



Tengxiang Technology.Inc

Dongguan Tengxiang Electronics Co., Ltd.

Product Number:AN2450-75F81BX-W

Product Name: Antenna

Specification For Approval

Date:2025.11.14

Version: 1.0

customer name

Customer:

Customer ID

Customer P/N:

Teng Xiang material
number

T X P/N:

AN2450-75F81BX-W

specification DESCRI-
PTION

Description: 2.4G/5G white antenna 1.13mm black wire L=230mm+ IPEX

Tengxiang Checked By: Teng Xiang Audit		Customer Approved By: Customer audit	
DRAWN Production	Lutin	TESTED BY	
CHECKED BY	Hu Chao	CHECKED BY	
Q.C.DEPT. Quality Control	Zhou Zhihong	Q.C.DEPT. Quality Control	
APPROVED BY	Wei Jia	APPROVED BY	



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Product Number:AN2450-75F81BX-W

Product Name: Antenna

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data)

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Specifications) Revision History

Revision	Date	Change Notification	Description
1.0	2025.11.14	Editio princeps	

Product Number:AN2450-75F81BX-W

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500 MHz/5150-5850MH
S.W.R. Stationary Wave Ratio	<= 2.0 / <= 2.5
Antenna gain	3.61dBi /3.59dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Plastic material	TPE/ABS/PC+PBT
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

