



Antenna Approval Sheet

For **E308WH** Project

Customer	Fowke Innovation	Project	E308WH
Band	WiFi 2.4G		
ZC PN	FD012-CA-93		
Version	R:A	Data	2024-10-15

RF		ME	
Checked By			
Confirmed By			
Cust Confirm			



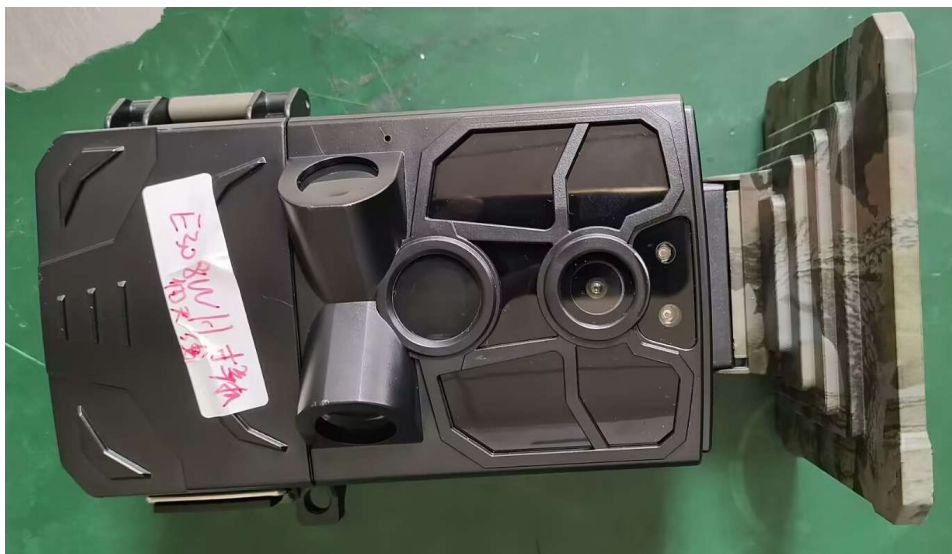
1.Manufacturer information

Company name: Shenzhen Zhongxinrui communication products Co., Ltd

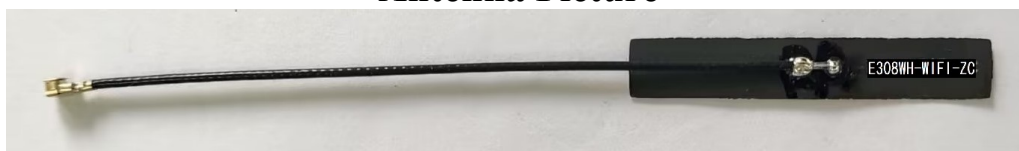
Address: 5th floor, building C, Huafeng Industrial Zone, Liuxian Road, 71 District, Bao' an, Shenzhen

2. Summary of the DUT

E308WH Picture



Antenna Picture



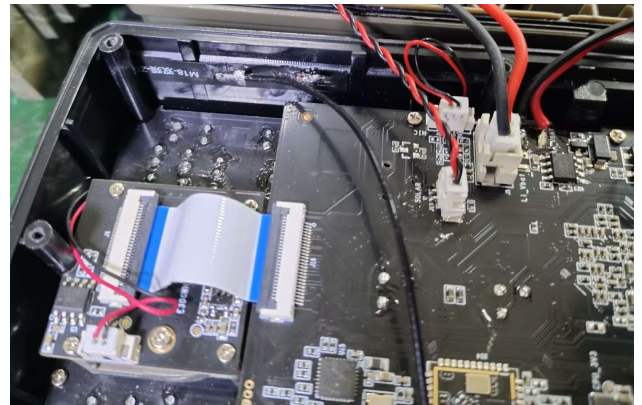
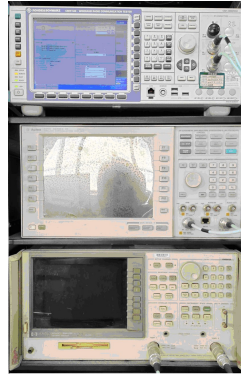
3. Electrical Specification:

