



SPECIFICATION

for

Guangzhou Joinmong Technology Co., Ltd.

Customer No.

Product No.

SD0101-Copper tube-2.4G -100MM

Author: Zeng Xiaofeng Review: Li Ming

Release Date: 2021.4.9

ShenZhen Tianxing Communication Technology Co., Ltd

510 West, building 64, Jinlong Industrial City, majialong, Nanshan District, Shenzhen

E-mail: sz_shuodian@163.com

Tel: 0755-86006322

Fax: 0755-86006323



Contents

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



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	≥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 100MM 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:



Page number 6-10

Technical drawing of a heat shrinkable tube assembly. The drawing shows a side view of a metal tube with a heat shrinkable tube (HST) sleeve. The HST sleeve has a length of 100 ± 2 mm. The metal tube has a length of 65.0 mm. The HST sleeve has an outer diameter of 1.13 mm and an inner diameter of 1.0 mm. The metal tube has an outer diameter of 1.5 mm and an inner diameter of 1.0 mm. The drawing also shows a cross-section of the metal tube with an outer diameter of $\phi 4.40$ mm and an inner diameter of $\phi 4.00$ mm. The drawing is labeled "Heat shrinkable tube" and "Metal tube".

Shenzhen Tianxing Communication Technology Co.,Ltd



4.2 Electric Performance

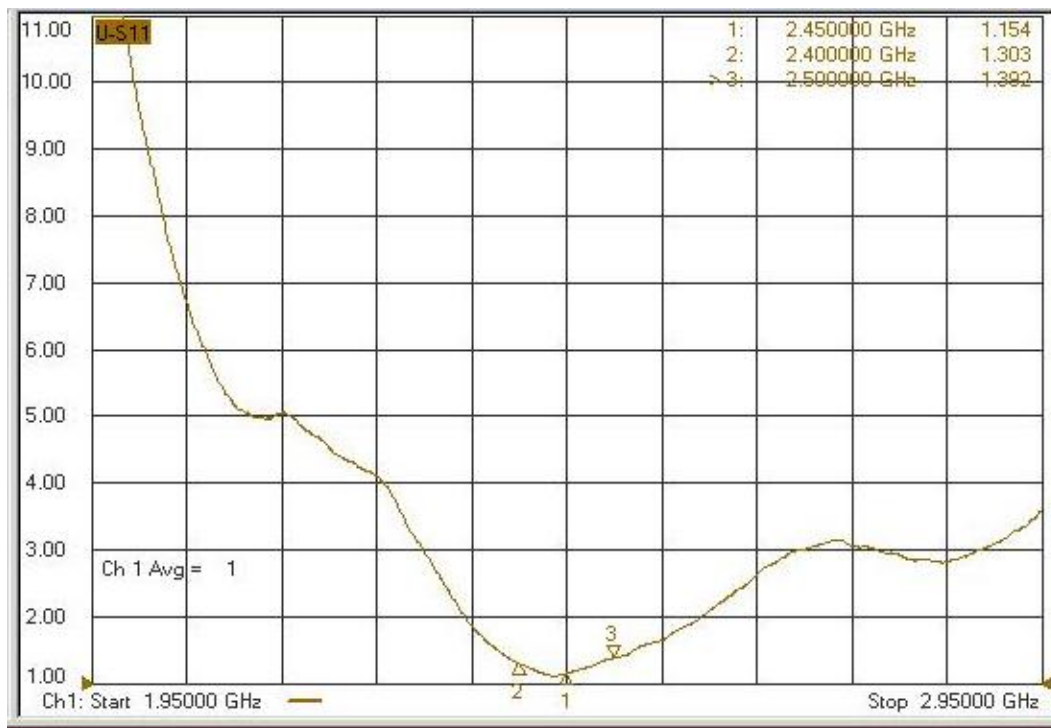
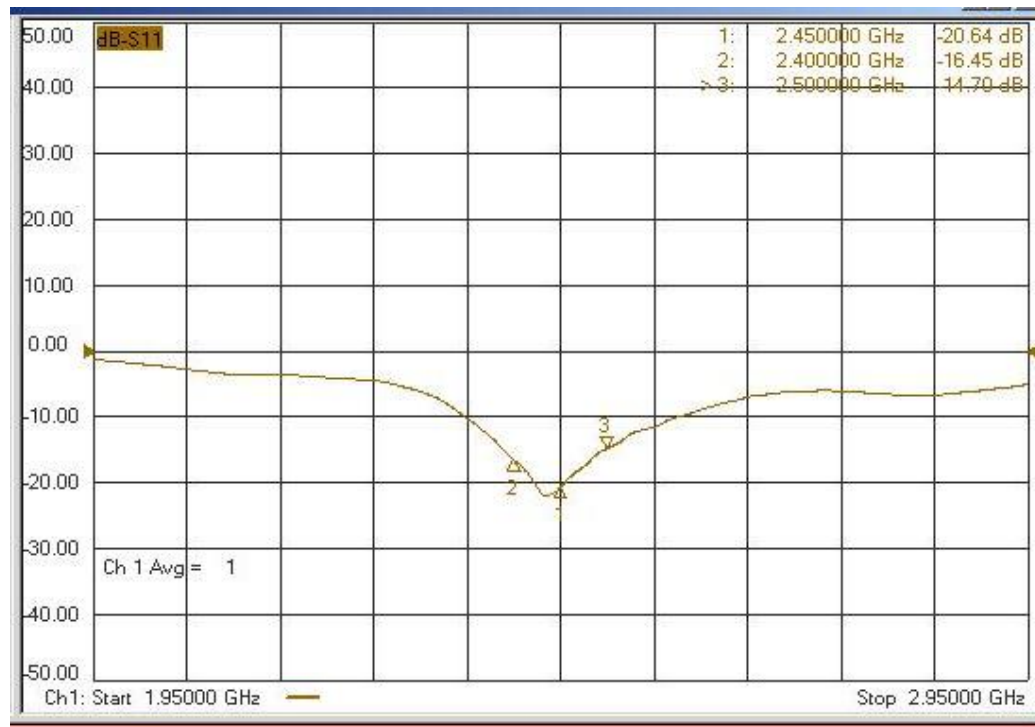
4.21 Test condition

