WA-P-LE-03-041 Specification

1. Explanation of part number:

WA	_	P	_	LE	_	03	_	041
(1)		(2)		(3)		(4)		(5)

(1) Product Type: PCB Antenna

(2) Material: PCB+ Cable

(3) Frequency:2400-2500MHz&5150-5850MHz&5925-7125MHz

(4) Coaxial Cable Type:03

(5) Suffix :041

(6) Gain（Peak）：2400-2500MHz：2.53dBi；5150-5850MHz：5.87 dBi；5925-7125MHz：4.69 dBi

(7) Company address: INPAQ TECHNOLOGY(SUZHOU) CO, LTD. No. 5, Chunqiu Road, Huangdai Town, Xiangcheng District, Suzhou City, Jiangsu Province, China

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 DH400 WIFI 2 model, and all characteristics were measured under the model's handset testing.

4-1. Frequency Band:

Frequency Band	MHz
WIFI 6E	2400-2500MHz&5150-5850MHz&5925-7125MHz

4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

4-4. Return Loss

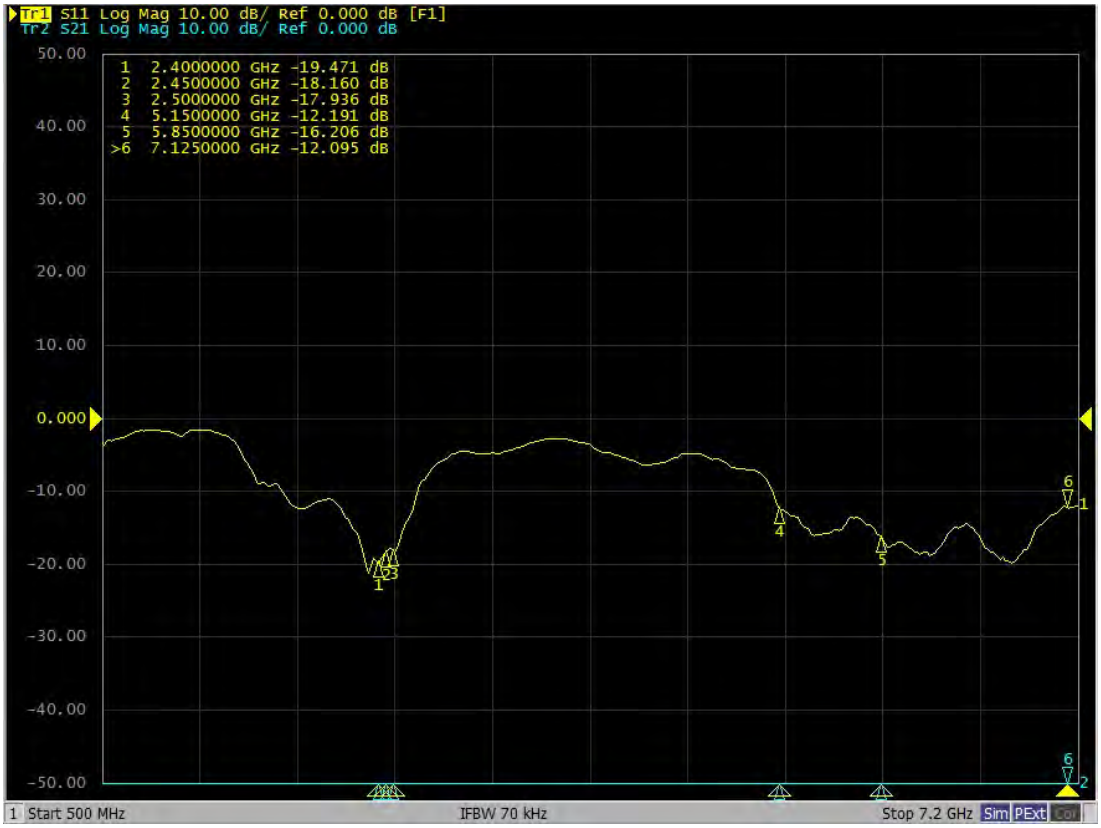
4-4.1 Measuring Method

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

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

4-4.2 Measurement frequency points and Return Loss value

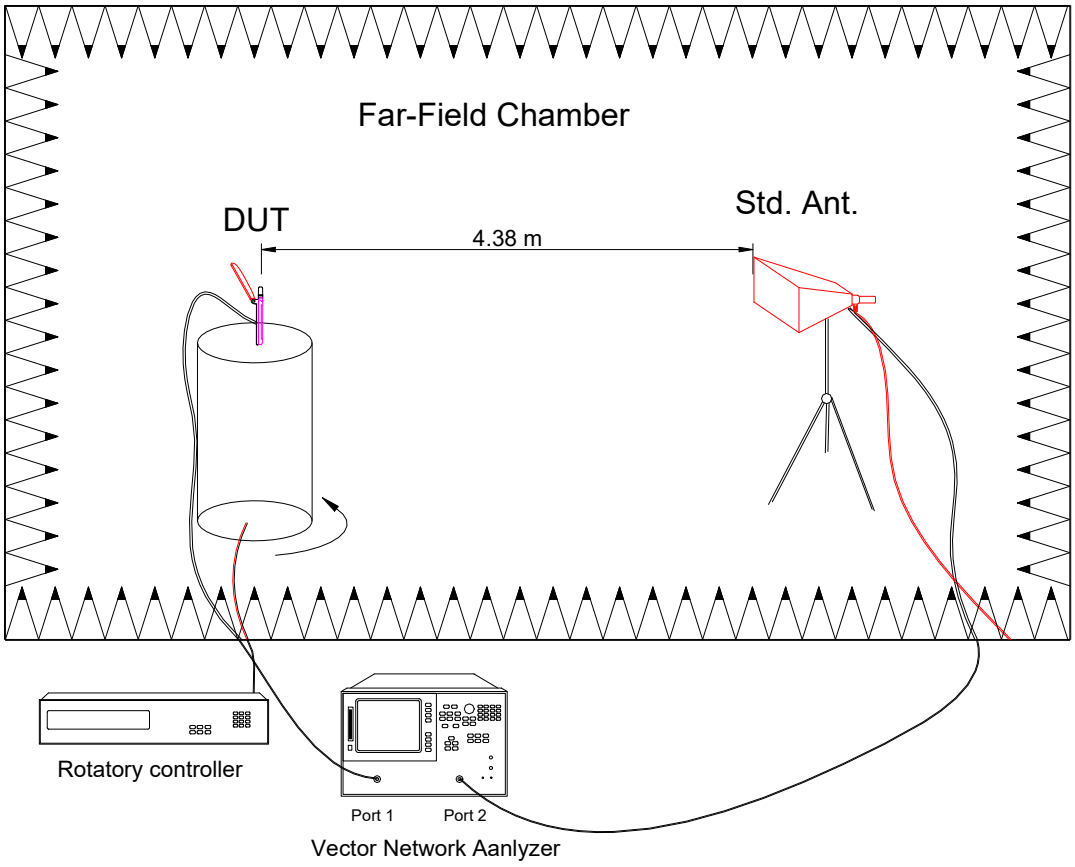
Frequency (Unit MHz)		2400	2450	2500	5150	5850	7125
Return Loss	WIFI 6E	**-19.47**	**-18.16**	**-17.94**	**-12.19**	**-16.21**	**-12.1**



4-5. Efficiency and Gain

4-5.1 Measure method

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



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)

