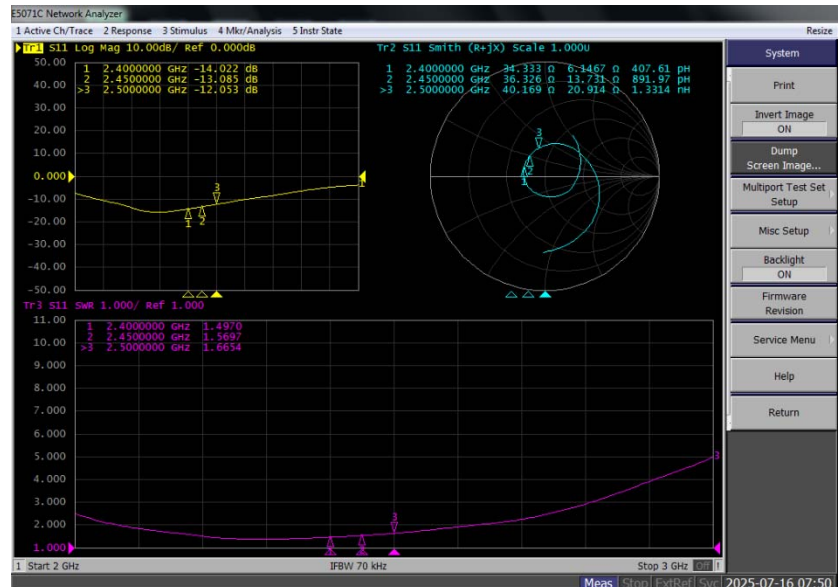
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Antenna Performance Test

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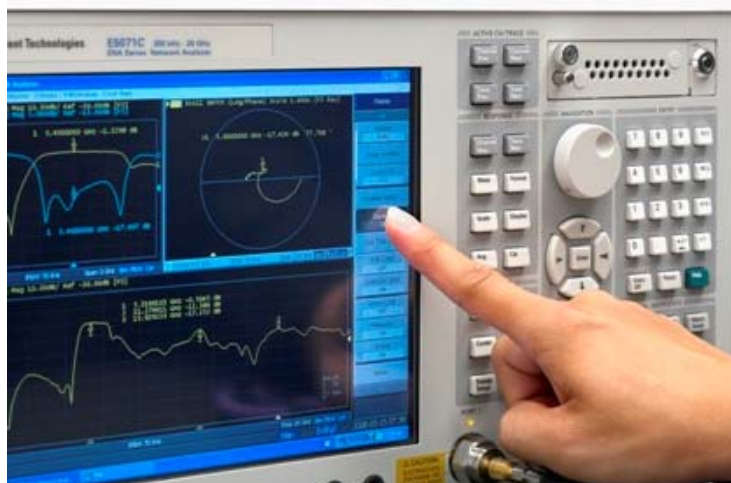


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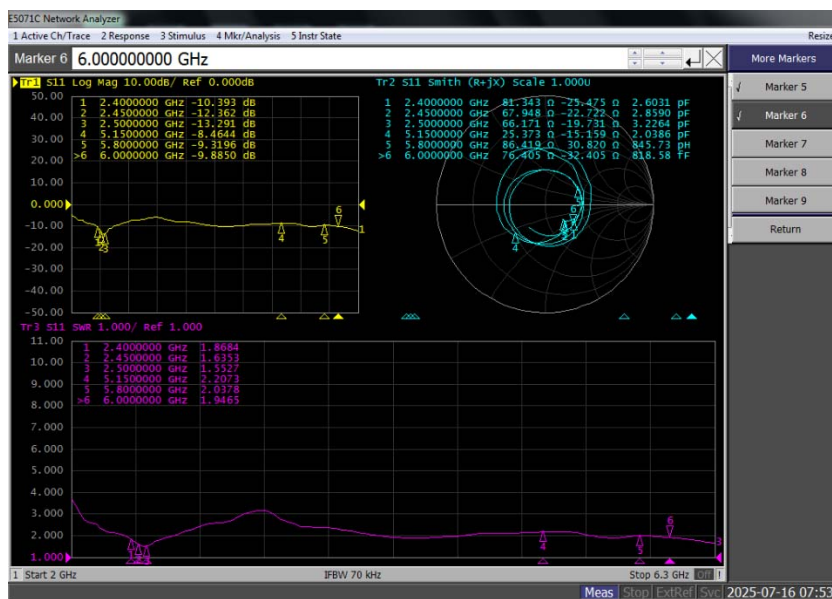


Antenna Performance Test

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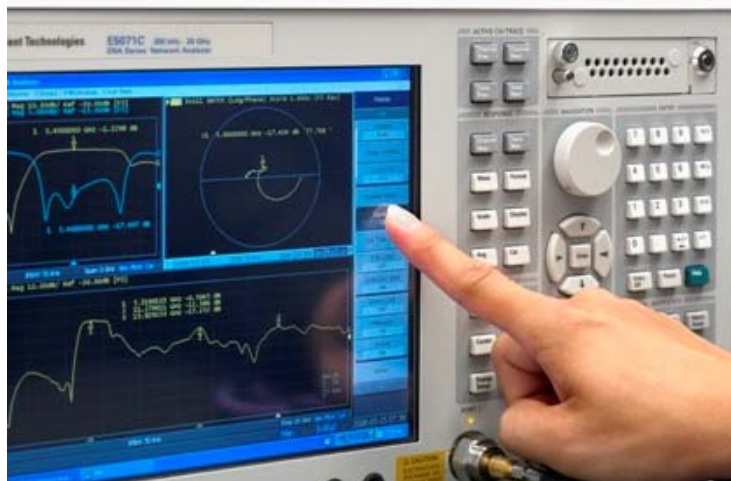


