Advanced Technology & Communications

A1782_Antenna Report V4

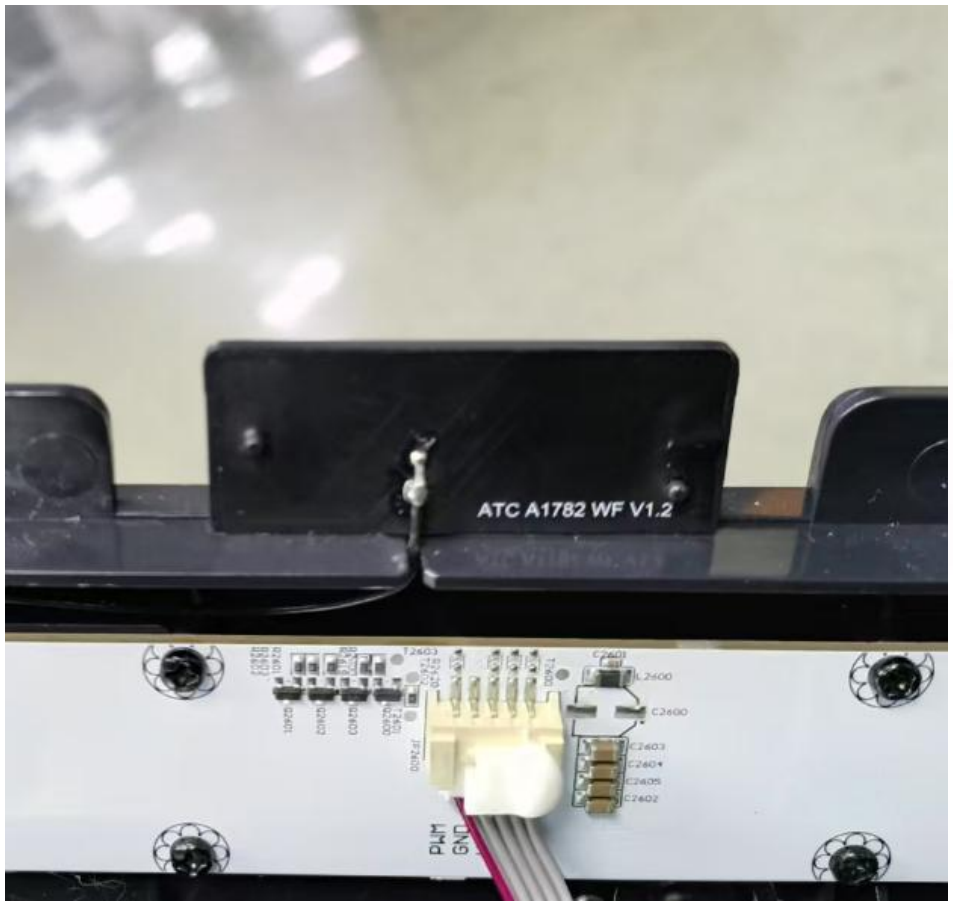
2025.01.13

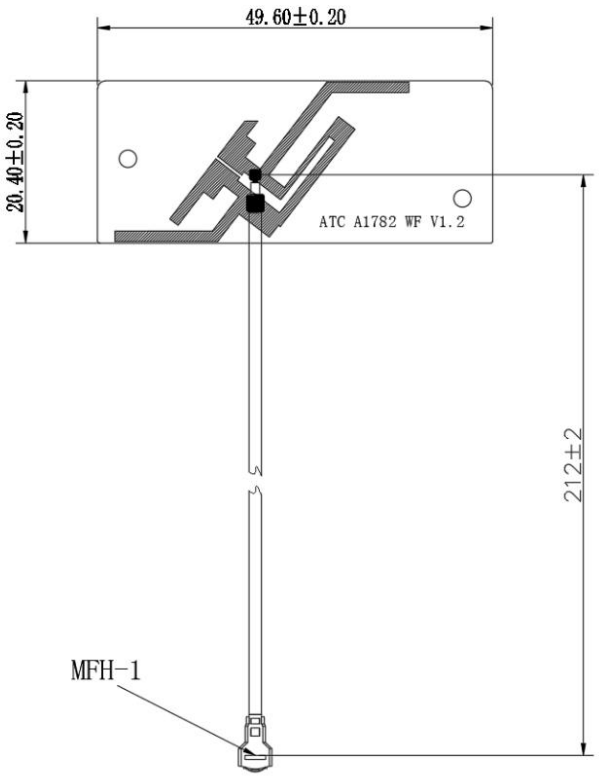
Room 201, Building C, No. 5, Skyworth Innovation Valley, Tangtou No. 1 Road, Tangtou Community, Shiyan Street, Bao'an District, Shenzhen

