

Antenna Factory: Shanghai Shangyuan Communication
Technology Co., Ltd
1st Floor, Building 4, No. 99, Lane 215, Gaoguang Road,
Qingpu District, Shanghai

1、Main antenna

- technical parameter

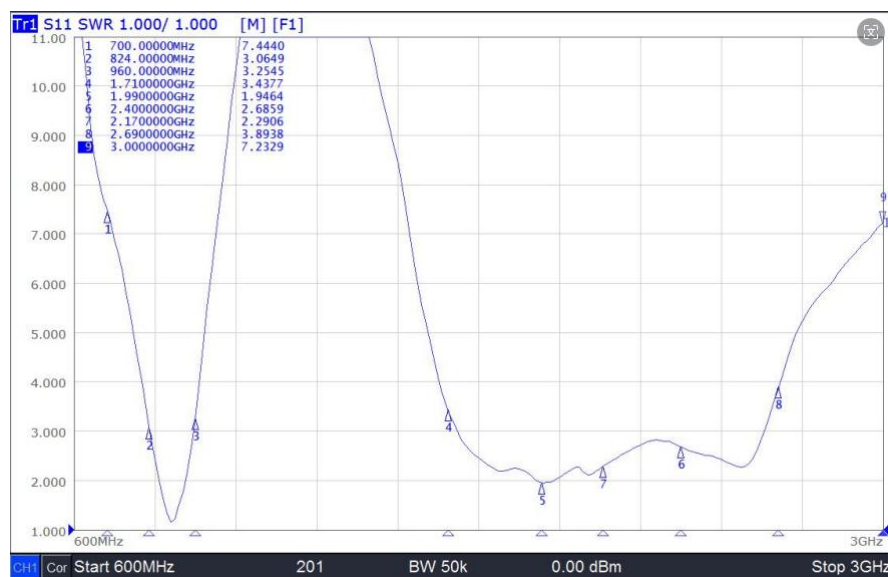
Antenna model: 2G/3G/4G

Antenna type: **FPC**

frequency range : **700MHz~2690MHz**

Voltage standing wave ratio: ≤ 5.0 : 1

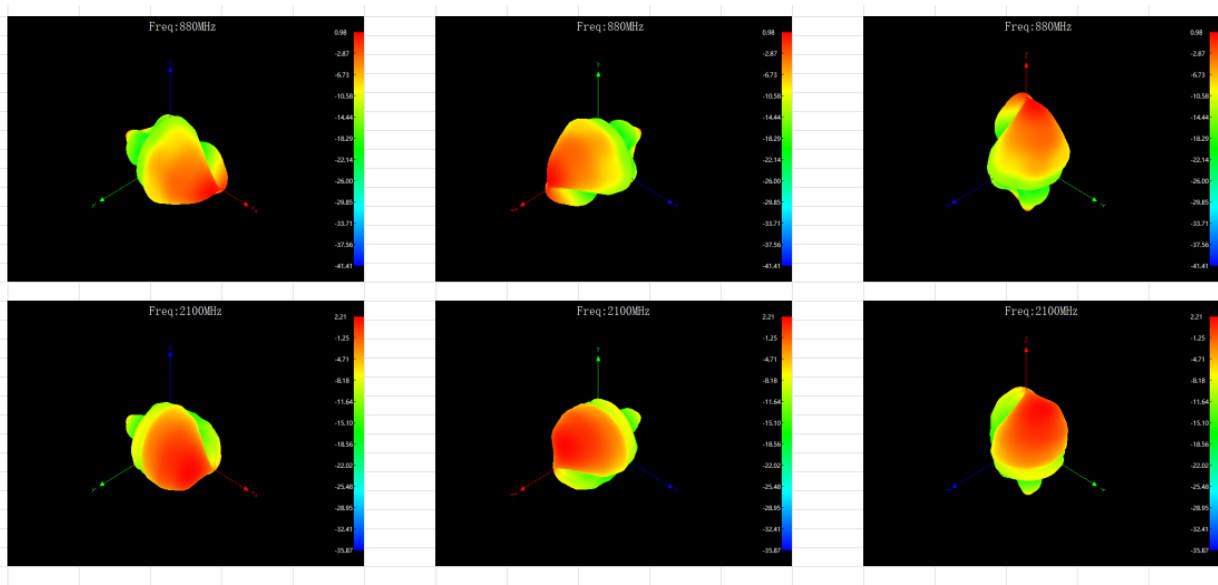
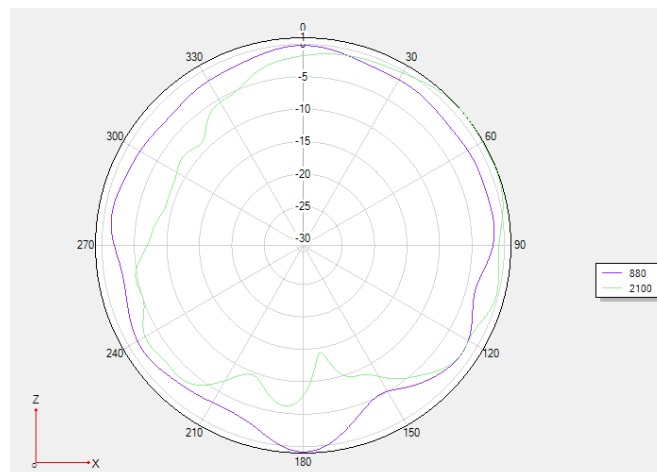
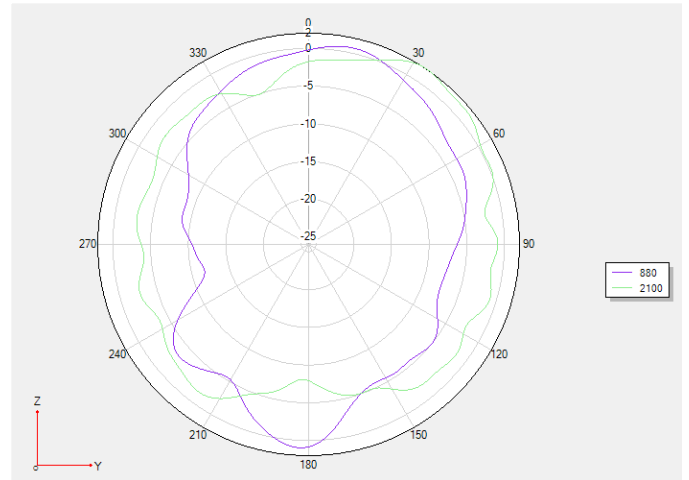
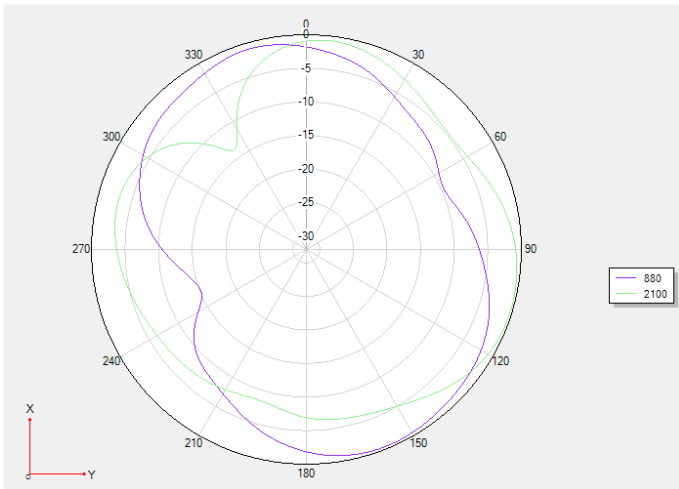
- S11