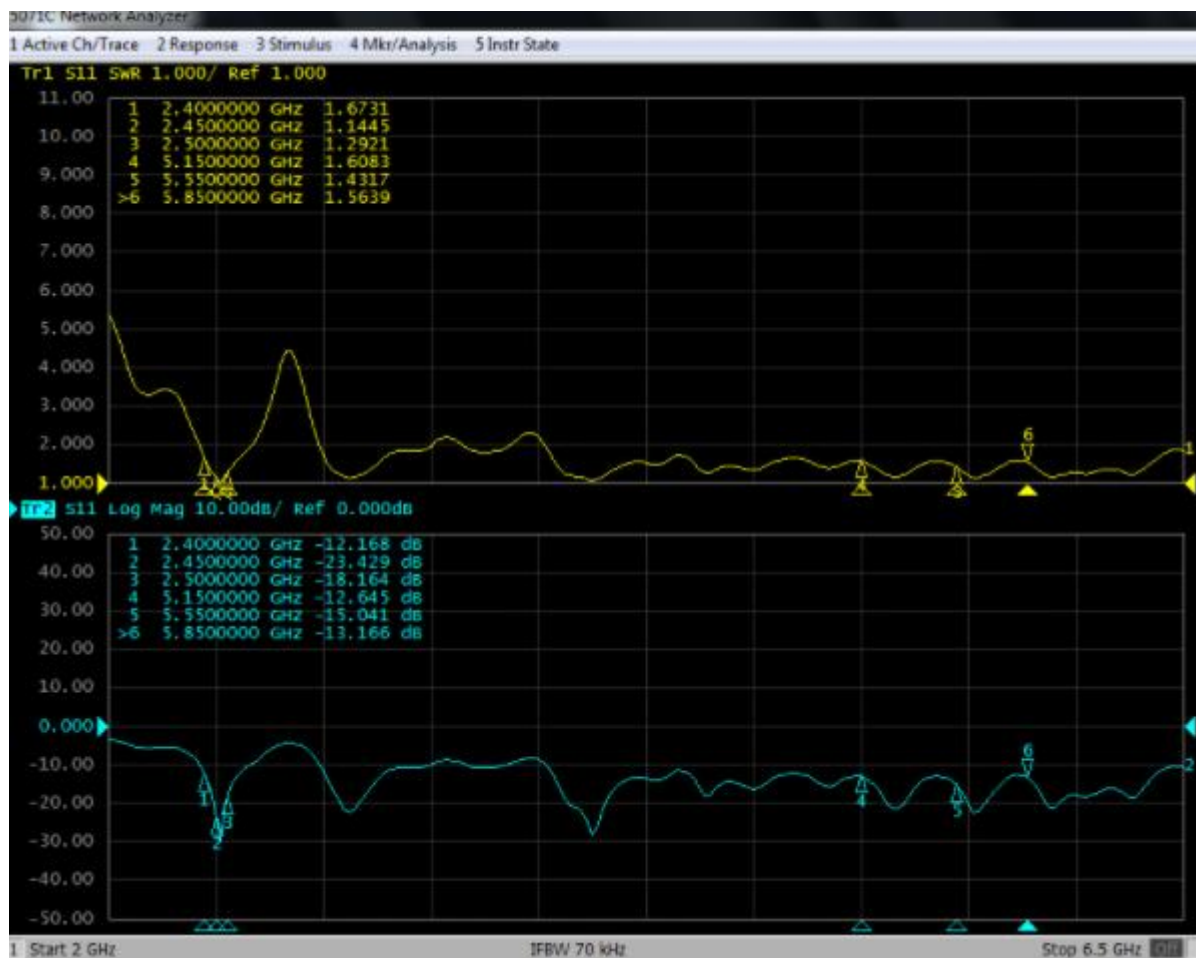
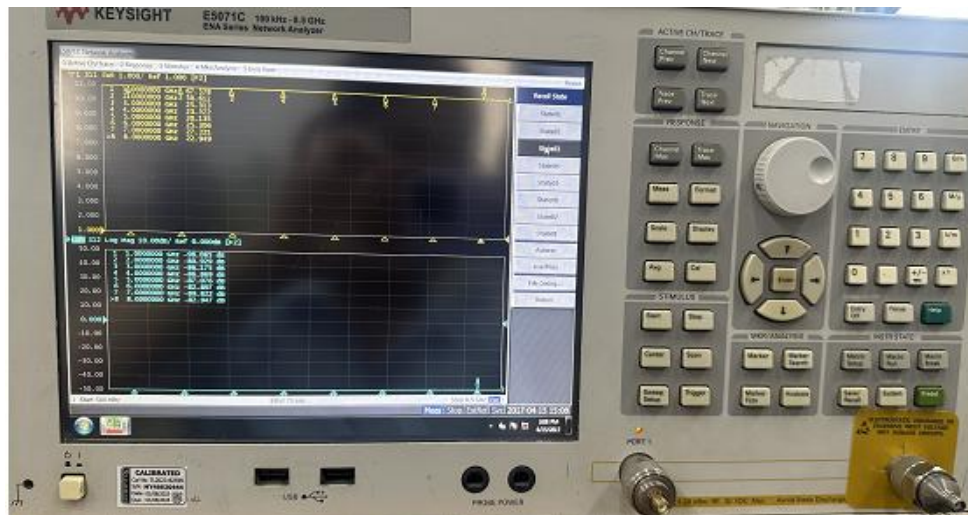
Test Items Project		Test Condition and Procedure	Requirements	Results
1	V.S.W.R.voltage standing wave ratio	Set the DUT (Device Under Test) on the Network Analyzer; perform individual calibration for testing	Directive DUT specification	PASS
2	Antenna Gain	Place the DUT (Device Under Test) in the antenna chamber and perform individual calibration for testing.	Directive DUT specification	PASS
3	Pull Test	Holding with individual specification; force applied to the terminal axis. Defines the terminal pull force separately	1. Directive DUT specification 2. Frequency Tol.≤5% Complies with the test object specifications; frequency offset ≤ 5%	PASS
4	Dimension	Inspection of dimensions, color, material, packaging, and surface treatment.	Directive DUT specification	PASS
5	Salt Spray Fog	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 24H Temperature 35°C; humidity ≥ 95%;salt water concentration ≥ 5%; test 24H	1. No Visual Damage 2. Frequency Tol.≤5% No obvious appearance defects; frequency offset ≤ 5%	PASS
6	Temperature and Humidity Chamber	GB / T 2423.3-2006 Temp: 80°C / 12 H; -40°C / 12H RH: ≥ 90%; Time: 24H Temperature 80°C test 12H to 40°C test 12H; humidity ≥ 90%; time 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% No obvious appearance defects after recovery 2H; frequency offset ≤ 5%	PASS
7	Aging test	GB /T 2423.2 - 2008 Temp:80°C; Time: 24 hours Temperature 80 ° C, test 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% No obvious appearance defects; frequency offset ≤ 5%	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart Refer to IEC 62321 test procedure	Directive RoHS 2011/65/EU Complies with RoHS 2015/863/EU	PASS

