



Antenna Datasheet

Product OC: Y0BMZ0CA9AA

Version: 0.1

Date: 2025-12-16

Product Name: WIFI Antenna

Key Features:

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

Dimensions: 36.15 mm × 17.04 mm

Efficiency: Up to 53.0 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

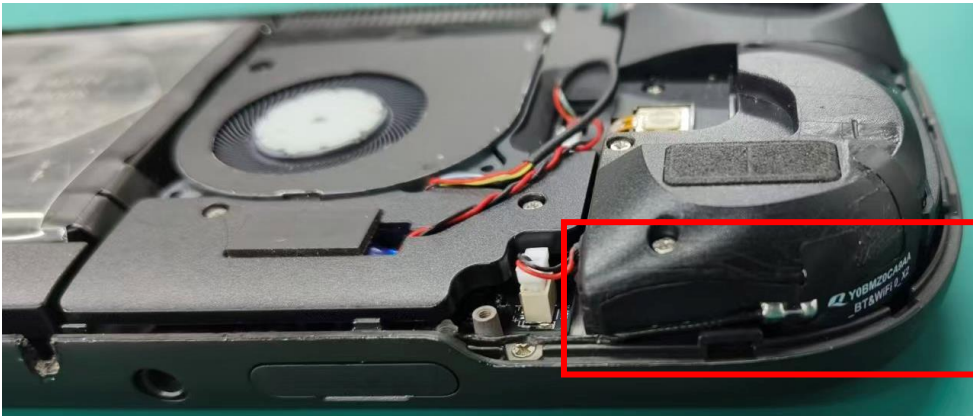
Electrical	
Frequency Range	2400–2500 MHz, 5150–7125 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 3.0
Peak Gain	3.7 dBi

1.2. Mechanical & Environmental

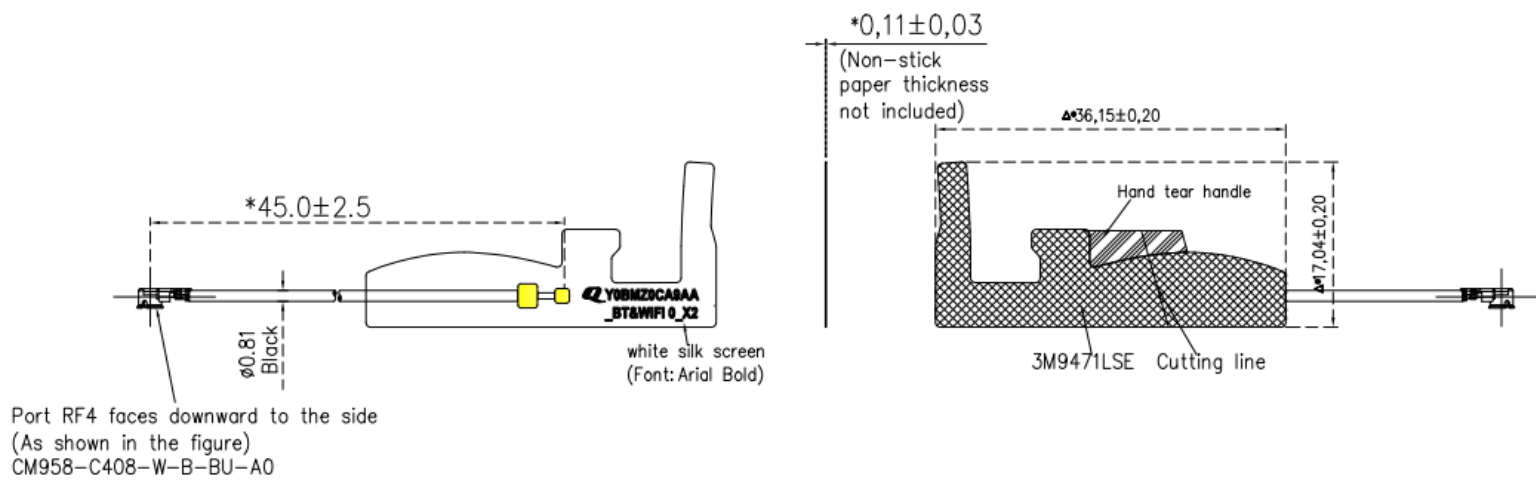
Mechanical	
Antenna Dimensions	36.15 mm × 17.04 mm
Material & Color	FPC & Black
Mounting Type	Φ 0.81 & Black & 45 mm
Weight	RF 4
Mounting Type	Adhesive
Weight	Typ. 0.20 g
Environmental	
Operation Temperature	-40 °C to +85 °C

