



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-FPC229BX

Product Name: Antenna

Index:

1. Specification
2. Characteristics and Reliability Test
3. Antenna - S Parameter Test Data
4. Antenna - Radiation Pattern Test Data
5. Mechanical and Packing Drawing

Revision History

Revision	Date	Change Notification	Description
1.0	2024.6.17	初版	

Product Number:AN2450-FPC229BX

Product Name: Antenna

1. Specification

Sample Photo



A. Electrical Characteristics

Frequency	2400-2500 MHz/5150-5850MHz
S.W.R.	<= 2.0
Antenna Gain	3.69dBi /4.91dBi
Polarization	Linear
Impedance	50 Ohm

B. Material & Mechanical Characteristics

Cable Type	OD1.13mm ,Black
Connector Type	I-PEX

C. Environmental

Storage Temperature	- 40°C ~ +80 °C
Operation Temperature	- 40°C ~ +80 °C

Product Number:AN2450-FPC229BX

Product Name: Antenna

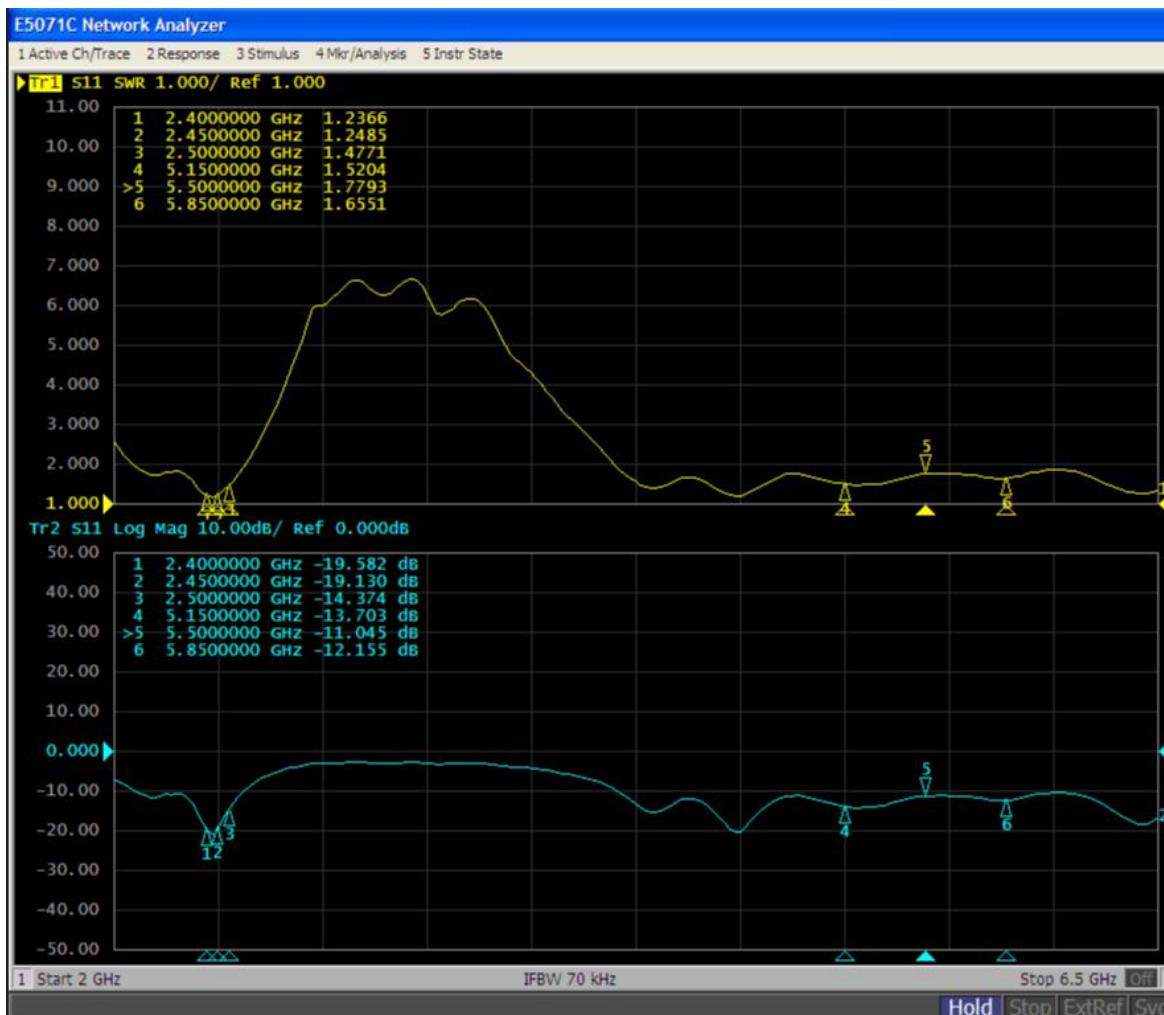
2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements	Result
1	V.S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification	PASS
2	Insertion Loss	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification	PASS
3	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification	PASS
4	Solderability	GB / T2423.28-2005 Temp: $260 \pm 5^{\circ} \text{C}$; Duration: 5 seconds $260 \pm 5^{\circ} \text{C}$;	Tin evenly on full	PASS
5	Pull Test	Holding with individual specification; force applied to axis of terminal .	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$	PASS
6	Dimension	Inspection of dimension, color, material, package, surface process.	Directive DUT specification	PASS
7	Salt Spray	GB / T 2423.17-2008 Temp: 35°C ; RH: $\geq 95\%$; NaCl solution: $\geq 5\%$; Time: 24H 35°C ; $\geq 95\%$; $\geq 5\%$; 24H	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321	Directive RoHS 2015/863/EU RoHS 2015/863/EU	PASS

