

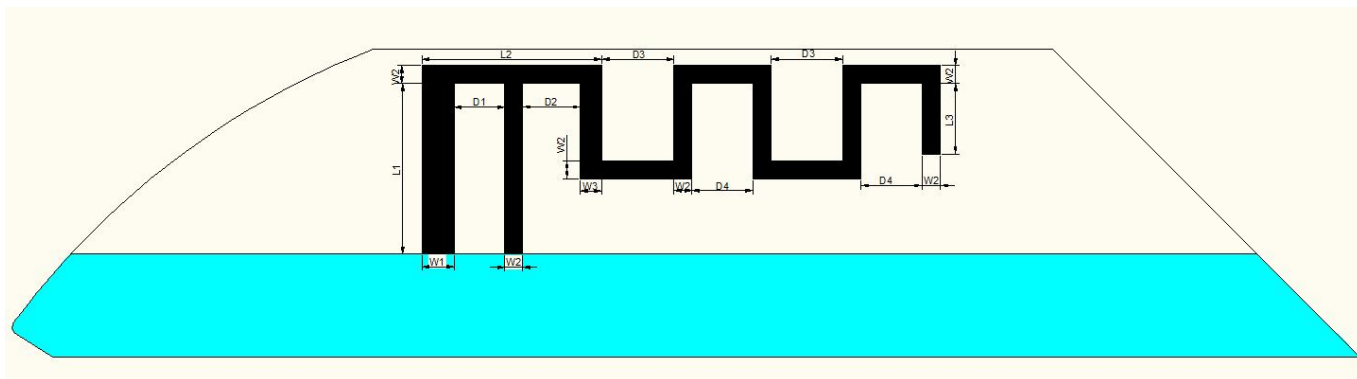


天线型号 (Antenna Version): ANT-BBNCNC20006
产品型号 (Model of the DUT): BC01
PCB 编号及版本 (PCB number and version): MS92SFB-V1.0
责任硬件工程师 (Hardware Engineer): XuNing
测试日期 (Test Data): 2022/9/9

1、技术指标 (Technical Specification)

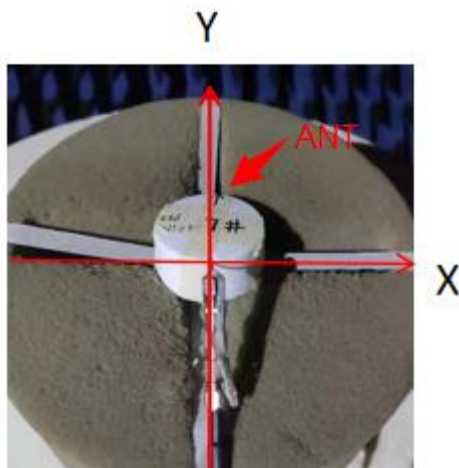
电性能指标 Electrical Specifications	
频率范围 Frequency Range (MHz)	2400-2480
频带宽度 Bandwidth (-10dB) (MHz)	S11<-10dB
输入阻抗 Input Impedance (Ω)	50
回波损耗 Return Loss (dB)	<-13
电压驻波比 VSWR	<1.6
增益 Gain (@2.44GHz) (dBi)	1.51
峰值增益 Peak Gain (dBi)	2.29
极化形式 Polarization Type	线极化 (Linear polarization)
雷电保护 Lightning Protection	直流接地 (DC grounding)
功率容量 Power Capacity (mW)	1000
机械指标 Mechanical Specifications	
天线尺寸 Antenna Size (mm)	14.4*5.23
辐射体 Radiator	铜 Cuprum
连接器型号 Connect Type	/
工作温度 Working Temperature ($^{\circ}\text{C}$)	-40~85
存储温度 Storage Temperature ($^{\circ}\text{C}$)	-40~85

2、天线尺寸 (Antenna Size)