Contents

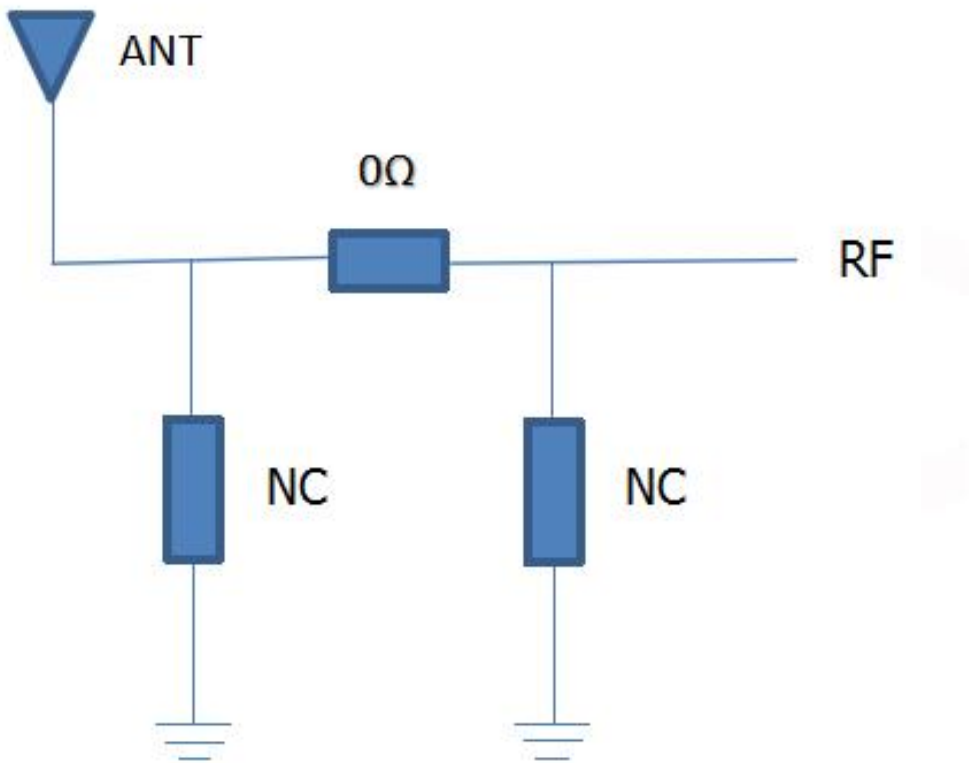
● A1782_Antenna information

1. Type of the antenna :FPC+CABLE
2. Placement of the antenna : as shown below
3. Coverage : 2400 ~ 2500MHz.
4. Unit: mm

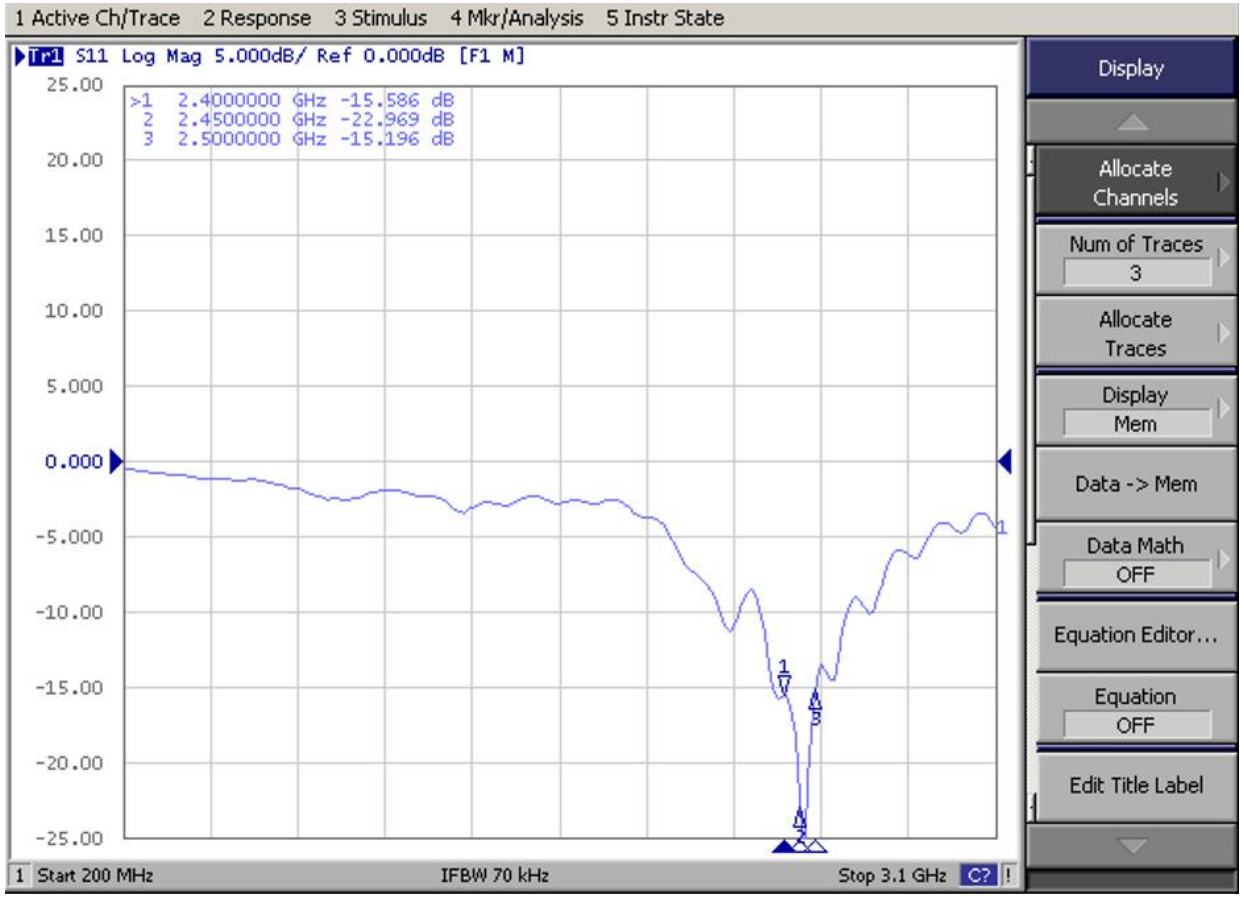




1. No changes。



● A1782_S11/VSWR



● A1782 _Efficiency & Gain

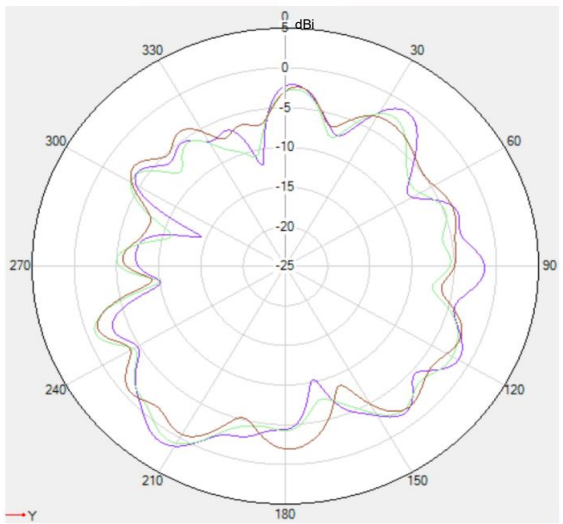
1. Passive efficiency: about 50%。

(2.4G) Passive Test Results			
Frequency(MHz)	Efficiency(%)	Efficiency(dB)	Max Gain(dBi)
2400	50.23%	-2.99	3.42
2410	48.81%	-3.11	3.08
2420	47.75%	-3.21	3.36
2430	46.81%	-3.30	3.50
2440	46.99%	-3.28	3.61
2450	47.53%	-3.23	3.74
2460	48.31%	-3.16	3.78
2470	48.67%	-3.13	3.59
2480	48.64%	-3.13	3.54
2490	49.20%	-3.08	3.42
2500	49.29%	-3.07	3.40
AVG:	48.38%	-3.15	3.49