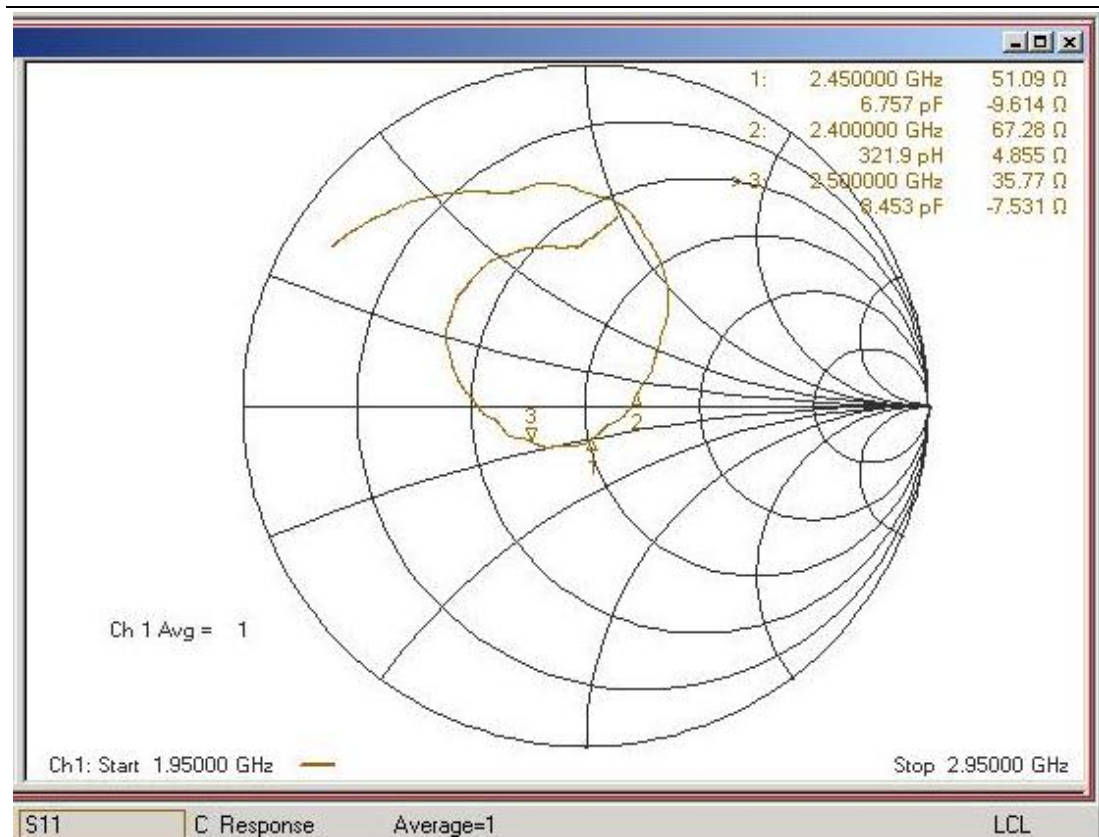
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: Agilent E8358A
Humidity: ≤80% (+40℃)	Anechior Chamber: ETS
Atmospher: 750mmkg±30mmkg	

