

The Main Antenna Sample Confirmation

Project Name	CGA25		Date	2025-12-26
Project NO.	SN1548	Notes	coaxial line+ PCB	
Frequency Range	2400MHz-2500MHz			
Checked By	Engineering Manager			
	Alice			

Manufacturer: SINAWELL Electronics(Shenzhen) Co., Ltd.

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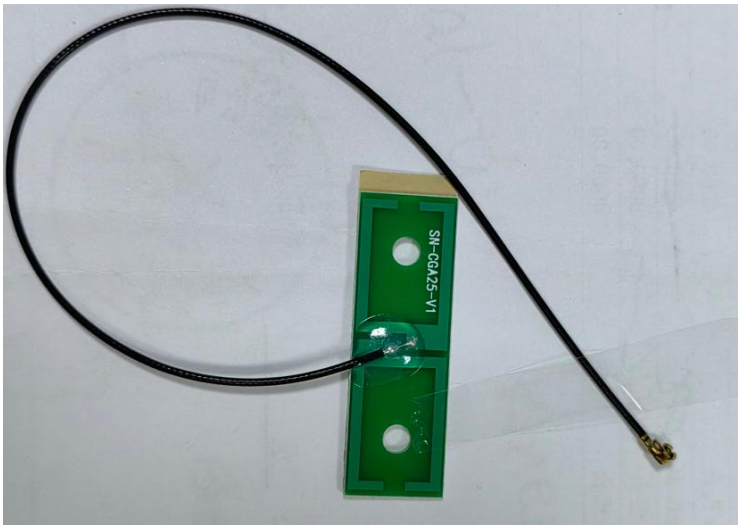
Table of Contents

1. Specification description	1
2. Summary of specifications	2
3. Appearance	3
3. Electrical performance	3
3.1. Antenna band	3
3.2. Matching circuit	3
3.3. Return Loss	4
4. Appearance structure	5
4.1. WIFI antenna passive test data.....	6
4.2. WIFI antenna Active Test.....	6
5. Field intensity pattern.....	7-10
5.1. Passive Field intensity pattern.....	7-8
5.2. Active Field intensity pattern.....	9-10

1. Specification description

This specification describes the status of the CGA25 internal antenna with a frequency band of 2400MHz-2500MHz.

2. Antenna appearance



3. Electrical performance

3.1. Antenna band

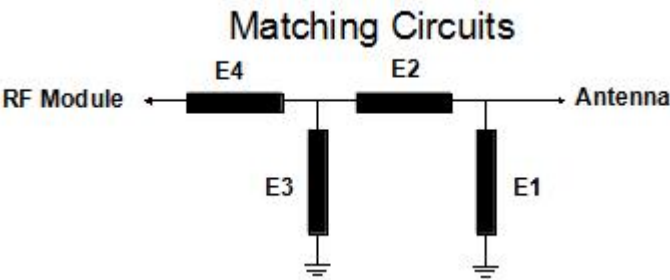
	WIFI
Transmitting band(MHz)	2400MHz-2500MHz

3.2. Matching Circuit

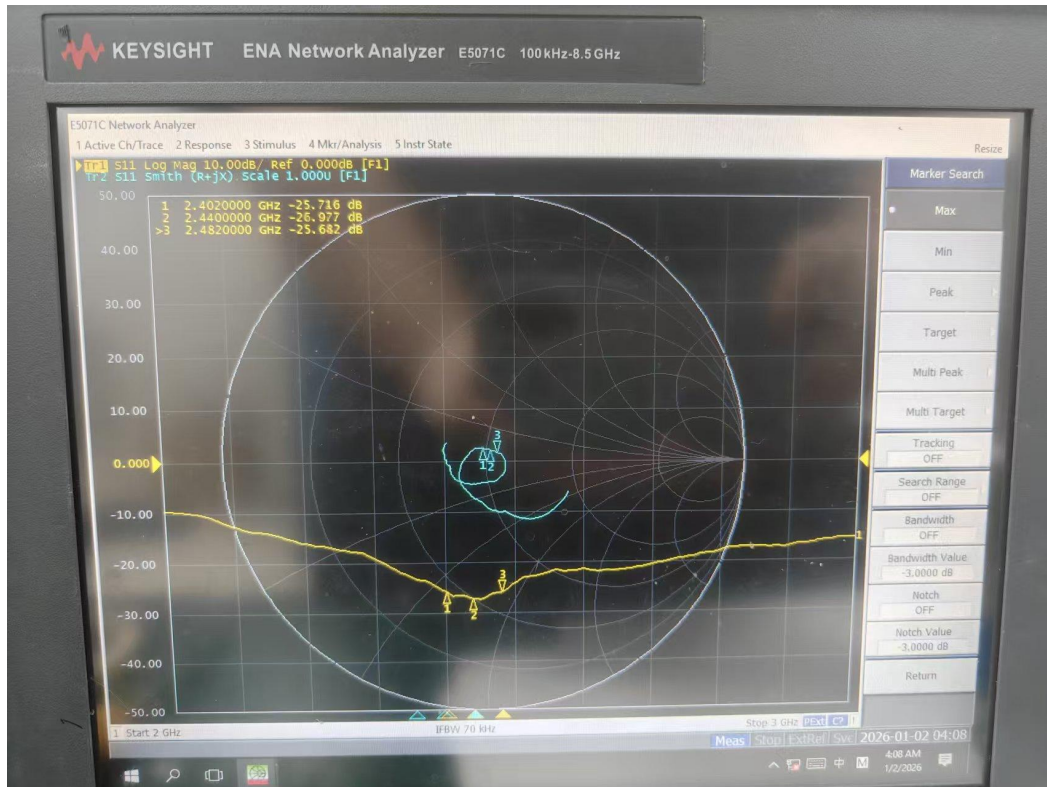
After the test point is at the antenna connector (RF test port), see the figure below.

