

**3F19, Block B, Runmao Building, Minzhi Street,
Longhua New District, Shenzhen**

FPC Antenna Specification Recognition Letter
Product Specifications for Approval

Customer Name:

Antenna frequency band: 2400-2500/5150-5850MHz

Version: 0 A Production Date: 2024-09-20

Number: HS-NZ-FPC-001

Structure:		RF:	
Review:		Approval:	
Customer Confirmation			
Customer Review:		Customer Approval:	



Breadth 35mm

Length 40mm

Product characteristic specification table

Basic characteristics of 1. products:

Product Type: FPC Antenna-WIFI Dual Frequency-Ring Stripping Tin Plating - 1.37 Wire-Double Tin Wire-Black-L = 125MM

DESCRIPTION	VALUE
Frequency range (operating frequency band)	2400-2500/5150-5850MHz
Impedance (characteristic impedance)	50Ω;
V.S.W.R (Voltage Standing Wave Ratio)	Comparison of sample waveforms
Gain	2.4G: -1 dBi 5G: -1 dBi
adiation (Directional)	Omni-directional
Connector (connector type)	/
Operating temp (operating temperature)	-45 °C ~ +85 °C
Storage temp (storage temperature)	-45 °C ~ +85 °C

Summary Summary:

This report to account for the measurement setup and result of the Antenna. The measurement setup includes s-parameter, The measured data for Antenna are presented and analysis.

This report is used to illustrate the results of the measured antenna. The measurement settings include the voltage standing wave ratio and reflection coefficient of the S parameter, which is the data representation and analysis of the measured antenna.

2. Measurement S-Parameter S parameter measurement:

A. Reflection coefficient coefficient of reflection:

(a) Instrument (deliberator): Network Analyzer (network analysis).

(B) Setup:

(1) Calibrate the Network Analyzer by one port calibration using O.S.L. calibration kits.

The calibration of the device is carried out by the OSL calibration kit for one port.

(2) Connect the antenna under test to the Network Analyzer.

Connect the antenna to be tested to the network analysis.

(3) Measure the S11(reflection coefficient) shown in Fig. 1.

Measurement S11 is shown in Figure 1.

(4) Generally, the S11 is less than -10dB to ensure the 90% VSWR 2.0:1 power into antenna and only less than 10% power back to system.

In general, S11 is less than -10dB and VSWR is less than 2.0: 1 to ensure that 90 percent of the power is converted to the antenna and only less than 10 percent of the power is reflected back to the system.

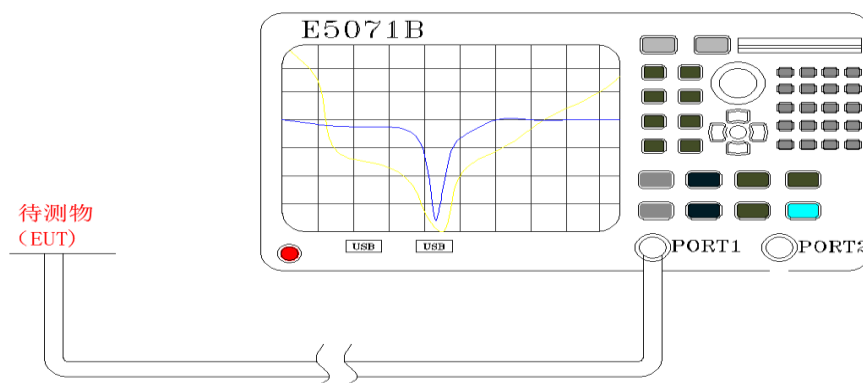


Fig.1 Antenna measured in Network Analyzer Figure 1 Antenna Measurement Network Analyzer

3. S-Parameter the measurement result of Measurement

S parameter:

S-Parameter test data S- Measurement data for parameters:

Frequency MHz Working frequency band	2400	2450	2500	5150	5850
V.S.W.R	1.41	1.48	1.61	1.53	1.66

S-Parameter test image S- Picture of parameter measurement:



Physical picture:

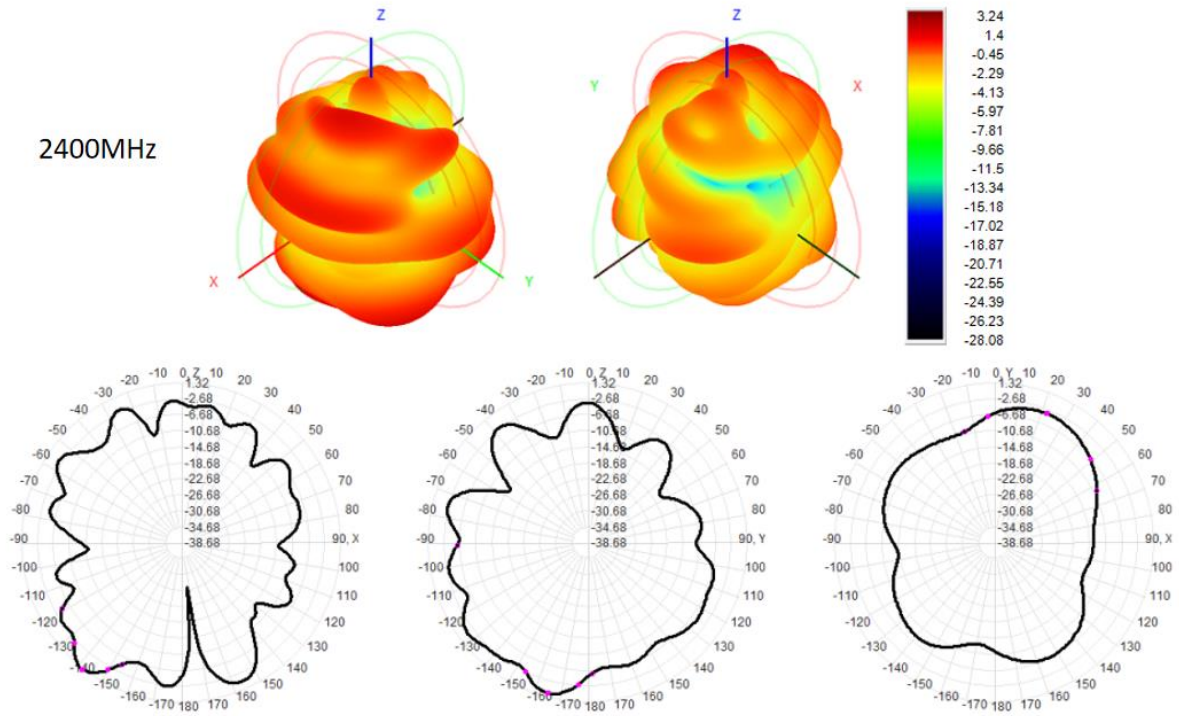


Passive value:

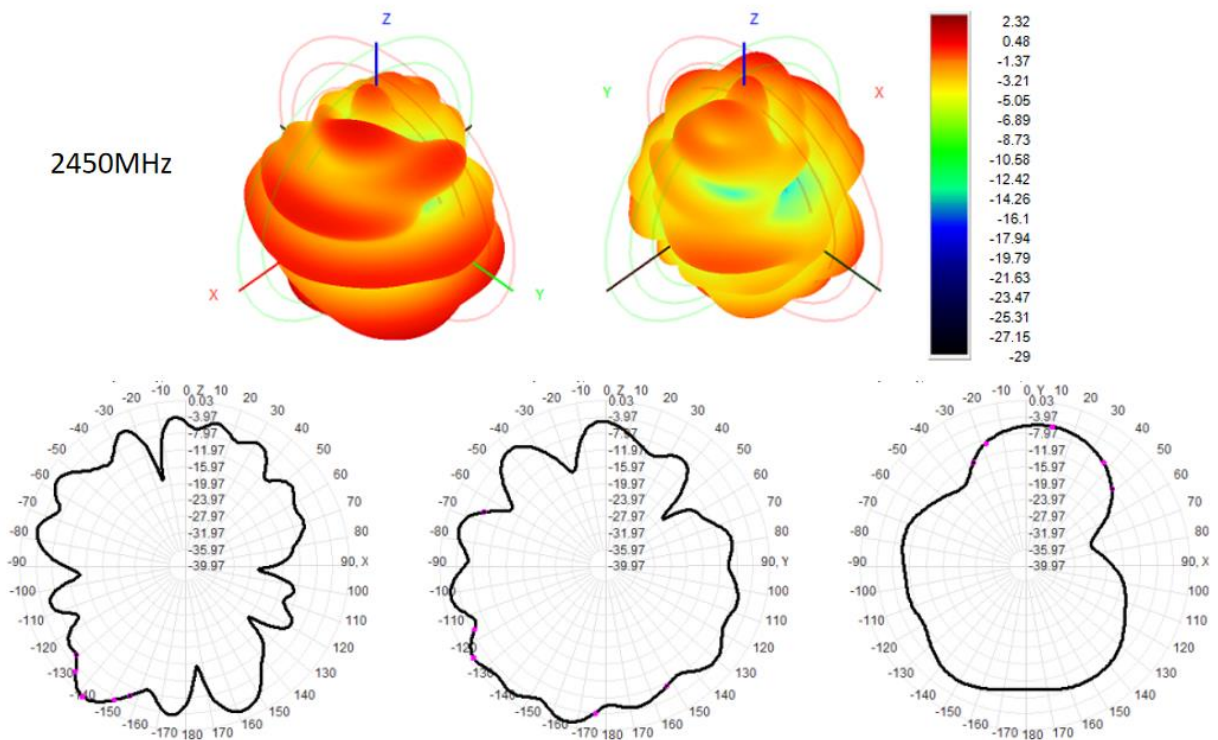
Frequency(MHz)	Efficiency(%)	Peak Gain (dBi)
2400	28.37	-1.0
2450	23.71	-1.83
2500	29.70	-1.88
5150	32.45	-1.0
5850	40.68	-1.02

