

Antenna Datasheet

Product OC: YF0026AA-0RSGCA0A

Version: 1.0

Date: 2024-11-14

Product Name: WIFI FPC Antenna

Key Features:

Frequency Band: 2400–2500 MHz

Dimensions: 28.9 mm × 11 mm × 0.12 mm

Efficiency: Up to 57.4 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

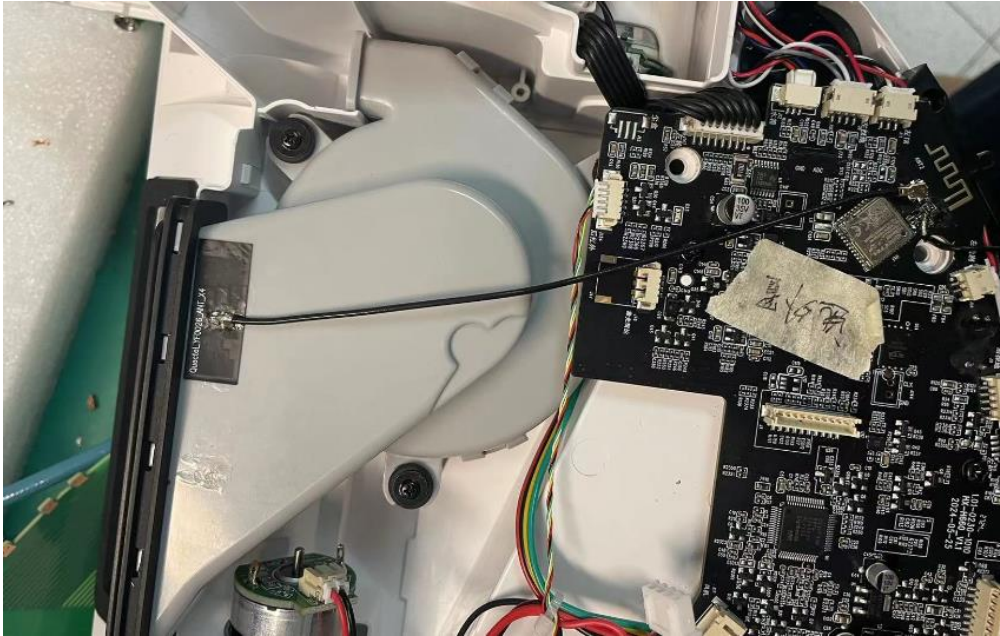
Electrical	
Frequency Range	2400–2500 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 2
Peak Gain	4.6 dBi

1.2. Mechanical & Environmental

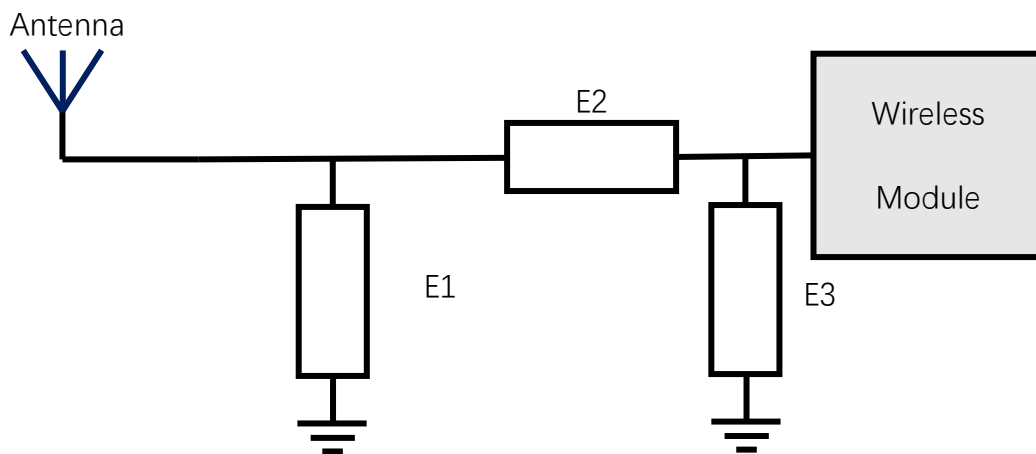
Mechanical	
Antenna Dimensions	28.9 mm × 11 mm × 0.12 mm
Material & Color	FPC & Black
Connector Type	Φ 1.37 & Black & 150mm
Weight	Typ. 0.9 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C