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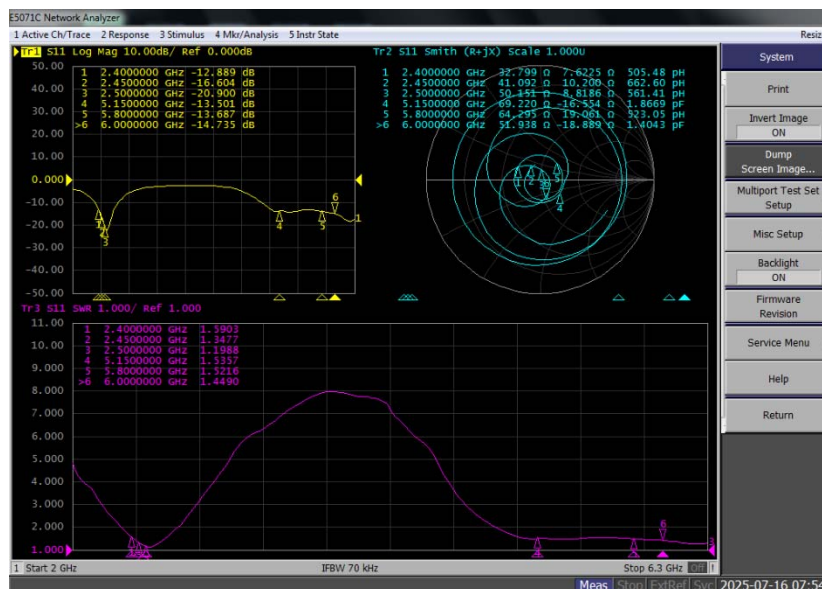


Antenna Performance Test

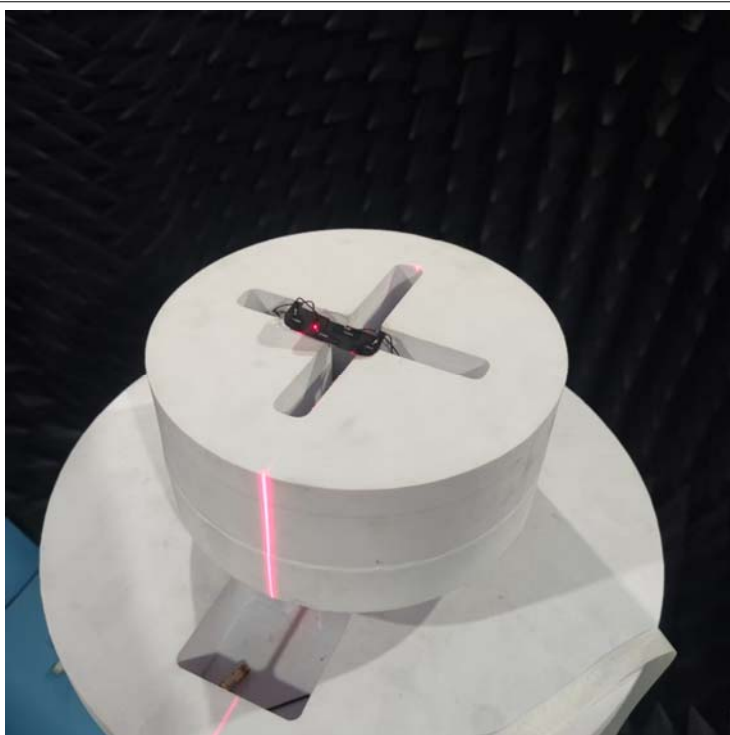
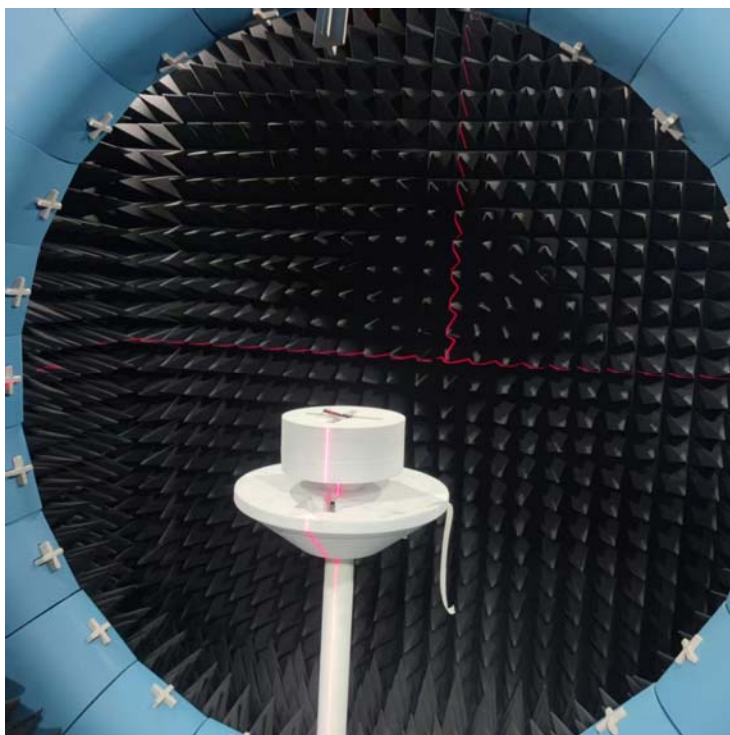
**Agilent
E5071C**



**S
Parameter
Test //
WIFI**



Antenna Passive Test



2.4G-1

Passive Test For Antenna (2.4GHz)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	47.1	-3.27	1.8
2350	47.97	-3.19	1.51
2400	48.98	-3.1	1.87
2450	46.13	-3.36	1.41
2500	40.27	-3.95	1.29
2550	45.19	-3.45	2.79
2600	43.15	-3.65	2.29

2.4G-2

Passive Test For Antenna (2.4GHz)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	28.12	-5.51	1.23
2350	30.9	-5.1	1.22
2400	34.59	-4.61	1.99
2450	39.99	-3.98	2.16
2500	45.71	-3.4	3.02
2550	48.31	-3.16	3.66
2600	43.65	-3.6	2.59

