



品名：WAG-B1.01.L.0806 工規

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 : 699-960Mhz, 1710-2690 Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 088

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
GSM	1575Mhz,2400-2500Mhz, 5200-5800 Mhz

UNLESS OTHER SPECIFIED TOLERANCES ON:

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

NHAIT 浙江海通通讯电子股份有限公司

SCALE: UNIT: mm

DRAWN BY: 张有远 CHECKED BY: 蒋代勇

DESIGNED BY: 蒋代勇 APPROVED BY: 周振邦

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2-2. Impedance

50 ohm nominal

2-3 VSWR:

Frequency Band	1575	2400	2500	5200	5800	
2-3-1. Typical Value:	-13.2	-13.4	-13.1	-5.7	-8.6	
2-3-2 Measuring Method	1. A 50 Ω 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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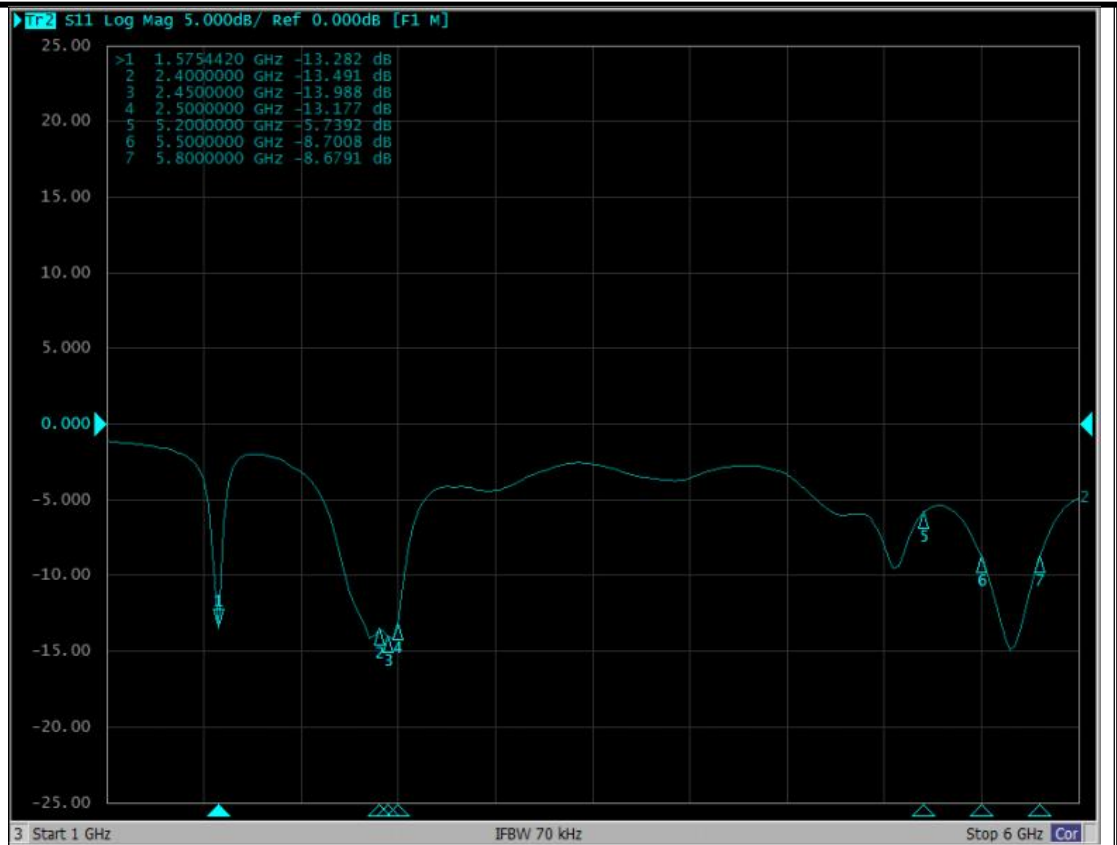
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2-3-3Picture

