### TKSR6

# **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
WIFI/BT/GPS	2400-2500

#### 2-2. Impedance

50 ohm nominal

#### 2-3. VSWR

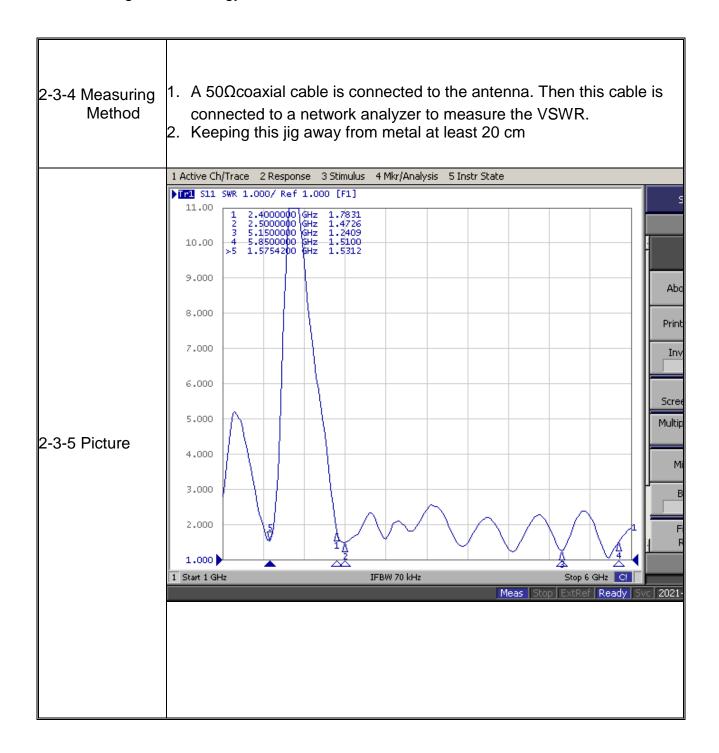
#### 2-3-1. Measurement frequency points and VSWR value

Frequency Band(MHz)	1575.42	2400	2500
2-3-3. Typical Value:	1.78	1.47	1.24

#### 2-3-2. VSWR

Frequency Band(MHz)	1575.42	2400	2500
2-3-3. Typical Value:	<b>≤</b> 2	≤2	≤2

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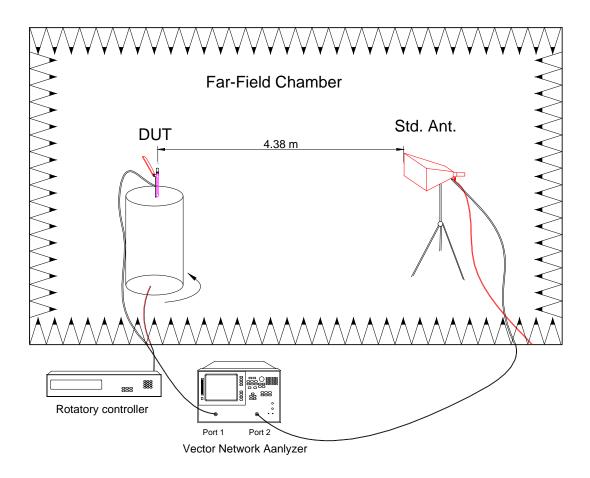
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#### 2-4. Efficiency and Gain

#### 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



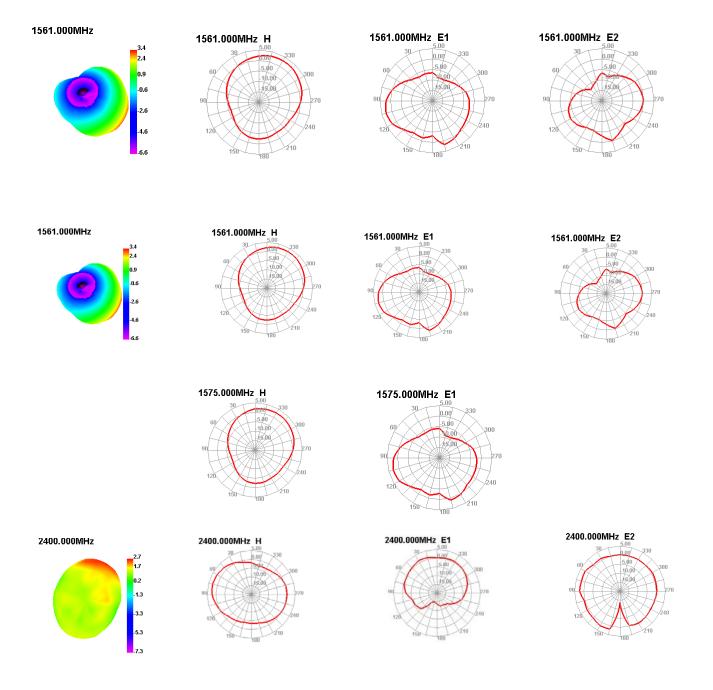
- 1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
- 2. The quite room region is 40cmx40cmx40cm at the center of rotator
- 3. The distance between DUT and standard antenna is 4.38 m
- 4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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# Shenzhen KingRF Technology Co.,ltd 2-4-1 Efficiency and Gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
(1711 12)			
1573	59. 04	-2. 29	0.91
1574	59. 38	-2. 26	0.82
1575	60. 05	-2. 21	0.71
1576	60. 96	-2. 15	0.89
1577	62. 03	-2. 07	0.98
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	53. 36	-2. 73	0.89
2410	68. 27	-1. 66	0.98
2420	58. 85	-2. 3	0.89
2430	70. 06	-1. 55	0.88
2440	55. 38	-2. 57	0.97
2450	59. 1	-2. 28	0.95
2460	61. 69	-2. 1	0.96
2470	65. 68	-1. 83	0.98
2480	68. 03	-1.65	1.00
2490	70. 09	-1. 54	0.89
2500	62. 63	-2. 03	0.88

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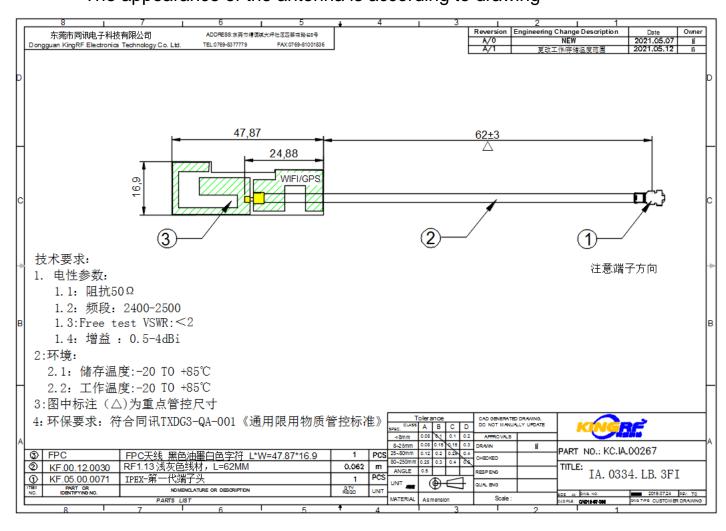


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# 3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



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# 3-2. Connector appearance: IPEX-1

# 3-3. Product Image:



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