



U6+LR Antenna Report

2022/08/26

History

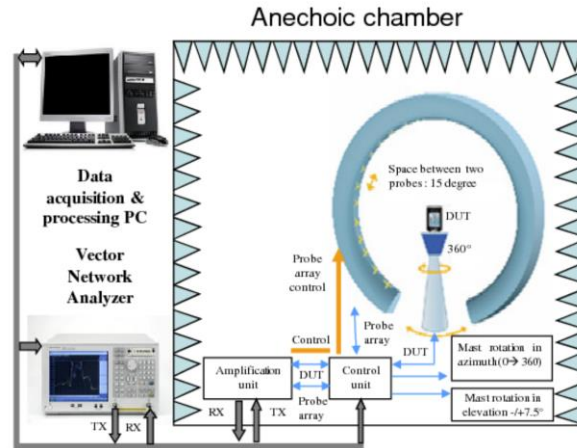


Revision	Date	Description	Author
V.01	2022.07.14	1. Antenna performance validation of SR1 sample	Mark Hung
V.01	2022.08.26	1. Antenna performance validation of SRT1 sample	Mark Hung

Test Environment



- Report Number: U6LRPlus20220826
- UUT Description: Wifi AP
- Lab. And Equipment set-up:



Test equipment schematic

VNA Testing Information

- VNA model : Keysight E5071C calibrated to 8.5 GHz
- Frequency sweep : 1000~7500 / 1201 points

Over-The-Air Passive Testing Information

- Chamber model : SATIMO SG24 calibrated to 10 GHz
- Frequency sweep : 2300~2600 / 10 MHz
5000~6000 / 25 MHz
5800~7200 / 25 MHz
- The angle of scanning increment : 3 deg
- The angle of data export : 3 deg
- Chamber orientation definition as left-hand photo shown

- DUT: U6+LR_SRT1

	function	Type	Con.
Ant1	2G+5G	stamping	N/A
Ant2	BT+5G	stamping	N/A
Ant3	2G+5G	stamping	N/A

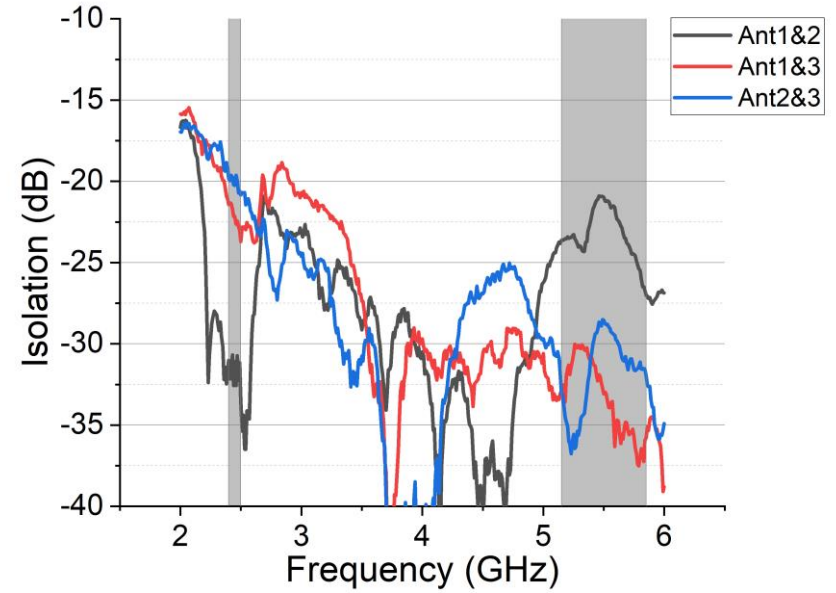
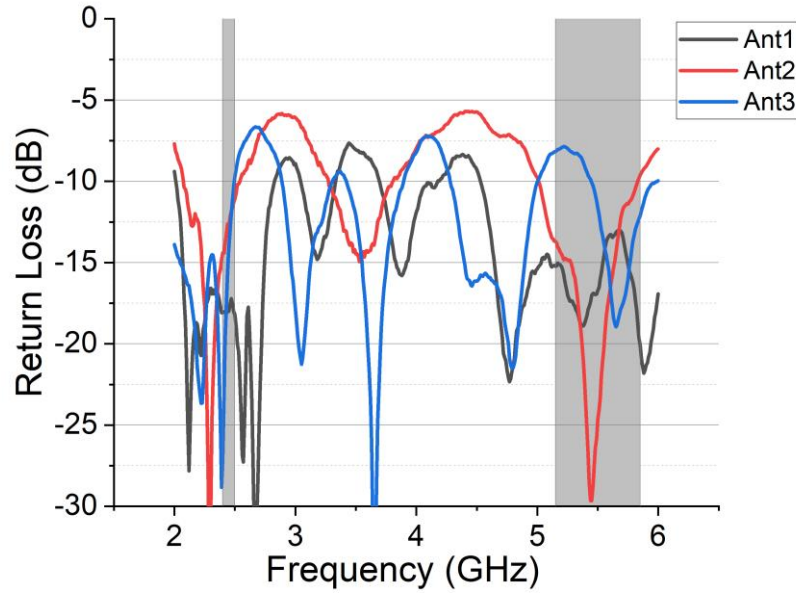
Radio:

2G:2x2

5G:2x2 (or 3x3)

BT

S Parameter



Antenna Efficiency and Gain



Ant1		
Fre.(MHz)	Efficiency (%)	Gain (dBi)
2400	74	2.68
2450	74	2.79
2500	73	2.76
5150	59	4.23
5250	60	4.33
5350	60	5.03
5450	60	5.78
5550	55	5.45
5650	52	5.29
5750	52	6.28
5850	53	6.32

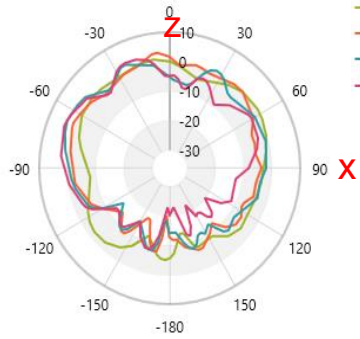
Ant2		
Fre.(MHz)	Efficiency (%)	Gain (dBi)
2400	75	3.81
2450	78	4.02
2500	77	4.01
5150	67	5.01
5250	68	5.57
5350	68	5.51
5450	68	4.75
5550	66	4.83
5650	65	5.57
5750	63	5.97
5850	57	5.34

Ant3		
Fre.(MHz)	Efficiency (%)	Gain (dBi)
2400	61	3.4
2450	53	3.01
2500	50	3.47
5150	51	3.55
5250	50	3.3
5350	52	2.77
5450	54	3.55
5550	58	4.14
5650	57	4.67
5750	55	4.84
5850	53	4.58

Radiation Pattern_Ant1, Ant2

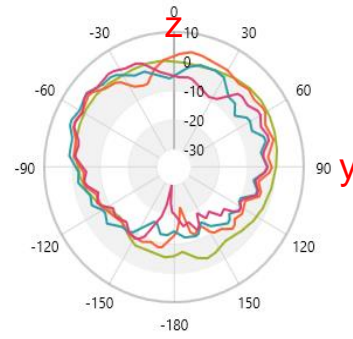


- 2450 MHz 0° E Total
- 5150 MHz 0° E Total
- 5550 MHz 0° E Total
- 5850 MHz 0° E Total