Product Number: AN2450-FPC229BX

Product Name: Antenna

3. Antenna - S Parameter Test Data



天线位置

Product Number:AN2450-FPC229BX

Product Name: Antenna

4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	3.68	3.69	3.58	3.48	3.43	3.53	3.43	3.60	3.48	3.35	3.25
Efficiency (%)	60.52	63.74	64.09	64.24	66.54	68.38	64.90	66.25	62.38	60.95	58.59

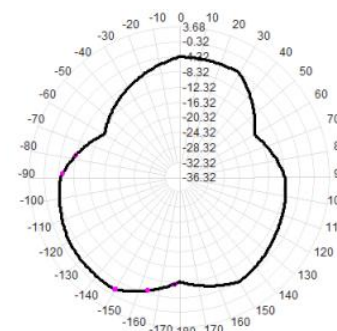
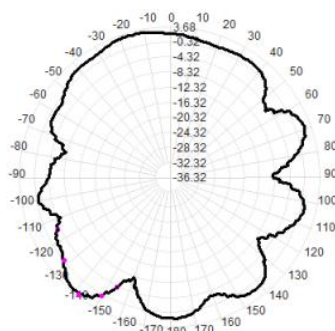
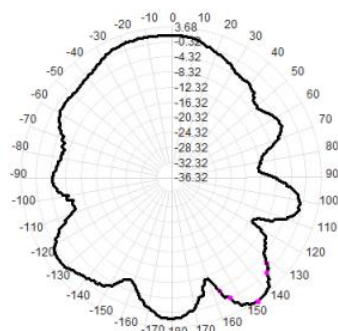
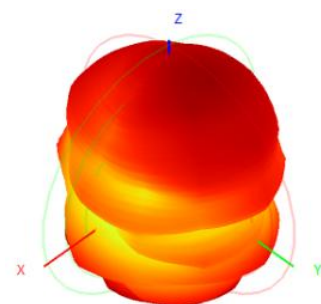
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
4.11	4.46	4.74	4.42	4.62	4.71	4.59	4.64	4.90	4.91	4.88	4.00	4.70	4.70	4.67
57.06	59.34	58.45	51.66	56.57	56.89	57.34	51.80	56.71	55.83	57.00	51.69	53.23	56.34	56.46

XZ

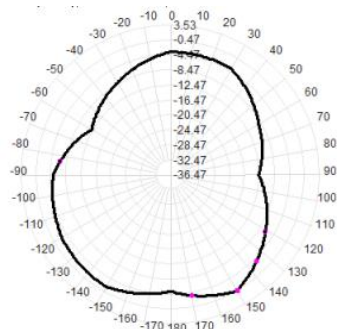
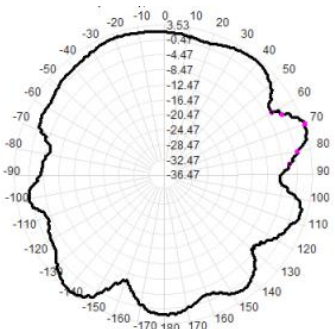
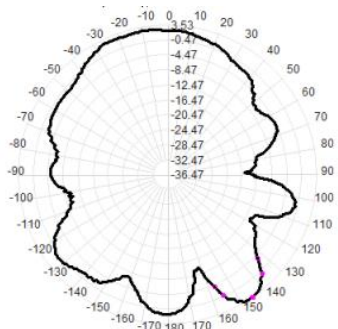
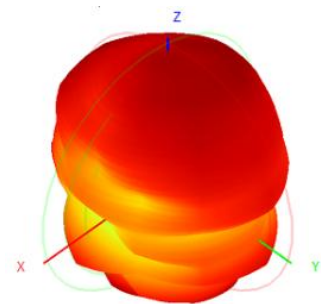
YZ

