

KC.IA.00355 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

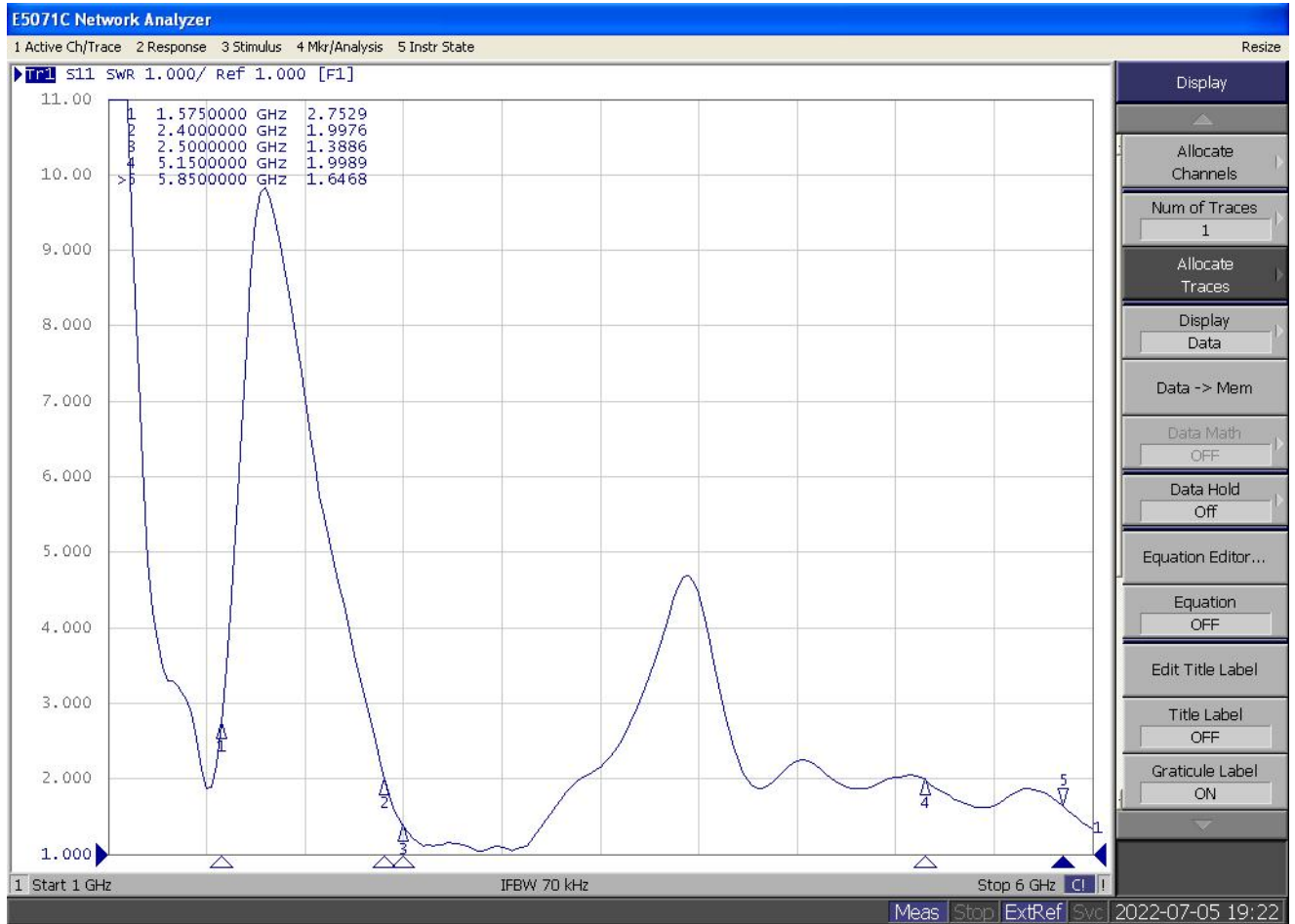
2-3. VSWR


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

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WiFi&GPS