Antenna types	Built-in WIFI/BT antenna
Frequency	2400-2500 MHz
Impedance	50 Ω
VSWR	< 2.0
Peak Gain	2.4GHZ 1.73 dbi
Efficiency	>35 %
Antenna Material	FPCB+Coaxial Cable
Connector Type	1.13 MHF-1-Plug



4. Test Condition

4.1	TEST ITEM	TESTING INSTRUMENT	REMARKS
PASSIVE TEST	1.Radiation Pattern 2.Antenna Gain 3. Return Loss 4. S.W.R	1.Satimo SG24(3D) 2. Agilent 8960 E5515C 3. R&S ZVL6	



4.2 Antenna installation diagram:

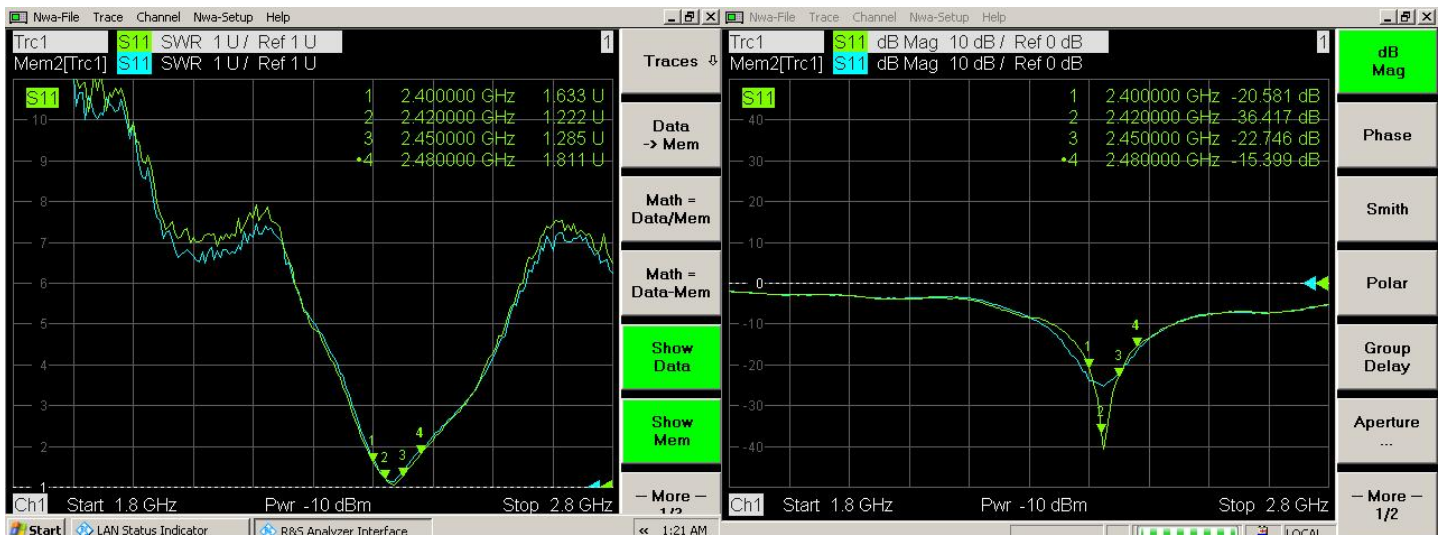
5. RF Performance

5.1 Passive parameters

Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	0.58	0.66	1.1	1.02	1.17	1.59	0.72	0.08	0.72	1.19	1.73

