

# Antenna Datasheet

**Product OC:** Y0RGH0CA2DA

**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 73 %

RoHS Compliant

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# 1 Specification

Test Condition: Assembled in test device

## 1.1. Electrical

Electrical		
Frequency Range	<b>2.4G</b>	2400–2500 MHz
	<b>5G</b>	5150–5850 MHz
Impedance	<b>2.4G</b>	50 Ω
	<b>5G</b>	50 Ω
Polarization	<b>2.4G</b>	Linear
	<b>5G</b>	Linear
Radiation Pattern	<b>2.4G</b>	Omni-directional
	<b>5G</b>	Omni-directional
VSWR	<b>2.4G</b>	≤ 1.6
	<b>5G</b>	≤ 1.5
Peak Gain	<b>2.4G</b>	3.5 dBi
	<b>5G</b>	4.9 dBi

## 1.2. Mechanical & Environmental

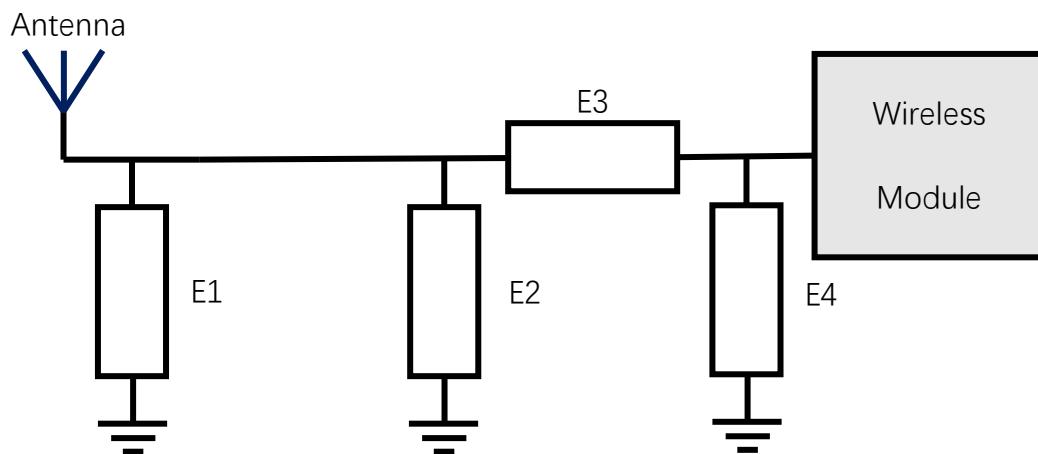
Mechanical	
Antenna Dimensions	164.79 mm × 23.79 mm × 21.05 mm
Material & Color	ABS & Blue-gray

<b>Mounting Type</b>	<b>5.0G</b>	Φ 1.37 & Blue & 290 mm
	<b>2.4G</b>	Φ 1.37 & Red & 150 mm
<b>Connector Type</b>		RF1 & ETC
<b>Mounting Type</b>		Terminal
<b>Weight</b>		Typ. 24.9 g
<b>Environmental</b>		
<b>Operation Temperature</b>		-20 °C to +70 °C
<b>Storage Temperature</b>		-20 °C to +70 °C
<b>RoHS Compliant</b>		Yes

