KC.IA.00487(T77)

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	2400-2500/5150-5850MHz

2-2. Impedance

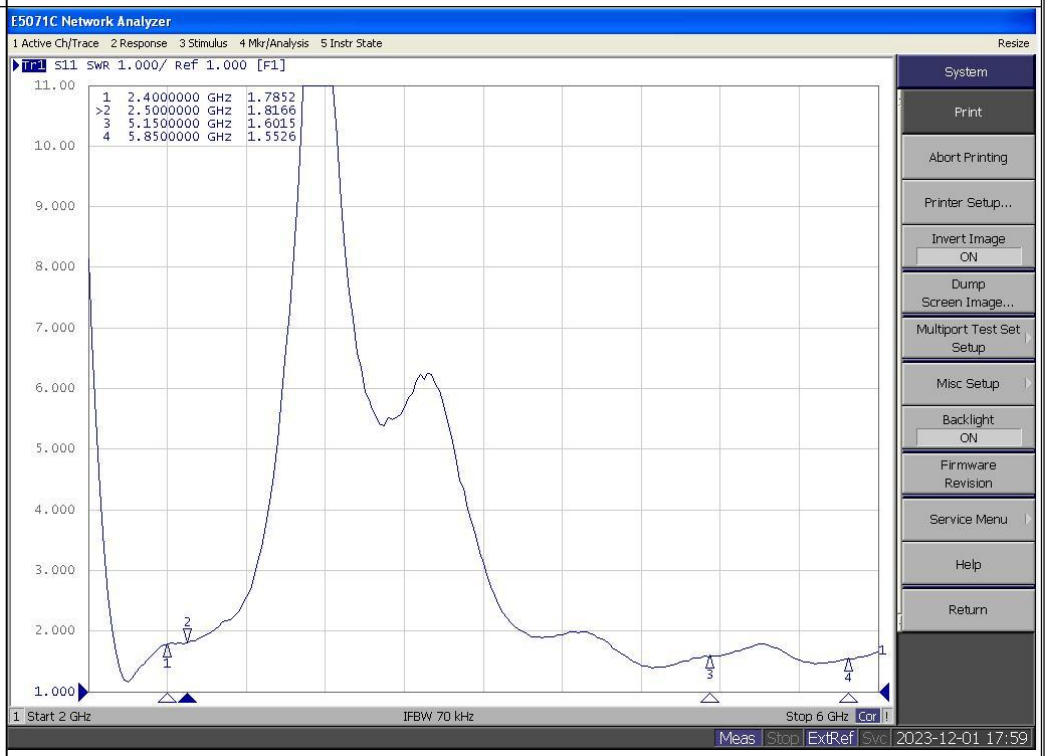
50 ohm nominal

2-3. VSWR

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

Frequency Band(MHz)	2400	2500	5150	5850
Typical Value:（VSWR）	1.7	1.8	1.6	1.5

2-4.Antenna type:FPC Antenna

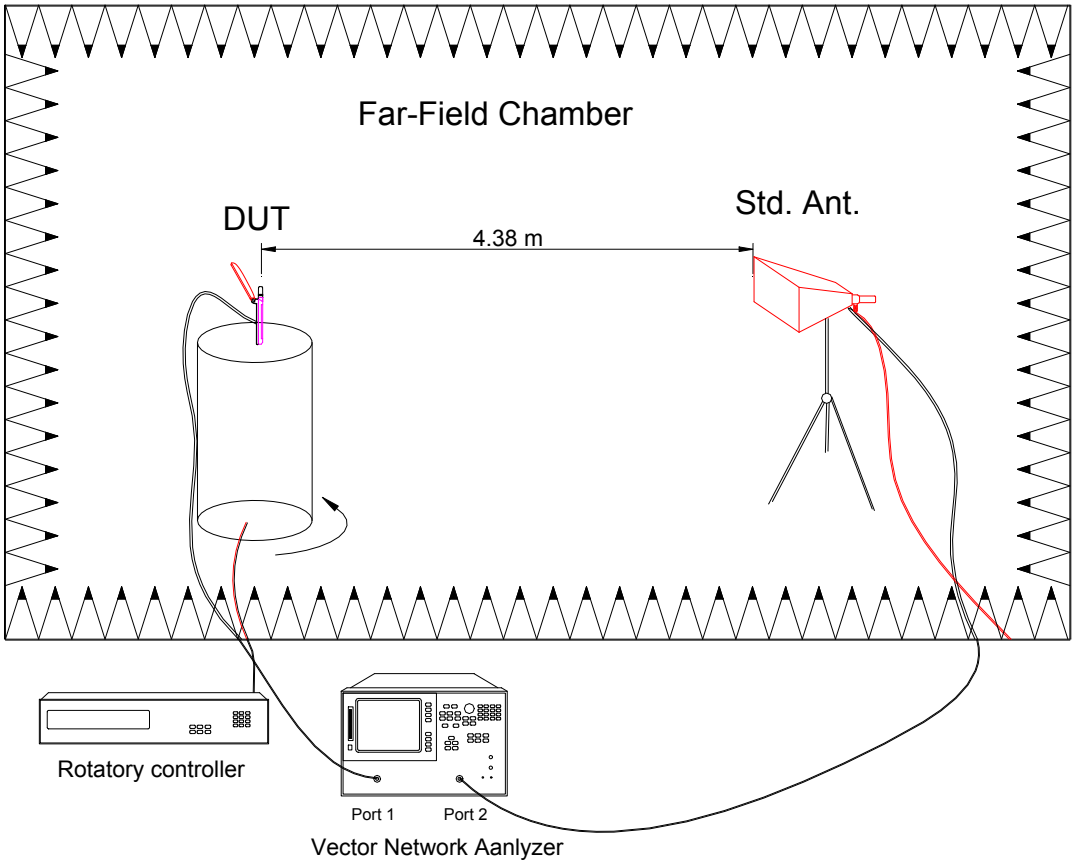
2-3-4 Measuring Method	1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm
2-3-5 Picture	

