

Jordan_Piper Antennas Evaluated Report

Real device

- Prepared by: Kent Hu
- Data: 2023/05/18
- Rev:X02



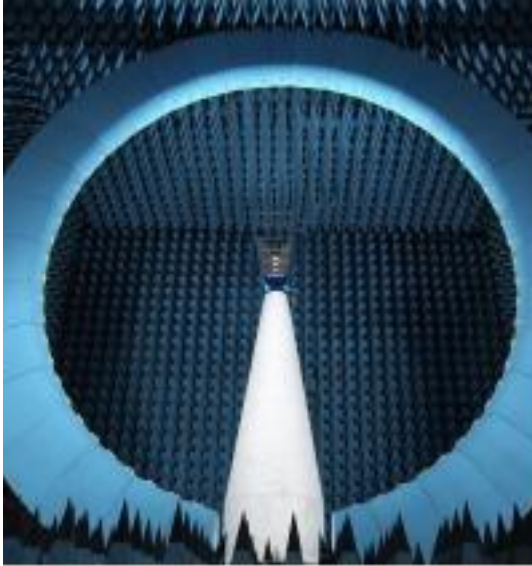
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- Antenna Picture
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Revised History

Date	Version	Revised Record
2023/04/26	X01	1 st Evaluated antenna report_ Prototype
2023/05/18	X02	2 nd Evaluated antenna report

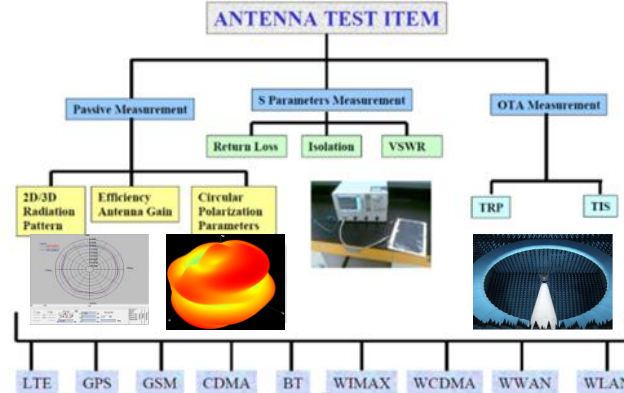
► Description of Antenna Test Environment



