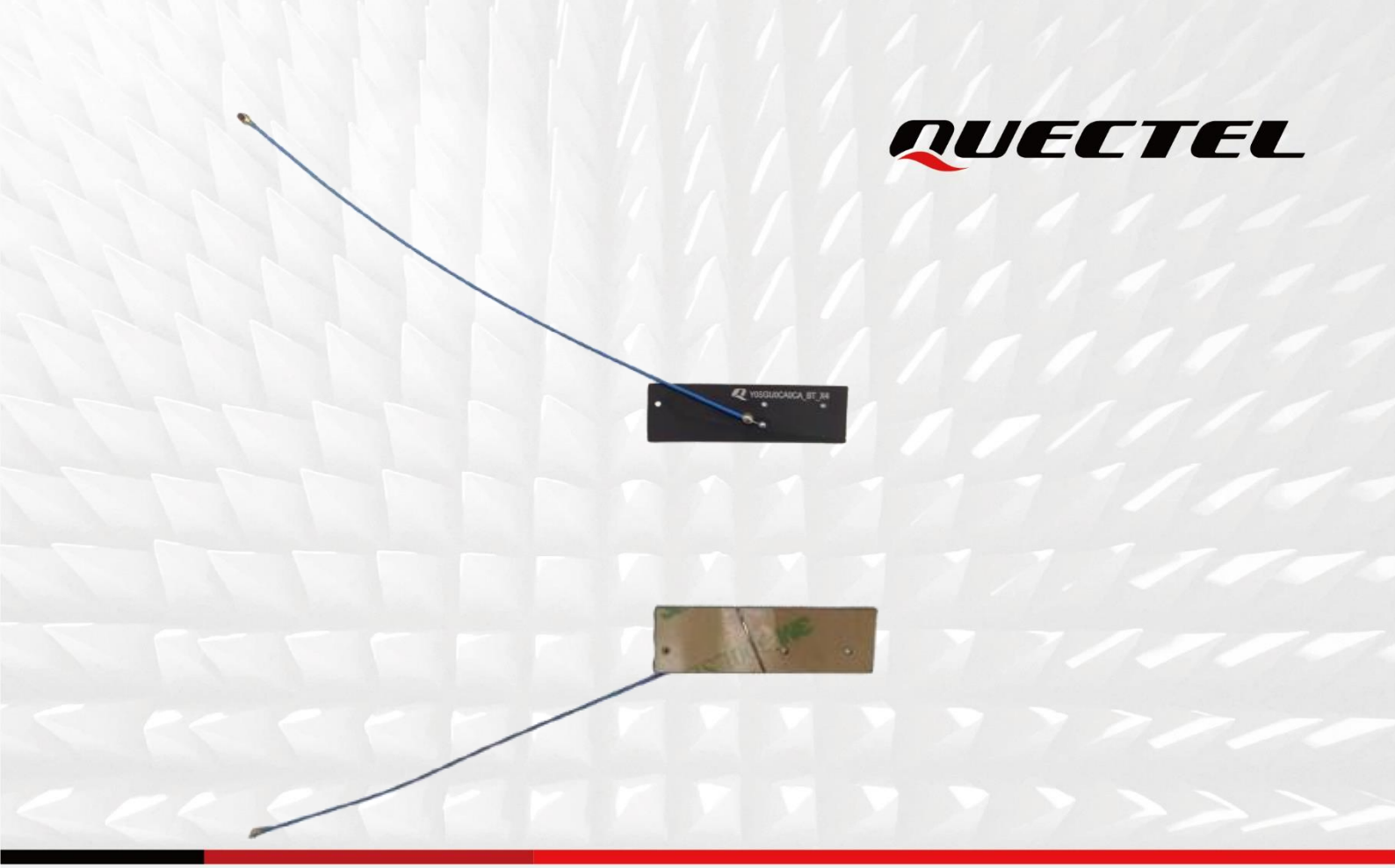

Antenna Datasheet

Product OC: Y0SGU0CA0CA
Version: 1.0
Date: 2025-12-15

Product Name: BT Antenna
Key Features:
Frequency Range: 2400–2500 MHz
Dimensions: 42.67 mm × 12.40 mm × 0.13 mm
Efficiency: Up to 38.3 %
RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

