



Sample SPECIFICATION

Client :	Eviews
Project name :	W107V
Antenna category:	Internal Antenna
Edition :	V1.0
Date :	2026.2.11
Supplier address:	Room 505-506, Block A, Donglian Building, Chuangye 2nd Road, Bao'an District, Shenzhen
Supplier :	Shenzhen Cicent Communication Technology Co., Ltd.



Catalogue

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Change History Column			
Creation/Change Date	Reason for change	Change content	Edition
2026.2.11	First edition release	First edition release	V1.0



1: Passive Test Report



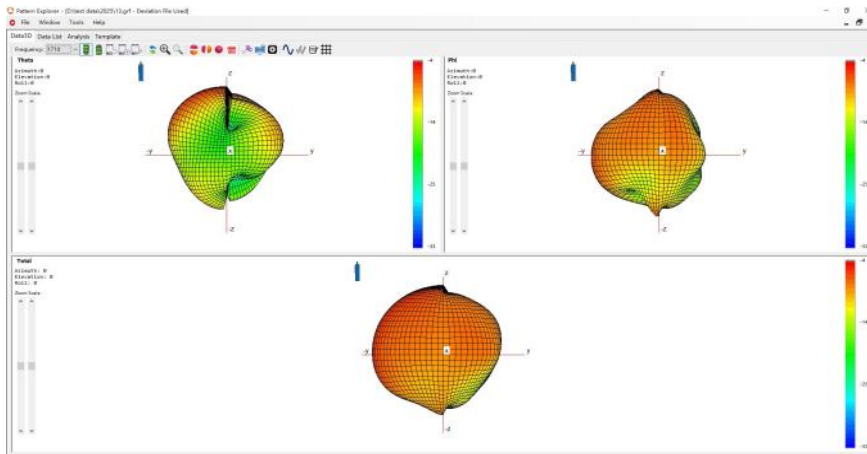
Passive efficiency

of Angilent E5071C main antenna: (B4)

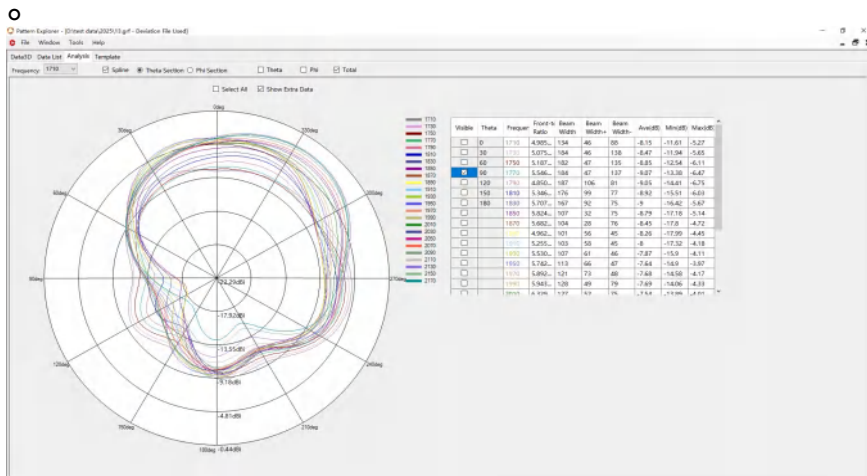
B4			
Frequency	Productiveness dB	Gain	Productiveness %
1710	-8.25	-4.59	14.95
1730	-8.47	-4.50	14.22
1750	-8.80	-4.62	13.17
1770	-8.99	-4.71	12.61
1790	-8.83	-4.40	13.10
1810	-8.51	-3.98	14.08
1830	-8.31	-3.51	14.75
1850	-7.94	-3.07	16.06
1870	-7.54	-2.51	17.64
1890	-7.28	-2.33	18.72
1910	-6.86	-1.89	20.62
1930	-6.78	-1.84	21.00
1950	-6.55	-1.68	22.11
1970	-6.55	-1.84	22.12
1990	-6.54	-2.03	22.20
2010	-6.40	-1.93	22.93
2030	-6.22	-1.74	23.90
2050	-6.29	-1.63	23.49
2070	-6.26	-1.38	23.68
2090	-6.12	-1.04	24.46
2110	-6.04	-0.74	24.87
2130	-6.03	-0.46	24.97
2150	-6.33	-0.58	23.27
2170	-6.57	-0.54	22.01
1950	-6.55	-1.68	22.11
1970	-6.55	-1.84	22.12
1990	-6.54	-2.03	22.20
2010	-6.40	-1.93	22.93
2030	-6.22	-1.74	23.90
2050	-6.29	-1.63	23.49
2070	-6.26	-1.38	23.68
2090	-6.12	-1.04	24.46
2110	-6.04	-0.74	24.87
2130	-6.03	-0.46	24.97
2150	-6.33	-0.58	23.27
2170	-6.57	-0.54	22.01