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

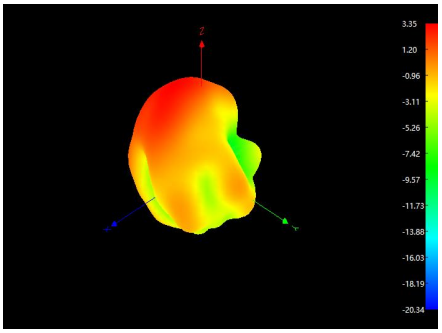
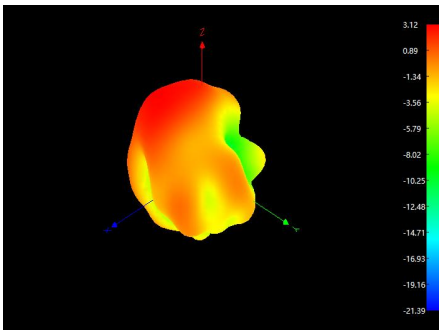
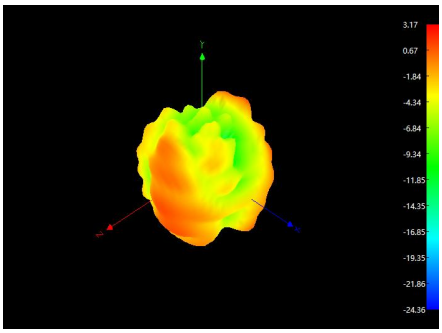
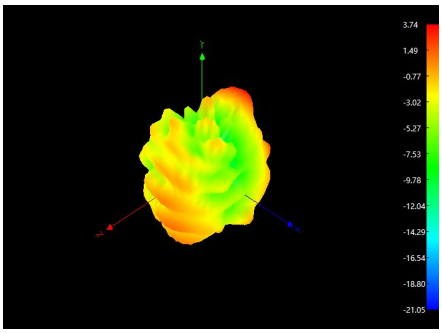
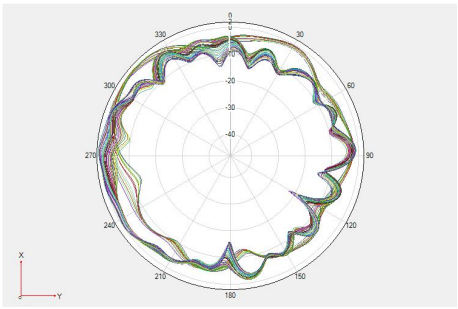
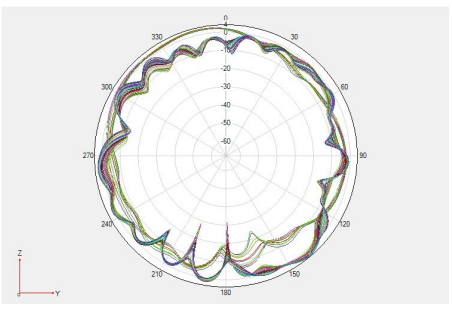
4-5.2 Chamber definition



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)

2-4-1 Efficiency and Gain and 3D Date

Freq (MHz)	Effi (%)	Gain (dBi)
2400	52.71	3.35
2450	51.54	3.42
2500	51.27	3.12
5150	54.33	3.87
5500	49.55	3.27
5700	50.97	3.23
5850	49.71	3.74

