

HXPCB24CC-498-120B1C Specification

WiFi/Bluetooth / 2.4G Single-Band Antenna – Black

Double-Sided PCB Antenna

Shenzhen Hongxin IoT Technology Co., Ltd.

Website: <http://www.wuxiankaifa.com>

Postal Code: 315000

Contact Person: Mr. Yan

QQ: 780254926

Tel: 0755- 2320- 5219

Mobile: +86 18588272526 (WeChat ID same as mobile number)

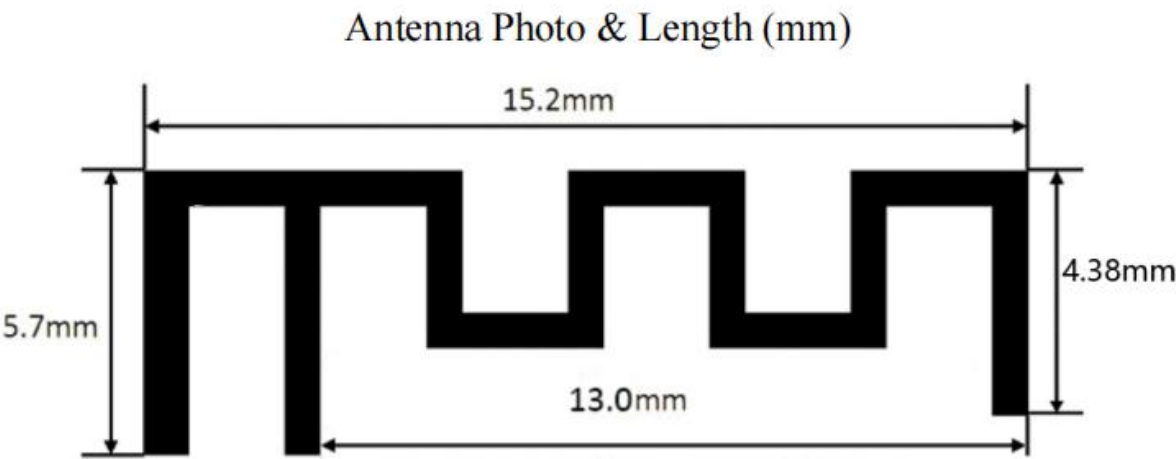
E-mail: yqh@hx-iot.com [<https://iot.com>]

Address: Hongjun Xinye Building, Xin'an 45th District, Xin'an Sub-district, Bao'an District, Shenzhen City, P.R.China

1.1 Specifications

Antennas Type	PCB Antenna
Cable Type	1.13
Impedance	50Ω
Polarization	Linea
Frequency	2.4-2.5GHz
VSWR	<2.0
Peak gain (dBi)	2.32dBi

