



Antenna Datasheet

Product OC: YEBT013W7AM-CN

Version: 1.0

Date: 2026-04-27

Status: Released

Product Name: Wi-Fi Terminal Mount Fiberglass Dipole External Antenna

Key Features:

Frequency Band:

Wi-Fi: 2400–2500 MHz, 5150–5850 MHz;

Dimensions: Φ 22.8 mm $\times$ 300 mm

Efficiency: Up to 70 %

RoHS Compliant

IP65

Overview

YEBT013W7AM-CN is a Wi-Fi Fiberglass antenna measuring Φ 22.8 mm $\times$ 300 mm. This ultra-wide-band antenna provides broad coverage from 2400–2500 MHz, 5150–5850 MHz. The antenna is terminated with N Male connector. This low profile, terminal mount omni-directional antenna, ideal for applications where the antenna is required to be discrete, is easy to install with maximum durability assured thanks to its TPE enclosure. It is compatible with Quectel's WIFI Series modules.

It allows constant and reliable transmission and reception due to its omni-directional gain across all frequency bands. YEBT013W7AM-CN is designed as a monopole antenna, which needs to be mounted on a ground plane to offer high efficiency in all working bands. It is a perfect antenna product for customers that desire highest performance. This high-efficiency, high-gain omni-directional antenna is ideally suited for gateways and routers, IoT Sensors, public safety and security, point of sales terminals, smart home automation, robotics / autonomous.

- **Typical applications include:**

- ✓ Gateways and Routers
- ✓ IoT Sensors
- ✓ Public Safety and Security
- ✓ Point of Sales Terminals
- ✓ Smart Home Automation
- ✓ Robotics / Autonomous

Quectel provides comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs. We have regional R & D centers to offer quick response to meet your requirements. Please contact our sales & FAEs if you have any requests.

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1 Specification

Test Condition: Free Space

1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional

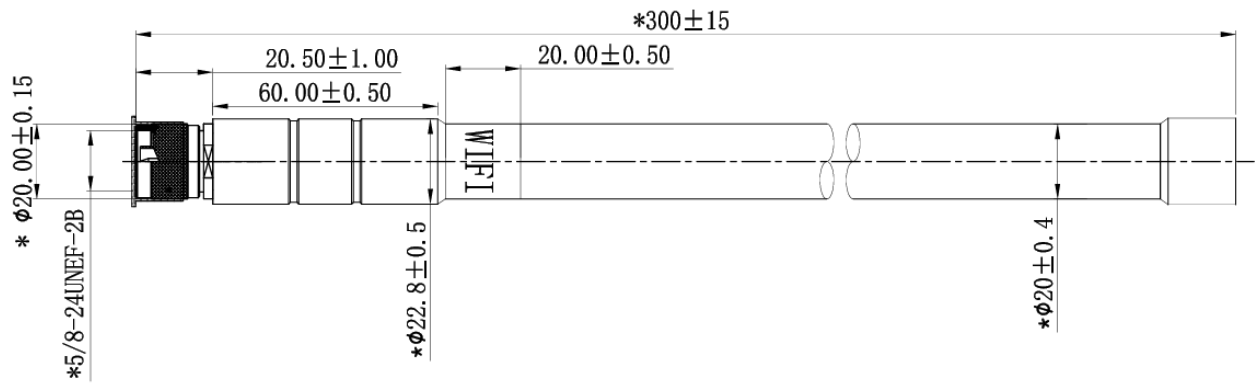
1.1.1. Wi-Fi

Specification	Band	Band	Wi-Fi 2G	Wi-Fi 5G	Wi-Fi 6G
		Freq. (MHz)	2400–2500	5150–5850	5925–7125
Max. VSWR			1.5	2.3	-
Max. Return Loss (dB)			-14.3	-8.0	-
AVG Eff. (%)			68.1	42.3	-
AVG AVG Gain (dB)			-1.7	-3.7	-
Max. Peak Gain (dBi)			2.8 (2440)	5.2 (5850)	-
VSWR		≤ 2.3			
Return Loss		≤ -8.0 dB			
Peak Gain		≤ 5.2 dBi			

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	Φ 22.8 mm × 300 mm
Casing Material & Color	FRP & Gray
Connector Type	N Male
Mounting Type	Terminal
Weight	Typ. 118 g
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Ingress Protection (IP) Rating	IP65
RoHS Compliant	Yes

