

SPECIFICATION

APPLICATION FOR APPROVAL

PART NAME : 433 PCB ANTENNA
DATE : 2024/1/20

Release : Full release

Customer Approval	
Program Manager	R & D director
Peter Lu	Peter Lu
Supplier Approval	
Program Manager	R & D director
郝井强(Jingqiang Hao)	孙高鹤(Gaohe Sun)

Confidential

This message contains information that may be confidential and privileged. Unless you are the addressee (or authorized to receive messages for the addressee), you can not use, copy or disclose to any third party or any information contained in the message. If you have received the message in error, please advise the sender by reply e-mail and delete the message. Nothing in this message should be interpreted as a digital or electronic signature that can be used to authenticate a contract or other legal document. Thank you very much.

Company:Tianjin Yingshun Communication Technology Co., Ltd

Address: Room 805, Building 2, Fubao Industrial Park, Zhangjiawo Town, Xiqing District, Tianjin

REVISION

REV.NO.	DATE	DESCRIPTION
0	2024/1/20	APPROVAL

1. ELECTRICAL SPECIFICATIONS

1-1 FREQUENCY BAND

Freq. Band	Freq.(MHz)
433	433-434MHz

1-2 IMPEDANCE

Nominal Impedance(including matching circuit) : **50** ohms

1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure 1-3.

Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available

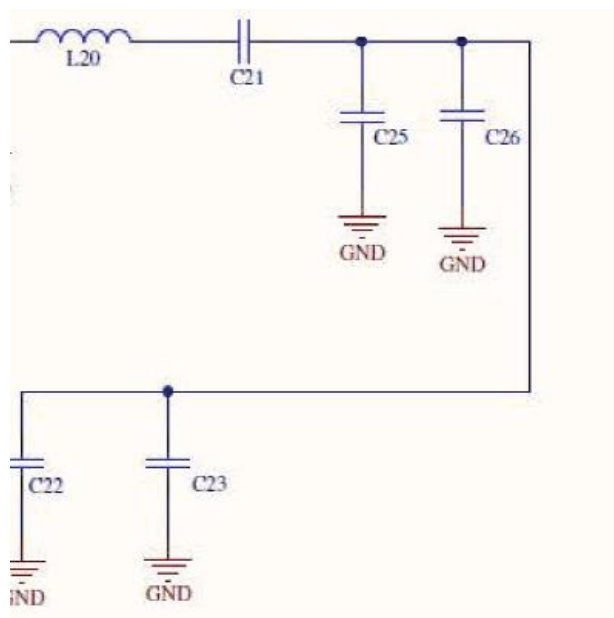


Figure 1-3

3.ENVIRONMENTAL CHARACTERISTICS

Customer No: Sensata Technologies (Changzhou) Co., Ltd.	<i>File: 2024/01/20</i>
Test Condition: FREE SPACE	Note: VSWR/ReturnLoss/Smith Chart
Confirmation: Jing Qiang Hao	Engineer: GaoHe Sun

NO.	ITEM	TEST CONDITION
1	Normal condition	1.Temperature: 24.3±1℃ 2. Humidity: 35%±2% 3. Pressure: 101.2KPa

4. Test equipment

Equipment	Model No	Manufactory	Series No
ENA vector analyzer	E5071C	Keysight	MY46900684
OTA chamber	FT-0024	FEITU	FS20200302

5. PACKAGING

Antenna is PCB type , packaging with PCB board.

6. APPENDIX

All of the specifications are shown as the attached files.