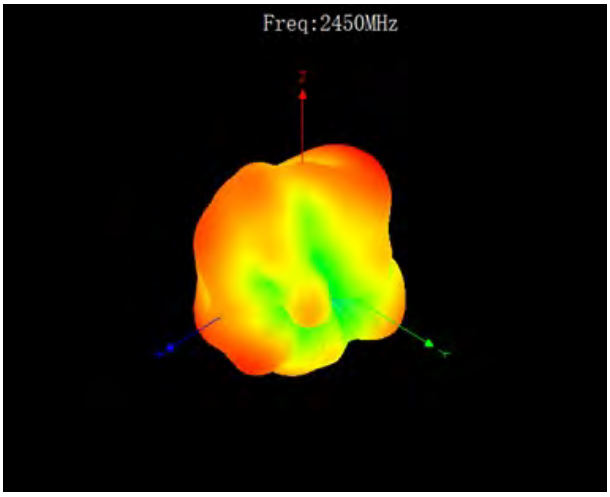
4-5.3 Efficiency and Gain

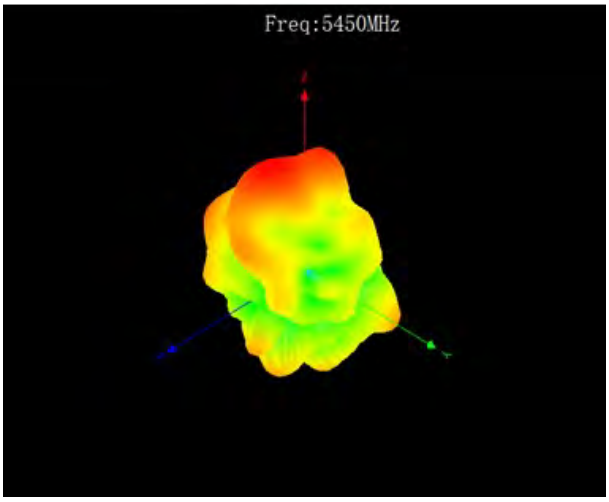
Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The data shows Peak Gain and Average Gain.

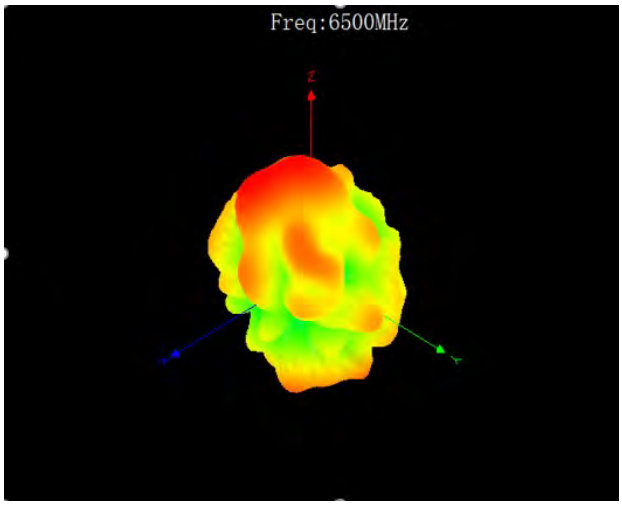
Antenna type	PCB					
Frequency (MHz)	2400	2450	2500	5150	5850	7125
Efficiency (%)	48.17	50.87	48.85	54.45	52.6	47.42
Peak Gain (dBi)	2.14	2.47	2.03	5.87	4.56	3.08
Frequency (MHz)	2400~2500			5150~5850		5925~7125
Peak Gain (Max)	2.53dBi			5.87dBi		4.69dBi

4-6. 3D/2D Radiation Pattern Results

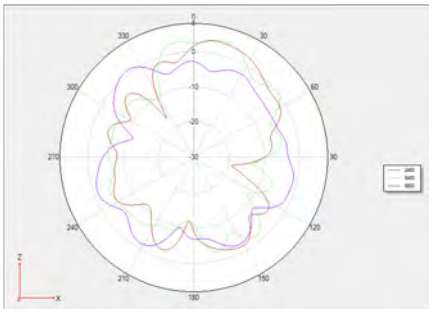
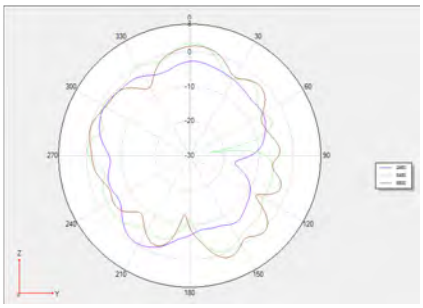
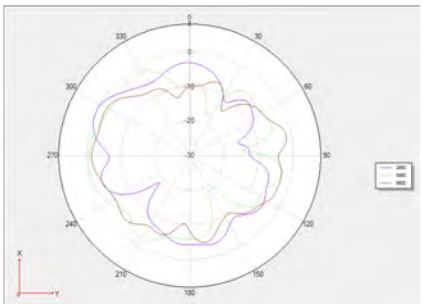
- **3D Radiation Pattern Results**