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

1.3. Antenna Assembly



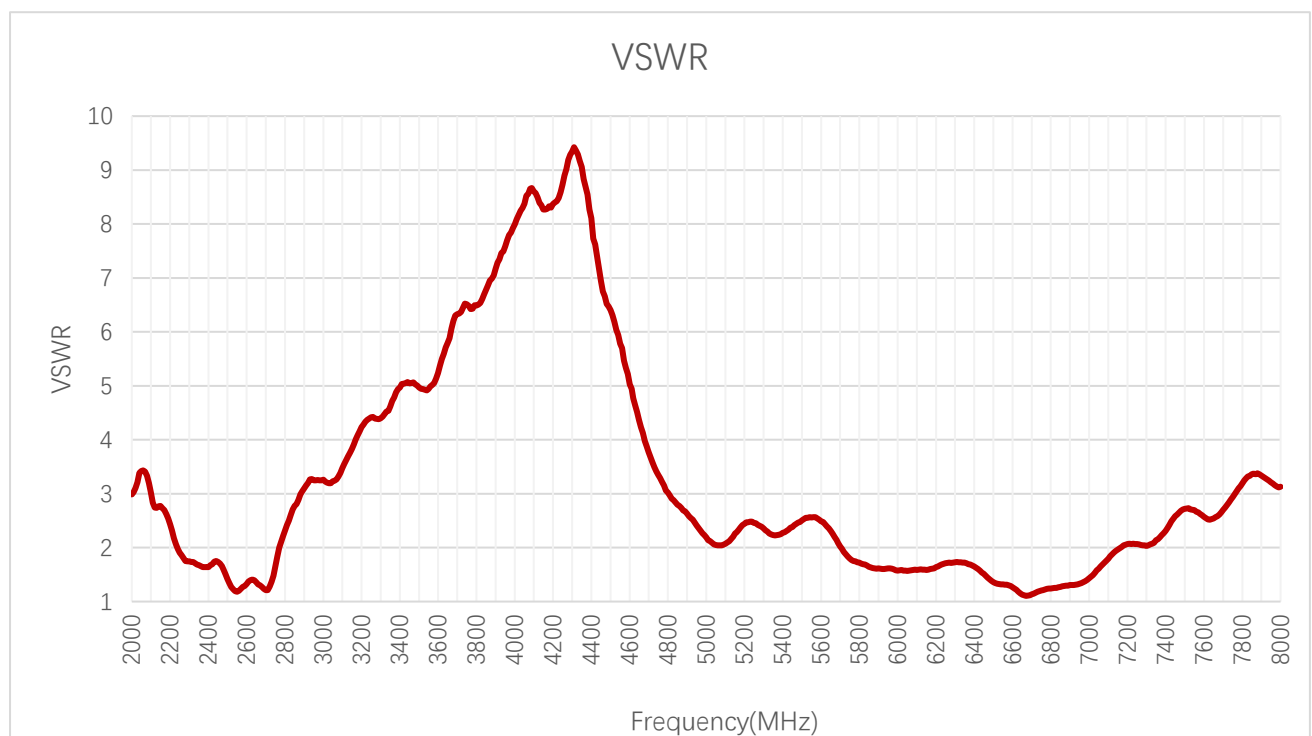
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

