



尚远科技（中国）有限公司

Sunnyway Technology (China) Co. Ltd.

Antenna SPEC

Customer: Wanlida Group Co., Ltd.

Project Name: MPD-J011

Working Band: 2400~2500MHz

Mainboard Version: SA08407778

Admission Version: A

Sunnyway BOM

SPEC-Type	Sunnyway Antenna
BT Antenna	FZ034IB75

Sunnyway Countersign Column				
R&D	ME: 林锋	Audit: 陈金林	Quality Engineer: 陈小平	Approval: 陈金林
	RF: 姜昊	Audit: 陈金林		
Customer Countersign Column				
Electronic Engineer	Project Manager	Structural Engineer	Quality Engineer	

Tel: +86-021-64842326 (Shanghai)

+86-0755-82504258 (Shenzhen)

+86-0591-87862232 (Fuzhou)

Fax: +86-021-64842328

Shanghai R & D center: Room 302, building 65, No.421, Hong Cao Road, Caohejing Development Zone, Shanghai.

Shenzhen R&D Center: Room 405, 4th Floor, Jinke Building, No.8 Qiongyu Road, Nanshan District, Shenzhen

Fuzhou R&D Center: Room 205, building 19, zone A, fuzhou software park, 89 software avenue, gulou district, Fuzhou.

Huizhou Factory: Floor 5, no. 1, central village road, longhu industrial zone, shuikou town, huicheng district, Huizhou

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1. PROJECT THE PICTURE

The project picture is as follows:



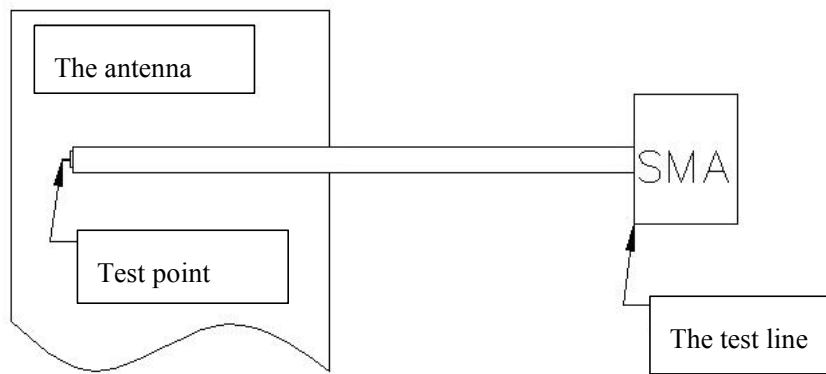
Instructions: The customer finally verified that the antenna performance prototype was kept in our company for at least one year, which was convenient for analyzing and solving the abnormal situation in the mass production of the antenna.

Ensure the delivery quality of antenna.

2. TEST FIXTURE

Purpose: The passive parameters of the antenna are tested as accurately as possible。

Production methods: The sample mechanism is a 50 ohm coaxial cable, one end of which is connected to the test point of the matching circuit back end (rf test hole front end) of the POS machine motherboard, and the other end is connected to the SMA connector。 The schematic is as follows:



3. Matching circuit

Do not make changes

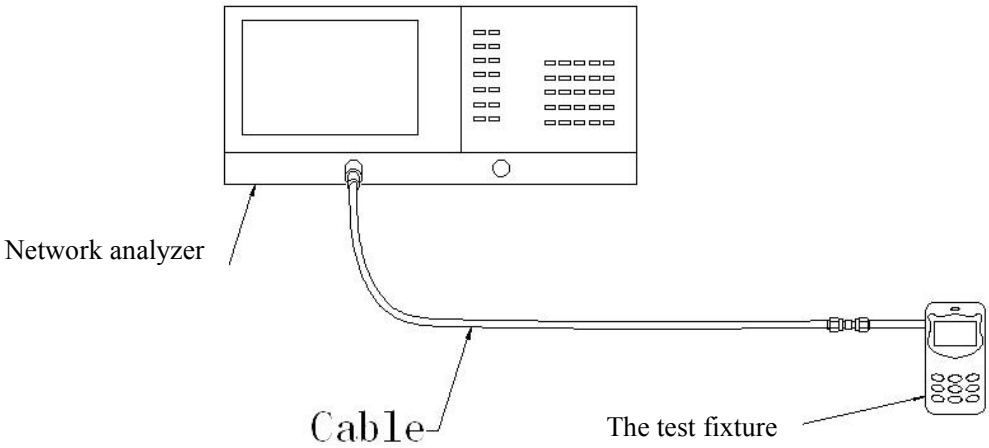
4. S11 Test

4.0 S11 Test method description

The device under test: Network analyzer(HP 8753E)

The test method: A 50 ohm CABLE was exported from the test port of the instrument, and the SMA connector of the sample mechanism after calibration with the calibration piece was used to record the return loss and standing wave ratio corresponding to the correlation frequency points.

The test diagram is as follows:



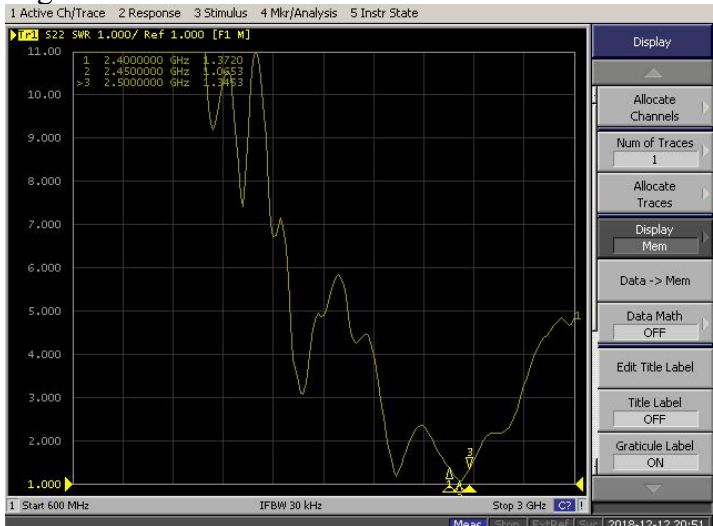
Test diagram

4.1 S11 Parameter

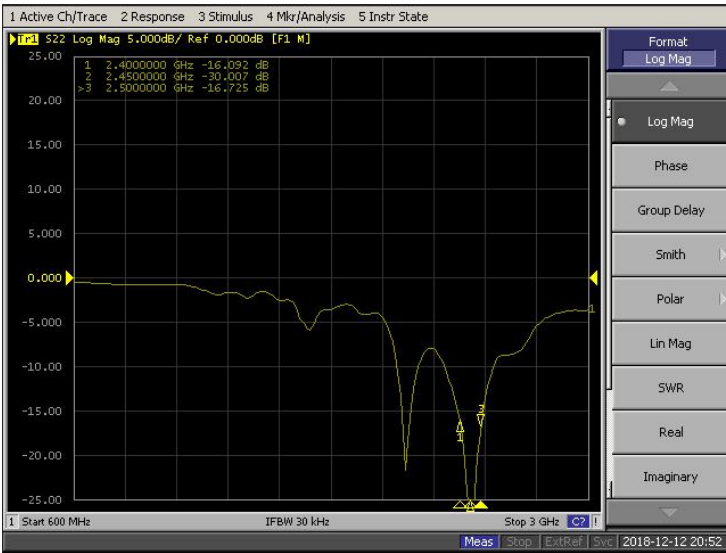
BT

Frequency (MHZ)	2400	2450	2500
SWR	1.37	1.06	1.34

4.2 Parameters of the images



SWR



Return loss

5 Chamber test data

- The device under test
- The test system: anechoic chamber
- The test environment: The temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, Humidity $50\% \pm 15\%$
- The device under test: Use a network analyzer when testing passive data: AgilentE5062C

Passive Test
BT Antenna

Freq (MHz)	Effi (%)	Gain (dBi)
2400	42.45	1.25
2410	42.41	1.22
2420	41.97	1.19
2430	40.97	0.78
2440	42.27	1.17
2450	43.24	1.38
2460	41.77	1.1
2470	40.54	0.77
2480	41.44	1.05
2490	41.22	0.97
2500	40.76	0.86

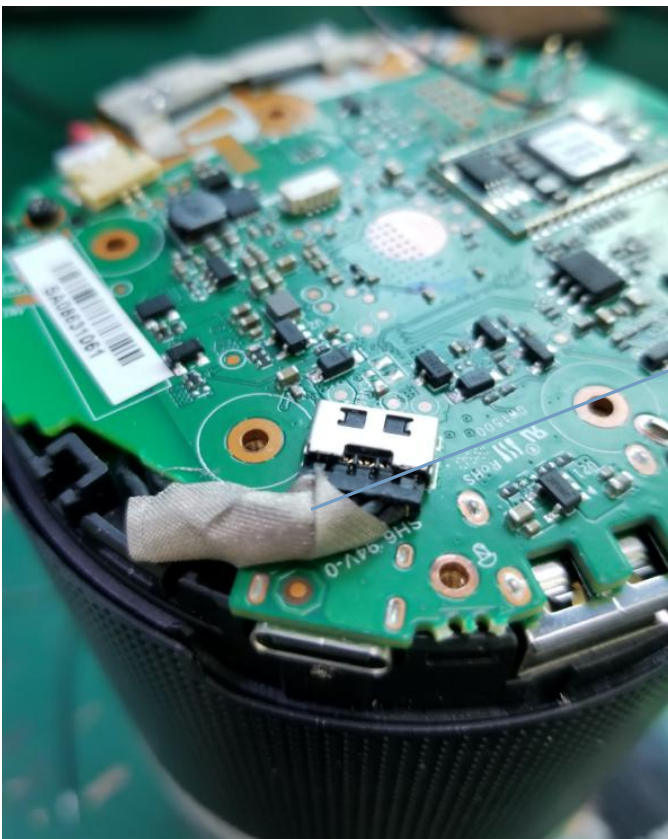
6. Mass production antenna index

The standing-wave ratio is used as the mass production test standard when the antenna is in mass production.

According to the differences of the project itself, the following standards are given:

Frequency	Production standard
2400~2500MHz	VSWR (Production performance) <VSWR(Recognition performance)+0.5

7. Environmental treatment

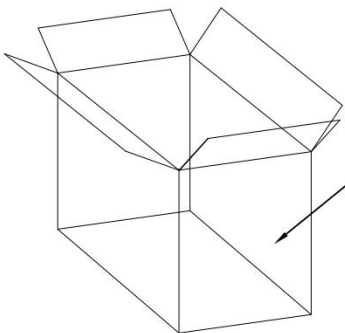


The wiring here needs to be covered with conductive cloth for shielding

The figure is a technical drawing of a bracket, showing both front and back views. The front view (top) includes dimensions: a width of 20.36 ± 0.15 mm, a height of 20.76 ± 0.15 mm, and a hole diameter of $2 \times \phi 0.8$. The back view (bottom) shows a width of 20.36 ± 0.15 mm and a hole diameter of $3 \times \phi 1.2$. The drawing also includes a detail of the bracket's base, labeled 'SY-MPD-J011-V2.0'. A dimension of 0.12 mm is shown for the white ink layer. The drawing is labeled 'Sunnyway Technology (China) Co. Ltd.' and includes a table with technical specifications and a revision history.

Rev	Content	Rev	Content
1	Initial	1	Initial
2	Change	2	Change
3	Change	3	Change
4	Change	4	Change
5	Change	5	Change
6	Change	6	Change
7	Change	7	Change

9 Packaging drawings

Sunnyway Technology (china) Ltd. Company Product packaging operation specification				
customer: wanlida		project:MPD-J011		Serial number:SYC-BZ-001
edition: TEST:A				
detail	Serial number	Trade name	specification	dosage
	PE	sealed bag	120*85*0.12	100/10000
	SYC-BZ-01	carton	280*230*170	1/10000 graphic
procedure	<p>1.Prepare the necessary packing materials and place them in a suitable position.</p> <p>2.According to syc-bz01 packaging specifications, packing in cartons and sealed pockets,100PCS/ bag, a total of 10000PCS for each package of 100 bags.</p> <p>3.Put 100 packages in each box, a total of 10000PCS. After filling the box, seal the box with transparent tape.</p>			attention
	<p>1.Operators must wear gloves to operate.</p> <p>2.Note the number of cases, not more, less. The final number of cases must be noted</p> <p>3.Cartons must not be stacked too high to prevent excessive weight of glue.</p>			
graphic				
	<p>Each box contains 100 packages, a total of 10000PCS</p> <p>Note: the quantity is subject to the actual packing. This is the reference quantity.</p>			
Approved		check	producer	date
			LinFeng	2018.12.14

Serial number: ED-QR-09-20 edition: A/0