R2SP8T, R2SP9T
Antenna test Report

Date：2021-12-29

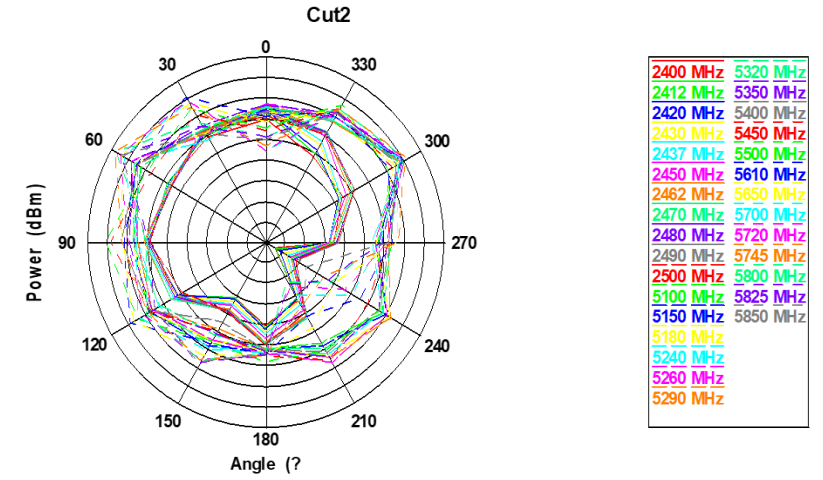# Antenna Field Pattern

Ant 1 is IFA antenna
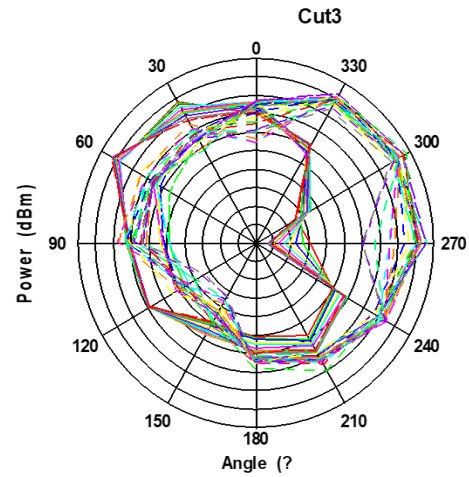
Cut1

Power (dBm)

Angle (?

Max: 2
Min: -18
Scale: 2/div

2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2470 MHz	5700 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

Cut2

Power (dBm)

Angle (?

Max: 2
Min: -16
Scale: 2/div

2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2470 MHz	5700 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

Cut3

Power (dBm)

Angle (?

Max: 2
Min: -18
Scale: 2/div

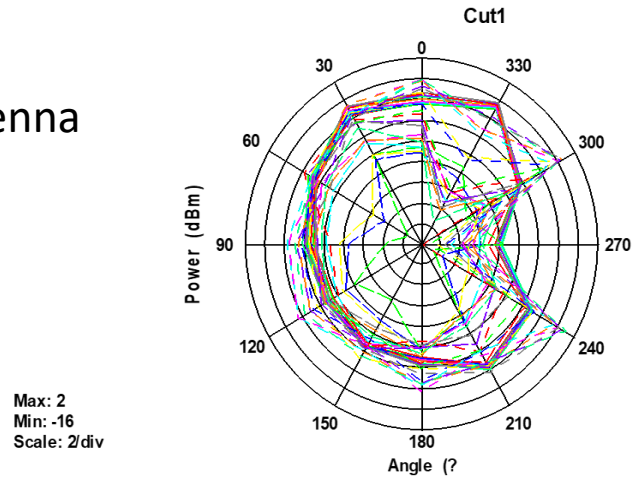|	
2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2470 MHz	5700 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

ANT 1

Antenna Field Pattern

Ant 2 is Monopole antenna

Cut1

Power (dBm)

Angle (?

Max: 2
Min: -16
Scale: 2/div

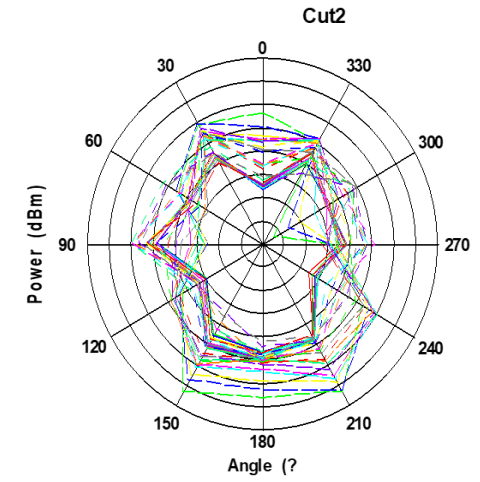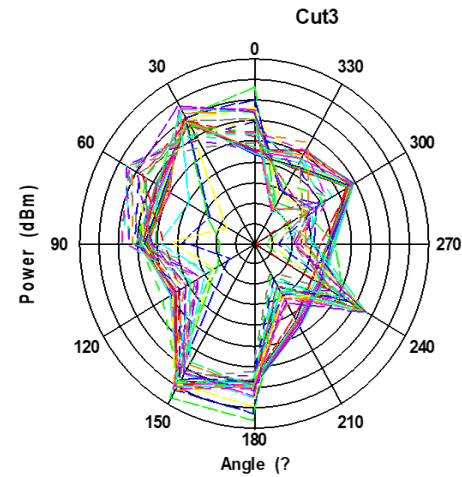|	
2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2470 MHz	5700 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

Cut2

Power (dBm)

Angle (?

Max: 4
Min: -12
Scale: 2/div

2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

Cut3

Power (dBm)

Angle (?

Max: 2
Min: -16
Scale: 2/div

2400 MHz	5320 MHz
2412 MHz	5350 MHz
2420 MHz	5400 MHz
2430 MHz	5450 MHz
2437 MHz	5500 MHz
2450 MHz	5610 MHz
2462 MHz	5650 MHz
2470 MHz	5700 MHz
2480 MHz	5720 MHz
2490 MHz	5745 MHz
2500 MHz	5800 MHz
5100 MHz	5825 MHz
5150 MHz	5850 MHz
5180 MHz	
5240 MHz	
5260 MHz	
5290 MHz	

ANT 2

Antenna gain

Frequency	Gain (dBi)	
	Ant-1	Ant-2
2400	-0.5	-0.2
2410	-0.5	-0.3
2420	-0.5	-0.4
2430	-0.6	-0.4
2440	-0.7	-0.4
2450	-0.5	-0.3
2460	-0.5	-0.2
2470	-0.5	-0.3
2480	-0.5	-0.3
2490	-0.8	-0.5
2500	-0.6	-0.4

Frequency	Gain (dBi)	
	Ant-1	Ant-2
5100	0.5	0.2
5150	0.6	0.6
5180	0.4	0.0
5240	0.5	0.3
5260	0.3	0.8
5290	0.4	0.3
5320	1	0.4
5350	0.6	0.9
5400	0.6	0.6
5450	0.5	0.6
5500	0.5	0.6
5610	0.5	0.3
5650	0.3	0.1
5700	0.8	0.6
5720	0.9	0.9
5745	0.9	0.9
5800	1.0	0.8
5825	0.4	0.2
5850	-0.1	-0.2

Test procedure and test equipment

1. Implement passive fixture for passive test

2. Place the fixture in the chamber and fix it in the holder

3. Set up the frequency range, step and angle sweep step

4. Start test and collect test data

Test equipment

1. Far field test chamber. Model: AMS8500

2. Network analyzer. Model: E5071C

3. Software: EMQuset EMQ-100 Pattern Measurement Software