

## 双频 WIFI 天线

### 测试设备(Test Equipment & Conditions)

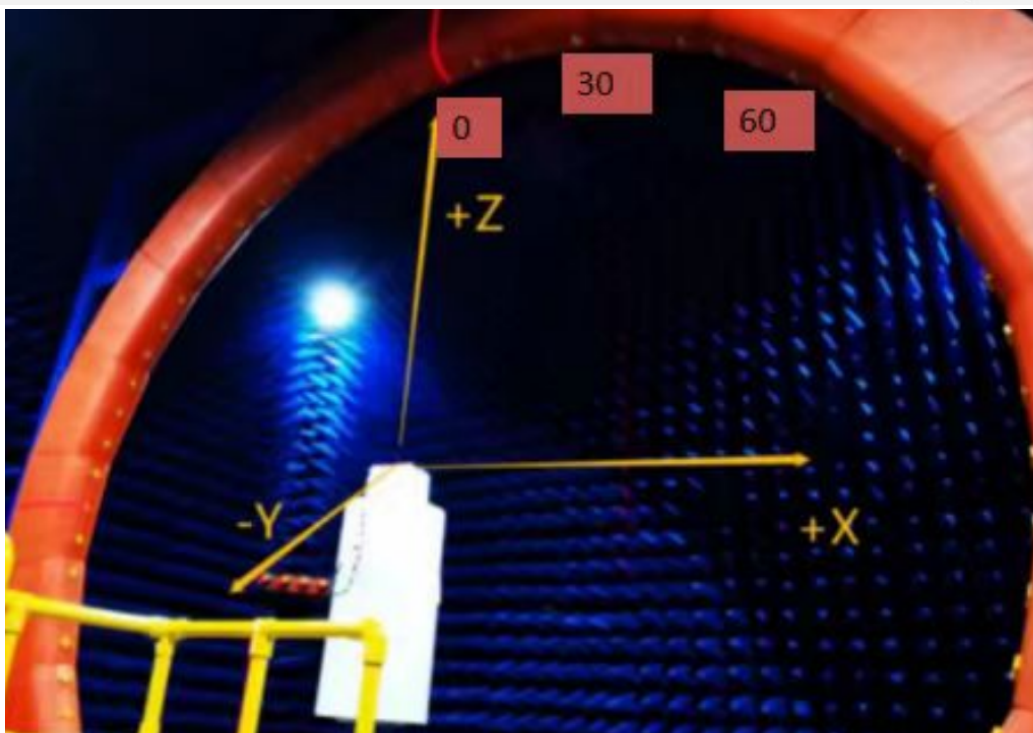
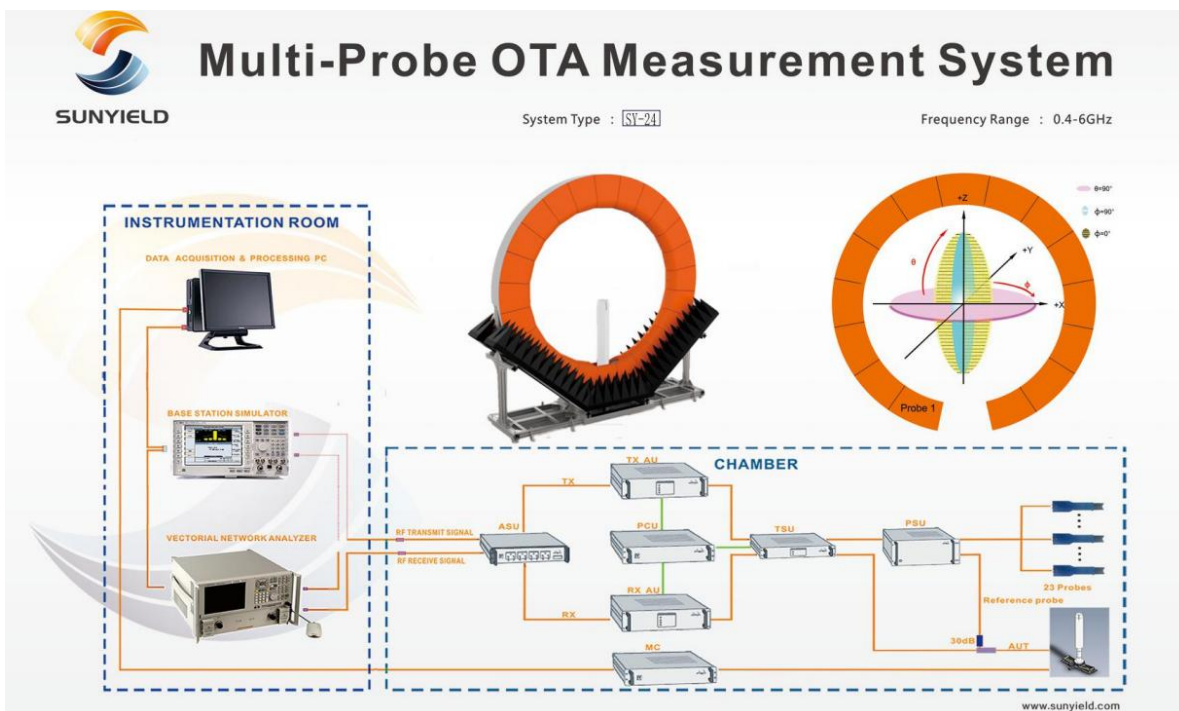
1. 网络分析仪 NetWork Analyzers:

Keysight E5071C

2. 综合测试仪 Comprehensive tester:

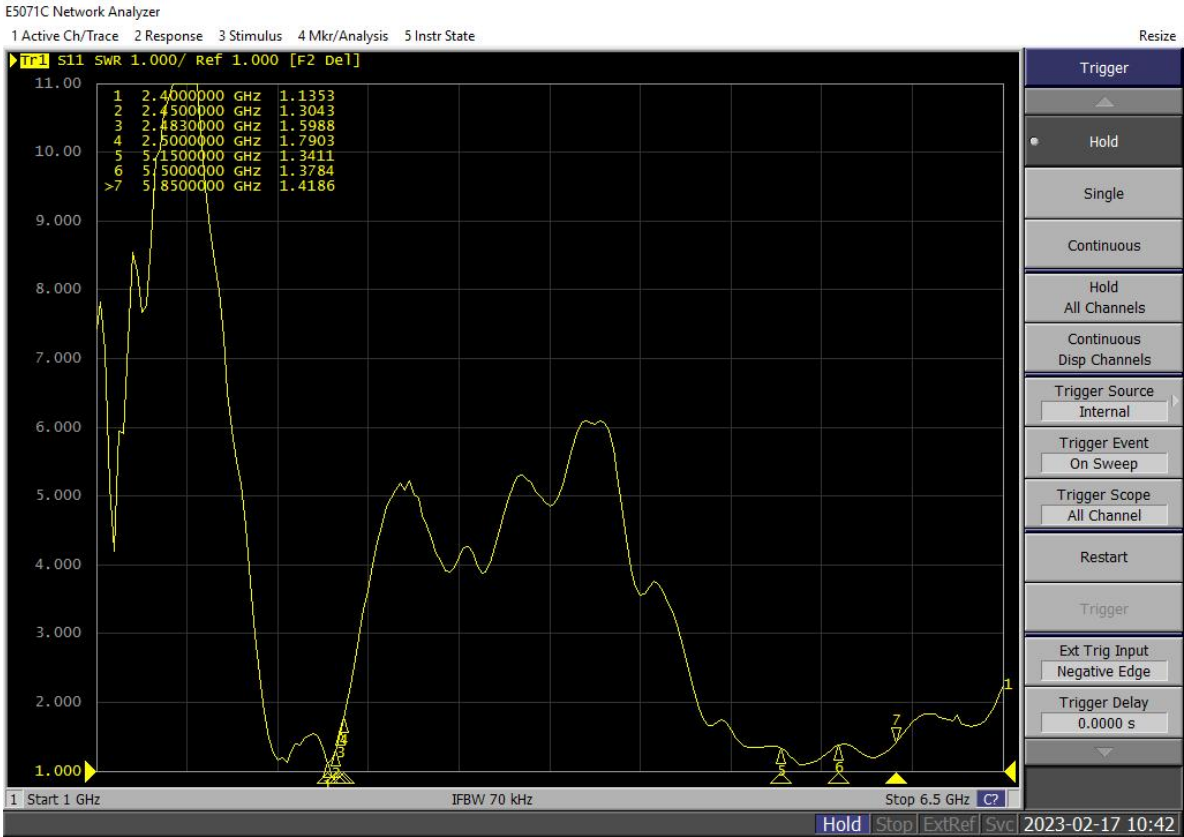
CMW500 、 MT8000A、 MT8862A

3. 3D 暗室测试系统 3D Chamber Test System:

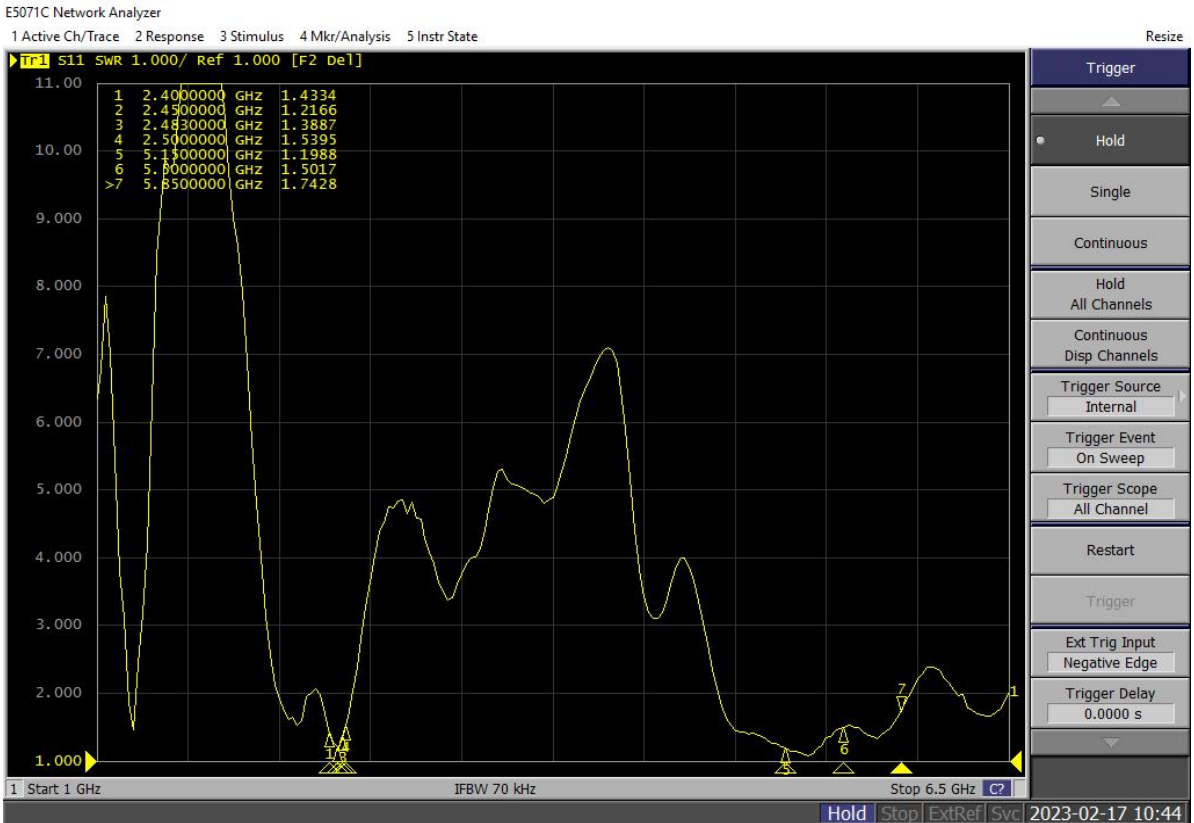


# 天线阻抗Antenna Impedance: S11

## ANT1



## ANT2



## 效率&增益Efficiency & Gain:

双频WiFi-1

Freq (MHz)	Effi (%)	Gain (dBi)
2400	62.88	4.24
2410	62.66	4.3
2420	61.2	4.28
2430	55.03	3.87
2440	56.92	4.08
2450	56.75	4.11
2460	64.25	4.72
2470	56.99	4.24
2480	56.41	4.15
2490	50.7	3.64
2500	63.22	4.52

Freq (MHz)	Effi (%)	Gain (dBi)
5150	65.7	2.93
5200	60.16	2.78
5250	59.26	2.7
5300	58.89	2.91
5350	57.74	2.78
5400	59.49	3.16
5450	58.05	3.45
5500	58.89	3.9
5550	58.83	4.07
5600	58.79	3.92
5650	57.23	3.88
5700	57.61	3.56
5750	58.57	3.34
5800	57.45	3.42
5850	63.03	3.71