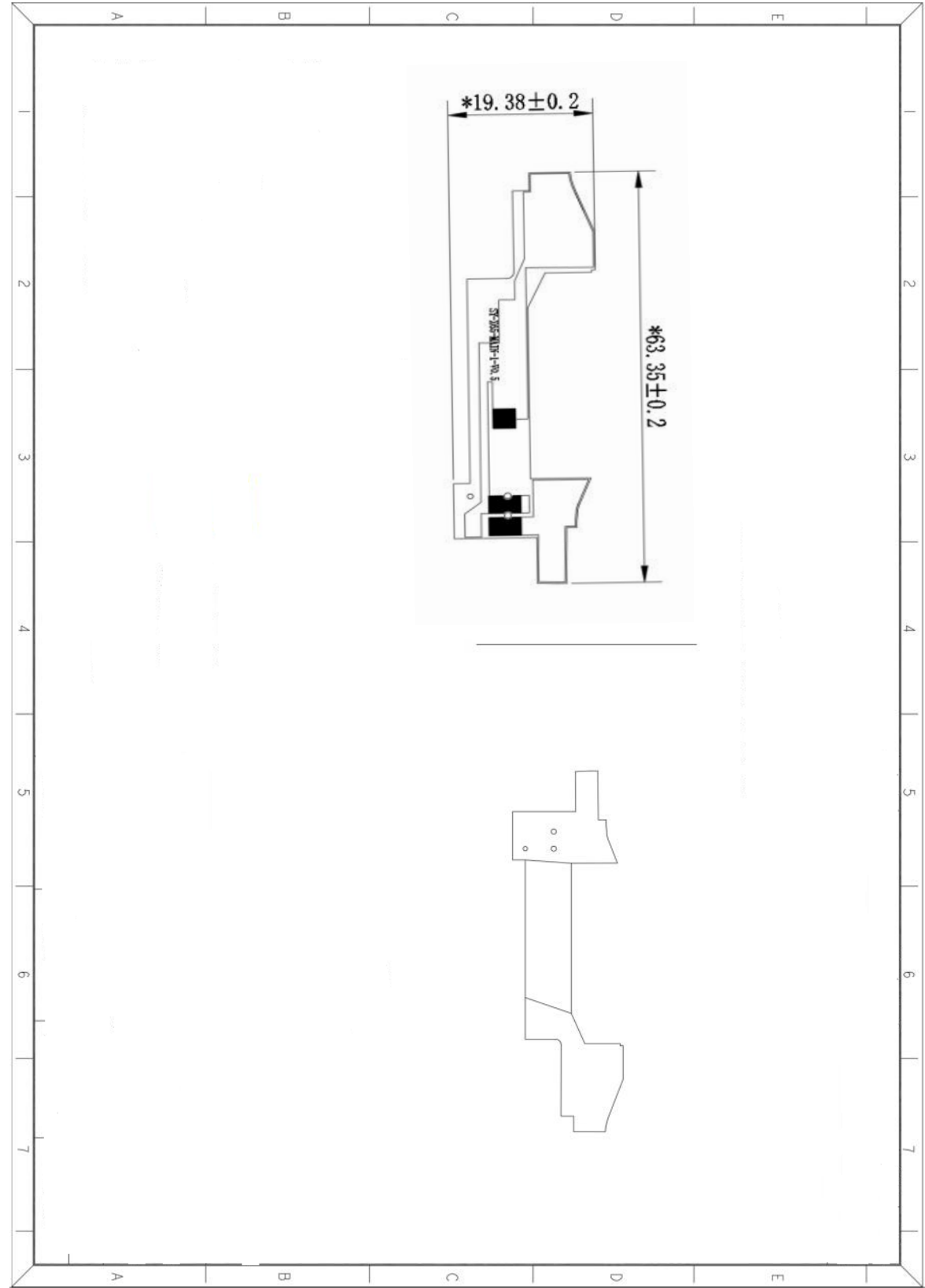
● Antenna efficiency and gain

Frequency/MHz	MaxGain/dBi	Efficiency / %	Frequency/MHz	MaxGain/dBi	Efficiency / %
700	0.09	25.43	1700	-0.54	25.96
720	0.15	25.48	1730	-0.54	25.46
740	0.03	26.69	1760	-0.08	27.45
780	0.93	27.83	1790	-0.49	27.54
800	0.99	26.75	1820	-0.18	26.28
820	0.08	26.57	1850	-0.09	25.39
840	0.02	27.25	1880	0.57	25.32
860	0.07	28.18	1910	0.62	25.61
880	0.98	31.92	1940	0.88	28.12
900	0.79	35.32	1970	0.97	25.61
920	0.33	38.55	2000	1.14	28.12
940	0.09	38.02	2030	1.42	27.39
960	0.09	38.19	2060	2	28.82
			2090	1.04	29.49
			2120	2.21	28.82
			2150	1.39	29.66
			2180	1.72	27.35
			2210	1.84	30.55
			2240	1.86	31.26
			2270	1.51	31.48
			2300	1.7	31.92
			2330	1.58	31.48
			2360	1.39	31.48
			2390	1.14	28.51
			2420	1.34	29.58
			2450	1.34	30.27
			2480	1.3	29.79
			2510	1.66	29.11
			2540	1.52	30.48
			2570	1.85	29.65
			2600	1.74	29.24
			2630	1.85	30.48
			2660	1.73	28.84
			2690	2.17	29.92

