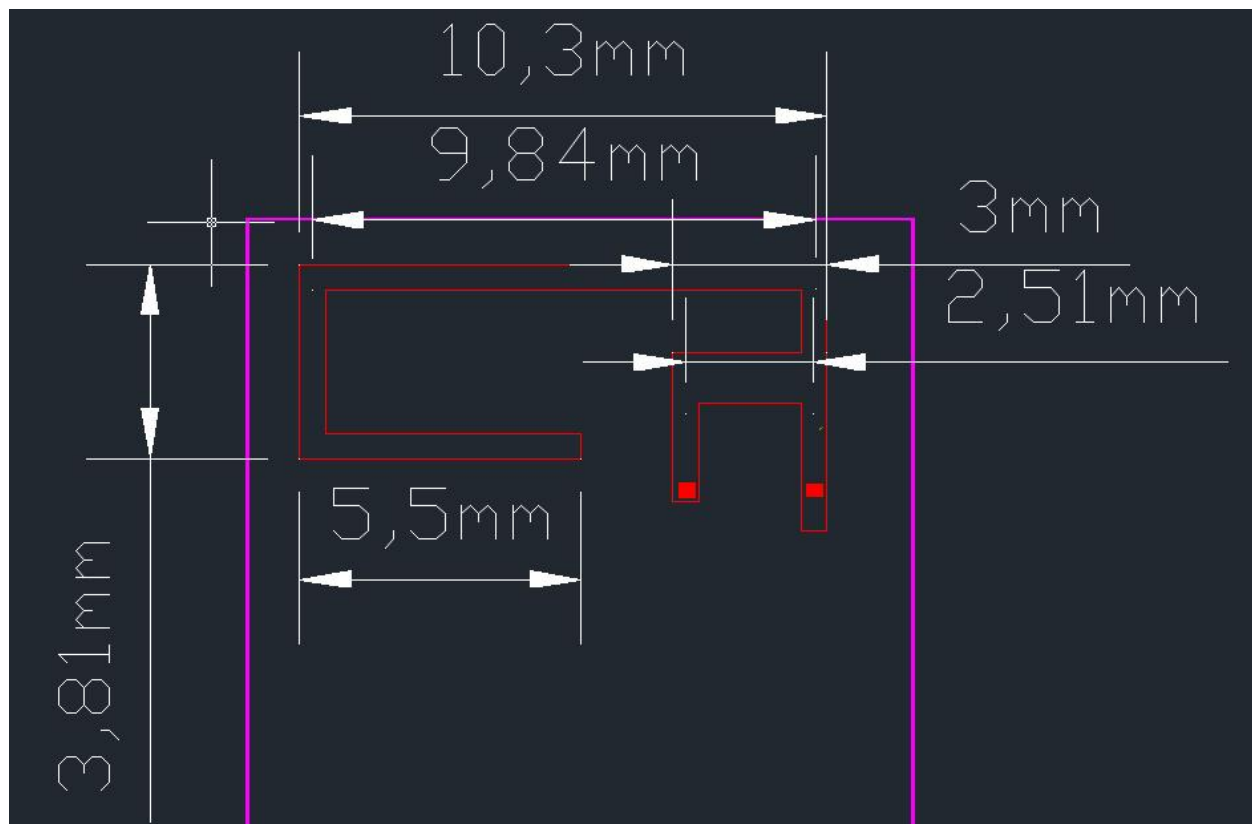


# Antenna Specification

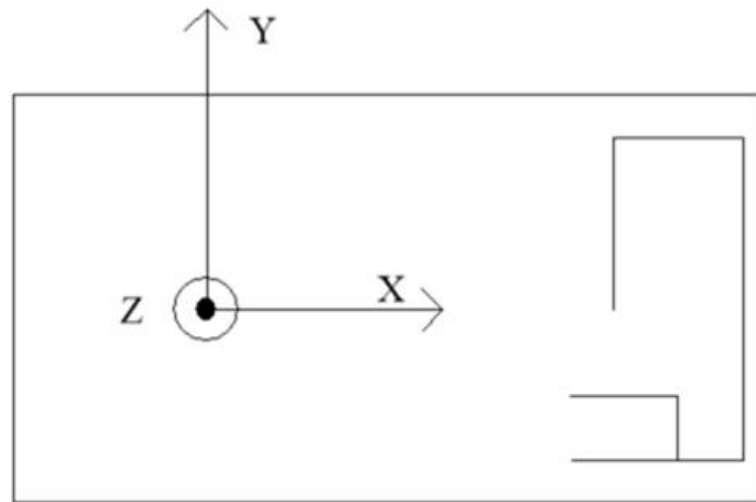
ITEM	SPEC
Antenna type	PCB Antenna(B)
MAX GAIN	4.35dbi
Polarization	Horizontal
Azimuth Beam Pattern	Omni-directional
Impedance	50ohm
Antenna Length	