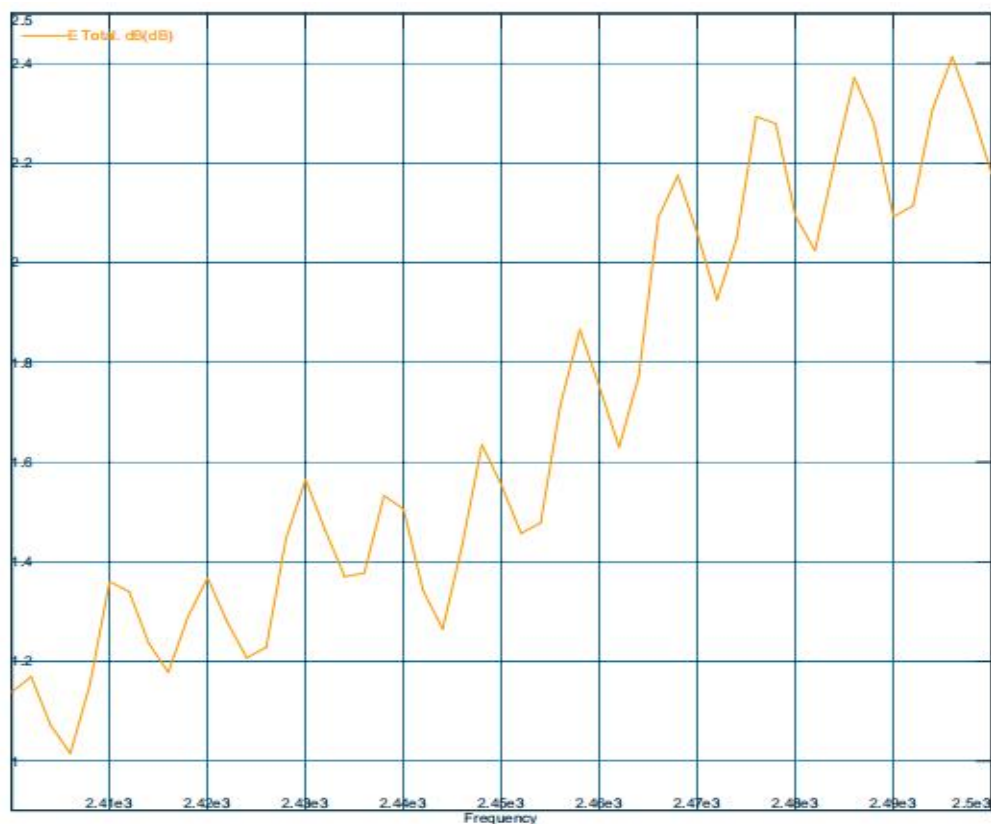
3、测试结果 (The result of the test)



