

KC.DA.00223

Antenna Specification

1. Application:

This application shall apply for antenna unit which shall be used such as automotive, conventional communications, smart home, etc..

2. Electrical Specification:

Those specifications were specially defined for customer's model, and all characteristics were measured under the model's handset testing jig .

2-1. Frequency Band:

Frequency Band	MHz
WiFi	2400-2500MHz

2-2. Impedance

50 ohm nominal

2-3. VSWR

2-3-1. Measurement frequency points and VSWR value

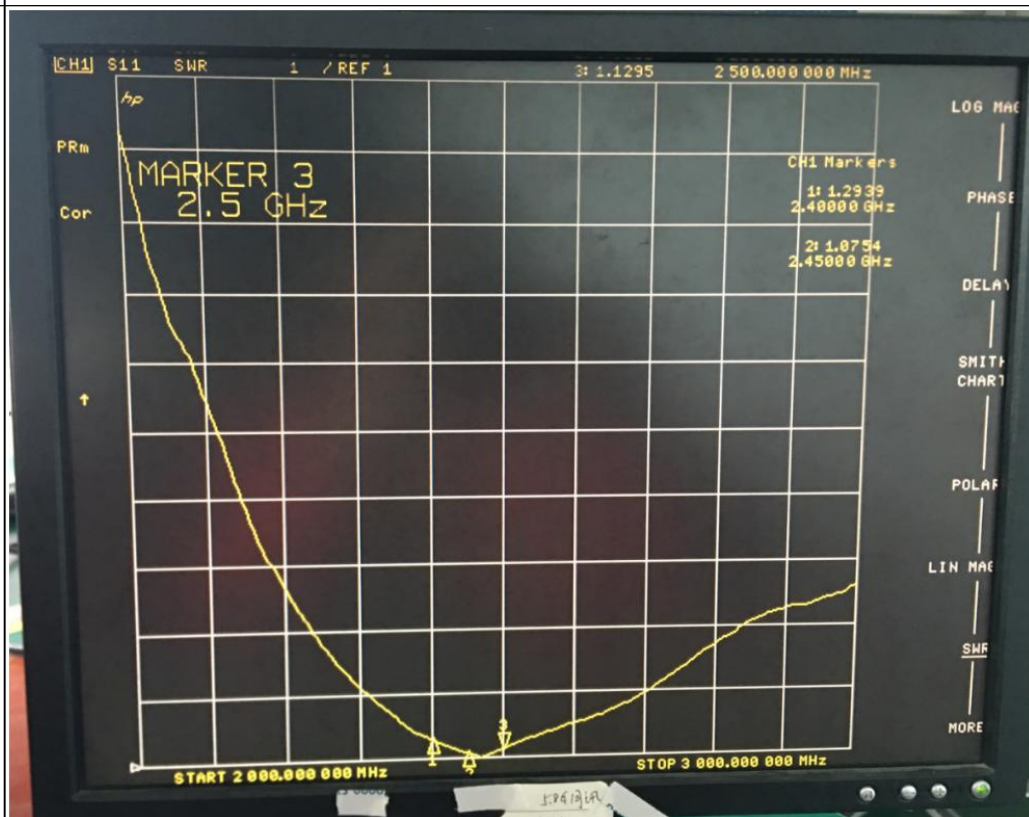
Frequency Band(MHz)	2400	2500
Typical Value: (VSWR)	1.29	1.12