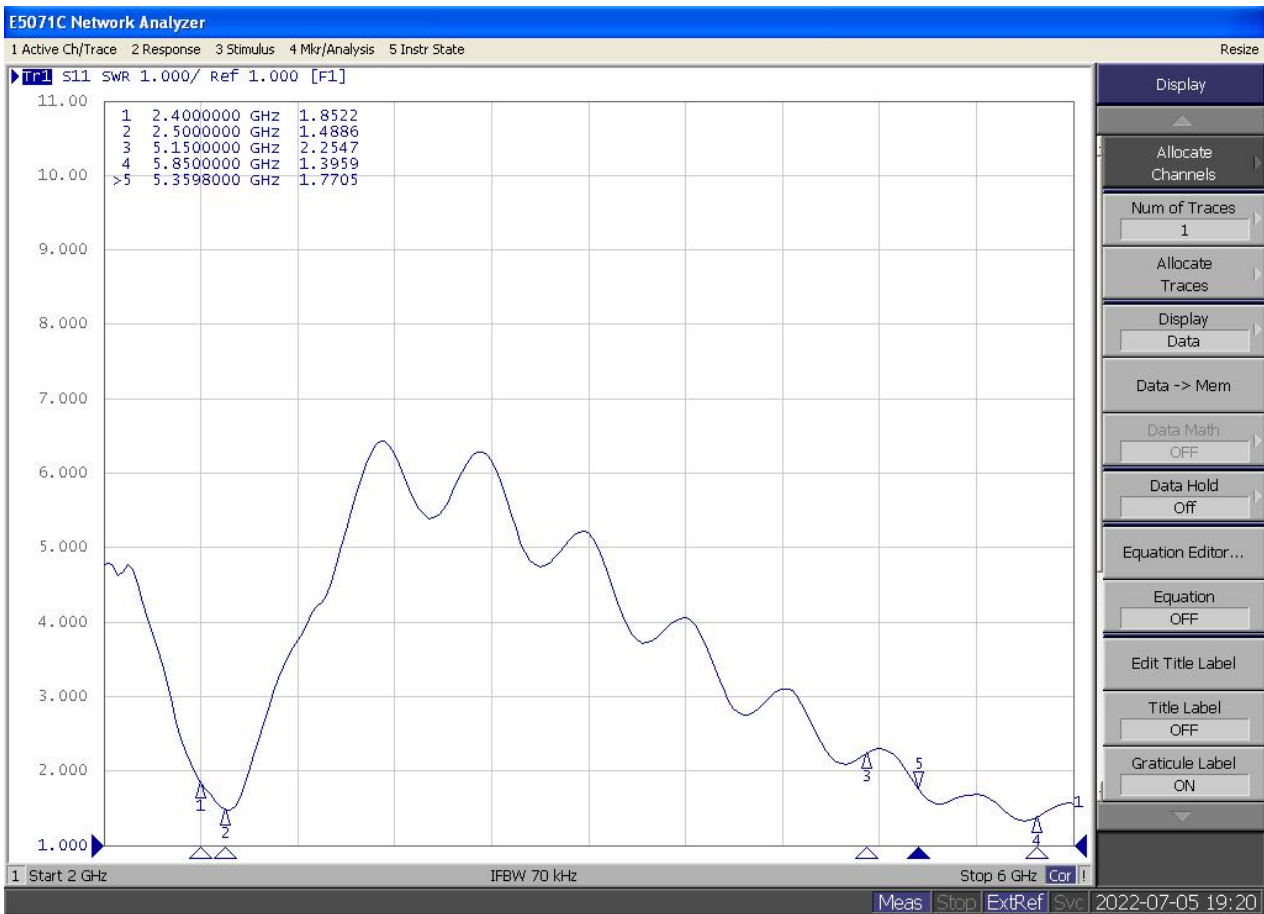
Frequency Band(MHz)	1575	2400	2500	5150	5850
Typical Value: (VSWR)	2.75	1.99	1.38	1.99	1.64




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WiFi

Frequency Band(MHz)	2400	2500	5150	5850
Typical Value: (VSWR)	1.85	1.48	2.25	1.39



