WA-F-R3-03-001 Specification

1. Explanation of part number :

<u>WA</u> _ <u>F</u> _ <u>R3</u> _ <u>03</u> _ <u>001</u>
(1)   (2)   (3)   (4)   (5)

(1) **Product Type：Wireless Antenna**

(2) **Material: FPCB+CABLE**

(3) **Frequency : 868MHz-915MHz**

(4) **Coaxial Cable Type : 03**

(5) **Suffix :001**

2. Storage Condition:

Temperature	-40　to　+70°C
Humidity	65±20 % RH

3. Operating Condition:

Temperature	-40　to　+70°C
Humidity	65±20 % RH

4. Electrical Specification :

Those specifications were specially defined for 佳德 GC NEXT SubG900-Aux model, and all characteristics were measured under the model's handset testing jig .

4-1. Frequency Band:

Frequency Band	MHz
SubG900- Aux	868MHz-915MHz

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INPAQ TECHNOLOGY CO., LTD.

SCALE：	UNIT：mm
DRAWN BY： 靳静	CHECKED BY：赵付辉
DESIGNED BY：余晓晖	APPROVED BY：赵付辉

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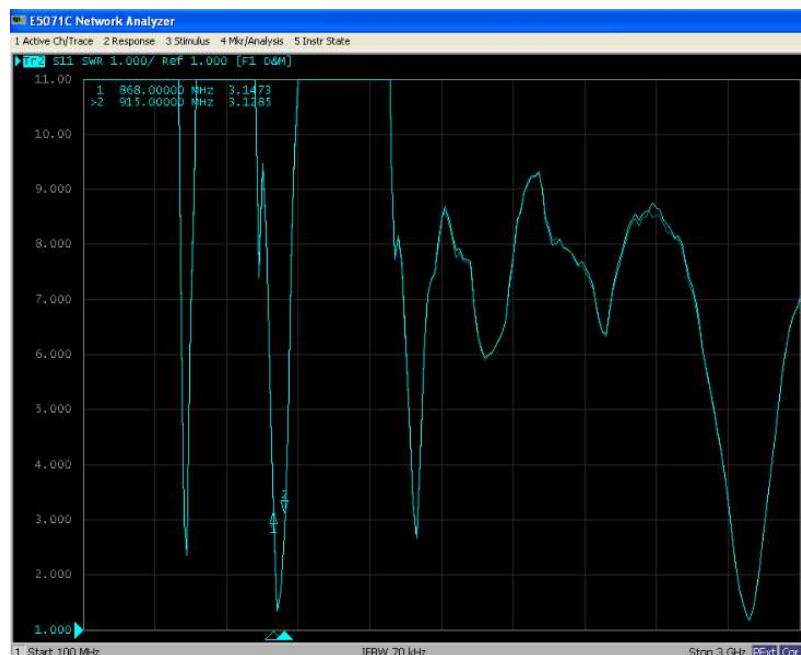## 4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

4-4. VSWR

4-4.1 Measuring Method

1.A 50Ω coaxial cable is connected to the antenna. Then this cable is connected
to a network analyzer to measure the VSWR

2.Keeping this jig away from metal at least 20cm

4-4.2 Measurement frequency points and VSWR value

Frequency (Unit MHz)	868	915
VSWR	≤4.0	≤3.0
VSWR	3.14	3.12

4-5. Efficiency and Gain

4-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig

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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

4-5.2 Chamber definition
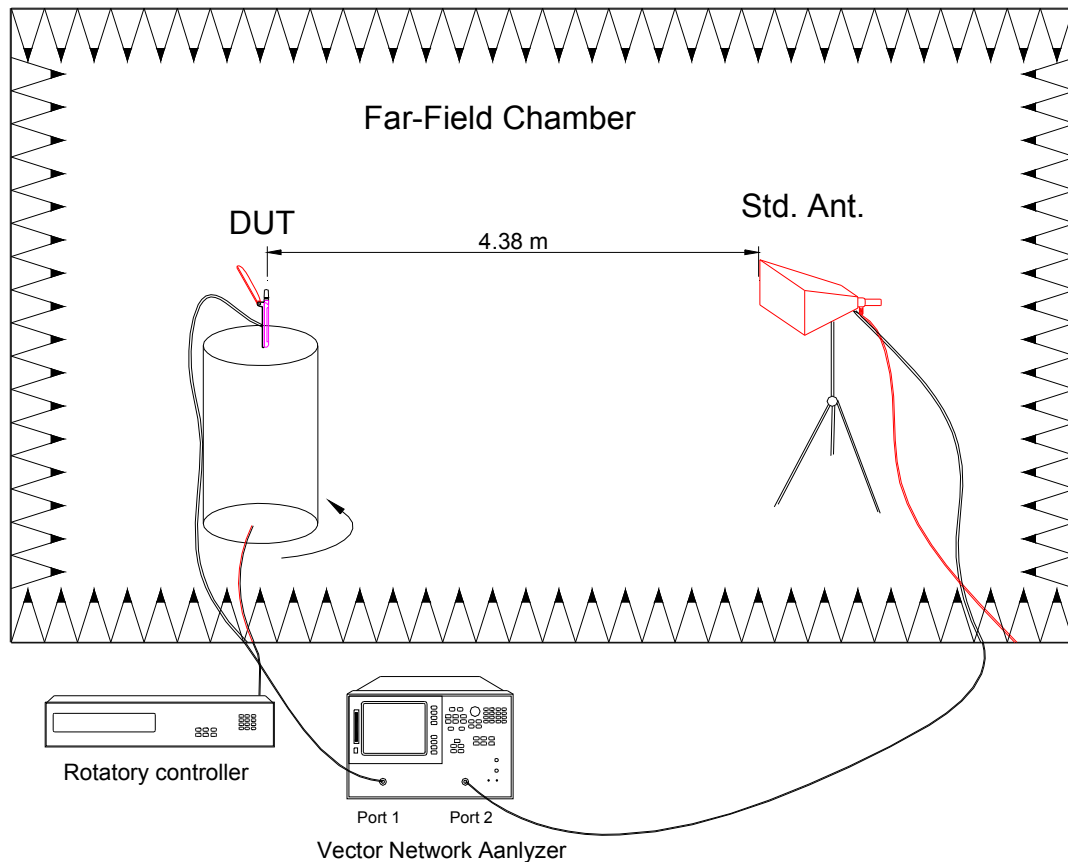
1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect

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)

4-5.3 Efficiency and Gain

Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The

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ANGLES=± **HOLEDIA**=±					
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data showsPeakGain and AverageGain.

Frequency　(MHz)	868	915
Efficiency (%)	33.64	29.38
Gain (dBi)	-0.4	0.02

5.　　Mechanical Specification:

5-1. Mechanical Configuration (Unit: mm)

　　　The appearance of the antenna is according to drawing Figure **5-1-1**

IPEX MHF RF Cable1.13X30MM-灰
I-PEX Equivalent(compatible)

泡棉10X10
靠近板边贴附

30±2

25.00±0.20

7.00±0.20

4.00±0.20

17.79±0.20

subG900-A-V3

2-Ø1.1±0.2

62.90±0.20

CUT LINE
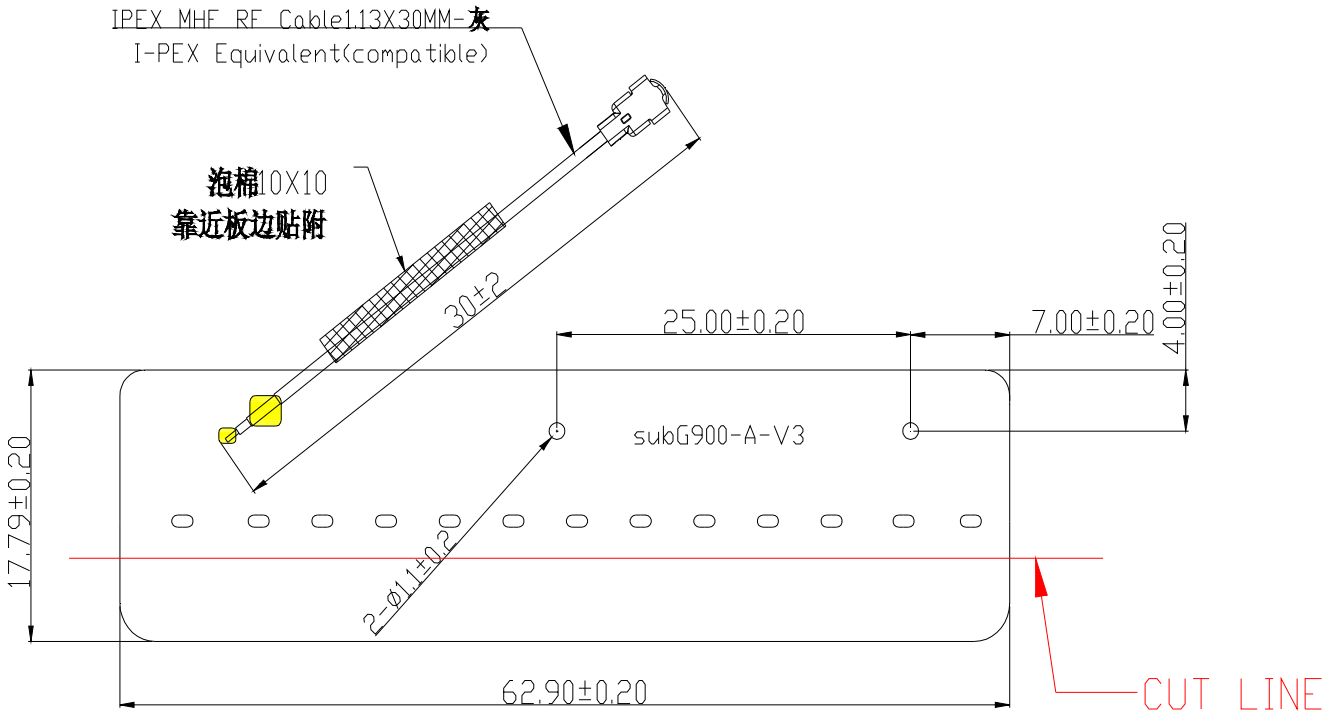
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