



Antenna Datasheet

Product OC: Y0BMZ0CA9BA

Version: 0.1

Date: 2025-12-16

Product Name: WIFI Antenna

Key Features:

Frequency Range: 2400–2500 MHz, 5150–7125 MHz

Dimensions: 53.88 mm × 13.74 mm

Efficiency: Up to 51.2 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz, 5150–7125 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 3.0
Peak Gain	4.8 dBi

1.2. Mechanical & Environmental

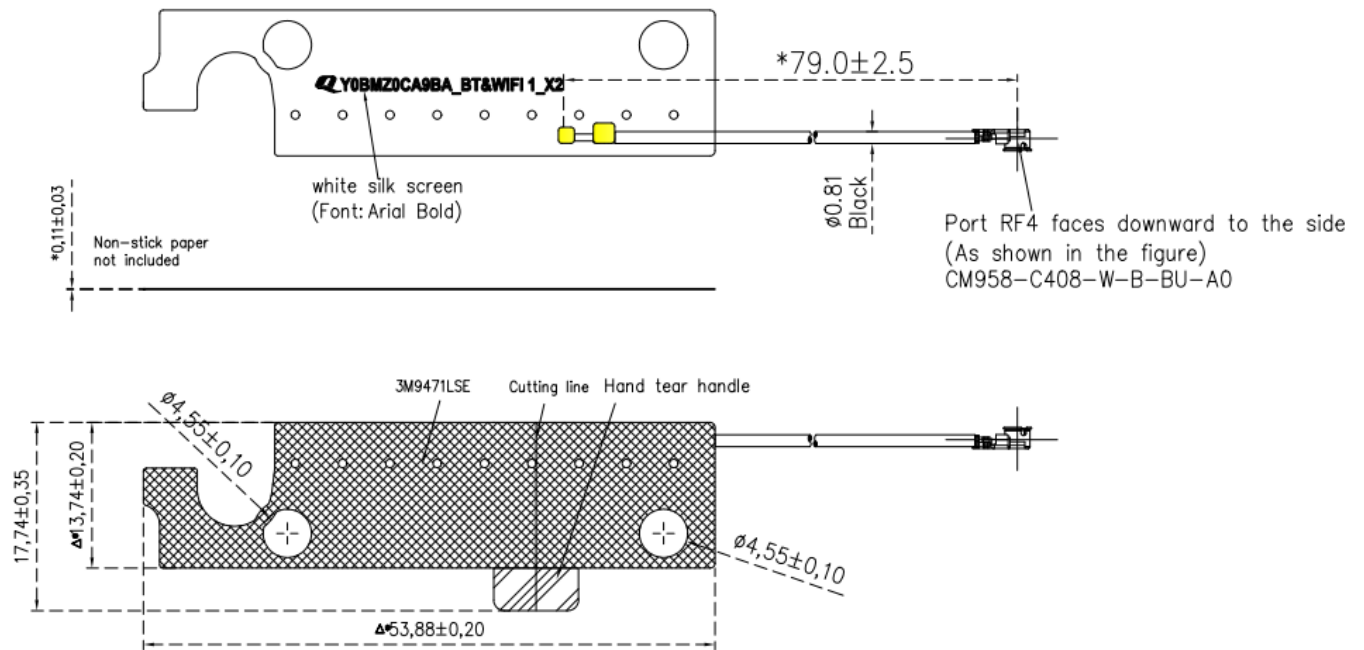
Mechanical	
Antenna Dimensions	53.88 mm × 13.74 mm
Material & Color	FPC & Black
Mounting Type	Φ 0.81 & Black & 79 mm
Weight	RF 4
Mounting Type	Adhesive
Weight	Typ. 0.28 g
Environmental	
Operation Temperature	-40 °C to +85 °C

