



SPECIFICATION

for

S1 Mini 2.4G BT Antenna

Customer No.

400103290

Product No.

WA-S1 Mini 2.4G BT-PCB-210MM

Author: XiaofengZeng Review: Liming

Release Date: 2023. 04. 23

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1. Bilateral Confirmation page

1.1 Customer signature

Customer: XIE CHUANG

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

1.2 Signature of ShuoDian Technology company

Seapartment/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 XIECHUANG S1 Mini 2.4G BT 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	S1 Mini 2.4G BT
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.0
4	Impedance	50 Ω
5	Antenna Type	Dipole
6	Antenna composition	PCB
7	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	PCB	40. 3*7*0. 8 Black
2	CABLE	IPEX-1 L=210 black

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:

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4.2 Electric Performance

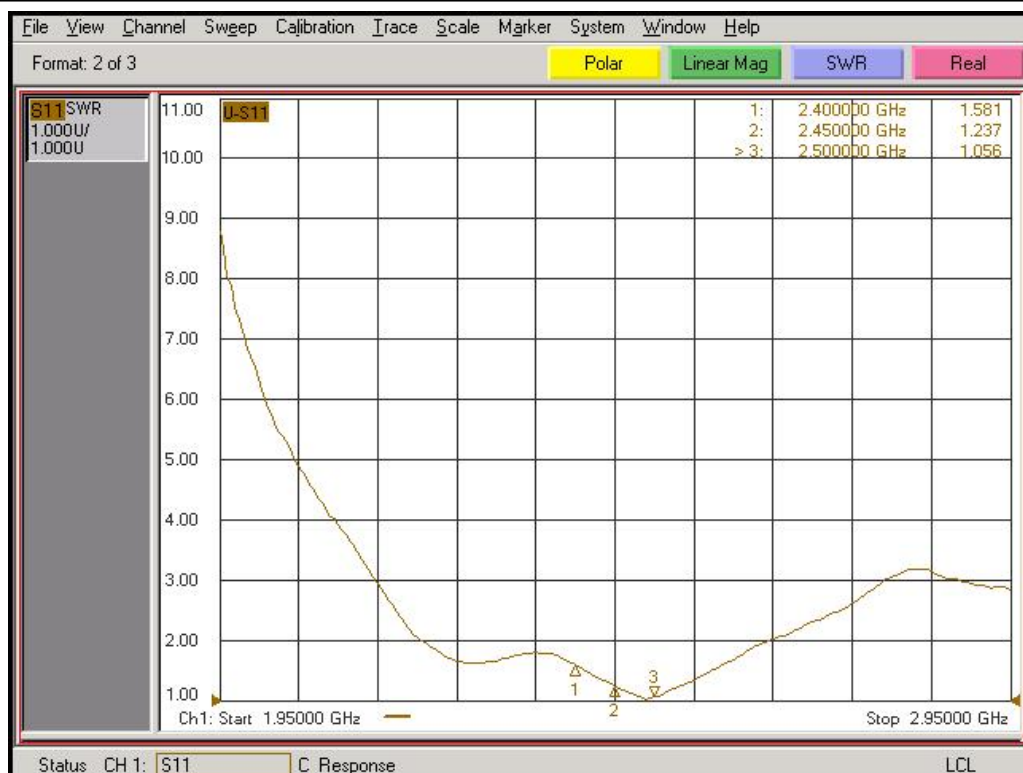
4.21 Test condition

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	2400MHz	2450MHz	2500MHz
Returnloss	-13.1	-20.2	-28.9
VSWR	1.5	1.2	1.0



