



Antenna Approval Sheet

For
K803 Project

Customer	HUAXINZHIYING	Project	K803
Band	WiFi 2.4GHZ/5GHZ		
ZC PN	HA040-CA-93		
Version	R:A	Data	2024-8-2

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

K803 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	FPCB+Coaxial Cable
Connector Type	0.81 MHF-2-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	

4.2Antenna 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		

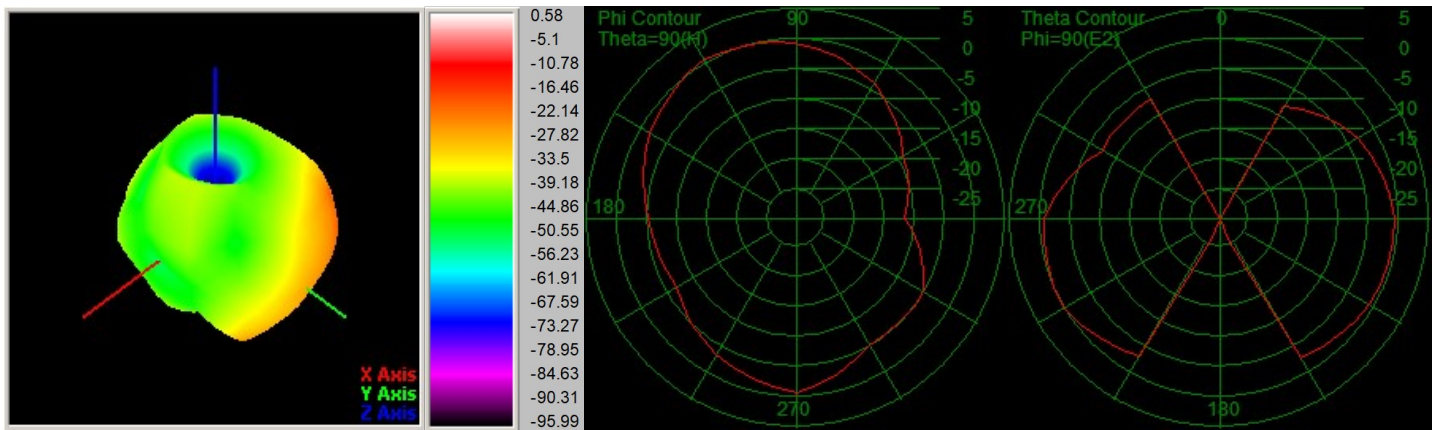
5.2 S Parameter

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



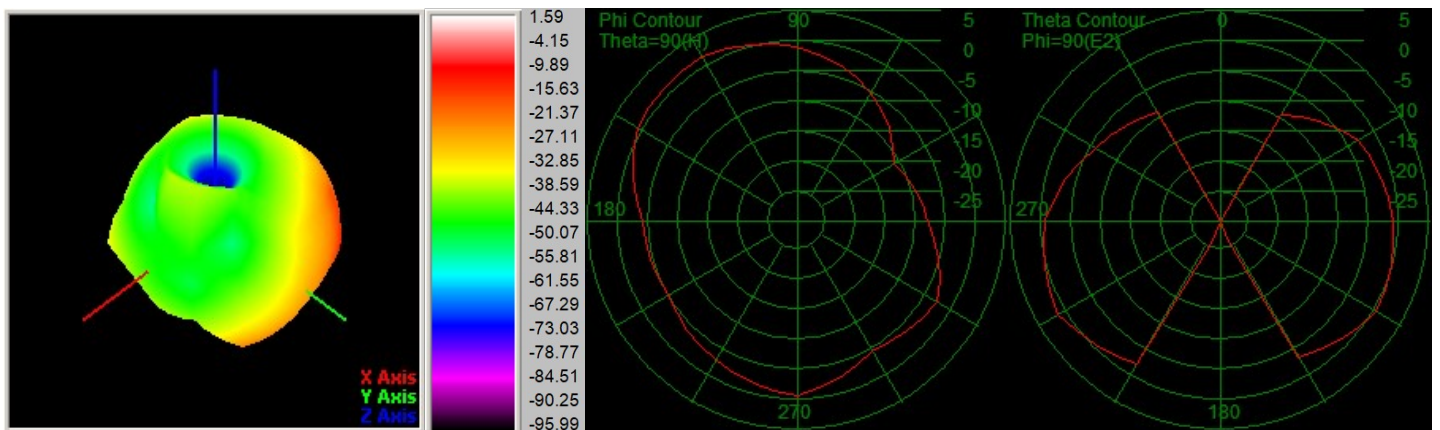


5.3 Radiation



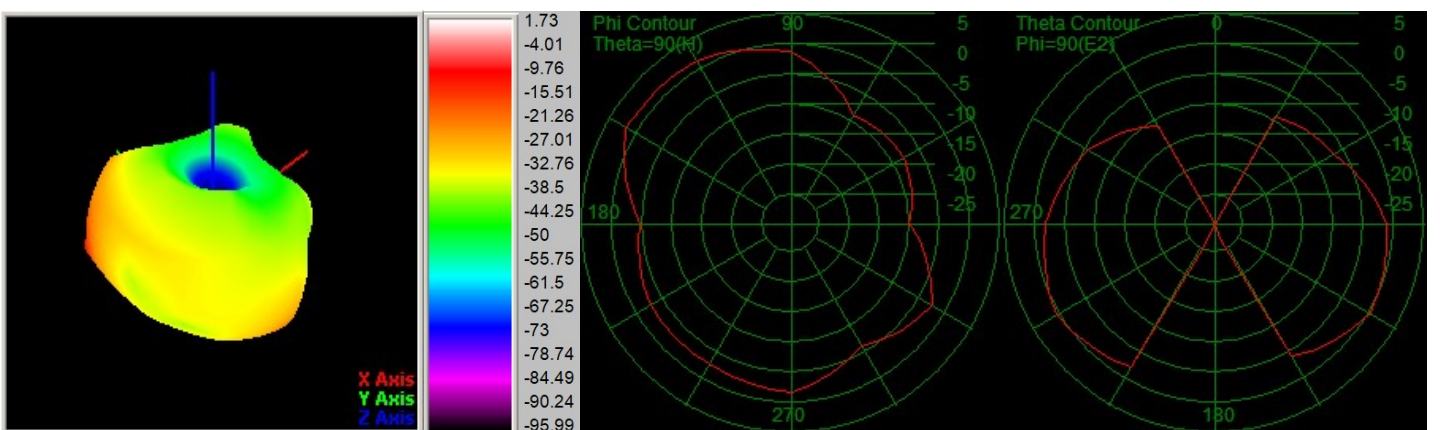
Passive -Freq2400.00MHZ

Gain:0.58(dBi)