1. WIFl antenna matching。

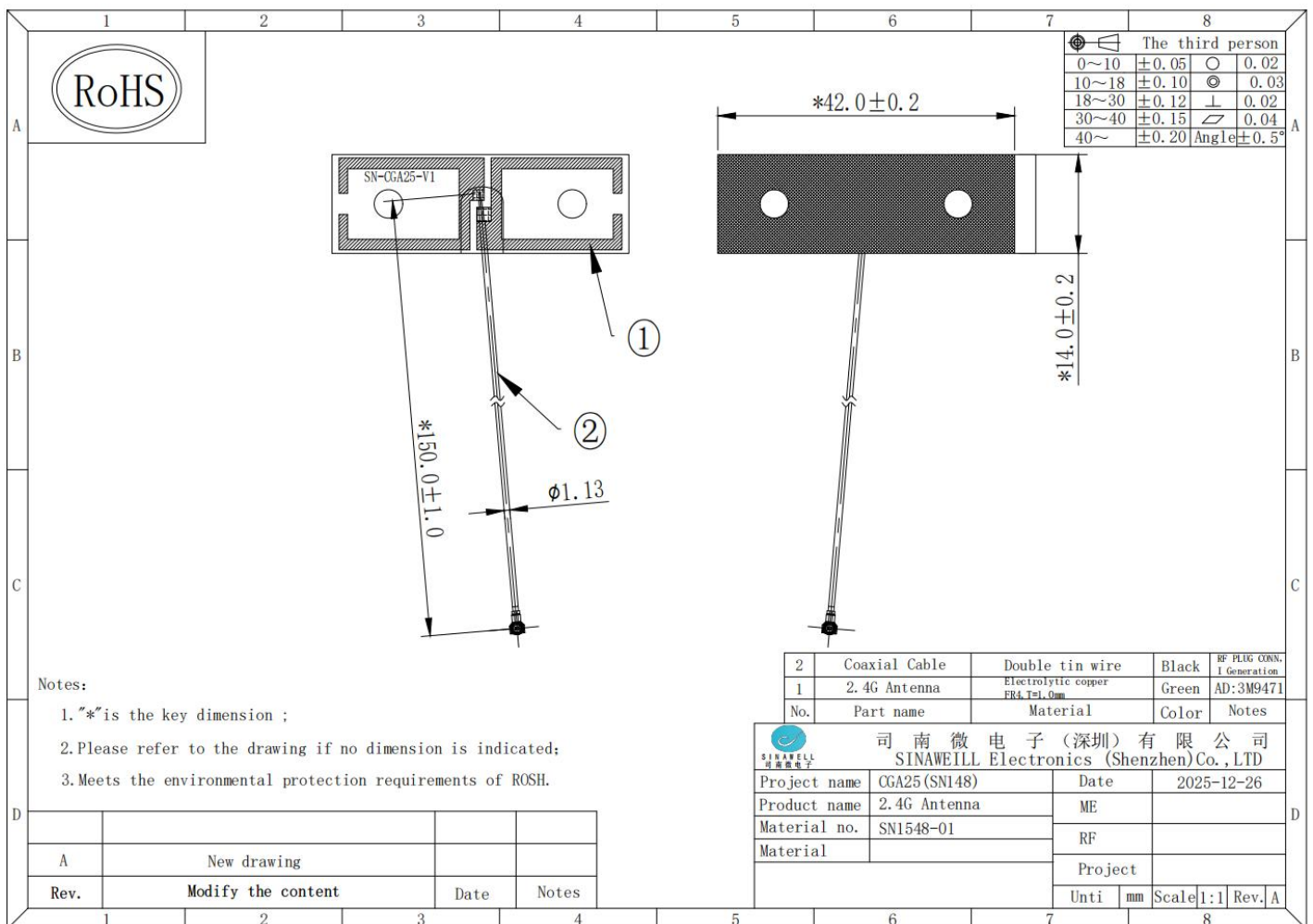
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4	0 Ω