● Direction diagram



● structure size



2、Three in one antenna

- technical parameter

Antenna model: 2.4G/5.8G/GPS

Antenna Factory: Shenzhen Shangyuan Technology Co., Ltd

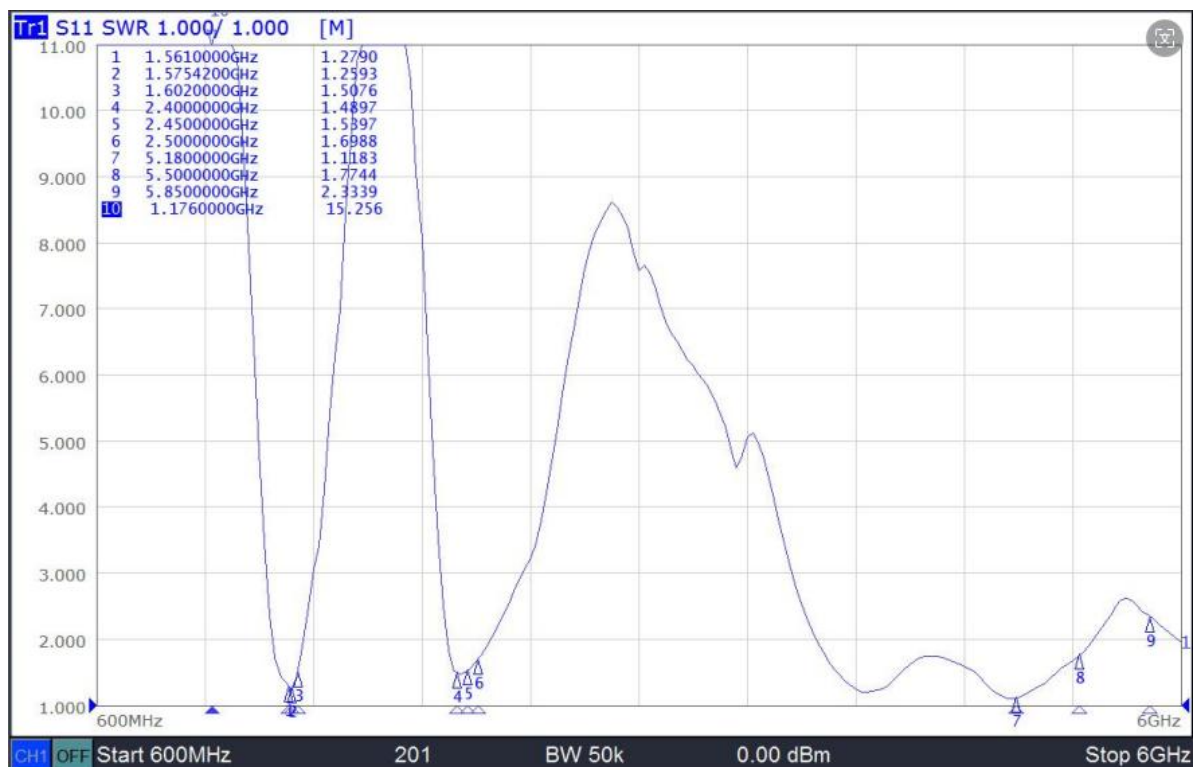
Antenna type: FPC

frequency range: 2400MHz~2500MHz 5150MHz~5850MH

1575.42MHZ

Voltage standing wave ratio: ≤ 3.0 : 1

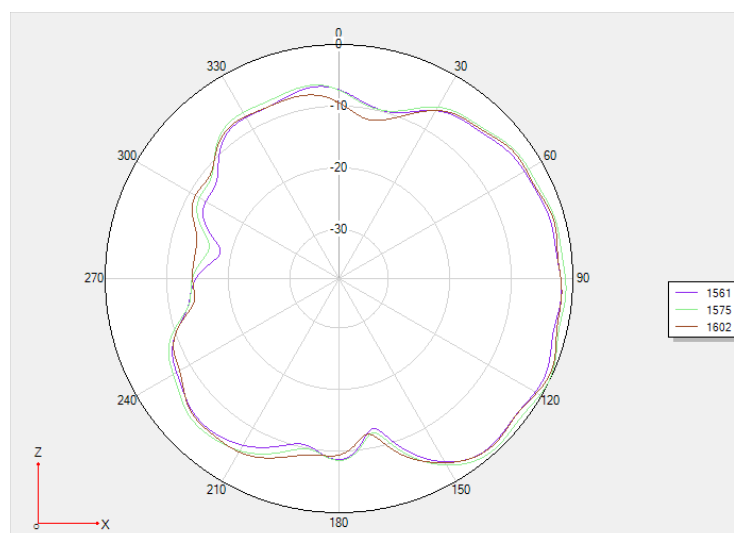
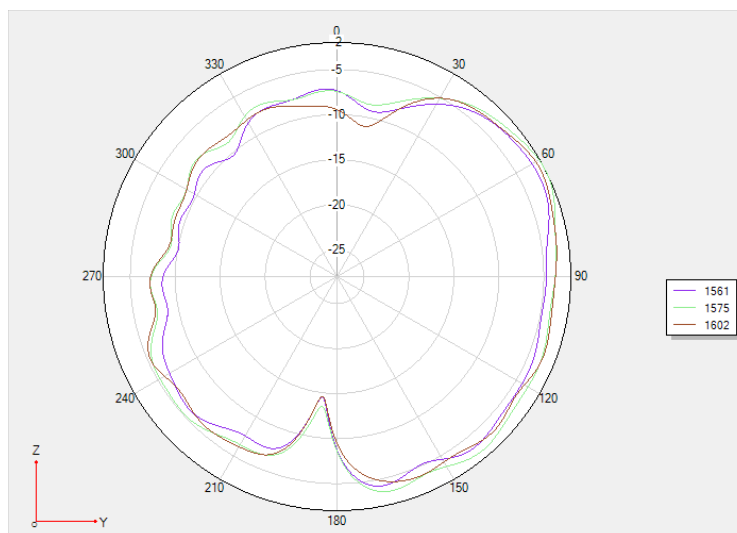
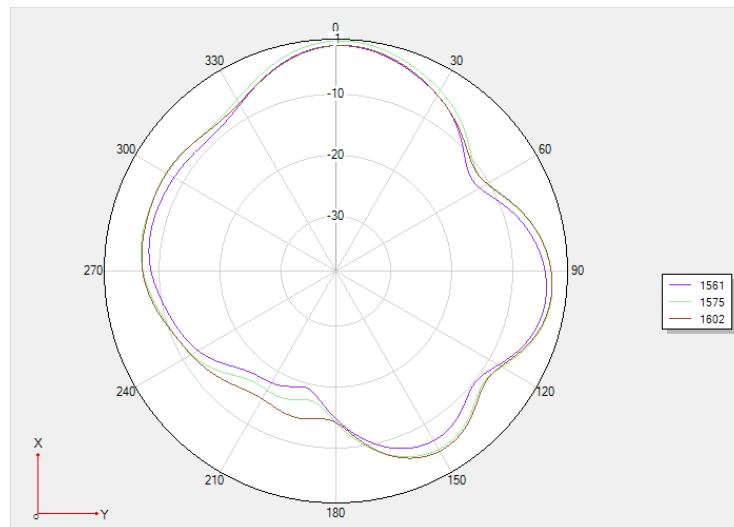
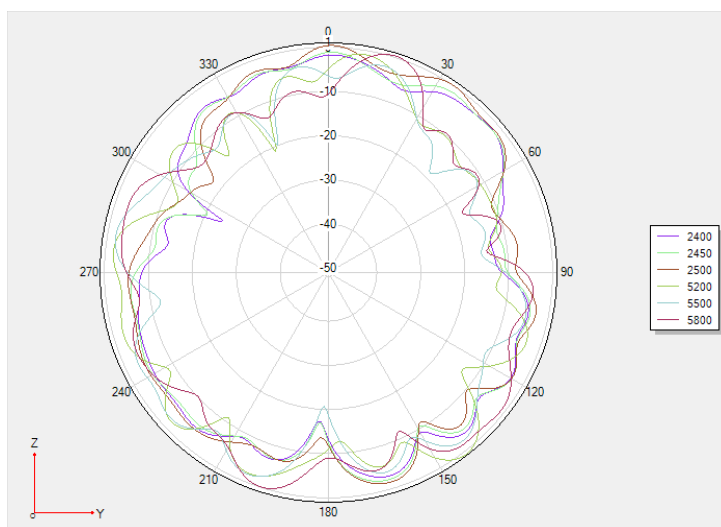
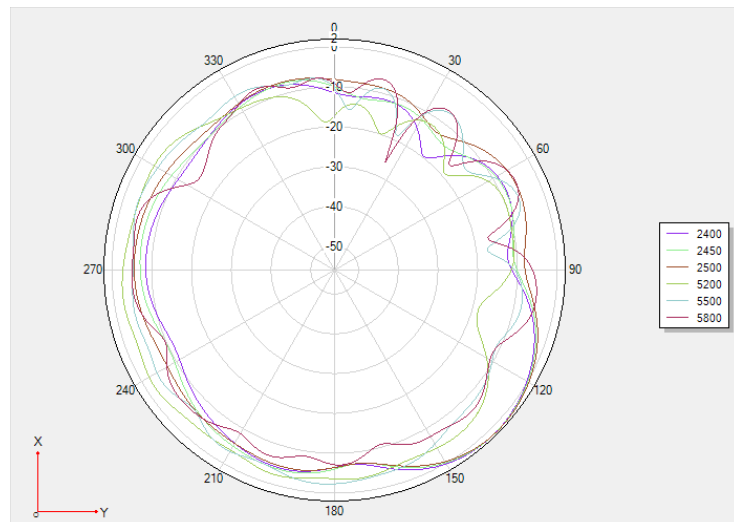
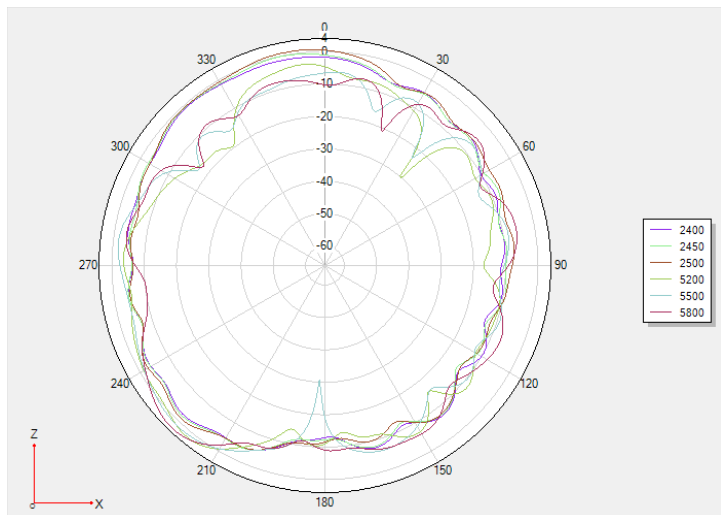
- S11

