

Antenna Performance Test Specification

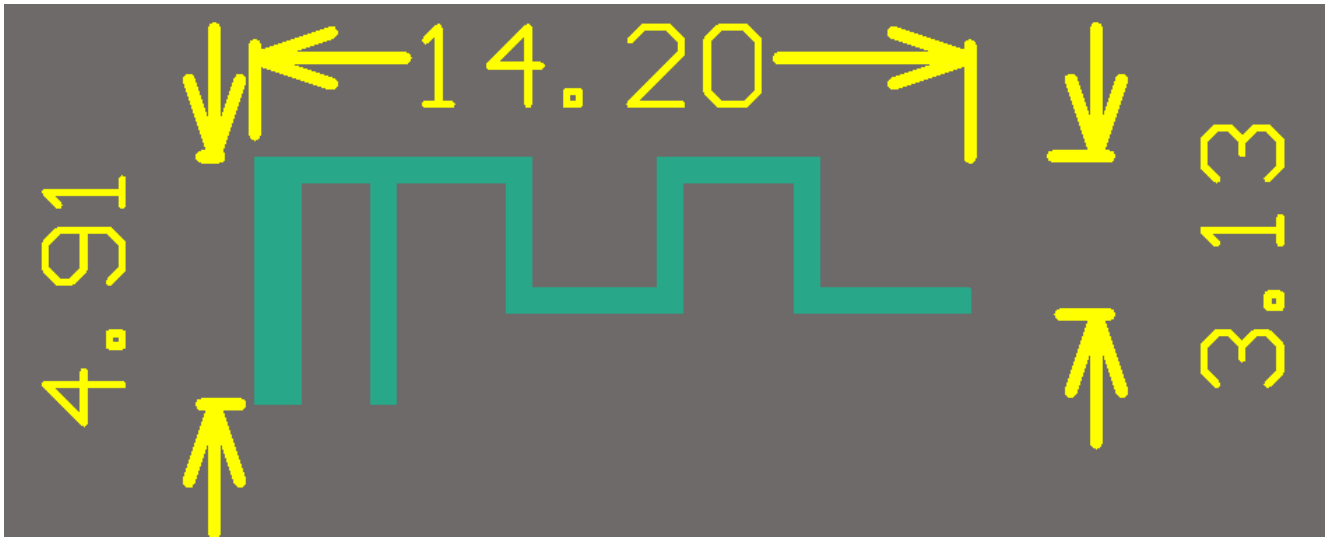
Company Name: Shenzhen Huaxin Antenna Technology Co., Ltd.
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16 Langshan Road, North Zone of Science and Technology Park,
Nanshan District, Shenzhen City, Guangdong Province, China