Storage Temperature	-40 °C to +85 °C
RoHS	Yes

1.3. Antenna Assembly



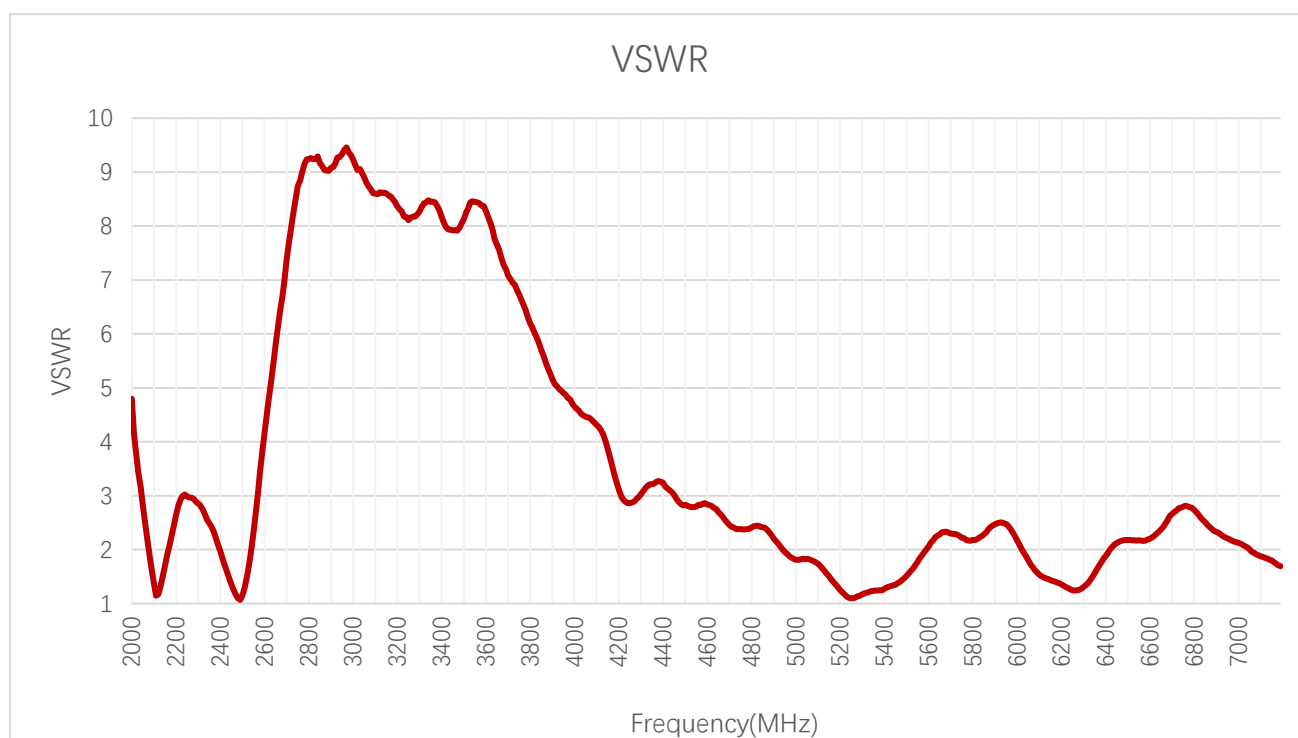
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

