



Antenna Approval Sheet

For **MV01** Project

Customer	永福昌	Project	MV01
Band	WiFi 2.4GHZ/5GHZ		
ZC PN	YC001-BA-73		
Version	R:A	Data	2024-8-20

RF		ME	
Checked By			
Confirmed By			
Cust Confirm			



1.Manufacturer information

Company name: Shenzhen Zhongcheng communication products Co., Ltd

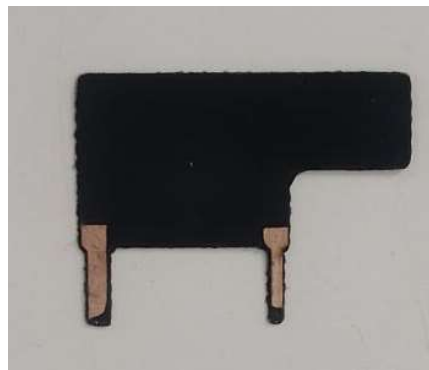
Address: 5th floor, building C, Huafeng Industrial Zone, Liuxian Road, 71 District, Bao' an, Shenzhen

2. Summary of the DUT

MV01-Dual-Band Picture



Antenna Picture



3. Electrical Specification:

Antenna types	Built-in WIFI Antenna
Frequency	2400-2500 MHz, 5150-5350MHZ, 5725-5850MHZ
Impedance	50 Ω
VSWR	< 2.0
Gain	2.4GHZ 1.73dbi, 5.1GHZ 4.31dbi, 5.8GHZ 4.45dbi
Antenna Material	PCB
Connector Type	soldering



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	

4.2Antenna 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
Freq. (MHz)	5150	5170	5190	5210	5230	5250	5270	5290	5310	5330	5350
Gain (dBi)	3.13	3.45	3.56	4.11	4.31	4.21	4.1	3.82	3.28	3.19	3.04
Freq. (MHz)	5720	5740	5760	5780	5800	5820	5840	5860	5880		
Gain (dBi)	2.51	4.45	3.32	4.18	2.54	4.01	1.41	2.47	1.09		

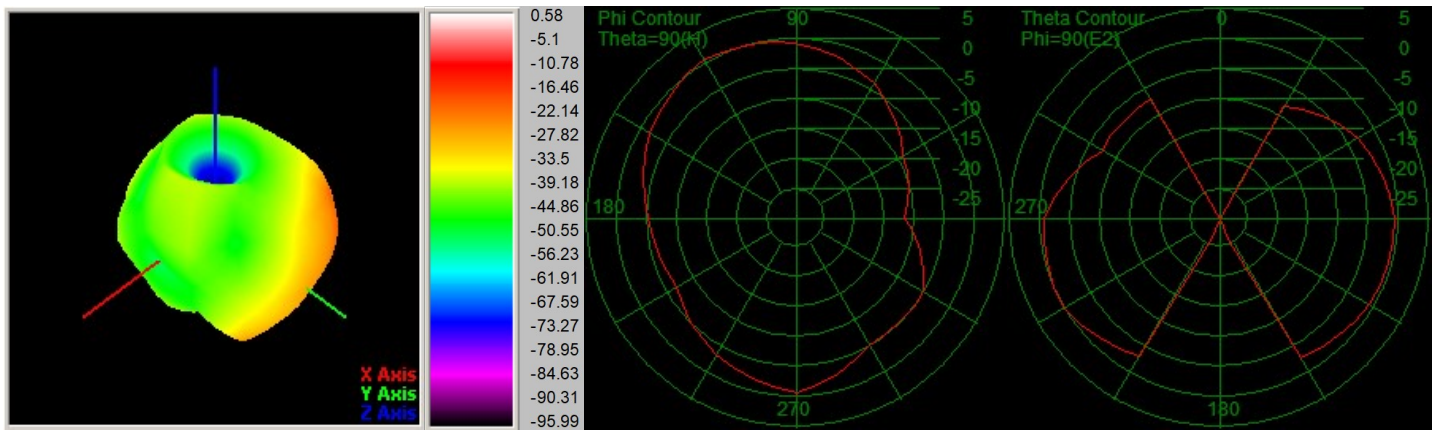
5.2 S Parameter

Frequency (MHz)	2400	2450	2480	5725	5875
Return Loss (dB)	-13.2	-20.6	-13.9	-17.5	-17.1
VSWR	1.53	1.27	1.6	1.28	1.33



