

WAG-B.01.L.0806 Specification

1. Explanation of part number :

WAG - B - 01 - L - 0806
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material : FPC

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

(4) Coaxial Cable Type : 00

(5) Suffix : 047

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
GPS,WIFI	1575.42Mhz , 2400-2500Mhz,

2-2. Impedance

50 ohm nominal

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

DRAWN BY : 程国富 CHECKED BY : 蒋代勇

DESIGNED BY : 蒋代勇 APPROVED BY : 夏彪

TITLE : WAG-F-LAG0-00-047 Specification

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NO.

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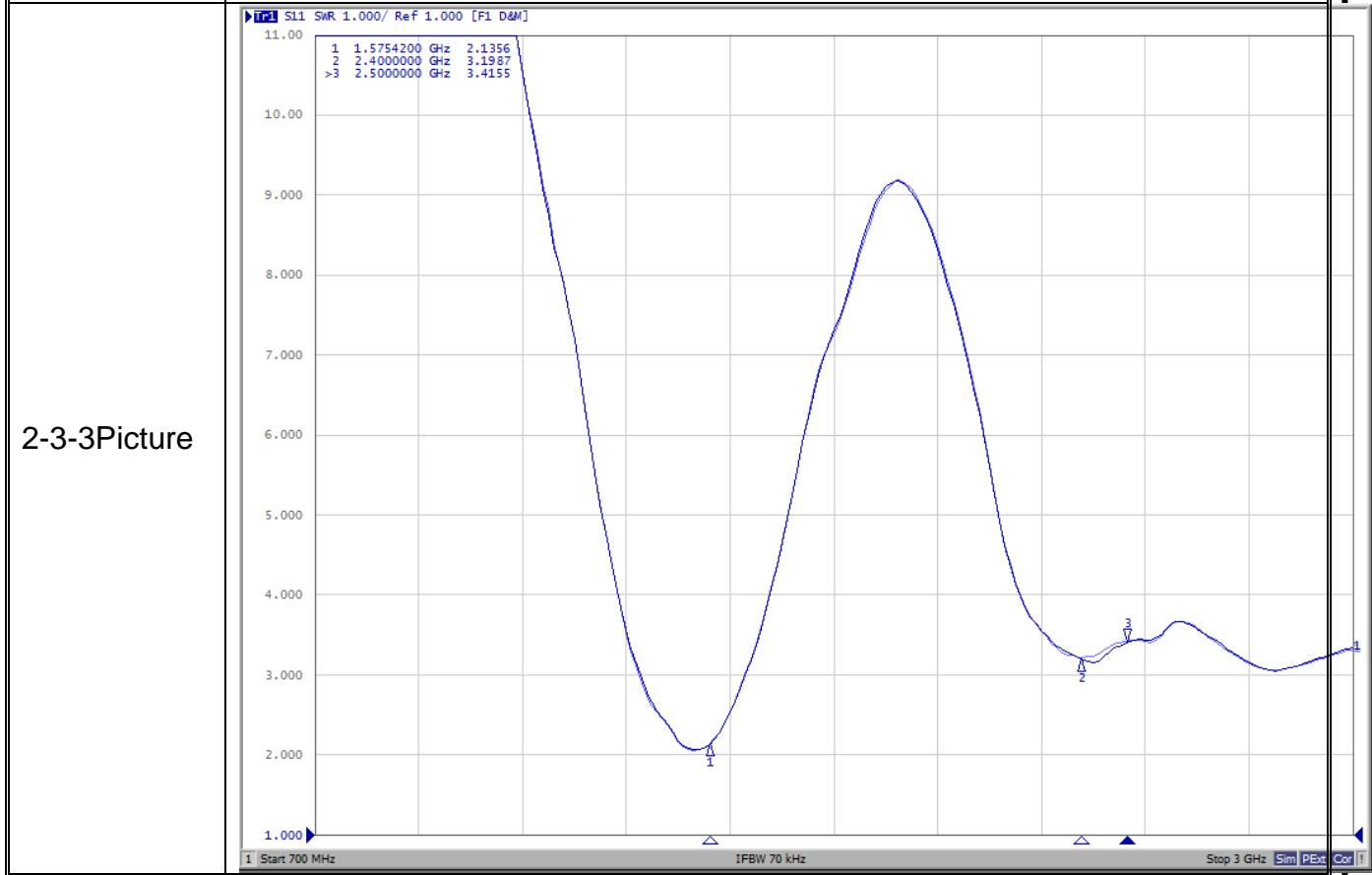
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2-3. VSWR ,Efficiency , and Active Data :