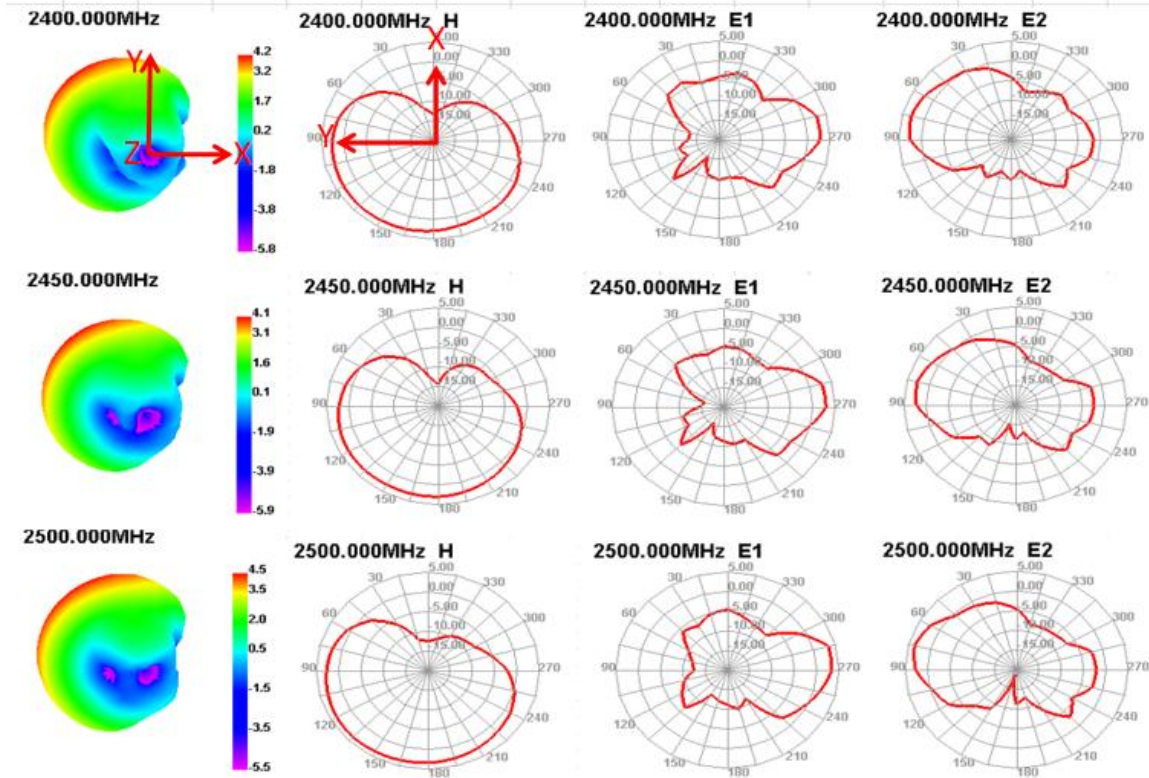
双频WiFi-2

Freq (MHz)	Effi (%)	Gain (dBi)
2400	68.42	4.05
2410	64.5	3.91
2420	60.68	3.77
2430	54.7	3.47
2440	58.71	3.86
2450	59.57	3.96
2460	66.38	4.37
2470	57.22	3.63
2480	57.3	3.56
2490	52.44	3.2
2500	65.66	4.31

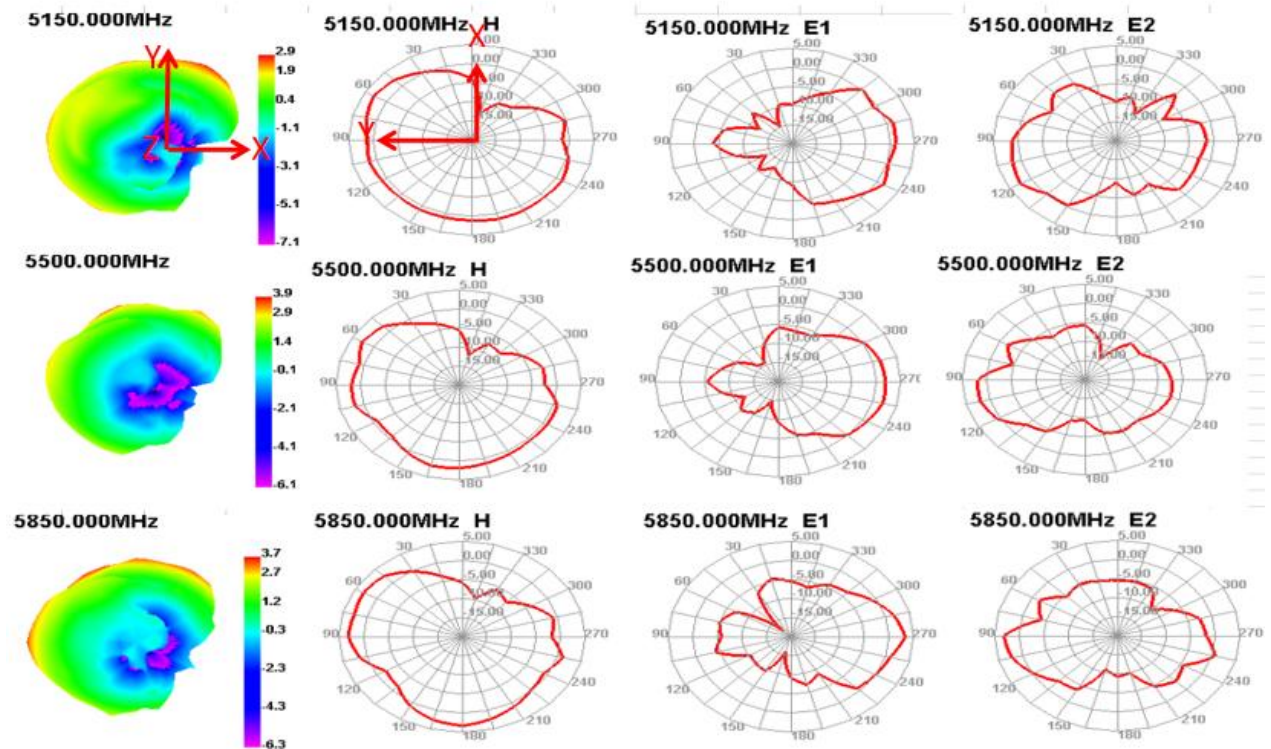
Freq (MHz)	Effi (%)	Gain (dBi)
5150	64.41	3.83
5200	59.31	3.69
5250	58.92	3.75
5300	59.33	3.81
5350	58.58	3.71
5400	60.72	3.77
5450	59.35	3.51
5500	59.51	3.16
5550	59.18	2.9
5600	58.99	3.08
5650	57.81	3.06
5700	58.54	3.13
5750	59.27	2.9
5800	58.13	2.86
5850	62.99	3.24

