



Shenzhen Shuodian Electronic Technology Co.,Ltd

Date:2025-04-02

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Specification Sheet

for

ClimatePanel aerial

Woan Technology (Shenzhen) Co., Ltd.

ClimatePanel on Board

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Date: April 2, 2025

Manufacturer: Shenzhen Shuodian Electronic Technology Co.,Ltd

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1.Confirmation by both parties

1.1 Customer Confirmation Signature

Customer: Wo'an Technology (Shenzhen) Co., Ltd

Client Department/Position	Signature of Confirmer	Confirmation Date
Hardware/RF		
structure		
Project Manager		
Commercial/Procurement		
review		

1.2 Shuodian Technology confirmation signature

Department/Position	Confirmation signature	confirmation date
antenna engineer		
structural engineer		
Project Manager		
QA		
review		



2.General matters

2.1 Scope of application

This specification applies only to the ClimatePanel antenna manufactured by Woan Technology.

2.2 Operating temperature range

This product is designed for use within a temperature range of $-20 \sim +65^{\circ}\text{C}$

2.3 Storage temperature range

This product is stored at $-30 \sim 75^{\circ}\text{C}$.

3.General product specifications

NO.	ITEMS	DETAILS
1	model	ClimatePanel
2	frequency band	2400-2500MHz
3	VSWR	≤ 2.0
4	impedance	$50\ \Omega$
5	Antenna type	IFA
6	Antenna implementation	On-board PCB
7	Antenna pictures	



4.Product Specifications

4.1 Product Structure Parameters

4.11 Product Material Composition:

serial number	Materials	Specifications (MM)
1		

4.12 Appearance

The product has a good appearance, with no scratches, sweat marks, protrusions, or other defects that seriously affect its appearance.

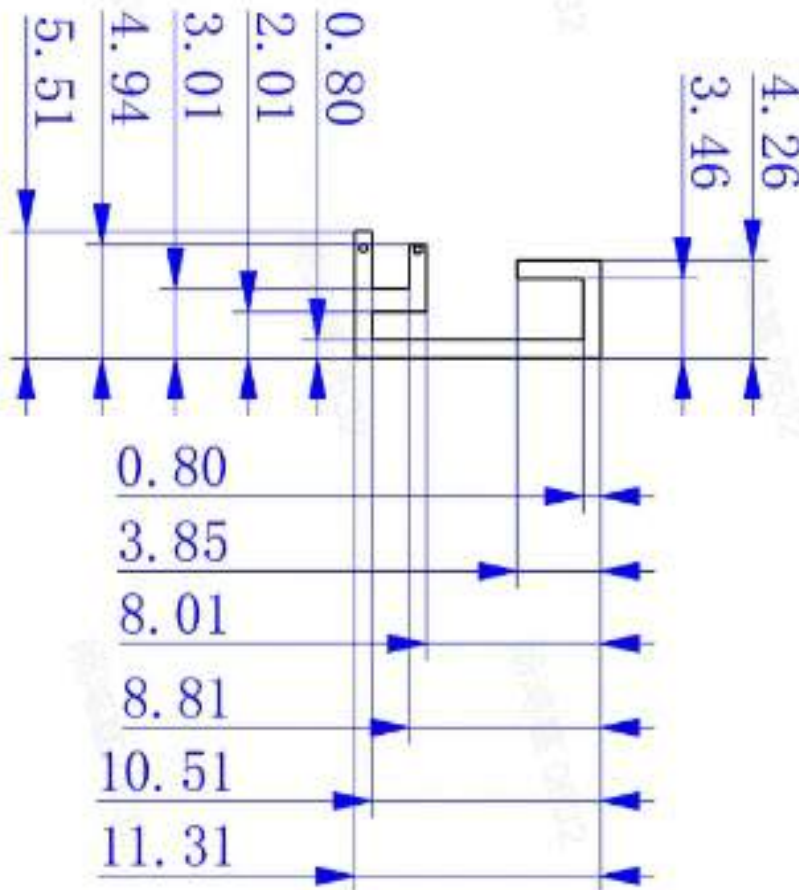
4.13 Structural dimensions

Reference product drawings:



产品图纸:

