

KC.IA.00395 (1.02.23.0086-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..

1. 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/WIFI2.4/5.8G	1575.42/2400-2500/5150-5850

2-2. Impedance

50 ohm nominal

2-3. VSWR

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

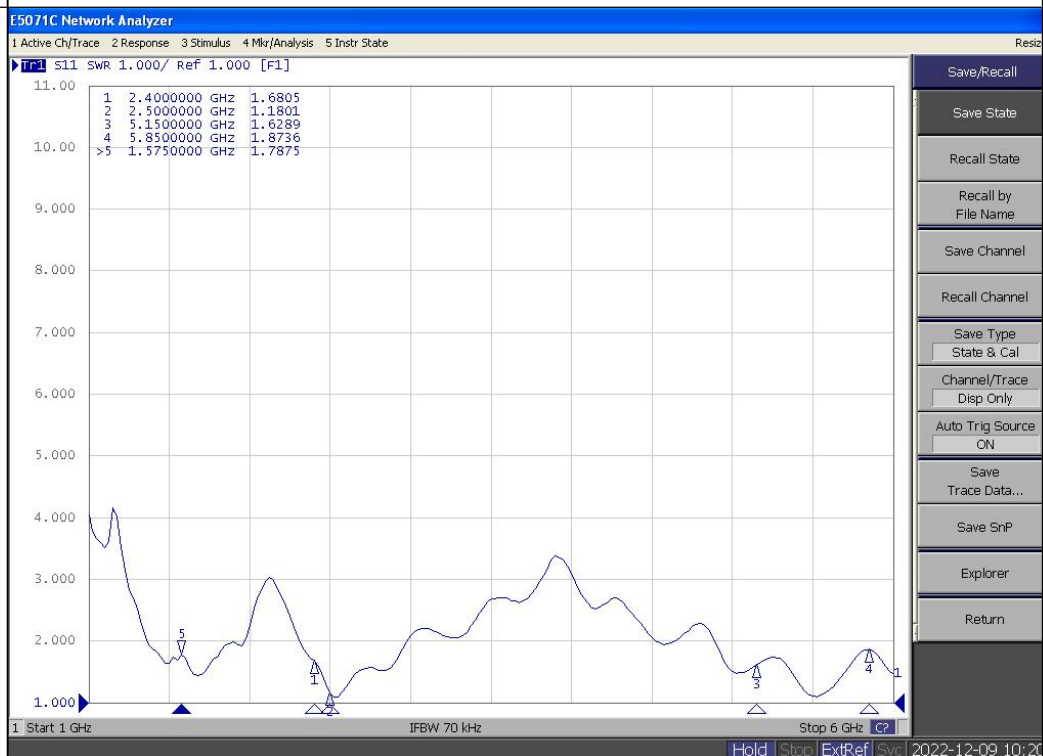
Frequency Band(MHz)	1575.42	2400	2500	5150	5850
2-3-3. Typical Value:	1.6	1.2	1.6	1.8	1.7

UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同 讯 技 术	TOXU TECHNOLOGY CO., LTD.
SCALE :	UNIT : mm		
DRAWN BY: LI	CHECKED BY: YS	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