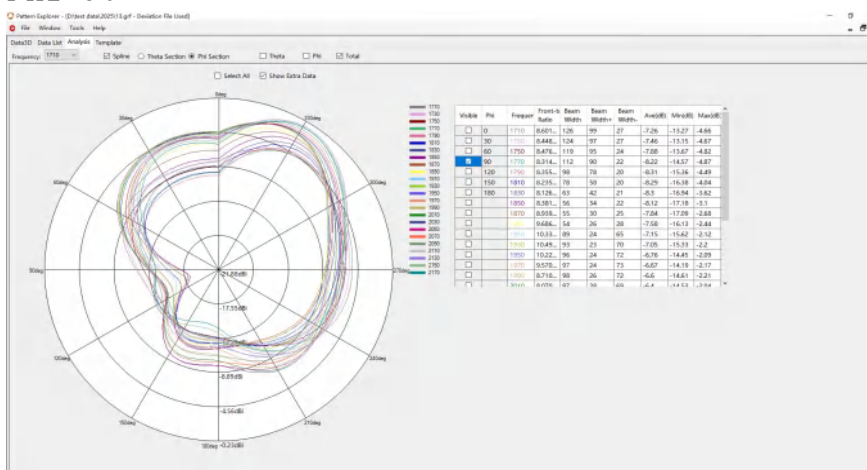
Antenna 3D Direction Pattern



Antenna 2D pattern Theta = 90

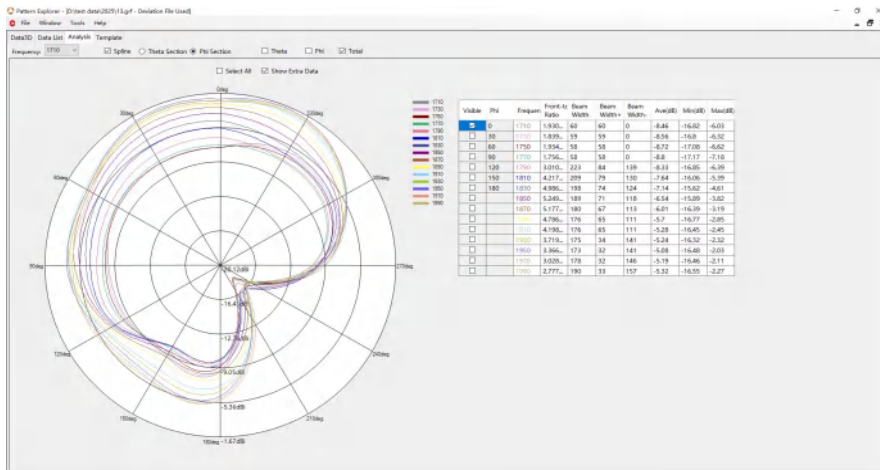


Phi=90°





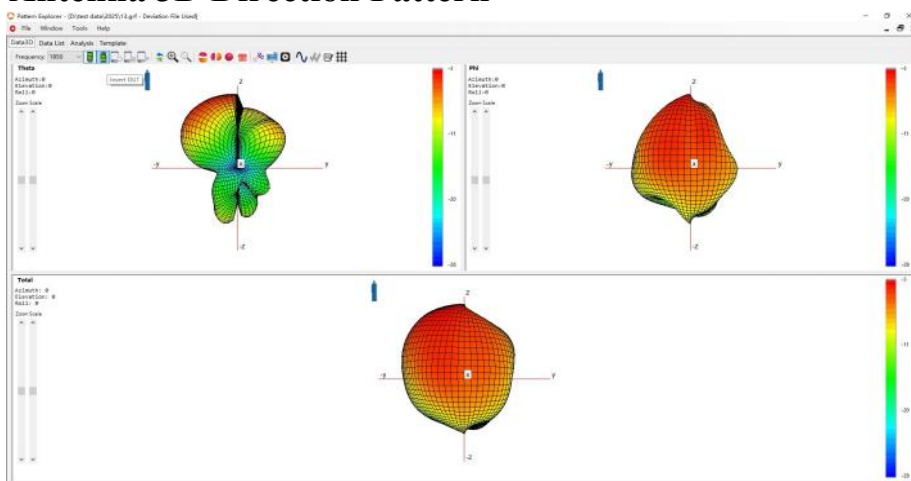
Phi=0°

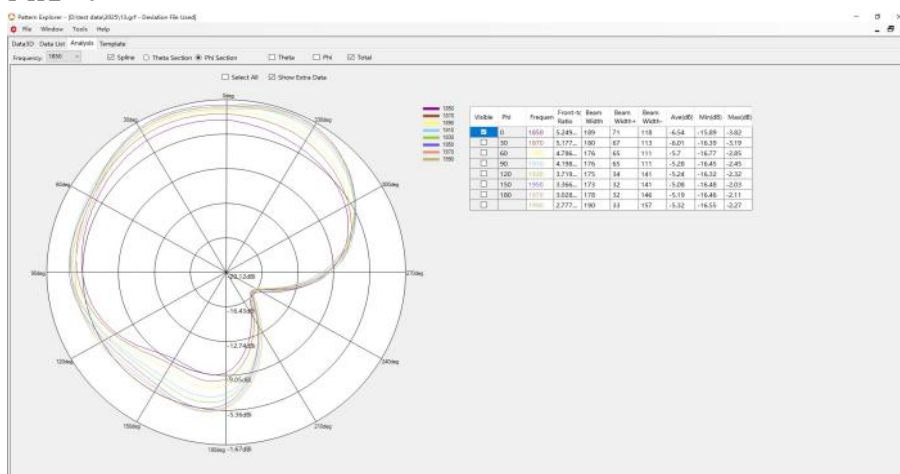
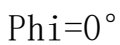
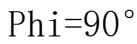


Passive efficiency of main antenna: (B2)

B2			