### 1.3. Antenna Assembly

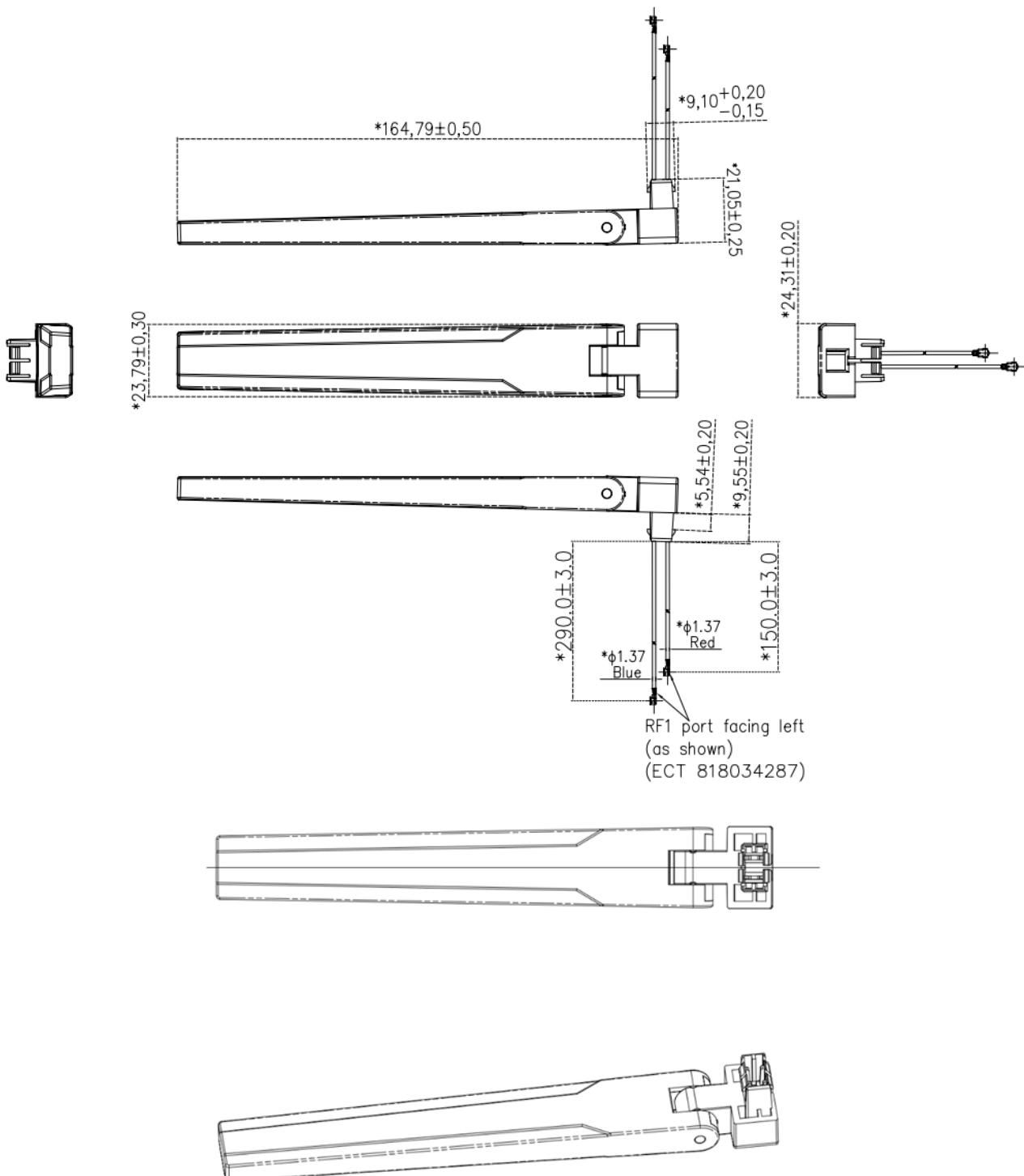


## 1.4. Matching Circuit



	E1	E1	E3	E4
<b>Default Matching</b>	DNI	DNI	0 Ω	DNI
<b>Tolerance</b>	N/A	N/A	±5 %	N/A