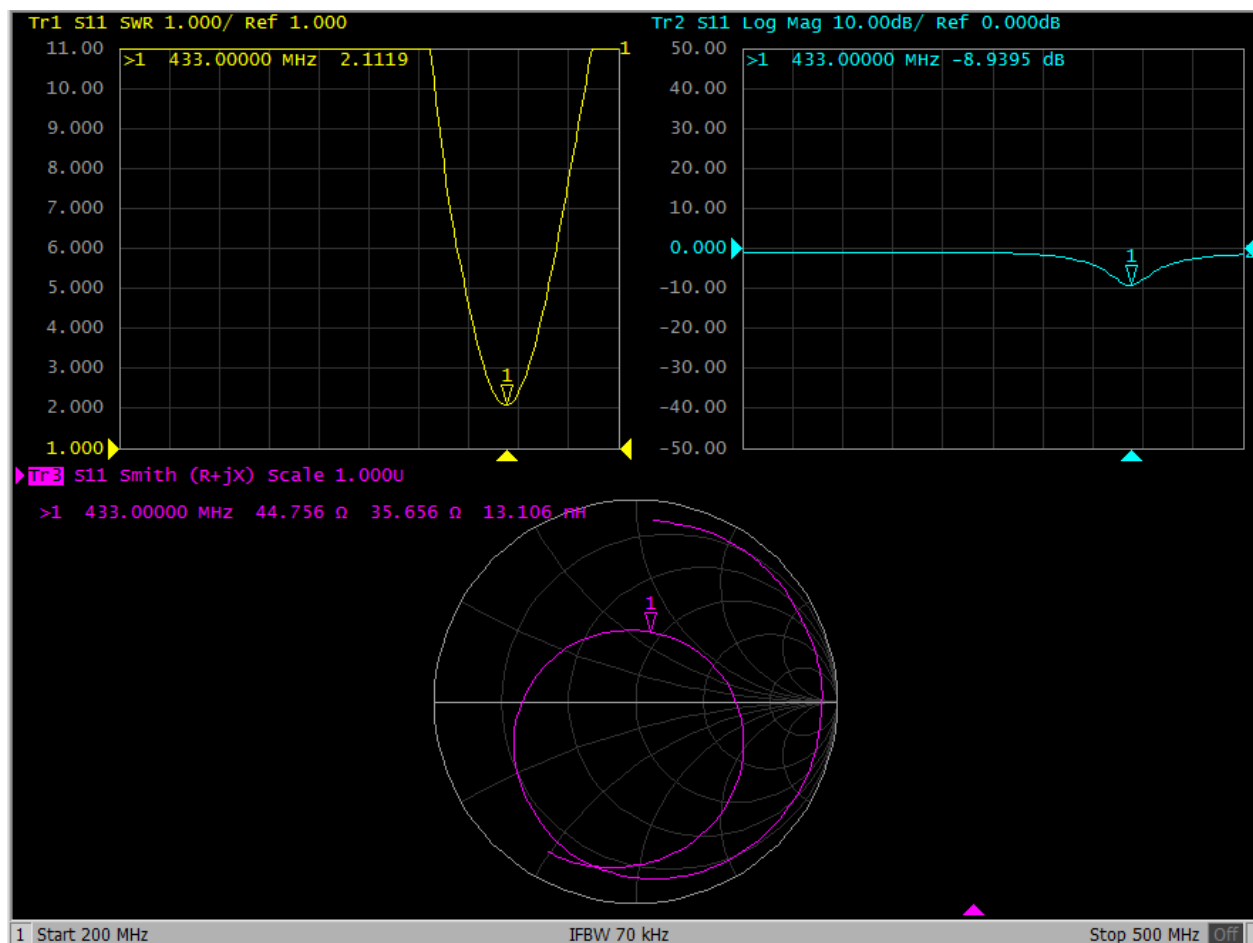
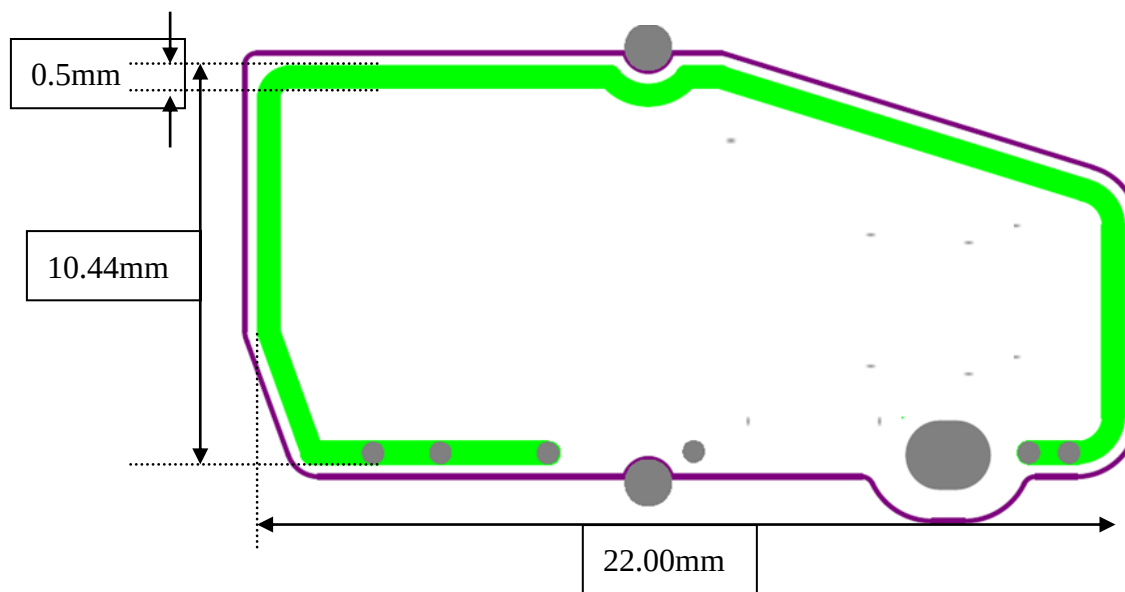


