



Antenna Coding: ANT-BPNCNC23026

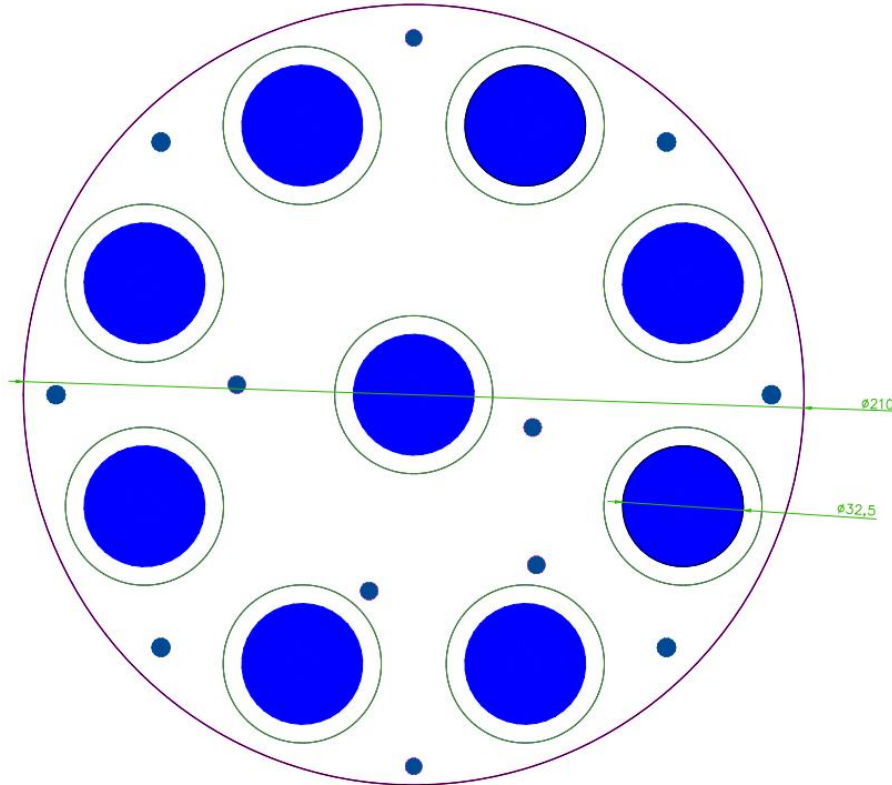
Antenna Type: PCB Onboard Antenna, Patch Antenna

Antenna Manufacturer: Shenzhen Minew Technologies Co., Ltd.

### 1、Technical Specification

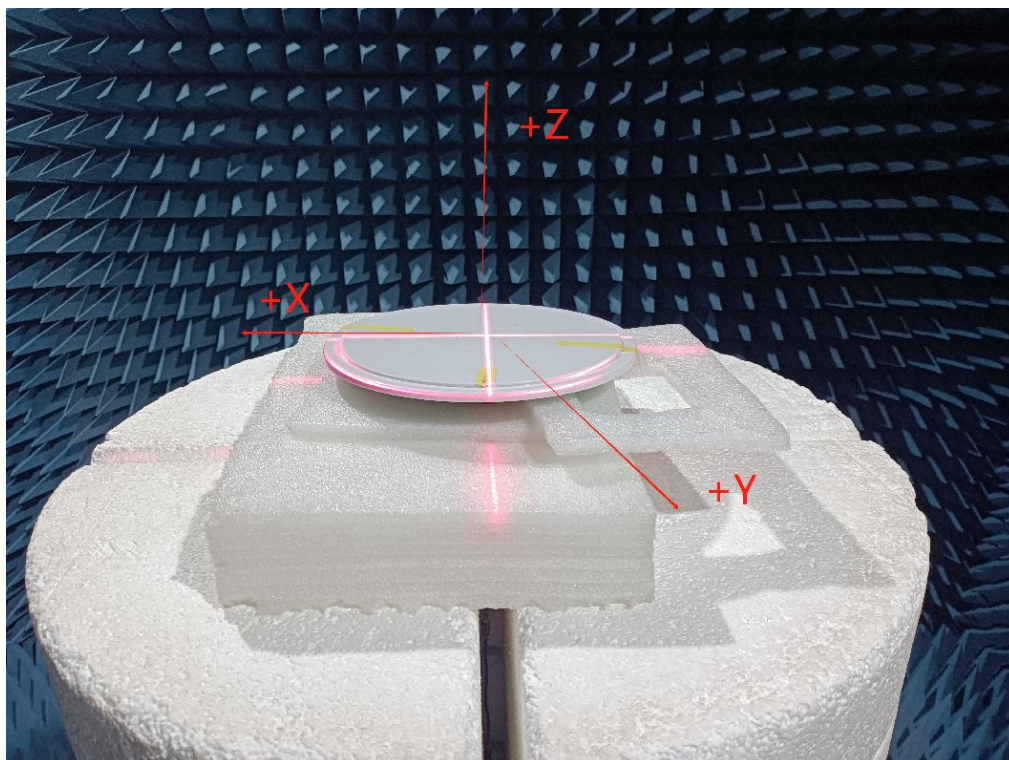
Electrical Specifications	
Frequency Range (MHz)	2400-2480
Input Impedance ( $\Omega$ )	50
Return Loss (dB)	<-5
VSWR	<3
Peak Gain (dBi)	ANT0: -1.75 ANT1: -1.6 ANT2: -2.44 ANT3: -2.44 ANT4: -1.71 ANT5: -1.72 ANT6: -2.16 ANT7: -2.15 ANT8: -1.77 ANT9: -3.31 ANT10: -3.86 ANT11: -4.08 ANT12: -3.3 ANT13: -3.53 ANT14: -3.88 ANT15: -3.97 ANT16: -3.39
Polarization Type	circularly polarized antenna
Mechanical Specifications	
Antenna Size (mm)	$\varnothing$ 32.5
Radiator	Cuprum