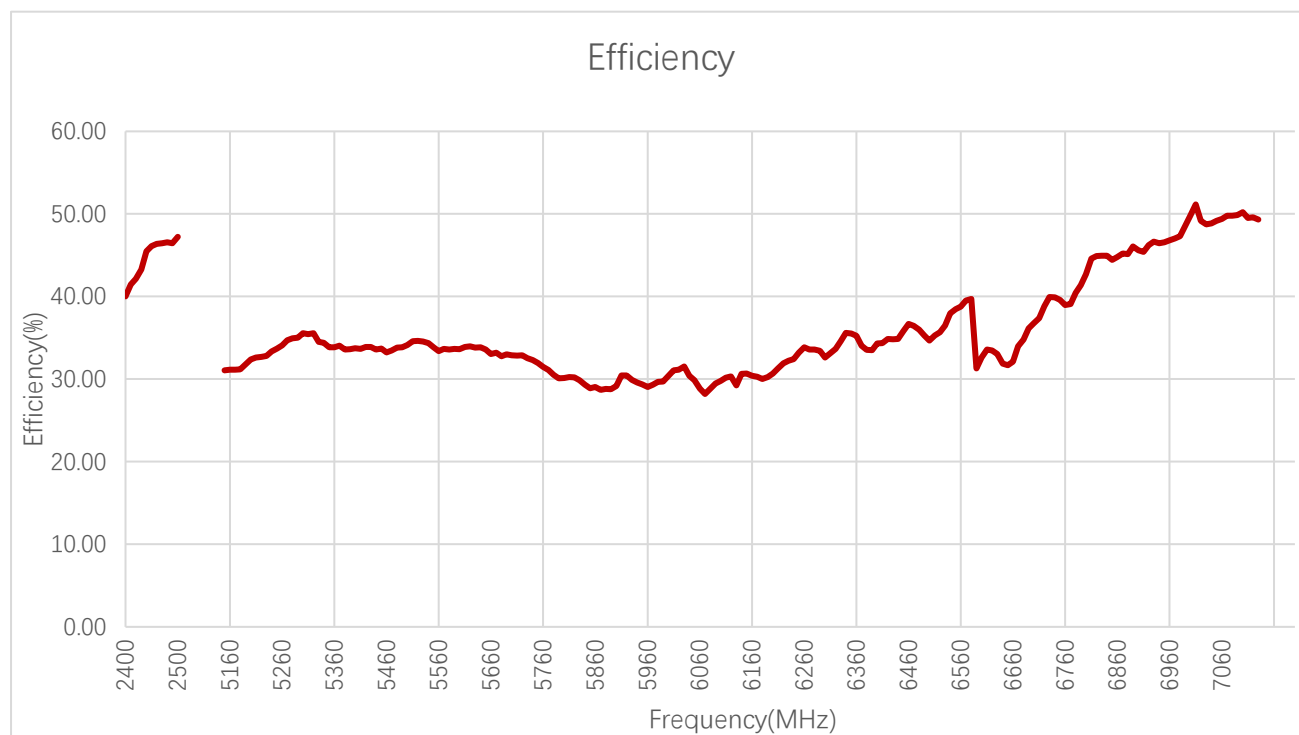


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	2.0	1.3	1.2	1.5	1.5	2.3	2.5	2.2	1.8

3.2. Radiation Performance Test

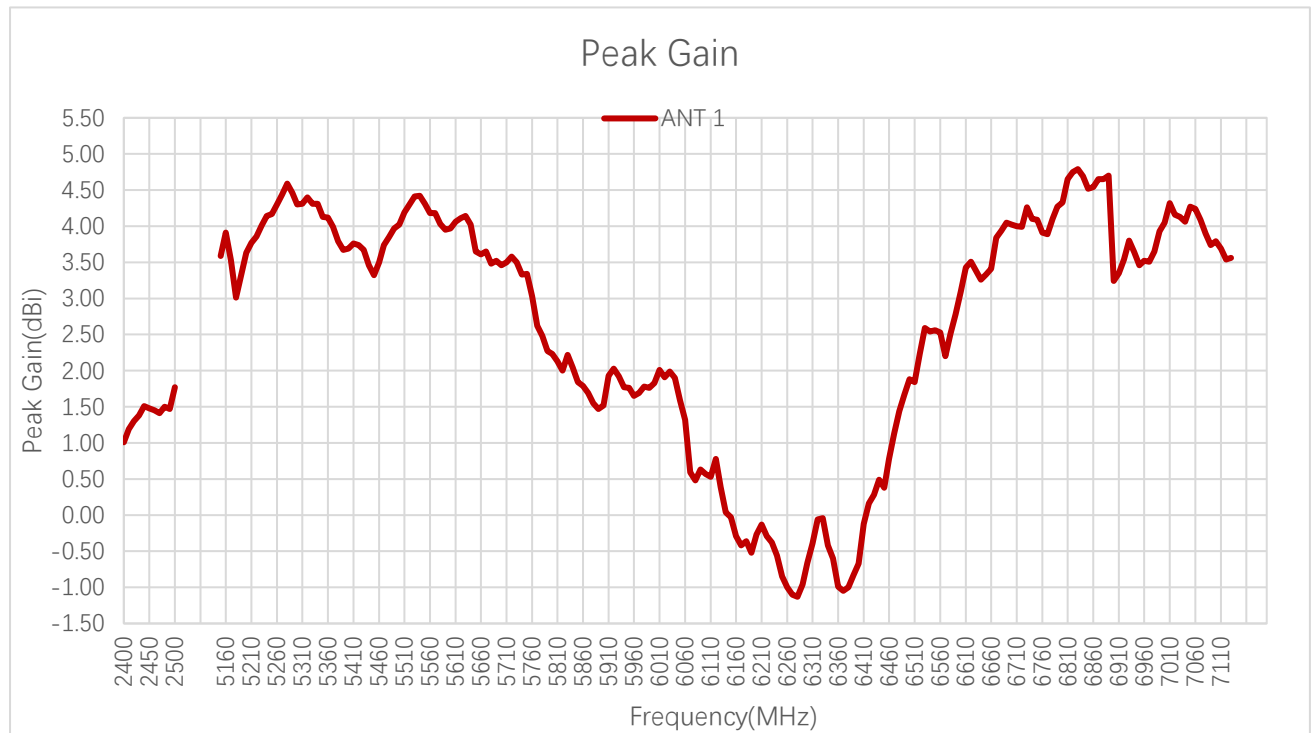
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	40.0	46.1	47.2	31.1	34.1	28.9	30.5	35.7	49.6