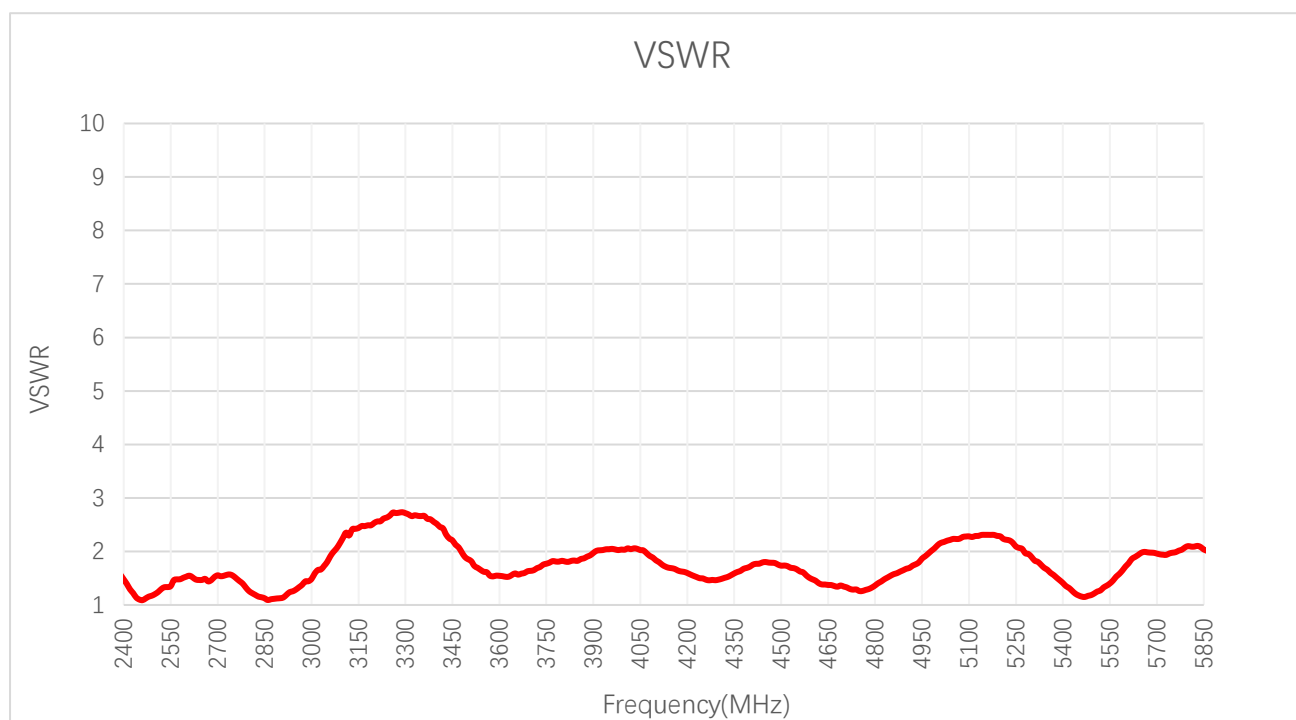
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