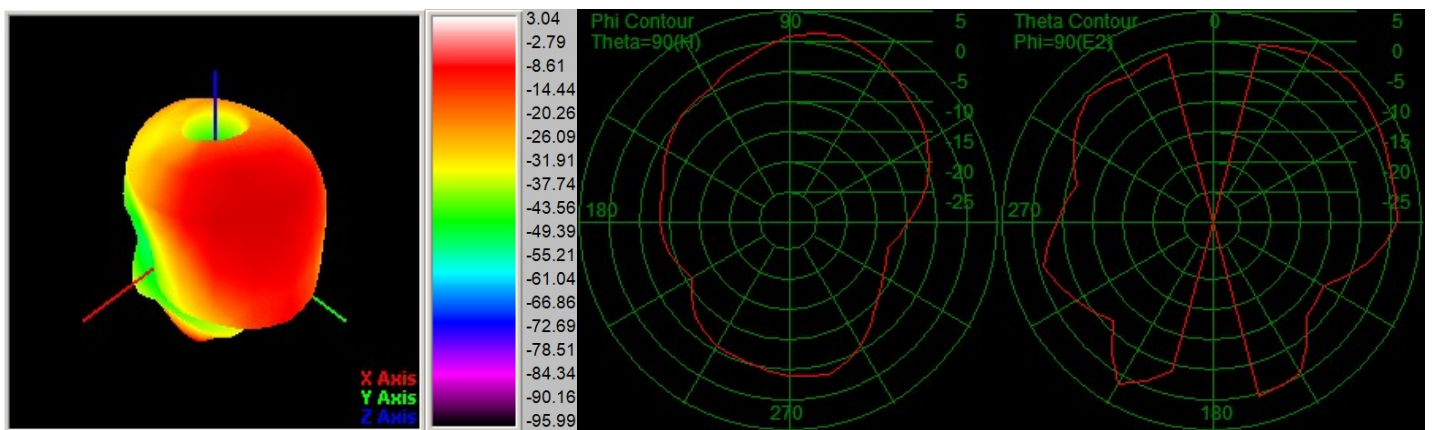
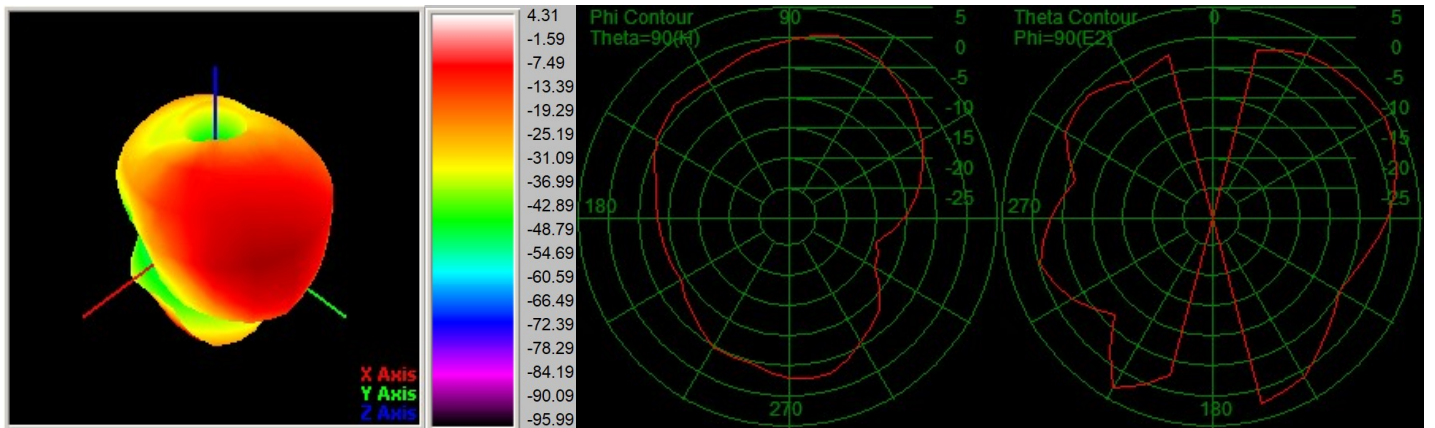
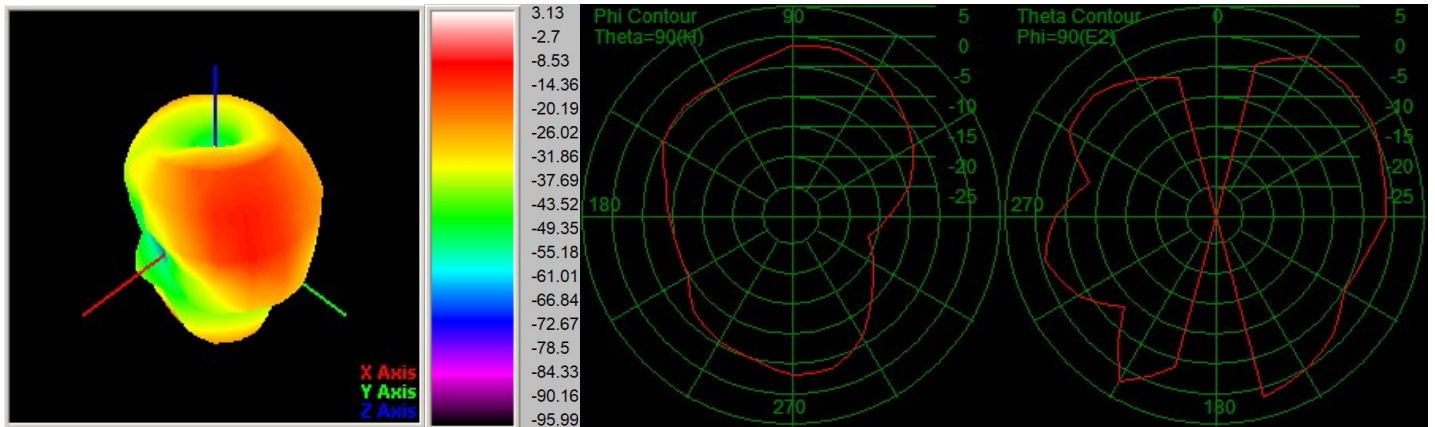
Passive -Freq2450.00MHZ

