

Product specification

Mobile communication terminal antenna

Product design and manufacturing

PRODUCT NAME : OWLNV L3 2.4G WIFI Antenna

CUSTOMER NAME :

Part number (P/N) : LXC-WIFI-1

Antenna Type: FPC antenna

Manufacturer: JDiag Electronics Technology Co.,Ltd.

Address: 3rd Floor,B2,Jindida Science Park,Langkou Community,Dalang Street,Longhua District,Shenzhen China

1. Purpose

To standardize the product specifications and test methods of the mobile communication terminal antenna produced by OnePlus One. Avoid error caused by different test conditions and methods.

2. Product category and product model overview

2.1 Product model overview

The main outline of this report is OWLNV L3 Electrical results of the antenna designed for the project.

The antenna design frequency band is: 2. 4G WIFI

3. Description of basic parameters and experimental equipment

3.1 Basic parameter

Product electrical performance index	
Operating frequency range	2400-2480MHz
Standing-wave ratio	2400-2480 MHz: < 1.5
Antenna gain	2400-2480 MHz: 1.6dBi
Radiation efficiency	2400-2480 MHz: > 30%
Impedance	50 ohm
Product material description	
FPC	Electrolytic copper +PI
Coaxial line	Braided wire + terminal
Product environment description	
Operating temperature	- 30°C ~ + 85 °C
Storage temperature	- 30°C ~ + 85 °C

3.2 Description of experimental equipment

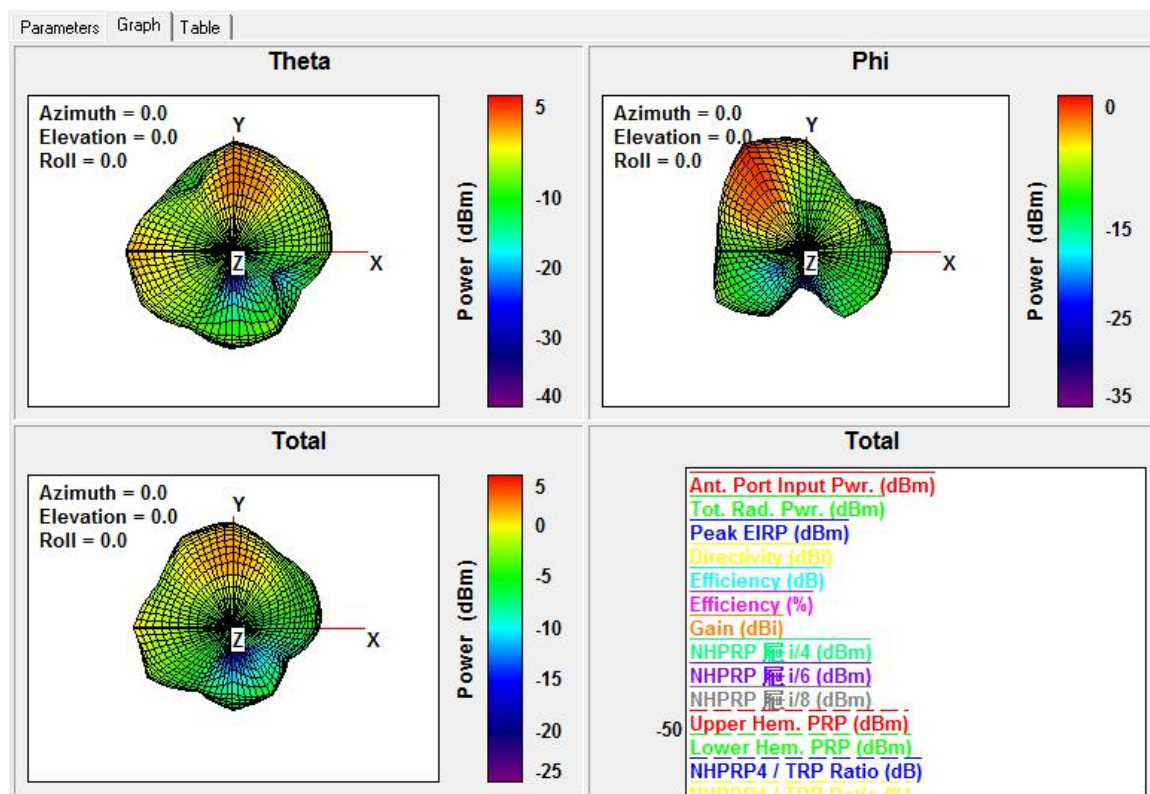
List	Testing project	Equipment
1. S Parameters	1.Return loss 2. VSWR at	Network analyzer: Agilent 8753ES
2. Coupling power test	1. Transmission power 2. Receiving sensitivity	Comprehensive tester: Agilent 8960 E5515C
3. Radiation pattern and gain	1. Radiation pattern 2. Antenna gain	1. Darkroom: 7x4x3 m (3D) 2. Network analyzer : Agilent 8753ES

