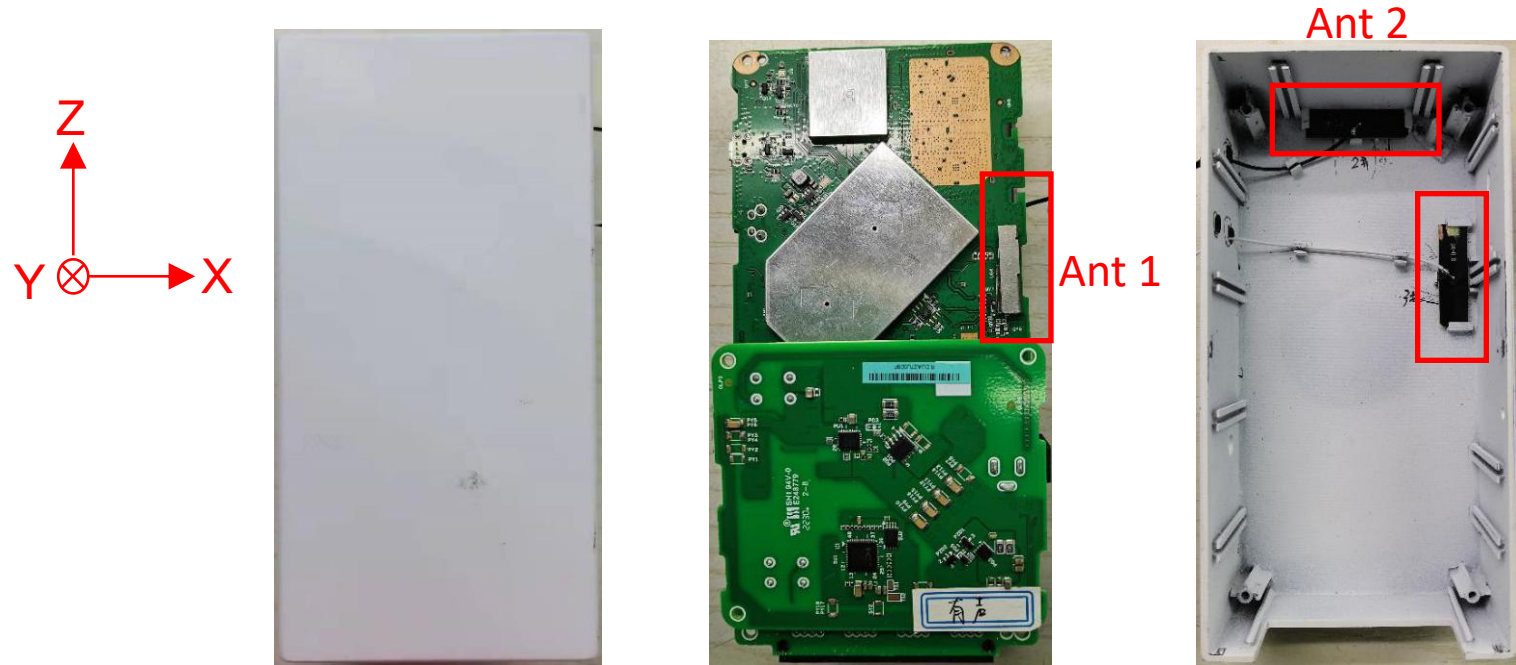
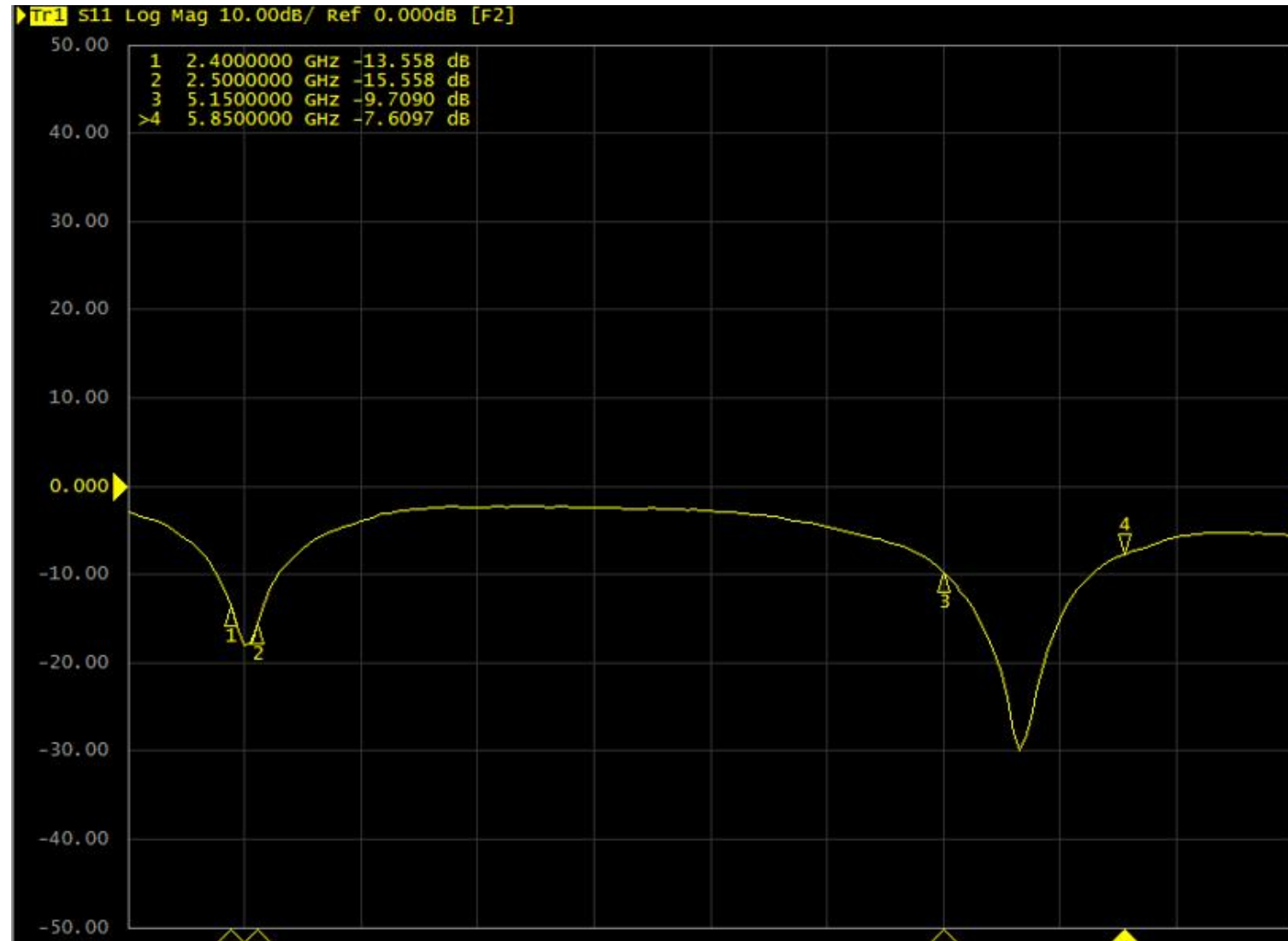


Manufacturer: Wanshih Electronic Co,. Ltd.
Address: 4F 72 Wu Kong 6th Rd., Wugu Dist., New Taipei Industrial Park, New Taipei City 24891, Taiwan(R.O.C.)

