



Doko Tab50wifi antenna design and test report

Antenna Design And Test Report

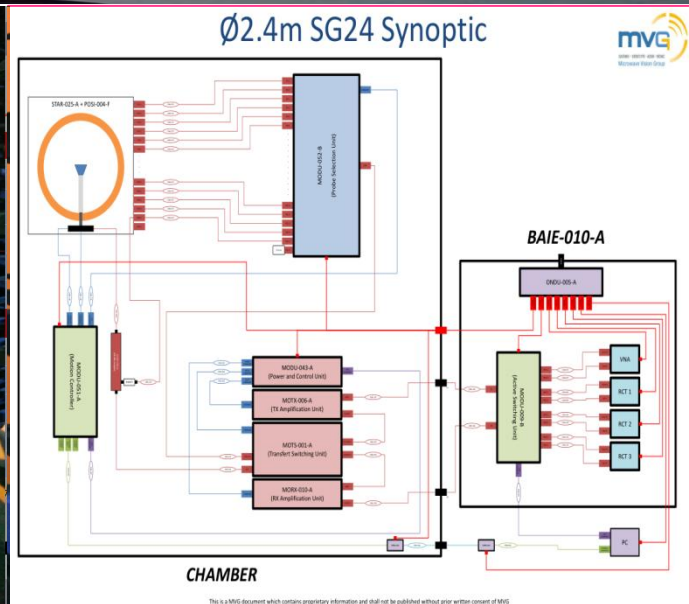
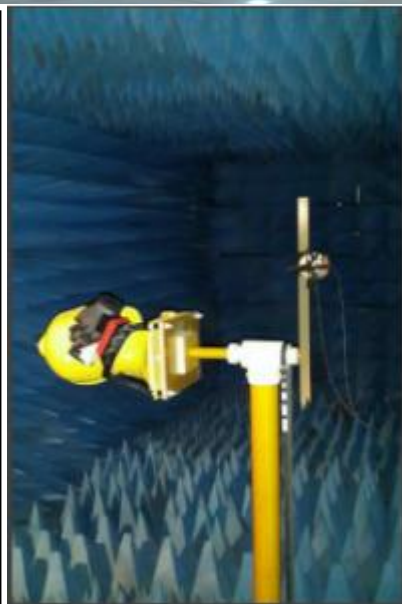
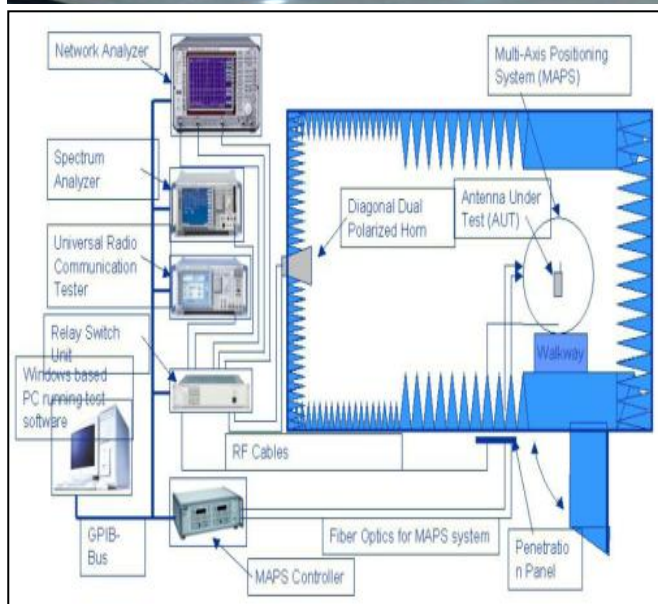
电话: **13425109220**

报告日期: **2023年6月15日星期四**



天线设计频段: main antenna design spectrum	wifi/b/g/n/a/ac/ax
天线类型: Type of antenna	PFIA

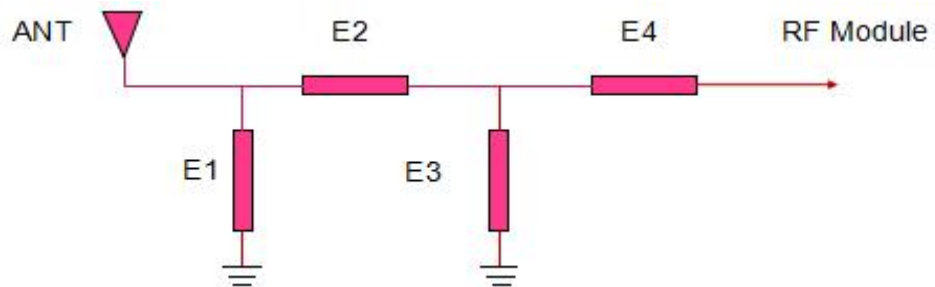
报告版本: Report version	日期 Date	内容 Content
V1	2023.06.13	Preliminary commissioning report
V2	2023.06.15	Sample to see the optimization report



3 far-field 3D all-wave microwave darkroom laboratory systems, 1 MVGSG24LT (Satmio) near-field 3D microwave darkroom laboratory system (synchronized with relevant national laboratories)



主天线设计: main antenna design	
元件 Element	值 Value
E1(0201):	
E2(0201):	
E3(0201):	
E4(0201):	

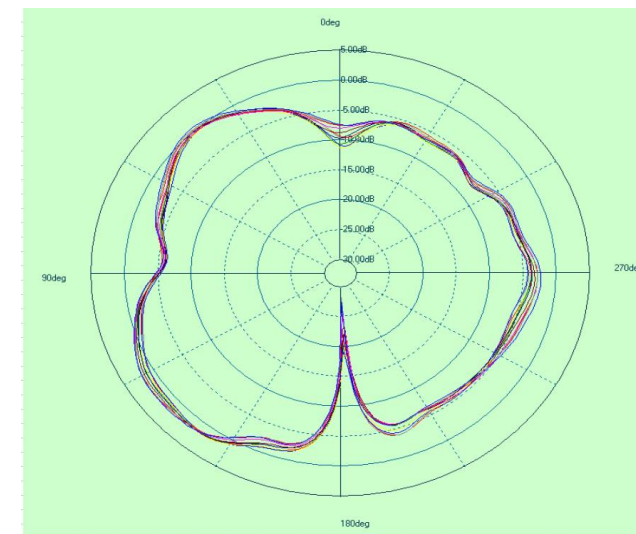
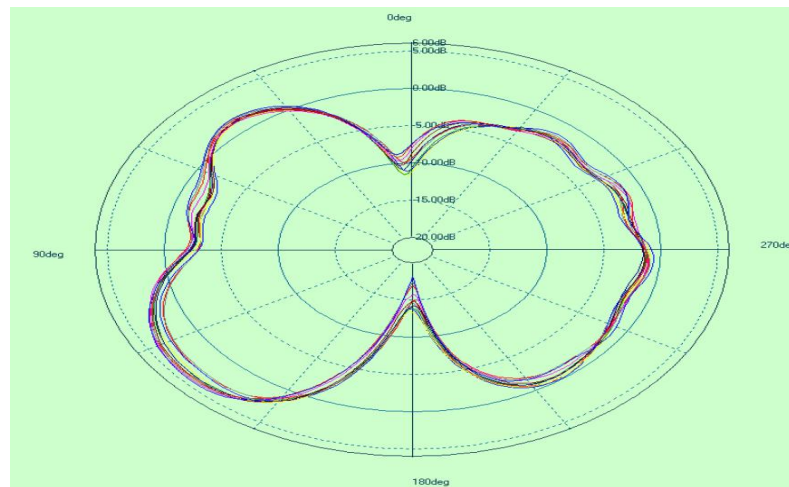
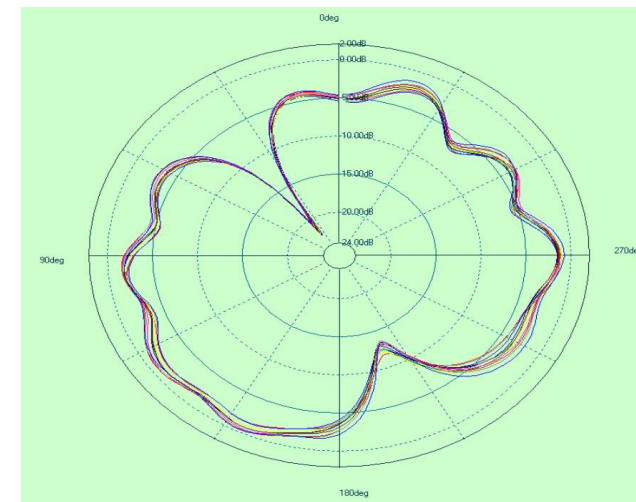
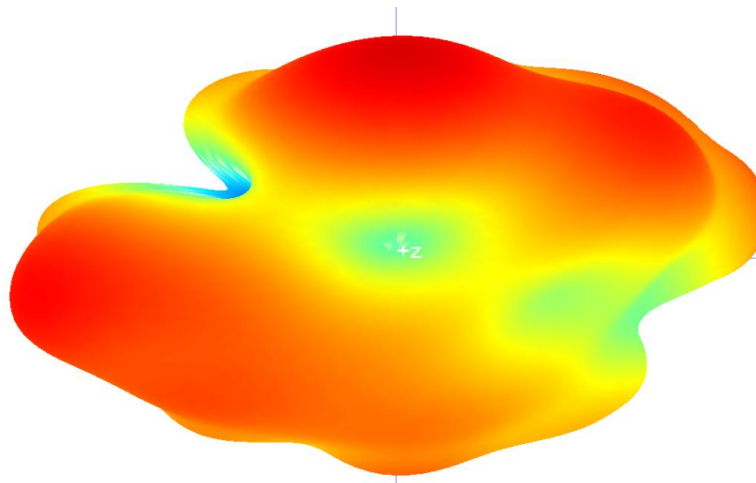


The matching circuit has not changed

1#	BAND	WiFi_11b_CCK_11M			WiFi_11g_OFDM_54M		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	18.22	18.23	18.26	15.65	15.68	16.21
	TIS			-83.55			-71.48
	BAND	WiFi_11n_20M_MCS7			WiFi 5.8_11a_54M		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	14.50	14.68	15.10	12.09	13.14	13.56
	TIS			-67.09			-70.97
	BAND	WiFi 5.8_11ac			WiFi _AX-MCS8		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	12.08	13.36	14.06	11.58	12.51	13.28
	TIS			-64.23			-65.77

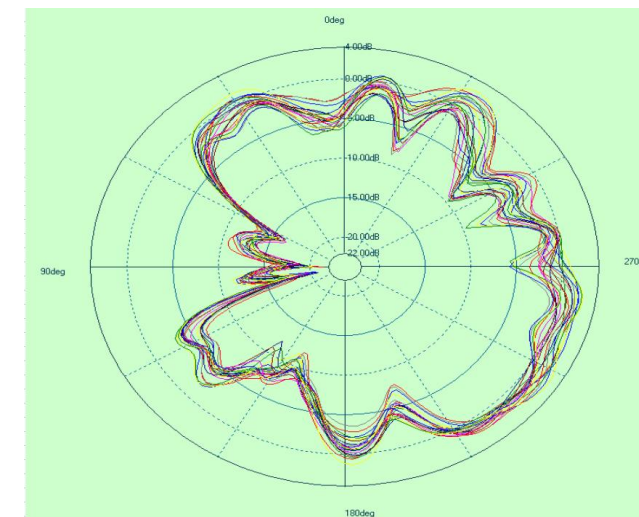
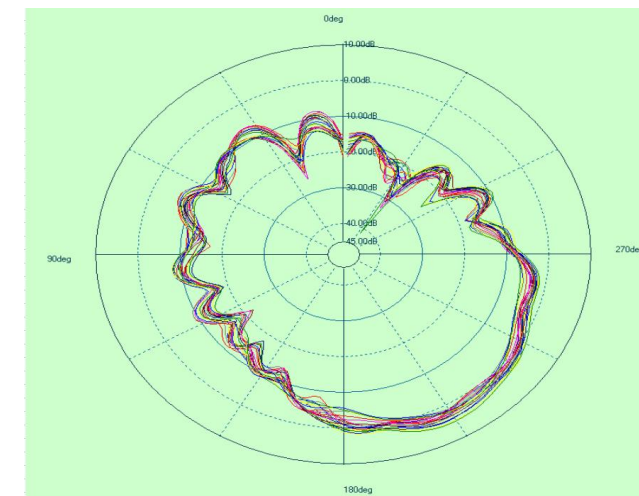
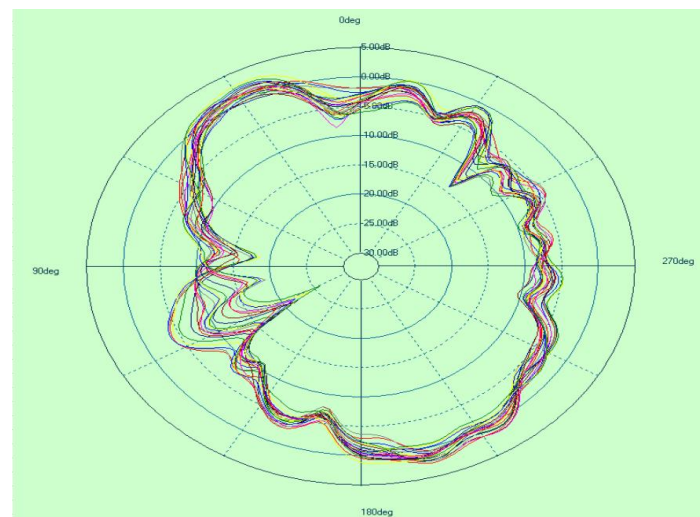
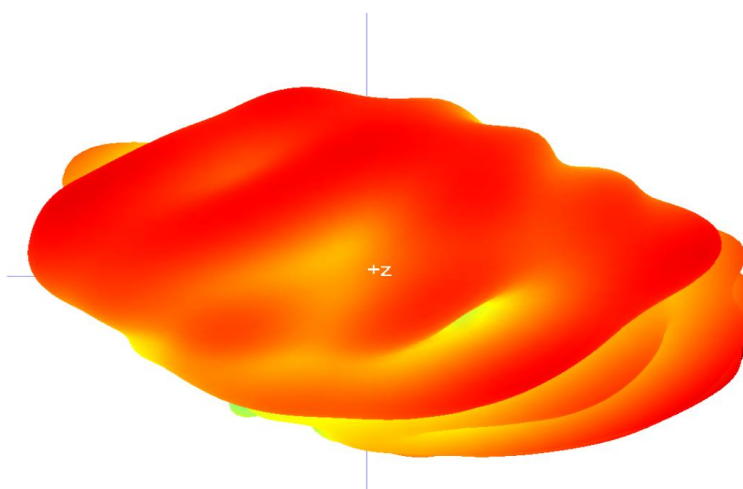
2.4g无源效率增益

Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
2.4E+09	52.08%	-2.83304	2.4E+09	2.976601
2.41E+09	51.59%	-2.87415	2.41E+09	3.083862
2.42E+09	51.24%	-2.9041	2.42E+09	3.228217
2.43E+09	54.57%	-2.63076	2.43E+09	3.562425
2.44E+09	55.30%	-2.57259	2.44E+09	3.719194
2.45E+09	55.00%	-2.59615	2.45E+09	3.749
2.46E+09	55.97%	-2.52039	2.46E+09	3.921814
2.47E+09	58.52%	-2.32696	2.47E+09	4.261172
2.48E+09	58.77%	-2.30878	2.48E+09	4.043669
2.49E+09	59.59%	-2.24796	2.49E+09	4.140135
2.5E+09	62.16%	-2.06499	2.5E+09	4.378149



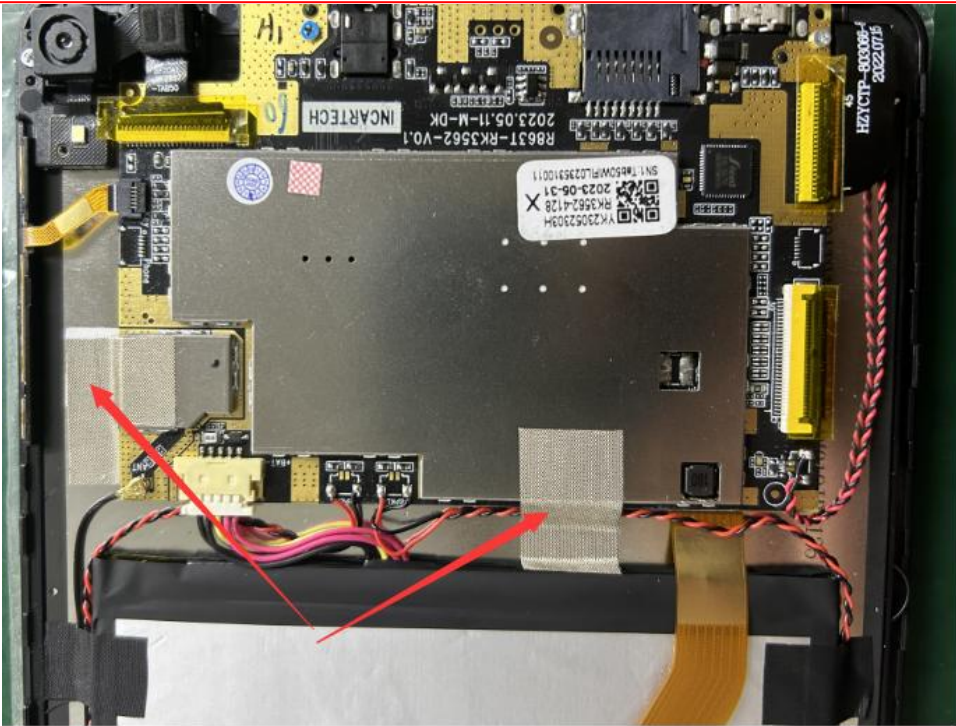
2.4g无源效率增益

Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
5.2E+09	42.25%	-3.74176	5.2E+09	4.283329
5.23E+09	41.84%	-3.78447	5.23E+09	4.46698
5.26E+09	43.65%	-3.60051	5.26E+09	5.037963
5.29E+09	44.25%	-3.54066	5.29E+09	5.051955
5.32E+09	42.15%	-3.75206	5.32E+09	4.421238
5.35E+09	38.24%	-4.17481	5.35E+09	3.751002
5.38E+09	39.85%	-3.99563	5.38E+09	3.913796
5.41E+09	44.28%	-3.53779	5.41E+09	4.527931
5.44E+09	49.89%	-3.02014	5.44E+09	5.540927
5.47E+09	48.86%	-3.11073	5.47E+09	5.927102
5.5E+09	51.18%	-2.90897	5.5E+09	6.441052
5.53E+09	55.61%	-2.54814	5.53E+09	6.983796
5.56E+09	53.30%	-2.73281	5.56E+09	6.951129
5.59E+09	45.98%	-3.37473	5.59E+09	5.941299
5.62E+09	43.49%	-3.61578	5.62E+09	5.306469
5.65E+09	40.35%	-3.94146	5.65E+09	4.752628
5.68E+09	38.98%	-4.09151	5.68E+09	4.378969
5.71E+09	36.01%	-4.43574	5.71E+09	3.991906
5.74E+09	35.87%	-4.45243	5.74E+09	4.364155
5.77E+09	38.16%	-4.18448	5.77E+09	4.800568
5.8E+09	36.45%	-4.38273	5.8E+09	4.827231

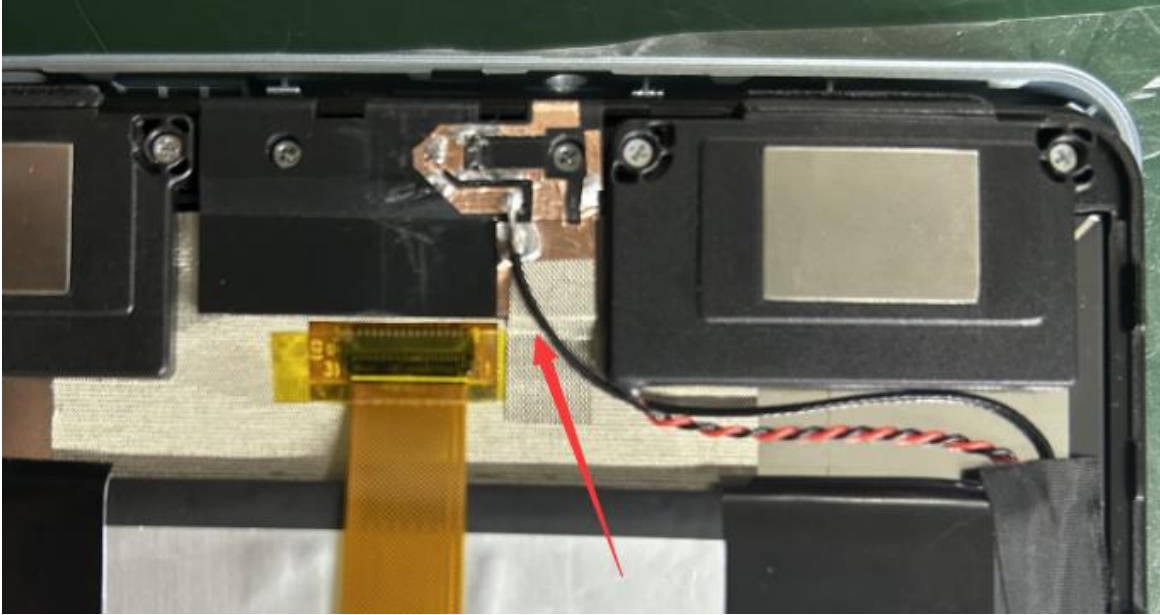


PA

1. Attach a conductive sponge to the copper leakage area of the mainboard and ground the screen.

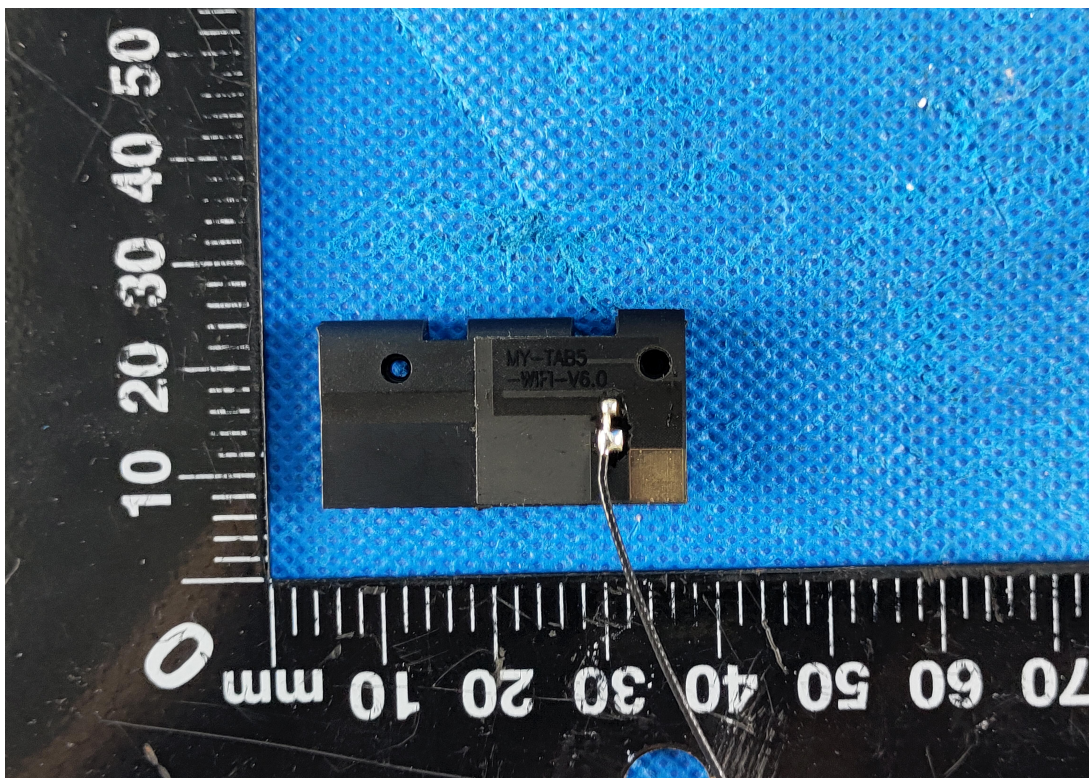


2.The module shield cover and mainboard shield cover are grounded to the screen
(2.4wifi will increase by about 1.5db).



3.The copper leakage area of the antenna body is grounded to the screen.

Dimension



Length 17mm and Width 11mm

1.The above is sample optimized antenna data.



01

Whether the antenna matching circuit is changed in the report and whether the environmental treatment related to the antenna is increased will directly affect the antenna performance. Please confirm it carefully.

02

If your company has the latest trial production or updated products (such as software, ESD, materials, etc.), please provide us as soon as possible for verification, to confirm whether the antenna performance has changed.

03

If your company needs to send a third-party testing institution for retest or customer test, please be sure to conduct antenna related test with our company first to confirm, because the consistency of motherboard and assembly, as well as the difference of antenna assembly and other factors may lead to the deviation of antenna parameters.

谢谢

THANK YOU

如有疑问 请联系我们

日常服务时间：周一至周五 9:00-18:00

总机热线：0755-36615535 销售热线：0755-36615535 传真：0755-82916227

 网址：www.mayaant.com