

Antenna Coding: ANT-WWSL6024002

Antenna Type: External rod antenna

Model of the DUT: MS12SF1

Antenna Manufacturer: Shenzhen Minew Technologies Co., Ltd.

1、Technical Specification

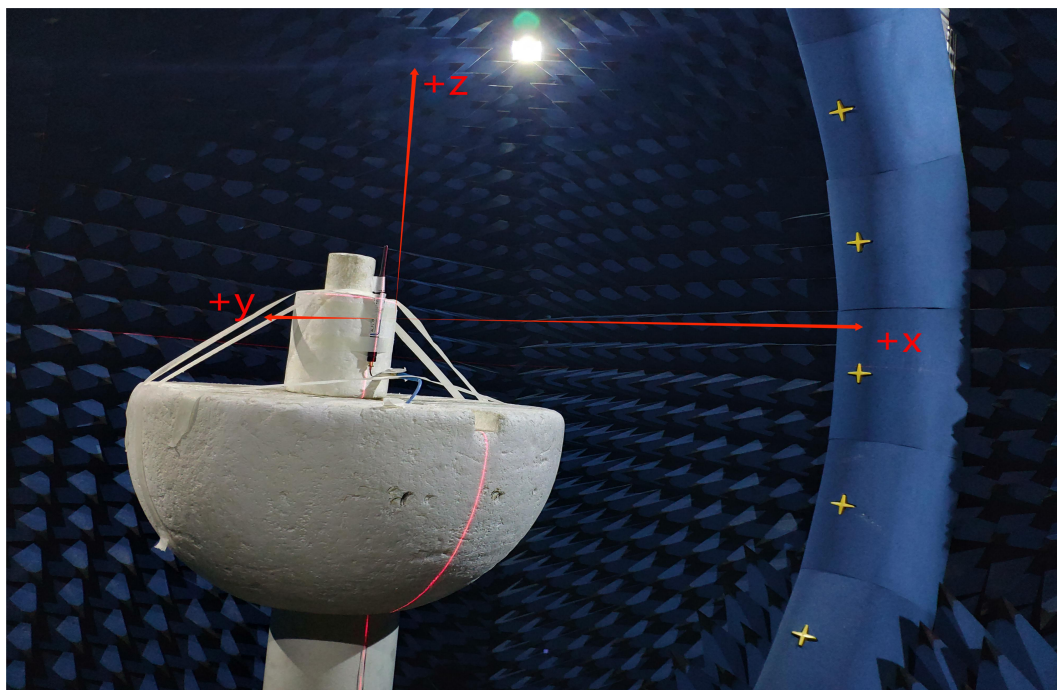
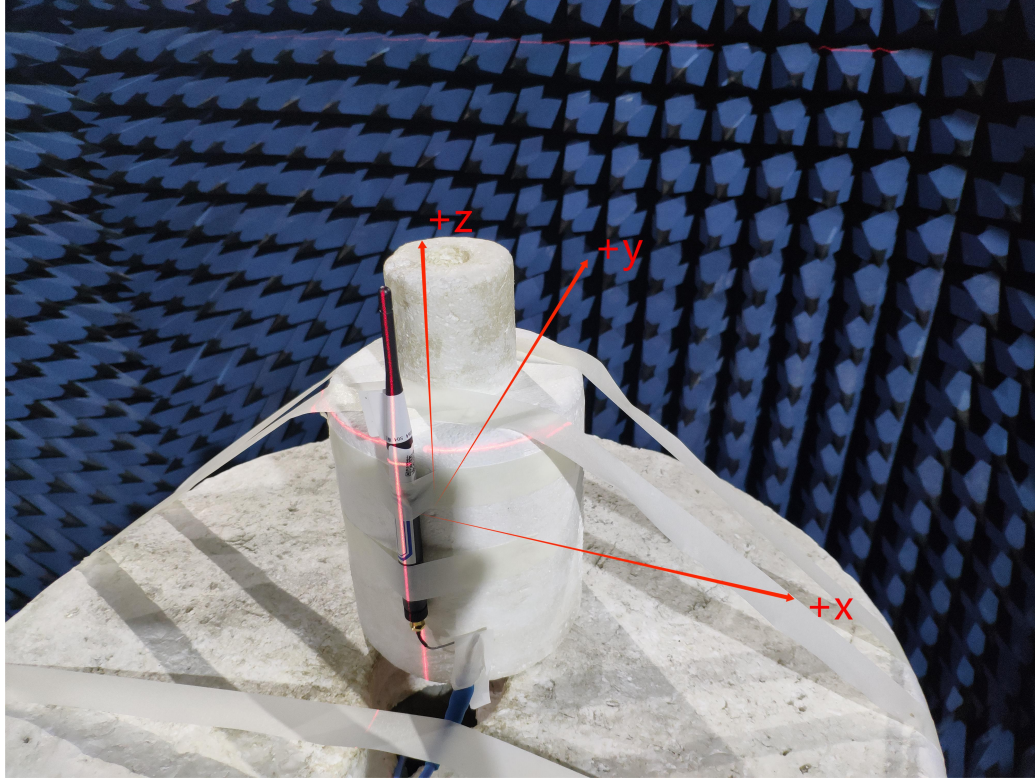
Electrical Specifications	
Frequency Range (MHz)	2400-2500
Input Impedance (Ω)	50
Return Loss (dB)	<-3.45
VSWR	<5
Peak Gain (dBi)	4.01
Polarization Type	Linear polarization
Mechanical Specifications	
Antenna Size (mm)	195*13mm
Radiator	Cuprum