## Antenna Photo & Length(mm)

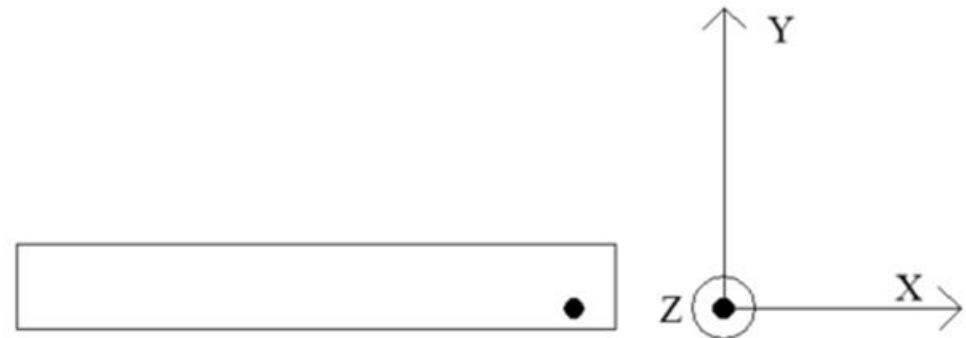


# Coordinate System Reference: Antenna

Top view

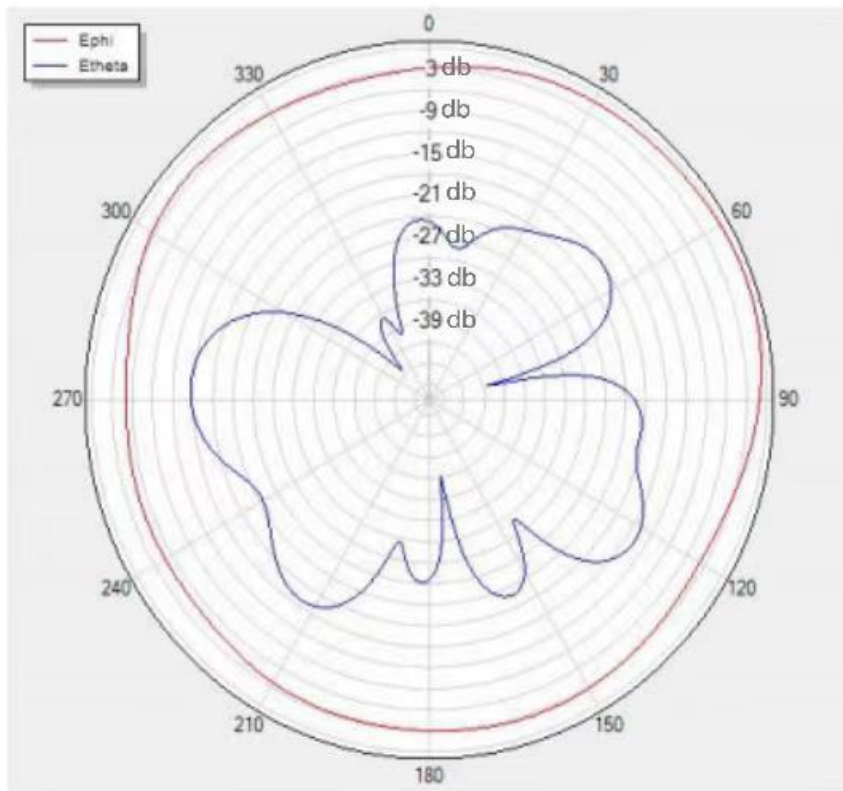


Side view

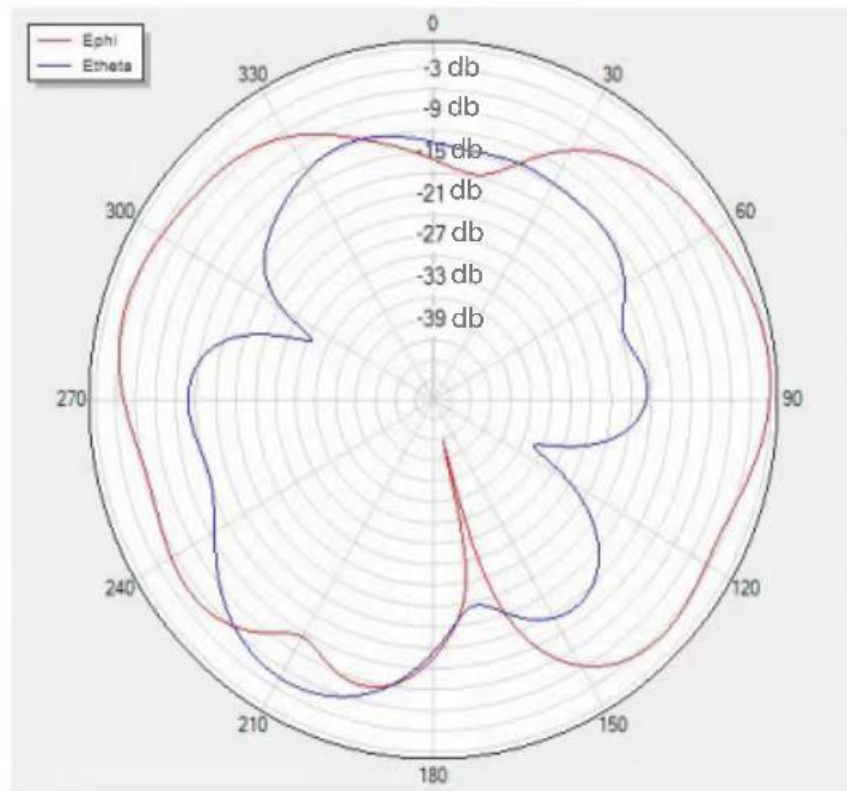


