

一、Project information

1、IMEI: 864084060197299

2、Operating frequency band: GSM: B2/B3/B5/B8 UMTS: B1/B2/B4/B5/B8 LTE: B1/B2/B3/B4/B5/B7/B8/B20/B28A/B28B/B38/B40/B41 WiFi B/A GPS

4、Antenna version:

Main antenna: V0.2

Diversity antenna: V0.3

GPS WiFi antenna: V0.5

5、Match Circuit

Main antenna:

No change

Diversity antenna:

No change

GPS WiFi antenna

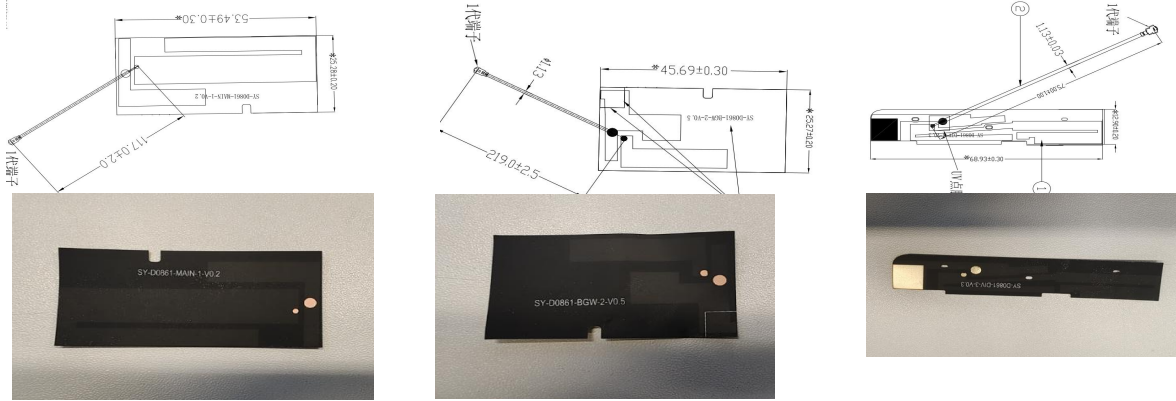
No change

6、open question:

7、Prototype grounding treatment:

Follow the environment of the original machine.

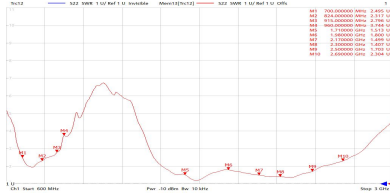
二、Antenna picture



test data

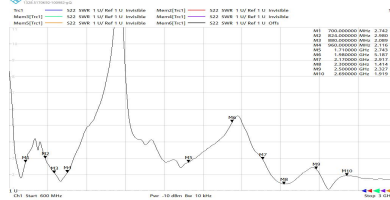
天线驻波

MAIN



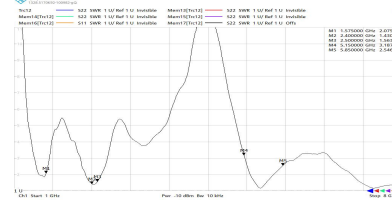
Frequency/MHz	Efficiency / %	Efficiency / %	MaxGain/dBi
700	32.53	-4.88	-1.09
710	33.59	-4.74	-0.88
720	33.76	-4.72	-0.9
730	35.27	-4.53	-0.89
740	34.14	-4.67	-1.55
750	35.67	-4.48	-1.24
760	36.76	-4.35	-0.87
770	37.88	-4.22	-0.4
780	41.92	-3.78	0.03
790	42.7	-3.7	0.1
800	46.6	-3.32	0.01
810	45.13	-3.46	0.5
820	44.71	-3.5	0.62
830	43.89	-3.58	0.83
840	43.09	-3.66	0.66
850	40.77	-3.9	0.92
860	37.62	-4.25	1.61
870	34.39	-4.64	1.56
880	33.6	-4.74	1.76
890	34.39	-4.64	1.21
900	35.84	-4.46	1
910	36.5	-4.38	0.52
920	36.85	-4.34	0.48
930	35.68	-4.48	0.83
940	34.71	-4.6	0.79
950	32.39	-4.9	0.79
960	30.36	-5.18	0.43
1710	43.81	-3.58	2.48
1720	45.87	-3.39	2.28
1730	47.15	-3.27	2.33
1740	46.19	-3.35	2.42
1750	44.72	-3.49	2.56
1760	43.81	-3.58	2.5
1770	42.32	-3.73	2.4
1780	43.7	-3.59	2.5
1790	47.59	-3.23	2.43
1800	50.52	-2.97	2.58
1810	52.06	-2.83	2.75
1820	50.41	-2.97	2.96
1830	49.15	-3.08	2.63
1840	47.37	-3.25	2.07
1850	45.66	-3.41	1.53
1860	44.21	-3.55	1.32
1870	43.3	-3.63	1.21
1880	45.66	-3.41	1.45
1890	44.21	-3.55	1.77
1900	43.6	-3.6	2.04
1910	43.4	-3.62	1.81
1920	45.24	-3.44	1.4