WIFI-1

Passive Test For Antenna (2300MHz/6000MHz)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	48.53	-3.14	1.12
2500	30.97	-5.09	0.08
3000	12.02	-9.2	-4.61
3500	13.68	-8.64	-3.05
4000	64.27	-1.92	4.51
4500	39.9	-3.99	1.92
5000	49.89	-3.02	4.43
5500	52.36	-2.81	4.1
6000	60.12	-2.21	3.47

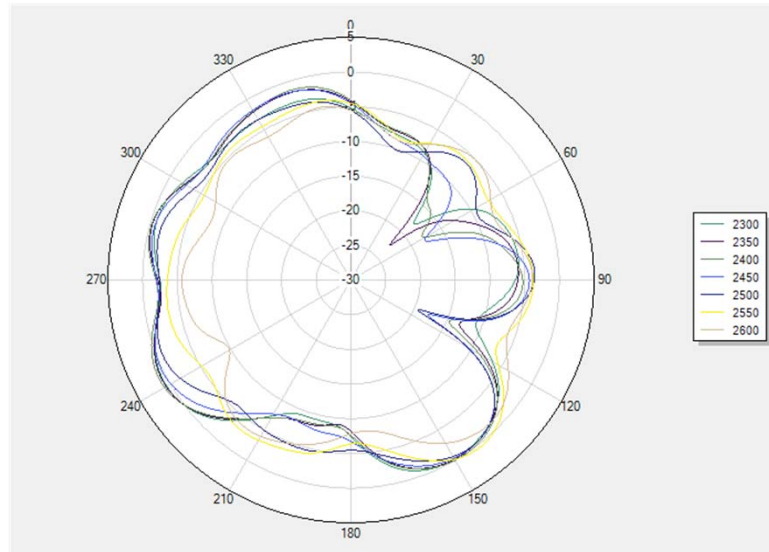
WIFI-2

Passive Test For Antenna (2300MHz/6000MHz)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2300	61.52	-2.11	2.55
2500	40.64	-3.91	0.59
3000	13.61	-8.66	-5.1
3500	7.71	-11.13	-3.93
4000	15.7	-8.04	-1.66
4500	61.38	-2.12	3.27
5000	56.75	-2.46	2.93
5500	63.83	-1.95	3.01
6000	61.94	-2.08	3.66

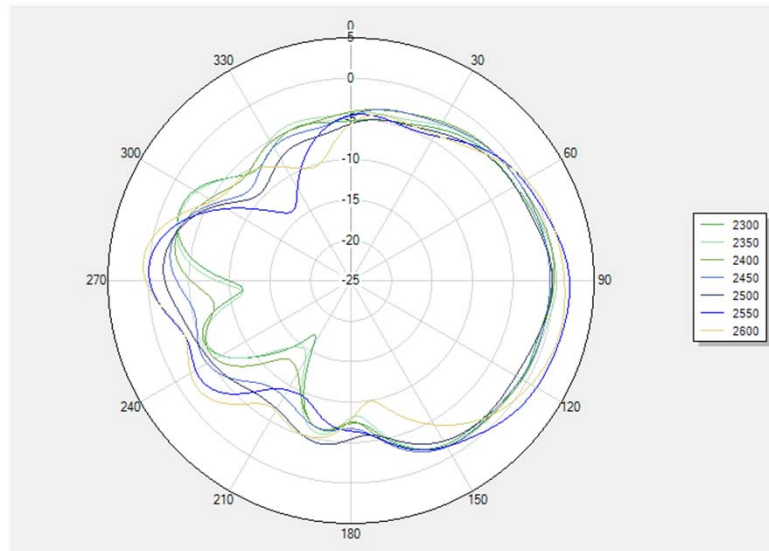
Antenna Radiation Pattern

2.4G-1

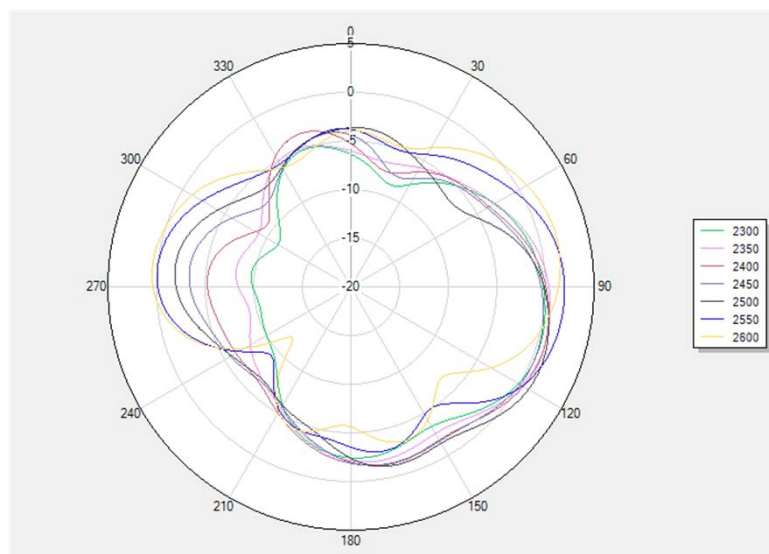
Phi 0 2D



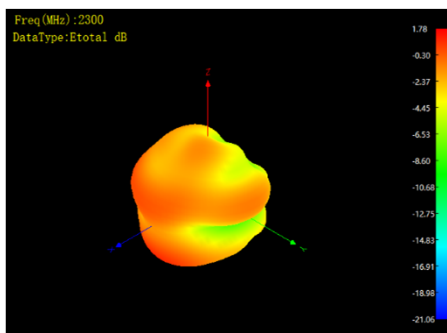
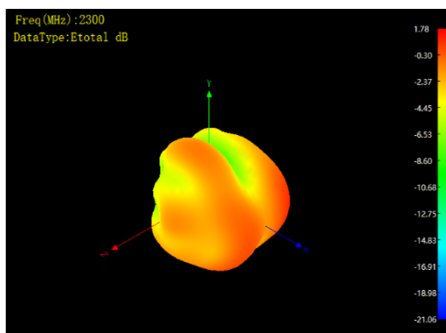
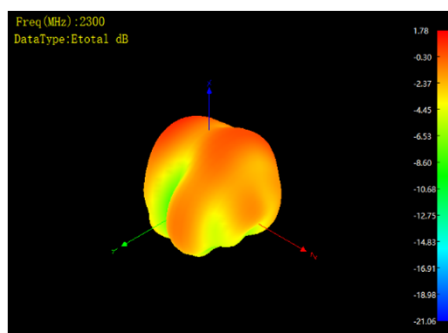
Phi 90 2D



