

KC.IA.00391 WiFi&GPS

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
GPS	1560~1580MHz
WIFI	2400~2500/5150~5850MHz

2-2. Impedance

50 ohm nominal

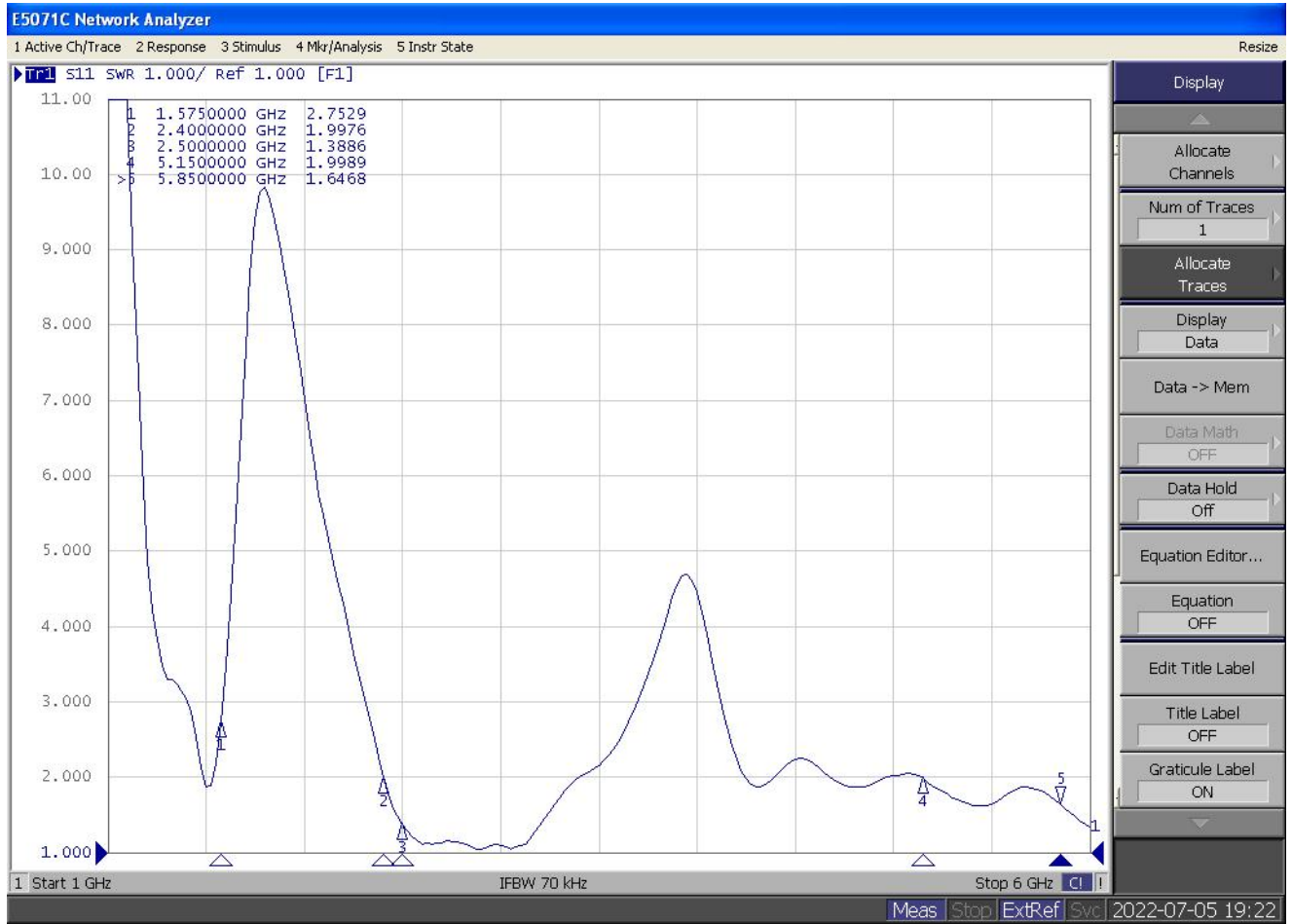
2-3. VSWR

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

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WiFi&GPS

Frequency Band(MHz)	1575	2400	2500	5150	5850
Typical Value: (VSWR)	2.75	1.99	1.38	1.99	1.64



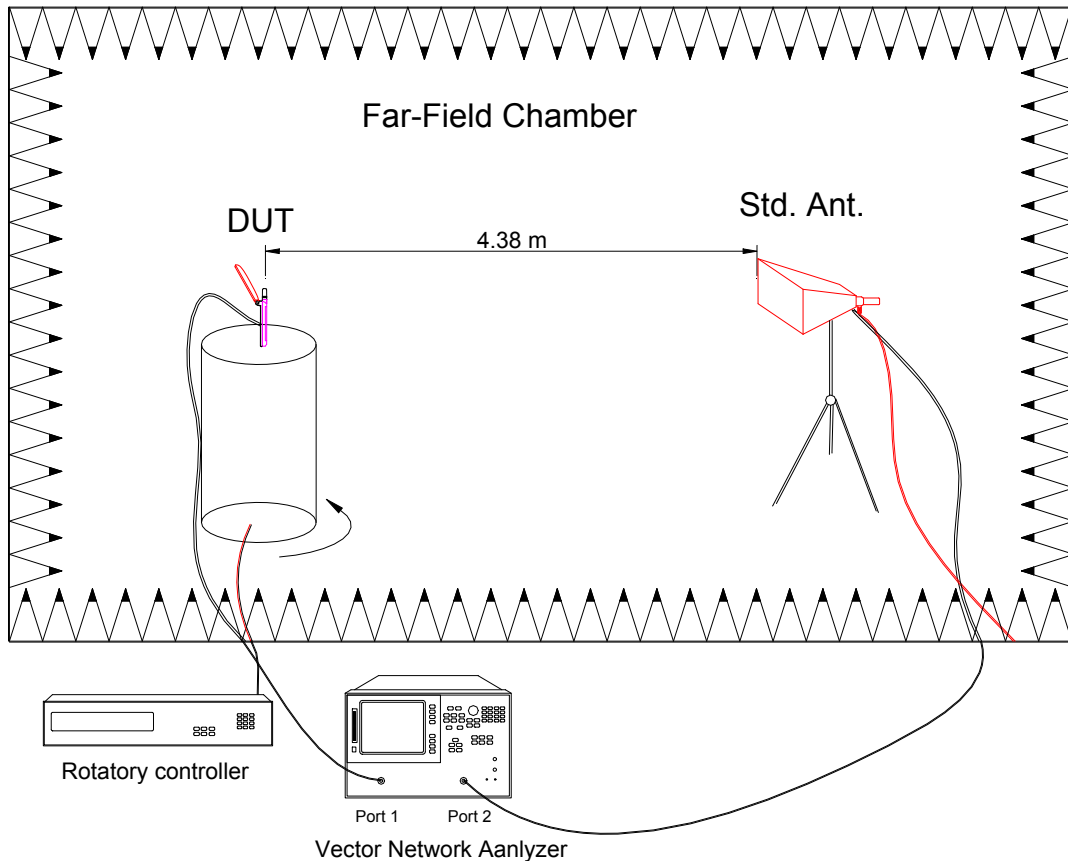
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2-4. Efficiency and Gain


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 quiet 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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2-4-1 WiFi&GPS Efficiency and Gain

Frequency/Mhz	MaxGain/dBi	Efficiency / %
1560	1.12	45.47
1565	0.79	43.23
1570	0.46	45.35
1575	0.07	41.99
1580	0.19	45.47

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	3.12	52.24
2410	3.27	53.21
2420	3.22	51.29
2430	3.48	51.17
2440	3.63	53.46
2450	3.63	50.35
2460	3.62	53.09
2470	3.72	52
2480	3.65	54.08
2490	3.71	52.48
2500	3.7	54.33

