

1. Overview of the Acknowledgment

The acknowledgment describes the condition of the WIFI antenna of the Shadow Cube 2.4/5GHz Ver1.0, which is in the frequency band of 2.4/5GHz, and the manufacturer is Shenzhen Ouhuang Communication Technology Co., Ltd.

2. Appearance



3. Electrical performance

2.4G-2.5G; 5.15G-5.85G

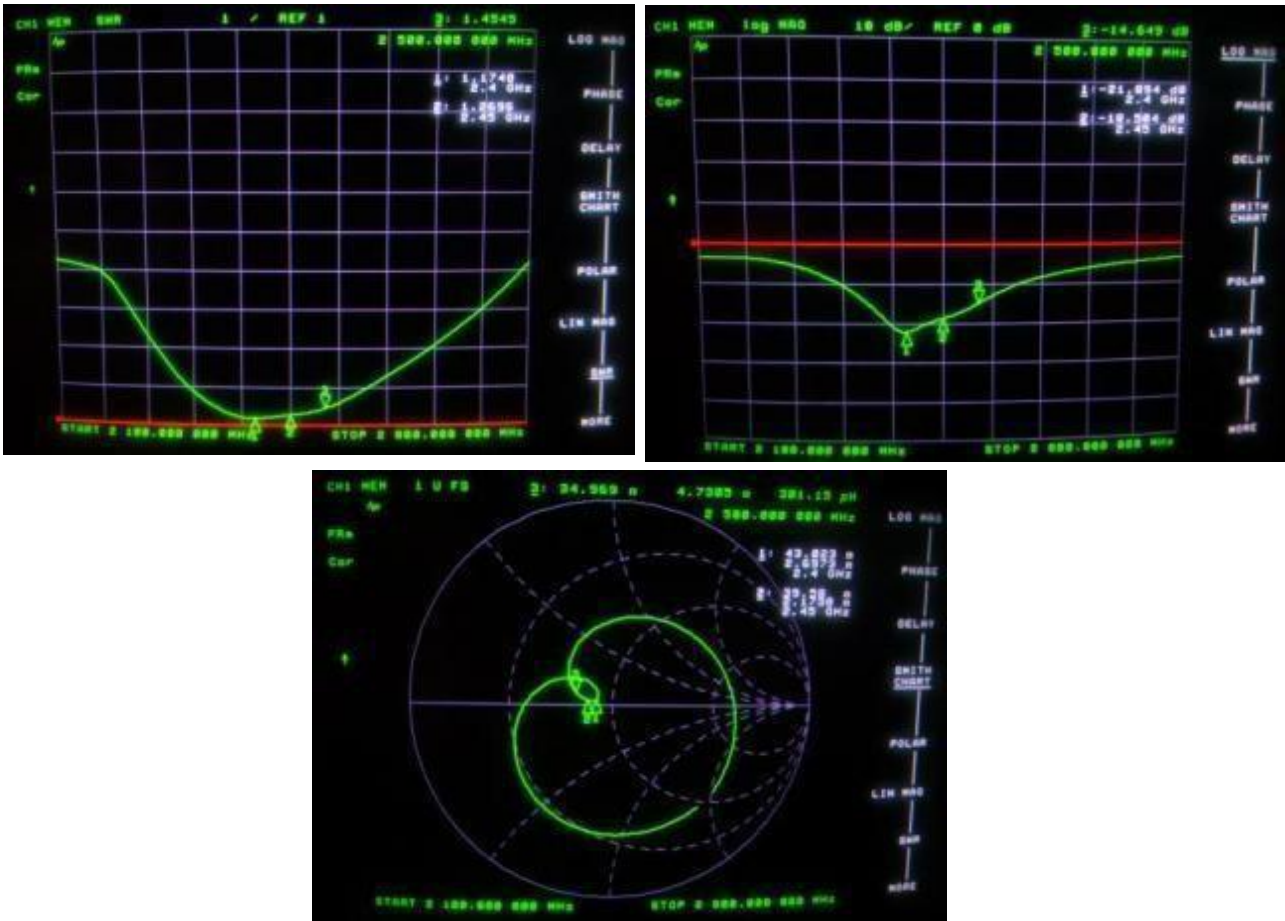
Transmit/Receive Frequency Bands (Hz)	WIFI
	2.4G-2.5G;5.15G-5.85G