2-3.1 VSWR:

Frequency Band	1575.42	2400	2500	
2-3-1. Typical Value:	≤ 2	≤ 4	≤ 4	

2-3-2 Measuring Method	<ol style="list-style-type: none"> 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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ANGLES=±

HOLEDIA=±

SCALE :

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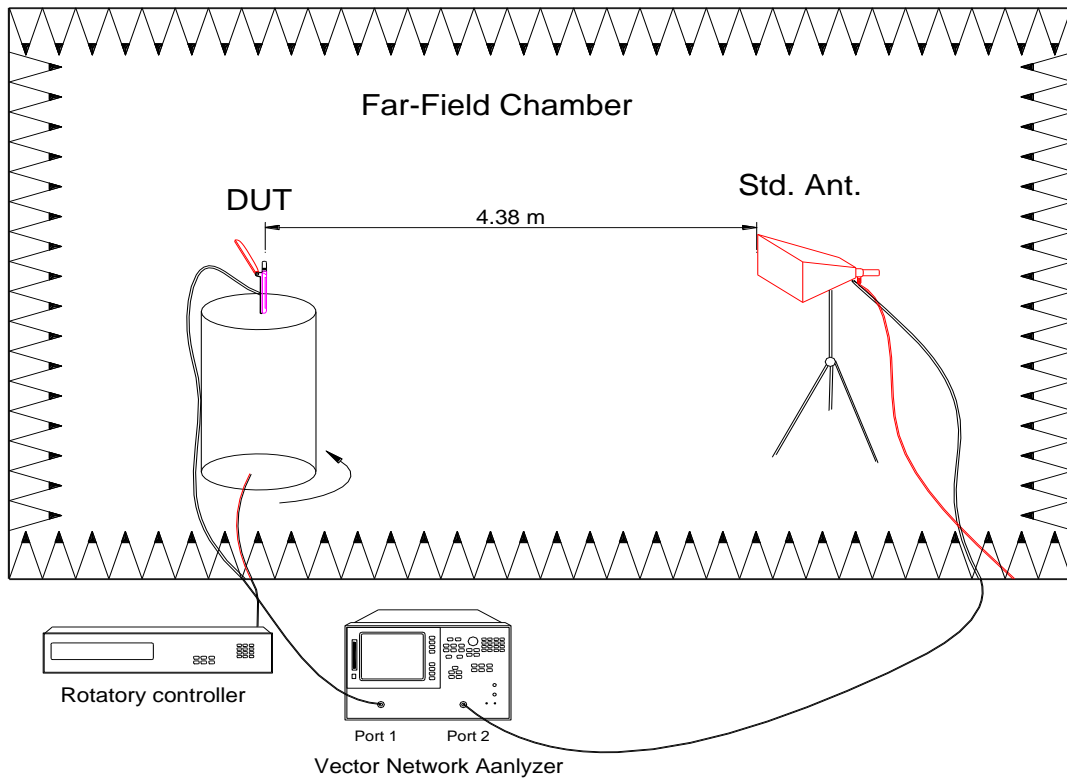
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2-4. Measure and Chamber