Applications

※Bluetooth Home RF

※ISM band 2.4GHz applications

1. Dimensions



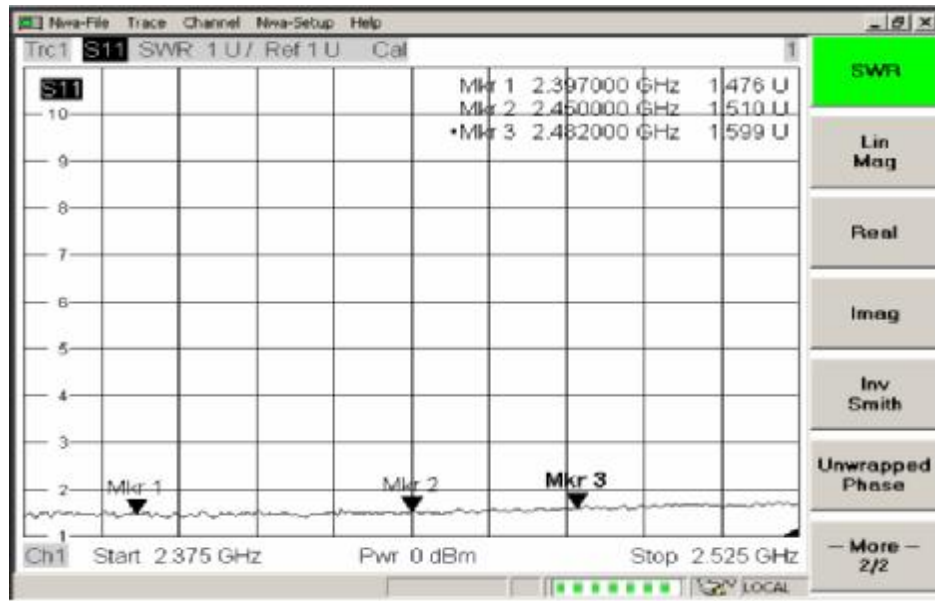
2. Specifications

number	Item	Specifications
1	Working Central Frequency	2441 MHz
2	Band Width	(2402-2480)MHz
3	Gain	3dBi
4	VSWR	≤2.0
5	Antenna type	PCB antenna
6	Azimuth Beam width	Omni - directional
7	Impedance	50 欧姆
8	Modulation mode	GFSK