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

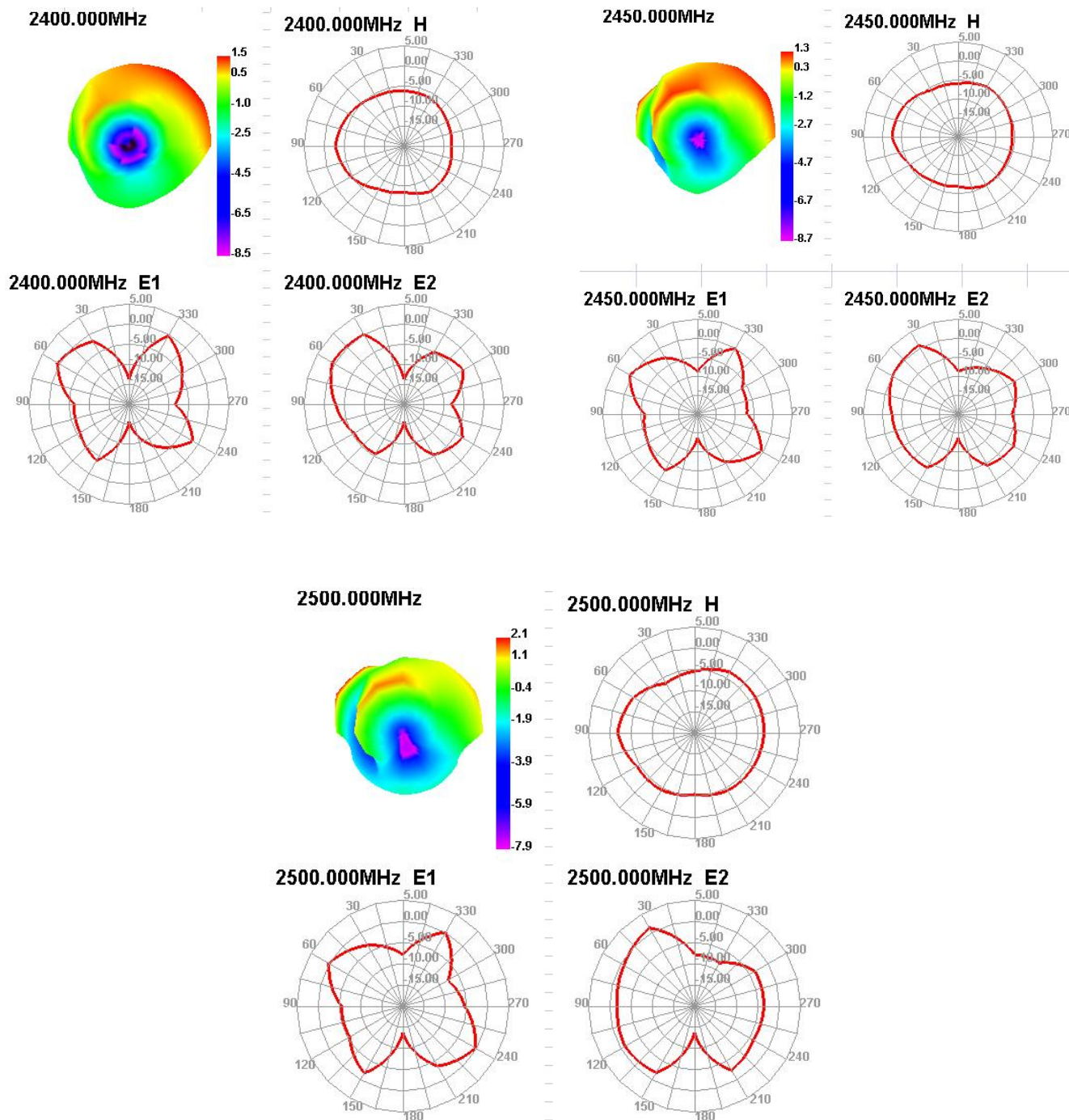
Marker	2450MHz	2400MHz	2500MHz
Returnloss	-20.6	-16.4	-14.7
VSWR	1.1	1.3	1.3





Efficiency&gain

Frequency (MHz)	Efficiency (%)	Peak Gain (dBi)
2400	71.13	1.67
2410	70.53	1.74
2420	70.47	1.48
2430	67.27	1.54
2440	64.98	1.65
2450	64.77	1.67
2460	63.38	2.00
2470	62.49	1.90
2480	64.13	1.87
2490	65.75	1.72
2500	67.74	1.96





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2022/09/20
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2022/09/20	1.00	New Project