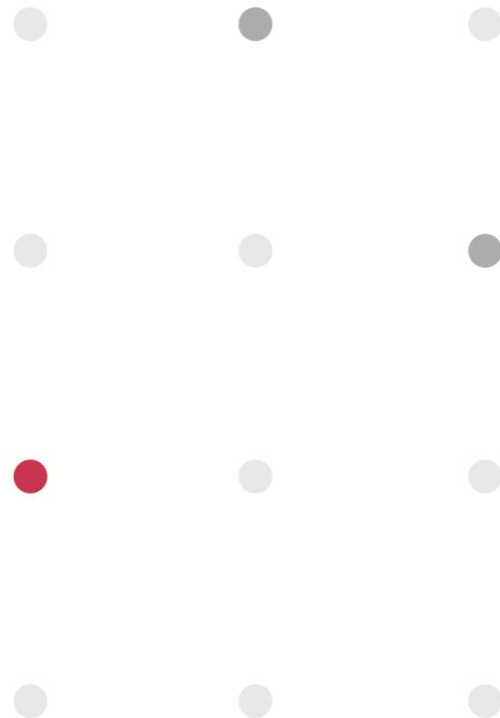


PSA

佳邦科技股份有限公司

INPAQ TECHNOLOGY CO., LTD.

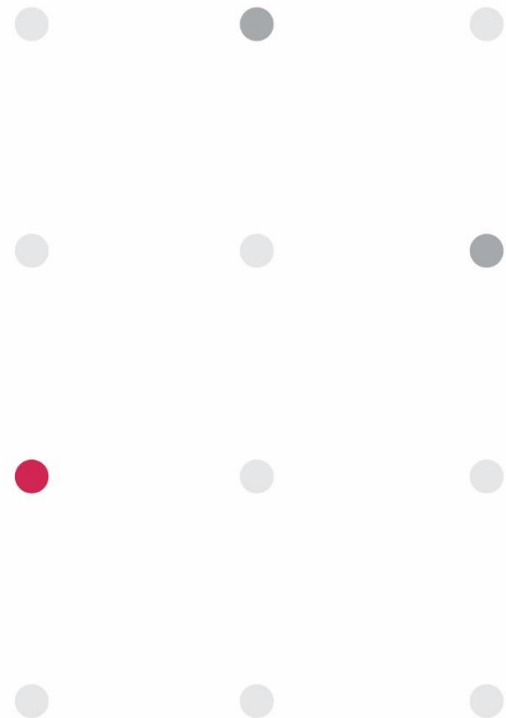
WE CONNECT & WE PROTECT WE ARE ONE



PSA

PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.

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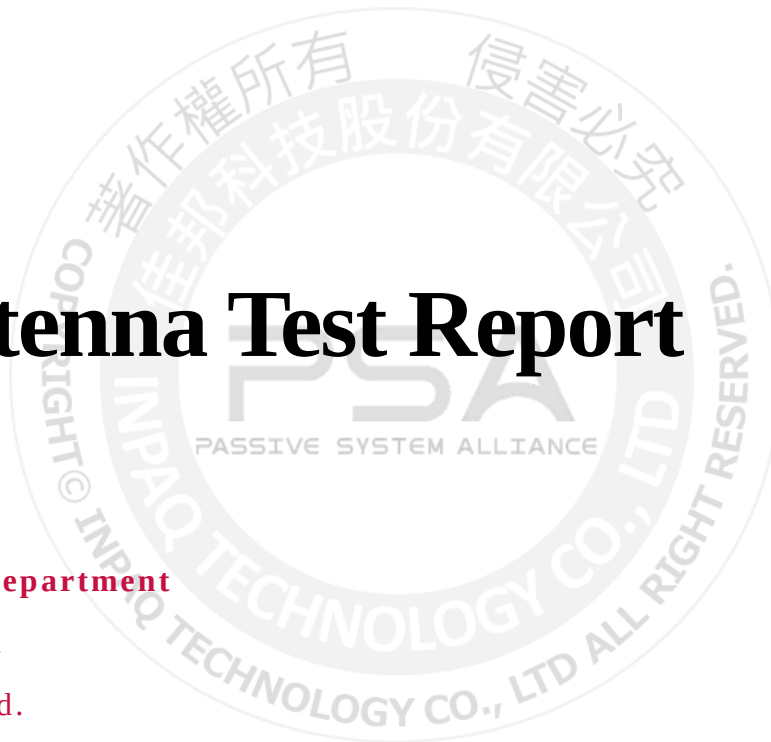
Biscuits Antenna Test Report