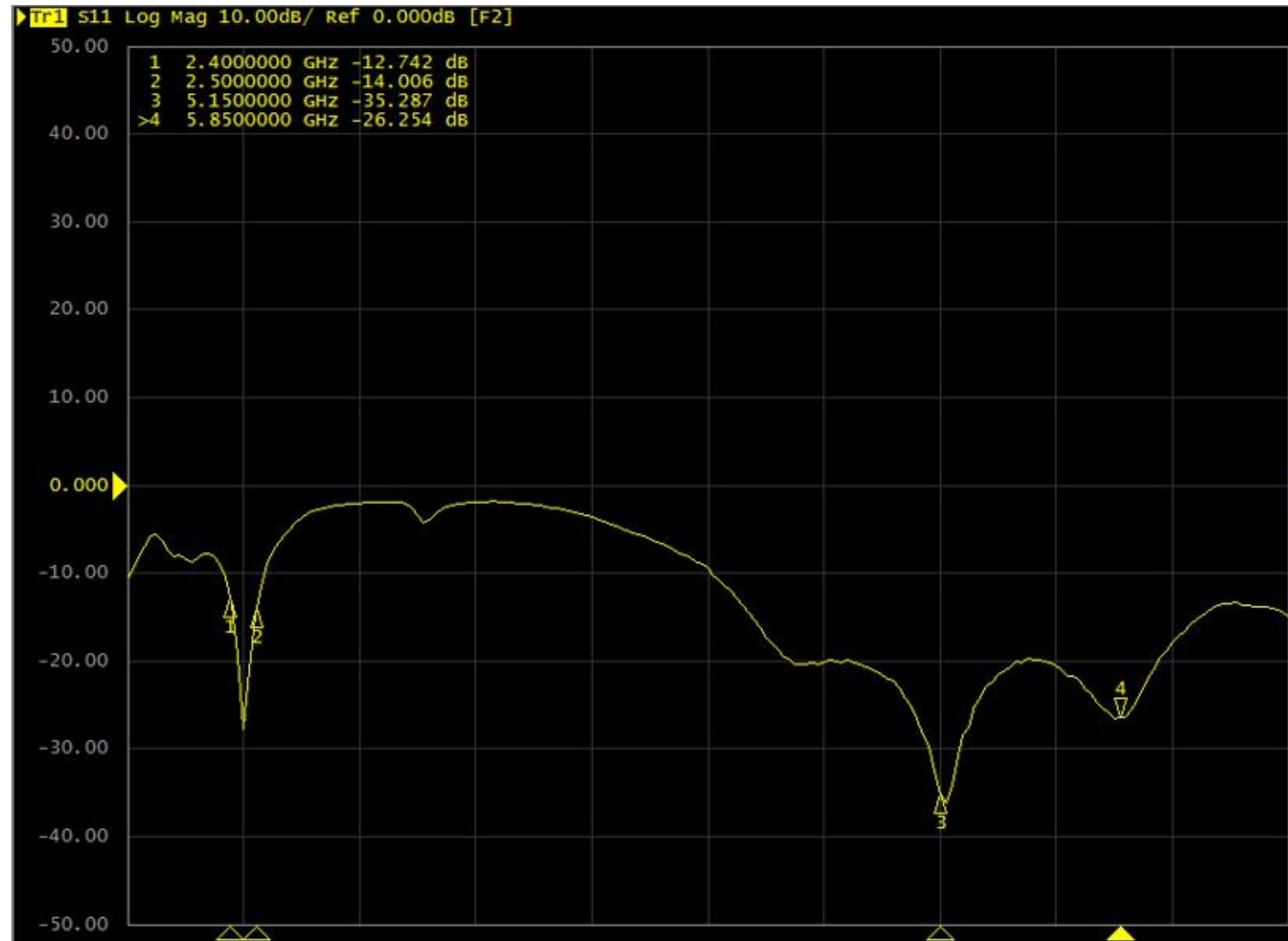


Antenna No.	Operating Frequency	Type	Material	Feeding	Size
Ant 1	BT	PIFA	Metal	Trace	22.8(L) x 5.1(W) x 4.8(H) mm ³
Ant 2	WiFi 2G/5G	PIFA	PCB	Cable	35(L) x 10(W) x 0.8(T) mm ³
Ant 3	WiFi 2G/5G	PIFA	PCB	Cable	35(L) x 10(W) x 0.8(T) mm ³