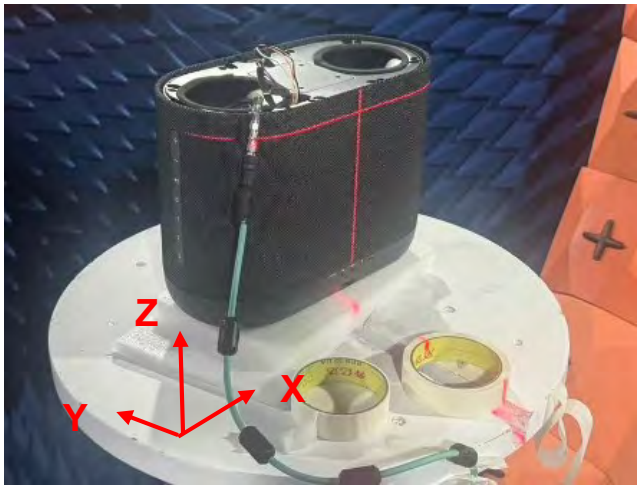




➢ 2D Radiation Pattern Results

➢ Physical coordinate Image



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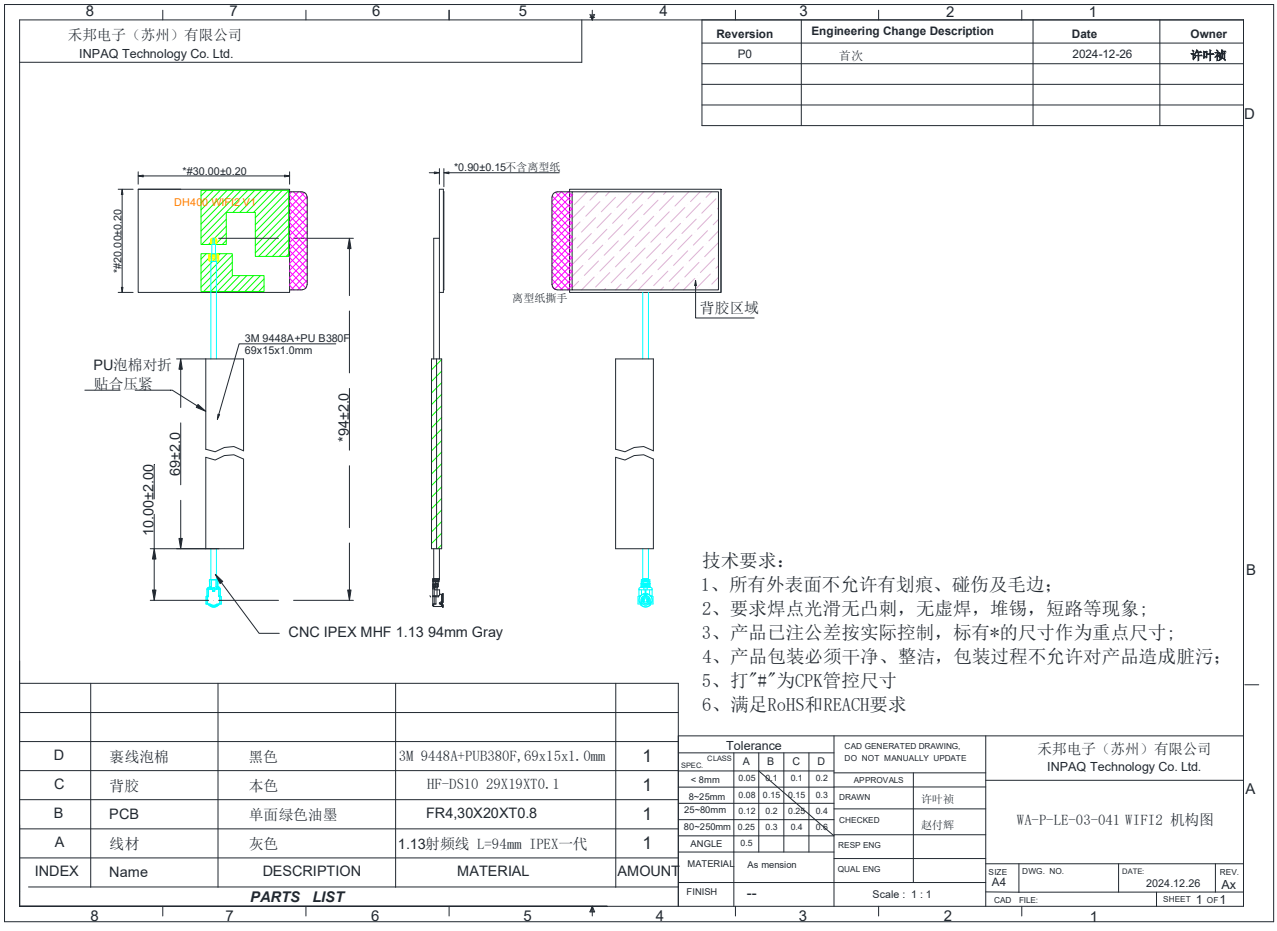
5. Mechanical Specification:

5-1. Mechanical Configuration (Unit: mm)

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



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