

# Antenna Datasheet

**Product OC:** Y0RGH0CA2AA

**Version:** 1.0

**Date:** 2025-05-07

**Product Name:** External Wi-Fi Antenna

**Key Features:**

Frequency Band: 2400–2500 MHz, 5150–5850 MHz

Dimensions: 164.79 mm × 23.79 mm × 21.05 mm

Efficiency: Up to 72 %

RoHS Compliant

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# 1 Specification

Test Condition: Assembled in test device

## 1.1. Electrical

Electrical		
Frequency Range	2.4G	2400–2500 MHz
	5G	5150–5850 MHz
Impedance	2.4G	50 $\Omega$
	5G	50 $\Omega$
Polarization	2.4G	Linear
	5G	Linear
Radiation Pattern	2.4G	Omni-directional
	5G	Omni-directional
VSWR	2.4G	$\leq 1.4$
	5G	$\leq 1.7$
Peak Gain	2.4G	3.1 dBi
	5G	5.1 dBi

## 1.2. Mechanical & Environmental

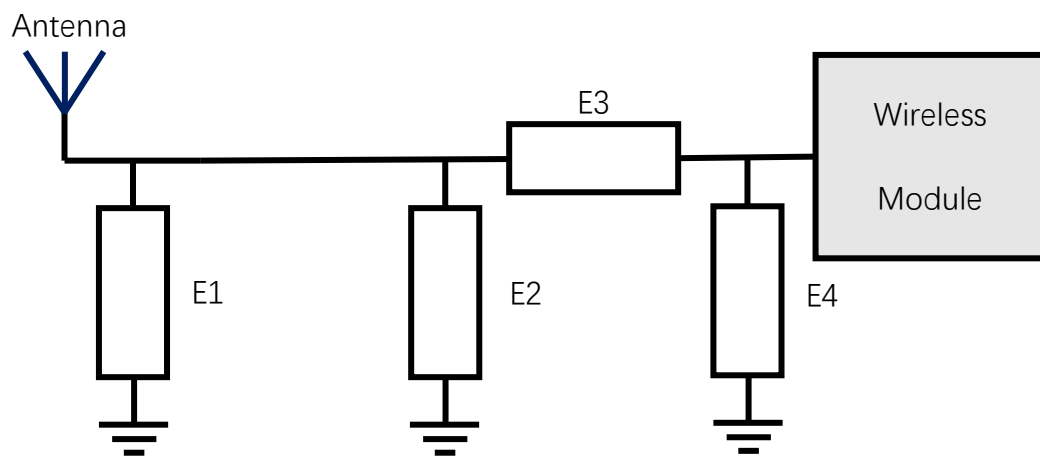
Mechanical	
Antenna Dimensions	164.79mm × 23.79 mm × 21.05 mm
Material & Color	ABS & Blue-gray

Mounting Type	2.4G	Φ 1.37 & White & 300 mm
	5.0G	Φ 1.37 & Black & 90 mm
Connector Type		RF1 & ETC
Mounting Type		Terminal
Weight		Typ. 24.9 g
Environmental		
Operation Temperature		-20 °C to +70 °C
Storage Temperature		-20 °C to +70 °C
RoHS Compliant		Yes