2-3-4 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 20 cm

2-3-5 Picture



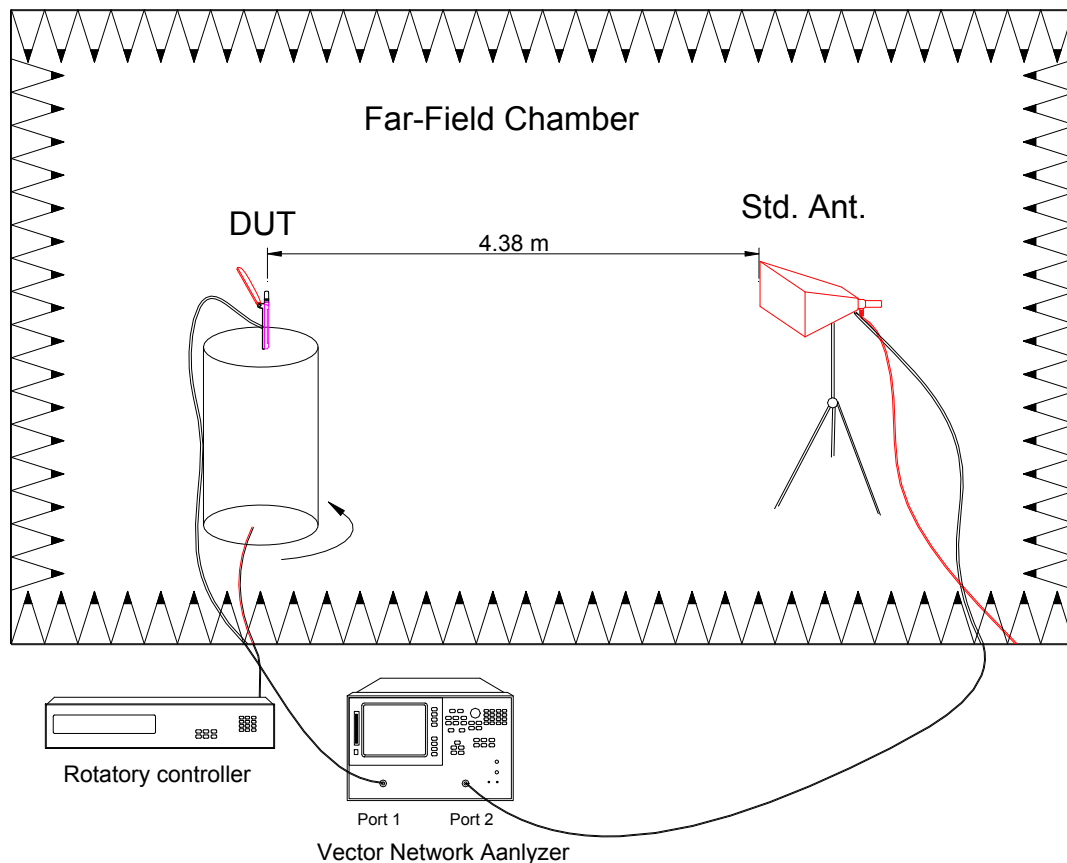
UNLESS OTHER SPECIFIED TOLERANCES ON :			TOXU TECHNOLOGY CO., LTD.
X=±	X.X=±		
ANGLES=±	HOLEDIA=±		
SCALE :	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: LI	CHECKED BY: YS		
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

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)

UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术	TOXU TECHNOLOGY CO., LTD.
SCALE :	UNIT : mm		
DRAWN BY: LI	CHECKED BY: YS	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

2-4-1 Efficiency and Gain

GPS/BD

Frequency/Mhz	MaxGain/dBi	Efficiency / %
1559	3.74	55.72
1560	3.79	57.02
1561	3.72	56.23
1562	3.68	55.59
1563	3.68	55.08
1573	3.94	54.33
1574	3.97	53.33
1575	4.02	52.84
1576	4.13	52.97
1577	4.22	53.46

WIFI2.4G

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	0.96	50.74
2410	1.61	53.45
2420	1.76	54.77
2430	1.88	52.17
2440	1.87	52.17
2450	1.5	50.18
2460	1.59	50.64
2470	1.76	50.74
2480	1.95	53.25
2490	2.51	54.57
2500	2.28	49.03

WIFI5.8G

Frequency/Mhz	MaxGain/dBi	Efficiency / %
5150	4.55	45.64
5180	3.87	45.06
5210	3.88	45
5240	3.7	45.7
5270	3.57	45.53
5300	4.23	48.44
5330	3.88	48.58
5360	4.29	50.48
5390	4.24	49.31
5420	3.39	46.49
5450	2.97	45
5480	2.36	45.35

Frequency/Mhz	MaxGain/dBi	Efficiency / %
5510	1.85	44.32
5540	2.09	46.77
5570	2.61	45.55
5600	2.99	49.77
5630	2.9	47.66
5660	2.9	48.65
5690	3.12	51.88
5720	3.57	52.91
5750	3.02	51.13
5780	3.19	52.59
5810	2.88	53.33
5840	2.9	45.94

UNLESS OTHER SPECIFIED TOLERANCES ON :
 $X=\pm$ $X.X=\pm$ $X.XX=\pm$
ANGLES $=\pm$ **HOLEDIA** $=\pm$

SCALE :