3.3. Return Loss



Appendix 1: Structural Drawing



WIFI antenna passive test data

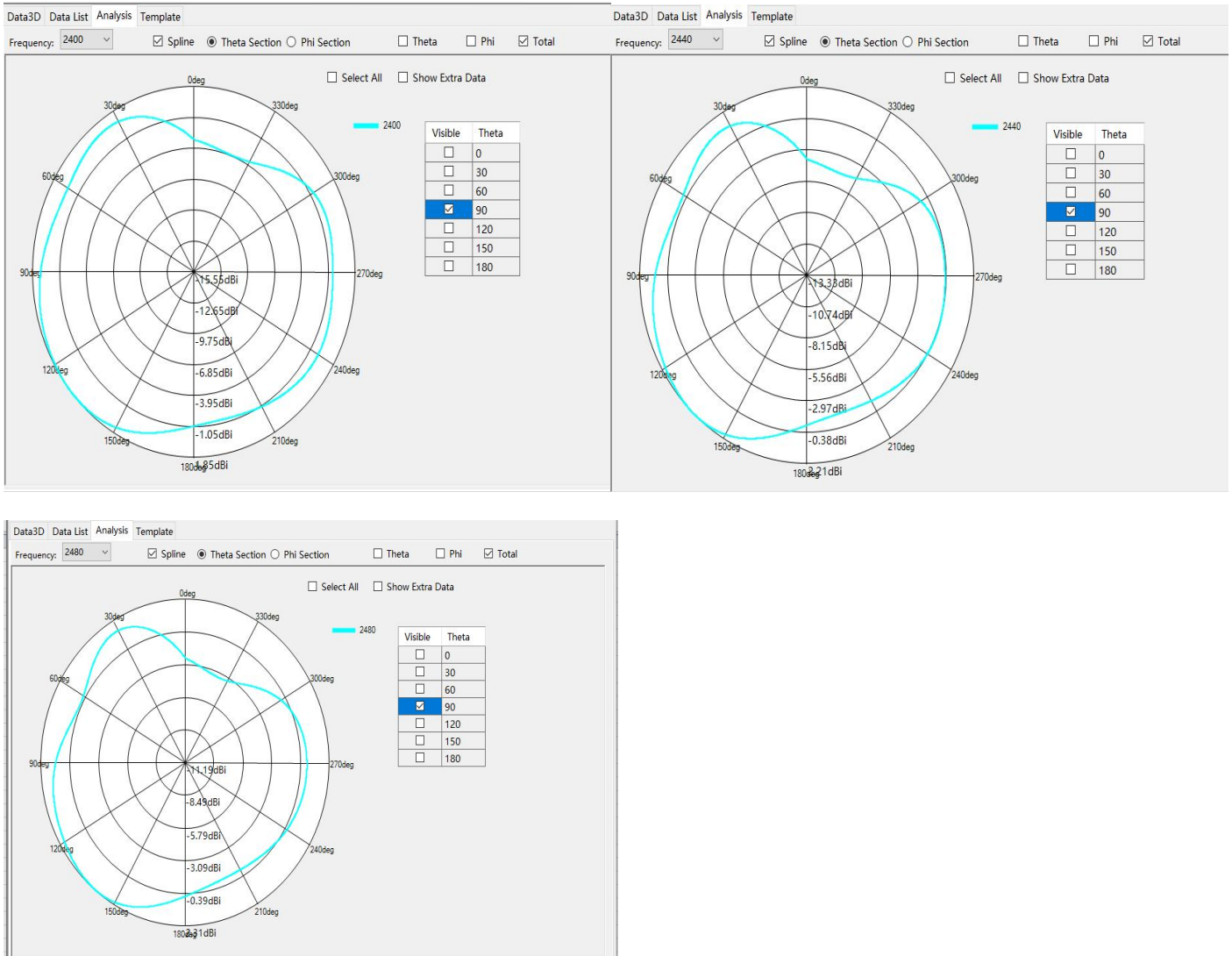
Freq	Effi	Gain	Effi
(MHz)	(dB)	(dBi)	(%)
2400	-1.75	1.79	66.81
2410	-1.67	1.92	68.02
2420	-1.87	1.76	65.05
2430	-1.88	1.86	64.8
2440	-1.83	1.94	65.58
2450	-1.75	2.1	66.87
2460	-1.79	2.14	66.2
2470	-1.79	2.19	66.2
2480	-1.87	2.13	65.06
2490	-1.91	2.05	64.42
2500	-1.99	1.86	63.22

