



Tengxiang Technology, Inc

Product Number: AN2450-FPC239BX

Product Name: Antenna

Specification For Approval

Date: 2025.8.29

Version: 1.0

Customer: 东莞市安冉智能科技有限公司

Customer P/N: BCPTX0000075

T X P/N: AN2450-FPC239BX

Description : 2.4G/5G FPC Antenna 1.13mm Black Cable L=60mm +IPEX

Tengxiang Checked By:	Customer Approved By:
TESTED BY 检测	
TESTED BY 检测	



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Tengxiang Technology.Inc

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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	2025.8.29	1.0	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500 MHz
S.W.R.	<= 2.0
Antenna Gain	3.14dBi
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

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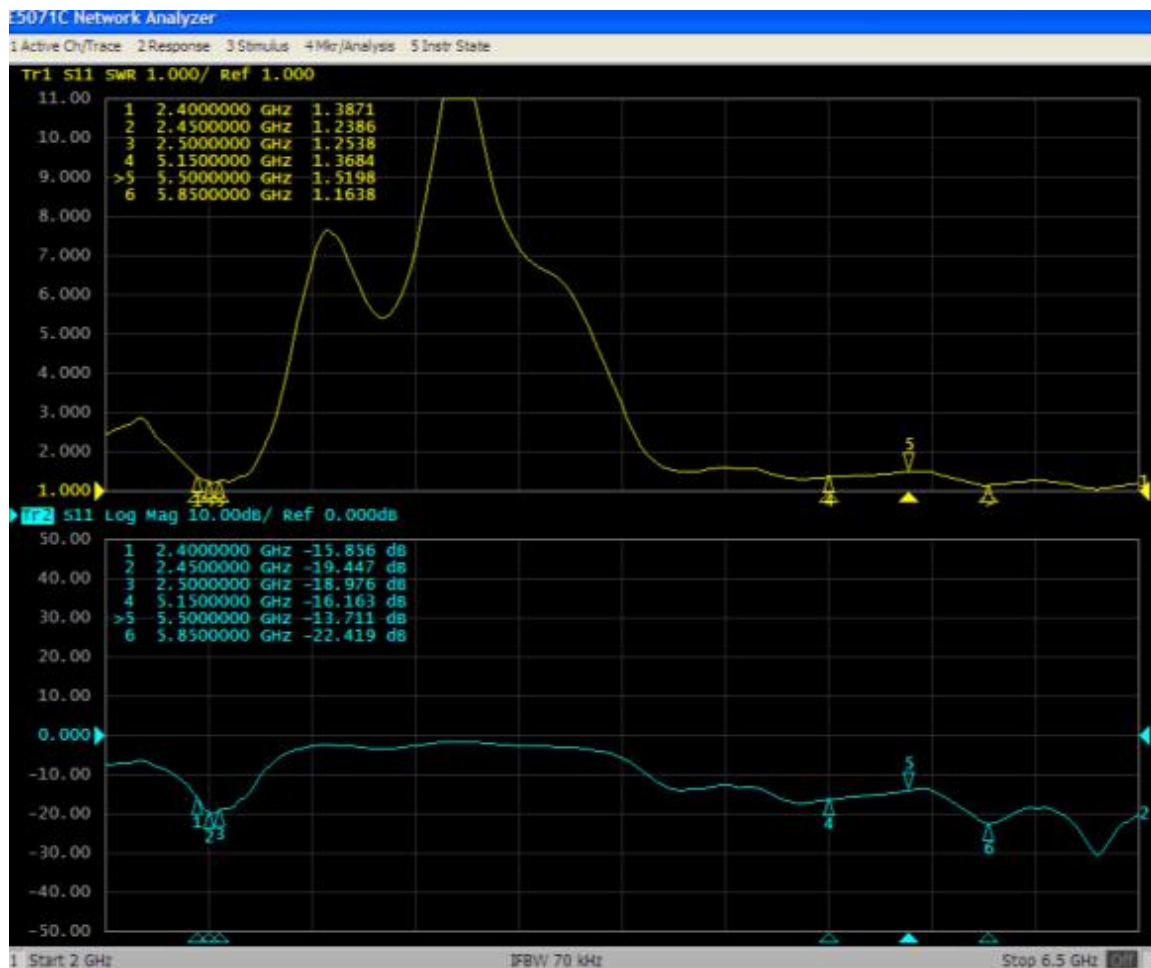
2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements	Result 结果
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	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	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU	PASS