## 2、The shape and size of the antenna



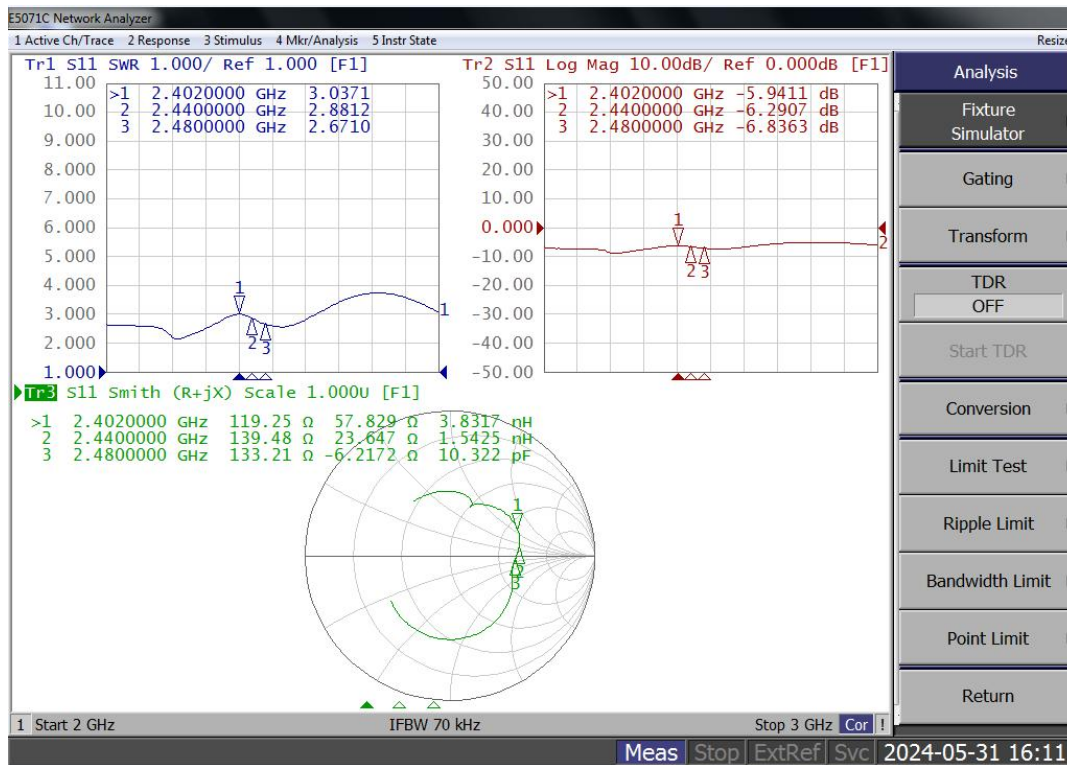
## 3、 The result of the test

### 3.1 Test Environment



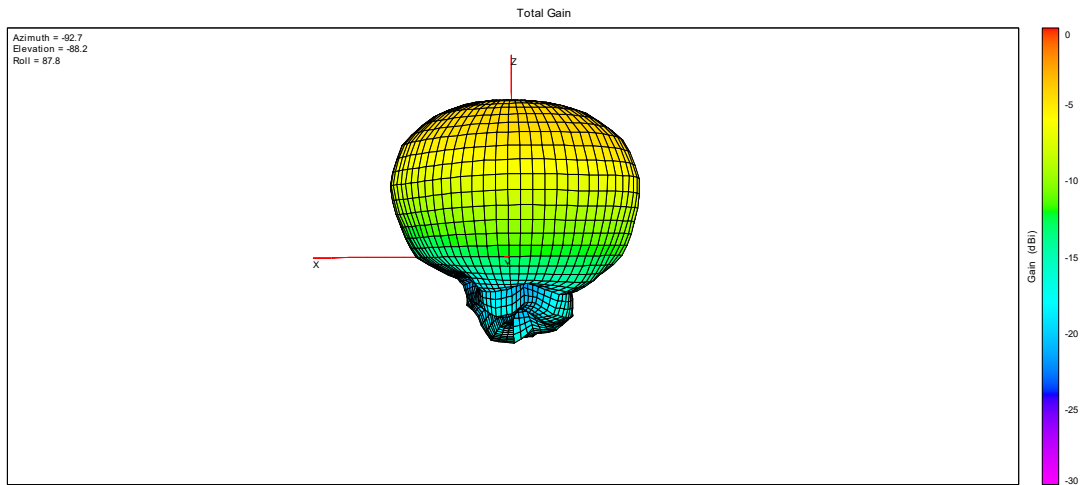
### 3.2 ANT 0

#### 3.2.1 S11

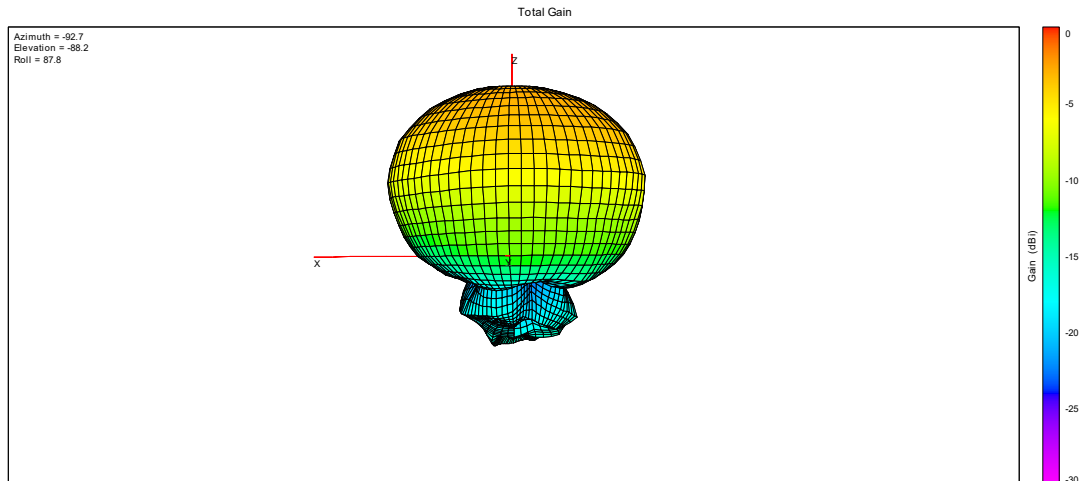


S11

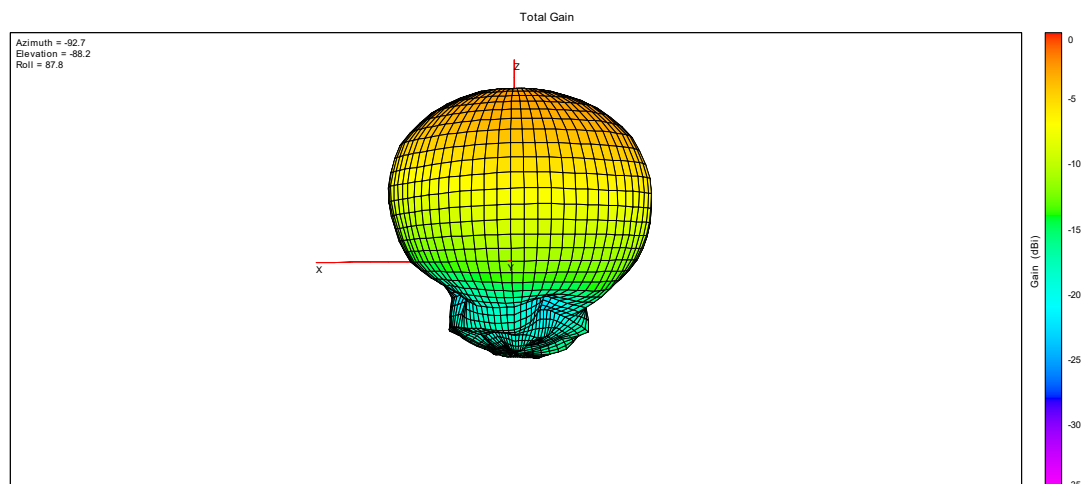
### 3.2.2 Gain



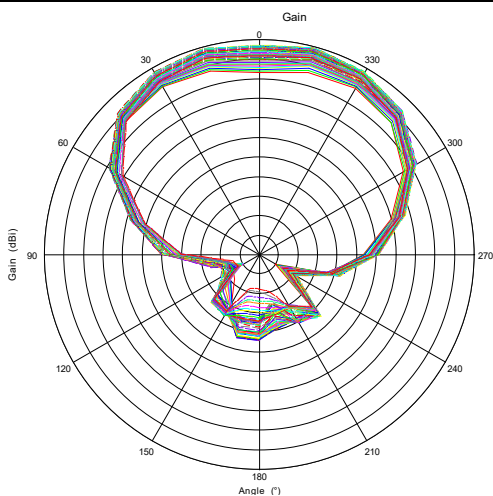
2402MHz



2440MHz

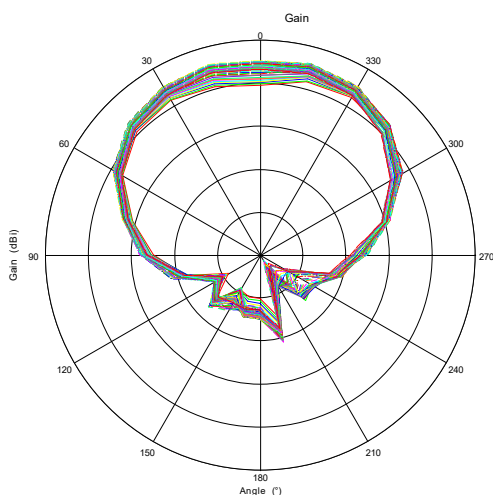


2480MHz



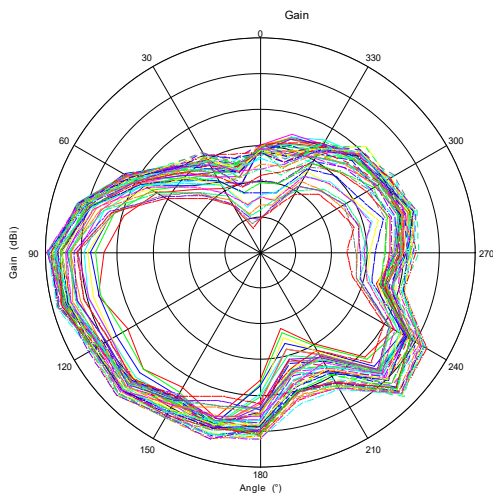
Max: -2  
Min: -24  
Scale: 2/div

Phi=0°



Max: 0  
Min: -25  
Scale: 5/div

Phi=90°



Max: -11  
Min: -17  
Scale: 1/div

Theta=90°

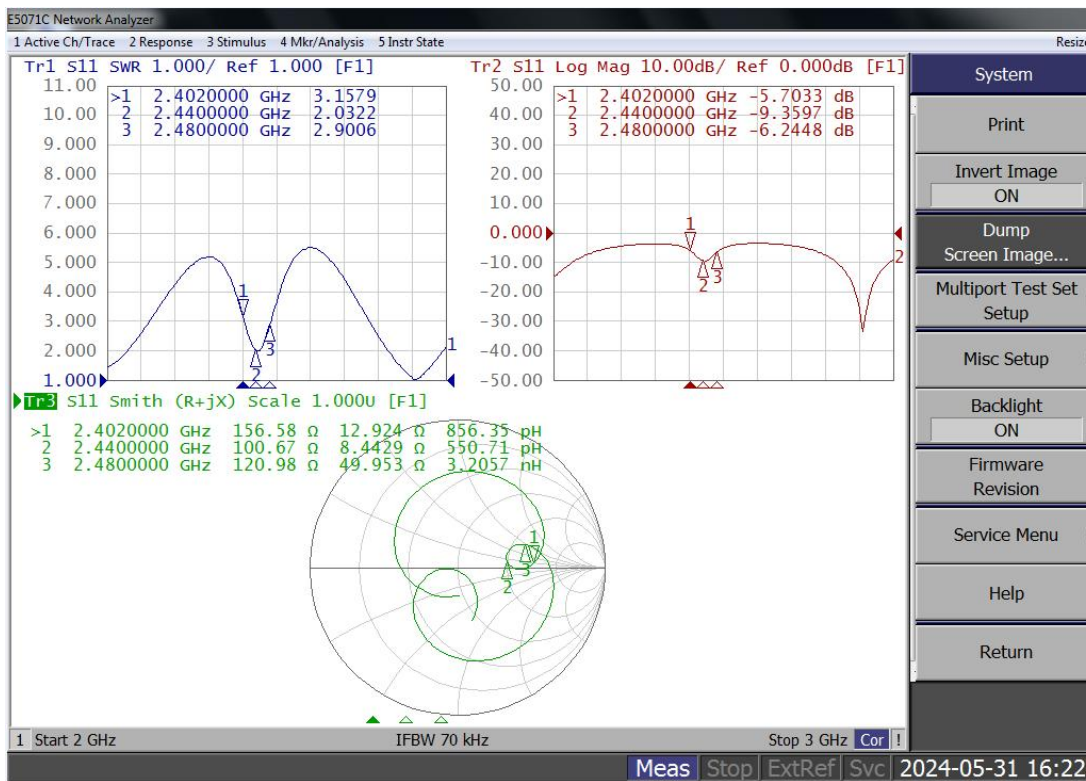


1# (MG2-0)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	11.47	-3.78	-1.75
2402	11.72	-3.64	
2404	12.02	-3.57	
2406	12.22	-3.51	
2408	12.38	-3.42	
2410	12.58	-3.38	
2412	12.65	-3.32	
2414	12.74	-3.26	
2416	12.98	-3.06	
2418	13.25	-2.93	
2420	13.38	-2.86	
2422	13.41	-2.84	
2424	13.54	-2.80	
2426	13.64	-2.76	
2428	13.70	-2.66	
2430	14.01	-2.51	
2432	14.24	-2.42	
2434	14.25	-2.45	
2436	14.35	-2.41	
2438	14.59	-2.26	
2440	14.70	-2.20	
2442	14.77	-2.15	
2444	15.00	-2.09	
2446	15.10	-2.02	
2448	15.09	-2.06	
2450	15.30	-1.99	
2452	15.60	-1.89	
2454	15.66	-1.75	
2456	15.54	-1.80	
2458	15.50	-1.82	
2460	15.55	-1.81	
2462	15.32	-1.86	
2464	15.27	-1.92	
2466	15.46	-1.77	
2468	15.33	-1.82	
2470	14.88	-1.94	
2472	14.77	-2.01	
2474	14.72	-2.03	
2476	14.39	-2.14	
2478	14.17	-2.15	
2480	14.18	-2.15	

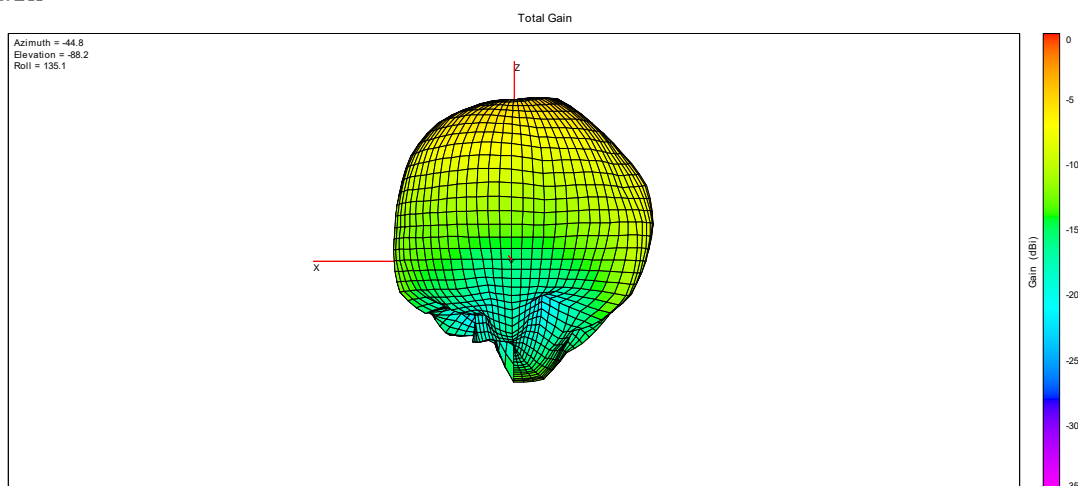
Gain data ( Ant0)