# 天线3D&2D方向图Antenna 3D & 2D pattern:

## 双频WiFi-1-2G

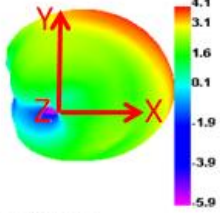


## 双频WiFi-1-5G

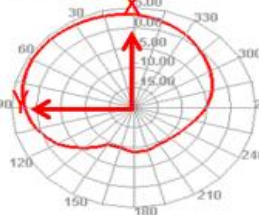


## 双频WiFi-2-2G

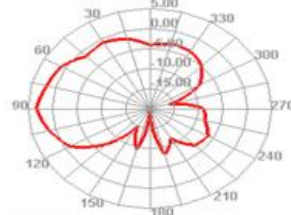
2400.000MHz



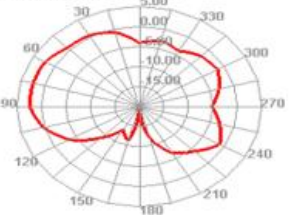
2400.000MHz H



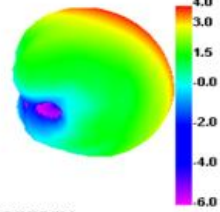
2400.000MHz E1



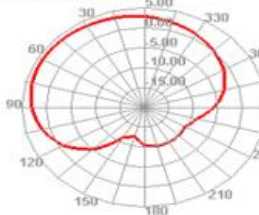
2400.000MHz E2



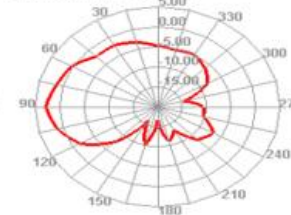
2450.000MHz



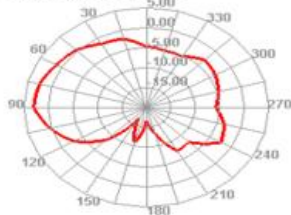
2450.000MHz H



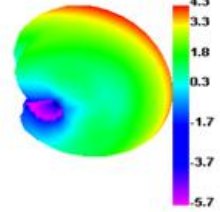
2450.000MHz E1



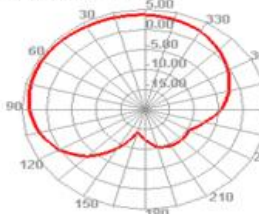
2450.000MHz E2



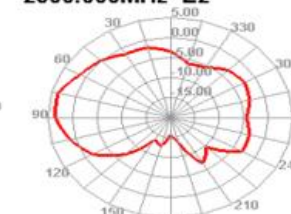
2500.000MHz



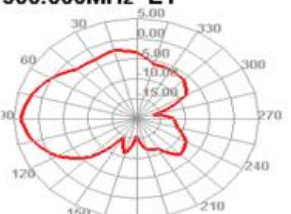
2500.000MHz H



2500.000MHz E2

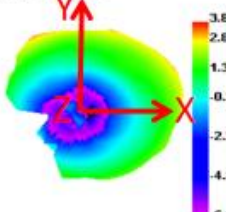


500.000MHz E1

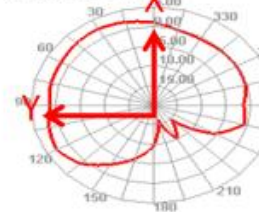


