

Model: KC.IA.00342 (TURBO_III_TOP)**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**

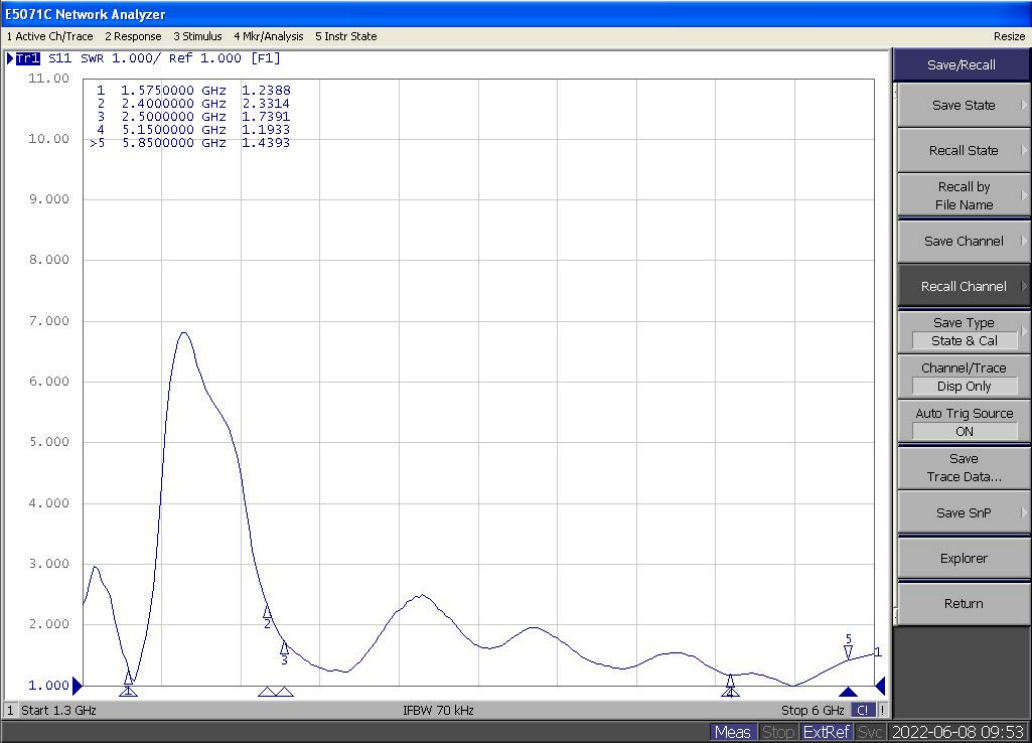
Frequency Band(MHz)	1575.42	2400	2500	5150	5850
2-3-3. Typical Value:	1.23	2.33	1.73	1.19	1.43

UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术 shenzhen Tongxun Precision 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.00342 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



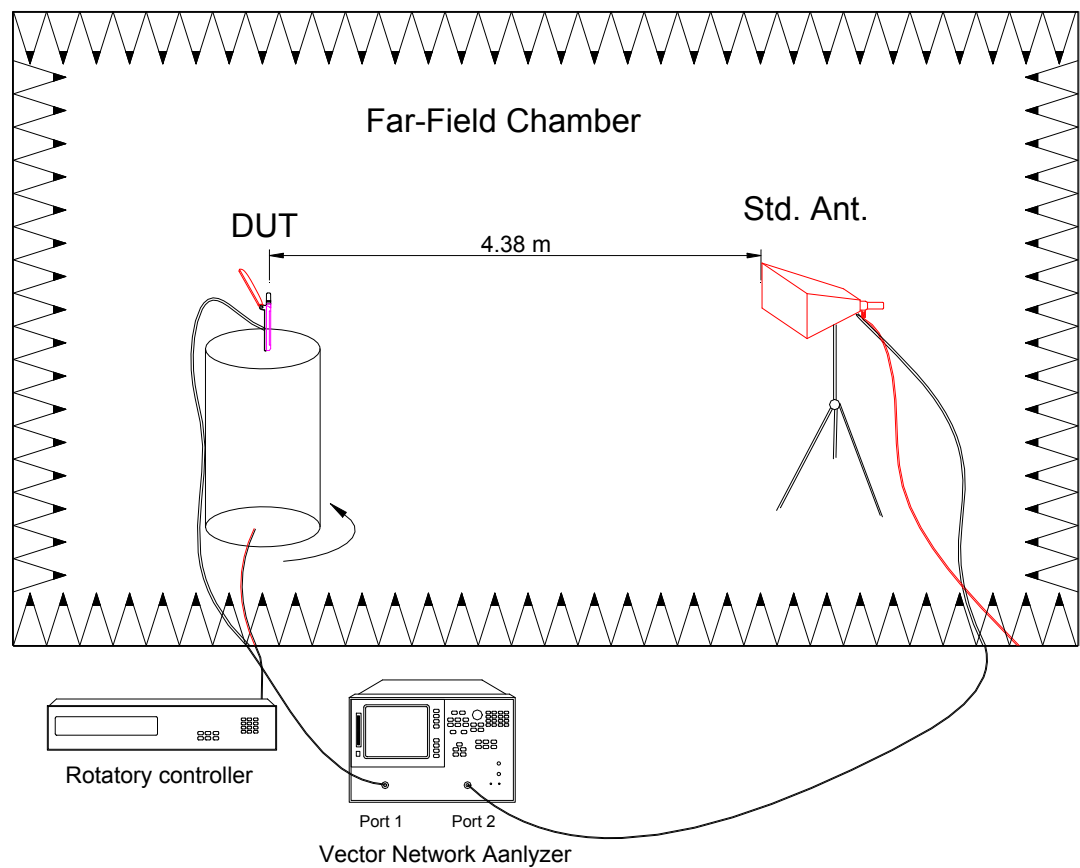
UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术 shenzhen Tongxun Precision Technology Co., Ltd	
SCALE :	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: LI	CHECKED BY: YS		
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00342 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 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)