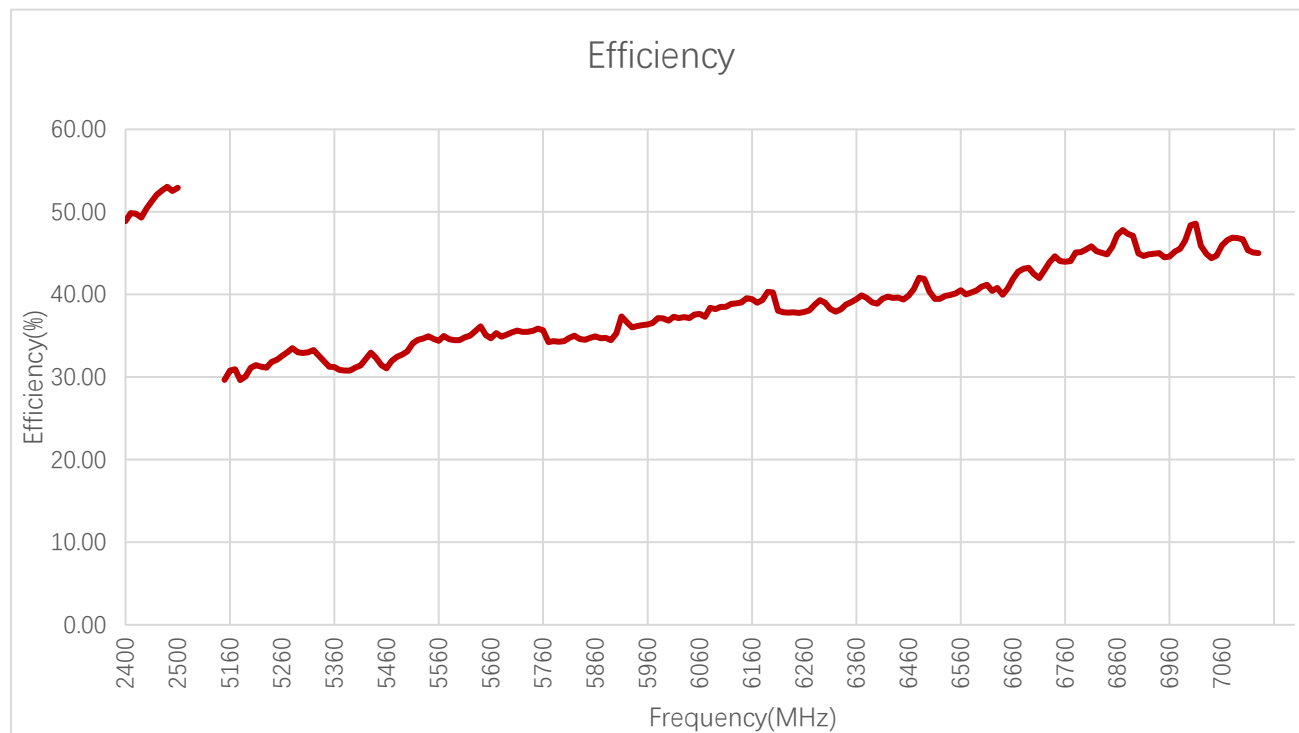


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	1.6	1.7	1.4	2.3	2.5	1.6	1.6	1.3	1.9

3.2. Radiation Performance Test

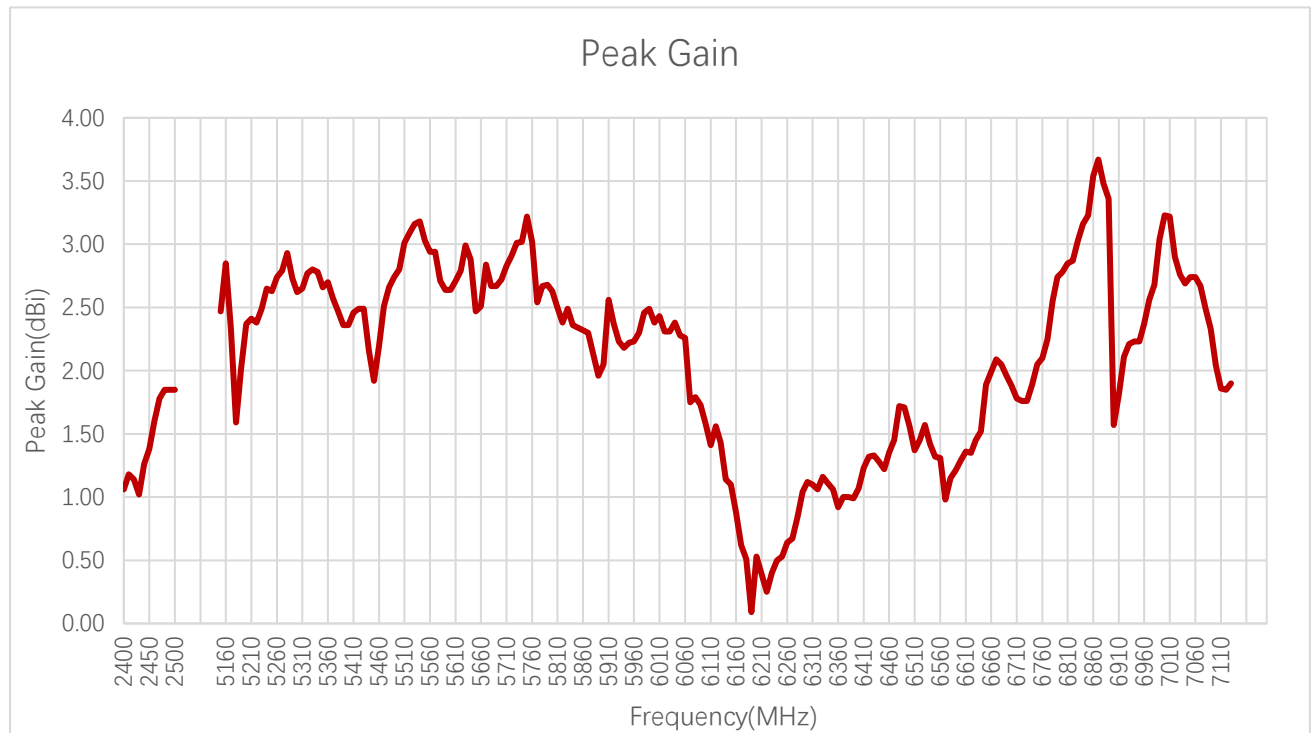
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	48.9	51.3	52.9	29.7	33.1	34.7	36.7	39.5	45.1

