

# 产 品 规 格 书

## Product specification

客 户:	
CUSTOMER:	
客 户 案 号:	
CUSTOMER P/N:	
本 厂 编 号:	GC-2458FPC620-L=95
OUR MODEL NO:	
品 名 / 规 格:	Dual-frequency built-in FPC antenna
SPECIFICATIONS:	
样 品 数:	0
Q' TY:	
日 期:	2025-2-25

**Manufacturer:Shenzhen Jienuowei Technology Co., Ltd.**

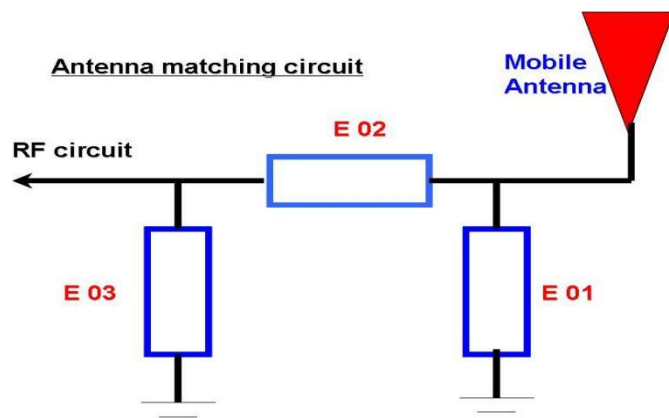
**Address:Room 301-C, Building D, No. 8 Baodan Road, Danzhutou**

**Community, Nanwan Street, Longgang District, Shenzhen**

## 1. Technical Specification

<b>A. Electrical Characteristics</b>	
<b>Working Frequency Range</b>	<b>2400~2500MHz</b>
<b>S.W.R.</b>	<b>2400~2500MHz:&lt;2.0</b>
<b>Antenna Gain(avg.)</b>	<b>2400~2500MHz: 2dBi±0.5dBi</b>
<b>Impedance</b>	<b>50ohm</b>
<b>B. Material</b>	
brass	
<b>C. Environmental</b>	
<b>Operation Temperature</b>	<b>-45℃~+85℃</b>
<b>Storage Temperature</b>	<b>-45℃~+85℃</b>

## 2. Matching Circuits



Element	Value	Vender
E1(0402)	OPEN	/
E2(0402)	SHORT	50 Ω

E3(0402)	OPEN	/
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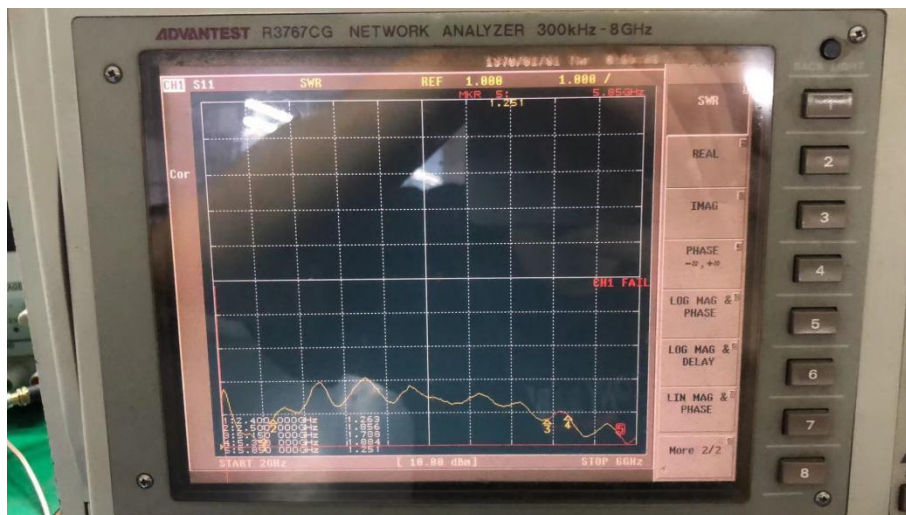
### 3. Curing antenna S11 Testing Result.

The S11 parameter was performed using a Agilent 8753D Network Analyzer and BEST'S test fixture that was using customer-providing device.

**VSWR (Voltage standing wave ratio)**

The Voltage Standing Wave Ratio (VSWR) is an indication of how good the impedance match is. VSWR is often abbreviated as SWR. If the transmission line and the antenna are not matched, the antenna will not accept all the power from the transmission line. The part it does not accept is reflected back and forth between the transmitter and the antenna. This sets up a fixed wave pattern along the line which we can measure and which is called the voltage standing wave ration(VSWR).The VSWR (ratio of maximum voltage to the minimum voltage along the line)expresses the degree of match between the transmission line and the antenna. When the VSWR is 1 to 1(1:1) the match is perfect and all the energy is transferred to the antenna prior to be radiated. When the VSWR is 1.5:1, 96% of the power reaches the antenna. By definition VSWR can never be less than 1.VSWR and reflected power are different ways of measuring and expressing the same thing. A high VSWR is indication that the signal is reflected prior to being radiated by the antenna.