2、The shape and size of the antenna



3、 The result of the test

3.1 Test Environment

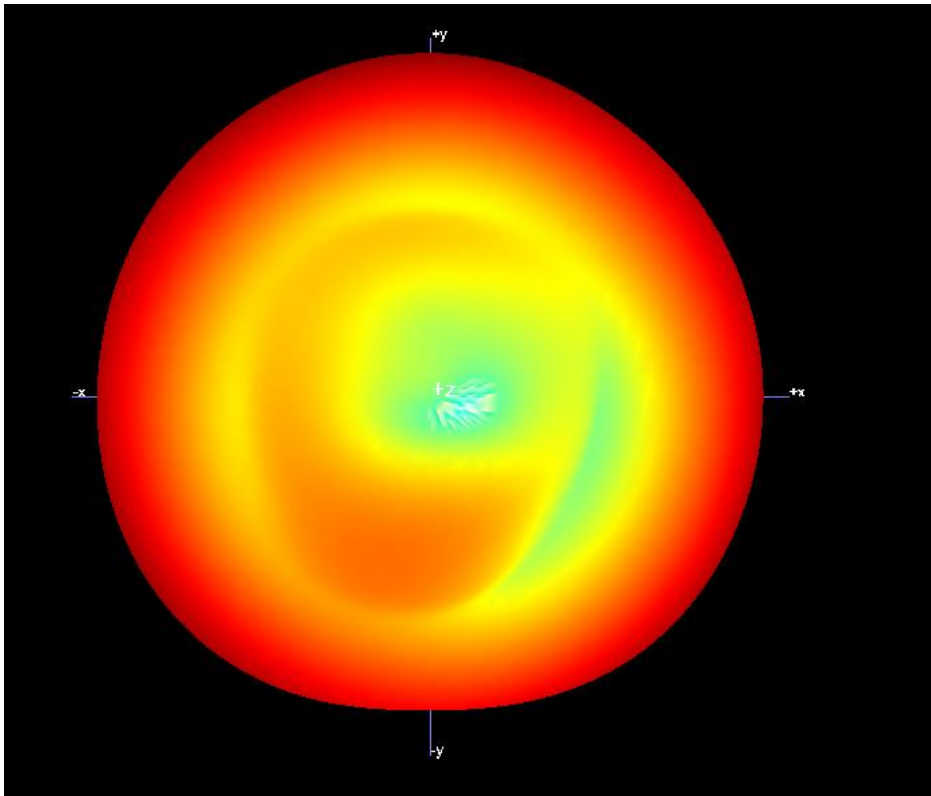




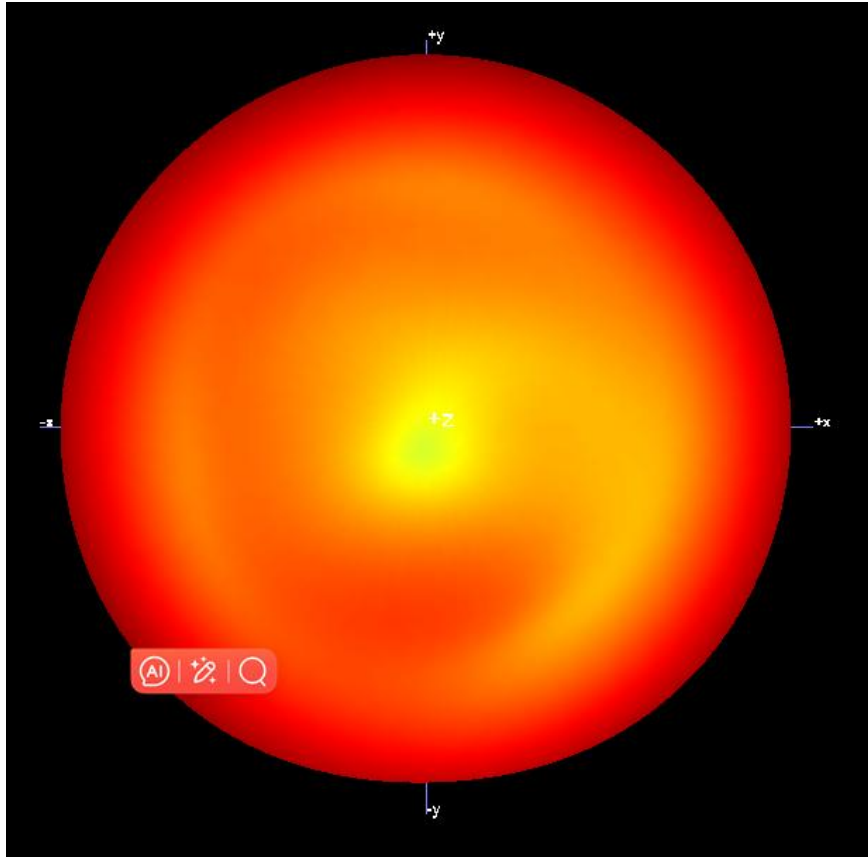
3.2 Gain and Efficiency

样品编号	4#-WIFI-2.4G		
EUT型号	4#		
备注			
Frequency	Gain (dBi)	Efficiency()	PeakGain (dBi)
2400MHz	3.69	80%	4.01
2402MHz	3.71	80%	
2404MHz	3.72	80%	
2406MHz	3.74	80%	
2408MHz	3.78	80%	
2410MHz	3.81	81%	
2412MHz	3.84	81%	
2414MHz	3.81	81%	
2416MHz	3.79	80%	
2418MHz	3.77	80%	
2420MHz	3.77	80%	
2422MHz	3.77	80%	
2424MHz	3.81	80%	
2426MHz	3.76	81%	
2428MHz	3.76	81%	
2430MHz	3.75	81%	
2432MHz	3.72	80%	
2434MHz	3.76	81%	
2436MHz	3.78	81%	
2438MHz	3.75	80%	
2440MHz	3.67	80%	
2442MHz	3.67	81%	
2444MHz	3.68	81%	
2446MHz	3.59	80%	
2448MHz	3.59	80%	
2450MHz	3.61	80%	
2452MHz	3.64	80%	
2454MHz	3.66	80%	
2456MHz	3.66	80%	
2458MHz	3.69	80%	
2460MHz	3.73	80%	
2462MHz	3.77	80%	
2464MHz	3.81	80%	
2466MHz	3.88	81%	
2468MHz	3.92	81%	
2470MHz	3.95	81%	
2472MHz	3.96	81%	
2474MHz	3.99	81%	
2476MHz	4.01	81%	
2478MHz	4.01	81%	
2480MHz	4.00	81%	
2482MHz	3.97	80%	
2484MHz	3.96	80%	
2486MHz	3.87	78%	
2488MHz	3.85	78%	
2490MHz	3.82	78%	
2492MHz	3.80	77%	
2494MHz	3.77	77%	
2496MHz	3.81	77%	
2498MHz	3.76	76%	
2500MHz	3.72	76%	

