

规格承认书

Approval Sheet

客户名称 Bright Sound Technology

(Customer Name)

产品名称 DM40 (WIFI antenna)

(Specification)

客户料号

(Customer P/N)

产品料号

(O/I)

送样日期 2026-9-11

(Date)

frequency band	2.4G WIFI		
version	A		
radio frequency	CheMushao	Confirm	
structure	Yangguo Army		
Customer confirmation			
Date			

catalogue

1. Project images

2. Testing fixtures

3. Matching circuit

4. S11 testing electrical performance

4.1 S11 Test Method Description
Specification Standards

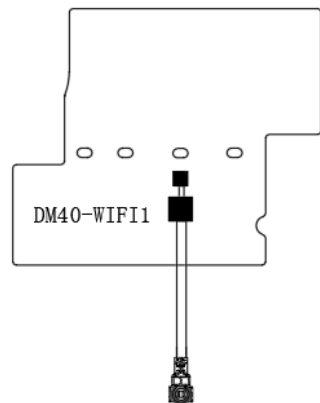
4.2 S11 parameter image

5. Power and sensitivity testing

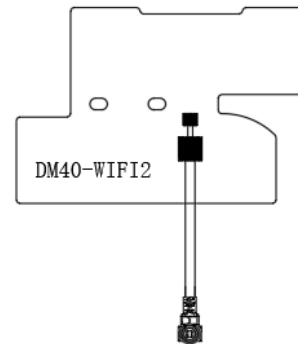
5.1 Test Data

6. Structural drawings

1. Project images (for reference only)



WIFI 1 antenna

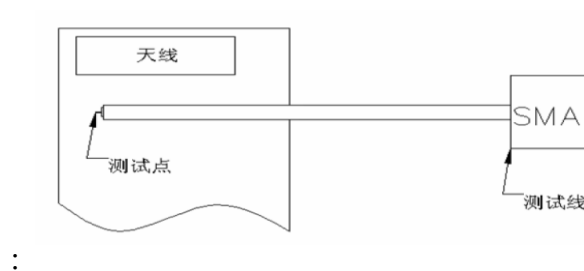


WIFI 2 antenna

2. Passive Test

Purpose: To test the passive parameters of the antenna as accurately as possible.

Method: This fixture uses a 50 ohm coaxial cable, with one end connected to the testing point at the back end (front section of the RF test hole) of the matching circuit on the mobile phone motherboard, and the other end connected to the SMA connector. As shown in the following figure



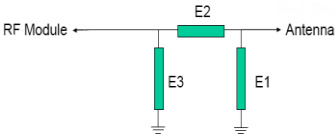
The following table shows the performance test indicators for DM40 frequency mass-produced antennas

WIFI antenna				
	频率 (MHz)	VSWR	频率 (MHz)	VSWR
frequency band	transmitting end		receiving end	
2.4G/BT WIFI	2400-2550	≤3.0	2400-2550	≤3.0

3.Matching circuit

Main antenna (with changes in matching))

Element	matching value
E1(0201)	
E2(0201)	0 ohms
E3(0201)	



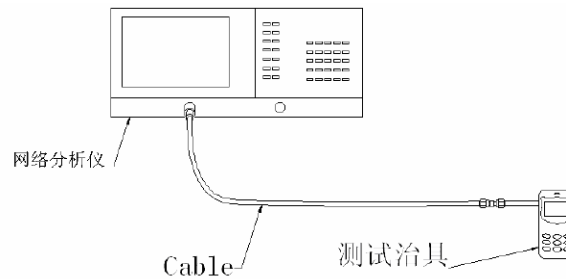
4. S11 test

4.1 S11 Test Method Description Specification Standards

The VSWR testing device is sequentially connected as follows:
HDD10K753ES network analyzer → 50 ohm coaxial cable → 120mm long copper tube → testing fixture.

