



Shenzhen Tianxing Communication Technology Co.,Ltd
Page number 1-10

SPECIFICATION

for

Guangzhou Chixiang Technology Industrial Co., Ltd

Customer No.

Product No.

SD0101-Copper tube-2.4G -200MM

Author: Zeng Xiaofeng

Review: Li Ming

Release Date: 2024.09.19

ShenZhen Tianxing Communication Technology Co., Ltd

1st Floor, Building 2, No. 71 Tianwan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen

E-mail: sz_shuodian@163.com

Tel: 0755-86006322

Fax: 0755-86006323

Shenzhen Tianxing Communication Technology Co.,Ltd



Contents

<u>SPECIFICATION.....</u>	<u>1</u>
<u>SHENZHEN TIANXING COMMUNICATIONTECHNOLOGY CO., LTD</u>	<u>1</u>
<u>CONTENTS</u>	<u>2</u>
<u>1. BILATERAL CONFIRMATION PAGE</u>	<u>3</u>
<u>2. GENERAL</u>	<u>4</u>
<u>3. GENERAL PRODUCT SPECIFICATIONS</u>	<u>4</u>
<u>4. SPECIFICATION DETIALS</u>	<u>5</u>
<u>4.1 MECHANICAL PROPERTIES</u>	<u>5</u>
<u>4.2 ELECTRIC PERFORMANCE</u>	<u>7</u>
<u>5. PRODUCT PACKAGING</u>	<u>10</u>
<u>6. DOCUMENT RESUME</u>	<u>10</u>



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
4	Gain	2dBi
5	Radiation Efficiency	$\geq 50\%$
6	Impedance	50Ω
7	Antenna Type	monopole
8	Antenna composition	1.13 Coaxial line+copper pipe
9	Entity Picture	



4. Specification Details

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 200MM black
3	Heat shrinkable rod	Ø 4.0 32MM black

4.12 Apperance

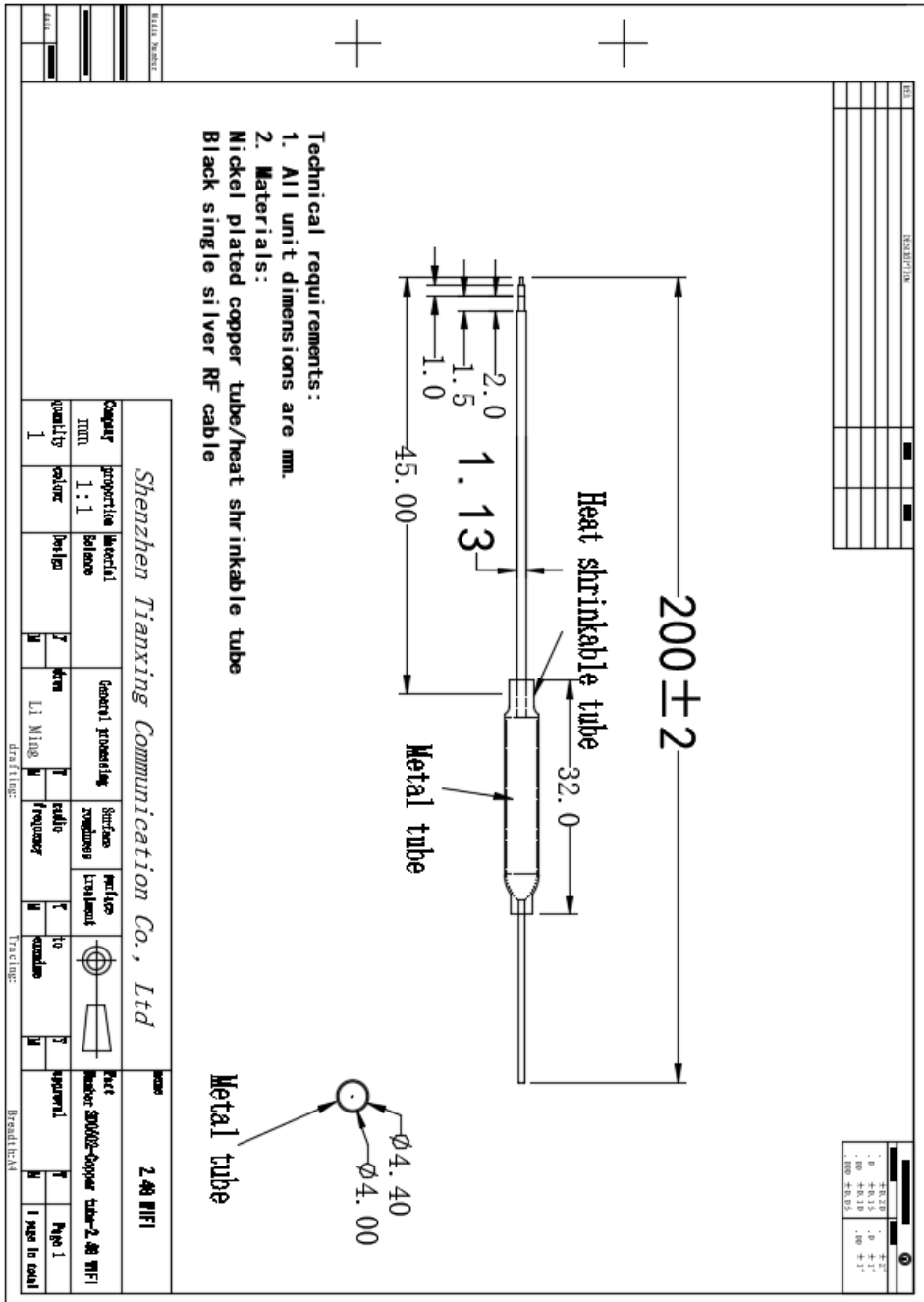
Good appearance without scars 、 dirt、 protuberances, etc.

