



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-FPC229BX

Product Name: Antenna

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- 2. Characteristics and Reliability Test
- 3. Antenna - S Parameter Test Data
- 4. Antenna - Radiation Pattern Test Data
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Revision History

Revision	Date	Change Notification	Description
1.0	2024.6.6	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	1.90dBi /3.05dBi
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

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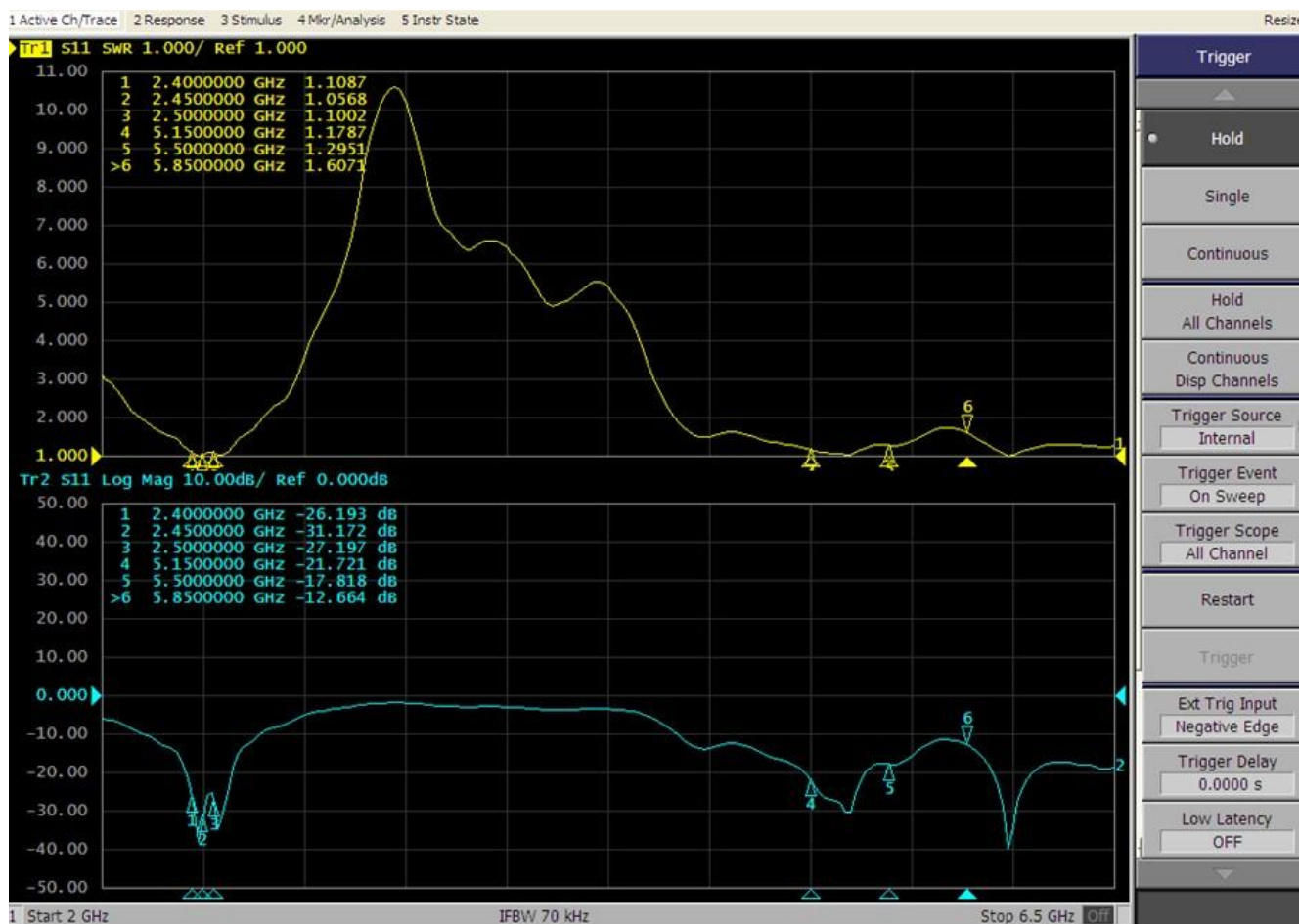
2. Characteristics and Reliability Test

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 $260 \pm 5^{\circ}$	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

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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
Efficiency (dBi)	-2.67	-2.59	-2.55	-2.67	-2.78	-2.72	-2.80	-2.67	-2.63	-2.81	-2.79
Gain (dBi)	1.47	1.46	1.66	1.49	1.60	1.90	1.85	1.85	1.74	1.80	1.87
Efficiency (%)	54.07	55.10	55.63	54.06	52.74	53.49	52.43	54.12	54.60	52.40	52.61

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
-2.15	-2.05	-1.93	-1.87	-2.01	-2.19	-2.24	-2.40	-2.75	-2.80	-3.01	-3.21	-3.30	-3.14	-3.18
2.54	2.76	2.97	3.03	2.97	2.76	3.05	2.73	2.27	2.30	2.00	1.72	2.48	2.59	2.10
60.94	62.37	64.11	65.06	62.98	60.36	59.67	57.49	53.12	52.54	49.97	47.78	46.72	48.54	48.13

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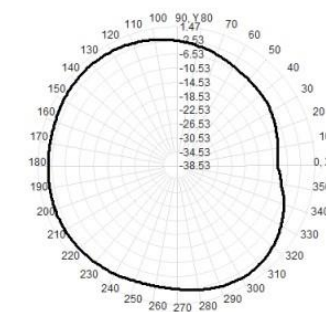
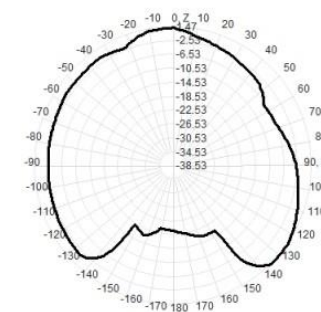
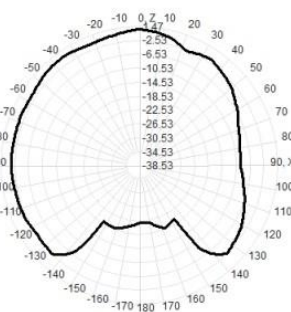
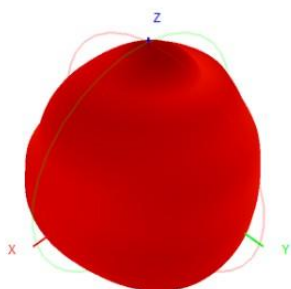
Product Name: Antenna

XZ

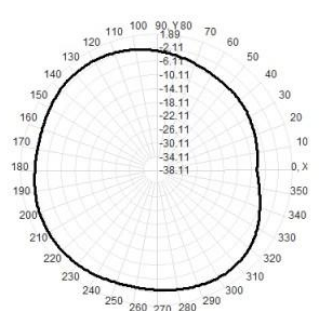
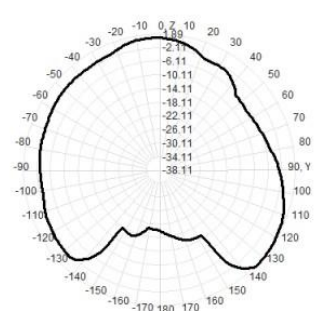
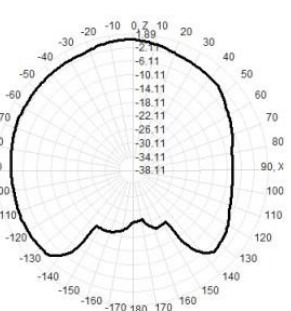
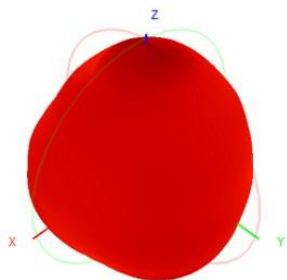
YZ

XY

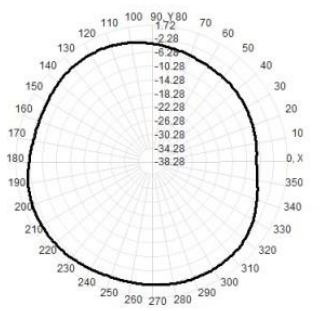
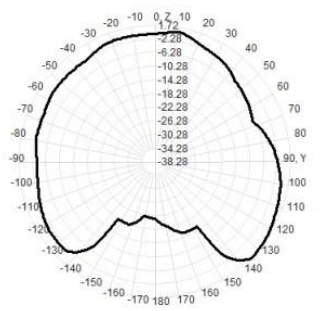
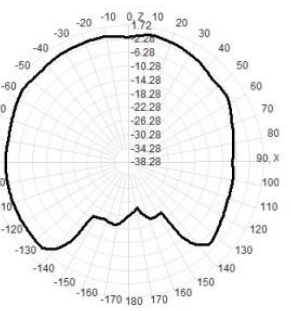
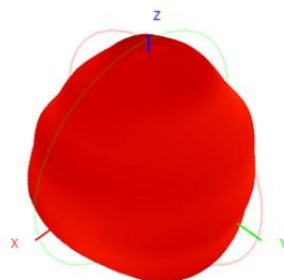
2400MHz



2450MHz



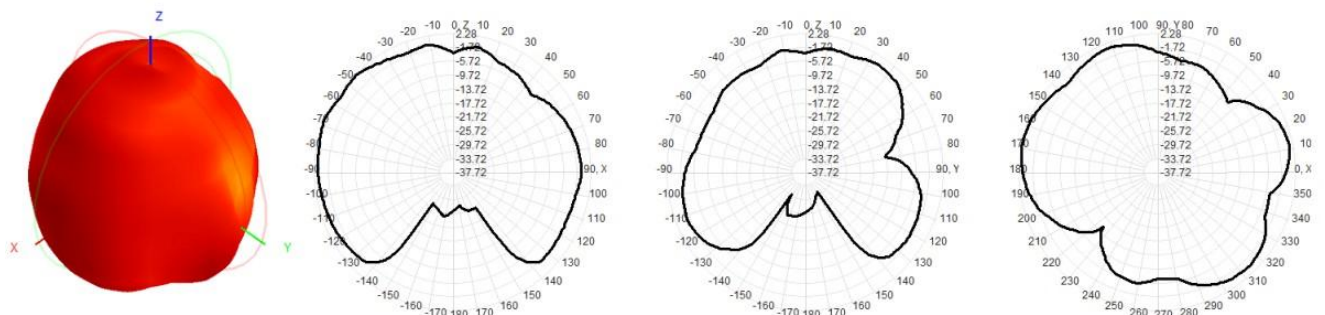
2500MHz



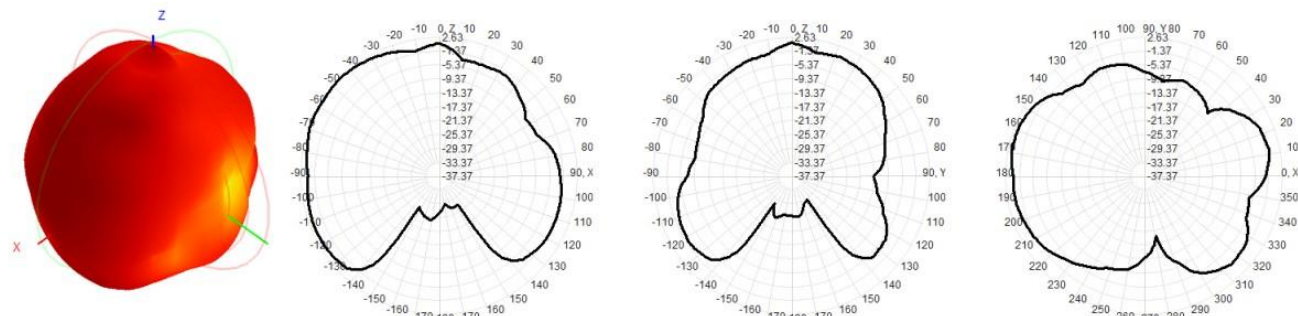
Product Number:AN2450-FPC229BX

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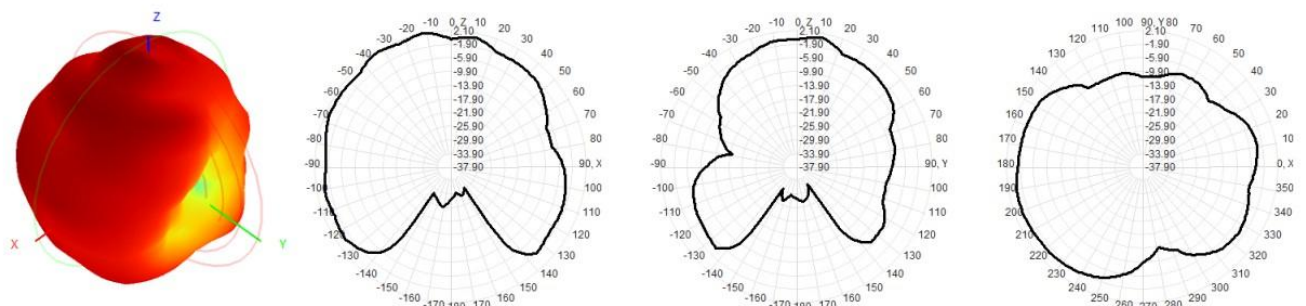
5150MHz