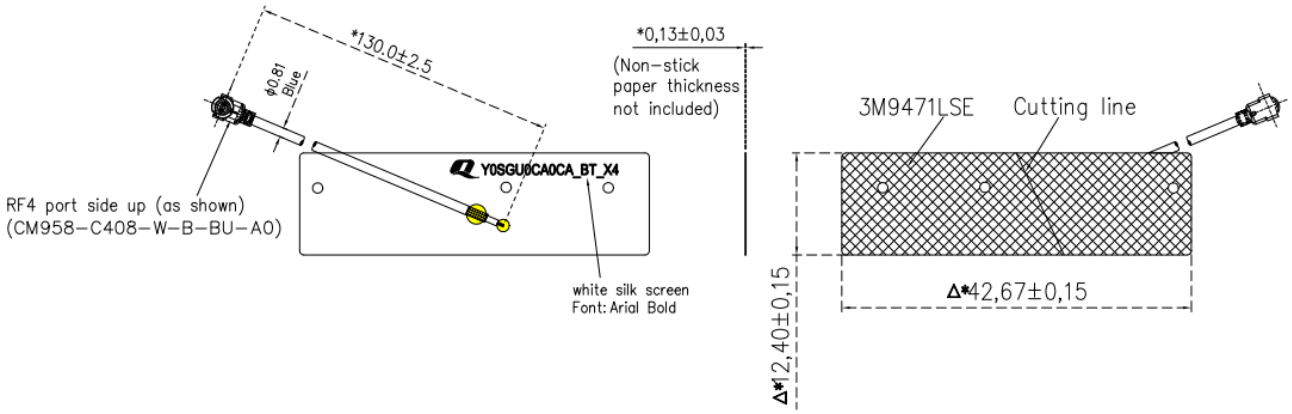
Electrical	
Frequency Range	2400–2500 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 1.5
Peak Gain	0.3 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	42.67 mm × 12.40 mm × 0.13 mm
Material & Color	FPC & Black
Cable Type & Color & Length	Φ 0.81 &Blue & 130 mm
Connector Type	RF 4
Weight	Typ. 0.4 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C

