



Antenna Datasheet

Product OC: Y0DPW00A0AA

Version: 1.1

Date: 2024-12-18

Product Name: WIFI Adhesive FPC PIFA Antenna

Key Features:

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

Dimensions: 31.28 mm × 18.67 mm

Efficiency: Up to 43%

ROHS and REACH Compliant

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1 Specification

Test Condition: Assembled in test device

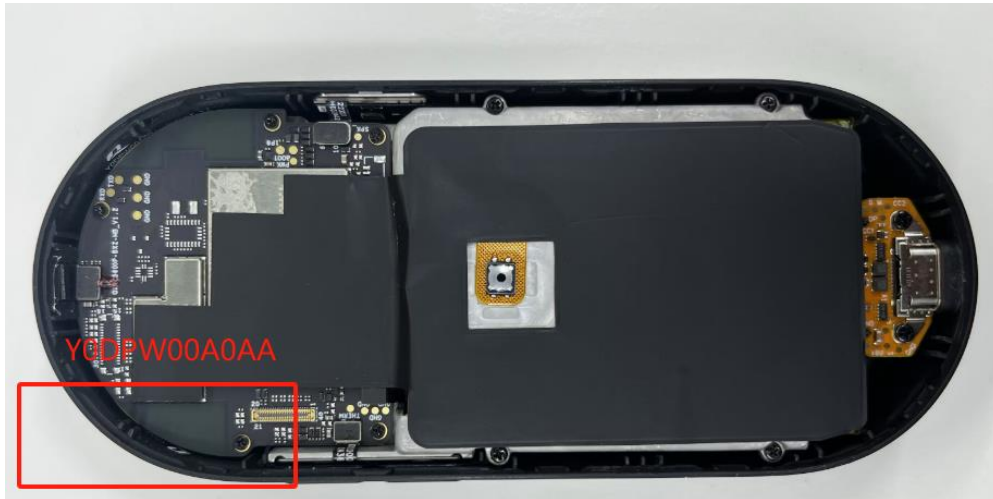
1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 2.5
Peak Gain	2.4 dBi

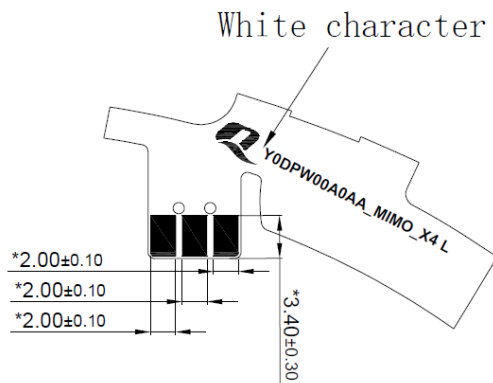
1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	31.28 mm × 18.67 mm
Material & Color	FPC & Black
Weight	Typ. 0.07 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