RoHS Compliant	RoHS2.0
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1.3. Antenna Assembly

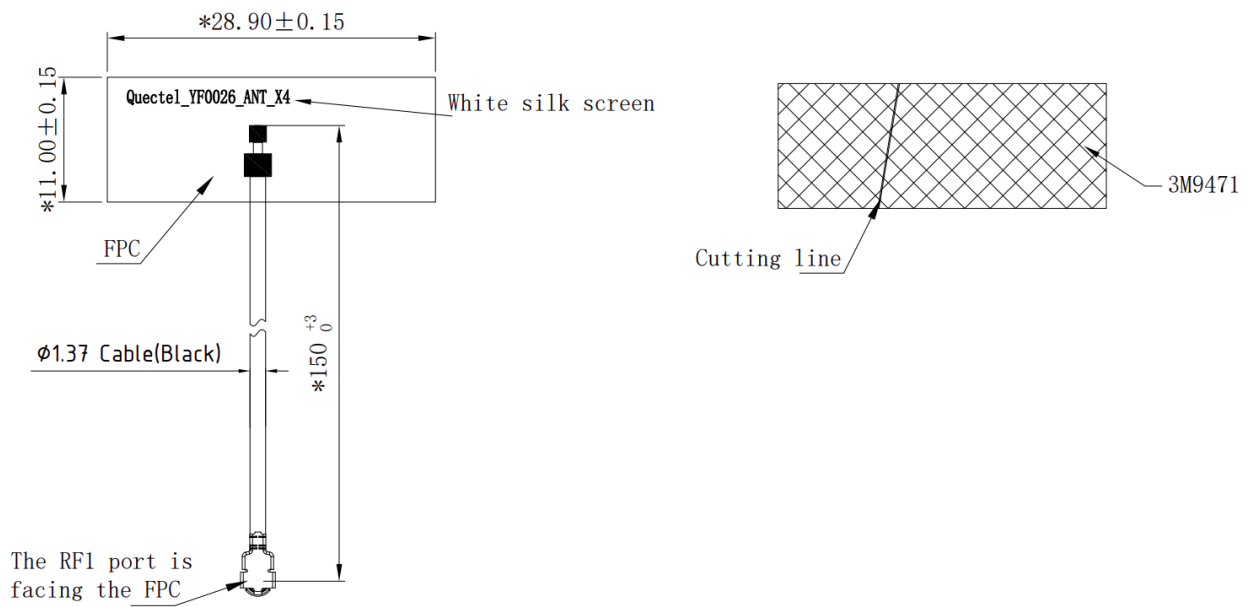


1.4. Matching Circuit



	E1	E1	E3
Default Matching	NA	0ohm	NA
Tolerance	N/A	±5 %	N/A

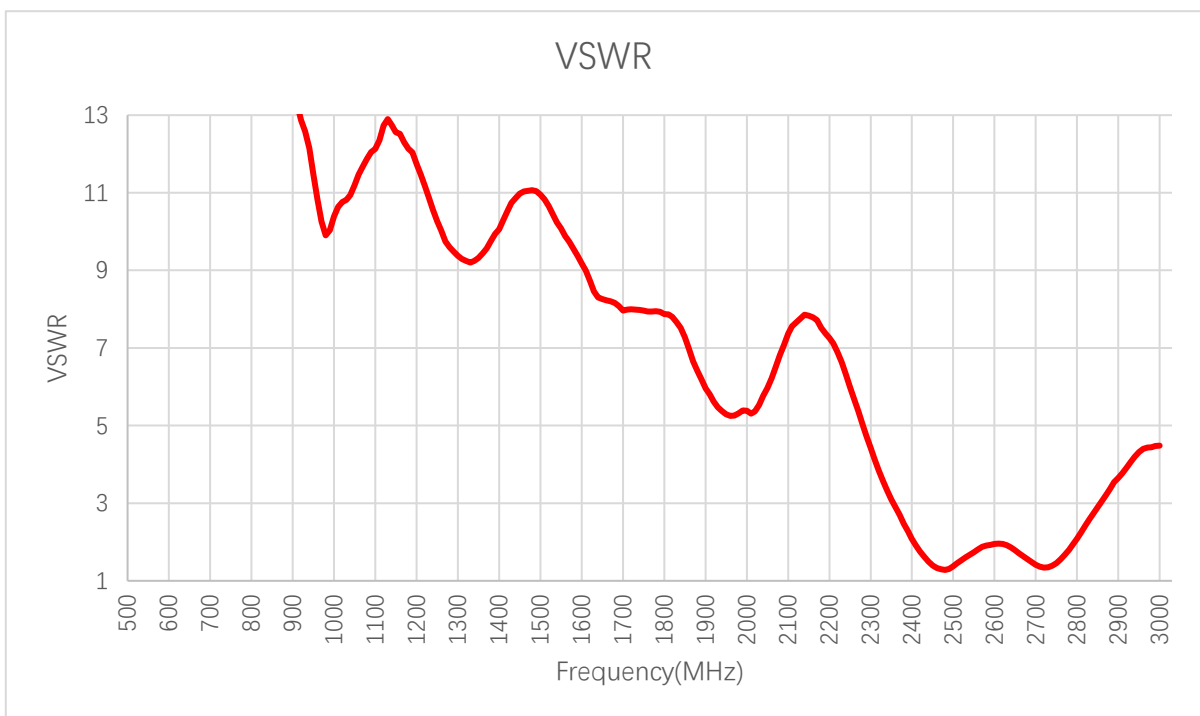
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR



VSWR

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
VSWR	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2460	2500	3600	4200	5000	5500	6000
VSWR	-	-	2.0	1.3	1.4	-	-	-	-	-

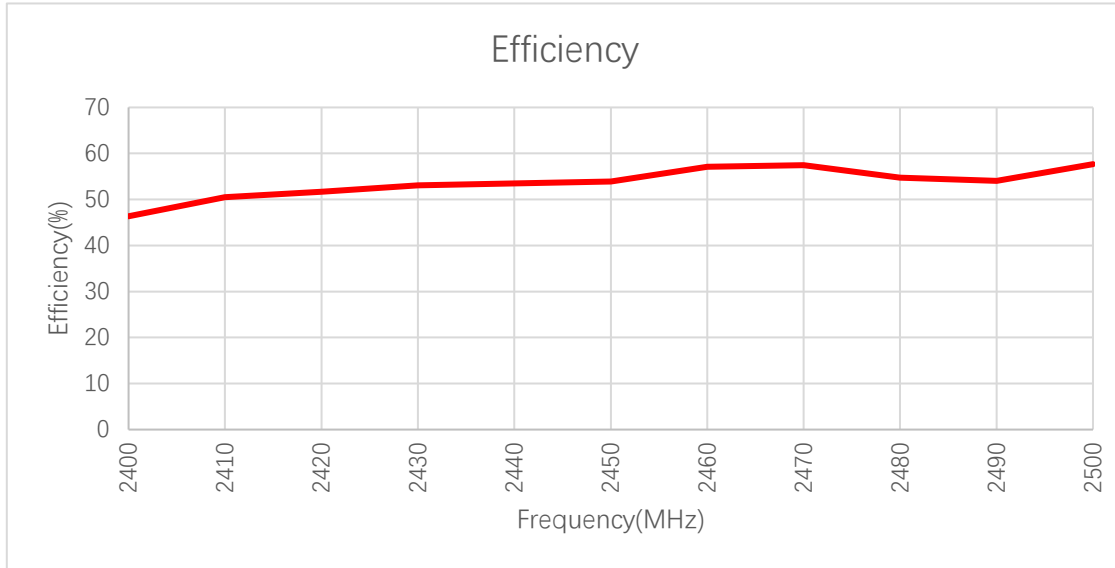
3.2. OTA Test Data

- 2.4G WIFI
- Test Condition: Assembled in test device

Band		Channel	TRP (dBm)	TIS (dBm)
2.4G WIFI	11B (11M ACK)	1/2412	15.3	-84.4
		6/2437	15.6	-85.4
		11/2462	16.3	-85.3
	11G (54M ACK)	1/2412	12.2	-70.3
		6/2437	13.4	-70.2
		11/2462	13.9	-70.8
	11N (MCS7 PING)	1/2412	11.8	-67.2
		6/2437	12.9	-68.1
		11/2462	13.5	-68.5