Presented by
Simon.Hoang, RF R&D, Department

Revised by: Hong Xianxiu

INPAQ Technology Co., Ltd.

Last updated in Dec.04, 2025



Outline

1. Measurement Setup
2. Antenna Information
3. Outline Drawing
4. Antenna Performance
5. Antenna 2D Radiation Pattern
6. Conclusion



1. Measurement Setup

■ Measurement Parameter:

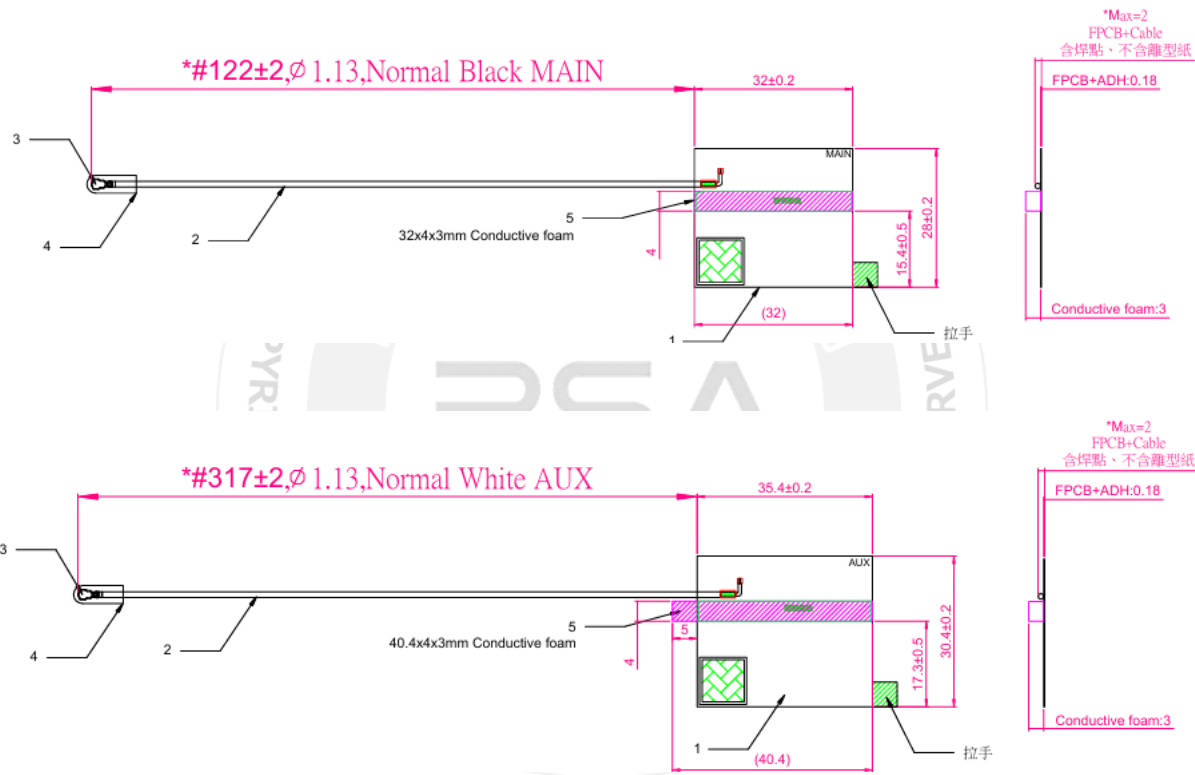
- VSWR
- Radiation Pattern
- VSWR:
 - a. Instrument: E5071C ENA Network Analyzer
 - b. Calibration Method: Open/Short/Load
- Radiation Pattern:
 - a. Instrument: MPS-4842 Multi-probe Measurement System
 - b. Chamber: XH-IOE MPS-4842