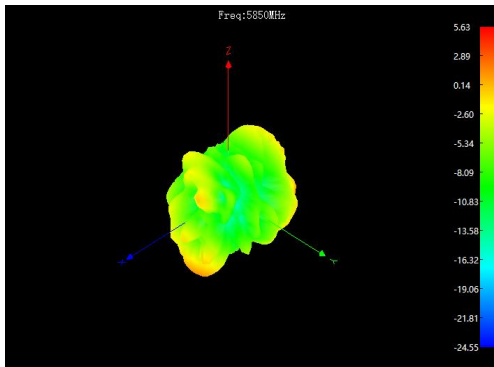
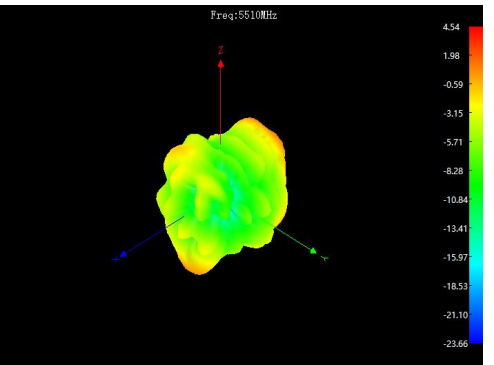
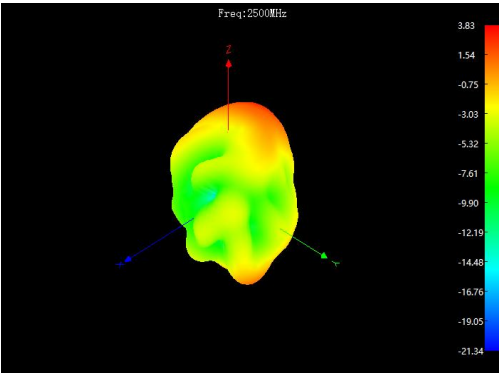
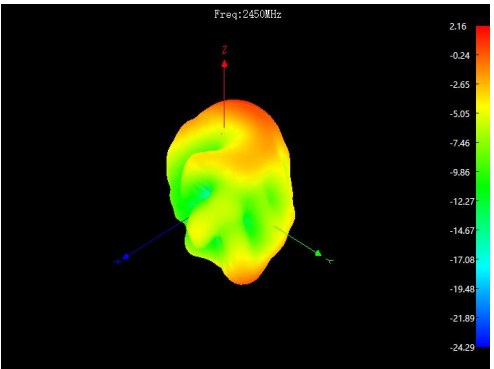
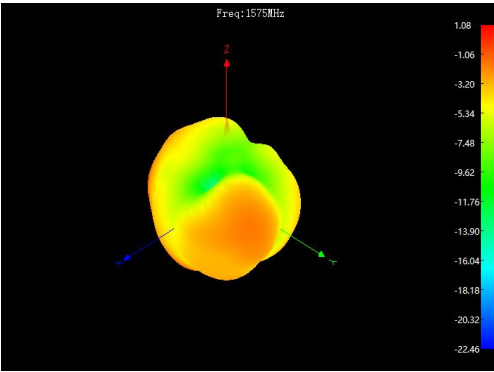
UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术 shenzhen Tongxun Precision Technology Co., Ltd	
SCALE :	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: LI	CHECKED BY: YS		
DESIGNED BY: De wen	APPROVED BY: YS		
TITLE : KC.IA.00342 Antenna Specification			SPEC REV. P0