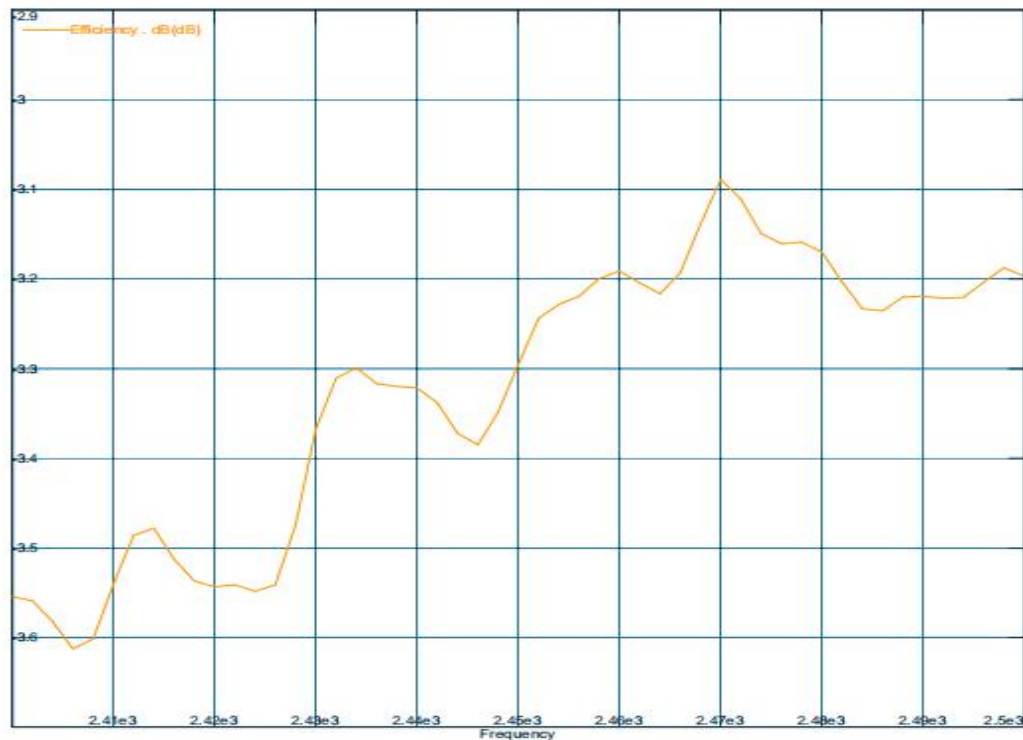


Frequency	Gain . dBi	PeakGain (dBi)
2400000000	1.14	2.29
2402000000	1.17	
2404000000	1.07	
2406000000	1.02	
2408000000	1.15	
2410000000	1.36	
2412000000	1.34	
2414000000	1.24	
2416000000	1.18	
2418000000	1.29	
2420000000	1.37	
2422000000	1.28	
2424000000	1.21	
2426000000	1.23	
2428000000	1.45	
2430000000	1.56	
2432000000	1.46	
2434000000	1.37	
2436000000	1.38	
2438000000	1.53	
2440000000	1.51	
2442000000	1.34	
2444000000	1.26	
2446000000	1.43	
2448000000	1.64	
2450000000	1.55	
2452000000	1.46	