3.2.2. Peak Gain

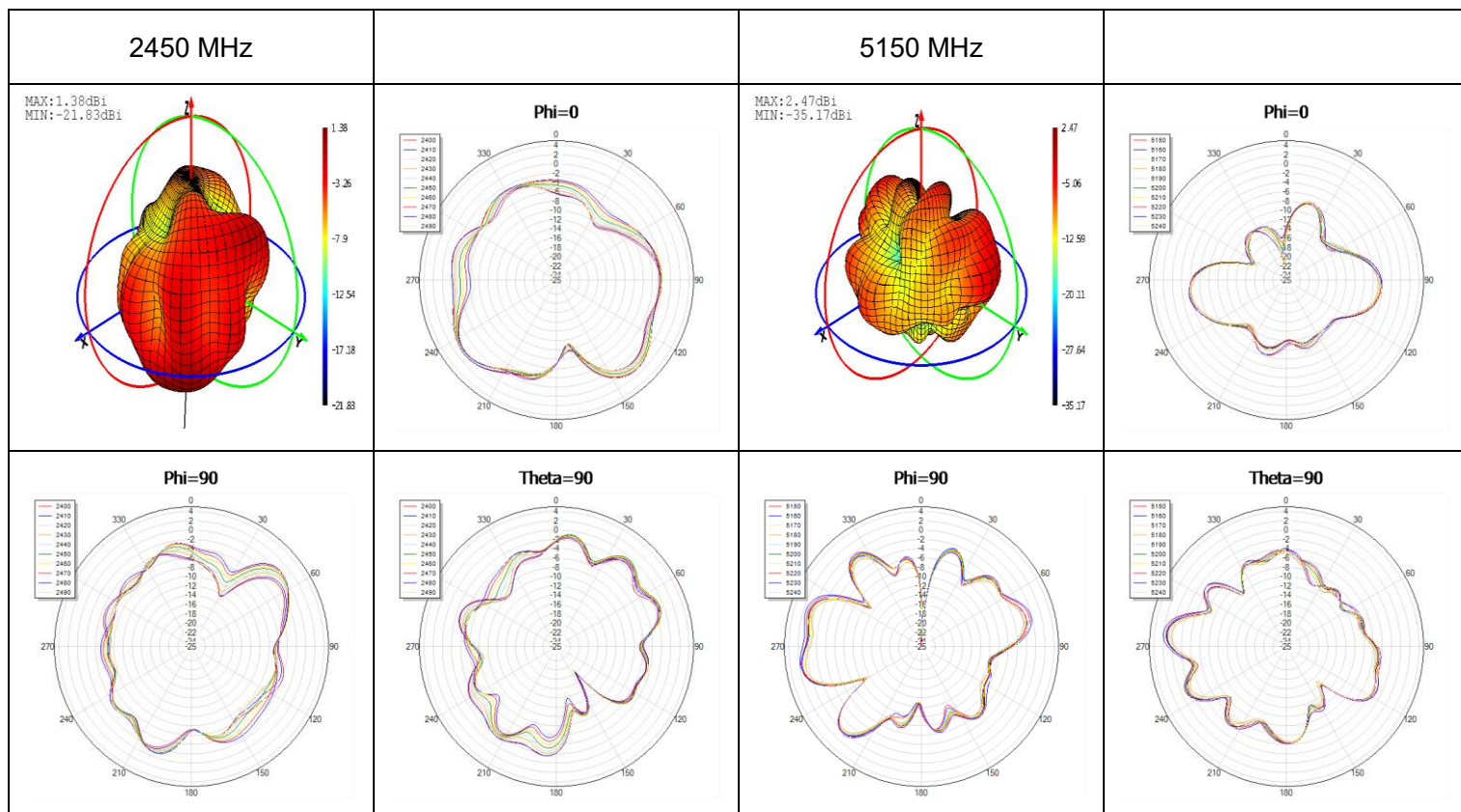


Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	1.06	1.38	1.85	2.47	2.8	2.34	2.37	1.45	1.85

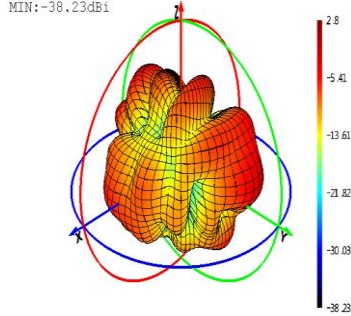
3.2.3. 2D Radiation Pattern

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

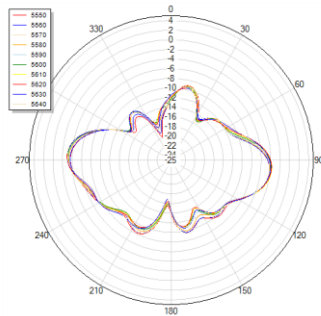


5500 MHz

MAX: 2.8dBi
MIN: -38.23dBi

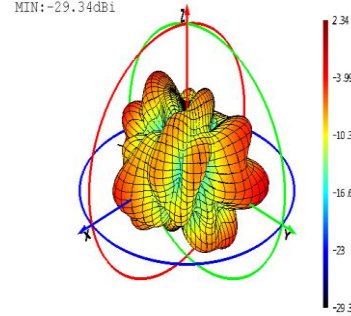