2-4-1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

2-4-2 Chamber definition



1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

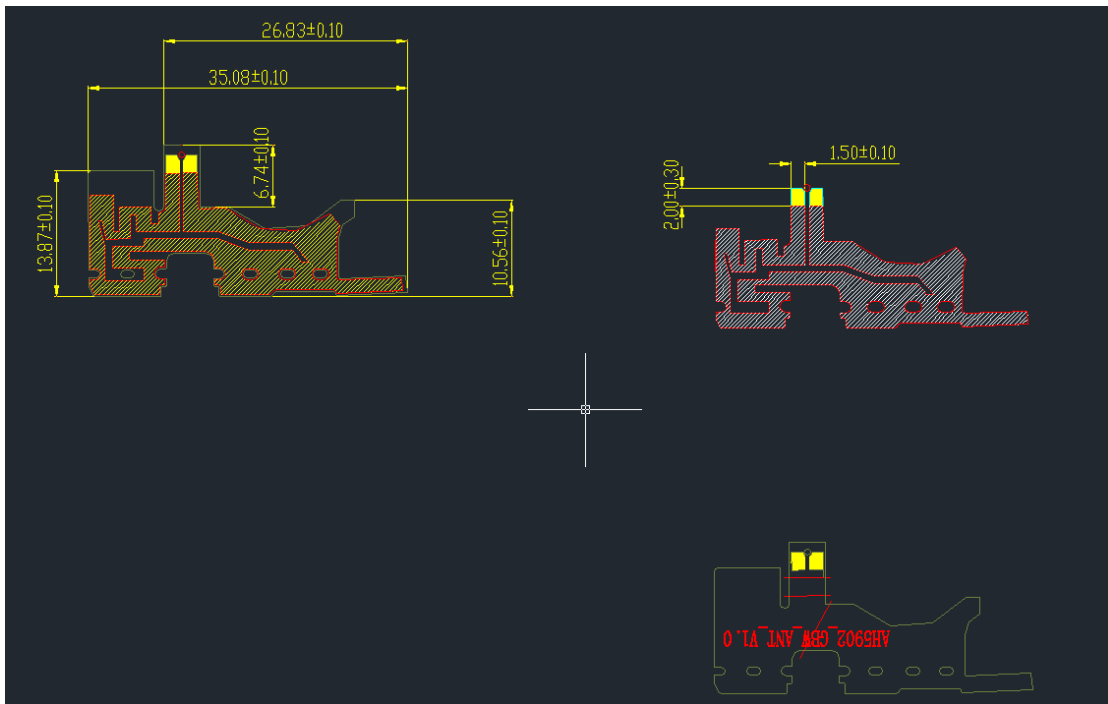
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2-4-3 Antenna Efficiency

Frequency (MHz)	Peak Gain(dB)	Average Gain(dB)	Efficiency (%)
1570	0.51	-5.01	31.52
1571	0.52	-5.03	31.44
1572	0.54	-5.03	31.38
1573	0.57	-5.04	31.37
1574	0.6	-5.03	31.42
1575	0.64	-5.02	31.51
1575.42	0.66	-5.03	31.52
1576	0.67	-5	31.59
1577	0.72	-4.99	31.67
1578	0.75	-4.99	31.72
1579	0.78	-4.98	31.75
1580	0.8	-4.98	31.74
2400	-5.58	-0.67	27.67
2410	-5.52	-0.44	28.06
2420	-5.73	-0.53	26.72
2430	-5.78	-0.53	26.45
2440	-5.67	-0.39	27.12
2450	-5.64	-0.19	27.3
2460	-5.63	-0.11	27.34
2470	-5.86	-0.29	25.94
2480	-6.03	-0.46	24.97
2490	-6.03	-0.47	24.97
2500	-6.35	-0.64	23.16

3. Antenna Dimensions:

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4. Testing Environment

Passive Test

Please refer to antenna test photos for details.