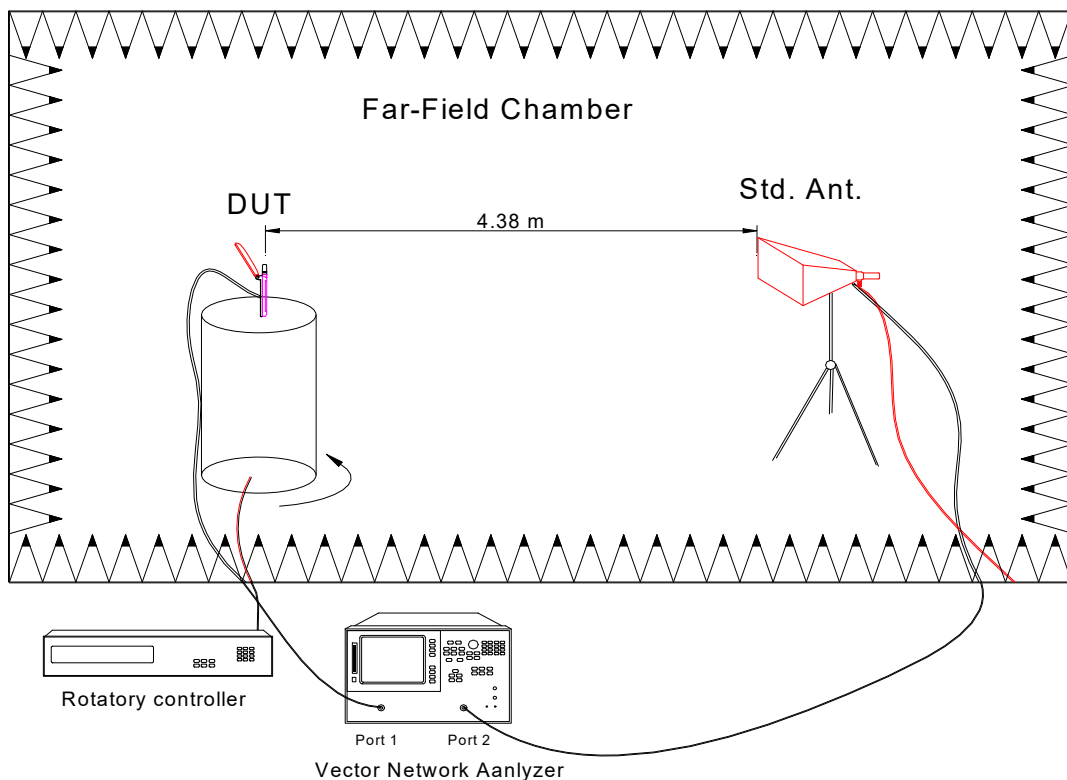


2-4. Measure and Chamber

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)

2-4-3 Antenna OTA

TRP/TIS:

Band	Channel	TRP	TIS
802.11b 11M	1	10.38	
	6	10.26	
	11	12.44	-82.16
802.11a 6M	36	11.55	
	100	12.83	
	165	10.24	-87.85

GPS	
TIS	-147.67
UHS	-145.61
SNR	35.89

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2-4- Antenna Efficiency

Frequency	Efficiency	Efficiency . dB	Gain . dBi
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5100000000	24.2%	-6.2	0.4
5120000000	24.9%	-6.0	0.3
5140000000	26.3%	-5.8	0.4
5160000000	29.0%	-5.4	1.2
5180000000	28.8%	-5.4	0.5
5200000000	32.4%	-4.9	1.6
5220000000	33.3%	-4.8	1.4
5240000000	31.5%	-5.0	1.6
5260000000	31.3%	-5.0	2.0
5280000000	30.8%	-5.1	1.8
5300000000	29.6%	-5.3	1.0
5320000000	30.4%	-5.2	1.2
5340000000	33.2%	-4.8	1.0
5360000000	34.9%	-4.6	1.1
5380000000	35.4%	-4.5	1.9
5400000000	36.8%	-4.3	2.1
5420000000	38.3%	-4.2	2.4
5440000000	38.7%	-4.1	2.7
5460000000	37.7%	-4.2	2.9
5480000000	37.9%	-4.2	2.9
5500000000	36.9%	-4.3	3.0
5520000000	35.7%	-4.5	2.6
5540000000	34.2%	-4.7	2.4
5560000000	32.2%	-4.9	1.9
5580000000	30.8%	-5.1	1.9
5600000000	29.1%	-5.4	1.4
5620000000	28.7%	-5.4	1.5
5640000000	28.9%	-5.4	1.5
5660000000	29.7%	-5.3	1.8
5680000000	30.1%	-5.2	1.7