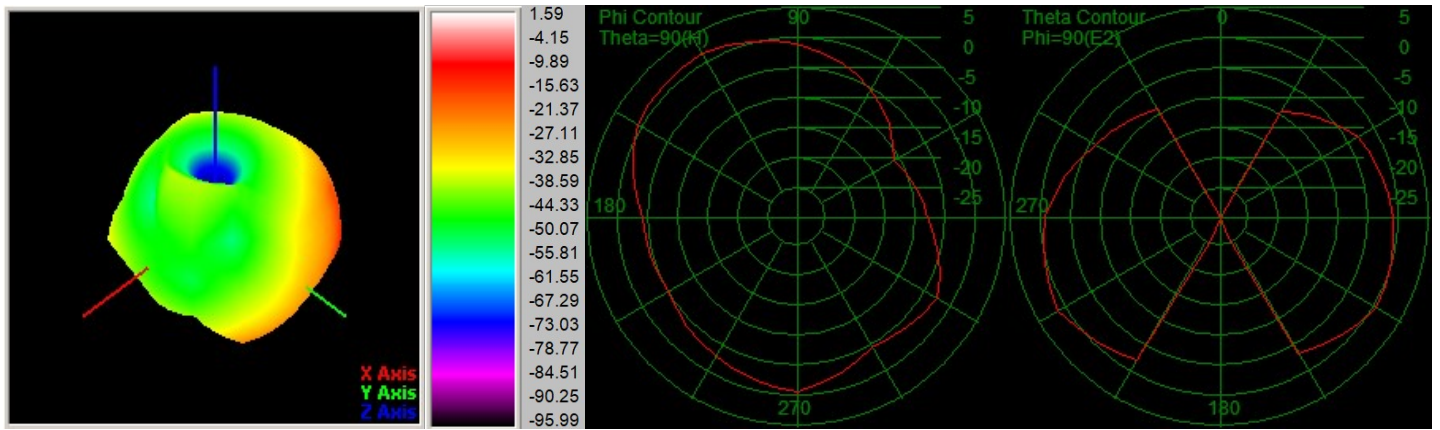


5.3 Radiation



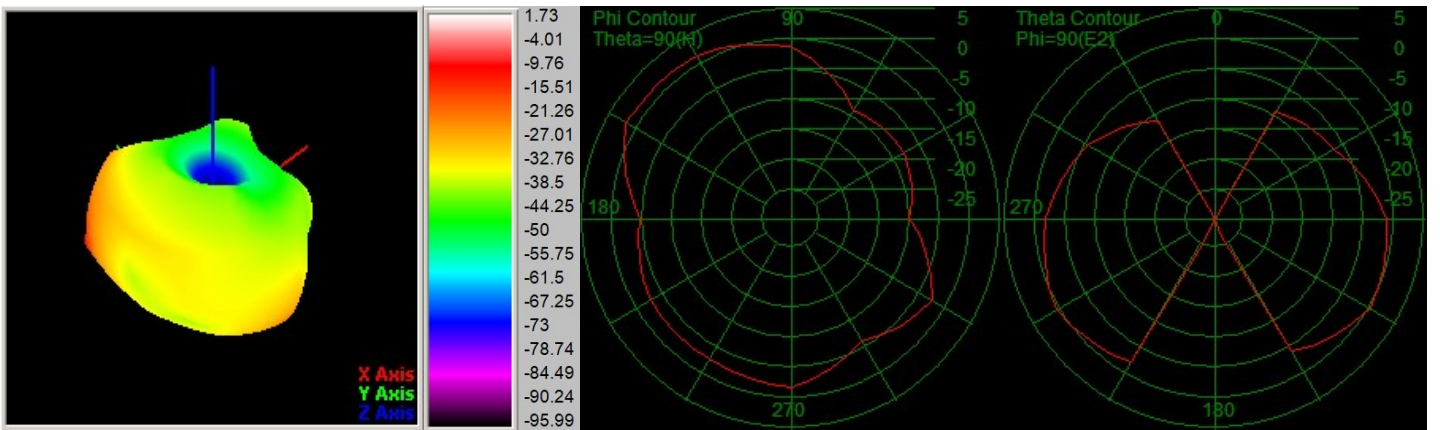
Passive -Freq2400.00MHZ