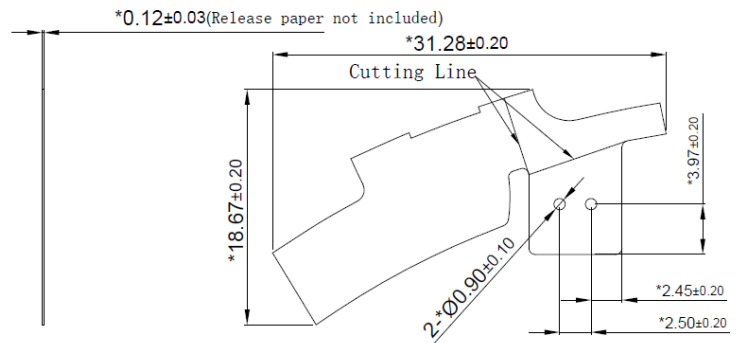
1.3. Antenna Assembly



2 Drawing



TOP

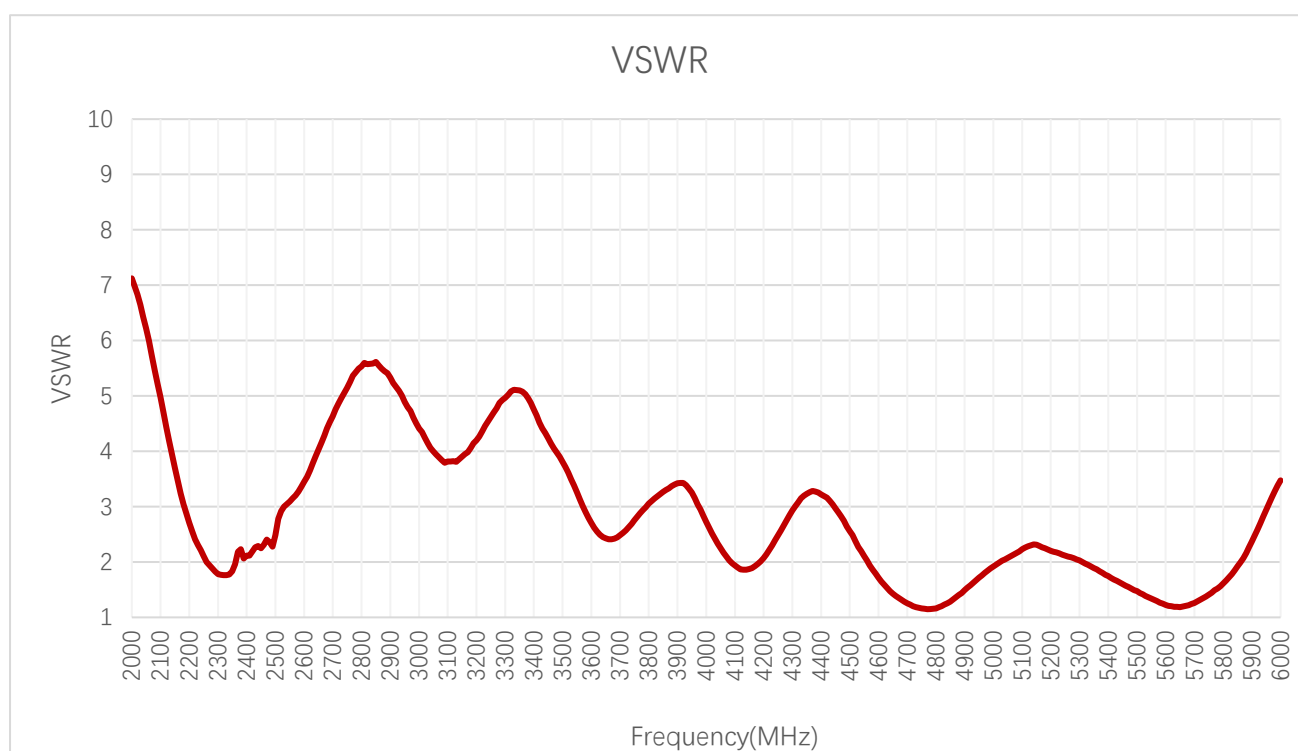


BOTTOM

3