Product Number: AN2450-FPC239BX

Product Name: Antenna

3. Antenna - S Parameter Test Data



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)	2.87	2.92	2.99	3.02	3.12	3.14	3.11	3.05	3.02	2.86	2.66
Efficiency (%)	57.47	58.98	60.37	60.09	59.34	59.40	58.46	60.07	60.07	59.84	58.66

Product Number: AN2450-FPC239BX

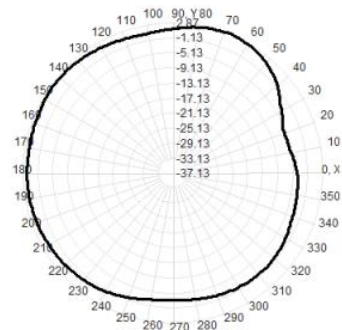
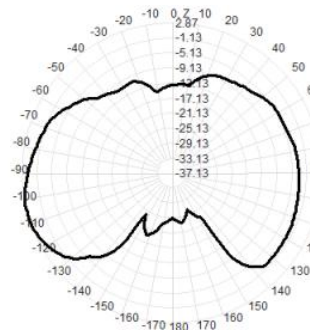
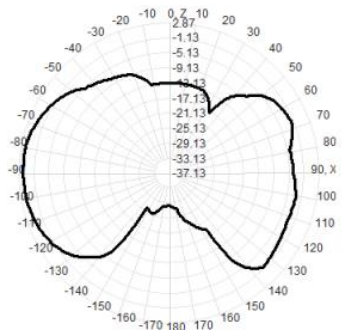
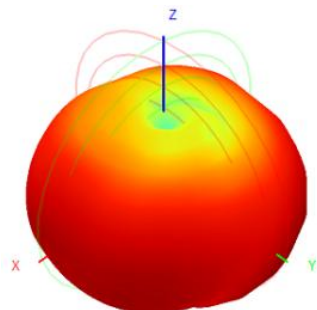
Product Name: Antenna

XZ

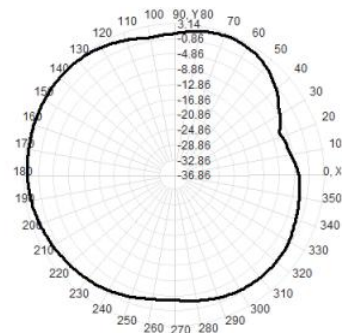
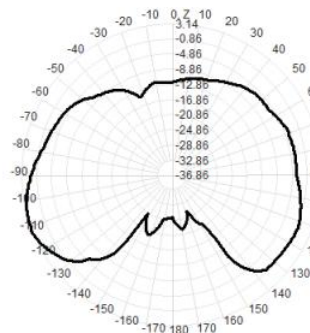
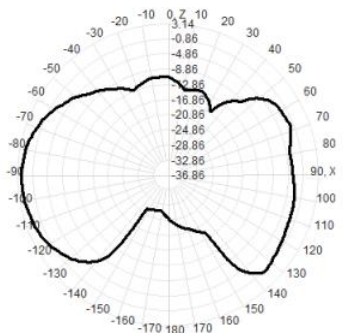
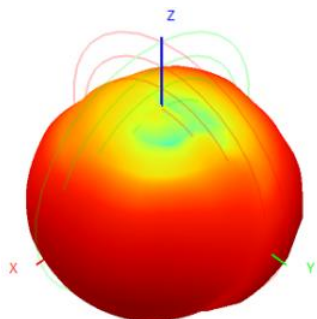
YZ

XY

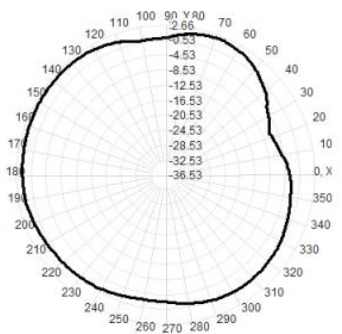
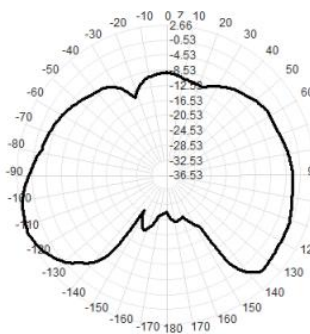
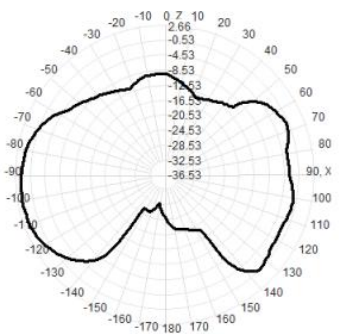
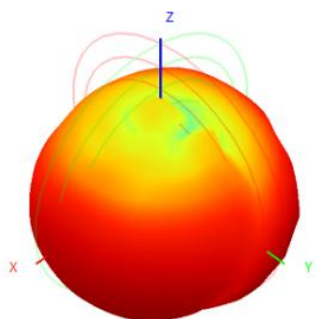
2400MHz