Frequency	Productiveness dB	Gain	Productiveness %
1850	-7.94	-3.07	16.06
1870	-7.54	-2.51	17.64
1890	-7.28	-2.33	18.72
1910	-6.86	-1.89	20.62
1930	-6.78	-1.84	21.00
1950	-6.55	-1.68	22.11
1970	-6.55	-1.84	22.12
1990	-6.54	-2.03	22.20

Antenna 3D Direction Pattern



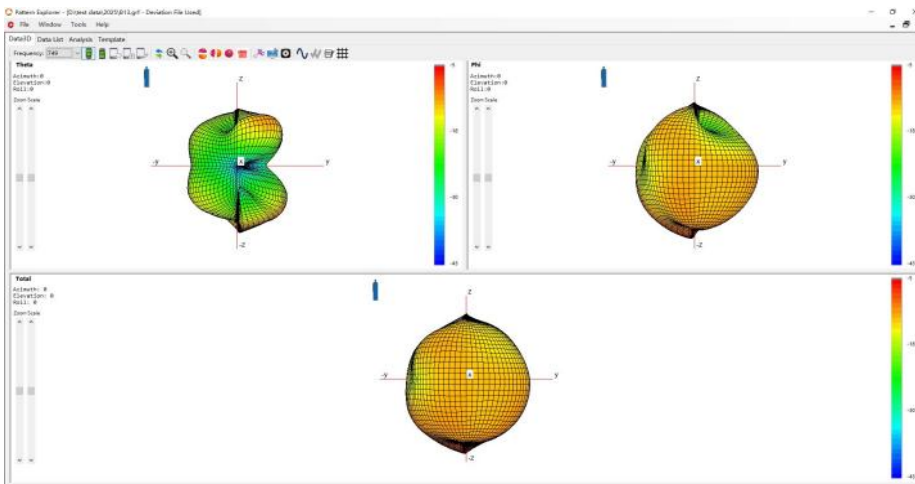
$$\text{Theta} = 90^\circ$$




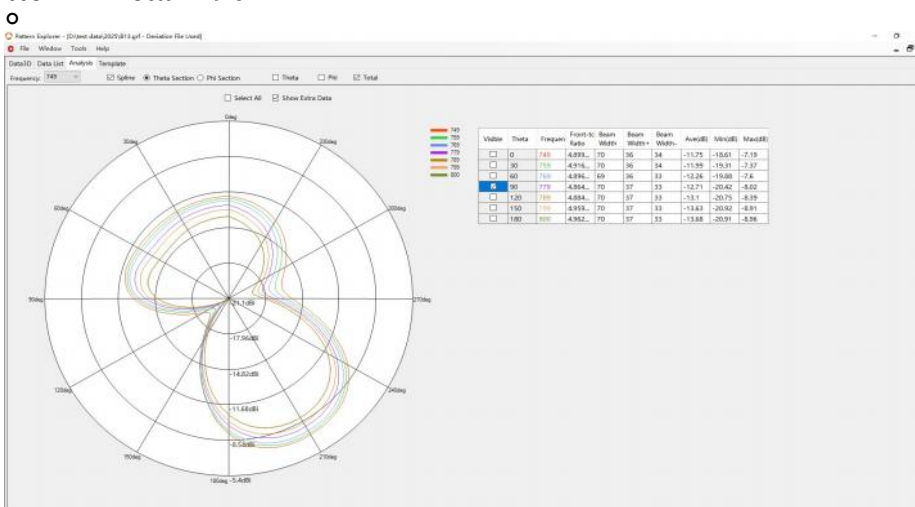
Passive efficiency of main antenna: (B13)

