

Antenna Specification

Product Item:

Y0BBW0CA1CA **Version:**

1.0

Date: 2024-11-06

Product Name: WIFI & BT FPC

Key features:

2400~2500 MHz, 5150~5850 MHz

59.32mm × 37.60mm × 0.11mm

Efficiency: 72.21 percent maximum

RoHS Compliant

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1 specifications

Test status: complete machine test

1.1. Electrical Performance

Electrical Specifications	
Frequency range	2400~2500 MHz, 5150~5850 MHz
Impedance	50 Ω ;
polarization mode	linear polarization
radiation field type	Omni-directional
voltage standing wave ratio	≤ 2.7
Peak Gain	6.4 dBi

1.2. Mechanical and environmental characteristics

Mechanical		
Antenna size		59.32mm \times 37.60mm \times 0.11mm
Material & Color		FPC & Black
Cable Type & Color & Length	WiFi	Φ ; 1.13 & Black & 75mm
	BT	Φ ; 1.13 & white & 75mm
Connector Type		RF1
Weight		1.05g typical
Installation Type		Adhesive paste
Environment		

Working temperature	-40° C to +85° C
Storage temperature	-40° C to +85° C
Compliance with environmental standards	RoHS

1.3. Antenna Installation Diagram

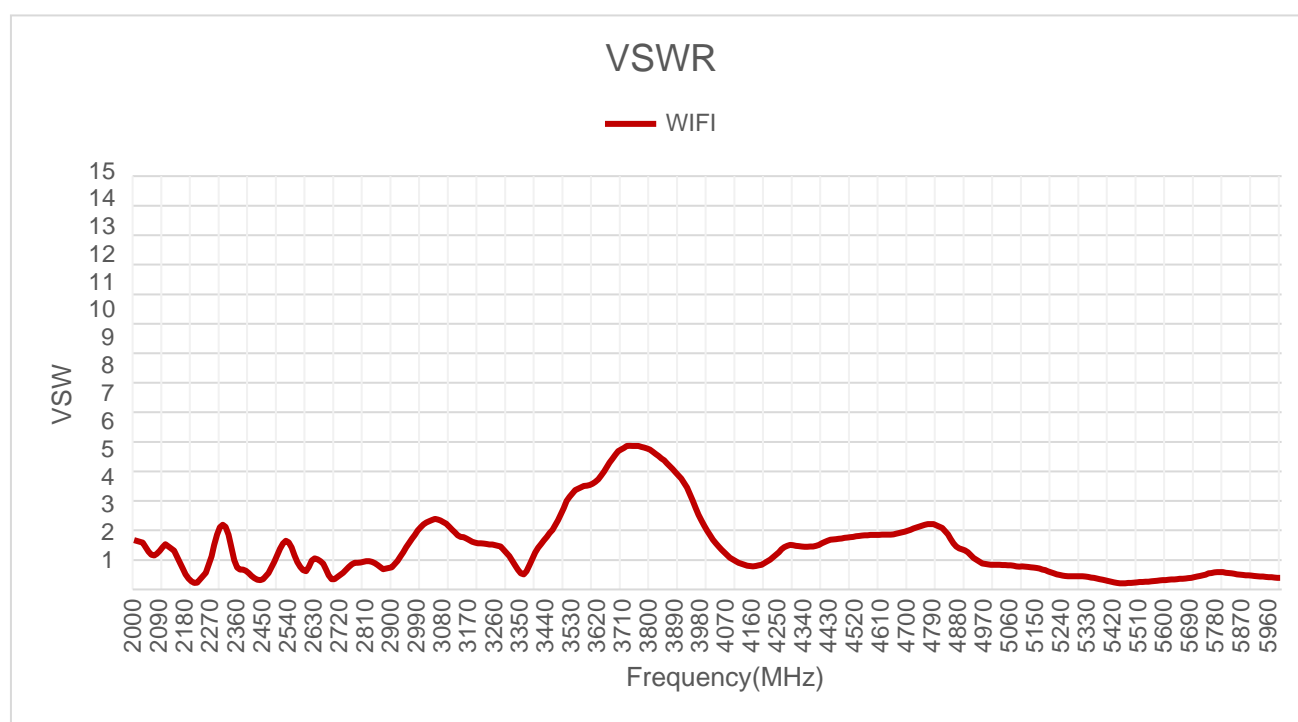




3 detailed performance

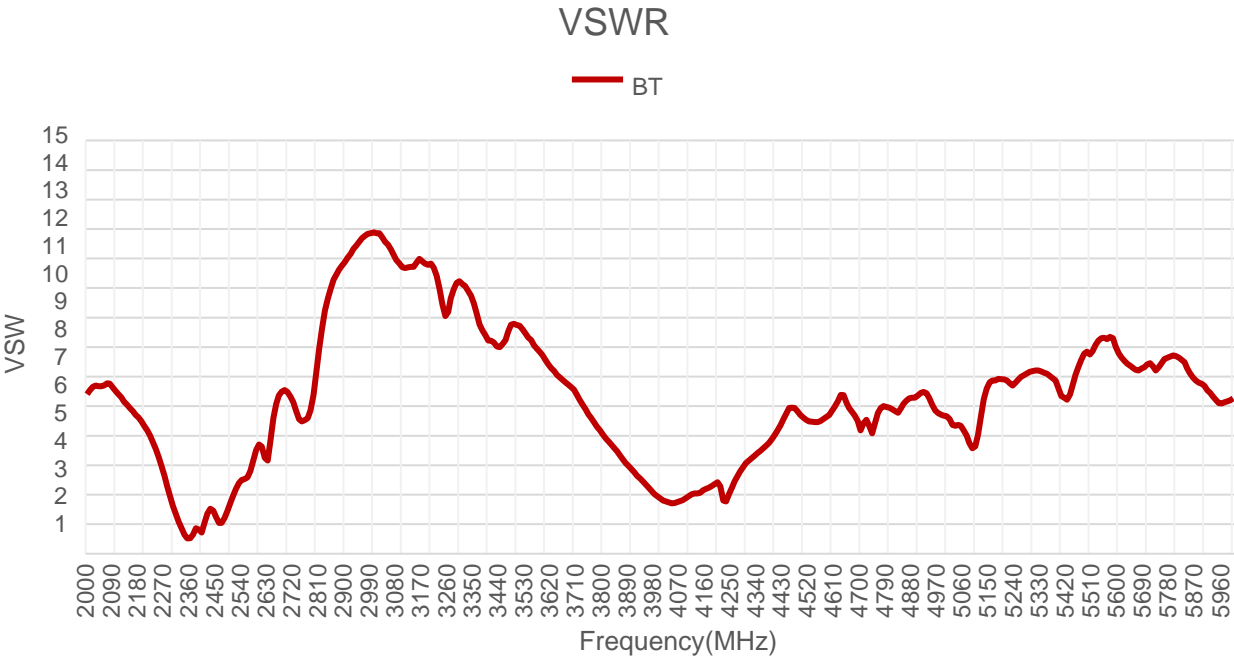
3.1. S-parameter test

3.1.1. Voltage standing wave ratio of



voltage standing wave ratio

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
voltage standing wave ratio	1.5	1.3	2.2	1.7	1.2	1.5	-	-	-	-

