



天线调试报告

客户：九州
项目：R6506
结构：肖工-13316888409
射频：黄工-13682667404
日期：2026-1-29



报告类型:

版本号:

机器状态: 试产机

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

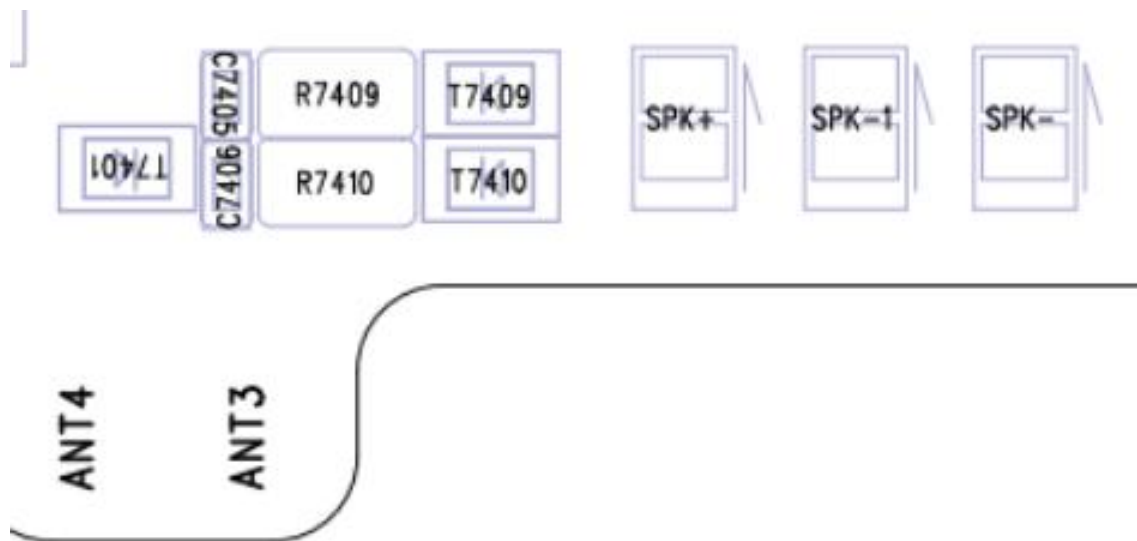
蓝牙

测试情况:

PCB小板（喇叭匹配）：

规格

Element	Value	PCB位号
E1 0603	村田磁珠： BLM182G221SNP	R7409
E2 0603		R7410
E3 0201	1NF	C7405
E4 0201		C7406



R6506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	6. 2nH	GSM:850 WCDMA:B5 LTE:B5/18/19/20/26
RF3	C7414	22nH	LTE:B12/17/28A/28B
RF4	C7413	27pF	GSM:900RX



PCB小板（主天线主路匹配）：

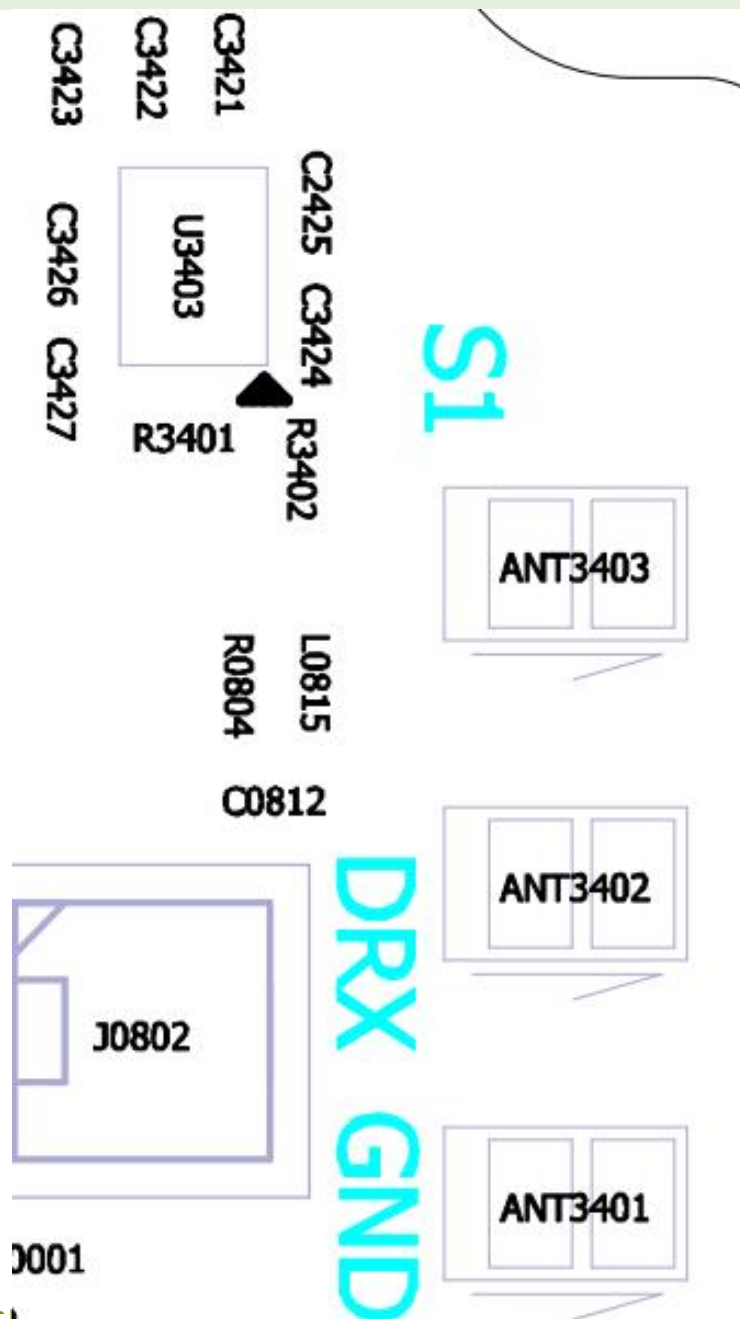
0201规格

Element	Value	PCB位号	Element	Value	PCB位号
E1	0R	R2409	E6	NC	R7413
E2	0R	R7411	E7	0 Ω	R7412
E3	NC	L7402	E8	0R	C7411
E4	18nH	L7401	E9	6. 2nH	C7412
E5	5. 6pF	R7400	E10	22nH	C7414
			E11	27pF	C7413