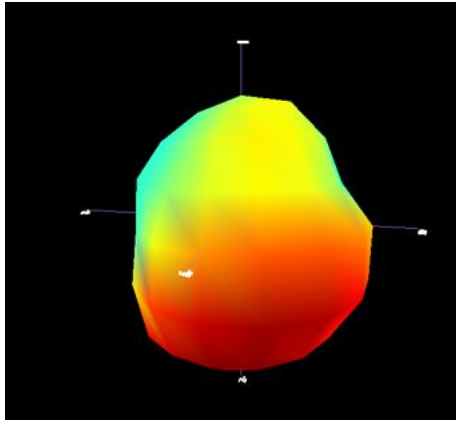
**VSWR**



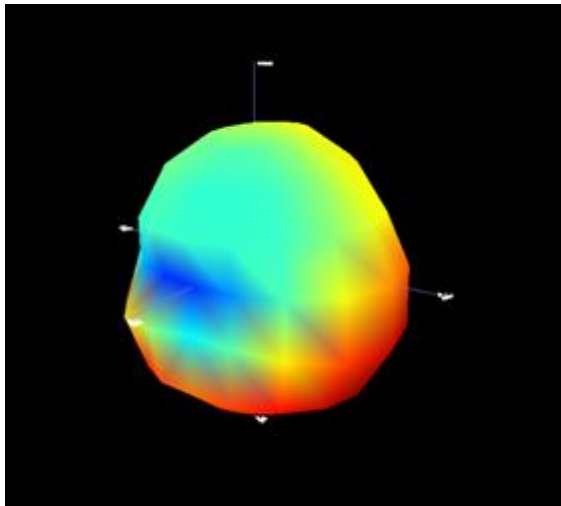
Marker	2400MHz	2450MHz	2500MHz
S.W.R	<2.0		

#### 4.3D Test Report

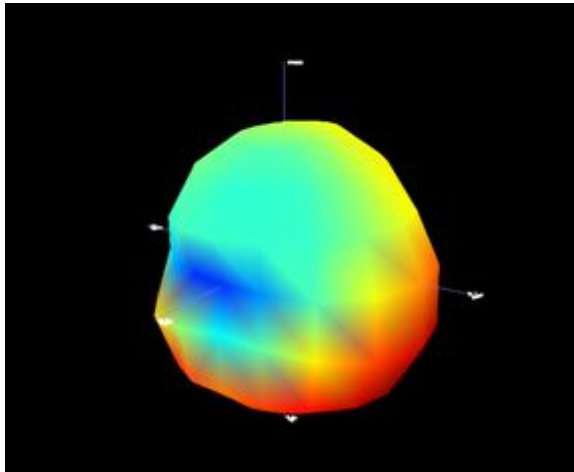
Frequency: 2400MHZ Gain: 2.43dbi



Frequency: 2450MHZ Gain: 2.19dbi



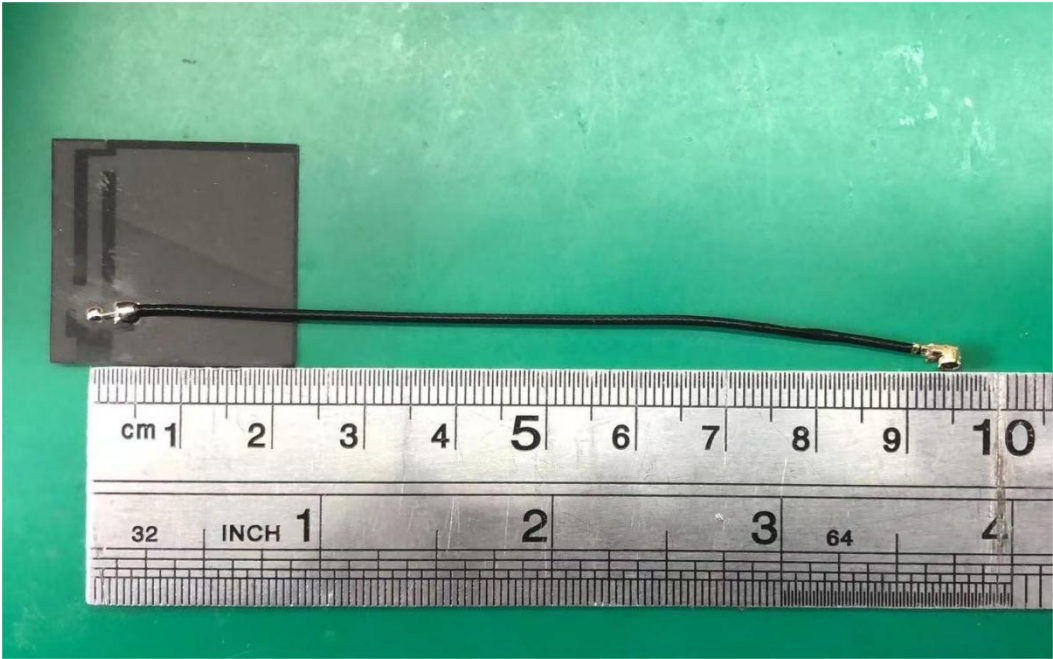
Frequency: 2500MHZ Gain: 2.36dbi



5. Passive test data

Passive Test For 2.4G~5.8G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	69.15	-1.6	2.43	0.28	40.05	29.101	2.43	-29.12	4.04	0	45.51	45.06
2450	73.97	-1.31	2.19	0.04	42.274	31.696	2.19	-23.01	3.5	30	45.36	44.92
2500	82.67	-0.83	2.36	0.21	47.697	34.976	2.36	-18.76	3.19	30	45.93	45.51

6.Product appearance picture



Product physical sample 1.13 Black L = 95MM