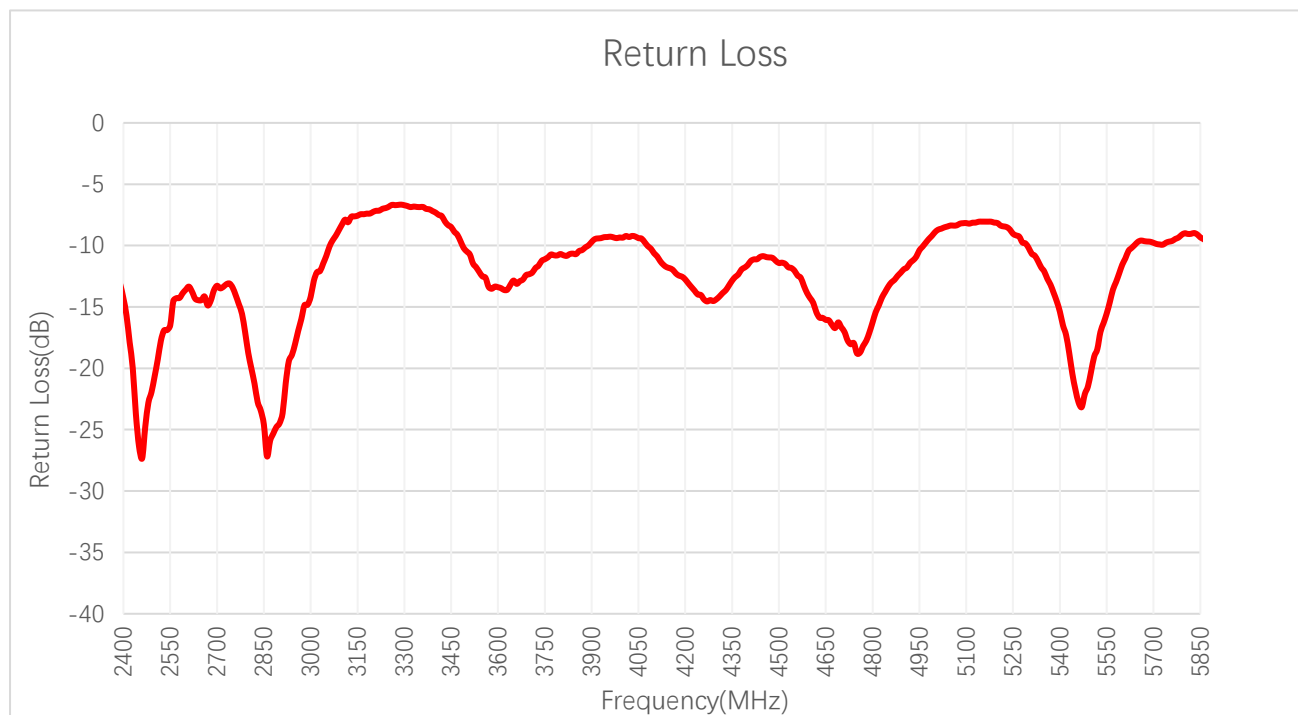
3.1.1. VSWR



VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	1.5	1.1	1.2	2.3	1.2	2.0	-	-	-	-