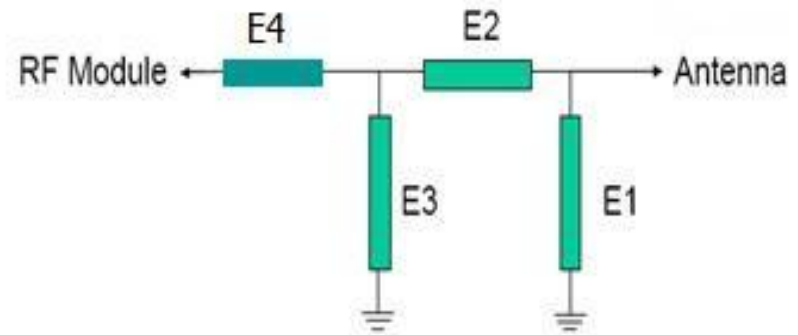
分集天线（主板）：

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

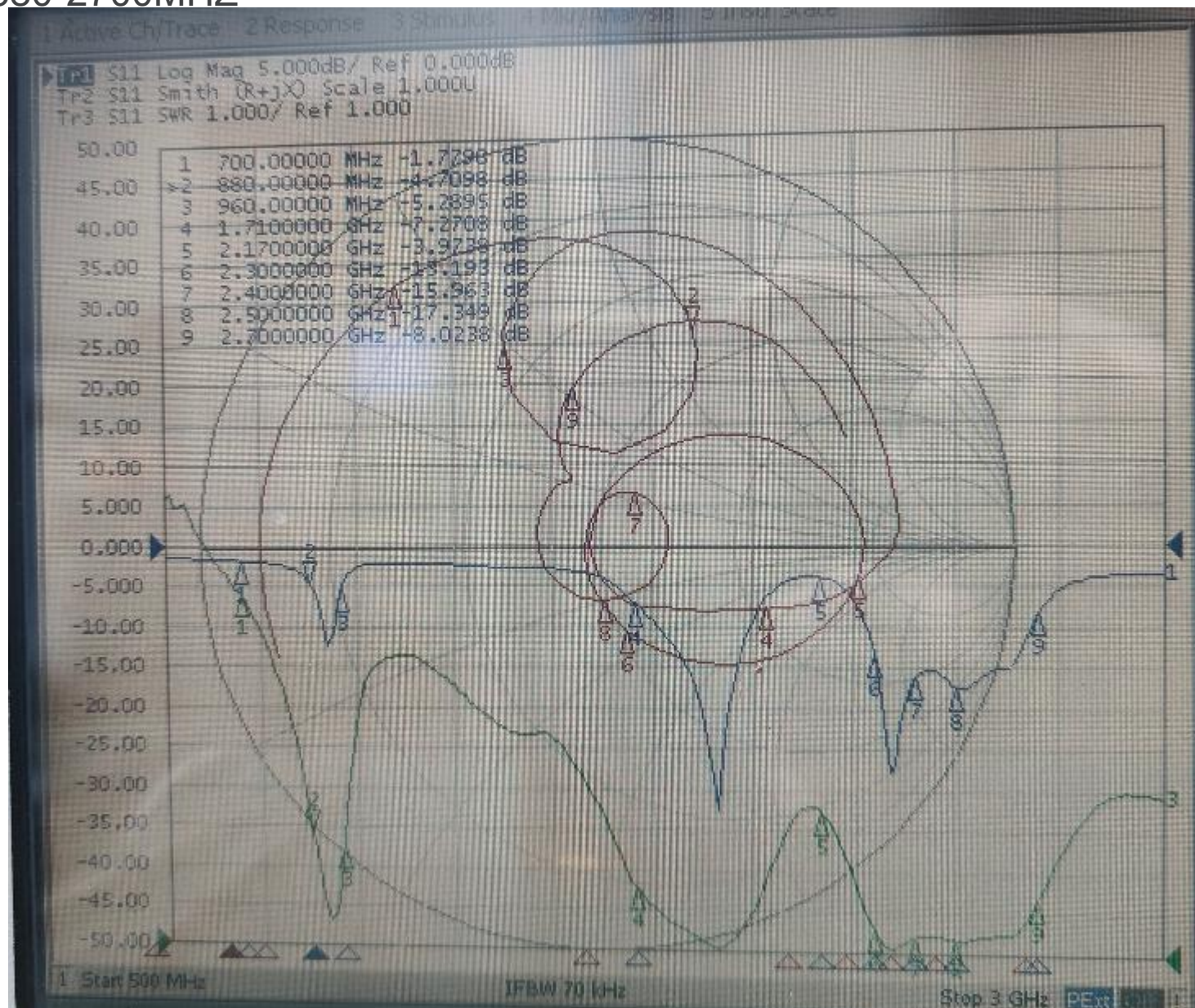


三合一天线（主板）：

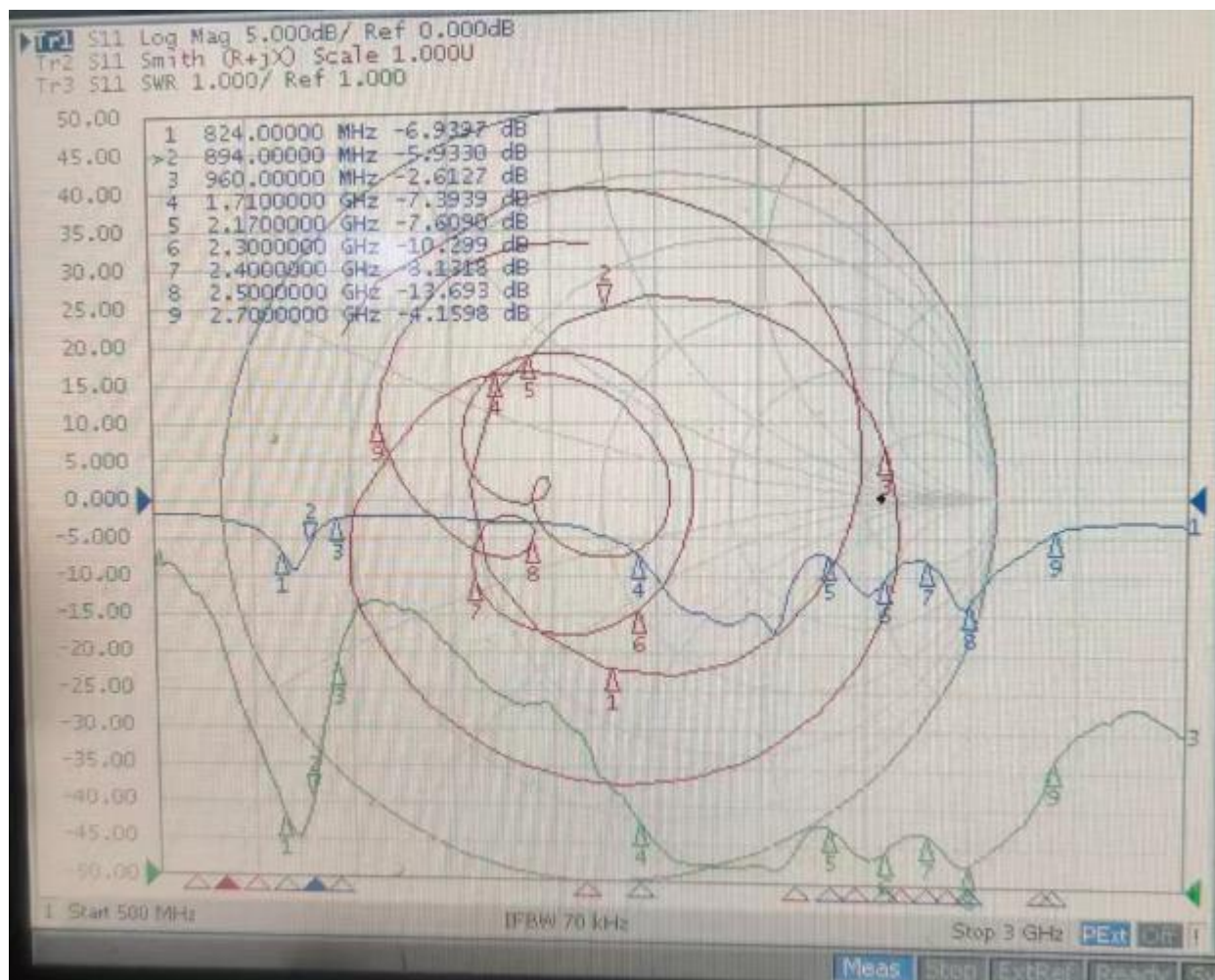
0201规格		
Element	Value	位号
E1	三合一匹配无更改	
E2		
E3		
E4		



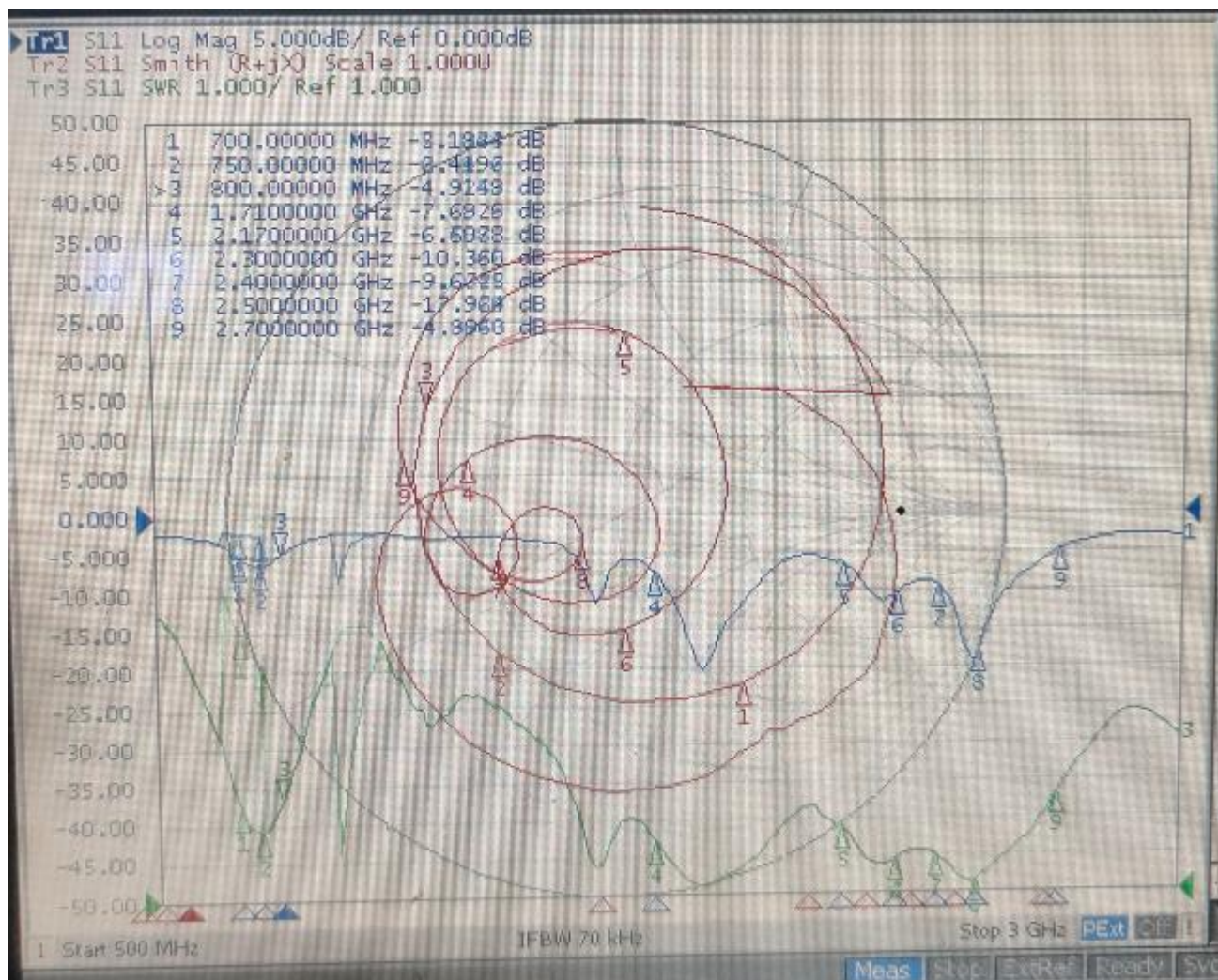
主天线880-2700MHz



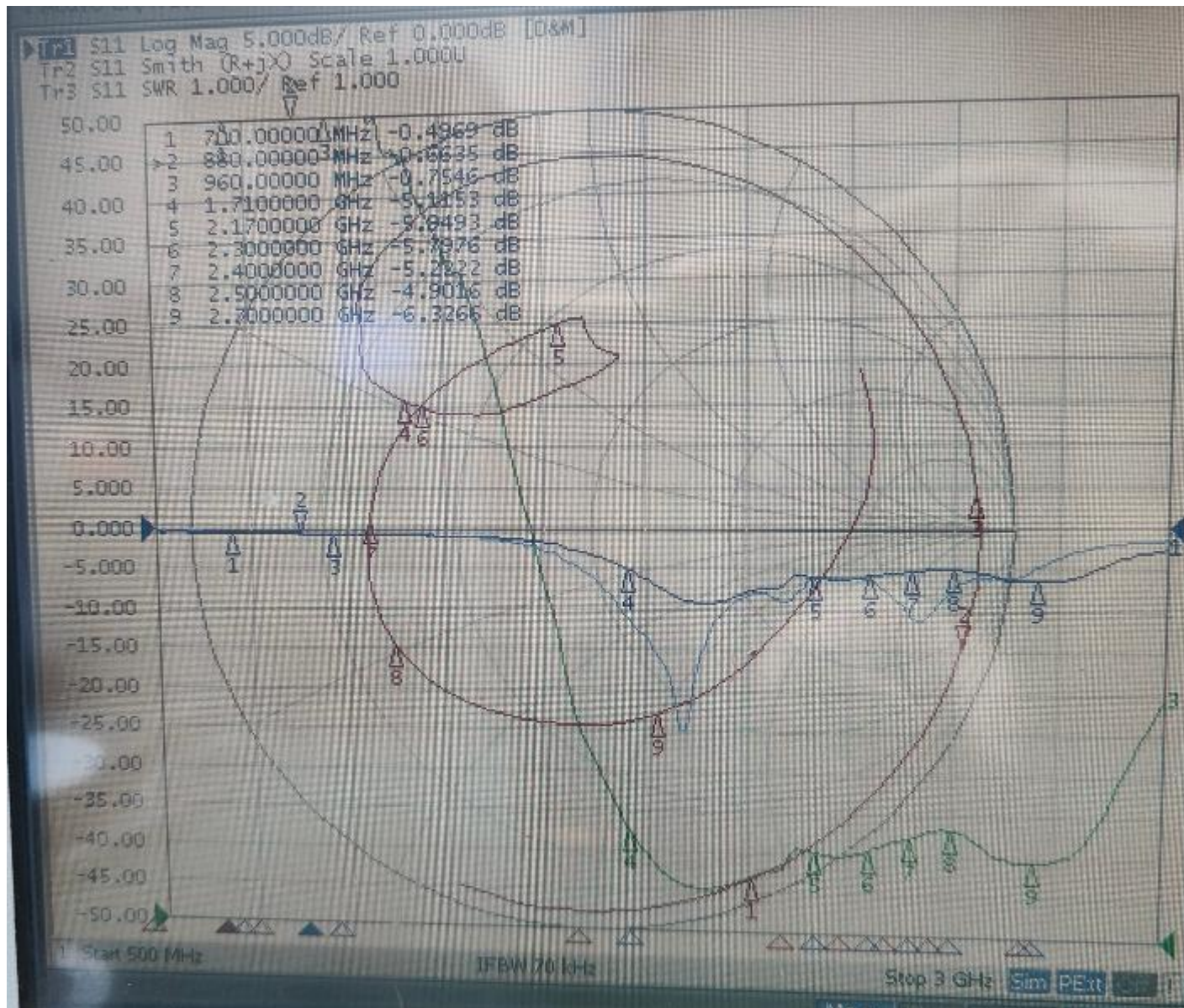
主天线820-900MHZ



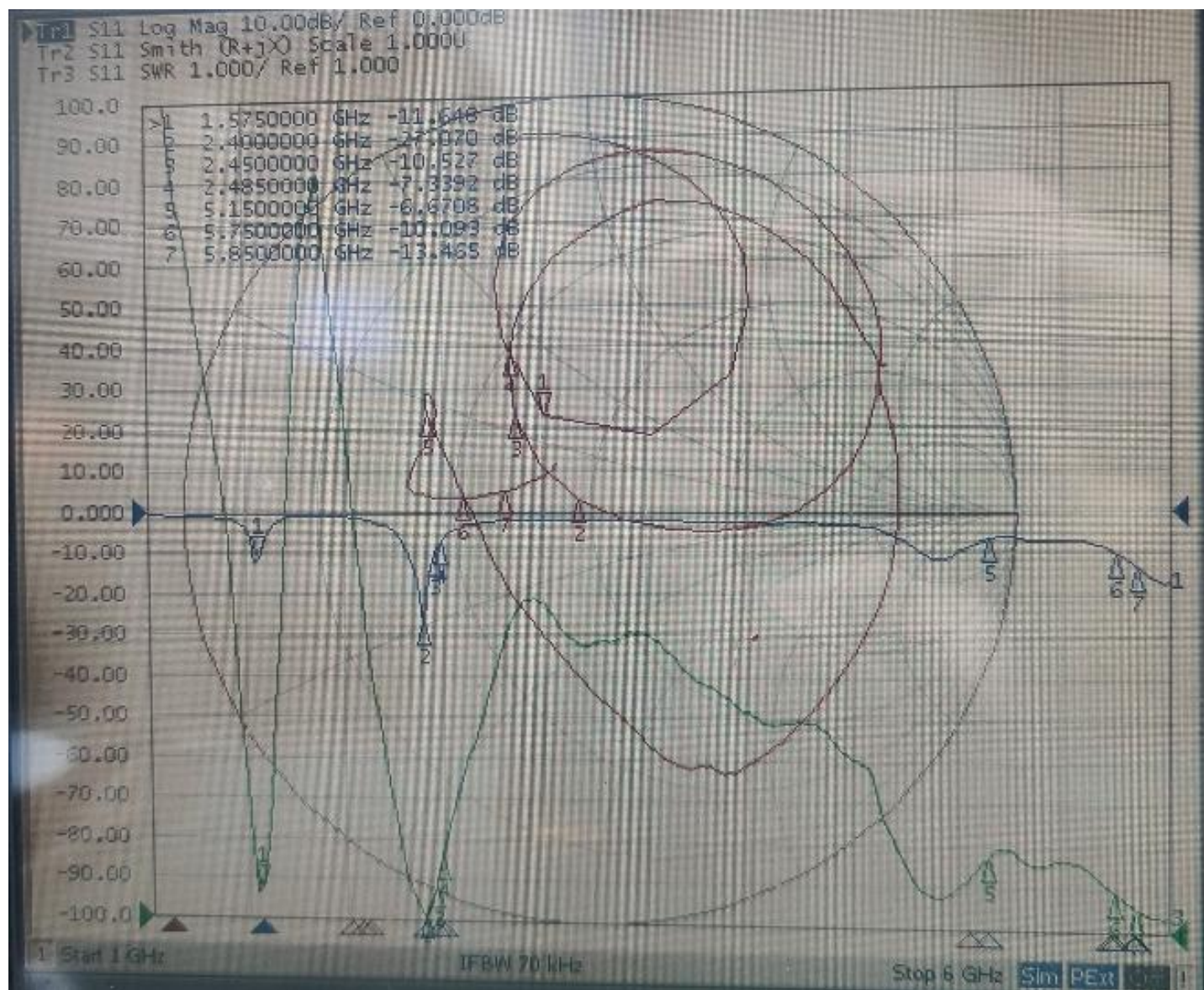
主天线700-800MHZ



分集天线



三合一天线



主天线

Frequency (MHz)	Gain (dBi)	Efficiency (%)
700.0	-0.98	20.53
710.0	0.41	22.56
720.0	-0.04	22.08
730.0	-0.54	24.34
740.0	-0.59	27.24
750.0	-0.16	24.83
760.0	-1.95	24.85
770.0	0.03	27.66
780.0	-0.85	19.61
790.0	-2.34	21.07
800.0	0.00	25.87

Frequency (MHz)	Gain (dBi)	Efficiency (%)
820.0	-0.12	29.57
830.0	-1.24	30.90
840.0	-1.13	28.41
850.0	0.20	32.46
860.0	-0.69	28.87
870.0	-0.90	28.06
880.0	-1.04	26.00

主天线

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
880.0	-4.39	11.09	2080.0	-0.84	16.03
890.0	-2.73	14.63	2100.0	-1.42	13.49
900.0	-3.07	14.59	2120.0	-2.01	13.62
910.0	-2.08	17.80	2140.0	-2.73	11.56
920.0	-0.70	25.58	2160.0	-2.51	11.67
930.0	-2.32	22.09	2180.0	-3.99	10.32
940.0	0.03	31.89	2200.0	-4.89	10.08
950.0	-0.97	27.28	2300.0	-3.69	15.47
960.0	-1.57	24.63	2320.0	-2.46	18.23
1700.0	-6.24	7.99	2340.0	-1.89	19.52
1720.0	-4.93	10.80	2360.0	-0.93	21.89
1740.0	-4.27	11.05	2380.0	-0.60	22.97
1760.0	-4.84	10.80	2400.0	-1.26	21.19
1780.0	-2.40	16.97	2420.0	-0.85	21.47
1800.0	-1.23	21.17	2440.0	-0.80	20.53
1820.0	-0.88	24.55	2460.0	-0.66	20.09
1840.0	1.26	34.40	2480.0	1.29	23.86
1860.0	1.63	35.70	2500.0	2.10	25.19
1880.0	0.52	31.11	2520.0	0.74	23.43
1900.0	1.23	35.54	2540.0	0.41	25.26
1920.0	0.84	30.35	2560.0	-0.01	25.61
1940.0	-0.24	24.77	2580.0	-0.60	23.99
1960.0	0.88	30.44	2600.0	0.96	29.29
1980.0	-0.03	23.80	2620.0	1.30	29.28
2000.0	-1.32	17.46	2640.0	-0.21	24.97
2020.0	-0.48	20.36	2660.0	-0.73	24.63
2040.0	-1.09	16.99	2680.0	-1.19	21.41
2060.0	-2.01	13.28	2700.0	-2.23	17.69

分集天线

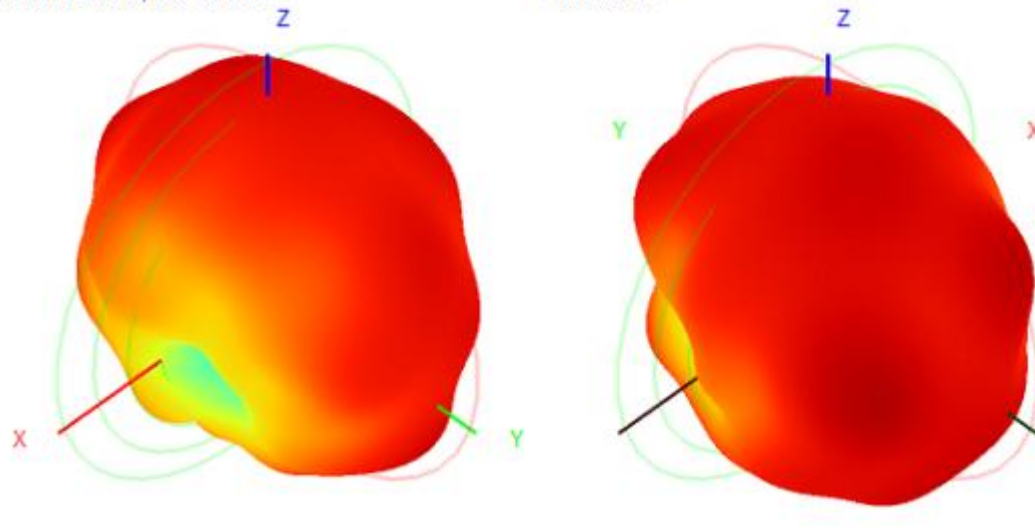
Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
1700.0	-5.76	8.18	2200.0	0.85	34.55
1720.0	-6.85	6.27	2220.0	0.14	32.32
1740.0	-6.75	5.95	2240.0	0.29	32.38
1760.0	-4.74	9.34	2260.0	1.07	33.74
1780.0	-2.77	13.35	2280.0	0.80	31.40
1800.0	-2.03	15.04	2300.0	0.99	30.85
1820.0	-1.08	19.95	2320.0	0.69	30.45
1840.0	0.87	28.08	2340.0	0.39	28.23
1860.0	1.01	27.91	2360.0	1.42	30.55
1880.0	0.16	26.35	2380.0	2.10	31.99
1900.0	0.77	30.71	2400.0	1.52	28.86
1920.0	0.31	26.83	2420.0	1.95	30.63
1940.0	-0.17	24.63	2440.0	1.56	29.37
1960.0	1.47	32.75	2460.0	1.12	27.91
1980.0	0.91	28.97	2480.0	2.75	32.98
2000.0	-0.22	25.64	2500.0	2.89	32.79
2020.0	0.71	32.43	2520.0	1.39	29.36
2040.0	0.67	30.37	2540.0	1.82	31.83
2060.0	0.14	26.16	2560.0	2.01	30.89
2080.0	1.07	31.86	2580.0	0.96	27.29
2100.0	0.58	27.73	2600.0	1.87	32.79
2120.0	0.14	26.05	2620.0	1.37	31.58
2140.0	1.27	33.25	2640.0	0.10	25.35
2160.0	0.95	33.64	2660.0	1.01	26.25
2180.0	0.57	32.72	2680.0	0.49	25.68
			2700.0	0.29	24.60

三合一天线

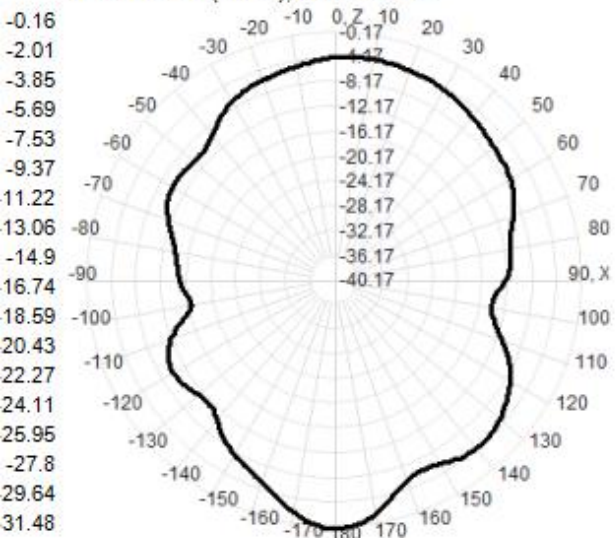
Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
1570.0	-0.12	29.43	2400.0	5.05	40.33	5100.0	-1.69	31.80	5500.0	-1.35	32.25
1571.0	-0.40	27.99	2410.0	6.42	49.34	5120.0	-2.01	29.48	5520.0	-1.21	31.98
1572.0	-0.68	26.74	2420.0	5.44	42.64	5140.0	-1.98	30.71	5540.0	-0.91	34.06
1573.0	-0.95	25.70	2430.0	5.45	42.61	5160.0	-1.89	30.43	5560.0	-0.80	33.34
1574.0	-1.20	24.84	2440.0	5.15	40.17	5180.0	-1.81	29.68	5580.0	-0.38	34.92
1575.0	-1.41	24.18	2450.0	6.60	47.90	5200.0	-1.86	27.72	5600.0	-0.49	32.59
1576.0	-1.45	23.95	2460.0	4.76	37.07	5220.0	-2.21	26.60	5620.0	-0.61	32.68
1577.0	-1.47	23.85	2470.0	6.37	44.08	5240.0	-2.41	24.21	5640.0	-0.54	33.27
1578.0	-1.46	23.84	2480.0	6.28	44.13	5260.0	-2.74	23.63	5660.0	-0.52	34.51
1579.0	-1.42	23.89	2490.0	5.02	38.04	5280.0	-2.31	24.47	5680.0	-0.28	36.46
1580.0	-1.36	23.94	2500.0	6.09	42.44	5300.0	-2.20	26.24	5700.0	-0.19	39.44
深圳市信必诺通讯						5320.0	-2.36	25.04	5720.0	-0.30	36.35
						5340.0	-2.25	26.36	5740.0	-0.26	37.73
						5360.0	-2.06	27.32	5760.0	-0.25	33.92
						5380.0	-2.07	27.39	5780.0	-0.33	33.25
						5400.0	-2.20	27.20	5800.0	-0.30	35.59
						5420.0	-1.52	31.41	5820.0	0.05	39.58
						5440.0	-1.53	31.80	5840.0	0.64	40.22
						5460.0	-1.57	32.54	5860.0	0.82	44.94
						5480.0	-1.33	33.29	5880.0	0.64	41.81
									5900.0	0.60	40.66

750.0MHz Total, Eff: 24.8%

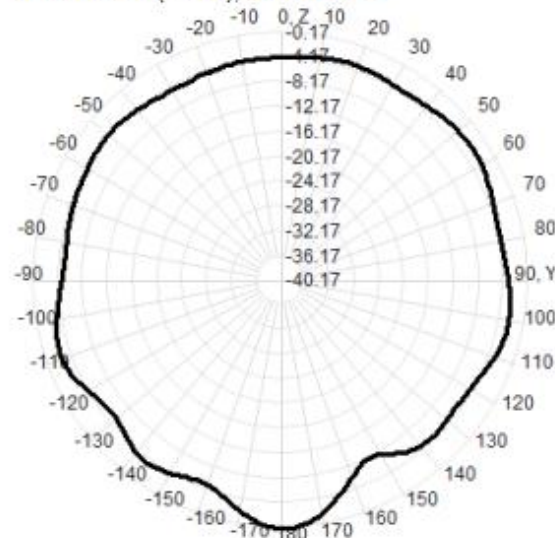
Back View



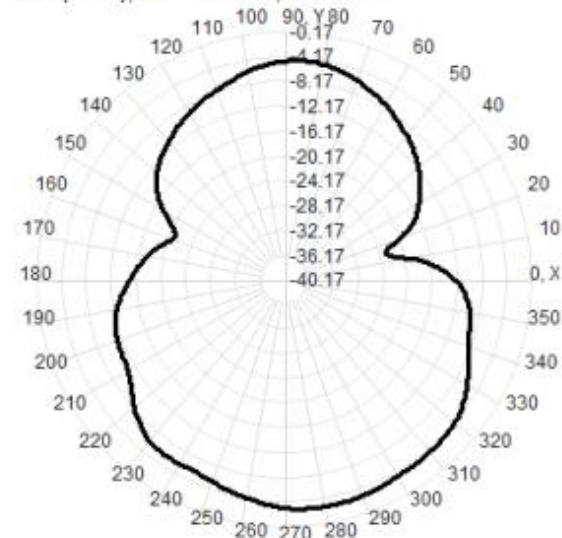
750.0MHz Total(E1-XZ), Max=-0.19dBi



750.0MHz Total(E2-YZ), Max=-0.17dBi

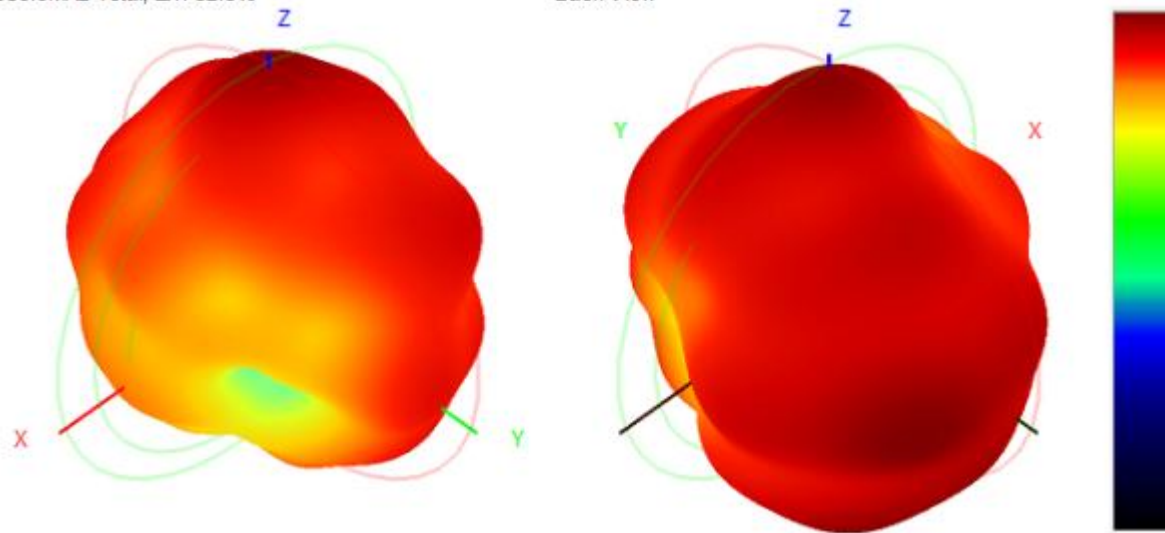


Total(H-XY), Max=-3.14dBi, CirD=20.32

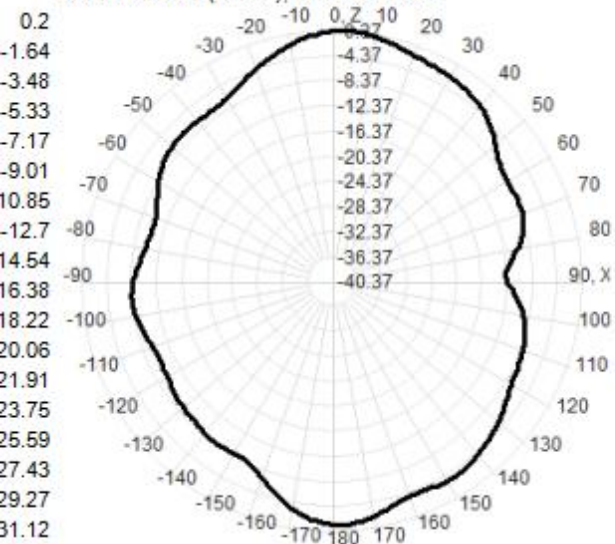


850.0MHz Total, Eff: 32.5%

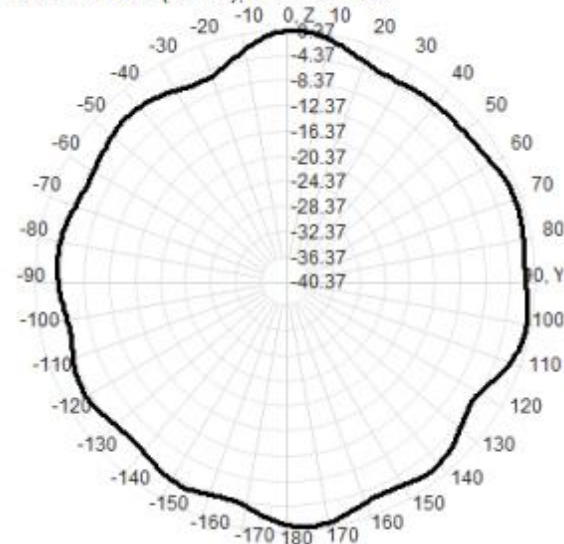
Back View



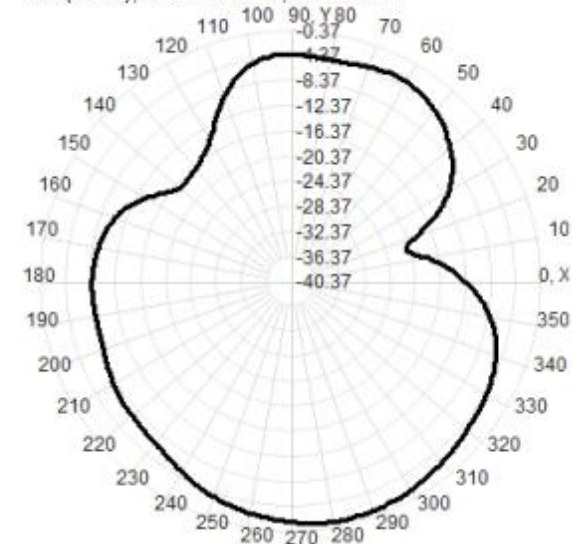
850.0MHz Total(E1-XZ), Max= -0.37dBi



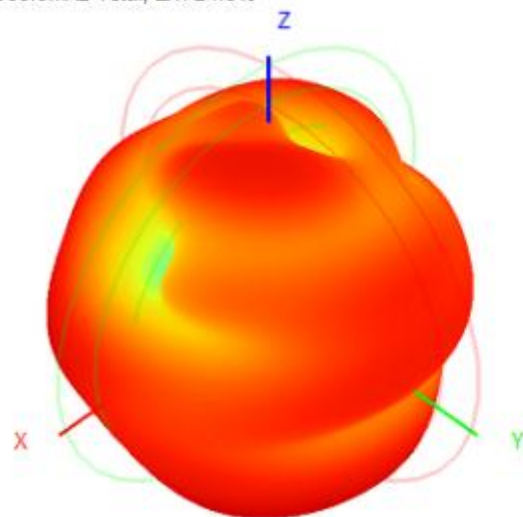
850.0MHz Total(E2-YZ), Max= -0.37dBi



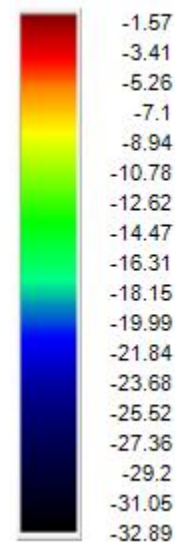
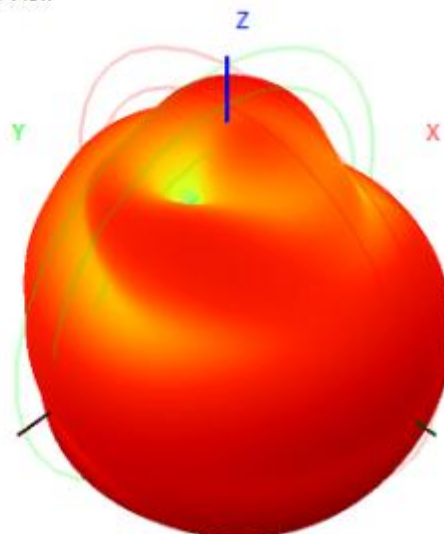
Total(H-XY), Max= -1.58dBi, CirD=19.73



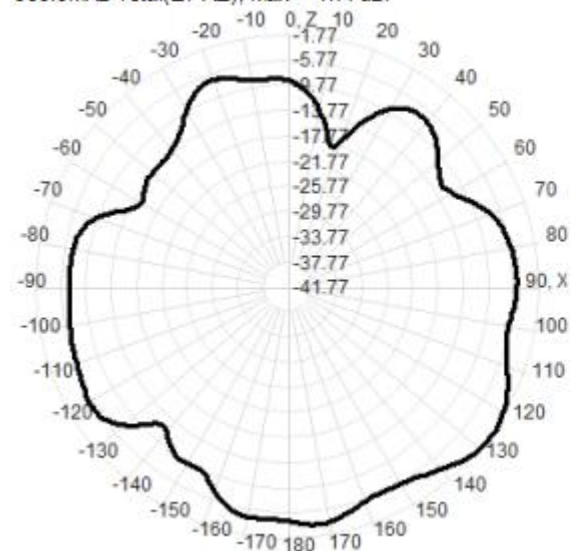
960.0MHz Total, Eff: 24.6%



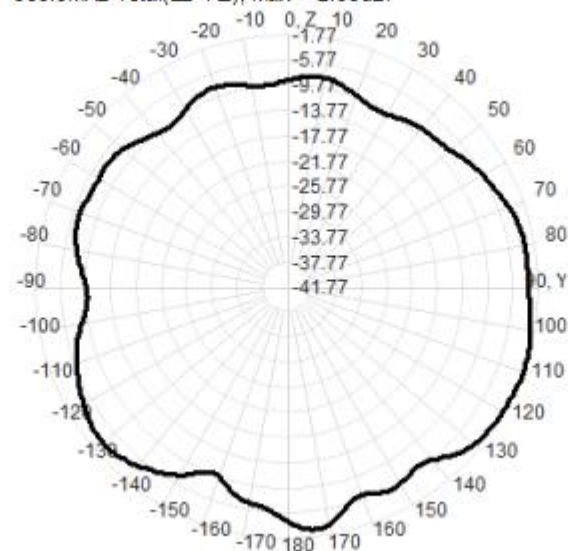
Back View



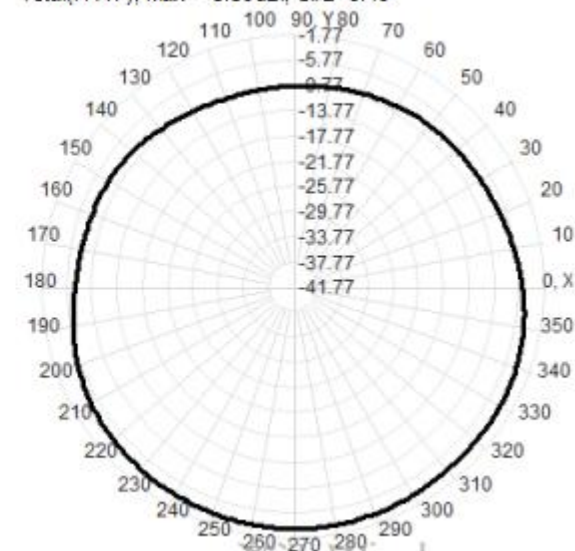
960.0MHz Total(E1-XZ), Max= -1.77dBi



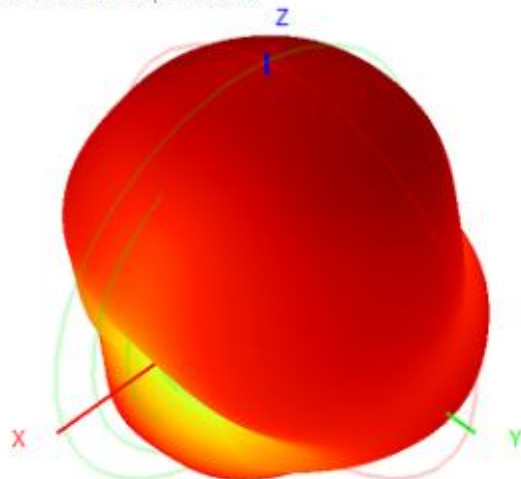
960.0MHz Total(E2-YZ), Max= -2.06dBi



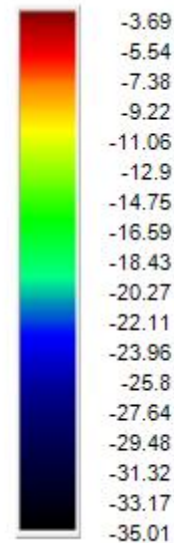
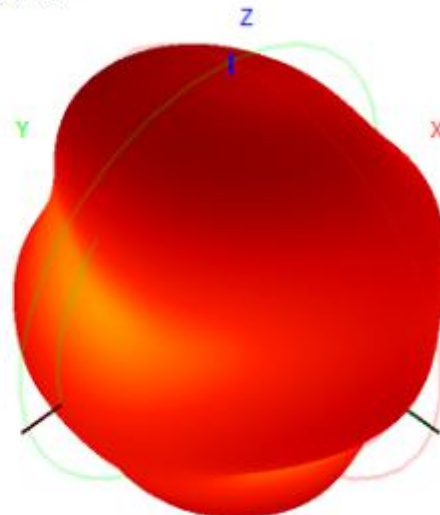
Total(H-XY), Max= -3.58dBi, CirD=6.49



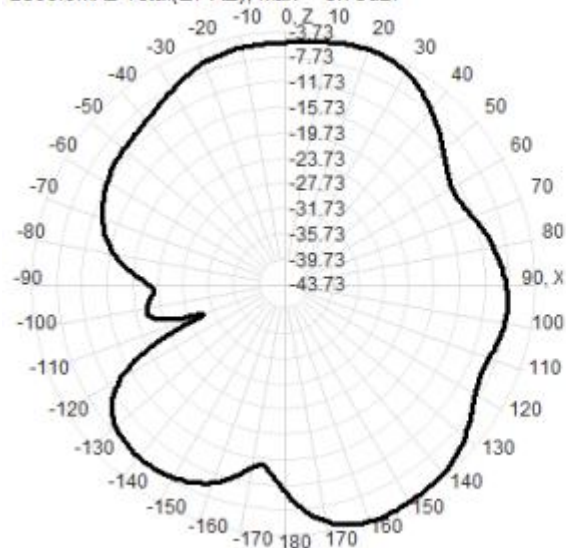
2300.0MHz Total, Eff: 15.5%



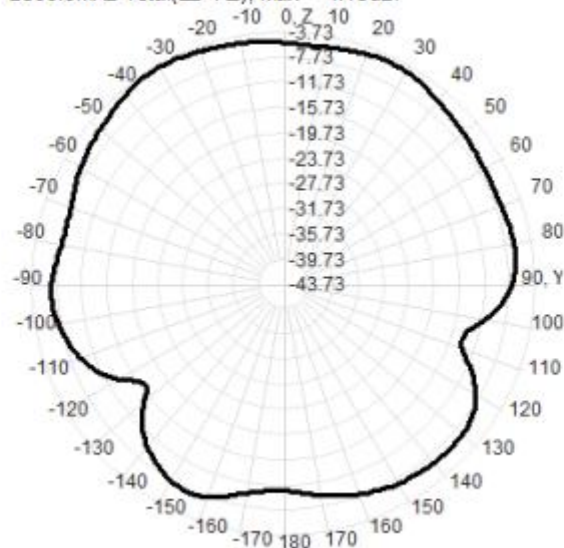
Back View



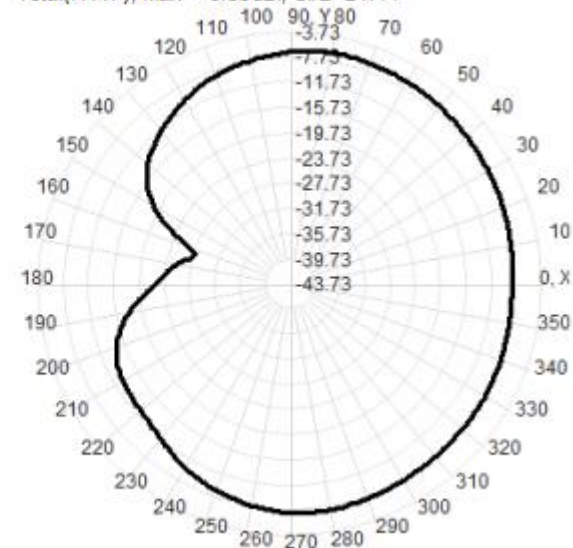
2300.0MHz Total(E1-XZ), Max= -3.73dBi



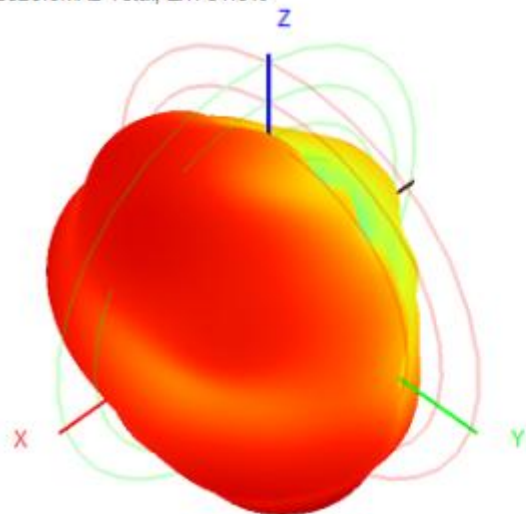
2300.0MHz Total(E2-YZ), Max= -4.15dBi



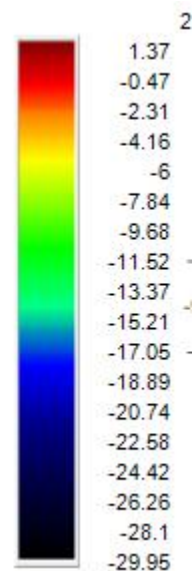
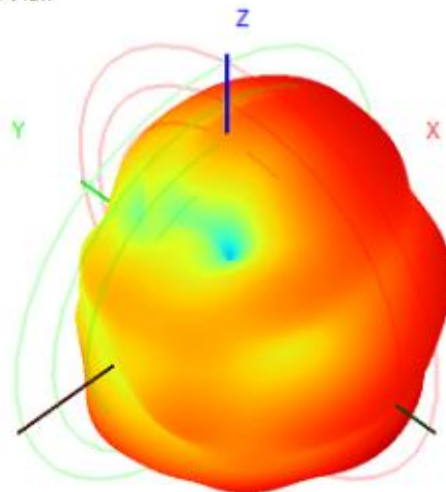
Total(H-XY), Max= -6.50dBi, CirD=21.44