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

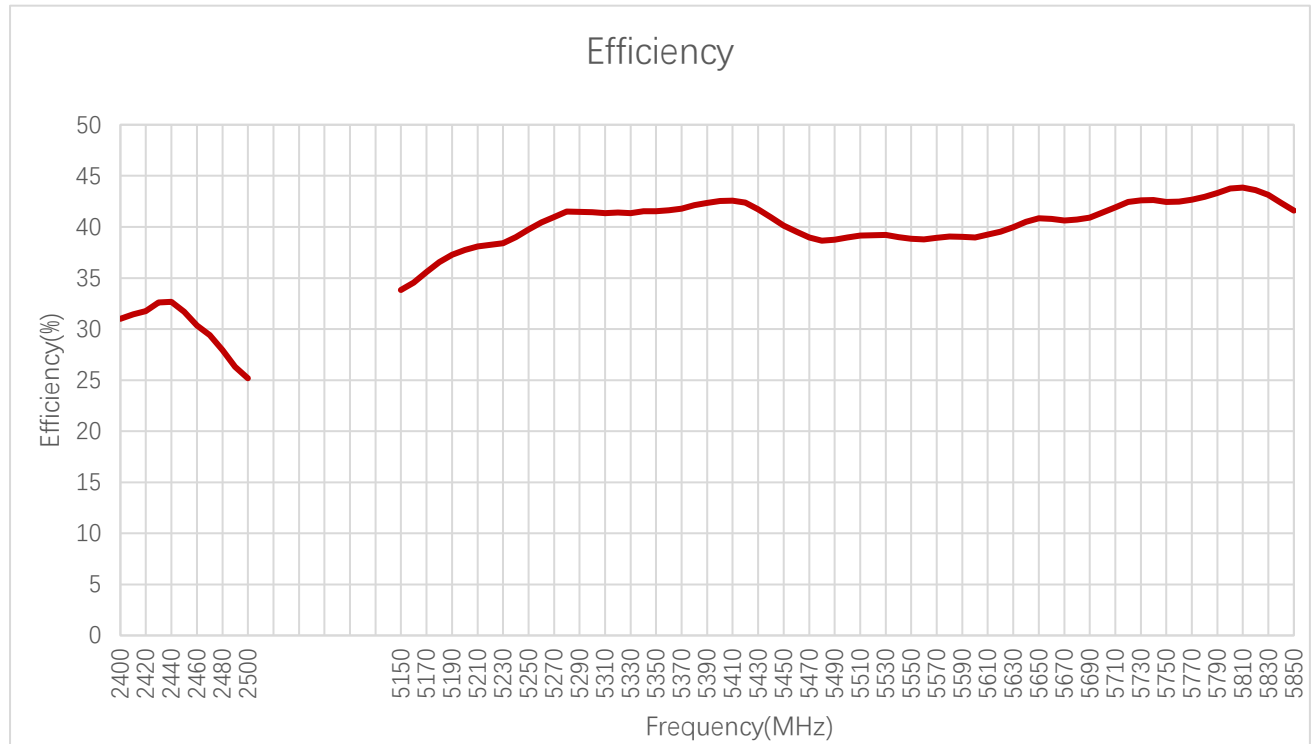


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	2.1	2.3	2.5	2.3	1.5	1.9	-	-	-	-

