

Product Specification

Customer Name: _____

Project Name: _____

Product Spec: _____

Antenna: 31.85mm in length and

10.1mm in width. Black wire 1.13,

1 - IPEX, L = 80mm.

Customer P/N: _____

REV: _____

V1.0

Date: _____

2025-06-04

Drawing	Check	Approved
Gongze Rao	Xichun Wu	Zhenhua Jiang



Customer Approve

Check	Approved	Approval
	Mengping Lin 2025.06.04	

Address: Room 101, No. 355, Huarong Road, Tongsheng Community, Dalang Sub-district, Longhua District, Shenzhen City

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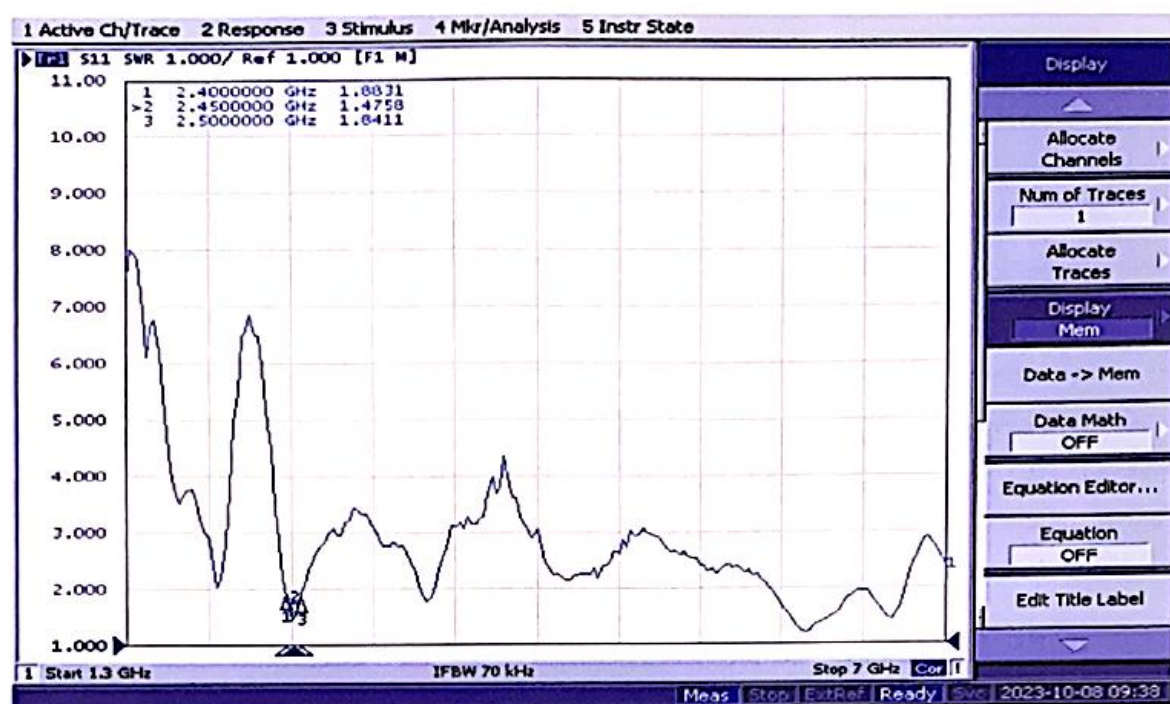
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3. Electrical Performance Index

Electrical Specifications	
Frequency range: 2400-2500 MHz	
VSWR	≤2.0
GAIN	≤2.92 DBI
Radiation	OMNI
Polarizatin	LINEAR
Input Impedance	50 Ω
Mechanical Specifications	
Input connector	IPEX
Antenna materia	FPC
Working Temperature	-30℃~+80℃
Working Humidity	40~85%
Real picture	

