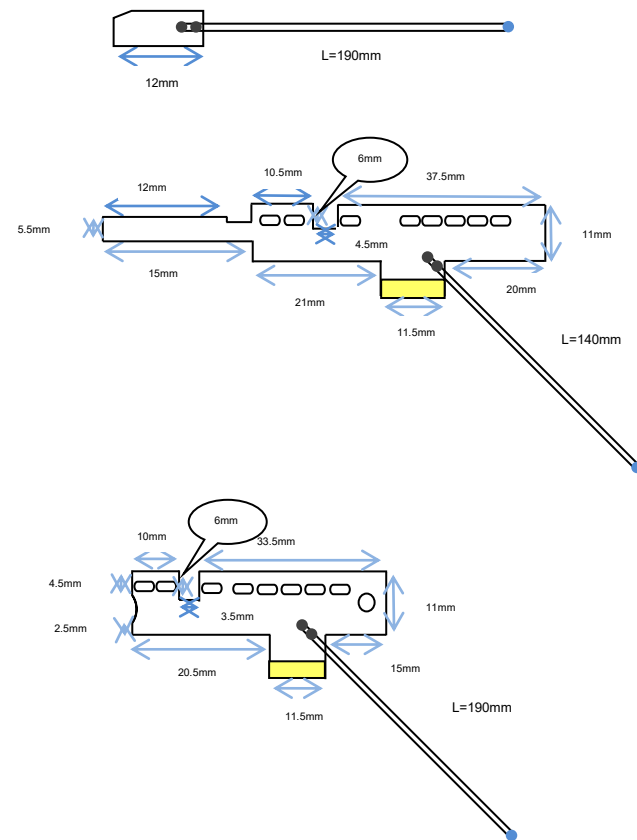


SHENZHEN JUNYU COMMUNICATION EQUIPMENT CO., LTD

Antenna type: FPC built-in antenna

4G antenna drawings:

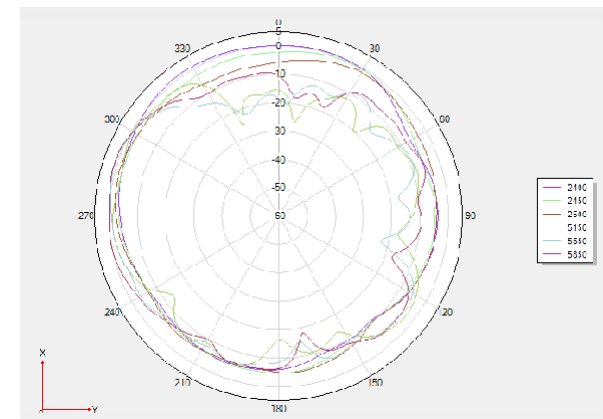
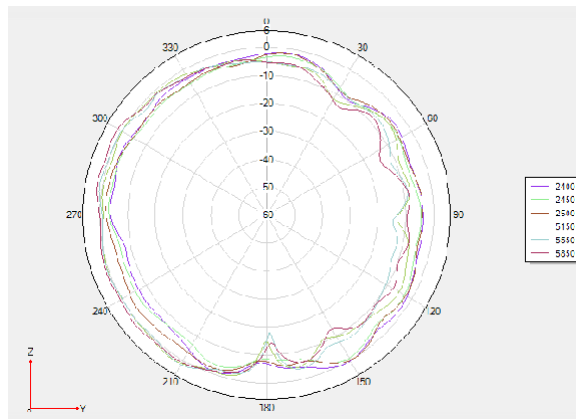
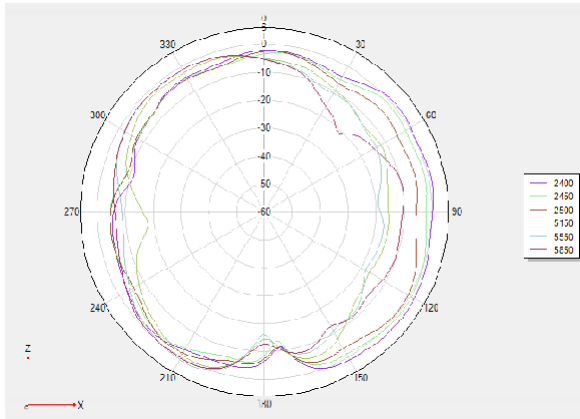