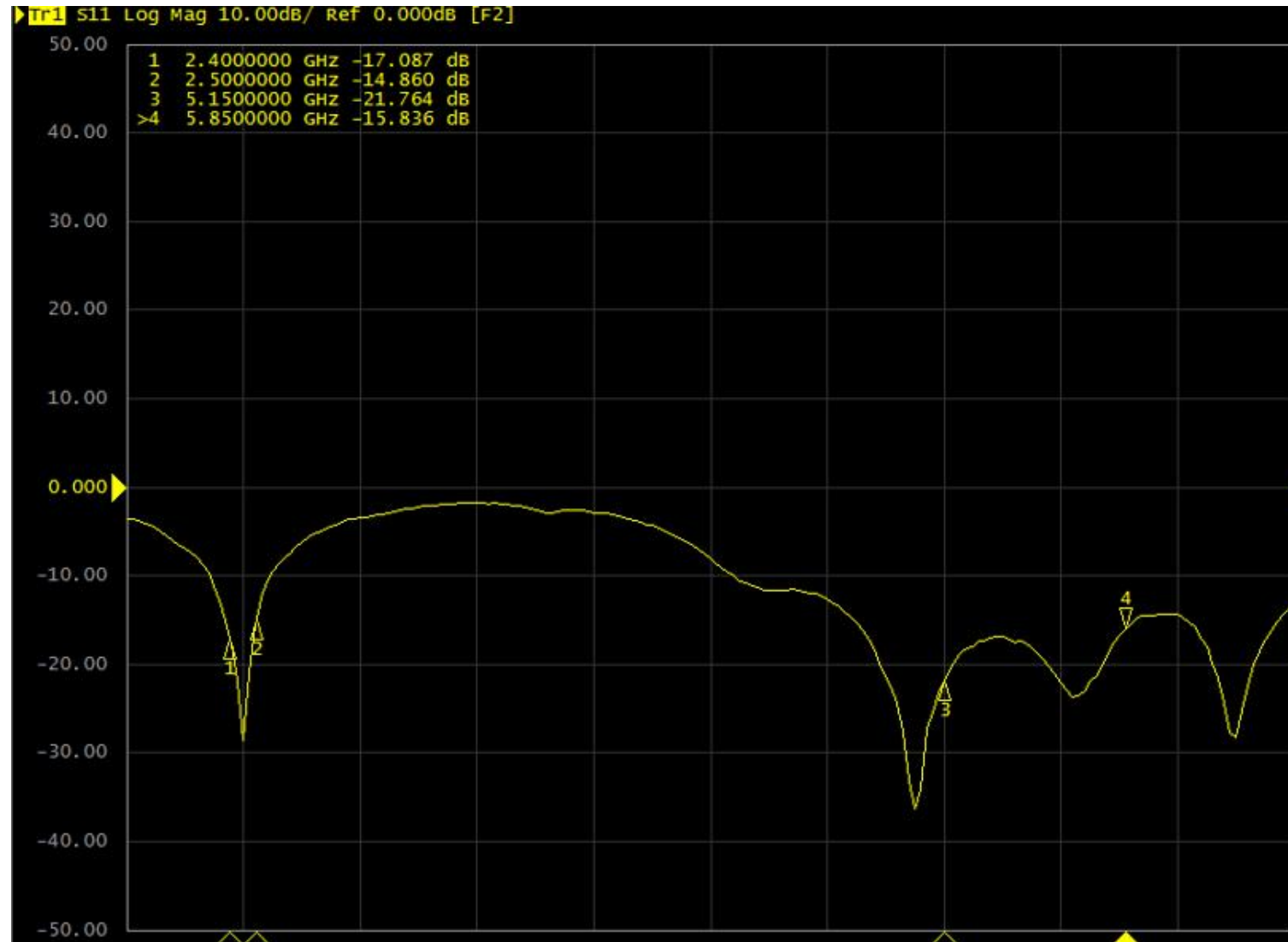
Return Loss – Ant 1



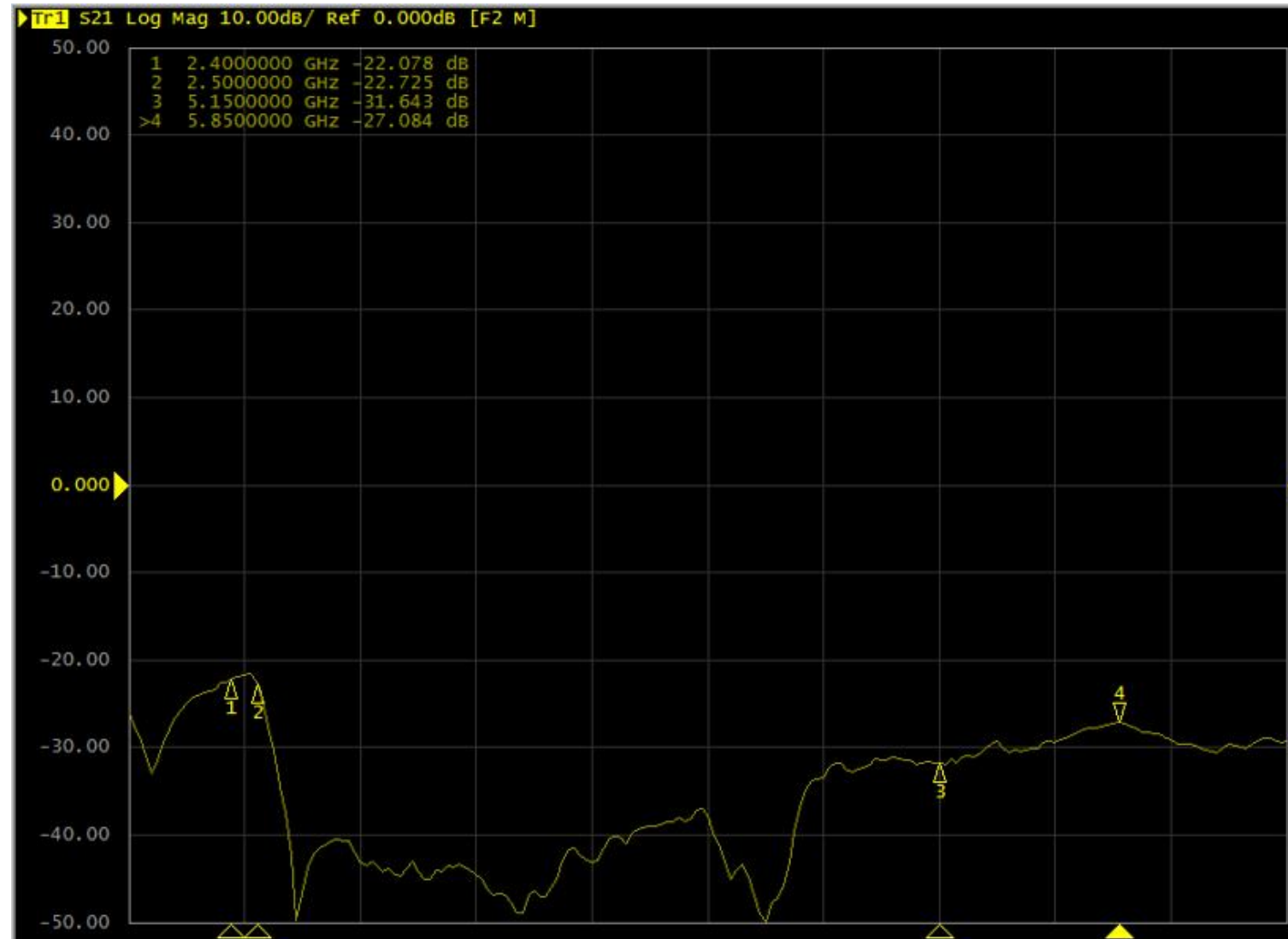
Return Loss – Ant 2



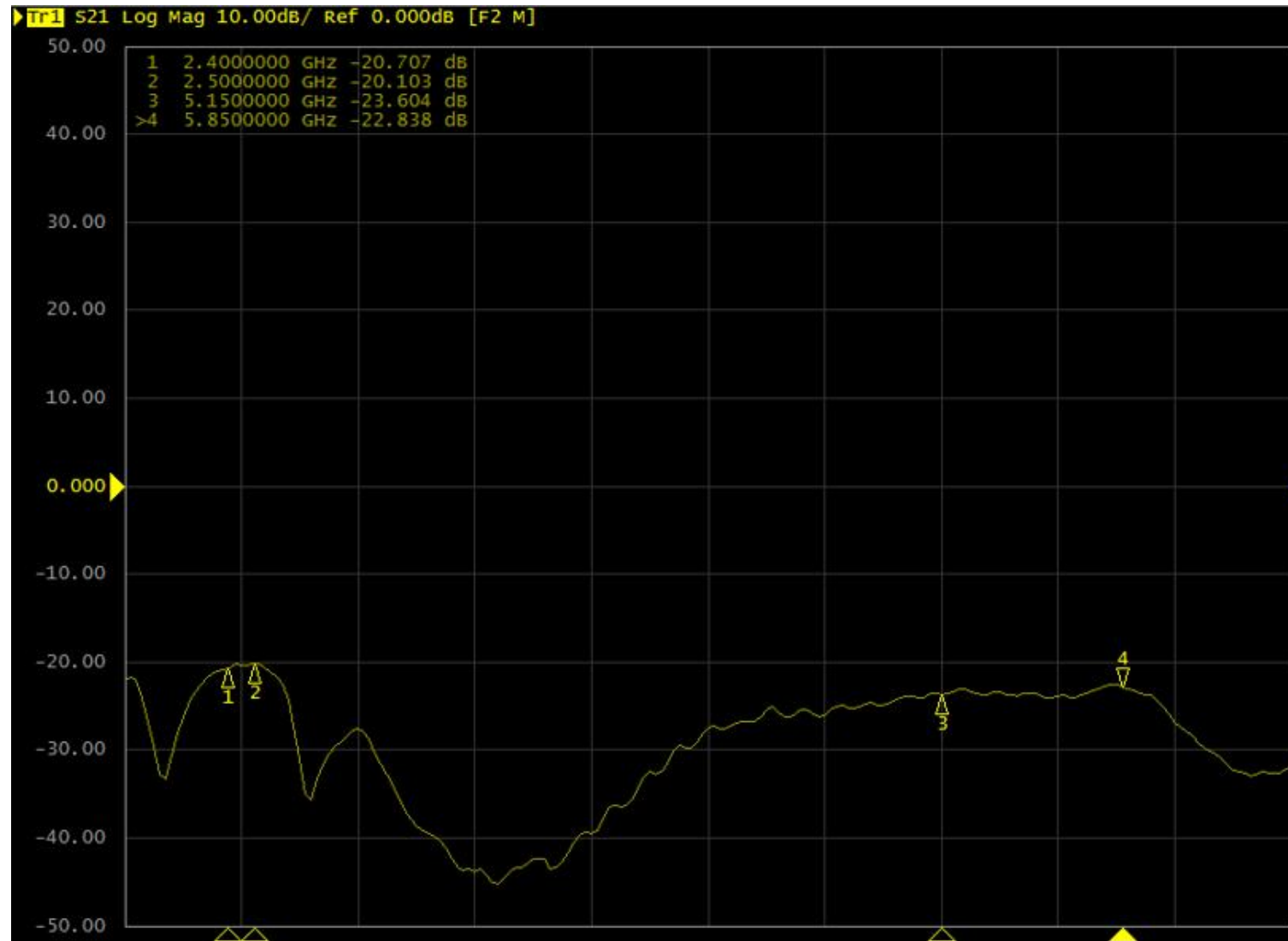
Return Loss – Ant 3