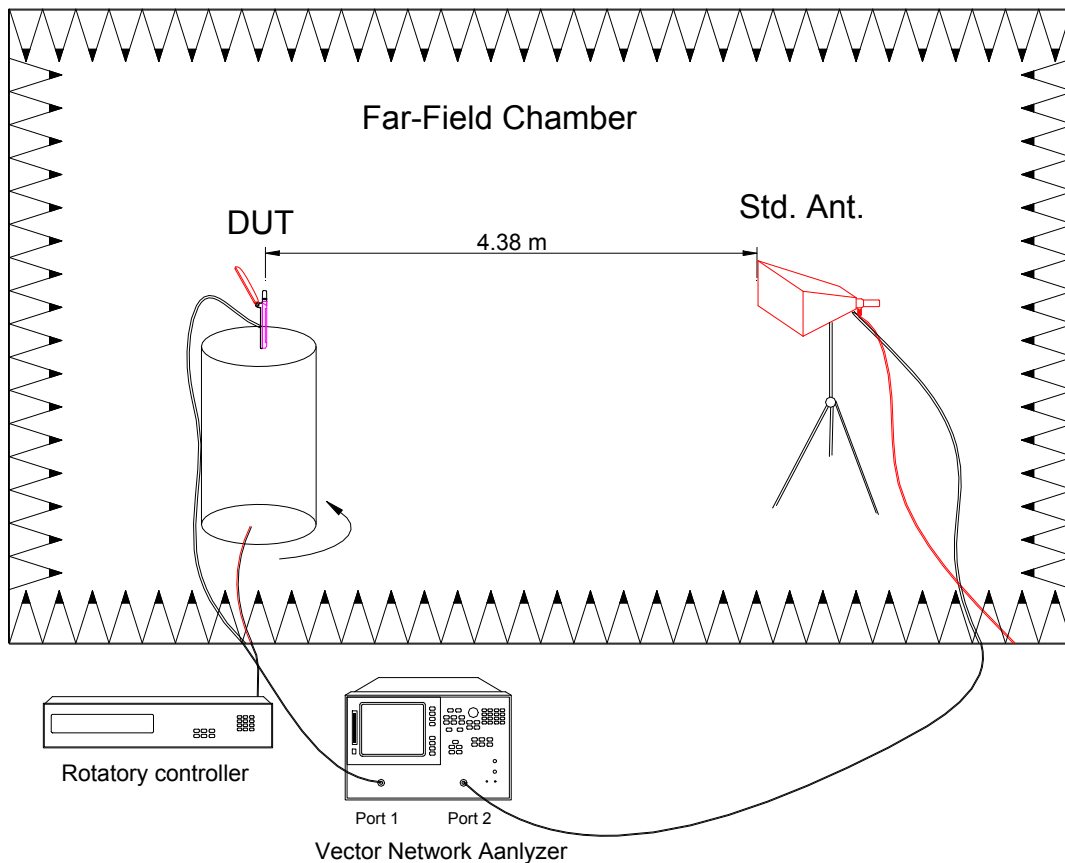
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2-4. Efficiency and Gain

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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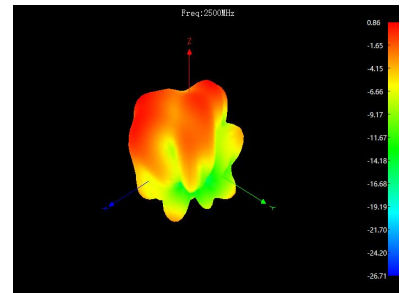
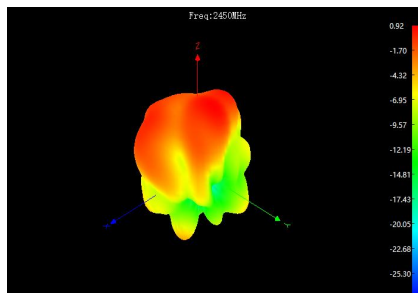
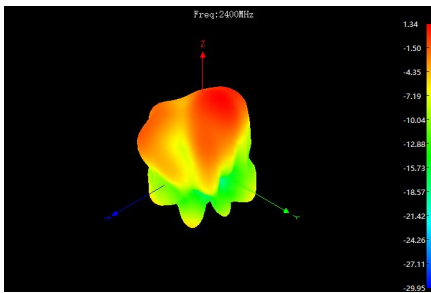
2-4-1 WiFi&GPS Efficiency and Gain

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

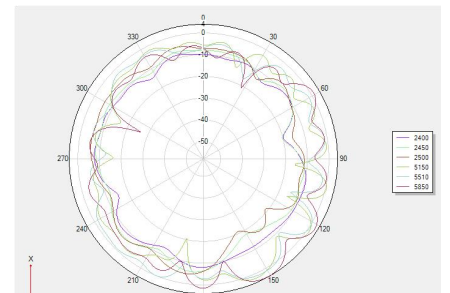
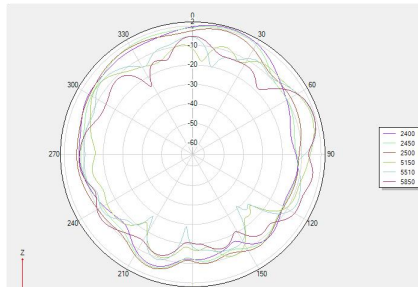
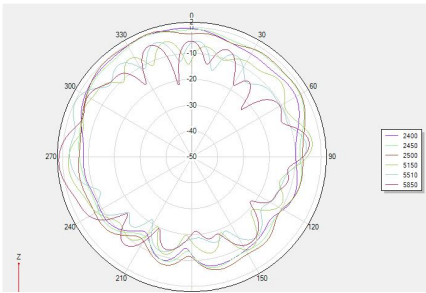
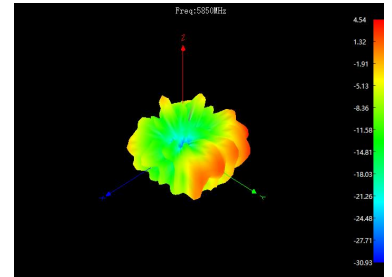
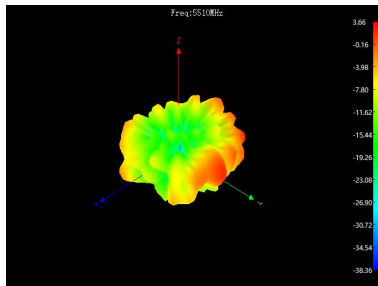
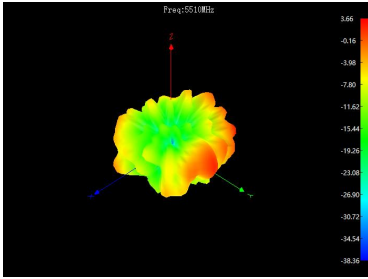
Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	3.12	52.24
2410	3.27	53.21
2420	3.22	51.29
2430	3.48	51.17
2440	3.63	53.46
2450	3.63	50.35
2460	3.62	53.09
2470	3.72	52
2480	3.65	54.08
2490	3.71	52.48
2500	3.7	54.33

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Frequency/MHz	Efficiency / %	MaxGain/dBi	Frequency/MHz	Efficiency / %	MaxGain/dBi
5150	54.57	3.76	5510	56.03	3.66
5170	46.03	3.91	5530	55.71	3.59
5190	48.71	3.82	5550	55.6	3.71
5210	49.77	3.69	5570	54.87	3.89
5230	50.71	3.36	5590	54.98	4.09
5250	50.19	3.13	5610	55.6	4.34
5270	47.16	3.12	5630	55.92	4.45
5290	49.71	3.23	5650	55.39	4.59
5310	46.19	3.06	5670	54.77	4.43
5330	45.5	3.11	5690	53.15	4.34
5350	46.77	3.27	5710	54.98	4.64
5370	46.34	3.07	5730	54.87	4.67
5390	45.45	2.77	5750	53.75	4.63
5410	45.19	2.99	5770	51.98	4.53
5430	47.77	3.1	5790	50.83	4.43
5450	51.99	3.36	5810	51.88	4.47
5470	51.45	3.58	5830	52.27	4.41
5490	52.03	3.68	5850	51.88	4.54