### 1.3. Antenna Assembly

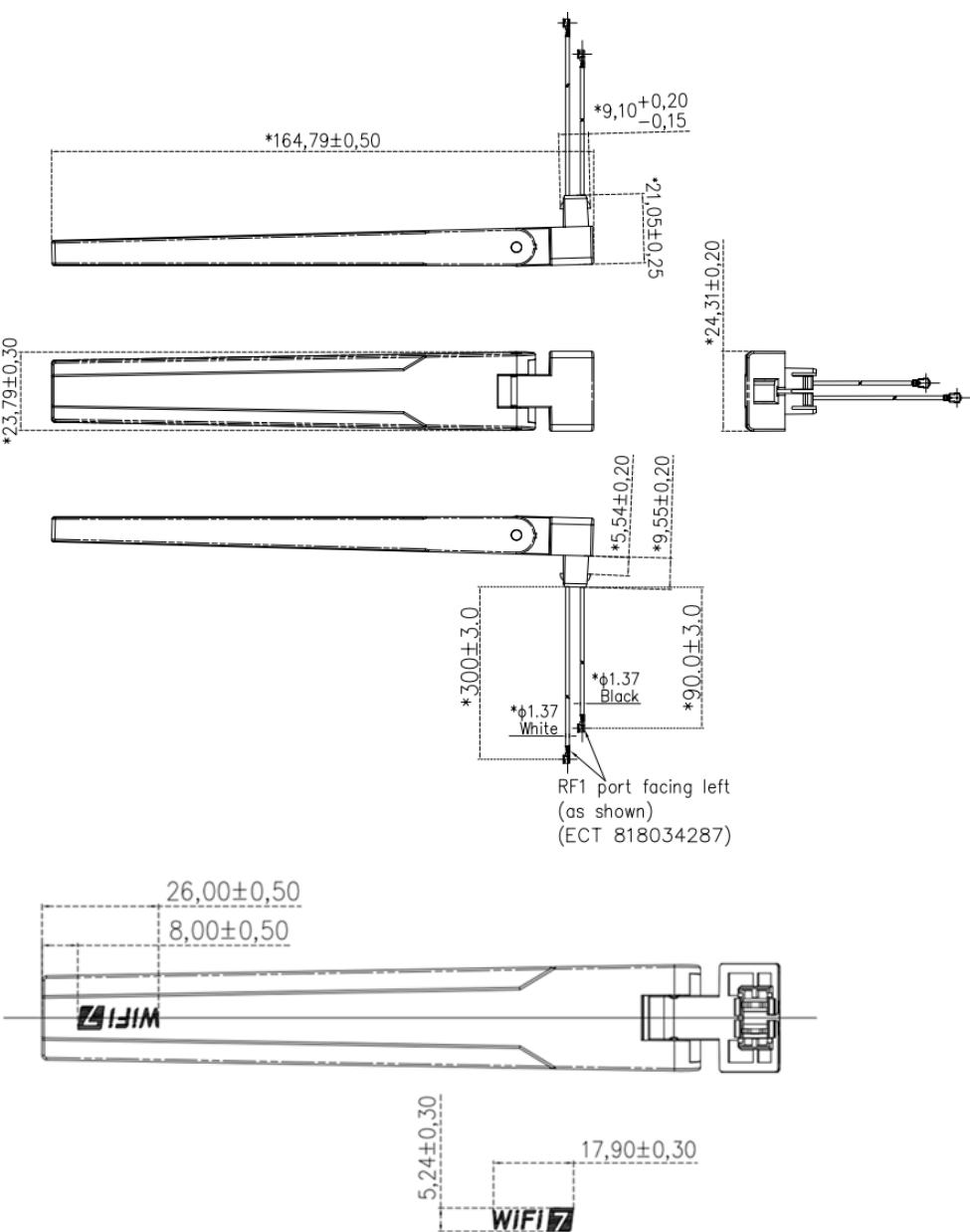


## 1.4. Matching Circuit



	E1	E1	E3	E4
Default Matching	DNI	DNI	0 $\Omega$	DNI
Tolerance	N/A	N/A	$\pm 5\%$	N/A

