



# FG6222RTM

## Antenna Test Report

Date : Mar. 17, 2022  
Prepared by : AK Chen



# Outline

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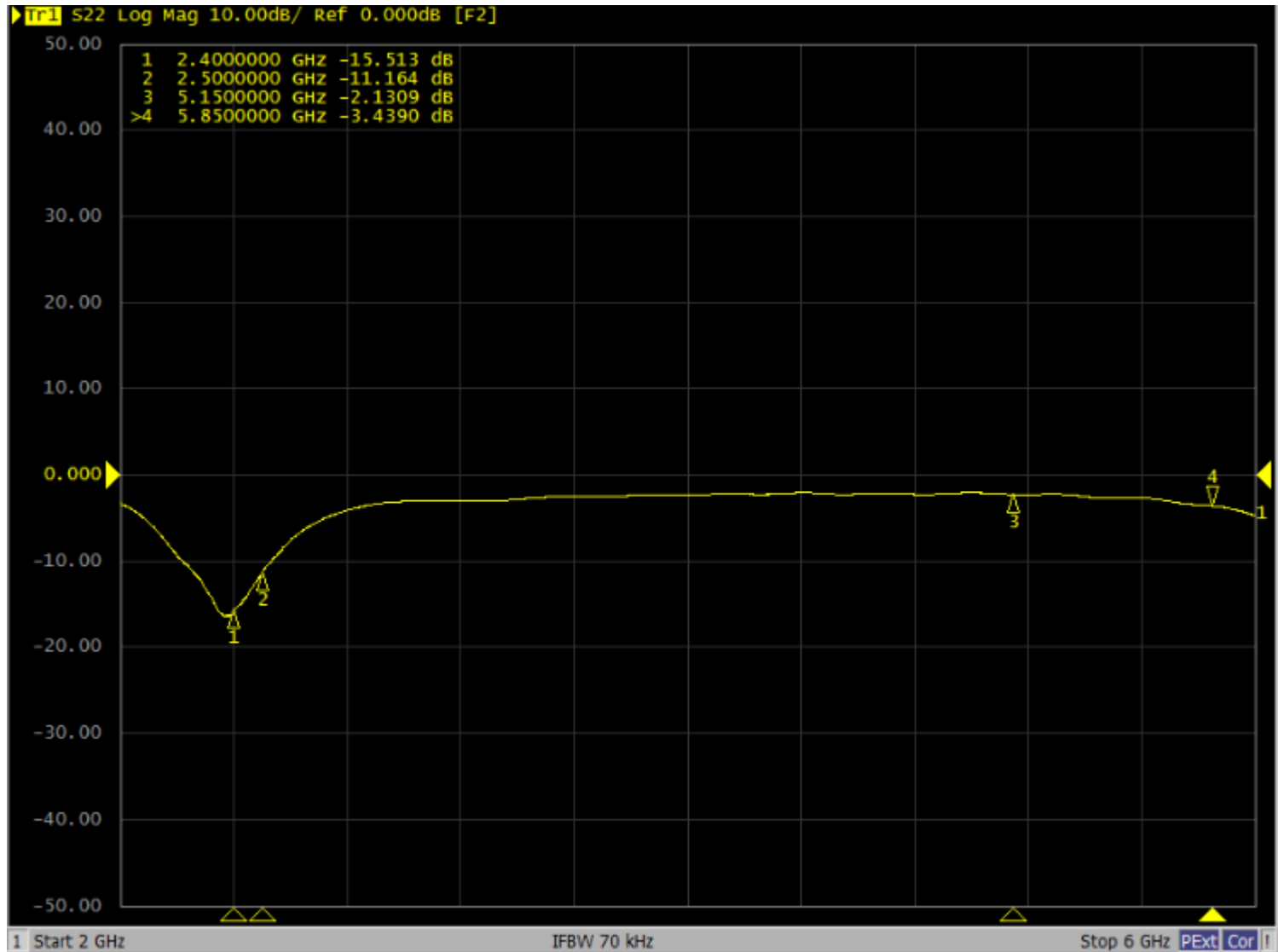
- Antenna Structure & Placement
- Return Loss & Isolation
- Radiation Pattern
- Peak Gain & Efficiency