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2-3-4 Measuring Method

1. A 50 Ω 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 20 cm

2-3-5 Picture



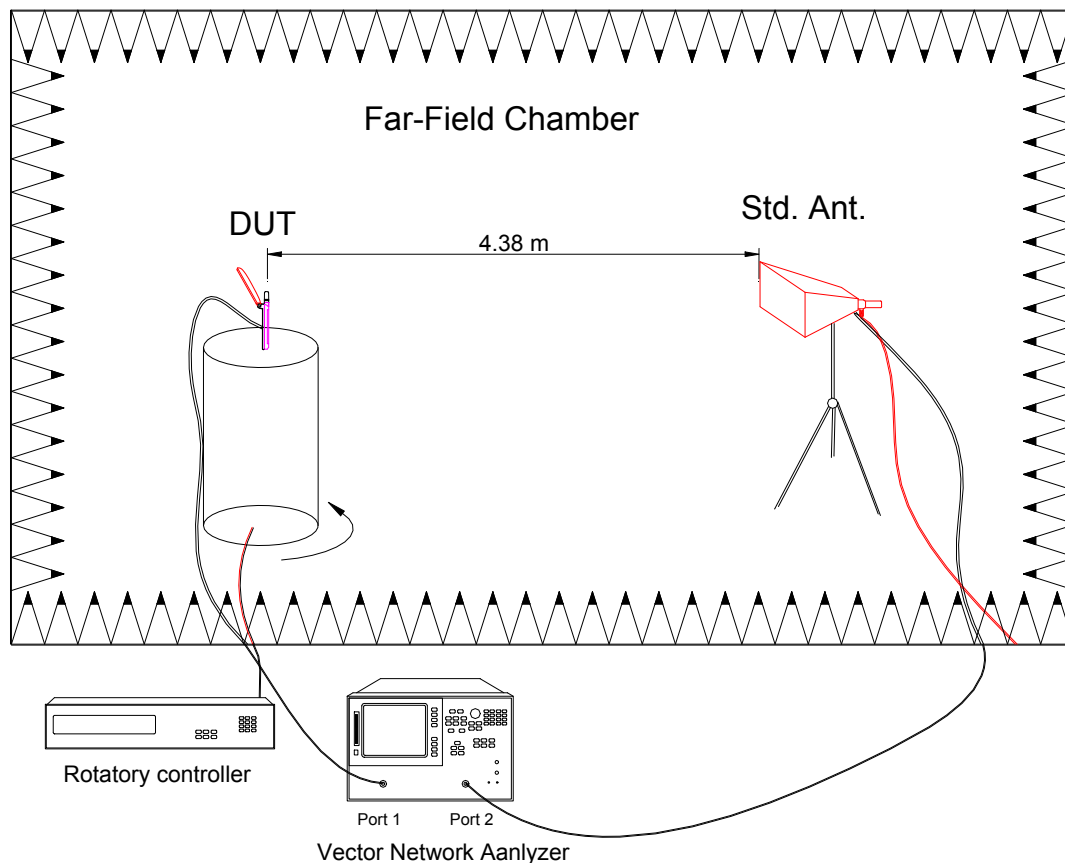
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2-4. Efficiency and Gain

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



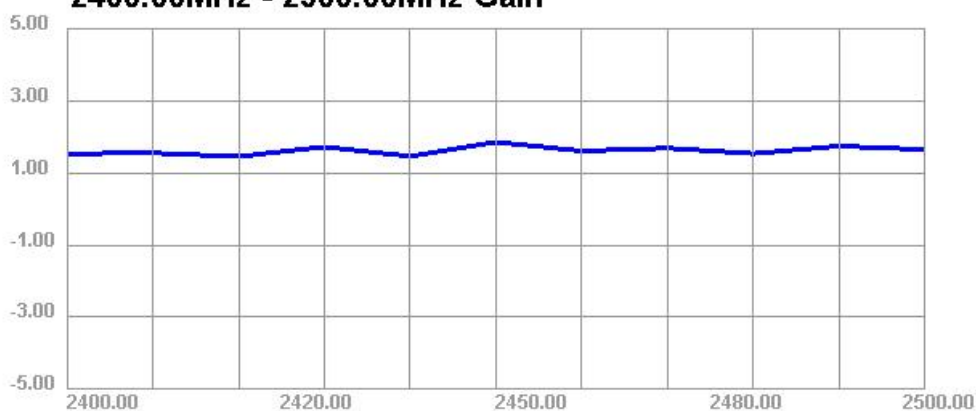
1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna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

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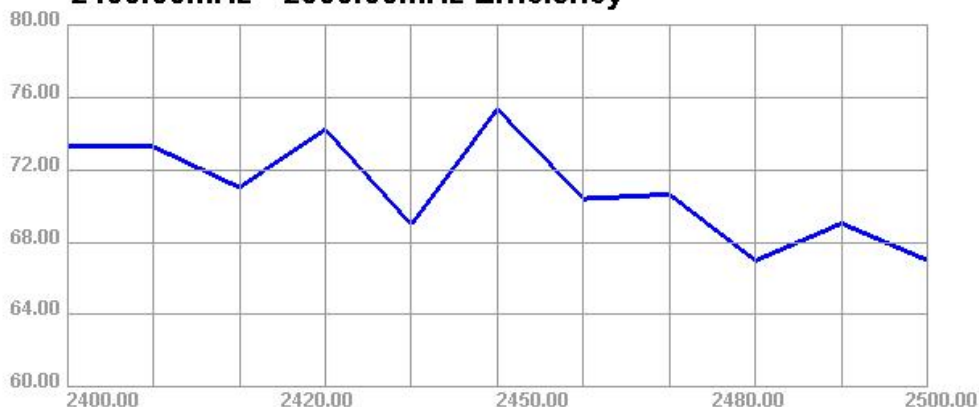
2-5-1 Efficiency and Gain and 3D Date