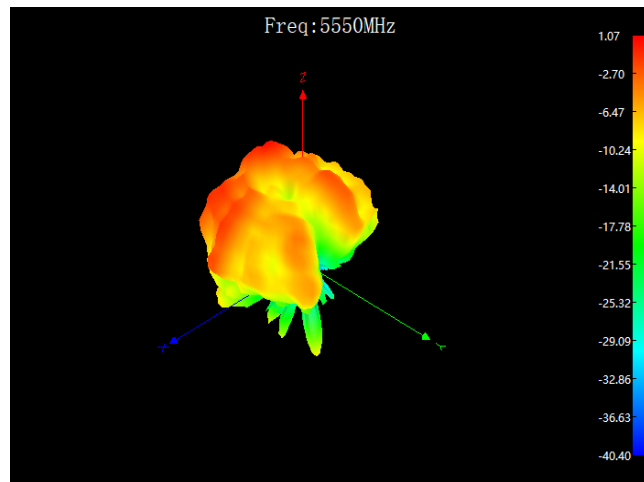
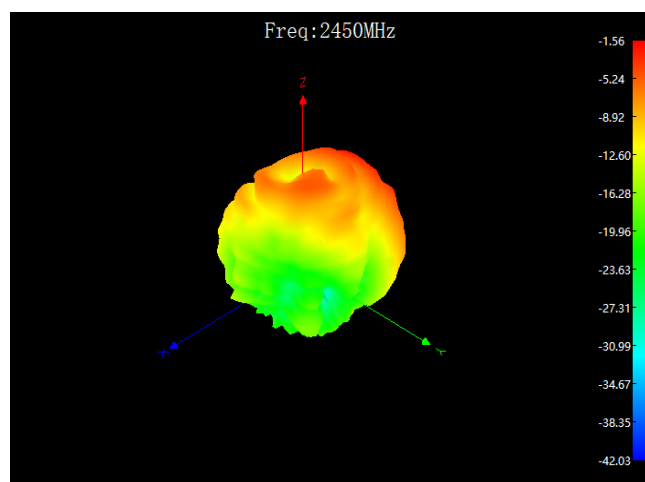
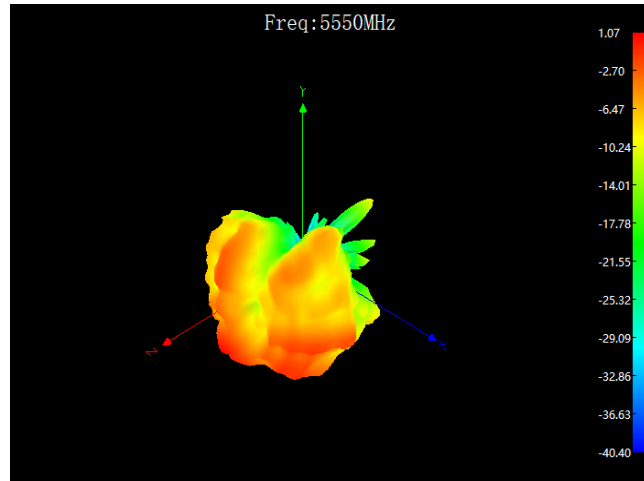
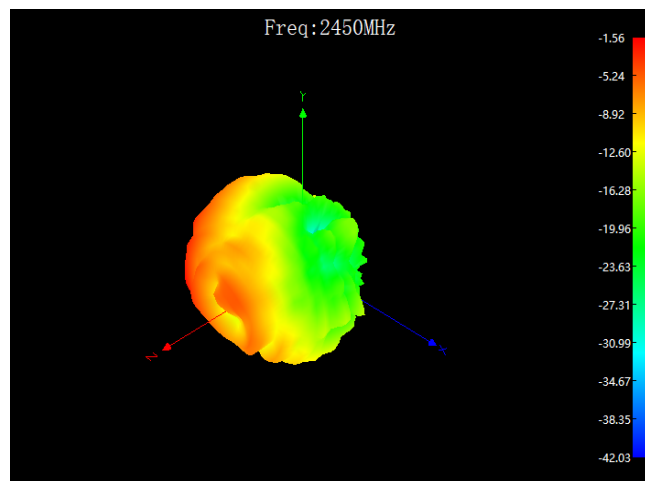
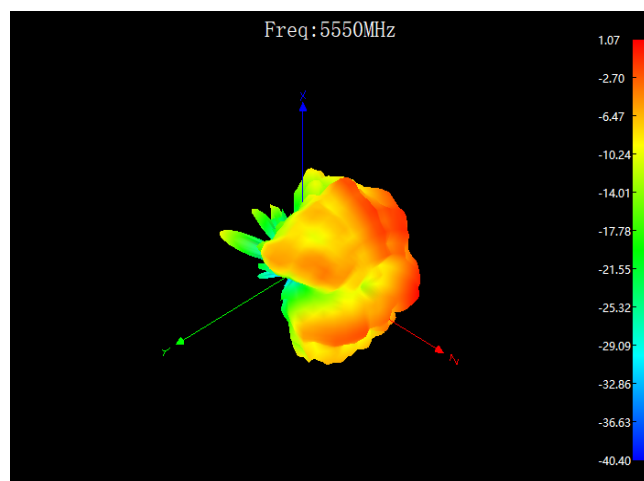
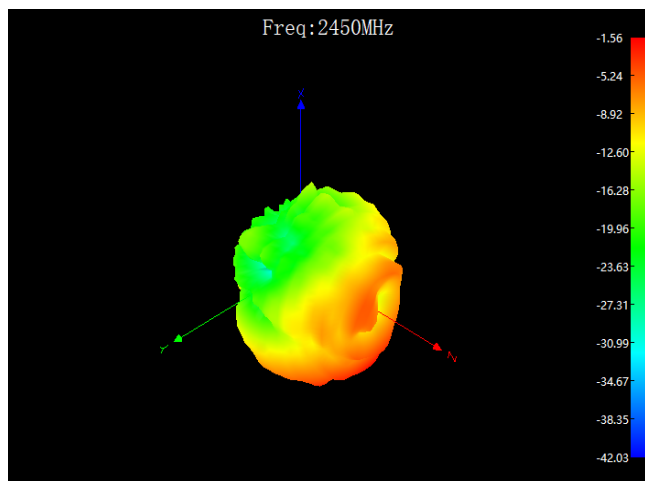