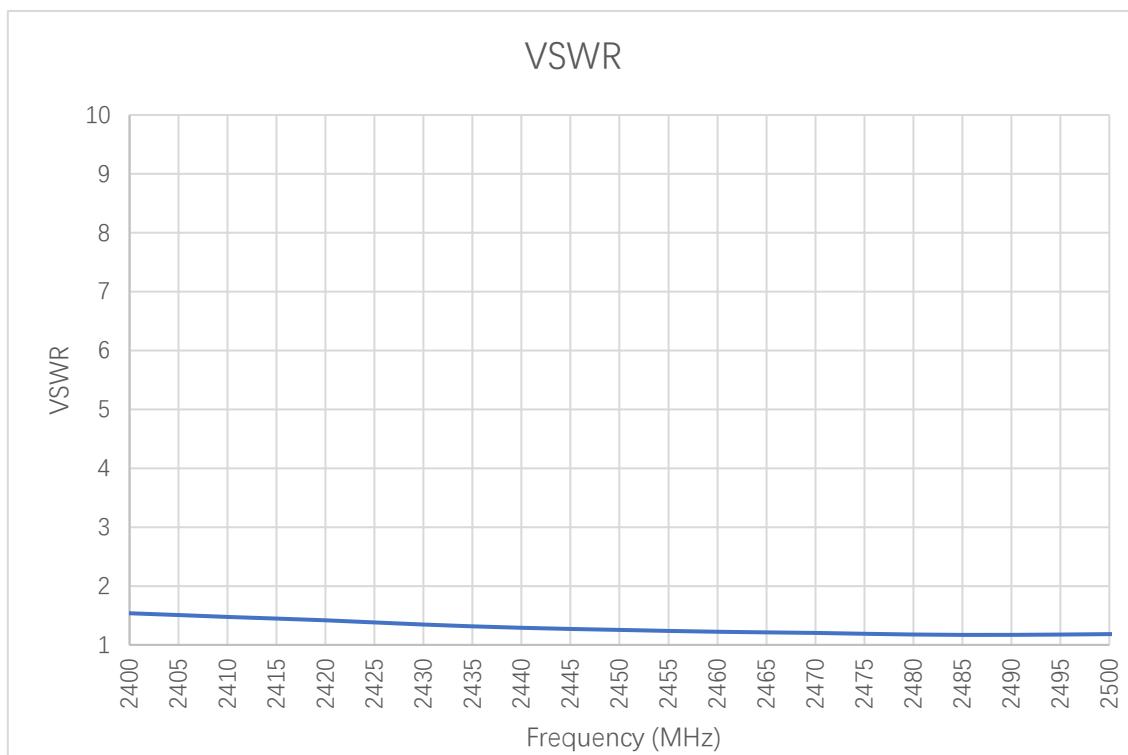
## 2 Drawing

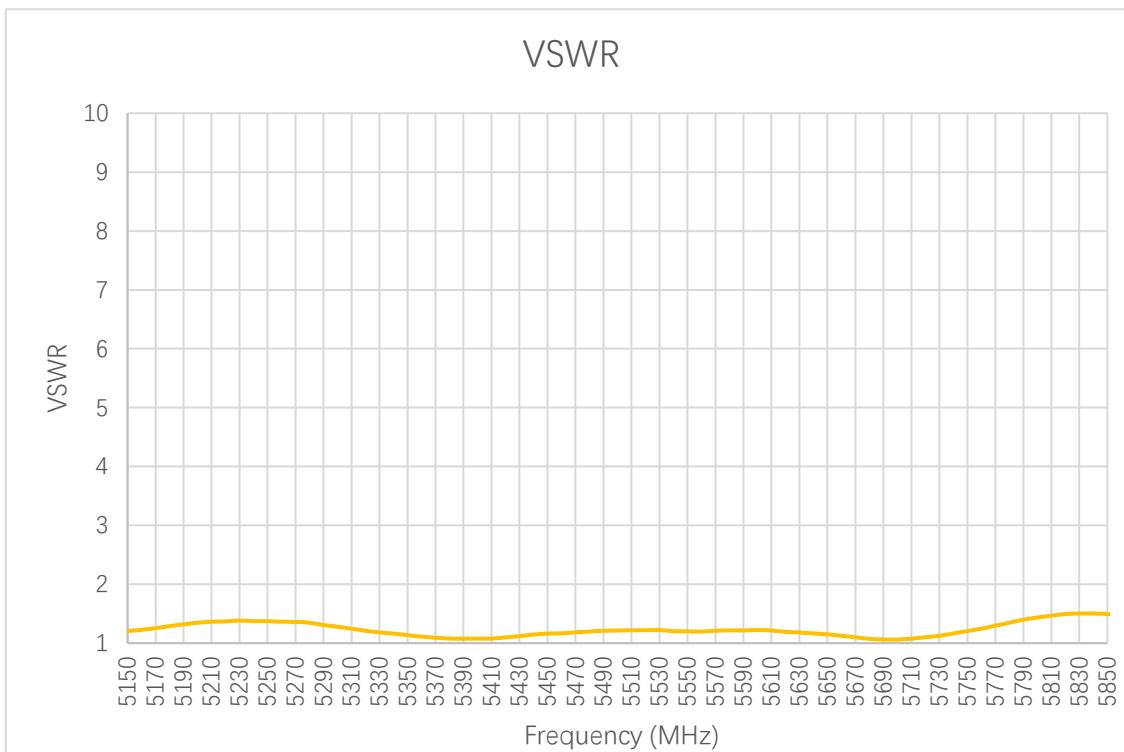


# 3 Detailed Performance

## 3.1. S-Parameter Test

### 