2-4-1 Efficiency and Gain

Frequency/MHz	Efficiency / dB	MaxGain/dBi	Frequency/MHz	Efficiency / dB	MaxGain/dBi
1560	44.28	1.3	2400	40.46	1.72
1565	42.96	0.91	2410	44.16	2.11
1570	45.32	1.25	2420	42.36	1.95
1575	41.7	1.08	2430	44.36	2.15
1580	44.12	1.63	2440	48.53	2.63
1585	42.81	1.05	2450	45.6	2.16
1590	45.16	1.29	2460	52.36	3.09
1595	43.19	0.55	2470	50.93	2.71
1600	43.96	1.27	2480	57.94	3.64
1605	42.28	0.41	2490	56.23	3.12
			2500	61.38	3.83

Frequency/MHz	Efficiency / dB	MaxGain/dBi	Frequency/MHz	Efficiency / dB	MaxGain/dBi
5150	53.58	3.3	5510	59.02	4.54
5170	54.95	3.39	5530	58.88	4.57
5190	54.08	3.28	5550	57.94	4.59
5210	54.95	3.3	5570	57.15	4.6
5230	54.7	3.28	5590	58.34	4.73
5250	54.08	3.31	5610	59.16	4.78
5270	52.36	3.22	5630	58.75	4.85
5290	54.45	3.33	5650	58.61	4.94
5310	54.2	3.27	5670	57.81	5.1
5330	55.08	3.34	5690	55.59	5.06
5350	57.41	3.57	5710	58.61	5.42
5370	57.41	3.72	5730	58.21	5.49
5390	53.33	3.56	5750	56.1	5.46
5410	56.36	3.81	5770	54.45	5.49
5430	57.41	3.88	5790	53.33	5.46
5450	59.29	4.14	5810	53.58	5.53
5470	59.43	4.28	5830	54.2	5.58
5490	59.84	4.46	5850	54.7	5.63

UNLESS OTHER SPECIFIED TOLERANCES ON : $X=\pm$ $X.X=\pm$ $X.XX=\pm$ ANGLES $=\pm$ HOLEDIA $=\pm$		TOXU 同讯技术 shenzhen Tongxun Precision 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.00342 Antenna Specification			SPEC REV.
			P0



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
shenzhen Tongxun Precision 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

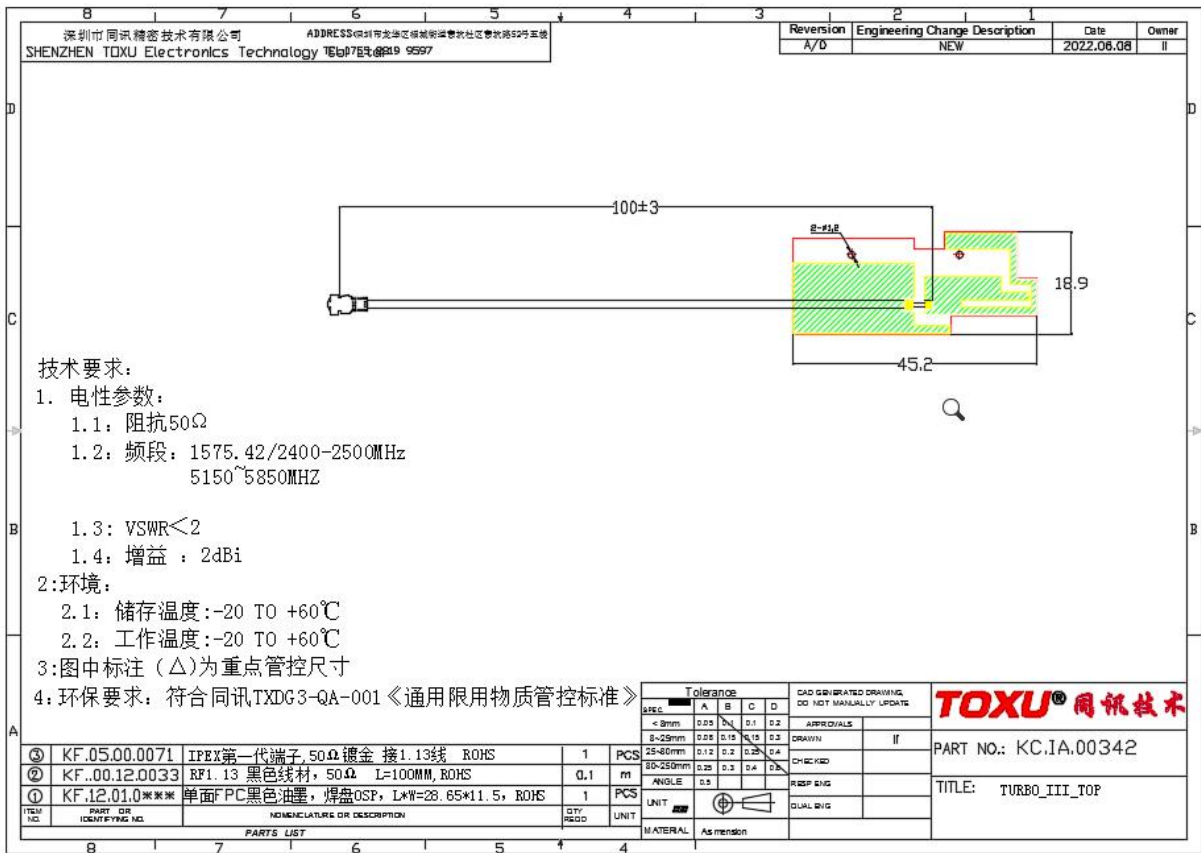
TITLE : KC.IA.00342 Antenna Specification