WIFI antenna Active Test

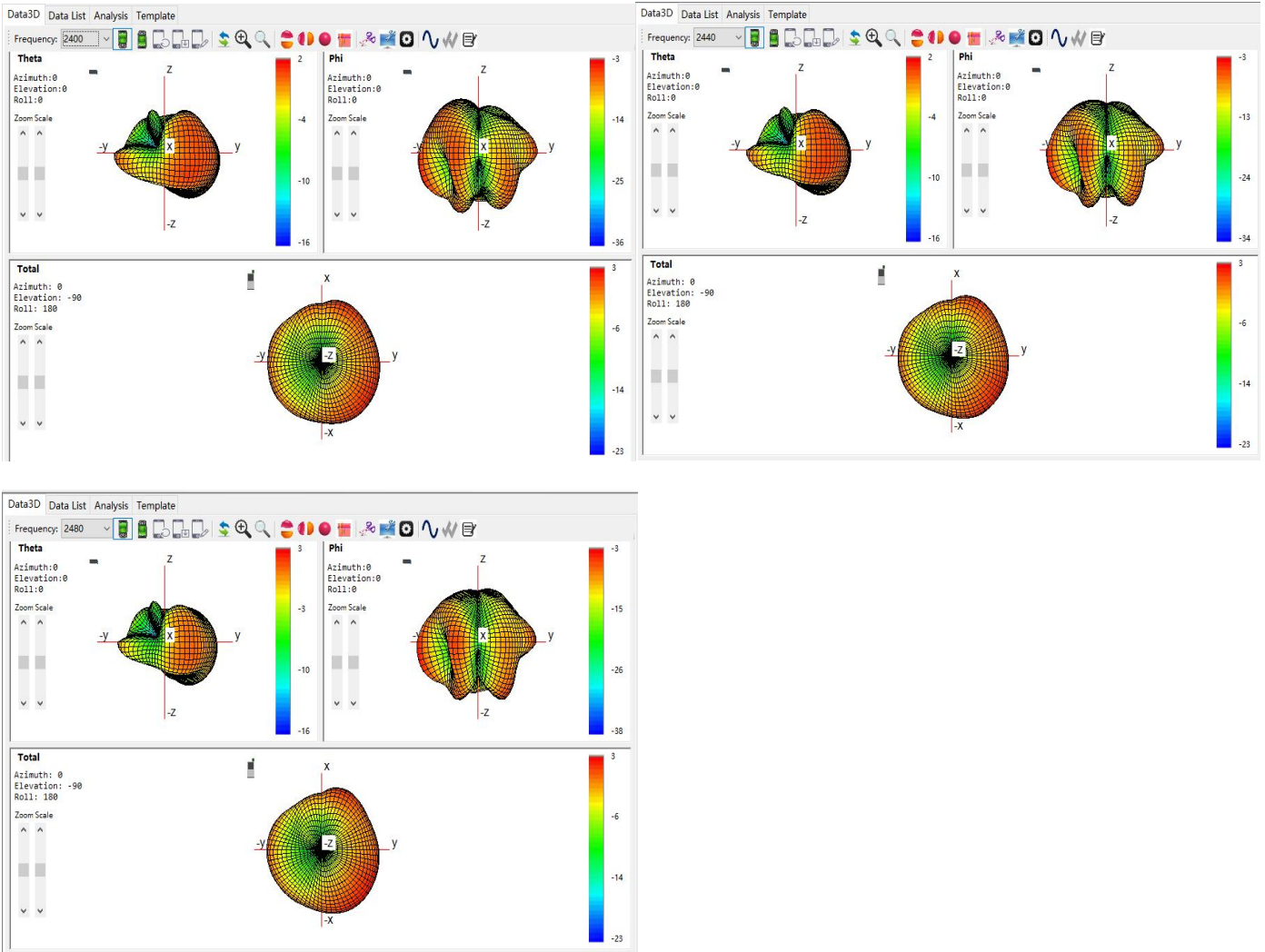
	Channel	TRP	TIS
11B-11M	1	13.66	-85.58
	3	13.89	-84.79
	6	13.34	-85.46
	9	13.09	-85.52
	11	12.99	-85.35
	13	13.06	-84.3