### 3.3 ANT1

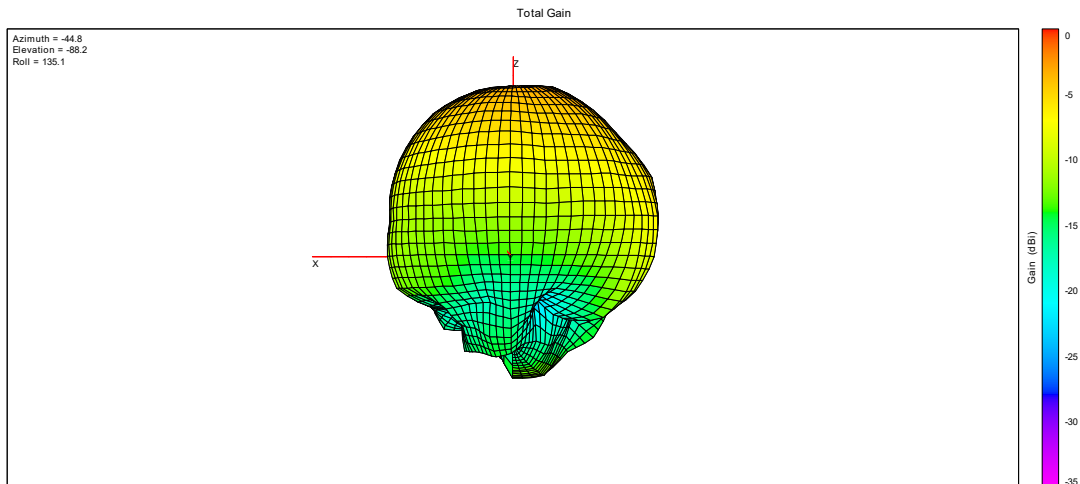
#### 3.3.1 S11



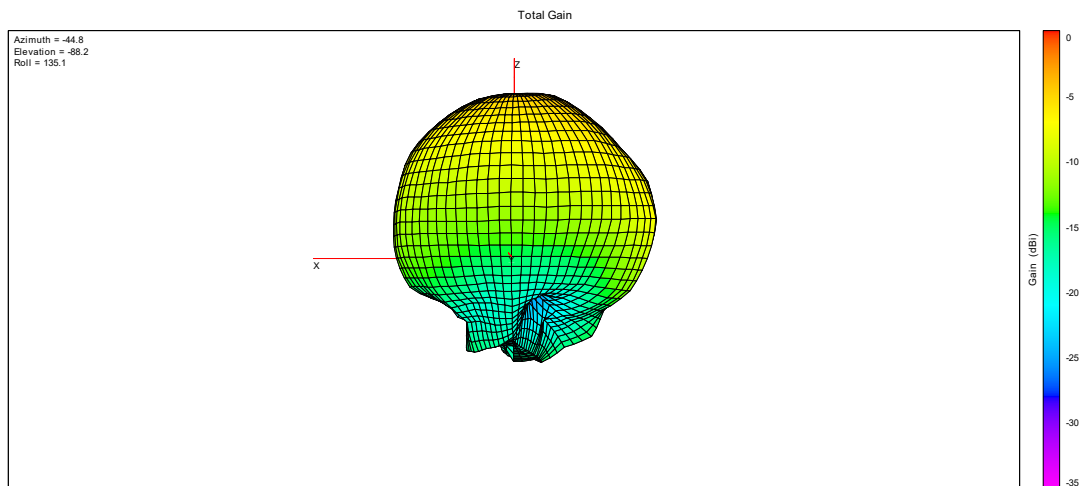
#### 3.3.2 Gain



2402MHz



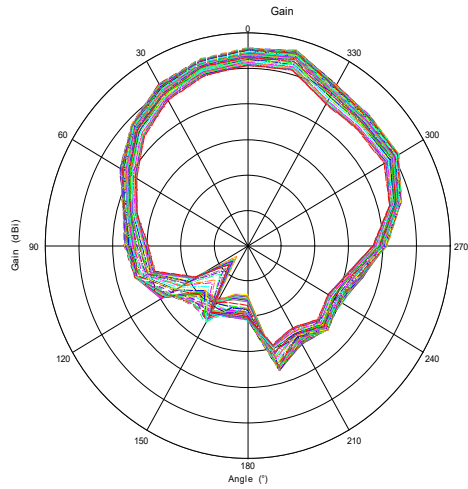
2440MHz



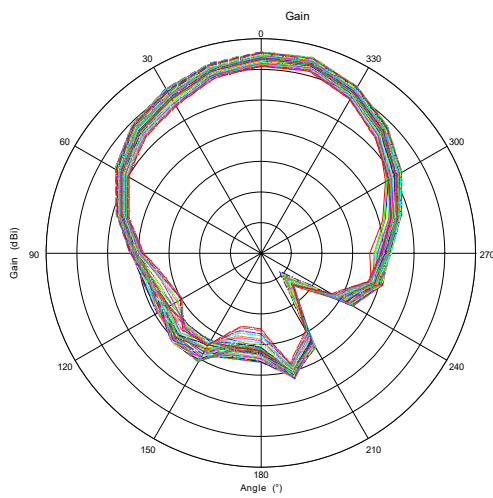
2480MHz



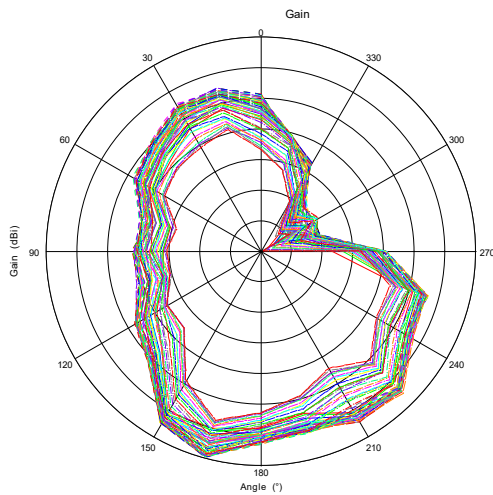
Max: 0  
Min: -30  
Scale: 5/div



Max: 0  
Min: -35  
Scale: 5/div



Max: -8  
Min: -22  
Scale: 2/div



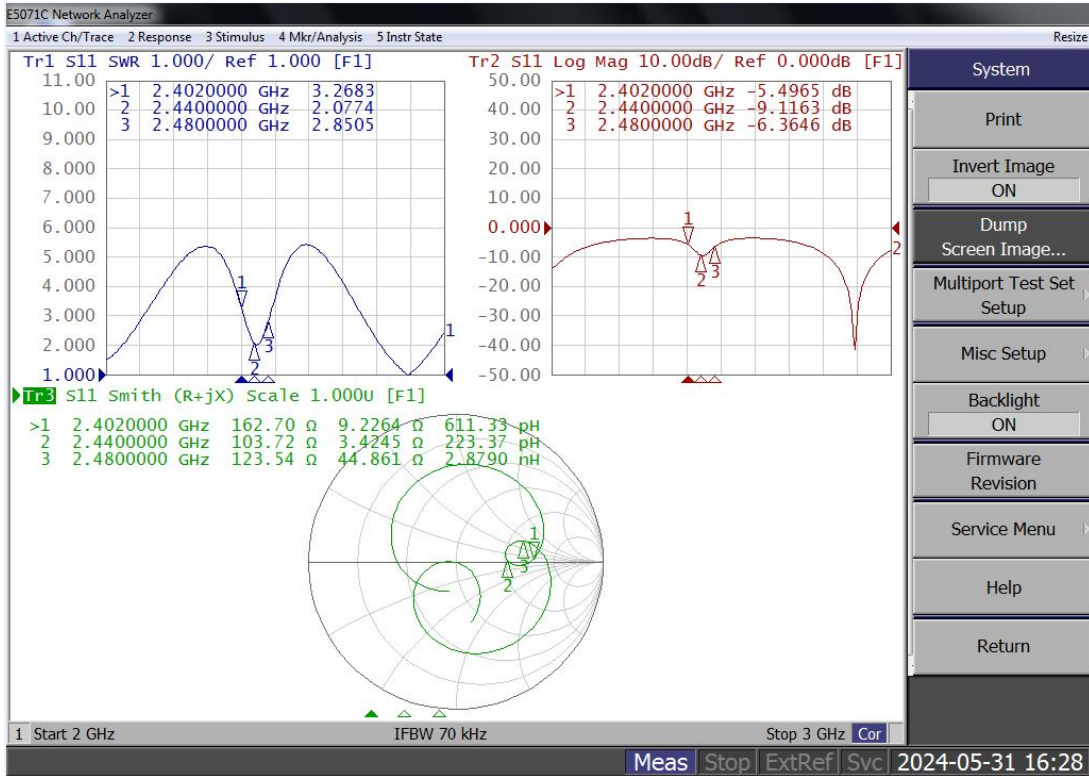


3# (MG2-1)			
频率(MHz)	效率(%)	增益(dBi)	PeakGain (dBi)
2400	9.76	-2.75	-1.60
2402	10.07	-2.58	
2404	10.45	-2.37	
2406	10.72	-2.28	
2408	10.96	-2.23	
2410	11.23	-2.16	
2412	11.37	-2.12	
2414	11.53	-2.09	
2416	11.83	-1.95	
2418	12.15	-1.82	
2420	12.35	-1.76	
2422	12.40	-1.81	
2424	12.58	-1.81	
2426	12.67	-1.80	
2428	12.76	-1.83	
2430	13.05	-1.70	
2432	13.27	-1.60	
2434	13.20	-1.70	
2436	13.28	-1.76	
2438	13.46	-1.71	
2440	13.48	-1.70	
2442	13.44	-1.71	
2444	13.55	-1.69	
2446	13.52	-1.75	
2448	13.38	-1.83	
2450	13.39	-1.86	
2452	13.52	-1.80	
2454	13.42	-1.84	
2456	13.15	-1.95	
2458	12.94	-2.04	
2460	12.78	-2.13	
2462	12.42	-2.28	
2464	12.20	-2.37	
2466	12.18	-2.36	
2468	11.92	-2.42	
2470	11.41	-2.66	
2472	11.15	-2.75	
2474	10.93	-2.79	
2476	10.54	-2.99	
2478	10.22	-3.16	
2480	10.08	-3.18	

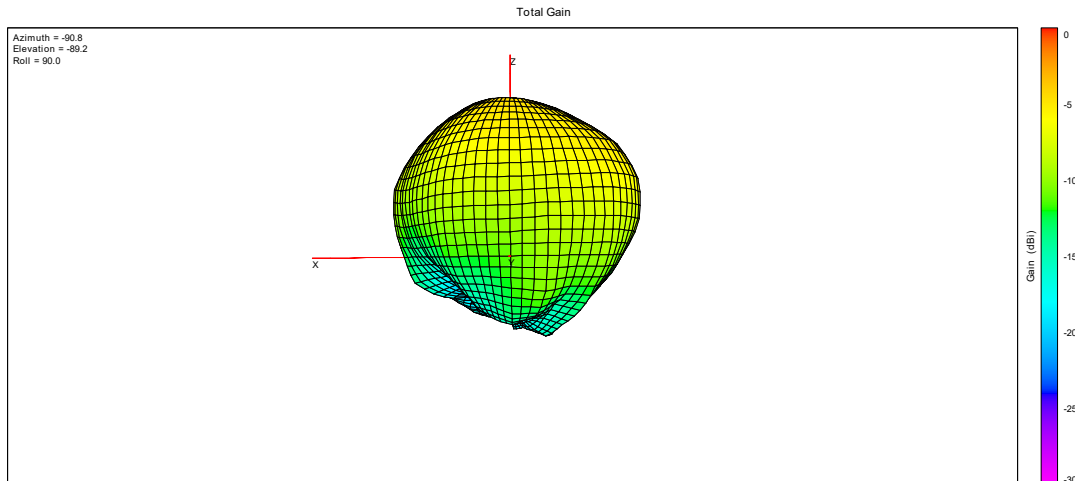
Gain data ( Ant1)

### 3.4 ANT2

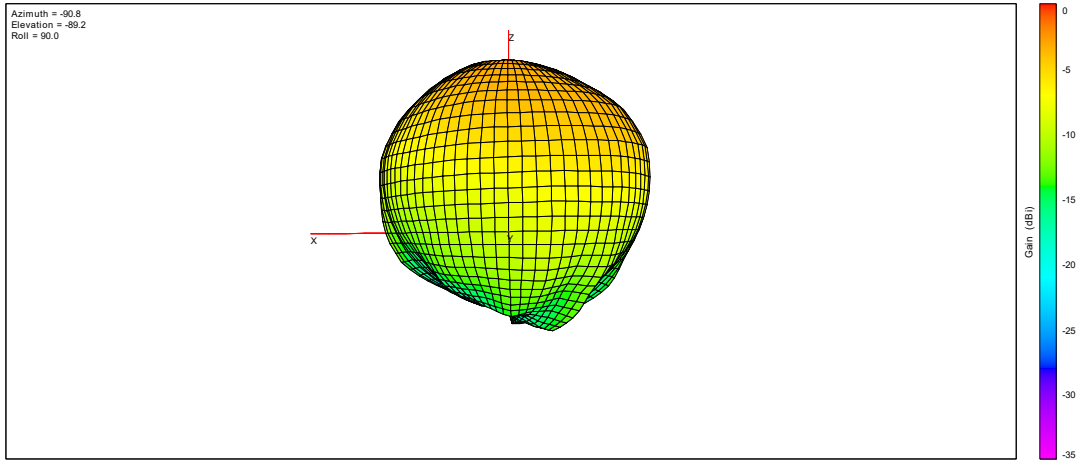
#### 3.4.1 S11



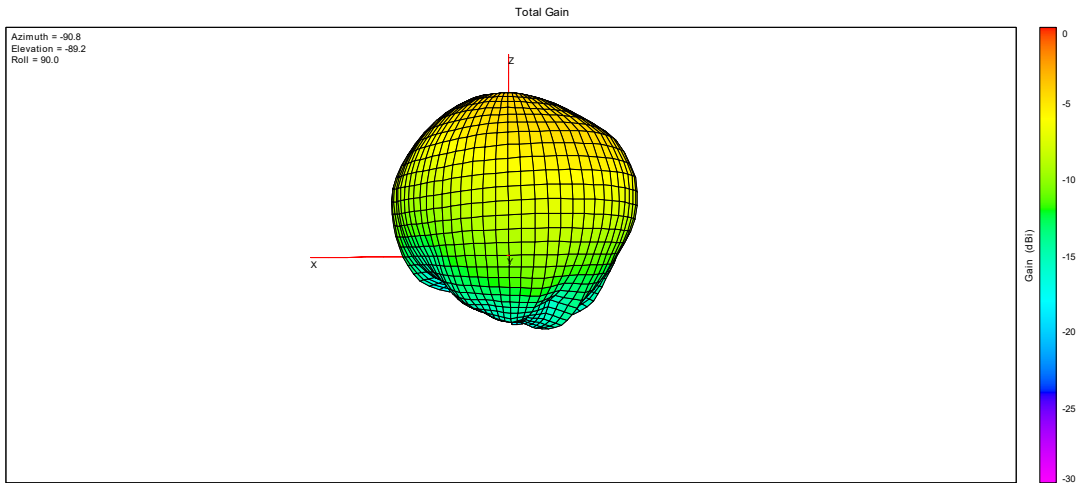
#### 3.4.2 Gain



2402MHz



2440MHz



2480MHz



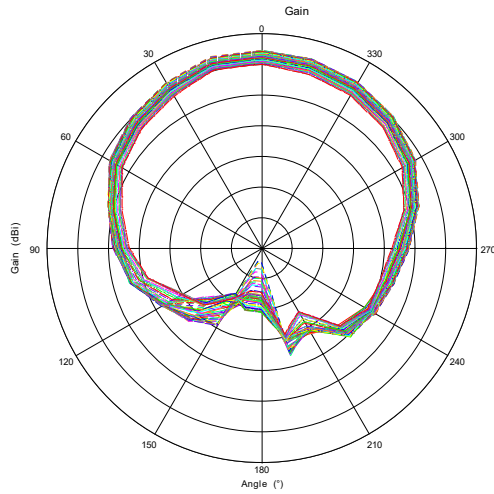
# 深圳云里物里科技股份有限公司

## 产品天线测试报告 (The Antenna Test Report)

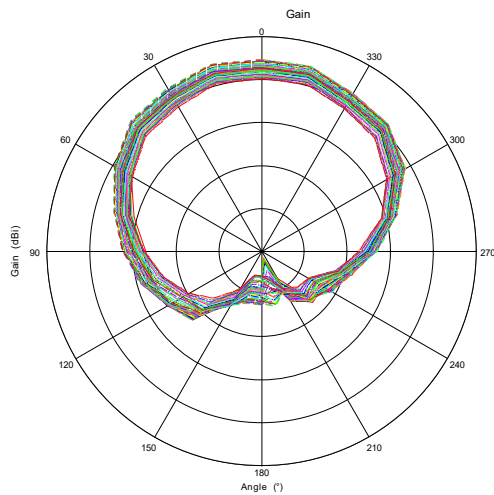
Y-YB-CR-115

V001

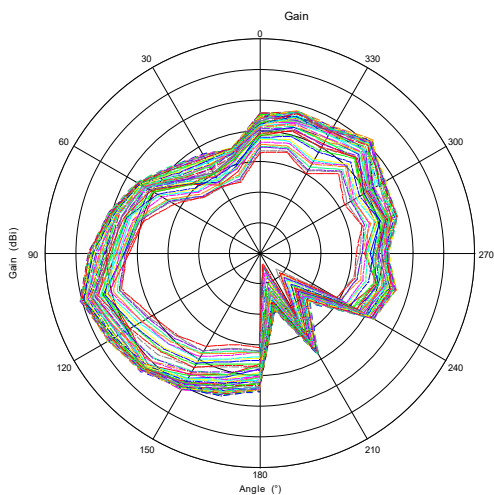
密级: 绝密 /confidentiality



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	2482 MHz
2410 MHz	2484 MHz
2412 MHz	2486 MHz
2414 MHz	2488 MHz
2416 MHz	2490 MHz
2418 MHz	2492 MHz
2420 MHz	2494 MHz
2422 MHz	2496 MHz
2424 MHz	2498 MHz
2426 MHz	2500 MHz
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	2482 MHz
2410 MHz	2484 MHz
2412 MHz	2486 MHz
2414 MHz	2488 MHz
2416 MHz	2490 MHz
2418 MHz	2492 MHz
2420 MHz	2494 MHz
2422 MHz	2496 MHz
2424 MHz	2498 MHz
2426 MHz	2500 MHz
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	