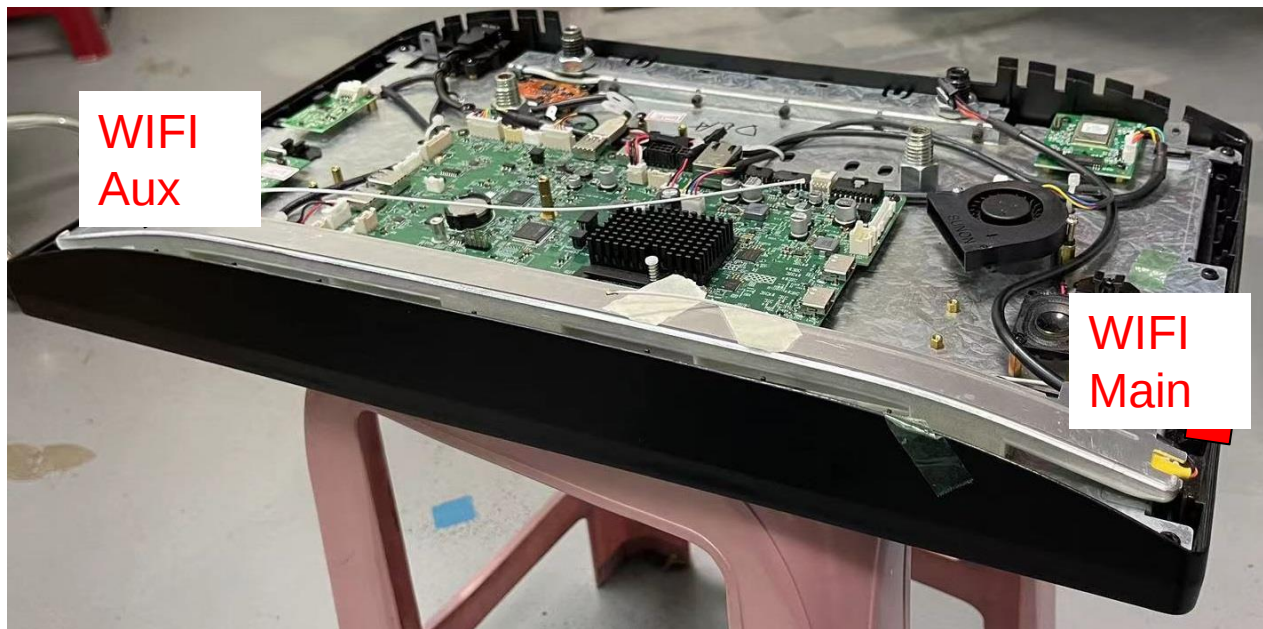
Satimo Chamber
Dimension: 6m*6m*7.5m



S11 measurements were taken with
Agilent E5071C ENA, 9kHz- 8.5GHz



► Antenna Picture

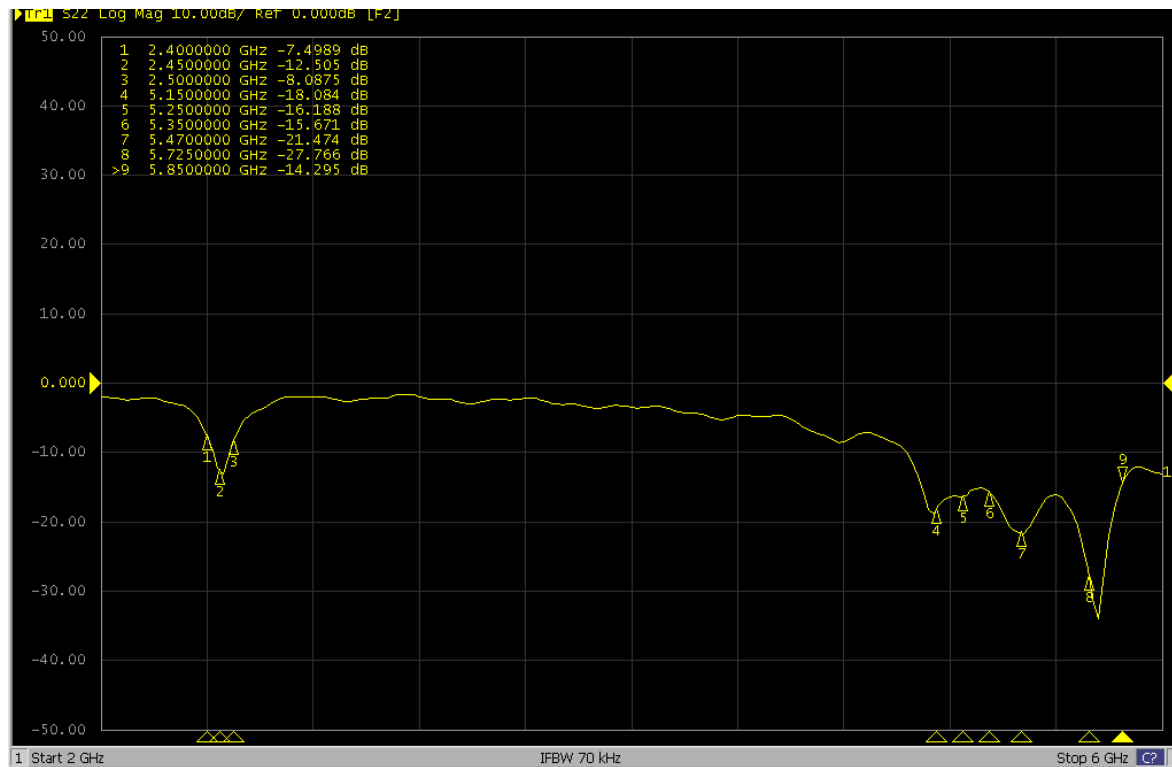


Antenna Picture

Number	Antenna Material	Antenna Dimension	Cable Length
WIFI Main	PCB	32mm x 12mm x 0.6mm	1.37 LowLoss 230 mm
WIFI Aux	PCB	32mm x 12mm x 0.6mm	1.37 LowLoss 400 mm