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

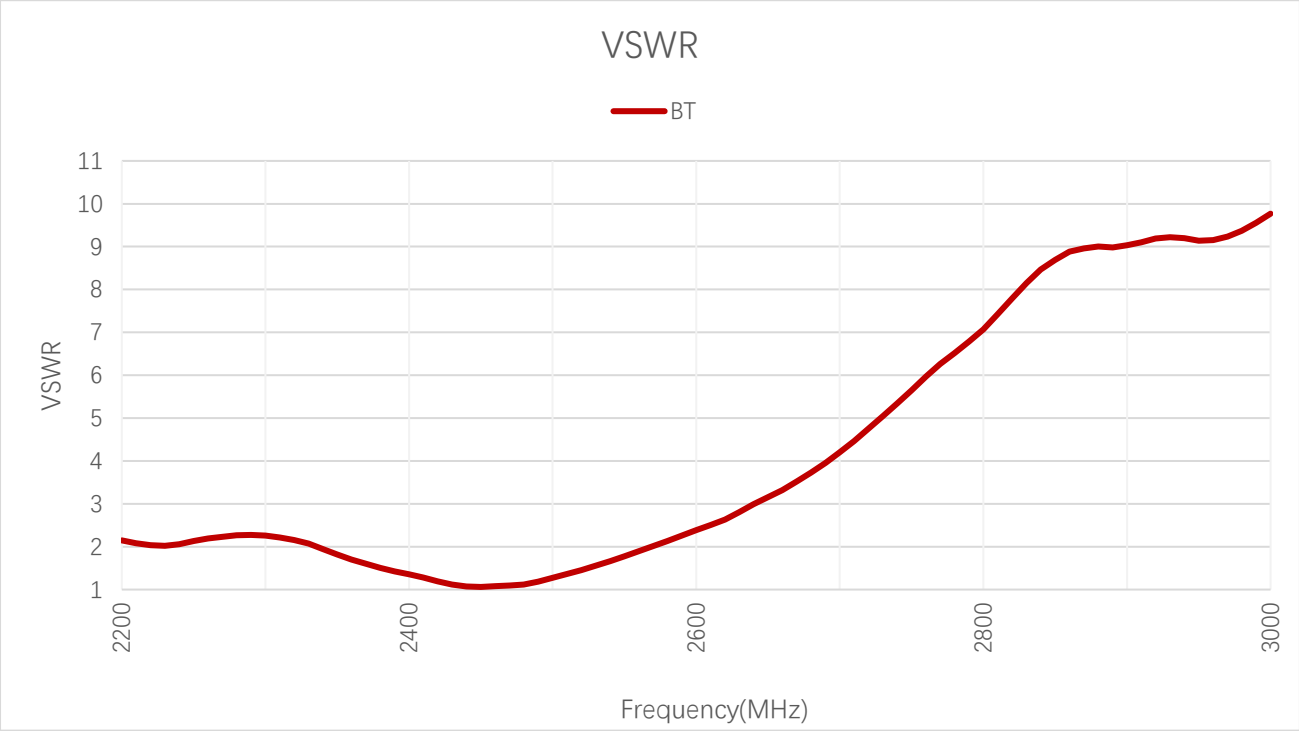
2 Drawing


*130.0±2.5
φ0.81
Blue
*0,13±0,03
(Non-stick
paper thickness
not included)
Y0SGU0CA0CA_BT_X4
RF4 port side up (as shown)
(CM958-C408-W-B-BU-A0)
white silk screen
Font: Arial Bold
3M9471LSE
Cutting line
Δ*42,67±0,15
Δ*12,40±0,15