3.4 Passive Test Data:

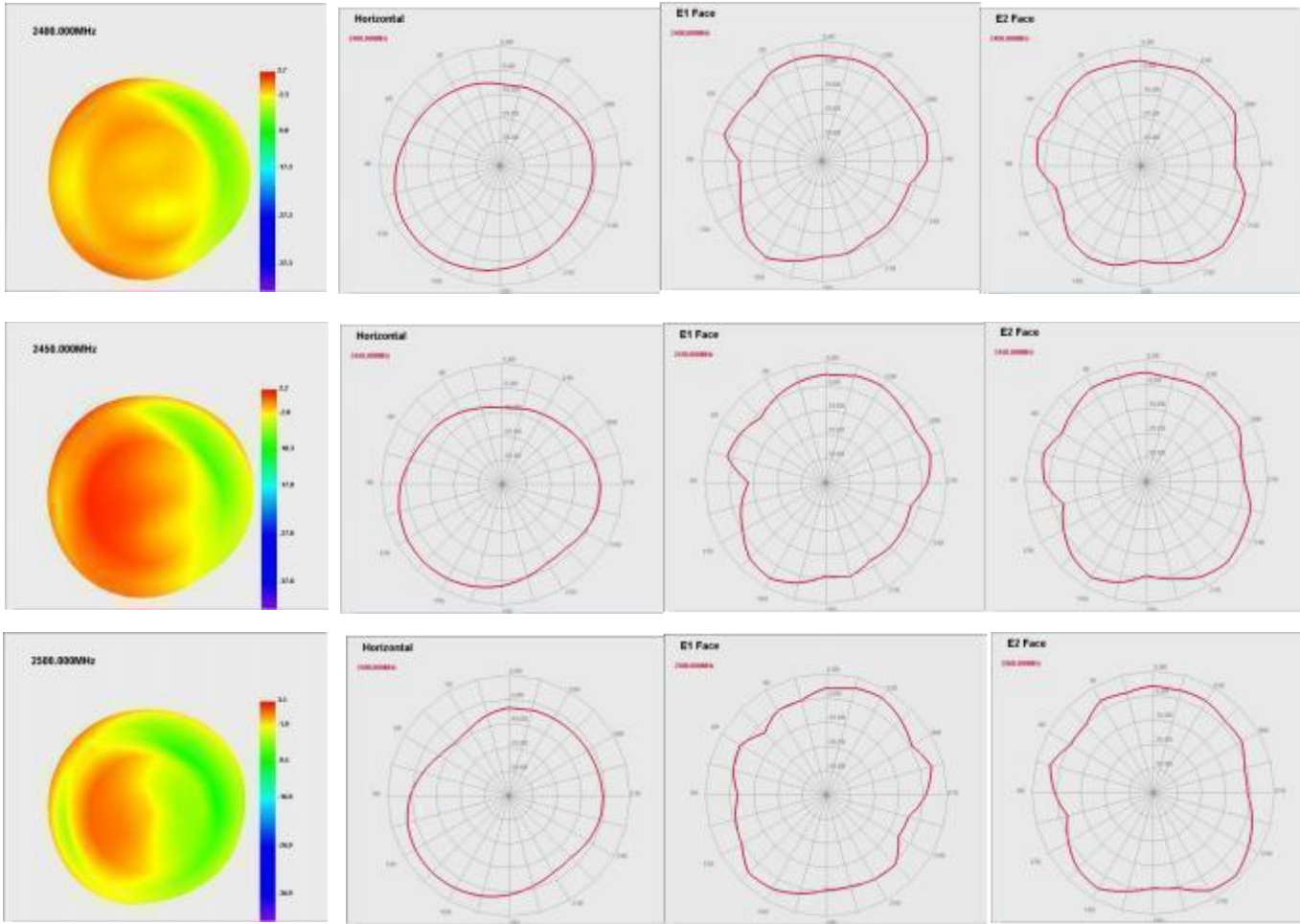
3.4.1 2.4G Data:

Electrical Properties	
Frequency	2.4GHz-2.5GHz
Impedance	50 ohm Nominal
V. S. W. R	1: 1.17 Max
Return Loss	-21.89dB Max
Radiation	Omni-directional
Polarization	Linear, Vertical

VSWR&Return Loss&Smith Chart:



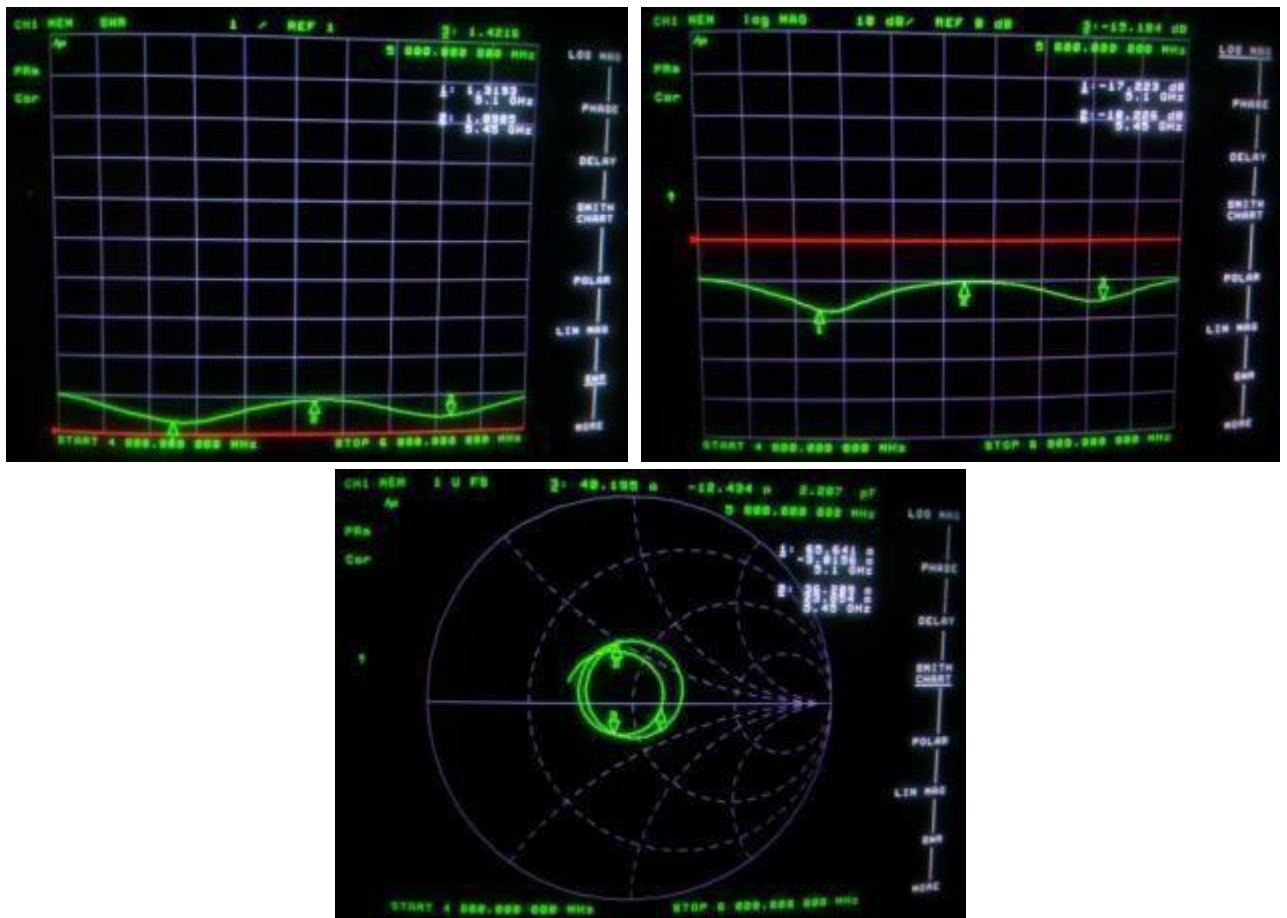
Passive Test For 2.4G-wifi							
Freq	Effi	Gain	Gain	UHS	DHIS	Max	Min
(MHz)	(%)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)
2400	63.61	2.69	0.54	28.461	24.258	2.69	-10.85
2450	64.25	2.15	0	27.346	25.613	2.15	-13.24
2500	62.41	3.11	0.96	29.349	26.427	3.11	-13.95