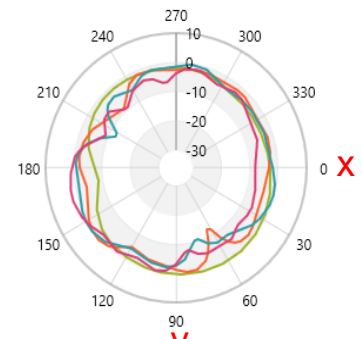
Elevation (°)
xz-cut

- 2450 MHz 90° E Total
- 5150 MHz 90° E Total
- 5550 MHz 90° E Total
- 5850 MHz 90° E Total



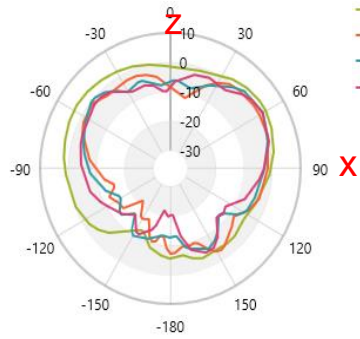
Elevation (°)
yz-cut

- 2450 MHz 90° E Total
- 5150 MHz 90° E Total
- 5550 MHz 90° E Total
- 5850 MHz 90° E Total



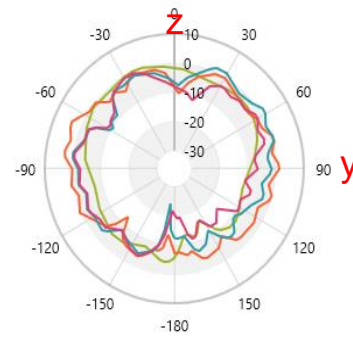
Azimuth (°)
xy-cut

- 2450 MHz 0° E Total
- 5150 MHz 0° E Total
- 5550 MHz 0° E Total
- 5850 MHz 0° E Total



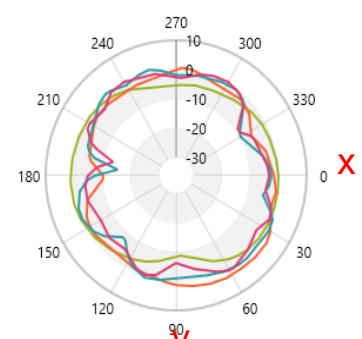
Elevation (°)

- 2450 MHz 90° E Total
- 5150 MHz 90° E Total
- 5550 MHz 90° E Total
- 5850 MHz 90° E Total

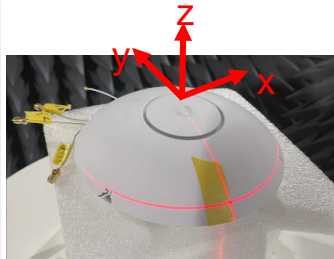


Elevation (°)

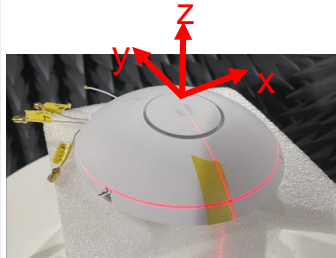
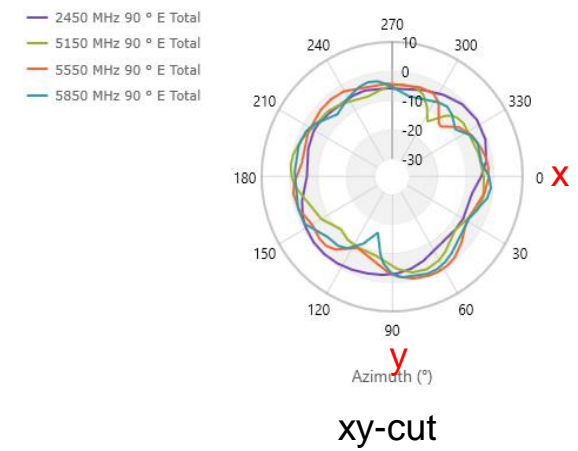
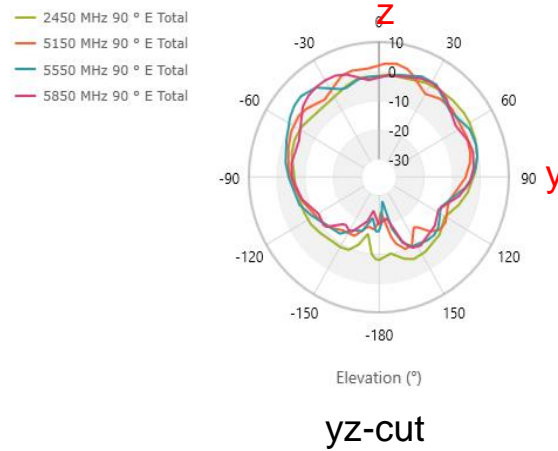
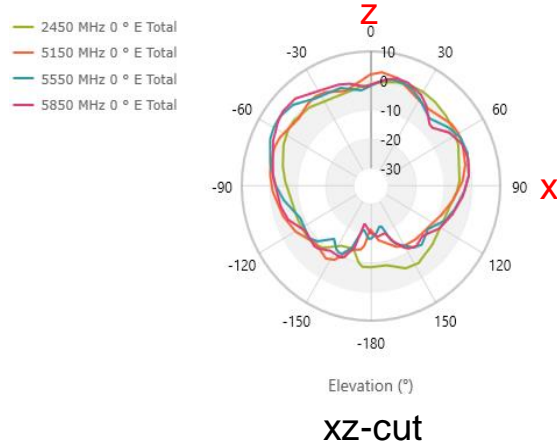
- 2450 MHz 90° E Total
- 5150 MHz 90° E Total
- 5550 MHz 90° E Total
- 5850 MHz 90° E Total



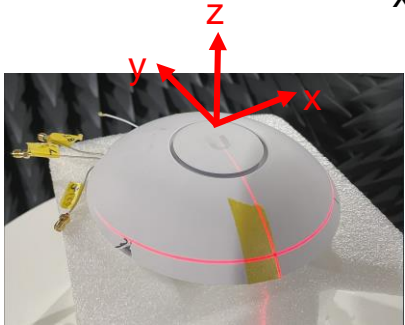
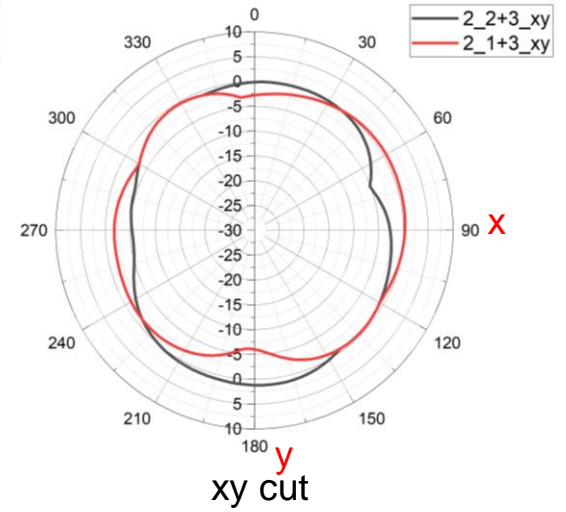
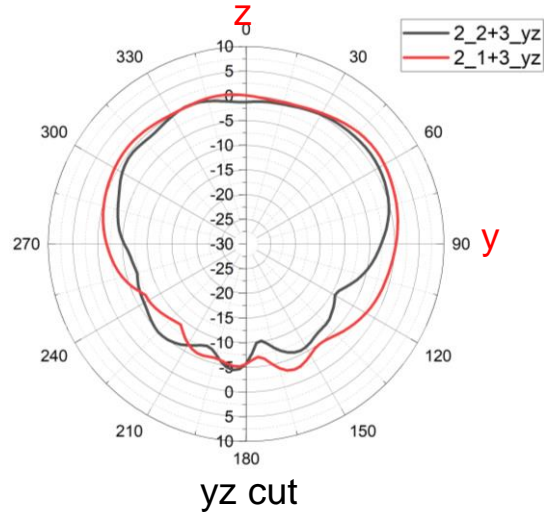
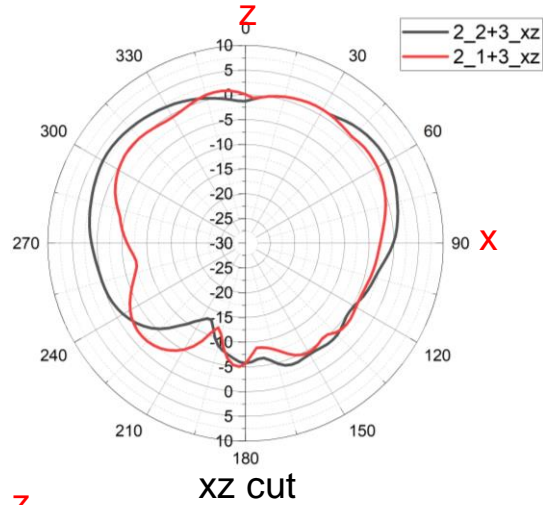
Azimuth (°)



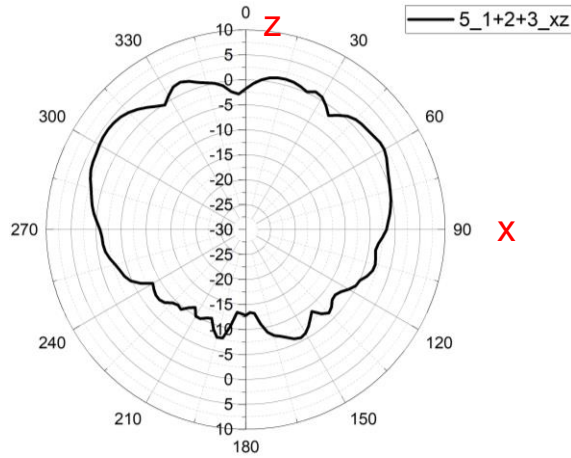
Radiation Pattern_Ant3



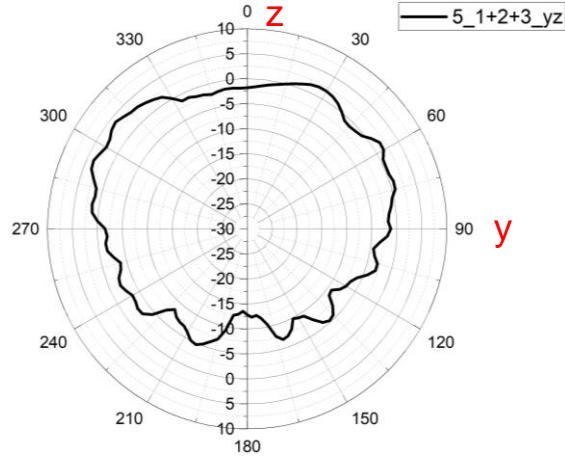
Radiation Pattern_2G Combine Pattern



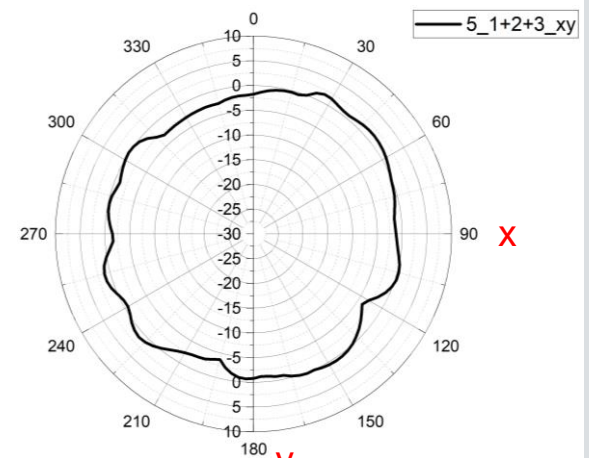
Radiation Pattern_5G Combine Pattern



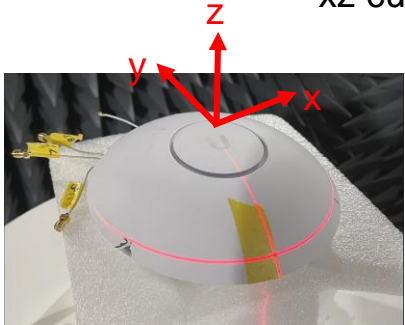
xz cut



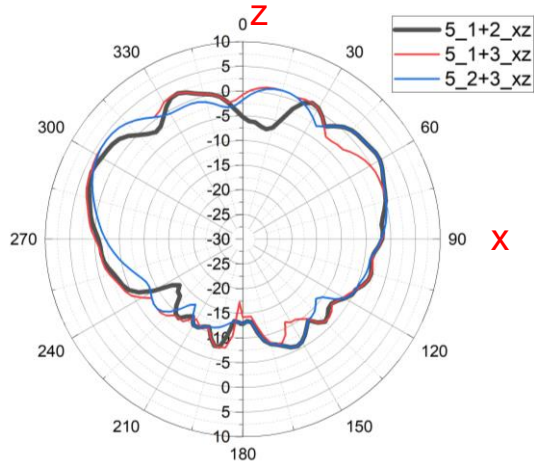
yz cut



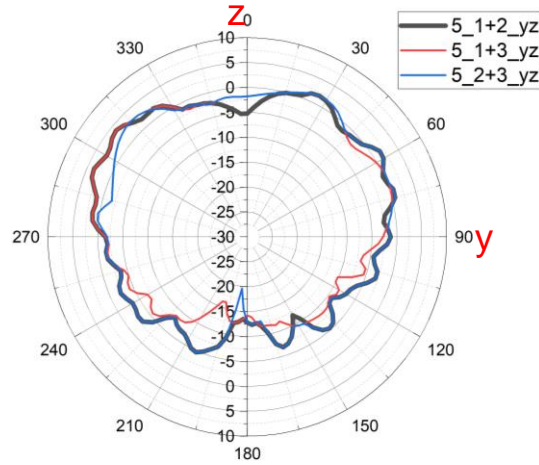
xy cut



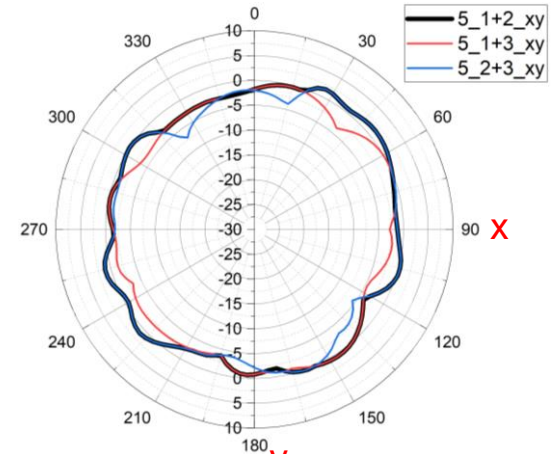
Radiation Pattern_5G Combine Pattern



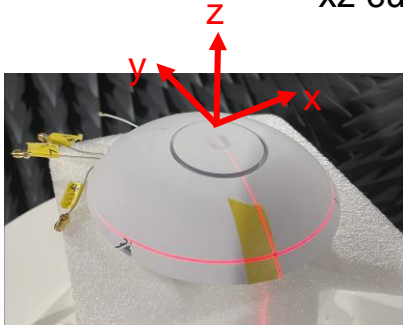
xz cut



yz cut



xy cut





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