SPEC REV.
P0

3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



UNLESS OTHER SPECIFIED TOLERANCES ON :
X=± X.X=± X.XX=±

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

DRAWN BY: LI CHECKED BY: YS

DESIGNED BY: De wen APPROVED BY: YS

TITLE : KC.IA.00342 Antenna Specification

TOXU 同讯技术

shenzhen Tongxun Precision Technology Co., Ltd

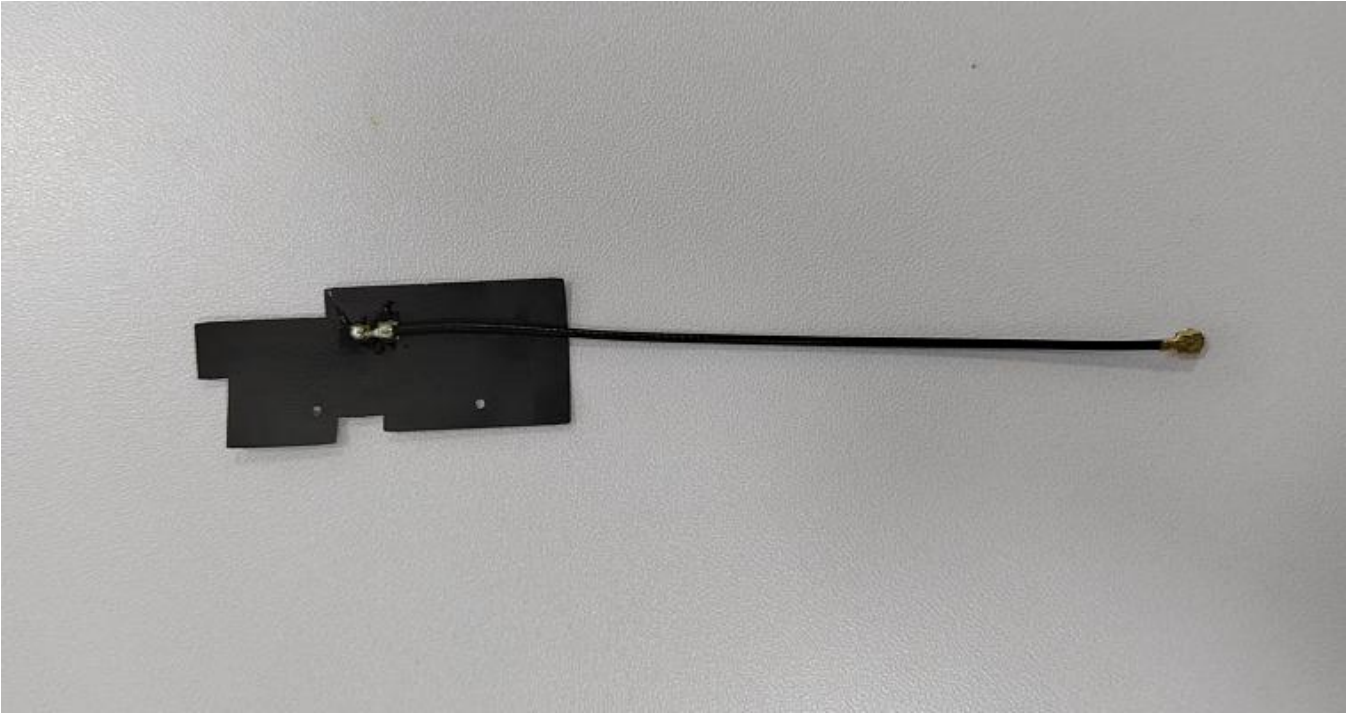
THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

SPEC REV.
P0

3-2. Connector appearance:

IPEX

3-3. Product picture:



UNLESS OTHER SPECIFIED TOLERANCES ON : X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±		TOXU 同讯技术 shenzhen Tongxun Precision Technology Co., Ltd	
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.00342 Antenna Specification			SPEC REV.
			P0