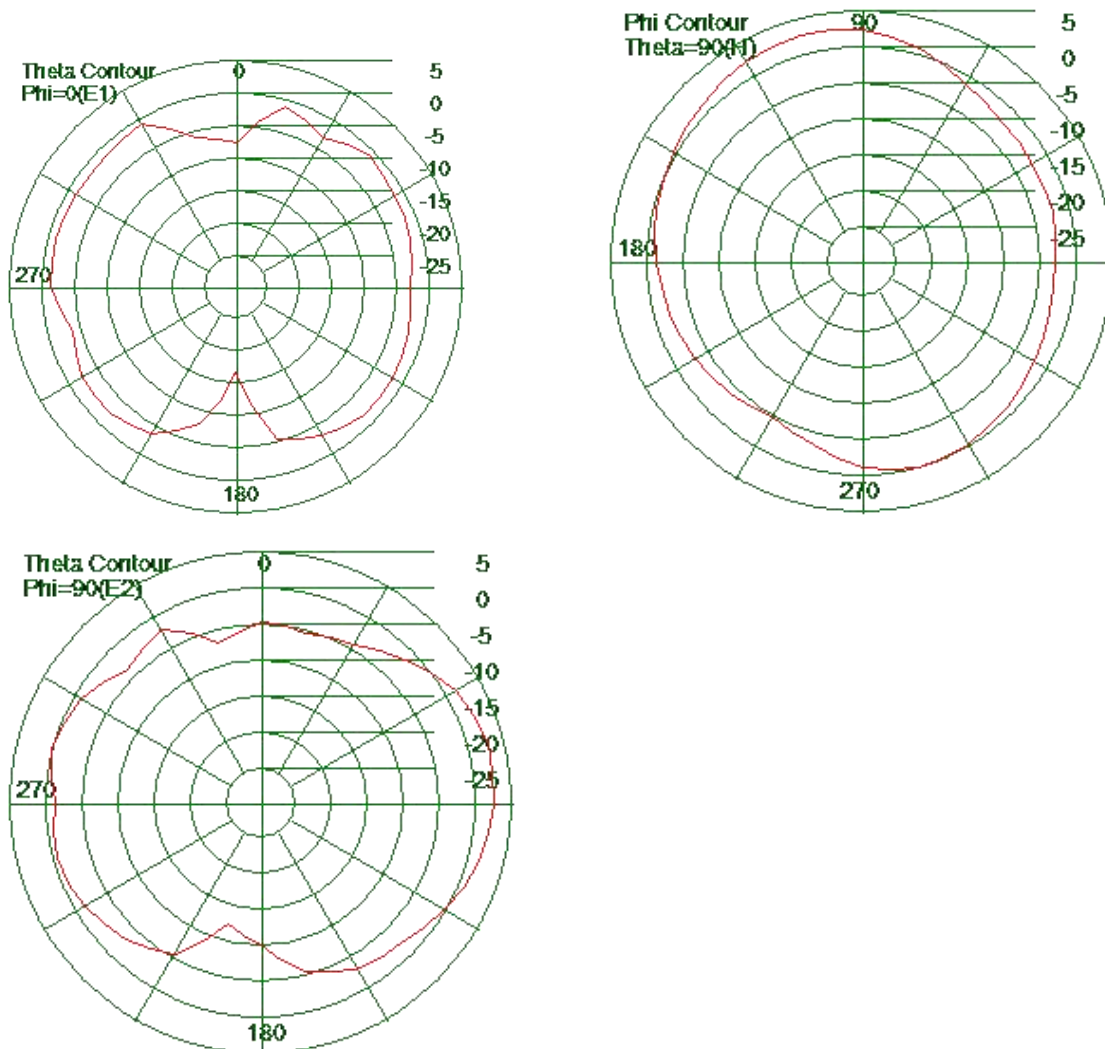
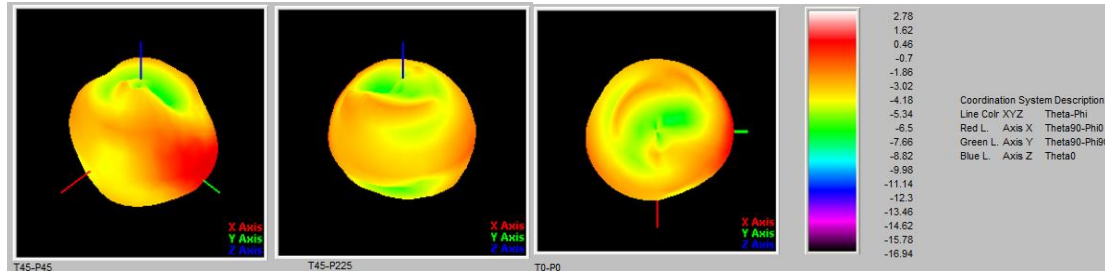


4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

频率 (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.42	62.7
2410.0	2.51	64.6
2420.0	2.54	65.8
2430.0	2.27	61.8
2440.0	2.53	65.1
2450.0	2.78	67.1
2460.0	2.93	68.1
2470.0	3.02	68.6
2480.0	3.05	68.8
2490.0	3.08	69.3
2500.0	3.05	68.9



Radiation Pattern 2450MHz





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2024/04/23
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2023/04/23	1.00	New Project