## 2 Drawing



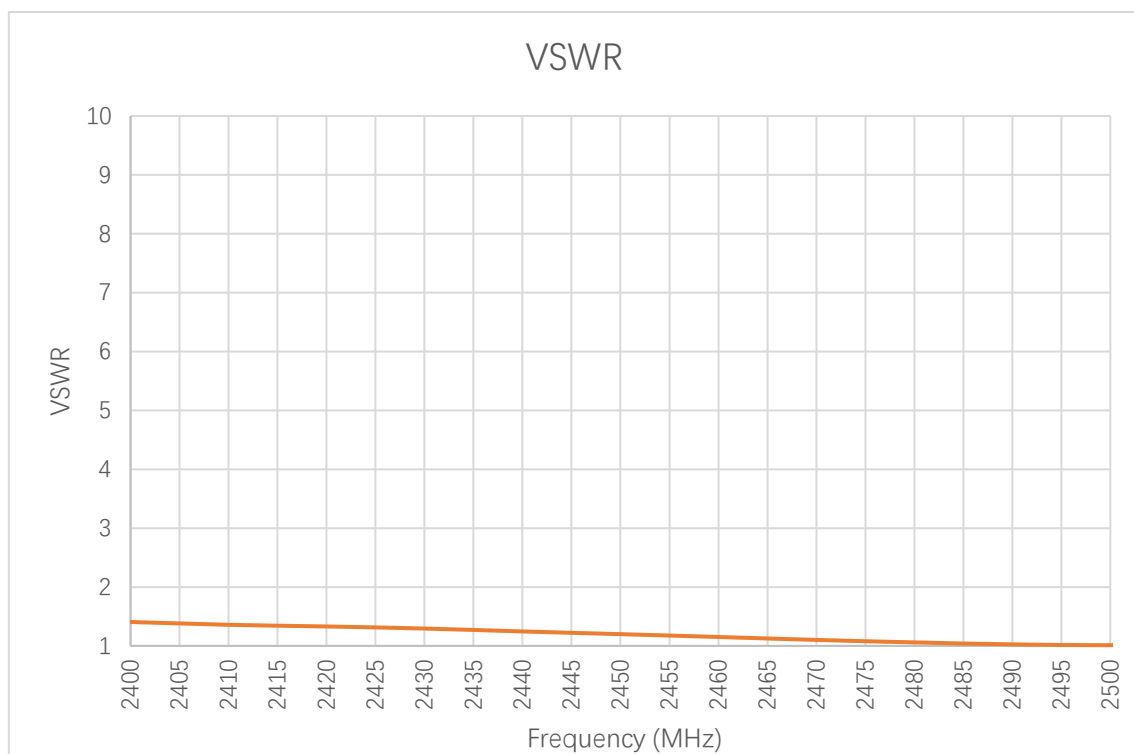
丝印颜色: Pantone Cool Gray 5C

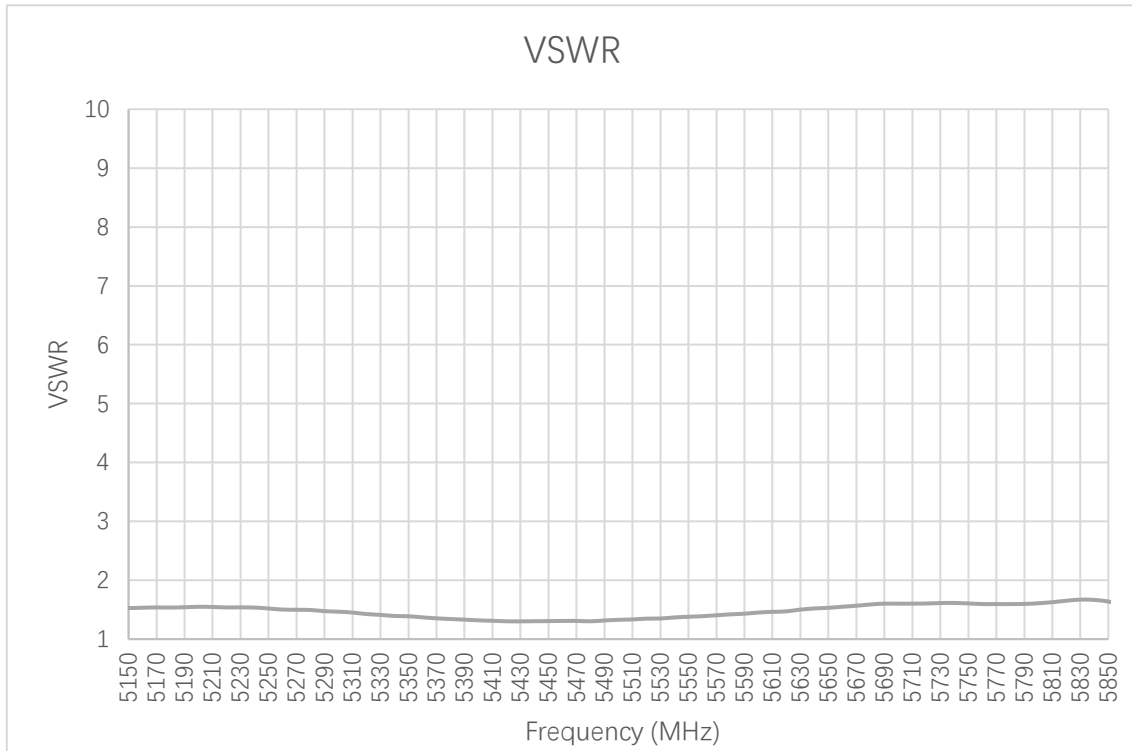


# 3 Detailed Performance

## 3.1. S-Parameter