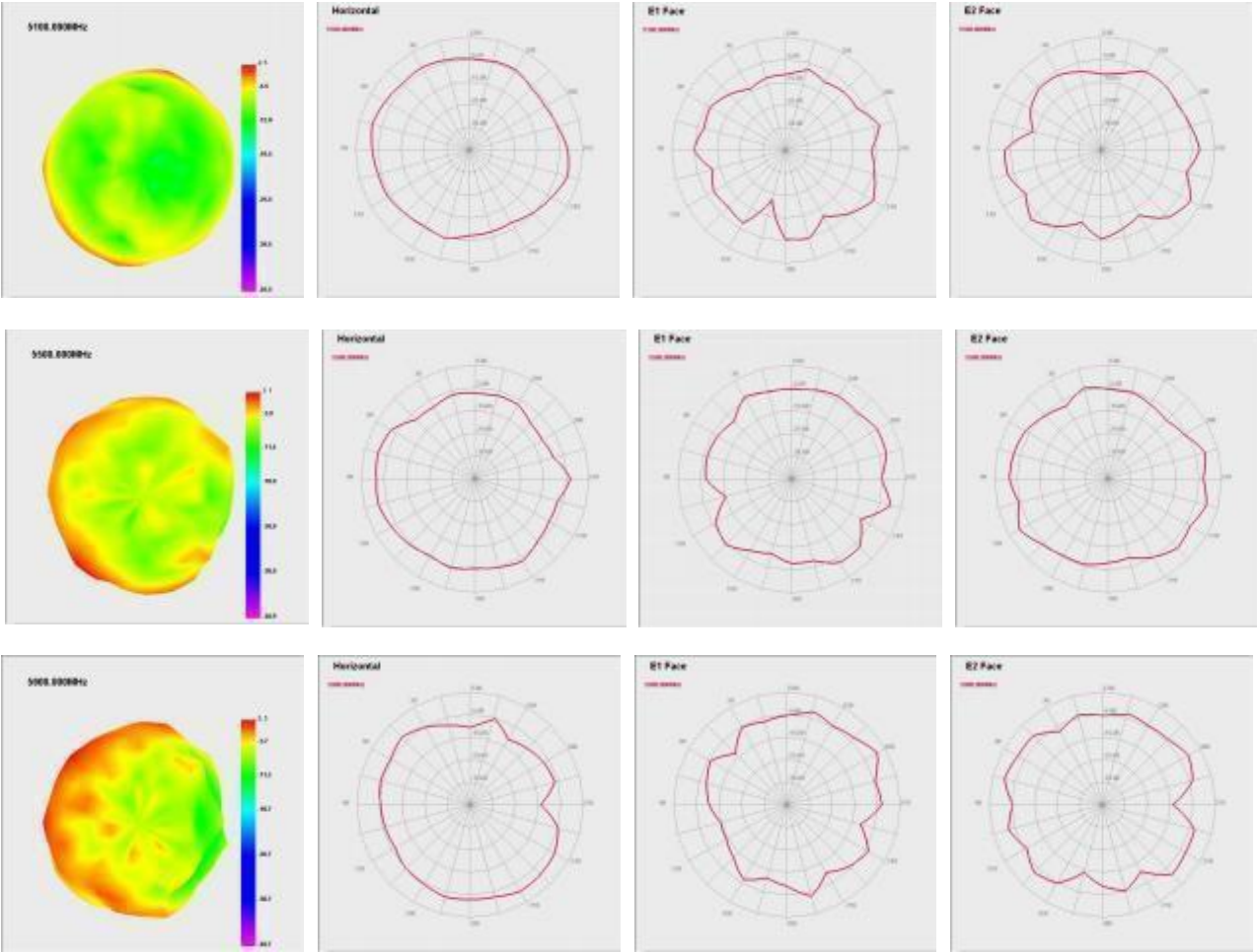
3.4.2 5G Data:

Electrical Properties	
Frequency	5.1GHz-5.9GHz
Impedance	50 ohm Nominal
V. S. W. R	1: 1.31 Max
Return Loss	-17.22dB Max
Radiation	Omni-directional
Polarization	Linear, Vertical

VSWR&Return Loss&Smith Chart:



Passive Test For 5G-wifi							
Freq	Effi	Gain	Gain	UHIS	DHIS	Max	Min
(MHz)	(%)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)
5100	63.16	2.54	0.39	18.945	15.461	2.54	-19.68
5500	62.46	3.13	0.98	19.346	16.257	3.13	-16.54
5900	63.92	3.25	1.10	20.524	14.643	3.25	-18.6



4. Antenna structure