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3. Antenna - S Parameter Test Data

Test instrument:VSWR is tested with Agilent E5071C connected to the fixture in free space state.



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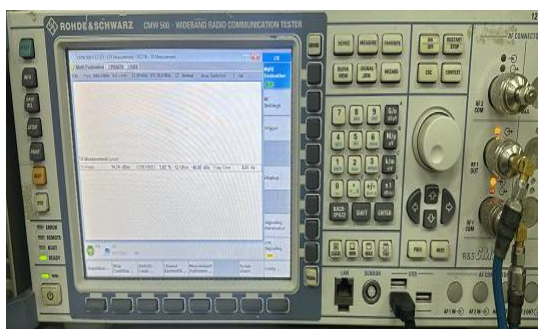
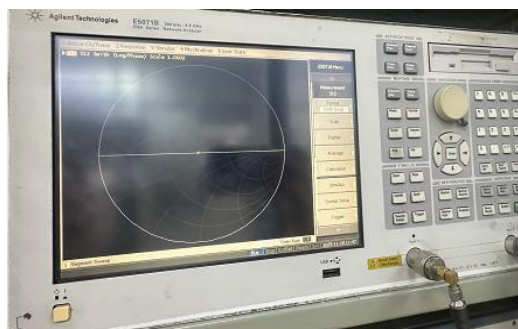
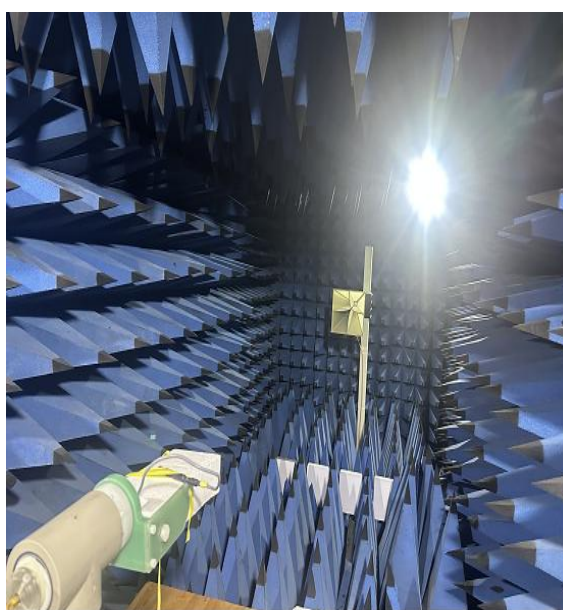
Product Name: Antenna

4. Test environment and equipment

Darkroom specifications: 6m*6m*6m/7m*3m*3m

LTE-TDD/FDD-SCDMA test equipment: ROHDE&SCHWARZ CMW500;