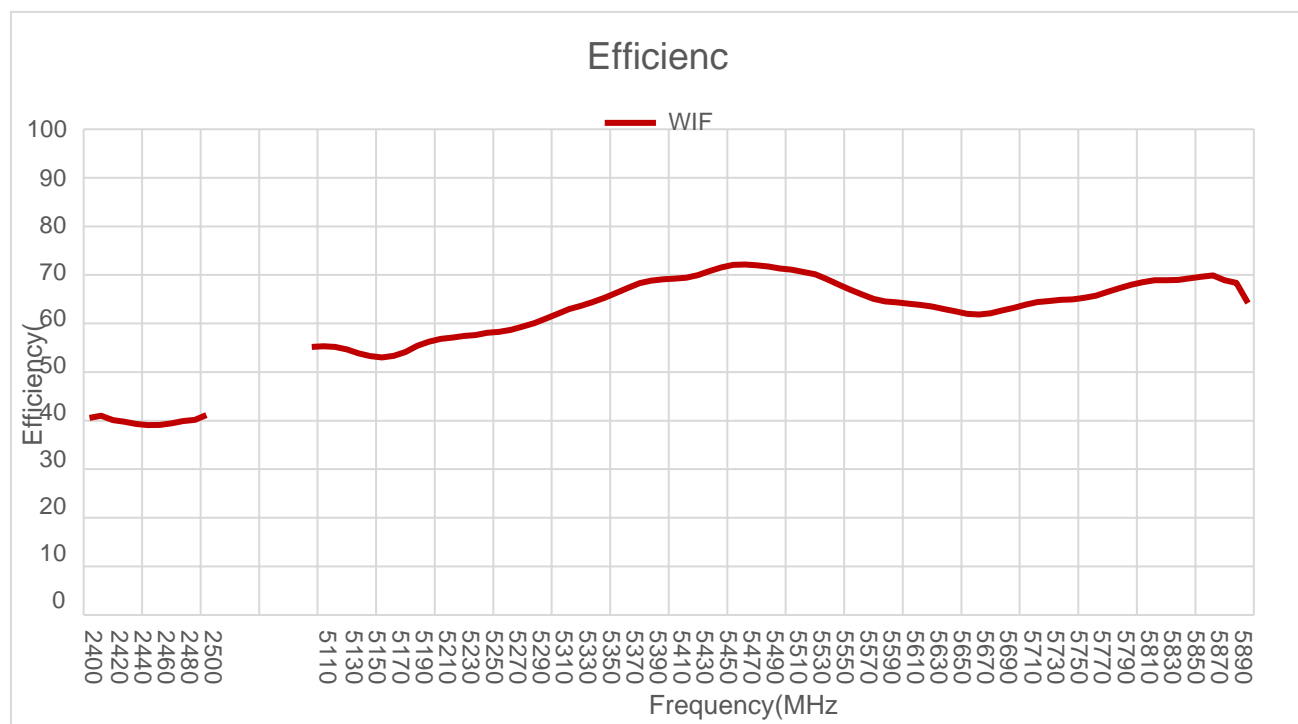


voltage standing wave ratio

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
voltage standing wave ratio	1.7	2.2	2.7	-	-	-	-	-	-	-