3.2. Radiation Performance Test

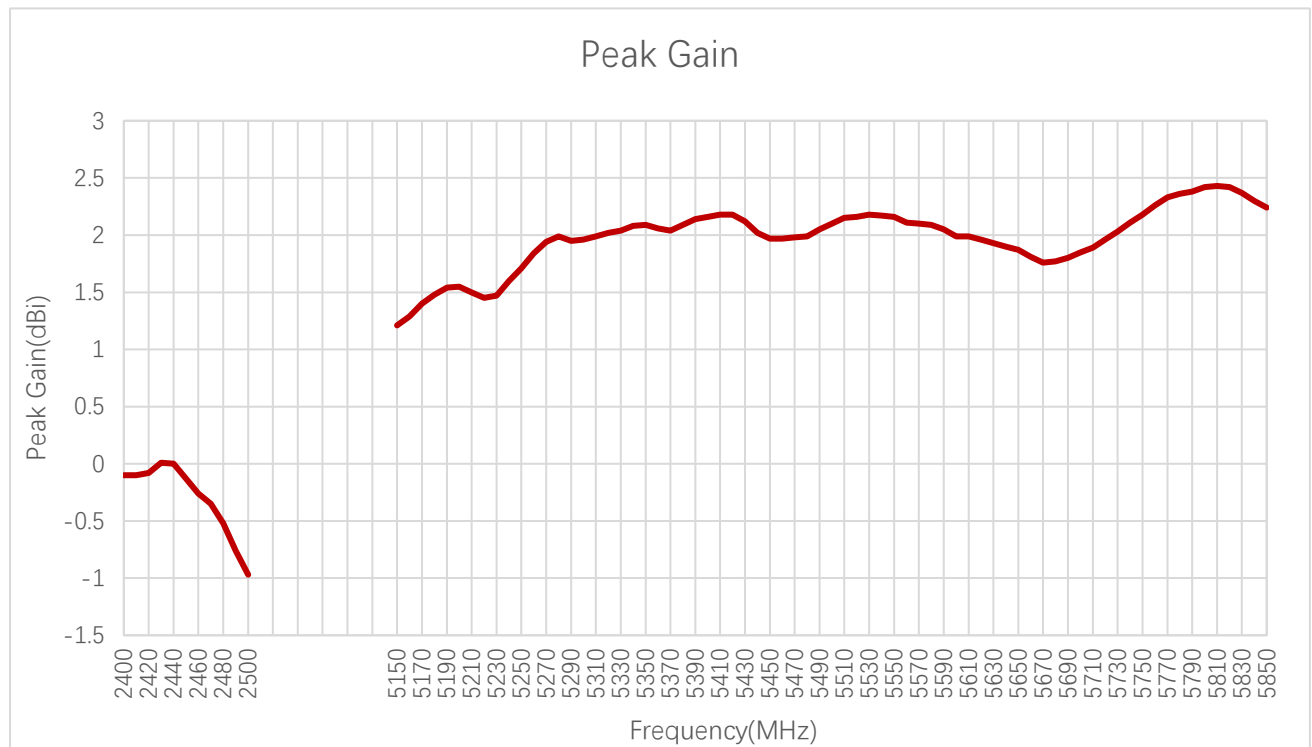
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	31.0	31.7	25.2	33.8	39.0	41.6	-	-	-	-

3.2.2. Peak Gain

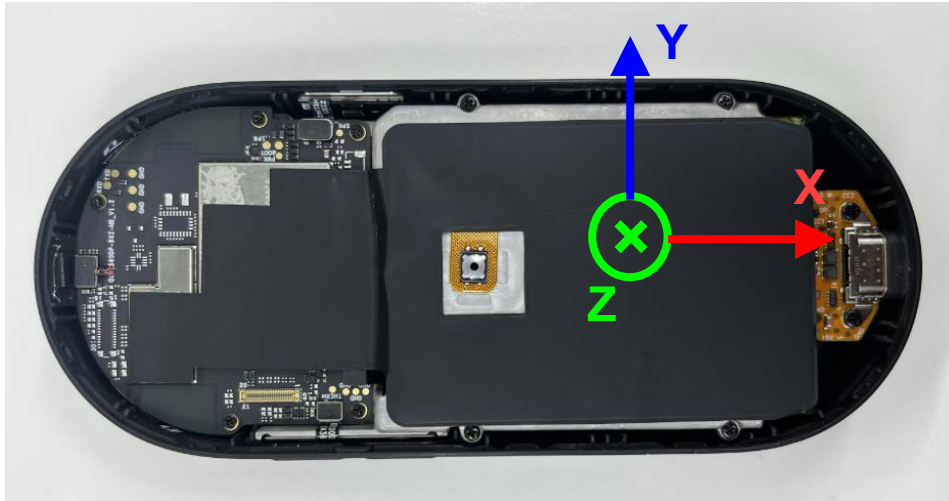


Peak Gain (dBi)

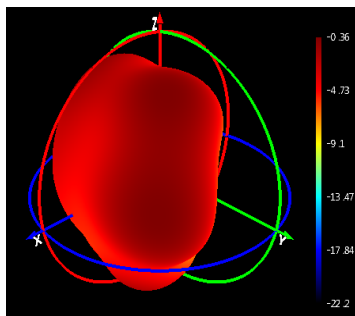
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	-0.1	-0.1	-1.0	1.2	2.1	2.2	-	-	-	-