B13			
Frequency	Productiveness dB	Gain	Productiveness %
749	-10.94	-5.56	8.06
759	-11.11	-5.69	7.74
769	-11.36	-5.93	7.31
779	-11.71	-6.37	6.75
789	-12.11	-6.91	6.14
799	-12.59	-7.55	5.50
800	-12.64	-7.63	5.44

Antenna 3D Direction Pattern

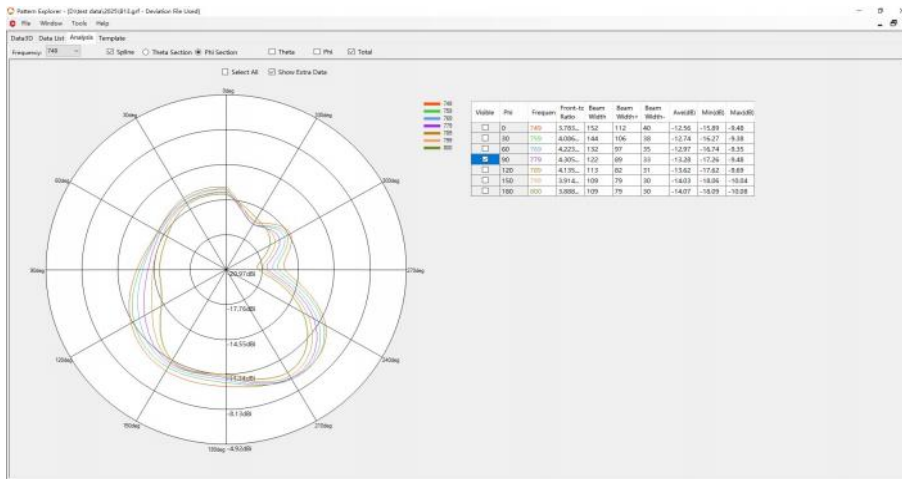


Antenna 2D pattern Theta = 90

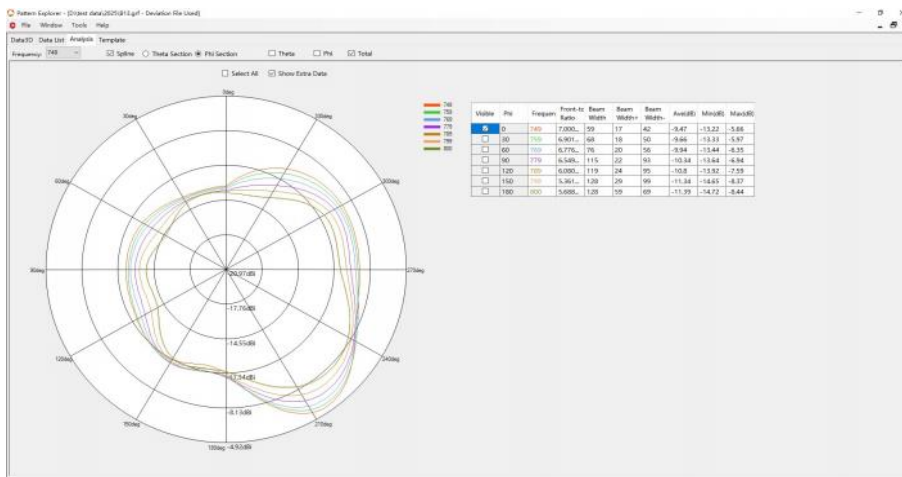




Phi=90°



Phi=0°



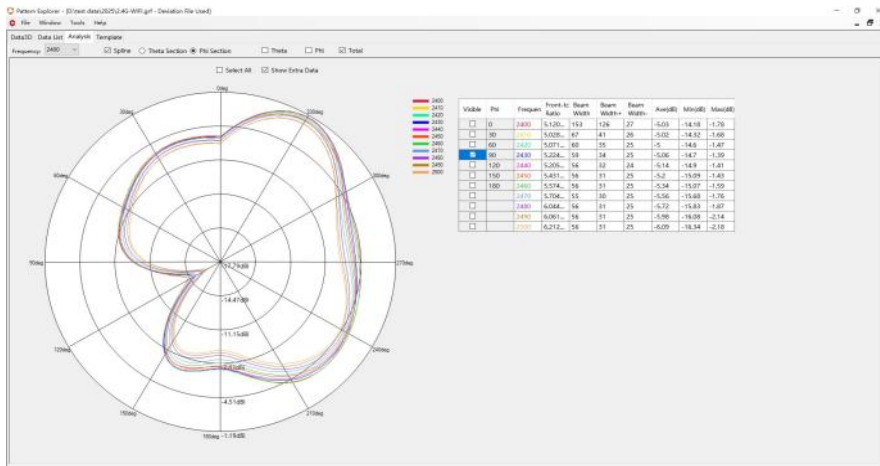
WIFI			
Frequency	Productiveness dB	Gain	Productiveness %
2400	-5. 58	-1. 49	27. 64
2410	-5. 54	-1. 34	27. 95
2420	-5. 52	-1. 25	28. 08
2430	-5. 56	-1. 21	27. 77
2440	-5. 65	-1. 25	27. 25
2450	-5. 71	-1. 29	26. 86
2460	-5. 83	-1. 30	26. 13
2470	-6. 03	-1. 40	24. 93
2480	-6. 16	-1. 40	24. 22
2490	-6. 37	-1. 56	23. 06
2500	-6. 43	-1. 62	22. 73

The screenshot displays the Return Explorer interface. On the left, a polar plot shows the radiation pattern for a 2400 MHz signal. The plot has concentric circles representing signal strength in dBm, with labels at 120dB, 115dB, 110dB, 105dB, 100dB, 95dB, 90dB, and 85dB. Radial lines indicate angles from 0deg to 330deg in 30deg increments. A color-coded legend on the right lists frequencies from 2400 to 2450 MHz. The main data table on the right provides detailed parameters for the selected 2400 MHz signal.

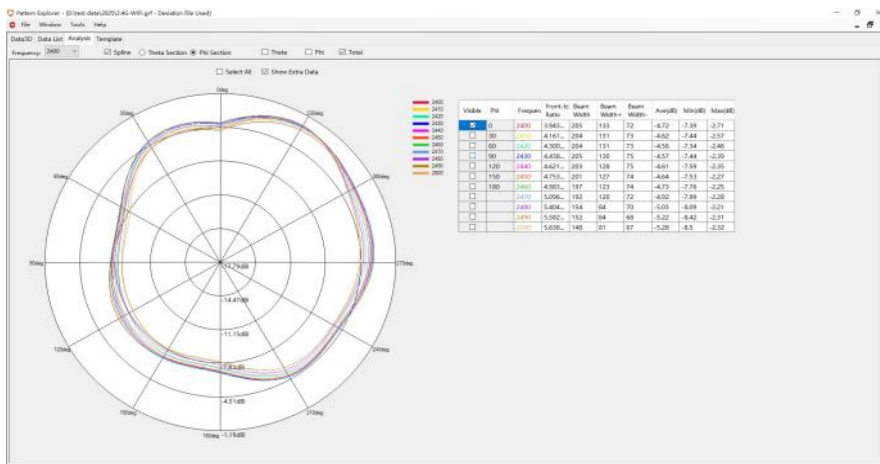
Wave	Theta	Frequency	Front-10 Ratio	Beam Width	Beam Width*	Beam Width	Avg(dB)	Min(dB)	Max(dB)
1	0	2400	6.182	100	35	65	-5.85	-13.93	-2.52
2	30	2400	6.334	100	35	65	-5.88	-14.05	-2.07
3	60	2400	6.351	121	54	65	-5.9	-14.15	-1.95
4	90	2400	6.210	121	57	64	-6.08	-14.25	-2.3
5	120	2400	6.433	122	58	64	-6.15	-14.4	-2.41
6	150	2400	6.373	138	60	64	-6.28	-14.53	-2.53
7	180	2400	6.351	127	63	64	-6.42	-14.79	-2.7
8	210	2400	6.376	108	64	64	-6.48	-15.14	-2.68
9	240	2400	6.397	129	67	62	-6.68	-15.34	-3.13
10	270	2400	6.344	130	60	62	-7.1	-15.20	-3.57
11	300	2400	6.485	130	60	61	-7.18	-15.13	-3.48