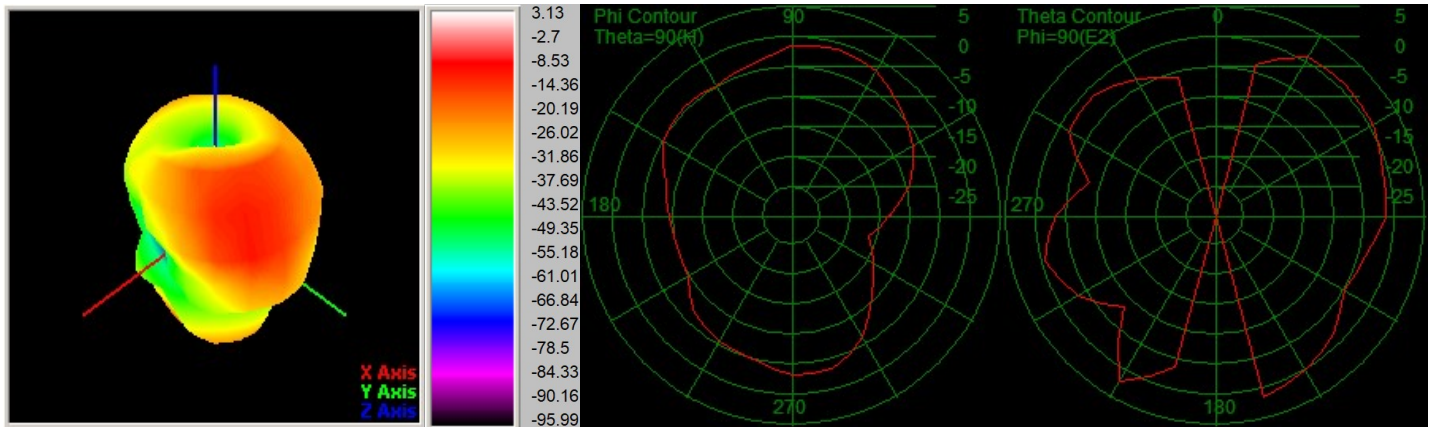
Gain:0.58(dBi)



Passive -Freq2450.00MHZ

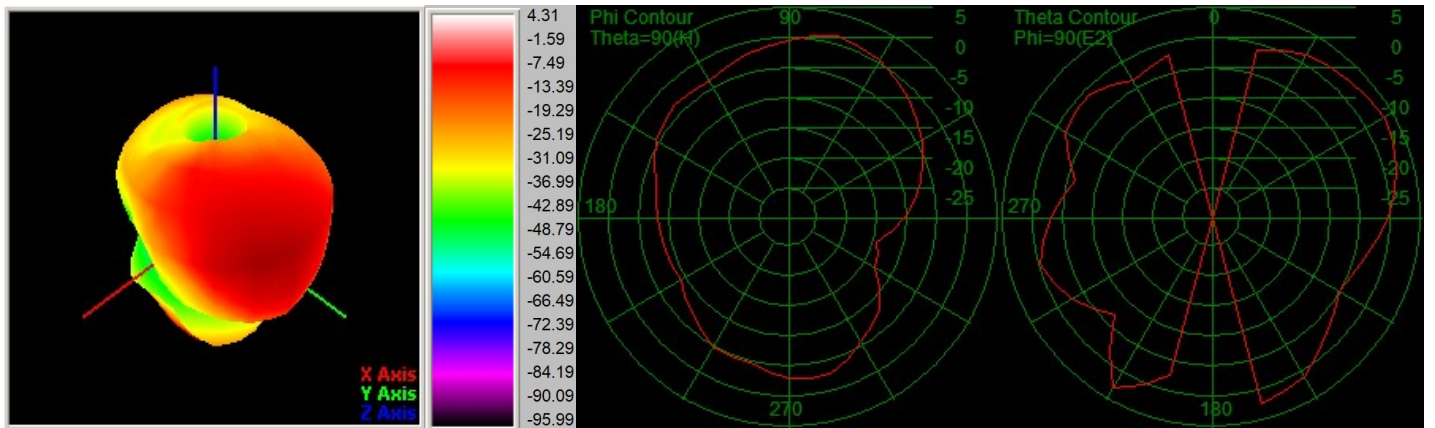
Gain: 1.59(dBi)





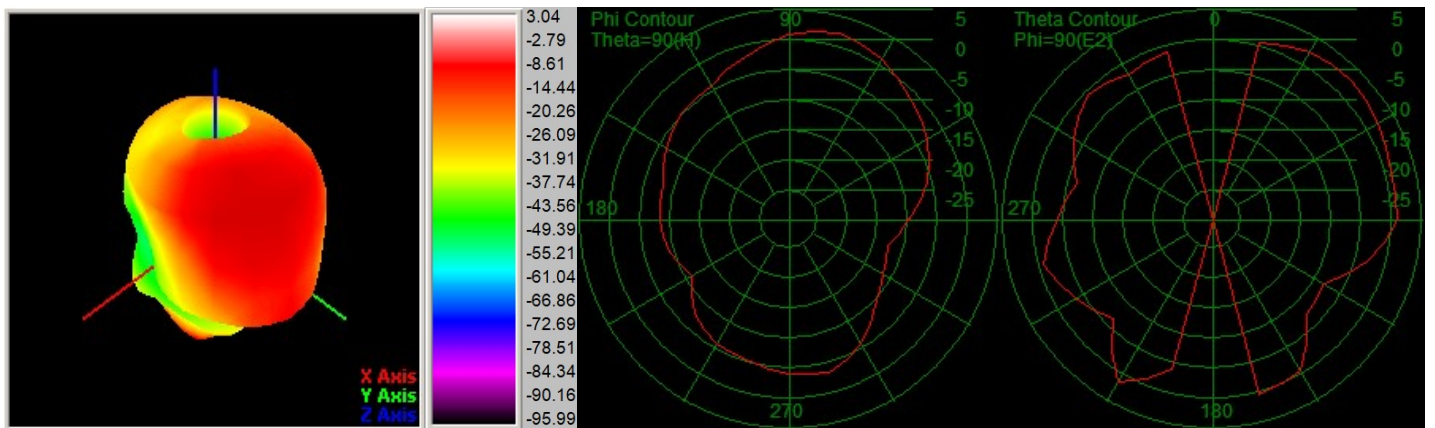
Passive -Freq5150.00MHZ

Gain: 3.13(dBi)



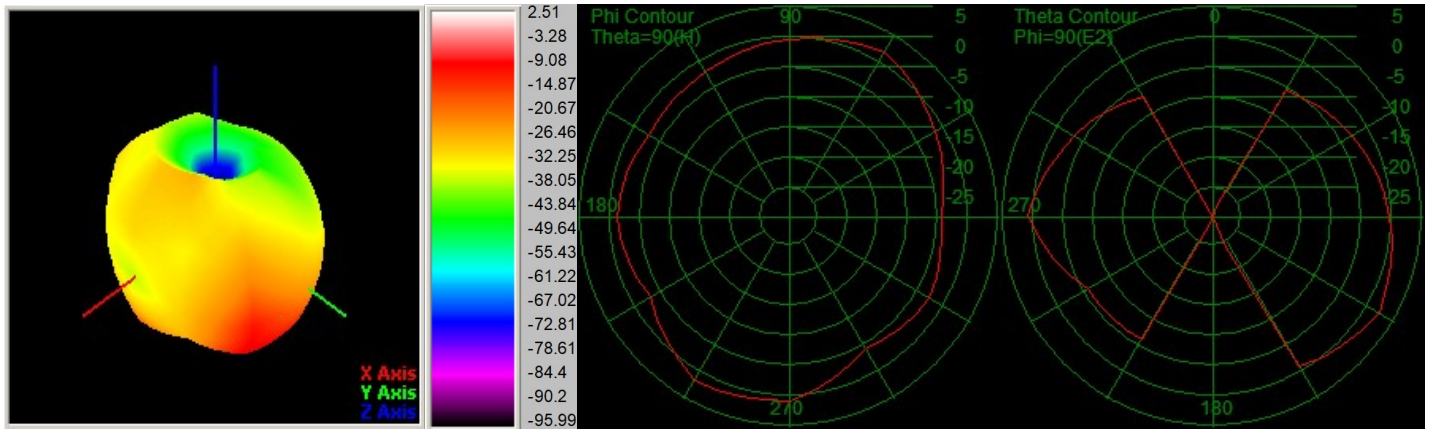
Passive -Freq5230.00MHZ

Gain: 4.31(dBi)