XY

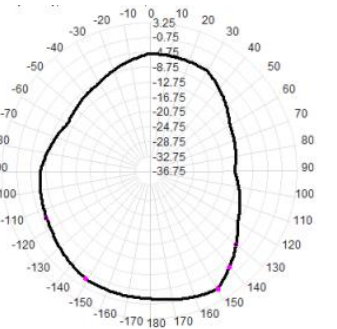
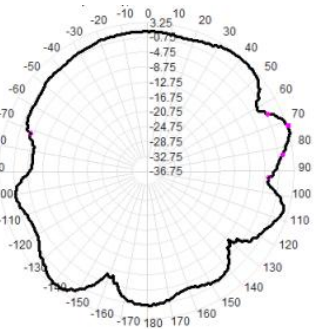
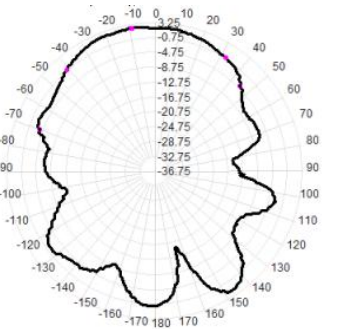
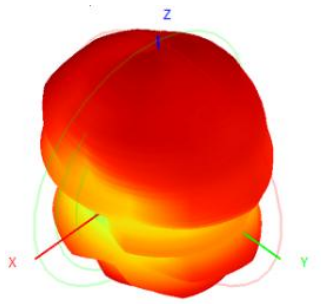
2400MHz



2450MHz



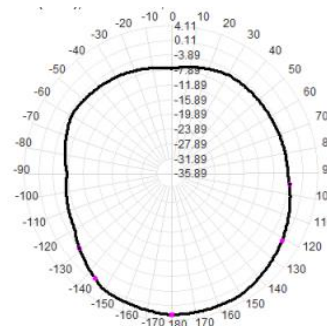
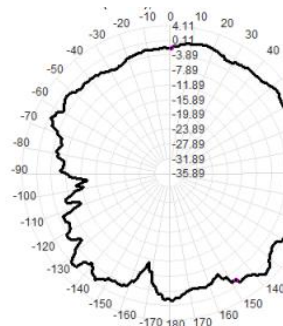
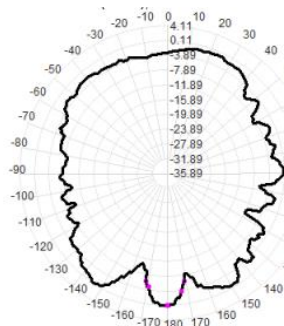
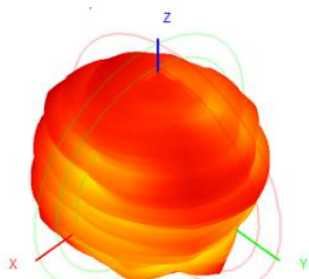
2500MHz



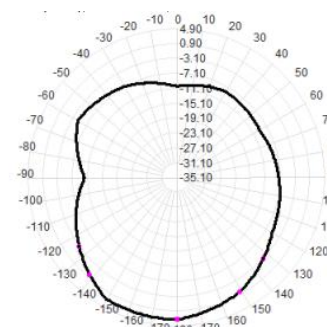
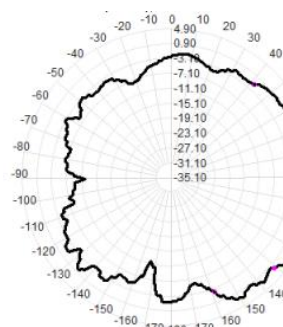
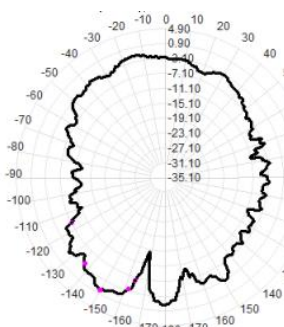
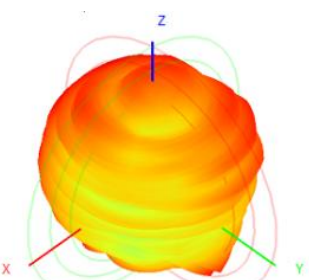
Product Number:AN2450-FPC229BX