Phi=90°

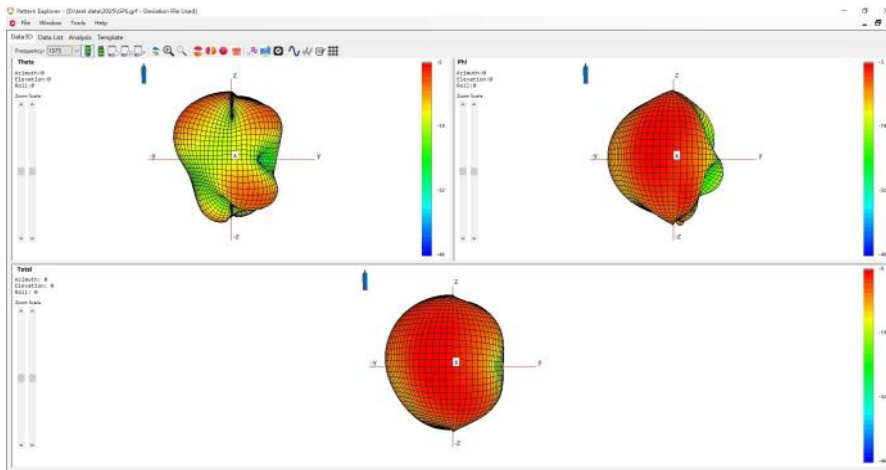


Phi=0°

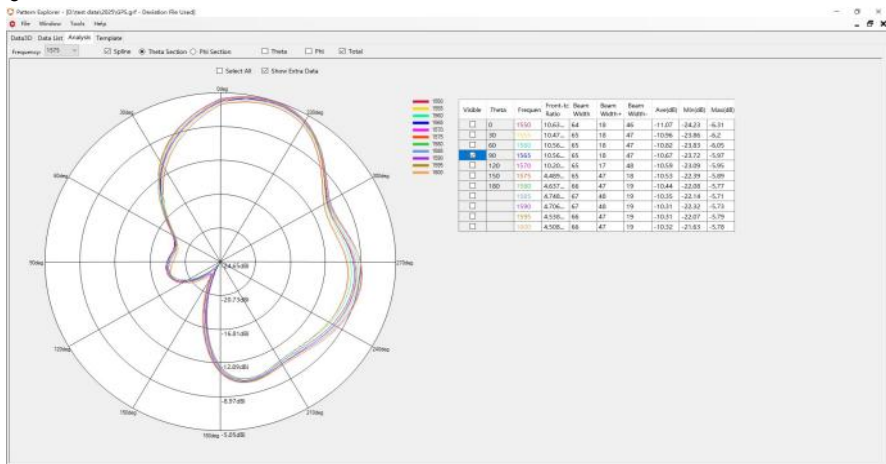
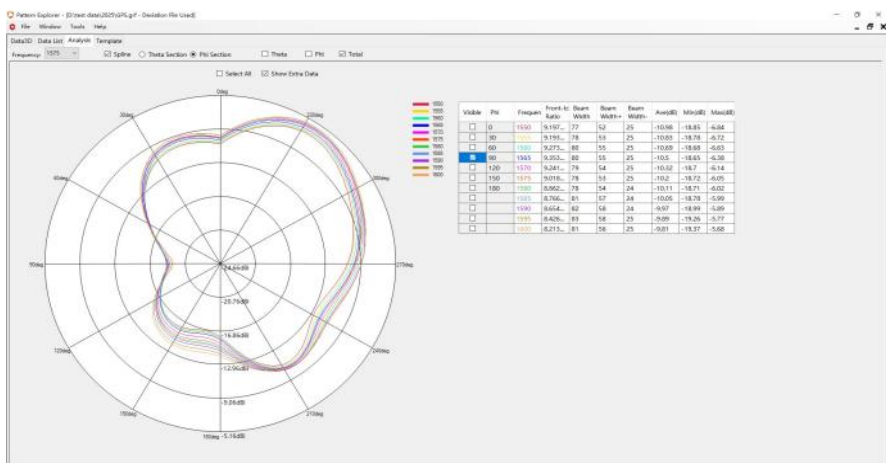


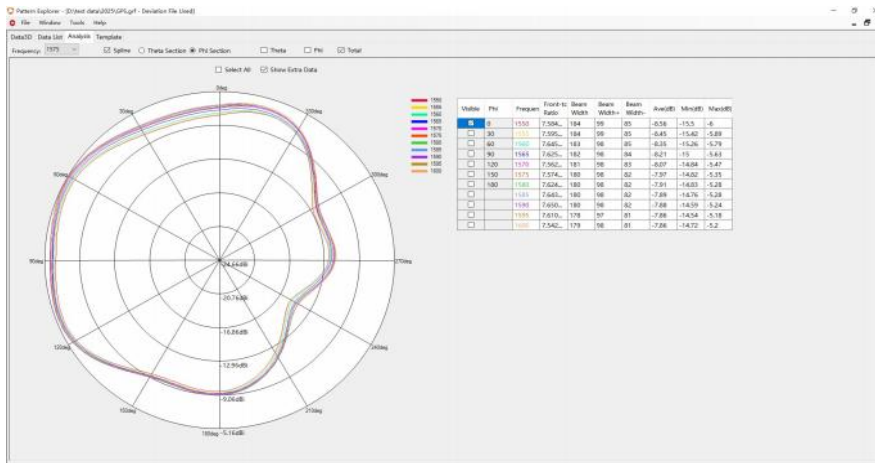
GPS antenna passive efficiency:

GPS			
Frequency	Productiveness dB	Gain	Productiveness %
1550	-10.46	-6.00	9.00
1555	-10.33	-5.89	9.28
1560	-10.21	-5.79	9.52
1565	-10.07	-5.63	9.85
1570	-9.93	-5.47	10.15
1575	-9.83	-5.35	10.40
1580	-9.75	-5.28	10.59
1585	-9.71	-5.28	10.68
1590	-9.68	-5.24	10.78
1595	-9.64	-5.18	10.86
1600	-9.62	-5.20	10.91



Antenna 2D pattern Theta = 90

 $\Phi=90^\circ$ 

$\Phi=0^\circ$ 

II: Active Test Data

Arm model	Channel	TRP (dBm)	TIS (dBm)
FDD B2	CH 18650	15.2	
	CH 18900	15.2	
	CH 19150	15.4	-87.6
FDD B4	CH 20000	14.8	
	CH 20175	14.9	
	CH 20350	14.9	-87.5
FDD B13	CH 23230	9.7	-84.5