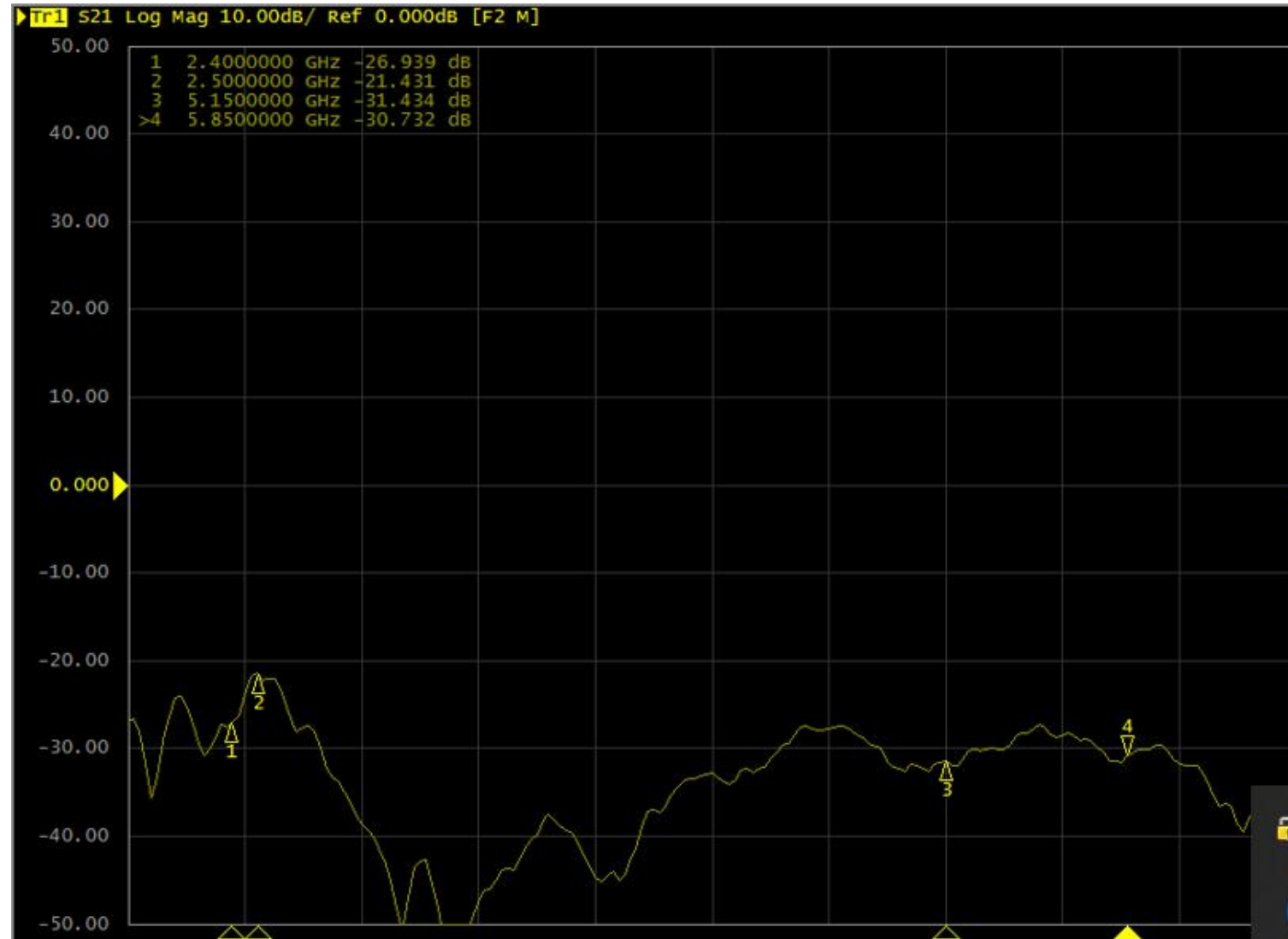
Isolation – Ant 1 & Ant 2



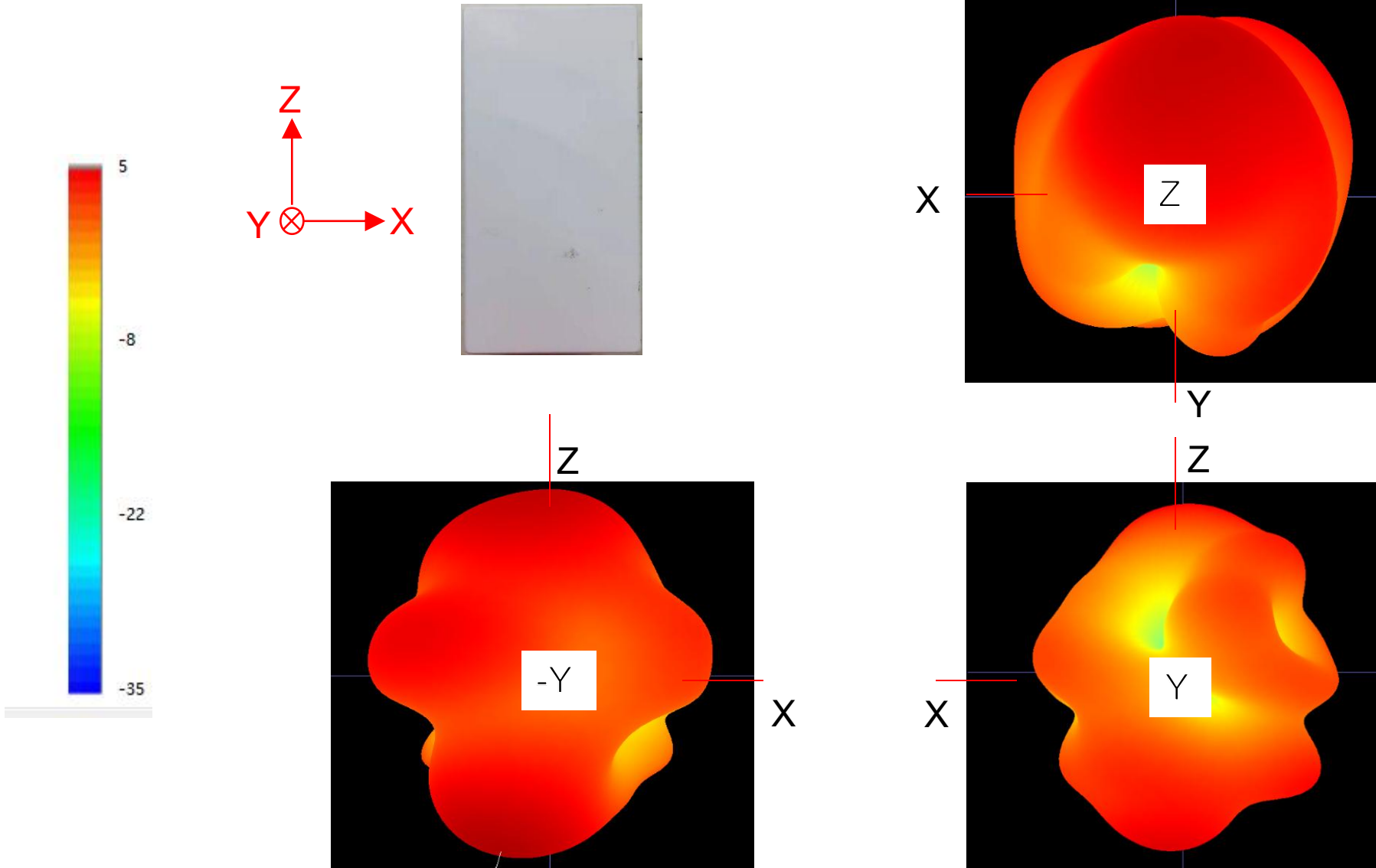
Isolation – Ant 1 & Ant 3



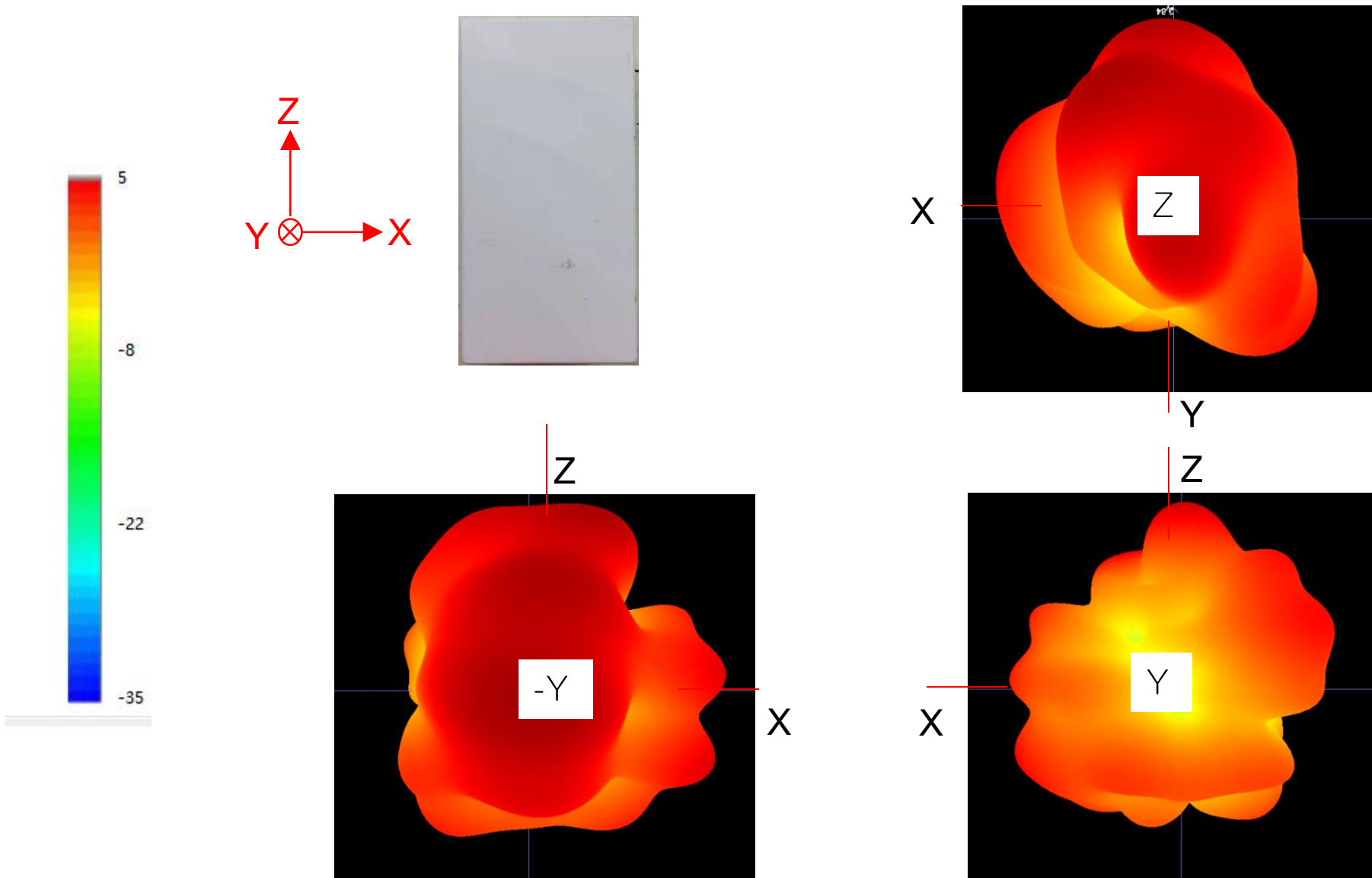
Isolation – Ant 2 & Ant 3



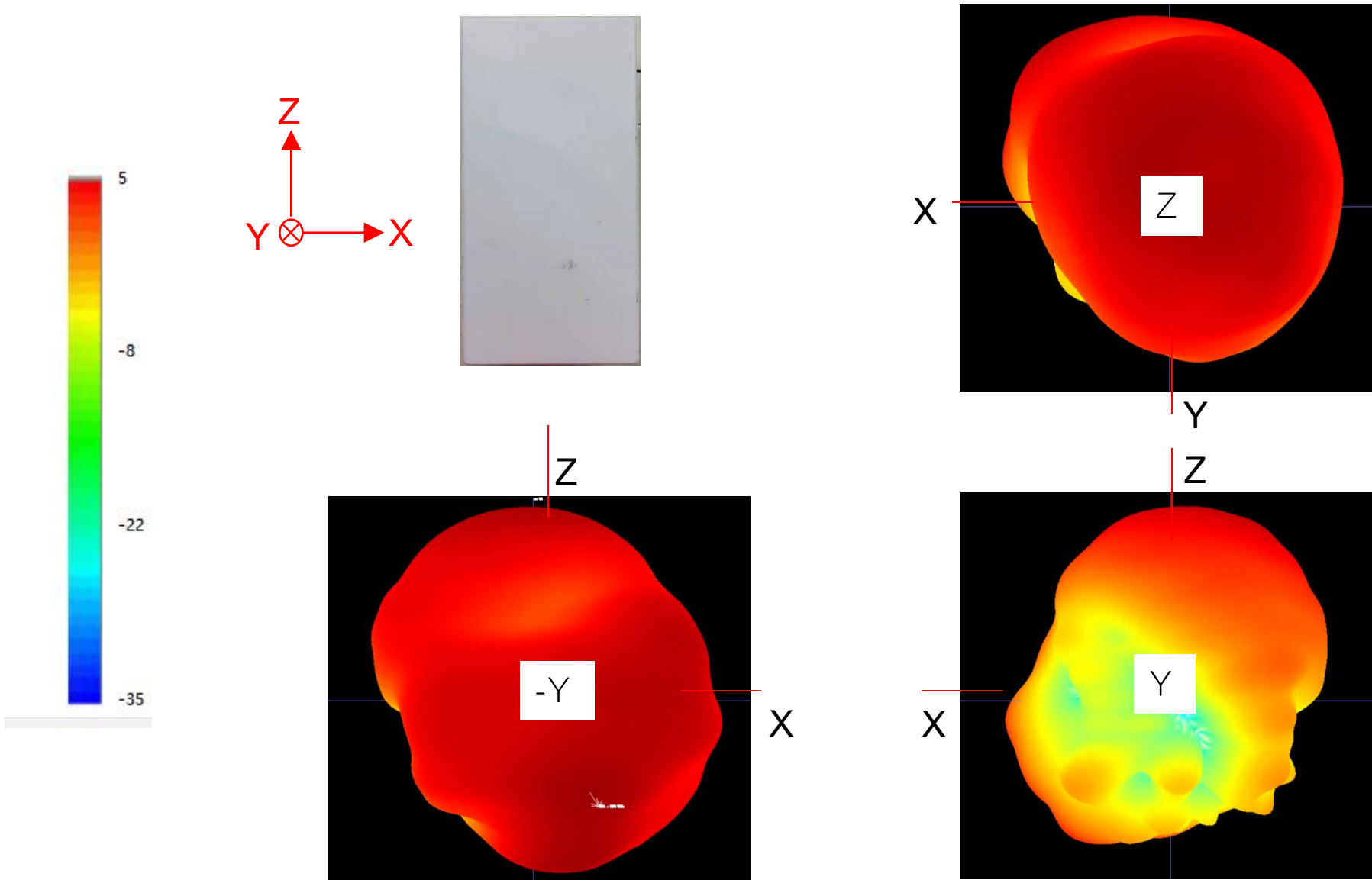
3D Pattern – Ant 1 @ 2.45GHz



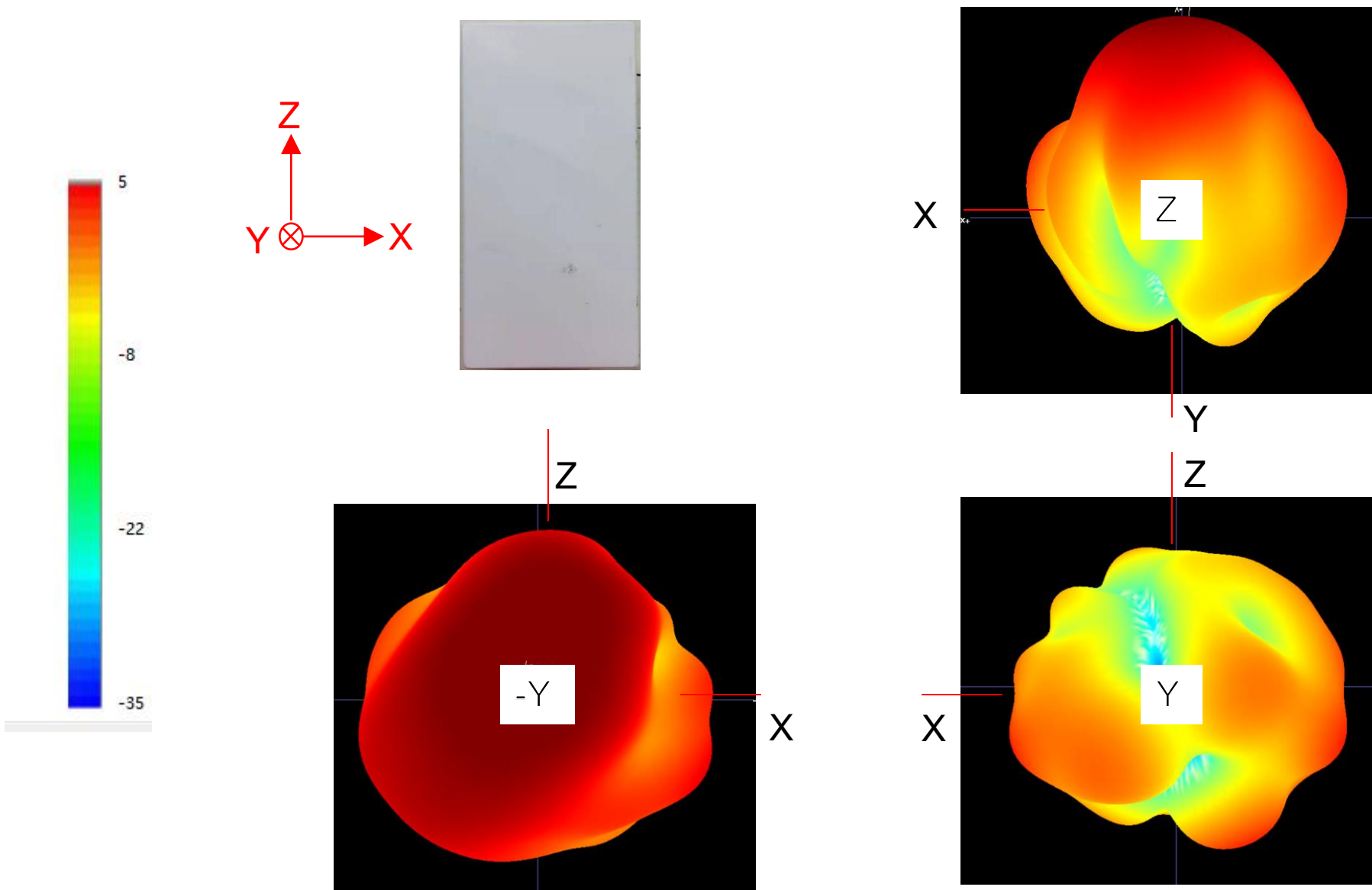
3D Pattern – Ant 2 @ 2.45GHz



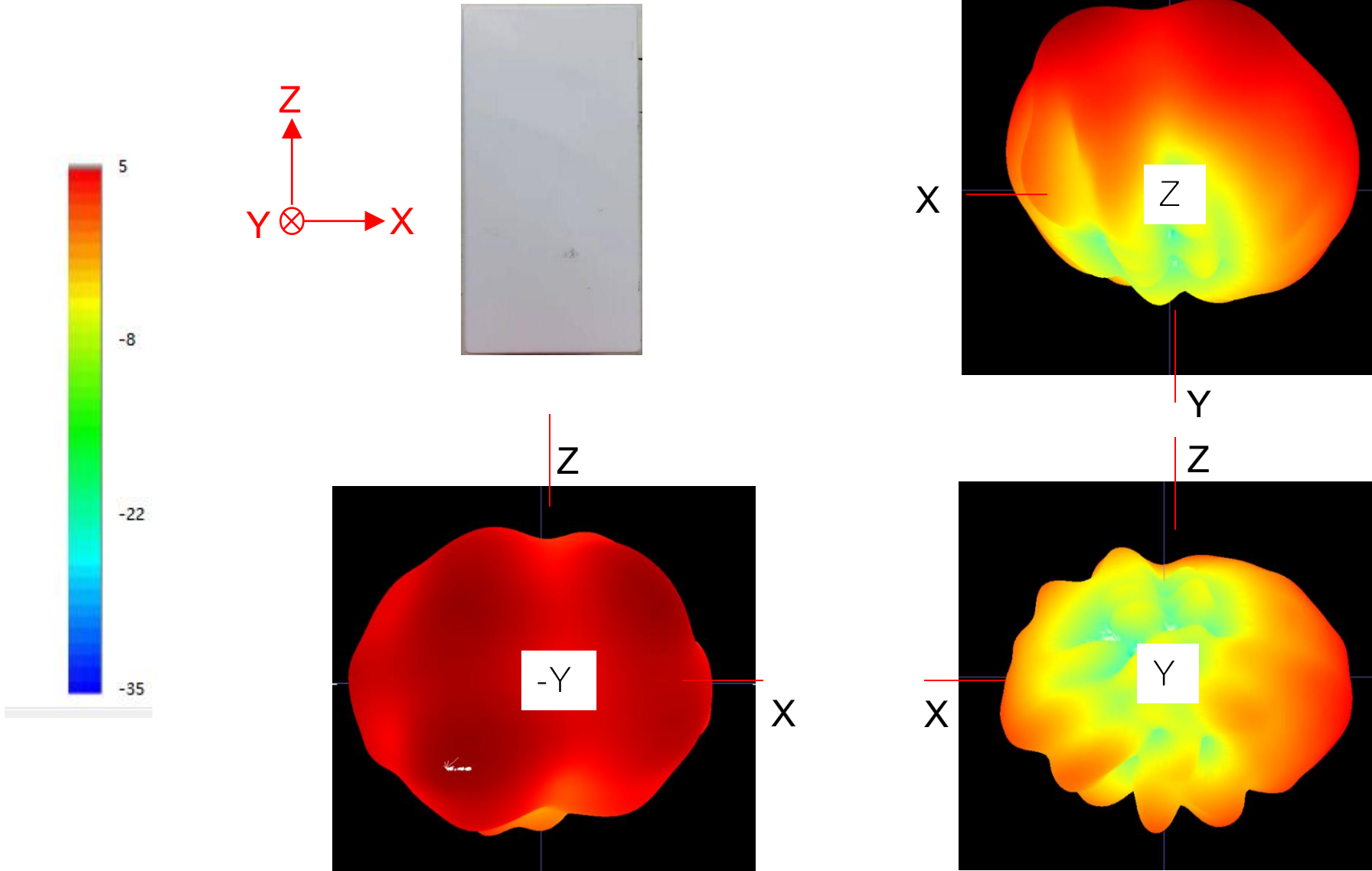