2. Antenna Information

Antenna Cable: Φ1.13 Normal		
	Cable length (mm)	Color
WLAN Main	122	Black
WLAN Aux.	317	White
材規		
WLAN Main	背膠, 導電泡棉	
WLAN Aux.	背膠, 導電泡棉	

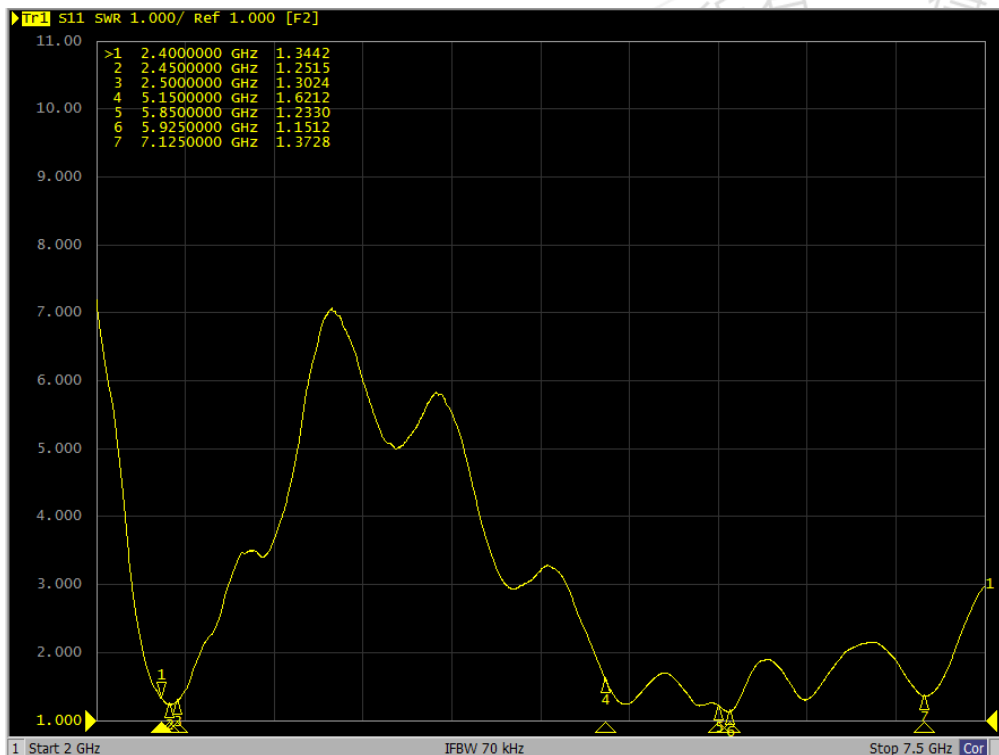
Ant. Model	
WLAN Main	WA-F-LE-02-080
WLAN Aux.	WA-F-LE-01-027
Production Location	
No.5, Chunqiu Road, Panyang Industrial Park, Huangdai Town, Xiangcheng Zone, Suzhou City, 215143 Jiangsu Province, China	

3. Outline Drawing



4. Antenna Performance: Efficiency & VSWR

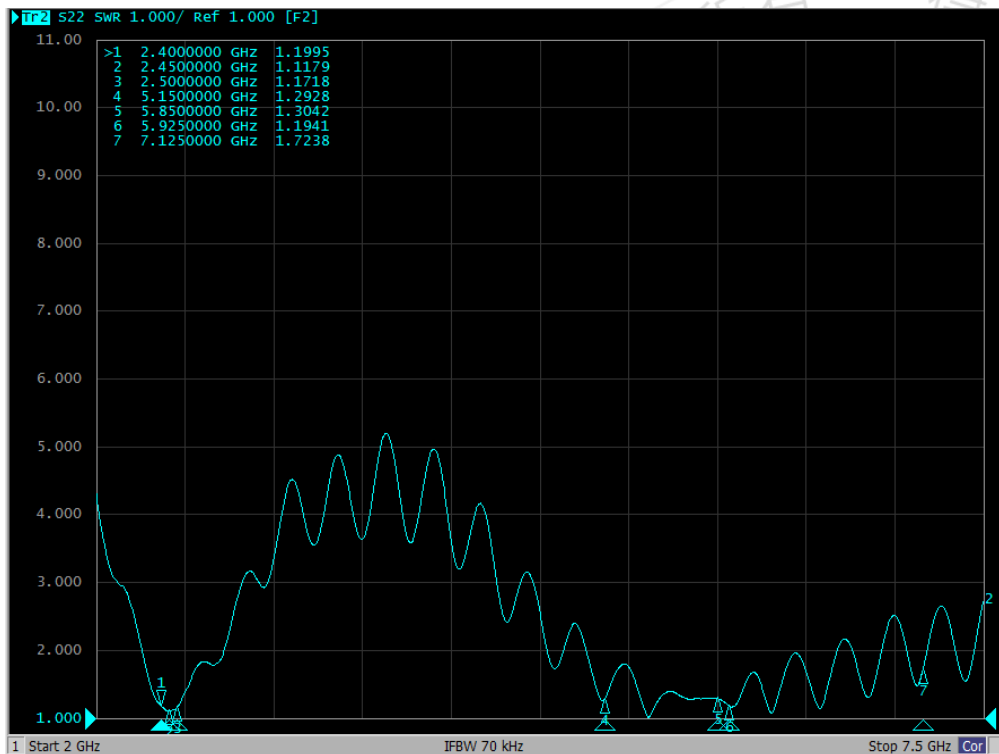
WLAN Main



Frequency (MHZ)	XY Plane Peak Gain (dBi)	3D PEAK Gain (dBi)	Efficiency (%/ dB)	
2412	-0.95	2.83	40%	-4.02
2437	-0.95	2.69	41%	-3.83
2462	-0.66	2.76	42%	-3.72
5160	-0.70	2.53	39%	-4.13
5250	-0.99	2.08	39%	-4.07
5320	-0.26	2.67	40%	-3.94
5470	-0.51	2.38	37%	-4.33
5600	-0.79	2.44	41%	-3.82
5725	-0.07	2.22	43%	-3.65
5785	-0.78	2.48	45%	-3.45
5850	-1.28	2.77	37%	-4.27
5925	-1.94	2.52	33%	-4.82
6085	-1.69	2.24	31%	-5.12
6125	-2.71	2.09	32%	-4.89
6225	-2.37	2.32	38%	-4.24
6325	-1.56	2.45	36%	-4.48
6425	-1.09	2.79	30%	-5.17
6565	-0.76	2.14	33%	-4.81
6625	-1.72	2.22	29%	-5.32
6725	-2.36	2.68	29%	-5.39
6885	-4.18	2.37	29%	-5.44
6925	-5.11	2.85	27%	-5.65
7000	-4.81	2.49	29%	-5.42
7125	-4.40	2.16	28%	-5.59

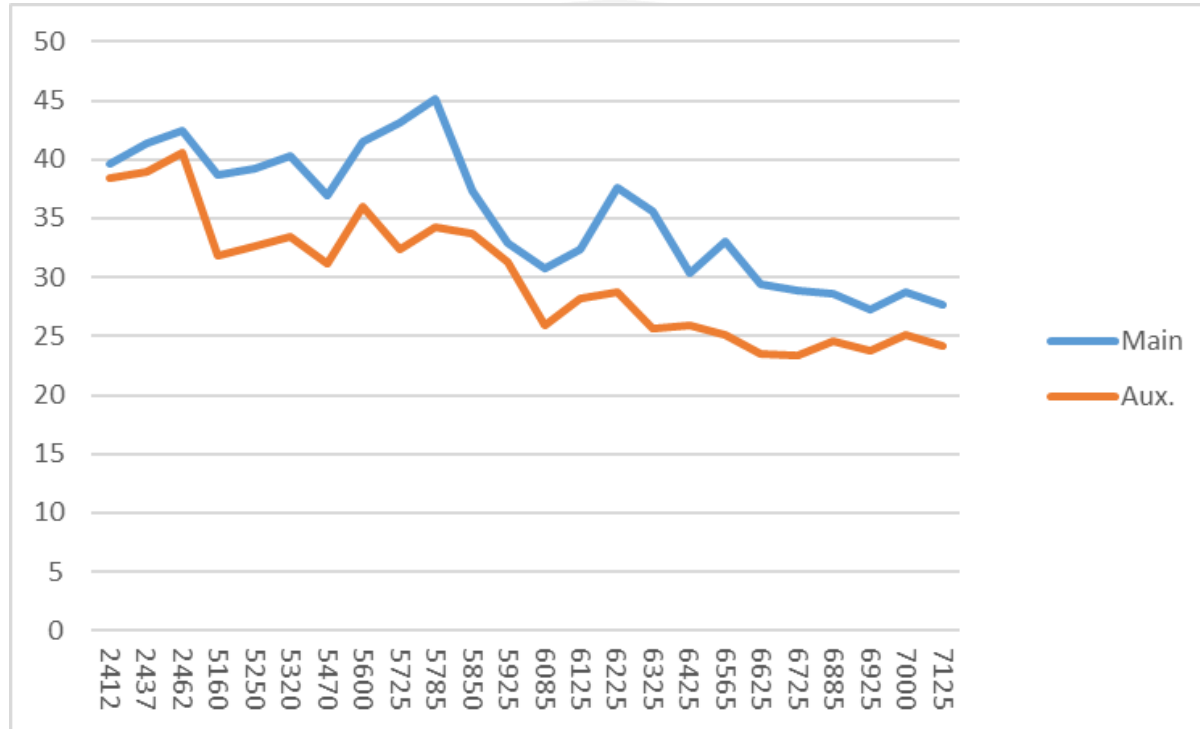
4. Antenna Performance: Efficiency & VSWR

WLAN Aux.