3.1.2. Return Loss

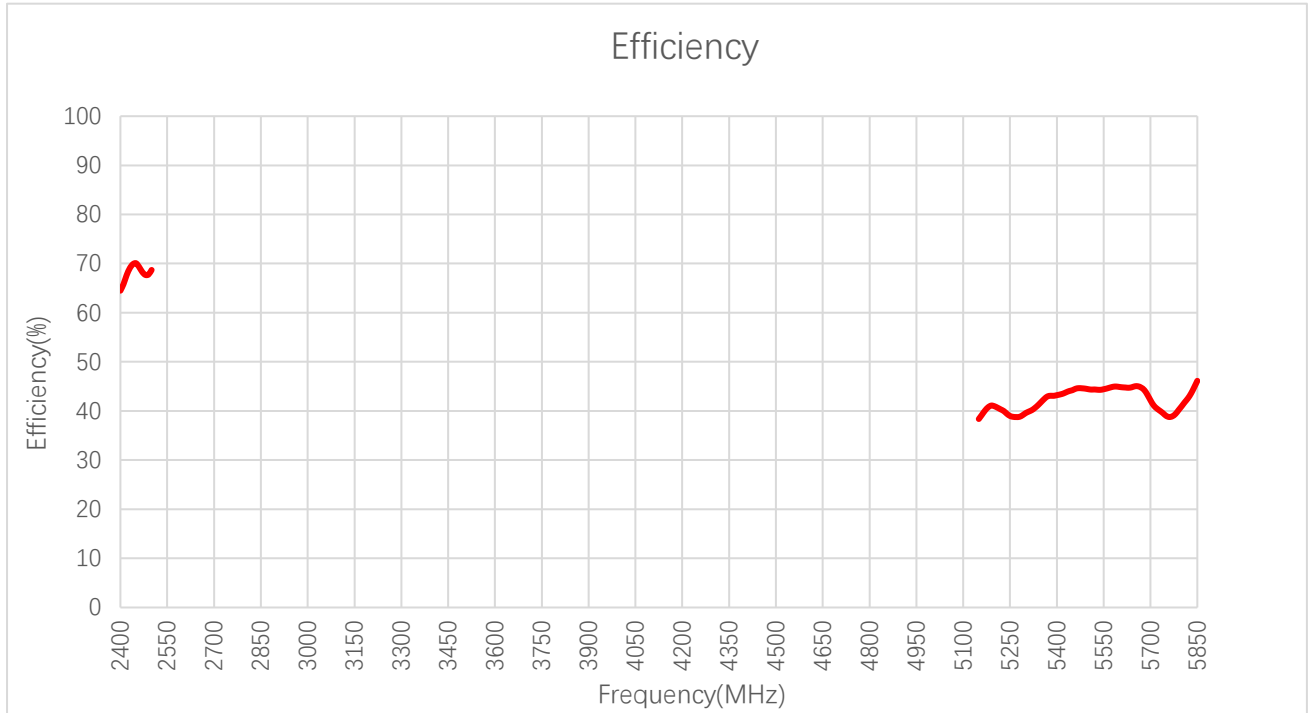


Return Loss (dB)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Return Loss (dB)	-14.3	-26.4	-20.7	-8.0	-20.3	-9.3	-	-	-	-

3.2. Radiation Performance Test

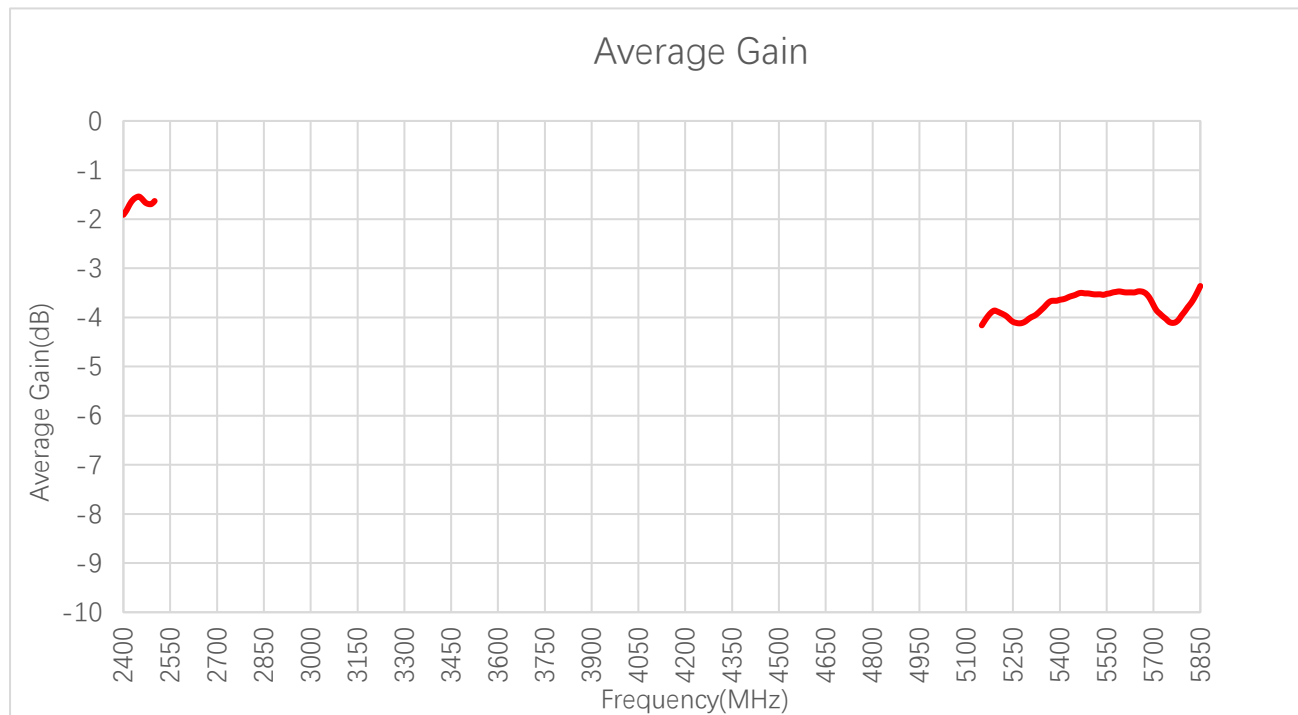
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	64.5	70.1	68.7	38.4	44.4	46.1	-	-	-	-