Unit:mm





4.2 Product electrical performance test data

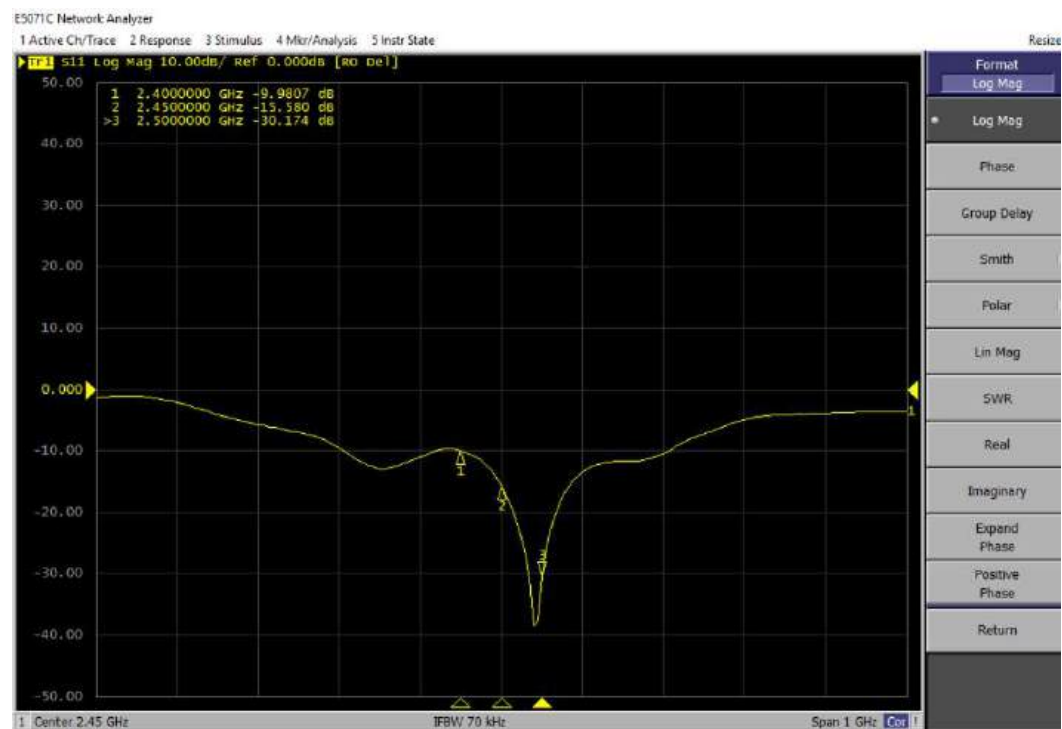
4.21 Test environment and equipment

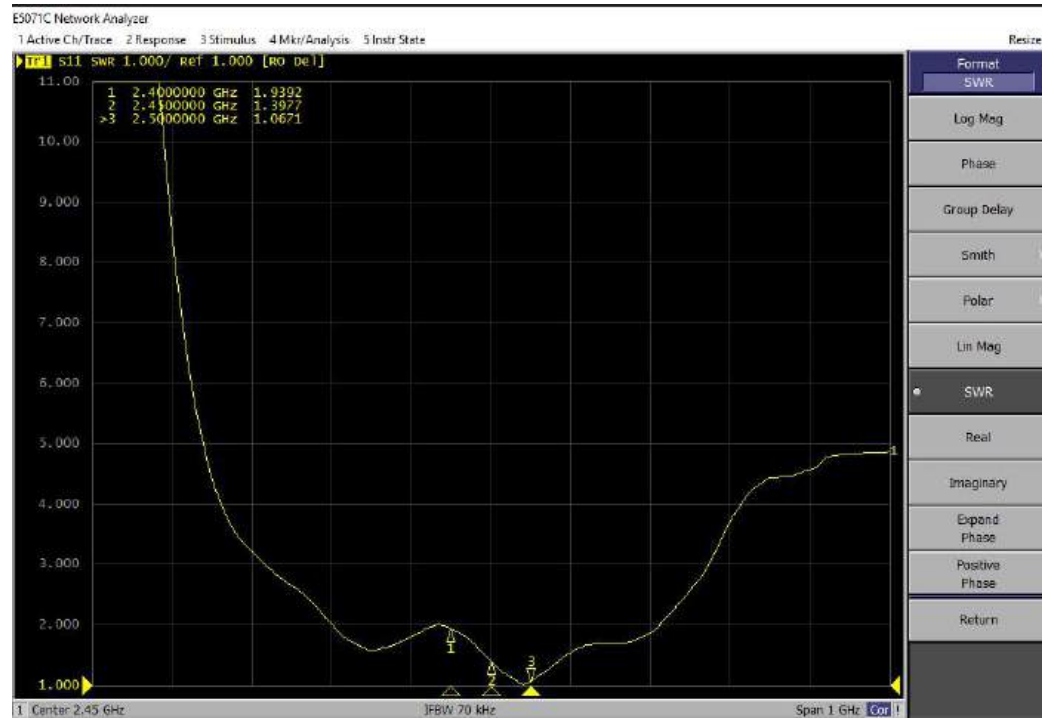
Test environment:	test device:
temperature: 10~30℃	network analyzer
relative humidity: ≤80% (+40℃)	KEYSIGHT E5071C
Atmospheric pressure: 750mmkg	muti probe microwave darkroom
±30mmkg	