Test

### 3.1.1. VSWR





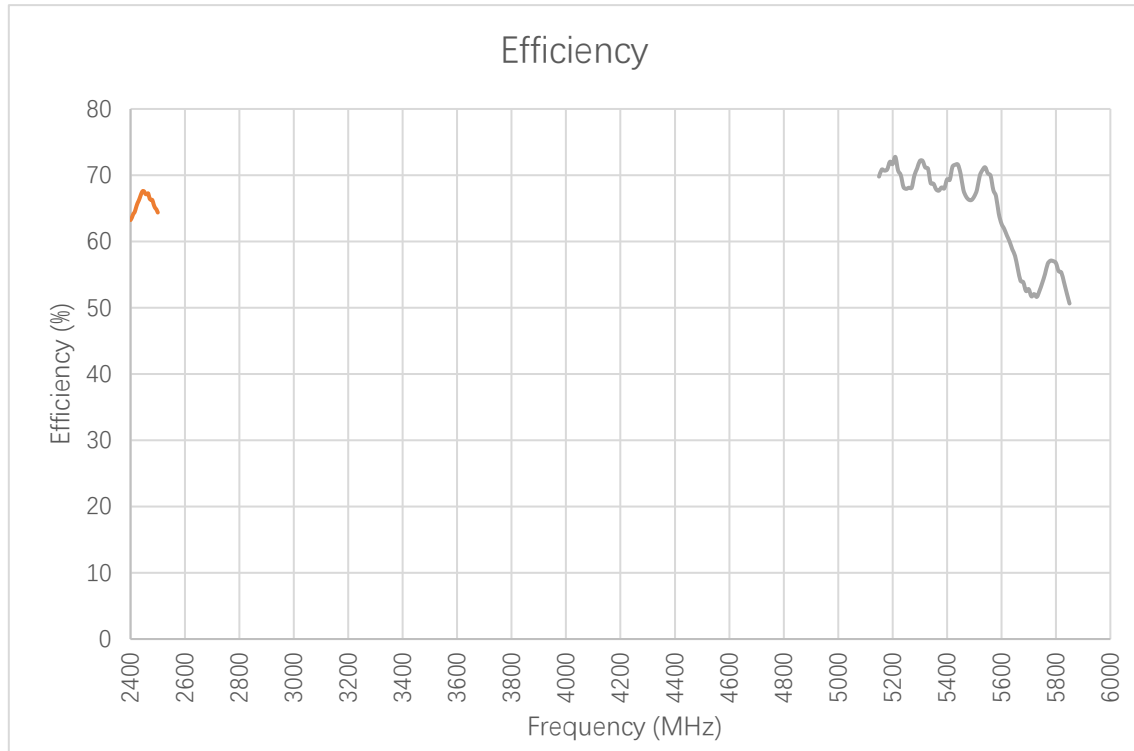
**VSWR**

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	1.4	1.2	1.0	1.5	1.3	1.6	-	-	-	-