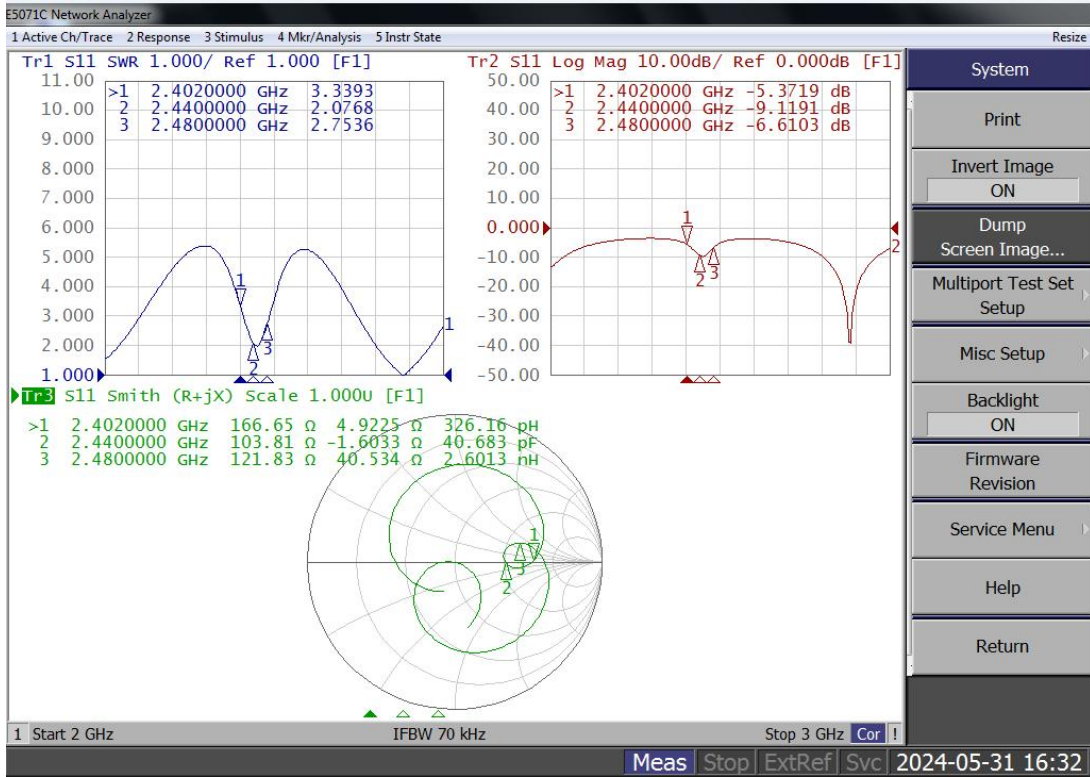
2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	2482 MHz
2410 MHz	2484 MHz
2412 MHz	2486 MHz
2414 MHz	2488 MHz
2416 MHz	2490 MHz
2418 MHz	2492 MHz
2420 MHz	2494 MHz
2422 MHz	2496 MHz
2424 MHz	2498 MHz
2426 MHz	2500 MHz
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

5# (MG2-2)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	10.10	-4.43	-2.44
2402	10.46	-4.24	
2404	10.85	-4.06	
2406	11.14	-3.91	
2408	11.43	-3.85	
2410	11.75	-3.67	
2412	11.92	-3.60	
2414	12.10	-3.55	
2416	12.41	-3.41	
2418	12.77	-3.22	
2420	12.99	-3.19	
2422	13.12	-3.16	
2424	13.35	-3.06	
2426	13.49	-2.95	
2428	13.58	-2.92	
2430	13.94	-2.81	
2432	14.16	-2.74	
2434	14.18	-2.76	
2436	14.32	-2.72	
2438	14.57	-2.61	
2440	14.63	-2.58	
2442	14.61	-2.52	
2444	14.78	-2.49	
2446	14.78	-2.53	
2448	14.71	-2.57	
2450	14.77	-2.51	
2452	14.96	-2.44	
2454	14.88	-2.45	
2456	14.65	-2.53	
2458	14.48	-2.61	
2460	14.32	-2.62	
2462	13.96	-2.76	
2464	13.74	-2.86	
2466	13.72	-2.81	
2468	13.44	-2.94	
2470	12.89	-3.14	
2472	12.67	-3.17	
2474	12.45	-3.25	
2476	11.99	-3.44	
2478	11.62	-3.58	
2480	11.45	-3.63	

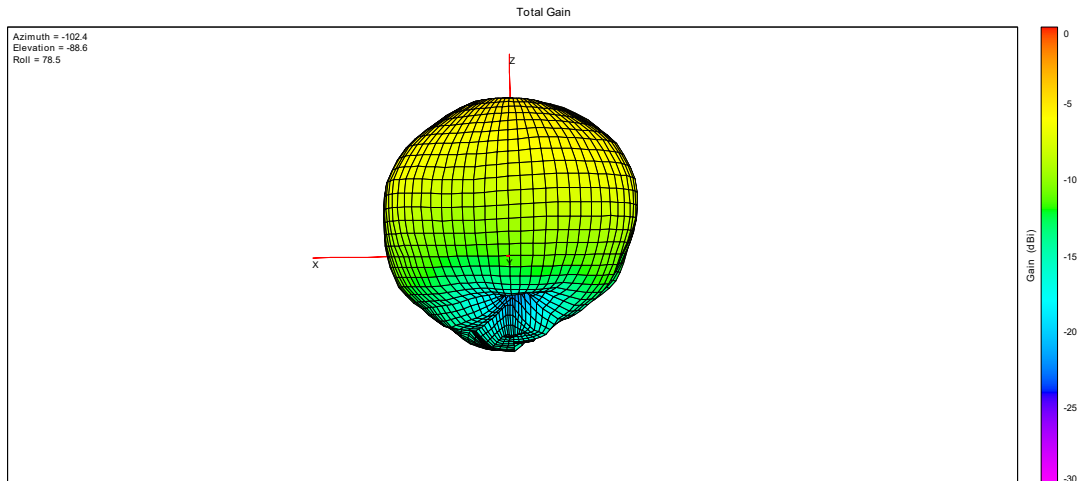
Gain data ( Ant2)