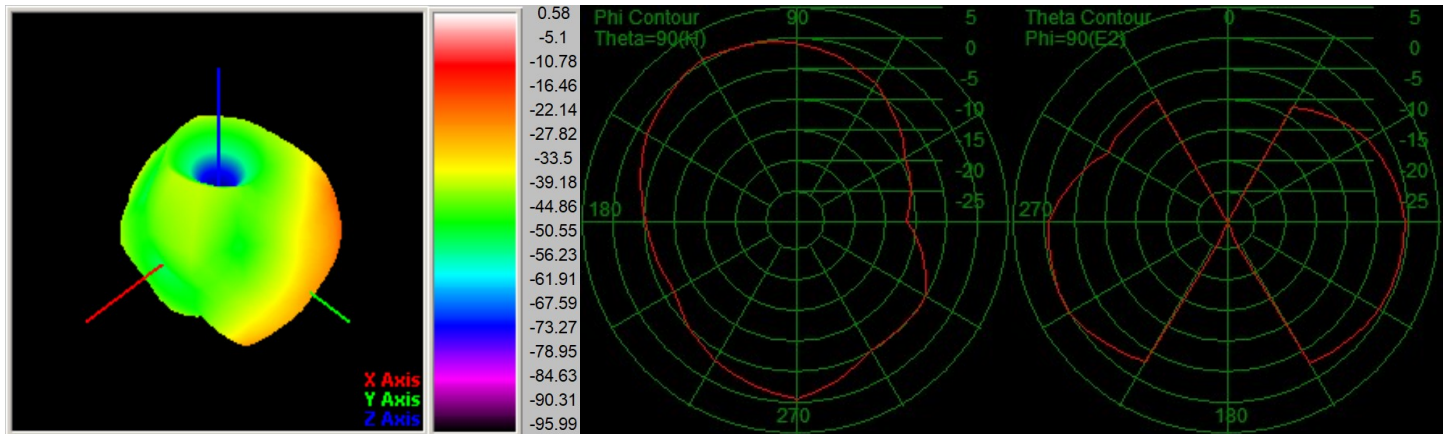
5.2 S Parameter

Frequency (MHz)	2400	2450	2480
Return Loss (dB)	-20.58	-22.74	-15.39
VSWR	1.63	1.28	1.81