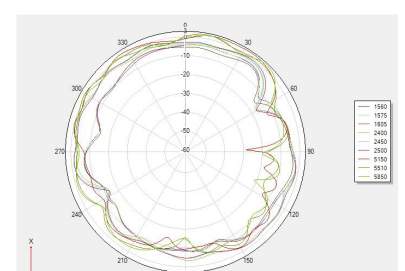
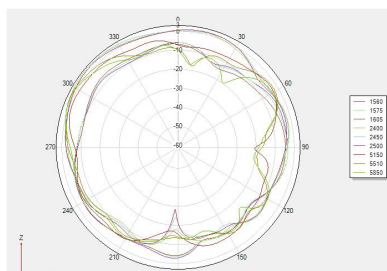
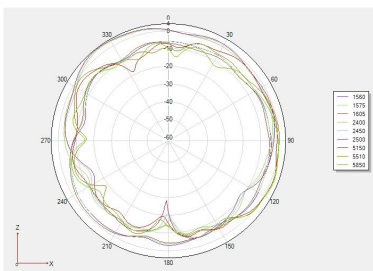
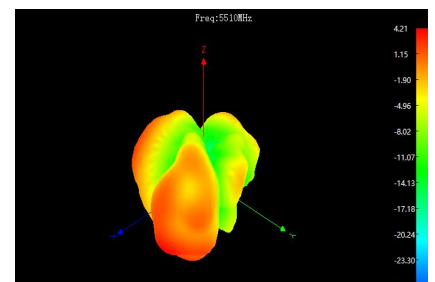
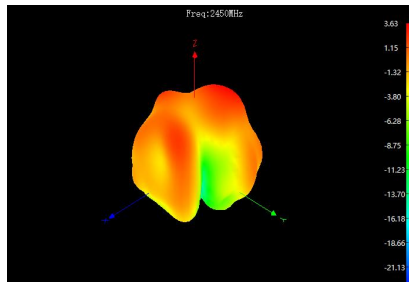
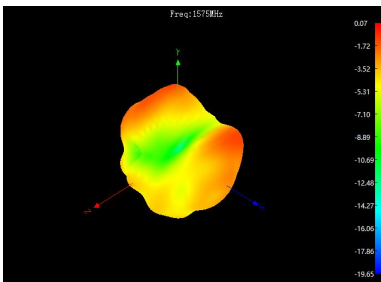
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Frequency/Mhz	MaxGain/dBi	Efficiency / %	Frequency/Mhz	MaxGain/dBi	Efficiency / %
5150	51.88	2.68	5510	4.21	52.48
5170	53.46	3.11	5530	3.97	52
5190	52.12	3.29	5550	3.88	51.64
5210	53.58	3.65	5570	3.81	50.12
5230	51.88	3.73	5590	3.95	51.17
5250	49.66	3.73	5610	4.03	52.36
5270	49.09	3.79	5630	4.16	52.36
5290	51.05	3.93	5650	4.18	52.48
5310	50.12	3.72	5670	4.21	51.88
5330	51.29	3.85	5690	4.17	49.77
5350	52.48	3.96	5710	4.49	51.76
5370	52	3.94	5730	4.55	51.88
5390	49.55	3.71	5750	4.48	50.35
5410	51.4	3.96	5770	4.34	47.64
5430	51.4	4.08	5790	4.14	45.5
5450	53.46	4.29	5810	4.16	46.88
5470	53.7	4.37	5830	4.2	47.1
5490	53.58	4.41	5850	4.21	45.92

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place	weather	Received quantity	Highest value
Fifth floor top	overcast	24	42




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3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing

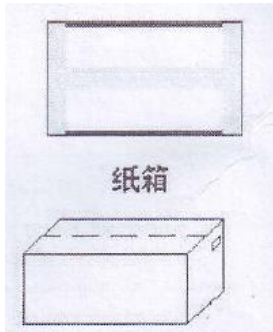


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4 .Packaging specification:

Product number: KC.IA.00391			
Product model: WIFI&GPS			
一、 Label requirements:			
Customer	xxx		
supplier	xxxxx		
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.;			

PE 袋



纸箱

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