



Shenzhen Tianxing Communication Technology Co.,Ltd
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SPECIFICATION

for

Guangzhou Zhongmeng Technology Co., Ltd

Customer No.

Product No.

SD0101-Copper tube-2.4G -80MM

Author: Zeng Xiaofeng Review: Li Ming

Release Date: 2025.10.23

ShenZhen Tianxing Communication Technology Co., Ltd

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Shenzhen Tianxing Communication Technology Co.,Ltd



1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer		
Mechanical		
Project Manager		
Commercial/Puchasing		
Checker		

1.2 Signature of Tianxing Communication company

Seapartment/post	Sign	Date
Antenna Engineer		
Mechanical		
Project Manager		
QA		
Checker		



2. General

2.1 Scope of application

WIFI Antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	/
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤1.3
5	Radiation Efficiency	≥50%
6	Impedance	50Ω
7	Antenna Type	monopole
8	Antenna composition	1.13 Coaxial line+copper pipe
9	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	Metal tube	Ø 4.4 24mm silver
2	Copper axis	Ø 1.13 80MM black
3	Heat shrinkable rod	Ø 4.0 65MM black

4.12 Apperance

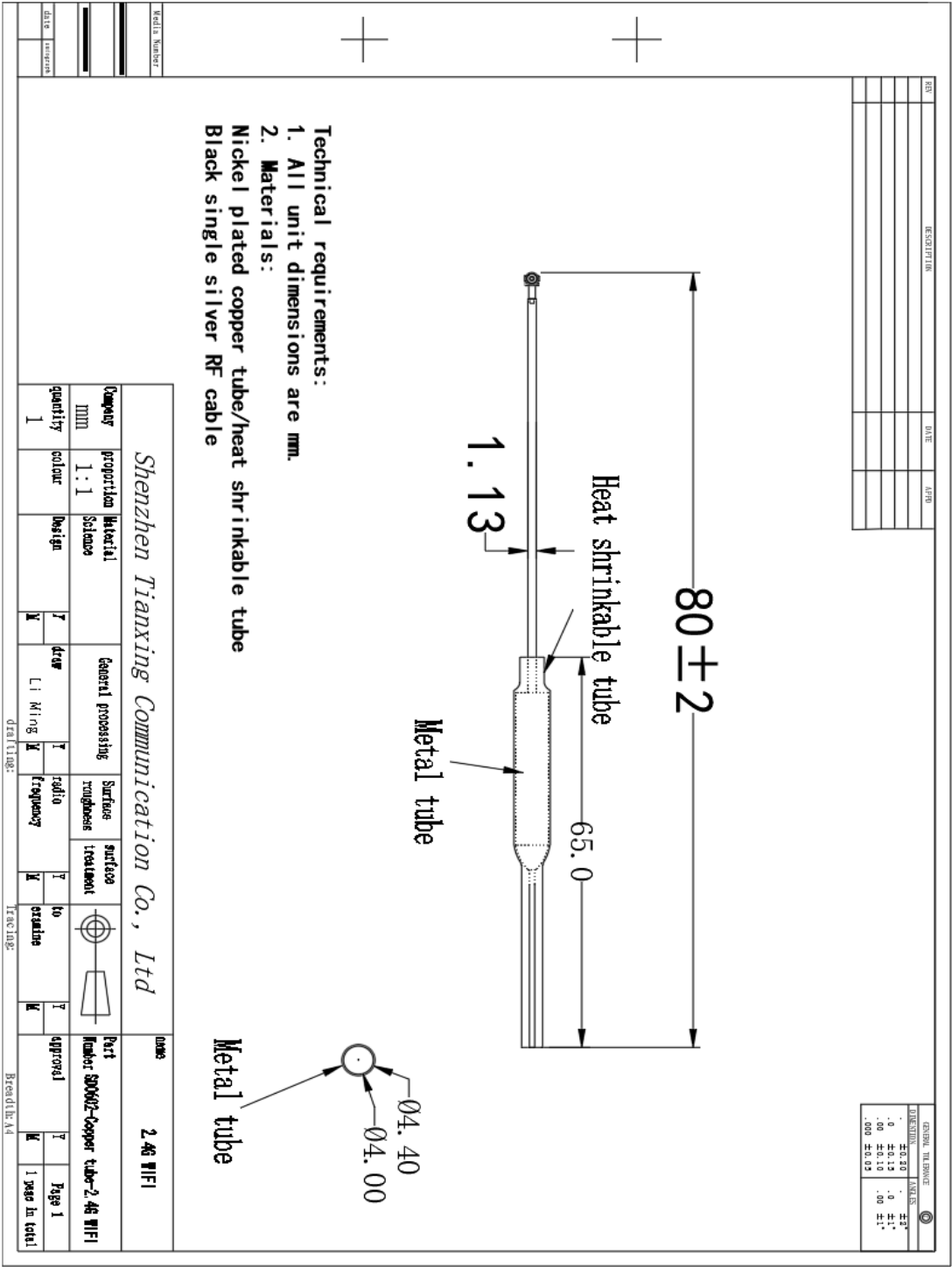
Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Refer to product drawings:



Product drawings:





4.2 Electric Performance

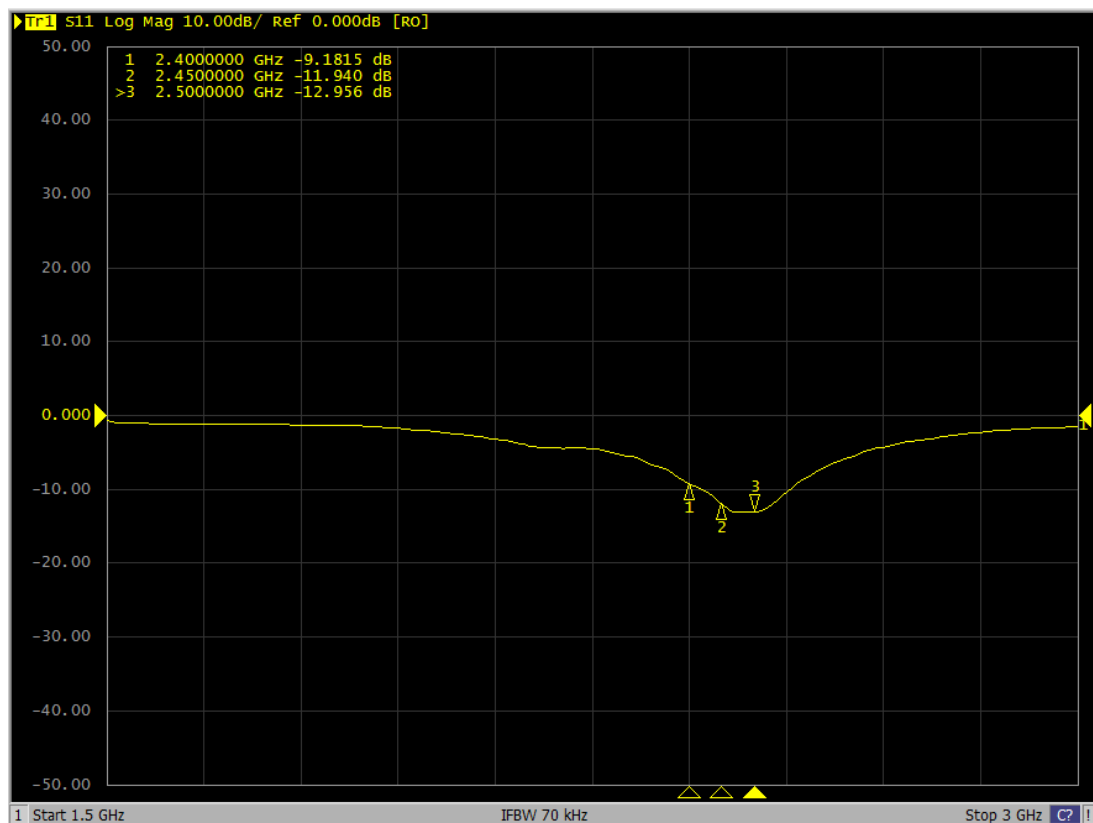
4.21 Test condition

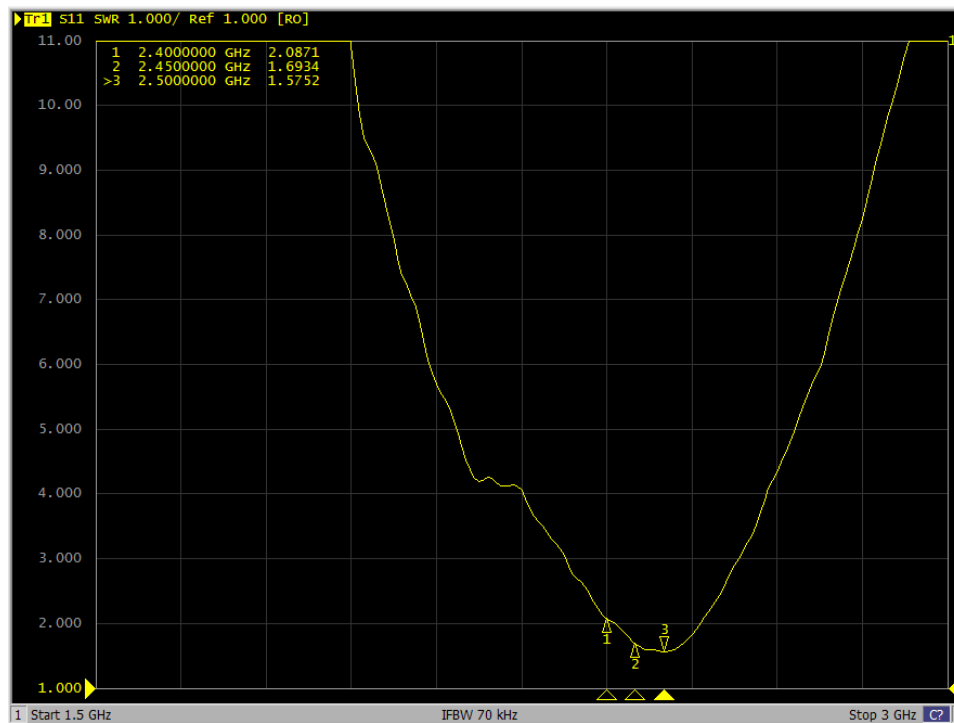
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: Agilent E8358A
Humidity: ≤80% (+40℃)	Anechior Chamber: ETS
Atmospher: 750mmkg±30mmkg	