## 3.2. Radiation Performance Test

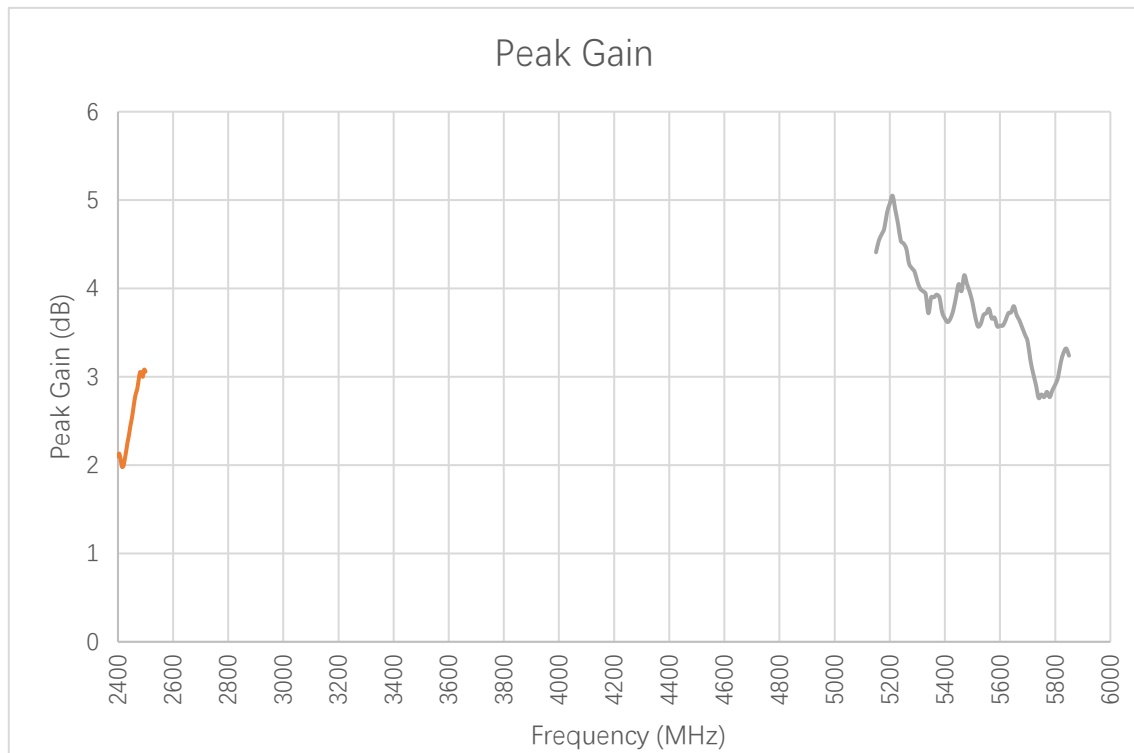
### 3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	63.3	67.6	64.4	69.8	66.8	50.7	-	-	-	-