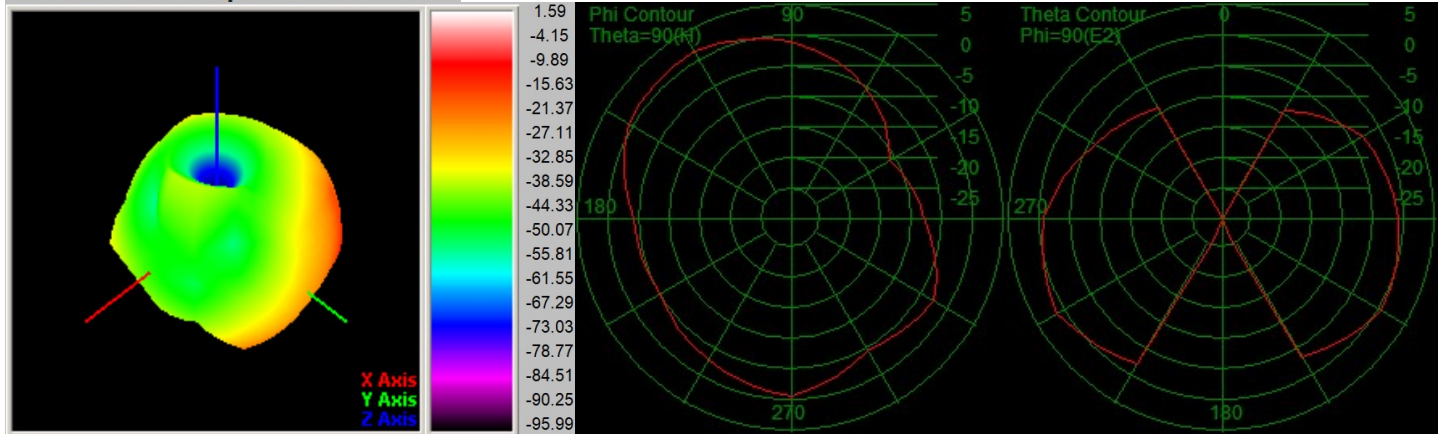




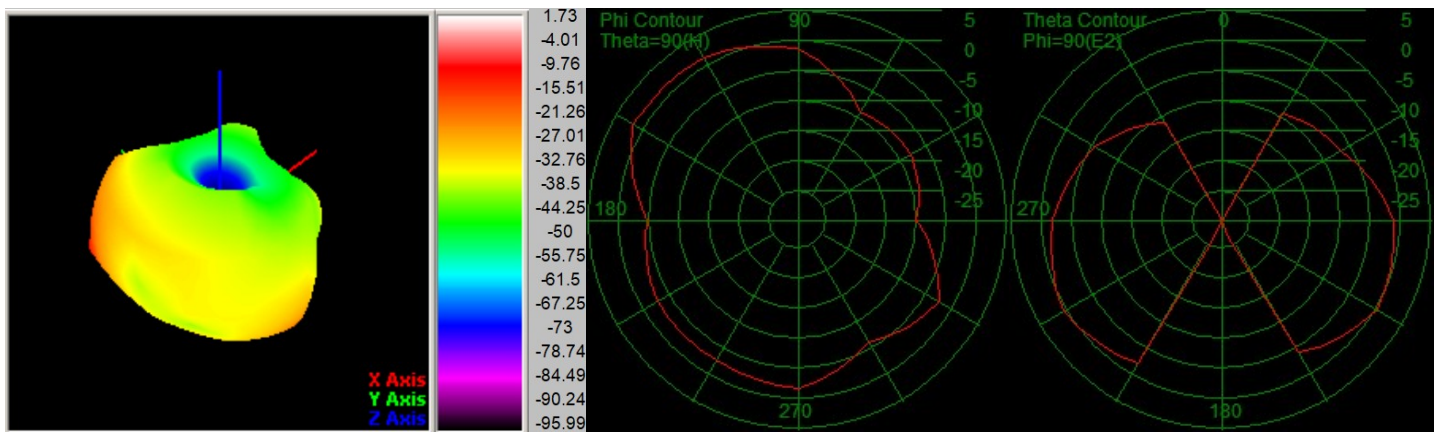
5.3 Antenna 3D Radiation Pattern (Unit:dbi)



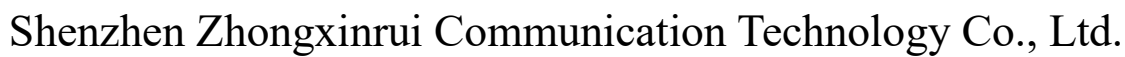
Passive -Freq2400.00MHZ



Passive -Freq2450.00MHZ



Passive -Freq2500.00MHZ



The drawing shows a cable assembly with the following dimensions and labels:

- Overall length: 90.00±1.5
- Connector length: 41.40±0.2
- Connector diameter: Ø1.13
- Label: E300MH-WIFI-ZC
- Label: 6.90
- Label: first generation connectors
- Label: Back adhesive

61-CL5-SF

REV Description of change BY DATE

T:A New drawings GUO 2024-10-15

Shenzhen Zhongcheng Communication Technology Co., Ltd.

General Tolerances

Third Angle Projection Unit: mm

NAME: Antenna DATE: 2024-10-15

PART NO. FD012-CA-03-TA DRWN:

MATERIAL: CHKD:

SURFACE: APPD:

COLOR: SCALE: 1.5:1 REV: T:A

Technical note:

1. The total length of the coaxial cable is 90 mm.

2. Can not burn FPC, can not cause FPC deformation, wrinkle, indentation.

3. Stripping wire can not be deformed or broken.

4. Add * size as the important dimensions, add "0" as the reference dimension

NO.	Product Name	Part NO.	Material	Color
1	FPC	FD012-PA-13	PI	Black
2	Cable	T13-185	TC+EP	Black