Passive Test For WIFI2										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenu t Hor	Attenu t Ver
2400	73.3	-1.35	1.53	-0.62	39.113	34.188	1.53	-19.75	53.58	53.59
2420	71.02	-1.49	1.45	-0.7	37.158	33.864	1.45	-18.86	53.83	53.76
2450	75.35	-1.23	1.85	-0.3	37.977	37.368	1.85	-17.95	54.17	54.08
2480	66.98	-1.74	1.54	-0.61	32.936	34.048	1.54	-20.36	54.08	53.86
2500	67	-1.74	1.65	-0.5	32.476	34.521	1.65	-22.18	54.04	53.84

2400.00MHz - 2500.00MHz Gain



2400.00MHz - 2500.00MHz Efficiency



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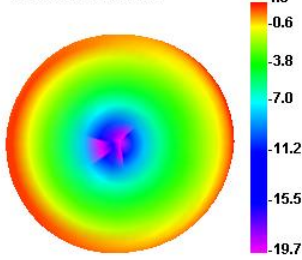
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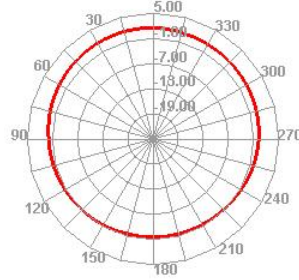
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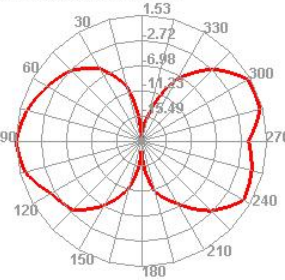
2400.000MHz