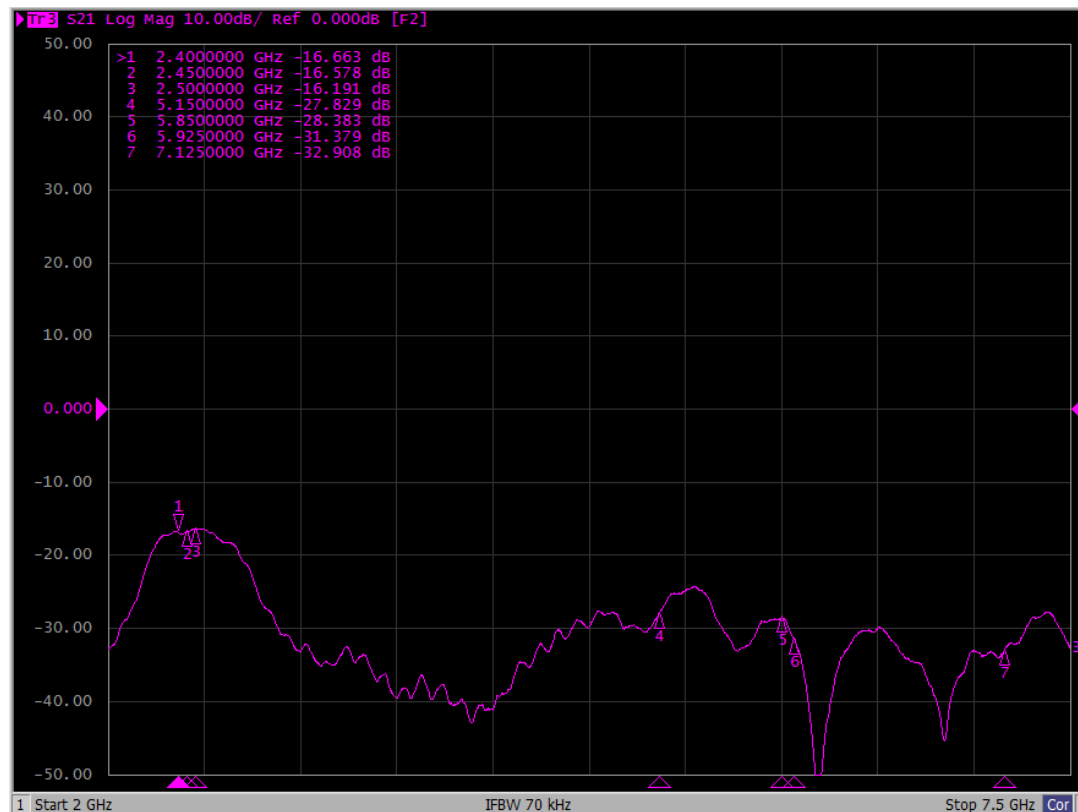


Frequency (MHZ)	XY Plane Peak Gain (dBi)	3D PEAK Gain (dBi)	Efficiency (%/ dB)	
2412	2.01	2.33	38%	-4.16
2437	1.65	2.48	39%	-4.10
2462	2.36	2.57	41%	-3.92
5160	1.58	2.45	32%	-4.97
5250	0.87	2.61	33%	-4.86
5320	0.85	2.48	33%	-4.75
5470	1.80	2.80	31%	-5.06
5600	2.09	2.23	36%	-4.44
5725	1.92	2.49	32%	-4.89
5785	2.19	2.32	34%	-4.65
5850	2.15	2.18	34%	-4.73
5925	2.00	2.35	31%	-5.05
6085	0.58	2.47	26%	-5.86
6125	0.62	2.62	28%	-5.49
6225	0.22	2.34	29%	-5.42
6325	-0.22	2.21	26%	-5.92
6425	-0.47	2.80	26%	-5.87
6565	-1.08	2.54	25%	-6.01
6625	-1.90	2.23	23%	-6.30
6725	-1.44	1.92	23%	-6.32
6885	-1.27	1.94	25%	-6.09
6925	-2.29	1.81	24%	-6.24
7000	-3.00	1.93	25%	-6.01
7125	-2.31	1.89	24%	-6.16

4. Antenna Performance: Efficiency Comparison



4. Antenna Performance: Isolation



5. Antenna 2D Radiation Pattern

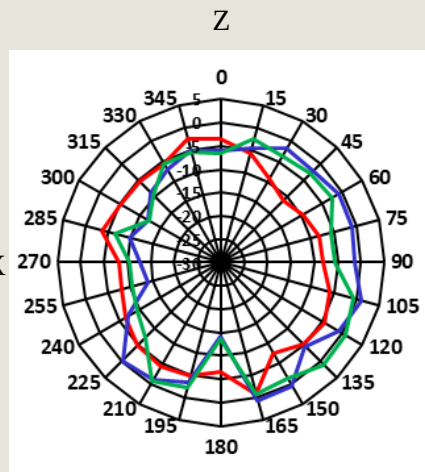
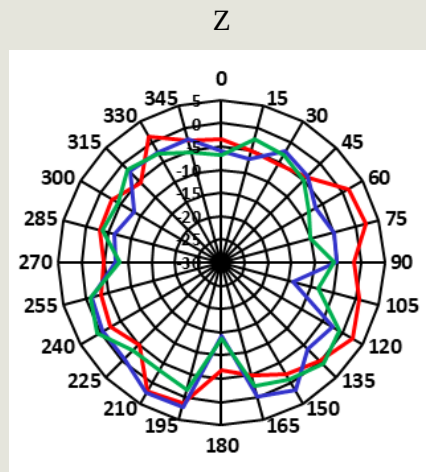
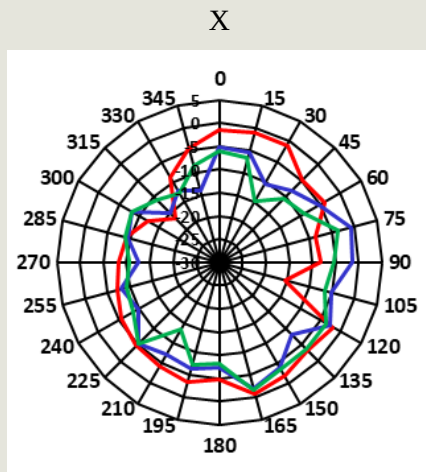
— 2437(MHz) — 5470(MHz) — 6565(MHz)