2D、3D test data:

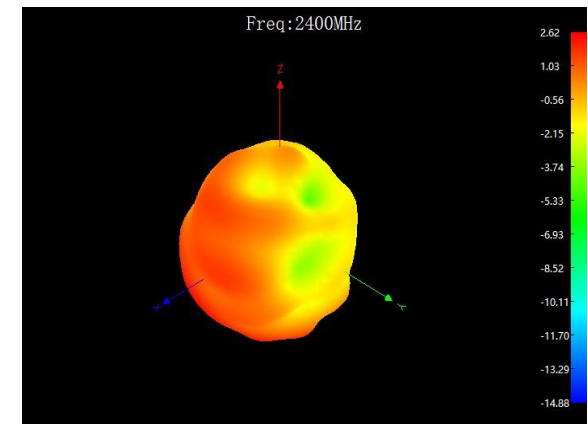
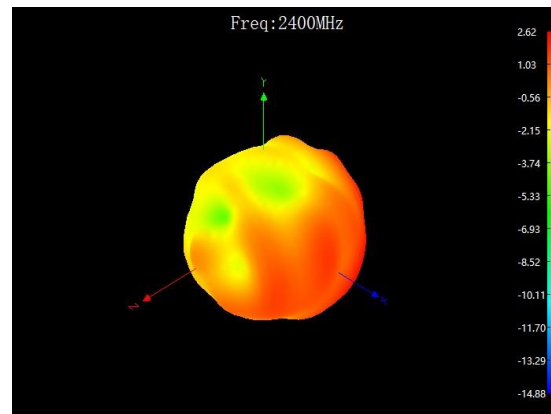
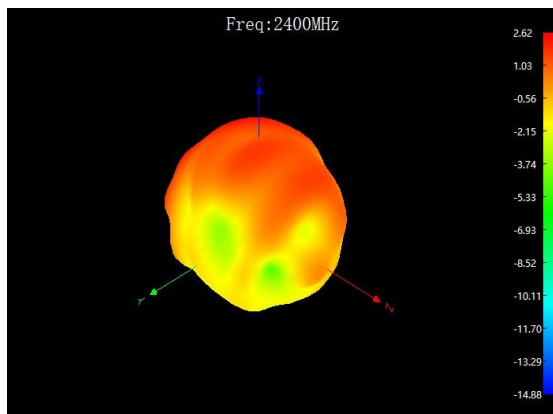
Frequency/Mhz	Efficiency / %	MaxGain/dBi
2400	59.79	3.00
2410	55.01	2.04
2420	58.81	1.75
2430	54.08	1.63
2440	50.12	2.30
2450	60.91	1.79
2460	57.97	1.83
2470	57.42	1.85
2480	53.85	2.28
2490	55.50	1.96
2500	56.24	1.63
5150	49.79	2.00
5250	50.15	2.11
5350	49.98	2.64
5450	52.09	2.55
5550	55.16	2.17
5650	59.98	3.31
5750	51.29	2.22
5850	52.07	2.35

2D、3D test data:

Phi 0 2D Figure Phi 90 2D Figure Theta 90 2D Figure

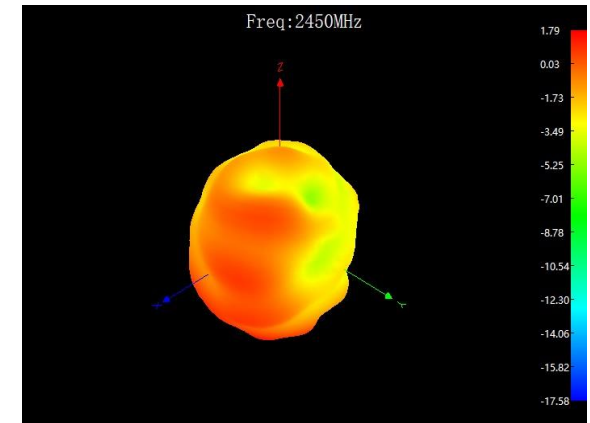
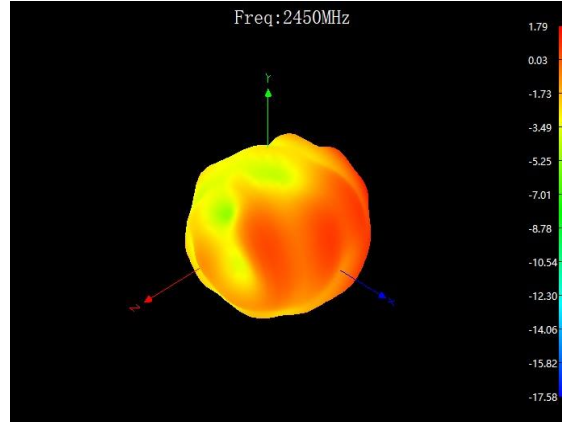
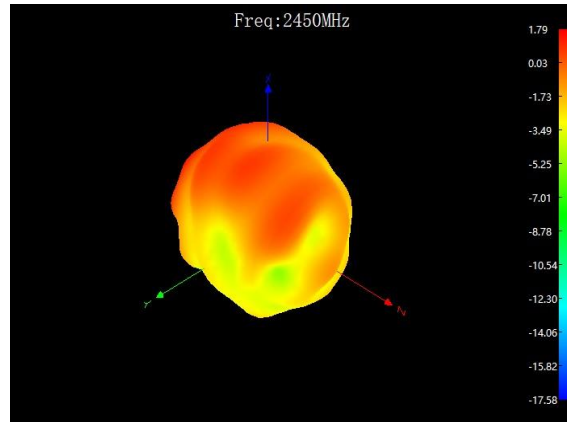


2400MHz 2400MHz 2400MHz

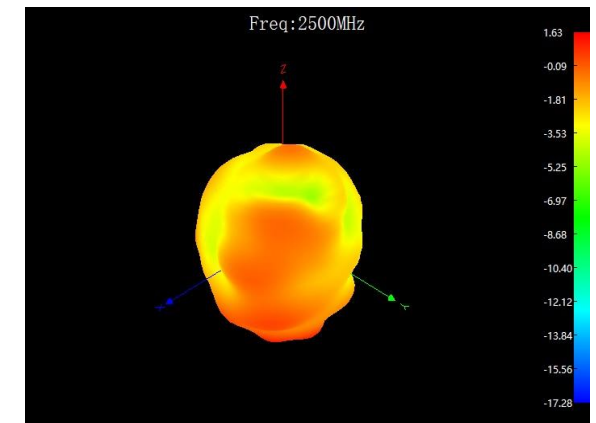
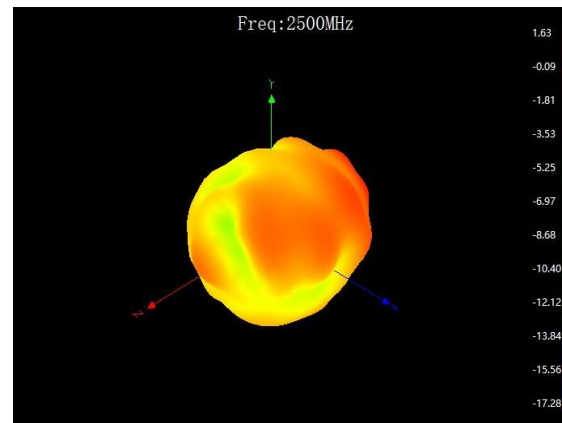
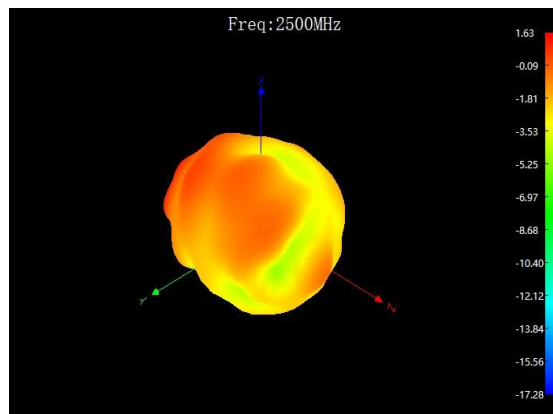


2D、3D test data:

2450MHz 2450MHz 2450MHz

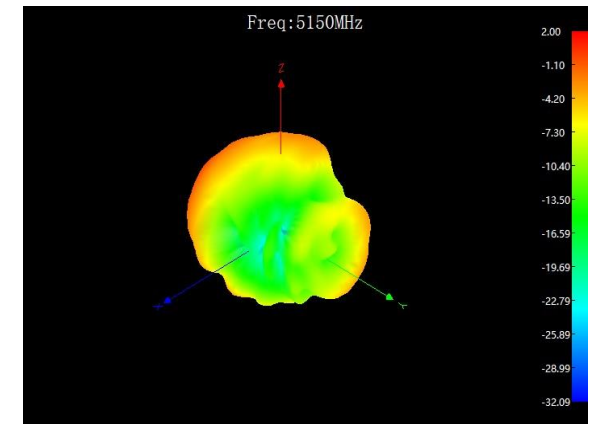
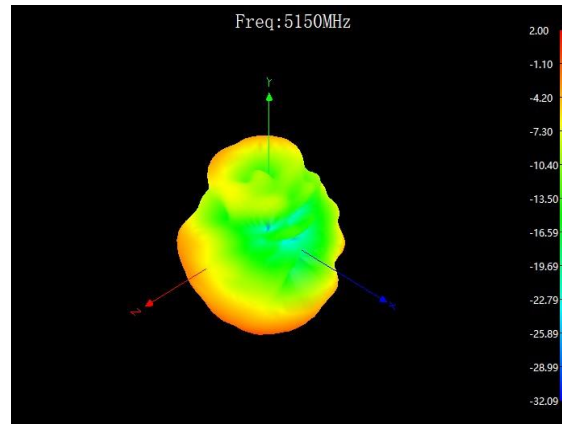
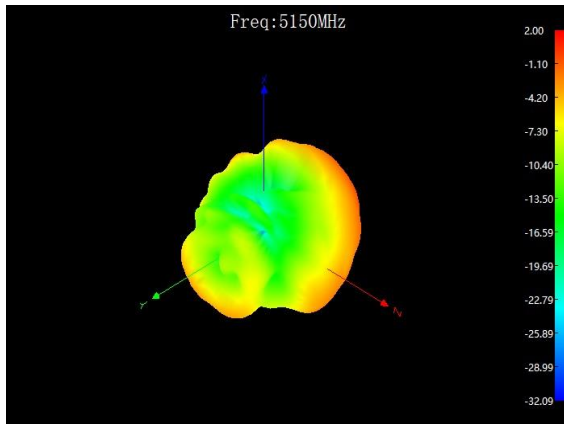


2500MHz 2500MHz 2500MHz

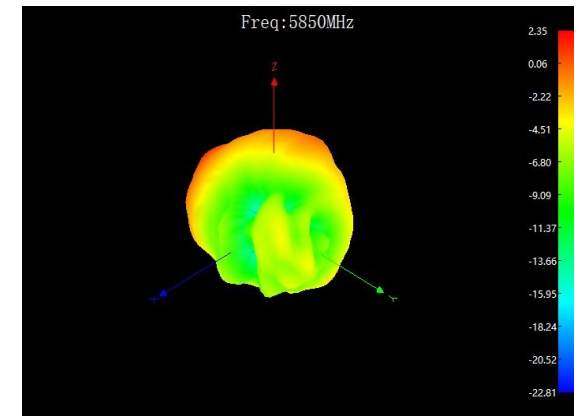
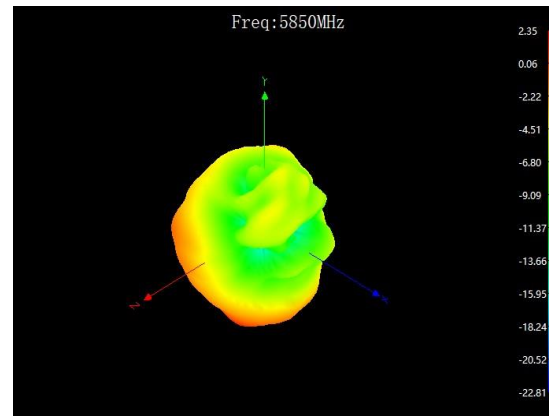
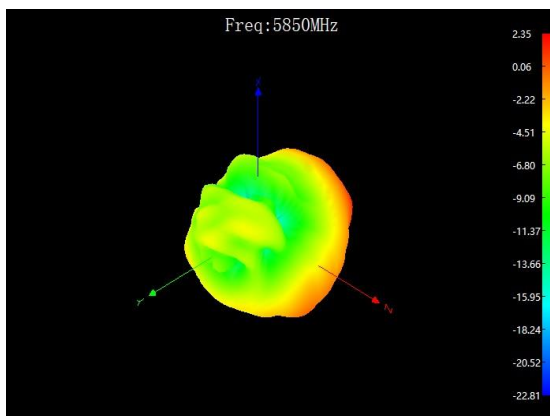


2D、3D test data:

5150MHz 5150MHz 5150MHz 5150MHz



5850MHz 5850MHz 5850MHz



WIFI ANTENNA OTA TEST DATA:

Item	Measurement	Standard	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI (AP)	WIFI_ B (11M)	1	2412	20.24	1.79	14.84
2	TRP	WIFI (AP)	WIFI_ B (11M)	6	2437	20.51	2.17	14.55
3	TRP	WIFI (AP)	WIFI_ B (11M)	11	2462	20.8	3.83	15.14
4	TIS(EIRP)	WIFI (AP)	WIFI_ B (11M)	1	2412	-76.92	-89.68	-86.78
5	TIS(EIRP)	WIFI (AP)	WIFI_ B (11M)	6	2437	-76.33	-90.27	-86.7
6	TIS(EIRP)	WIFI (AP)	WIFI_ B (11M)	11	2462	-76.67	-93.33	-87.91
7	TRP	WIFI (AP)	WIFI_ G (54M)	1	2412	14.67	0.5	10.22
8	TRP	WIFI (AP)	WIFI_ G (54M)	6	2437	13.54	0.18	10.18
9	TRP	WIFI (AP)	WIFI_ G (54M)	11	2462	15.23	1.07	11.78
10	TIS(EIRP)	WIFI (AP)	WIFI_ G (54M)	1	2412	-60.18	-75.72	-72.55
11	TIS(EIRP)	WIFI (AP)	WIFI_ G (54M)	6	2437	-61.06	-76.31	-72.77
12	TIS(EIRP)	WIFI (AP)	WIFI_ G (54M)	11	2462	-60.76	-75.87	-72.58
13	TRP	WIFI (AP)	WIFI_ N_ISM (65M)	1	2412	14.27	-0.76	10.17
14	TRP	WIFI (AP)	WIFI_ N_ISM (65M)	6	2437	14.84	-0.02	10.39
15	TRP	WIFI (AP)	WIFI_ N_ISM (65M)	11	2462	15.74	0.92	10.57
16	TIS(EIRP)	WIFI (AP)	WIFI_ N_ISM (65M)	1	2412	-60.85	-72.79	-69.44
17	TIS(EIRP)	WIFI (AP)	WIFI_ N_ISM (65M)	6	2437	-60.16	-72.98	-69.33
18	TIS(EIRP)	WIFI (AP)	WIFI_ N_ISM (65M)	11	2462	-57.26	-71.92	-68.58
19	TRP	WIFI (AP)	WIFI_ A (54M)	36	5180	15.52	-8.5	10.61
20	TRP	WIFI (AP)	WIFI_ A (54M)	149	5745	14.79	-5.96	10.6
21	TRP	WIFI (AP)	WIFI_ A (54M)	165	5825	16.47	-1.05	11.97
22	TIS(EIRP)	WIFI (AP)	WIFI_ A (54M)	36	5180	-60.73	-77.81	-72.72
23	TIS(EIRP)	WIFI (AP)	WIFI_ A (54M)	149	5745	-59.35	-76.34	-71.96
24	TIS(EIRP)	WIFI (AP)	WIFI_ A (54M)	165	5825	-59.13	76.44	-71.34

4G ANTENNA OTA TEST DATA:

Item	Measurement	Standard	Band	Channel	Frequency	Max	Min	Total
1	TRP	FDD_LTE	FDD_B1(10MHz)	18050	1925	22.64	3.64	19.16
2	TRP	FDD_LTE	FDD_B1(10MHz)	18300	1950	23.55	6.22	20.12
3	TRP	FDD_LTE	FDD_B1(10MHz)	18550	1975	23.04	3.56	19.35
4	TIS(RSSI)	FDD_LTE	FDD_B1(10MHz)	550	2165	-80.78	-96.27	-91.36
5	TRP	FDD_LTE	FDD_B3(10MHz)	19250	1715	20.32	4.52	17.07
6	TRP	FDD_LTE	FDD_B3(10MHz)	19575	1747.5	20.74	5.71	17.41
7	TRP	FDD_LTE	FDD_B3(10MHz)	19900	1780	22.04	6.78	18.6
8	TIS(RSSI)	FDD_LTE	FDD_B3(10MHz)	1900	1875	-80.32	-99.58	-93.63
9	TRP	TDD_LTE	TDD_B38(20MHz)	37850	2580	19.32	3.52	16.07
10	TRP	TDD_LTE	TDD_B38(20MHz)	38000	2595	20.74	5.71	17.41
11	TRP	TDD_LTE	TDD_B38(20MHz)	38150	2610	22.04	6.78	18.6
12	TIS FAST	TDD_LTE	TDD_B38(20MHz)	37850	2580	-75.52	-89.47	-86.6
13	TRP	TDD_LTE	TDD_B39(20MHz)	38350	1890	19.91	-4.09	16.96
14	TRP	TDD_LTE	TDD_B39(20MHz)	38450	1900	20.05	-4.36	16.92
15	TRP	TDD_LTE	TDD_B39(20MHz)	38550	1910	21.4	1.61	17.89
16	TIS(RSSI)	TDD_LTE	TDD_B39(20MHz)	38550	1910	-73.52	-94.39	-90.28
17	TRP	TDD_LTE	TDD_B40(20MHz)	38750	2310	20.34	3.66	15.73
18	TRP	TDD_LTE	TDD_B40(20MHz)	39150	2350	19.42	-2.44	15.64
19	TRP	TDD_LTE	TDD_B40(20MHz)	39550	2390	19.78	2.82	16.33
20	TIS(RSSI)	TDD_LTE	TDD_B40(20MHz)	39550	2390	-76.76	-88.42	-85.91
21	TRP	TDD_LTE	TDD_B41(20MHz)	39750	2506	21.81	4.95	17.98
22	TRP	TDD_LTE	TDD_B41(20MHz)	40620	2593	21.7	5.89	18.22
23	TRP	TDD_LTE	TDD_B41(20MHz)	41490	2680	20.97	4.97	17.34
24	TIS(RSSI)	TDD_LTE	TDD_B41(20MHz)	41490	2680	-72.99	-87.12	-81.92