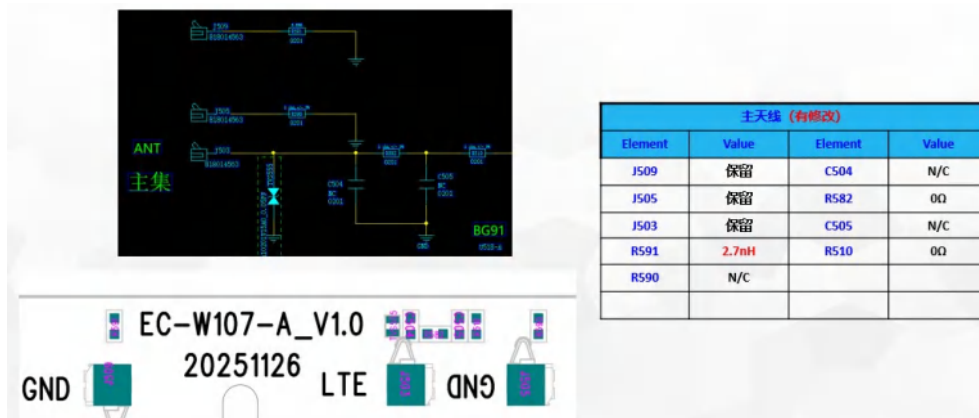


OTA Standard Chamber

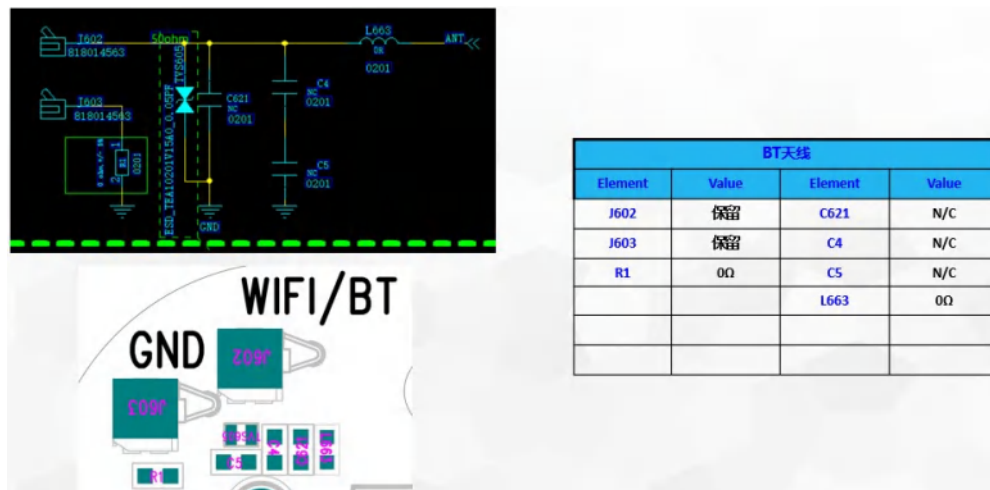


III: Matching Circuit

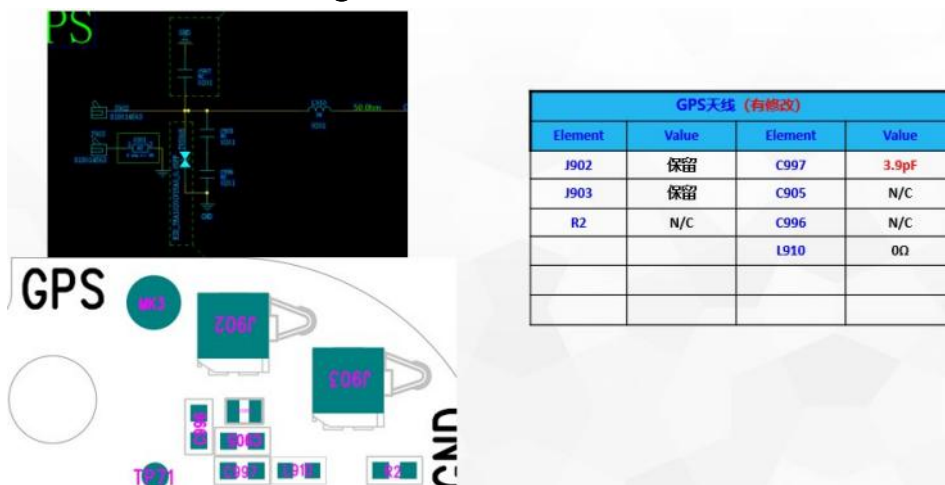
Main antenna matching circuit:



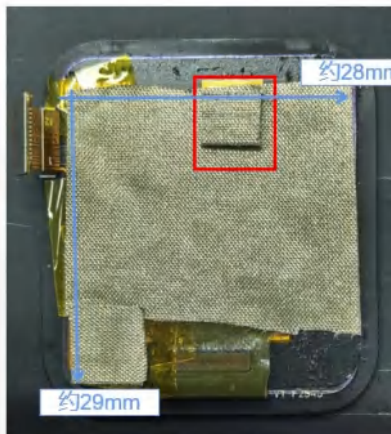
WIFI/BT antenna matching circuit:



GPS antenna matching circuit:

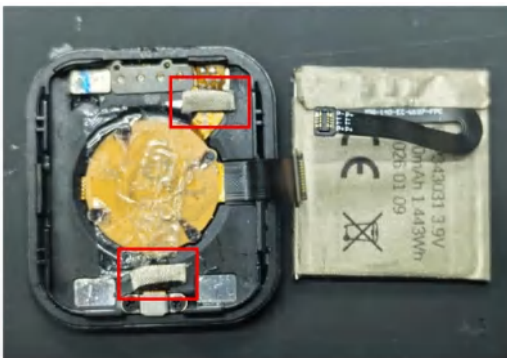


IV: Environmental Management



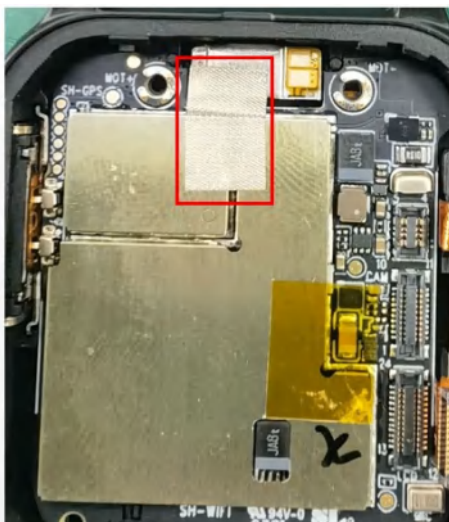
如图所示:

1. 屏幕增加导电布包屏处理, 还是在原来的露铜区域用导电泡棉与主板屏蔽罩做接地处理;



如图所示:

2. 电池需要用导电布包起来处理;
3. 心率排线对应红色方框区域需要做露铜处理, 增加导电泡棉与电池的导电布做接地处理;



如图所示:

4. 喇叭用导电布接地;



如图所示:

5. 主板对应的红色方框区域需要增加导电泡棉, 让电池包的导电布与主板做接地处理;

请注意确认以及导入如上的环境处理, 目前的环境对低频段的整机TIS数据会有影响, 做了如上处理后, 低频整机TIS数据才能满足要求以及测试稳定。



5: Structure Diagram File