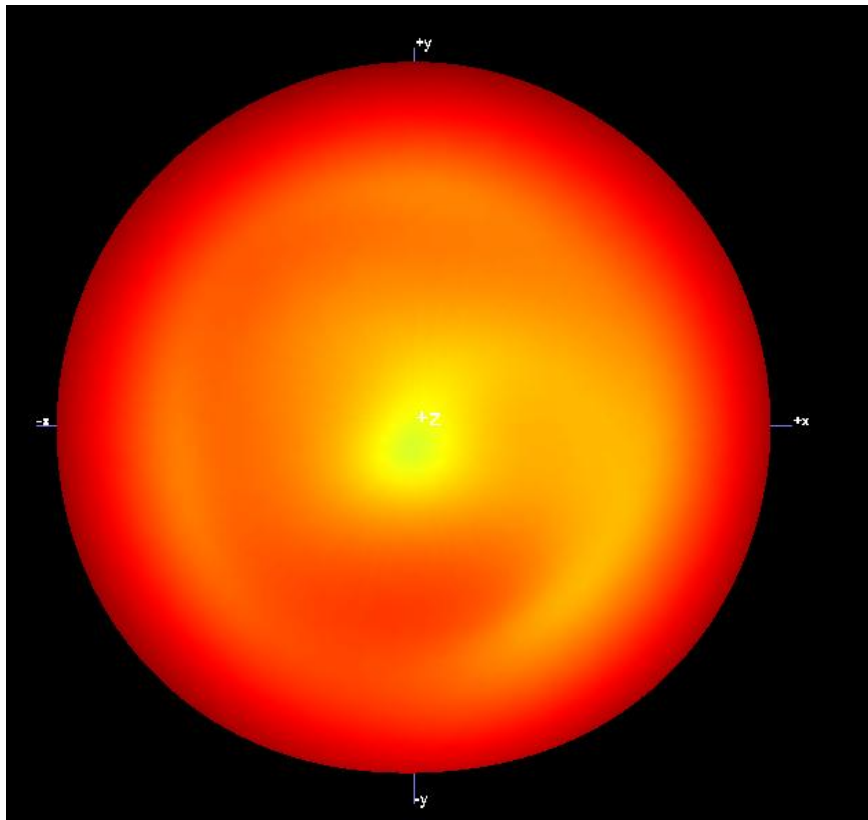
3.3 3D Polar Plot



2400MHz



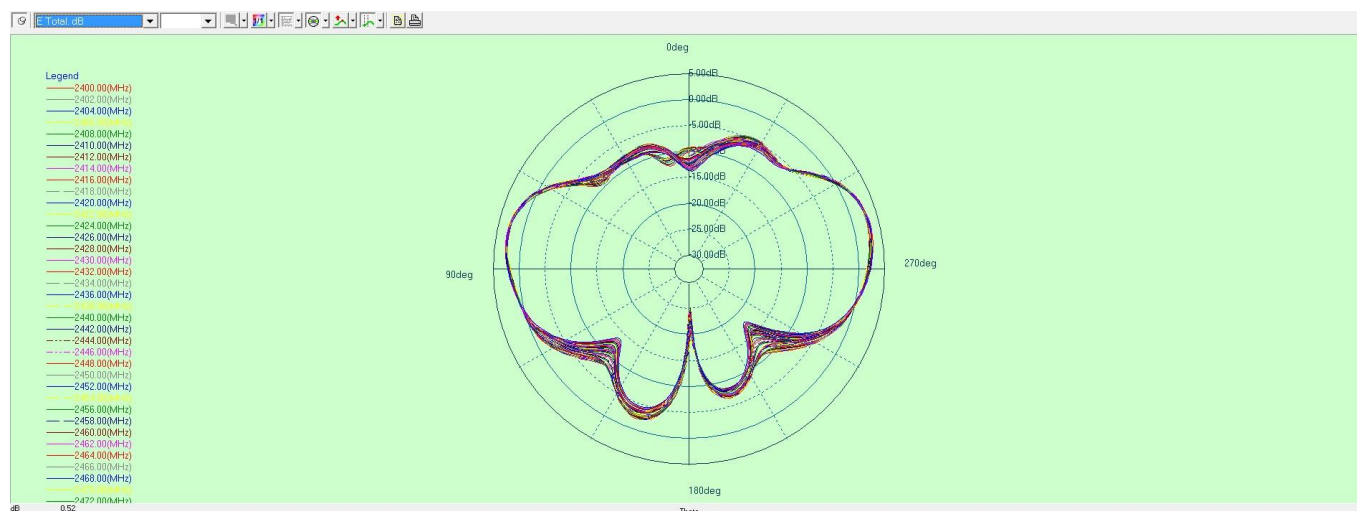
2442MHz



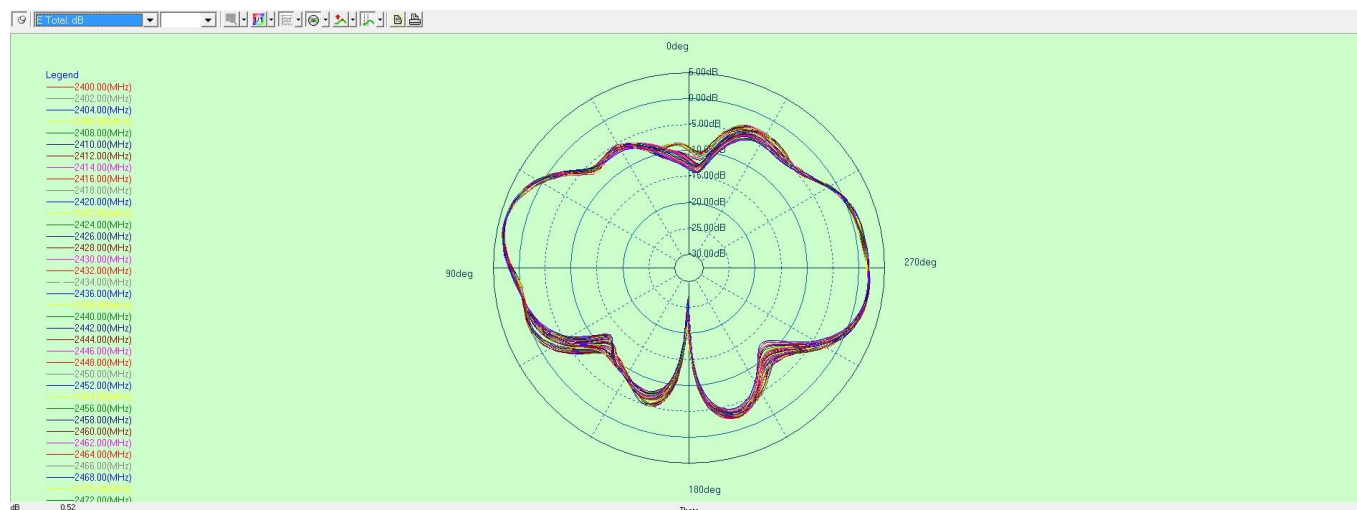
2480MHz

3.4 2D Radiation Pattern

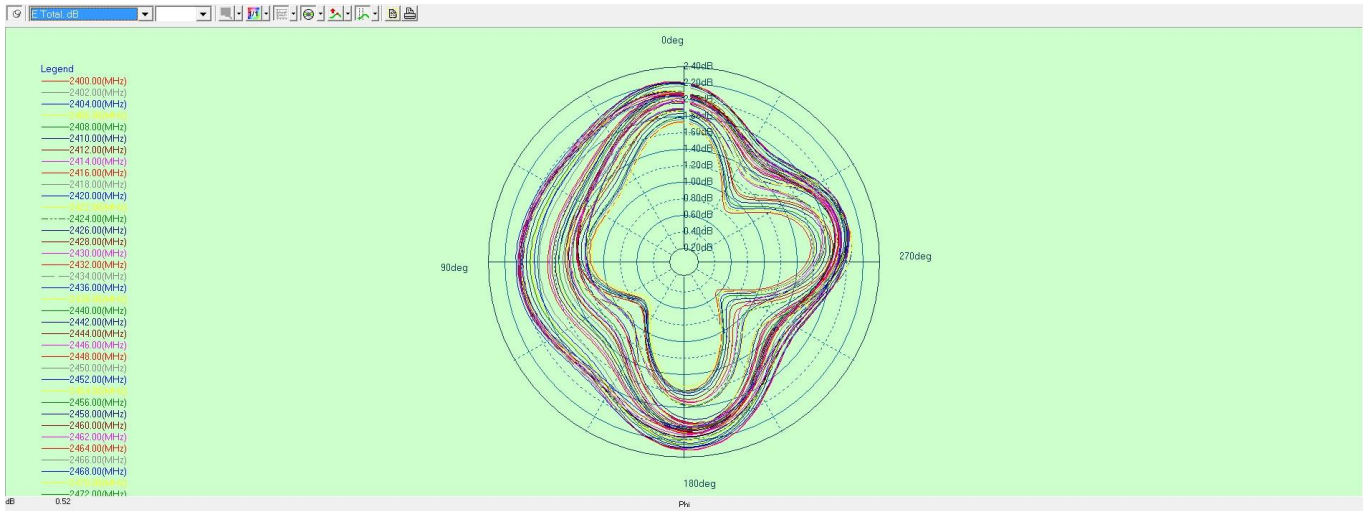
