



Shenzhen Shuodian Electronic Technology Co.,Ltd

SPECIFICATION

for

2.4GHz Spring Antenna

Shenzhen Shuodian Electronic Technology Co., Ltd

Customer No.

2.4G Spring Antenna WireSize D0.6mm (for Z760)

Product No.

Model : XYD-Z1-2.4G

Author: XiaofengZeng Review: Liming

Release Date: 2021.06.28

ShenZhen Shuodian Electronic Technology Co., Ltd

508 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 SHUODIAN ELECTRONIC TECHNOLOGY 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: Shenzhen Shuodian Electronic Technology Co., Ltd

Department/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Department/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		

2. General

2.1 Scope of application

This specification is only applicable to XingyingDa Z7602.4GHz Spring 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	XYD-Z1-2.4G
2	Operating Frequency Band	2.4~2.5GHz
3	VSWR	≤1.4
4	Gain	2.85dBi(Max)
5	Radiation Efficiency	≥50%
6	Impedance	50Ω
7	Antenna Type	IFA
8	Antenna composition	Spring
9	Entity Picture	

4. Specification Details

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	Phosphor Copper	$\Phi 3.6 \times 17.85$ mm

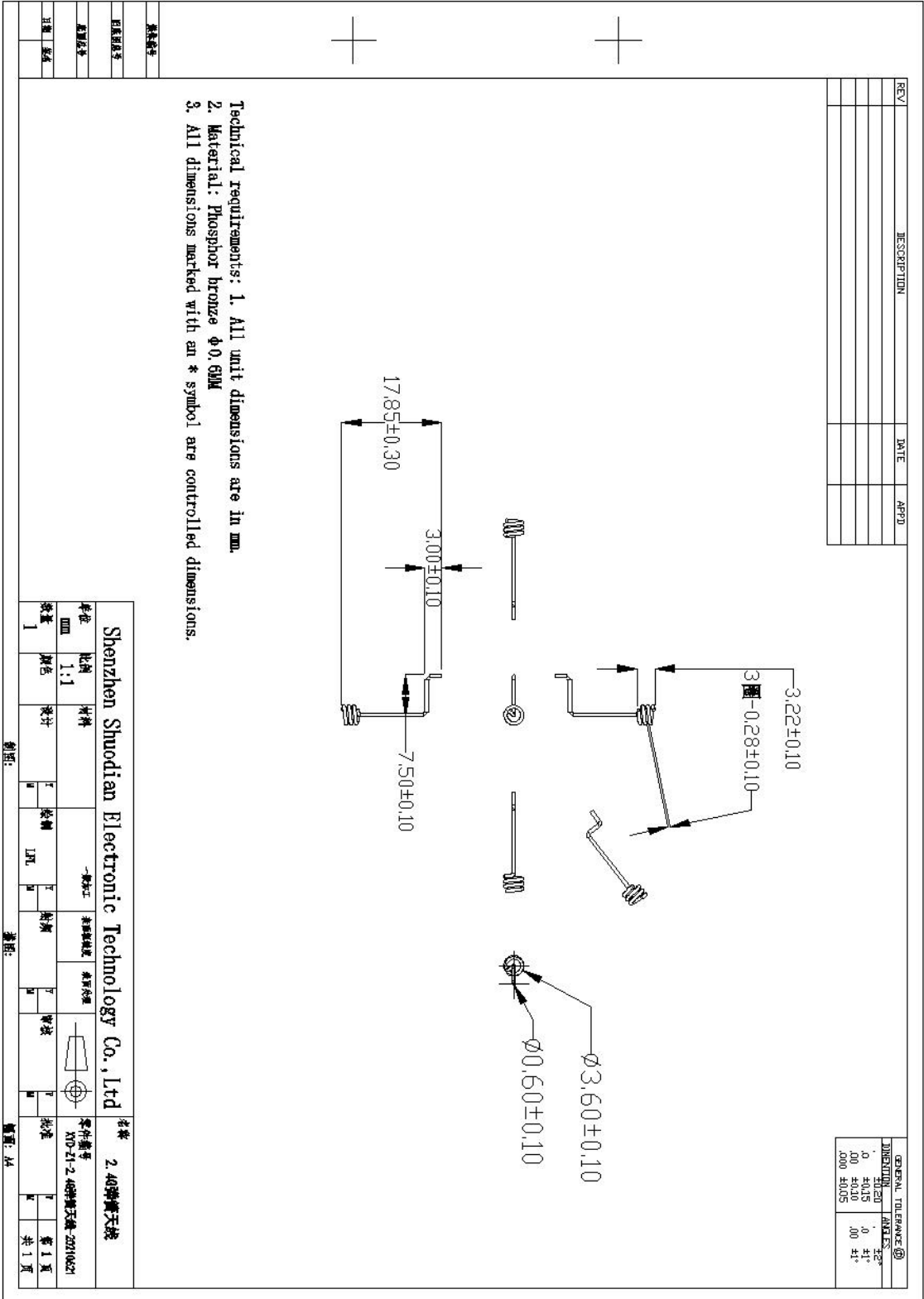
4.12 Apperance

Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Refer to product drawings:

Product drawings:



4.2 Electric Performance

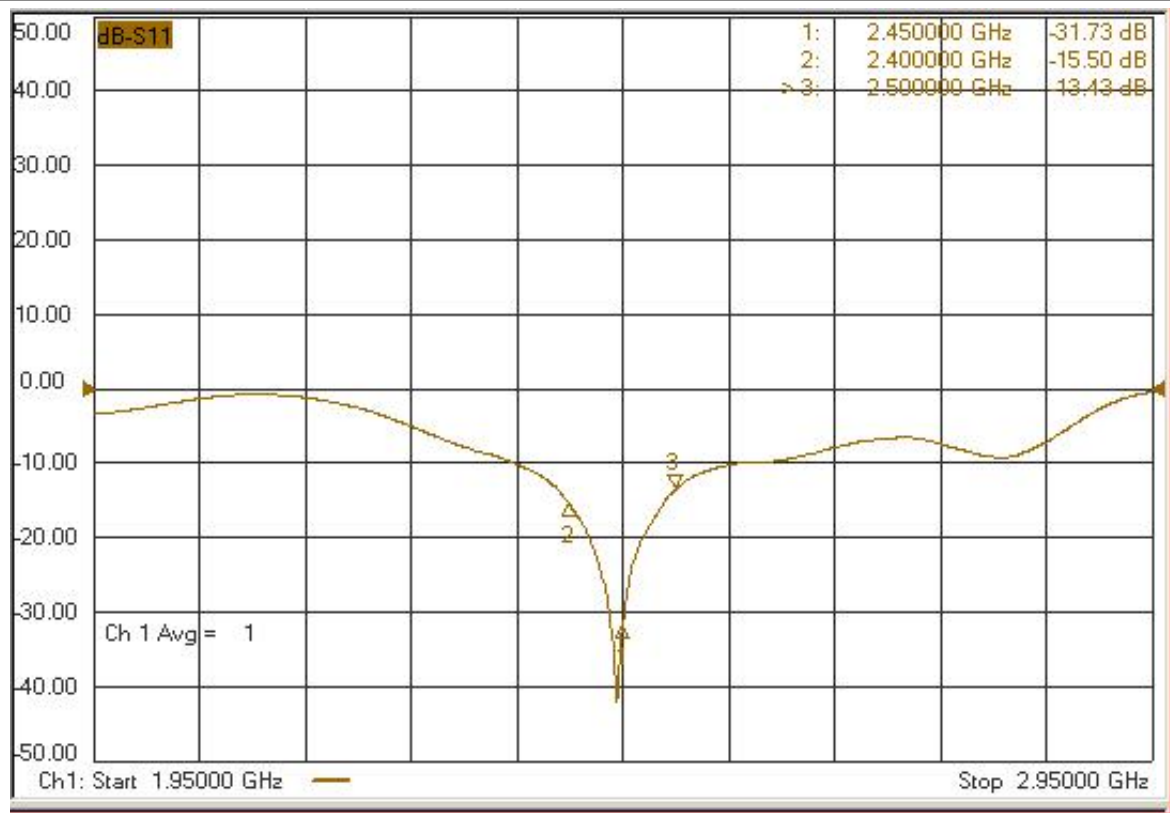
4.21 Test condition

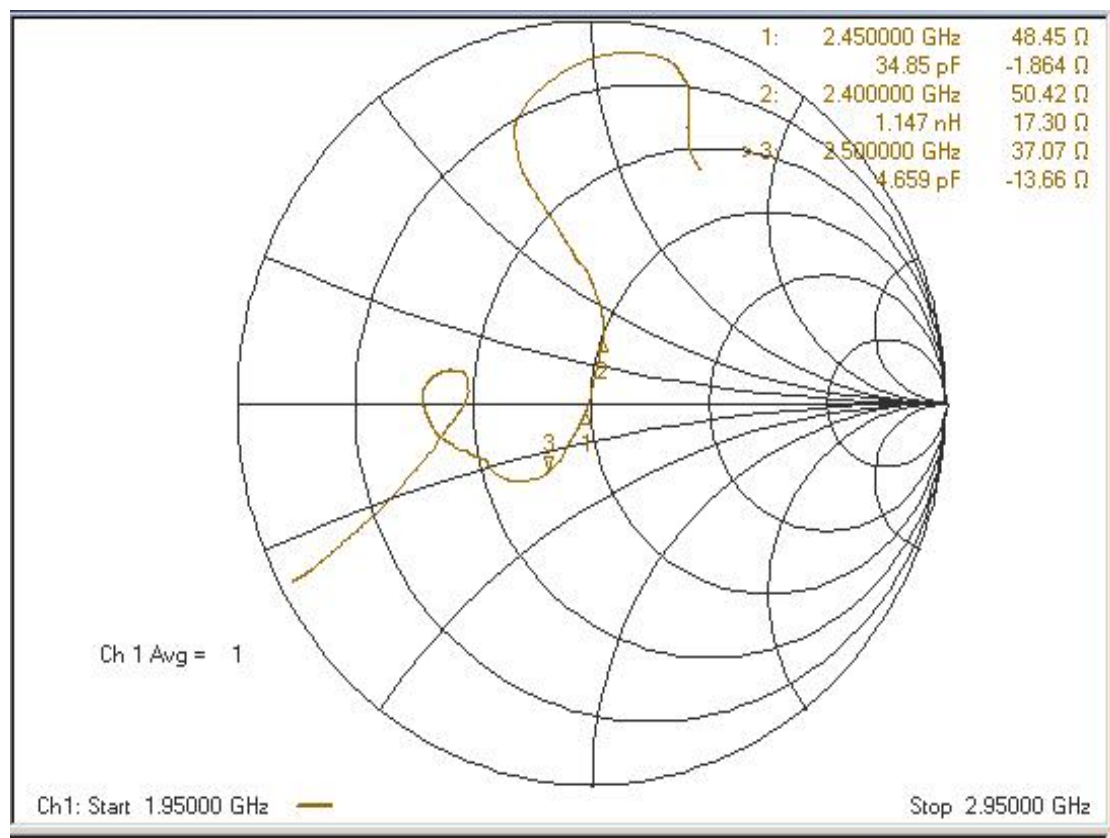
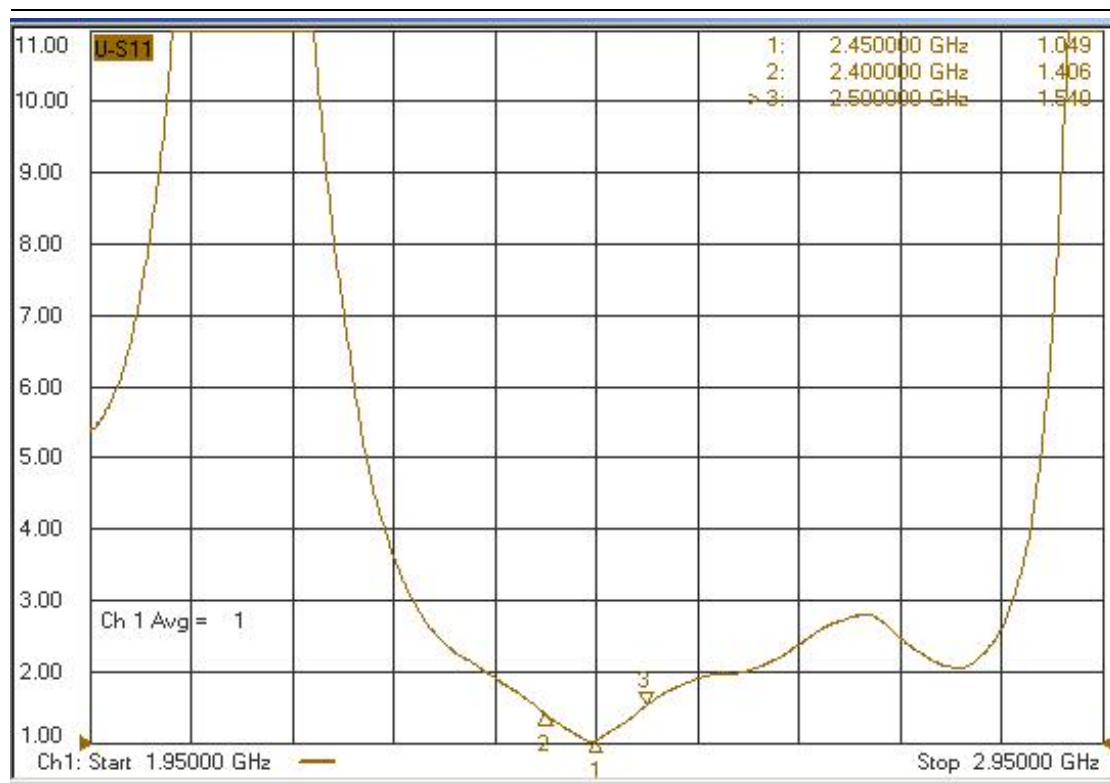
Environment:		Equipment:	
Temperature:	10°C——+30°C	Network Analyzer:	
Humidity:	≤80% (+40°C)	Agilent E8358A	
Atmospher:	750mmkg±30mmkg	Multi Probe full Anechior Chamber	