# Antenna Structure & Placement

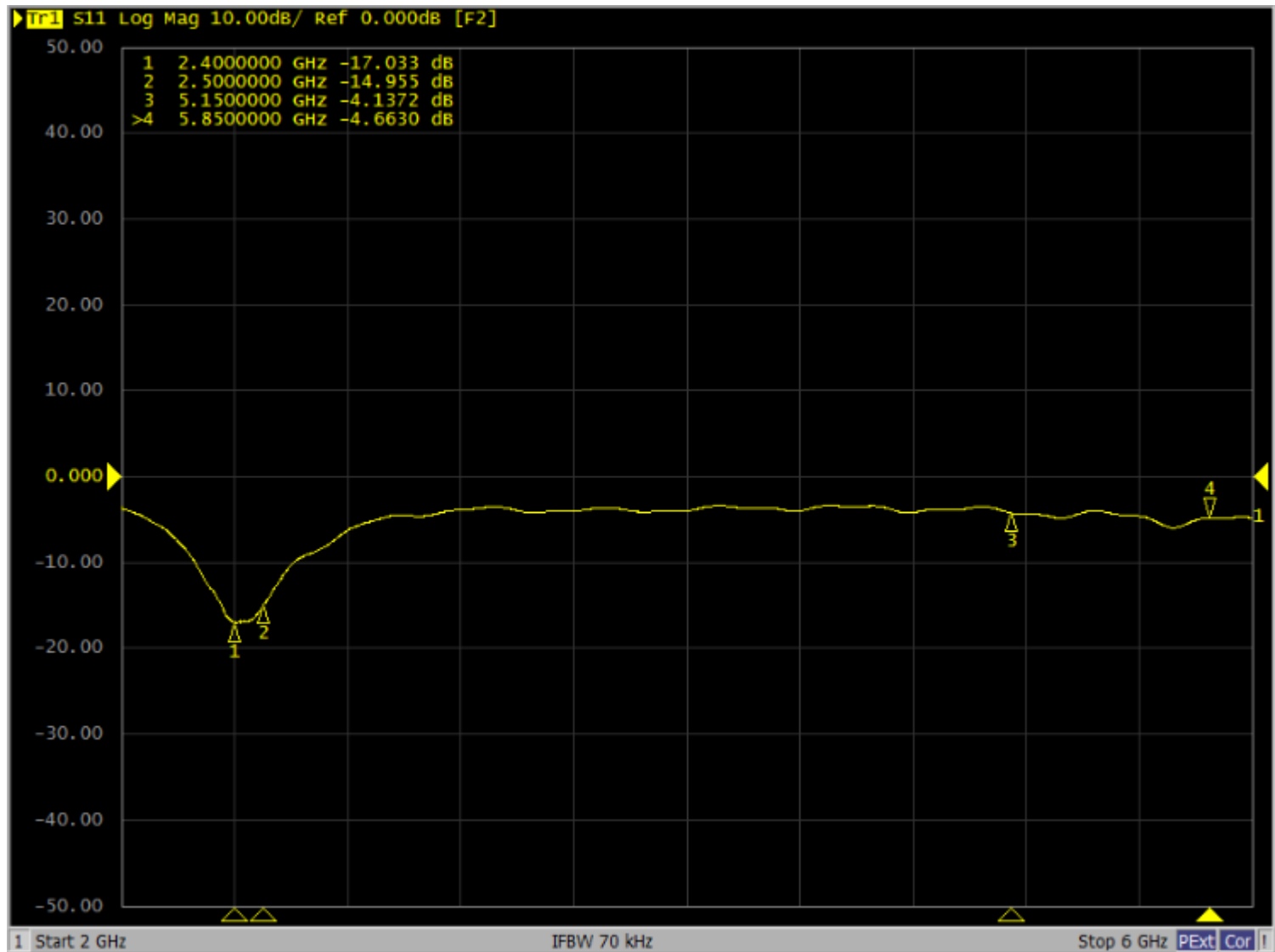


Ant No.	Operating Band	Type	Material	Feeding	Dimension
Ant 1 ~ 2	2400 MHz ~ 2500 MHz	PIFA	Metal	Cable	30 x 8 x 13 mm <sup>3</sup>
Ant 3 ~ 4	5150 MHz ~ 5850 MHz	PIFA	Metal	Cable	13 x 8 x 9 mm <sup>3</sup>