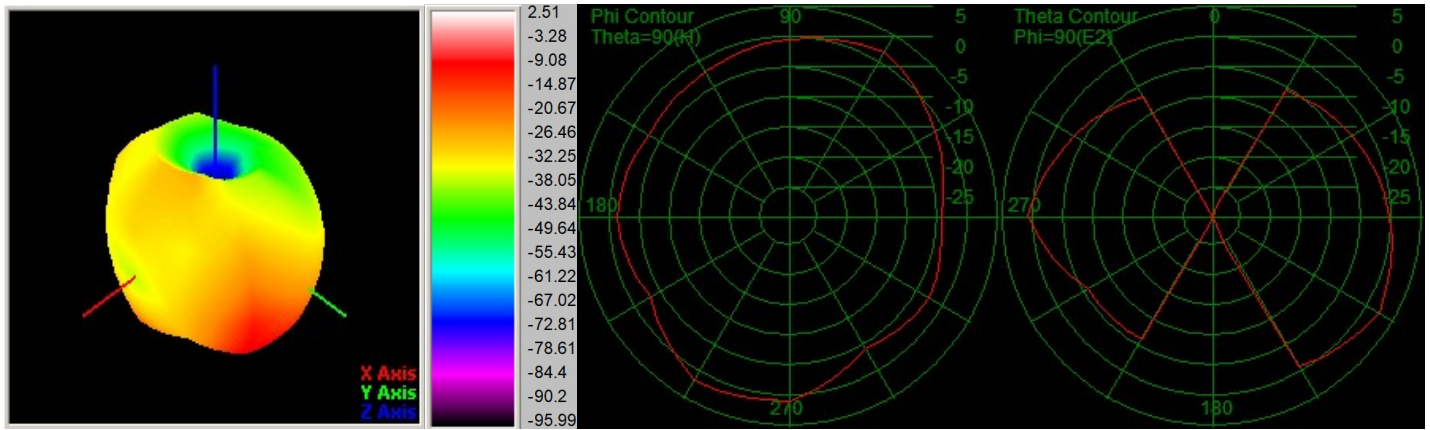
Gain: 1.59(dBi)