3. Instrument testing, software simulation parameters

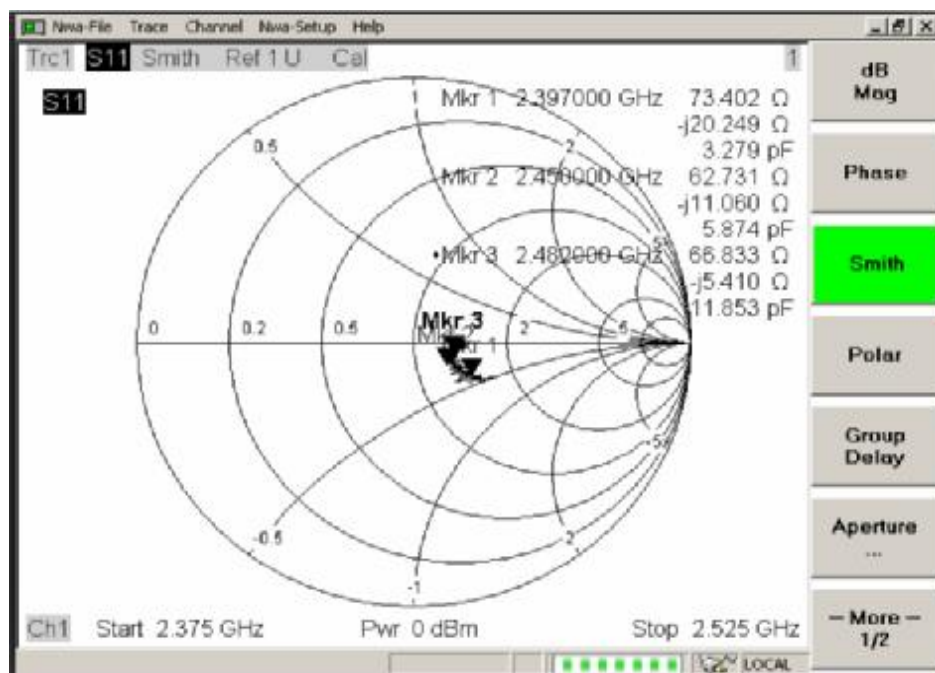
① VSWR

Mkr1: 2397MHz 1.47 Mkr2: 2450MHz 1.51 Mkr3: 2482 MHz 1.59



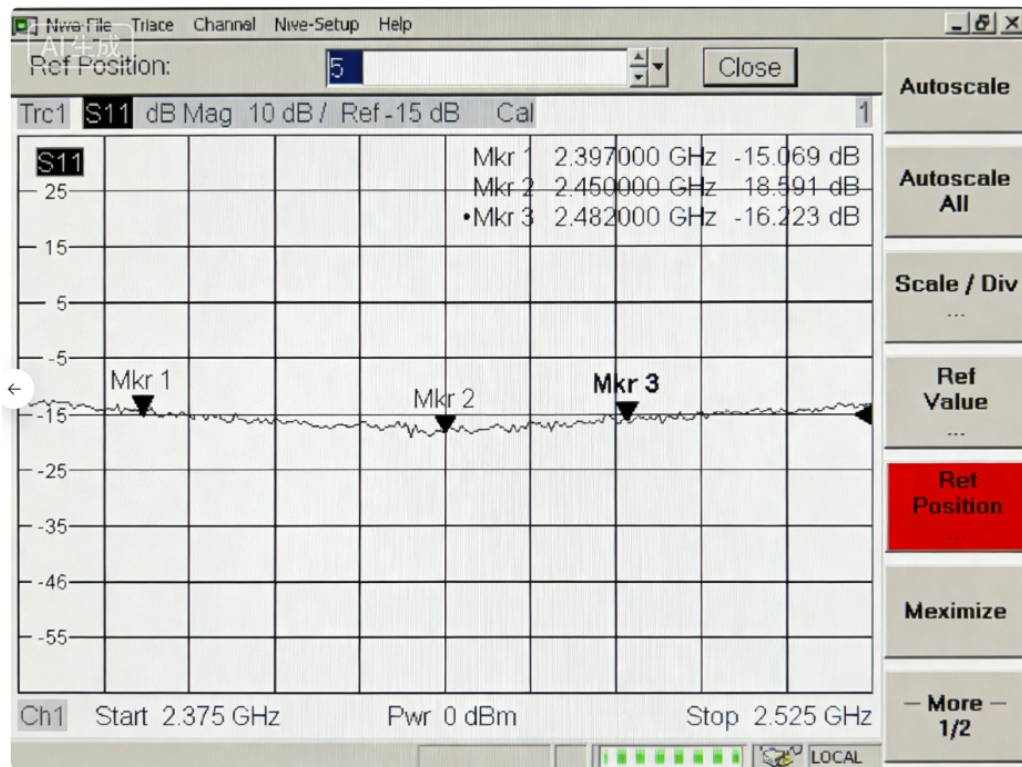
② Smith Char

Mkr1: 2397MHz 73.4 Mkr2: 2450MHz 62.7 Mkr3: 2482MHz 66.8



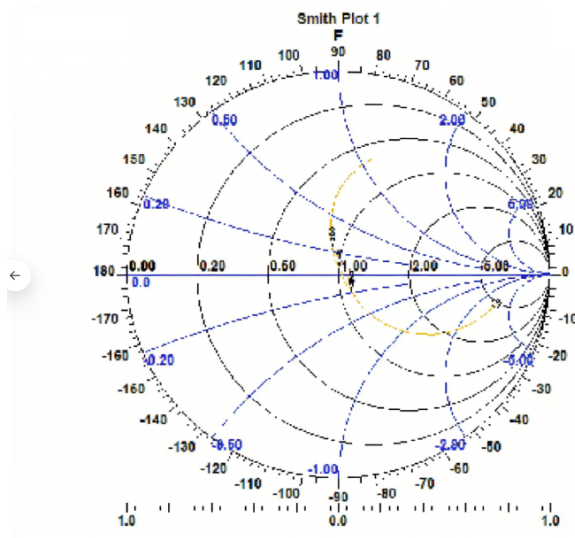