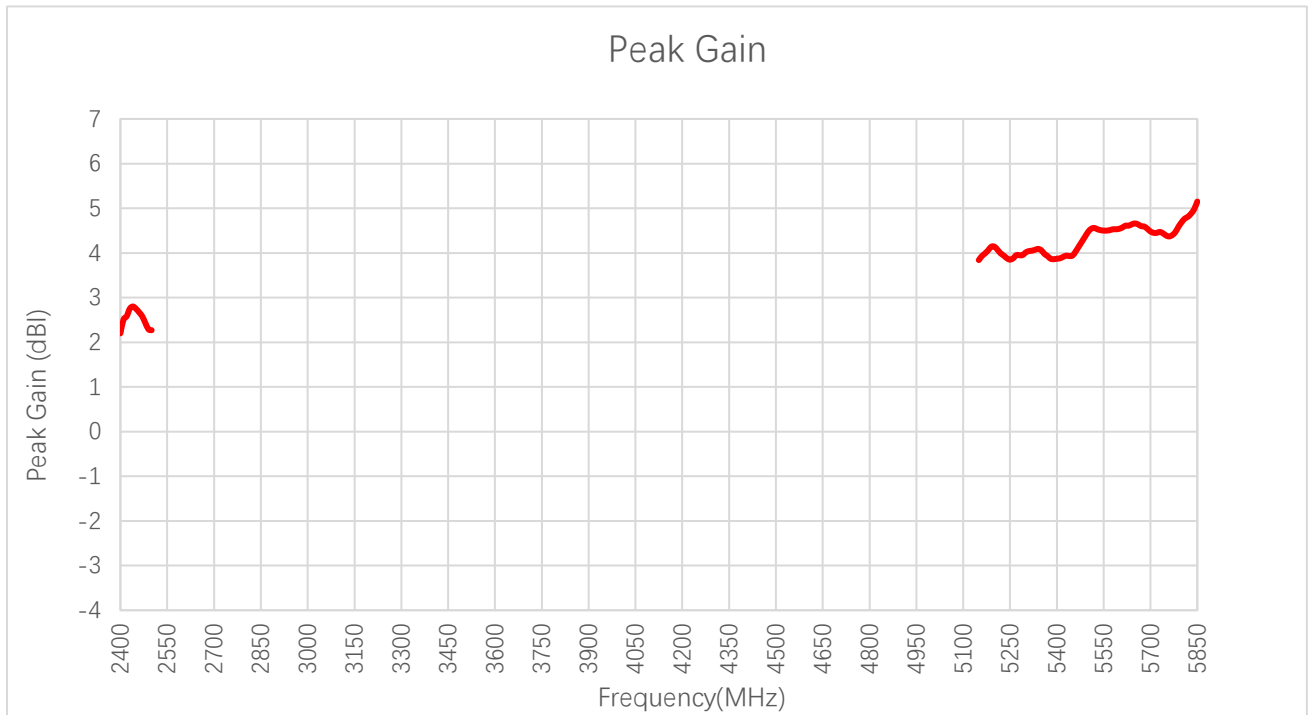
3.2.2. Average Gain



Average Gain (dB)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Average Gain (dB)	-1.9	-1.5	-1.6	-4.2	-3.5	-3.4	-	-	-	-

3.2.3. Peak Gain



Peak Gain (dBi)