3.2.2. Peak Gain

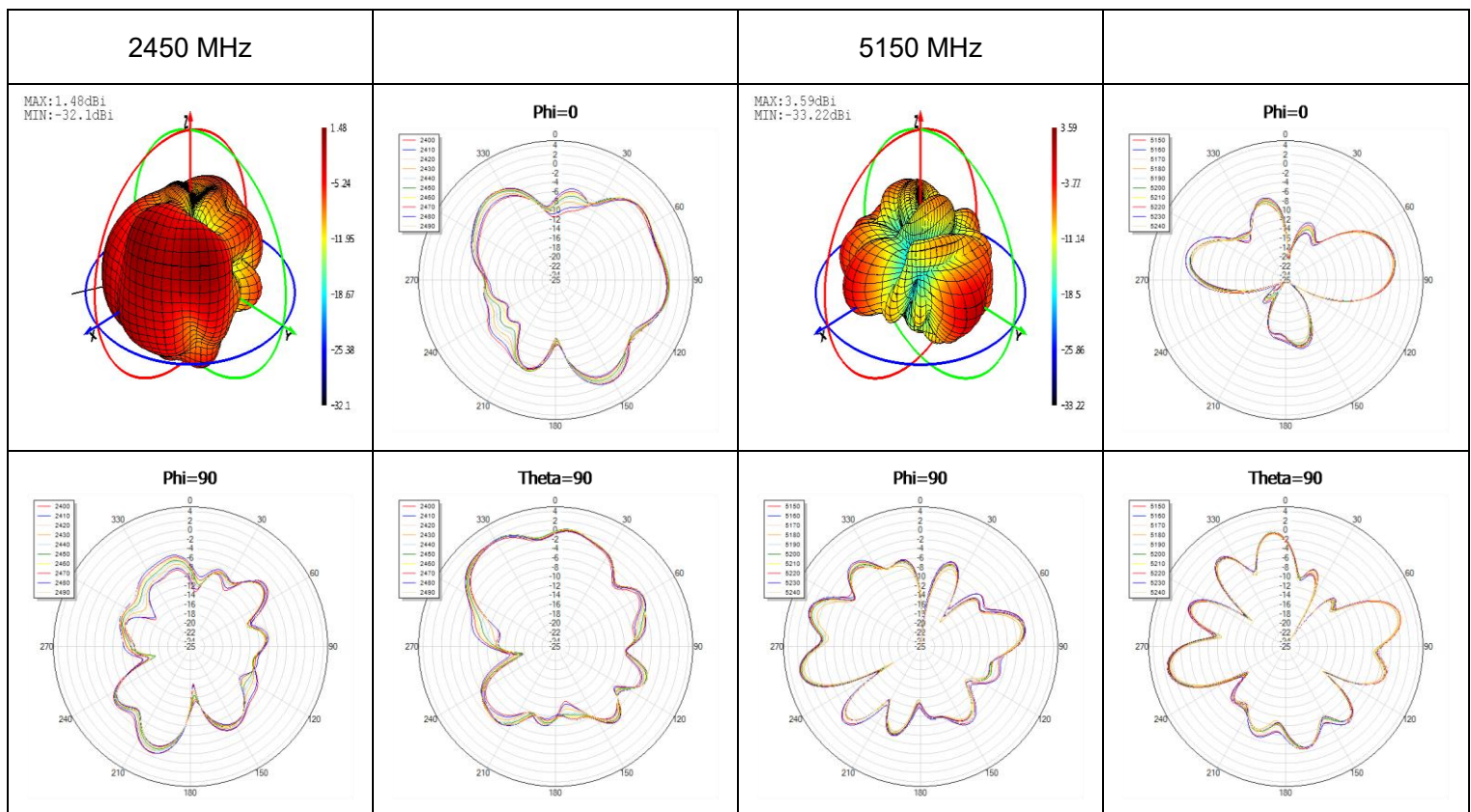


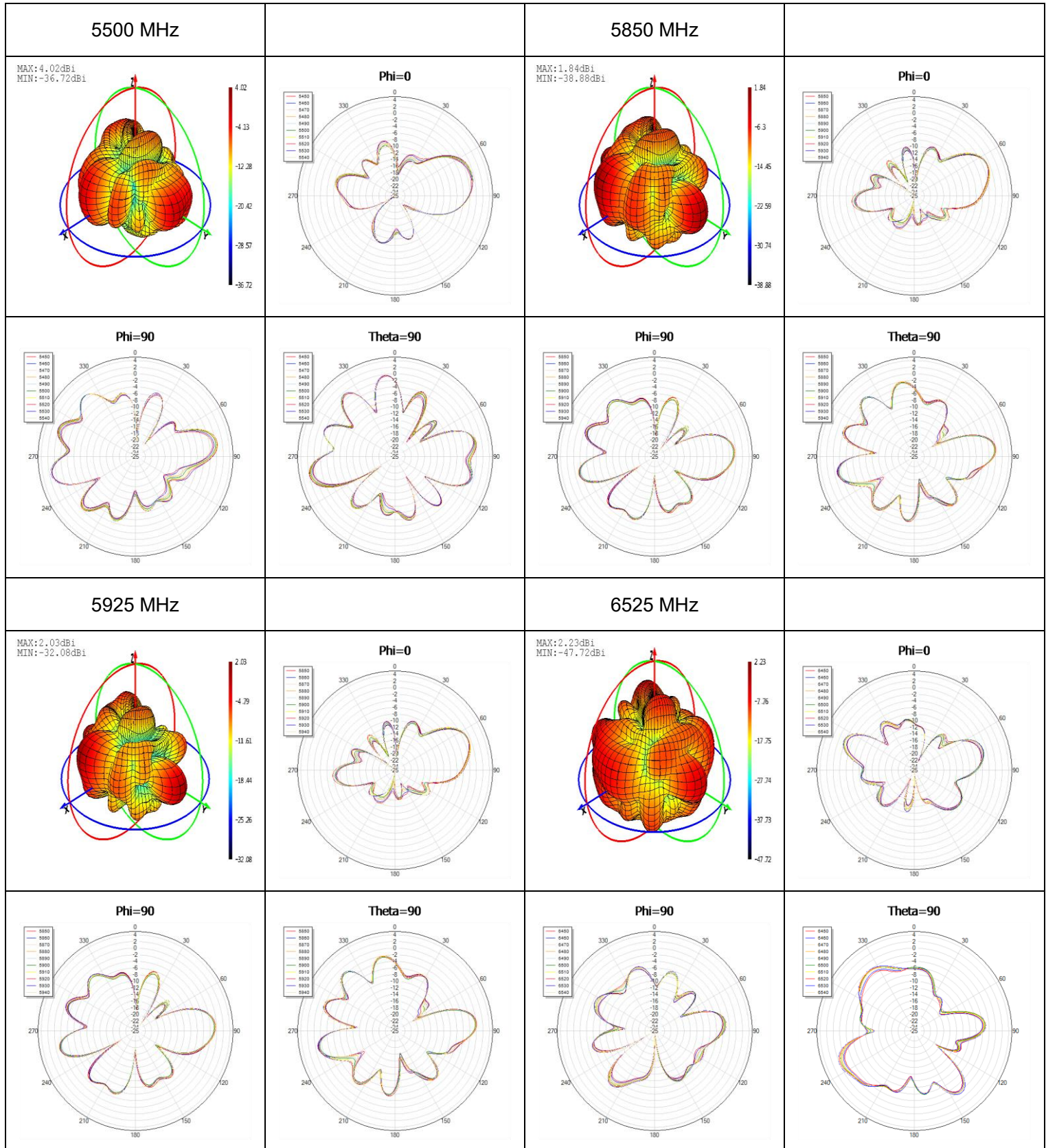
Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	1.01	1.48	1.77	3.59	4.02	1.84	2.03	2.23	3.54