③Return Loss

Mkr1: 2397MHz -15 Mkr2: 2450MHz -18 Mkr3: 2482 MHz -16



④Smith Char simulation

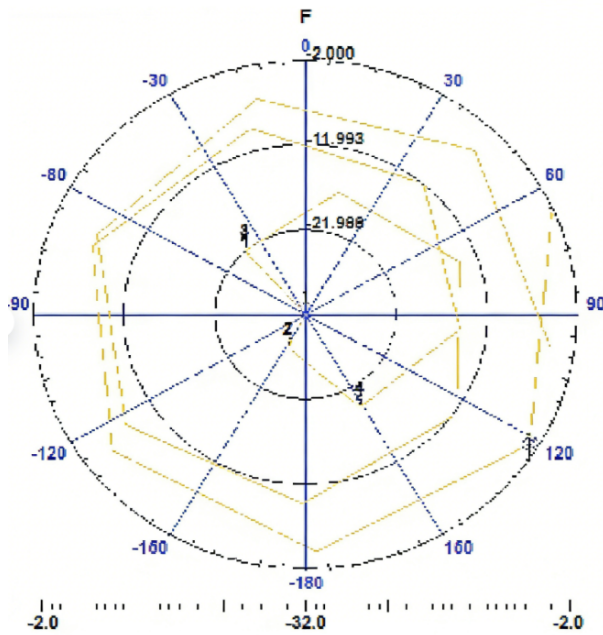
Mkr1: 2400MHz 1.234 Mkr2: 2500MHz 1.051 Mkr3: 2600MHz 1.322



⑤Return Loss simulation

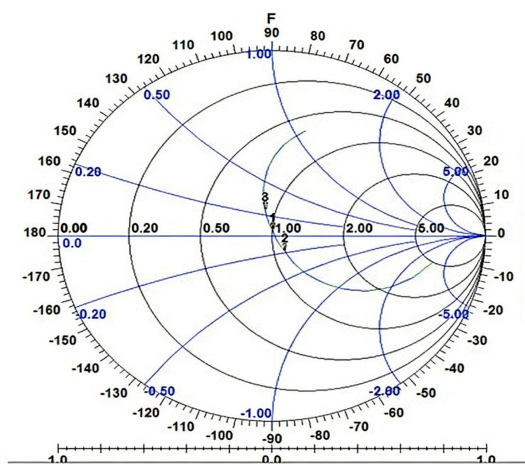
Mkr1: 2400MHz -19.59 Mkr2: 2450MHz -27.70 Mkr3: 2500MHz -31.97