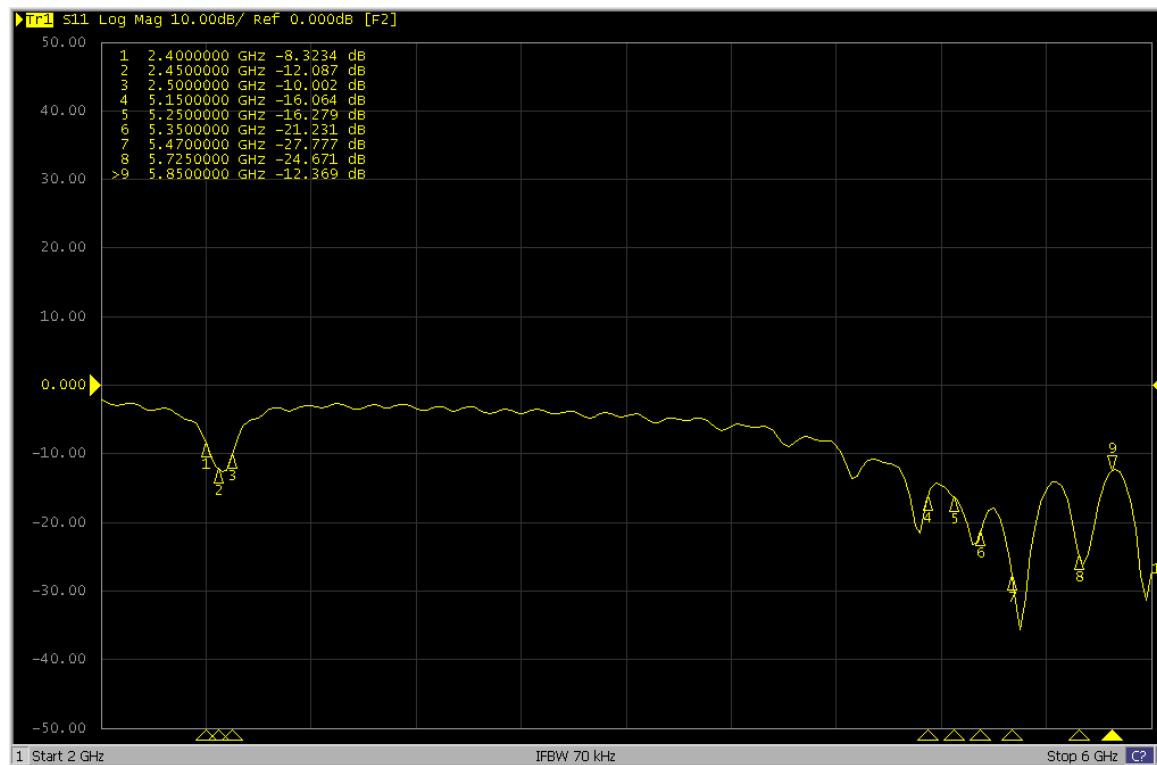


Return Loss @ WiFi Main



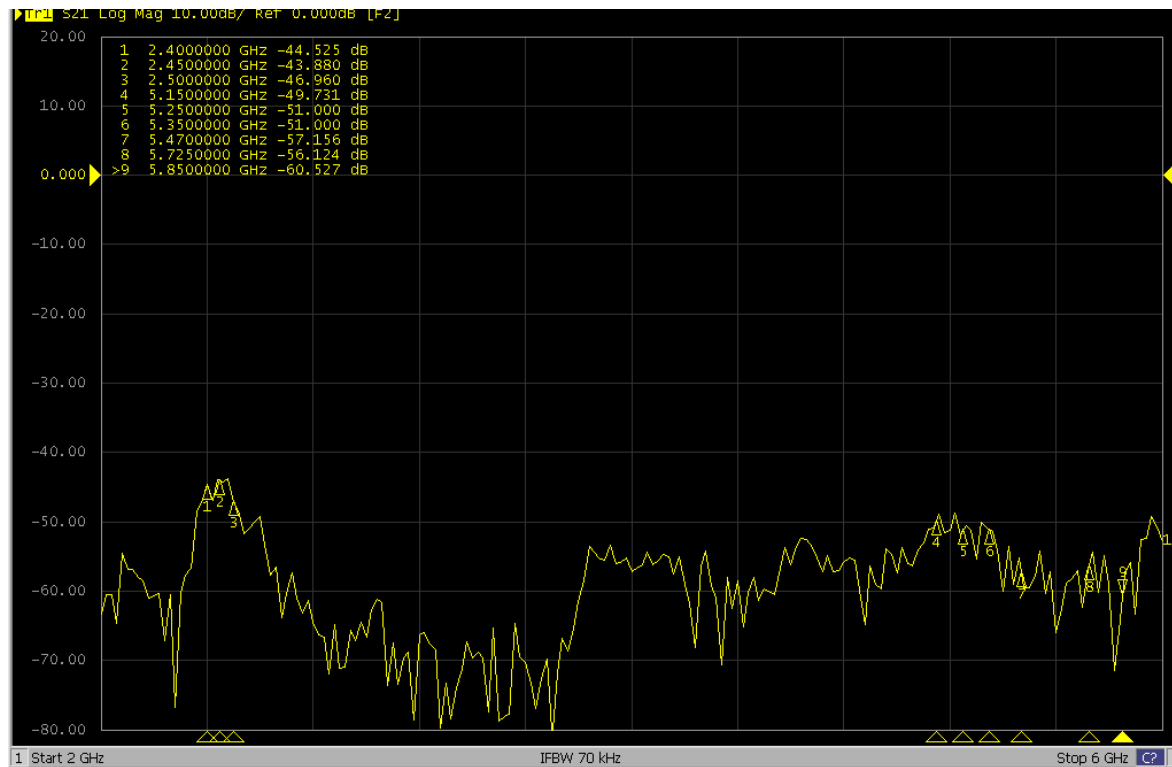


