



## SPECIFICATION

Shenzhen DreamLNK Technology Co.,Ltd.

# Shenzhen Junye Technology Co., Ltd.

Shenzhen DreamLNK Technology Co., Ltd.

## 2400-2500MHz (FPC) antenna

### Product Specification Sheet

Guest		Frequency	2400MHz~2500MHz
Wire name		Version	<b>A1</b>
Customer part number		Junyue part number	<b>F6-2.4G</b>
Jun Ye Number			
RF Design	<b>James wang</b>	Radio Frequency Manager	<b>Knight Ai</b>
Structural design		Structural Manager	
Chief Technology	Officer (CTO)	Sun. period	<b>2016-03-12</b>

Customer confirmation:

Does the assembly meet your company's requirements?  OK  NG

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Seal      Surface 1

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## I. Product Images

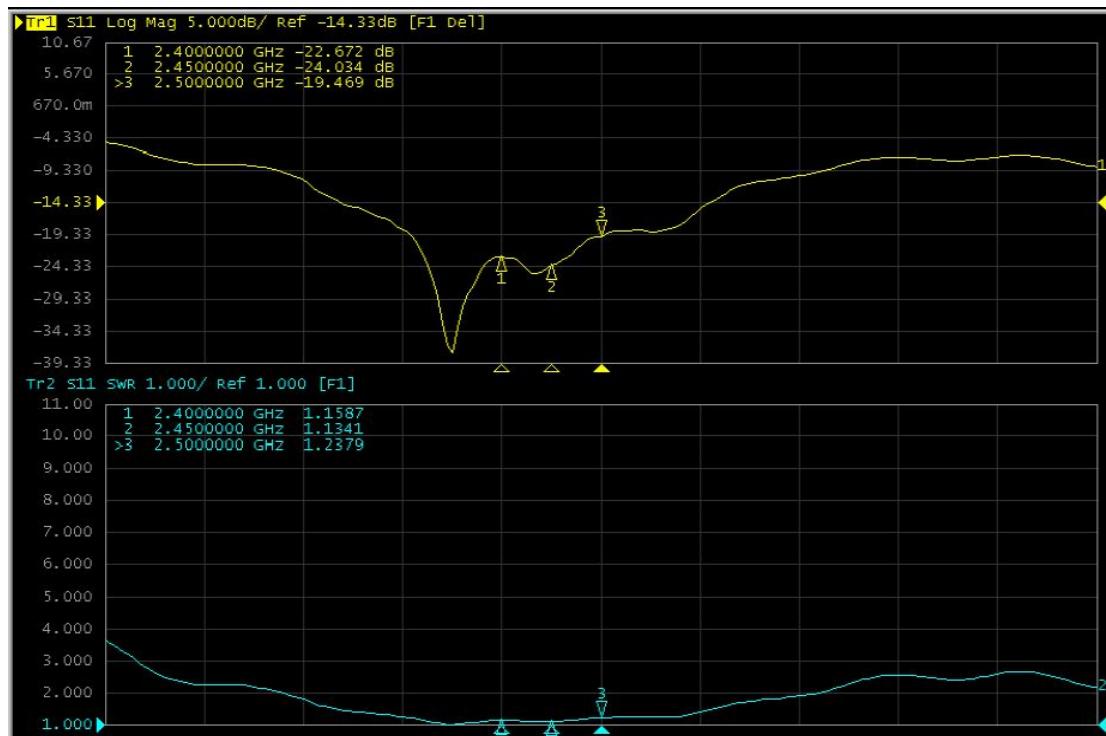