Mkr4: 2550MHz -21.83



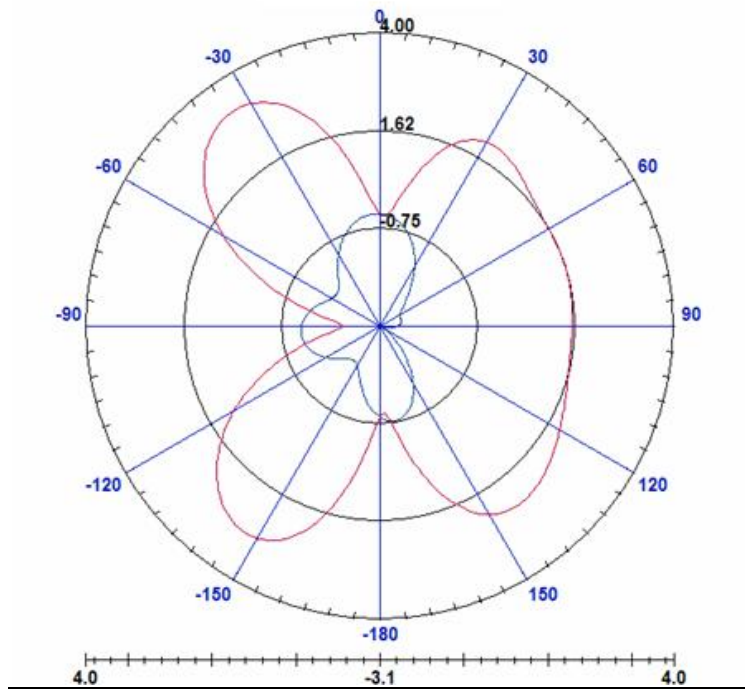
⑥Phase simulation

Mkr1: 2400MHz -54.89 Mkr2: 2500MHz -82.03 Mkr3: 2600MHz -102.6

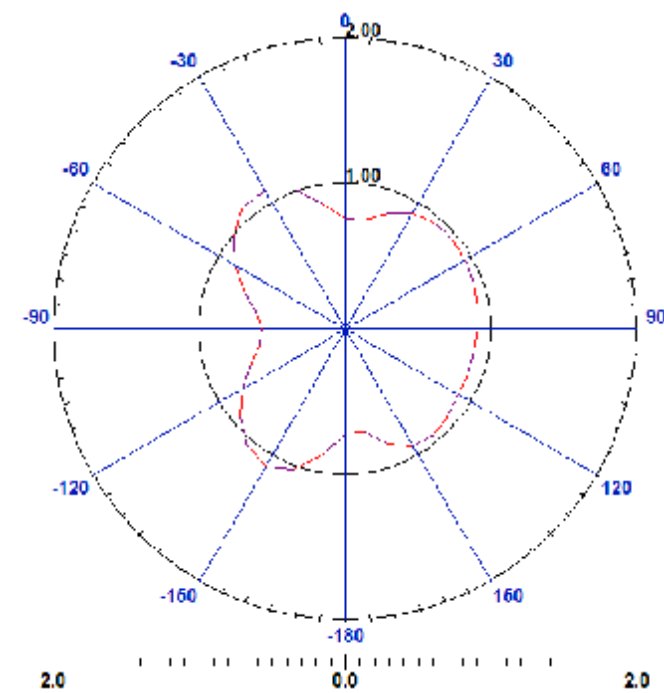


4. Radiation Patterns

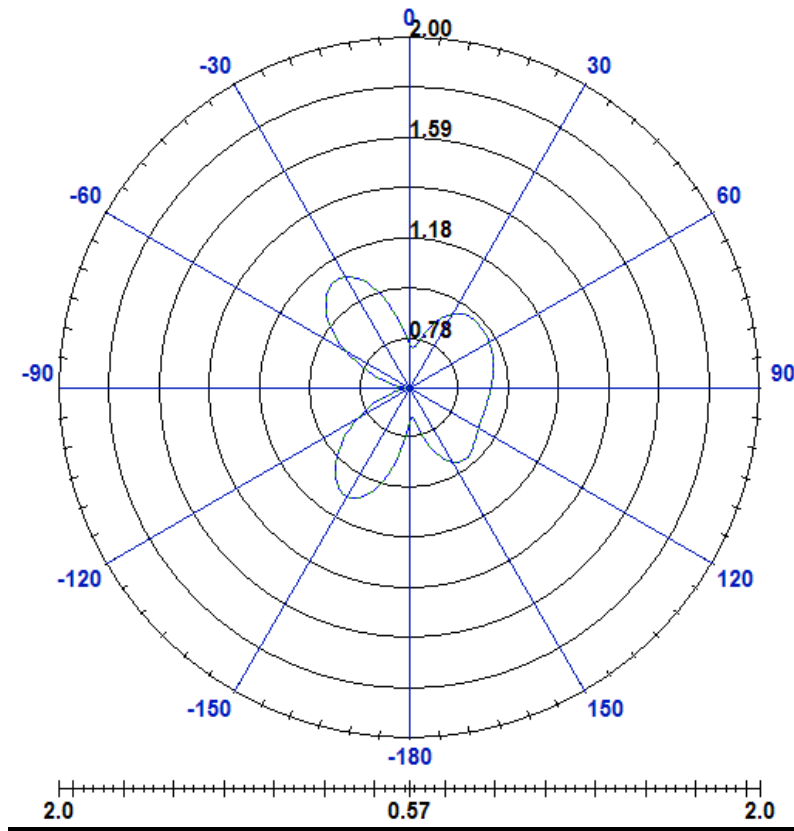
XY-plane



XZ-plane



YZ-plane



3D Radiation field pattern diagram