Return Loss @ WiFi Aux

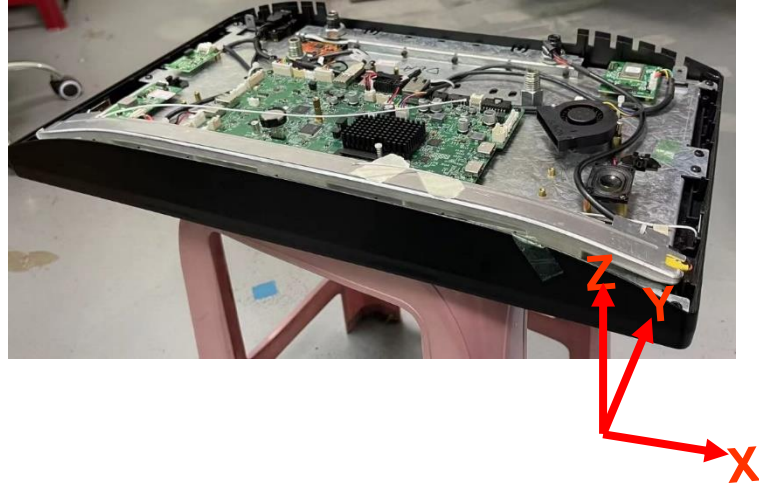
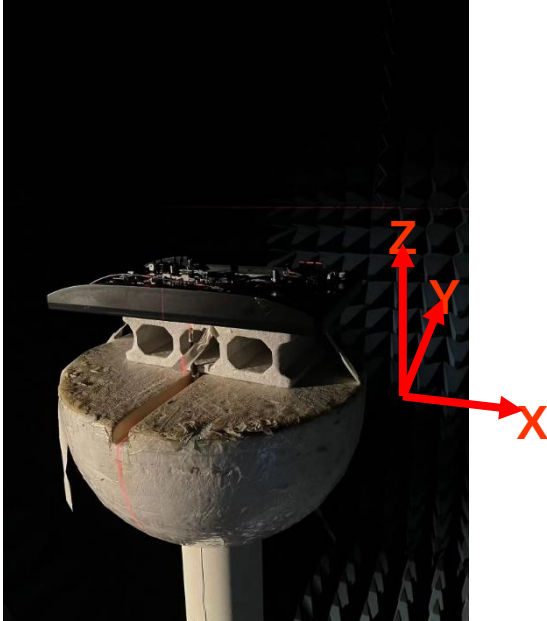