2454000000	1.48	
2456000000	1.71	
2458000000	1.87	
2460000000	1.75	
2462000000	1.63	
2464000000	1.77	
2466000000	2.09	
2468000000	2.18	
2470000000	2.06	
2472000000	1.93	
2474000000	2.05	
2476000000	2.29	
2478000000	2.28	
2480000000	2.09	

3.1 增益 (Gain)



3.2 效率 (Efficiency)

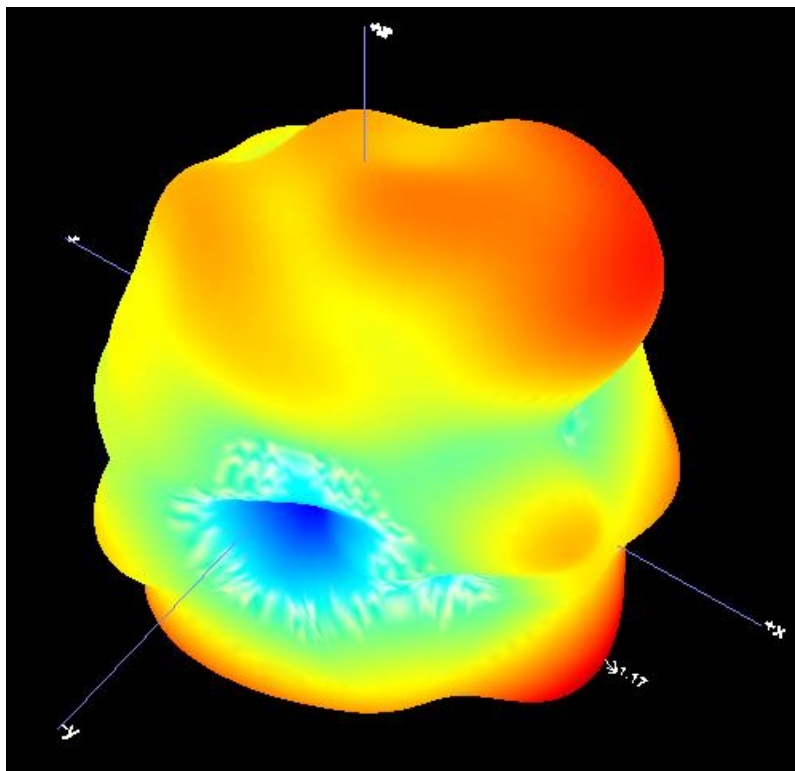


备注: 效率两种表达方式之间的关系: 效率 (dB) = 10lg(效率的百分比)

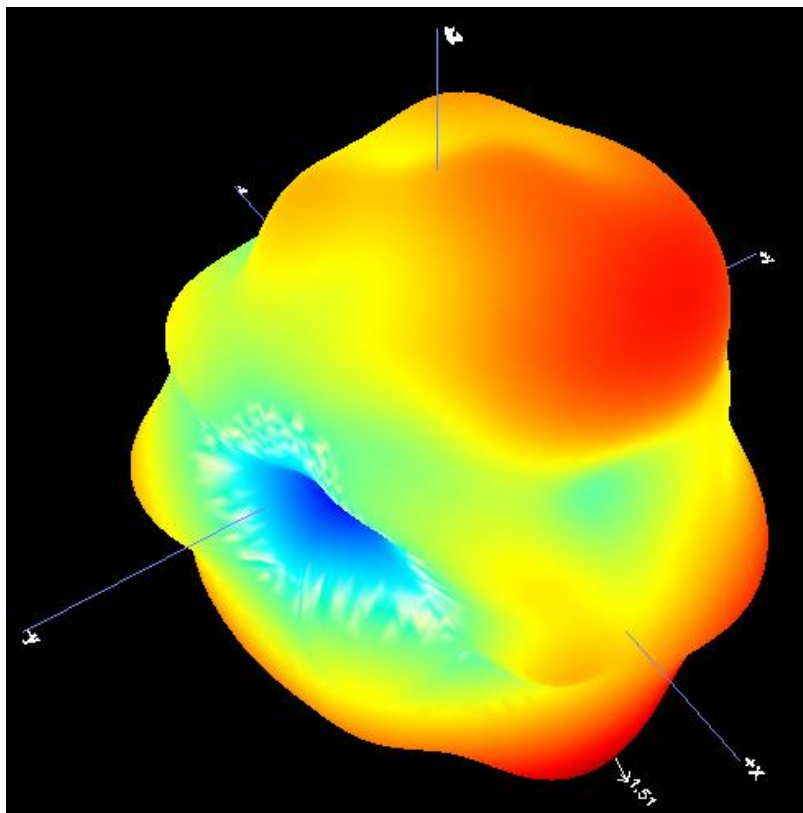
Note: the relationship between the two expressions of efficiency: $\text{efficiency (DB)} = 10\lg(\text{percentage of efficiency})$

4、辐射方向图 (Radiation Pattern)

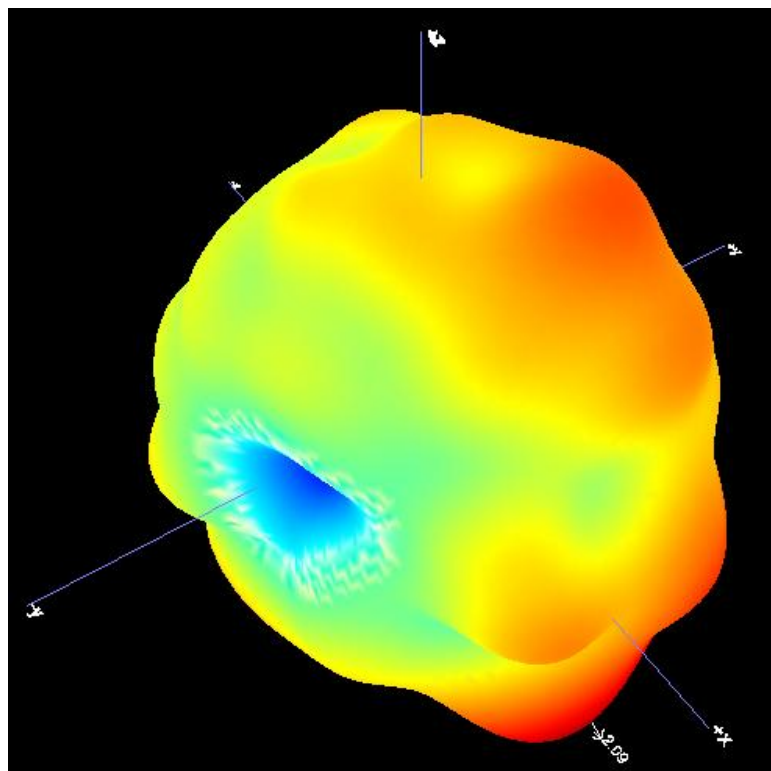
4.1 3D Polar Plot



2402MHz



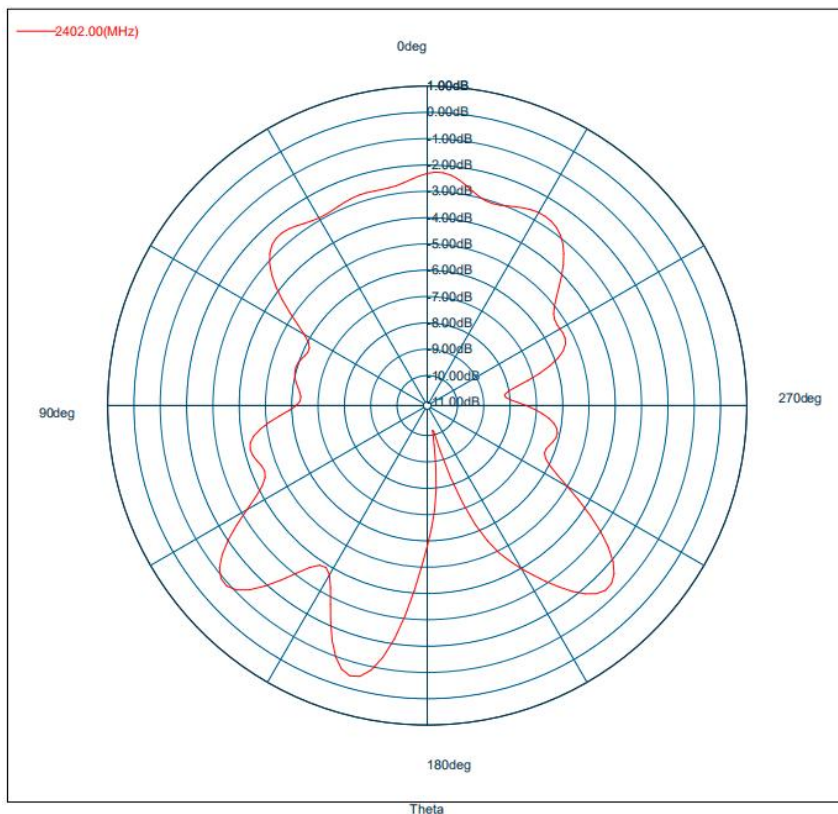
2440MHz



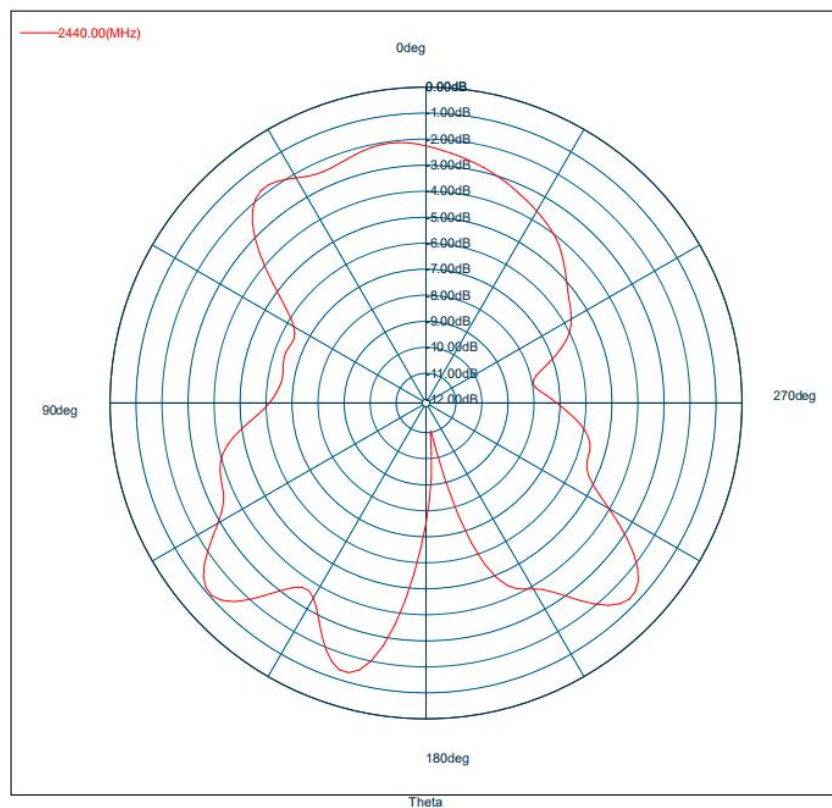
2480MHz

4.2 2D Radiation Pattern

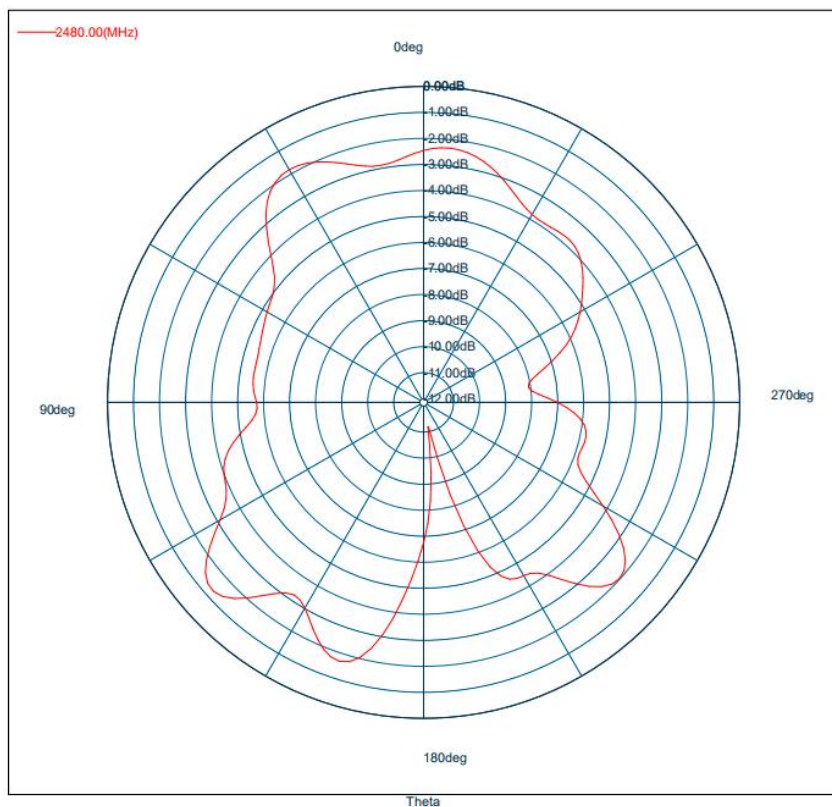
(1) E1, XZ plane, $\phi=0$;



2402MHz

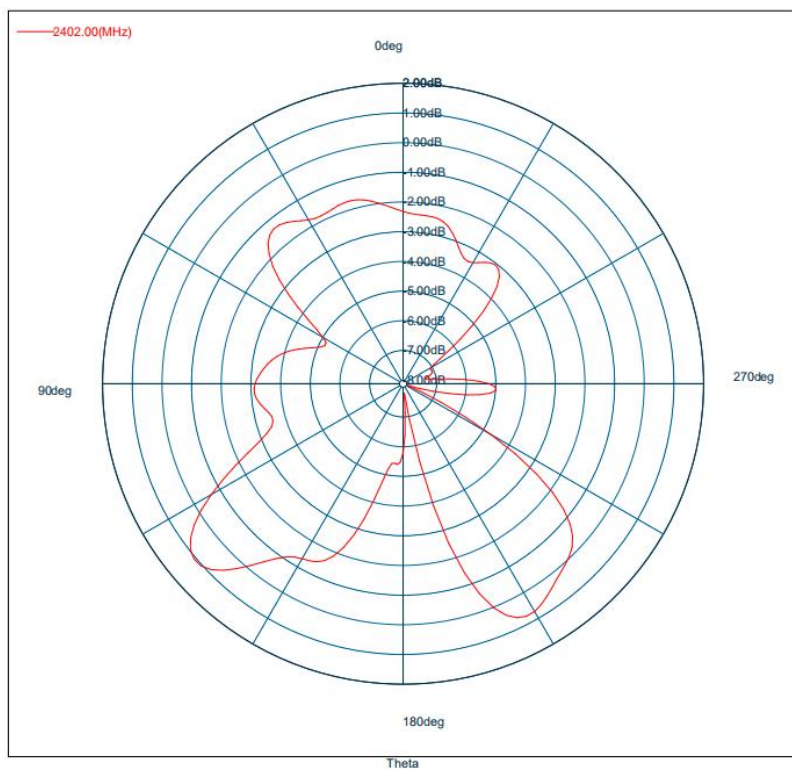


2440MHz

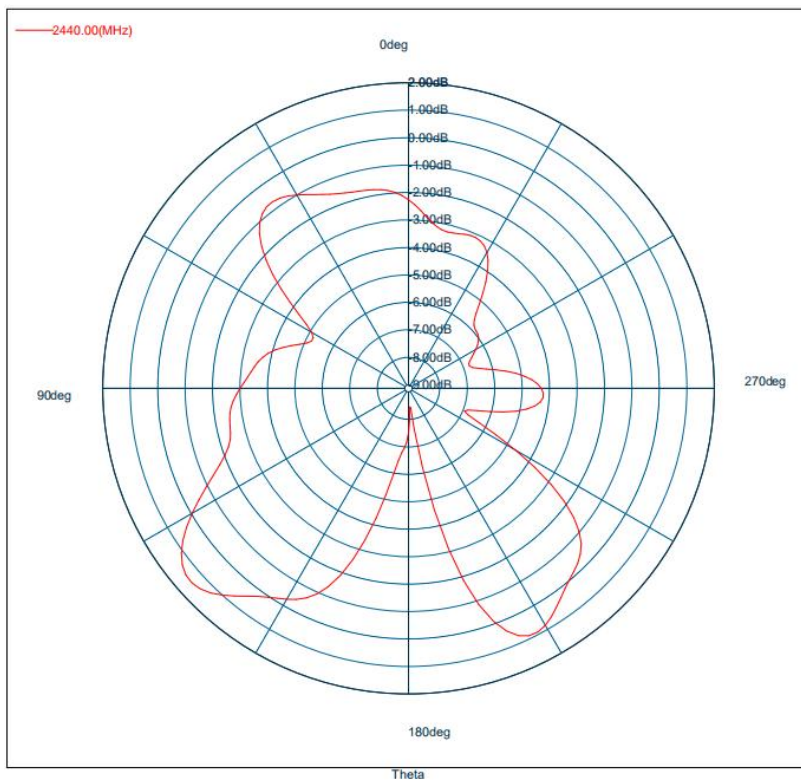


2480MHz

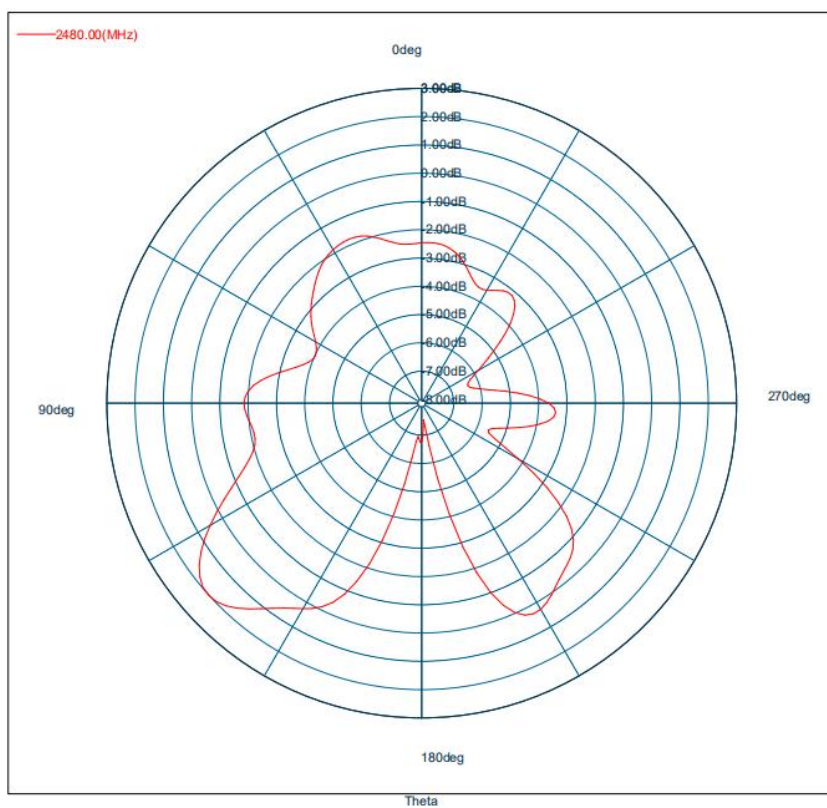
(2) E2, YZ plane, $\phi=90^\circ$;



2402MHz

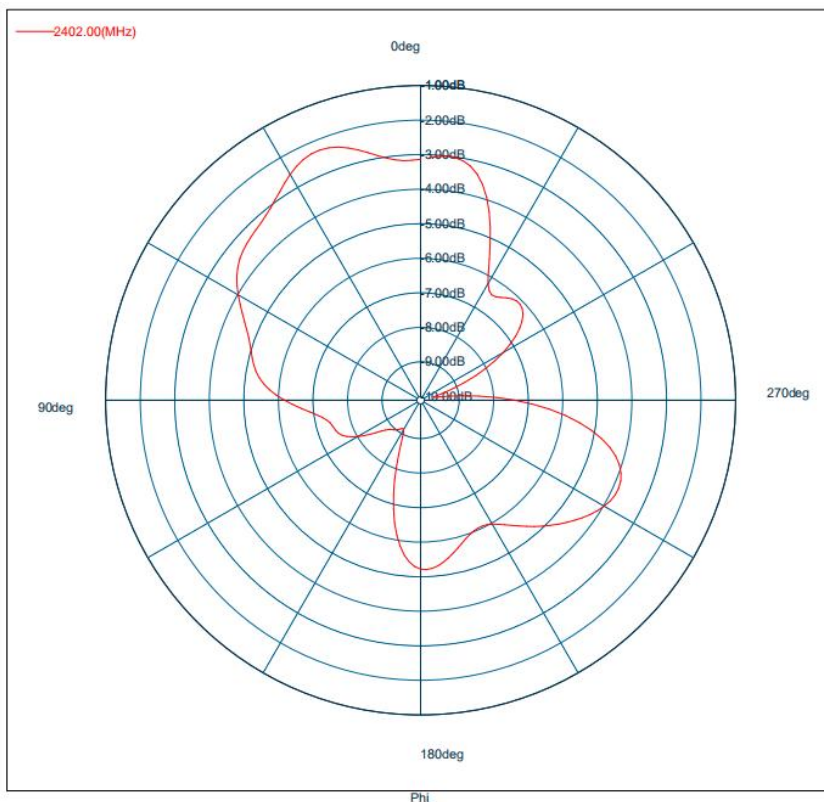


2440MHz

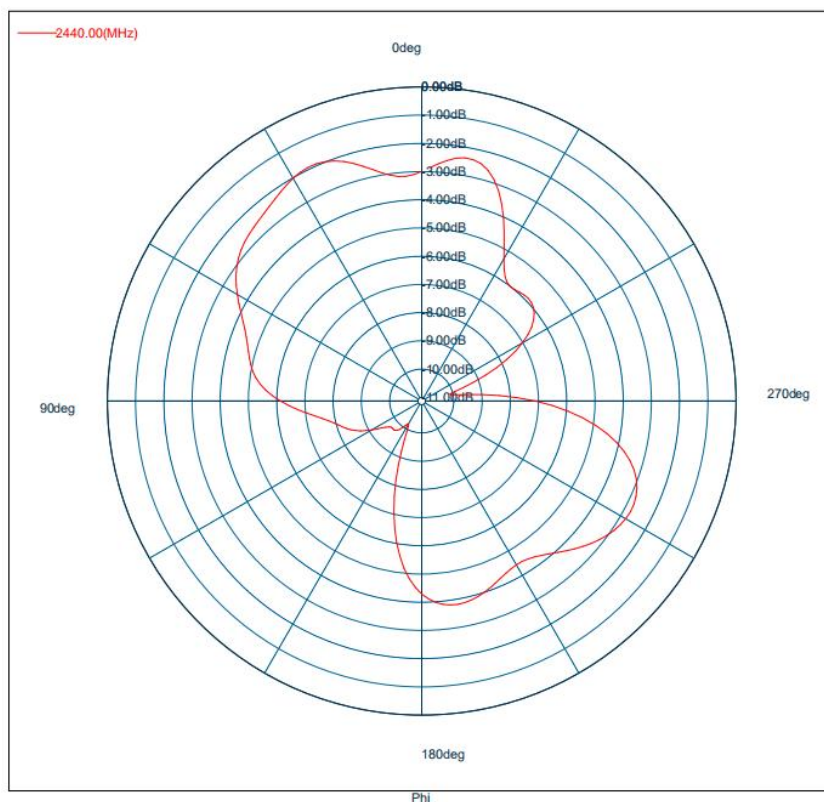


2480MHz

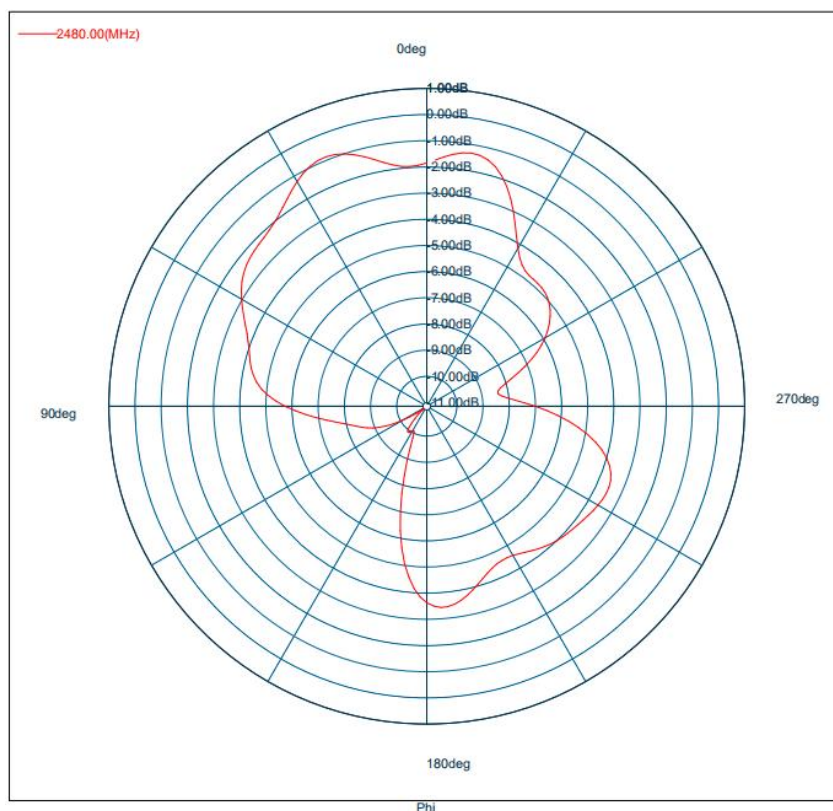
(3) H, XY plane, $\theta=90^\circ$;



2402MHz



2440MHz



2480MHz