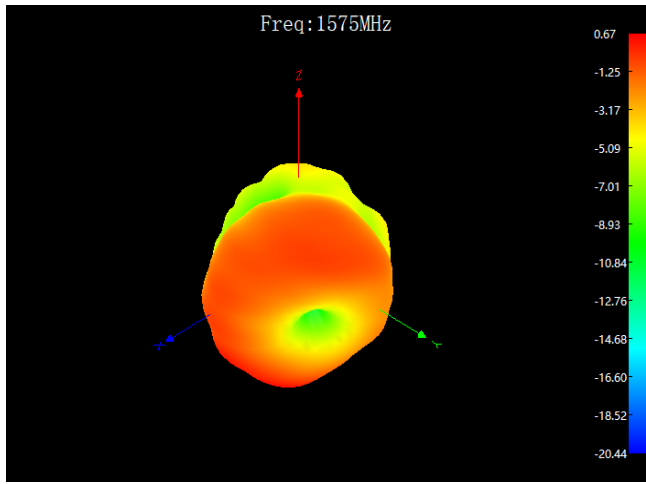
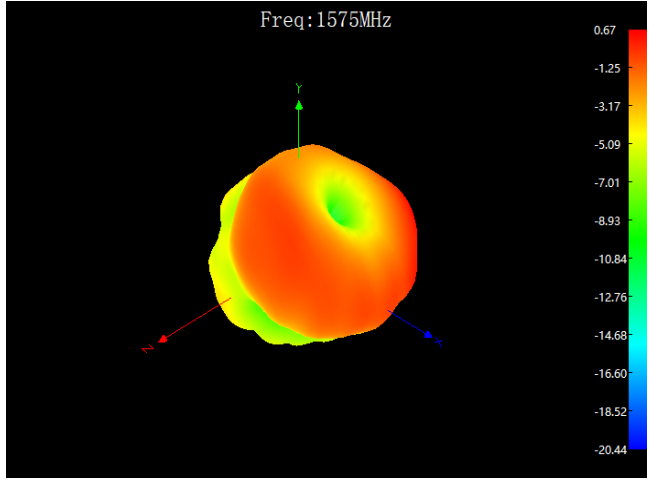
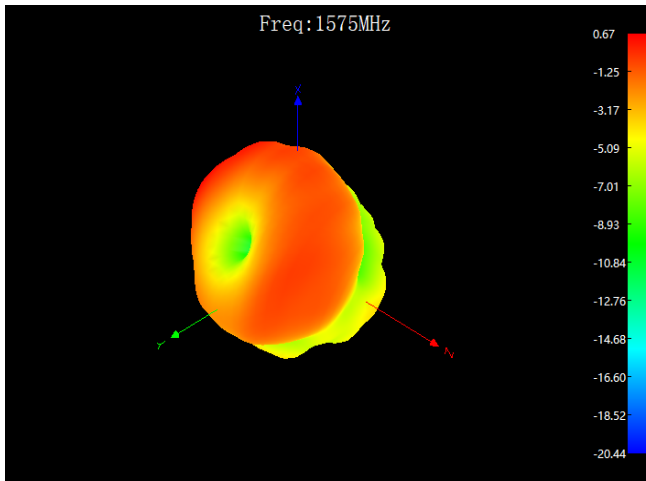
● Antenna efficiency and gain

