SPECIFICATION

for

Mobile trailer 2.4G WIFI Antenna

Customer No.

Product No.

SD-Mobile trailer 2.4G WIFI Antenna-300MM

Author：XiaofengZeng Review：Liming

Release Date： 2024.09.06

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1. Bilateral Confirmation page

1.1 Customer signature

Customer：

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

1.2 Signature of ShuoDian Technology company

Separtment/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 Mobile trailer 2.4G WIFI Antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 ℃

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 ℃

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	Mobile trailer
2	Operating Frequency Band	2.4~2.5GHz
3	VSWR	≤2.0
4	Gain	3.0±1dBi
5	Impedance	50Ω
6	Antenna Type	Monopole
7	Entity Picture	

4. Specification Detials

4.1 Mechanical Properties

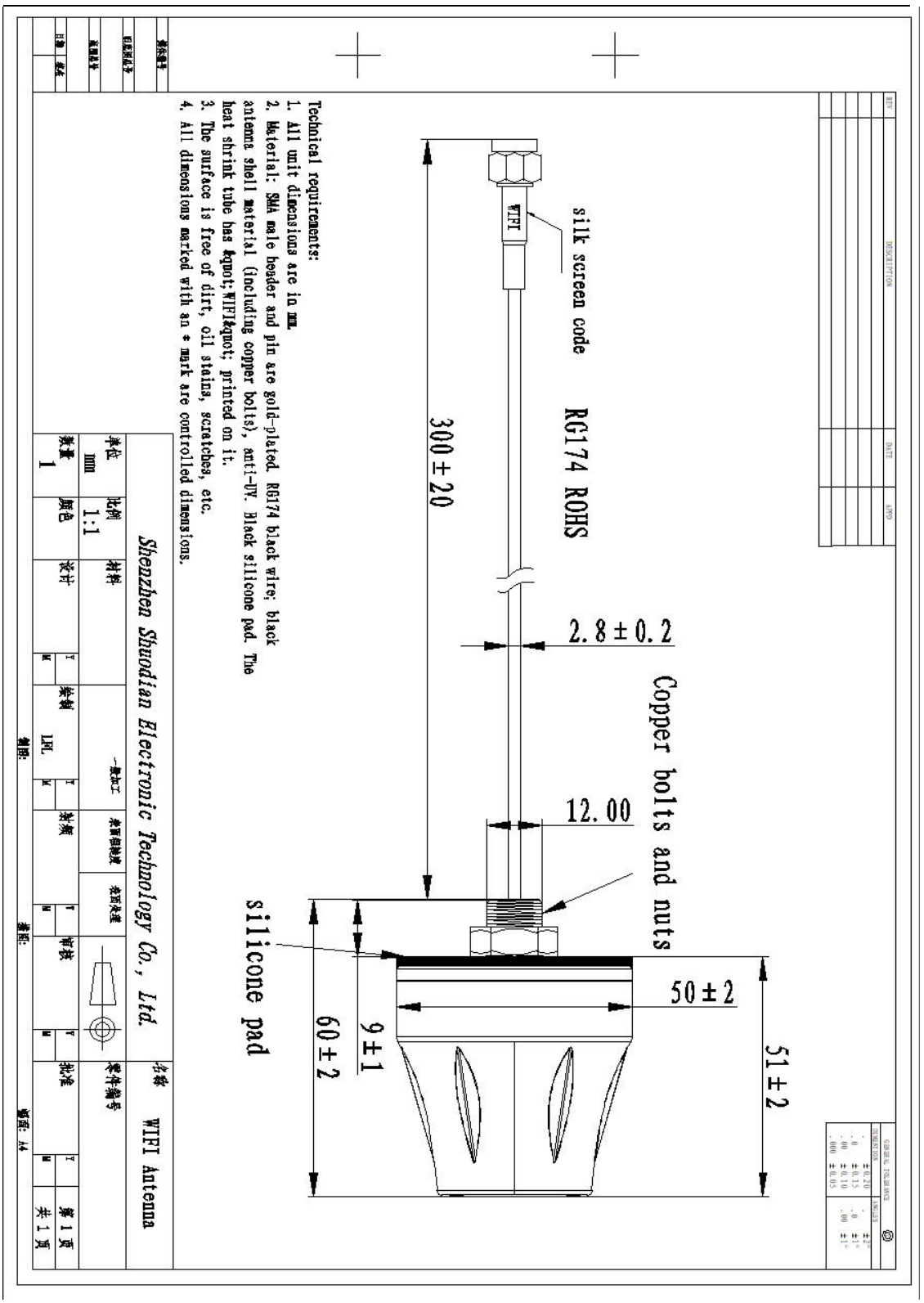
4.11 Product Composition：

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:


WIFI
silk screen code
RG174 ROHS
300±20
2.8±0.2
Copper bolts and nuts
12.00
silicone pad
50±2
51±2
9±1
60±2
Technical requirements:
1. All unit dimensions are in mm.
2. Material: SMA male header and pin are gold-plated. RG174 black wire; black antenna shell material (including copper bolts), anti-UV. Black silicone pad. The heat shrink tube has "WIFI" printed on it.
3. The surface is free of dirt, oil stains, scratches, etc.
4. All dimensions marked with an * mark are controlled dimensions.
Shenzhen Shuodian Electronic Technology Co., Ltd.
WIFI Antenna
单位 mm
比例 1:1
数量 1

4. 2 Electric Performance

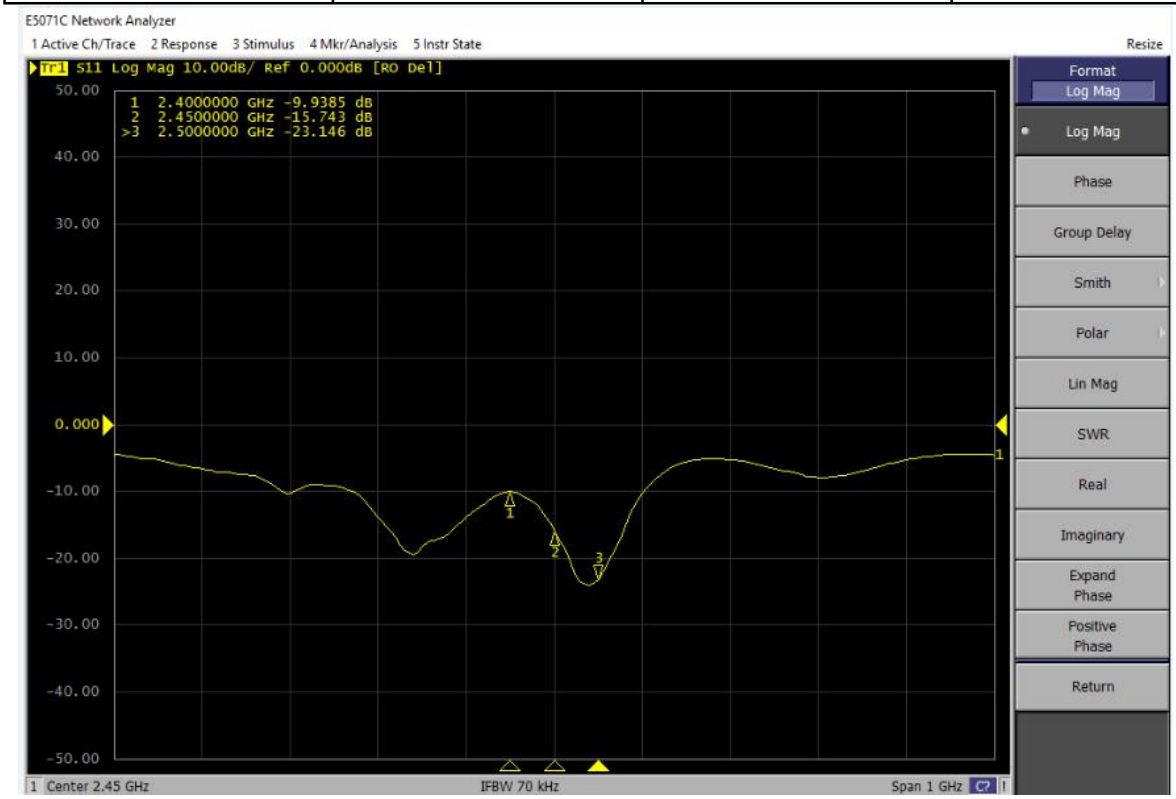
4. 21 Test condition

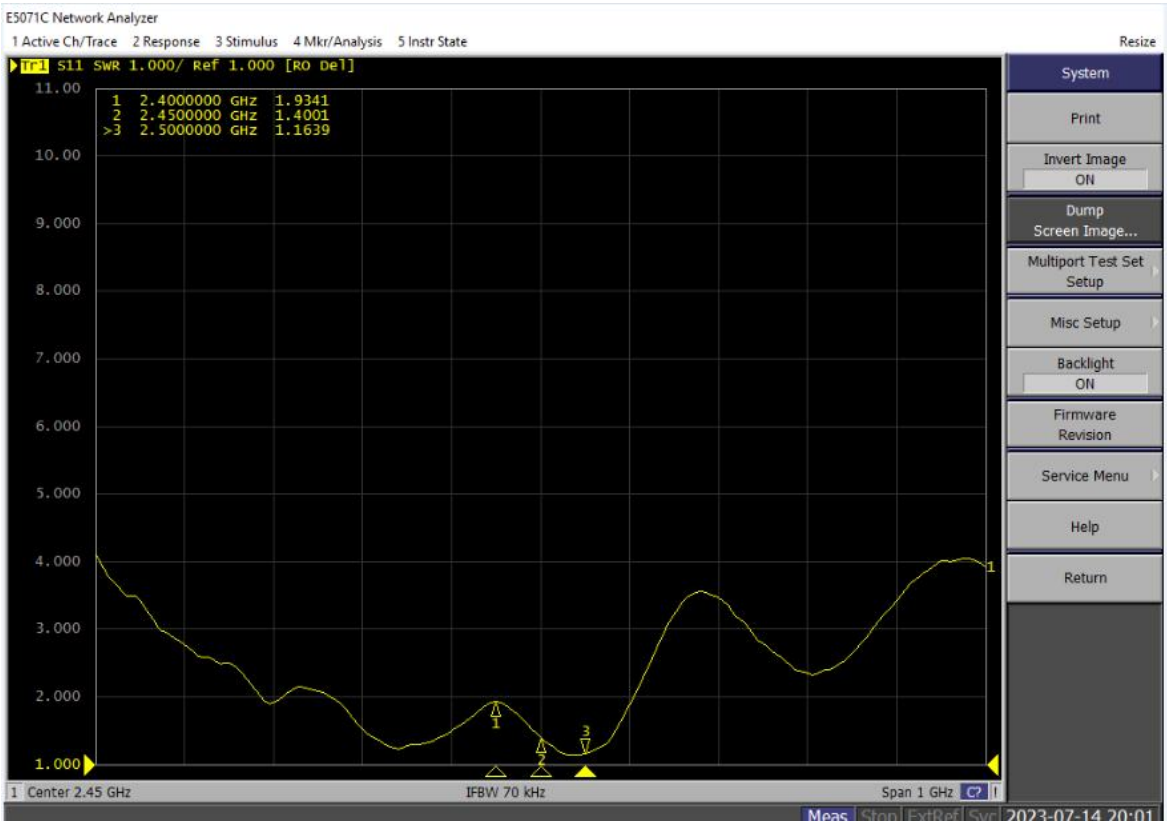
Environment: Temperature: 10℃——+30℃ Humidity: ≤80%（+40℃） Atmospher: 750mmkg±30mmkg	Equipment: Network Analyzer: KEYSIGHT E5071C Anechior Chamber: ETS

4. 22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker（MHz）	2400	2450	2500
ReturnLoss	-9.93	-15.7	-23.1
VSWR	1.93	1.40	1.16