5550MHz

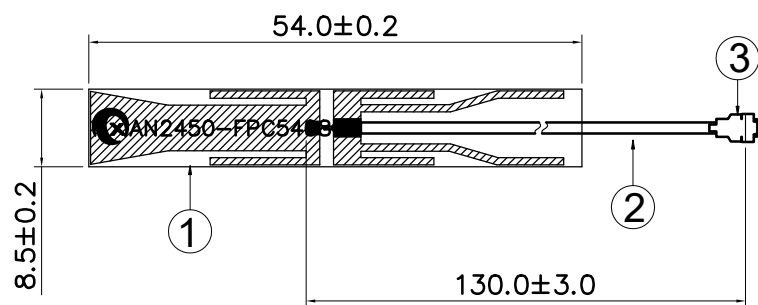


5850MHz



5. Mechanical Drawing See attached files

SIGN	DATE	DESCRIPTION	APPROVER
			
			
			



Note:

1. Mark * is important dimension; "Cpk "Identify for process control ($CpK \geq 1.33$).
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-FPC5408	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

 Tengxiang Electronics Co., Ltd.						
TITLE: Antenna						
PART NO.: AN2450-FPC209BX				CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY			Tolerance
YCX 2024.06.06	HC 2024.06.06	WJ 2024.06.06	SYY 2024.06.06	UNITS: mm		X.X ±0.5
				SCALE: 1/1		X.XX ±0.2
				REVISION: A		X° ±1

产品包装规范

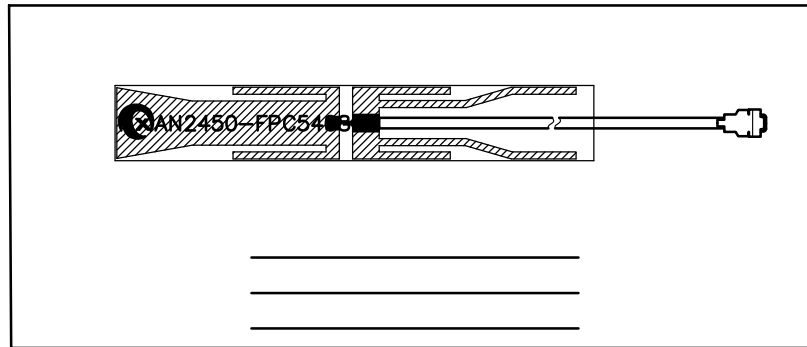
PACKING CRITERION

Date: 2024.06.06

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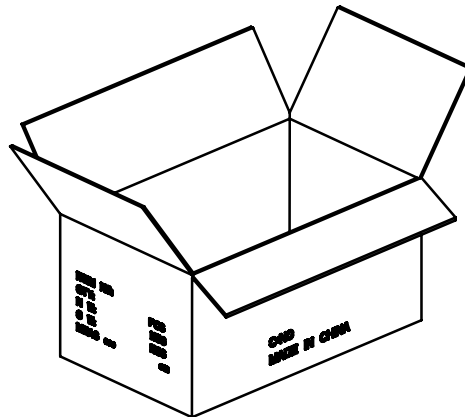
Part Number : AN2450-FPC209BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



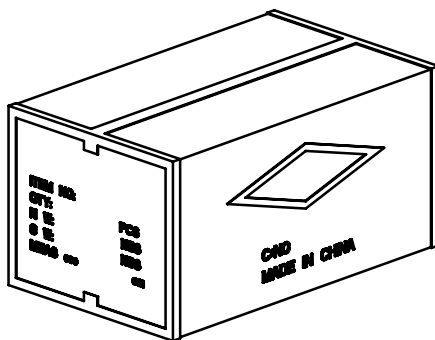
100pcs/ PE bag

2.PACKING。

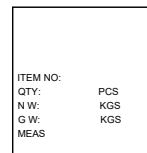


8000pcs/Carton

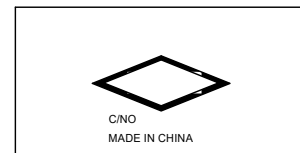
3. SEALING。



SIDE



FRONT



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