DIV



Frequency/MHz	Efficiency / %	Efficiency / %	MaxGain/dBi
700	21.24	-6.73	-5.02
710	21.7	-6.64	-4.63
720	22.24	-6.53	-4.21
730	24	-6.2	-3.84
740	25.14	-6	-3.54
750	26.21	-5.82	-2.93
760	26.15	-5.83	-2.9
770	25.86	-5.87	-2.72
780	27.66	-5.58	-2.32
790	29.16	-5.35	-1.99
800	32.17	-4.93	-1.81
810	34.02	-4.68	-1.05
820	36.68	-4.36	-0.8
830	39.15	-4.07	-0.49
840	40.42	-3.93	-0.3
850	41.21	-3.85	0.05
860	39.26	-4.06	0.36
870	38.05	-4.2	0.11
880	37.05	-4.31	-0.17
890	36.23	-4.41	-0.7
900	34.64	-4.6	-1.29
910	33.29	-4.78	-1.65
920	33.81	-4.71	-1.51
930	32.48	-4.88	-1.42
940	31.23	-5.05	-0.89
950	29.05	-5.37	-0.64
960	27.03	-5.68	-0.94
1710	40.65	-3.91	1.36
1720	41.63	-3.81	1.55
1730	40.51	-3.92	1.8
1740	39.54	-4.03	1.8
1750	40.18	-3.96	1.93
1760	39.63	-4.02	2.34
1770	38.2	-4.18	2.11
1780	38.32	-4.17	2.57
1790	39.14	-4.07	2.63
1800	39.28	-4.06	2.57
1810	39.41	-4.04	2.52
1820	39.41	-4.04	2.65
1830	39.23	-4.06	2.47
1840	38.32	-4.17	2.36
1850	37.82	-4.22	2.33
1860	37.66	-4.24	2.22
1870	37.26	-4.29	1.98
1880	37.22	-4.29	1.8
1890	35.67	-4.48	1.84
1900	34.06	-4.68	1.97
1910	34.26	-4.65	2.26
1920	34.39	-4.64	2.03

GPS WIFI



Frequency/MHz	Efficiency / %	Efficiency / %	MaxGain/dBi
1500	45.73	-3.4	1.43
1560	49.63	-3.04	1.64
1570	50.64	-2.96	1.83
1580	51.69	-2.87	1.9
1590	48.64	-3.13	1.89
1600	43.65	-3.6	2.26
2400	47.32	-3.25	1.9
2410	48.21	-3.17	1.76
2420	49.58	-3.05	1.89
2430	49.85	-3.02	1.89
2440	50.93	-2.93	1.65
2450	52.14	-2.83	1.79
2460	51.98	-2.84	1.62
2470	50.39	-2.98	1.79
2480	49.42	-3.06	1.73
2490	47.68	-3.22	1.83
2500	45.82	-3.39	1.81
5150	34.51	-4.62	2.76
5200	35.16	-4.54	3.12
5250	37.54	-4.26	2.26
5300	38.23	-4.18	2.36
5350	39.07	-4.08	2.21
5400	39.45	-4.04	1.68
5450	41.62	-3.81	1.8
5500	40.44	-3.93	1.76
5550	39.69	-4.01	2.14
5600	38.79	-4.11	1.95
5650	36.75	-4.35	1.79
5700	37.81	-4.22	1.64
5750	37.65	-4.24	1.52
5800	38.21	-4.18	1.69
5850	34.05	-4.68	1.66