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-15.5	-31.7	-13.4
VSWR	1.4	1.0	1.5





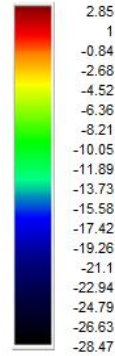
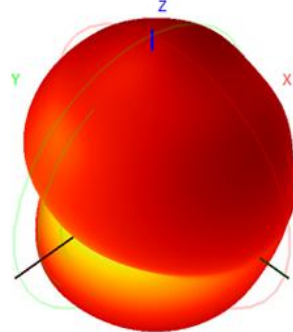
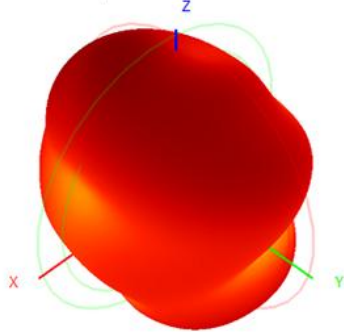
4.22.2 Passive gain、 efficiency and Radiation Pattern:

频率 (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.13	62.6
2410.0	2.11	65.1
2420.0	2.24	67.3
2430.0	2.43	68.3
2440.0	2.71	69.7
2450.0	2.85	70.2
2460.0	2.64	69.0
2470.0	2.18	64.8
2480.0	1.98	60.4
2490.0	1.66	55.7
2500.0	1.33	52.2

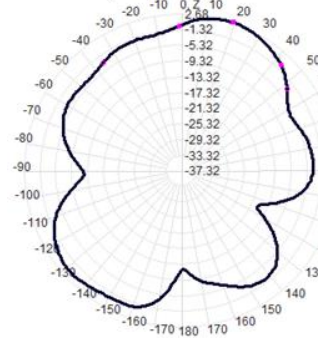
Radiation Pattern @2450MHz

2450.0MHz H+V, Eff: 70.9%

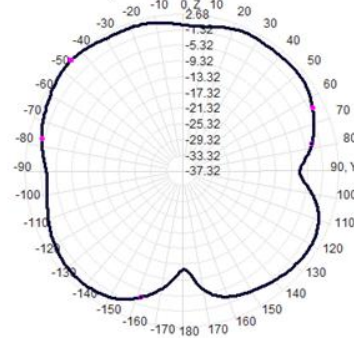
Back View



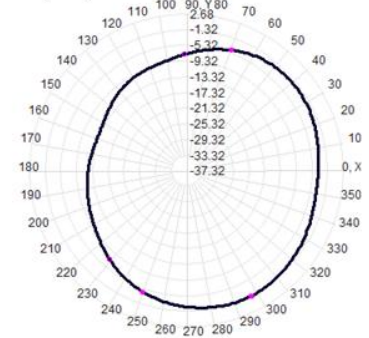
2450.0MHz Total(E1-XZ), Max= 2.68dBi



2450.0MHz Total(E2-YZ), Max= 2.52dBi



Total(H-XY), Max= -1.50dBi, CirD=11.59



5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2021/06/28
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2021/06/28	1.00	New Project