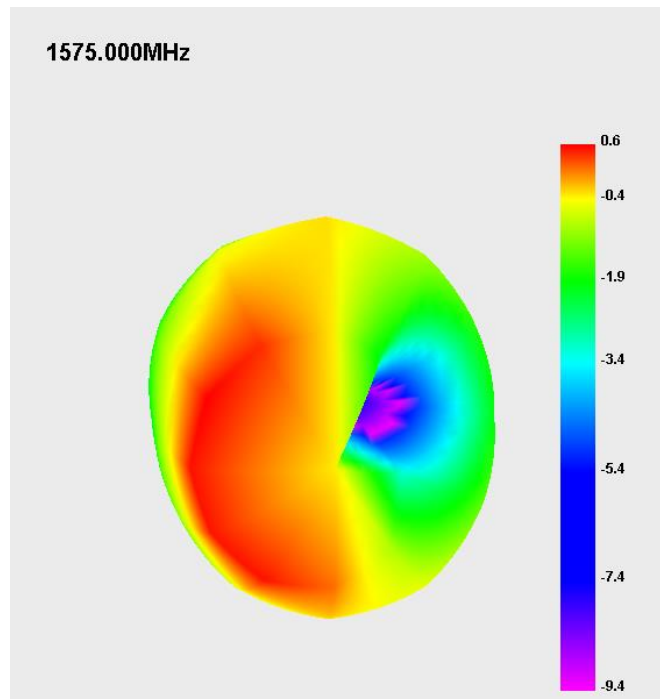
Active Test

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Please refer to antenna test photos for details.

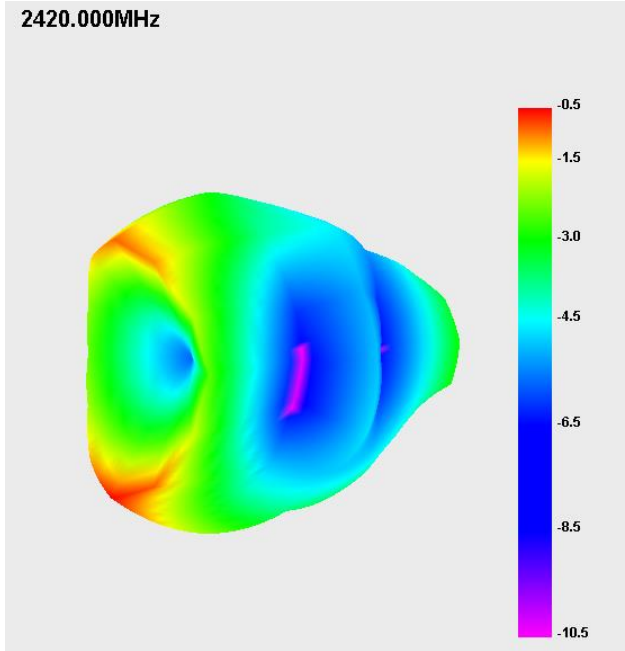
5.3D Radiation Pattern

GPS [1575MHz]

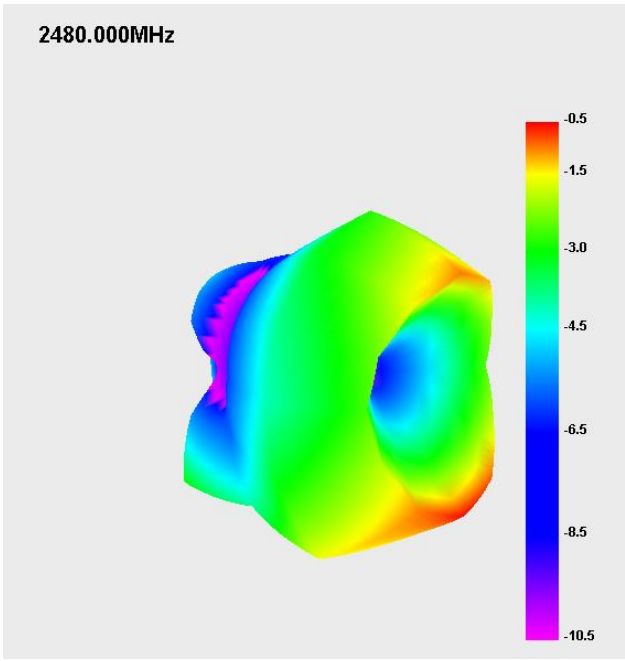


BT/WiFi 2.4GHz C0 [2420MHz]

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BT/WiFi 2.4GHz C0 [2480MHz]



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