## 2D Radiation pattern $f = 2400\text{MHz}$

### Theta=90 freq=2400MHz

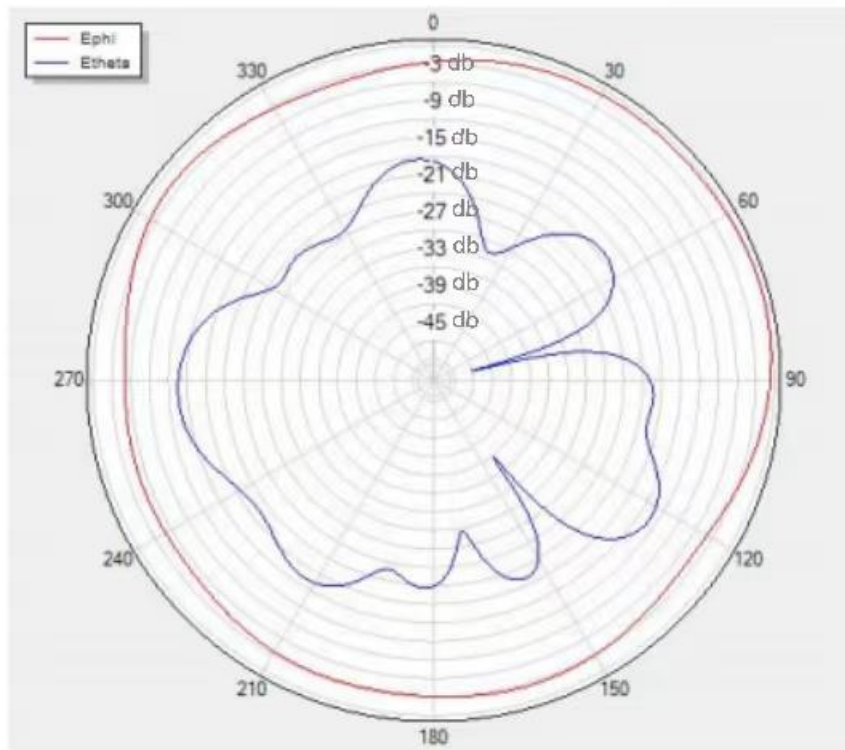


### Phi=90 freq=2400MHz

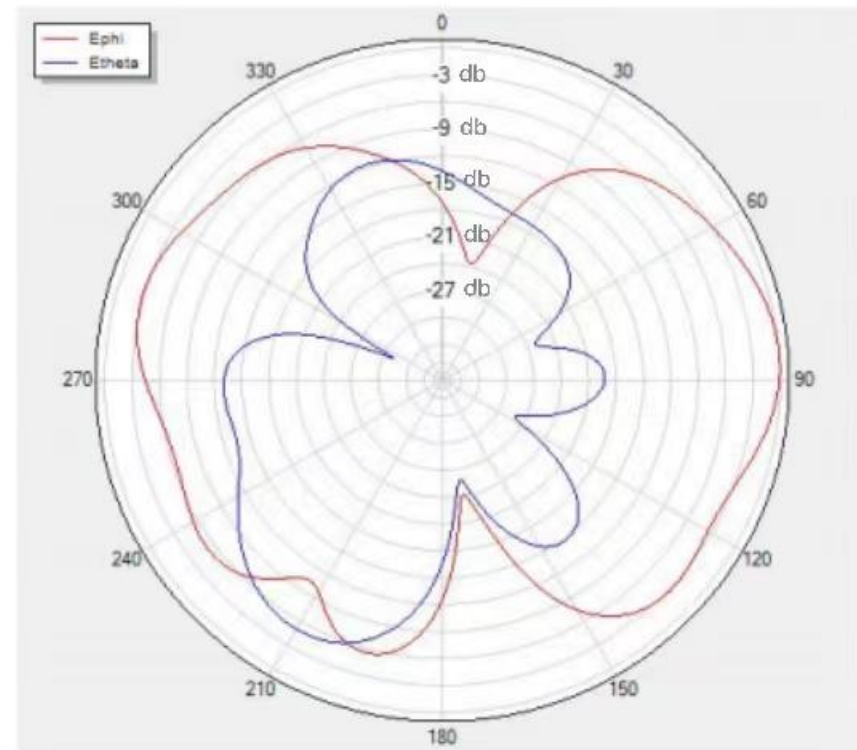


## 2D Radiation pattern $f = 2450\text{MHz}$

### Theta=90 freq=2450MHz