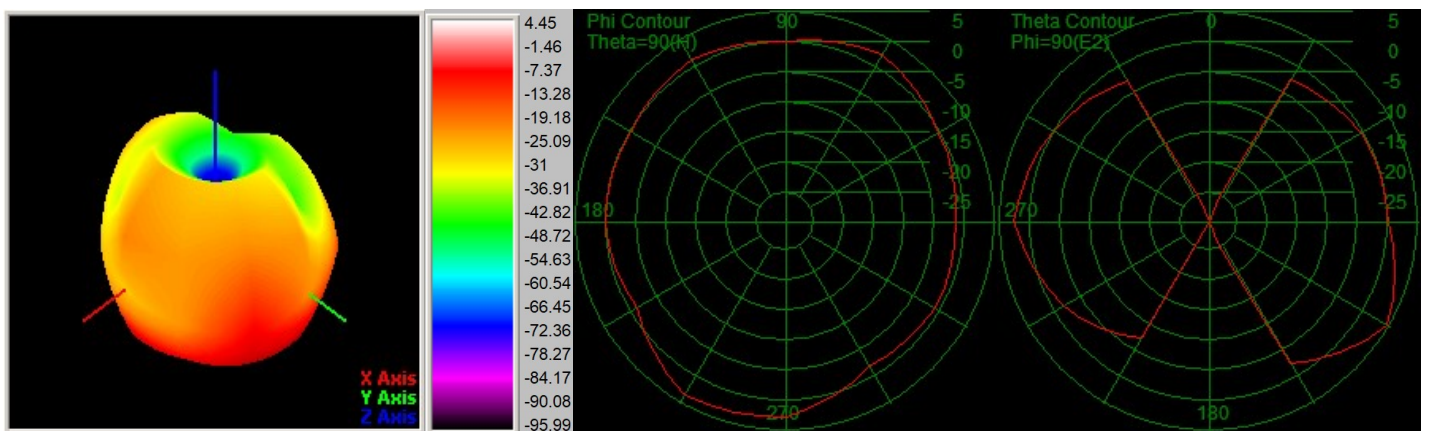
Passive -Freq5350.00MHZ

Gain: 3.04(dBi)



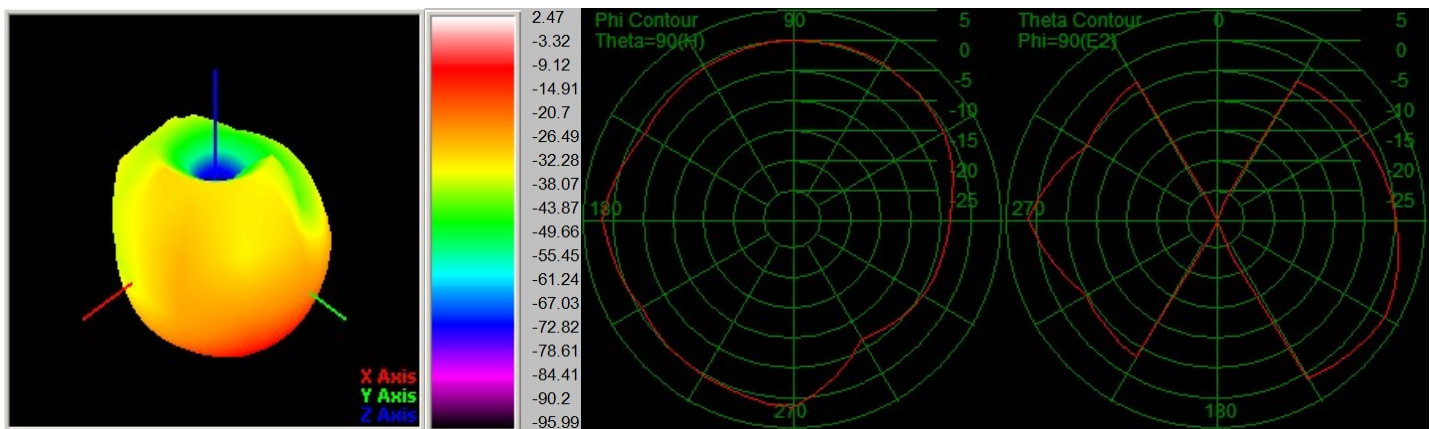
Passive -Freq5720.00MHZ

Gain:2.51(dBi)



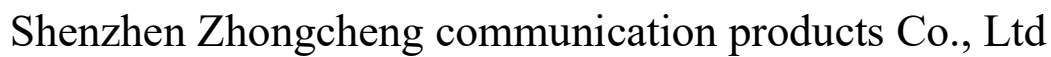
Passive -Freq5740.00MHZ

Gain: 4.45(dBi)



Passive -Freq5860.00MHZ

Gain: 2.47(dBi)



Technical drawing of a PCB antenna. The drawing includes a top view with dimensions 12.90±0.2 and 17.10±0.2, and a side view with dimensions 0.95 and 1.45. A label '镀金区' (Gold Plating Area) points to the top surface. A table at the bottom right contains the following information:

REV	Description of change	BY	DATE
T:A	New drawings	CUO	2024-8-20

Technical note:

- Add "x" size as the important dimensions, add "0" as the reference dimension.
- If the tolerance is not specified, follow the general tolerance, and if the rounded corner is not specified, R0.2.
- There should be no wrinkles, sand spots or other issues on the surface, according to the requirements of antenna appearance inspection.