UNIT : mm

DRAWN BY: LI

CHECKED BY: YS

DESIGNED BY: De wen

APPROVED BY: YS

TOXU
同讯技术

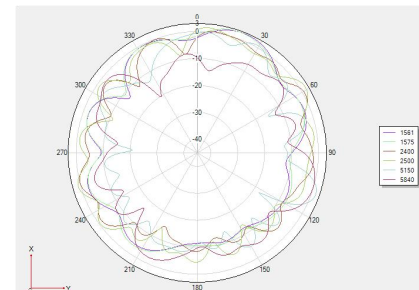
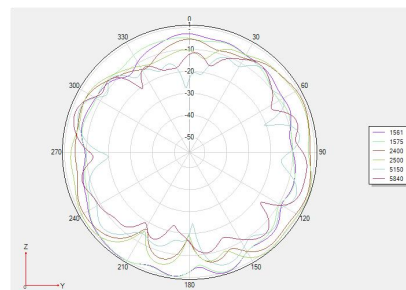
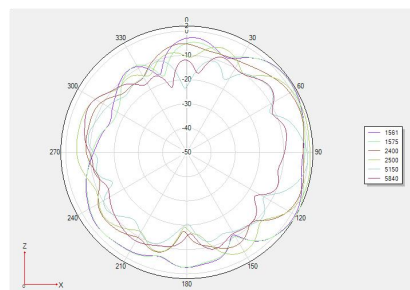
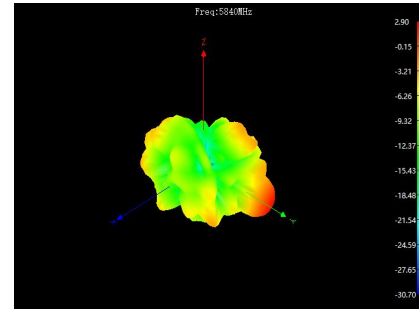
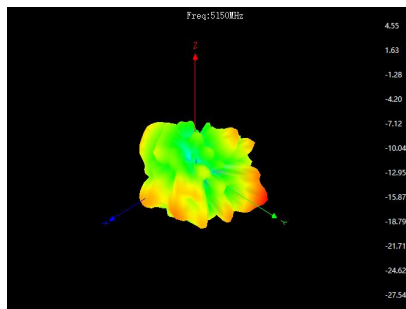
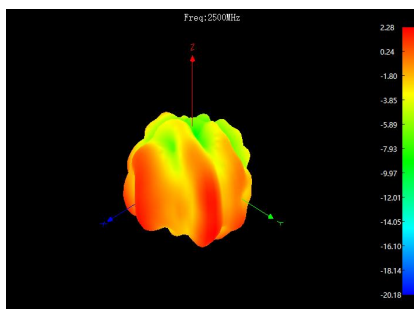
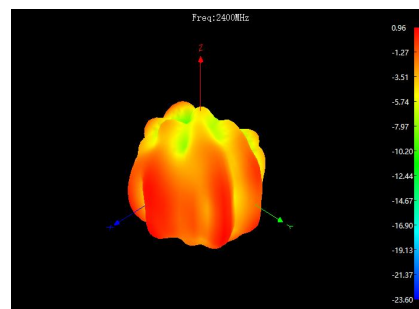
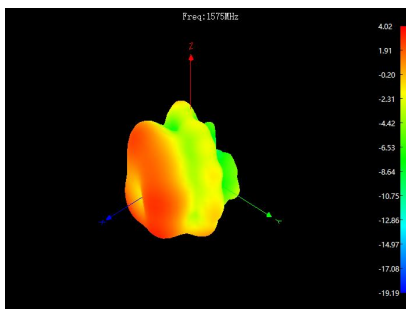
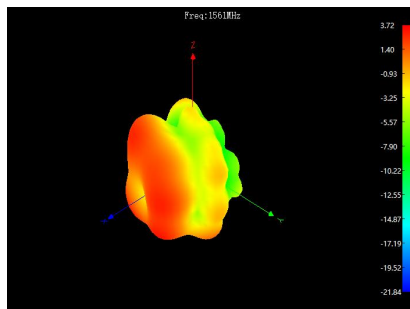
TOXU TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : KC.IA.00395 Antenna Specification

SPEC REV.

P0



UNLESS OTHER SPECIFIED TOLERANCES ON :		TOXU 同讯技术	TOXU TECHNOLOGY CO., LTD.
X=±	X.X=±		
ANGLES=±	HOLEDIA=±		
SCALE :	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: LI	CHECKED BY: YS		
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