## II. Product Parameters

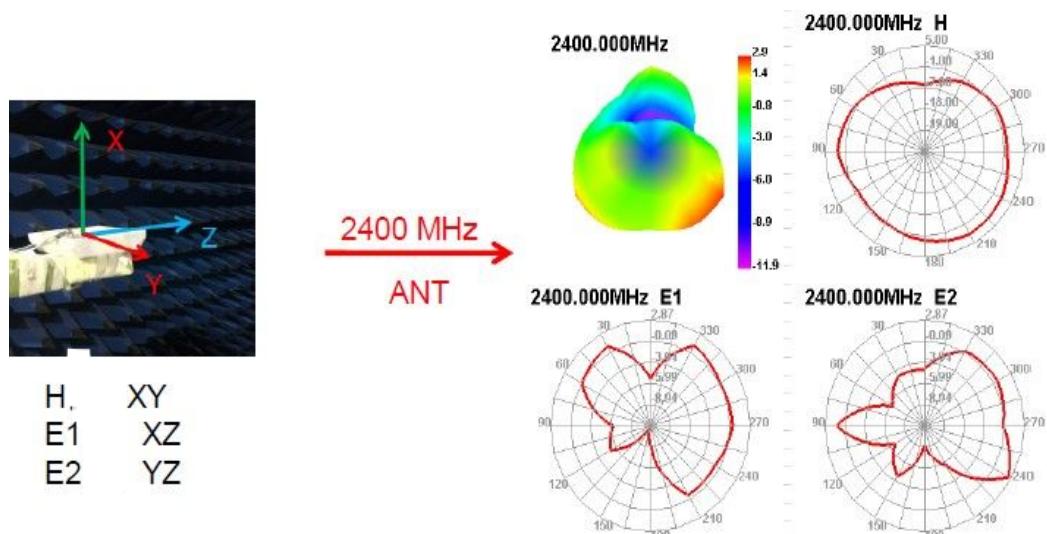
Product testing parameters			
Product Name (Name)	<b>FPC</b> built-in antenna	Product Model Type	F06-2.4G
Electrical Specifications			
Frequency Range	2400-2500 MHz	Polarization: Vertical	
Input impedance (Impedance)	50 ohms	Radiation direction	omnidirectional
Voltage Standing Wave Ratio (VSWR)	Less than or equal to 1.3	Maximum Admitted Power	1W
Gain	3 dBi ± 0.5	Bandwidth	135/46MHz
Connector type	Welding wire		
Mechanical indicators (Mechanical Specifications)			
尺寸 (Dimensions)	34.3 by 9.5 millimeters	Material (Antenna cover)	FR-4
Connector model (Connector)	Welding wire	Lead length (Cable Length)	130±3mm
Working Temperature	-20°C to +70°C	Storage temperature (Limit Temperature)	-40°C to +85°C