3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

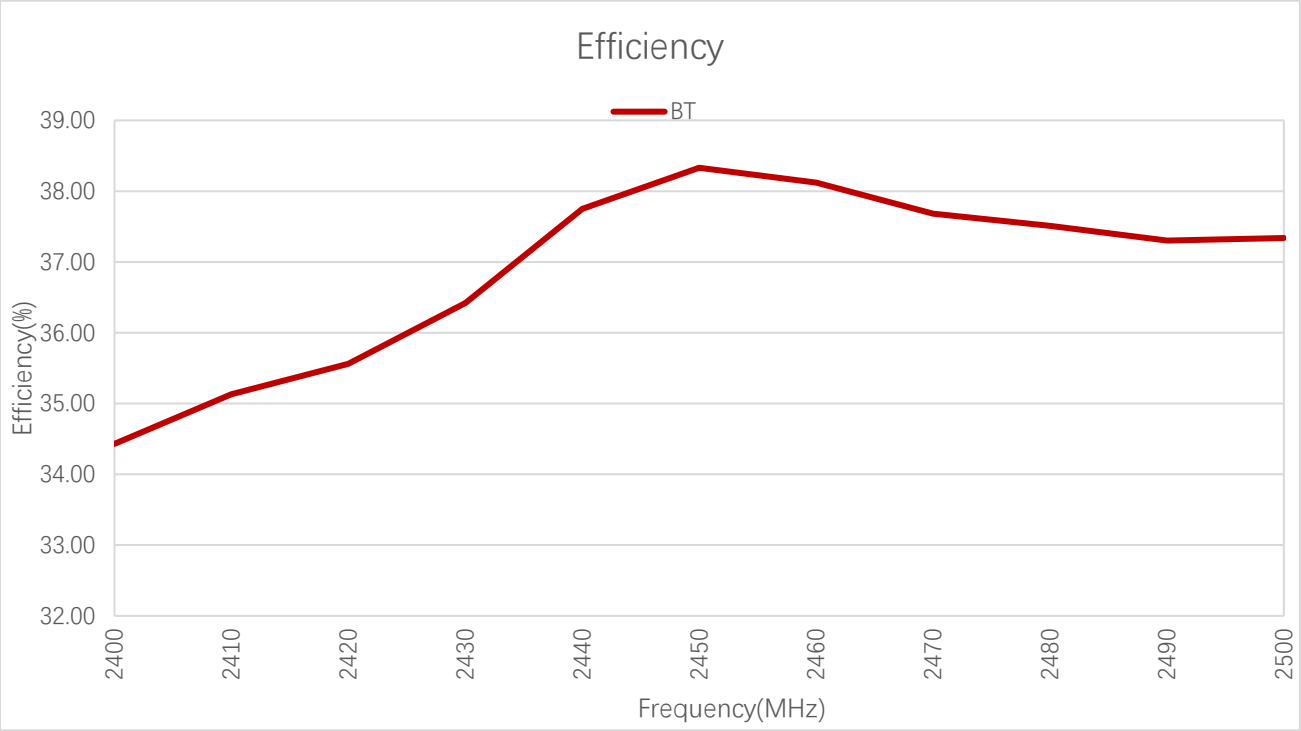


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	1.4	1.1	1.3	-	-	-	-	-	-

3.2. Radiation Performance Test

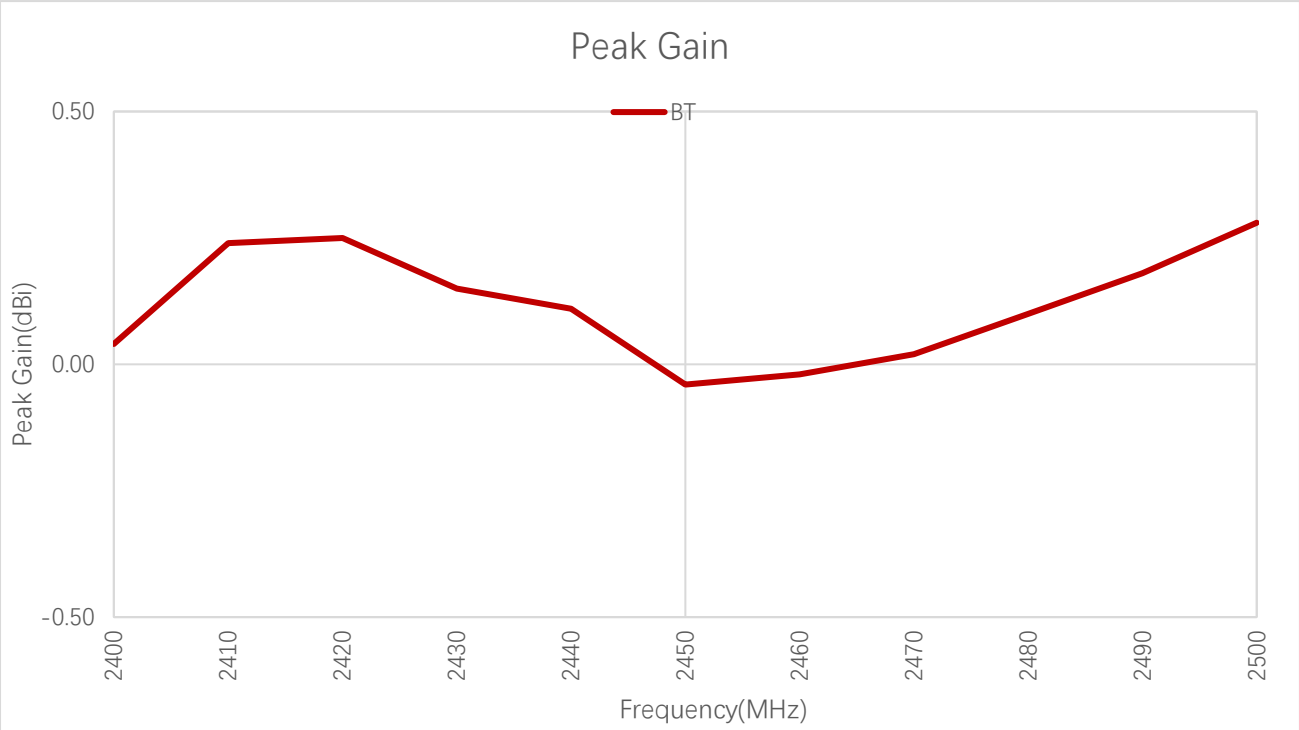
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	34.4	38.3	37.3	-	-	-	-	-	-