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		

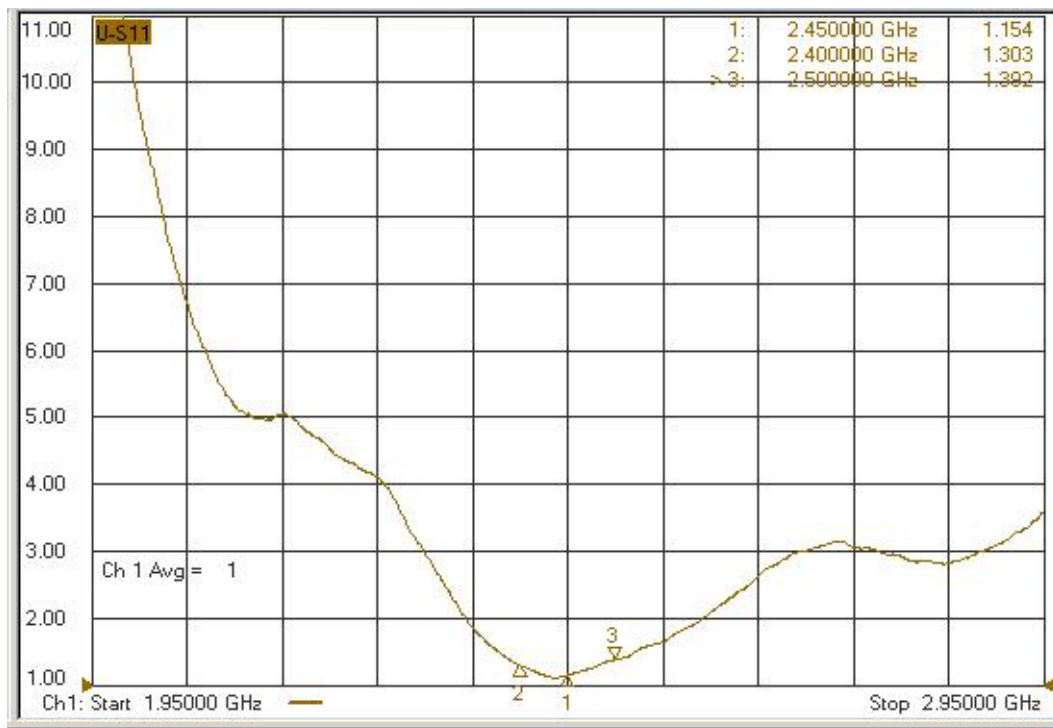
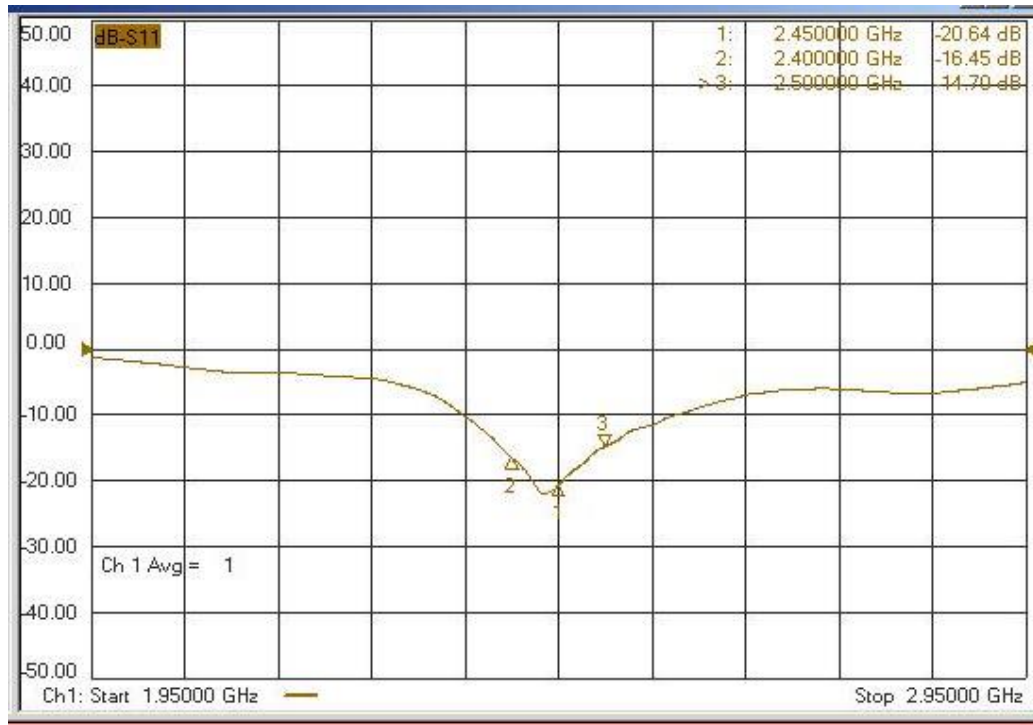
4.22 Test Data for Electrical Performance:

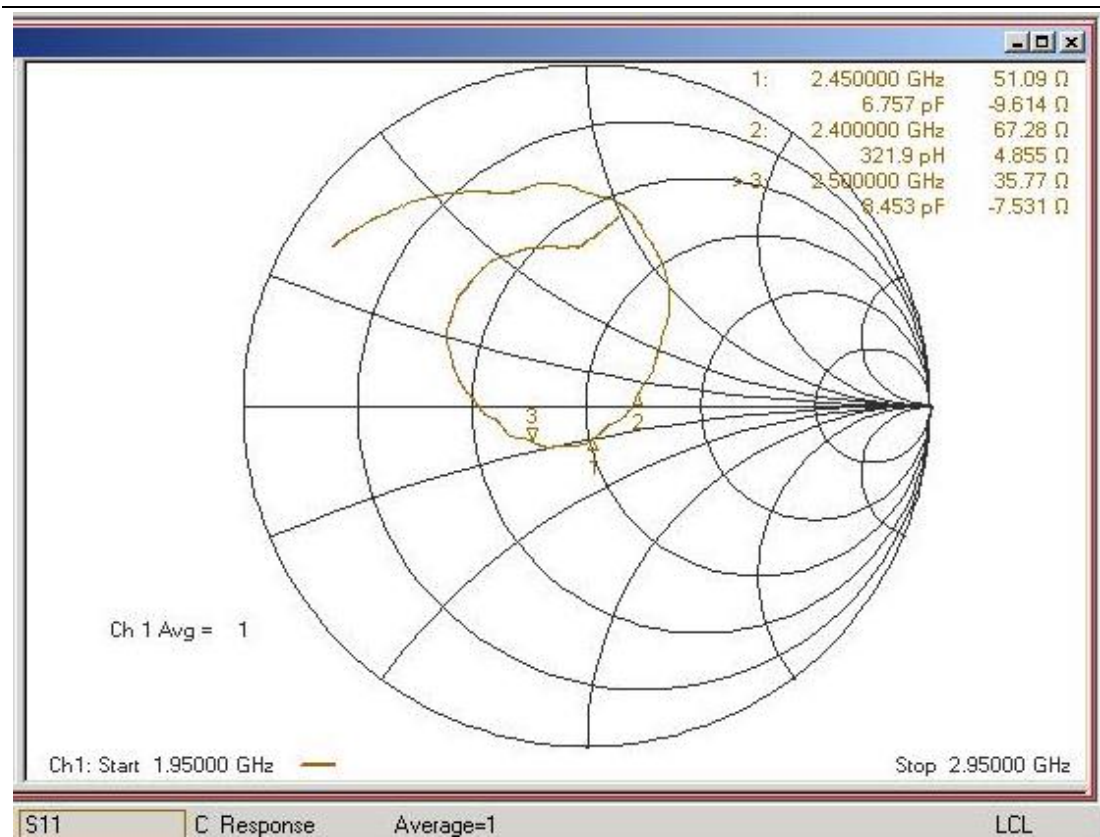
4.22.1 S11 of the Antenna:

Marker	2450MHz	2400MHz	2500MHz
Returnloss	-20.6	-16.4	-14.7
VSWR	1.1	1.3	1.3

4.22.2 Antenna Gain :

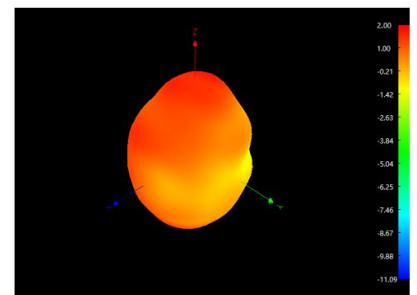
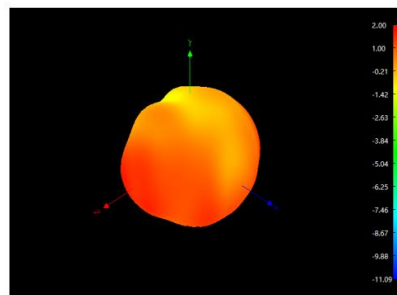
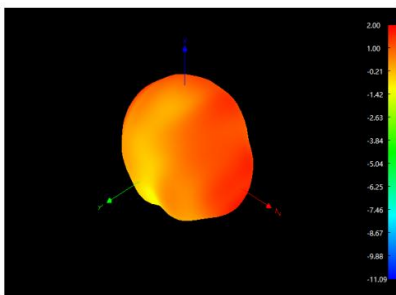
Frequency / MHz	Gain/ dBi
2400	1.67
2410	1.75
2420	1.82
2430	1.88
2440	1.94
2450	2.00
2460	1.79
2470	1.67
2480	1.74
2490	1.76
2500	1.35





Antenna Pattern Picture

2450MHz





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2024/09/19
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/09/19	1.00	New Project