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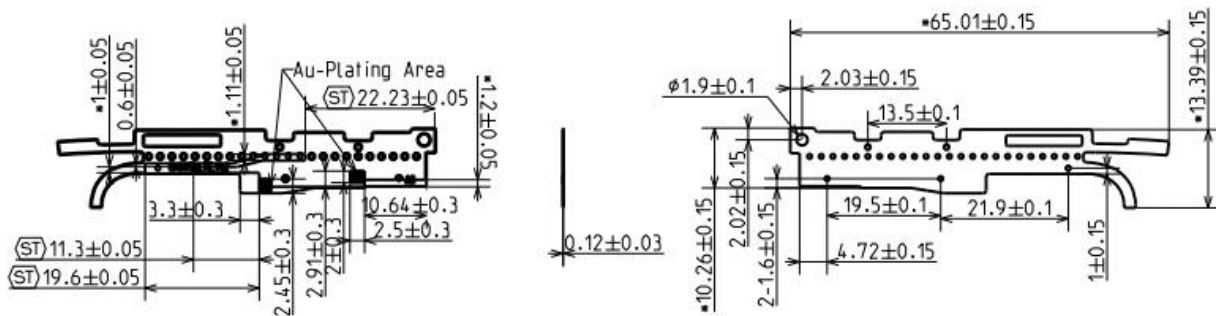
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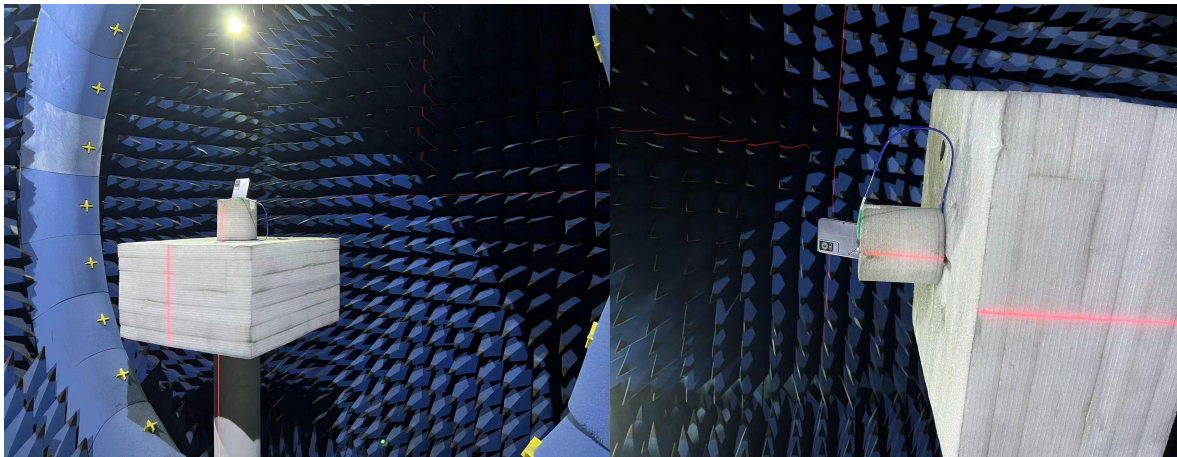
5700000000	30.4%	-5.2	1.9
5720000000	31.3%	-5.0	1.9
5740000000	31.6%	-5.0	1.6
5760000000	32.0%	-4.9	2.2
5780000000	31.4%	-5.0	1.9
5800000000	31.4%	-5.0	1.4
5820000000	29.5%	-5.3	1.2
5840000000	28.8%	-5.4	1.1
5860000000	28.1%	-5.5	0.6
5880000000	27.6%	-5.6	0.6
5900000000	27.3%	-5.6	0.7