3.2.3. 2D Radiation Pattern

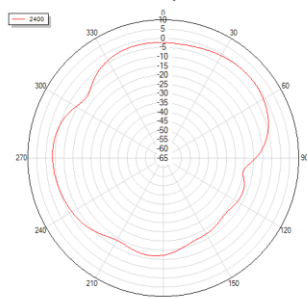
- Test Condition: Assembled in test device
- Test Chamber: HF-S-1



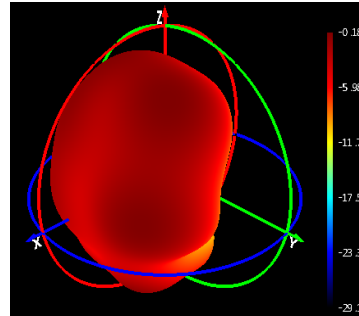
2400MHz



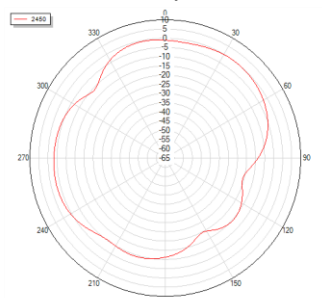
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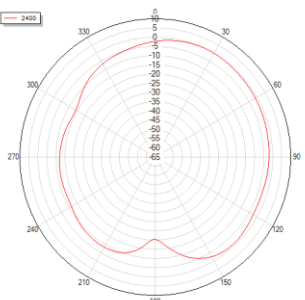
2450 MHz



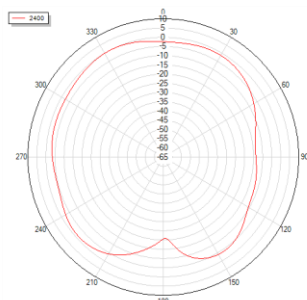
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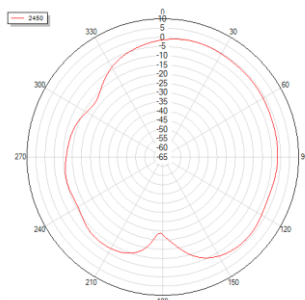
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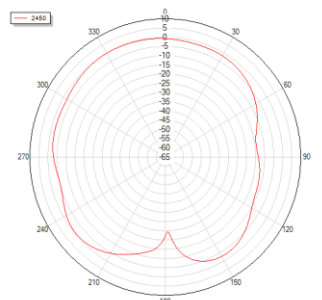
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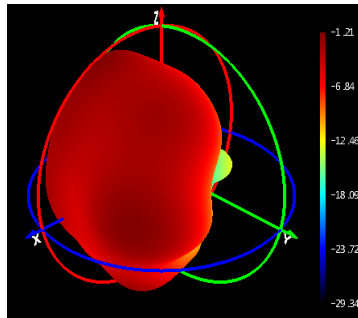
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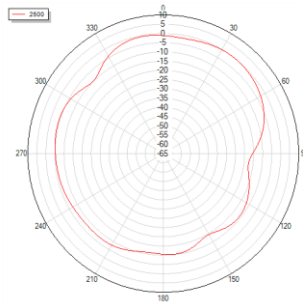
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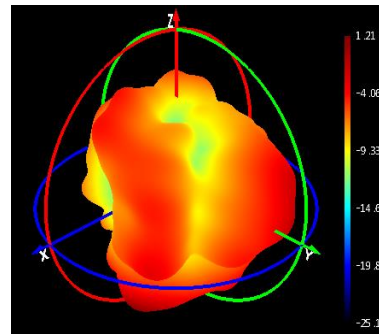
2500 MHz