Passive efficiency test equipment: Agilent Technologies E5071B



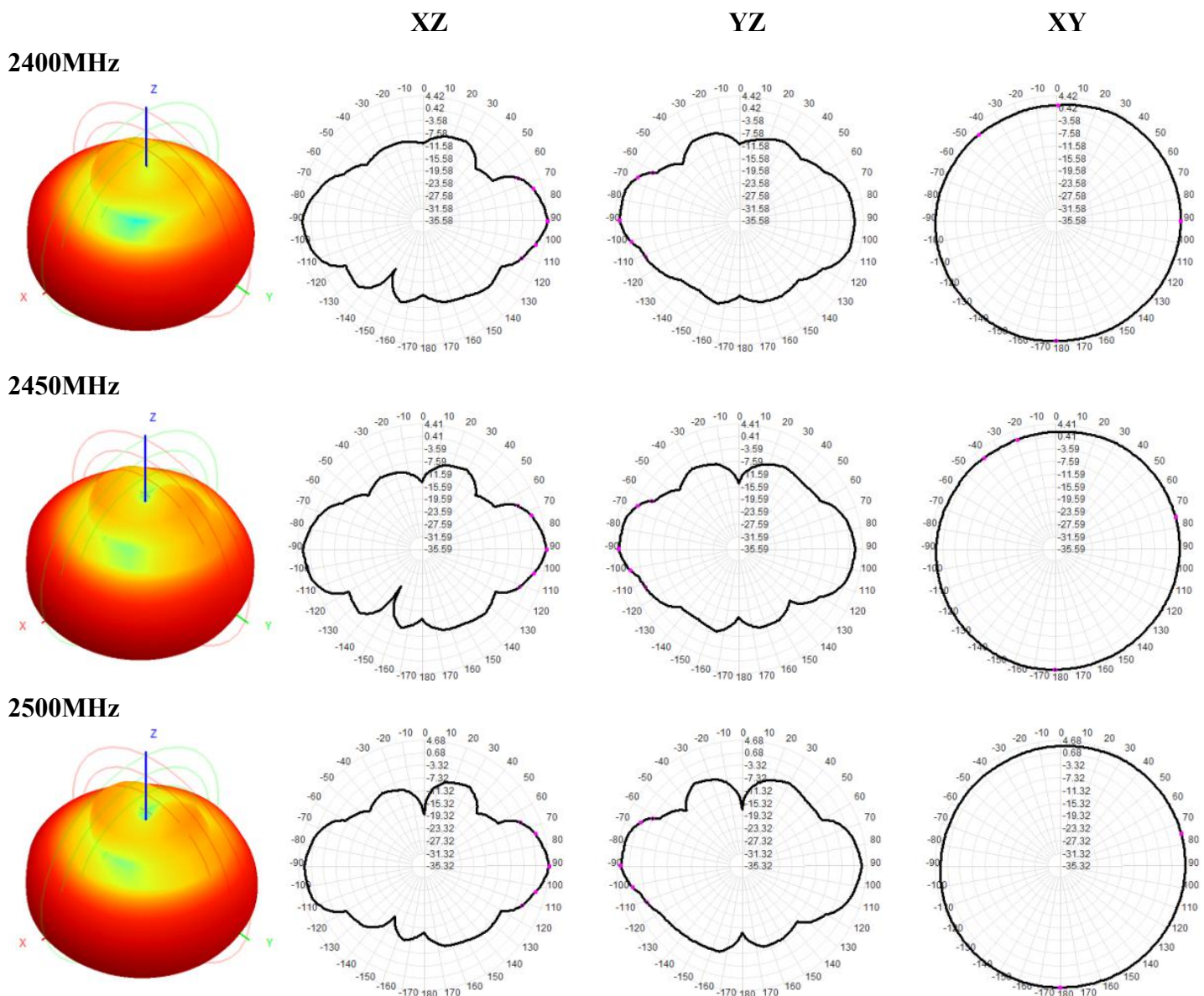
Product Number:AN2450-75F81BX-W

Product Name: Antenna

5. 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)	3.31	3.23	3.35	3.13	3.38	3.61	3.34	3.42	3.60	3.40	3.36
Efficiency (%)	66.21	65.58	65.78	64.39	67.63	64.24	66.19	66.87	69.68	66.99	72.54