3.1.1. VSWR

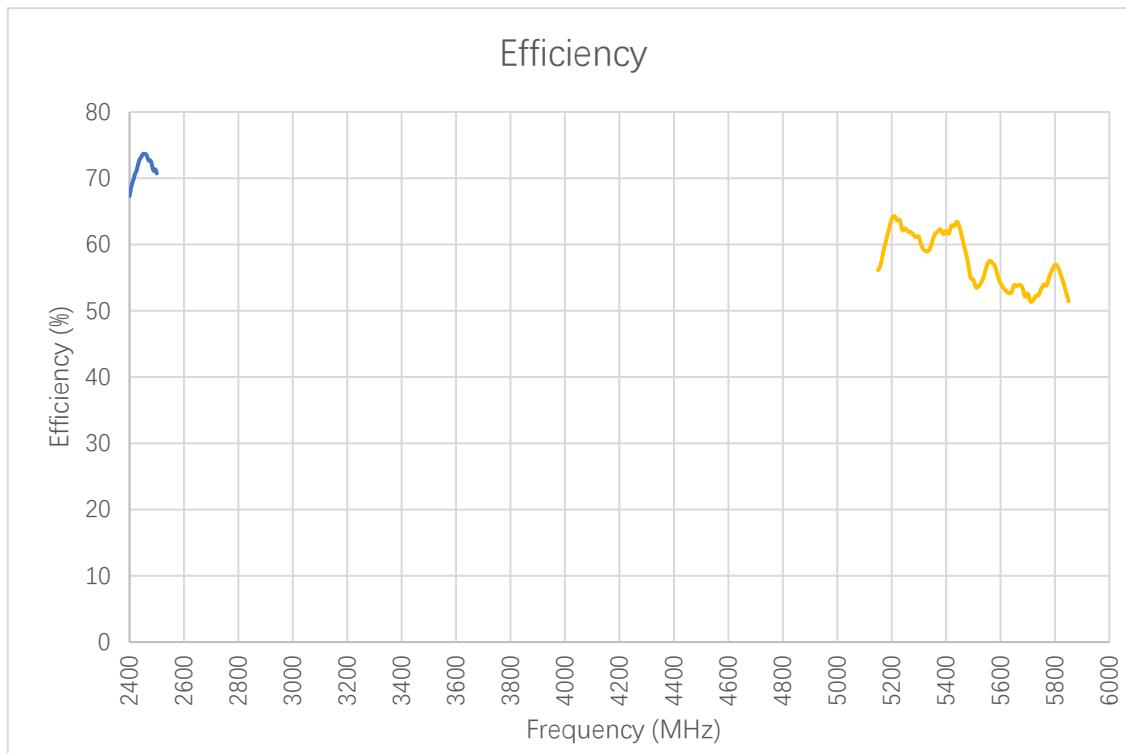


**VSWR**

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
<b>VSWR</b>	1.5	1.3	1.2	1.2	1.2	1.5	-	-	-	-