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

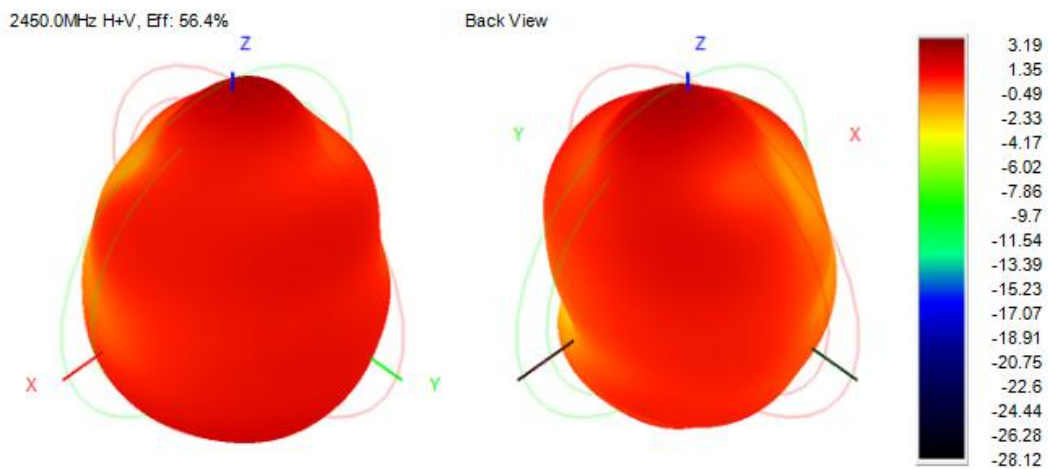
Marker (MHz)	2400	2450	2500
Return Loss	-9.18	-11.94	-12.95
VSWR	2.08	1.69	1.57

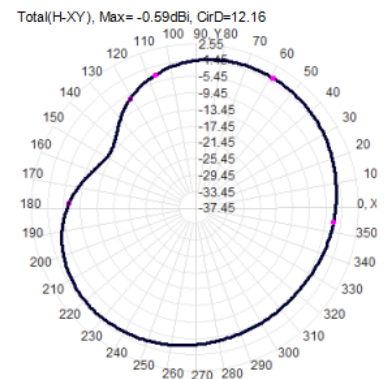
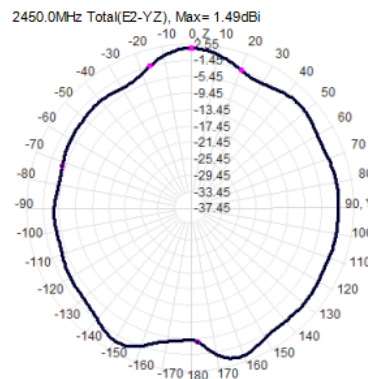
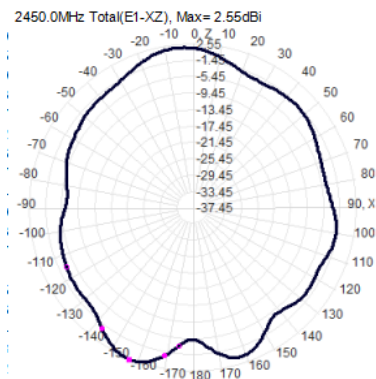




大尺寸 增益、效率及辐射方向图

frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.64	1.53	1.49	1.67	1.98	2.19	2.39	2.57	2.60	2.80	2.82
Efficiency (%)	48.43	49.28	49.69	51.54	54.41	56.42	58.49	61.48	60.88	62.13	60.06





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume



Document No.	
Release Date	2025/10/23
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/10/23	1.00	New Project