



Name : WAG-B1.01.L.0806

History List

[illegible]

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=±

浙江海通通讯电子股份有限公司

SCALE :

UNIT : mm

DRAWN BY : 程国富

CHECKED BY : 蒋代勇

DESIGNED BY : 蒋代勇

APPROVED BY : 夏彪

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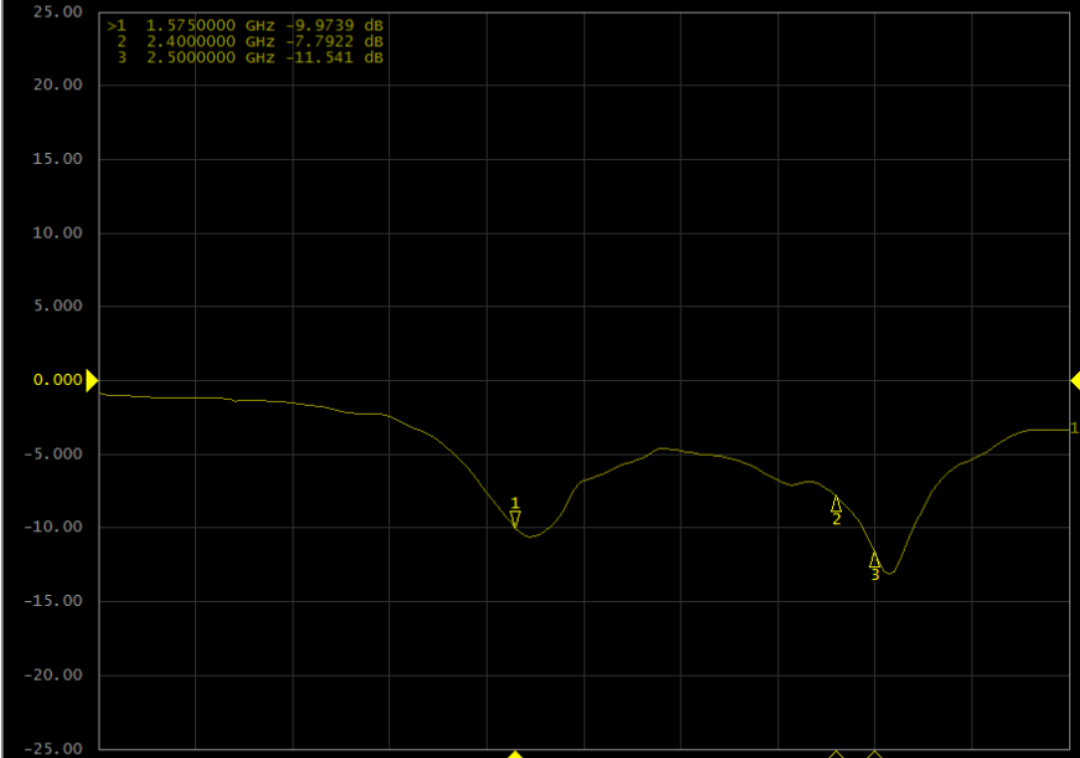
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2-3. VSWR ,Efficiency , and Active Data :

2-3.1 VSWR:

Frequency Band	1575.42	2400	2500	
2-3-1. Typical Value:	-9.9	-7.7	-11.5	
2-3-2Measuring 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.			
2-3-3Picture	S11 Log Mag 5.000dB/ Ref 0.000dB [F1 M] >1 1.5750000 GHz -9.9739 dB >2 2.4000000 GHz -7.7922 dB >3 2.5000000 GHz -11.541 dB 			