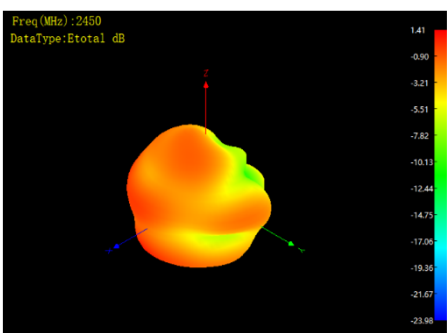
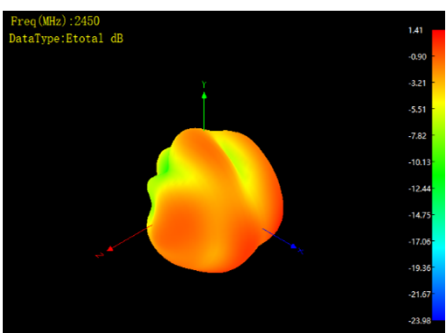
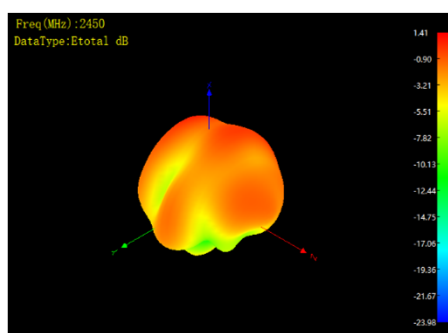
Theta 90 2D



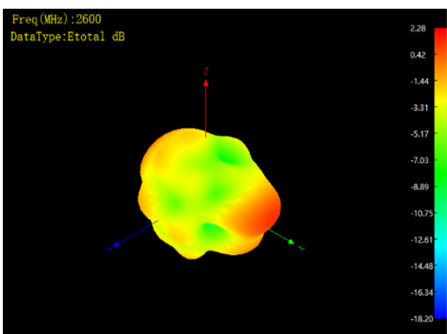
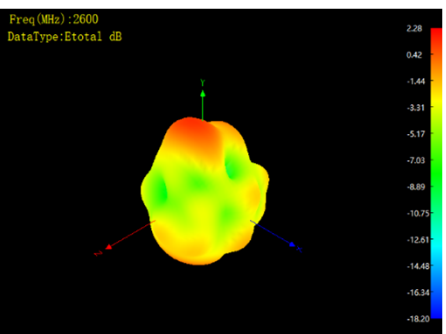
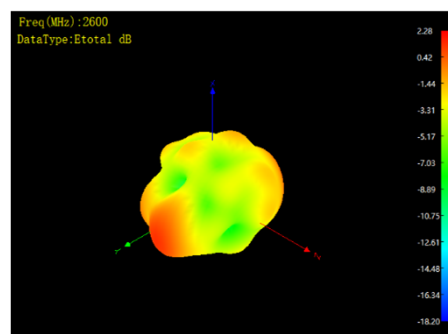
3D: 2300MHz