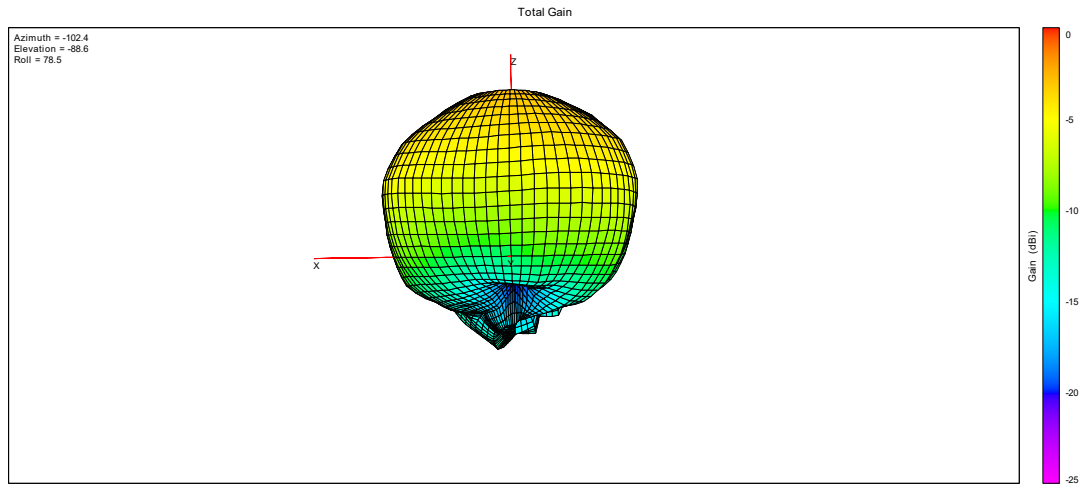
### 3.5 ANT3

#### 3.5.1 S11

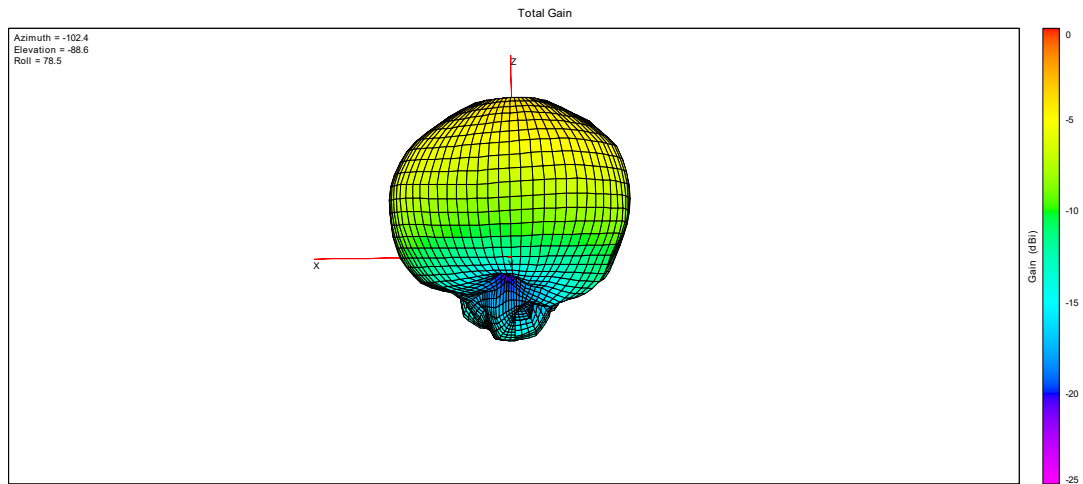


#### 3.5.2 Gain





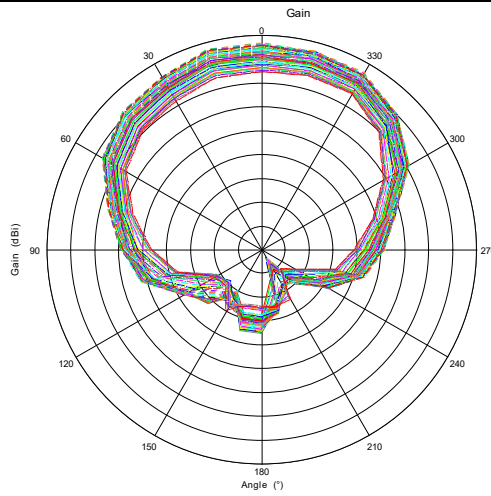
2440MHz



2480MHz

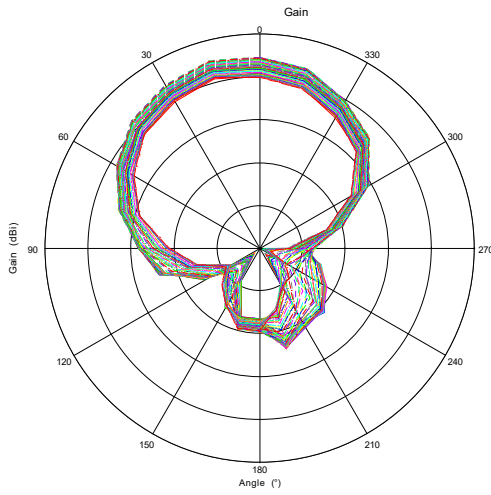


Max: -2  
Min: -20  
Scale: 2/div



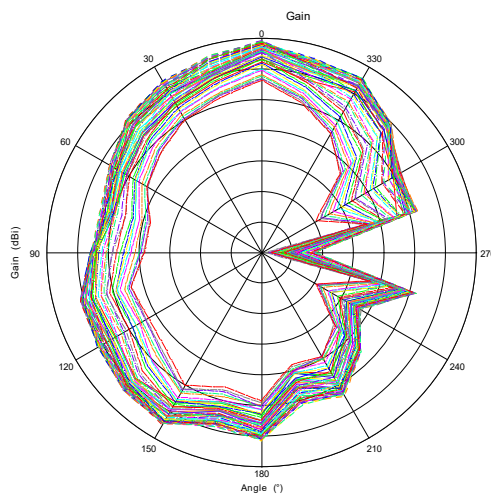
Phi=0°

Max: 0  
Min: -25  
Scale: 5/div



Phi=90°

Max: -8  
Min: -22  
Scale: 2/div



Theta=90°

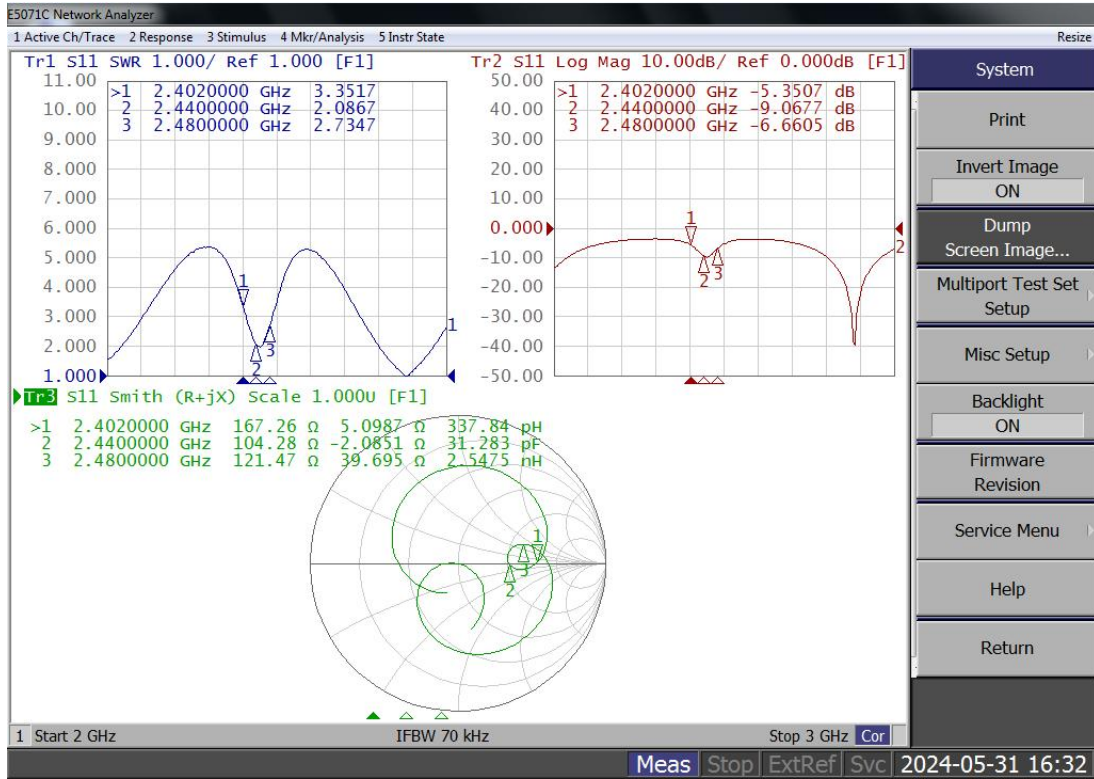


10# (MG2-3)			PeakGain (dBi)
频率 (MHz)	效率 (%)	增益 (dBi)	
2400	10.85	-4.42	-2.44
2402	11.21	-4.22	
2404	11.63	-4.03	
2406	11.94	-3.89	
2408	12.23	-3.76	
2410	12.58	-3.70	
2412	12.73	-3.64	
2414	12.91	-3.53	
2416	13.26	-3.32	
2418	13.61	-3.22	
2420	13.85	-3.15	
2422	13.96	-3.15	
2424	14.19	-3.14	
2426	14.32	-3.06	
2428	14.41	-3.02	
2430	14.76	-2.87	
2432	15.00	-2.80	
2434	15.01	-2.83	
2436	15.14	-2.79	
2438	15.39	-2.66	
2440	15.44	-2.59	
2442	15.42	-2.61	
2444	15.57	-2.57	
2446	15.57	-2.57	
2448	15.46	-2.58	
2450	15.51	-2.54	
2452	15.68	-2.44	
2454	15.59	-2.44	
2456	15.32	-2.52	
2458	15.14	-2.57	
2460	14.96	-2.56	
2462	14.57	-2.71	
2464	14.32	-2.72	
2466	14.30	-2.76	
2468	14.01	-2.83	
2470	13.44	-2.99	
2472	13.19	-3.05	
2474	12.97	-3.10	
2476	12.49	-3.25	
2478	12.12	-3.34	
2480	11.92	-3.45	

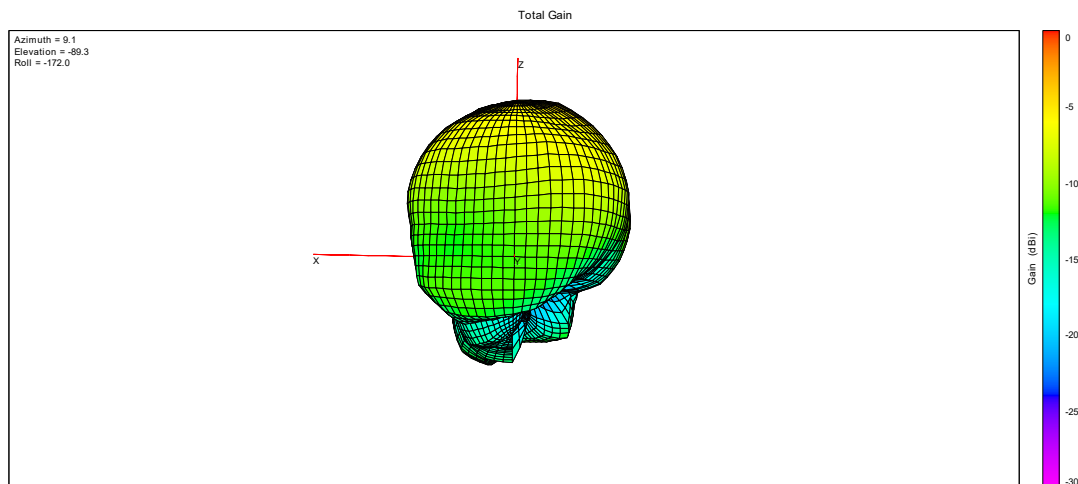
Gain data ( Ant3)

### 3.6 ANT4

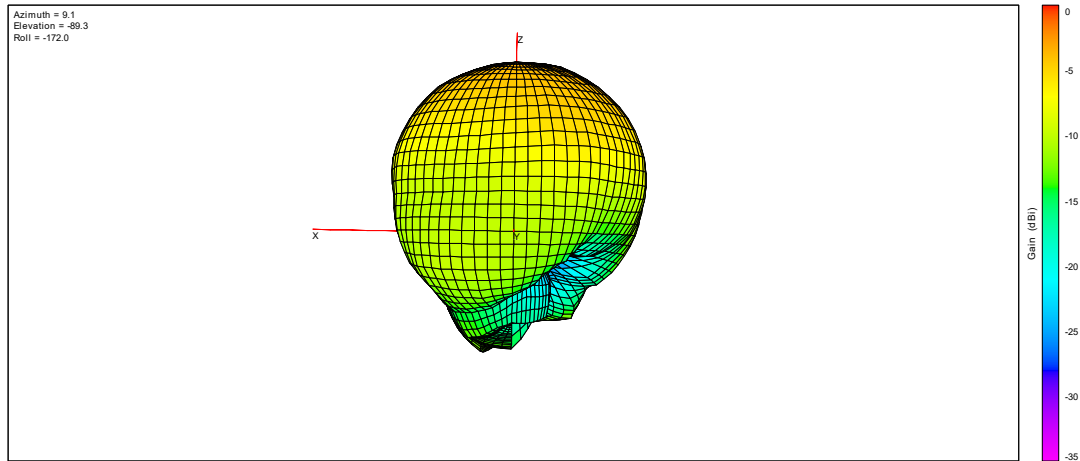
#### 3.6.1 S11



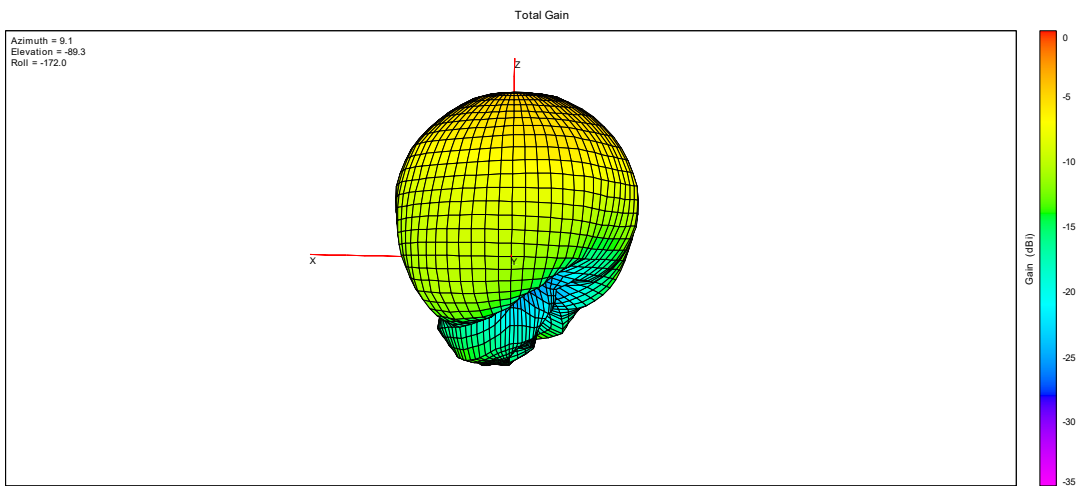
#### 3.6.2 Gain



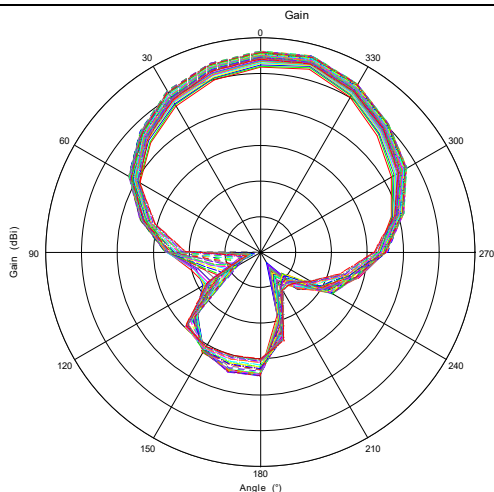
2402MHz



2440MHz



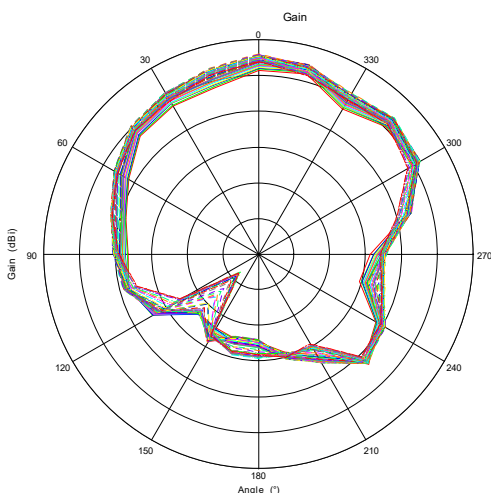
2480MHz



Max: 0  
Min: -30  
Scale: 5/div

Phi=0°

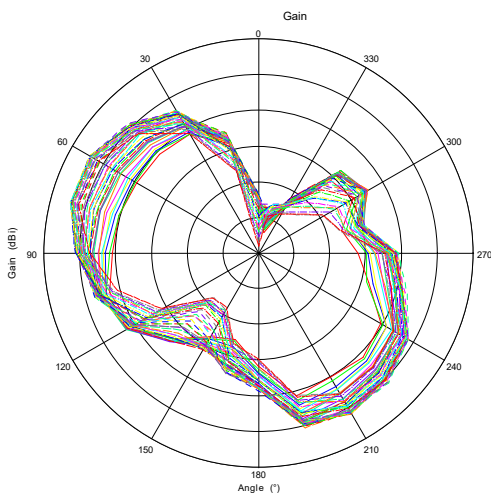
2400 MHz	2472 MHz
2402 MHz	2470 MHz
2404 MHz	2478 MHz
2406 MHz	2476 MHz
2408 MHz	2480 MHz
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	



Max: 0  
Min: -30  
Scale: 5/div

Phi=90°

2400 MHz	2472 MHz
2402 MHz	2470 MHz
2404 MHz	2478 MHz
2406 MHz	2476 MHz
2408 MHz	2480 MHz
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	



Max: -8  
Min: -20  
Scale: 2/div

Theta=90°

2400 MHz	2472 MHz
2402 MHz	2470 MHz
2404 MHz	2478 MHz
2406 MHz	2476 MHz
2408 MHz	2480 MHz
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

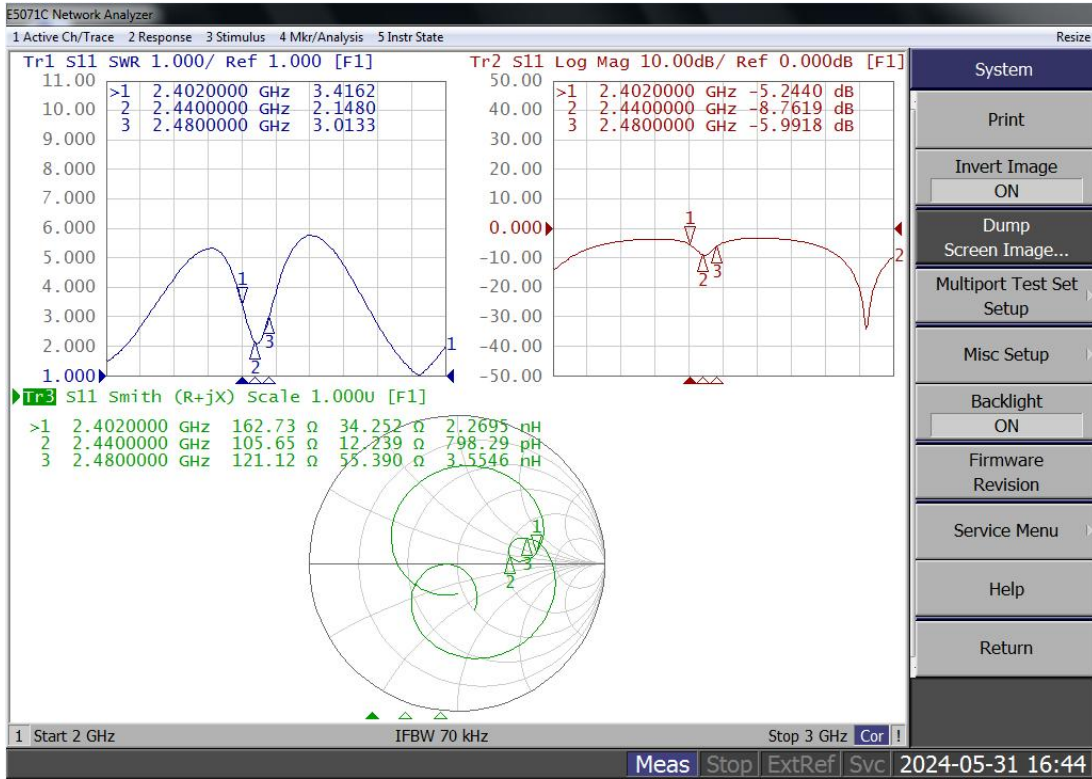


12# (MG2-4)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	9.95	-3.36	-1.71
2402	10.28	-3.17	
2404	10.66	-2.99	
2406	10.95	-2.91	
2408	11.20	-2.77	
2410	11.48	-2.70	
2412	11.64	-2.67	
2414	11.82	-2.59	
2416	12.13	-2.47	
2418	12.47	-2.29	
2420	12.66	-2.27	
2422	12.75	-2.22	
2424	12.95	-2.18	
2426	13.09	-2.17	
2428	13.19	-2.09	
2430	13.54	-2.00	
2432	13.76	-1.89	
2434	13.78	-1.94	
2436	13.88	-1.90	
2438	14.12	-1.82	
2440	14.19	-1.80	
2442	14.18	-1.79	
2444	14.33	-1.75	
2446	14.36	-1.78	
2448	14.26	-1.83	
2450	14.30	-1.80	
2452	14.47	-1.71	
2454	14.41	-1.72	
2456	14.15	-1.78	
2458	13.95	-1.85	
2460	13.80	-1.91	
2462	13.47	-2.04	
2464	13.26	-2.10	
2466	13.24	-2.12	
2468	12.99	-2.16	
2470	12.46	-2.36	
2472	12.21	-2.45	
2474	12.01	-2.52	
2476	11.60	-2.66	
2478	11.27	-2.78	
2480	11.14	-2.87	