3.2.3. 2D Radiation Pattern

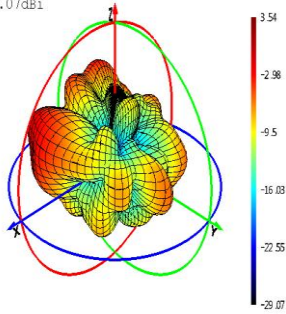
- Test Condition: Assembled in test device
- Test Chamber: SZ-S-1



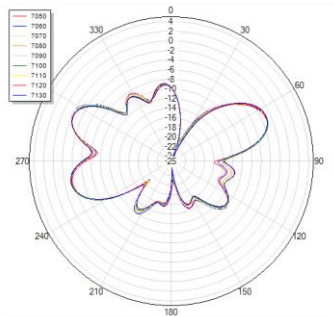


7125 MHz

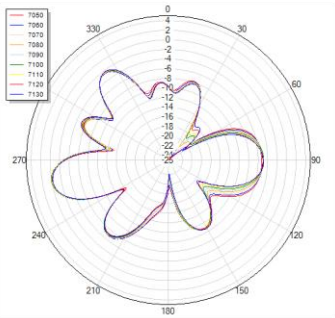
MAX:3.54dB1
MIN:-29.07dB1



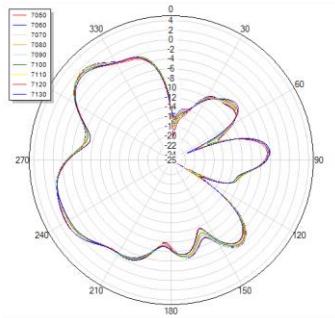
Phi=0



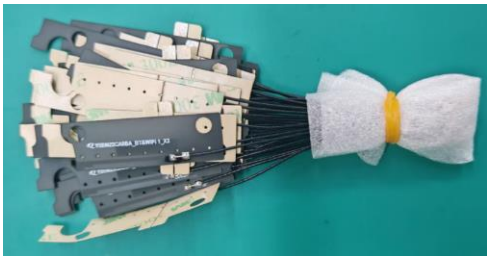
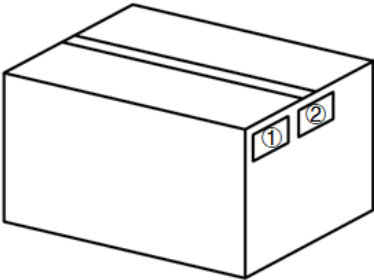
Phi=90

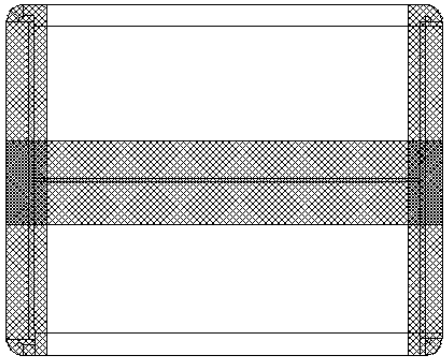


Theta=90



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		50 antenna products are wrapped with EPE foam (50 Antennas / Tie)
2		200 antenna products in a PE bag. (200 Antennas / PE Bag)
3		(30 PE Bags / Carton Box) (6000 Antennas / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L × W × H = 300 × 250 × 200 mm</u>
4		Position for Attaching Labels ① Carton Label ② Quality Label

5		Sealing Cartons H-shaped sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Revision History

Version	Date	Author	Note
-	2025-12-16	Lyney Lin/ Shea Li/ Riva Ren/ Rainey Liao	Creation of the document
0.1	2025-12-16	Lyney Lin/ Shea Li/ Riva Ren/ Rainey Liao	First official release



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