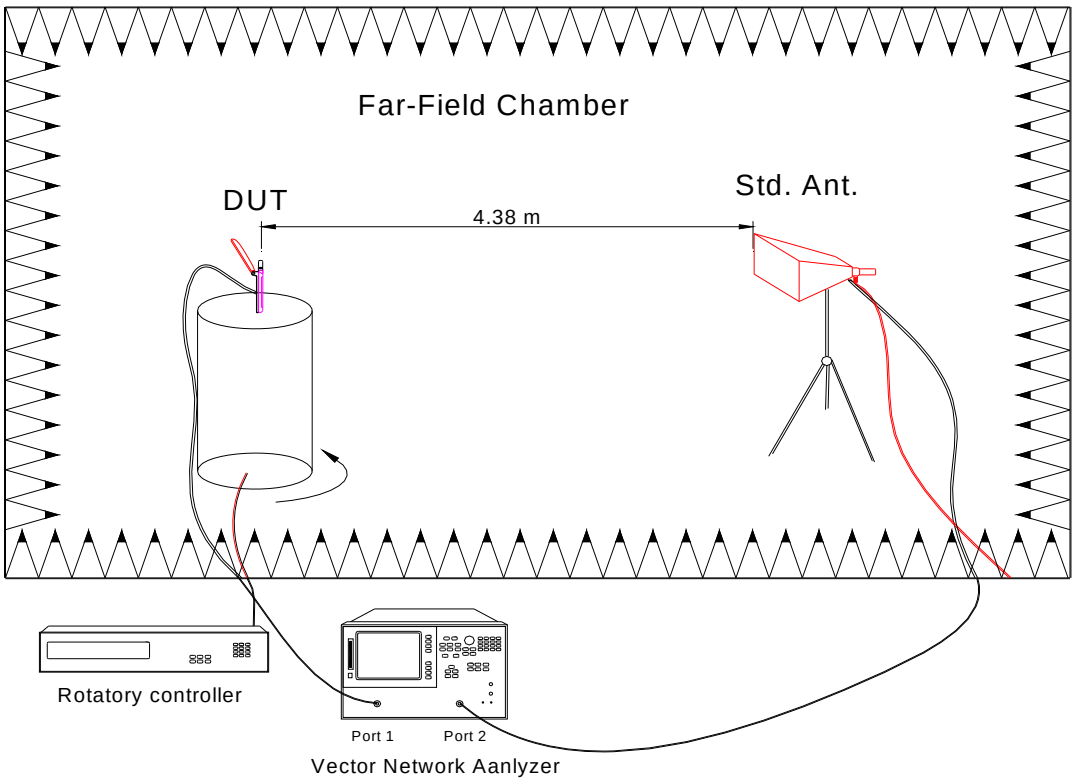
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2-4. Measure and Chamber

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 quite 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 TRP/TIS

WIFI-B		

WIFI-A		

GPS		
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2-4-4 Antenna Efficiency

Frequency	Efficiency	Efficiency . dB	Gain . dBi
1550000000	19.1%	-7.19	-1.11
1555000000	19.3%	-7.14	-1.17
1560000000	19.9%	-7.00	-1.08
1565000000	20.9%	-6.80	-0.98
1570000000	22.0%	-6.58	-0.83
1575000000	23.3%	-6.33	-0.64
1580000000	24.4%	-6.13	-0.65
1585000000	25.3%	-5.97	-0.75
1590000000	26.6%	-5.76	-0.74
1595000000	27.3%	-5.64	-0.91
1600000000	28.3%	-5.48	-0.88

2400000000	14.2%	-8.48	-3.35
2410000000	15.8%	-8.00	-2.67
2420000000	17.5%	-7.57	-2.15
2430000000	18.7%	-7.28	-1.96
2440000000	19.4%	-7.12	-1.61
2450000000	20.1%	-6.97	-1.24
2460000000	20.5%	-6.88	-1.02
2470000000	20.5%	-6.88	-0.98
2480000000	20.5%	-6.89	-1.03
2490000000	20.4%	-6.90	-1.06
2500000000	20.7%	-6.84	-0.91

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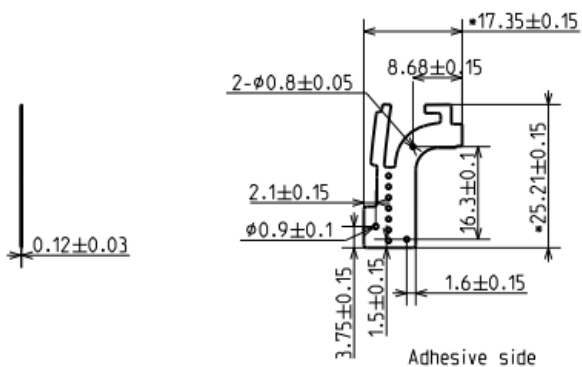
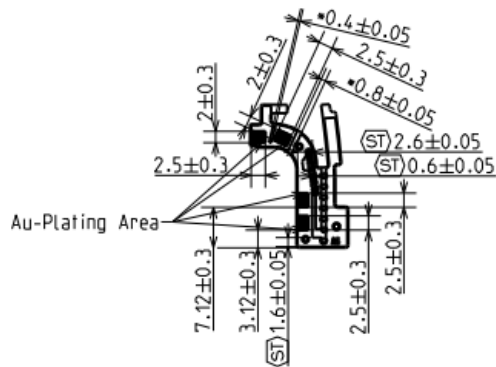
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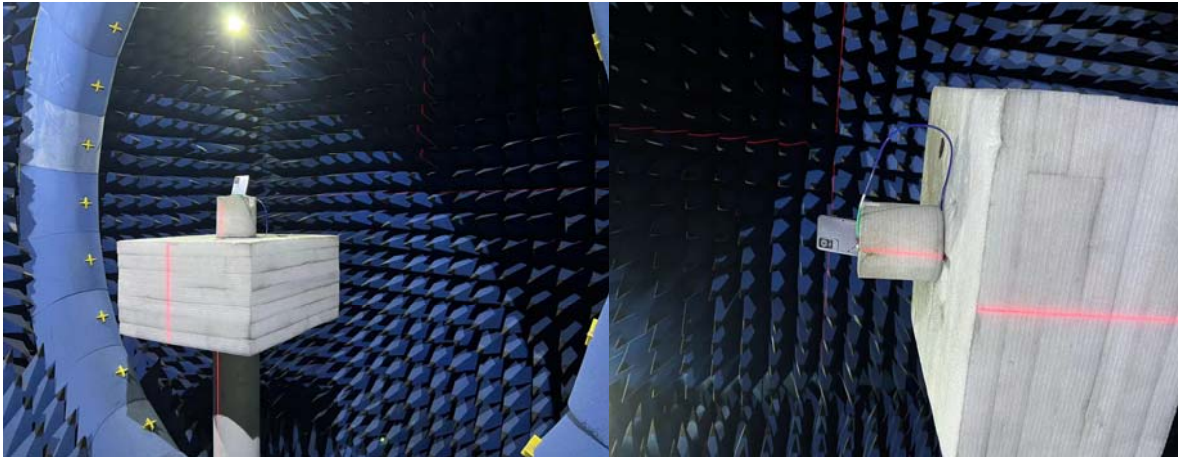
3. Antenna Dimensions:



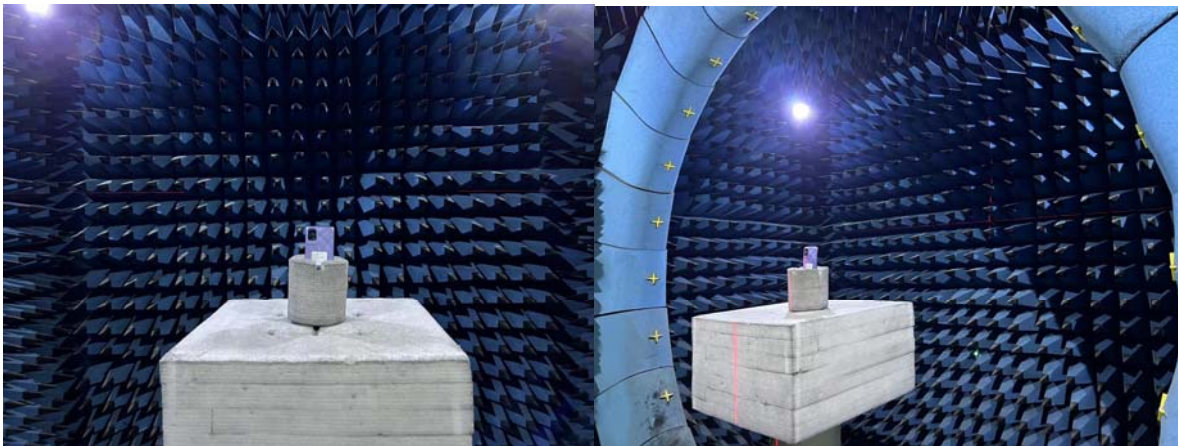
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4. Testing Environment