Product Name: Antenna

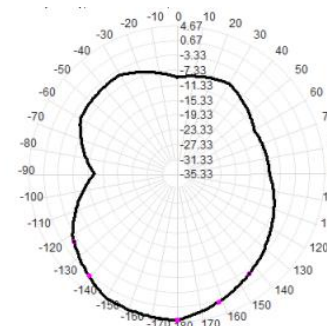
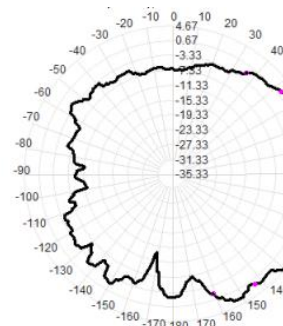
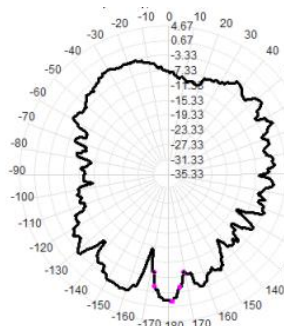
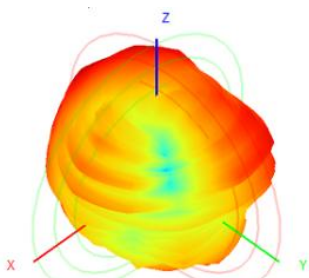
5150MHz



5550MHz



5850MHz



5. Mechanical Drawing See attached files

1		2		3		4		5		6		7		8																	
HF ☐												SIGN		DATE		DESCRIPTION		APPROVER													
RoHS2.0 ☒												☒																			
REACH ☐												☐																			
CONFIDENTIAL																															
端子朝向如图所示																															
Note: 1.Mark* is important dimension;"Cpk "Identify for process control(CpK≥ 1.33). 2.Tolerance:Unmarked tolerance refer to the standard tolerance please. 3.Pay attention to the direction of the connector.																															
3		CR-113-ZP-A		I-PEX		Cu		Au Plated		1																					
2		CB-113BS		Coaxial Cable		OD1.13		Black		1																					
1		AN2450-FPC4408		FPC				Black		1																					
No.		Part Number		Name		Material		Finish		Q'ty																					
1																															
2																															
3																															
4																															
5																															
6																															
7																															
8																															



Tengxiang Electronics Co., Ltd.

TITLE: Antenna						
PART NO.: AN2450-FPC229BX				CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance	
YCX	HC	WJ	SY		UNITS: mm	
2024.06.17	2024.06.17	2024.06.17	2024.06.17		SCALE: 1/1	
					REVISION: A	
					X.X ±0.5	
					X.XX ±0.2	
					X° ±1	

产品包装规范

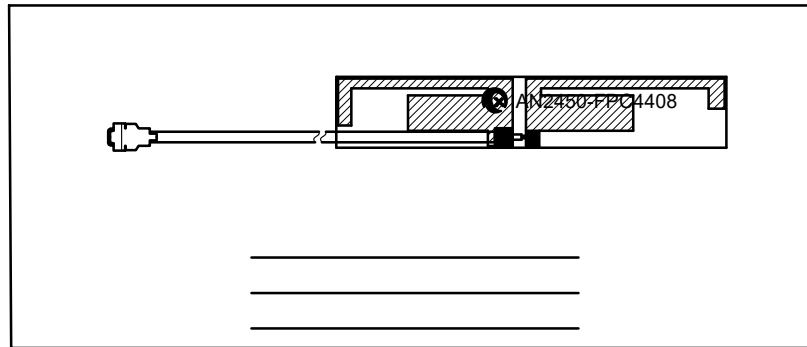
PACKING CRITERION

Date: 2024.06.17

Page: 1 of 1

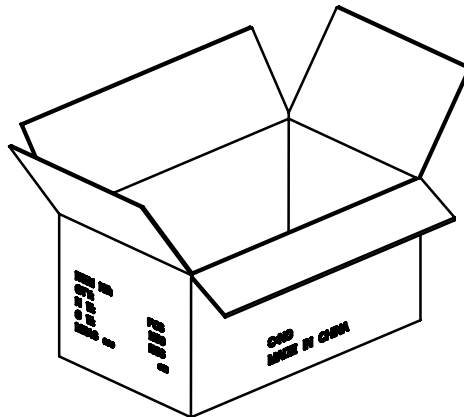
Part Number : AN2450-FPC229BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



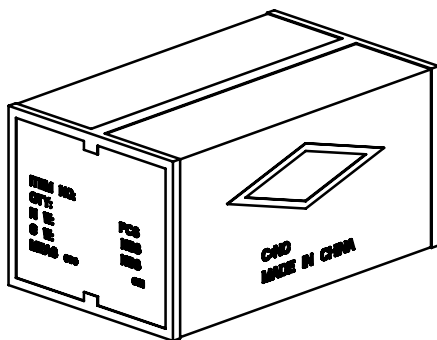
100pcs/ PE bag

2.PACKING。

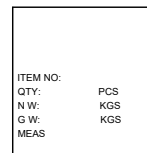


8000pcs/Carton

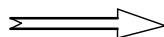
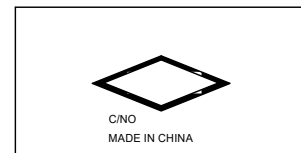
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX CHECKED BY : HC DESIGNED BY : SY Y