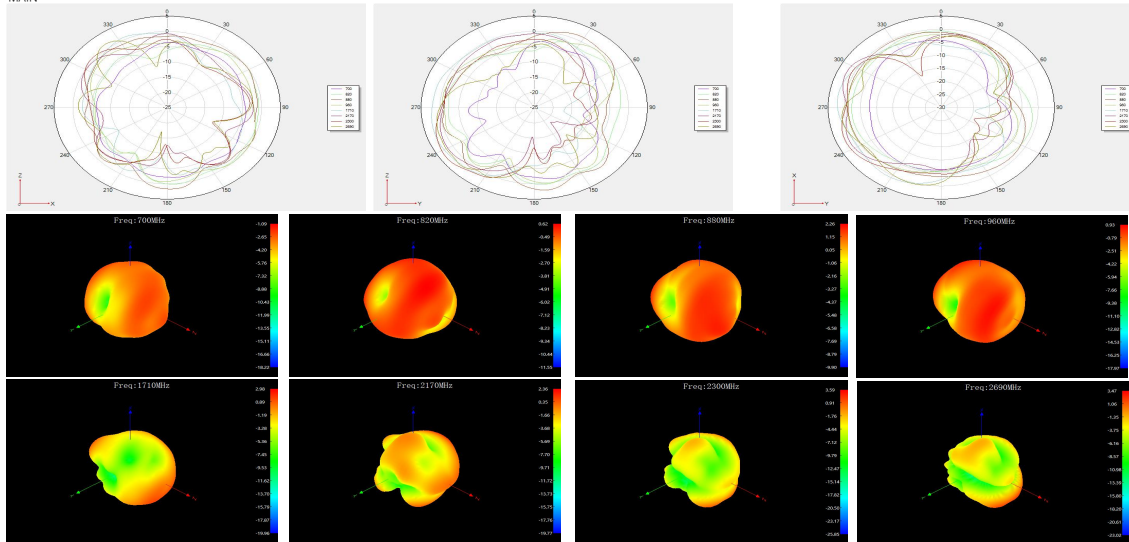
1930	47.48	-3.24	1.23
1940	48.25	-3.16	0.97
1950	49.83	-3.03	0.93
1960	50.76	-2.95	1.08
1970	50.88	-2.93	1.4
1980	49.83	-3.03	1.68
1990	47.81	-3.2	1.76
2000	47.37	-3.25	1.53
2010	47.81	-3.2	1.25
2020	47.92	-3.19	1.05
2030	49.83	-3.03	1.14
2040	51.7	-2.87	1.25
2050	52.67	-2.78	1.45
2060	52.78	-2.78	1.41
2070	51.94	-2.85	1.55
2080	50.06	-3	1.46
2090	48.14	-3.18	1.64
2100	48.48	-3.14	1.76
2110	49.15	-3.08	1.92
2120	50.88	-2.93	1.94
2130	51.46	-2.89	2.17
2140	52.18	-2.82	2.47
2150	49.83	-3.03	2.44
2160	51.7	-2.87	2.36
2170	50.41	-2.97	2.22
2300	43.91	-3.57	1.59
2310	45.87	-3.39	1.85
2320	47.23	-3.26	2.12
2330	47.66	-3.22	2.38
2340	46.9	-3.29	2.39
2350	47	-3.28	2.46
2360	49.45	-3.06	2.56
2370	48.32	-3.16	2.6
2380	50.95	-2.93	2.71
2390	48.43	-3.15	2.65
2400	48.88	-3.11	2
2410	49.45	-3.06	1.84
2420	47.66	-3.22	1.83
2430	49.11	-3.09	1.8
2440	50.83	-2.94	1.76
2450	52.99	-2.76	1.37
2460	52.86	-2.77	1.26
2470	56.12	-2.51	1.5
2480	53.84	-2.69	1.51
2490	56.26	-2.5	1.51
2500	53.6	-2.71	1.3
2510	52.74	-2.78	2.36
2520	52.26	-2.82	2.08
2530	51.42	-2.89	2.19
2540	50.48	-2.97	2.23
2550	50.6	-2.96	2.53
2560	50.02	-3.01	2.7
2570	47.55	-3.23	2.53
2580	48.32	-3.16	2.38
2590	49.33	-3.07	2.15
2600	50.95	-2.93	2.12
2610	52.26	-2.82	2.07
2620	54.1	-2.67	2.19
2630	52.74	-2.78	2.15
2640	50.72	-2.95	1.96
2650	49	-3.1	1.47
2660	46.57	-3.32	1.19
2670	44.68	-3.5	1
2680	48.55	-3.14	1.54
2690	48.32	-3.16	1.47