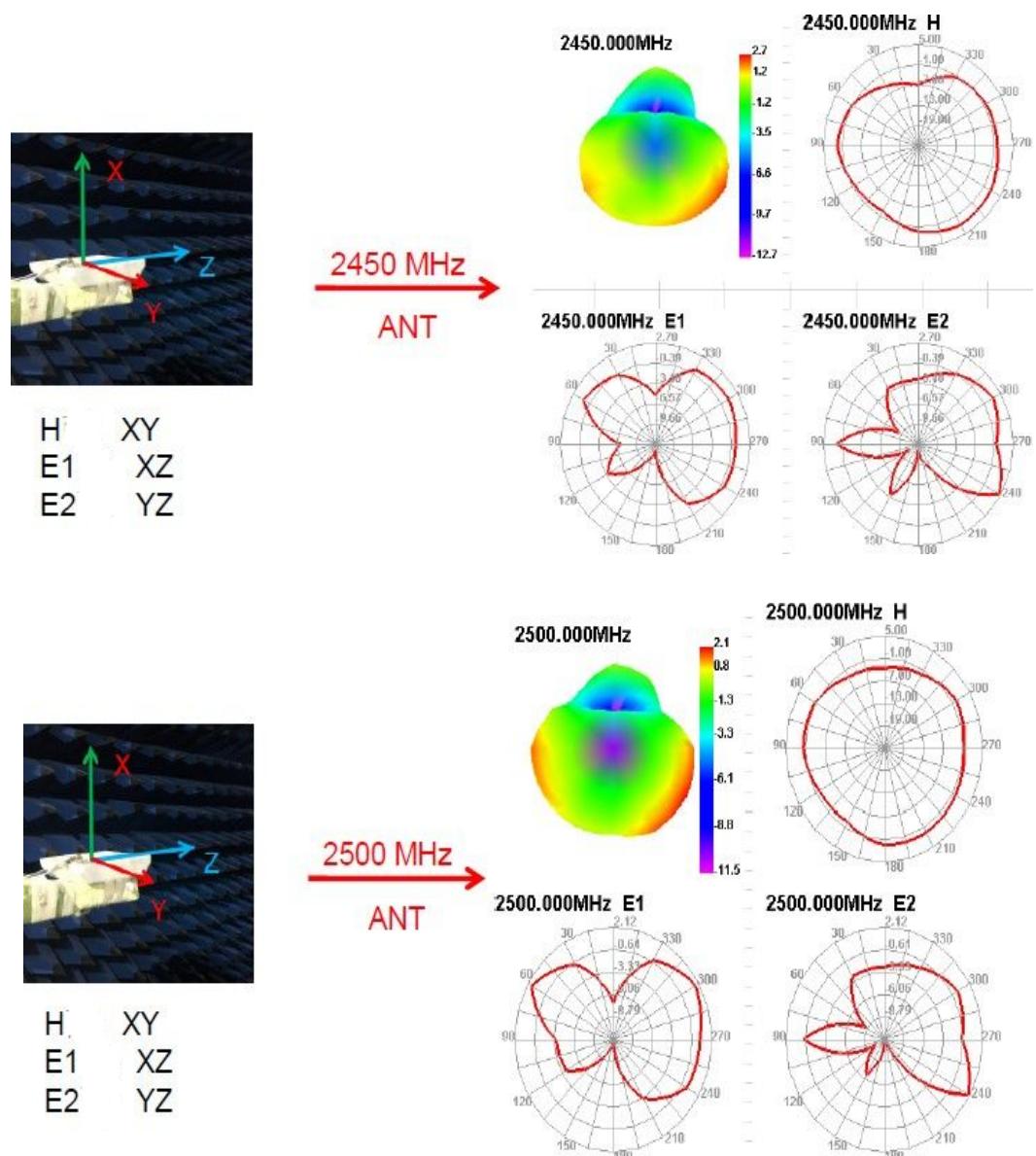
### III. S11 (VSWR, Return Loss, Smith Chart) Data