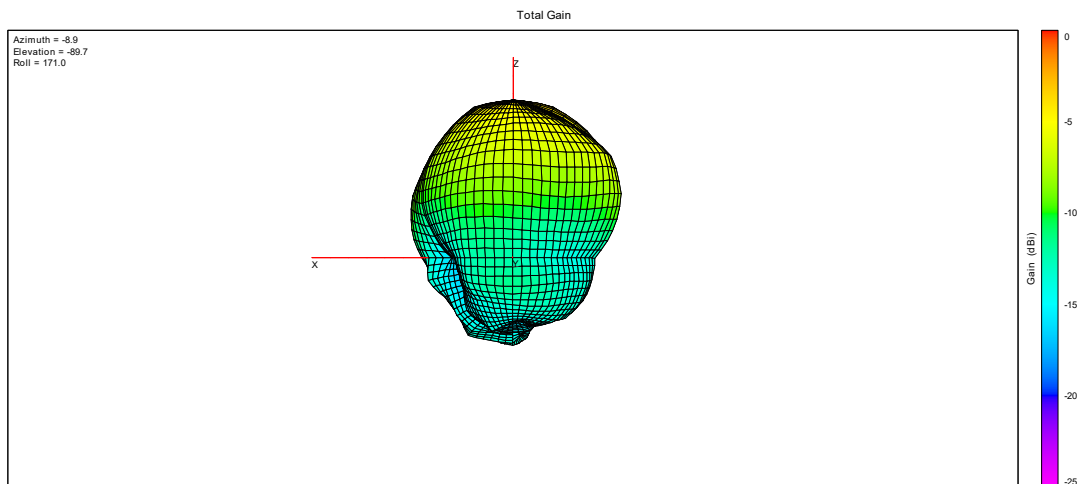
Gain data ( Ant4)

### 3.7 ANT5

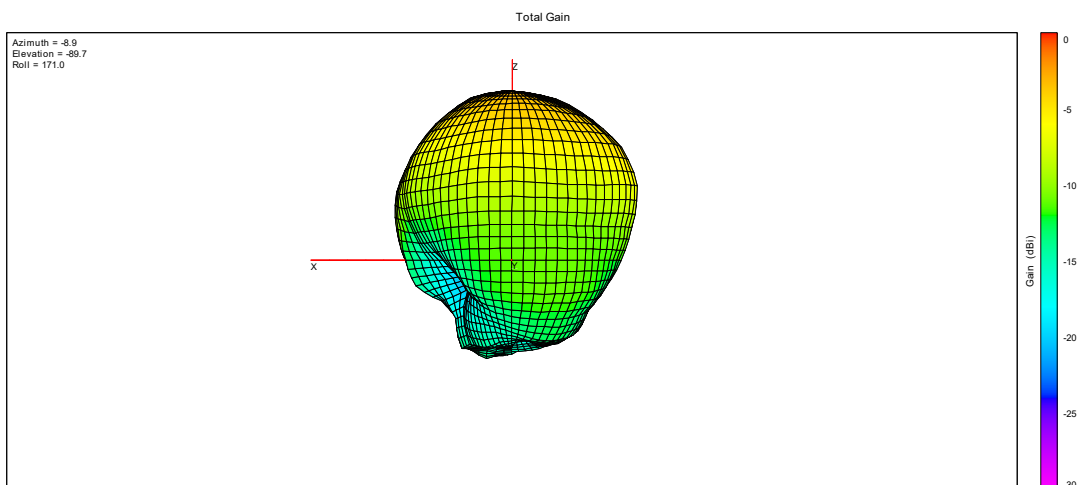
#### 3.7.1 S11



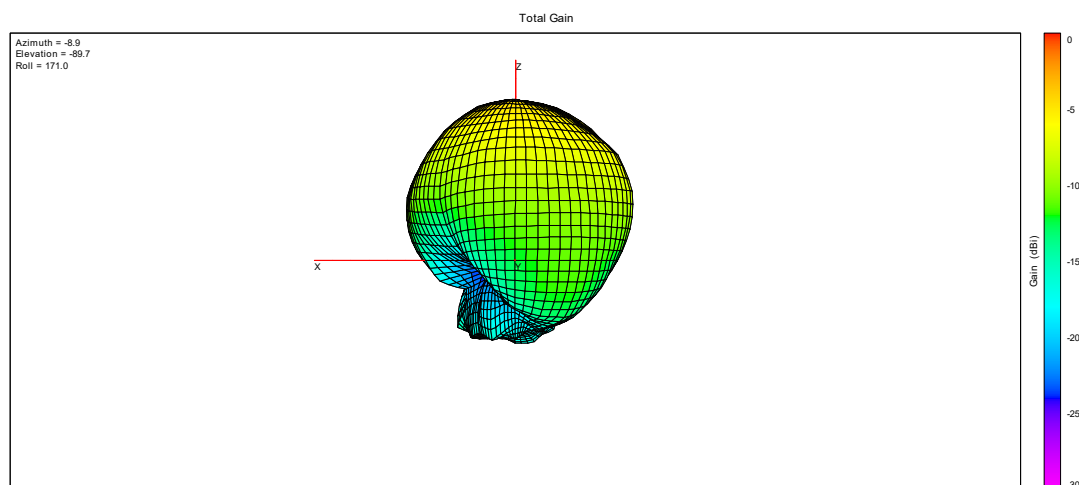
#### 3.7.2 Gain



2402MHz



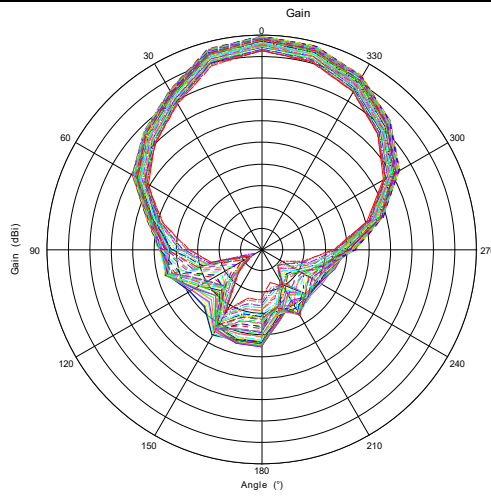
2440MHz



2480MHz



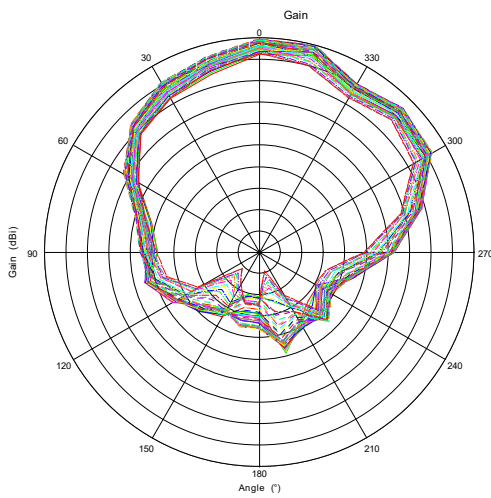
Max: -2  
Min: -22  
Scale: 2/div



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

Phi=0°

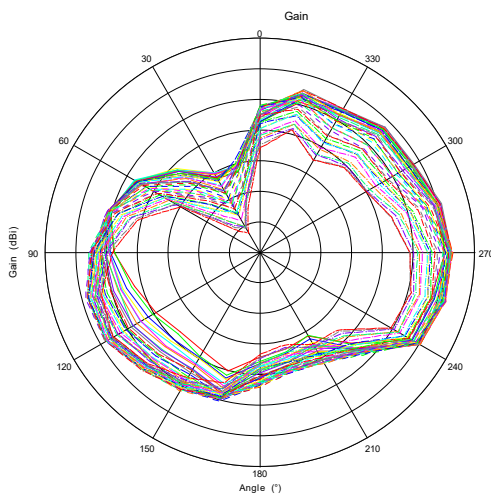
Max: -2  
Min: -22  
Scale: 2/div



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

Phi=90°

Max: -8  
Min: -22  
Scale: 2/div



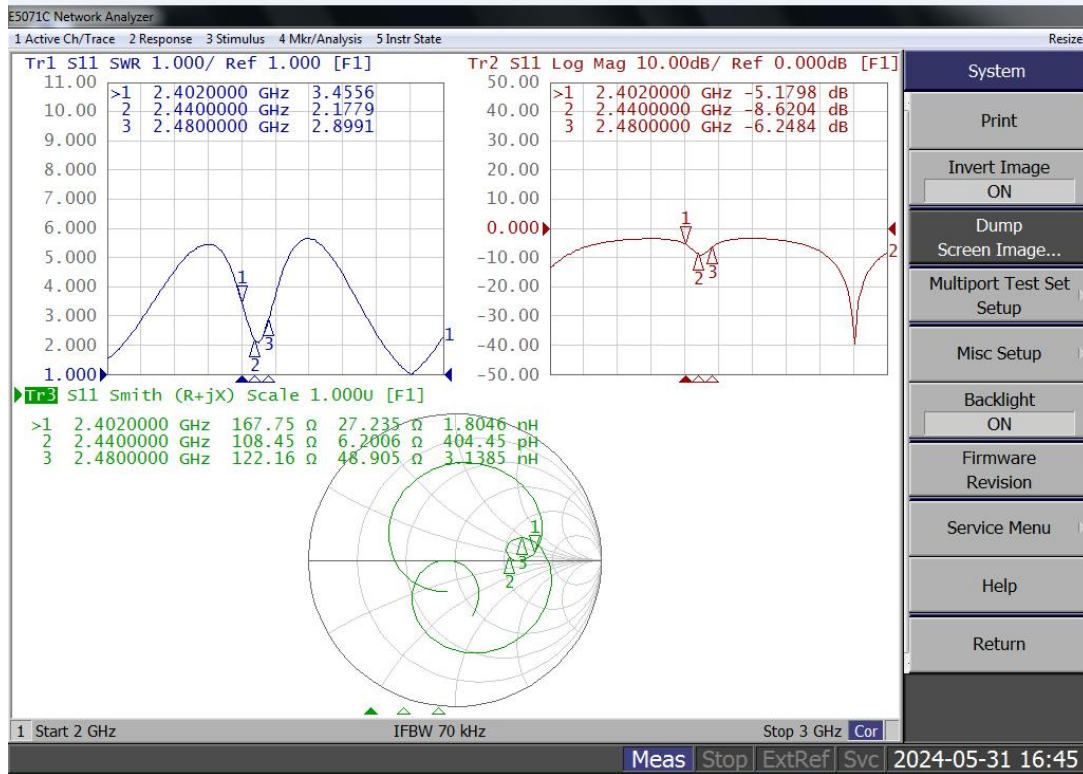
2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