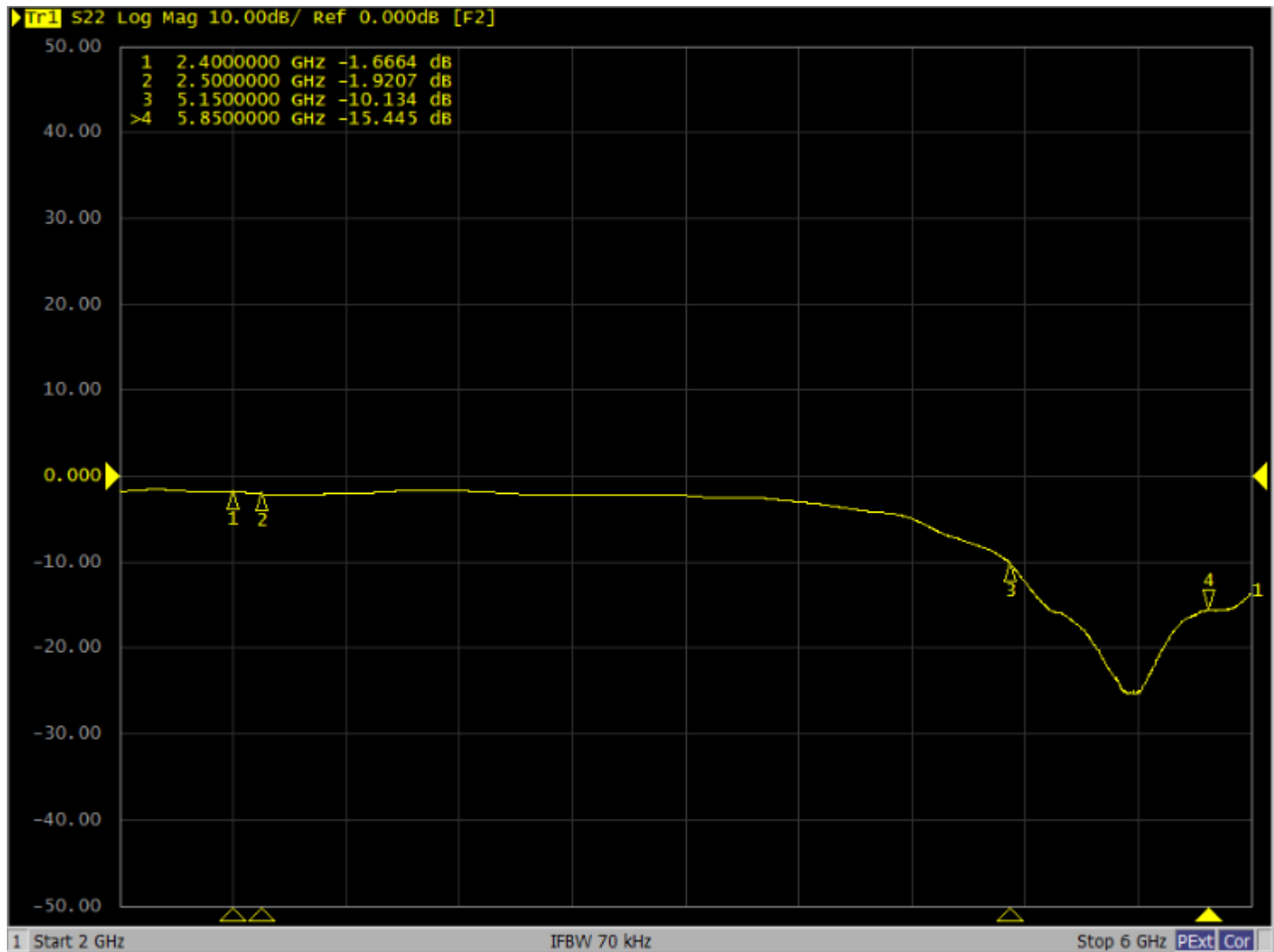
# Return Loss\_Ant 1



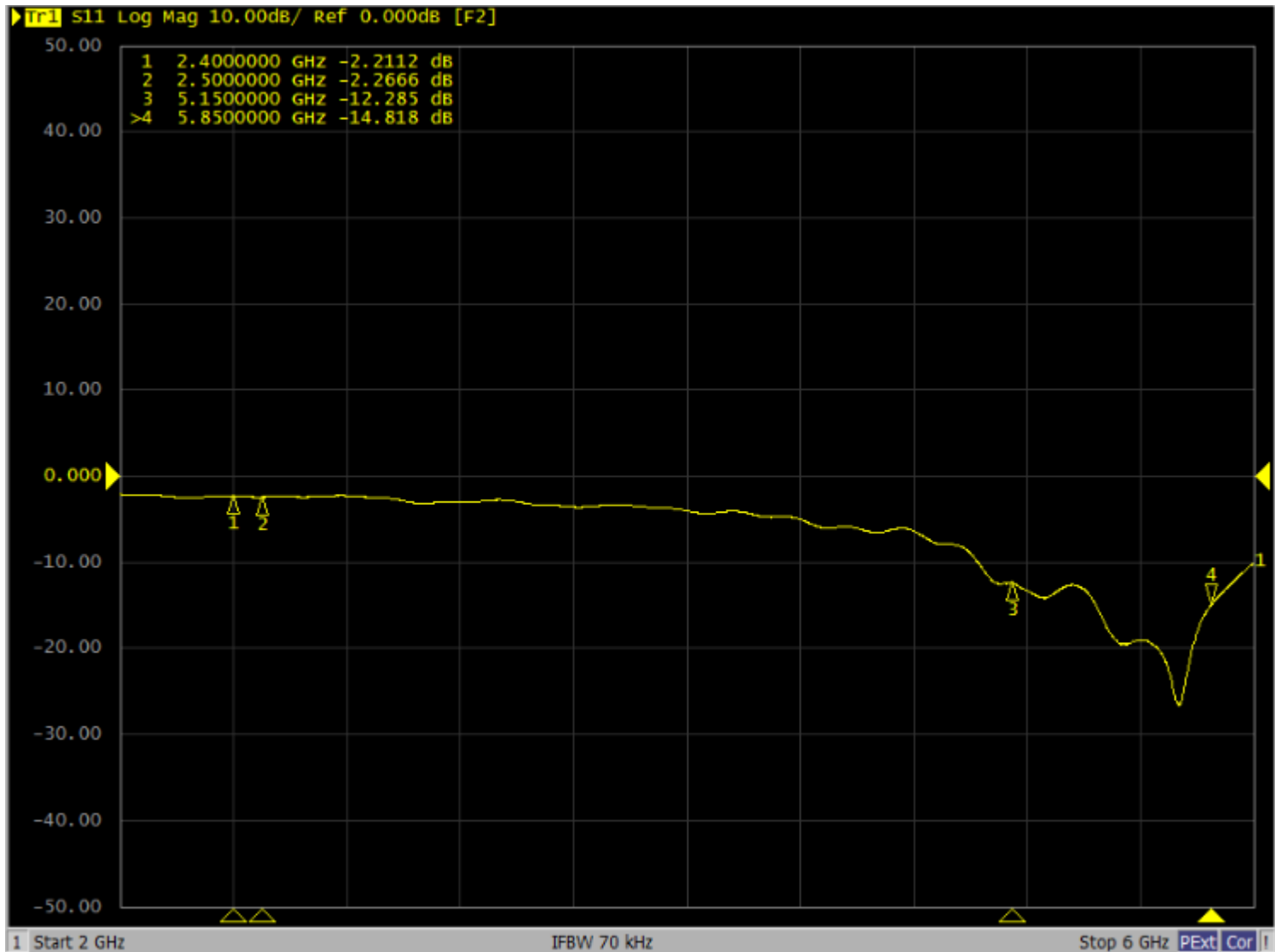
# Return Loss\_Ant 2



# Return Loss\_Ant 3

