



Shenzhen Kexin Wireless Technology Co., Ltd.

Product Number: AN2458-1395L120

Product Name: WIFI 2.4/5.8GHZ ANT

Antenna type: FPC Antenna

Index:

1. Specification

2. Characteristics and Reliability Test

3. Antenna - S Parameter Test Data

4. Mechanical and Packing Drawing

5. Material Description and RoHS Test Report

1. Specification

A. Electrical Characteristics	
Frequency 天线频率	2400-2500MHZ / 4900-5900MHZ
S.W.R. 驻波比	< 1.5
Antenna Gain 天线增益	5dBi $\pm$ 0.7
Polarization 极化方式	Linear polarization

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260 $\pm$ 5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-	Holding with individual specification; force applied	1. Directive DUT specification

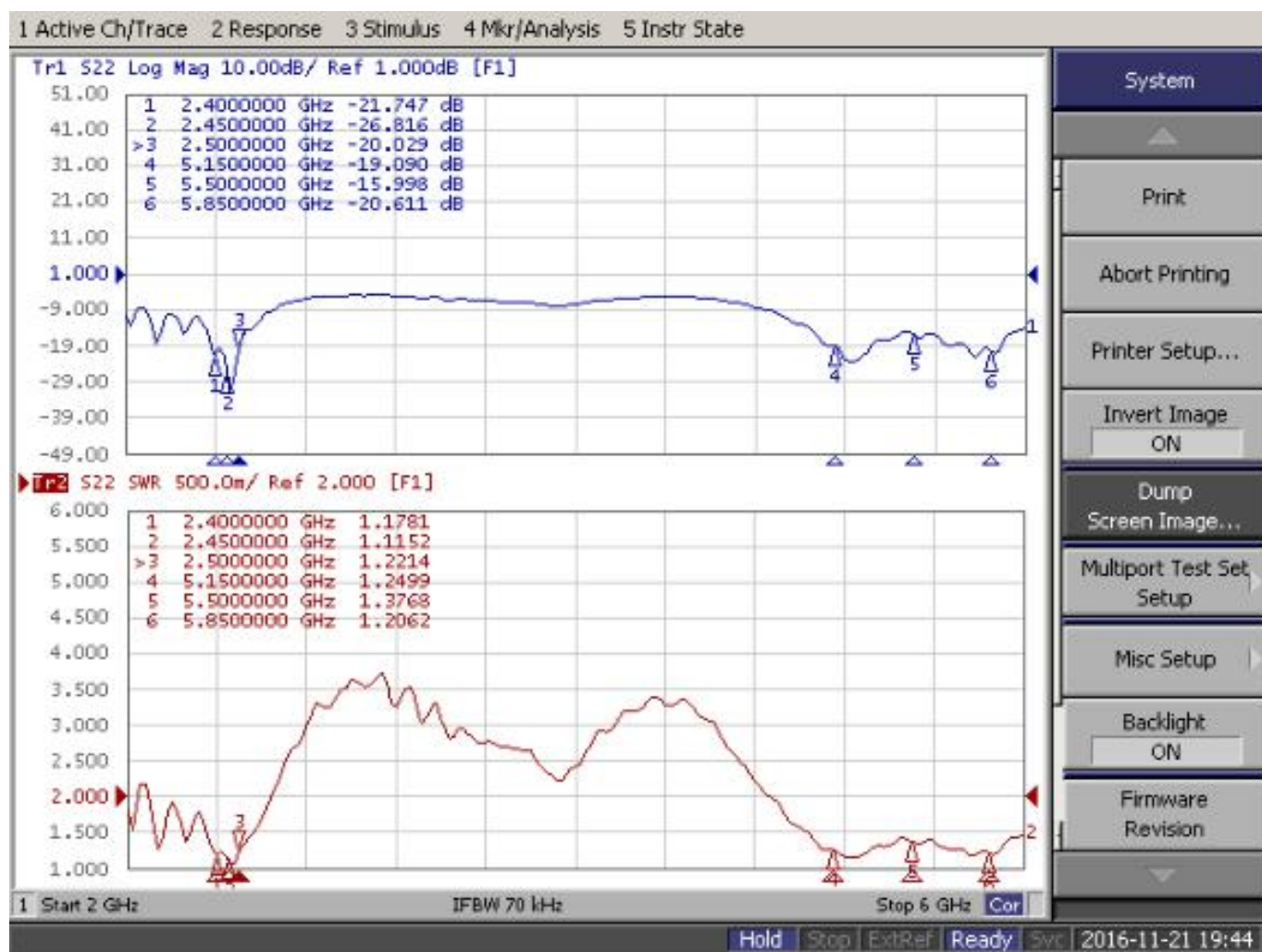
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator 材质	FR-4
Cable Type 线材类型	RG-1.13
Connector Type 天线接口	1 Generation IPEX
Cable length 天线长度	From the solder joints, it measures 12 centimeters.
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

