



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	A1	
Customer part number		Junyue part number	F6-2.4G	
Jun Ye Number				
RF Design	James wang	Radio Frequency Manager	Knight Ai	
Structural design		Structural Manager		
Chief Technology Officer (CTO)		Sun. period	2016-03-12	

Customer confirmation:

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

Contents

Seal	Surface 1	
Title	Record...	2
I. Product Images	3
II. Product Parameters		3
III. S1	Data	4
IV. Product Structure Diagram		6
V. Environmental Reliability Test Report		7
VI. Contact Information	7

I. Product Images

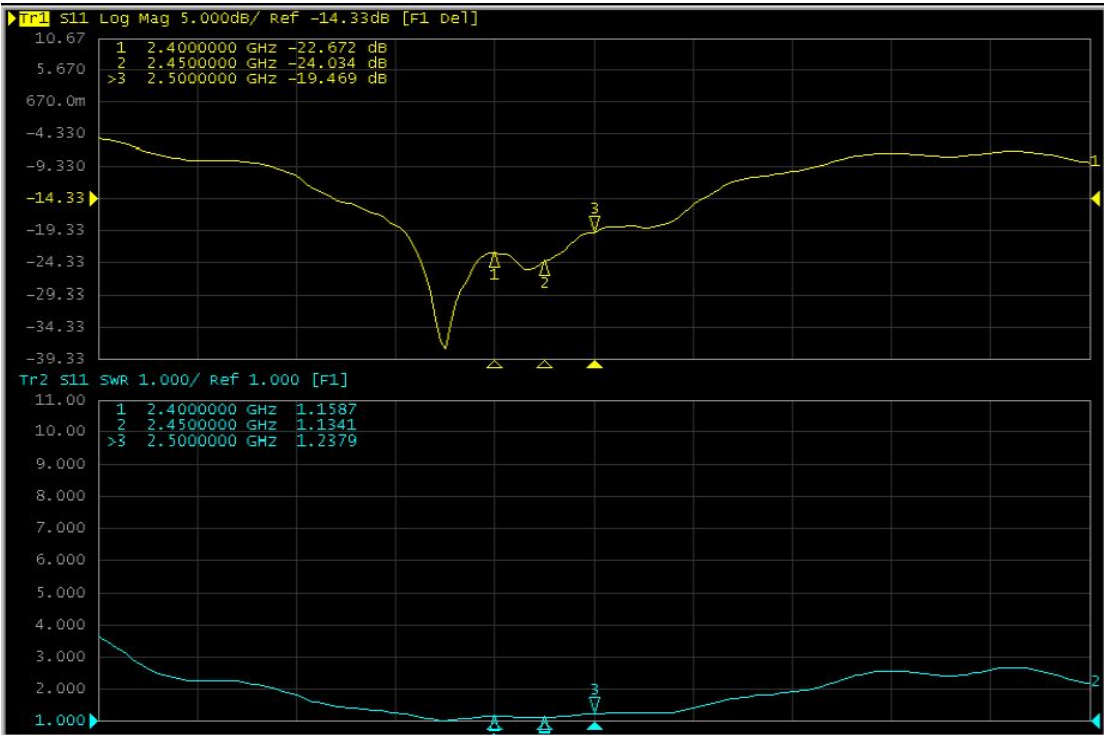


II. Product Parameters

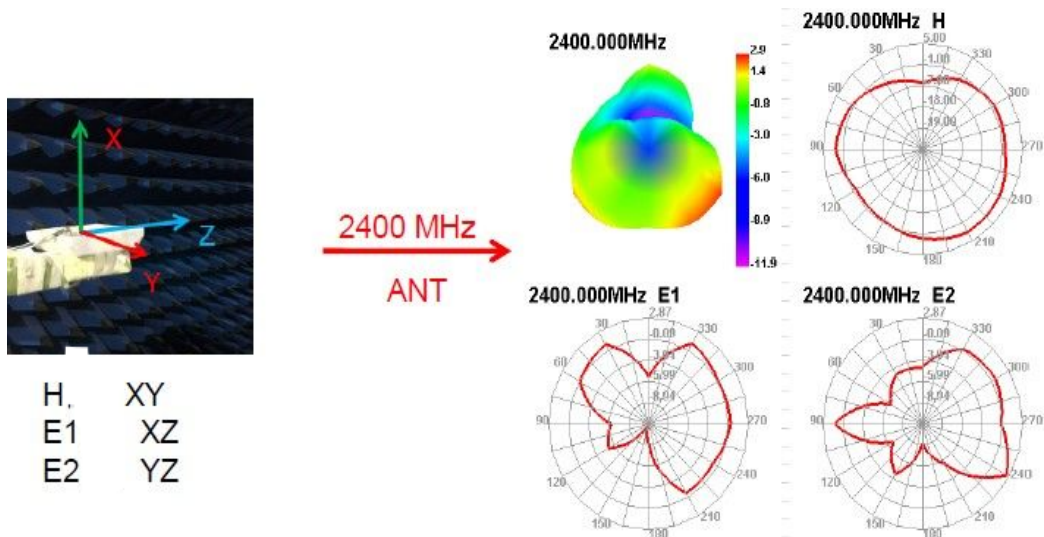
Product testing parameters			
Product Name (Name)	FPC built-in antenna	Product Model Type	F06-2.4G
Electrical Specifications			
Frequency Range	2400-2500 MHz	Polarization: Vertical	
Input impedance (Impedance)	50 ohms	Radiation direction	omnidirectional
Voltage Standing Wave Ratio (VSWR)	Less than or equal to 1.3	Maximum Admitted Power	1W
