客戶名稱 : 哈曼

CUSTOMER

Documnet No.:

Approval Sheet Rev.: A0

Spec. Rev. A0

承　認　書

APPROVAL SHEET

產品品名/Product Model No. :	**WA-P-LA-02-297**
客戶料號/Customer No. :	**T690800040500**
發行日期/ Issue Date :	**2023/04/14**
承認日期/ Approved Date :	**2023/04/14**

Approved by customer: (signing or stamping here)

禾邦電子(蘇州)有限公司
INPAQ TECHNOLOGY(SuZhou) Co.,Ltd

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INPAQ TECHNOLOGY Co.,Ltd

□ 苗栗縣竹南鎮大厝裏9鄰59-12號

No. 59-12, 9 Lin, Ta Tsuo Li, Chu Nan Chen, Miao Li Hsien, Taiwan, R.O.C.

WA-P-LA-02-297 Specification

1. Explanation of part number :

WA	_	P	_	LA	_	02	_	297
(1)		(2)		(3)		(4)		(5)

(1) Product Type：Wireless Antenna

(2) Material: PCB+CABLE

(3) Frequency : 2400MHz -2500MHz

(4) Coaxial Cable Type : 02

(5) Suffix :297

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 迪芬尼 **IRX ONE BT** model, and all characteristics were measured under the model's handset testing.*

4-1. Frequency Band:

Frequency Band	MHz
BT	2400-2500

4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

4-4. VSWR

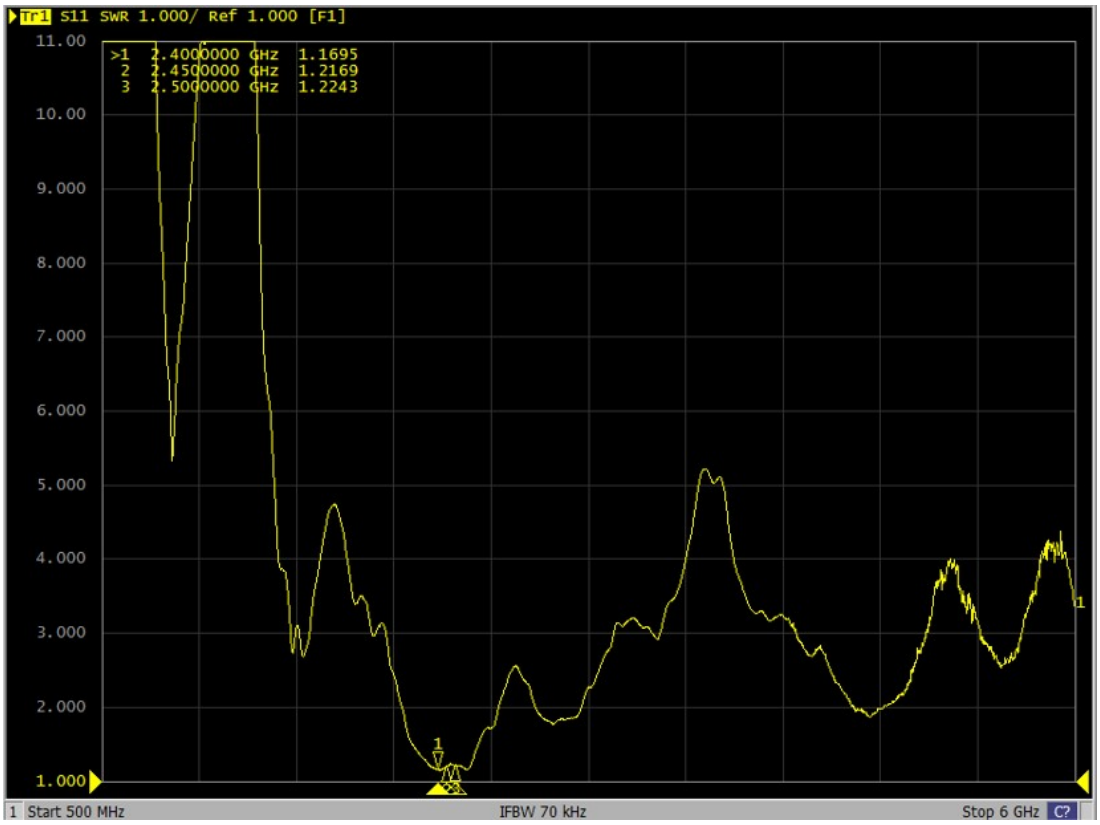
4-4.1 Measuring Method

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)	2400	2450	2500
VSWR	1.16	1.21	1.22