3.3. Radiation Performance Test

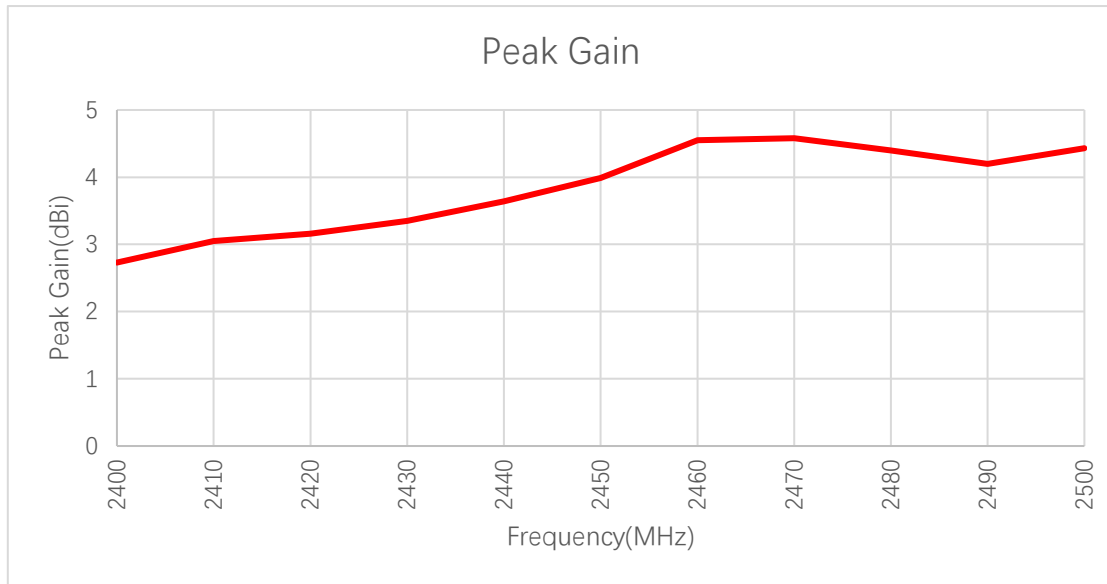
3.3.1. Efficiency



Efficiency (%)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Efficiency (%)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2460	2500	3600	4200	5000	5500	6000
Efficiency (%)	-	-	46.4	57.1	57.4	-	-	-	-	-

3.3.2. Peak Gain



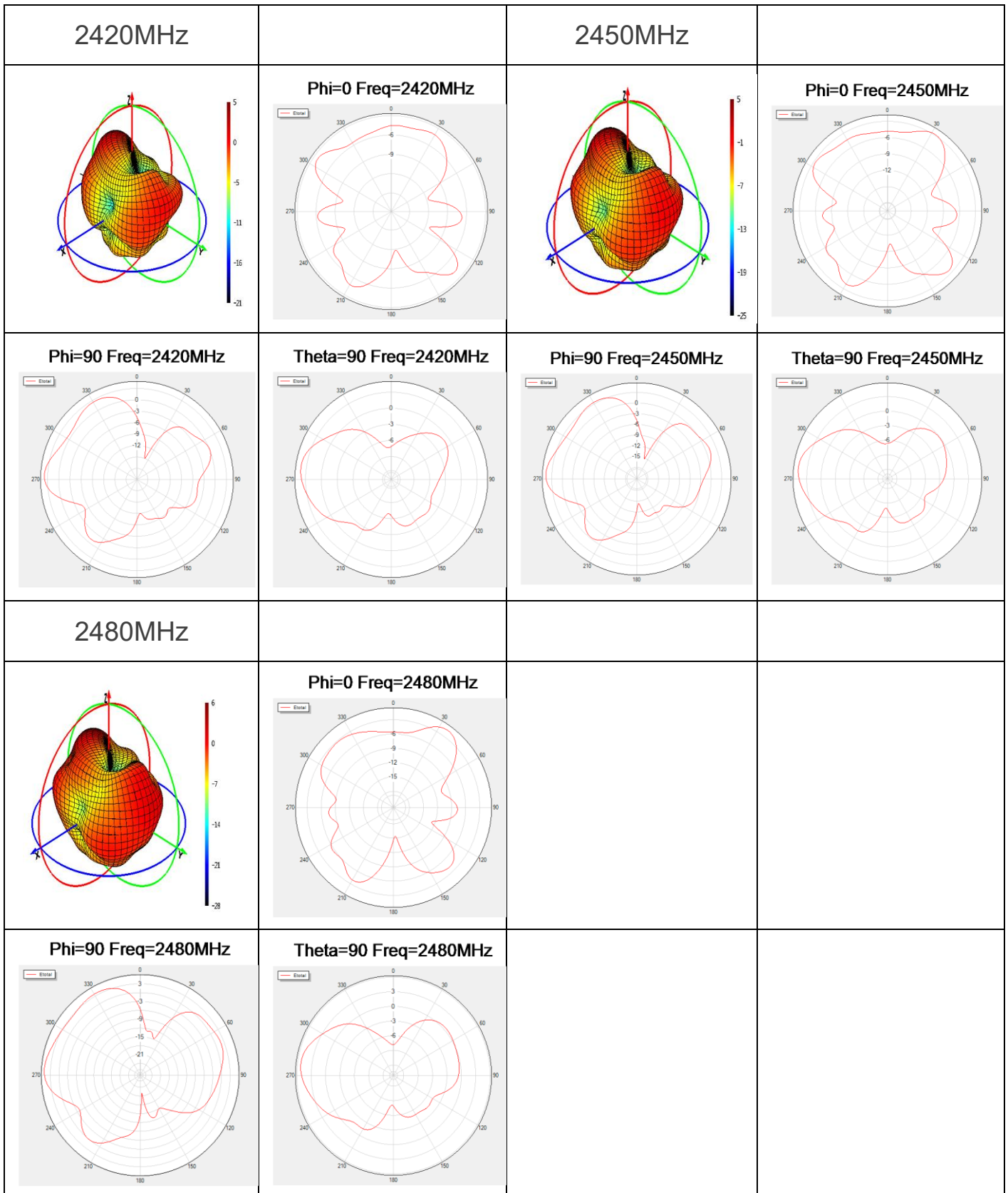
Peak Gain (dBi)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Peak Gain (dBi)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2460	2500	3600	4200	5000	5500	6000
Peak Gain (dBi)	-	-	2.7	4.6	4.4	-	-	-	-	-

