

[illegible]

WAG-F-LBG0-00-049 Specification

1. Explanation of part number :

WAG - F - LBG0 - 00 - 049
(1) (2) (3) (4) (5)

(1) Product Type: Wireless Antenna

(2) Material: FPCB

(3) Frequency : 1575.42MHz ,2400-2500MHz

5150-5850MHz

(4) Coaxial Cable Type : no cable

(5) Suffix : 034

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 GH6772 model, and all characteristics were measured in the customer's machine. .

4-1. Frequency Band:

Frequency Band	MHz
BGW	1575.42,2400-2500
WIFI 5G	5150-5850

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DESIGNED BY: 余超	APPROVED BY : 范东亚		
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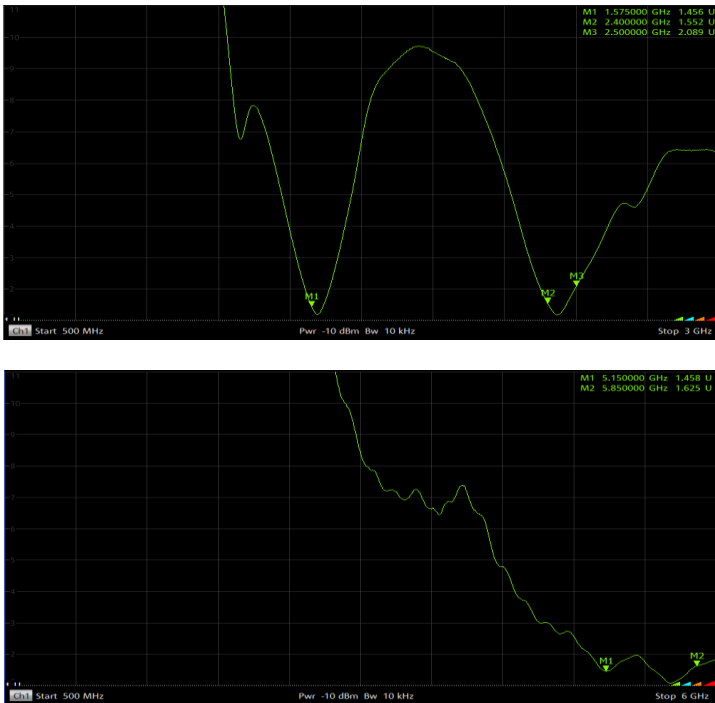
4-2. Impedance

50 ohm nominal

4-4. VSWR

Frequency Band	1575.42	2400	2500	5150	5850		
4-4-1. Typical Value:	≤ 2.0	≤ 2.5	≤ 2.5	≤ 2.5	≤ 2.5		

4-4-2. Measuring Method	1. A 50Ωcoaxial cable is connected to the pcb 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:

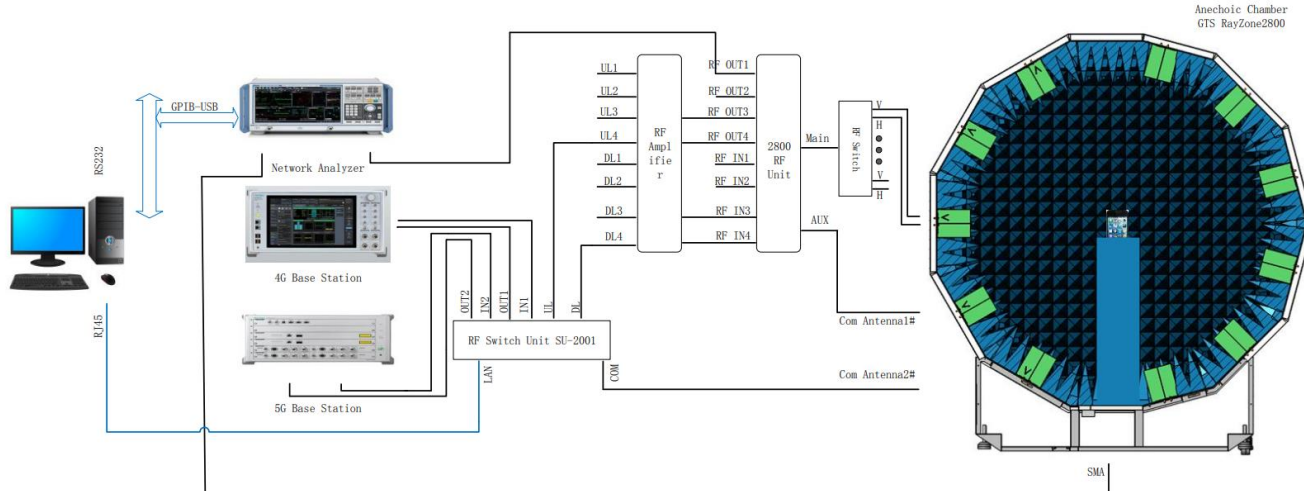
Microwave chamber, Network analyzer, and standard antenna.