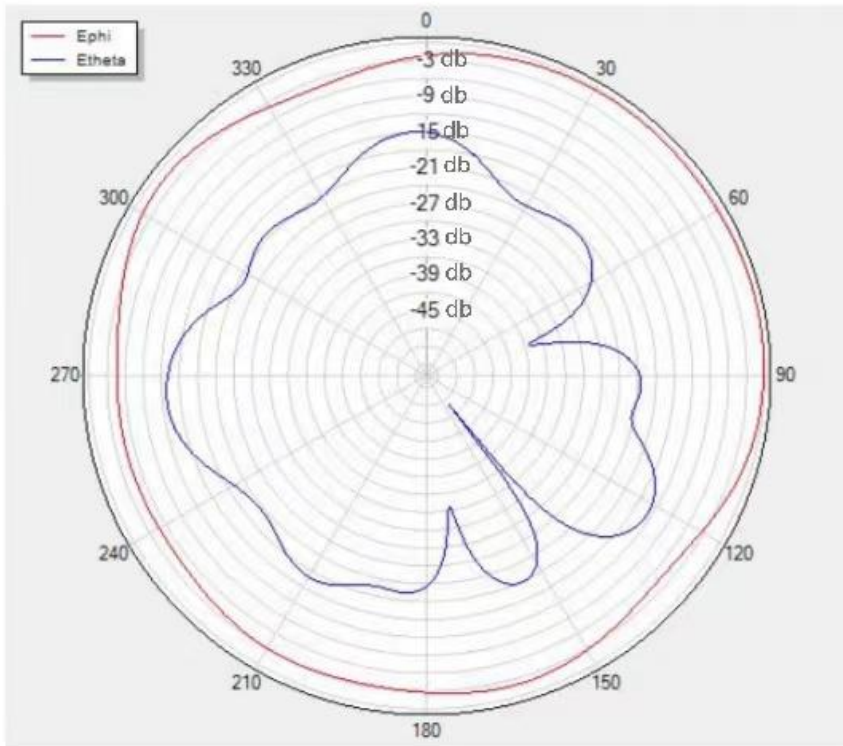


### Phi=90 freq=2450MHz

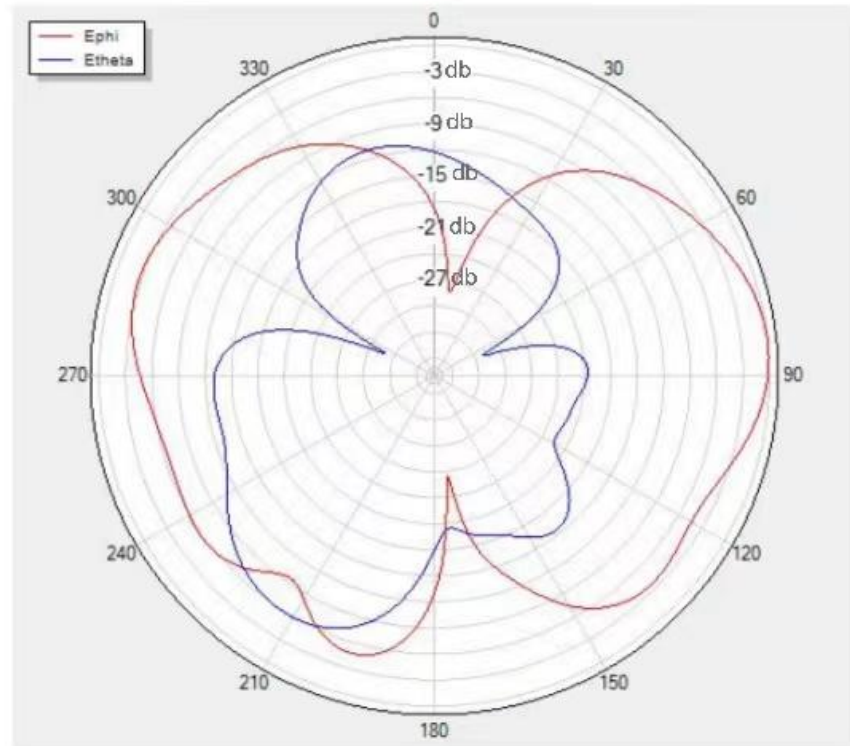


## 2D Radiation pattern f = 2500MHz

### Theta=90 freq=2500MHz

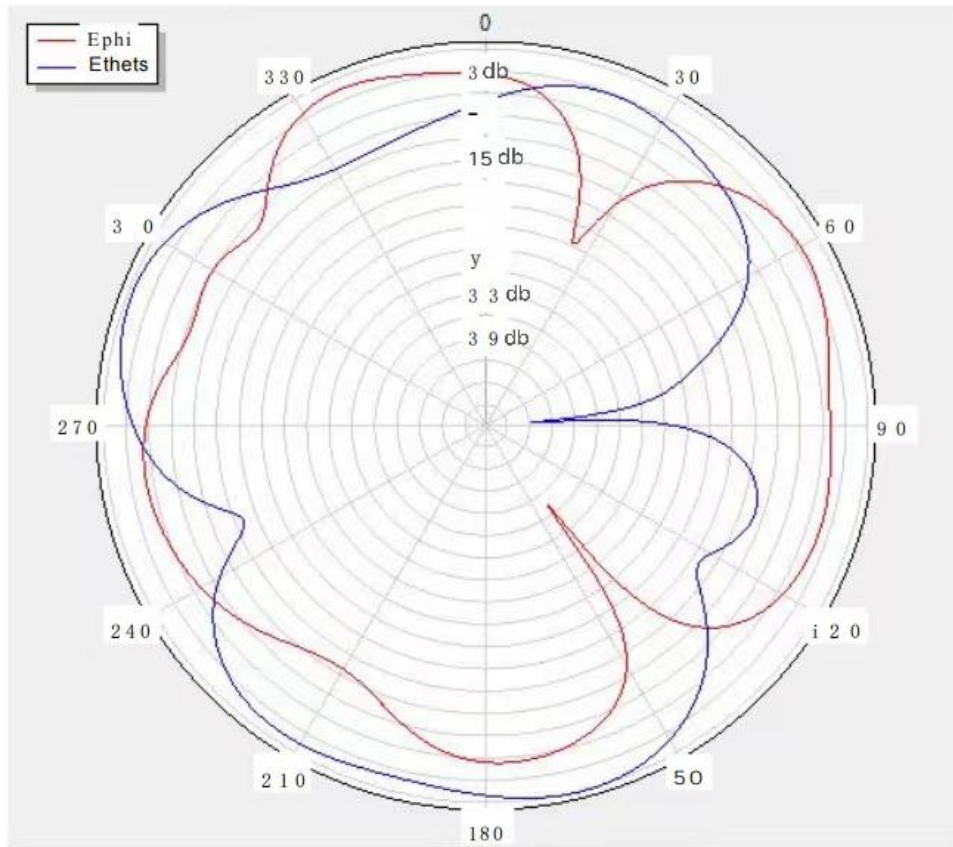