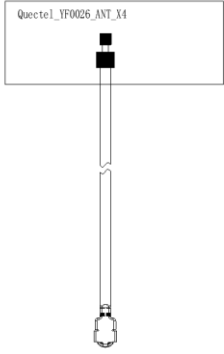
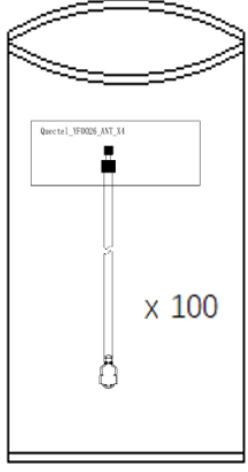
3.3.3. Radiation Pattern

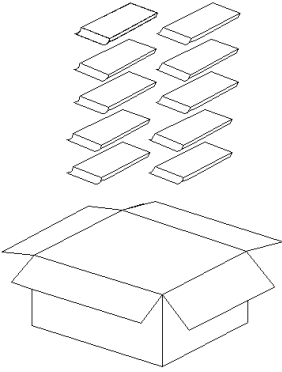
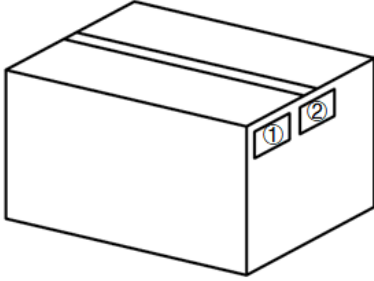
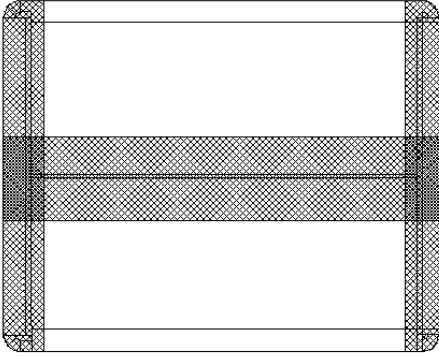
- Test Condition: Assembled in test device
- Test Chamber: SH-SY-16M





4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Product image
2		100 pcs antenna products in a big PE bag (100 PCS Antennas / Big PE Bag)

<p>3</p>		<p>40 big PE Bags / Carton Box (4000 PCS 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></p>
<p>4</p>		<p>Position for Attaching Labels ① Carton Label ② Quality Label</p>
<p>5</p>		<p>Sealing Cartons “I” type sealing cartons</p>
<p>Note</p>	<p>The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.</p>	

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
-	2024-11-14	Boris WANG/ Mike GUO/ David LIU/ Aria CHU	Creation of the document
1.0	2024-11-14	Boris WANG/ Mike GUO/ David LIU/ Aria CHU	First official release

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