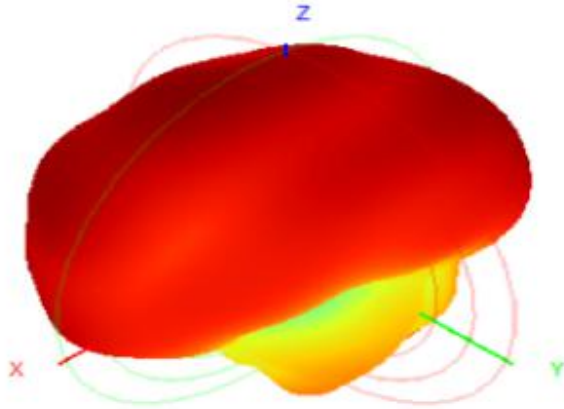
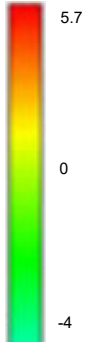
2. Characteristics and Reliability Test

	Pull Test	to axis of terminal	2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%

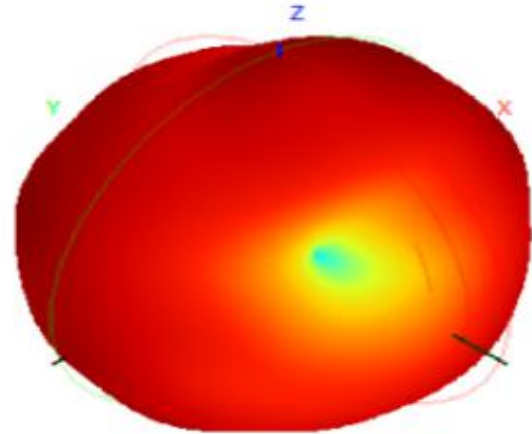
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

3. Antenna - S Parameter Test Data

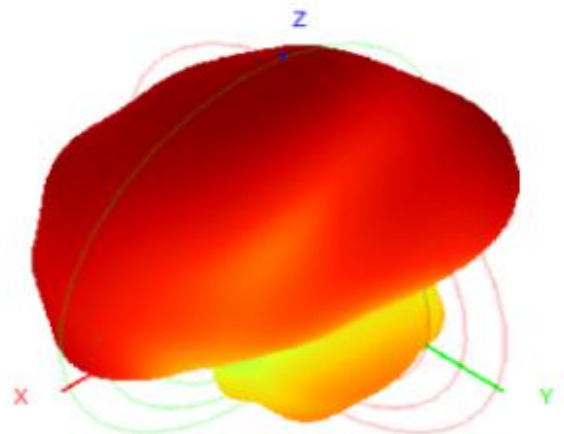




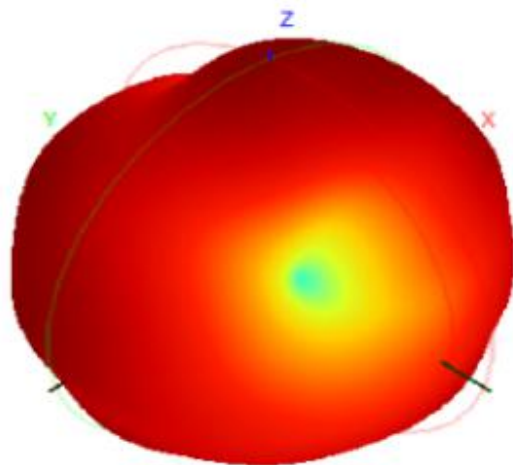
2400MHz



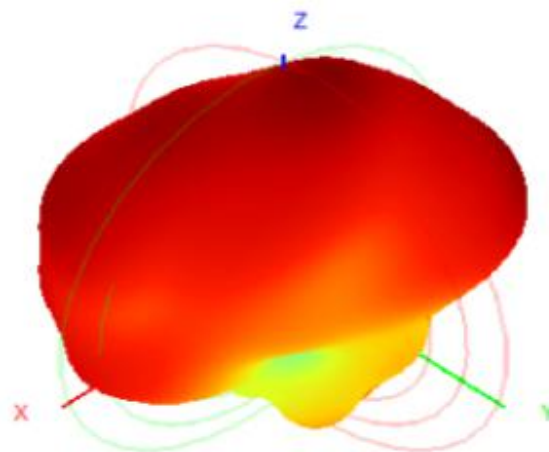
2440MHz



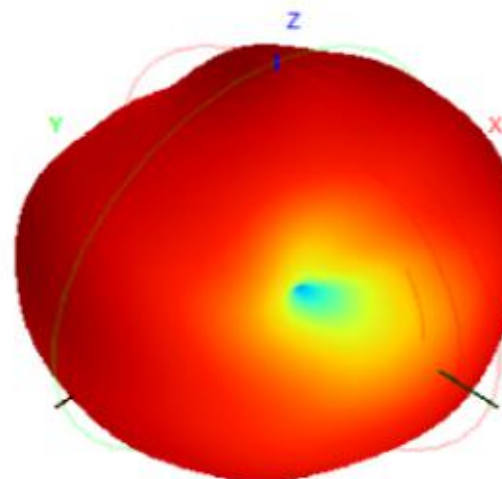
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2500MHz