3.2.2. Peak Gain

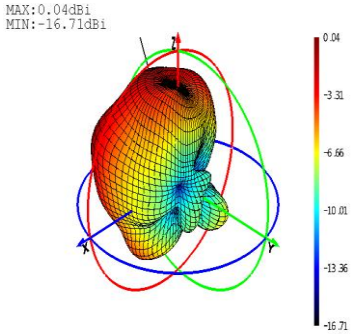
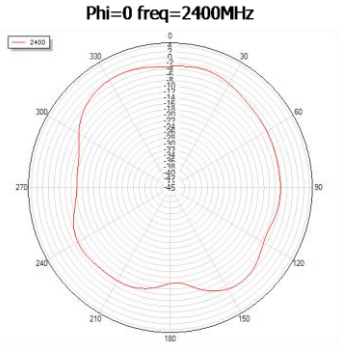
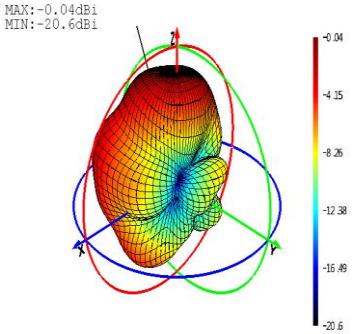
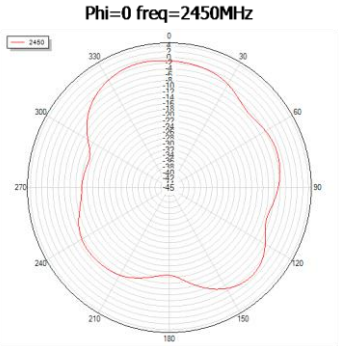
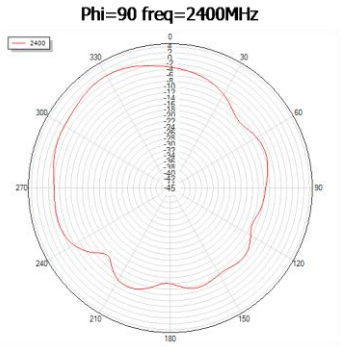
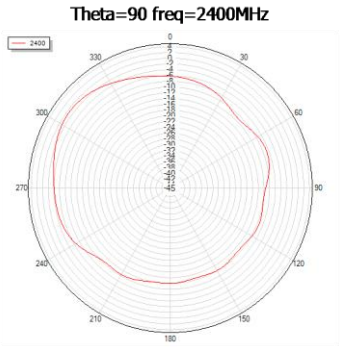
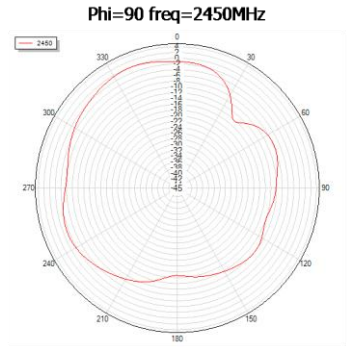
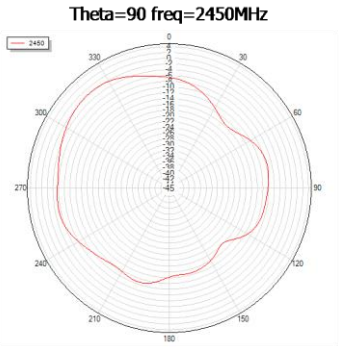