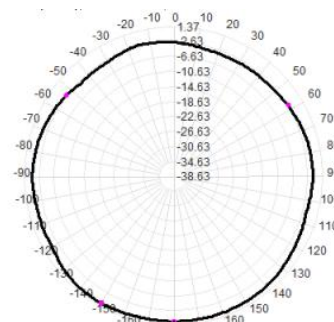
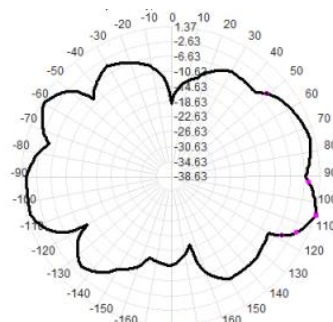
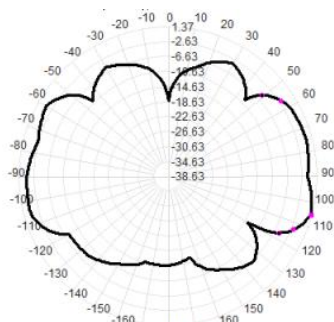
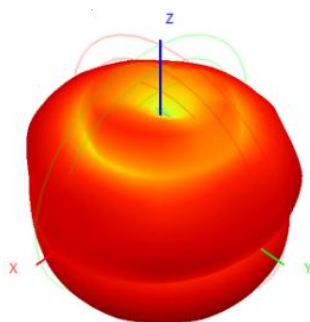
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
3.33	3.21	3.17	3.22	3.10	3.48	3.58	3.59	3.02	3.15	3.30	3.22	3.19	3.29	3.38
50.22	51.22	50.33	52.77	50.67	50.22	50.47	50.66	52.11	50.33	52.11	50.33	50.14	52.33	50.17



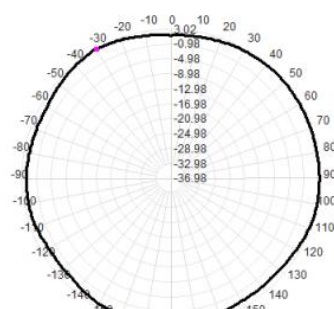
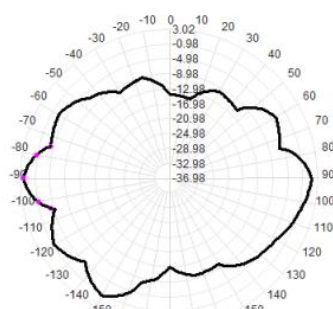
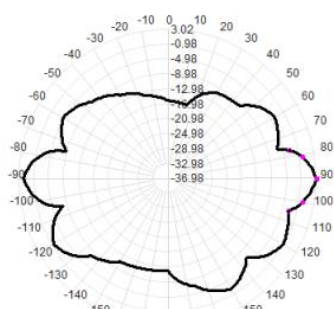
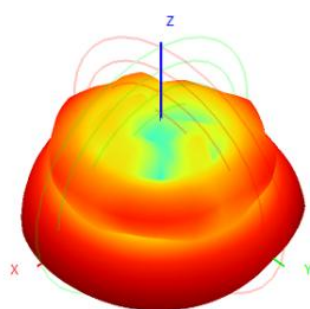
Product Number:AN2450-75F81BX-W