3D: 2450MHz



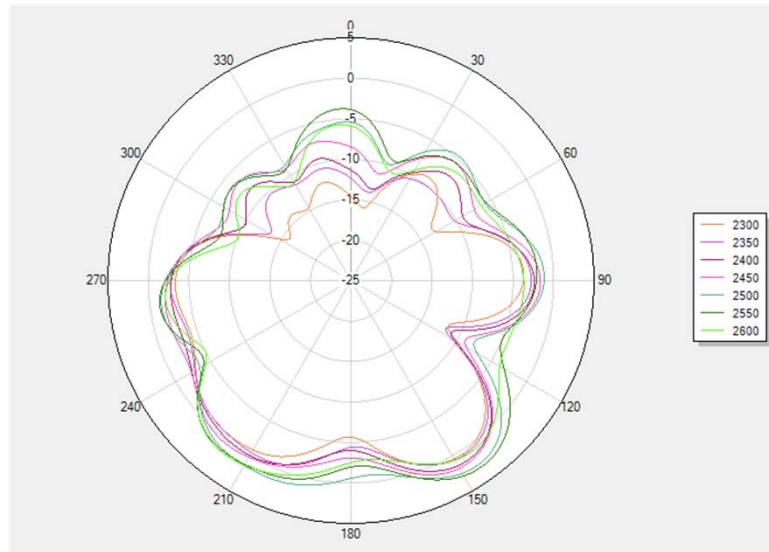
3D: 2600MHz



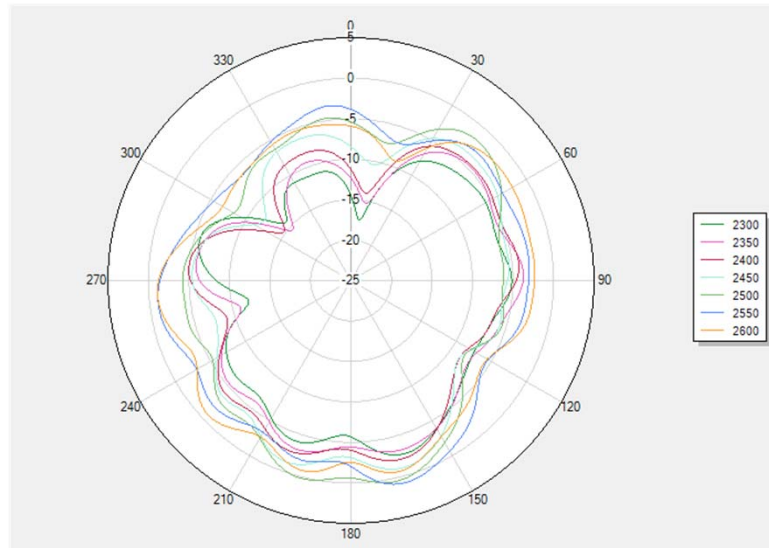
Antenna Radiation Pattern

2.4G-2

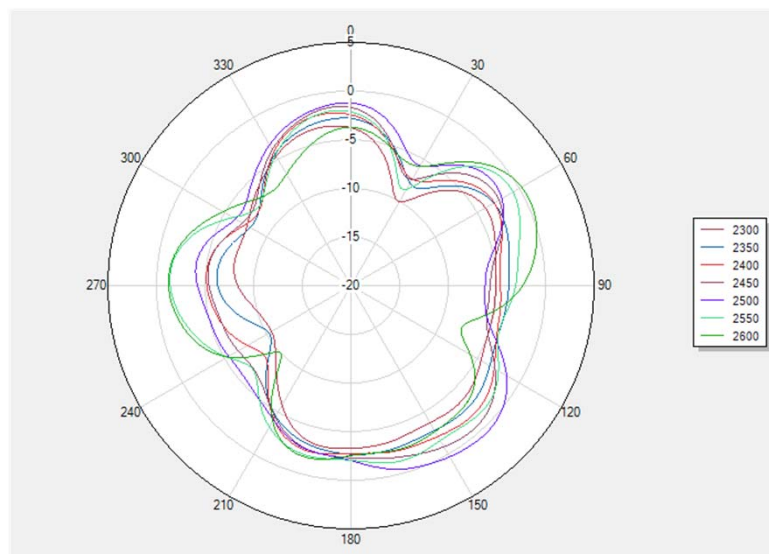
Phi 0 2D



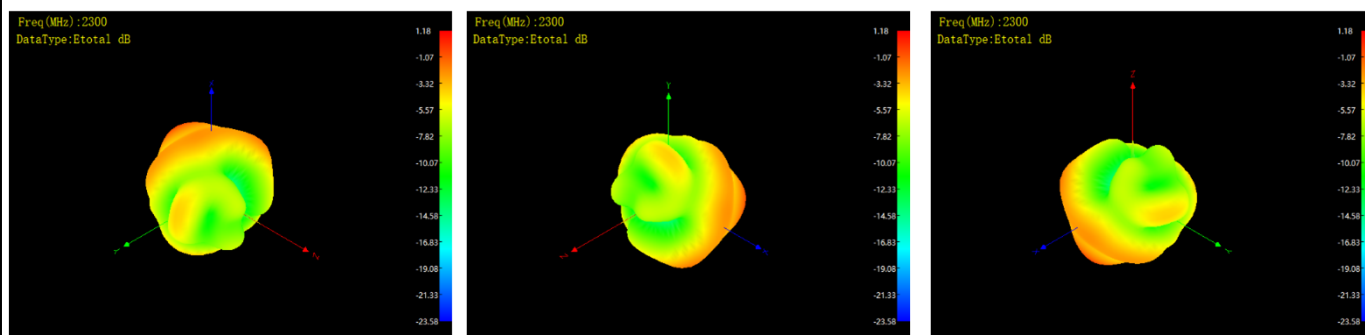
Phi 90 2D



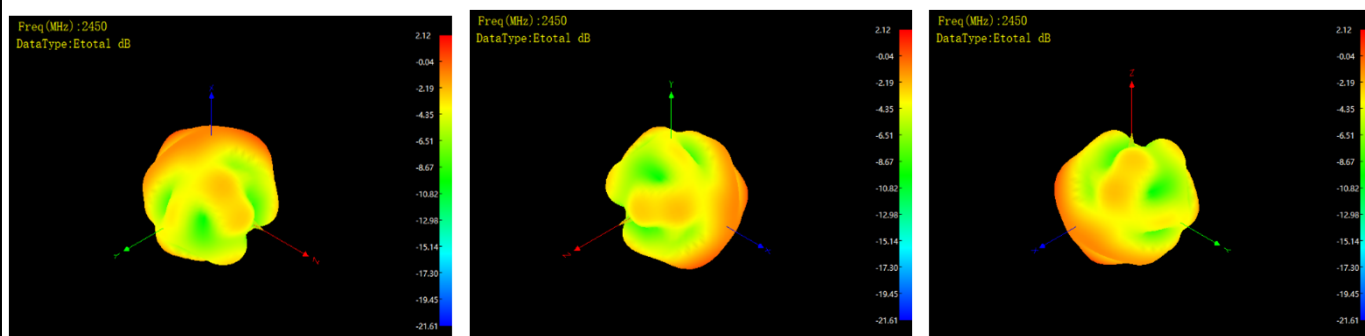