5150MHz

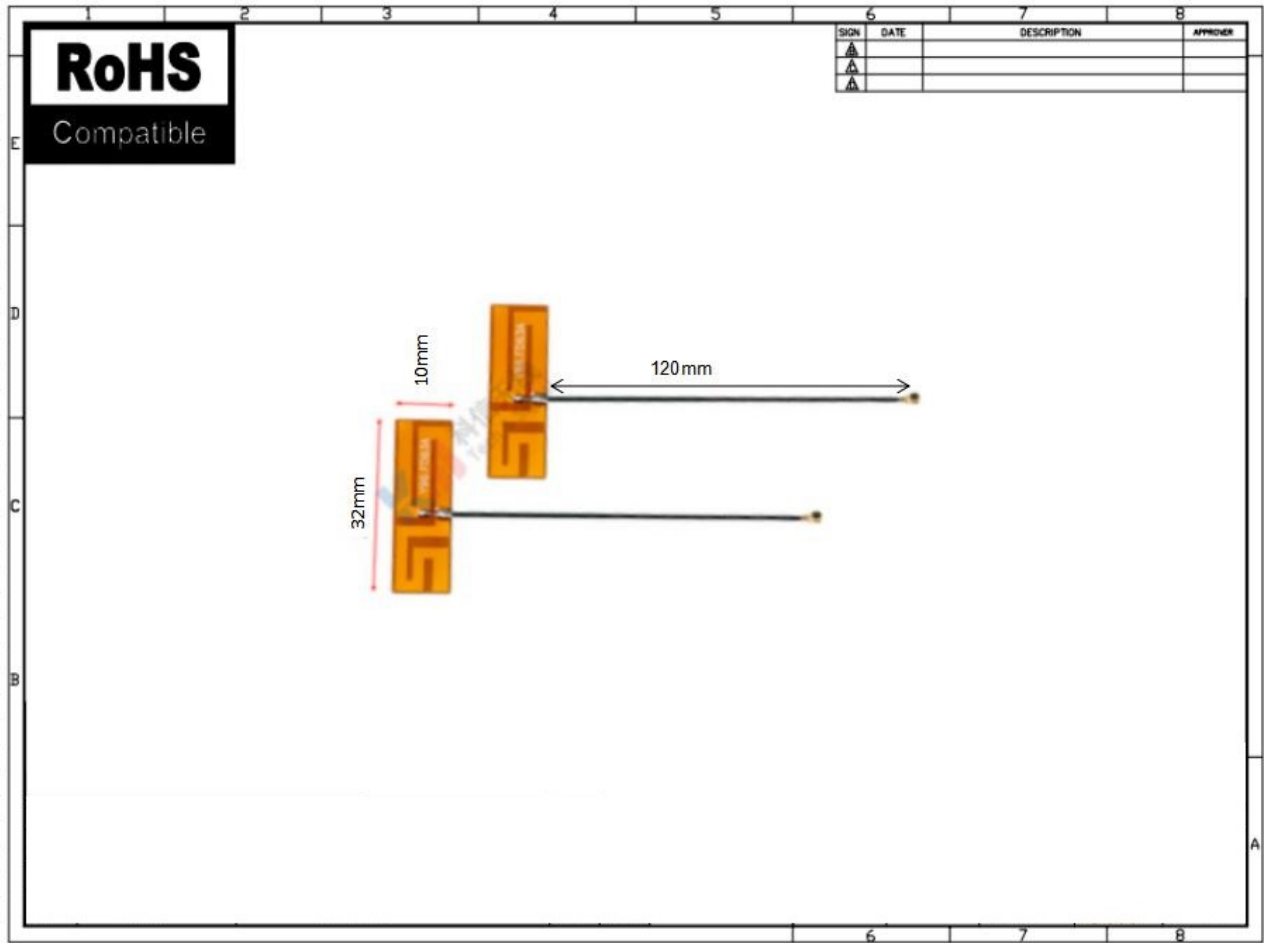


5850MHz

4. Test Result:

Frequency(MHz)	Efficiency(%)	Max GAIN(dBi)
2400	8.52	5.14
2410	8.48	5.18
2420	8.53	5.35
2430	8.31	5.26
2440	8.47	5.7
2450	8.25	5.65
2460	8.02	5.52
2470	7.45	5.38
2480	6.96	5.47

Frequency(MHz)	Efficiency(%)	Max GAIN(dBi)
5150	15.68	5.7
5250	16.11	5.47
5350	17.02	5.28
5450	18.74	5.36
5550	20.42	5.44
5650	20.14	5.25
5750	17.52	5.14
5850	14.85	5.06



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