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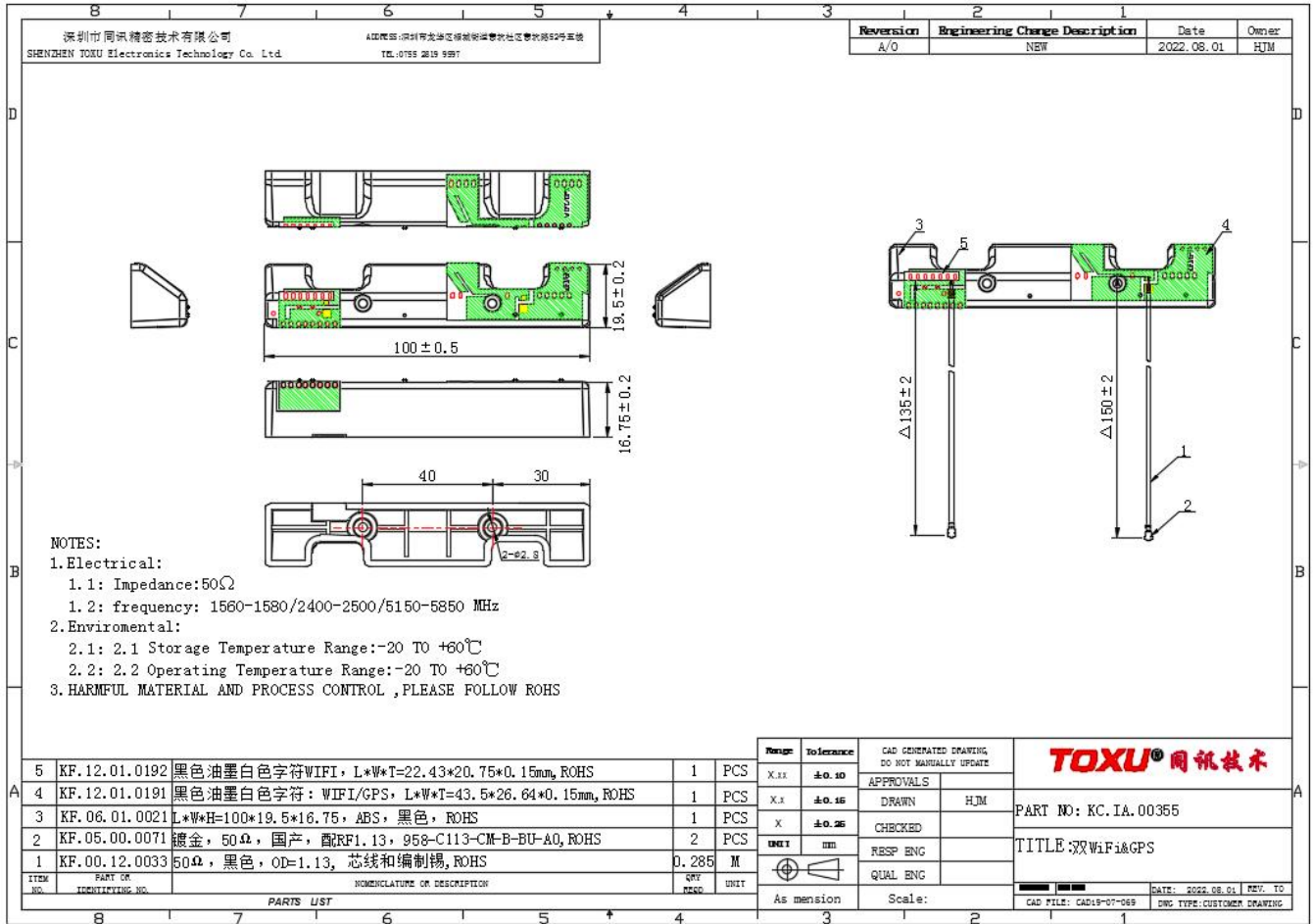


3. Mechanical Specification:

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3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



4 .Packaging specification:

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Product number: KC.IA.00355

Product model: WIFI&GPS

一、Label requirements:

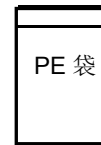
Customer	xxx		
supplier	xxxxx		
Material coding	xx		
Product model	xx		
Number	XXX PCS	Factory date	X X X
Remarks			

二、Boxing:

Job description:

1. Inner packaging:

XXpcs A bag

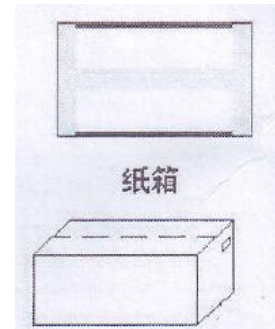


2. External packaging:

Xx PCS ;

3. Matters needing attention:

- a. Whether to add partition and pearl cotton;
- b. Label attachments, such as ROHS, etc.;



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