Product Name: Antenna

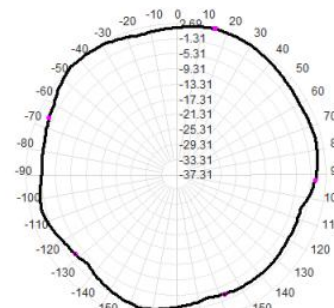
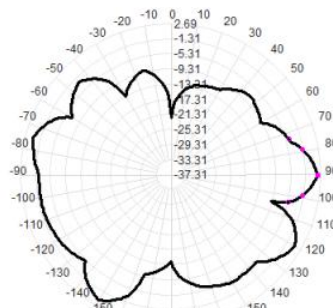
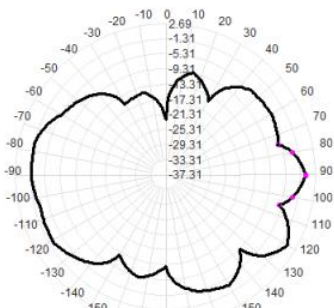
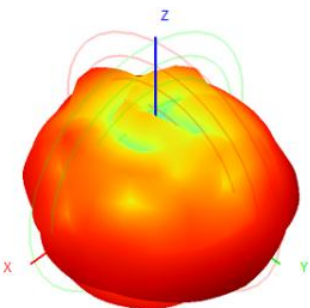
5150MHz