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 microware 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 Antenna Efficiency

	效率 (dB)	效率 (%)	增益 (dBi)
1570	-5.7	27.0	-0.2
1571	-5.7	27.1	-0.2
1572	-5.7	27.2	-0.2
1573	-5.6	27.2	-0.2
1574	-5.7	27.2	-0.2
1575	-5.7	26.7	-0.2
1575.42	-5.8	26.4	-0.3
1576	-5.8	26.1	-0.4
1577	-5.9	25.7	-0.4
1578	-5.9	25.7	-0.5
1579	-5.6	27.5	-0.2
1580	-5.5	28.2	-0.1
2400	-6.7	21.2	-1.9
2410	-6.3	23.2	-1.6
2420	-6.1	24.8	-1.5
2430	-6.1	24.7	-1.5
2440	-5.9	25.8	-1.1
2450	-5.4	28.9	-0.5
2460	-5.2	30.4	-0.4
2470	-5.4	28.8	-0.7
2480	-5.7	26.9	-0.9
2490	-5.4	28.5	-0.6
2500	-5.5	28.1	-0.8

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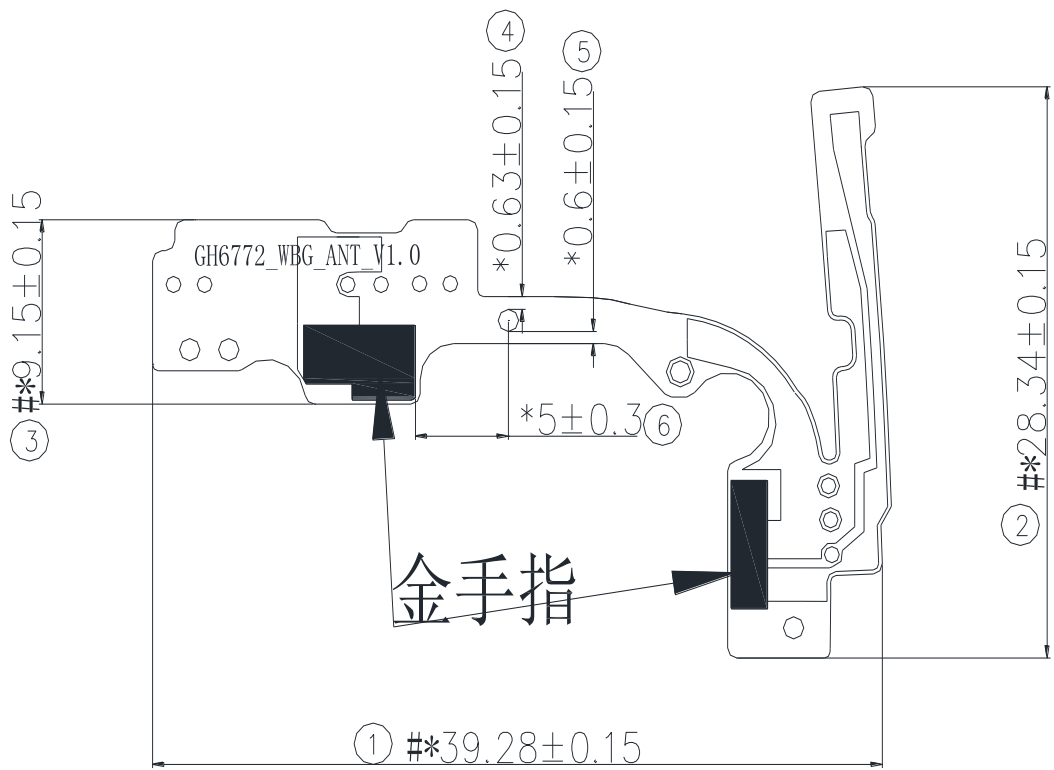
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5. Mechanical Specification:

工程图上"*"号为入料检验尺寸；"○"标为全尺寸；"# "号为 Cpk 量测尺寸标注指示



6. Assembly precautions:

Physical Picture:

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