Theta=90°

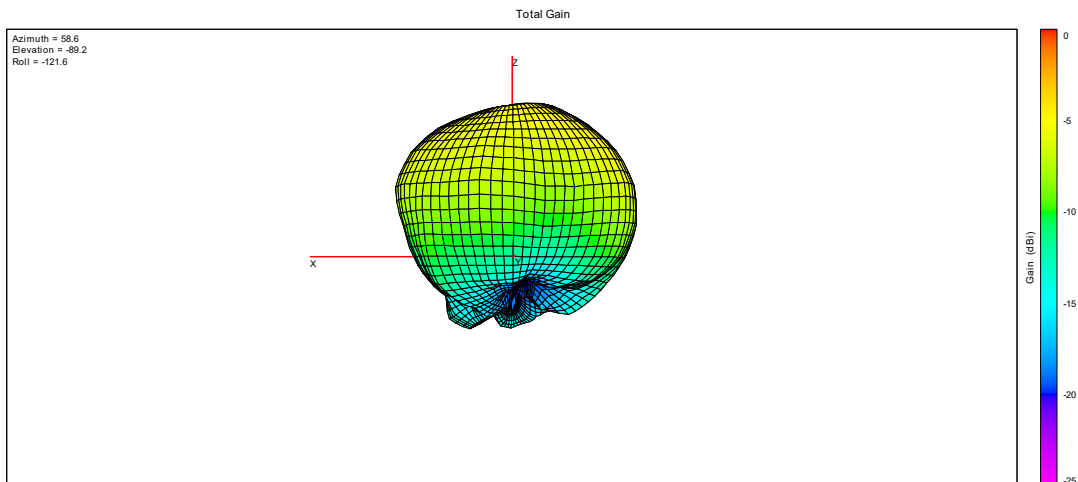
14# (MG2-5)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	10.75	-2.86	-1.72
2402	11.08	-2.71	
2404	11.47	-2.52	
2406	11.74	-2.39	
2408	11.97	-2.34	
2410	12.22	-2.22	
2412	12.36	-2.21	
2414	12.47	-2.19	
2416	12.75	-2.06	
2418	13.05	-1.96	
2420	13.18	-1.88	
2422	13.20	-1.90	
2424	13.33	-1.86	
2426	13.38	-1.87	
2428	13.39	-1.85	
2430	13.67	-1.77	
2432	13.80	-1.72	
2434	13.71	-1.81	
2436	13.74	-1.82	
2438	13.85	-1.80	
2440	13.78	-1.76	
2442	13.67	-1.78	
2444	13.71	-1.78	
2446	13.61	-1.85	
2448	13.42	-1.96	
2450	13.33	-1.94	
2452	13.43	-1.91	
2454	13.26	-1.94	
2456	12.92	-2.01	
2458	12.67	-2.13	
2460	12.48	-2.20	
2462	12.07	-2.36	
2464	11.82	-2.44	
2466	11.75	-2.49	
2468	11.47	-2.56	
2470	10.96	-2.75	
2472	10.70	-2.81	
2474	10.47	-2.95	
2476	10.06	-3.09	
2478	9.76	-3.23	
2480	9.59	-3.30	

Gain data ( Ant5)

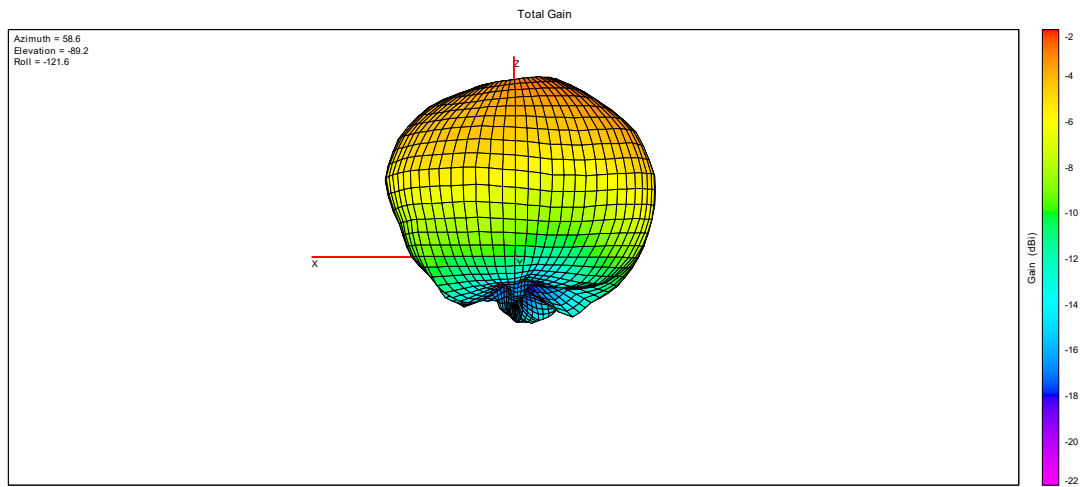
3.8 ANT6  
3.8.1 S11



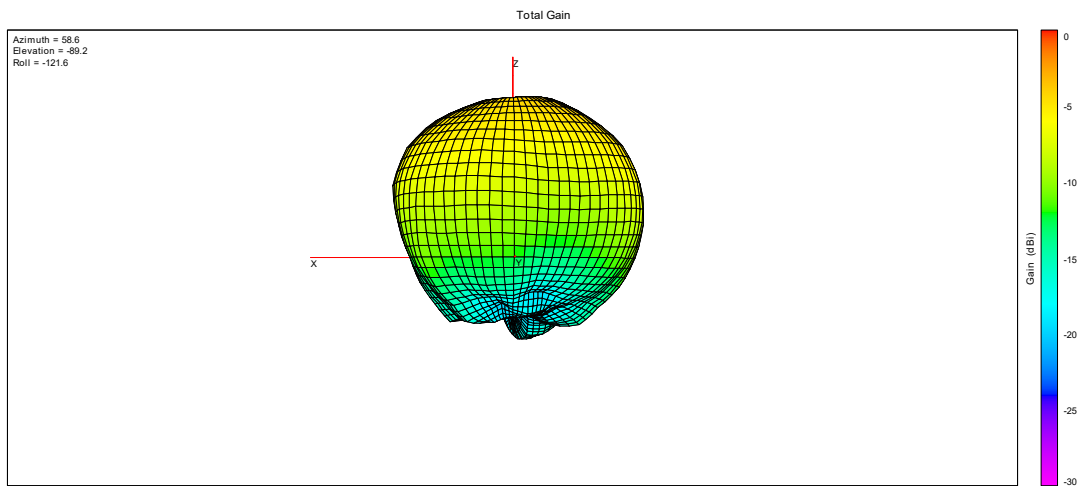
3.8.2 Gain



2402MHz



2440MHz



2480MHz



# 深圳云里物里科技股份有限公司

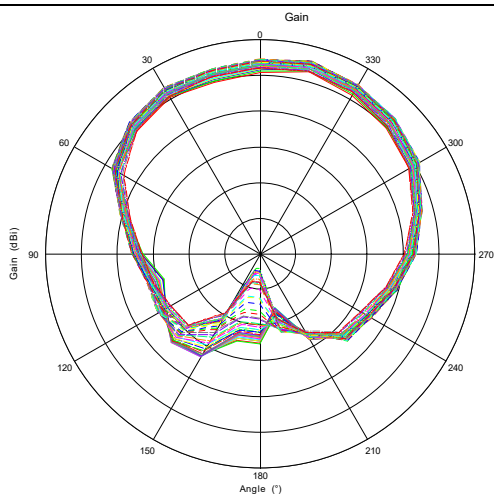
## 产品天线测试报告 (The Antenna Test Report)

Y-YB-CR-115

V001

密级: 绝密 /confidentiality

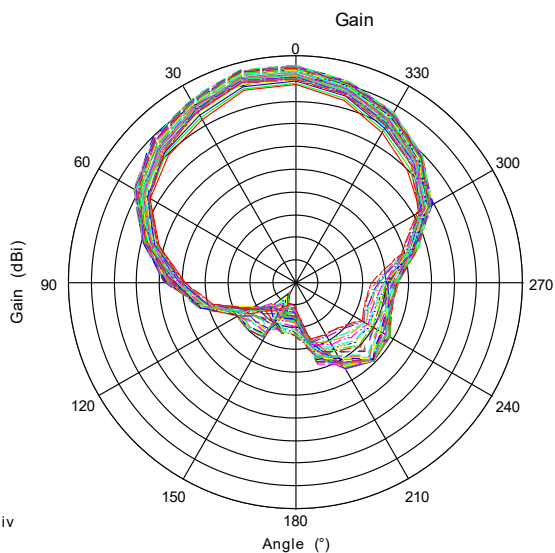
Max: 0  
Min: -30  
Scale: 5/div



Phi=0°

2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

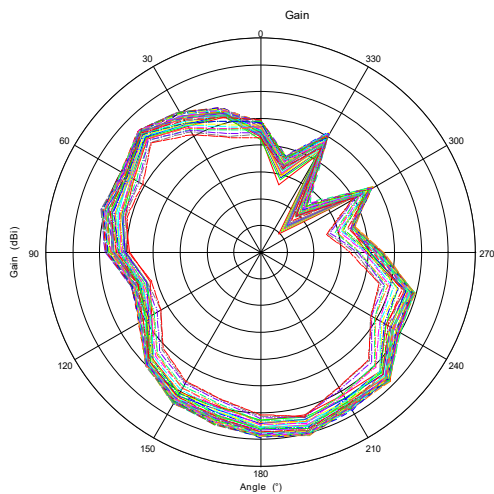
Max: -2  
Min: -22  
Scale: 2/div



Phi=90°

2400 MHz	2448 MHz
2402 MHz	2450 MHz
2404 MHz	2452 MHz
2406 MHz	2454 MHz
2408 MHz	2456 MHz
2410 MHz	2458 MHz
2412 MHz	2460 MHz
2414 MHz	2462 MHz
2416 MHz	2464 MHz
2418 MHz	2466 MHz
2420 MHz	2468 MHz
2422 MHz	2470 MHz
2424 MHz	2472 MHz
2426 MHz	2474 MHz
2428 MHz	2476 MHz
2430 MHz	2478 MHz
2432 MHz	2480 MHz
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	

Max: -6  
Min: -22  
Scale: 2/div



Theta=90°

2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

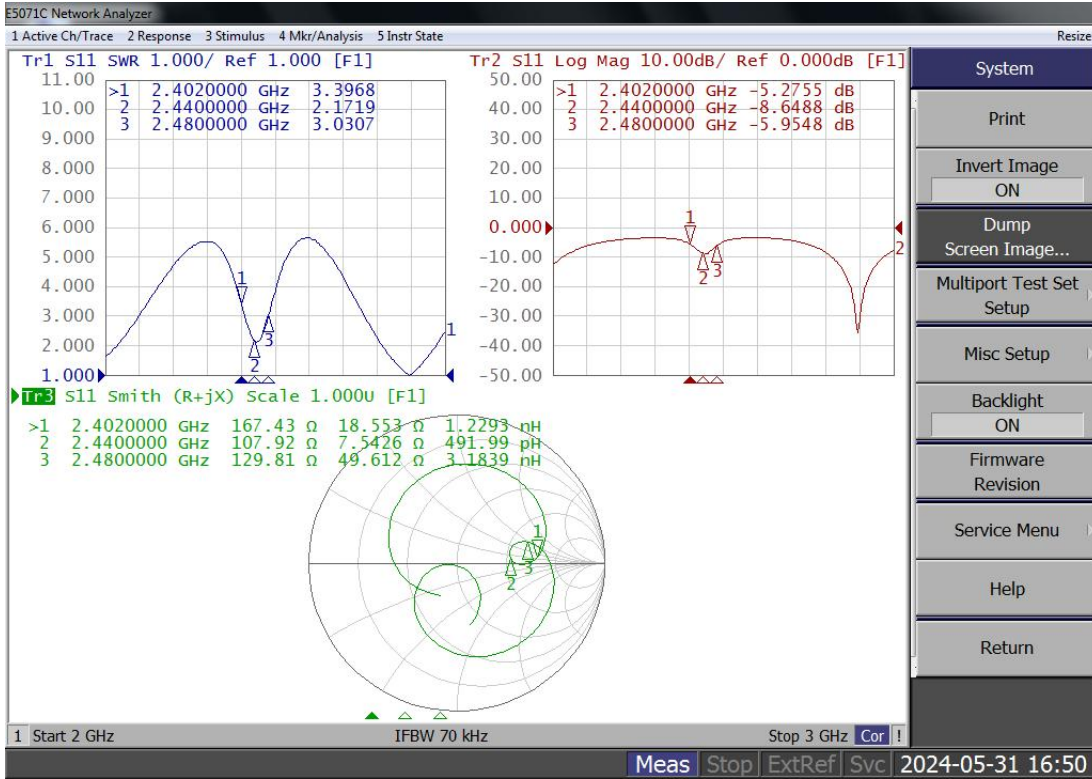


16# (MG2-6)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	11.27	-3.67	-2.16
2402	11.66	-3.47	
2404	12.09	-3.29	
2406	12.41	-3.09	
2408	12.69	-3.06	
2410	13.03	-2.90	
2412	13.19	-2.87	
2414	13.36	-2.80	
2416	13.69	-2.64	
2418	14.04	-2.48	
2420	14.26	-2.46	
2422	14.35	-2.47	
2424	14.57	-2.40	
2426	14.69	-2.37	
2428	14.75	-2.39	
2430	15.05	-2.20	
2432	15.25	-2.16	
2434	15.21	-2.24	
2436	15.29	-2.29	
2438	15.49	-2.25	
2440	15.47	-2.21	
2442	15.40	-2.21	
2444	15.47	-2.18	
2446	15.40	-2.23	
2448	15.22	-2.29	
2450	15.18	-2.26	
2452	15.29	-2.17	
2454	15.15	-2.22	
2456	14.81	-2.29	
2458	14.57	-2.38	
2460	14.32	-2.38	
2462	13.90	-2.57	
2464	13.63	-2.63	
2466	13.56	-2.61	
2468	13.24	-2.74	
2470	12.67	-2.92	
2472	12.40	-3.01	
2474	12.16	-3.07	
2476	11.68	-3.26	
2478	11.31	-3.40	
2480	11.12	-3.47	

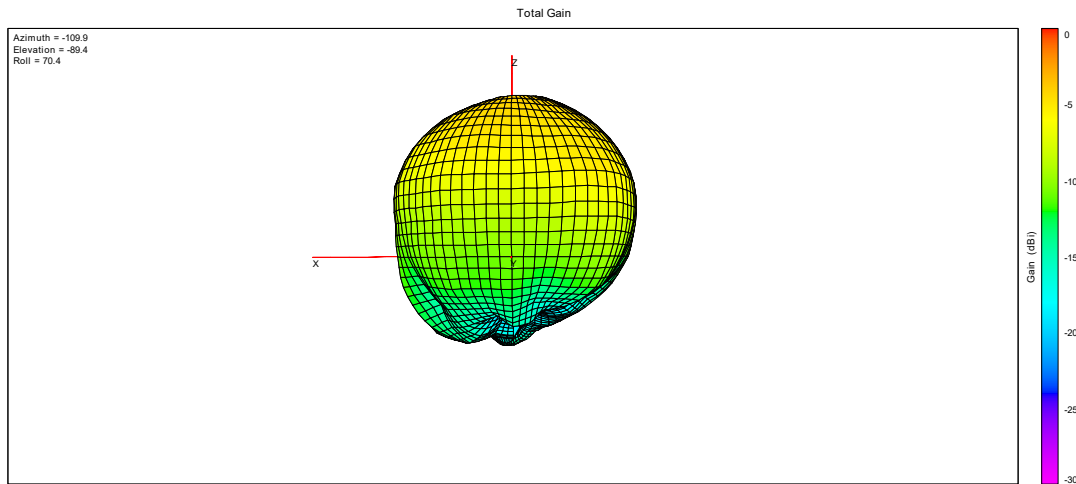
Gain data ( Ant6)