Theta 90 2D



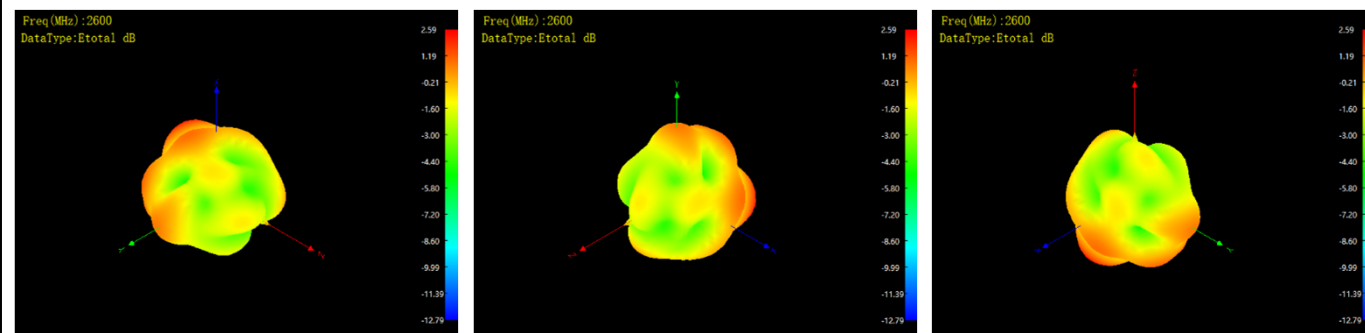
3D: 2300MHz



3D: 2450MHz



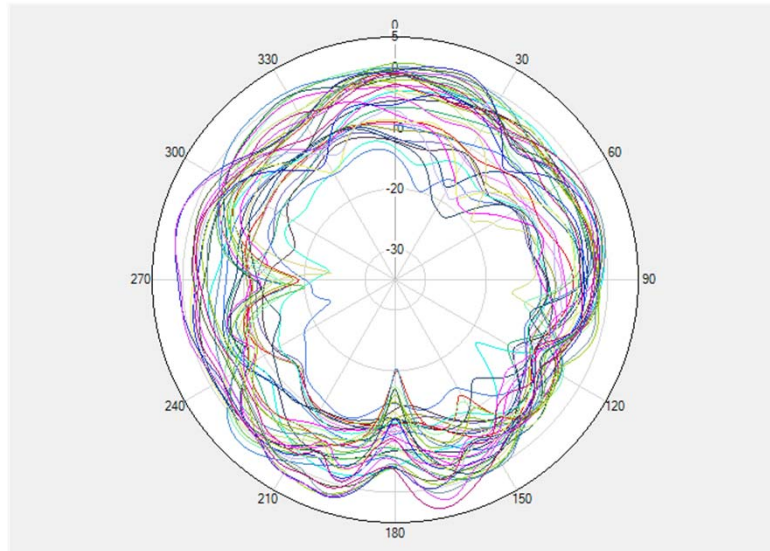
3D: 2600MHz



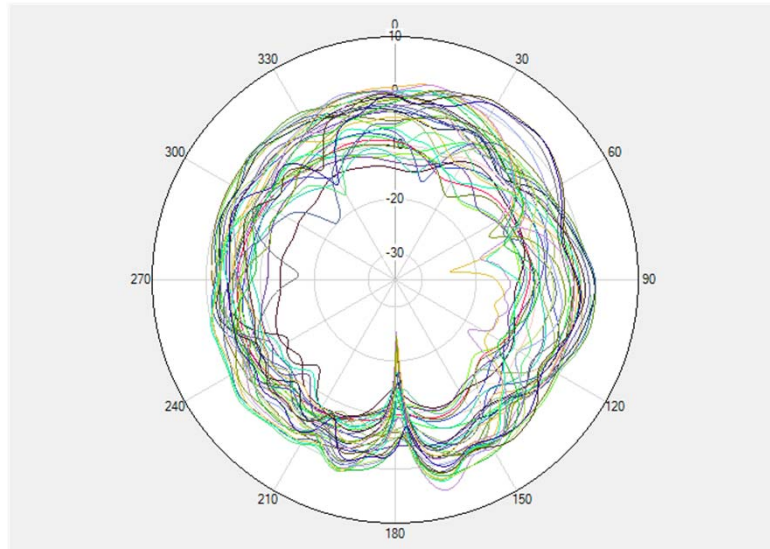
Antenna Radiation Pattern

WIFI-1

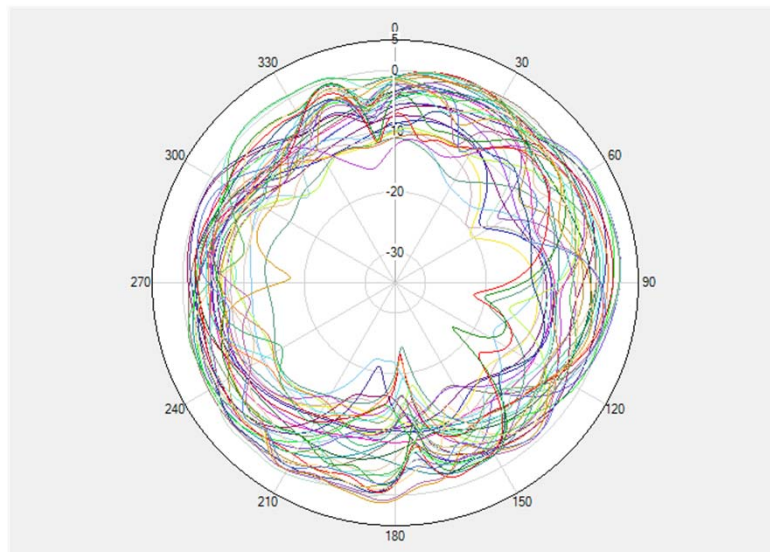
Phi 0 2D



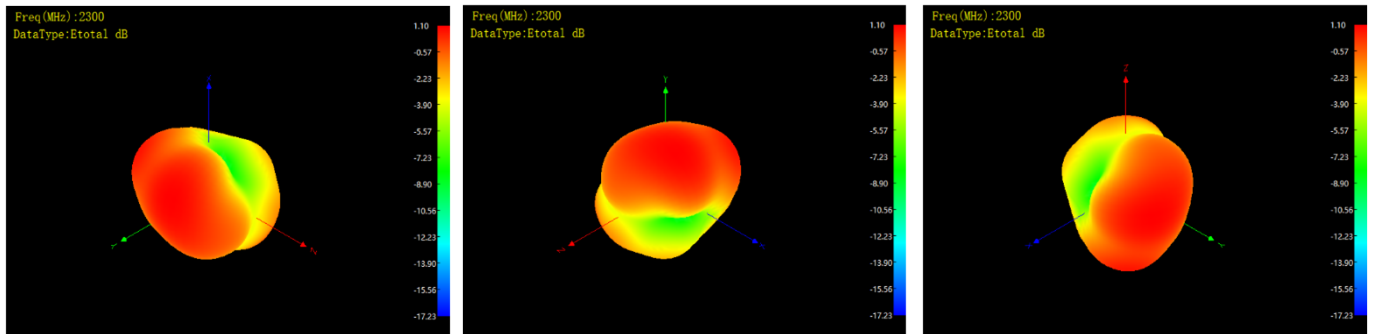
Phi 90 2D



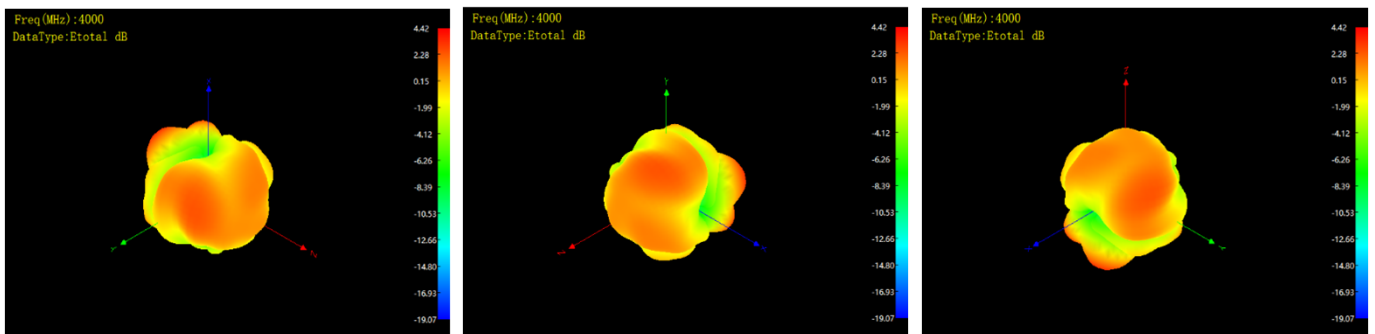
Theta 90 2D



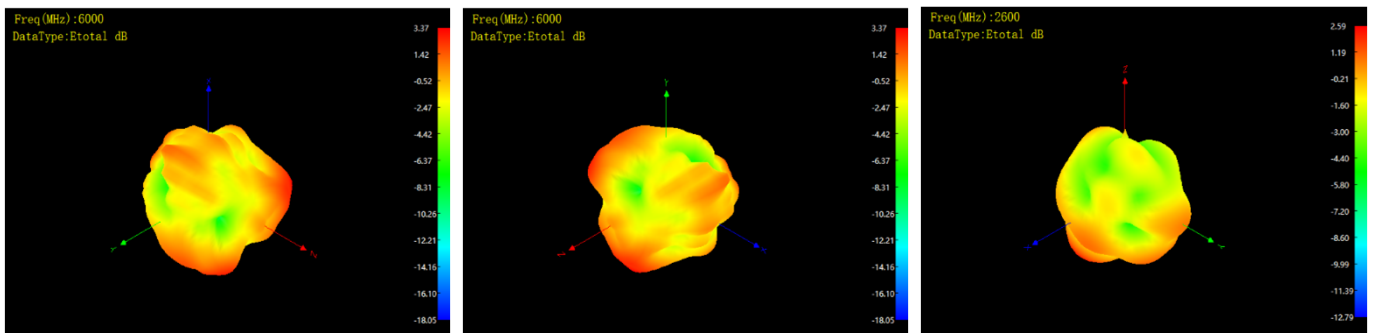
3D: 2300MHz



3D: 4000MHz



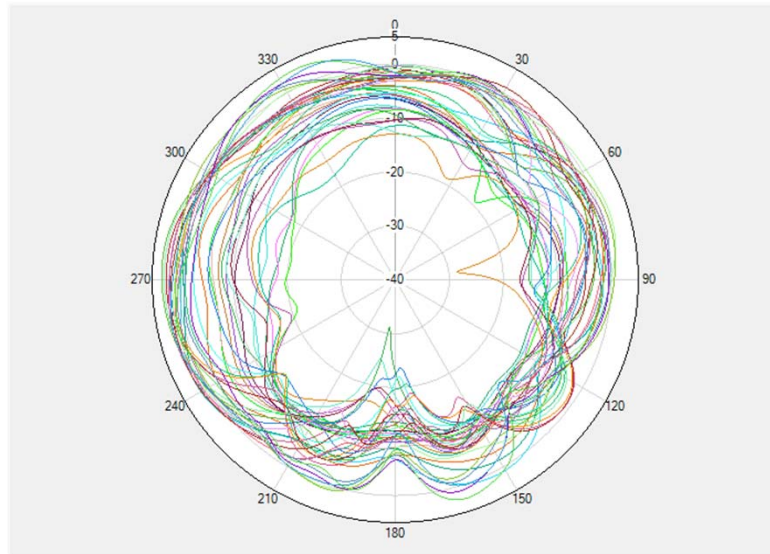
3D: 6000MHz



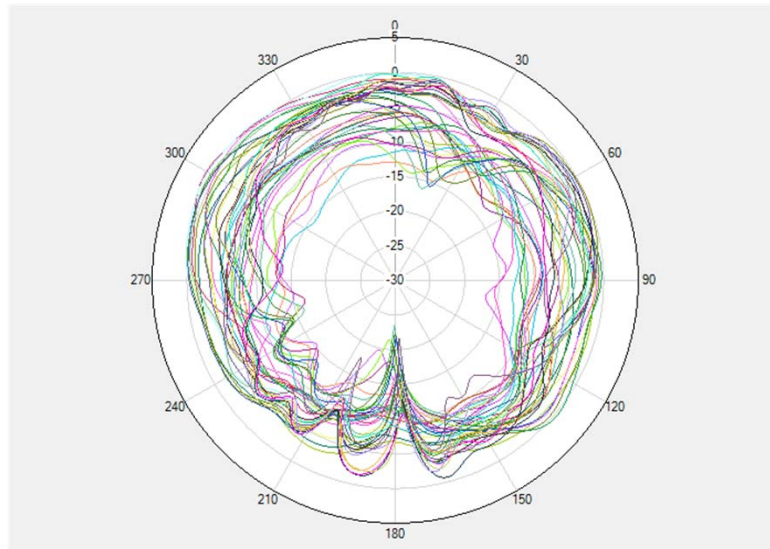