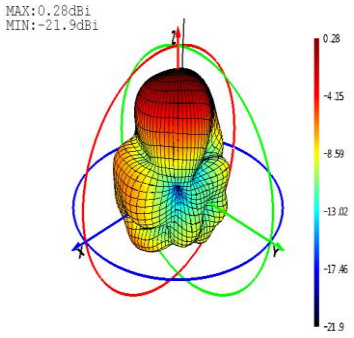
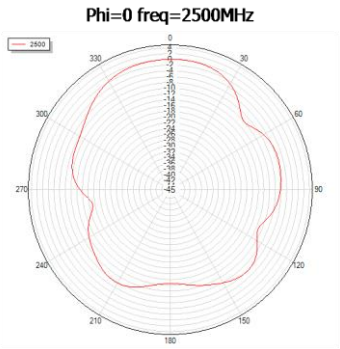
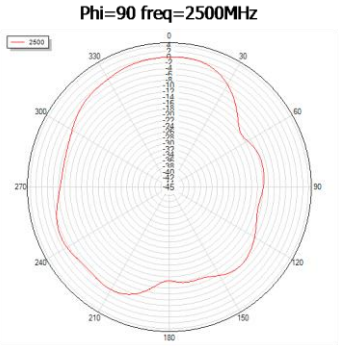
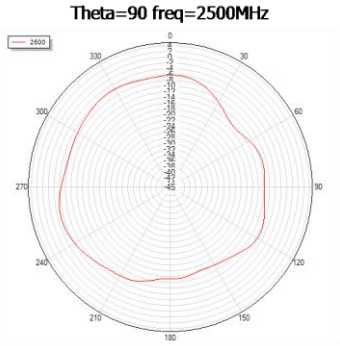
Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	0.0	0.0	0.3	-	-	-	-	-	-

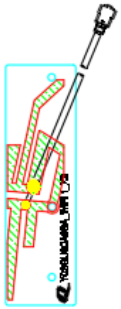
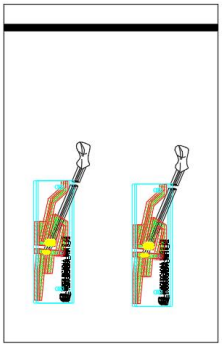
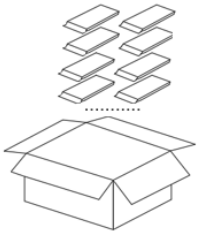
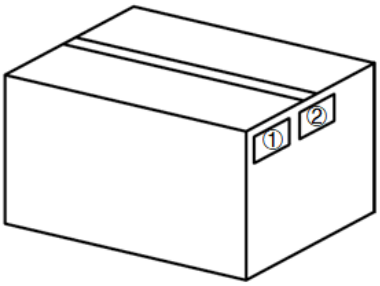
3.2.3. 2D Radiation Pattern

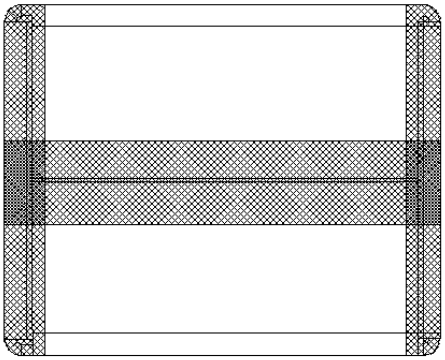
- Test Condition: Assembled in test device
- Test Chamber: SZ-S-1

2400 MHz		2450 MHz	
			
			

2500 MHz			
 MAX:0.28dBi MIN:-21.9dBi 0.28 -4.35 -8.59 -13.02 -17.46 -21.9	 Phi=0 freq=2500MHz 2500		
 Phi=90 freq=2500MHz 2500	 Theta=90 freq=2500MHz 2500		

4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Product drawing
2		200 antenna products in a PE bag. (200 Antennas / PE Bag)
3		(40 PE Bags / Carton Box) (8000 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 = 325 × 325 × 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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Tel: +86 21 5108 6236
Email: info@quectel.com

Or our local offices. For more information, please visit:
http: www.quectel.com-support-sales.htm

For technical support, or to report documentation errors, please visit:
http: www.quectel.com-support-technical.htm
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Revision History

Version	Date	Author	Note
-	2025-12-15	Lyney Lin/ Shea Li/ Riva Ren/ Rainey Liao	Creation of the document
1.0	2025-12-15	Lyney Lin/ Shea Li/ Riva Ren/ Rainey Liao	First official release

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