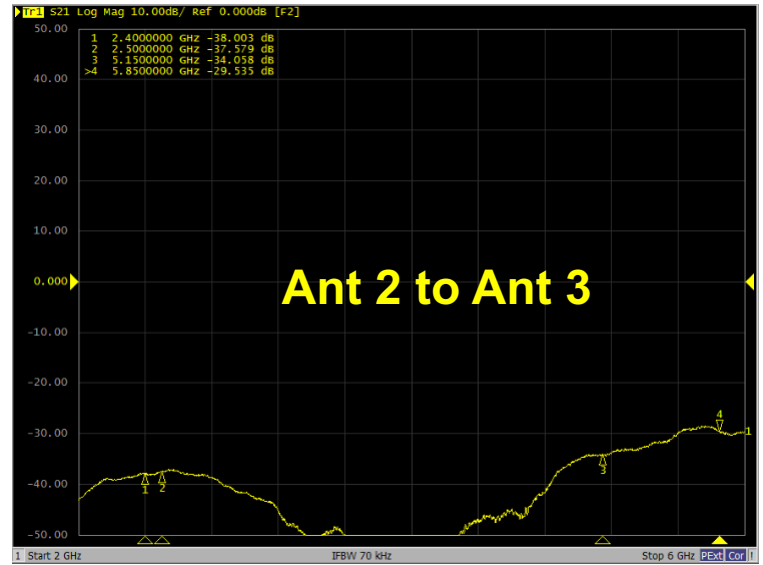
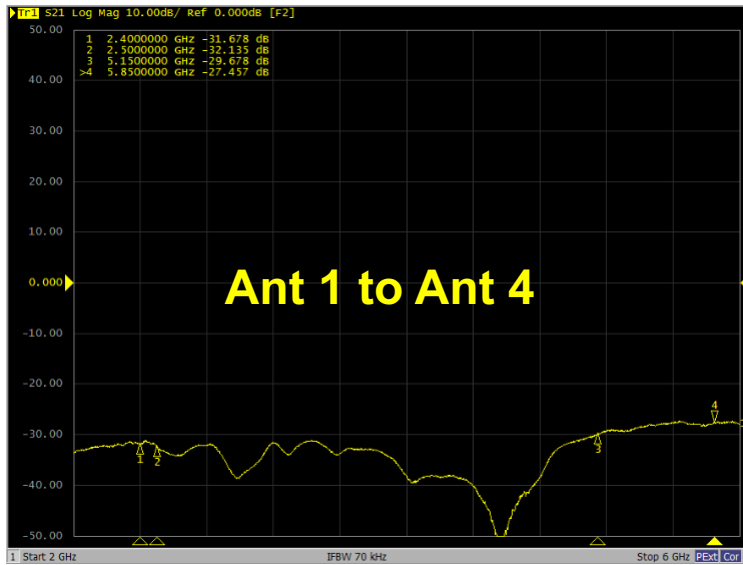
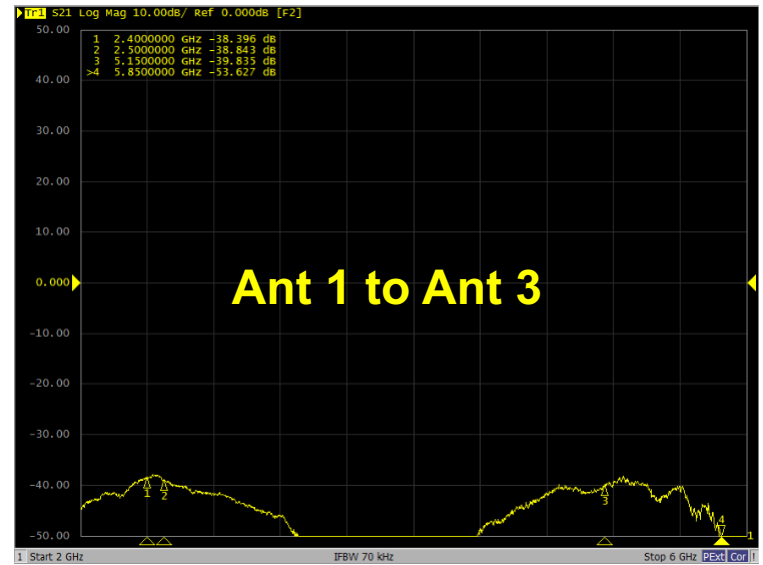
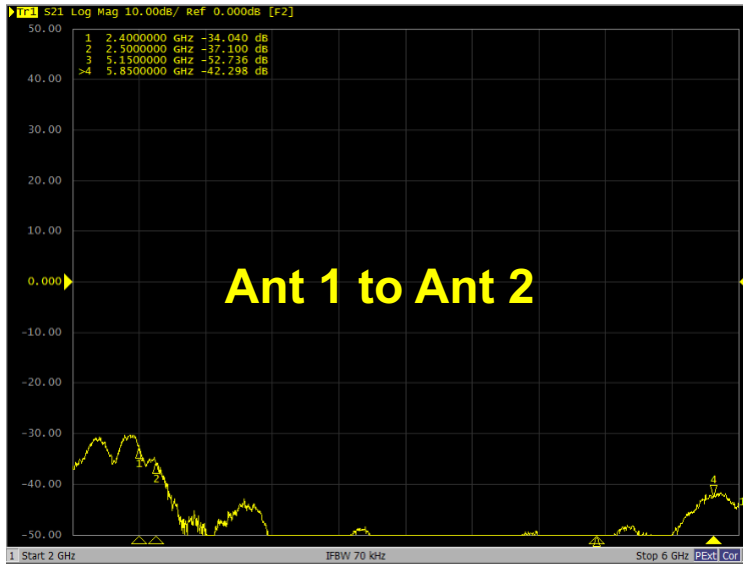


