

SPECIFICATION

for

2.4G WiFi Antenna

Customer No.

Product No.

DXHK-2.4G WiFi Antenna

- PCB-300MM

Author: XiaofengZeng Review: Liming

Release Date: 2025.11.06

Contents

<u>SPECIFICATION.....</u>	<u>1</u>
<u>CONTENTS</u>	<u>2</u>
<u>1. BILATERAL CONFIRMATION PAGE</u>	<u>3</u>
<u>2. GENERAL</u>	<u>4</u>
<u>3. GENERAL PRODUCT SPECIFICATIONS</u>	<u>4</u>
<u>4. SPECIFICATION DETIALS</u>	<u>5</u>
<u>4.1 MECHANICAL PROPERTIES</u>	<u>5</u>
<u>4.2 ELECTRIC PERFORMANCE</u>	<u>7</u>
<u>5. PRODUCT PACKAGING.....</u>	<u>9</u>
<u>6. DOCUMENT RESUME</u>	<u>10</u>

1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		

2. General

2.1 Scope of application

This specification is only applicable to 2.4G WiFi Antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	2.4G WiFi Antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.0
4	Gain	$2.5 \pm 1\text{dBi}$
5	Radiation Efficiency	$\geq 50\%$
6	Impedance	50Ω
7	Antenna Type	Dipole
8	Antenna composition	PCB+CABLE

4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

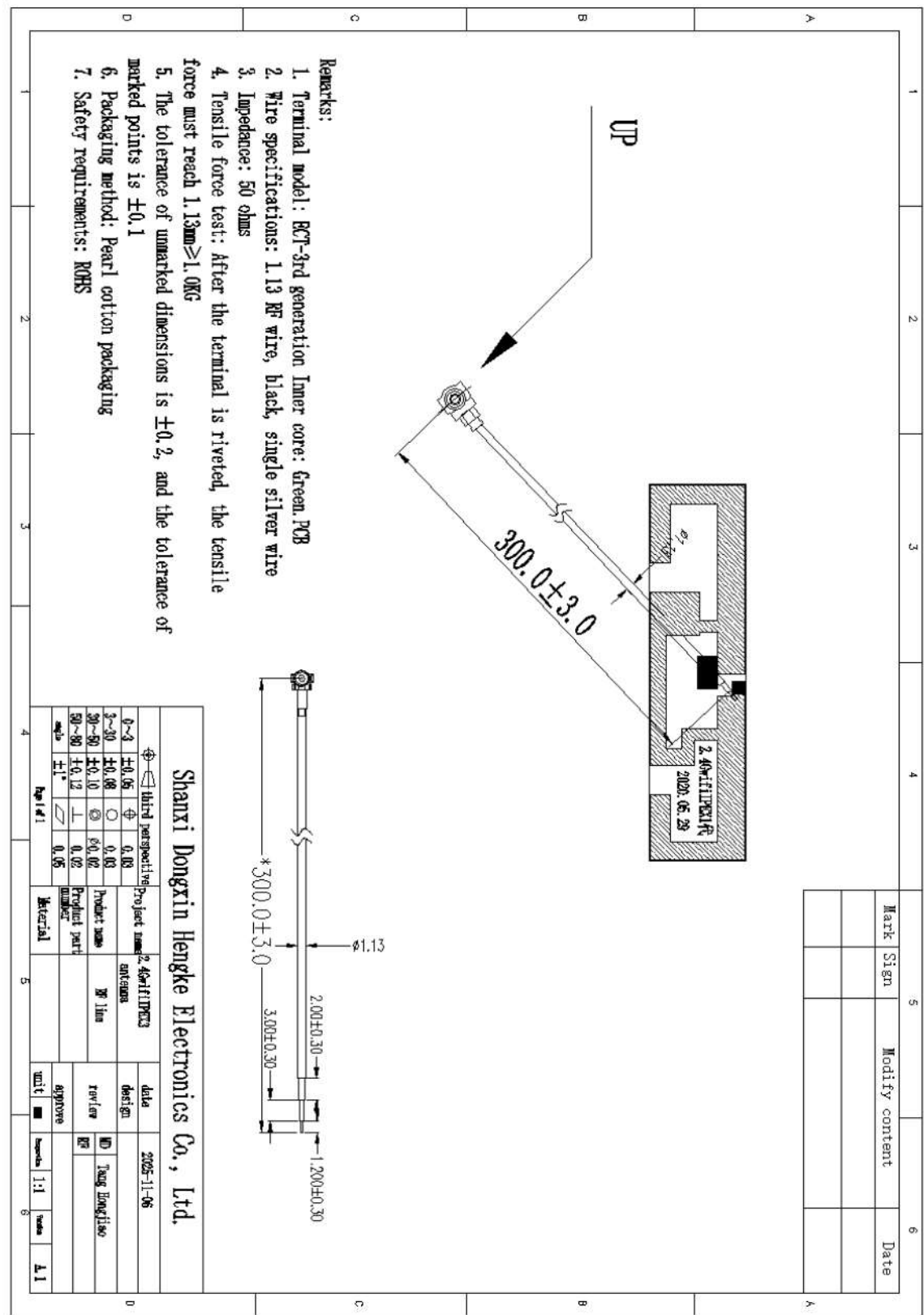
No.	Material	Size (MM)
1	PCB	XX Green
2	CABLE	ECT-3 ϕ 1.13 L=300 black