Passive -Freq2500.00MHZ

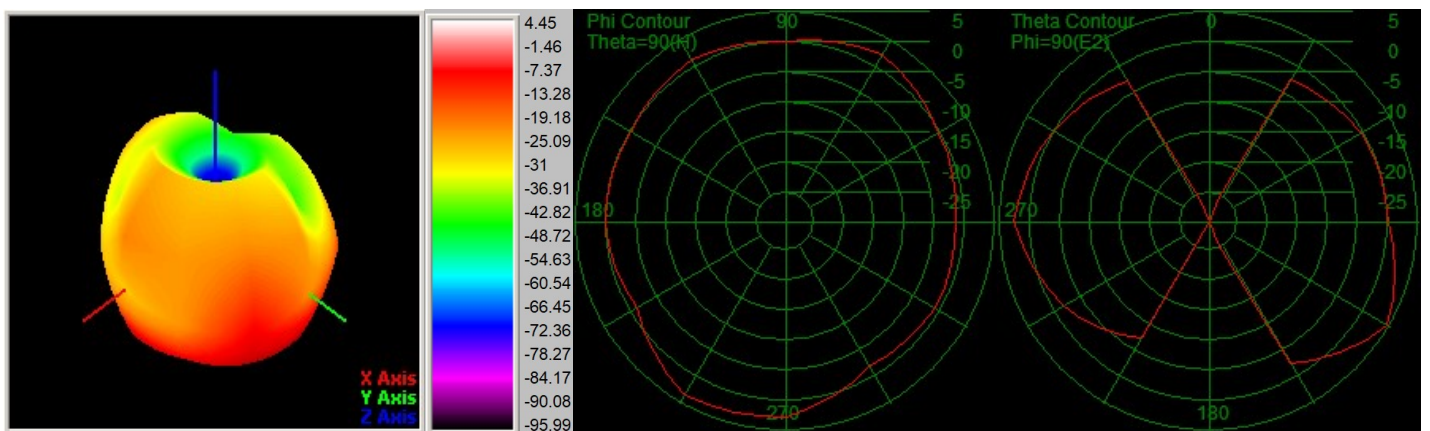
Gain: 1.73(dBi)





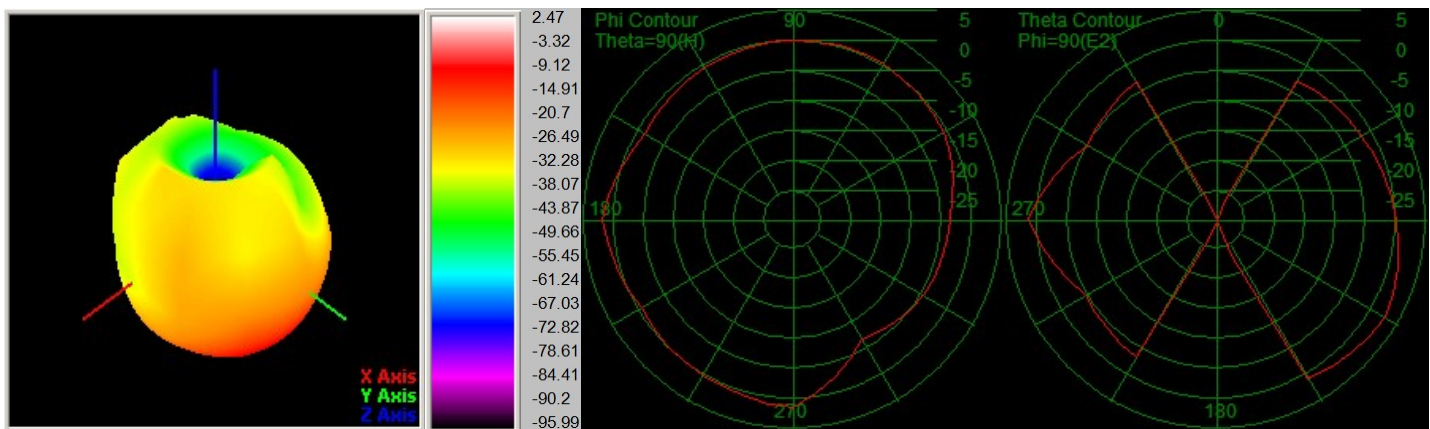
Passive -Freq5720.00MHZ

Gain:2.51(dBi)



Passive -Freq5740.00MHZ

Gain: 4.45(dBi)