1.2 Antenna Picture



2.4G Antenna

2. Electrical Specification

2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

2.2 Test Setup

2.2.1 Frequency Range

- A. 802.b/g/n: 2.4~2.5 GHz

2.2.2 VSWR

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



Figure.1

2.2.3 Radiation pattern and Gain

- A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

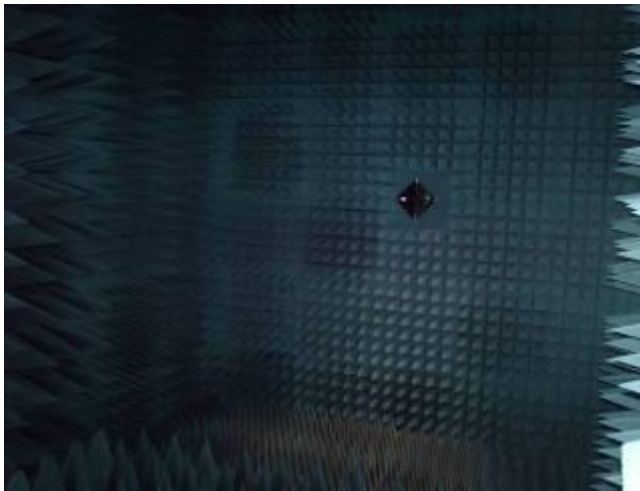


Figure.2

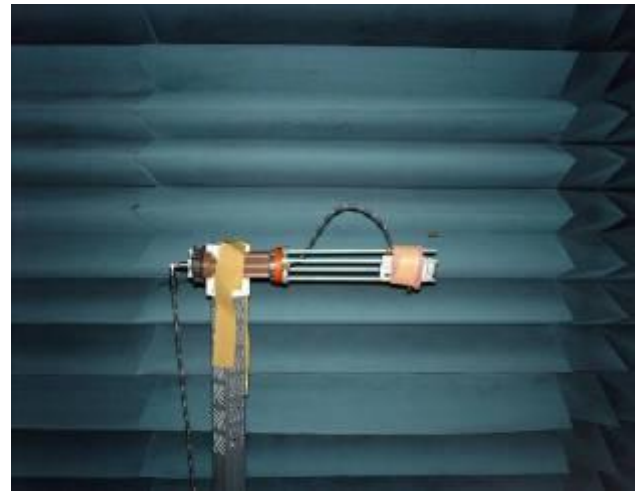


Figure.3



Figure.4

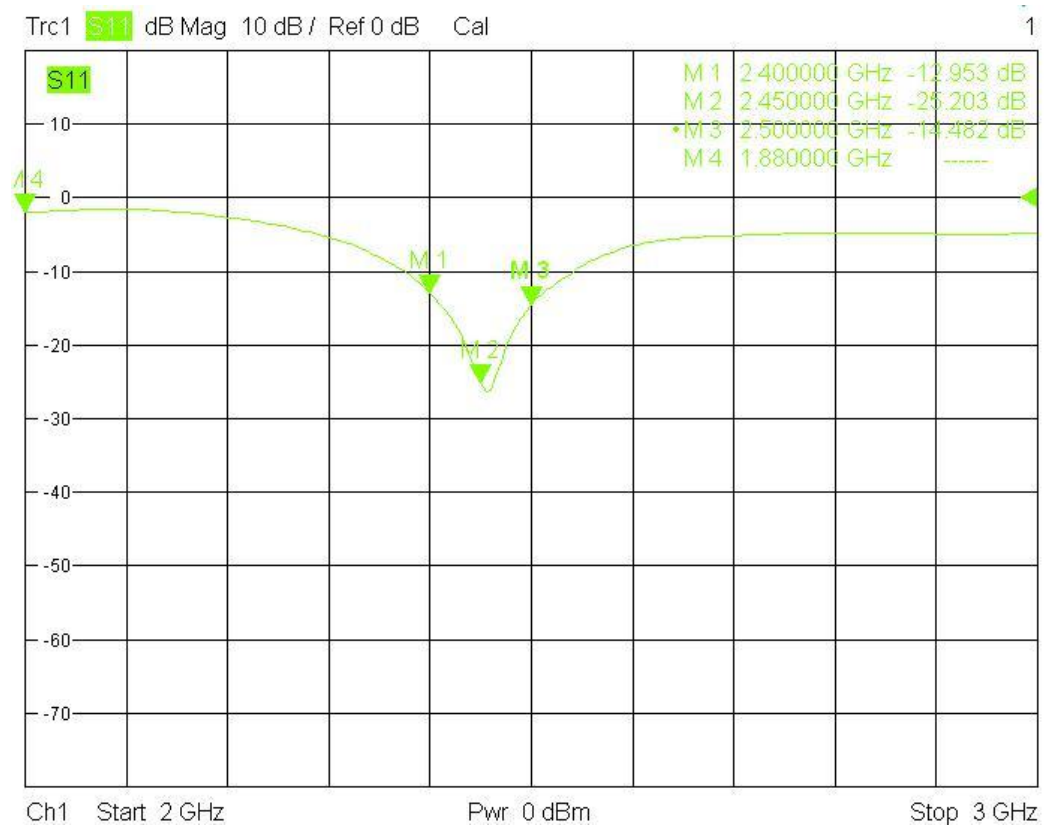
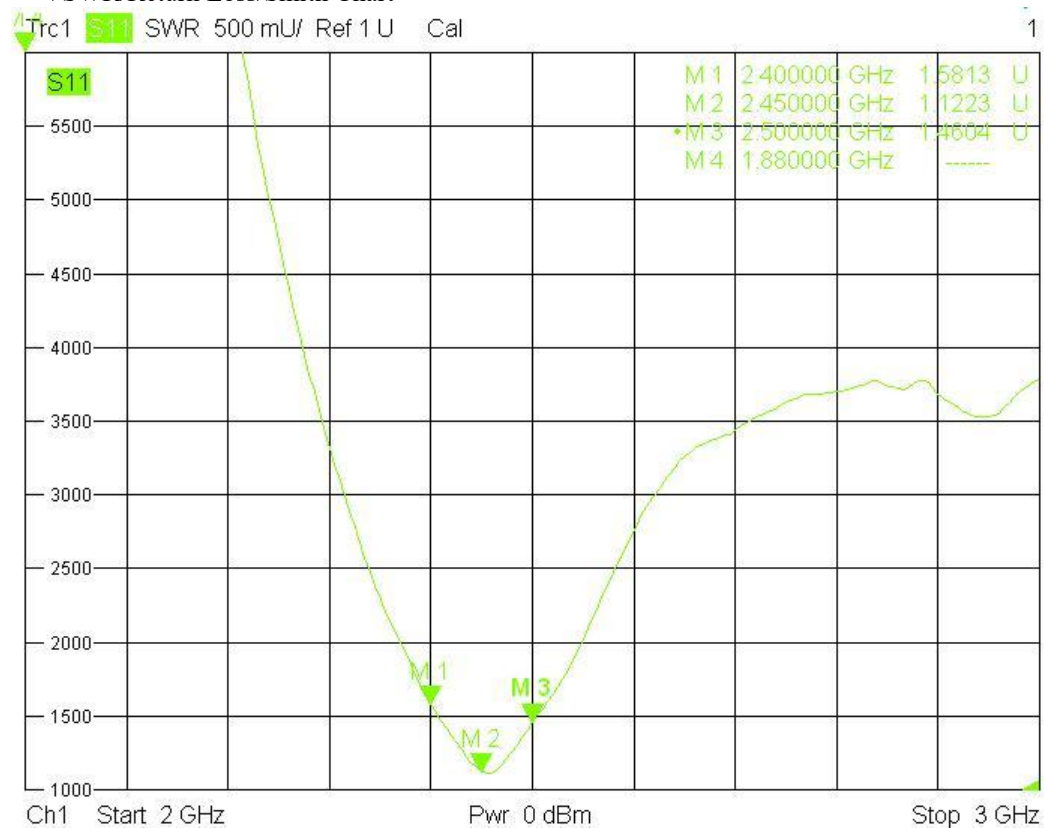