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:



4.2 Electric Performance

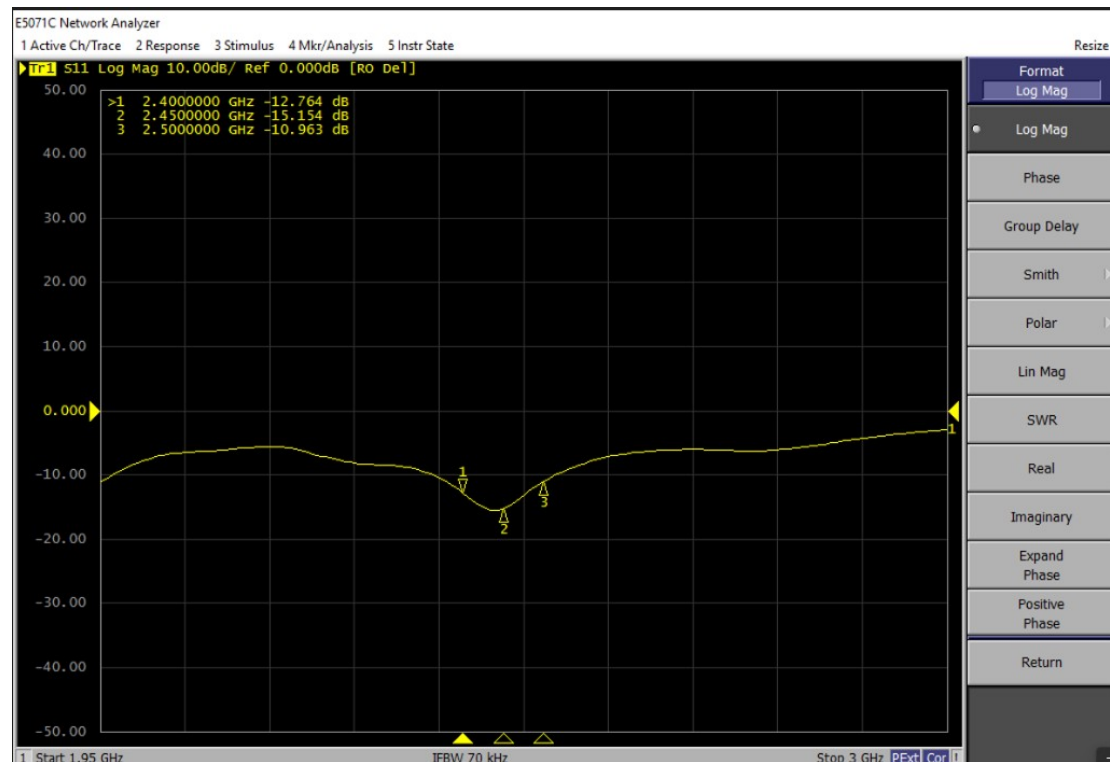
4.21 Test condition

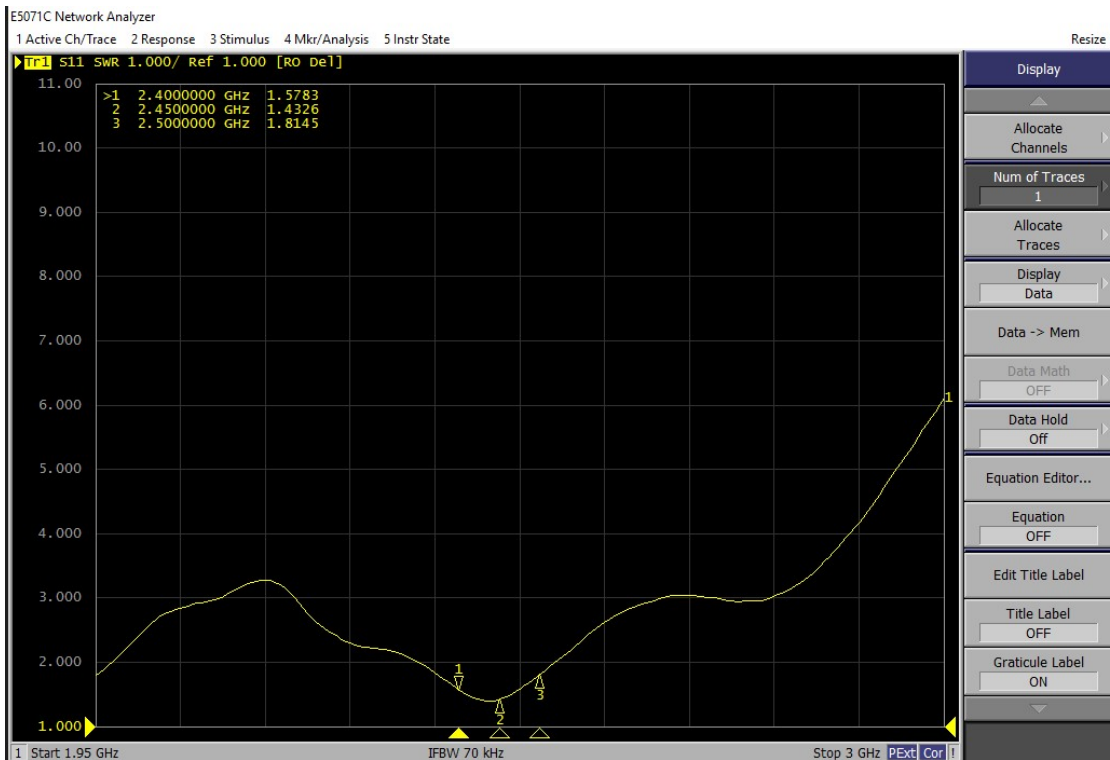
Environment:		Equipment:
Temperature:	10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity:	≤80% (+40℃)	Multi-probe microwave anechoic
Atmospher:	750mmkg±30mmkg	chamber

