

Product specification

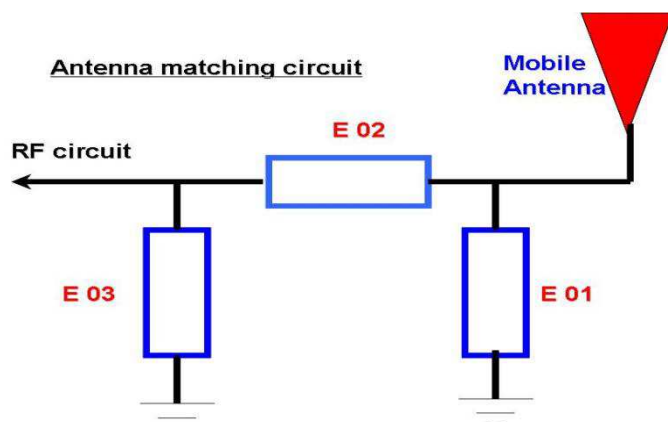
CUSTOMER:	Wuhan Qianyuan Technology Co., Ltd.
CUSTOMER P/N:	
OUR MODEL NO:	SC-N794FPC-L95
SPECIFICATION:	2.4G-5.8G-794 Internal Antenna
QTY:	0
DATE:	2024-1-11

1. Technical Specification

A. Electrical Characteristics

Working Frequency Range	2400~5800MHz
S.W.R.	2400~5800MHz:<3.0
Antenna Gain(avg.)	2400~5800MHz: 3dBi±0.5dBi
Impedance	50ohm
B. Material	
brass	
C. Environmental	
Operation Temperature	-45℃~+85℃
Storage Temperature	-45℃~+85℃

2. Matching Circuits



Element	Value	Vender
E1(0402)	OPEN	/
E2(0402)	SHORT	50 Ω
E3(0402)	OPEN	/

3. Curing antenna S11 Testing Result.

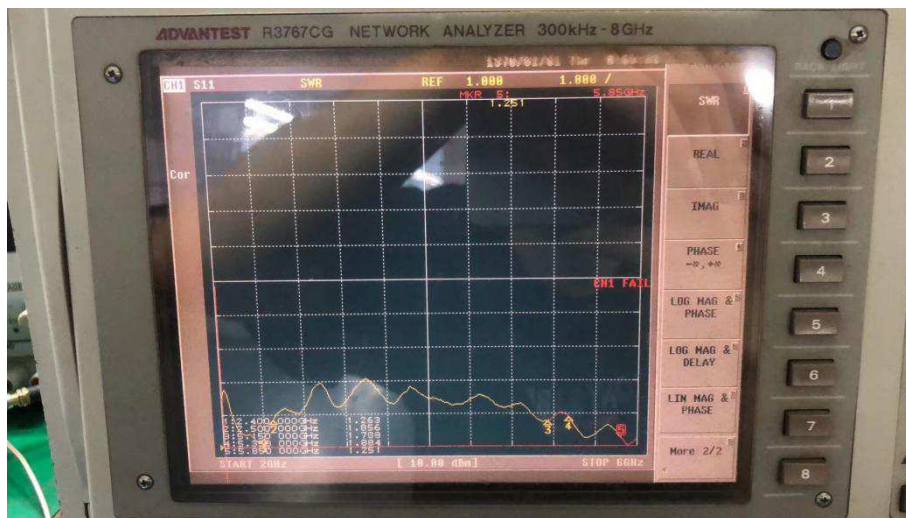
The S11 parameter was performed using a Agilent 8753D Network Analyzer

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.

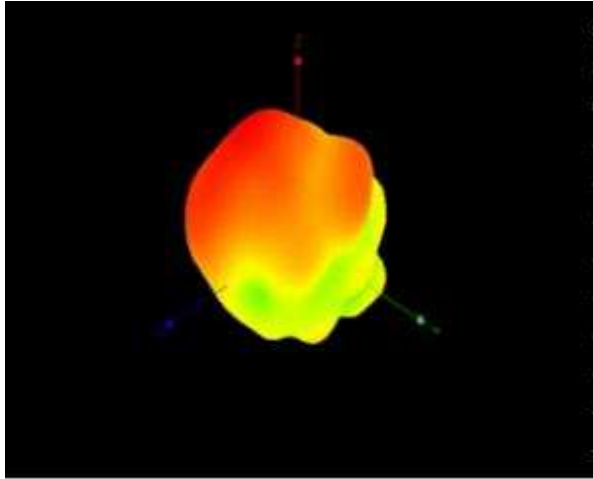
VSWR



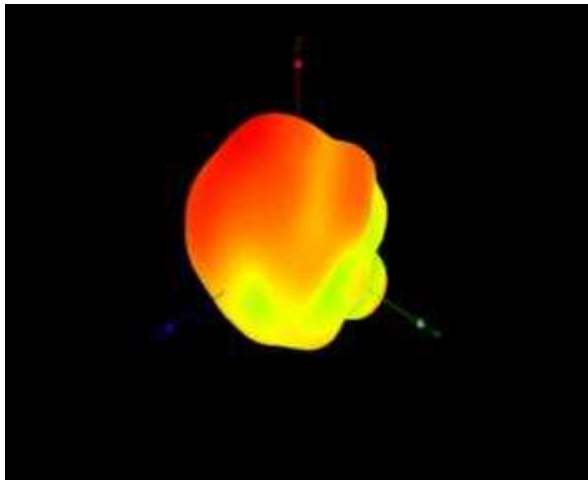
Marker	2400MHz	5000MHz	5350MHz	5800MHz
S.W.R	<3.0			

4. 3D Antenna Gain

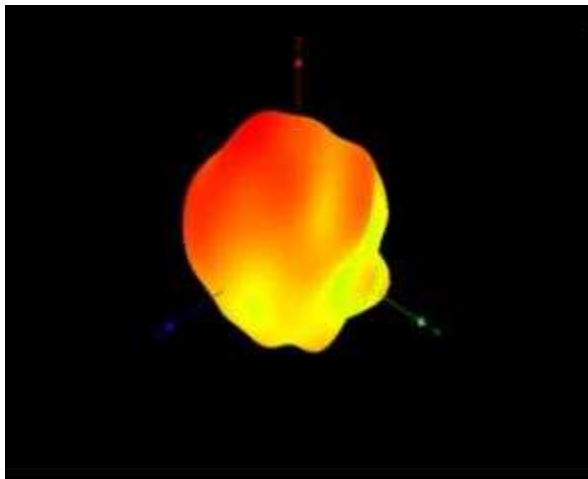
Frequency: 2400MHz Gain: 3.05dbi



Frequency: 5000MHz Gain: 3.2dbi

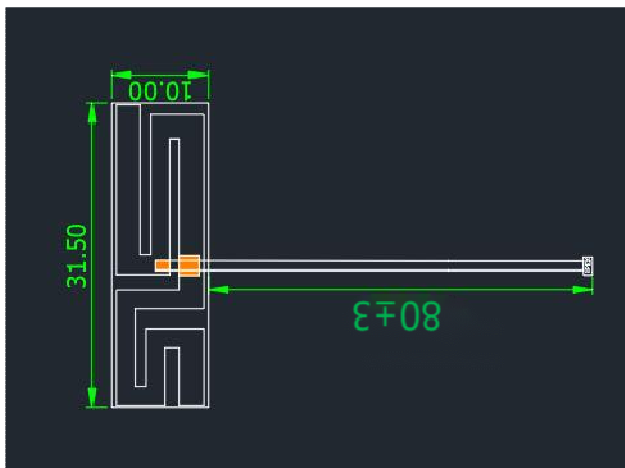


Frequency: 5800MHz Gain: 3.4dbi



Frequency (MHz)	Efficiency (%)	Peak Gain / dB
2400	62.6	3.05
2450	65.7	3.38
2500	64.1	3.20
5000	62.2	3.2
5350	60.2	2.98
5800	62.3	3.4

5. Antenna Dimensions



Unit: mm

2.4G-Internal FPC 1.13 black line 95MM