(1) E1, XZ Plane, phi=0



(2) E2, YZ Plane, phi=90°



(3) H, XY plane, theta=90°



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1、Technical Specification

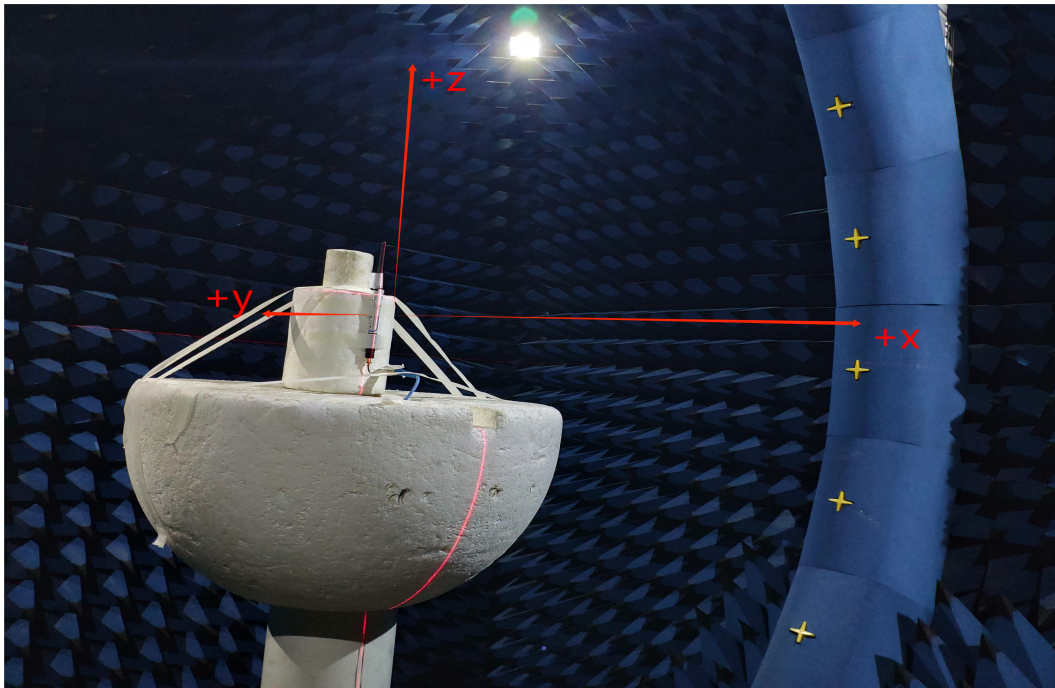
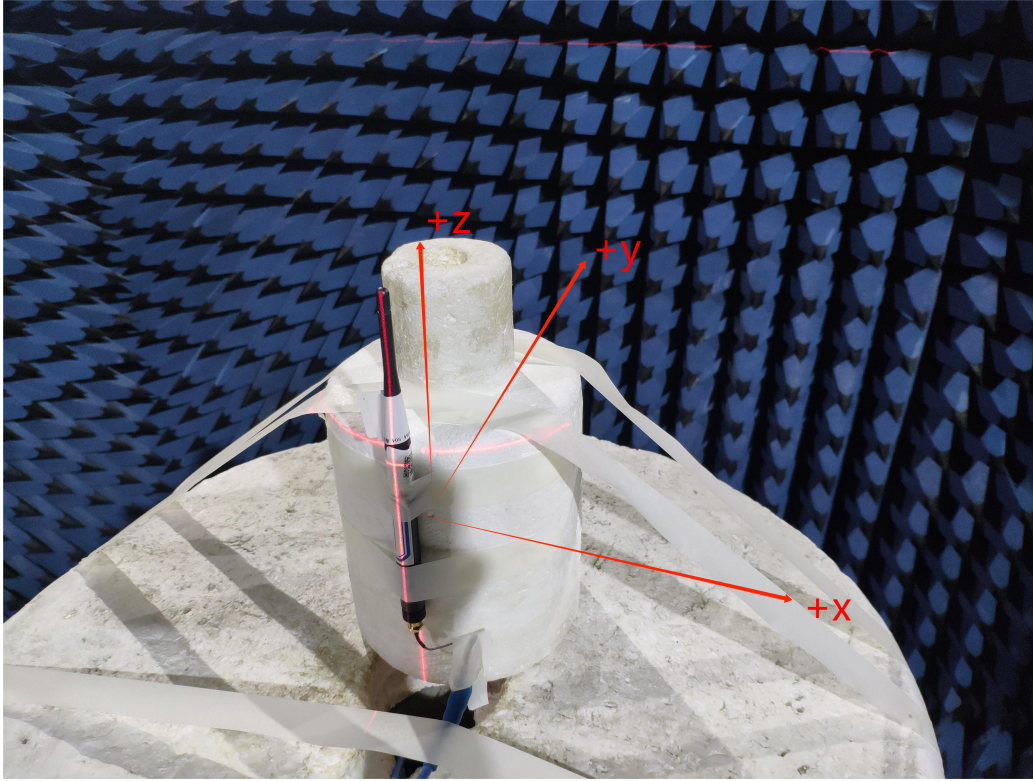
Electrical Specifications	
Frequency Range (MHz)	5150-5850
Input Impedance (Ω)	50
Return Loss (dB)	<-3.45
VSWR	<5
Peak Gain (dBi)	6.61
Polarization Type	Linear polarization
Mechanical Specifications	
Antenna Size (mm)	195*13mm
Radiator	Cuprum