4.22 Product electrical performance test data:

4.22.1 Product S11 diagram:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-9.98	-15.58	-30.17
VSWR	1.93	1.39	1.06





4.22.2 Gain, Efficiency, and Radiation Pattern

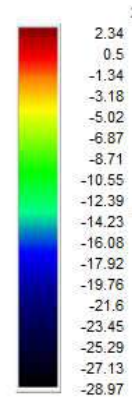
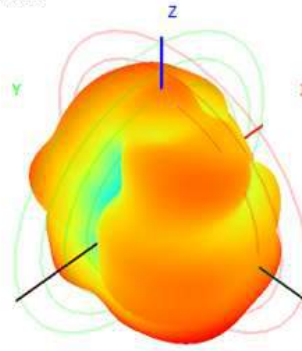
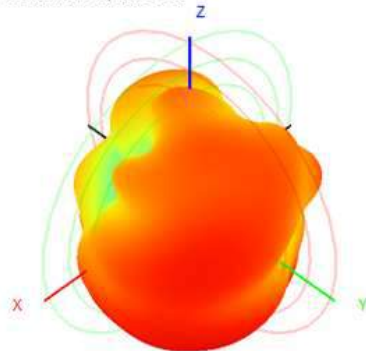
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.88	29.2
2410.0	1.73	29.4
2420.0	1.46	29.3
2430.0	1.48	30.1
2440.0	1.82	31.6
2450.0	2.34	33.2
2460.0	2.96	33.9
2470.0	3.70	35.6
2480.0	3.96	35.4
2490.0	4.00	35.7
2500.0	3.80	36.0



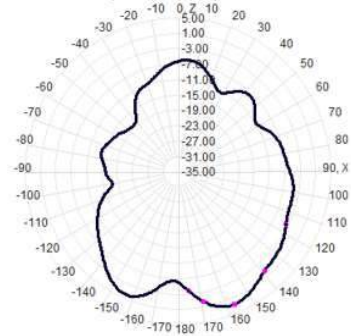
Radiation pattern @2450MHz

2450.0MHz H+V, Eff: 33.2%

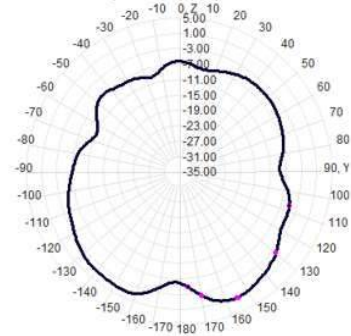
Back View



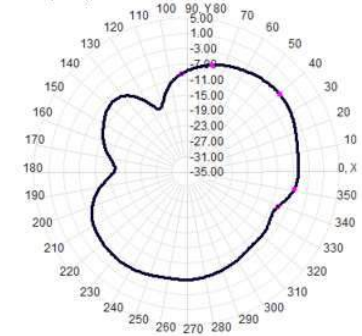
2450.0MHz Total(E1-XZ), Max= 2.32dBi



2450.0MHz Total(E2-YZ), Max= 0.91dBi



Total(H-XY), Max= -3.48dBi, CirD=13.66





5. Product packaging method

Packaging: Self-sealing bags, 200 pieces per bag

6. Document number

Document No.	
Release Date	2025/04/02
Author	Hungjie
Review	WH

Revised History

Date	Version	Revised Record
2025/04/02	1.00	New Project