

WAG-F-LA-00-210 Specification

1. Explanation of part number :

WAG F LA 00 210
(1) (2) (3) (4) (5)

(1) Product Type: Wireless Antenna

(2) Material: FPC

(3) Frequency :2400-2500 MHz

(4) Coaxial Cable Type : 00

(5) Suffix : 210

2. Storage Condition:

Temperature -40 to +85°C
Humidity 20 to 65 %RH
Recommended storage condition:

Store in room condition as listed below: Temperature -20°C~+45°C, Humidity 80% Max.

3. Operating Condition:

Temperature -40 to +85°C
Humidity 10 to 85 %RH

4. Electrical Specification :

Those specifications were specially defined for WLAN model, and all characteristics were measured in the customer's machine. .

4-1. Frequency Band:

Frequency Band	MHz
Bluetooth 2.4-2.5G	2400-2500MHz

4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±
ANGLES=± HOLEDIA=±



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SCALE : UNIT : mm

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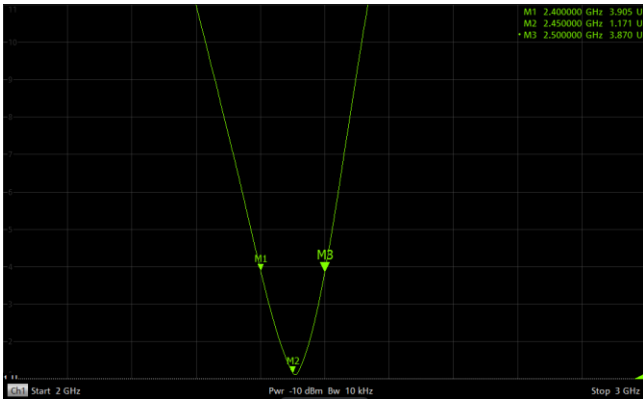
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4-4. VSWR

Frequency Band	2400	2500
4-4-1. Typical Value:	≤ 5.0	≤ 5.0

4-4-2. Measuring Method	1. A 50Ω coaxial cable is connected to the fpcb antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm.
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4-4-3. Picture	
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4-5. Efficiency and Gain

4-5.1 Measuring equipment

Measuring instrument:

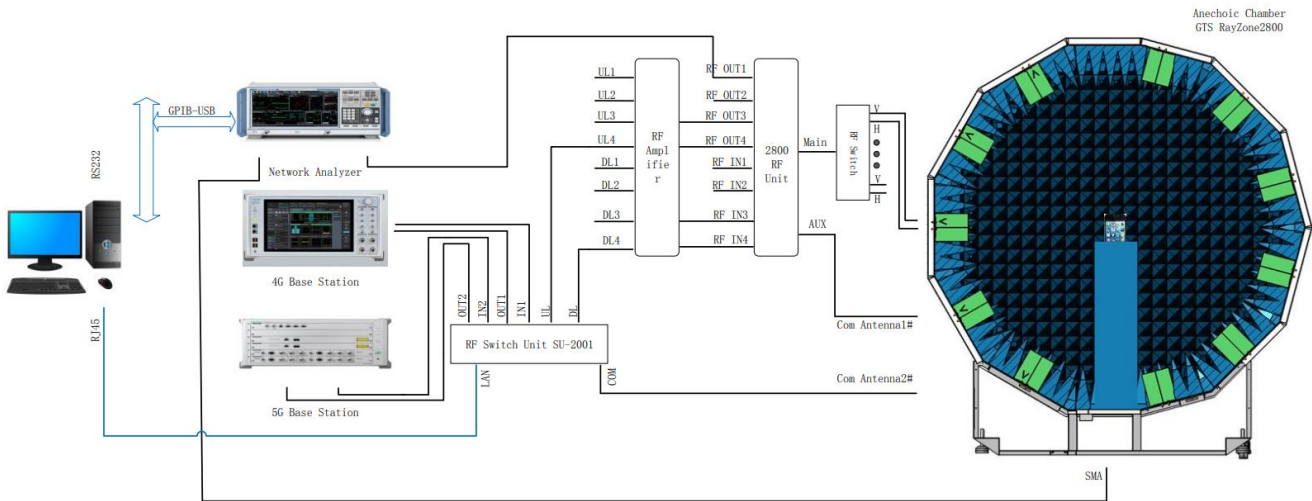
Microwave chamber, Network analyzer, and standard antenna.

Instructions for microwave chamber:

This is a microwave chamber set up by our company in Suzhou, This microwave chamber belongs to a set of near-field measurement system. The size of the chamber is 2.95M * 3M * 3M.



RayZone2800 Test Setup



The microwave chamber, shown above, using a unique multi-probe technique, The aim is to reduce the measurement time of the whole measurement system. The measuring system use multi-probe array instead of single probe to scan the measured surface of the antenna under test, a single probe has the capability of measuring orthogonal polarization amplitude and phase, it also has a wide frequency range, the corresponding multi-probe array is switched quickly by electronic switch, greatly improved the measurement efficiency.

The probe model: MA186960A(400MHz~7.5GHz) . Because of its capability of broadband frequency and the orthogonal polarization function, the number of probes needed to be equipped with the system is reduced; The small size of the probe reduces the coupling between the probes, make it is possible to insert probes of other frequency bands between probes, then a single system can support a wider frequency range.

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4-5.2 Efficiency and Gain

Bluetooth 2.4-2.5G

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Frequency (MHz)	Efficiency (dBI)	Efficiency (%)	Peakgain (dB)
2400	-9.8	10.6	-5.5
2410	-9.4	11.5	-5.1
2420	-9.2	11.9	-5.1
2430	-8.7	13.4	-4.9
2440	-8.1	15.5	-4.1
2450	-7.6	17.3	-3.7
2460	-7.7	16.8	-4.4
2470	-8.1	15.4	-4.7
2480	-8.1	15.6	-4.3
2490	-8.6	13.7	-4.6
2500	-9.7	10.8	-5.5

Frequency Band(MHz)	2400	2500
Efficiency(dB)	≥-10.5	≥-10.5
Peak Gain(dBi)	≤3.0	≤3.0

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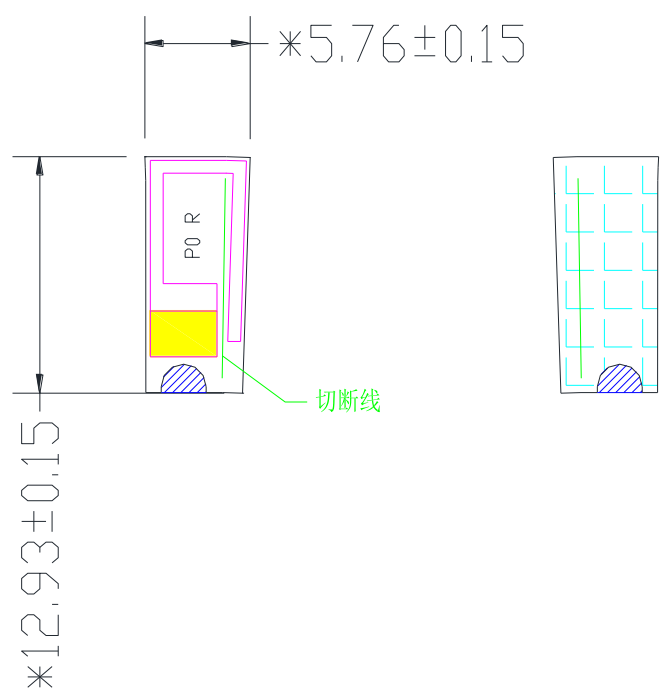
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5. Mechanical Specification:



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