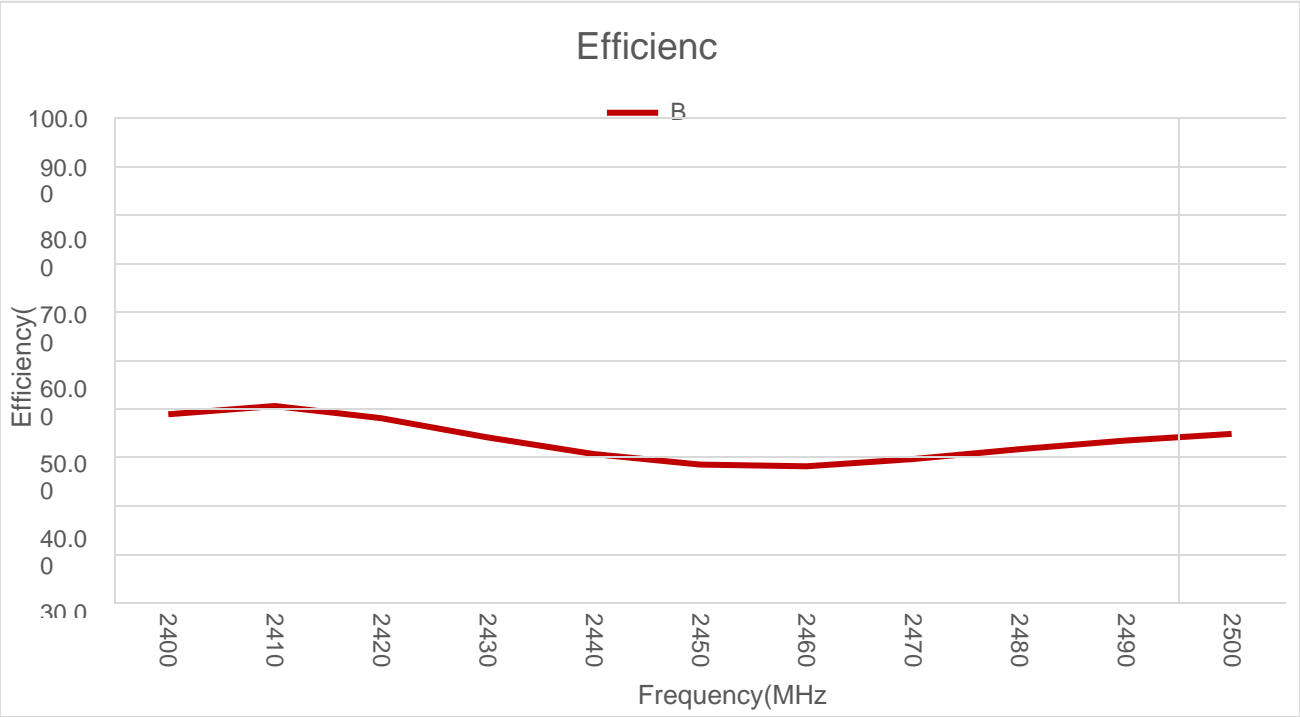
3.2. Radiation performance test

3.2.1. efficiency



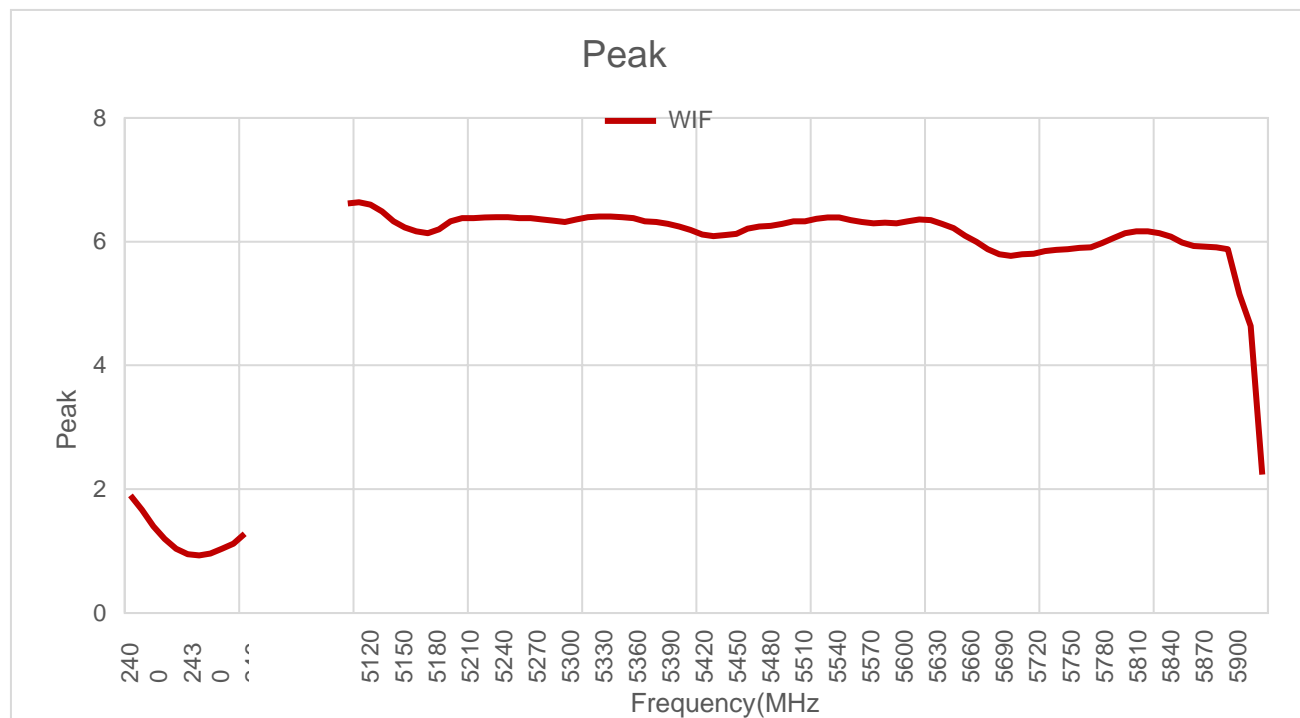
Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	40.6	39.1	41.2	53.3	71.4	69.3	-	-	-	-