## 3.2. Radiation Performance Test

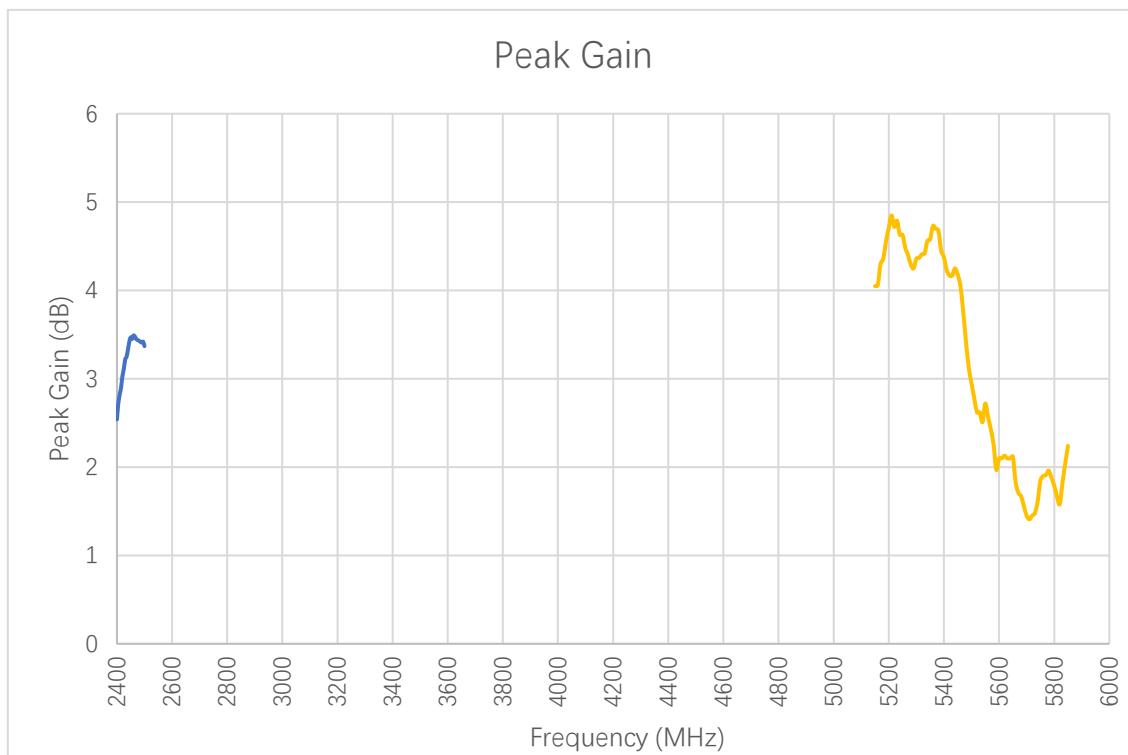
### 3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	67.3	73.7	70.8	56.1	54.7	51.5	-	-	-	-