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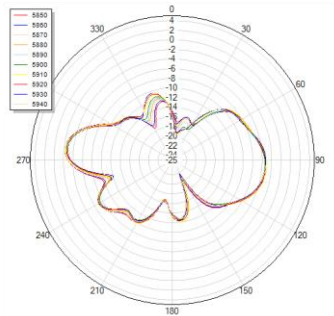


5850 MHz

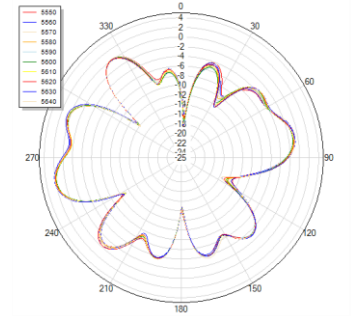
MAX: 2.34dBi
MIN: -29.34dBi



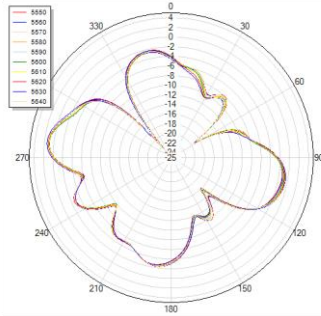
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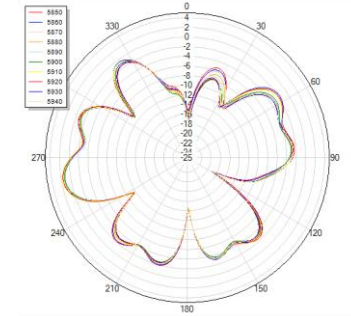
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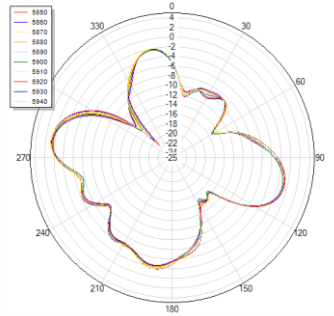
Theta=90