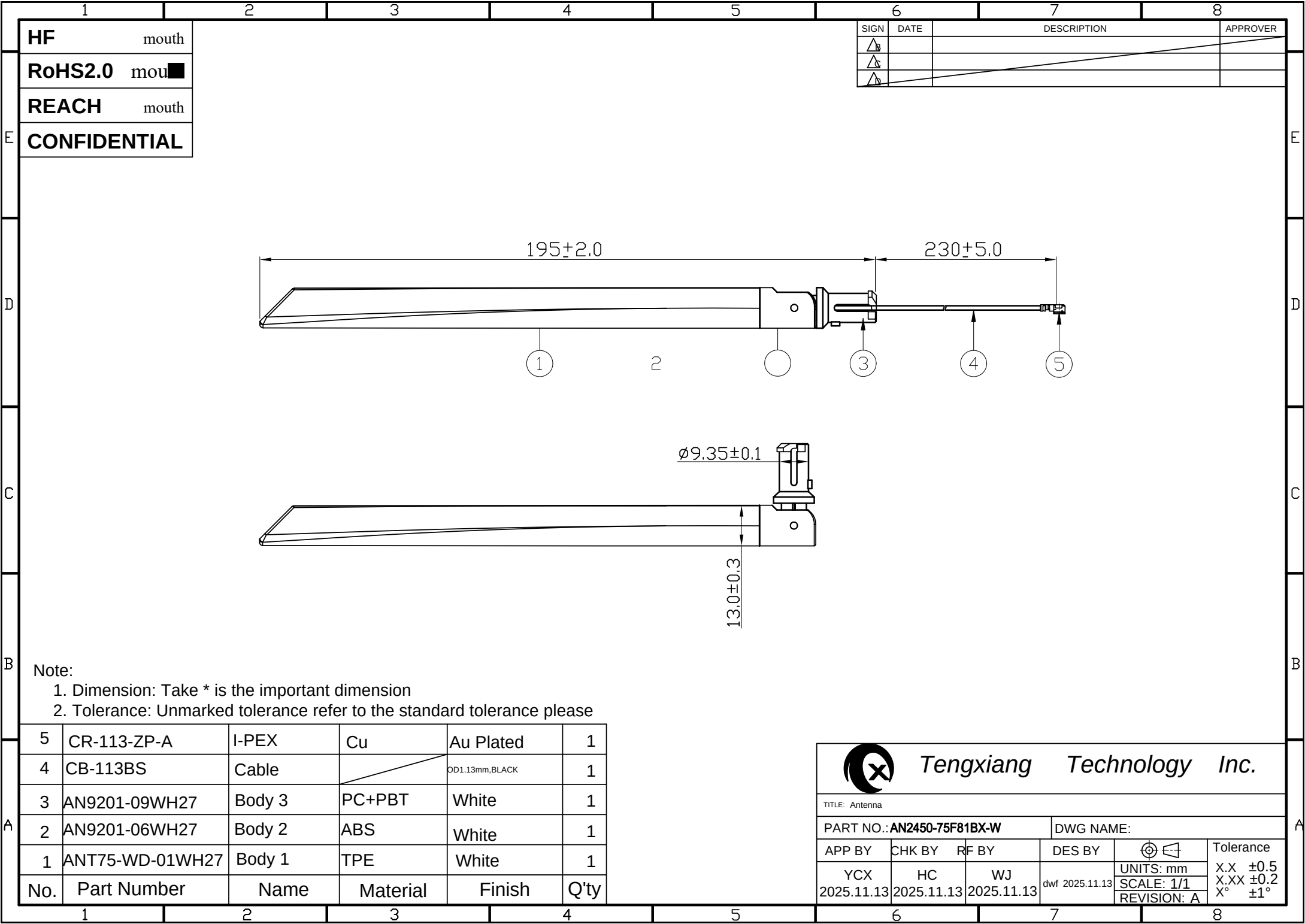
5550MHz



5850MHz



6. Mechanical Drawing See attached files



HF mouth
RoHS2.0 mou
REACH mouth
CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER

Note:
1. Dimension: Take * is the important dimension
2. Tolerance: Unmarked tolerance refer to the standard tolerance please

5	CR-113-ZP-A	I-PEX	Cu	Au Plated	1
4	CB-113BS	Cable		OD1.13mm,BLACK	1
3	AN9201-09WH27	Body 3	PC+PBT	White	1
2	AN9201-06WH27	Body 2	ABS	White	1
1	ANT75-WD-01WH27	Body 1	TPE	White	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: Antenna					
PART NO.: AN2450-75F81BX-W			DWG NAME:		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	dwf 2025.11.13	UNITS: mm	X.X ±0.5
2025.11.13	2025.11.13	2025.11.13		SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1°

Date: 2025.11.13

Page: 1 of 1

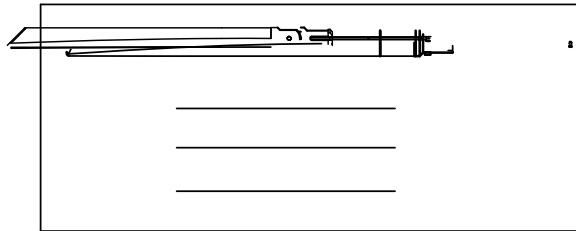
Part Number : AN2450-75F81BX-W

Revision : A

Name: Antenna

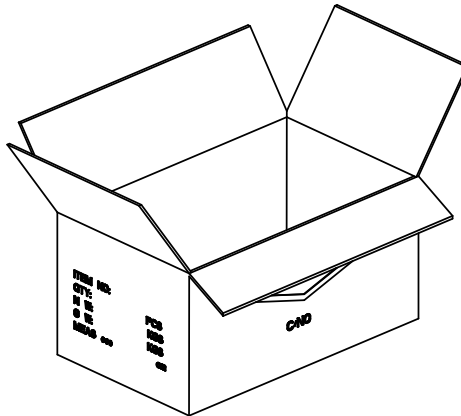
Customer : ALL

1 . Enter PE bag 。



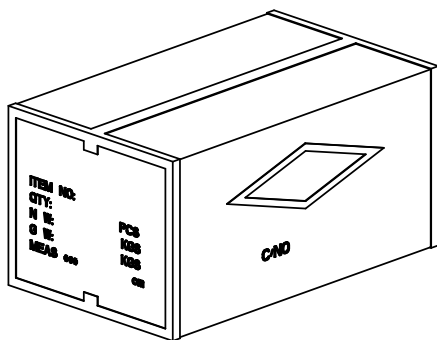
50pcs/ PE bag

2.PACKING 。

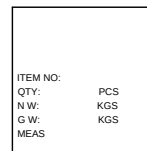


1000pcs/Carton

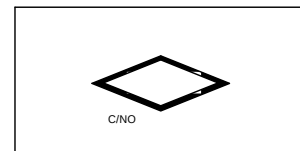
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF