



客户：九州
项目：R6883-F1
结构：肖工-13316888409
射频：黄工-13682667404
日期：2026-2-27

Antenna Manufacturer Address: Shenzhen Xinbinuo Communication Technology Co., Ltd
A, 3rd Floor, Building 25, Feipeng Industrial Park, Pinghu Street, Feipeng Industrial Park, No. 171 Ping'an Avenue, Longgang District, Shenzhen City, Guangdong Province



报告类型:

版本号:

机器状态:

调试频段:

GSM:B2/B3/B5/B8

WCDMA:B1/2/4/5/8

FDD-LTE: B1/2/3/4/5/7/8/12/17/18/19/20/26/28A/28B/66

TDD-LTE: B38/40/41

GPS等卫星定位天线

2.4G/5G WIFI

蓝牙



天线开关逻辑

小板开关逻辑			
RF1	C7411	OR	GSM:900TX WCDMA:B1/2/4/8 LTE:B1/2/3/4/7/8/38/40/41/66
RF2	C7412	5.6nH	GSM:850 WCDMA:B5 LTE:B5/18/19/20/26
RF3	C7414	15nH	LTE:B12/17/28A/28B
RF4	C7413	27pF	GSM:900RX

PCB小板（主天线主路匹配）：

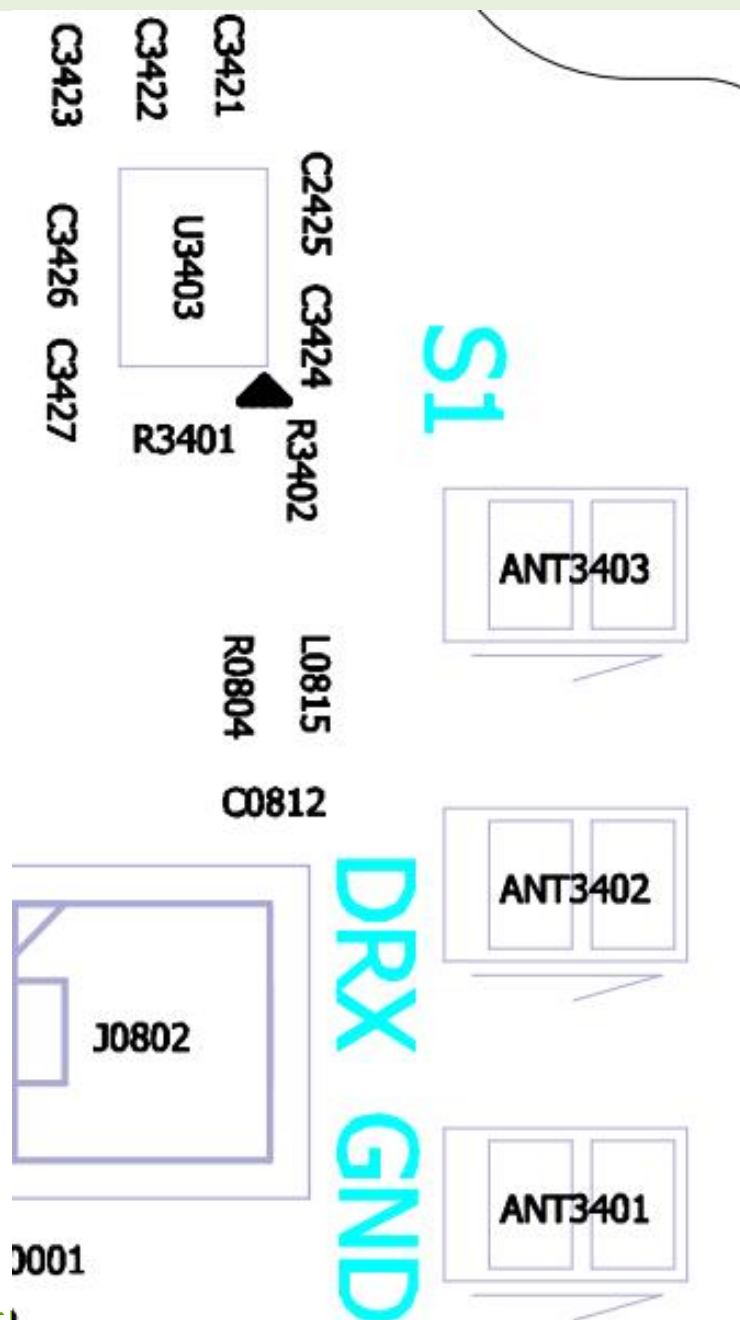
0201规格

Element	Value	PCB位号	Element	Value	PCB位号
E1	0R	R2409	E6	NC	R7413
E2	0R	R7411	E7	0Ω	R7412
E3	NC	L7402	E8	0R	C7411
E4	18nH	L7401	E9	5.6nH	C7412
E5	0R	R7400	E10	15nH	C7414
			E11	27pF	C7413



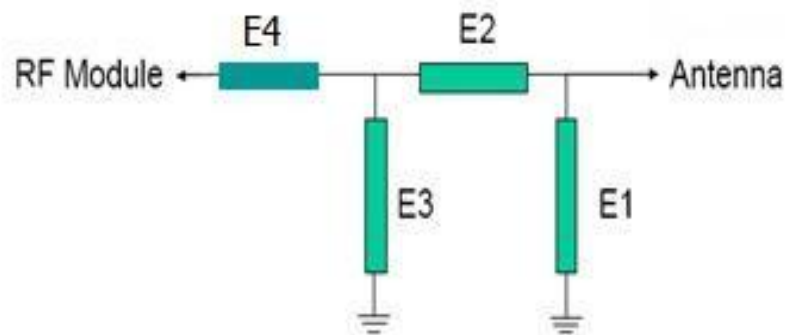
分集天线（主板）：

0201规格		
Element	Value	位号
E2	0.5pF	L0815
E3	6.2NH	R0804
E4	NC	C0812
E5	NC	R3402
E6	NC	R3401

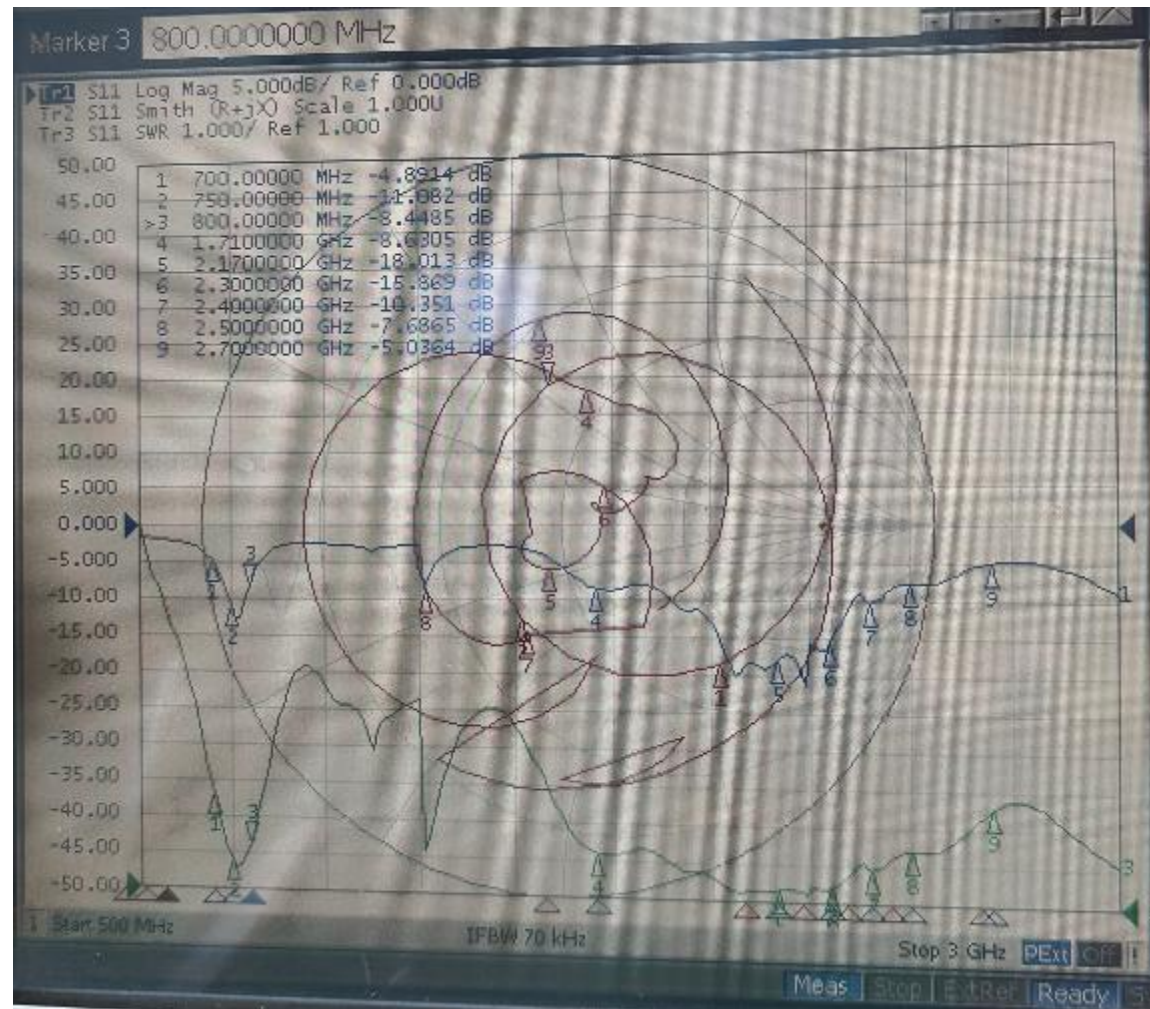


三合一天线（主板）：

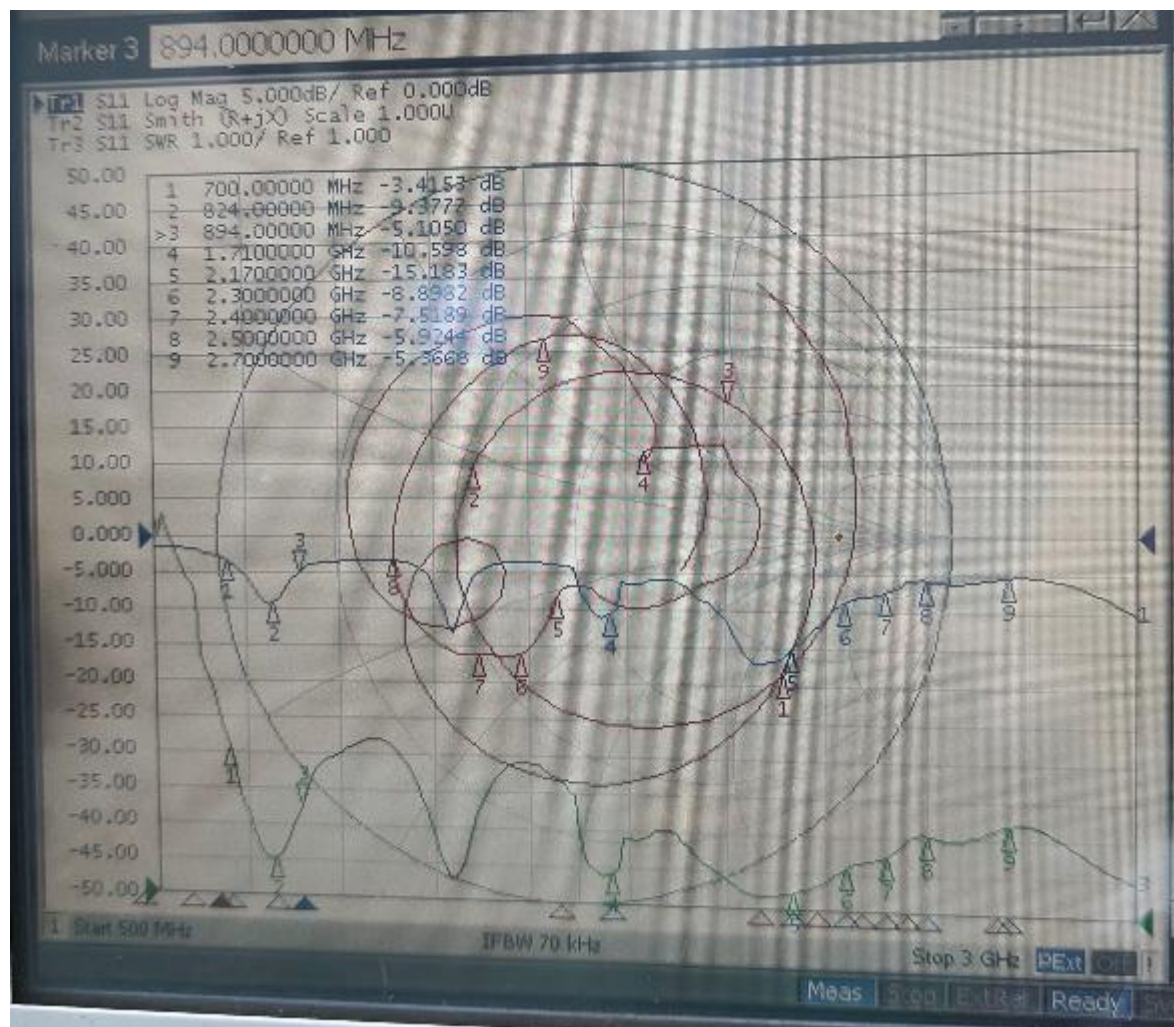
0201规格		
Element	Value	位号
E1	三合一匹配无更改	
E2		
E3		
E4		



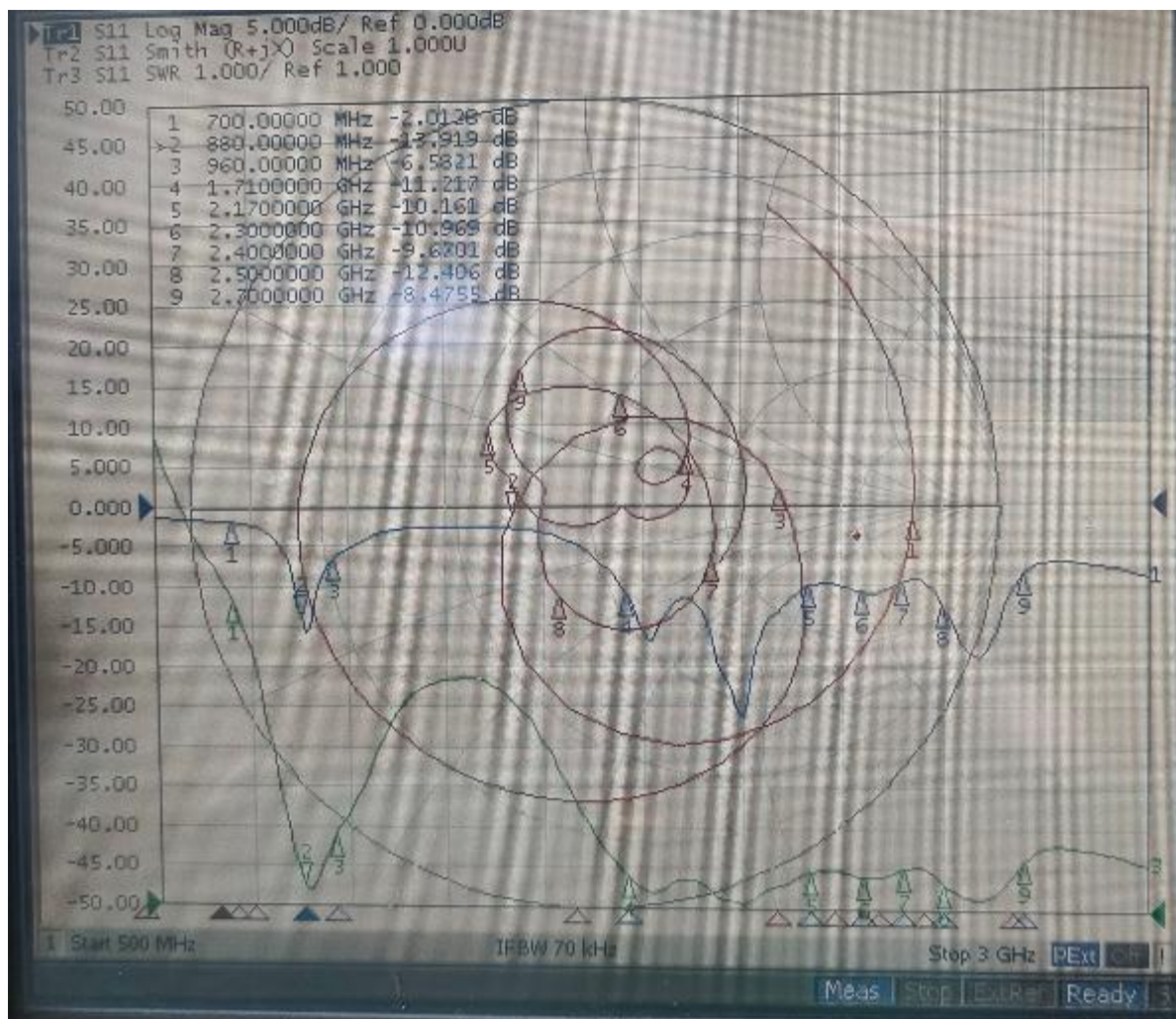
Main antenna 700-800MHz



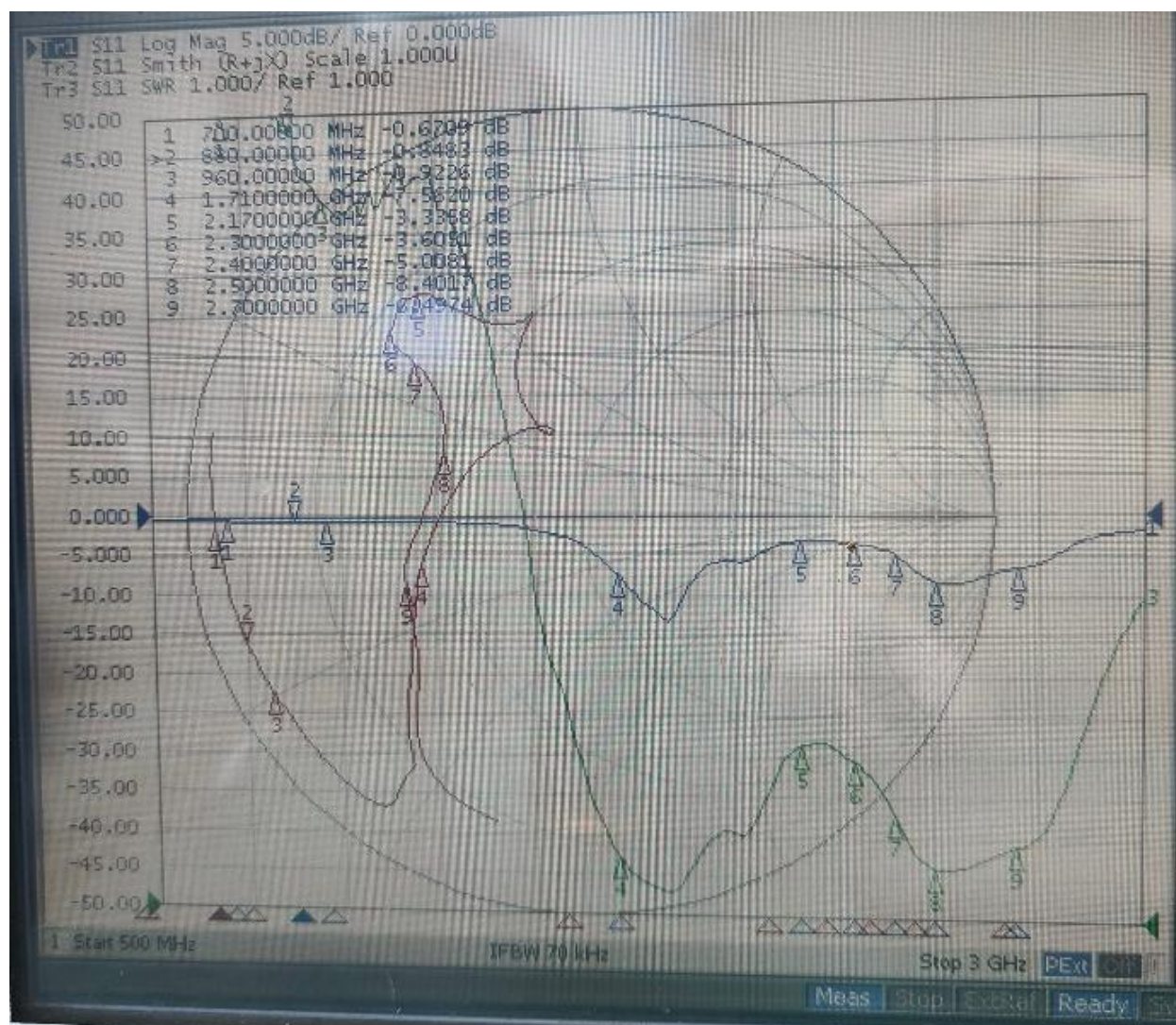
824-894MHz



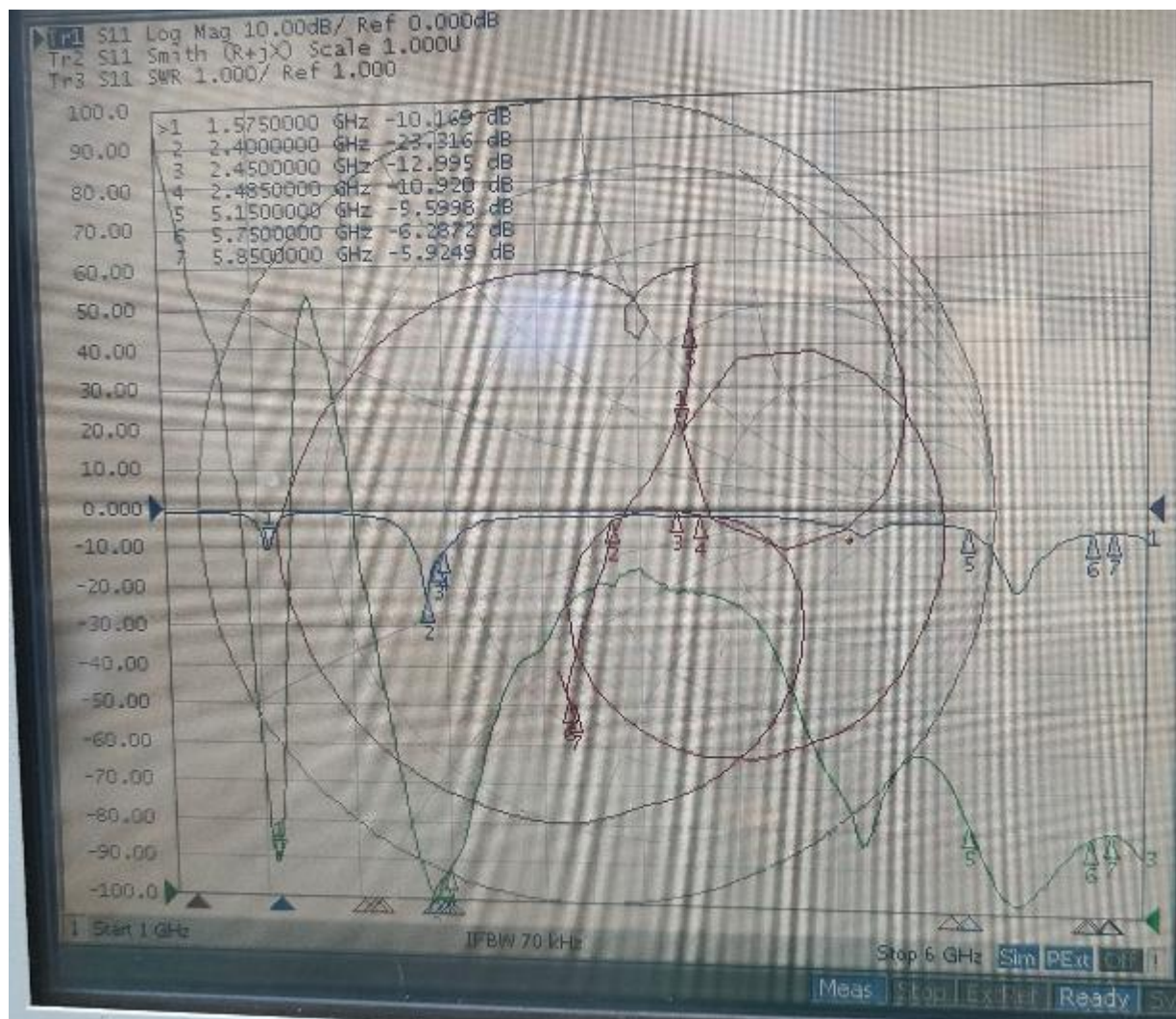
880-960MHz 1710-2690MHz



AUX Antenna



三合一天线 BT WIFI GPS ANTENNA



主天线

Main antenna

Frequency (MHz)	Gain (dBi)	Efficiency (%)
700.0	-2.20	13.07
710.0	-1.74	14.20
720.0	-1.59	14.94
730.0	-1.03	16.68
740.0	-2.22	18.18
750.0	-1.06	17.53
760.0	-1.57	17.87
770.0	-1.02	20.12
780.0	-1.21	15.41
790.0	-1.30	17.62
800.0	-0.74	21.39

Frequency (MHz)	Gain (dBi)	Efficiency (%)
800.0	-0.36	24.51
810.0	-0.28	24.34
820.0	-0.77	22.81
830.0	-1.10	22.56
840.0	-2.41	17.20
850.0	-1.46	18.50
860.0	-2.78	15.39
870.0	-2.82	12.98
880.0	-2.83	12.49
890.0	-3.01	11.61
900.0	-4.41	9.31

主天线 Main antenna

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
880.0	-1.07	18.65	1700.0	-6.24	5.53	2220.0	-0.06	24.28
890.0	-0.31	19.82	1720.0	-6.21	6.44	2240.0	-0.82	23.68
900.0	-1.43	16.89	1740.0	-5.83	7.86	2260.0	-0.65	24.92
910.0	-2.15	15.78	1760.0	-5.39	8.01	2280.0	-1.27	23.20
920.0	-2.10	16.15	1780.0	-5.18	7.55	2300.0	-1.35	22.43
930.0	-4.73	10.94	1800.0	-4.14	9.37	2320.0	-1.40	21.95
940.0	-4.78	11.12	1820.0	-2.88	11.80	2340.0	-2.15	20.17
950.0	-5.85	8.47	1840.0	-0.25	17.66	2360.0	-1.98	19.88
960.0	-6.76	7.61	1860.0	0.66	18.94	2380.0	-2.43	18.24
			1880.0	0.26	18.10	2400.0	-3.60	14.56
			1900.0	1.25	22.40	2420.0	-4.18	12.94
			1920.0	0.50	21.13	2440.0	-5.35	10.73
			1940.0	-0.42	20.28	2460.0	-5.75	9.56
			1960.0	0.87	26.79	2480.0	-5.55	10.12
			1980.0	0.05	24.18	2500.0	-5.23	10.03
			2000.0	-0.76	21.40	2520.0	-5.78	9.09
			2020.0	0.59	24.87	2540.0	-5.81	9.59
			2040.0	0.15	23.13	2560.0	-5.13	9.43
			2060.0	-0.22	19.49	2580.0	-5.70	9.51
			2080.0	1.05	22.44	2600.0	-3.64	11.26
			2100.0	0.74	21.36	2620.0	-3.97	11.14
			2120.0	0.01	20.55	2640.0	-4.24	10.07
			2140.0	1.02	24.12	2660.0	-3.58	10.34
			2160.0	0.83	23.07	2680.0	-3.83	9.85
			2180.0	0.51	22.49	2700.0	-3.93	9.76
			2200.0	0.81	25.48			

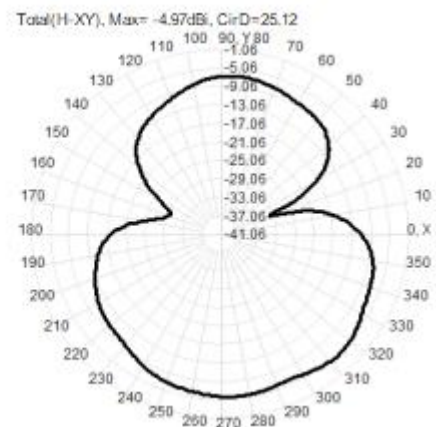
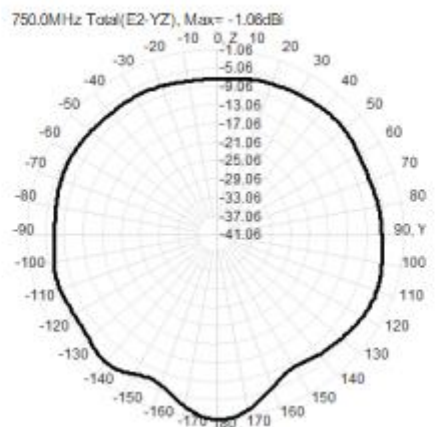
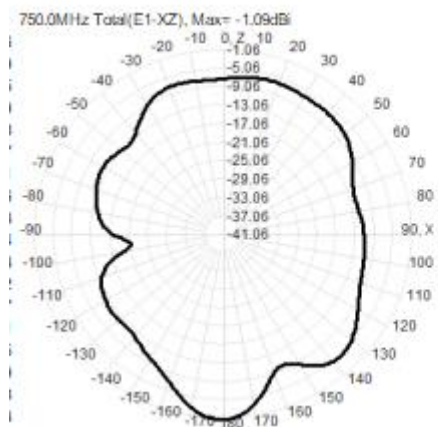
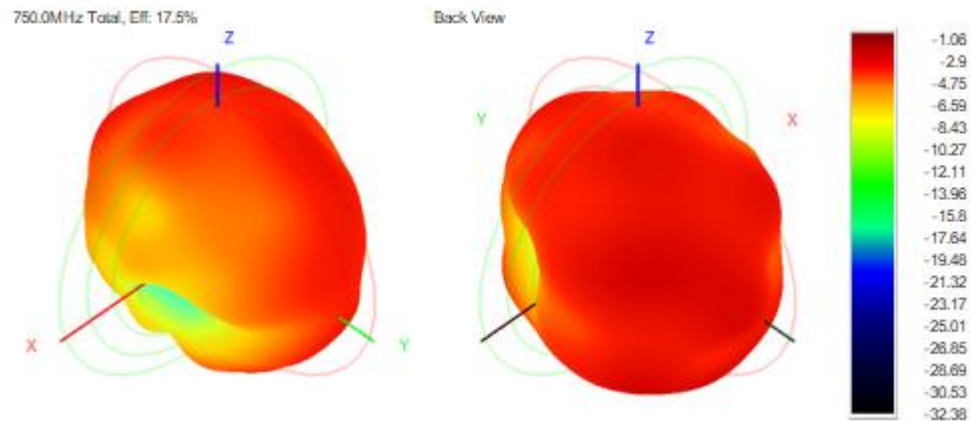
分集天线
aux antenna

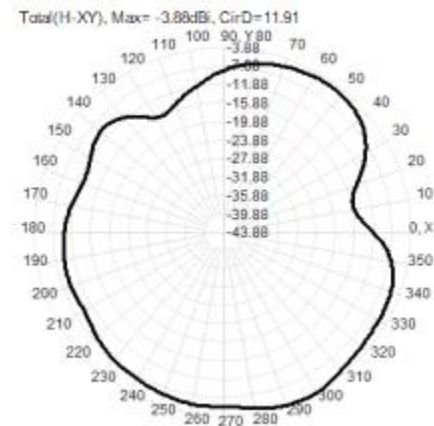
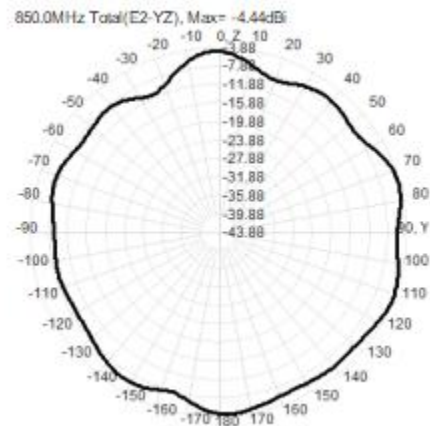
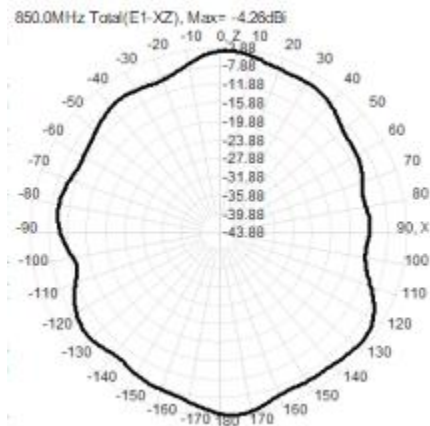
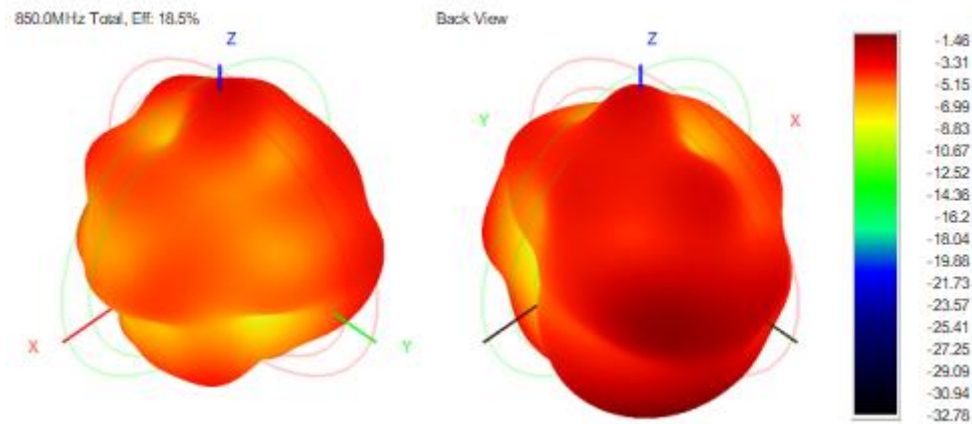
Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
1700.0	-6.25	6.43	2220.0	-3.06	14.63
1720.0	-6.05	6.97	2240.0	-3.21	13.79
1740.0	-5.24	9.00	2260.0	-3.36	14.60
1760.0	-4.69	11.01	2280.0	-3.39	14.42
1780.0	-2.85	14.54	2300.0	-2.82	15.34
1800.0	-2.49	15.74	2320.0	-2.50	16.47
1820.0	-2.86	16.02	2340.0	-2.57	16.71
1840.0	-1.50	19.36	2360.0	-2.05	18.96
1860.0	-1.69	19.25	2380.0	-1.93	19.88
1880.0	-2.64	19.87	2400.0	-2.60	17.95
1900.0	-1.61	24.45	2420.0	-1.88	18.97
1920.0	-2.11	24.16	2440.0	-1.72	18.10
1940.0	-1.91	22.87	2460.0	-1.36	17.15
1960.0	-0.93	27.60	2480.0	0.44	20.35
1980.0	-1.44	24.42	2500.0	0.35	20.71
2000.0	-2.71	20.89	2520.0	-0.19	18.81
2020.0	-1.58	22.72	2540.0	0.64	19.76
2040.0	-2.10	19.40	2560.0	-0.02	18.84
2060.0	-3.03	16.69	2580.0	-1.20	16.95
2080.0	-0.76	21.13	2600.0	0.01	19.93
2100.0	-0.89	20.26	2620.0	-0.72	19.42
2120.0	-1.81	17.85	2640.0	-2.04	16.81
2140.0	-1.24	19.93	2660.0	-1.82	18.11
2160.0	-2.03	17.31	2680.0	-2.13	18.06
2180.0	-2.67	15.06	2700.0	-2.22	18.29
2200.0	-2.29	16.04			

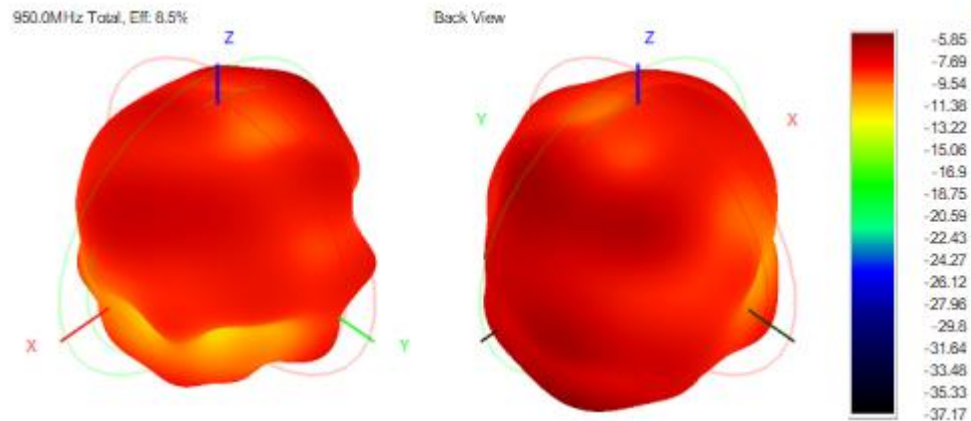
三合一天线 bt wifi gps

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
1570.0	-0.10	29.29	5100.0	-2.02	25.56	5560.0	0.74	33.84
1571.0	-0.36	27.68	5120.0	-2.06	26.03	5580.0	0.74	33.72
1572.0	-0.59	26.39	5140.0	-1.88	27.75	5600.0	0.42	30.30
1573.0	-0.81	25.39	5160.0	-0.99	29.55	5620.0	0.36	30.29
1574.0	-1.01	24.71	5180.0	-0.37	31.46	5640.0	0.38	29.19
1575.0	-1.18	24.30	5200.0	-0.48	29.70	5660.0	0.35	28.65
1576.0	-1.20	24.25	5220.0	-0.28	30.61	5680.0	0.58	29.35
1577.0	-1.18	24.37	5240.0	-0.40	30.18	5700.0	0.77	31.70
1578.0	-1.14	24.60	5260.0	-0.60	30.34	5720.0	0.48	28.48
1579.0	-1.07	24.79	5280.0	-0.34	32.41	5740.0	0.20	28.89
1580.0	-1.00	24.86	5300.0	-0.10	34.79	5760.0	0.00	26.62
Frequency (MHz)	Gain (dBi)	Efficiency (%)	5320.0	-0.02	31.80	5780.0	-0.05	25.90
2400.0	-0.20	29.10	5340.0	0.08	32.18	5800.0	0.29	26.69
2410.0	1.07	34.31	5360.0	0.24	31.74	5820.0	1.02	30.97
2420.0	-0.17	30.02	5380.0	-0.08	31.50	5840.0	1.23	30.65
2430.0	-0.26	29.62	5400.0	0.09	30.49	5860.0	1.14	32.36
2440.0	-0.83	27.59	5420.0	0.84	35.41	5880.0	1.04	30.61
2450.0	0.05	30.86	5440.0	1.43	37.11	5900.0	0.99	29.38
2460.0	-0.64	25.70	5460.0	1.39	36.65			
2470.0	-0.80	28.52	5480.0	1.35	36.22			
2480.0	-0.54	28.90	5500.0	1.15	35.14			
2490.0	-1.00	26.31	5520.0	0.95	33.34			
2500.0	-0.82	28.39	5540.0	0.71	34.54			

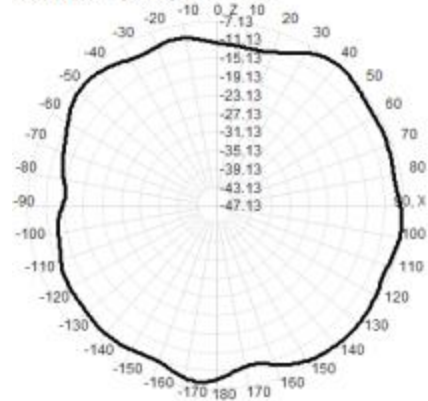
MAIN



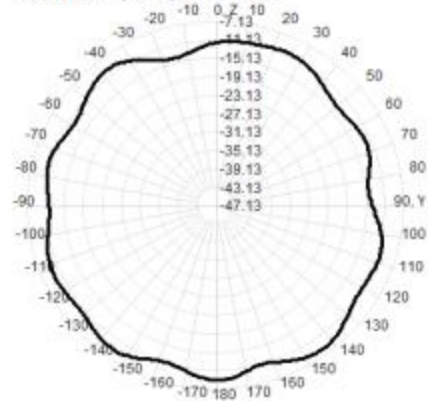




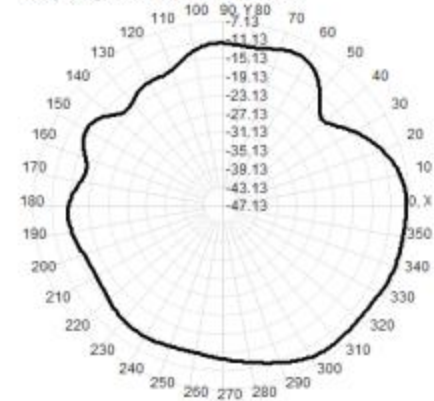
950.0MHz Total(E1-XZ), Max=-7.13dBi

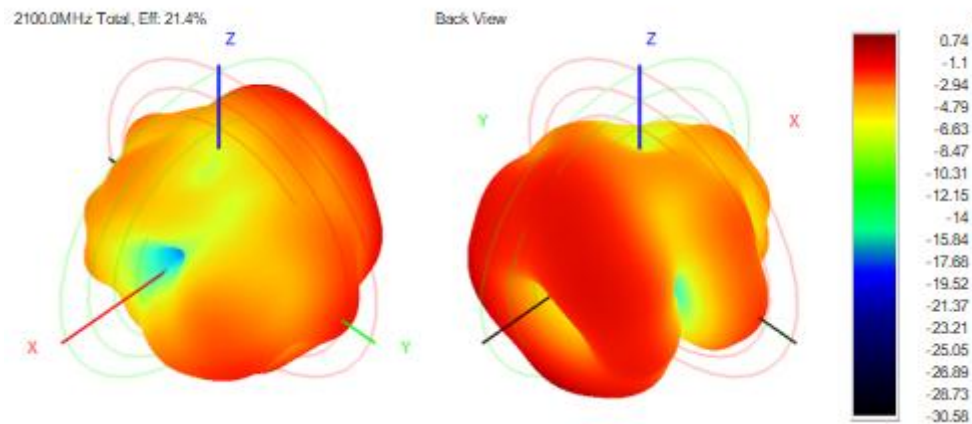


950.0MHz Total(E2-YZ), Max=-8.74dBi

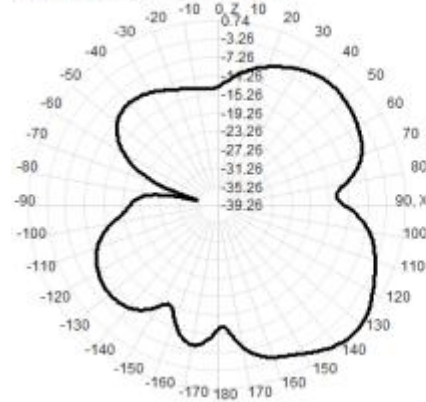


Total(H-XY), Max=-8.16dBi, CirD=10.68

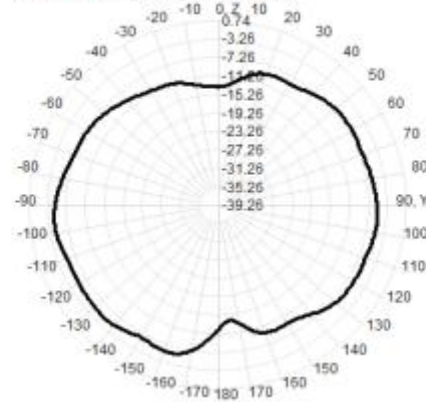




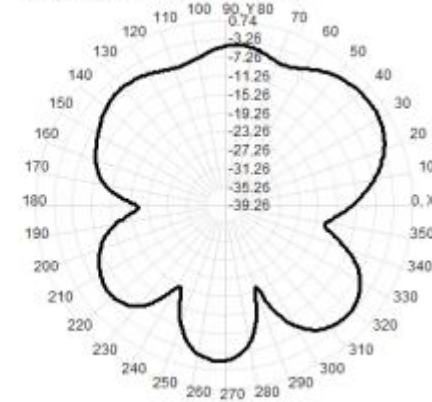
2100.0MHz Total(E1-XZ), Max= 0.74dBi



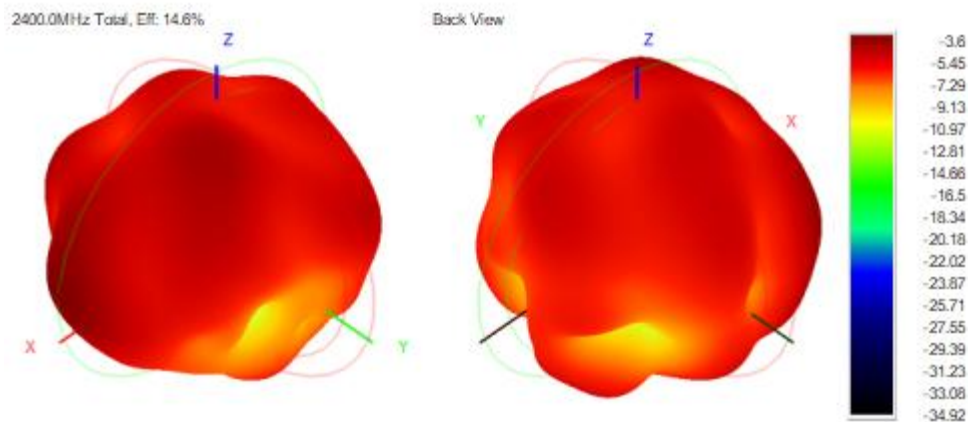
2100.0MHz Total(E2-YZ), Max= -4.57dBi



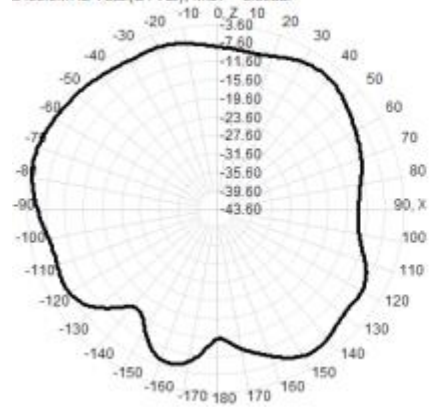
Total(H-XY), Max= -1.32dBi, CirD= 19.81



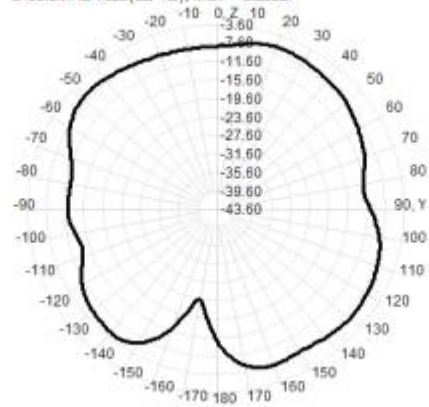
AUX



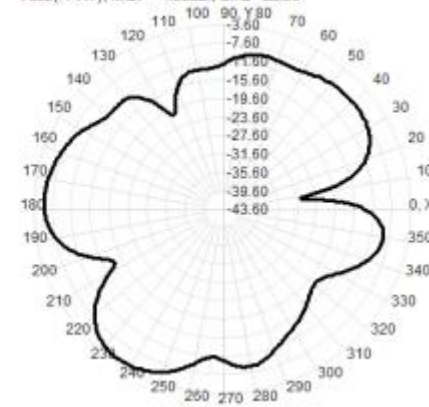
2400.0MHz Total(E1-XZ), Max= -3.60dBi



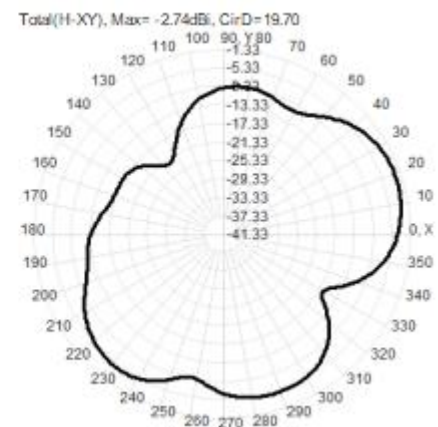
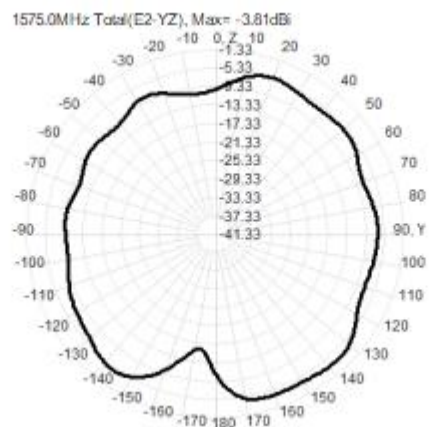
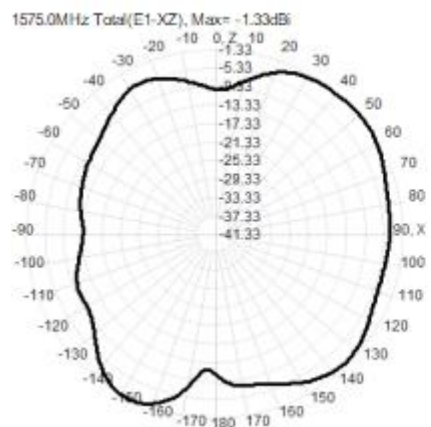
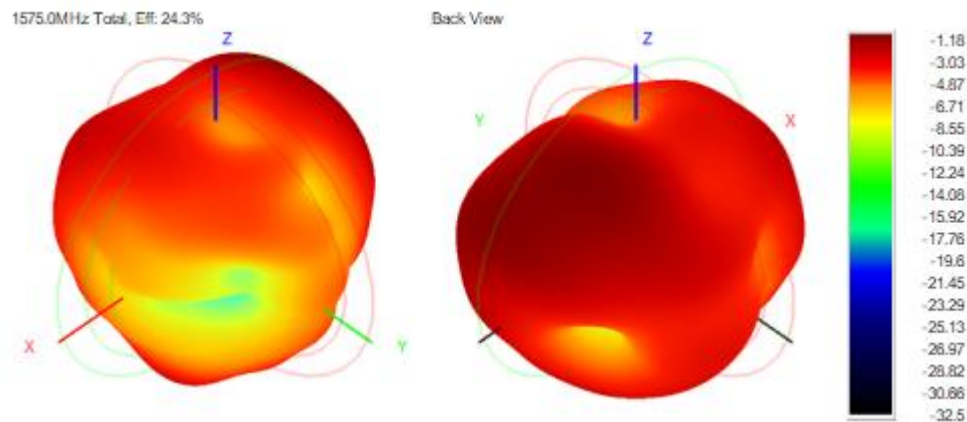
2400.0MHz Total(E2-YZ), Max= -6.22dBi



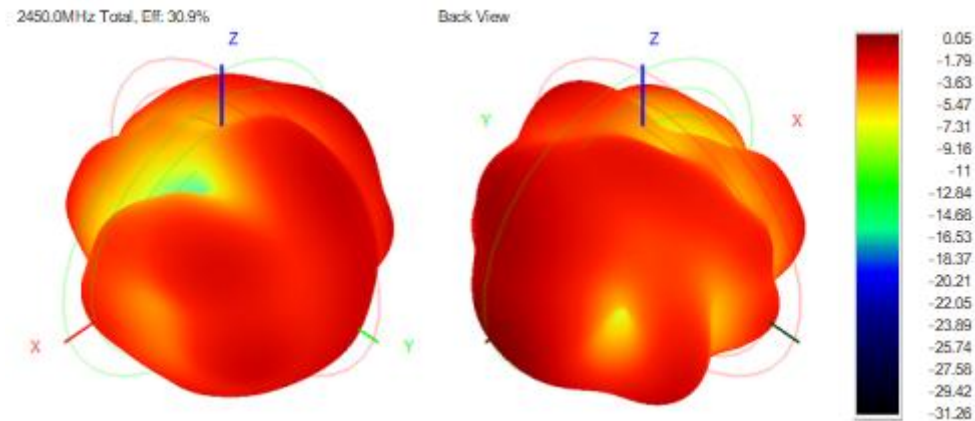
Total(H-XY), Max= -4.50dBi, CirD=22.59



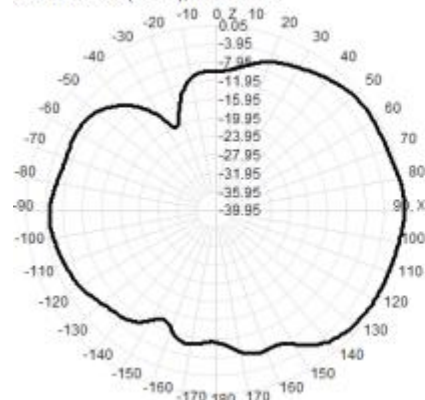
GNSS



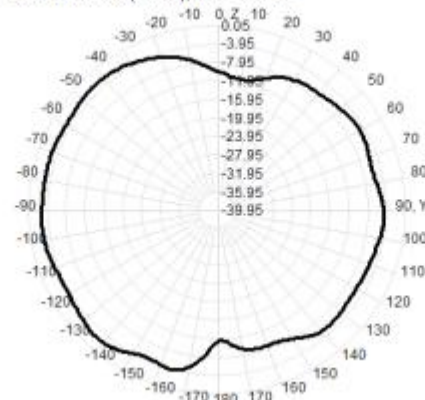
BT WIFI



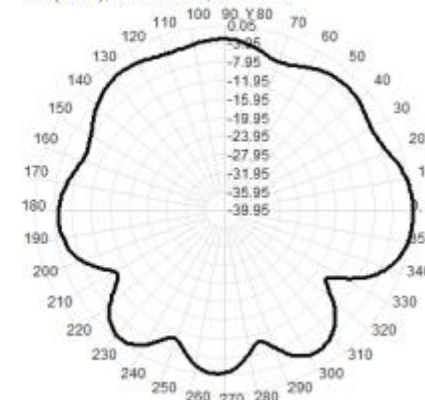
2450.0MHz Total(E1-XZ), Max= 0.05dBi



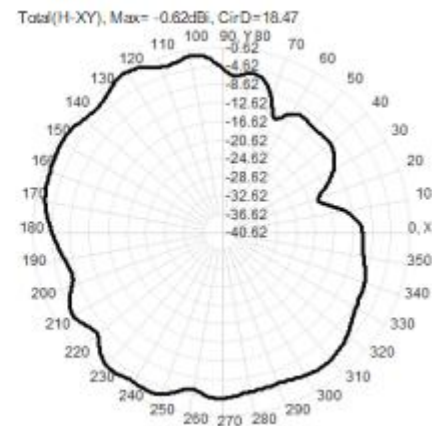
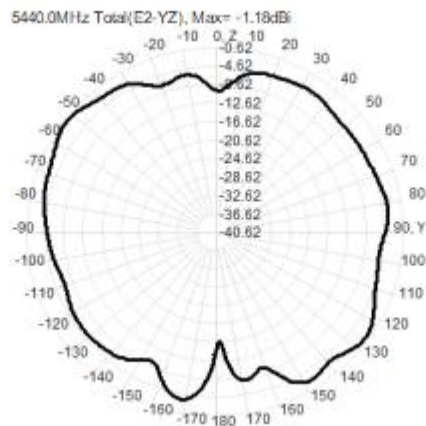
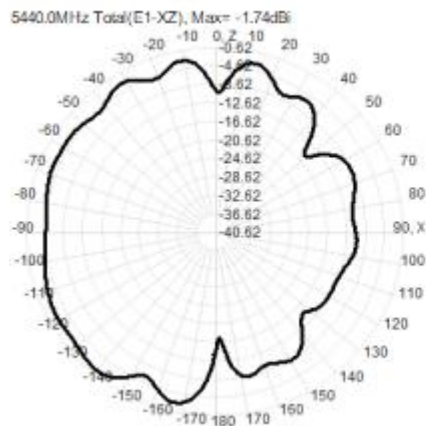
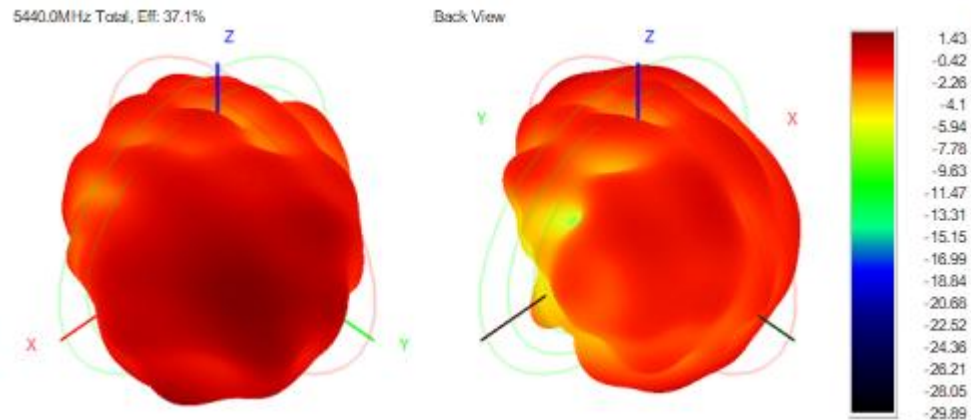
2450.0MHz Total(E2-YZ), Max= -2.51dBi



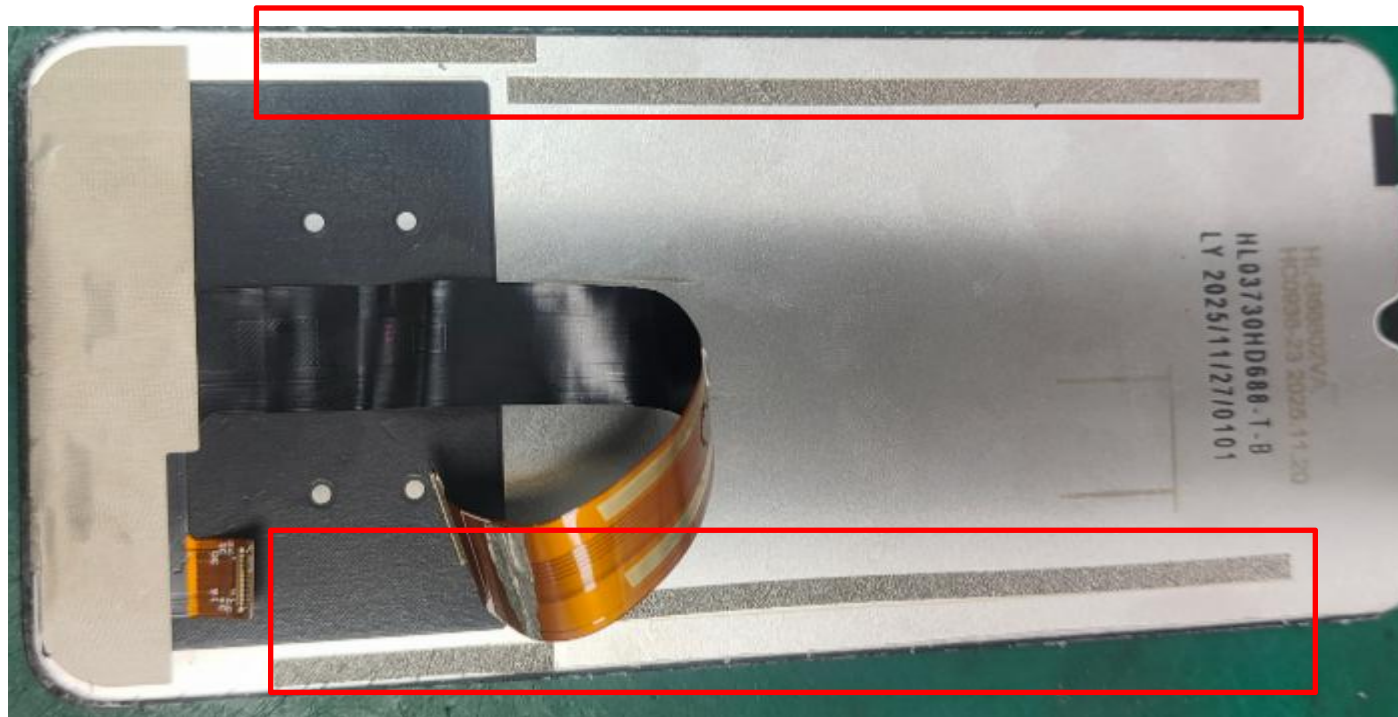
Total(H-XY), Max= 0.05dBi, CirD=13.78



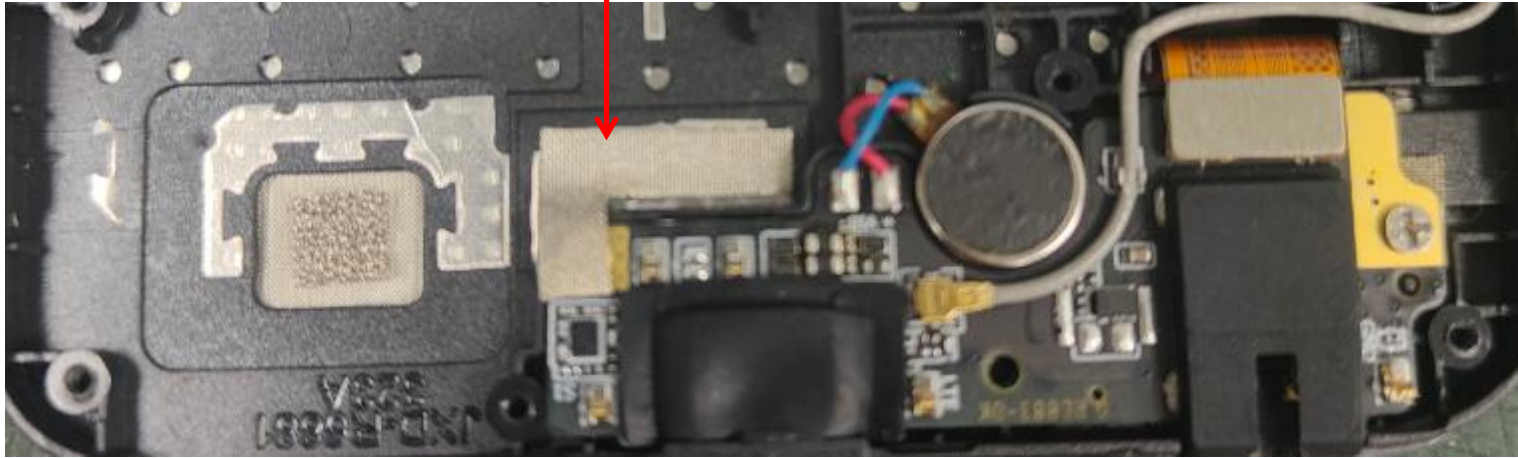
BT WIFI



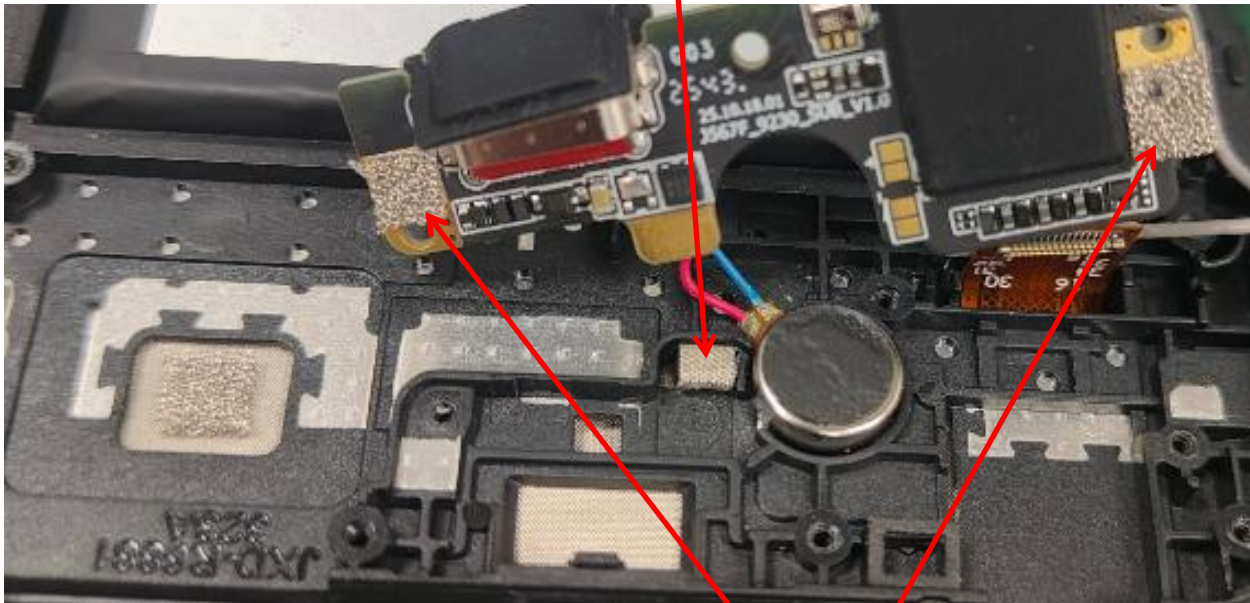
屏0.8mm厚的导电海绵。



增加一块L型导电布和小板充分接地。

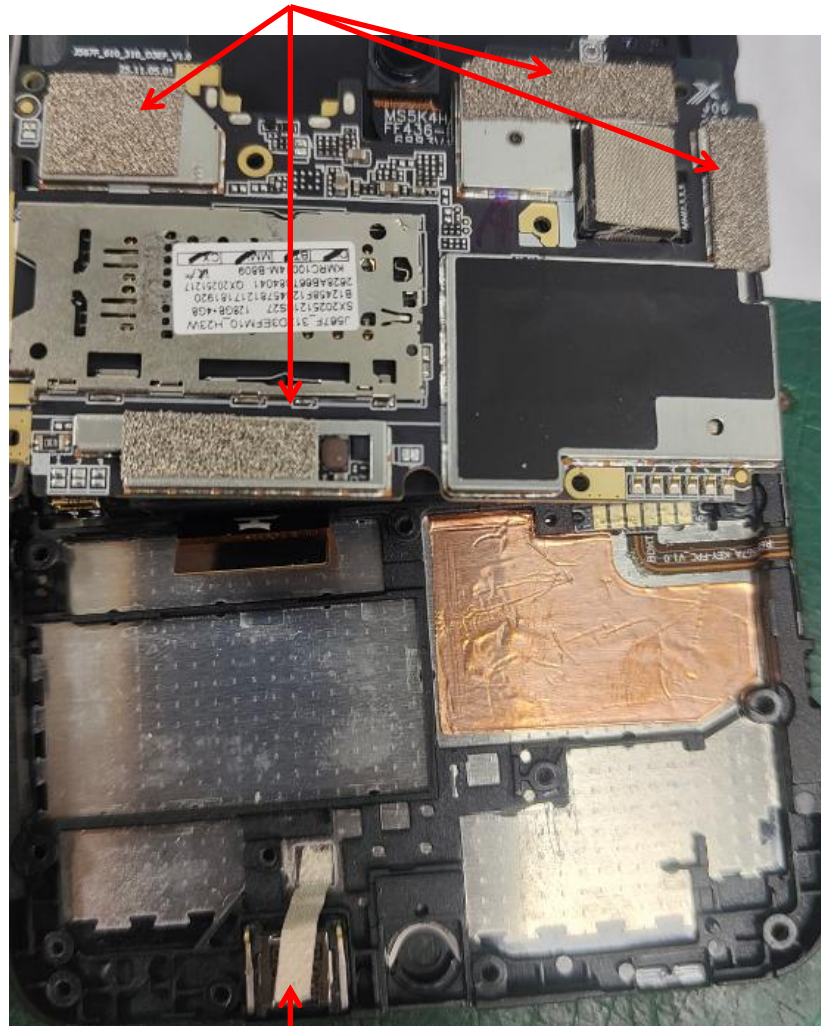


导电泡绵。



这里用厚一点的导电海棉和小板充分接地。

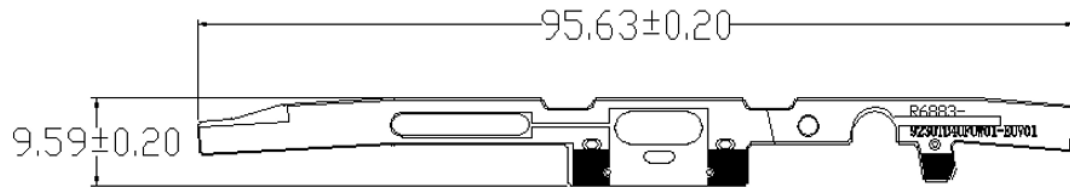
建议导电海绵加厚到1mm.



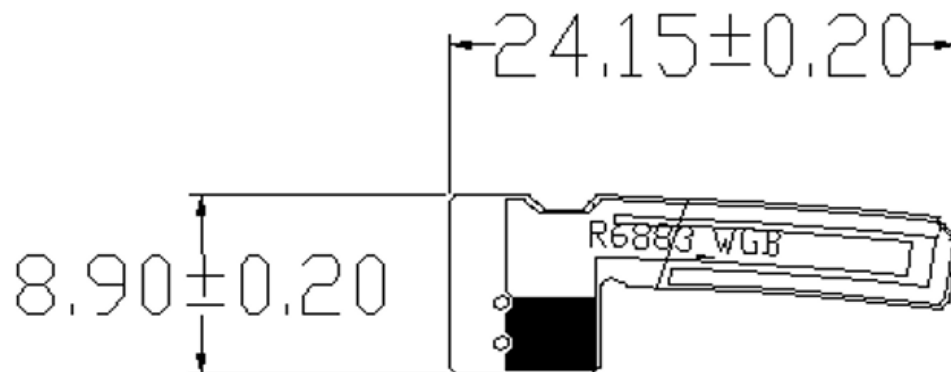
听筒接地。

Antenna Size Diagram

Main Antenna :



GPS/Wifi/BT Antenna :



Diversity Antenna :