3D Pattern – Ant 2 @ 5.5GHz



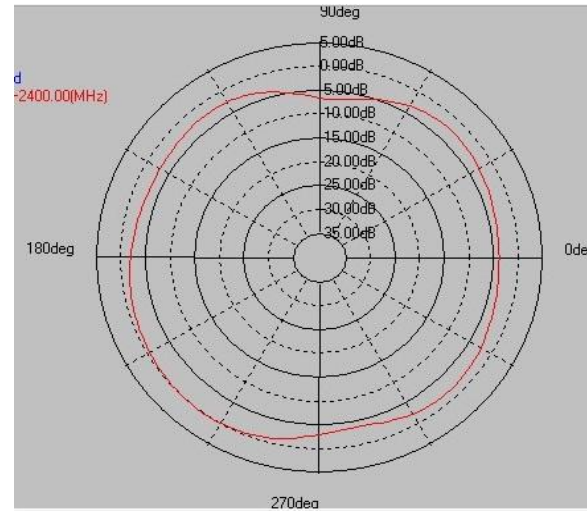
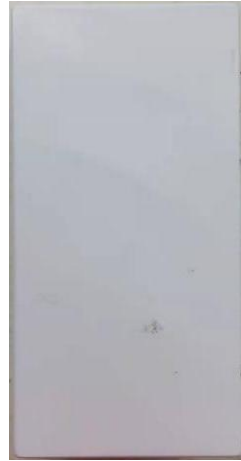
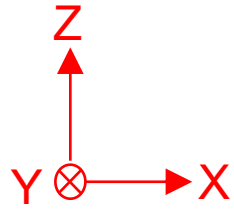
3D Pattern – Ant 3 @ 2.45GHz