### 3.2.2. Peak Gain

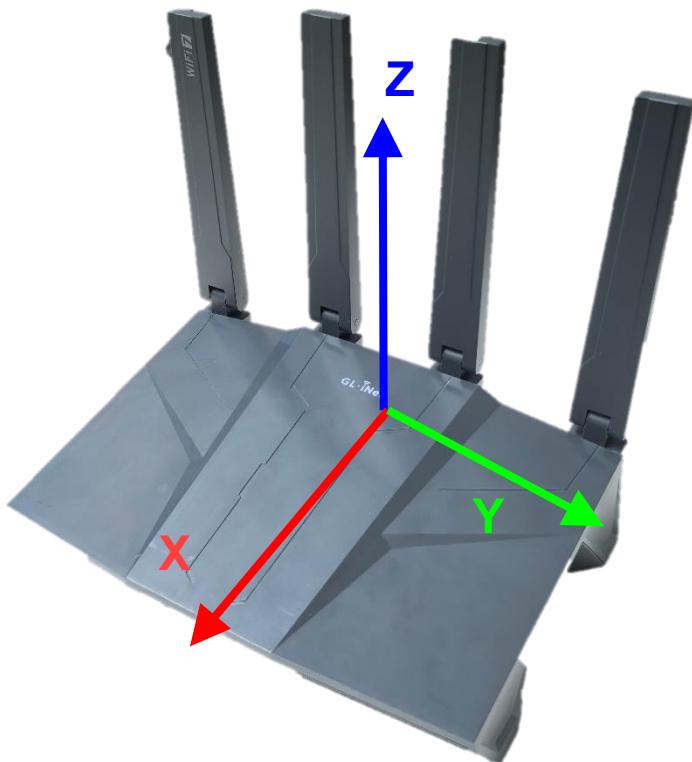


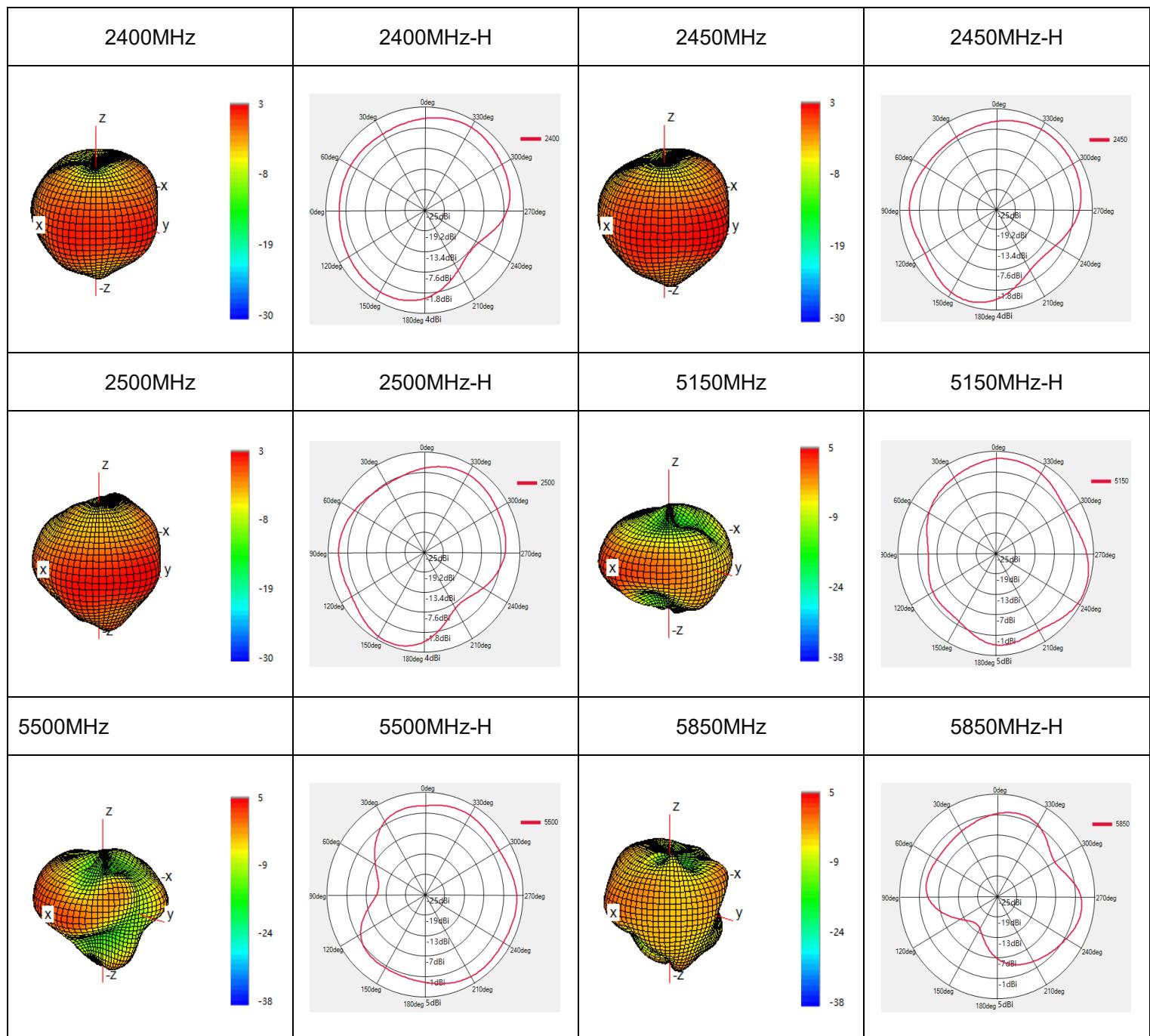
Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	2.5	3.5	3.4	4.1	3.0	2.2	-	-	-	-

### 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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