2、The shape and size of the antenna



3、 The result of the test

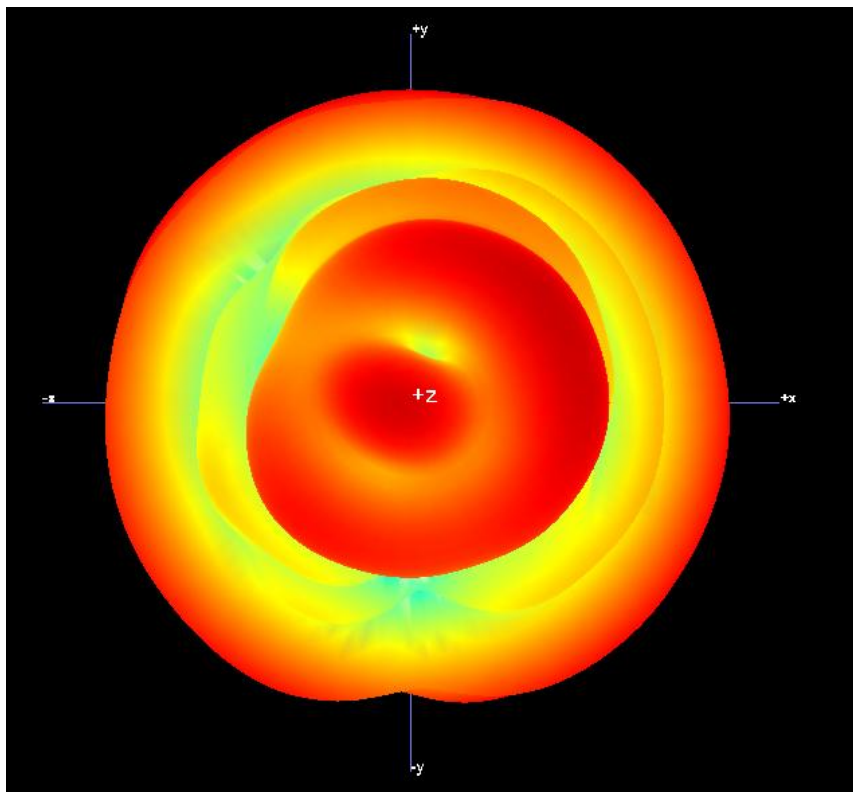
3.1 Test Environment



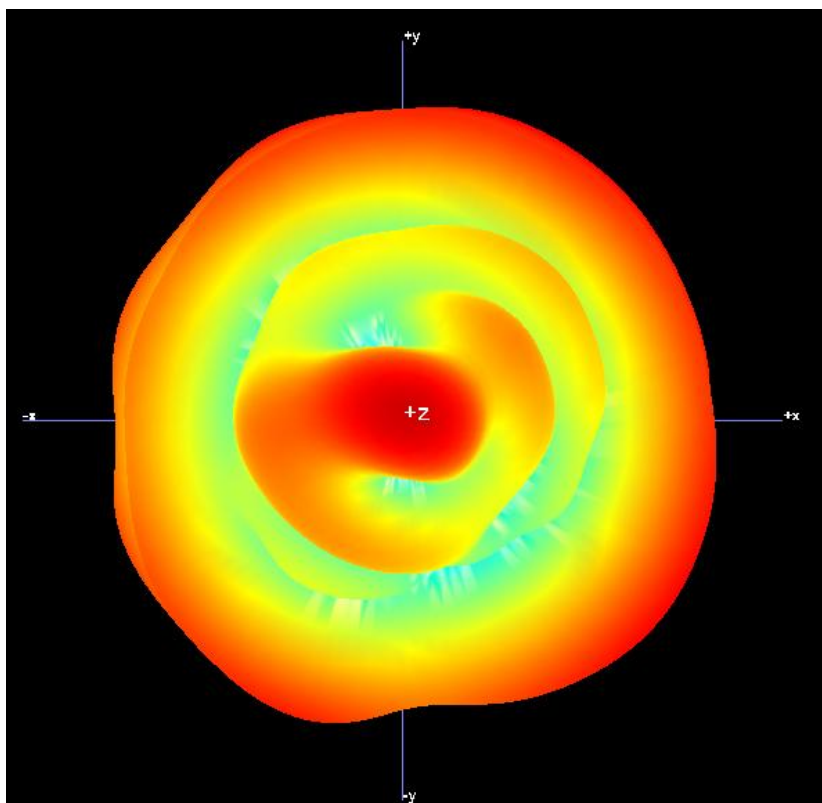
3.2 Gain and Efficiency

样品编号	4#-WIFI-5G		
EUT型号	5#		
备注			
Frequency	Gain (dBi)	Efficiency()	PeakGain (dBi)
5150MHz	3.63	39%	6.61
5180MHz	4.20	42%	
5210MHz	4.96	50%	
5240MHz	5.78	58%	
5270MHz	6.24	63%	
5300MHz	6.56	68%	
5330MHz	6.61	69%	
5360MHz	6.61	70%	
5390MHz	6.56	68%	
5420MHz	5.61	58%	
5450MHz	4.79	52%	
5480MHz	4.23	50%	
5510MHz	3.75	50%	
5540MHz	3.12	52%	
5570MHz	2.41	51%	
5600MHz	1.29	46%	
5630MHz	0.93	43%	
5660MHz	0.68	39%	
5690MHz	0.48	38%	
5720MHz	0.67	40%	
5750MHz	0.85	41%	
5780MHz	1.10	44%	
5810MHz	1.61	46%	
5840MHz	2.04	50%	
5850MHz	2.24	51%	

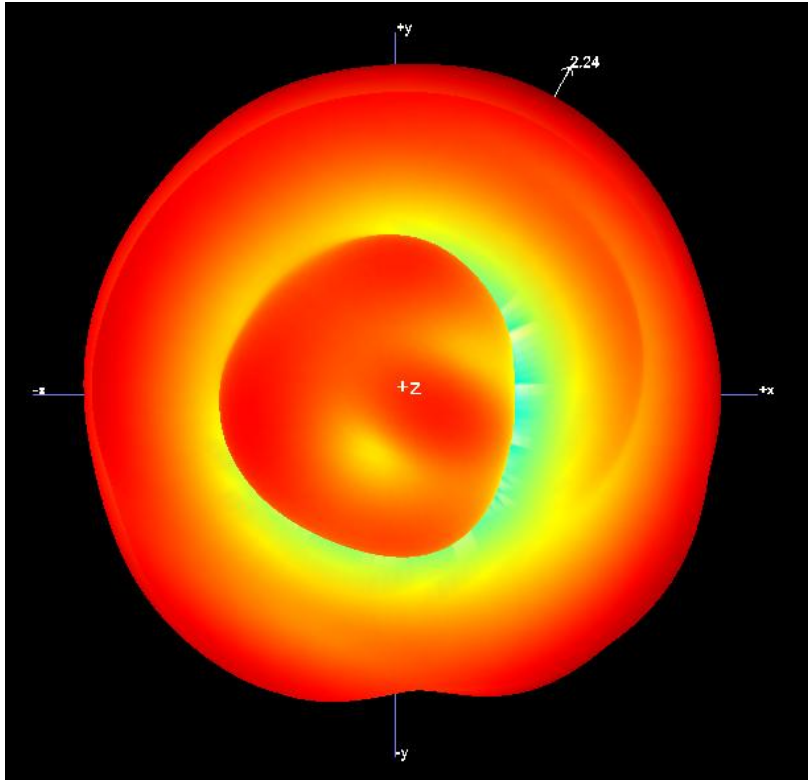
3.3 3D Polar Plot



5150MHz



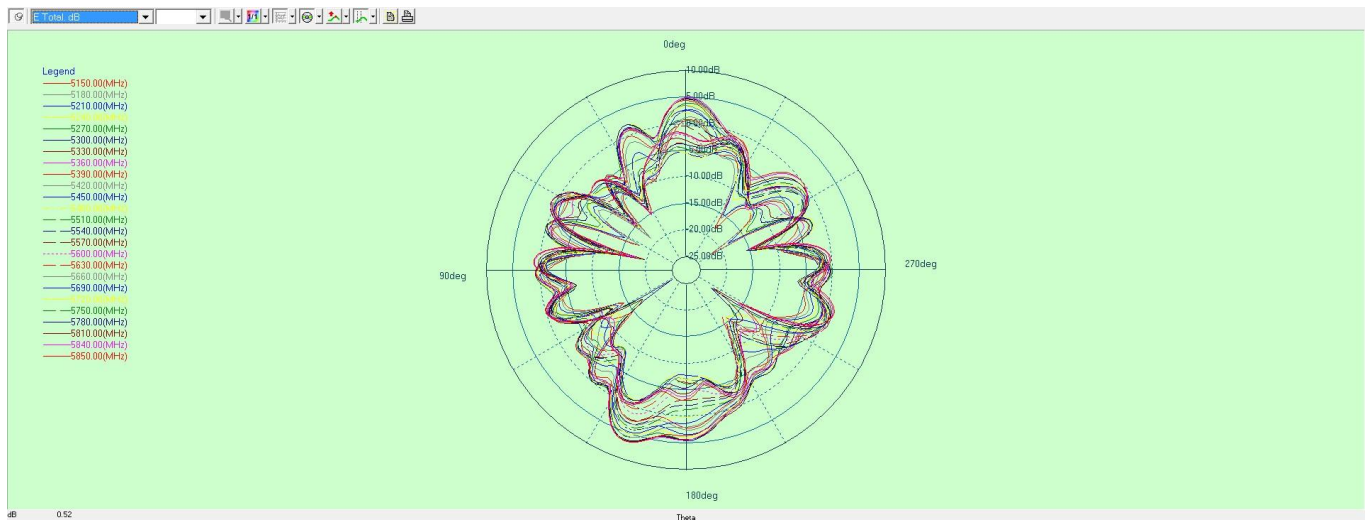
5480MHz



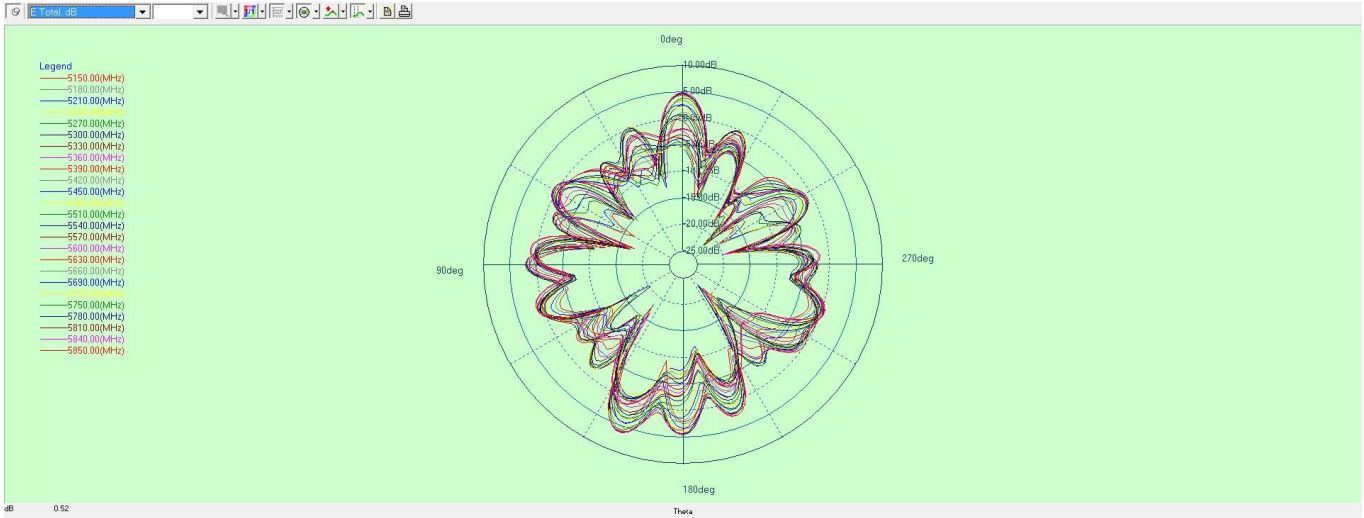
5850MHz

3.4 2D Radiation Pattern

(1) E1, XZ Plane, phi=0



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



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