Processing of test fixture: Use a hard cable to lead out the SMA-J connector from the 50 ohm test point of the antenna on the mobile phone PCB, connect it to a copper tube with a choke coil, and then connect

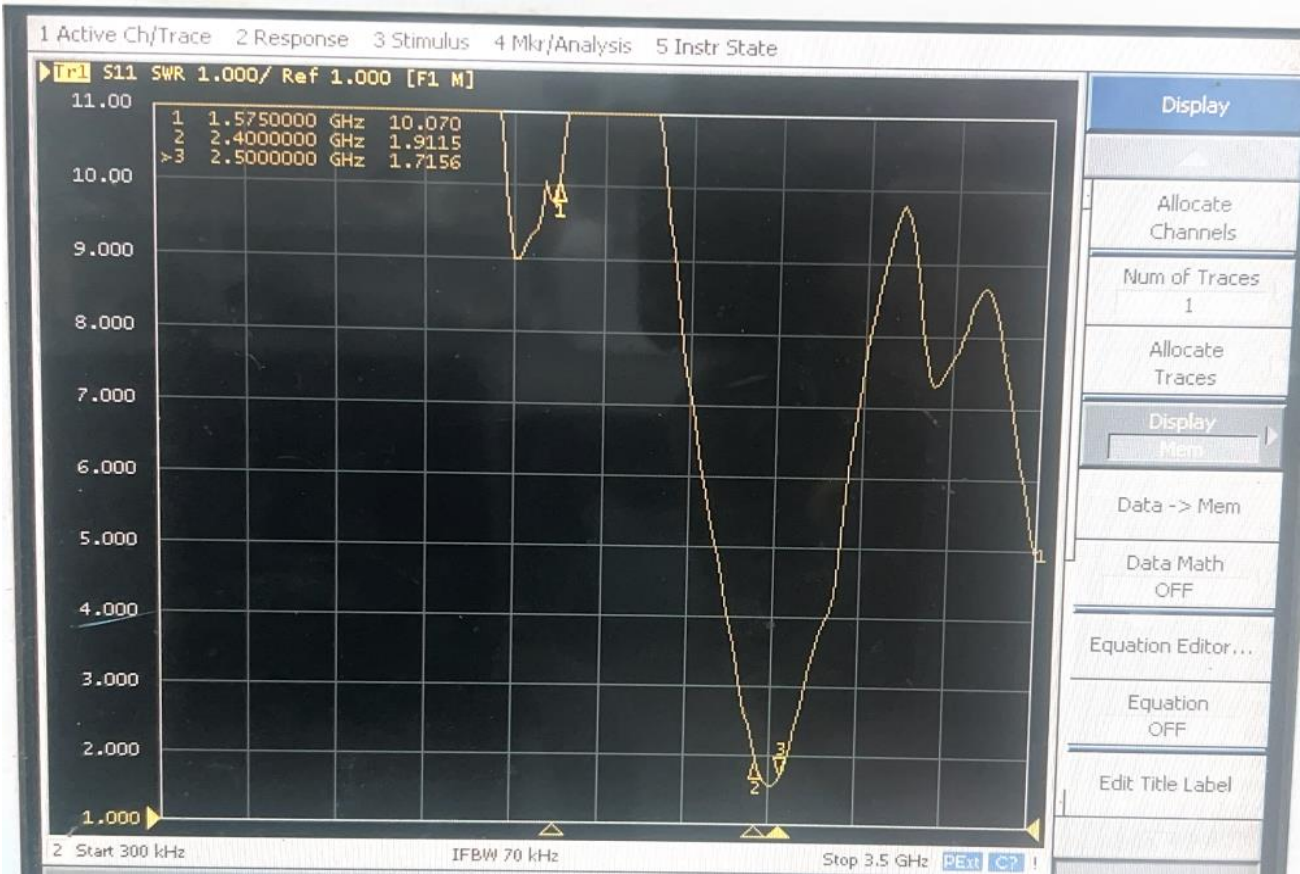
other devices in sequence.



测试示意图

4.2 S11

WIFI1 passive standing wave diagram:



5. WIFI1 passive efficiency/gain

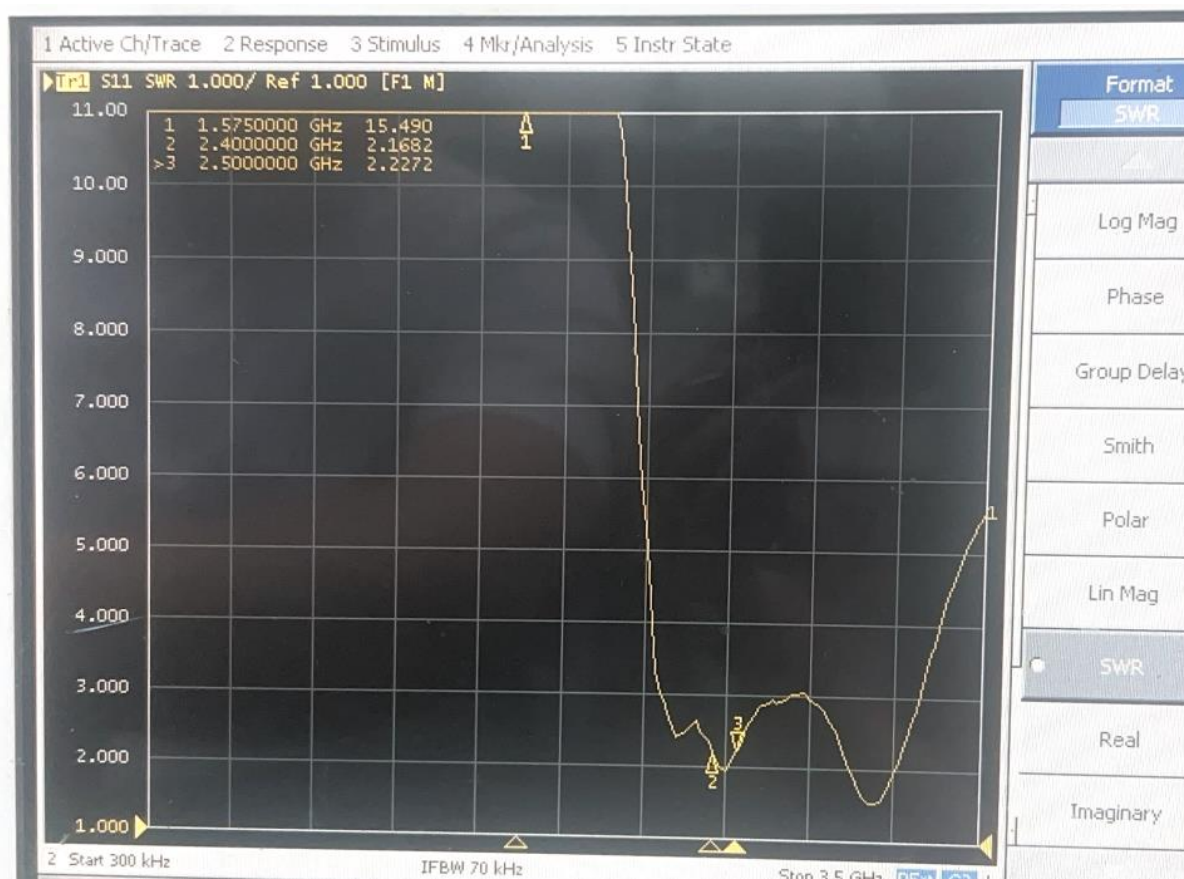
Freq(MHz)	Gain(dBi)	Efficiency(%)
2400	0.44	39.74
2420	0.88	40.91
2440	1.28	41.86
2460	1.58	42.98
2480	1.37	40.29

2500

1.15

37.92

WIFI2passivestandingwavediagram:



5. WIFI2 passive efficiency/gain

Freq(MHz)	Gain(dBi)	Efficiency(%)
2400	0.7	33.85
2420	0.96	35.82
2440	1.3	38.18
2460	1.52	39.13

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Deshiqin Technology Co., Ltd. – Acknowledgment

