

# Product specification

## Mobile communication terminal antenna Product design and manufacturing

**PRODUCT NAME :** OWLNV L3 2.4G WIFI Antenna

**CUSTOMER NAME :** Pard

**Part number (P/N) :** W3106A-F8COB-070-A

Manufacturer: Shenzhen Pard Technology Co.,Ltd

Address: B78,18/F,Guangyin building,38 Futian South Road, port community, Futian street, Futian District, Shenzhen

## 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: 1.5dBi ± 0.5dBi
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

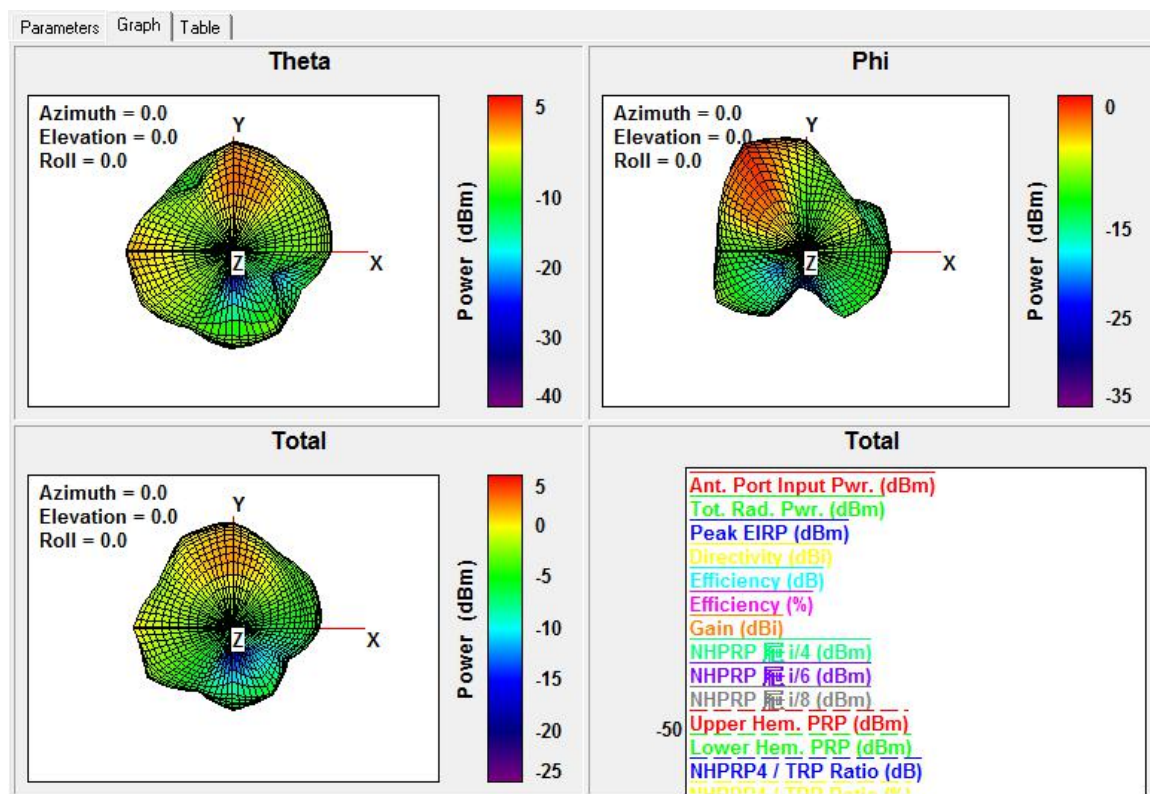
List	Testing project	Equipment
1. S Parameters	1. Return loss 2. VSWR at	Network analyzer: Agilent 8753ES
2. Coupling power test	1. Transmission power 2. Receiving sensitivity	Comprehensive tester: Agilent 8960 E5515C
3. Radiation pattern and gain	1. Radiation pattern 2. Antenna gain	1. Darkroom: 7x4x3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

## 4. Antenna test data

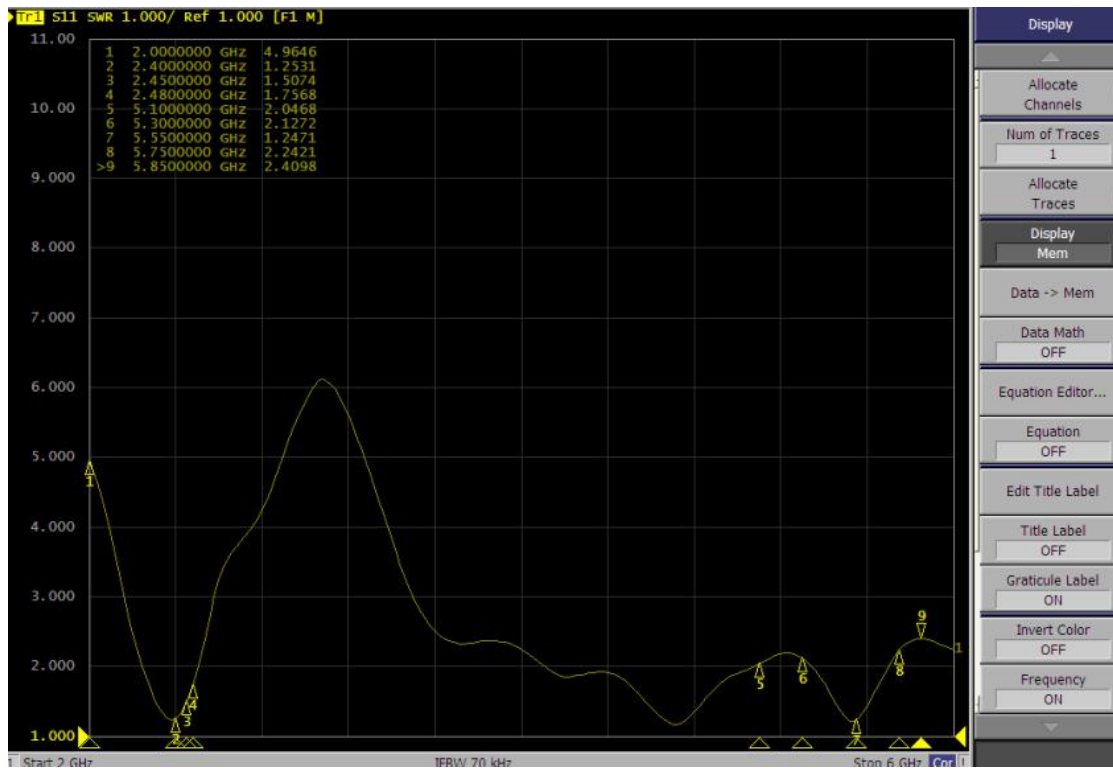
### 4.1 Wifi:2.4G Efficiency/gain

Fre.(Mhz)	Efficiency(%)	Gain(dBi)
2400	52.25	1.09
2410	51.41	1.08
2420	53.25	1.30
2430	55.47	1.28
2440	55.63	1.41
2450	58.47	1.50
2460	54.63	1.30
2470	53.25	1.25
2480	53.67	1.14

## 5.1 2.4G apple chart



## 6.1 Standing-wave ratio



## 7.1 Product 2D structure diagram and remarks

Unit: mm