### 3.9 ANT7

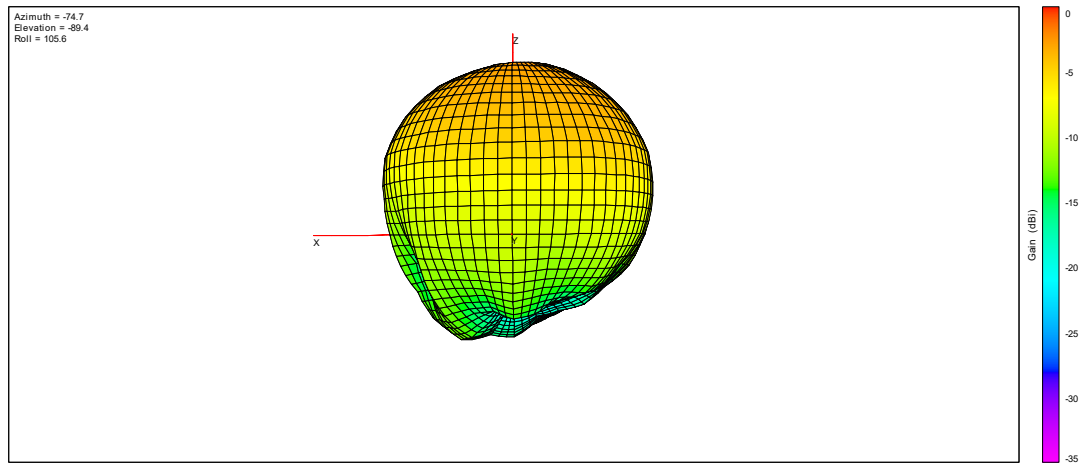
#### 3.9.1 S11



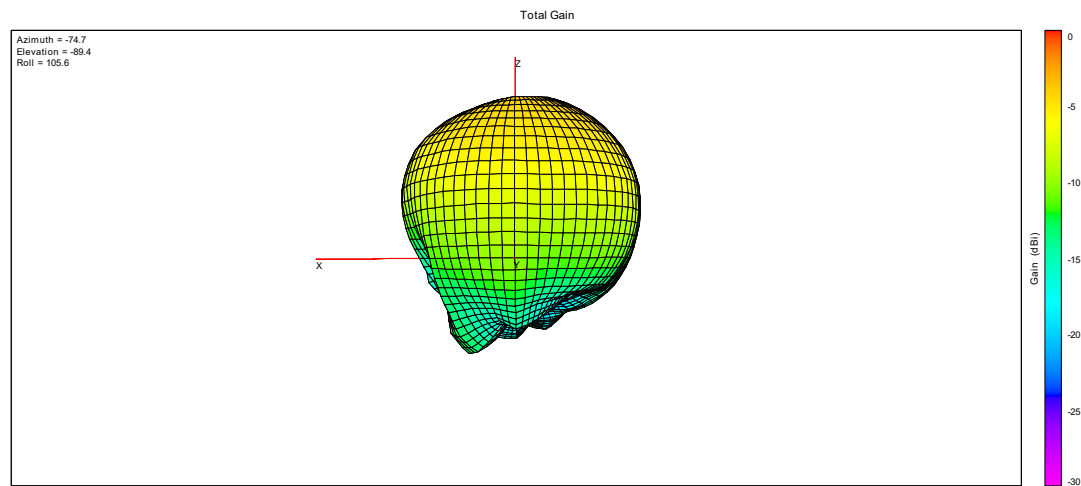
#### 3.9.2 Gain



2402MHz



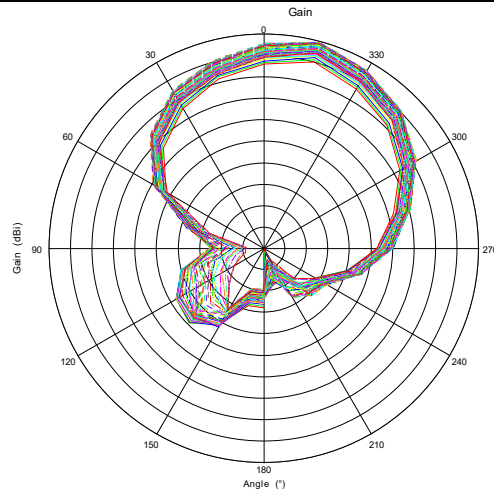
2440MHz



2480MHz



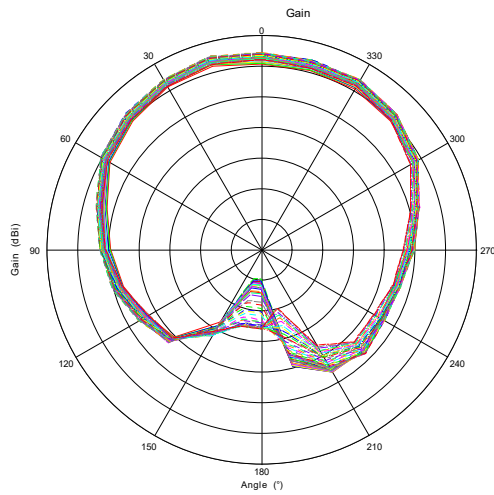
Max: -2  
Min: -22  
Scale: 2/div



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

Phi=0°

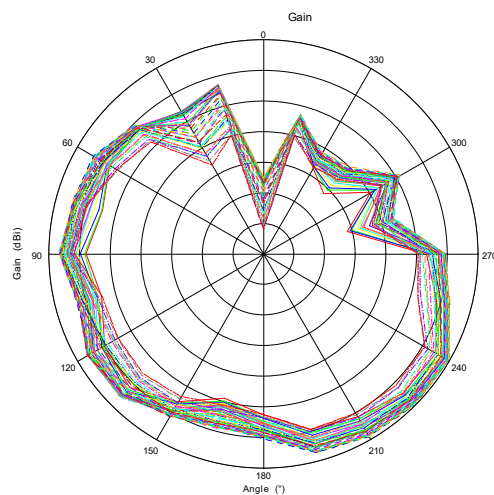
Max: 0  
Min: -35  
Scale: 5/div



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

Phi=90°

Max: -8  
Min: -22  
Scale: 2/div



2400 MHz	2474 MHz
2402 MHz	2476 MHz
2404 MHz	2478 MHz
2406 MHz	2480 MHz
2408 MHz	
2410 MHz	
2412 MHz	
2414 MHz	
2416 MHz	
2418 MHz	
2420 MHz	
2422 MHz	
2424 MHz	
2426 MHz	
2428 MHz	
2430 MHz	
2432 MHz	
2434 MHz	
2436 MHz	
2438 MHz	
2440 MHz	
2442 MHz	
2444 MHz	
2446 MHz	
2448 MHz	
2450 MHz	
2452 MHz	
2454 MHz	
2456 MHz	
2458 MHz	
2460 MHz	
2462 MHz	
2464 MHz	
2466 MHz	
2468 MHz	
2470 MHz	
2472 MHz	

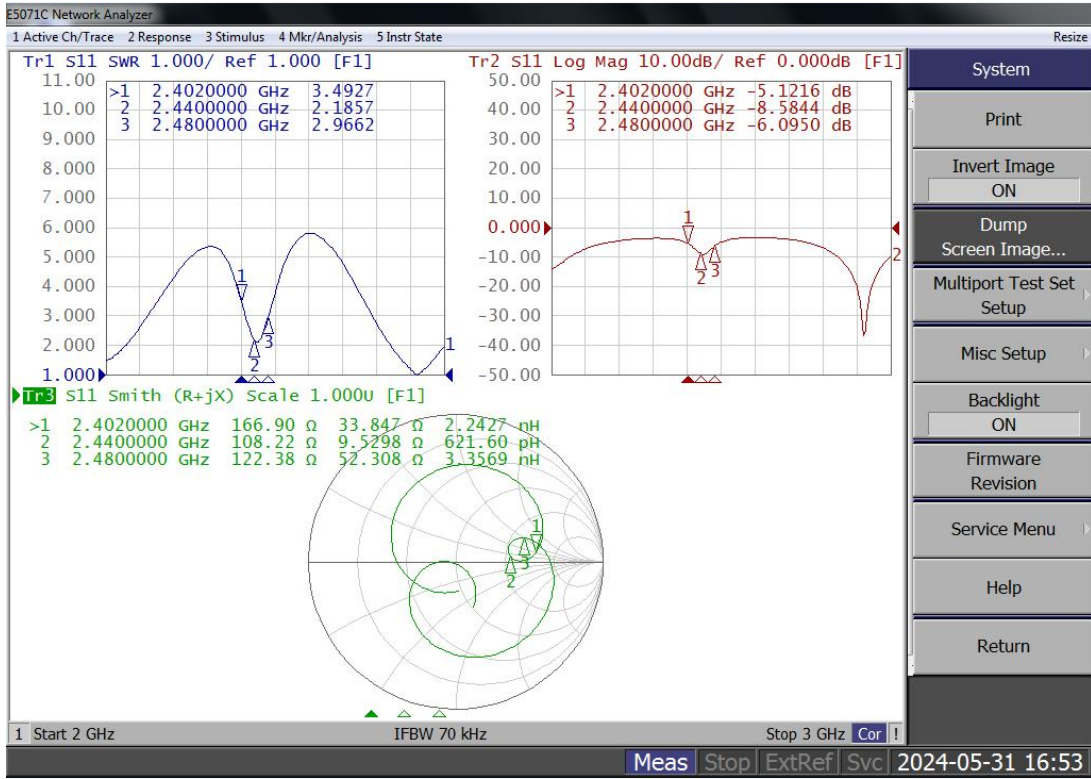
Theta=90°



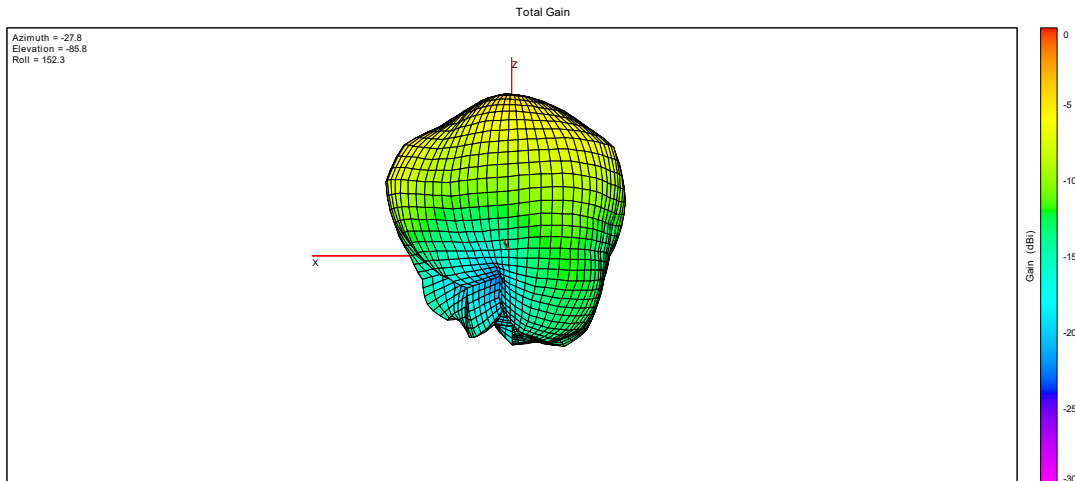
18# (MG2-7)			
频率 (MHz)	效率 (%)	增益 (dBi)	PeakGain (dBi)
2400	11.63	-3.97	-2.15
2402	12.01	-3.78	
2404	12.41	-3.64	
2406	12.74	-3.49	
2408	13.02	-3.39	
2410	13.35	-3.23	
2412	13.50	-3.20	
2414	13.67	-3.12	
2416	13.98	-2.97	
2418	14.36	-2.85	
2420	14.55	-2.79	
2422	14.67	-2.71	
2424	14.88	-2.66	
2426	15.00	-2.62	
2428	15.04	-2.58	
2430	15.40	-2.41	
2432	15.59	-2.38	
2434	15.56	-2.41	
2436	15.66	-2.34	
2438	15.86	-2.25	
2440	15.87	-2.21	
2442	15.80	-2.22	
2444	15.89	-2.18	
2446	15.83	-2.20	
2448	15.67	-2.25	
2450	15.67	-2.25	
2452	15.81	-2.15	
2454	15.66	-2.16	
2456	15.34	-2.22	
2458	15.11	-2.27	
2460	14.87	-2.34	
2462	14.44	-2.43	
2464	14.17	-2.52	
2466	14.11	-2.49	
2468	13.80	-2.56	
2470	13.22	-2.72	
2472	12.95	-2.86	
2474	12.72	-2.94	
2476	12.23	-3.07	
2478	11.86	-3.19	
2480	11.66	-3.24	

Gain data ( Ant7)

3.10 ANT8  
3.10.1 S11



3.10.2 Gain



2402MHz