Figure.5

3. Performance Data

3.1 Passive data

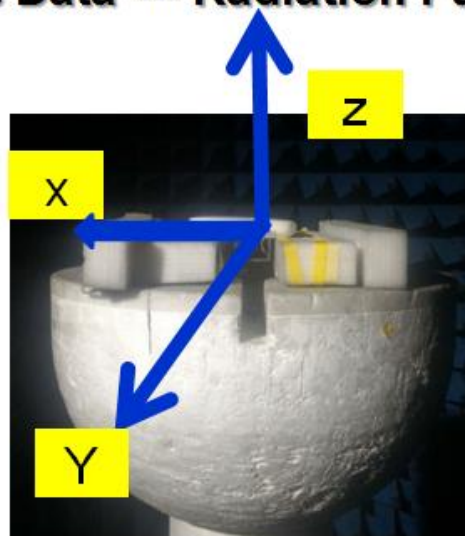
VSWR/Return Loss/Smith Chart



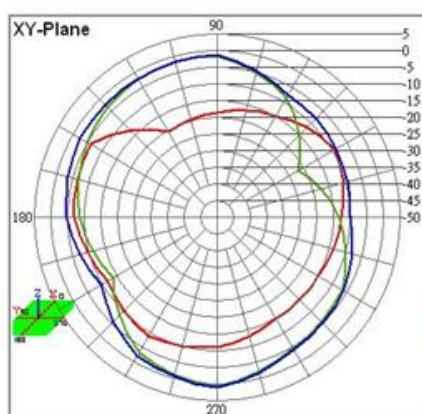
3.2 Radiation

Freq. (MHz)	Effy. (dBi)	Effy. (%)	Gain(dBi)
2400	-3.34	46.3	1.15
2450	-2.23	59.9	2.32
2500	-2.59	55.1	1.63

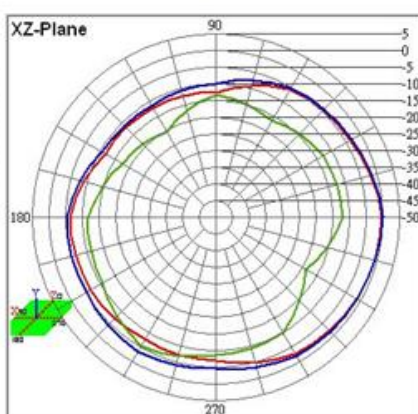
Performance Data --- Radiation Pattern



2.4GHz



2.45GHz



2.5GHz