### Phi=90 freq=2500MHz

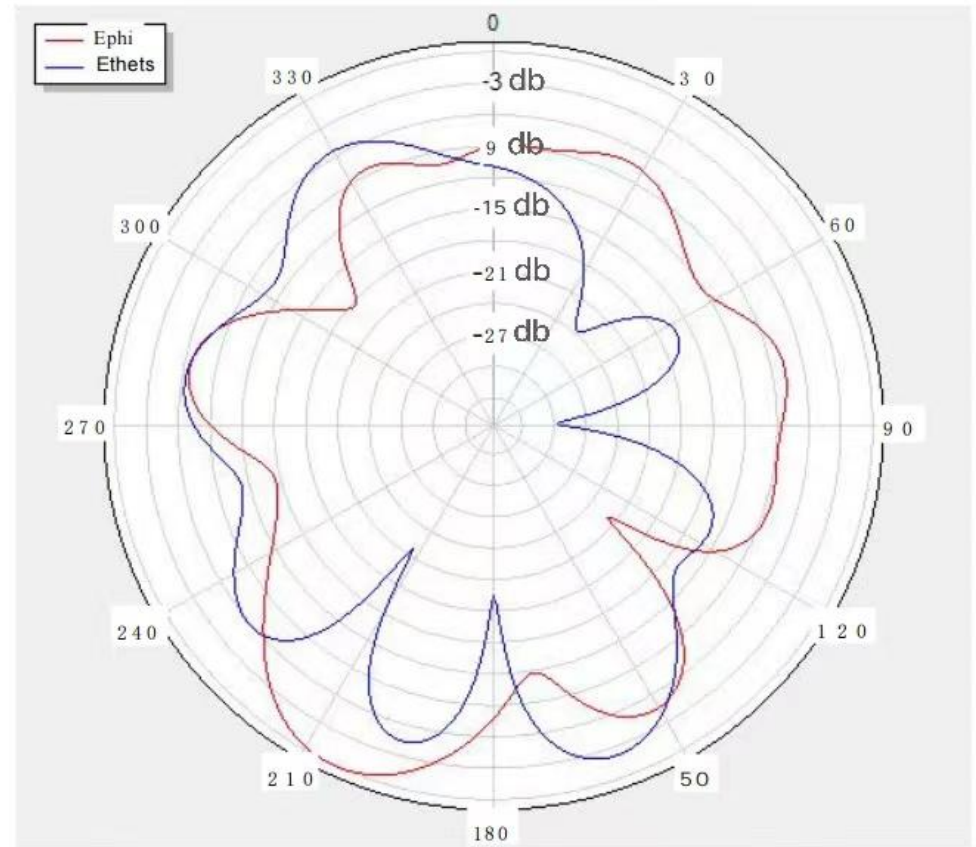


# 2D Radiation pattern $f = 2490\text{MHz}$

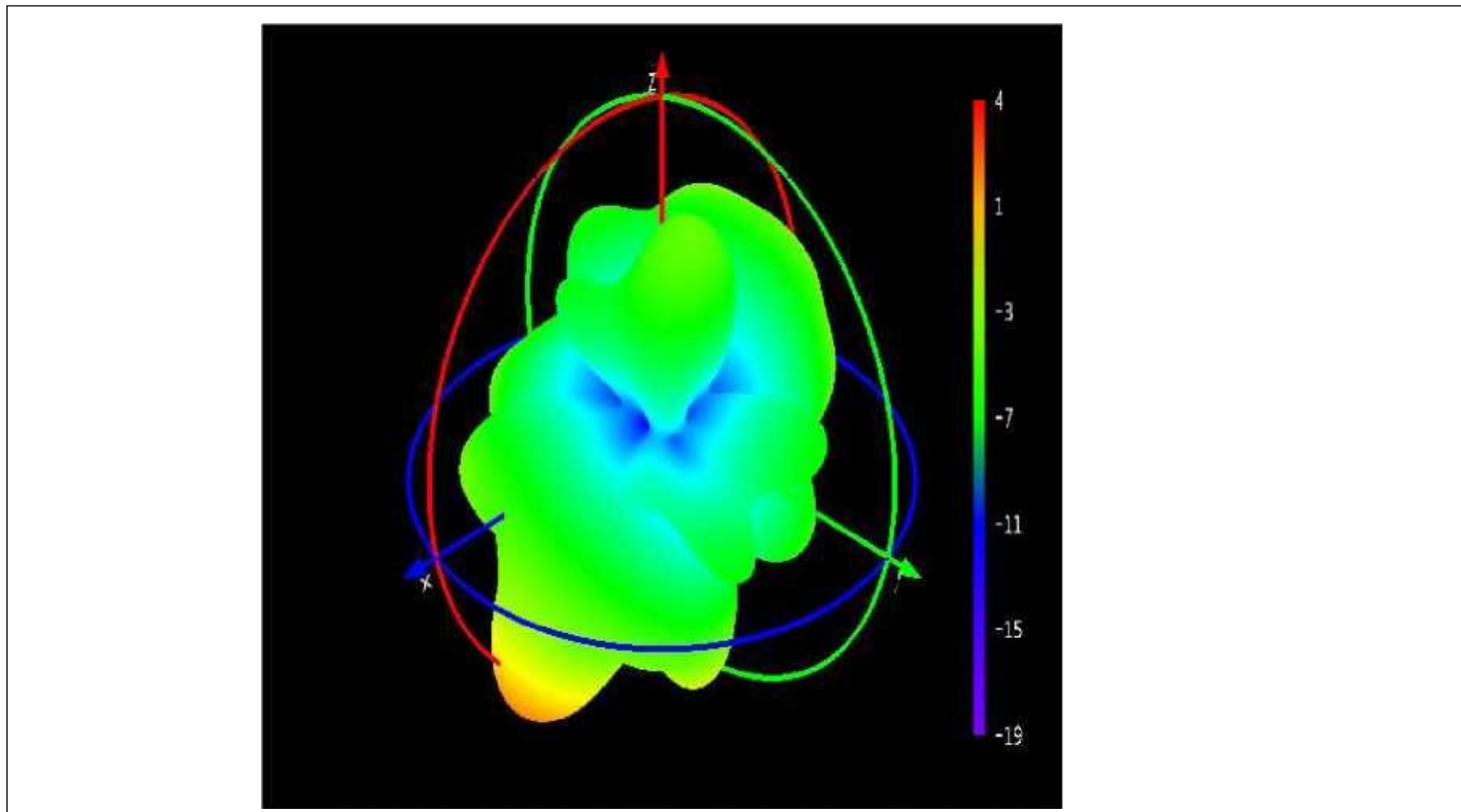
## Theta=90 freq=2490MHz



## Phi=90 freq=2490MHz

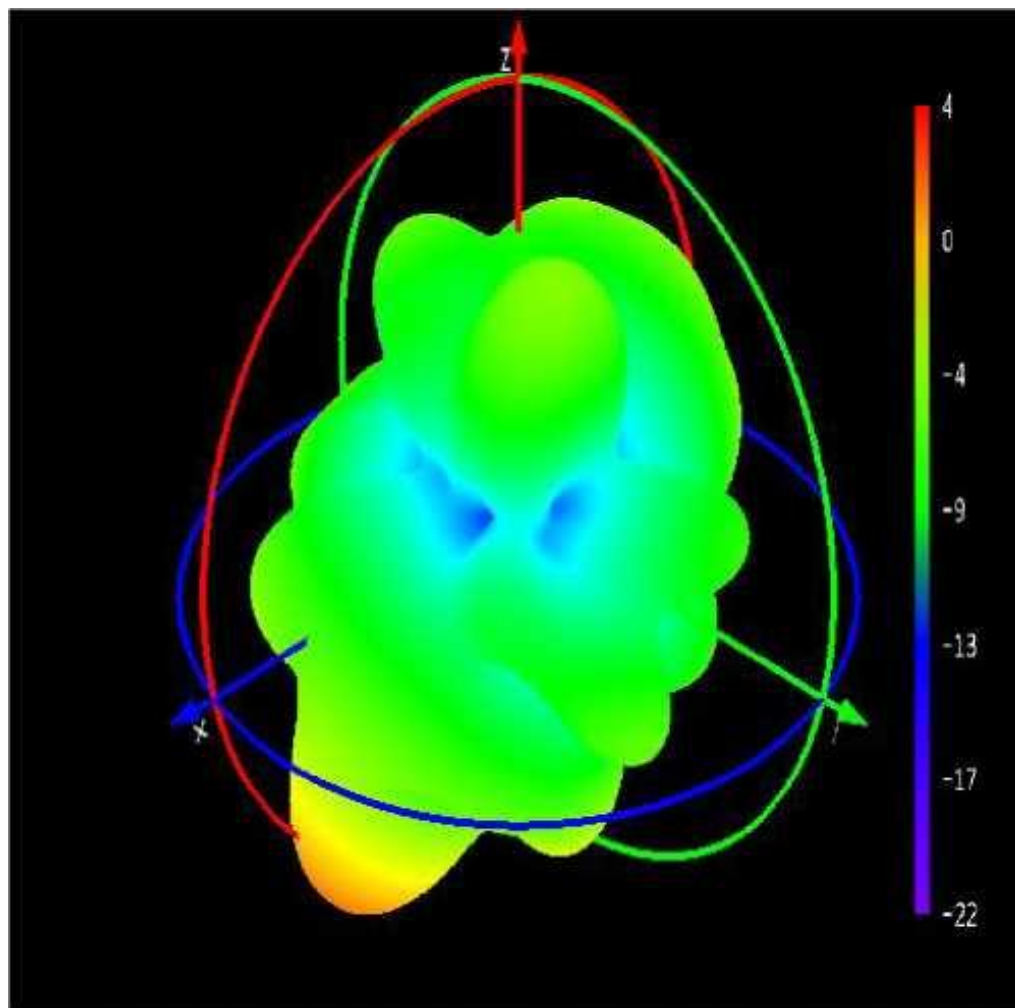