Antenna Radiation Pattern

WIFI-2

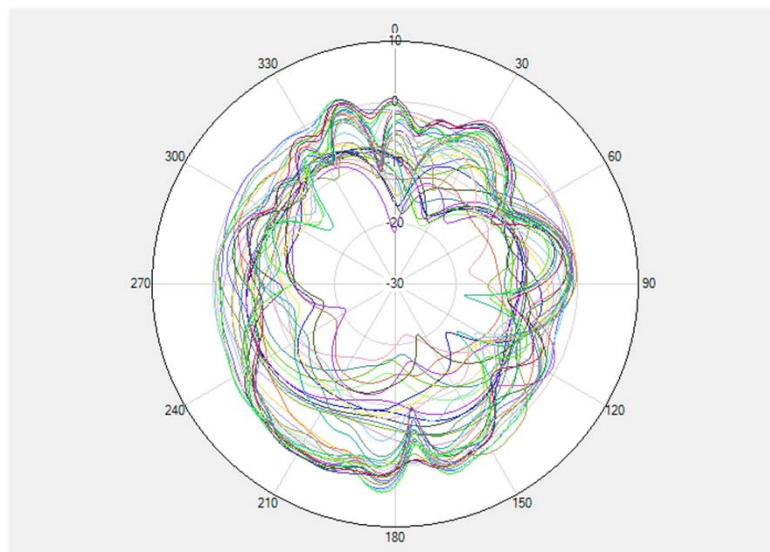
Phi 0 2D



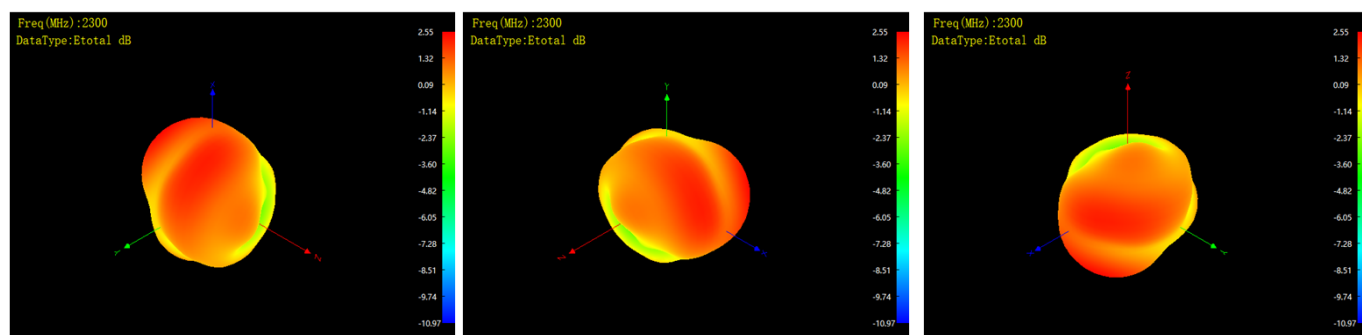
Phi 90 2D



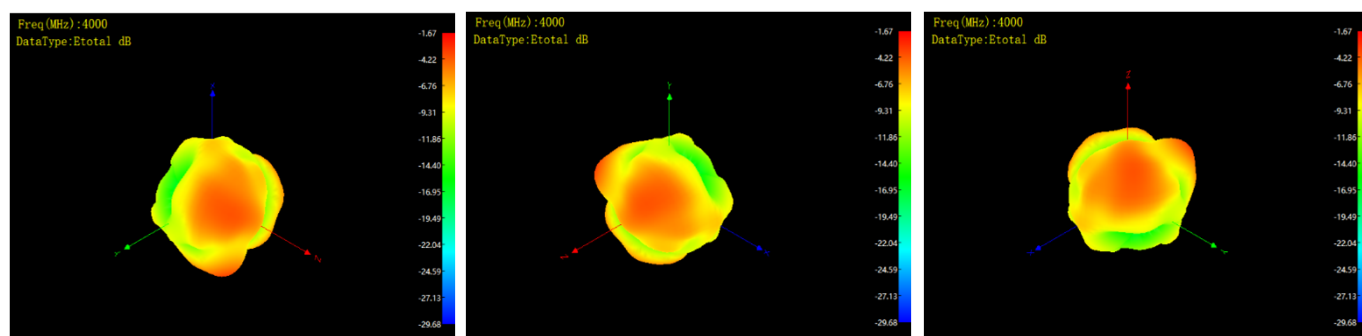
Theta 90 2D



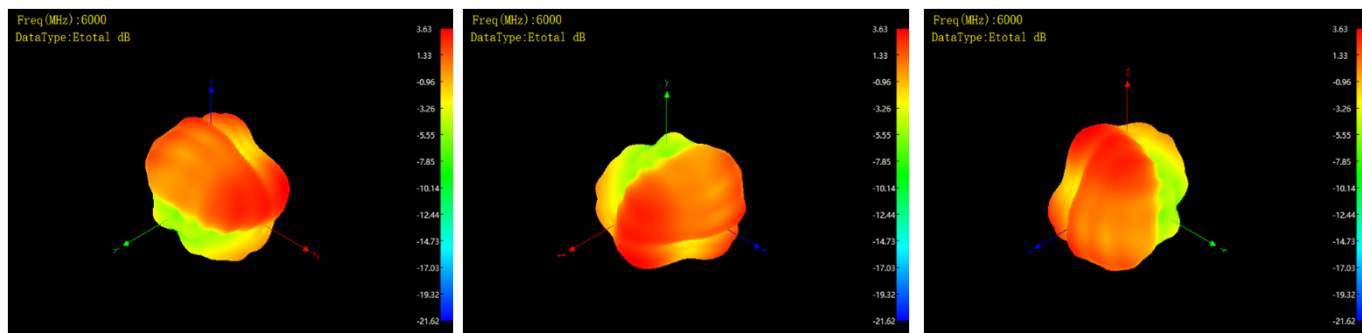
3D: 2300MHz



3D: 4000MHz



3D: 6000MHz



Antenna Photo