## 双频WiFi-2-5G

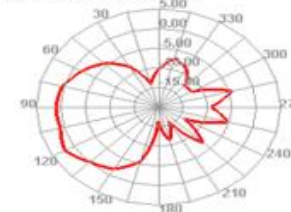
5150.000MHz



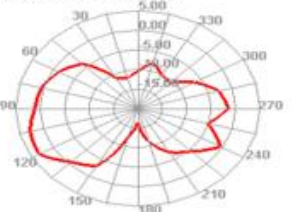
5150.000MHz H



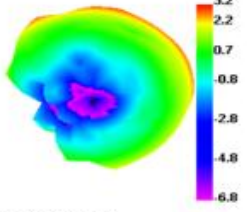
5150.000MHz E1



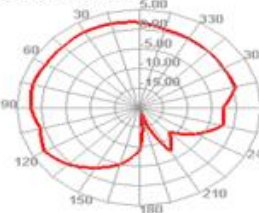
5150.000MHz E2



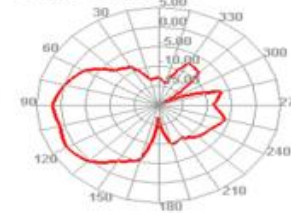
5500.000MHz



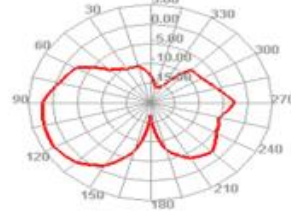
5500.000MHz H



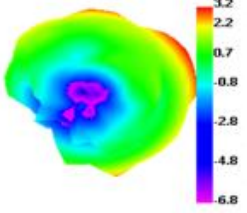
5500.000MHz E1



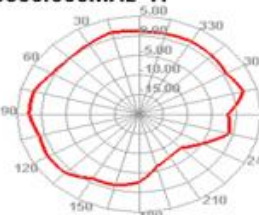
5500.000MHz E2



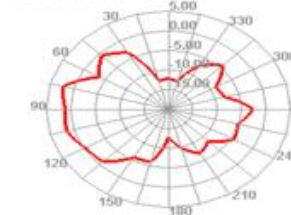
5850.000MHz



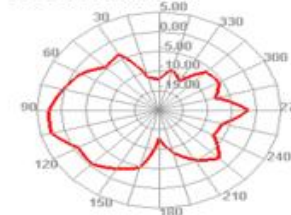
5850.000MHz H



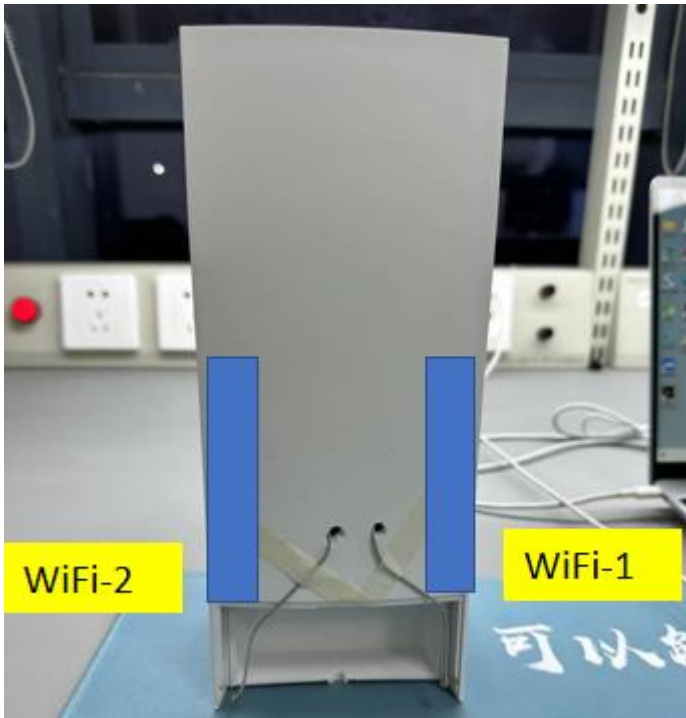
5850.000MHz E1



5850.000MHz E2



天线装配图片 antenna assembly picture:



# 4G外置天线

## 测试设备(Test Equipment & Conditions)

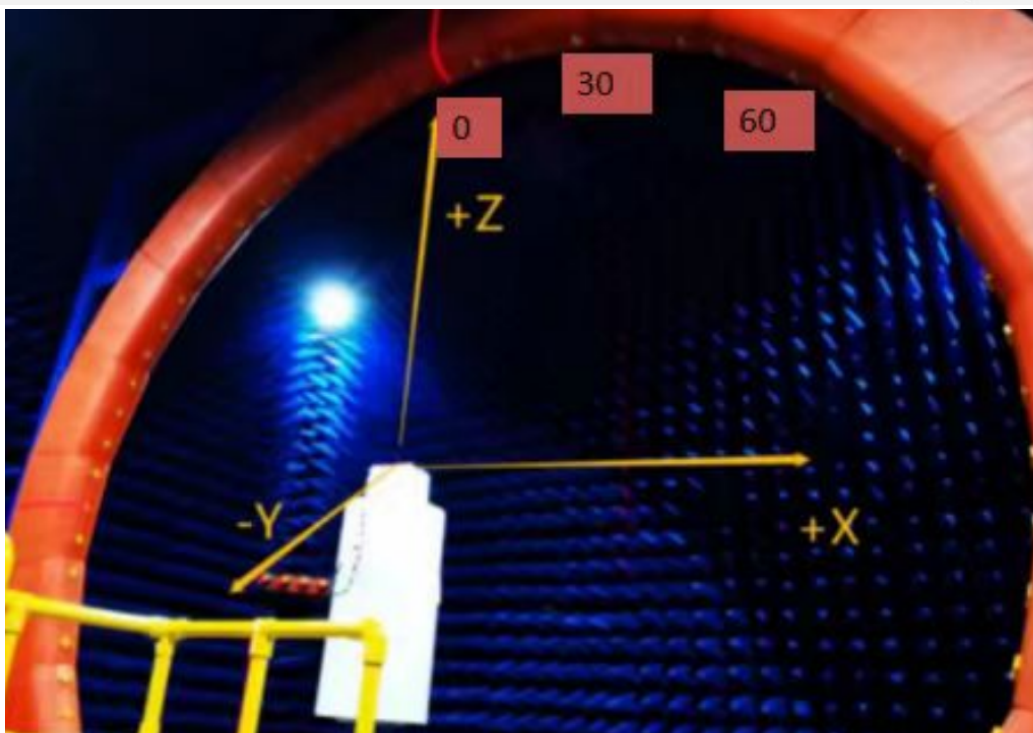
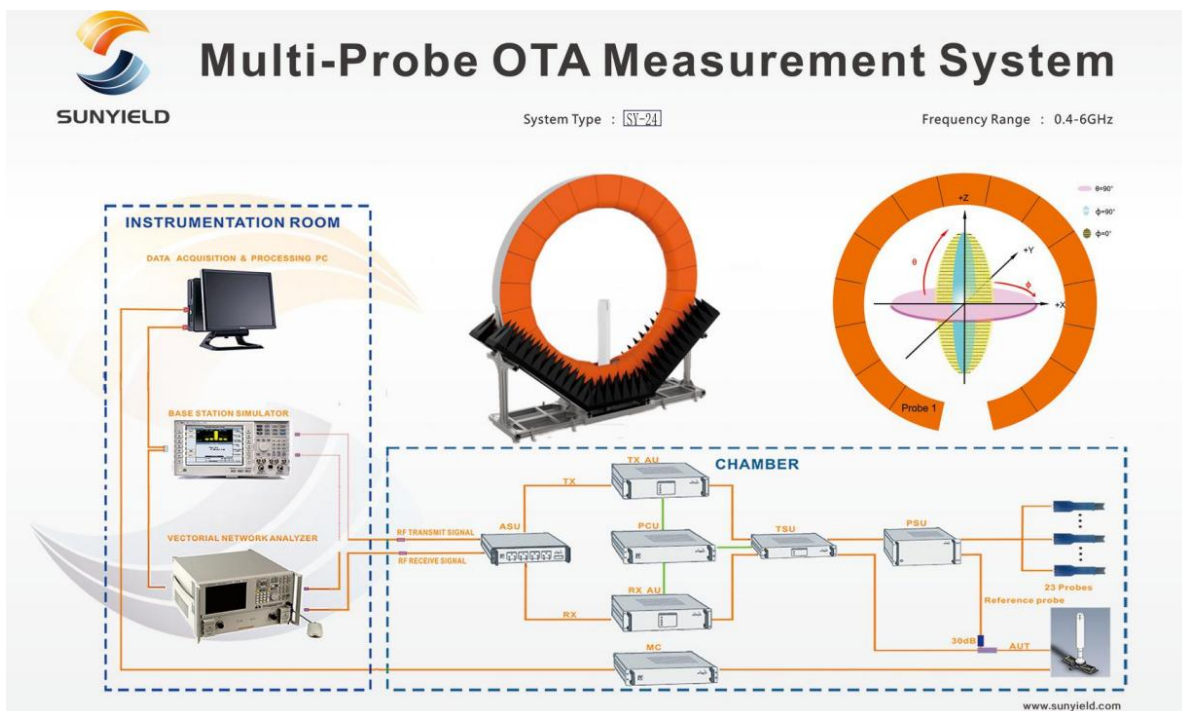
1. 网络分析仪 NetWork Analyzers:

Keysight E5071C

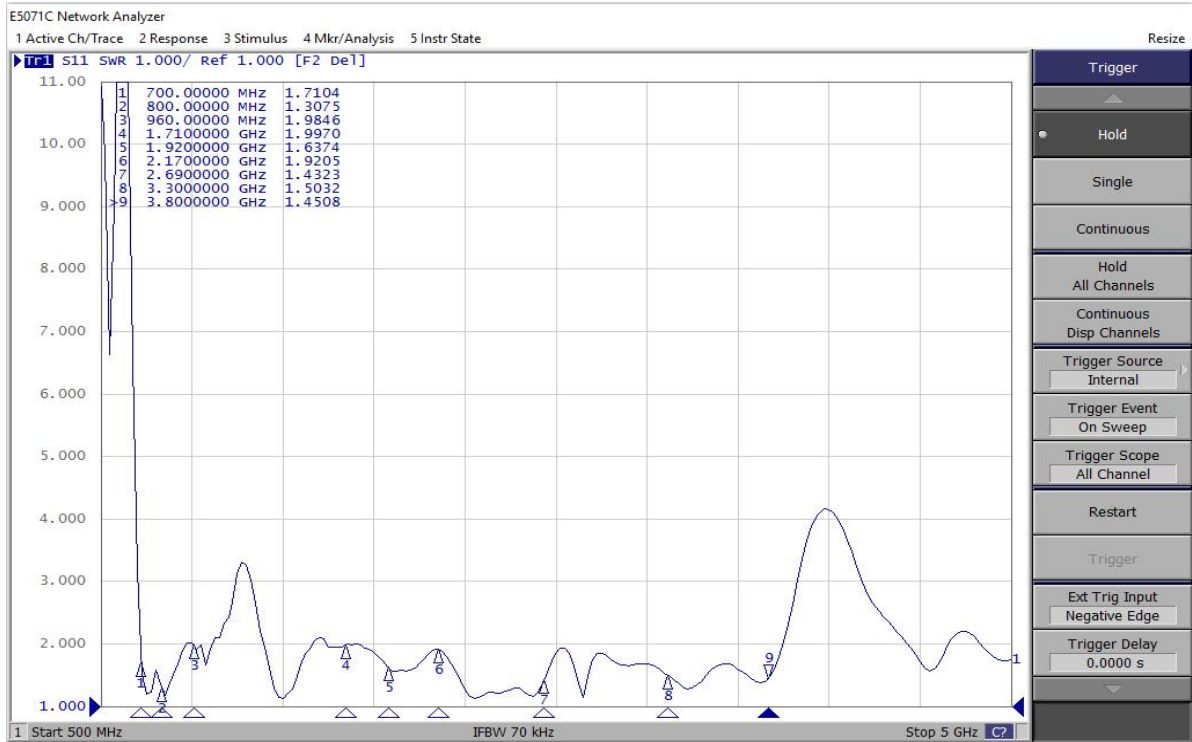
2. 综合测试仪 Comprehensive tester:

CMW500 、 MT8000A、 MT8862A

3. 3D 暗室测试系统 3D Chamber Test System:



# 天线阻抗Antenna Impedance: S11



# 效率&增益Efficiency & Gain:

Freq (MHz)	Effi (%)	Gain (dBi)
700	52.27	0.99
710	65.64	2
720	67.41	2.13
730	65.79	2.17
740	61.89	2.22
750	61.08	2.17
760	56.92	1.75
770	47.63	0.65
780	49.63	0.75
790	58.44	1.67
800	63.85	2.19
810	66.49	2.43
820	69.34	2.68
830	73.71	2.99
840	77.65	3.24
850	78.6	3.36
860	80.42	3.53
870	76.79	3.43
880	72.47	3.32
890	68.54	3.15
900	61.02	2.6
910	56.98	2.16
920	54.76	1.73
930	50.29	1.14
940	47.36	1.08
950	48.29	1.28
960	49.03	1.22
AVG	62.31	2.15

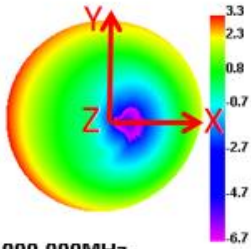
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
1710	73.53	1.89	2190	57.73	2.29
1730	65.68	1.39	2210	57.74	2.36
1750	66.31	1.5	2230	55.92	2.46
1770	65.82	1.51	2250	60.85	3.09
1790	67.33	2.03	2270	60.82	3.19
1810	68.08	2.14	2290	63.16	3.33
1830	66.53	1.99	2310	66.14	3.42
1850	70.07	2.31	2330	63.7	3.15
1870	64.13	2.08	2350	66.09	3.35
1890	63.79	2.07	2370	63.12	3.17
1910	60.3	1.79	2390	67.51	3.3
1930	64.59	2.17	2410	69.42	3.2
1950	65.46	2.23	2430	67.75	3.11
1970	61.97	2.04	2450	67.28	3.11
1990	71.12	2.56	2470	67.03	2.89
2010	63.34	2.17	2490	65.09	2.42
2030	62.52	2.34	2510	72.6	2.74
2050	73.46	3.3	2530	80.57	3.07
2070	66.52	3.11	2550	75.44	2.58
2090	64.13	2.89	2570	67.71	2.15
2110	52.51	1.91	2590	65.69	1.88
2130	53.49	2.08	2610	70.61	2.18
2150	57.25	2.48	2630	67.84	2.25
2170	48.45	1.59	2650	59.06	1.88
AVG	64.02	2.15	2670	59.81	2.3
			2690	59.23	2.56
			AVG	65.30	2.75

Freq (MHz)	Effi (%)	Gain (dBi)
3300	63.13	2.29
3350	74.29	2.93
3400	74.98	3.2
3450	68.23	2.55
3500	60.62	1.75
3550	62	1.77
3600	71.27	2.54
3650	76.59	3.05
3700	64.45	2.35
3750	61.26	2.12
3800	59.56	1.84
AVG	66.94	2.40

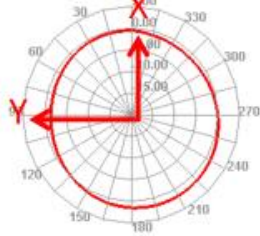


天线3D&2D方向图Antenna 3D & 2D pattern:

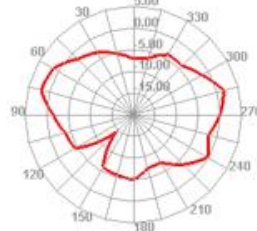
880.000MHz



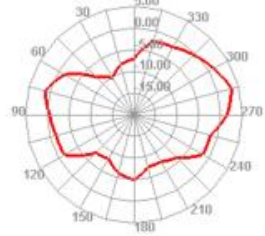
880.000MHz H



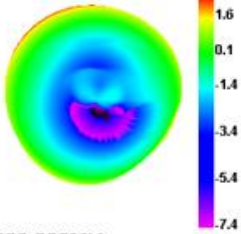
880.000MHz E2



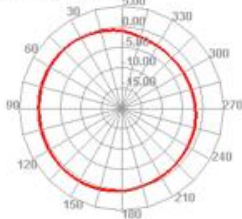
880.000MHz E1



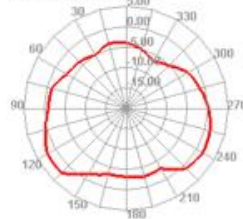
1990.000MHz



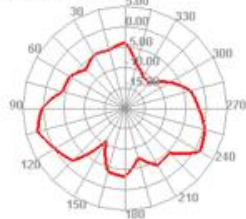
1990.000MHz H



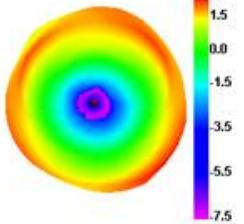
1990.000MHz E1



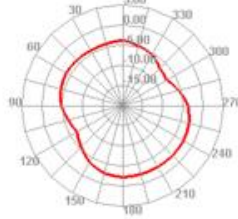
1990.000MHz E2



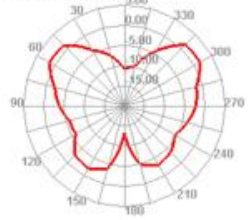
3600.000MHz



3600.000MHz H



3600.000MHz E1



3600.000MHz E2