# Return Loss\_Ant 4



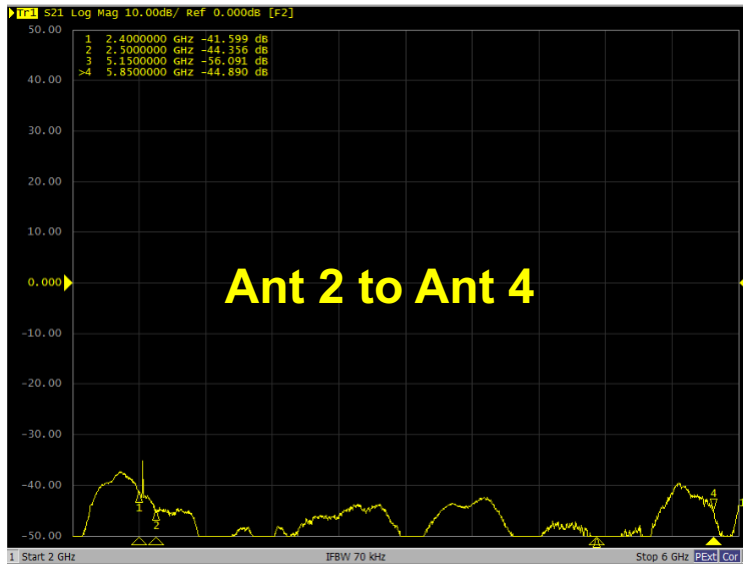


# Isolation

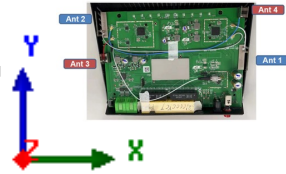




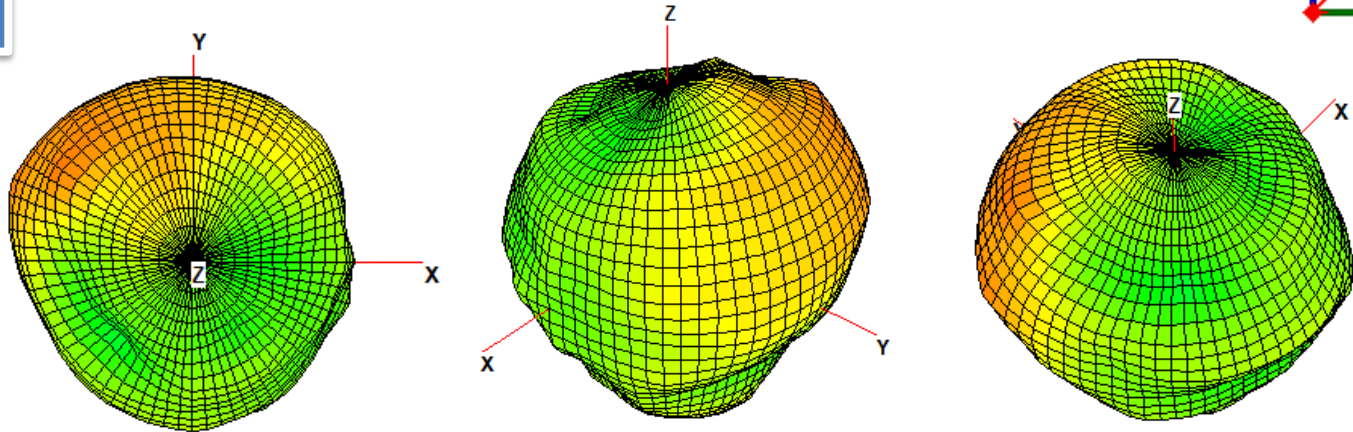
# Isolation



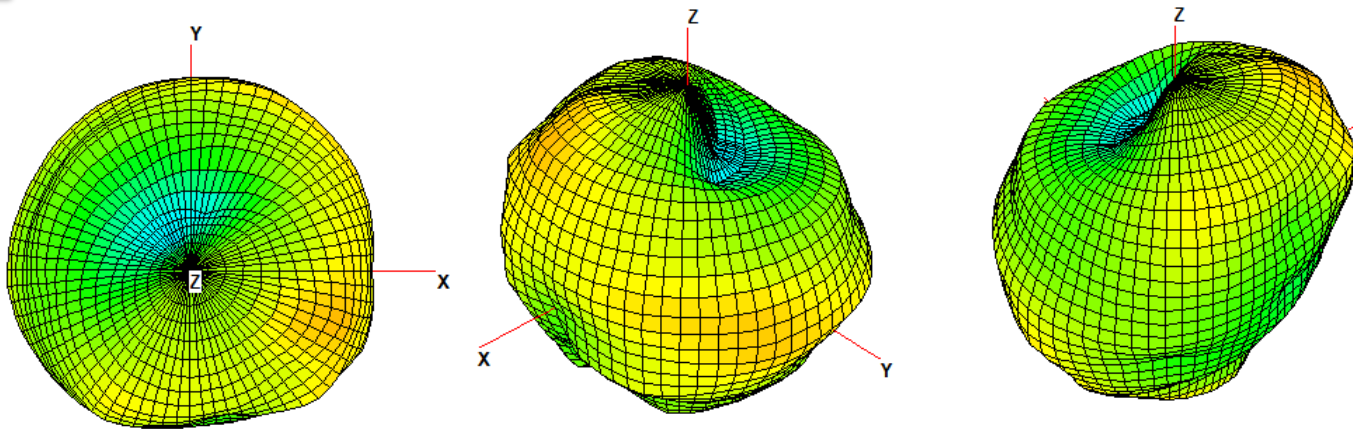