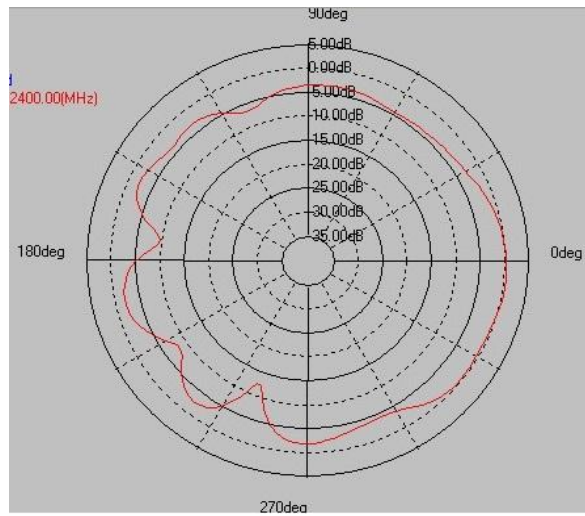
3D Pattern – Ant 3 @ 5.5GHz



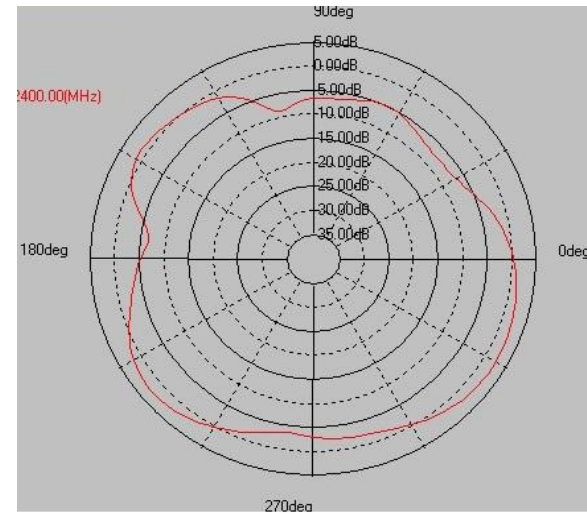
2D Pattern – Ant 1 @ 2.45GHz



XY plane

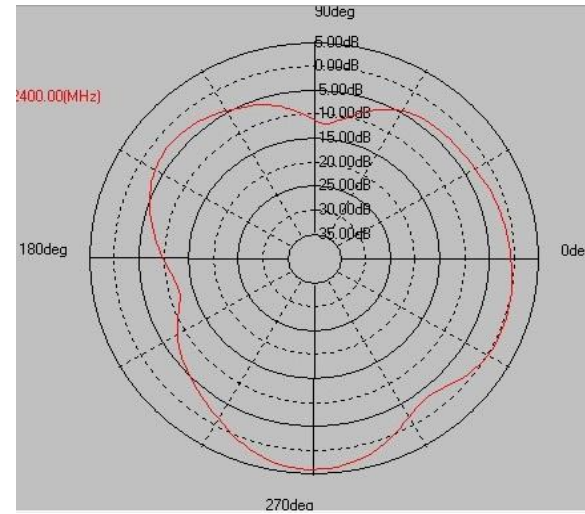
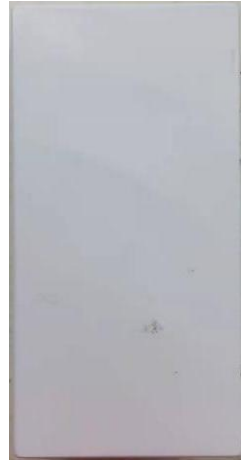
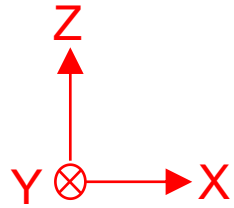


XZ plane

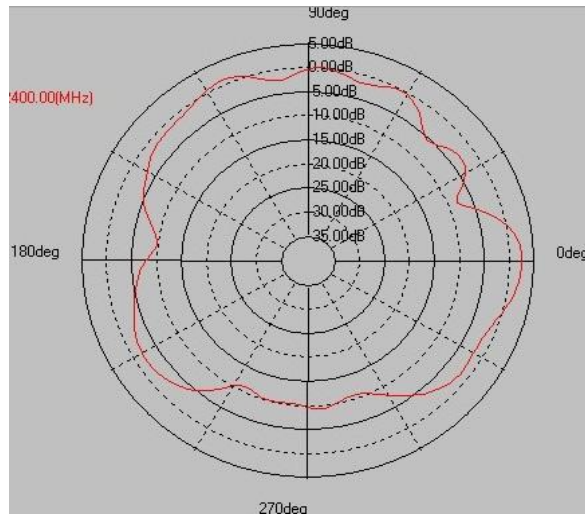


YZ plane

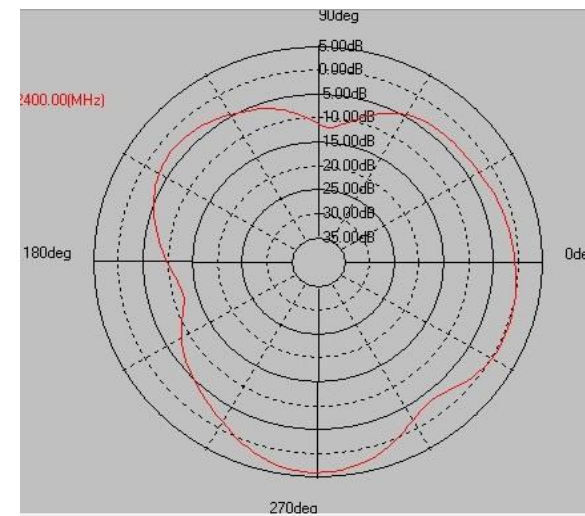
2D Pattern – Ant 2 @ 2.45GHz



XY plane

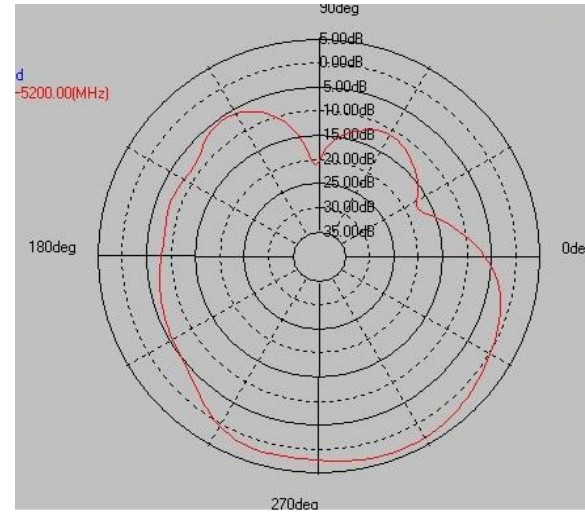
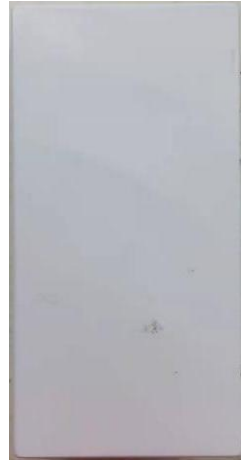
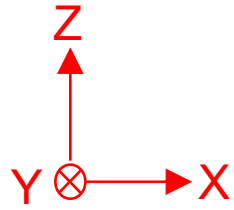