Passive Antenna Field Intensity Pattern

2D

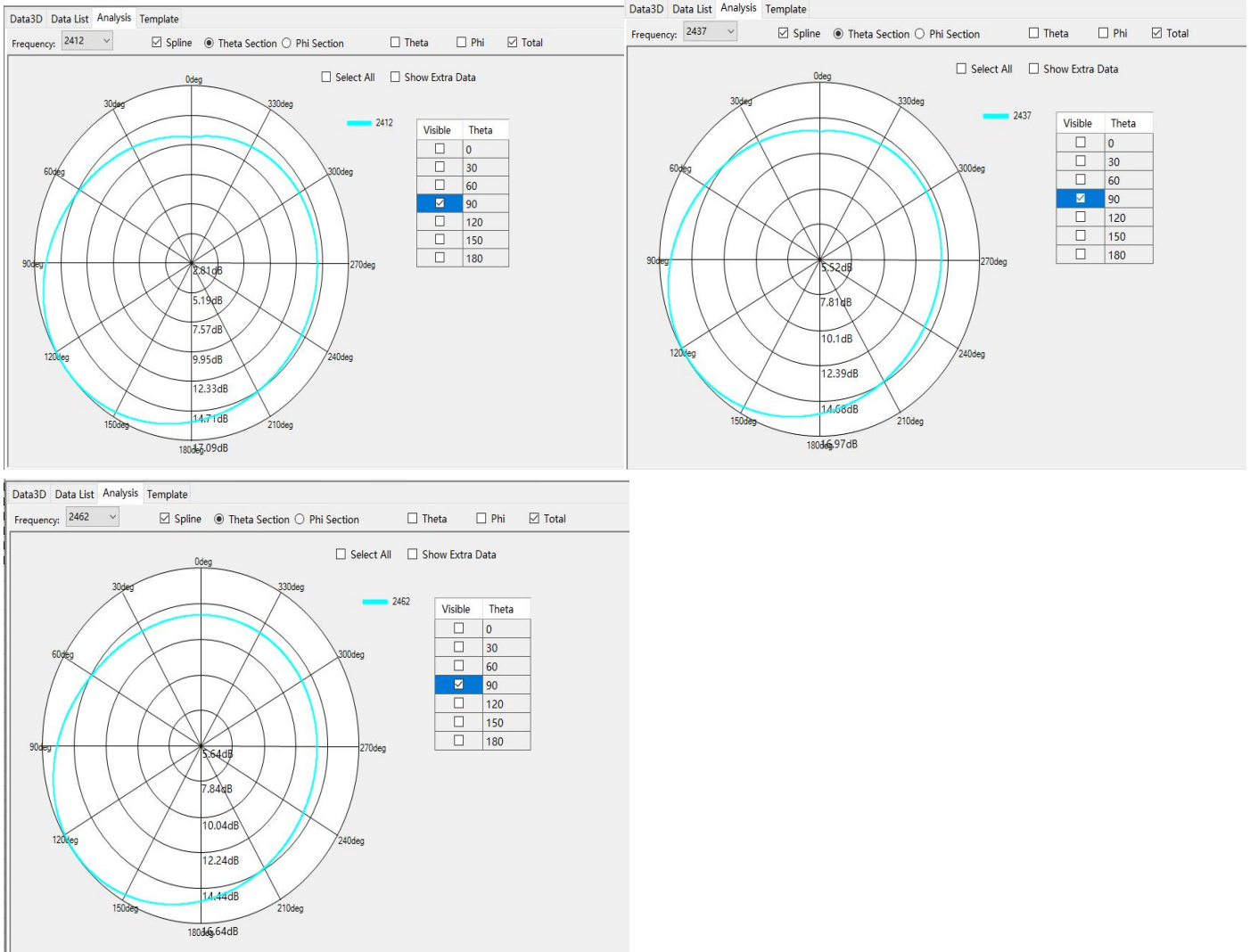


3D



Active Antenna Field Intensity Pattern

2D



3D