Isolation WiFi Main to WiFi Aux



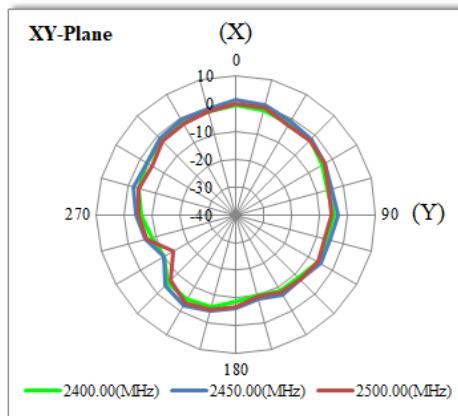
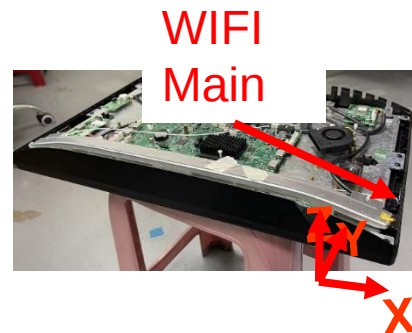
► Coordinate System



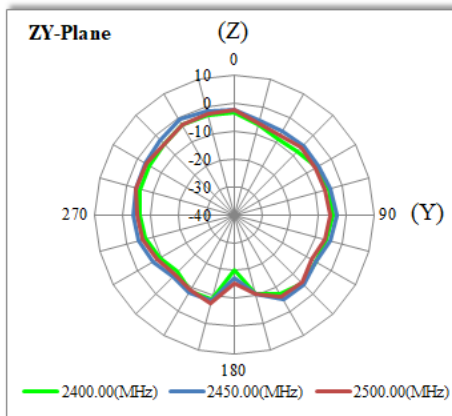
► 3D Peak Gain & Efficiency for WiFi Main&WiFi Aux

WIFI Main				WIFI Aux			
Freq(MHz)	Eff.(dB)	Eff.(%)	Peak Gain(dB)	Freq(MHz)	Eff.(dB)	Eff.(%)	Peak Gain(dB)
2400	-4.47	36	-0.35	2400	-4.22	38	0.83
2450	-3.17	48	1.51	2450	-3.12	49	1.53
2500	-4.35	37	0.73	2500	-4.06	39	1.31
5150	-3.41	46	3.90	5150	-4.19	38	4.58
5250	-3.18	48	4.08	5250	-3.95	40	4.69
5350	-3.01	50	4.23	5350	-3.74	42	4.61
5470	-3.14	49	4.31	5470	-3.75	42	4.76
5600	-3.46	45	4.45	5600	-4.32	37	4.50
5725	-3.62	43	4.66	5725	-4.22	38	4.37
5785	-3.69	43	4.26	5785	-4.30	37	4.30
5850	-3.74	42	4.53	5850	-4.35	37	4.35
5925	-3.59	44	4.49	5925	-4.32	37	4.23

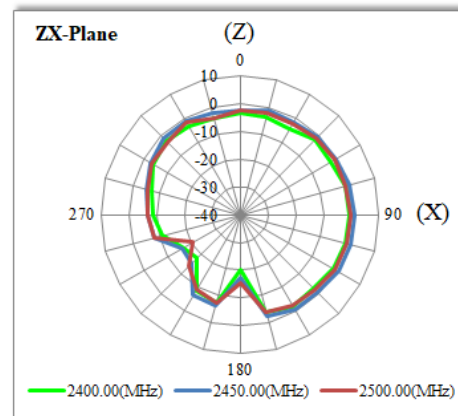
WiFi Main 2D Gain Pattern@2400-2500MHz



X-Y Plane

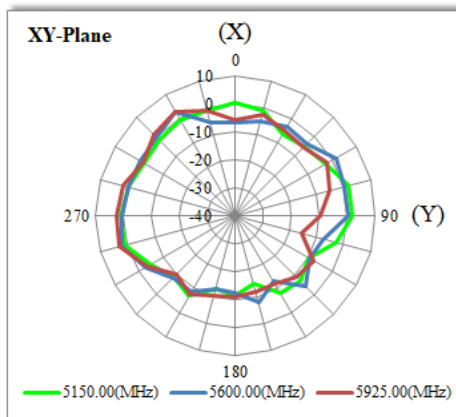
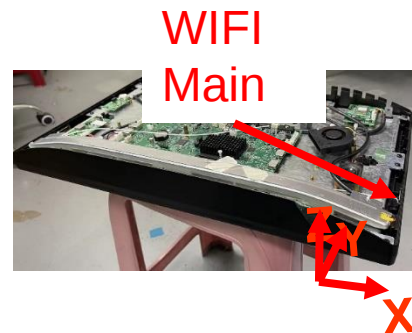