1930	34.03	-4.68	1.81
1940	33.87	-4.7	1.78
1950	33.24	-4.78	1.65
1960	33.4	-4.76	1.62
1970	32.19	-4.92	1.7
1980	32.13	-4.93	1.84
1990	31.83	-4.97	2
2000	32.11	-4.93	1.88
2010	31.78	-4.98	1.6
2020	31.19	-5.06	1.41
2030	30.19	-5.2	1.34
2040	29.32	-5.33	1.54
2050	27.14	-5.66	1.67
2060	27.1	-5.67	1.78
2070	27.91	-5.54	1.65
2080	28.03	-5.52	1.92
2090	26.67	-5.74	2.11
2100	26.22	-5.81	2.56
2110	26.75	-5.73	2.78
2120	26.52	-5.76	3.03
2130	25.89	-5.87	3
2140	25.89	-5.87	2.93
2150	26.79	-5.72	2.67
2160	27.34	-5.63	2.3
2170	27.82	-5.56	1.91

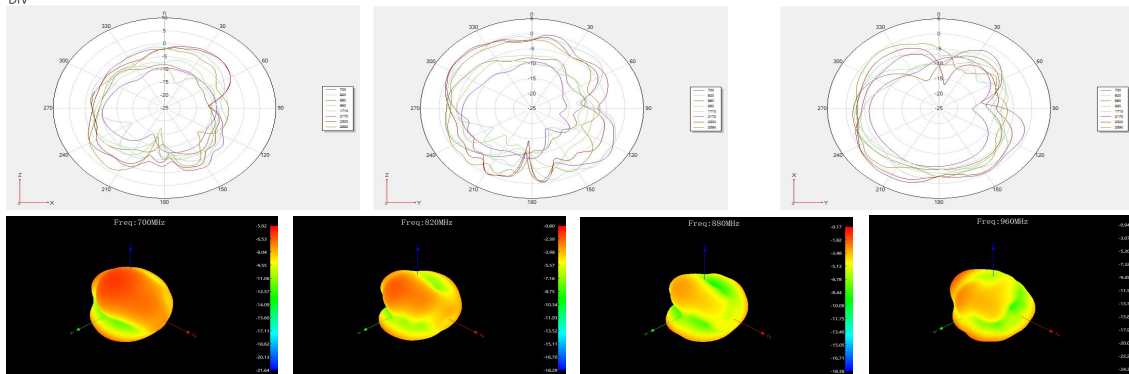
2300	41.9	-3.78	1.3
2310	40.84	-3.89	1.52
2320	40.39	-3.94	1.86
2330	41.06	-3.87	2.13
2340	42.59	-3.71	2.11
2350	42.5	-3.72	1.92
2360	43.07	-3.66	1.95
2370	44.25	-3.54	2.04
2380	45.22	-3.45	2.31
2390	44.9	-3.48	2.42
2400	44.35	-3.53	1.91
2410	46.43	-3.33	1.99
2420	46.97	-3.28	2.03
2430	46.67	-3.31	2.1
2440	47.89	-3.2	2.09
2450	49.54	-3.05	1.75
2460	50.06	-3	1.63
2470	50.43	-2.97	1.64
2480	50.96	-2.93	1.43
2490	49.2	-3.08	1.25
2500	48.02	-3.19	0.9
2510	47.81	-3.2	1.86
2520	48.96	-3.1	1.63
2530	48.28	-3.16	1.75
2540	48.85	-3.11	1.73
2550	47.85	-3.2	1.85
2560	49.52	-3.05	1.78
2570	50.28	-2.99	1.76
2580	51.43	-2.89	1.91
2590	50.04	-3.01	1.86
2600	49.37	-3.07	1.88
2610	50.35	-2.98	1.93
2620	49.37	-3.07	2.12
2630	49.22	-3.08	2.19
2640	49.67	-3.04	2.2
2650	49.74	-3.03	2.22
2660	48.71	-3.12	2.28
2670	47.15	-3.27	2.32
2680	45.35	-3.43	2.6
2690	45.67	-3.4	2.53

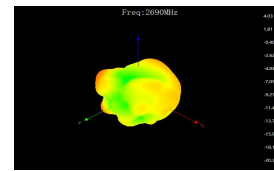
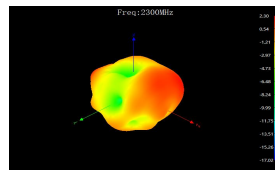
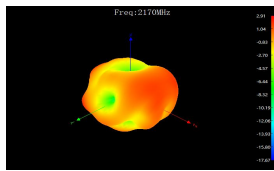
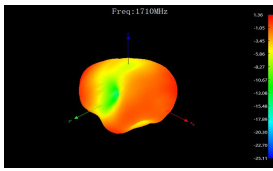
四、Antenna pattern

MAIN



DIV





GPS WIFI