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	-1.64	33.81
2410	-1.61	33.42
2420	-1.87	32.89
2430	-1.92	32.81
2440	-1.65	35.24
2450	-1.56	35.56
2460	-1.7	37.58
2470	-1.65	35.65
2480	-1.85	36.98
2490	-1.68	35.56
2500	-2.06	37.33
5150	0.96	29.38
5200	0.49	27.67
5250	0.65	26.79
5300	0.85	28.64
5350	0.89	27.61
5400	0.64	26.55
5450	0.67	29.99
5500	0.88	28.44
5550	1.07	26.06
5600	0.49	26.61
5650	0.76	26.98
5700	0.07	27.16
5750	0.39	26
5800	0.89	29.51
5850	0.99	30.13
Frequency/Mhz	MaxGain/dBi	Efficiency / %
1550	0.3	30.34
1555	0.42	31.05
1560	0.36	31.55
1565	0.51	31.77
1570	0.52	31.7
1575	0.67	31.62
1580	0.56	31.41
1585	0.55	31.19
1590	0.43	30.97
1595	0.31	30.69
1600	0.34	30.62
1605	0.27	30.48
1610	0.29	30.2

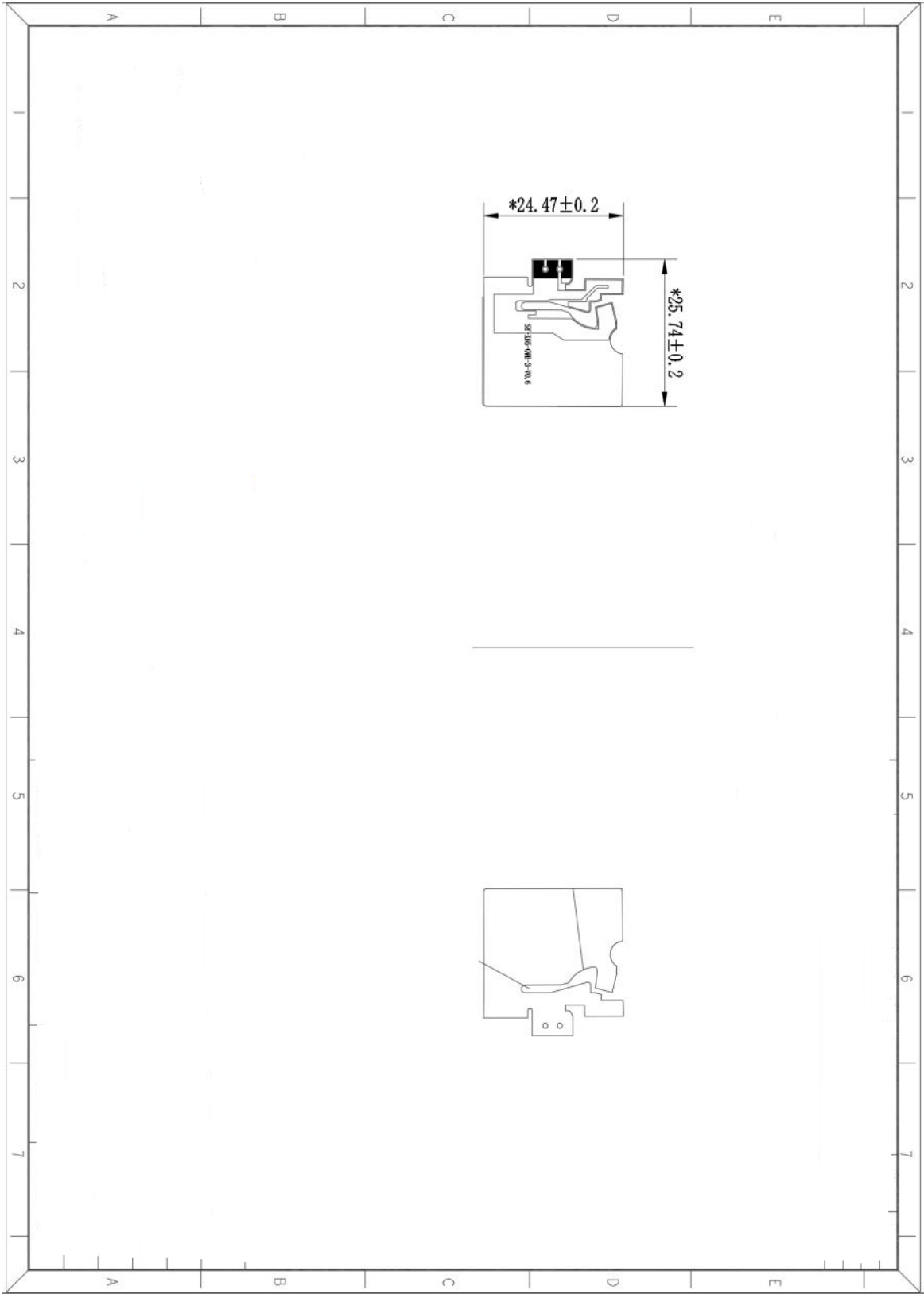
● Direction diagram







● structure size

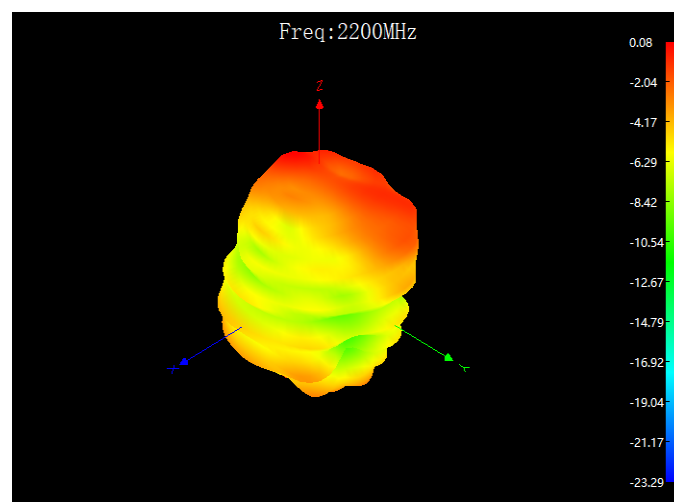
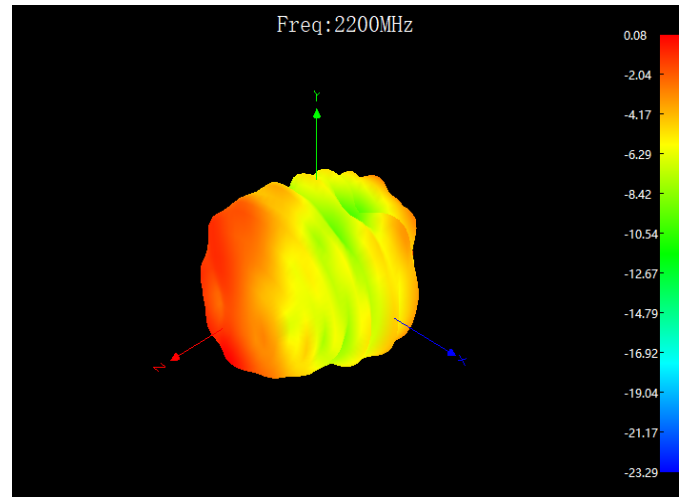
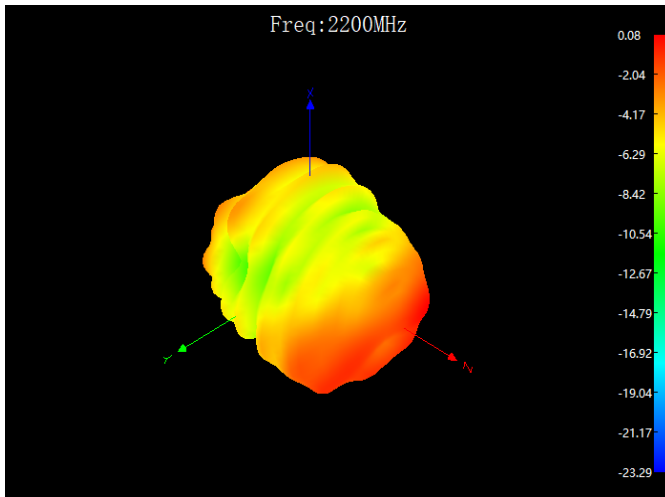
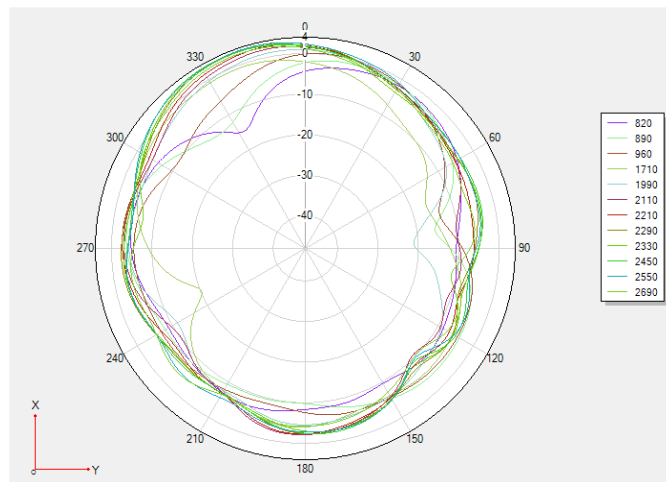
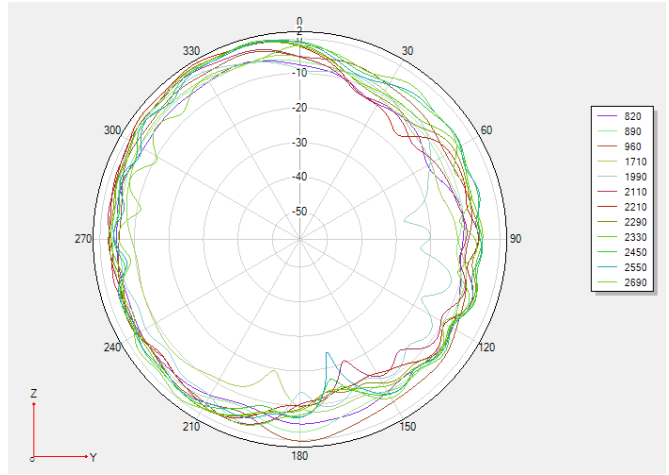
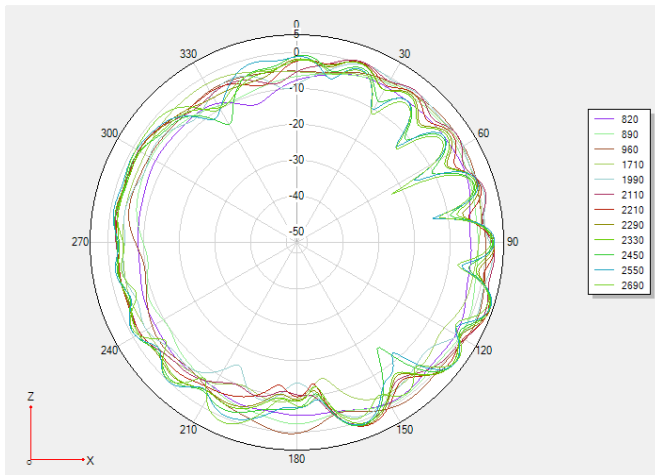


4、Diversity antenna

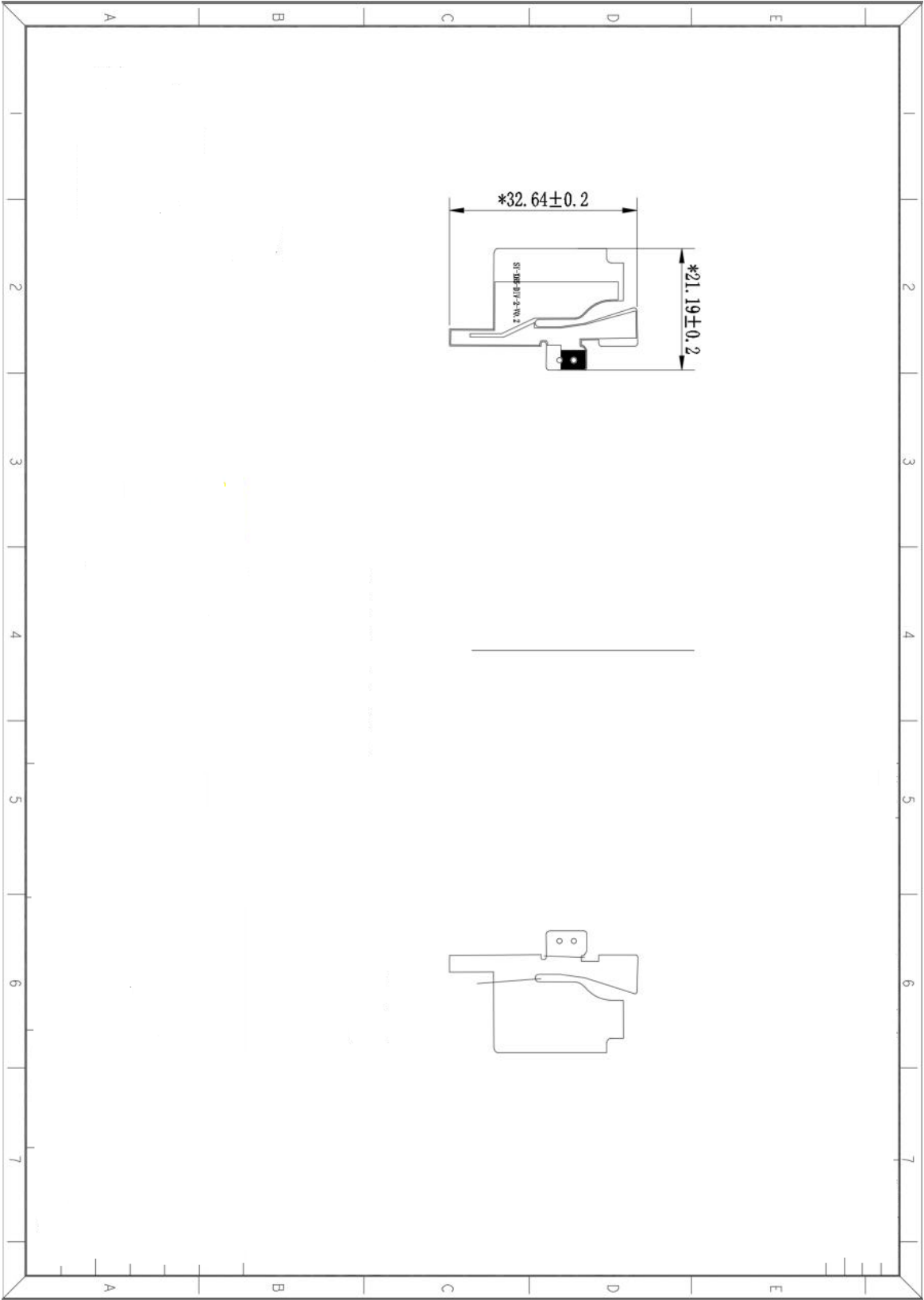
Antenna efficiency and gain

Frequency/Mhz	MaxGain/dBi	Efficiency / %				
1700	-1.97	26.85		2220	-0.02	25.47
1720	-1.6	31.12		2240	-0.27	25.7
1740	-0.81	34.91		2260	-0.26	26.61
1760	-0.89	39.9		2280	0.18	27.29
1780	-0.65	45.08		2300	0.31	26.36
1800	-0.55	45.71		2320	0.32	26.49
1820	0.41	48.53		2340	0.23	27.35
1840	1.24	53.21		2360	0.09	26.98
1860	0.96	53.46		2380	-0.04	26.18
1880	1.56	53.58		2400	-0.14	25.06
1900	1.86	52.36		2420	-0.81	22.91
1920	1.82	51.4		2440	-0.84	23.39
1940	1.34	50.23		2460	-0.4	25.23
1960	0.59	49.09		2480	-0.03	25.35
1980	0.35	48.42		2500	0.23	25.23
2000	0.21	46.13		2520	0.66	25.82
2020	0.46	44.06		2540	0.75	25.23
2040	0.48	41.69		2560	1.01	25.94
2060	0.03	39.36		2580	1.09	25.82
2080	0.05	37.76		2600	1.05	25.12
2100	0.18	35.89		2620	1.07	24.72
2120	0	33.42		2640	0.96	24.77
2140	-0.7	29.24		2660	0.81	24.04
2160	-0.46	27.93		2680	1.03	24.15
2180	-0.01	27.1		2700	1.08	23.01
2200	0.08	25.7				

● Direction diagram



● structure size

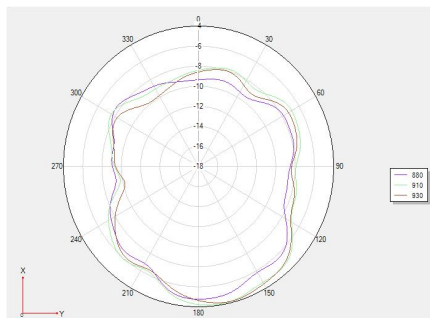
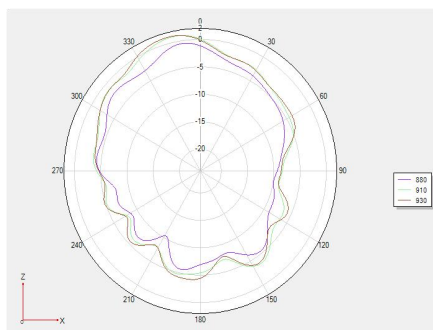


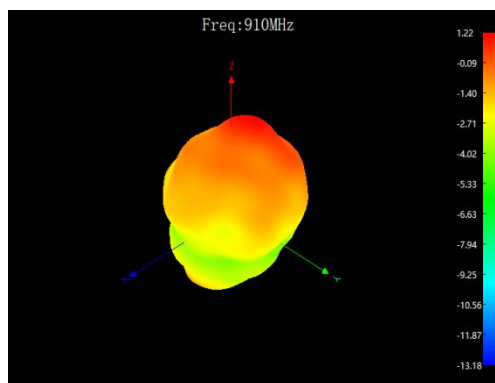
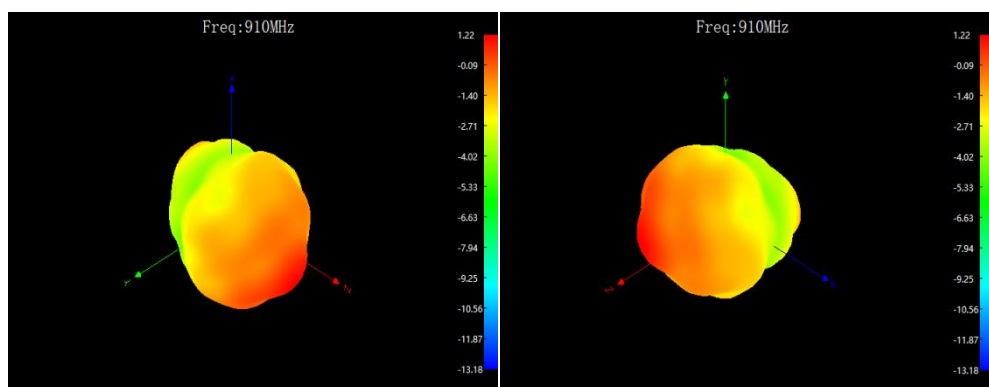
5、RFID antenna

Antenna efficiency and gain

Frequency/Mhz	Efficiency / %	MaxGain/dBi	Theta AxialRatio dB
800	24.53	-9	1.55
810	25.64	-7.35	1.05
820	26.68	-6.44	0.86
830	28.59	-5.18	0.71
840	30.69	-4.19	0.75
850	33.21	-2.98	1.25
860	36.56	-2.06	1.27
870	40.56	-1.15	0.96
880	44.77	-0.37	0.83
890	48.18	0.41	1.42
900	52.58	0.95	2.11
910	54.59	1.22	2.66
920	56.64	1.47	3
930	54.83	1.44	2.83
940	53.5	1.5	2.77
950	50.13	1.24	2.75
960	47.23	0.76	2.49
970	43.99	-0.01	2.25
980	40.89	-0.71	2.14
990	38.75	-0.97	2.5
1000	36.67	-1.36	2.62

● Direction diagram





● structure size