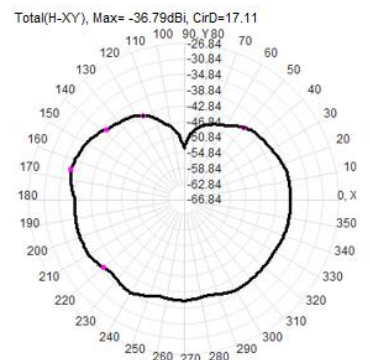
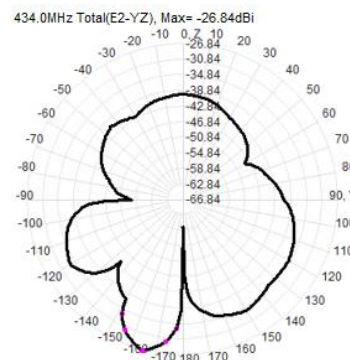
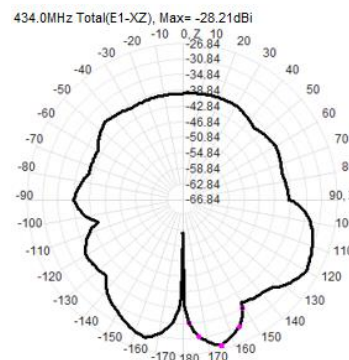
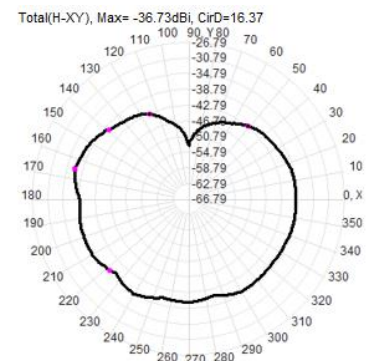
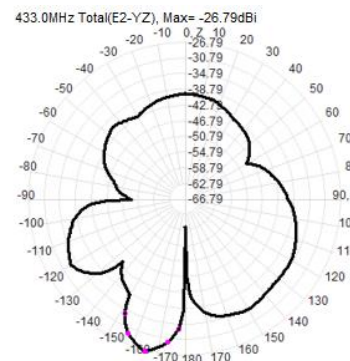
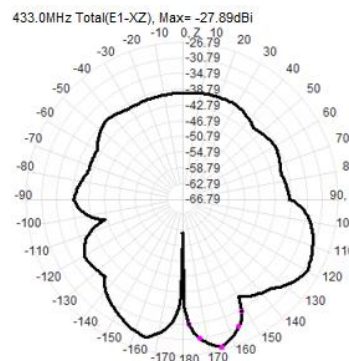
Figure 2-1

Antenna Test Date

一：Antenna Efficiency&PeakGain

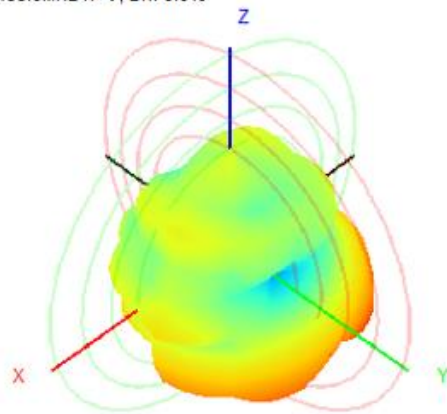
Frequency ID	1	2
Frequency (MHz)	433.0	434.0
Efficiency (dBi)	-36.45	-36.45
Gain (dBi)	-24.33	-24.50
Efficiency (%)	0.02	0.02
Directivity (dB)	12.12	12.06
Peak Gain Position (Theta)	165.00	165.00
Peak Gain Position (Phi)	120.00	120.00
Efficiency ThetaPol (%)	0.01	0.01
Efficiency PhiPol (%)	0.01	0.01
Upper Hem. Efficiency (%)	0.00	0.00
Lower Hem. Efficiency (%)	0.02	0.02

二：Antenna 2D-XZ/YZ/XY

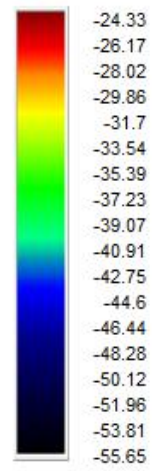
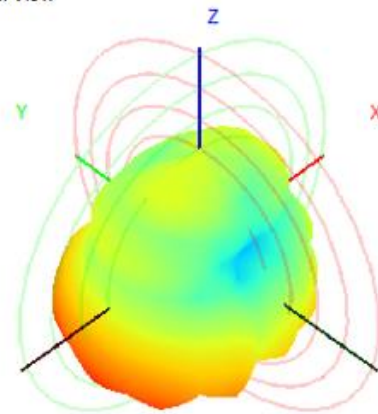


三: Antenna 3D (433-434MHz)

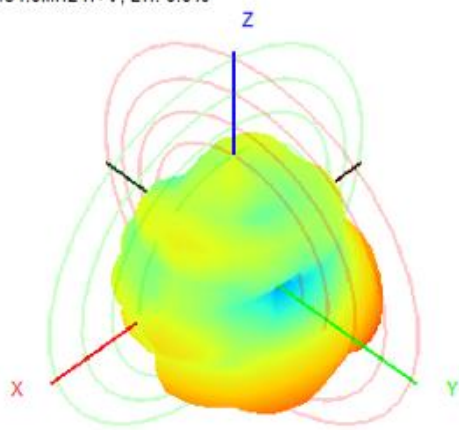
433.0MHz H+V, Eff: 0.0%



Back View



434.0MHz H+V, Eff: 0.0%



Back View