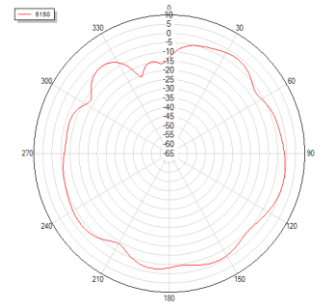
Theta=90 freq=2500MHz



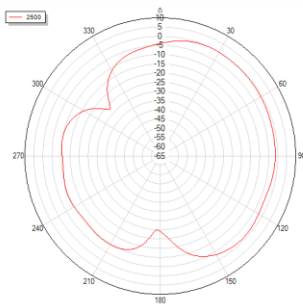
5150 MHz



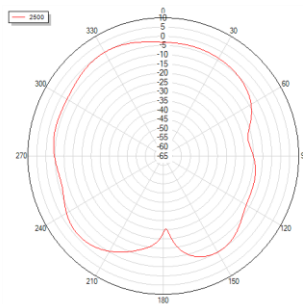
Theta=90 freq=5150MHz



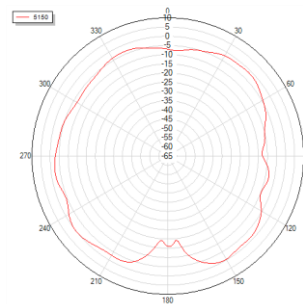
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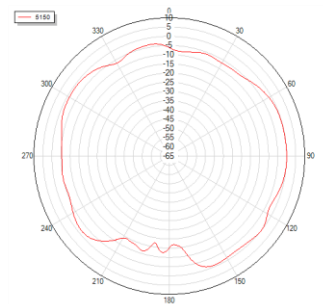
Phi=90 freq=2500MHz



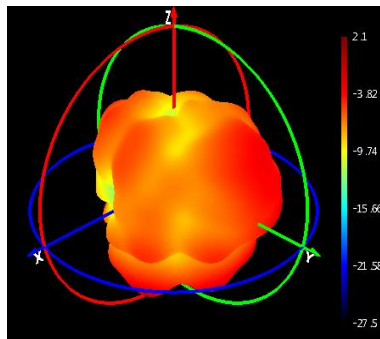
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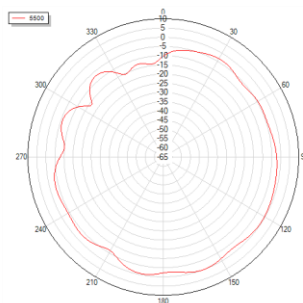
Phi=90 freq=5150MHz