4. Test report

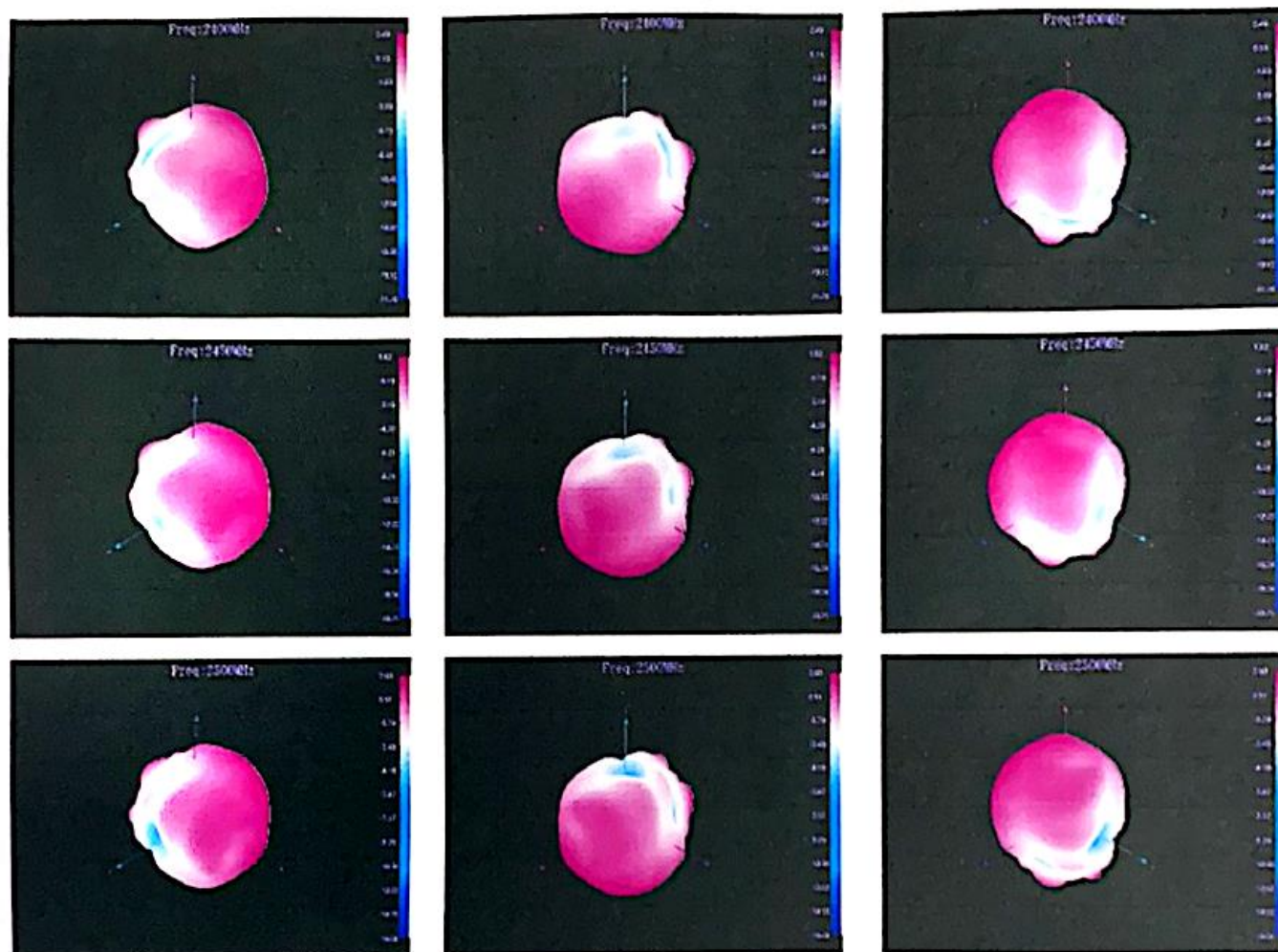
1.1. Antenna Standing Wave Diagram:



2.2. Antenna Efficiency and Gain:

Frequency/Mhz	Efficiency / %	MaxGain/dBi
2400	63.53	2.49
2410	62.81	2.92
2420	63.68	2.68
2430	66.07	2.33
2440	64.42	2.6
2450	61.66	1.82
2460	62.23	2.38
2470	57.81	2.11
2480	63.97	2.78
2490	60.26	3.01
2500	60.39	2.6

3.3. 3D Pattern of 2.4G:



5. Testing Equipment and Principle

1. Testing Equipment:

Network Analyzers :