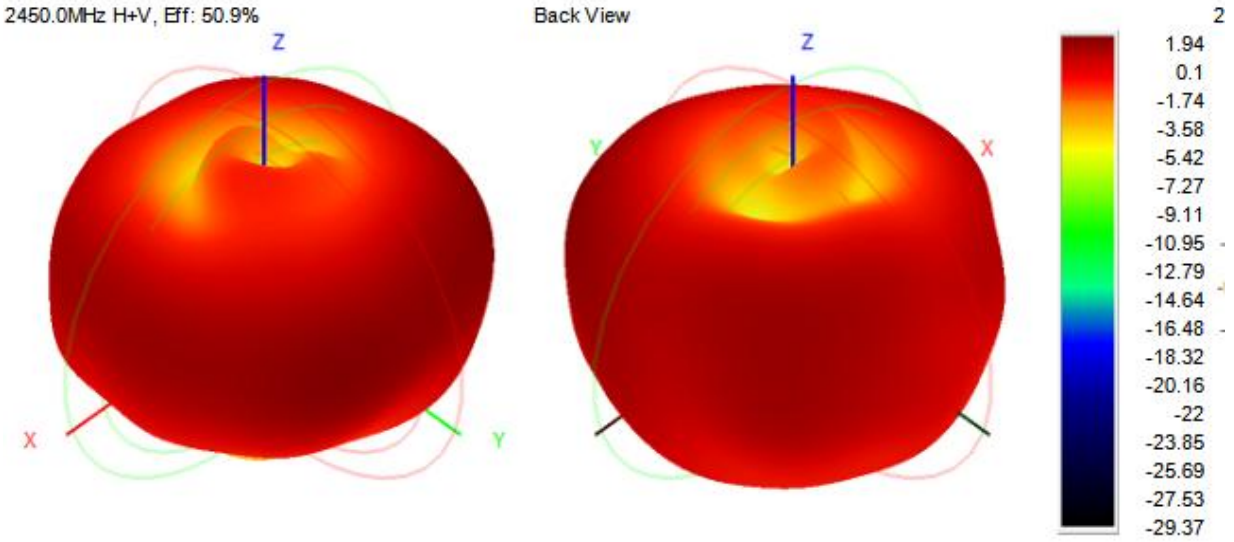


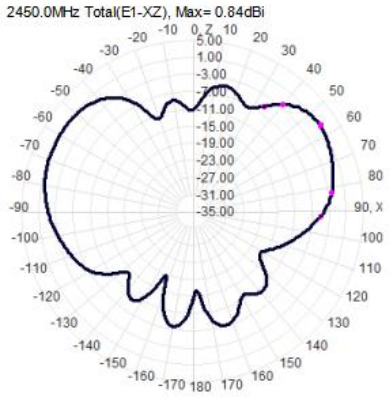


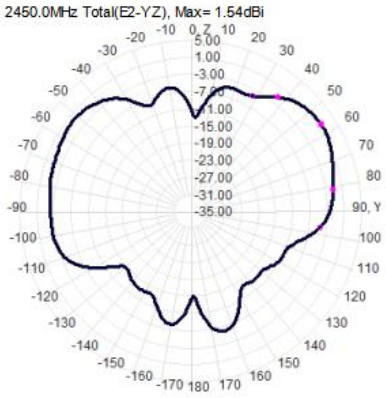
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

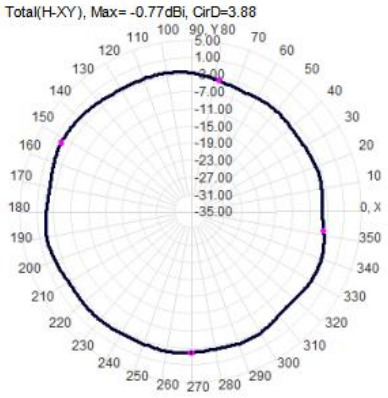
Marker （MHz）	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain（dBi）	2.70	2.60	2.47	2.31	1.84	1.94	2.28	2.51	2.60	2.47	2.12
Efficiency （%）	46.3	47.0	47.1	48.6	50.1	50.9	49.5	47.4	45.0	43.8	43.9

2450MHz









5. Product Packaging

Manner of packing**:**

Packed in self sealed bags, 50 pcs each.

6. Document Resume

Document No.	
Release Date	2024/09/06
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/09/06	1.00	New Project