#### 3.1 : Network Analyzer Test Report

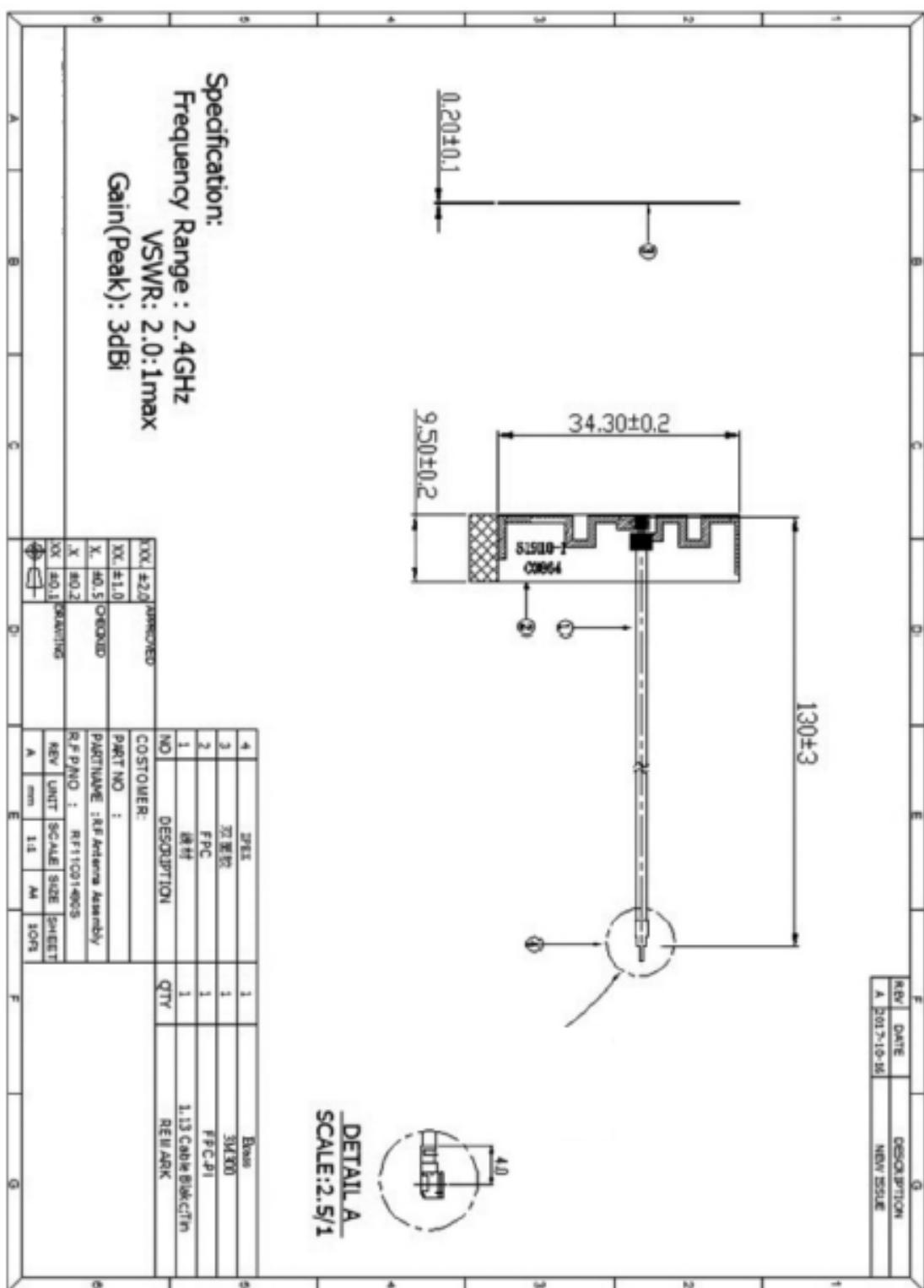


3.2: Darkroom 2D and 3D Radiation Pattern





#### IV. Structural Drawings



During the antenna design process, the placement, angle, distance from the ground plane, and height from the PCB substrate of the spring antenna should be determined in combination with the product's external shape and structure, the location of the RF module's signal input and output interfaces, and the location of internal interference sources. Reserve a  $\pi$ -type network for antenna matching. When debugging the antenna, please provide the entire product shell and internal PCBA functional board to calculate external interference sources and parasitic capacitance into the matching process to achieve the best performance and working efficiency of the antenna. The left figure is a side view, and the right figure is a top view. The PCB trace width of the matching network should be 0.5mm, and the ground plane on both sides of the network should be 0.35mm apart to maintain good impedance characteristics. If you have any questions, please email to [support@dreamlnk.com](mailto:support@dreamlnk.com) or send the PCB file to this email address or contact the FAE.

## V. Environmental Performance Testing

Project	Test conditions	Specification
Storage environment	When not specified, the test conditions for temperature, humidity and air pressure are as follows: 1. Temperature: -30°C to +80°C 2. Relative humidity: 45% to 85% 3. Air pressure: 86kPa to 106kPa	The electrical and mechanical performance is normal.
High and low temperature test	Cycle five times between 70°C and 40°C, then leave it under normal conditions for 1-2 hours and check the appearance quality.	The dimensions should comply with the regulations and be suitable for mechanical and electrical performance.
Constant damp heat test resistance	Relative humidity: 95 $\pm$ 3%, test temperature: 40°C. After 2 hours of action, measure the electrical performance within 5 minutes after the test sample is taken out. The test sample should be placed under normal conditions for 1-2 hours, and then the appearance quality should be inspected.	The dimensions should comply with the regulations and be suitable for mechanical and electrical performance.
Vibration test	Vibration frequency range: 10 - 55 Hz, displacement amplitude: 0.35 mm, acceleration amplitude: 50.0 m/s <sup>2</sup> , sweep frequency cycle: 30 times.	The electrical and mechanical performance is normal.
Drop test	Free fall three times from a height of 1 meter along mutually perpendicular axes	The electrical and mechanical performance is normal.

## VI. Contact Information

Shenzhen DreamLnk Technology Co., Ltd.

★Data acquisition, smart home, Internet of Things applications, wireless remote control technology, long-range active RFID, antenna research and development★

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