# 3D Radiation Pattern\_WiFi 2.4G



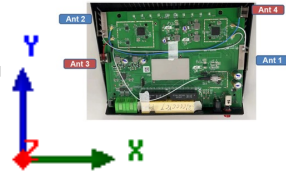
Ant 1



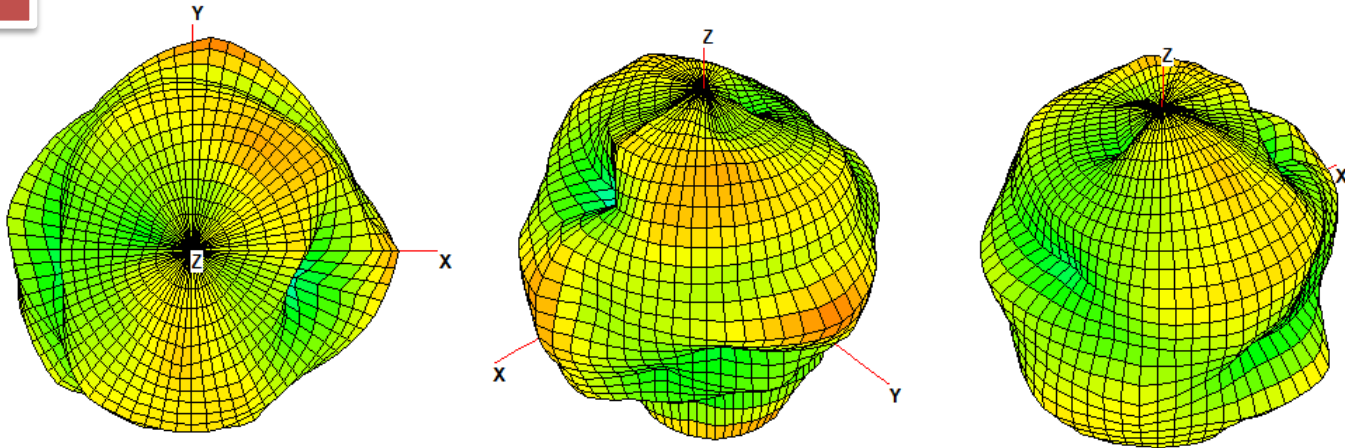
Ant 2



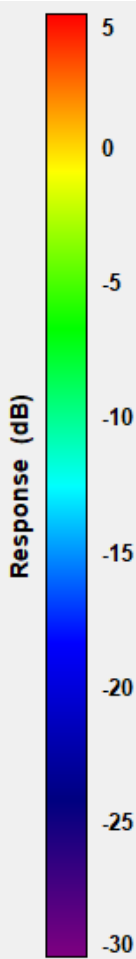
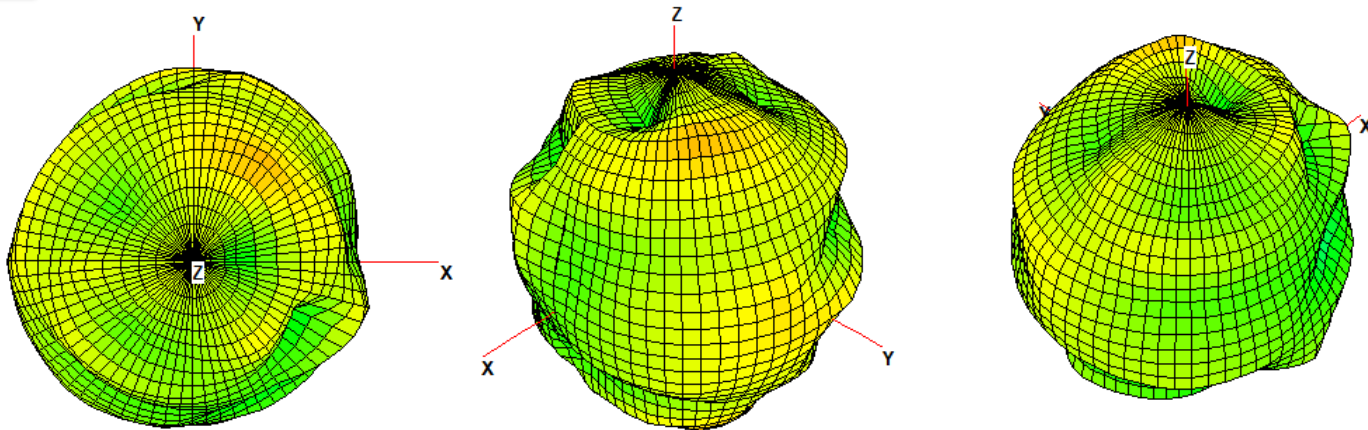
# 3D Radiation Pattern\_WiFi 5G



Ant 3

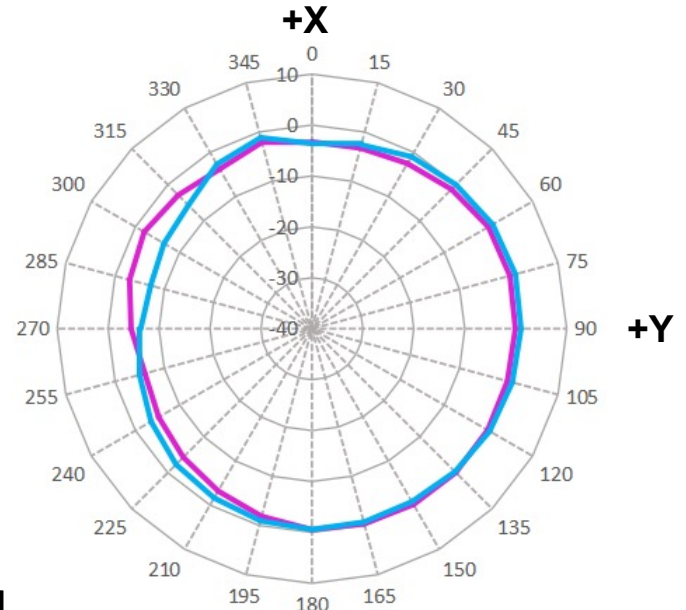
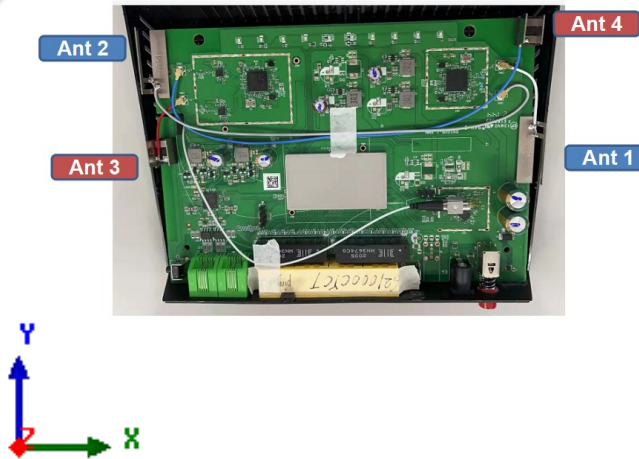


Ant 4

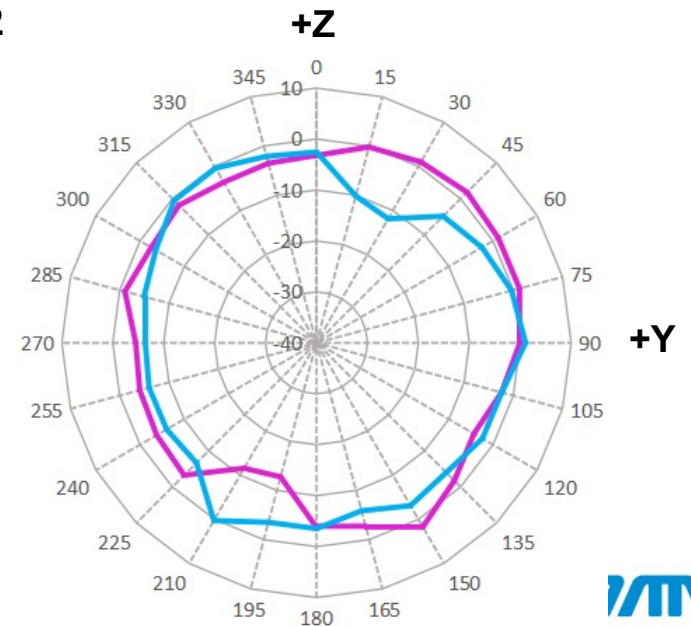
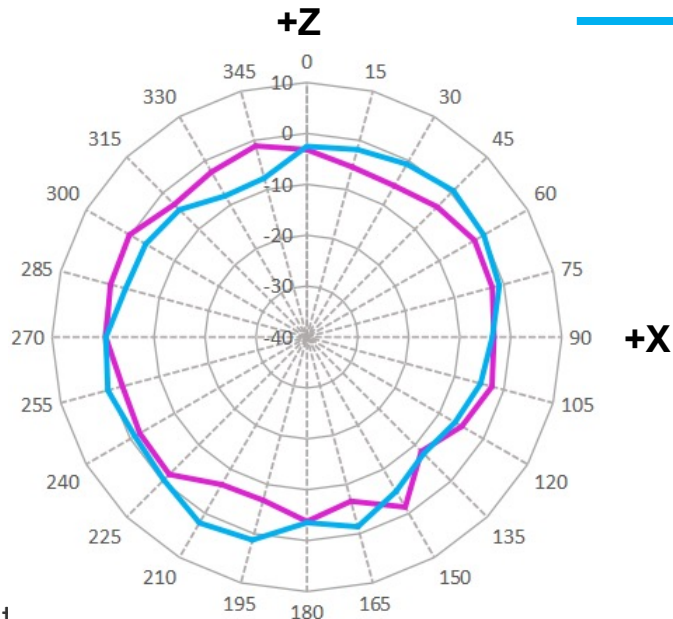