Passive Test



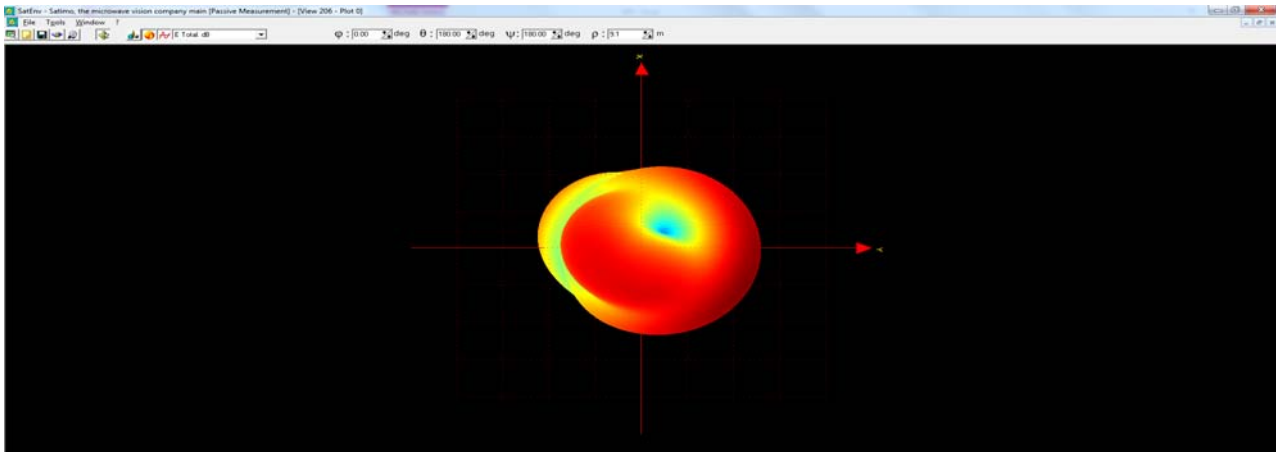
Active Test



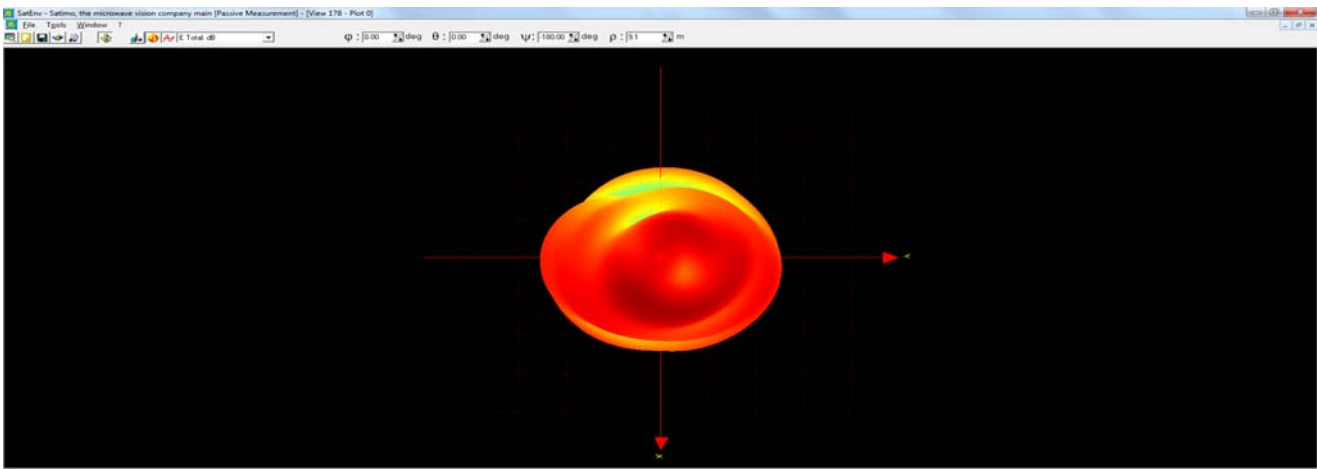
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5. 3D Radiation Pattern

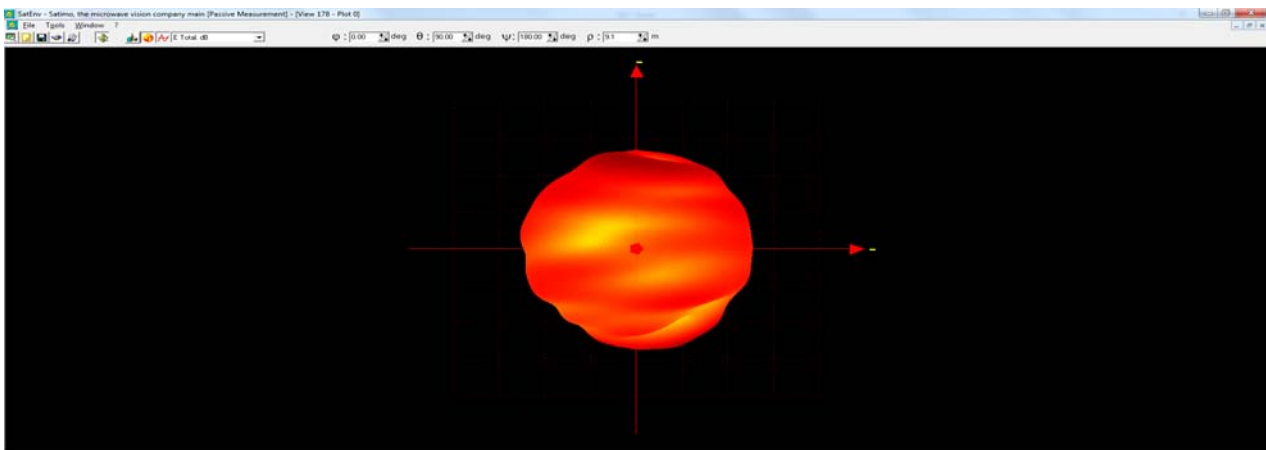
GPS [1575MHz]



BT/WiFi 2.4GHz C0 [2400MHz]



BT/WiFi 2.4GHz C0 [2483MHz]



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