4. Antenna test data

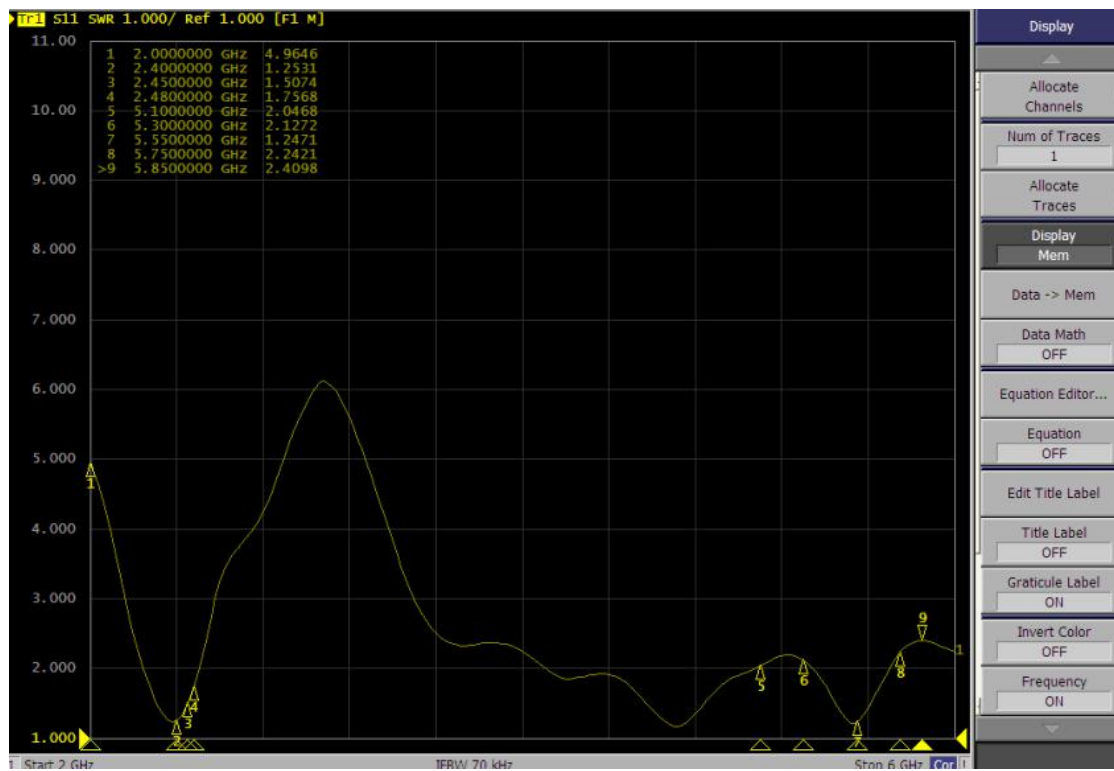
4. 1 Wifi:2.4G Efficiency/gain

Fre.(Mhz)	Efficiency(%)	Gain(dBi)
2400	52.25	1.09
2410	51.41	1.18
2420	53.25	1.30
2430	55.47	1.28
2440	55.63	1.41
2450	58.47	1.60
2460	54.63	1.31
2470	53.25	1.23
2480	53.67	1.16

5. 1 2.4G apple chart

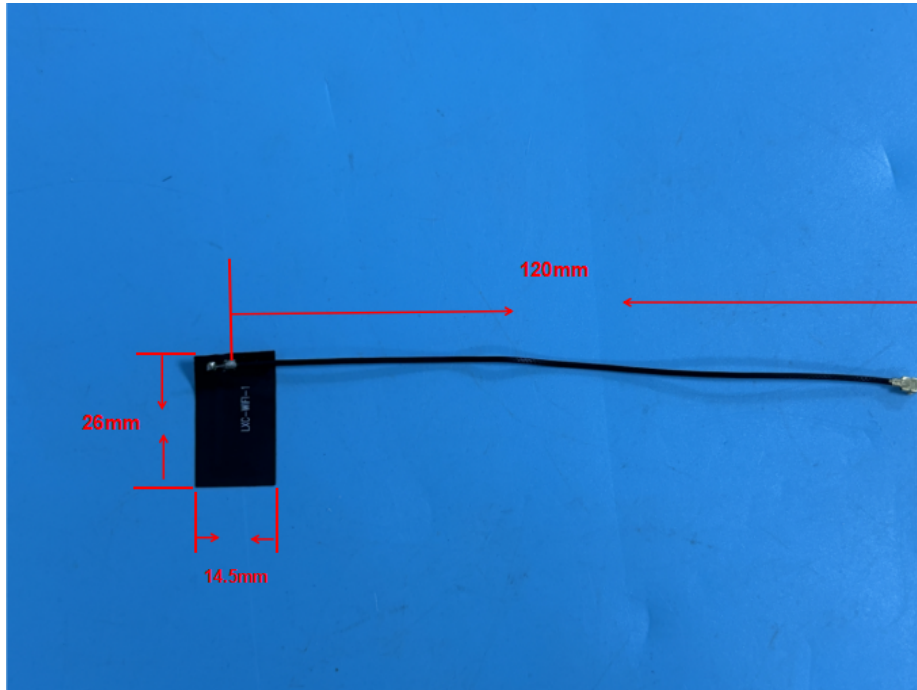


6.1 Standing-wave ratio



7.1 Product 2D structure diagram and remarks

Unit: mm



Line length