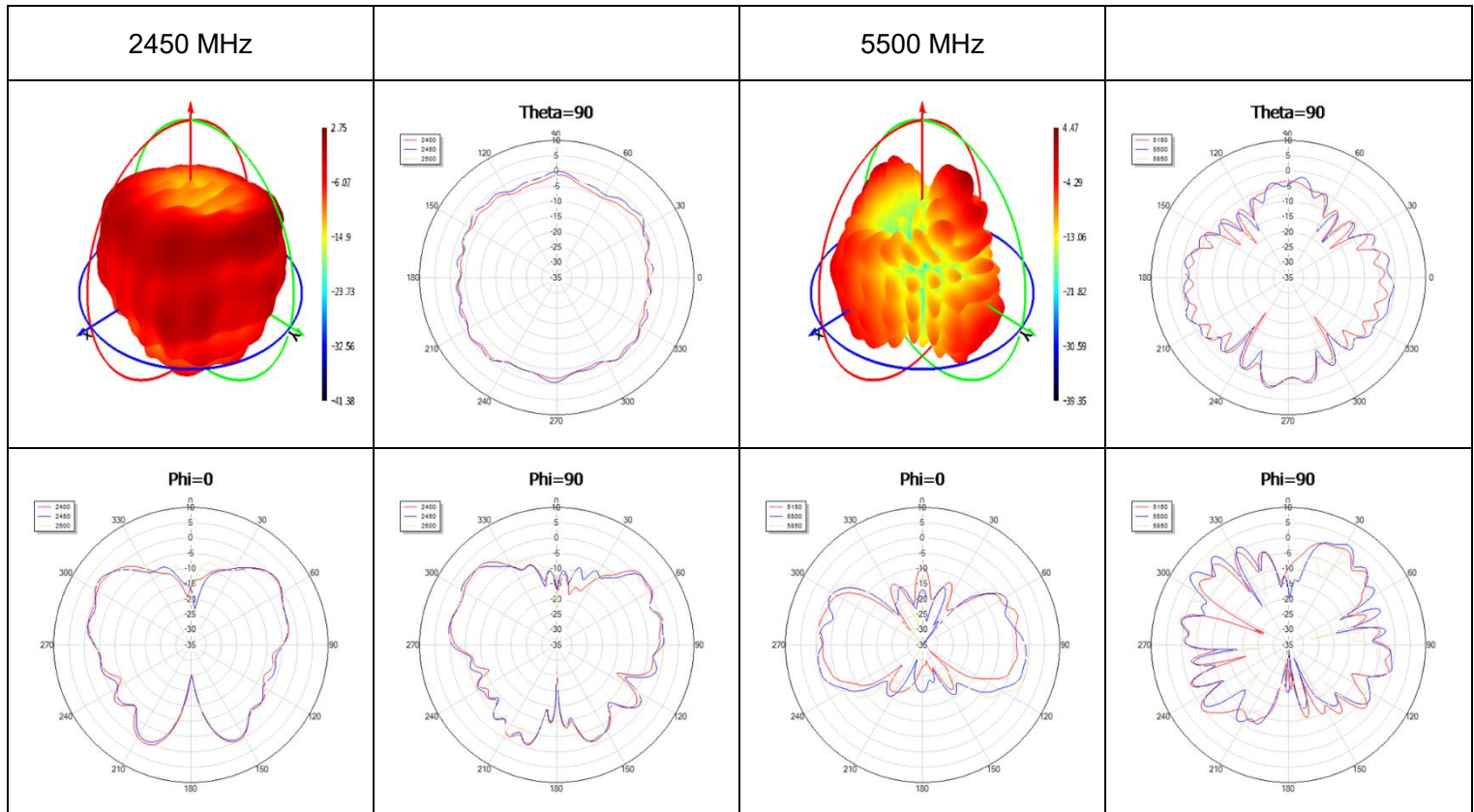
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	2.2	2.8	2.3	3.8	4.5	5.2	-	-	-	-