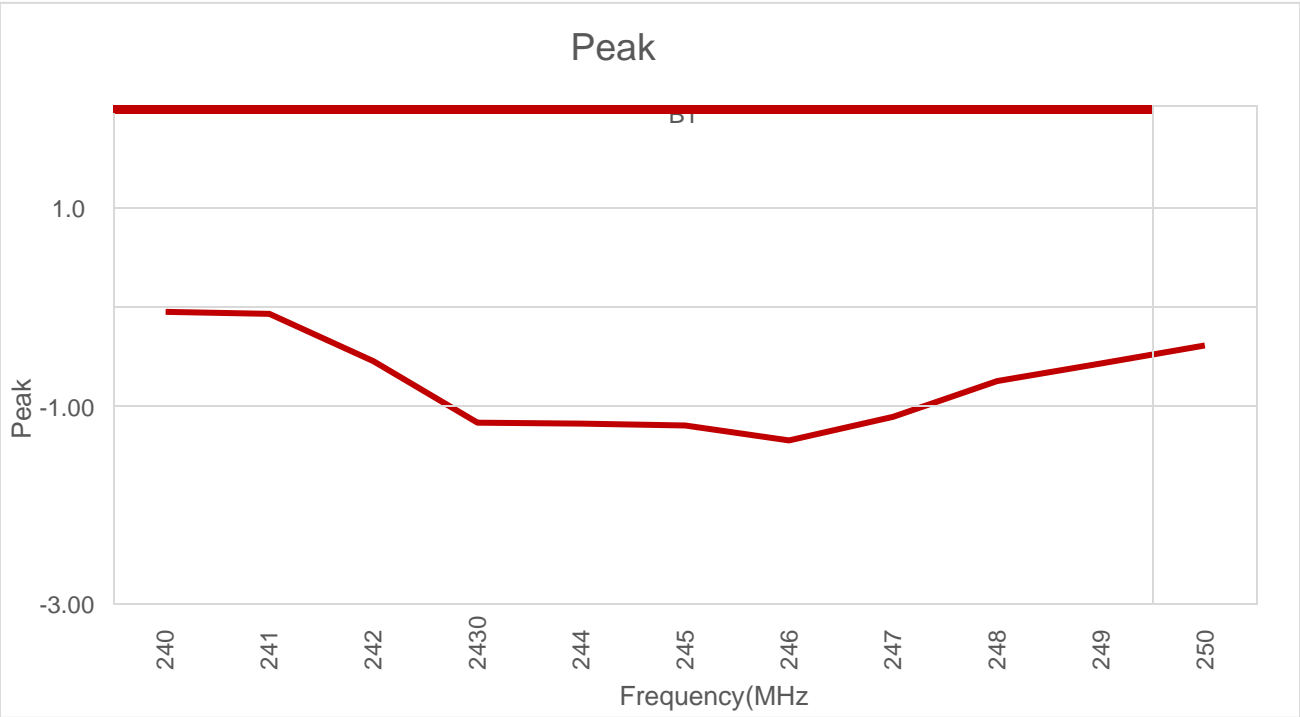
Efficiency (%)										
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	39.3	28.9	35.2				-	-	-	-

3.2.2. Peak gain of



Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	1.9	1.0	1.3	6.2	6.3	5.9	-	-	-	-