### 3.2.2. Peak Gain

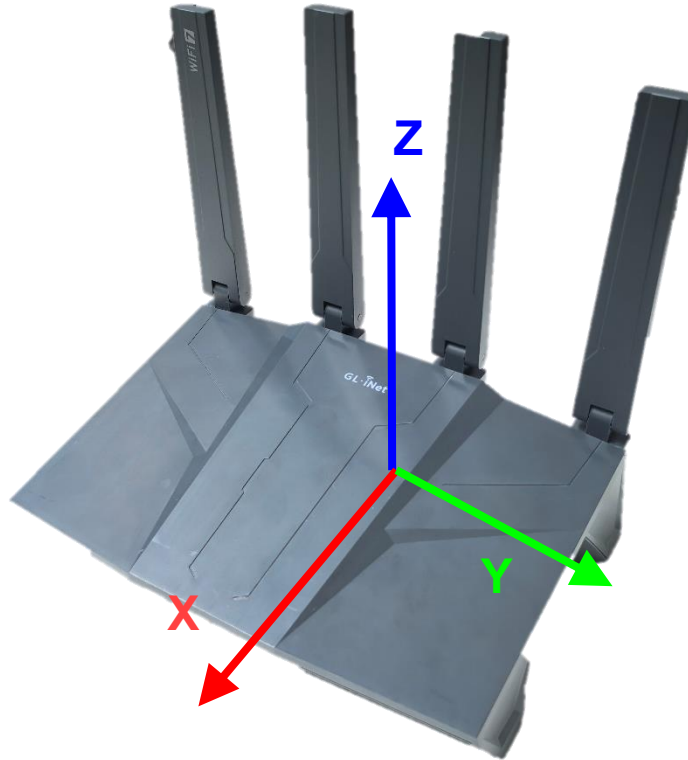


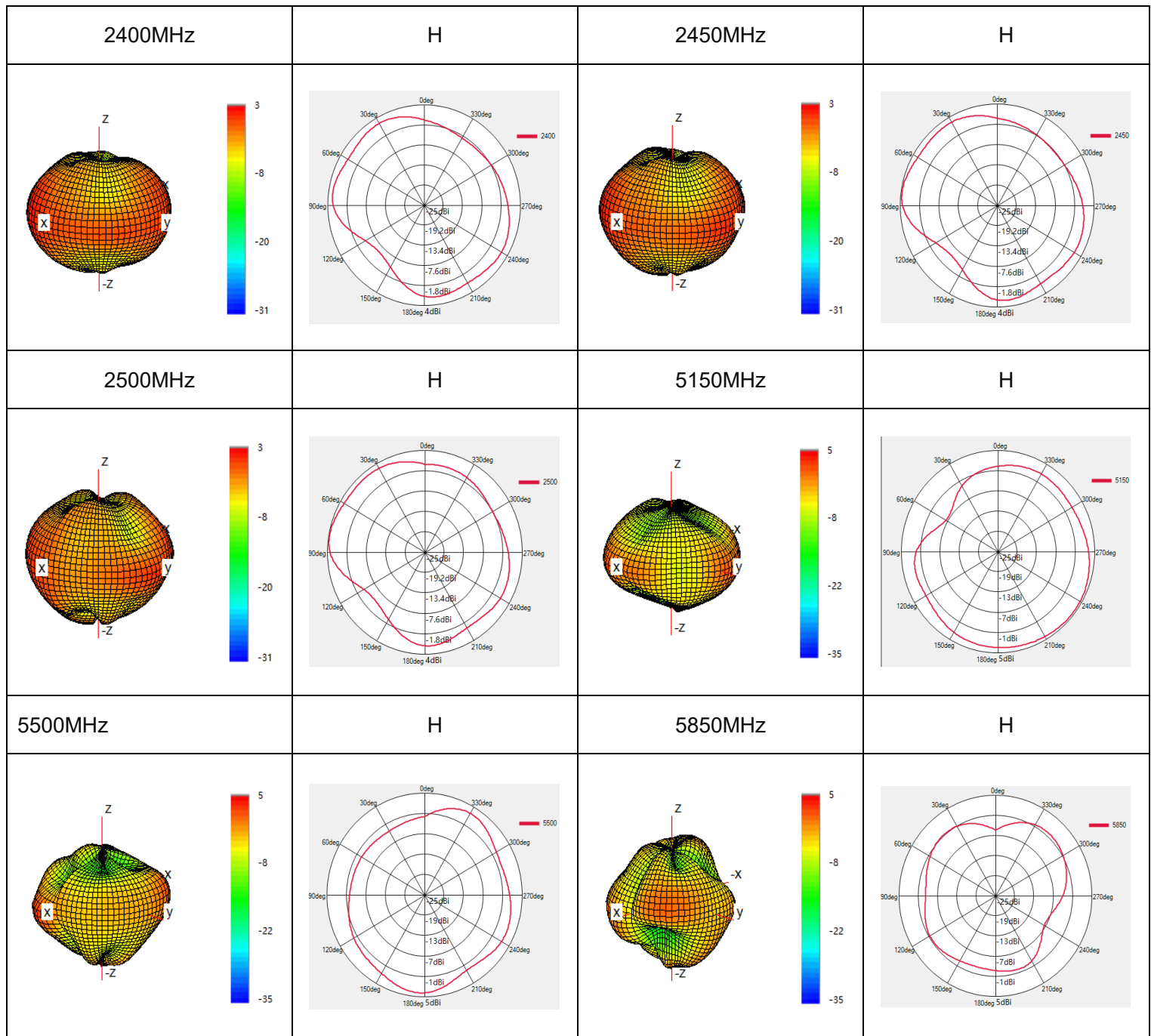
**Peak Gain (dBi)**

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	2.1	2.5	3.1	4.4	3.8	3.2	-	-	-	-

### 3.2.3. 2D Radiation Pattern

- Test Condition: Assembled in test device
- Test Chamber: FS-G-1





## 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
-	2025-05-07	Mordecai LIU/ Shea LI/ Aria CHU	Creation of the document
1.0	2025-05-07	Mordecai LIU/ Shea LI/ Aria CHU	First official release





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