WLAN Main

X-Y plane

X-Z plane

Y-Z plane



5. Antenna 2D Radiation Pattern

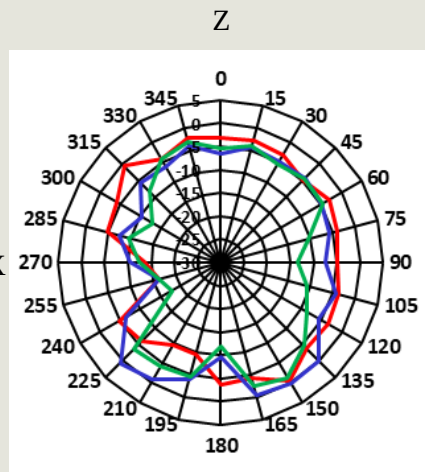
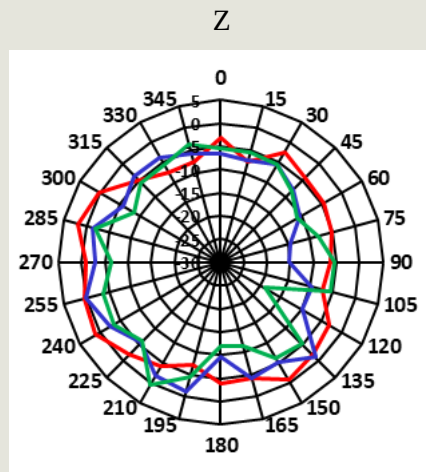
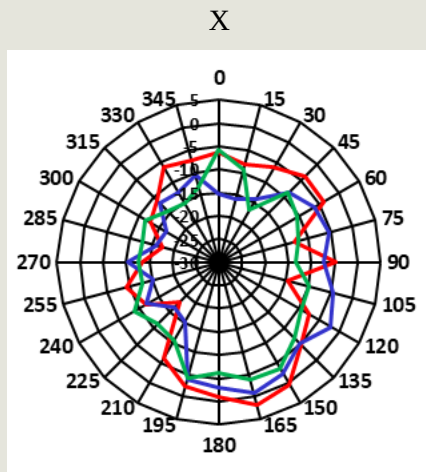
— 2437(MHz) — 5470(MHz) — 6565(MHz)

WLAN Aux.

X-Y plane

X-Z plane

Y-Z plane



6. Conclusion

WLAN	VSWR	Efficiency (%)	3D Peak gain (dBi)	XY plane Peak gain (dBi)
Main	< 2.8 @ 2.40~2.50 GHz < 2.8 @ 5.15~7.125 GHz	40~42 @ 2.412~2.462GHz 27~45 @ 5.16~7.125 GHz	2.69~2.83 @ 2.412~2.462GHz 2.08~2.85 @ 5.16~7.125 GHz	-0.95~ -0.66 @ 2.412~2.462GHz -5.11~ -0.07 @ 5.16~7.125 GHz
Aux.	< 2.8 @ 2.40~2.50 GHz < 2.8 @ 5.15~7.125 GHz	38~41 @ 2.412~2.462GHz 23~36 @ 5.16~7.125 GHz	2.33~2.56 @ 2.412~2.462GHz 1.81~2.80 @ 5.16~7.125 GHz	1.65~ 2.36 @ 2.412~2.462GHz -3.00~ 2.19 @ 5.16~7.125 GHz