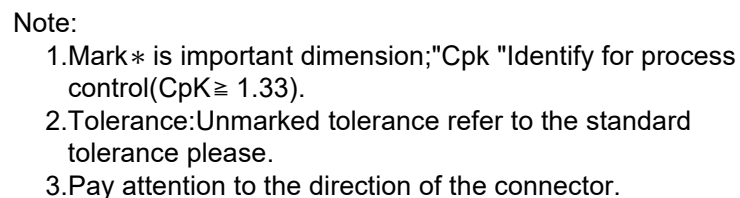
2450MHz



2500MHz



SIGN	DATE	DESCRIPTION	APPROVER
			
			
			



3	CR-113-ZP-A	I-PEX	Cu	Au Plated	1
2	CB-113BS	Coaxial Cable	OD1.13	Black	1
1	AN2450-FPC1132	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

 Tengxiang Electronics Co., Ltd.					
TITLE: Antenna					
PART NO.: AN2450-FPC239BX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY	UNITS: mm	X.X ±0.3
2024.08.29	2024.08.29	2024.08.29	2024.08.29	SCALE: 1/1	X.XX ±0.1
				REVISION: A	X° ±1

產品包裝規範

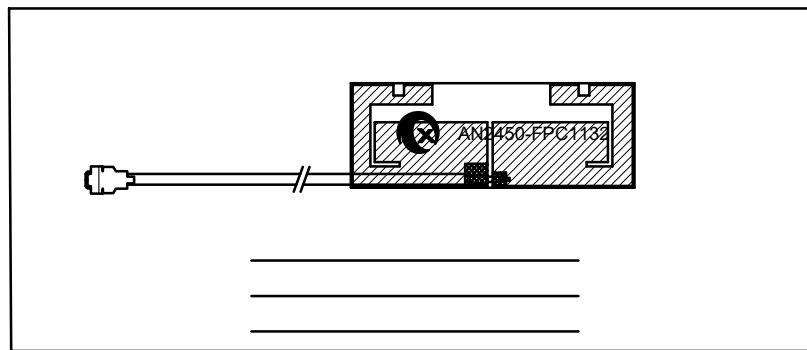
PACKING CRITERION

Date: 2025.08.29

Page: 1 of 1

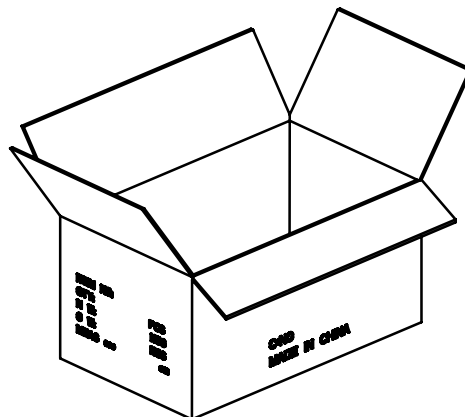
Part Number : AN2450-FPC239BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



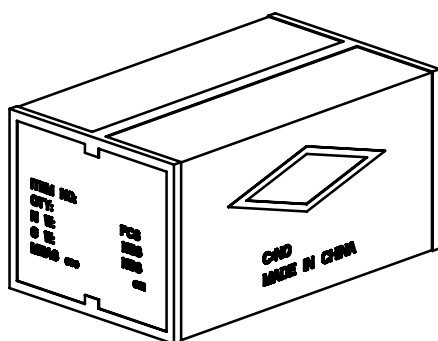
100pcs/ PE bag

2.PACKING。

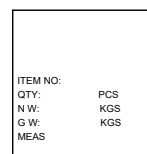


8000pcs/Carton

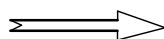
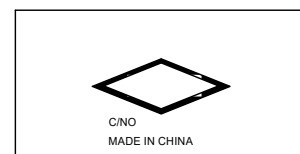
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX CHECKED BY : HC DESIGNED BY : DWF