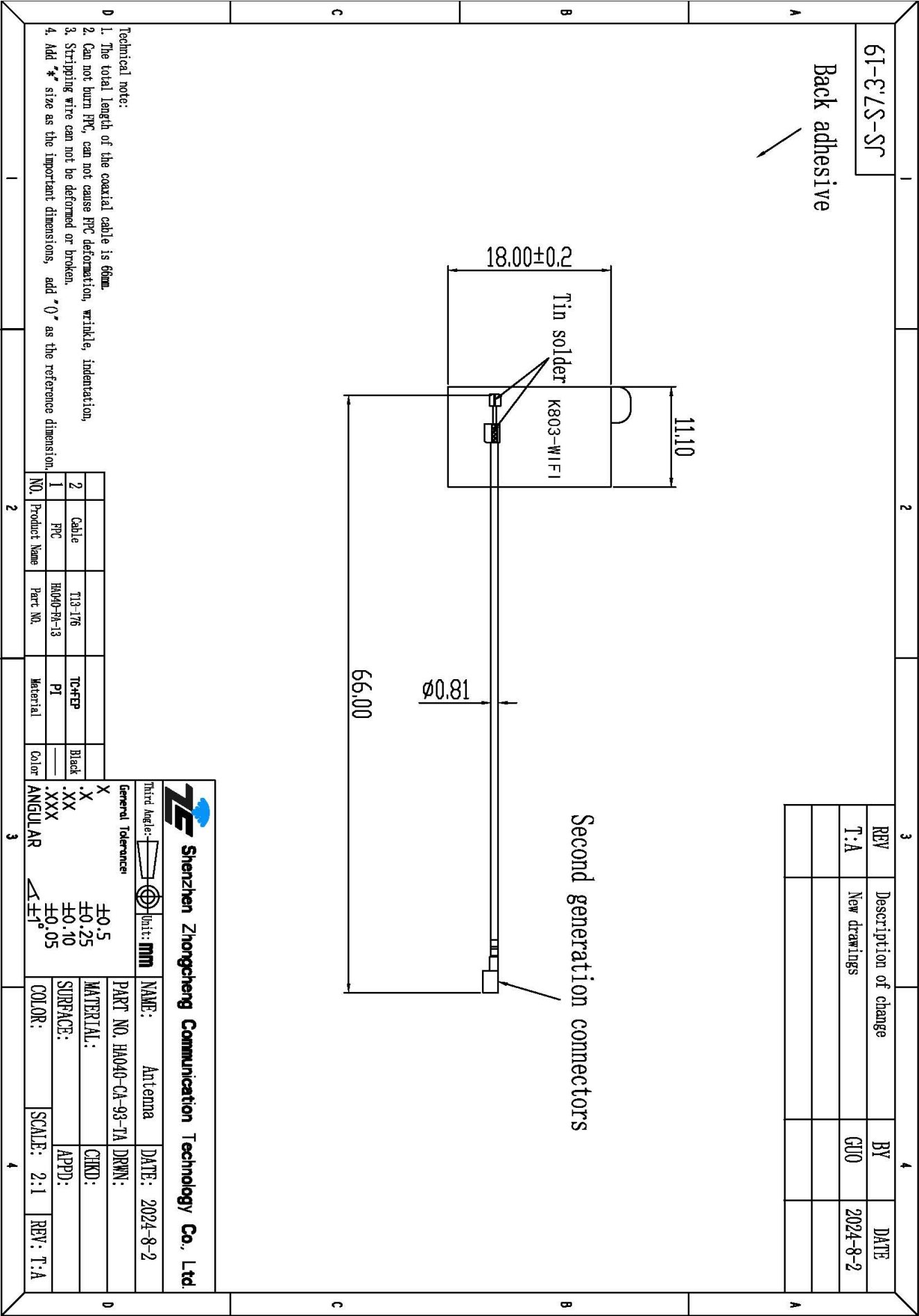


Passive -Freq5860.00MHZ

Gain: 2.47(dBi)



6. ME Drawing for the antenna



Technical note:

1. The total length of the coaxial cable is 66mm.

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 "()" as the reference dimension.