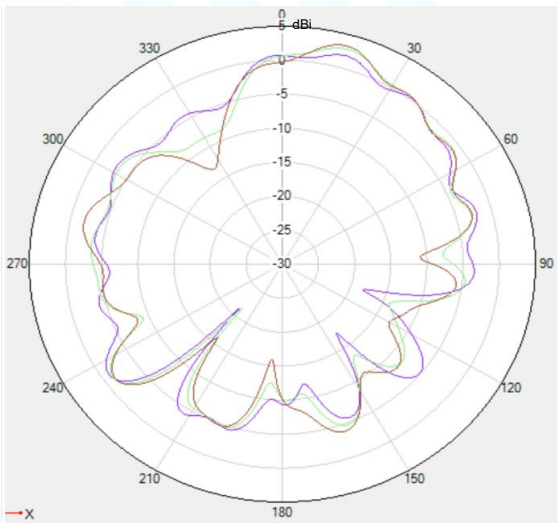
● A1782_2D Radiation Pattern

1. Azimuth Pattern H-Plane : “H”, X-Y plane
2. Elevation Pattern E1, E2-Plane : “E1”, “E2”, X-Z plane(E1), Y-Z plane(E2)
3. It is a structure that supplements the distortion of the horizontal plane in the vertical plane and has a gentle sphere shape in three d imensions.

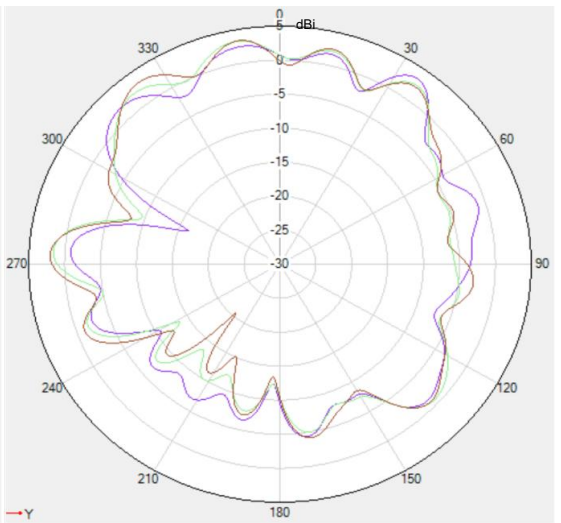
H



E1



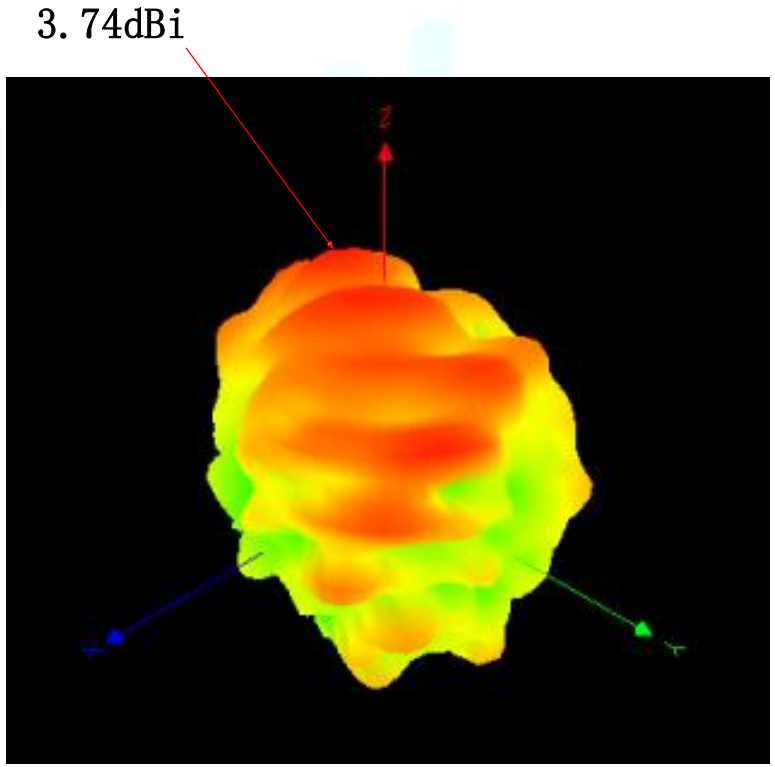
E2



● A1782 _ 3D Radiation Pattern

1. This 3D Radiation Pattern shows the response of each angle antenna gain on the sphere.
2. The objects corresponding to the X-Y-Z axes are shown in the left picture.

2450MHz



● A1782 _Antenna Summary

1.The antenna is debugged during the EVT stage, with a passive efficiency of about 50%, and the antenna performance is basically up to stan dard.

*** Please let me know if there is a change in the device. And if have any questions, please communicate promptly***

Thank You!!