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-12.76	-15.15	-10.96
VSWR	1.57	1.43	1.81



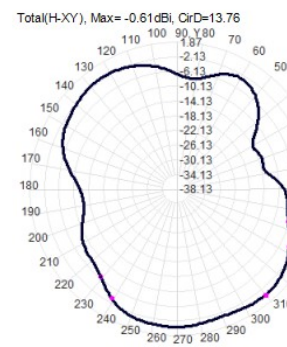
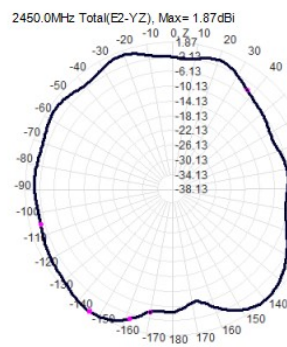
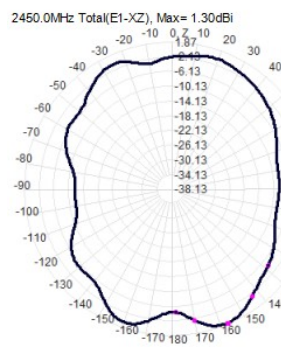
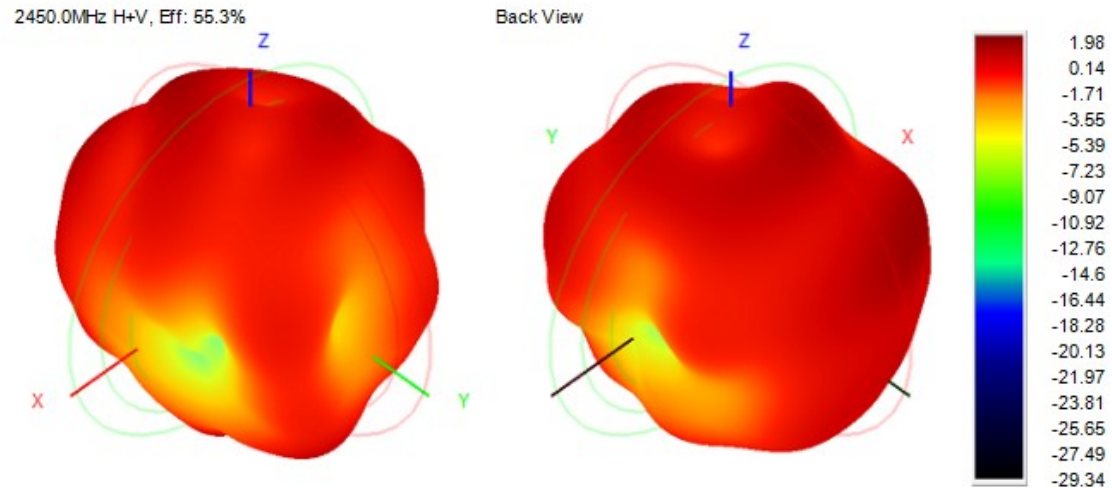


4. 22. 2 Passive gain , efficiency and Radiation Pattern:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.40	2.20	1.92	2.00	2.07	1.98	2.14	2.55	2.89	3.39	3.52
Efficiency (%)	55.72	55.46	54.27	54.93	56.00	55.26	55.02	55.87	55.45	57.12	56.08

Radiation Pattern 2450MHz

@2450MHz



5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

Shaanxi Dongxin Hengke Electronics Co., Ltd.
Building H3, 2nd Floor, Intelligent Terminal Industrial Park, High-tech
Zone, Ankang City, Shaanxi Province

6. Document Resume

Document No.	
Release Date	2025/11/06
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/11/06	1.00	New Project