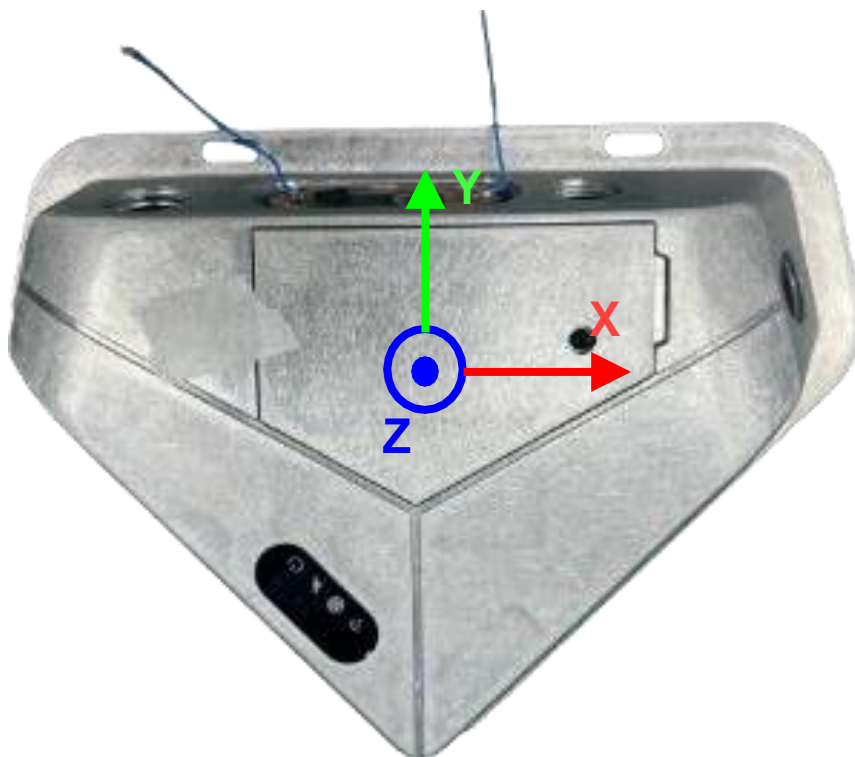


Peak Gain (dBi)

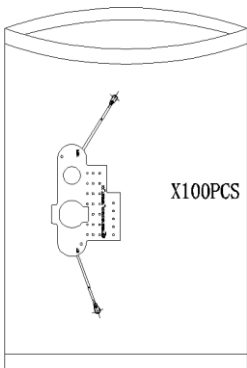
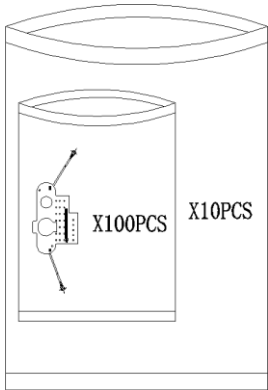
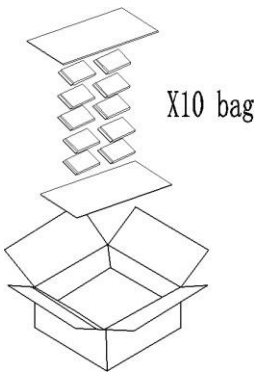
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	0.0	-1.2	-0.4				-	-	-	-

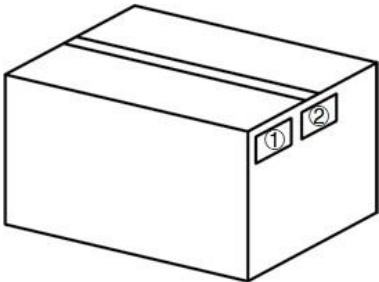
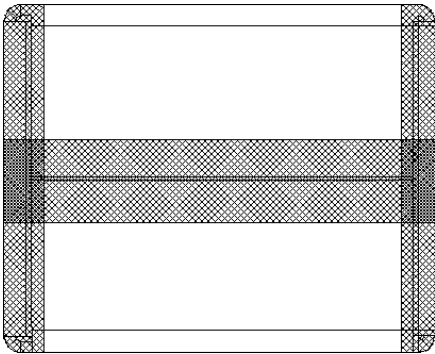
3.2.3. 2D radiation field pattern map

- Test status: complete machine test
- Test Lab: FS-G-1



4 packaging

Steps	Picture of packaging/ 2D picture	Brief description
1		100 products in a small bag PE
2		1 large PE bag small PE bag 1 large PE bag 1000 products
3		1 boxes of 10 large PE bags 1 boxes of 10000 products estimated quantity Products that are not satisfied with the box will be packed in suitable cartons. <u>Carton size: 370 x 370 x 295mm</u>

4		<p>Label Location</p> <p>① Carton label Quality label</p>
5		<p>Carton seal</p> <p>"I" shaped sealing box</p>
Remarks	<p>The above initial packaging method is for reference only, and the final actual packaging method is subject to the actual shipment packaging.</p>	

Contact Us

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Document History

Revision Record

Version	Date	Author	Change Expression
-	2024-11-06	Qinming PENG/ Shea LI/ David LIU/ Aria CHU	Document Creation
1.0	2024-11-06	Qinming PENG/ Shea LI/ David LIU/ Aria CHU	Controlled version

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