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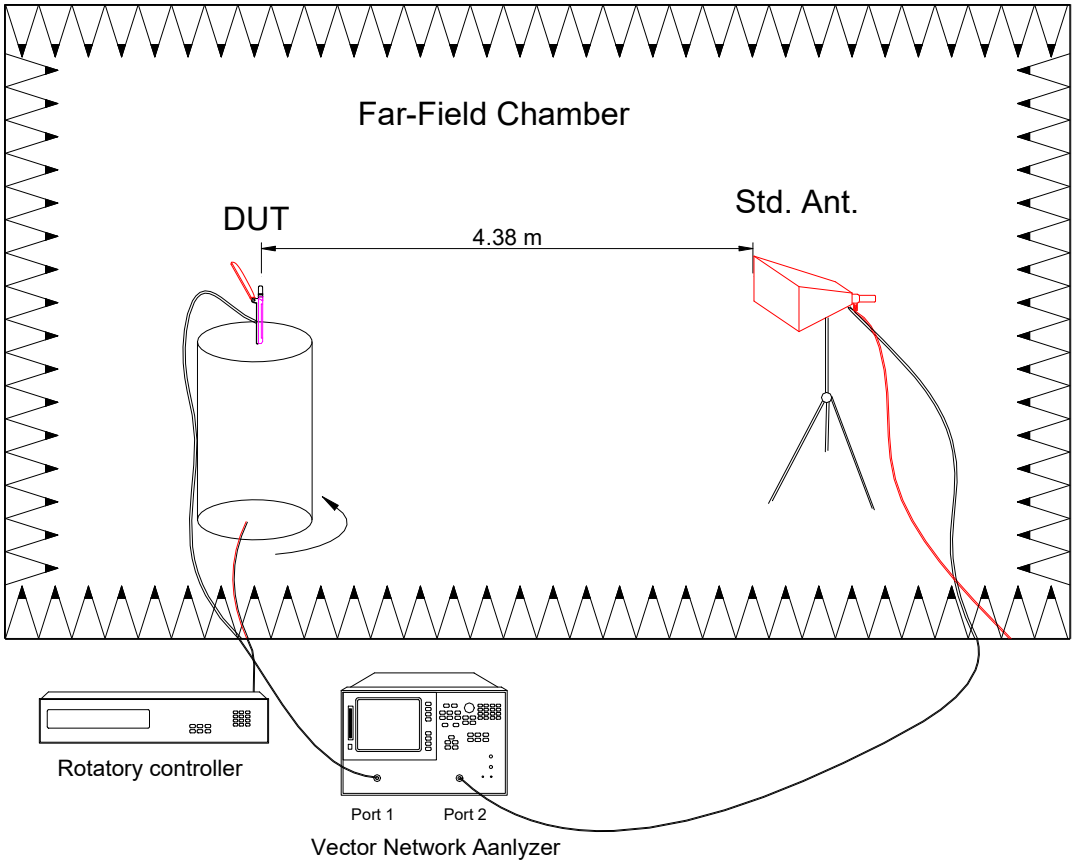
4-5. Efficiency and Gain

4-5.1 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

4-5.2 Chamber definition



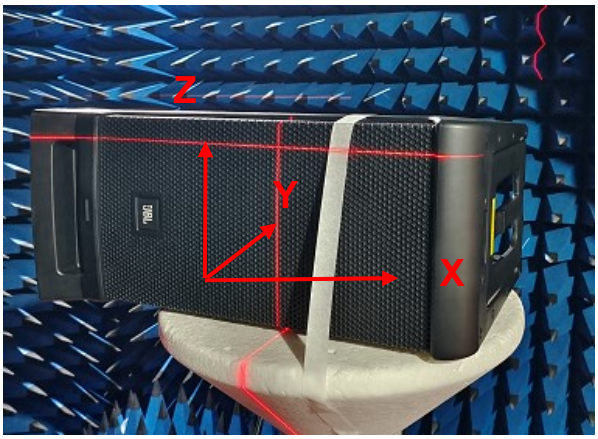
1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

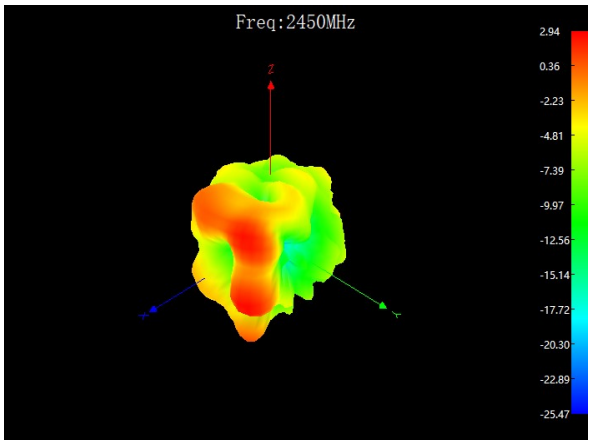
4-5.3 Efficiency and Gain

Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The data shows Peak Gain and Average Gain.

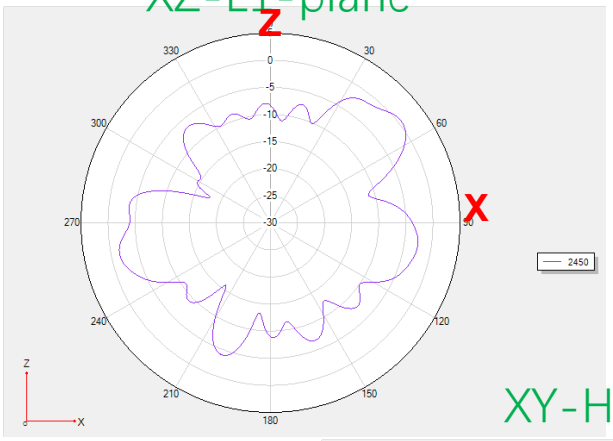
Frequency (MHz)	2400	2450	2500
Efficiency (%)	45.33	46.29	44.75
Gain (dBi)	2.81	2.94	2.51