3. Antenna Dimensions (mm) :



4. Testing Environment

Passive Test



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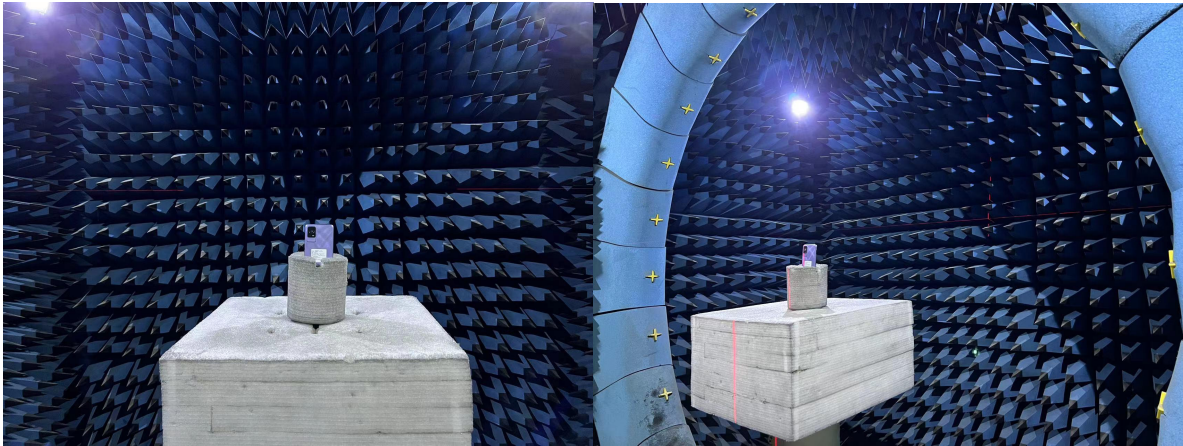
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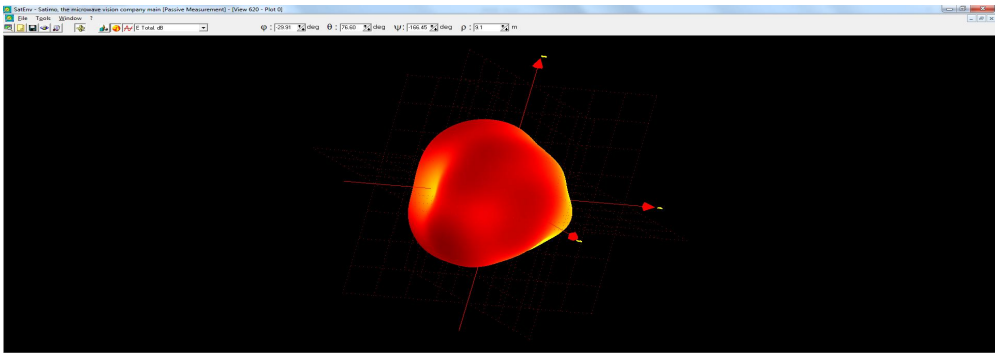
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Active Test

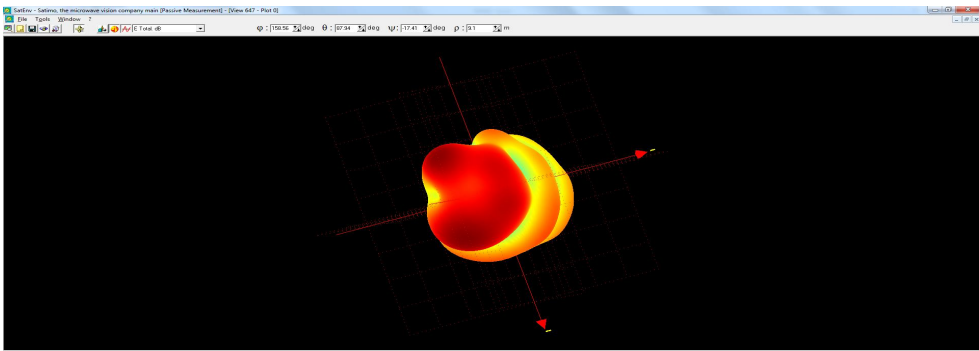


5.3D Radiation Pattern
- GPS L1

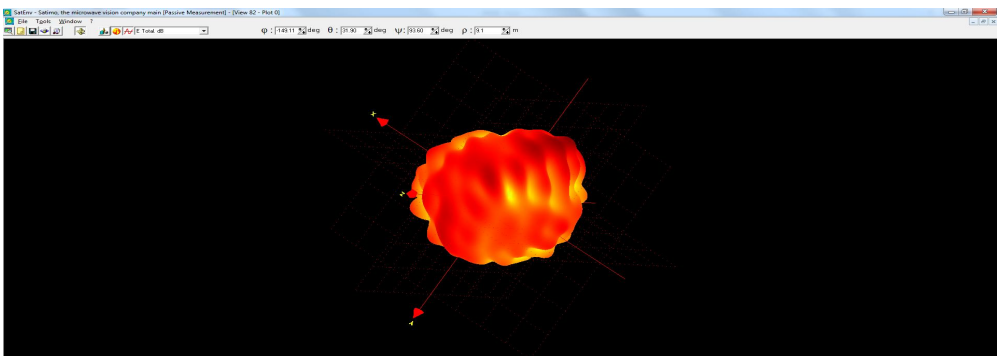


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- WIFI 2.4G



- WIFI 5G



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