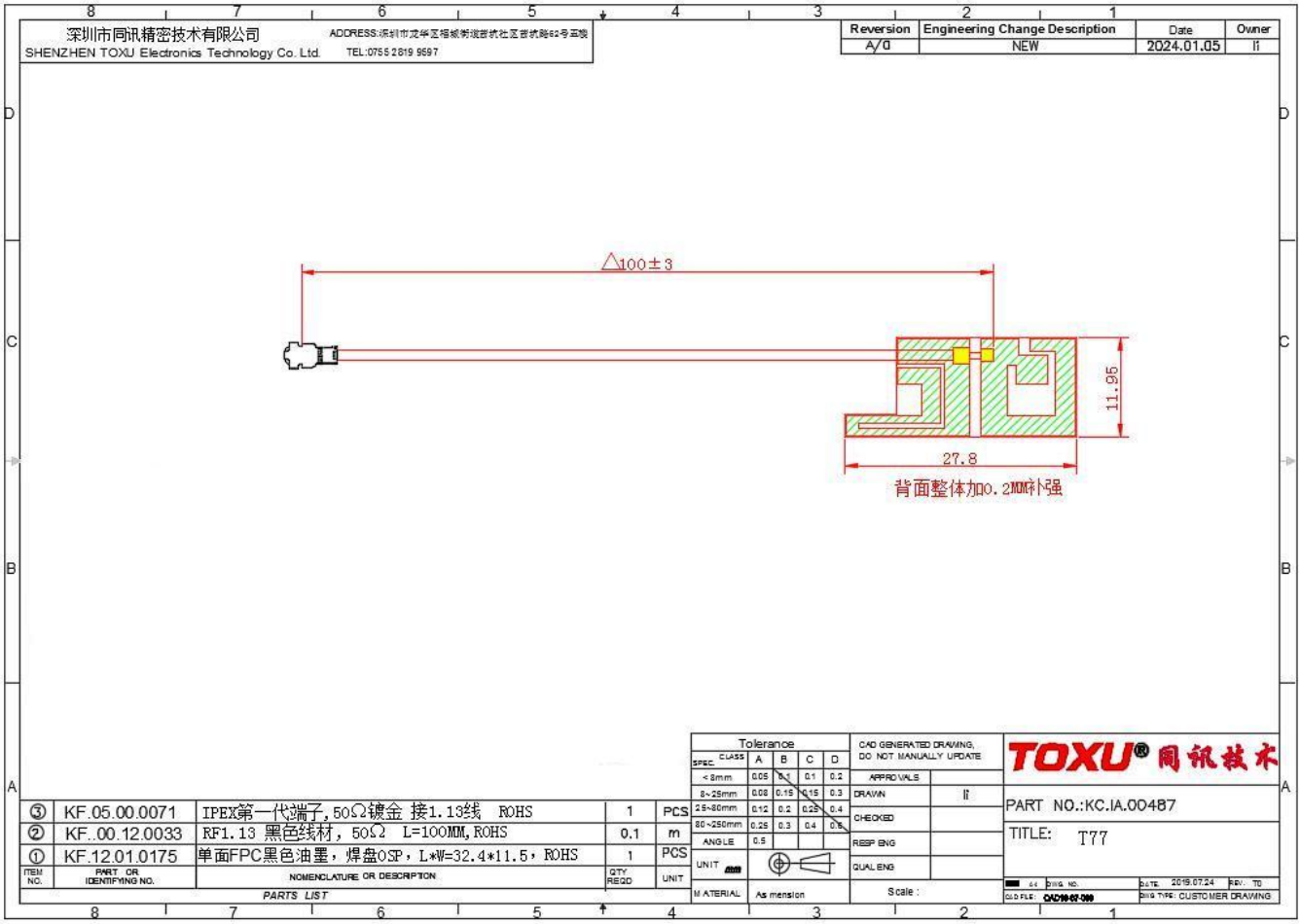







Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Max	Min	Total	参考标准
TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	1	2412	18.64	3.21	14.5	≥14
TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	19.09	4.97	15.66	
TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	-72.75	-86.84	-83.46	≤-81
TRP	Every30	Every30	WIFI (AP)	WIFI_G (54M)	1	2412	16.39	0.72	11.99	≥12
TRP	Every30	Every30	WIFI (AP)	WIFI_G (54M)	11	2462	16.44	2.28	13.13	
TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_G (54M)	11	2462	-60.84	-75.07	-71.7	≤-71
TRP	Every30	Every30	WIFI (AP)	WIFI_N_ISM (65M)	1	2412	16.84	1.14	12.43	
TRP	Every30	Every30	WIFI (AP)	WIFI_N_ISM (65M)	11	2462	14.66	-3.35	11.83	≥11
TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_N_ISM (65M)	11	2462	-56.75	-71.22	-67.83	≤-67

3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



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DESIGNED BY: De wen	APPROVED BY: YS	
TITLE：KC.IA.00487 Antenna Specification		SPEC REV. P0

4 .Packaging specification：

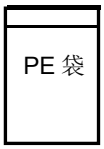
Product number： xxxxx			
Product model： xxxxx			

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：

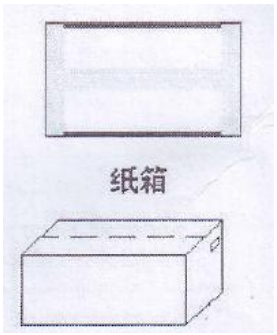


1. Inner packaging：

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.；