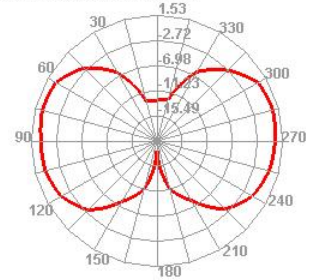
2400.000MHz H



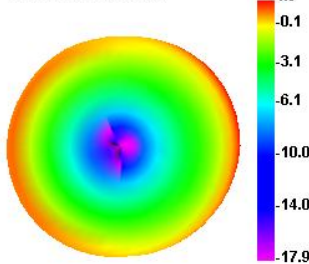
2400.000MHz E1



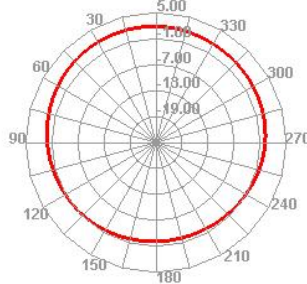
2400.000MHz E2



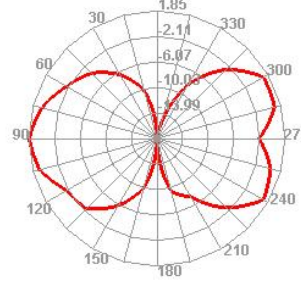
2450.000MHz



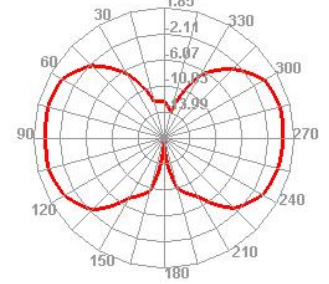
2450.000MHz H



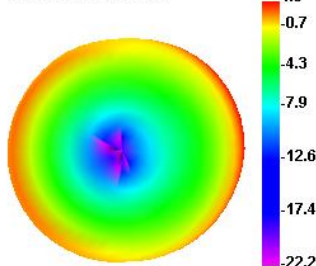
2450.000MHz E1



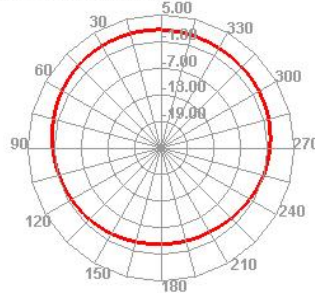
2450.000MHz E2



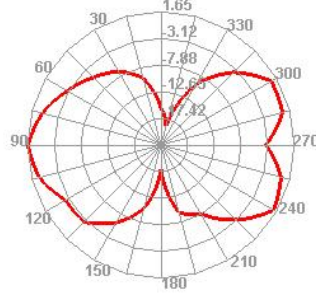
2500.000MHz



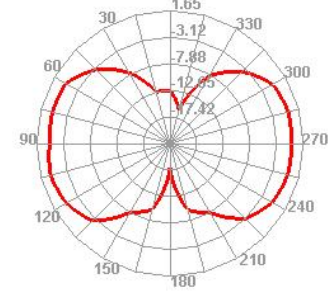
2500.000MHz H



2500.000MHz E1



2500.000MHz E2

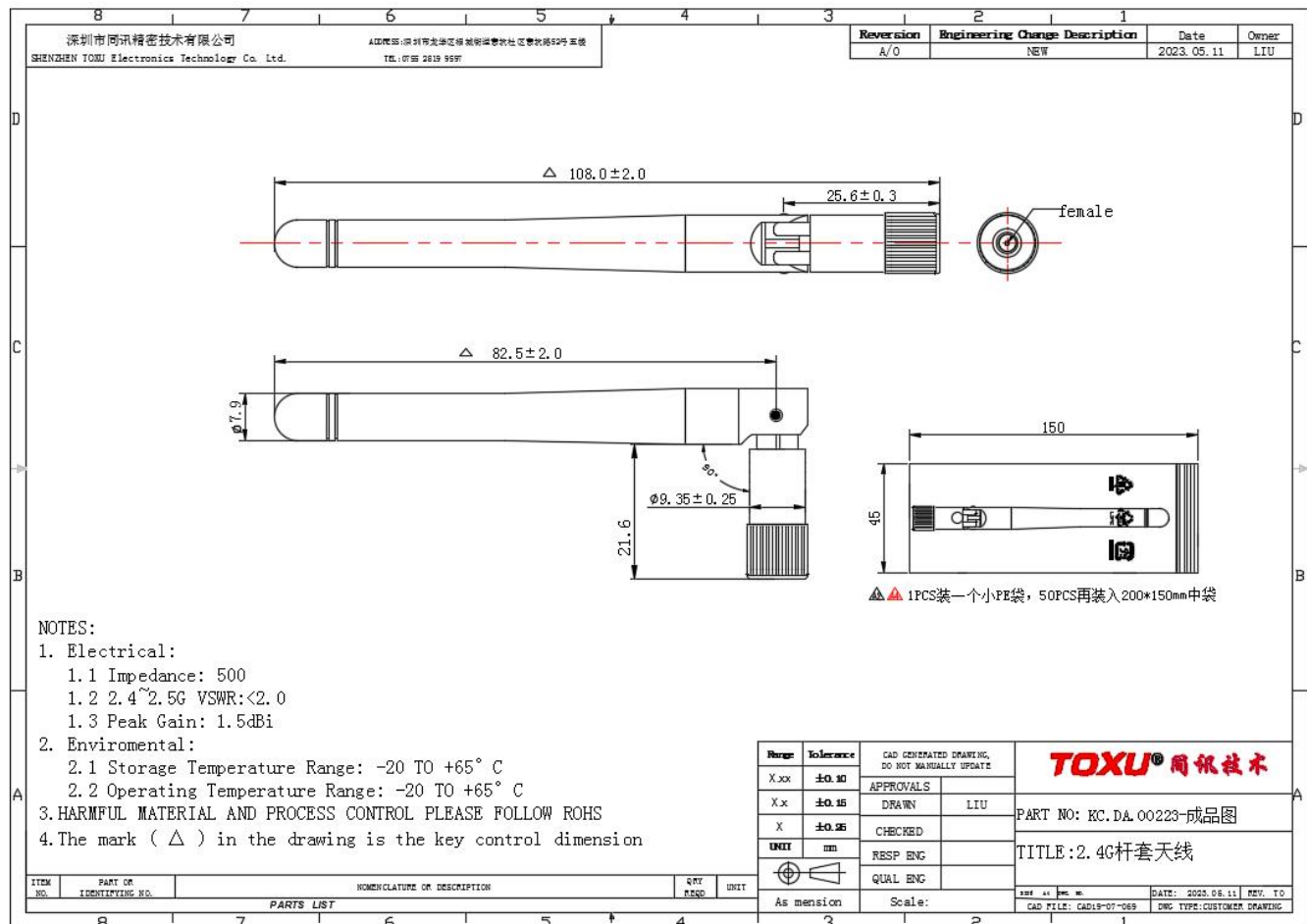


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3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

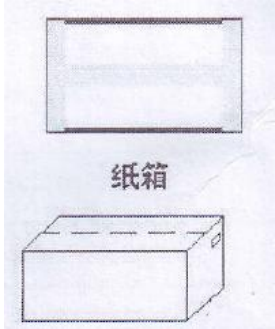
The appearance of the antenna is according to drawing



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4 .Packaging specification:

Product number: xxxxx			
Product model: xxxxx			
一、 Label requirements:			
Customer	xxx		
supplier	xxxxxx		
Material coding	xx		
Product model	xx		
Number	XXX PCS	Factory date	X X X
Remarks			
二、 Boxing:			
Job description:			
1. Inner packaging:			
XXpcs A bag			
2. External packaging:			
Xx PCS ;			
3. Matters needing attention:			
a. Whether to add partition and pearl cotton;			
b. Label attachments, such as ROHS, etc.;			

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