Gain	3 dBi \pm 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 \pm 3mm
Working Temperature	-20°C to +70°C	Storage temperature (Limit Temperature)	-40°C to +85°C

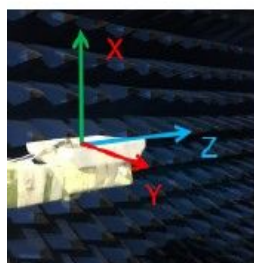
III. S11 (VSWR, Return Loss, Smith Chart) Data

3.1 : Network Analyzer Test Report



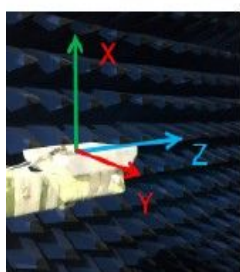
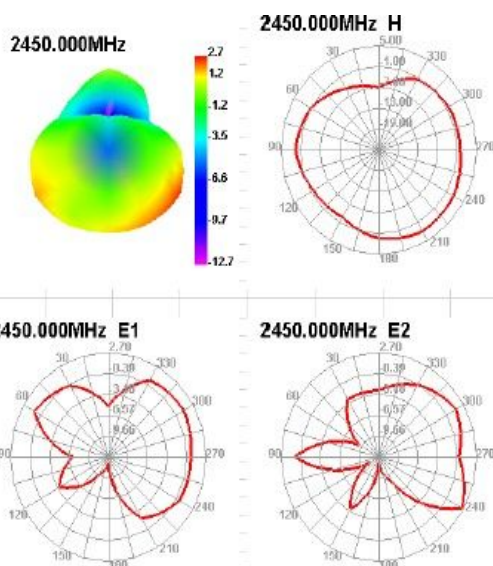
3.2: Darkroom 2D and 3D Radiation Pattern





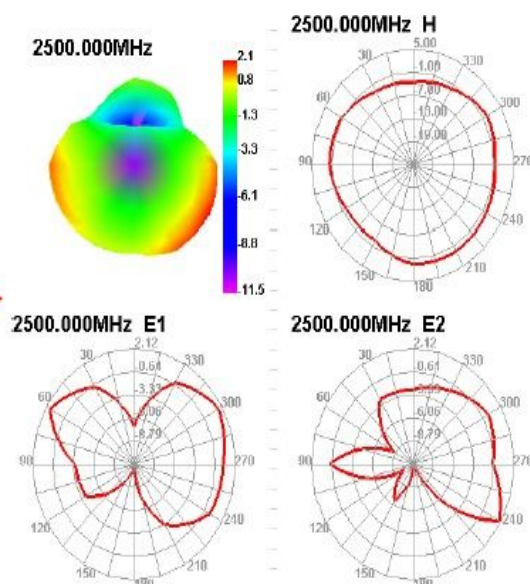
H XY
E1 XZ
E2 YZ

2450 MHz
ANT



H XY
E1 XZ
E2 YZ

2500 MHz
ANT



Frequency (MHz)	ANT	
	Efficiency (%)	Peak Gain (dBi)
2400	78.85	2.87
2410	81.9	3.15
2420	80.32	3.13
2430	78.25	2.98
2440	78.23	2.88
2450	77.33	2.7
2460	76.85	2.53
2470	78.23	2.47
2480	77.21	2.39
2490	77.45	2.37
2500	74.34	2.12

[illegible]

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 π -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 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 ² , 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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