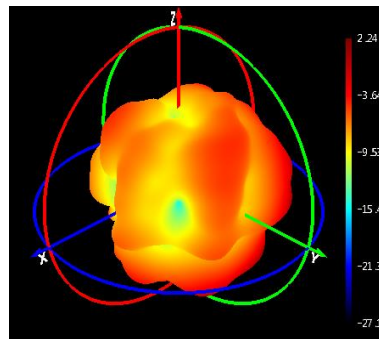
5500 MHz



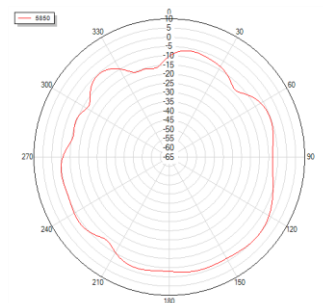
Theta=90 freq=5500MHz



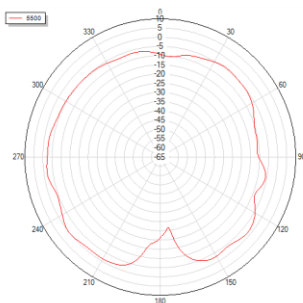
5850 MHz



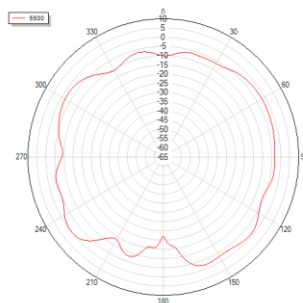
Theta=90 freq=5850MHz



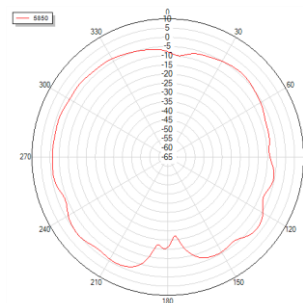
Phi=0 freq=5500MHz



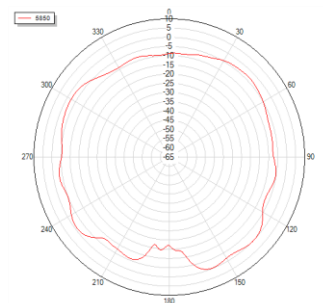
Phi=90 freq=5500MHz



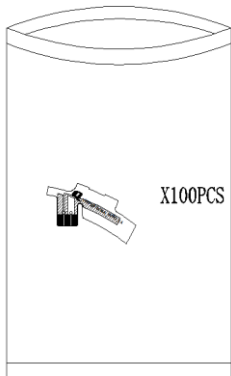
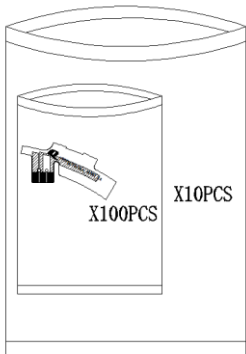
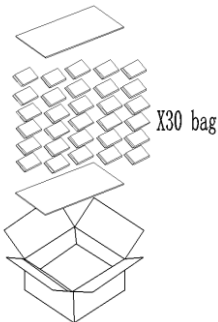
Phi=0 freq=5850MHz

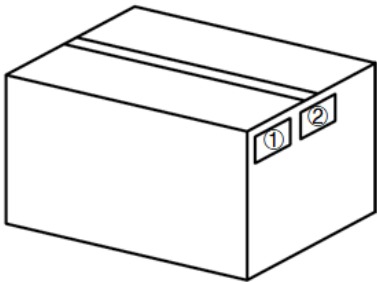
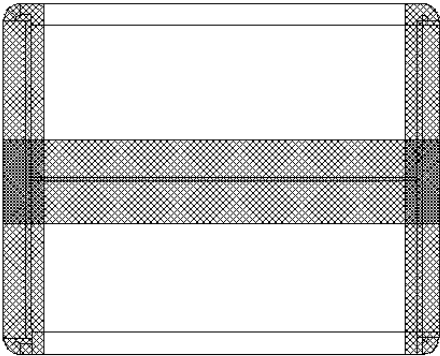


Phi=90 freq=5850MHz



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		100 pcs antenna products in a small PE bag (100 PCS Antennas / PE Bag)
2		1000 pcs antenna products in a big PE bag (1000 PCS Antennas / PE Bag)
3		30 PE Bags / Carton Box (30000 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 = 370 × 370 × 295 mm</u>

4		<p>Position for Attaching Labels</p> <ul style="list-style-type: none"> ① Carton Label ② Quality Label
5		<p>Sealing Cartons H-shaped sealing cartons</p>
Note	<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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Or our local offices. For more information, please visit:

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Revision History

Version	Date	Author	Note
-	2024-07-01	Edison LIU/ Blake XIANG/ David LIU/ Aria LIU	Creation of the document
1.0	2024-07-01	Edison LIU/ Blake XIANG/ David LIU/ Aria LIU	First official release
1.1	2024-12-18	Blake XINAG/ Edison LIU/ Aria CHU	1. Updated the drawing (Chapter 2) and cover photos 2. Updated Antenna Assembly (Chapter 1.3) 3. Add chapter 3.2.3 and REACH Compliant



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