Test scenario and antenna locatio

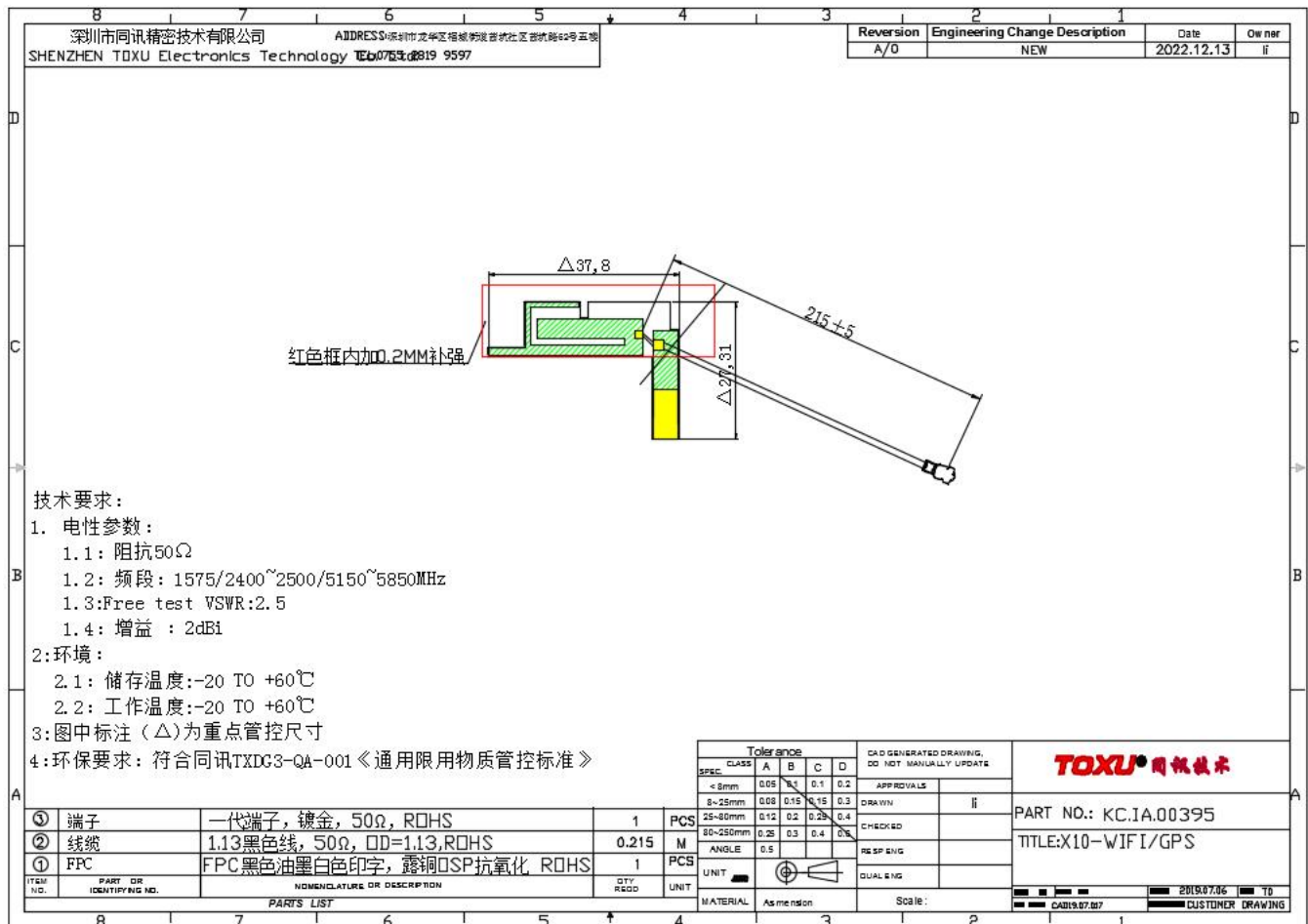


UNLESS OTHER SPECIFIED TOLERANCES ON :			TOXU TECHNOLOGY CO., LTD.
X=±	X.X=±		
ANGLES=±		HOLEDIA=±	
SCALE :	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: LI	CHECKED BY: YS		
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



3-2. Connector appearance:

IPEX

UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术	TOXU TECHNOLOGY CO., LTD.
SCALE :	UNIT : mm		
DRAWN BY: LI	CHECKED BY: YS	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00395 Antenna Specification			SPEC REV.
			P0

4. 包装规格:

产品料号: **xxx**产品型号: **xxx**

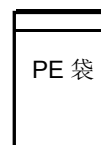
一、标签要求:

需方	xxx		
供方	xxxxxx		
物料编码	xx		
产品型号	xx		
数量/单	xxx PCS	出厂日期	x 年 x 月 x 日
备注/其他			

二、装箱要求:

作业说明:

1. 内包装:

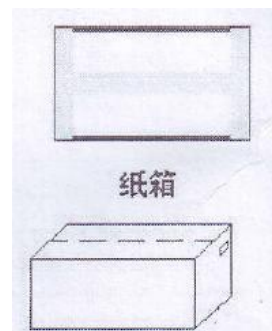
产品 **XXpcs** 一袋, 放入小 **PE** 袋;

2. 外包装:

XxPCS 一箱;

3. 注意事项:

- a. 是否要增设隔板、珍珠棉;
- b. 标签的帖附, 如 **ROHS** 等;



UNLESS OTHER SPECIFIED TOLERANCES ON :
 $X=\pm$ $X.X=\pm$ $X.XX=\pm$
 ANGLES $=\pm$ HOLEDIA $=\pm$

TOXU
同讯技术

TOXU TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN BY: LI

CHECKED BY: YS

DESIGNED BY: De wen

APPROVED BY: YS

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : KC.IA.00395 Antenna Specification

SPEC REV.

P0