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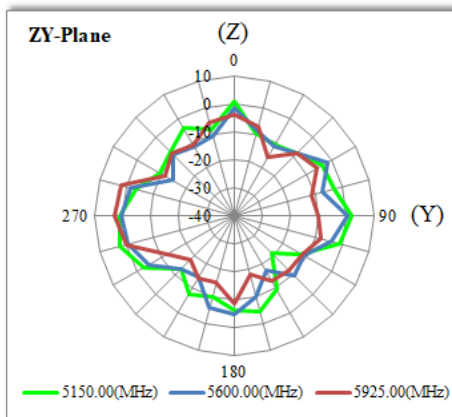


Z-X Plane

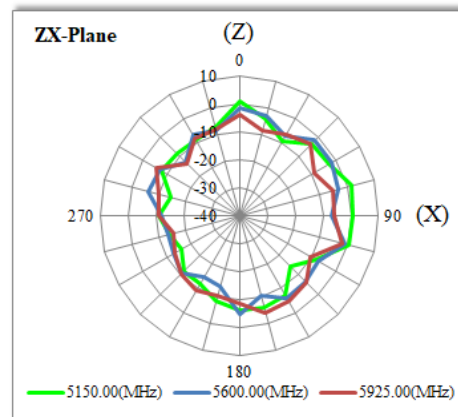
WiFi Main 2D Gain Pattern@5150-5925MHz



X-Y Plane

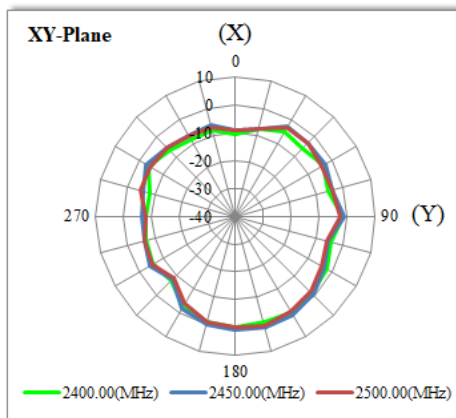
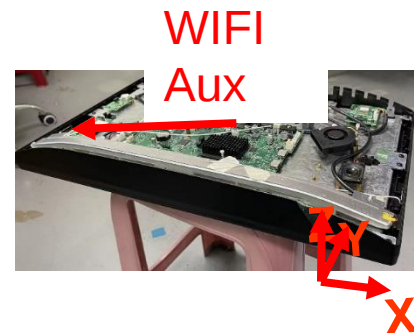


Z-Y Plane

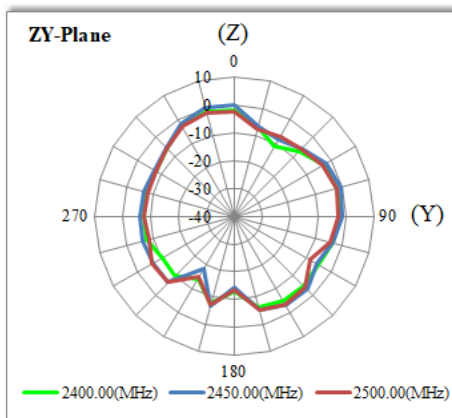


Z-X Plane

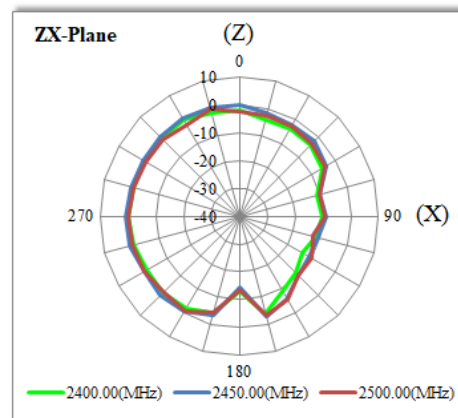
WiFi Aux 2D Gain Pattern@2400-2500MHz



X-Y Plane

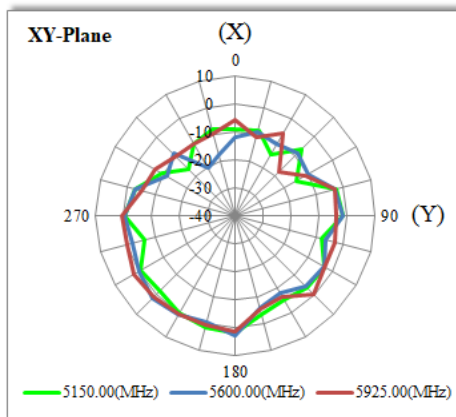


Z-Y Plane

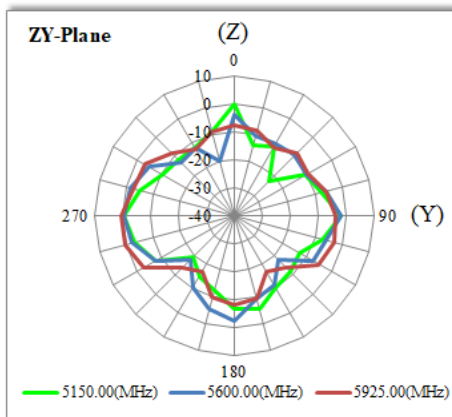


Z-X Plane

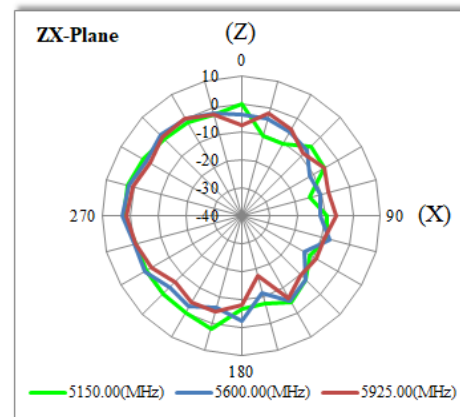
WiFi Aux 2D Gain Pattern@5150-5925MHz



X-Y Plane

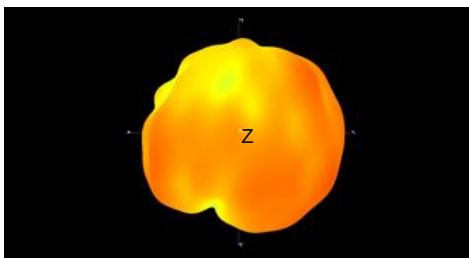
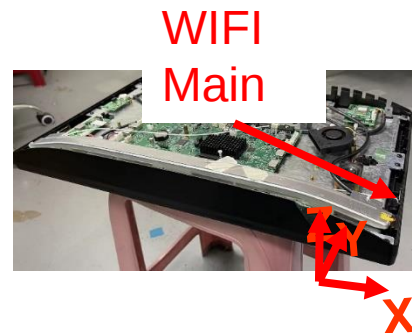


Z-Y Plane

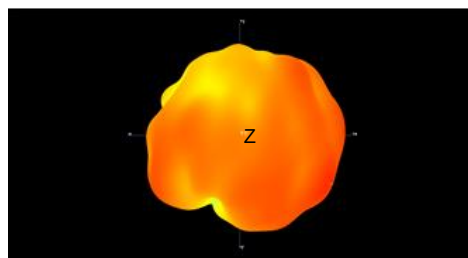


Z-X Plane

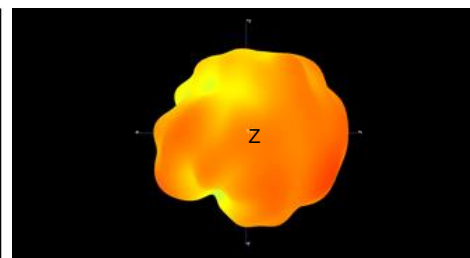
► WiFi Main 3D Gain Pattern@2400-2500MHz



2400MHz

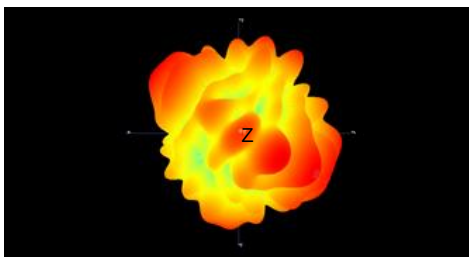
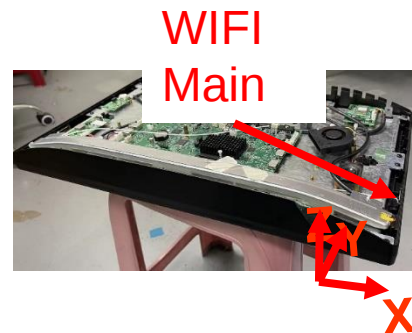