2D, 3D

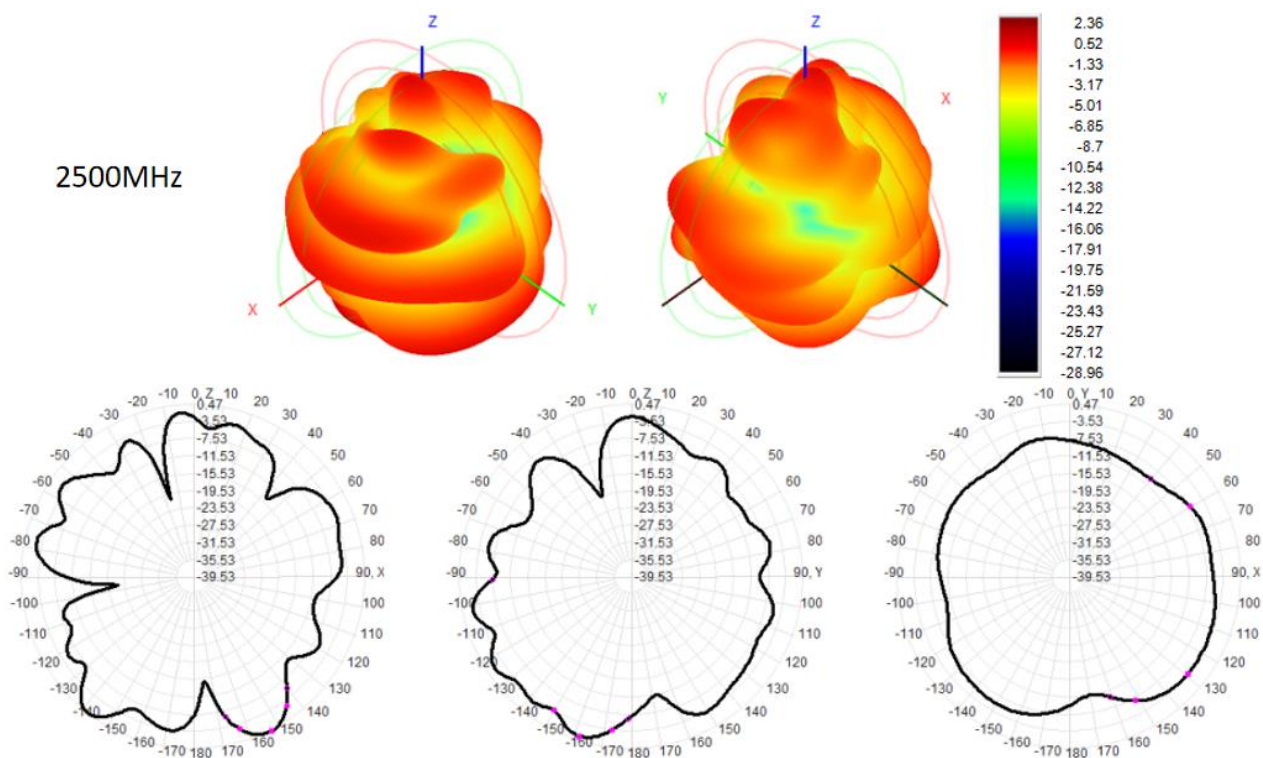
2400MHz



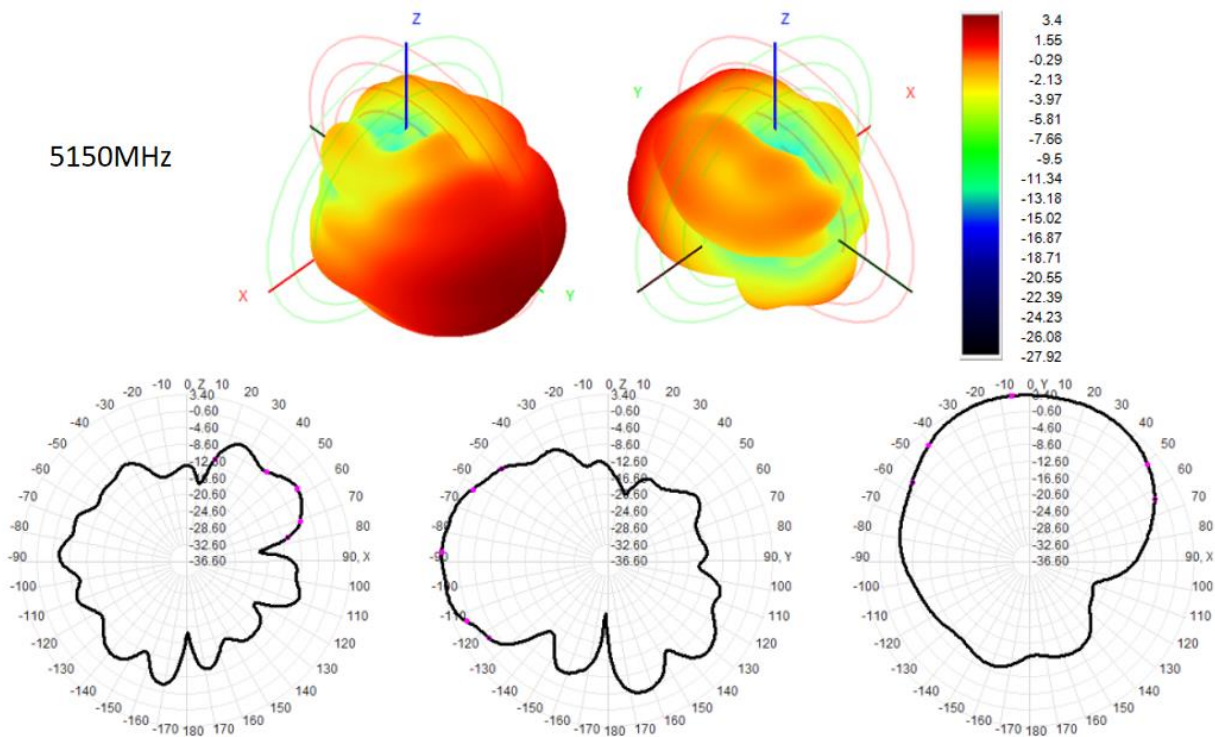
2450MHz



2500MHz



5150MHz



5850MHz

