# n Guang Huitong **PCB**Antenna specification acknowledgment

# **Product Specifications for Approval**

The item number: PCB1817B-B45L-A

Customer name: Jin Guang Huitong Model:

Antenna Band:

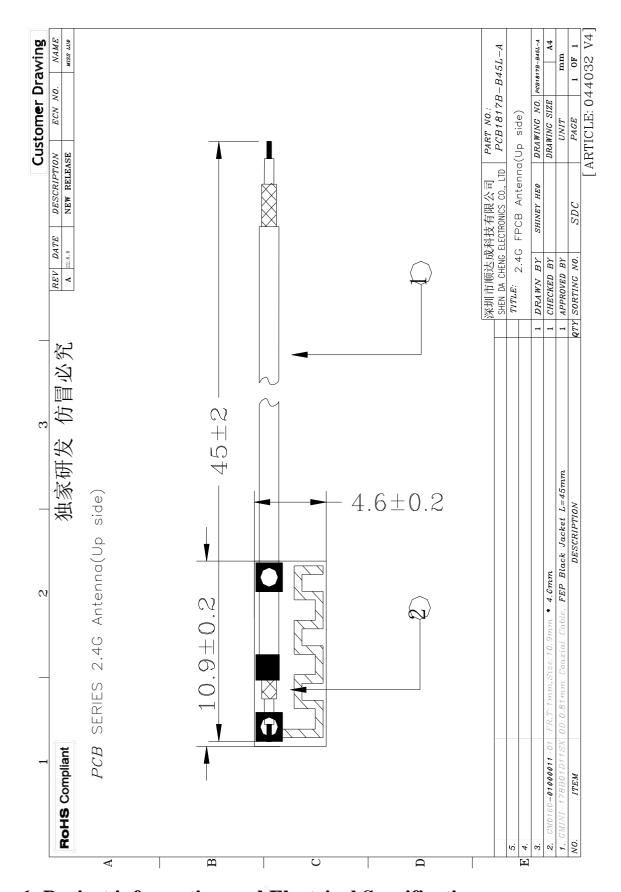
Version: R-A Date of production:

2024. 03. 29

Shunda Technology Co., Ltd. research and development						
Structure:	Nathan Chen	Rf:	Yang Yonghui			
Audit:	Zeng Liwen	Approve:	Chen Huaming			
Customer confirmation						
Customer Audits:		Customer Approval:				

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# 1. Project information and Electrical Specification

Those specifications were specially defined for Jin Guang Huitong PCB, , and all characteristics were measured under the model's handset testing jig.

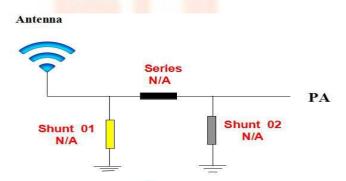
#### 1-1 Antenna picture



## 1-2 Frequency Band:

Frequency Band	MHz
WIFI2.4G	2400-2500 (MHz)

## 1-3 Impedance matching



There is no change to the original antenna matching

#### 2.VSWR

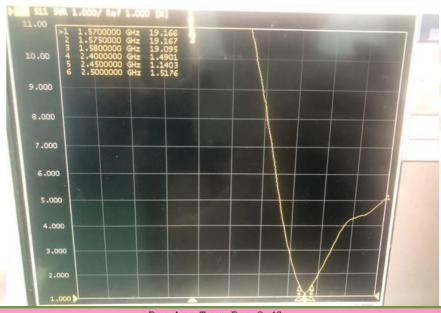
# **Measuring Method:**

- 1. A 50 $\Omega$ coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
- 2. Keeping this jig away from metal at least 20cm.

#### VSWR parameter values

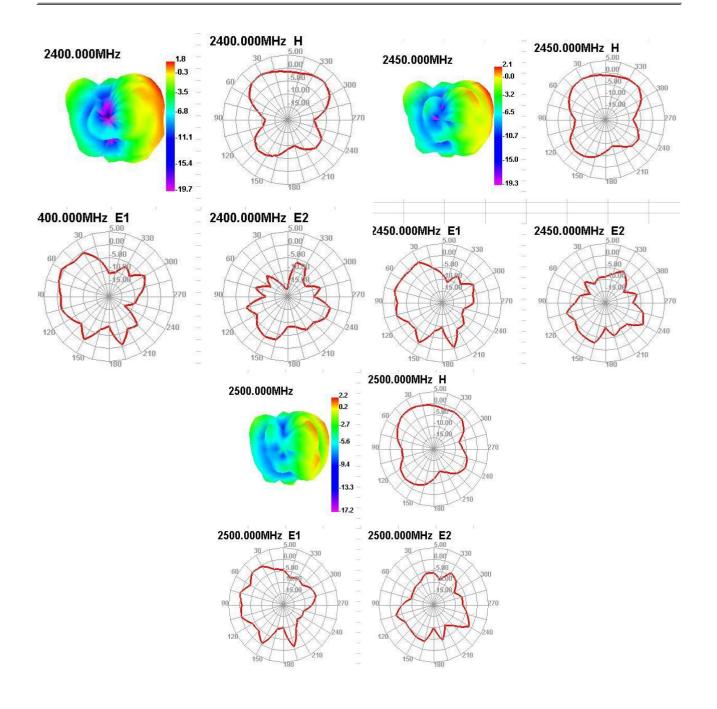
Frequency	2400	2450	2500
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standin 1.49	1.14	1.51
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	Passive Test For 2.4G									
Freq	Effi	Effi	Gain	Gain	UHIS	DHIS	Max	Min	Attenut	Attenut
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)	Hor	Ver
2400	43. 91	-3.57	1.84	-0.31	22.401	21.511	1.84	-19.67	49.25	48.85
2450	44.86	-3.48	2.13	-0.02	22.886	21.973	2.13	-19.33	49.5	49.28
2500	45. 49	-3.42	2.16	0.01	23.63	21.862	2.16	-17.15	49.61	49.52

2400.00MHz - 2500.00MHz Gain



# 3. **Efficiency and Gain**\*measuring and test instruments:

Microwave anechoic chamber, Agilent Network Analyzer, Agilent Spectrum Analyzer, 8960 Comprehensive Tester, Standard Antenna

#### \*test method:

The equipment is fixed in the center of the turntable on the H side, and is on the same horizontal line as the center of the horn antenna.

Efficiency/Gain-WIFI2.4G

## **4.**The production index

When the antenna is mass-produced, the VSWR is used as the mass production test standard. According to the differences in the project

itself, the following criteria are given: