



權億科技股份有限公司
Master Wave Technology Co., Ltd

Masterwave Technologies Co., Ltd.

19124_ POS_Printed Antenna Test Report

2023.Sep.14 v0

R&D Department

Provided by Jie hunag

Checked by Tony Cheng

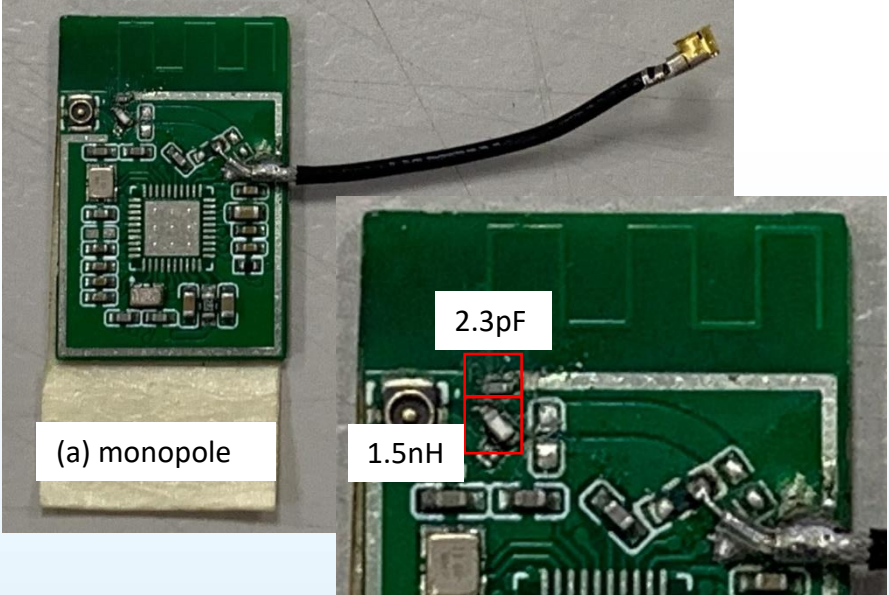


Total Solutions For your Needs

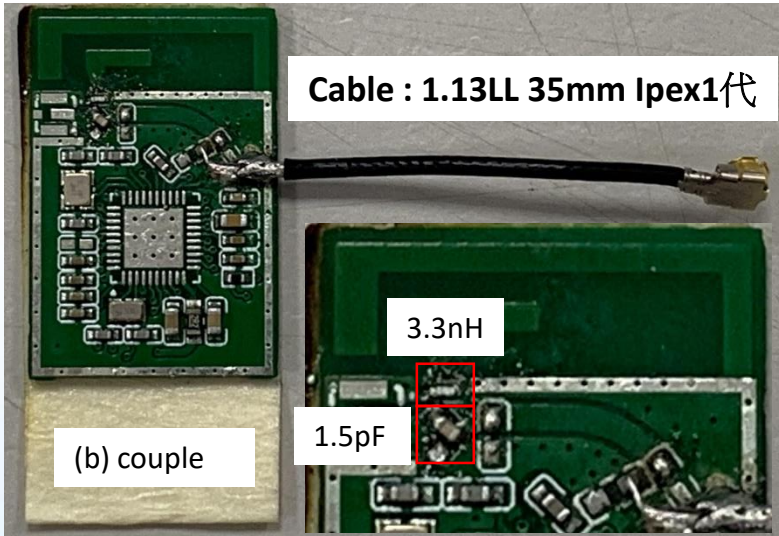
[illegible]



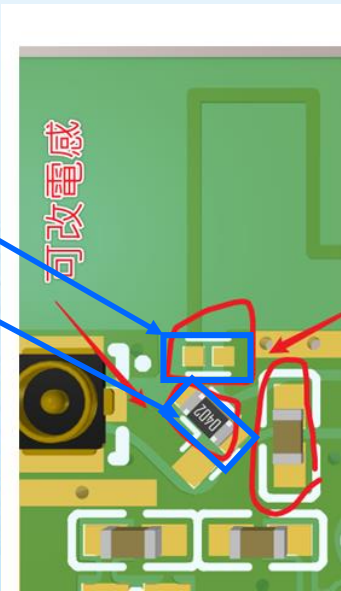
Illustration



Cable : 1.13LL 35mm and already calibrate cable before testing.



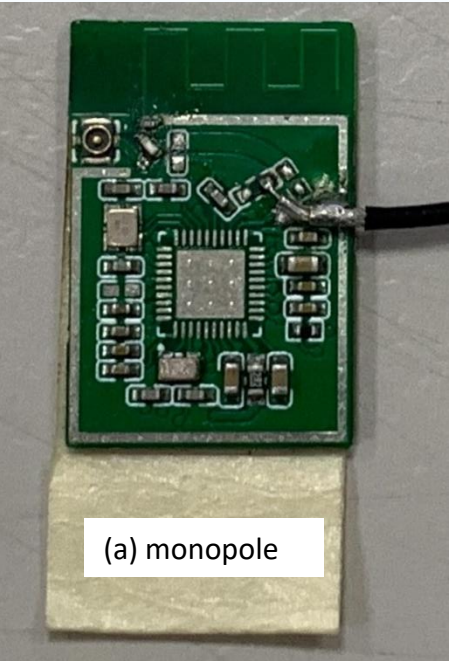
Change to 2.3pF
Change to 1.5nH
For monopole type



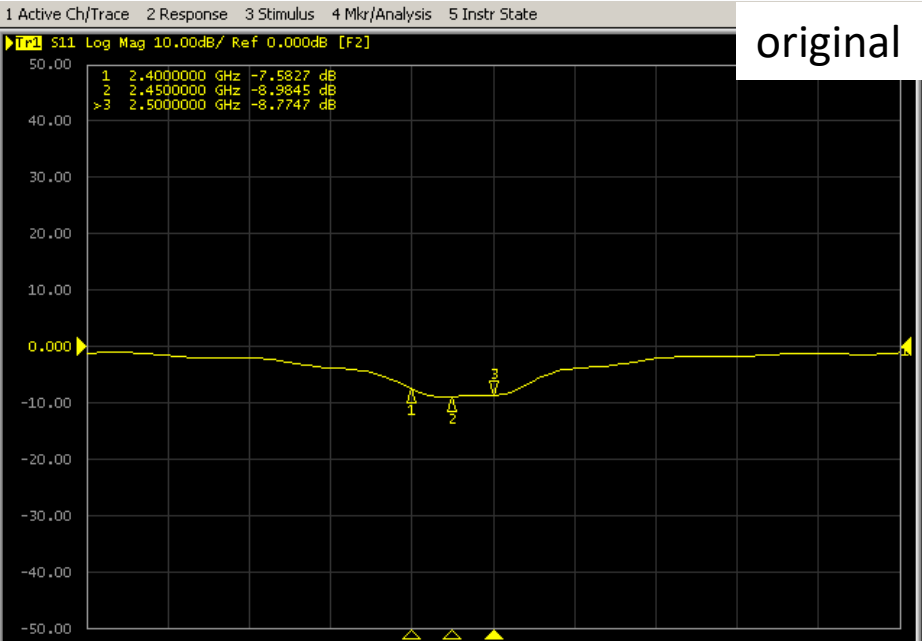
Change to 3.3nH
Change to 1.5pF
For couple type



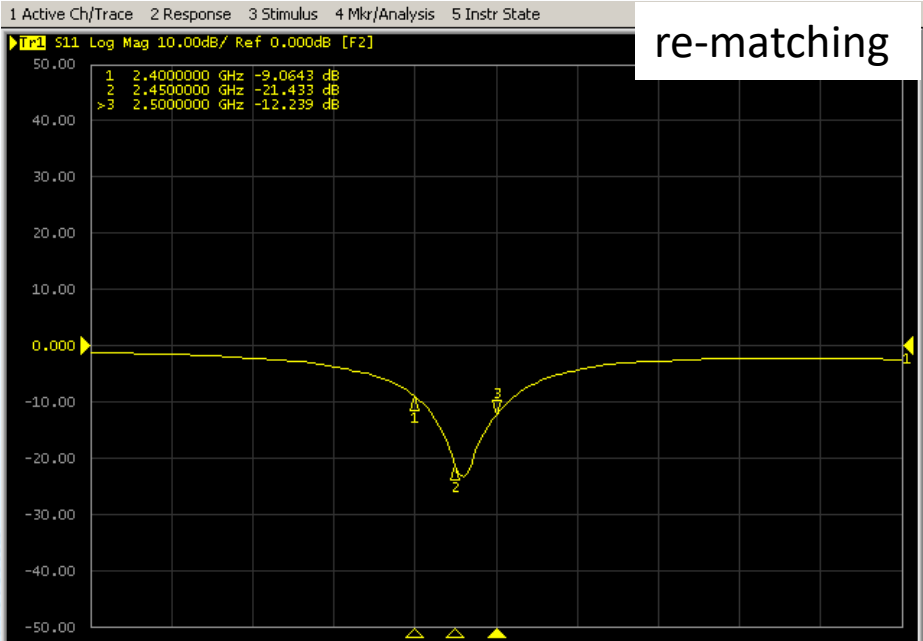
Antenna Performance



(a) monopole



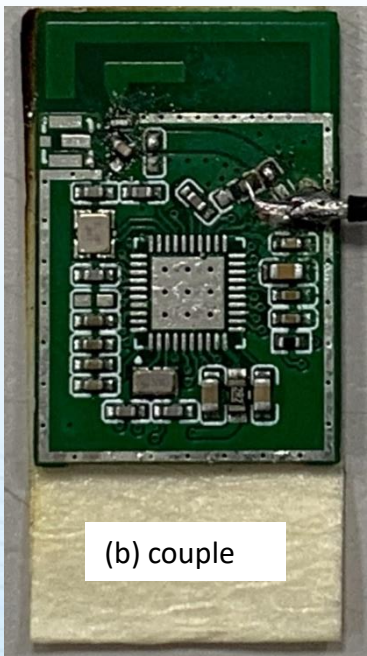
Freq.(MHz)	2400	2450	2500
Return Loss(dB)	-7.5	-8.9	-8.7



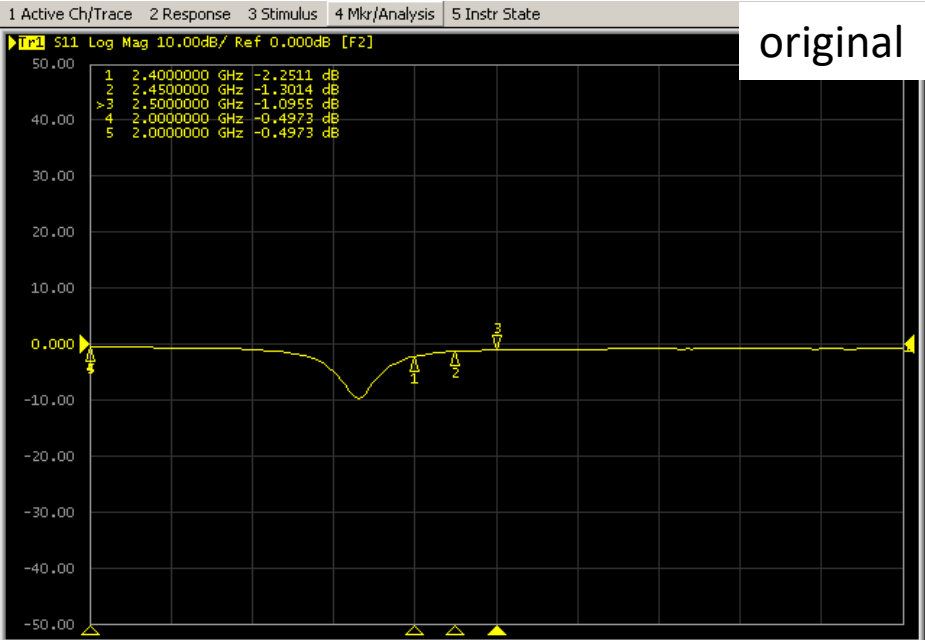
Freq.(MHz)	2400	2450	2500
Return Loss(dB)	-9.0	-21.4	-12.2



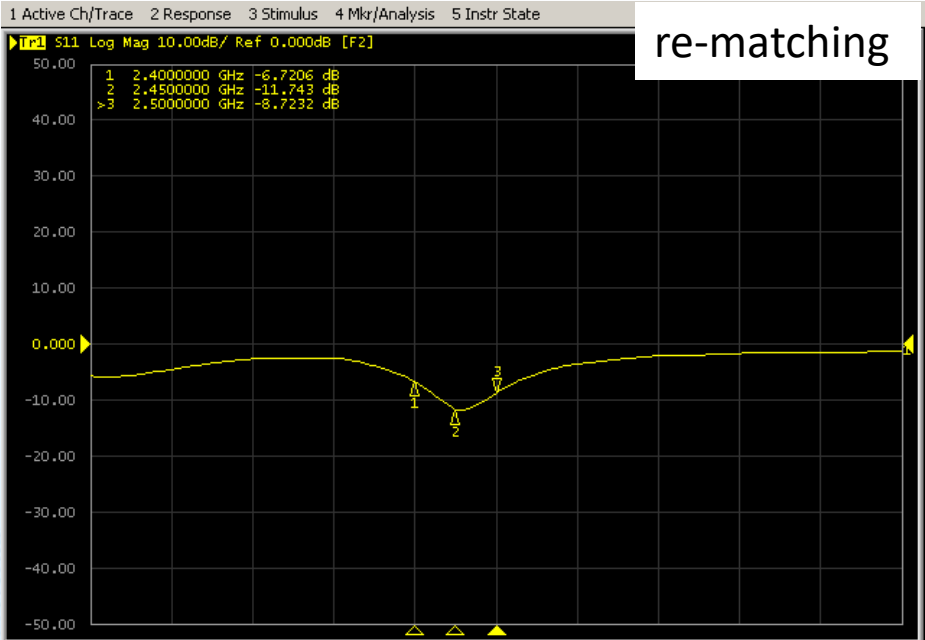
Antenna Performance



(b) couple



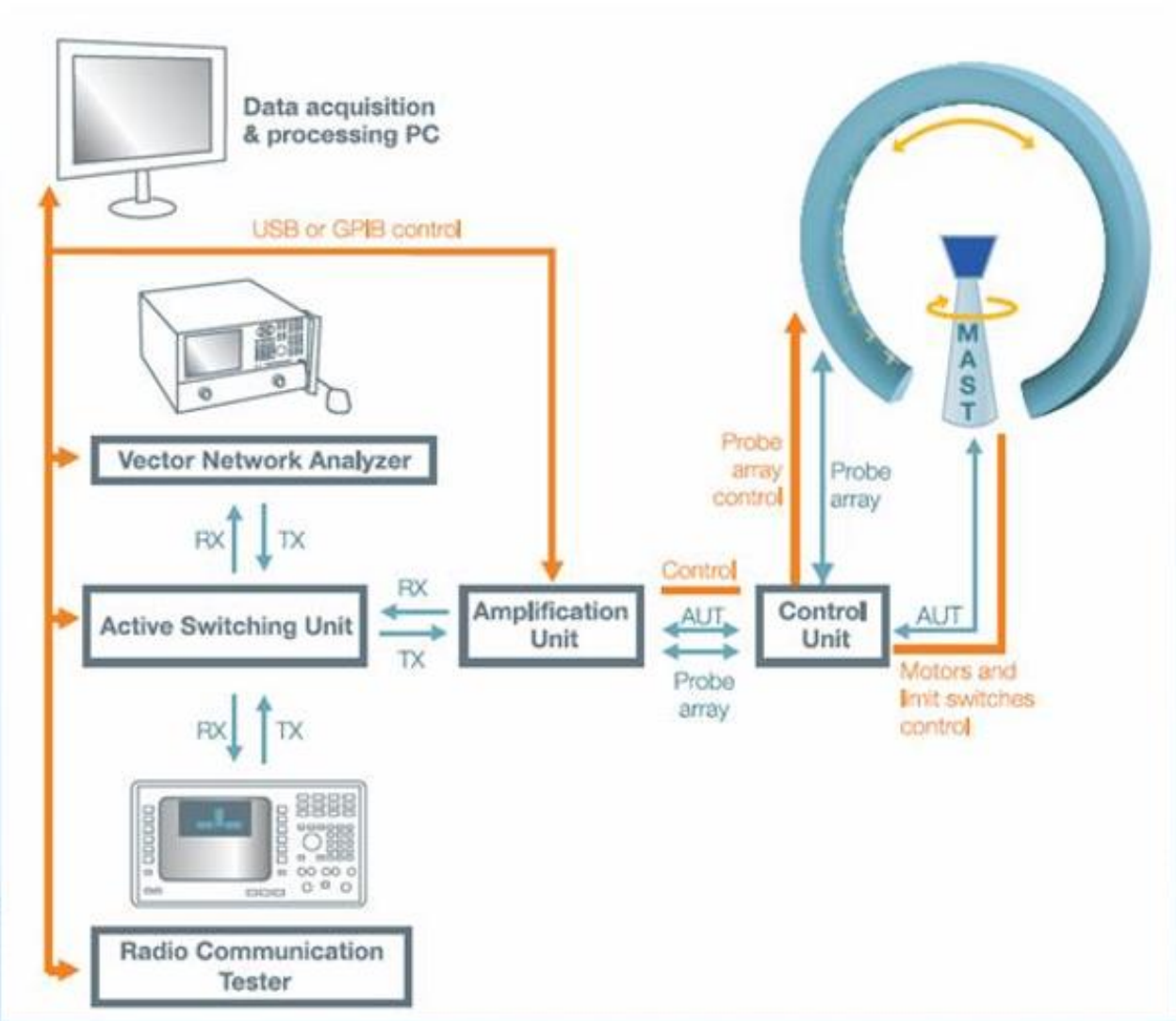
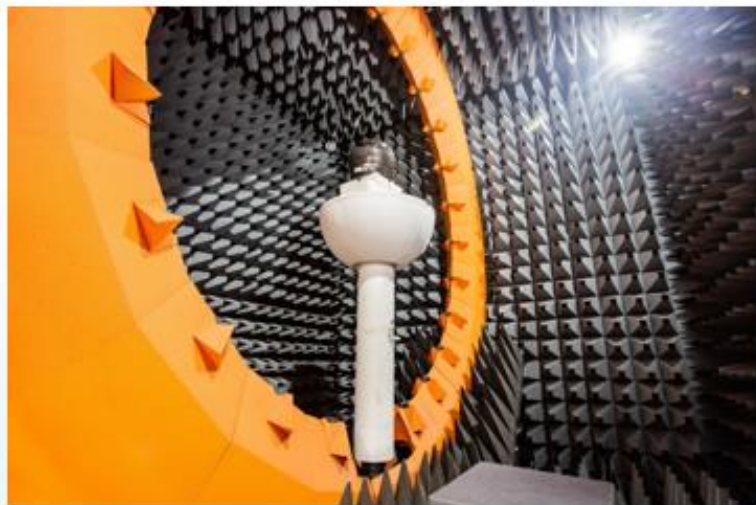
Freq.(MHz)	2400	2450	2500
Return Loss(dB)	-2.2	-1.3	-1.0



Freq.(MHz)	2400	2450	2500
Return Loss(dB)	-6.7	-11.7	-8.7

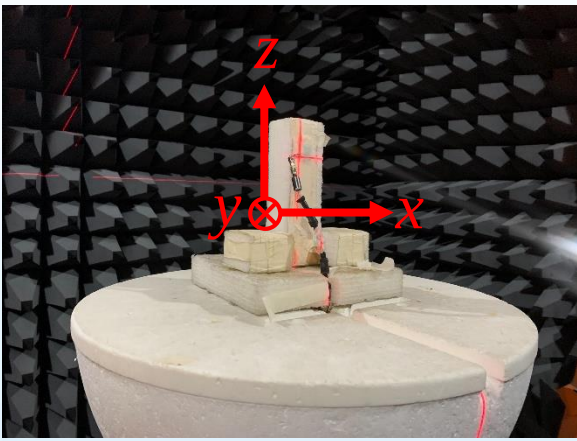


Measurement System – Satimo Chamber

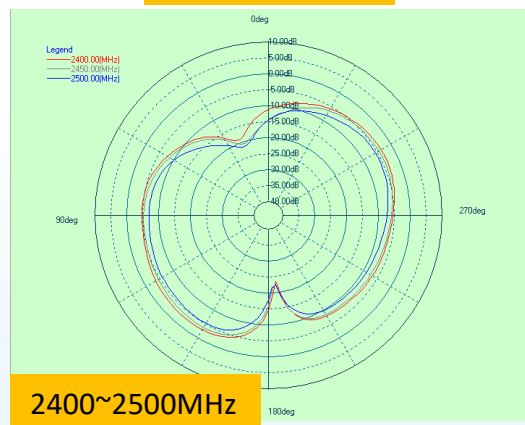




Antenna Radiation Pattern

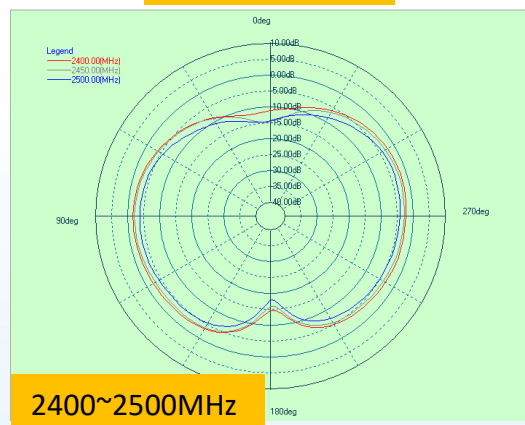


(一) monopole



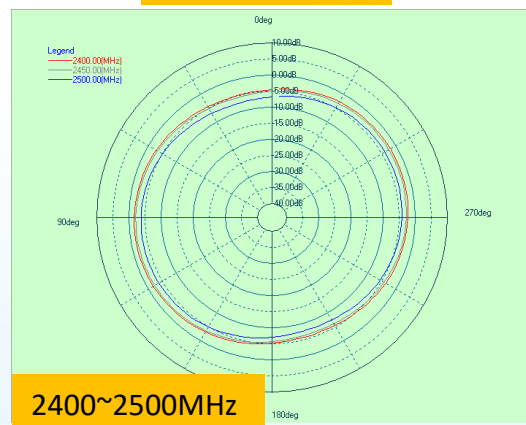
XZ

(一) monopole



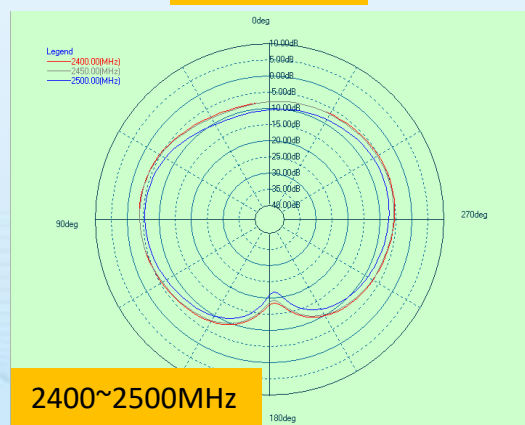
YZ

(一) monopole



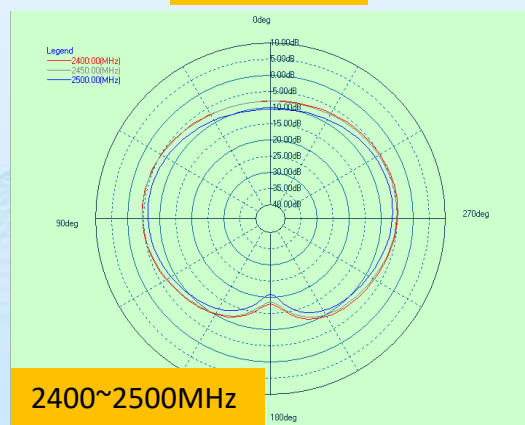
XY

(二) couple



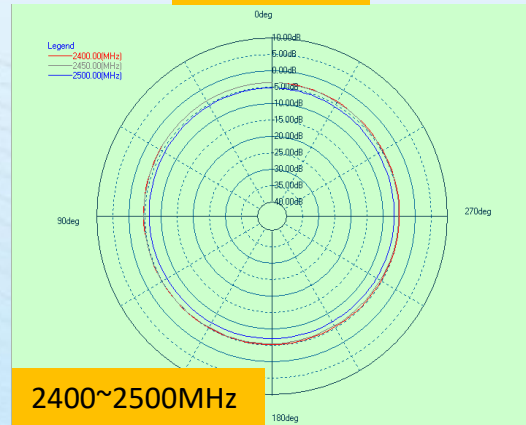
XZ

(二) couple



YZ

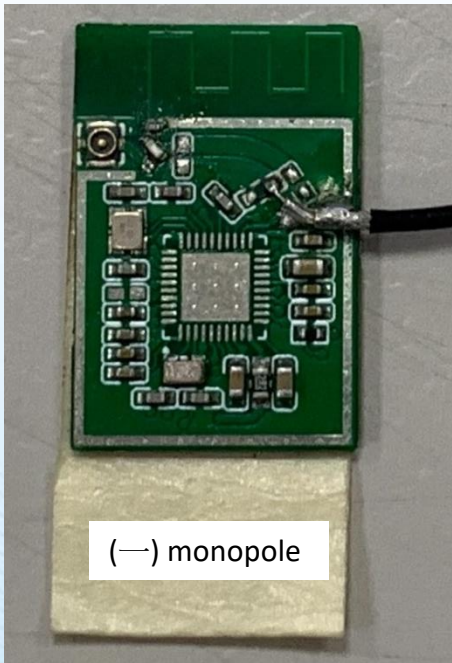
(二) couple



XY



Antenna Performance – Efficiency & Peak Gain

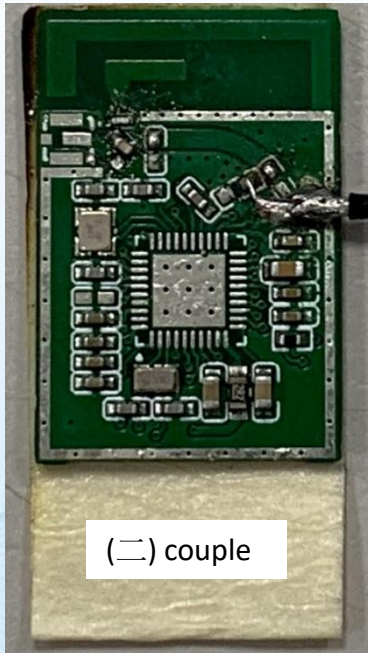


(一) monopole

re-matching

(a) monopole

Freq.	Peak Gain (dBi)	Effi.
2400MHz	-1.51	39%
2450MHz	-2.00	33%
2500MHz	-2.95	30%



(二) couple

re-matching

(b) couple

Freq.	Peak Gain (dBi)	Effi.
2400MHz	-3.63	28%
2450MHz	-3.70	29%
2500MHz	-4.75	27%



THANK YOU FOR YOUR ATTENTION.

We welcome your questions, suggestions and comments!