# 2D Radiation Pattern

2450 MHz



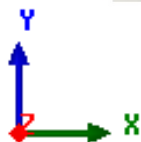
— Ant 1  
— Ant 2



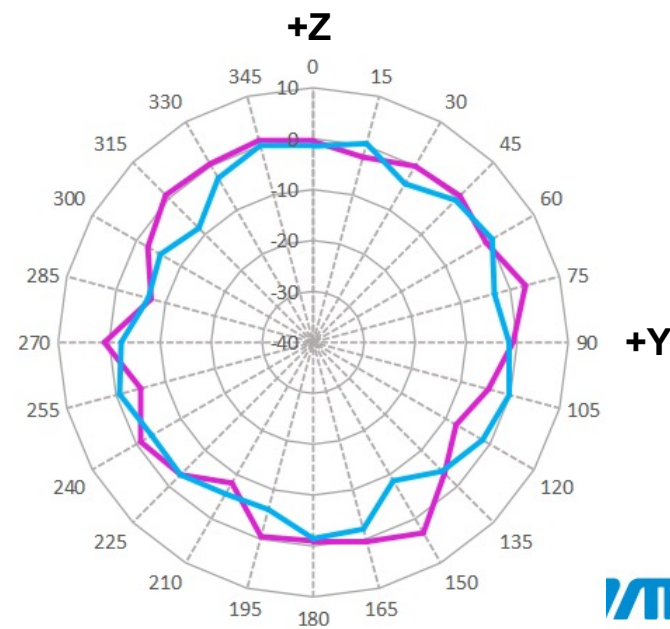
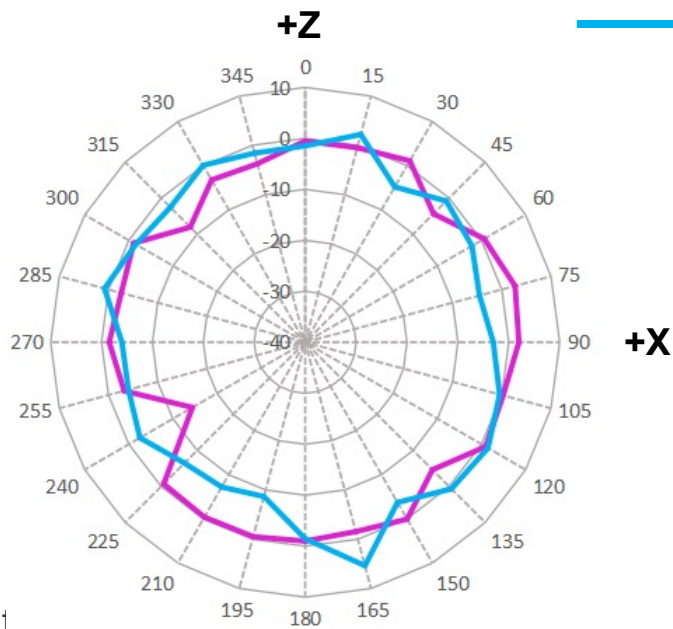
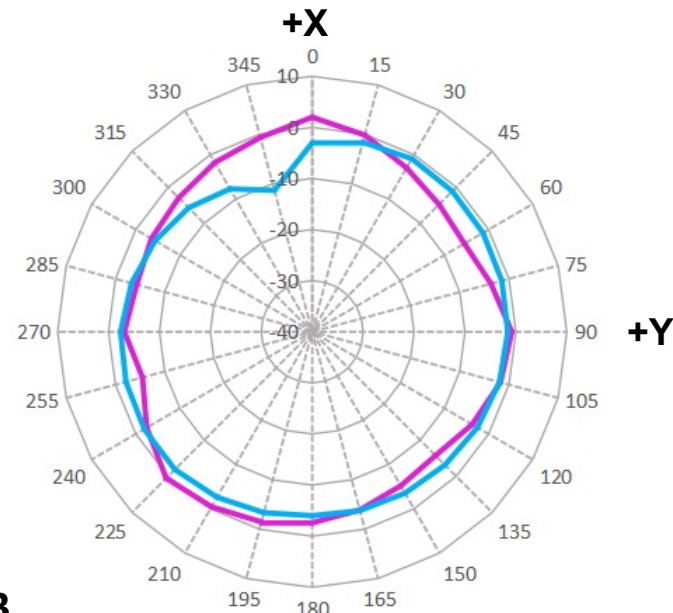


# 2D Radiation Pattern

5500 MHz



— Ant 3  
— Ant 4



# Peak Gain & Efficiency

Ant 1		
Frequency (MHz)	Efficiency (%)	Peak Gain (dBi)
2400	58.9	2.3
2450	59.4	2.1
2500	62.6	2.6

Ant 2		
Frequency (MHz)	Efficiency (%)	Peak Gain (dBi)
2400	53.7	2.2
2450	57.5	2.7
2500	54.6	2.4

Ant 3		
Frequency (MHz)	Efficiency (%)	Peak Gain (dBi)
5150	64.3	3.0
5500	61.0	3.5
5850	60.7	3.3

Ant 4		
Frequency (MHz)	Efficiency (%)	Peak Gain (dBi)
5150	56.6	3.6
5500	52.8	3.9
5850	50.4	3.0

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