4-5.4 2/3D Radiation Pattern Results

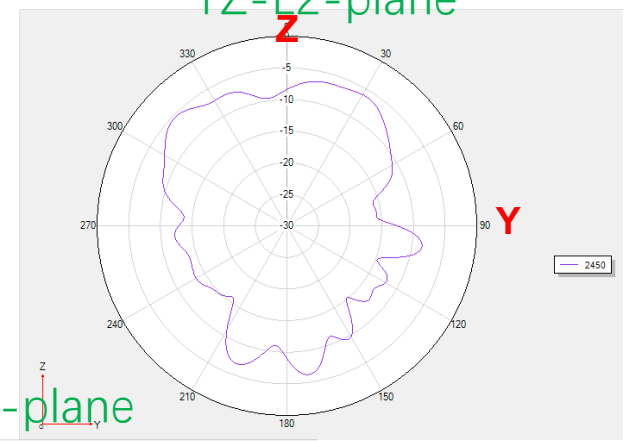




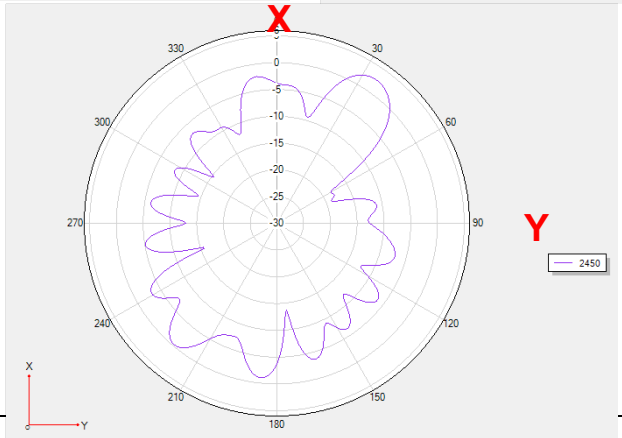
XZ-E1-plane



YZ-E2-plane



XY-H-plane



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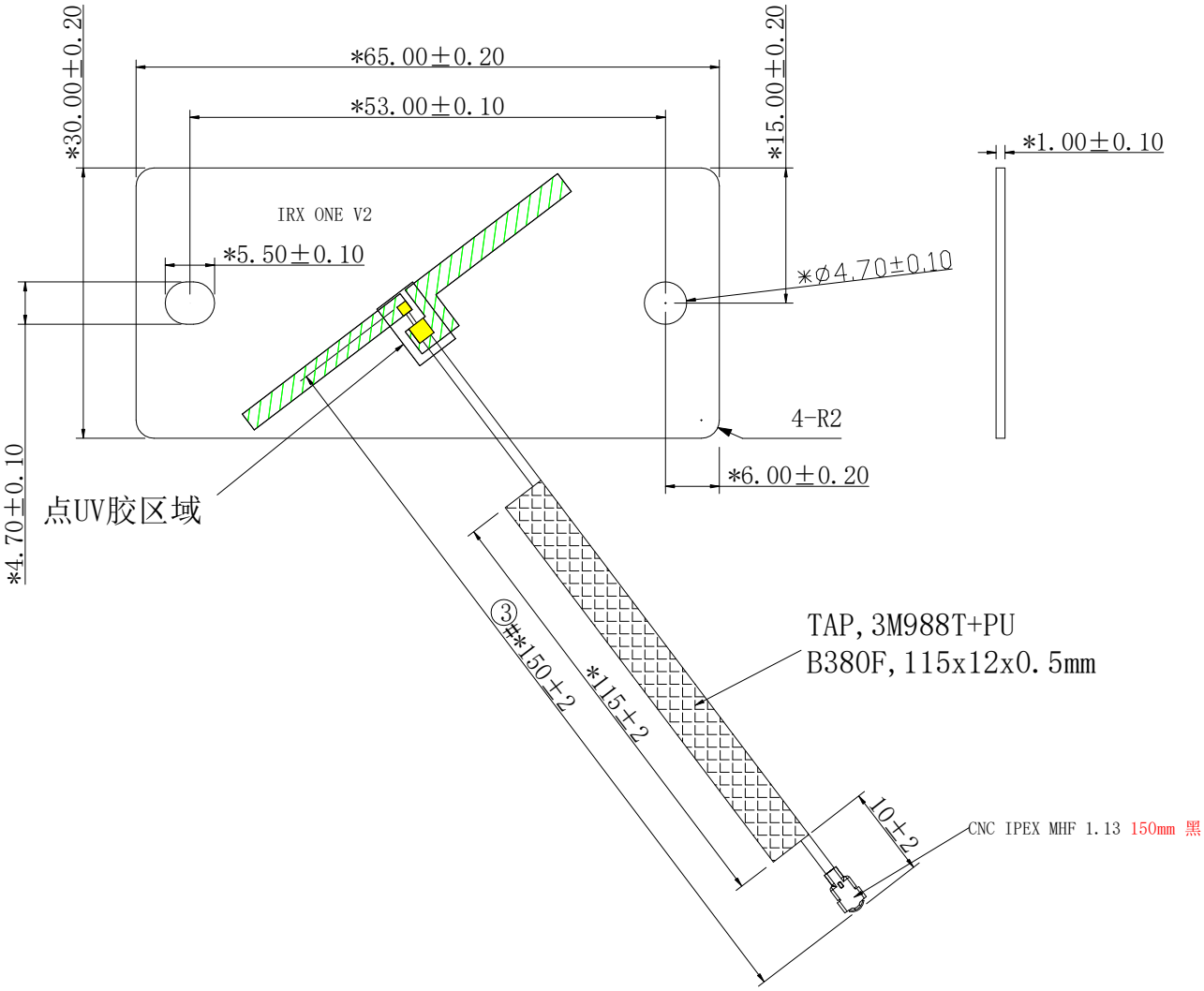
5. Mechanical Specification:

5-1. Mechanical Configuration (Unit: mm)

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



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