Phi=90

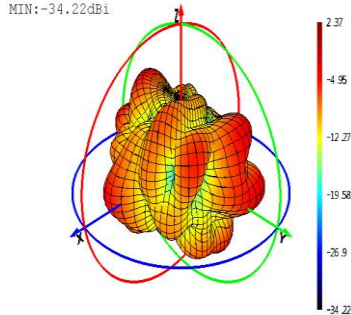


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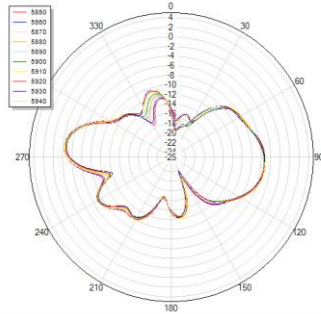


5925 MHz

MAX: 2.37dBi
MIN: -34.22dBi

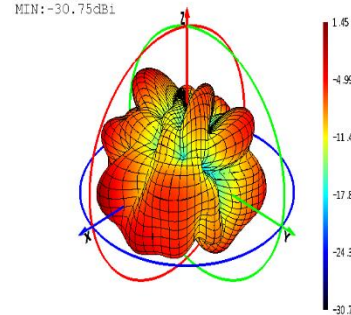


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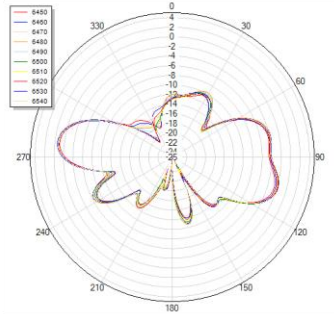