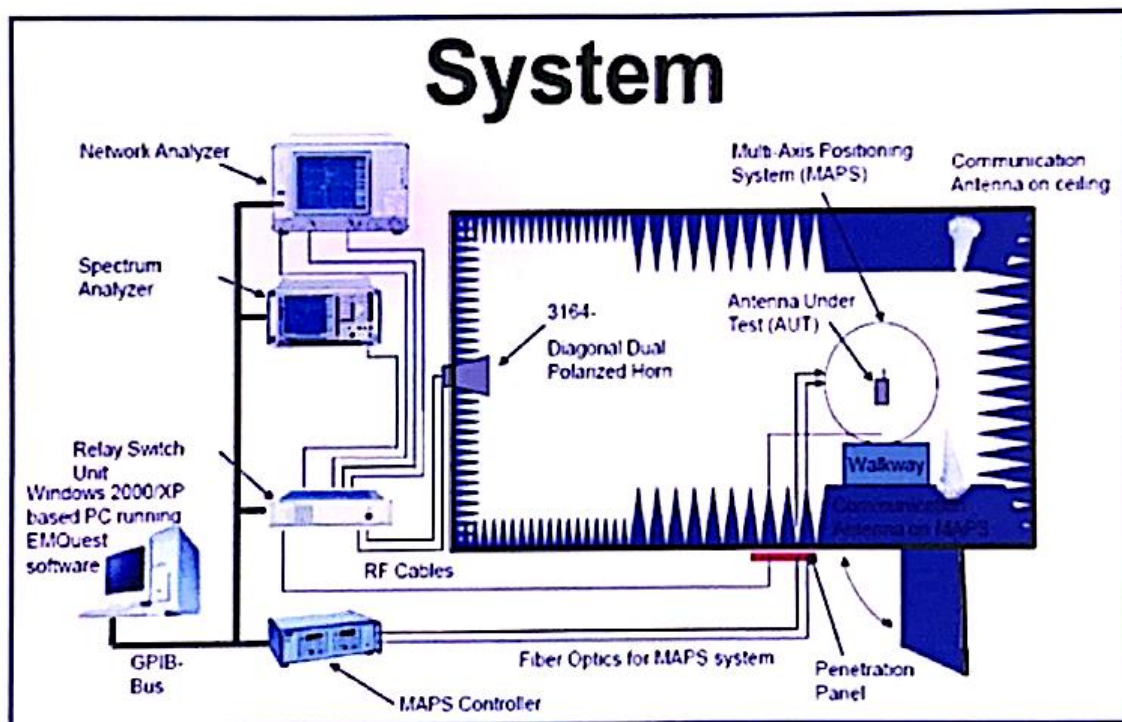
Agilent 8753D 5071B

Communications Test Set:

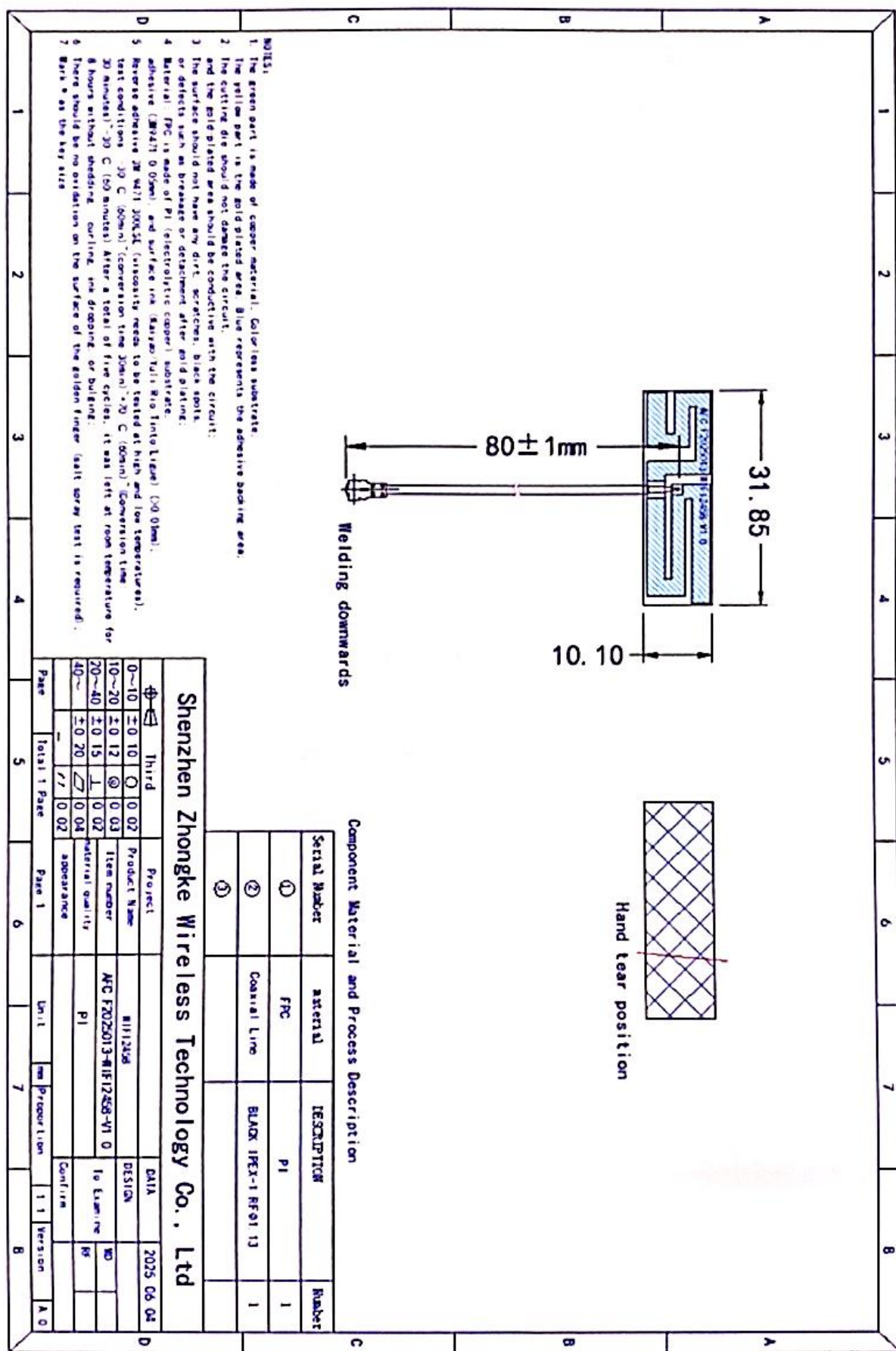
Agilent E5515C

3D Chamber Test System:

2. Testing Principle:



6. Product Drawing



7. Reliability test report

Test item		Test method	Requirement	Result
C1	V.S.W.R. Electrical Standing Wave Ratio	Design network analyzer parameters for testing	Meets the specification of the object to be measured	pass
M1	Antenna gain	Test the design parameters of the antenna dark room.	Meets the specification of the object to be measured	pass
M2	Vibration	GB / T2423.48-2008 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	pass
M6	Random Drop	GB / T2423.8-1995 Single: Height: 1.0 Meter; 3 directions; 1 time for each direction 单支天线, 高 1m; 3 个方向各 1 次	1. No parts separated, fracture 2. Frequency Tol. $\leq 5\%$	pass
E3	Dimension	Inspection of dimension, color, material, package, surface process.	Directive DUT specification	pass
E4	Temperature and Humidity Chamber	GB / T 2423.3-2006 Temp: 80° C / 12 H; -40° C / 12H RH: $\geq 90\%$; Time:	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	pass
E5	Thermal Shock	GB / T 2423.22 - 2008 - 40° C (30 minutes) to + 80° C (30 minutes); Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	pass
R1	Aging test	GB / T 2423.2 - 2008 Temp: 80° C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	pass
M1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU	pass

8. Code for product packaging

Product Name/Specification

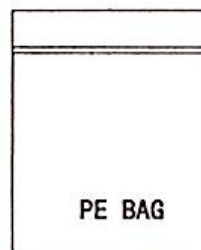
一、Label Requirements

Purchase order number	*****
Material code	*****
Product name and specifications	*****
Quantity/unit	*****
Remarks	*****

Purchase order number	*****
Material code	*****
Product name and specifications	*****
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Remarks	*****

二、Packing requirements

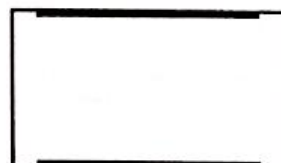
Homework instructions:



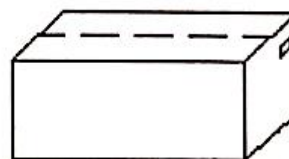
1. Inner packaging :

product 50 PCS A small bag.

2. Outer packaging:

Quantity/box based on actual quantity

carton



Note:

1. Do we need to add dividers or bubble wrap;
2. Labeling, such as ROHS;