2480

1.35

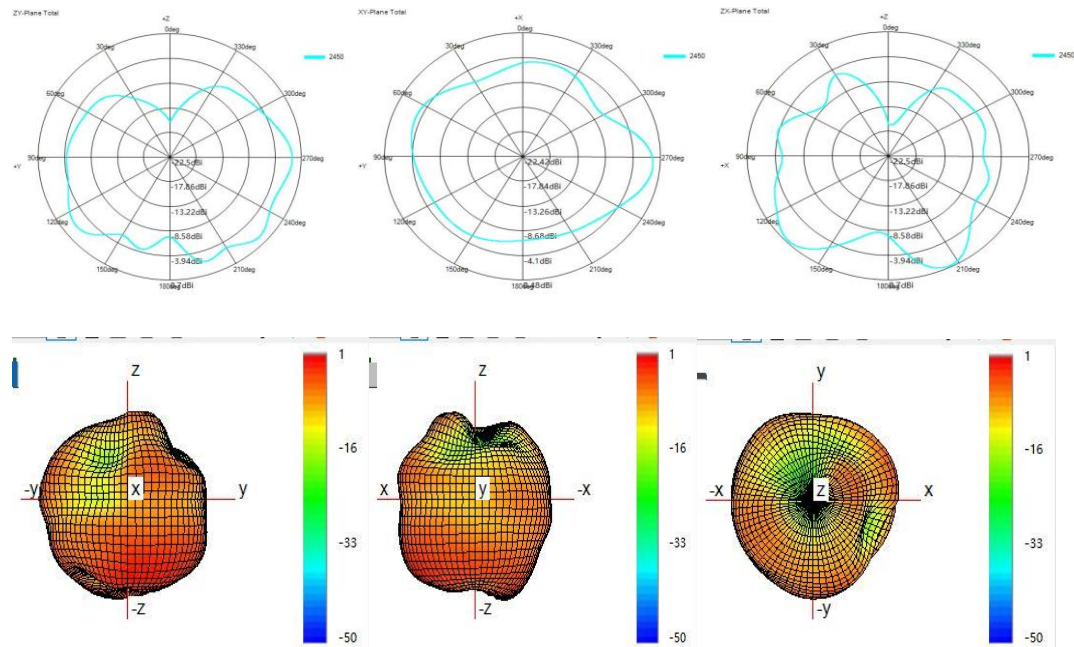
36.33

2500

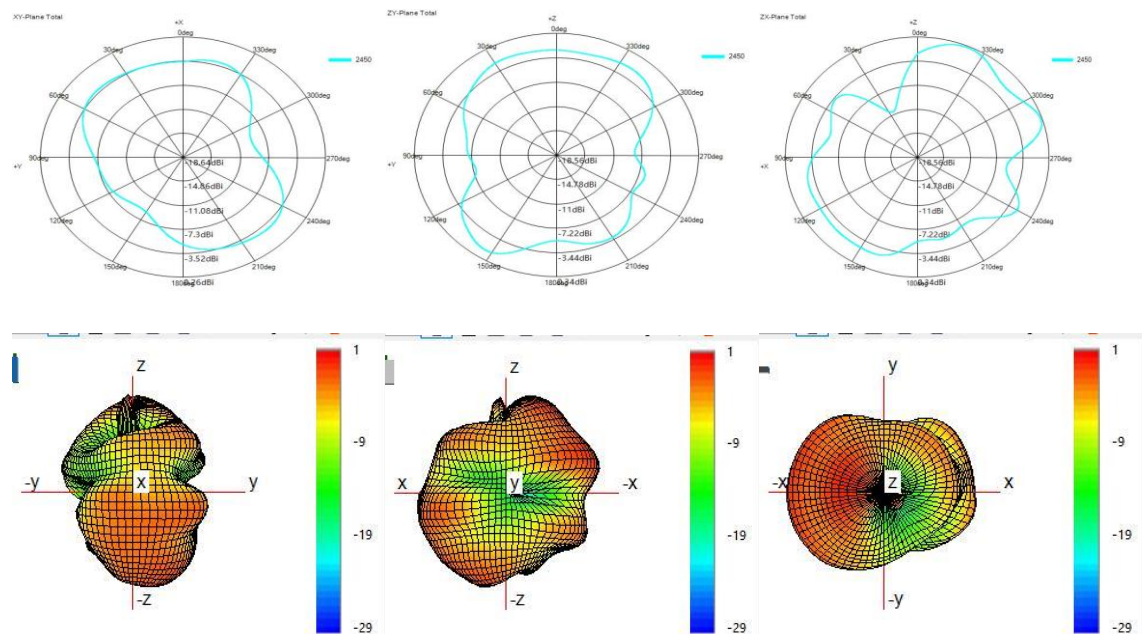
1.21

34.53

WIFI1-2D/3DPhi



WIFI2-2D/3DPhi



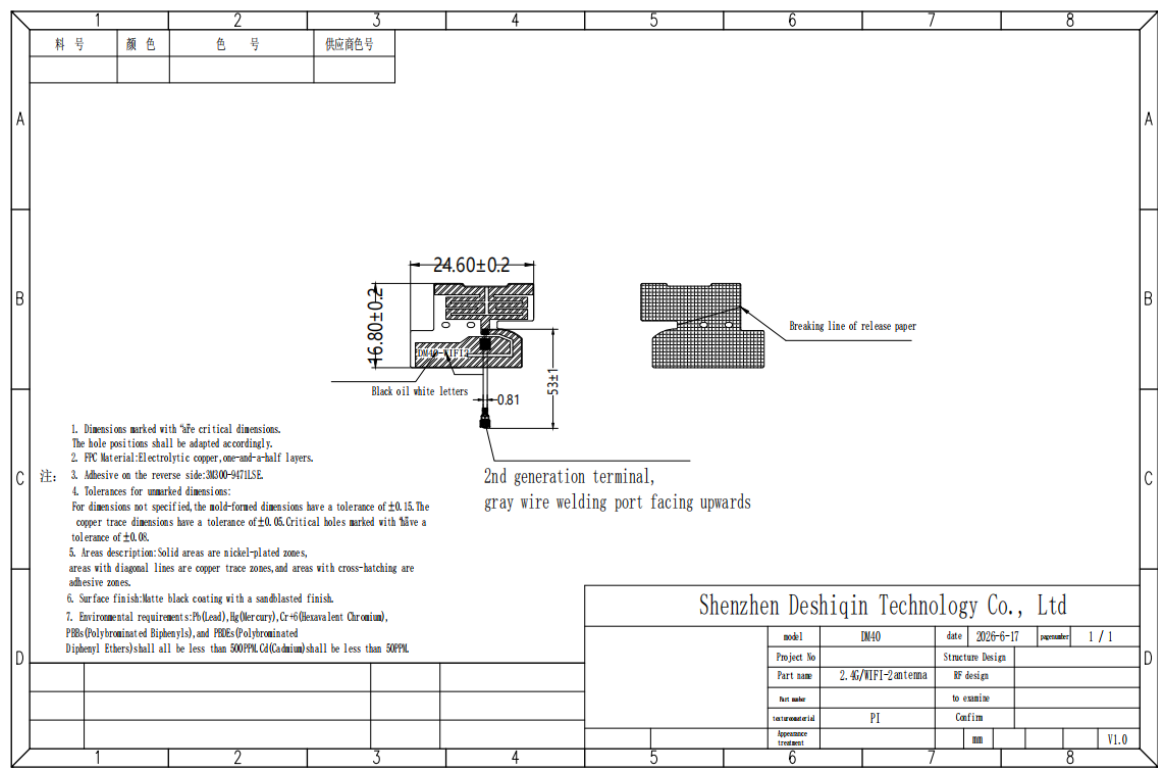
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6,Structural drawings



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1	2	3	4	5	6	7	8
料号	颜色	色号	供应颜色号				

2 Substitute terminal,
with the black wire soldering port facing upwards

1. Dimensions marked with *are critical dimensions.
The hole positions shall be adapted accordingly.
2. PFC Material: Electrolytic copper, one-and-a-half layers.
3. Adhesive on the reverse side: 30300-94711SE.
4. Tolerances for unmarked dimensions:
For dimensions not specified, the mold-formed dimensions have a tolerance of ± 0.15 . The copper trace dimensions have a tolerance of ± 0.05 . Critical holes marked with * have a tolerance of ± 0.08 .
5. Areas description: Solid areas are nickel-plated zones, areas with diagonal lines are copper trace zones, and areas with cross-hatching are adhesive zones.
6. Surface finish: Matte black coating with a sandblasted finish.
7. Environmental requirements: Pb (Lead), Hg (Mercury), Cr+6 (Hexavalent Chromium), PBBs (Polybrominated Biphenyls), and PBDEs (Polybrominated Diphenyl Ethers) shall all be less than 500PPM. Cd (Cadmium) shall be less than 50PPM.

注:

Shenzhen Deshiqin Technology Co., Ltd

model	DM40	date	2026-6-17	page number	1 / 1
Project No		Structure Design			
Part name	2. 4G/WIFI-1 antenna	RF design			
Part name		to examine			
reference material	PI	Confirm			
Approval		Signature			
Drawn					V1.0