6525 MHz

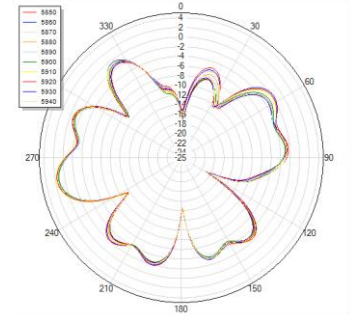
MAX: 1.45dBi
MIN: -30.75dBi



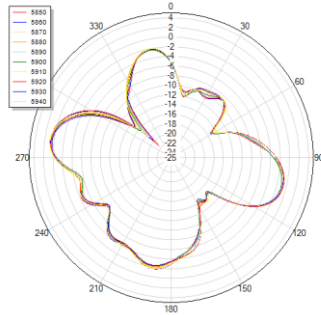
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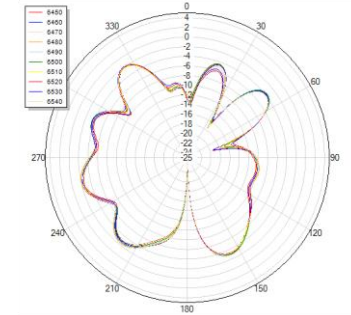
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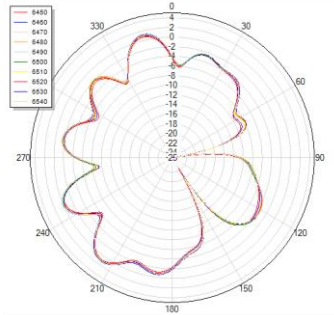
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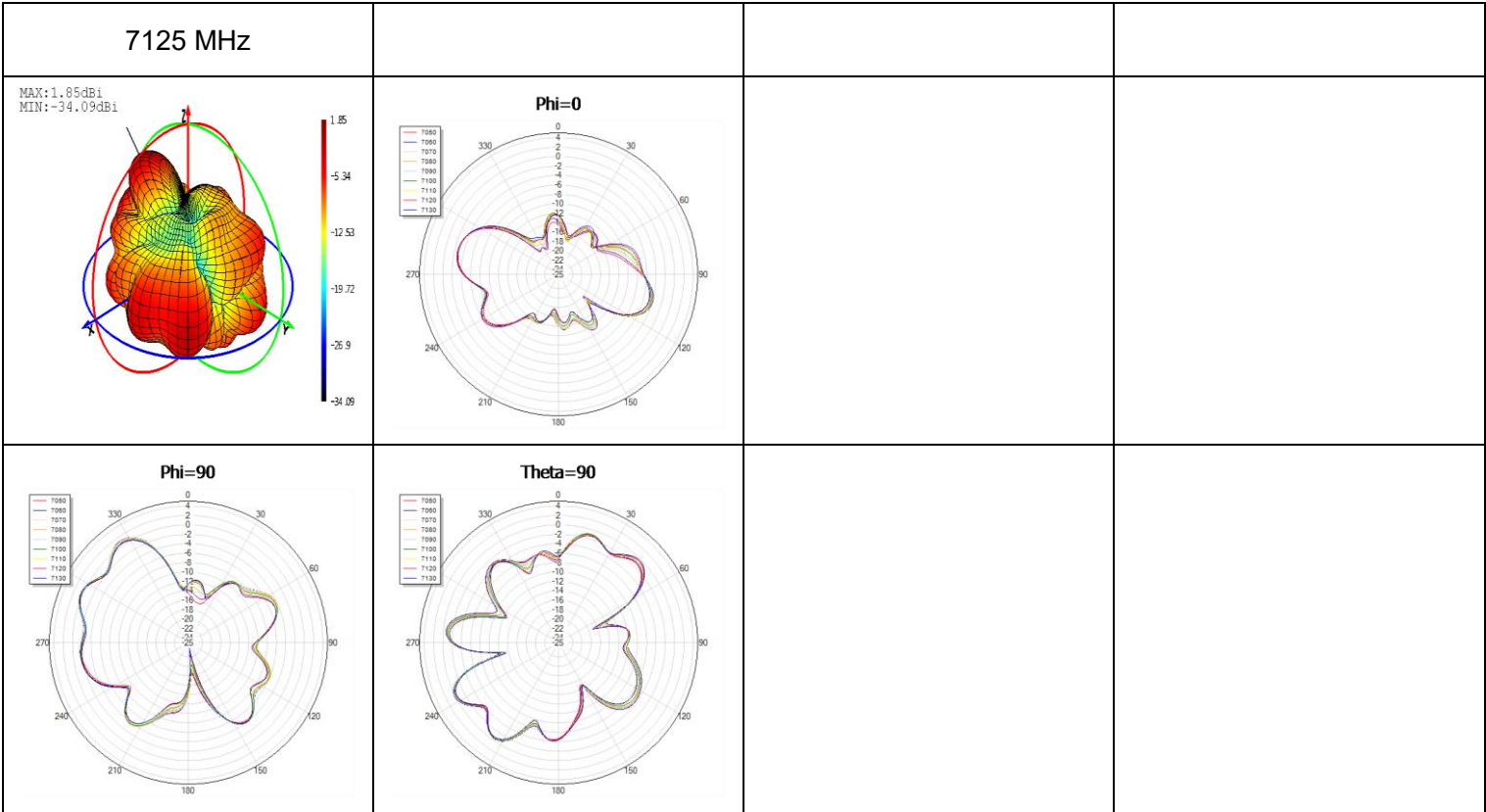


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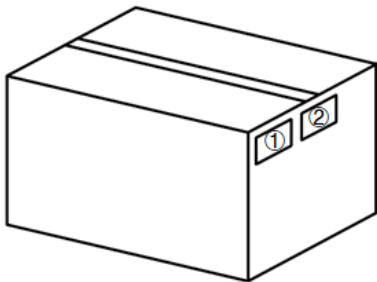


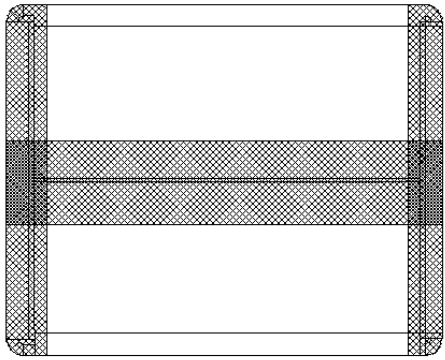
Theta=90





4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		50 antenna products in a small PE bag. (50 Antennas / Small PE Bag)
2		200 antenna products in a big PE bag. (200 Antennas / Big PE Bag)
3		(32 Big PE Bags / Carton Box) (6400 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 = 405 × 293 × 185 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:

Quectel Wireless Solutions Co., Ltd.

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

Tel: +86 21 5108 6236

Email: info@quectel.com

Or our local offices. For more information, please visit:

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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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