3.2.4. 3D & 2D Radiation Pattern

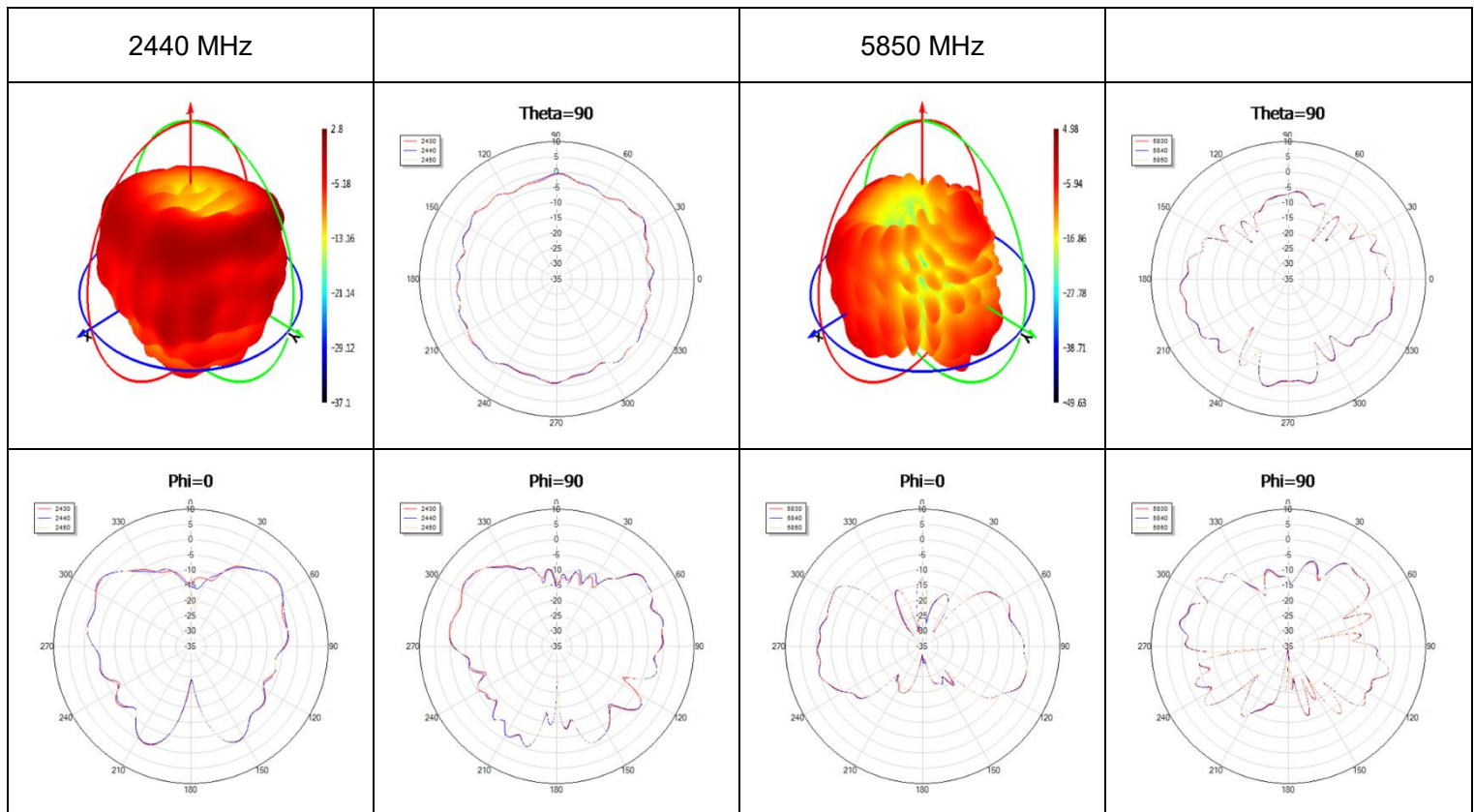
- Test Condition: Free Space
- Test Chamber: HF-S-1



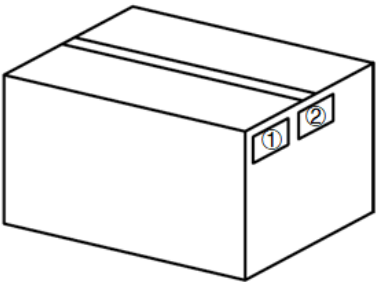
● **Wi-Fi**

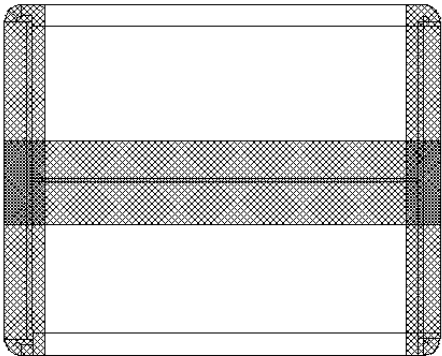


● **Max Peak Gain**



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		1 product packed in a bubble bag.
2		10 products packed in a PE bag. (10 Antennas / PE bag)
3	 × 10	(10 PE Bags / Carton Box) (100 Antennas / Carton Box) Estimated quantity <u>Carton Size:</u> <u>L × W × H = 370 × 370 × 295 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.

No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China

Tel: +86 21 5108 6236

Email: info@quectel.com

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

<https://www.quectel.com/contact/>.

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Revision History

Version	Date	Author	Note
-	2026-04-27	Christopher Yao/ Blake Xiang/ Kessie Geng/ Rainey Liao	Creation of the document
1.0	2026-04-27	Christopher Yao/ Blake Xiang/ Kessie Geng/ Rainey Liao	First official release



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