## 3D Radiation pattern $f = 2400\text{MHz}$

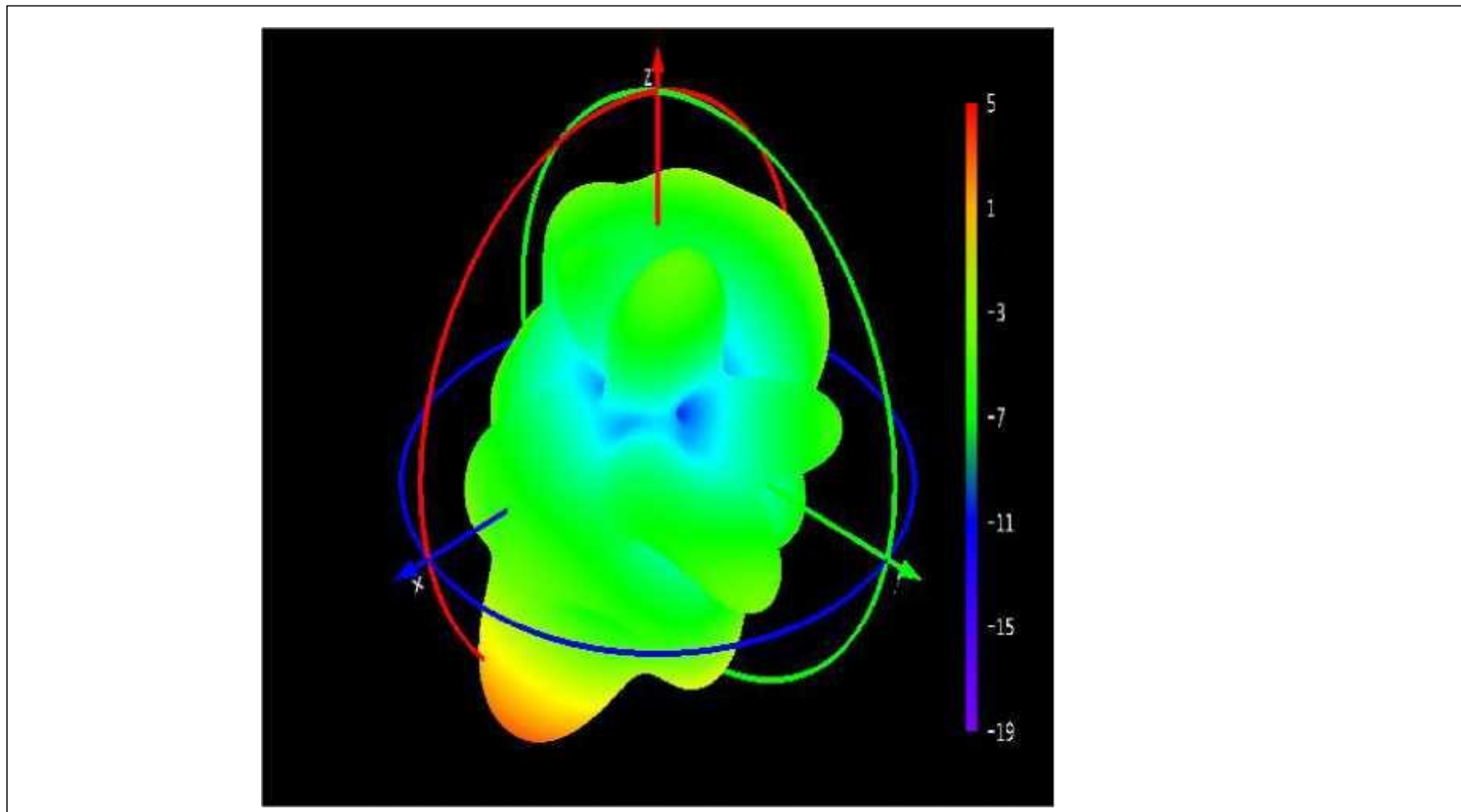




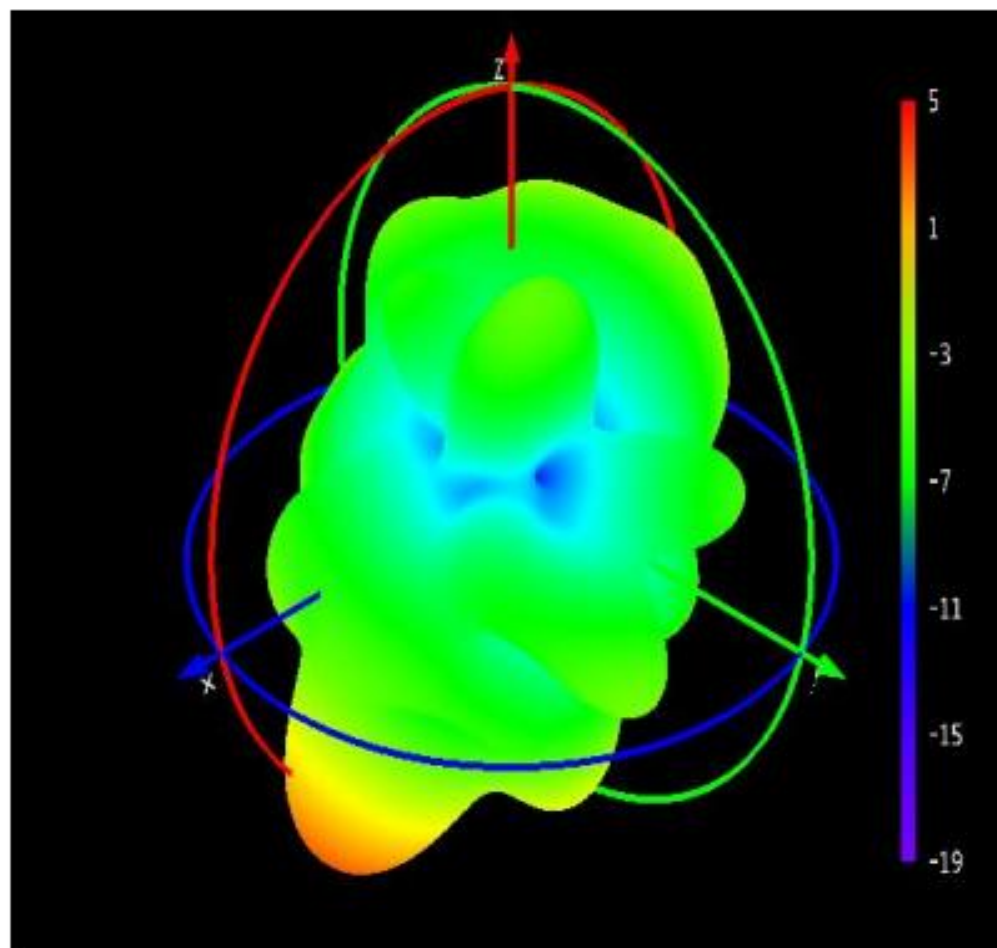
## 3D Radiation pattern $f = 2450\text{MHz}$



## 3D Radiation pattern $f = 2500\text{MHz}$



# 3D Radiation pattern $f = 2490\text{MHz}$



2490MHz

# Measurements summary

Frequency(GHz)	Gain(dBi)	CP Gain(dBi)	CO Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	3.37	-19.55	--	-5.46	28.43
2410	3.26	-20.51	--	-5.49	28.23
2420	3.26	-20.64	--	-5.45	28.53
2430	3.34	-22.37	--	-5.34	29.25
2440	3.49	-22.03	--	-5.2	30.22
2450	3.63	-22.02	--	-5.04	31.35
2460	3.9	-22.02	--	-4.79	33.16
2470	4.09	-20.5	--	-4.61	34.57
2480	4.18	-20.67	--	-4.51	35.43
2490	4.35	-19.34	--	-4.34	36.8
2500	4.21	-19.5	--	-4.38	36.44