2450MHz

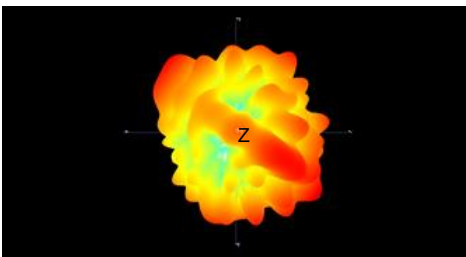


2500MHz

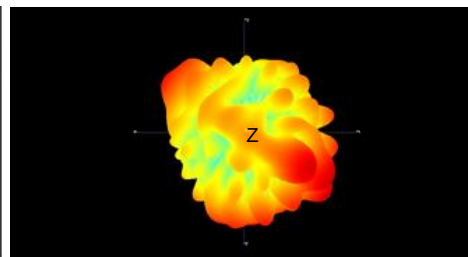
► WiFi Main 3D Gain Pattern@5150-5925MHz



5150MHz

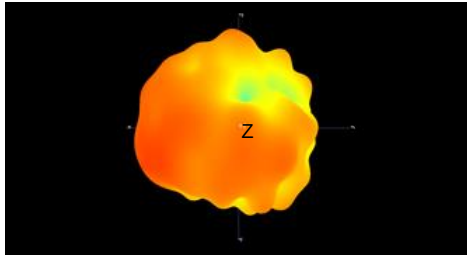


5600MHz

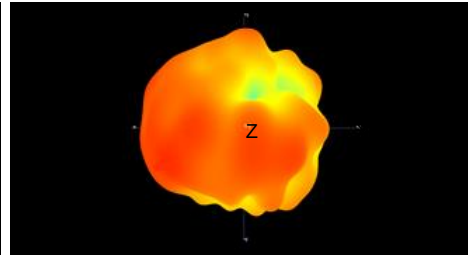


5925MHz

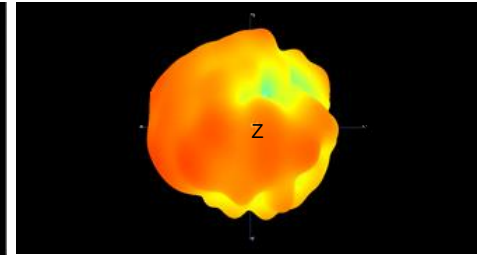
► WiFi Aux 3D Gain Pattern@2400-2500MHz



2400MHz

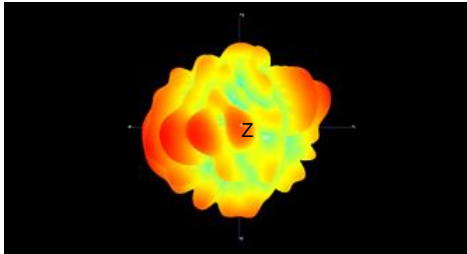


2450MHz

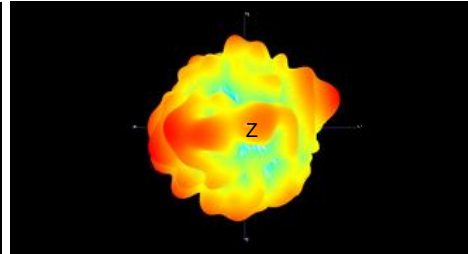


2500MHz

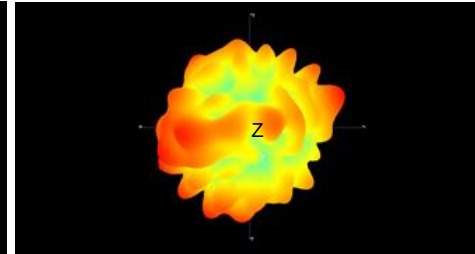
► WiFi Aux 3D Gain Pattern@5150-5925MHz



5150MHz



5600MHz



5925MHz

Thank You