XZ plane

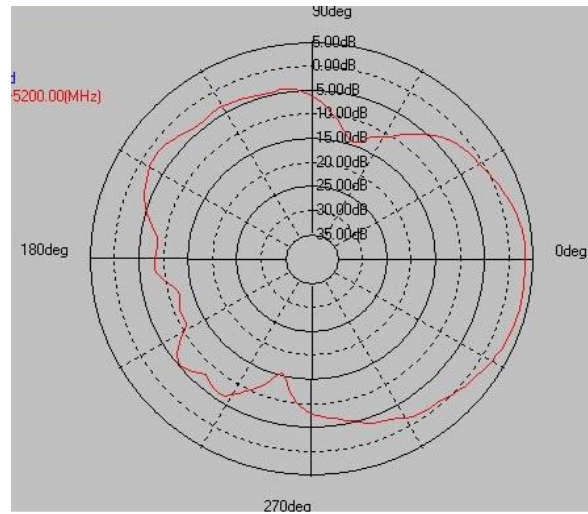


YZ plane

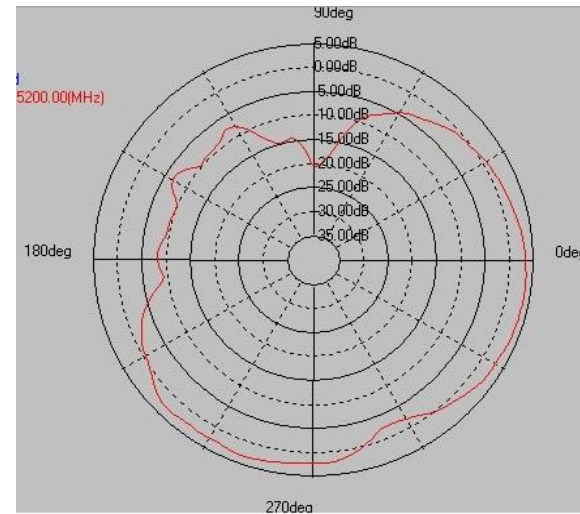
2D Pattern – Ant 2 @ 5.5GHz



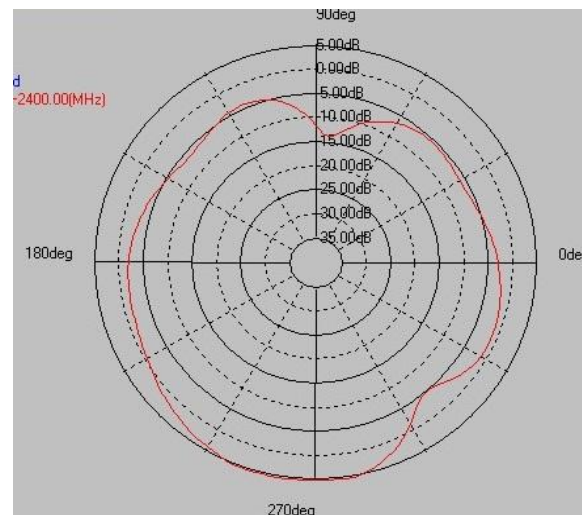
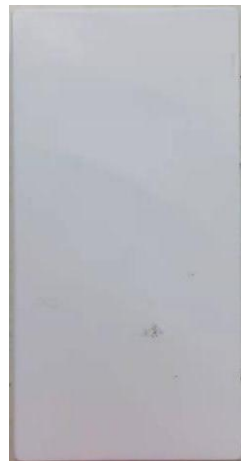
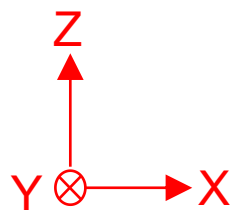
XY plane



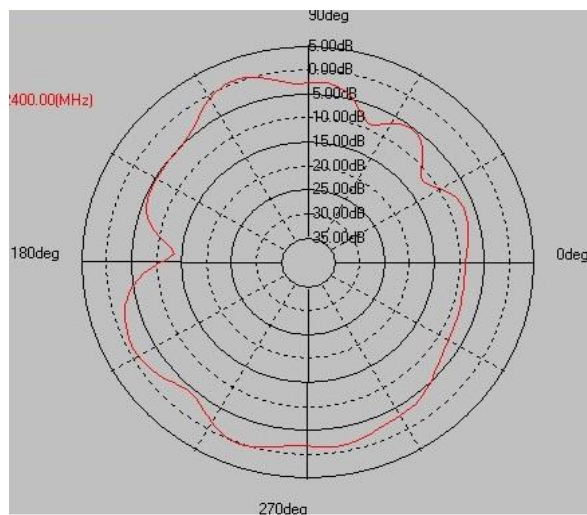
XZ plane



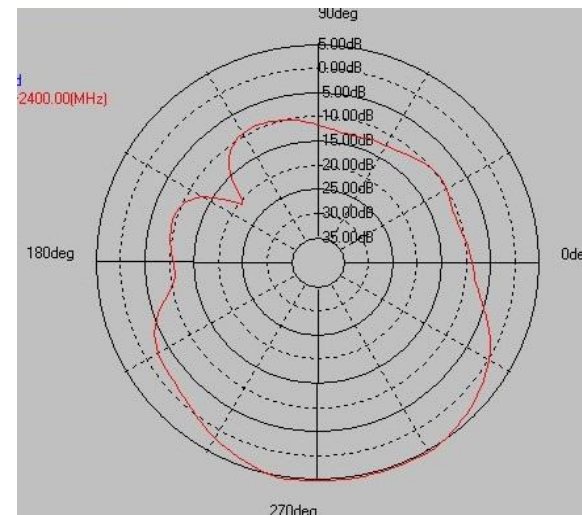
YZ plane



XY plane

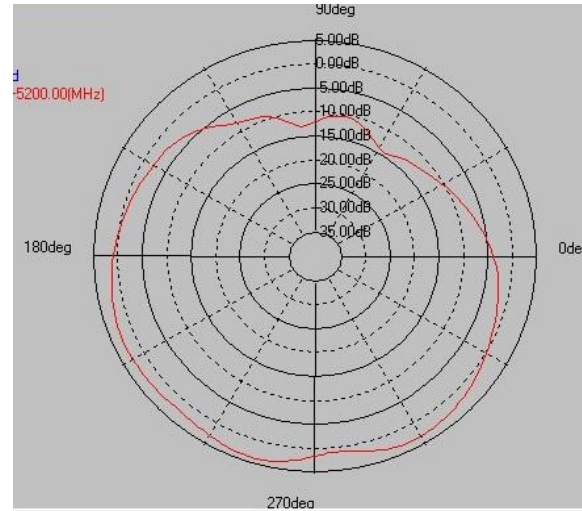
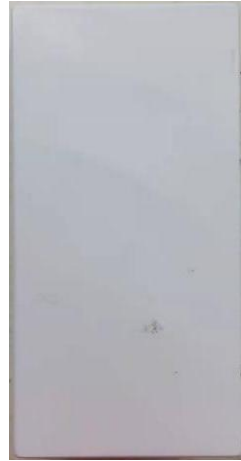
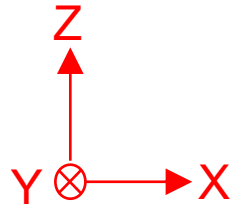


XZ plane

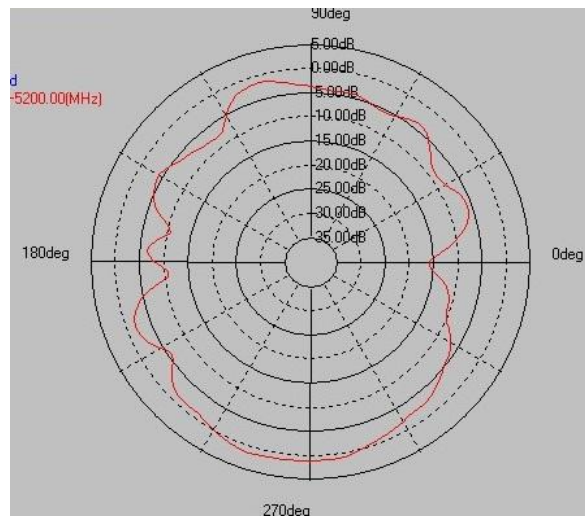


YZ plane

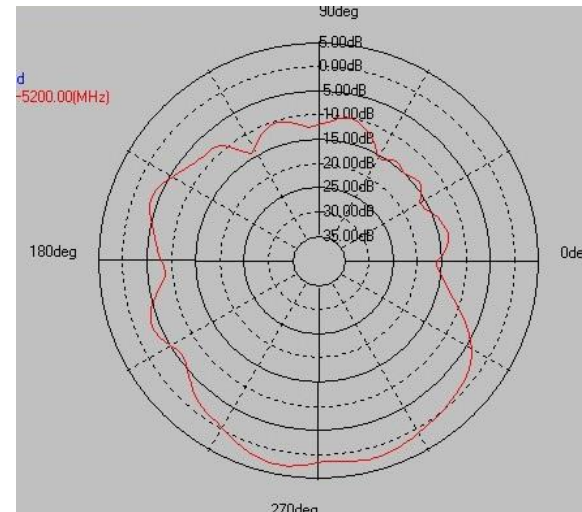
2D Pattern – Ant 3 @ 5.5GHz



XY plane



XZ plane



YZ plane

Peak Gain & Efficiency

Ant 1		
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400 MHz	2.5	53.2
2450 MHz	2.2	52.8
2500 MHz	2.1	51.9

Ant 2			Ant 3		
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)	Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400 MHz	3.4	53.4	2400 MHz	5.5	54.3
2450 MHz	3.7	55.3	2450 MHz	5.5	57.9
2500 MHz	3.6	53.6	2500 MHz	5.6	58.1
5150 MHz	4.1	65.5	5150 MHz	4.6	63.2
5550 MHz	4.6	72.9	5550 MHz	5.5	67.5
5850 MHz	4.3	73.3	5850 MHz	4.8	63.3