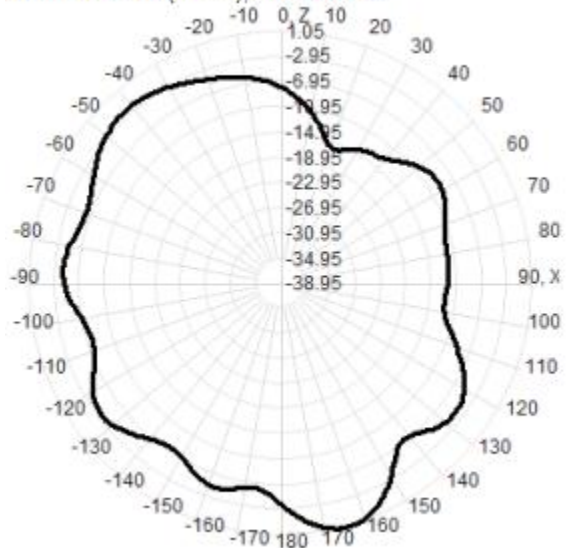
2620.0MHz Total, Eff: 31.6%



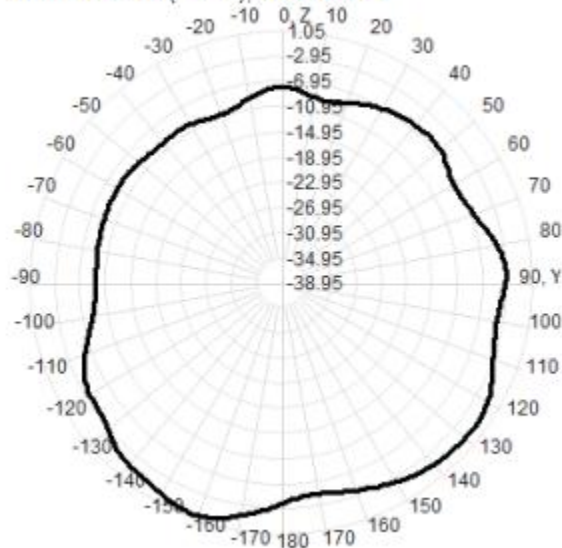
Back View



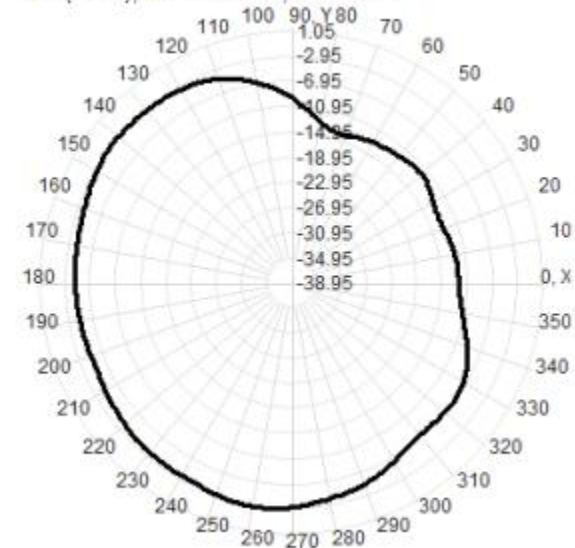
2620.0MHz Total(E1-XZ), Max= 1.05dBi



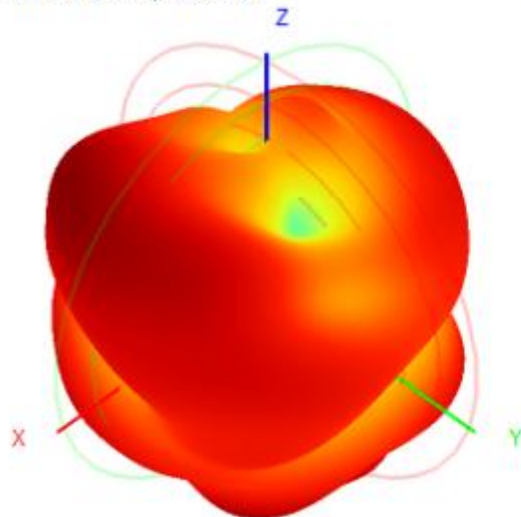
2620.0MHz Total(E2-YZ), Max= 0.18dBi



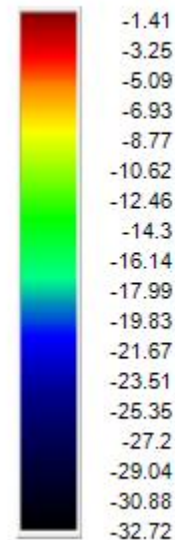
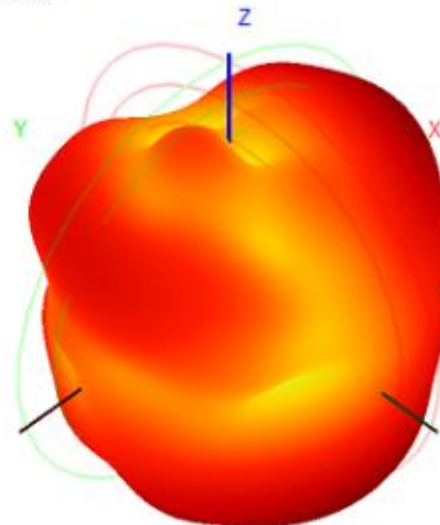
Total(H-XY), Max= -3.02dBi, CirD=11.09



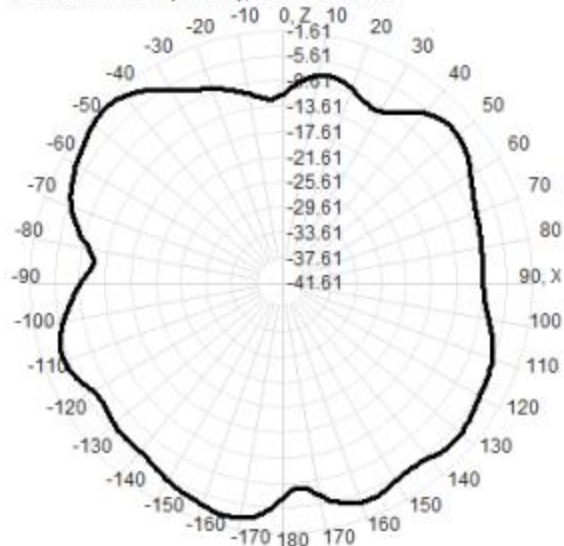
1575.0MHz Total, Eff: 24.2%



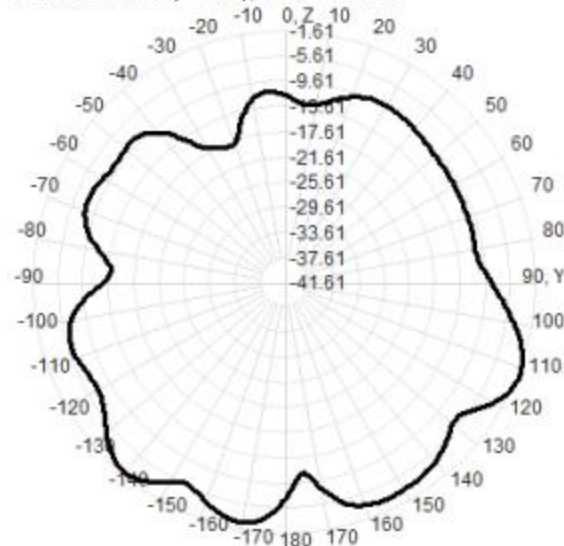
Back View



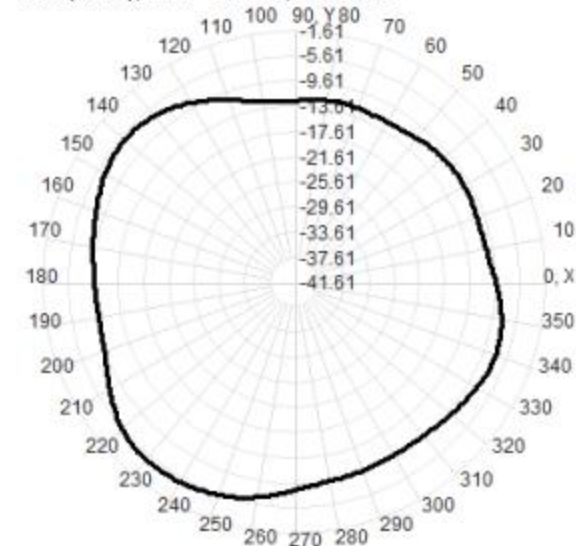
1575.0MHz Total(E1-XZ), Max=-2.31dBi



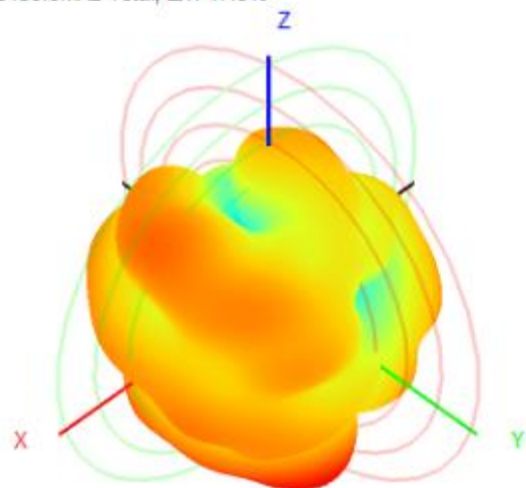
1575.0MHz Total(E2-YZ), Max=-1.61dBi



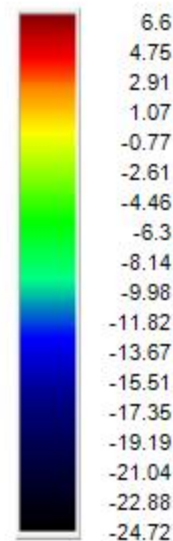
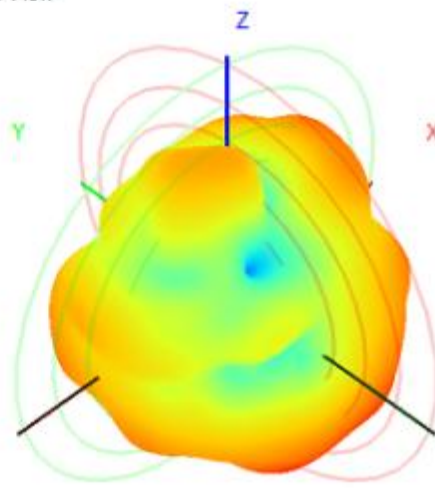
Total(H-XY), Max=-5.01dBi, CirD=7.78



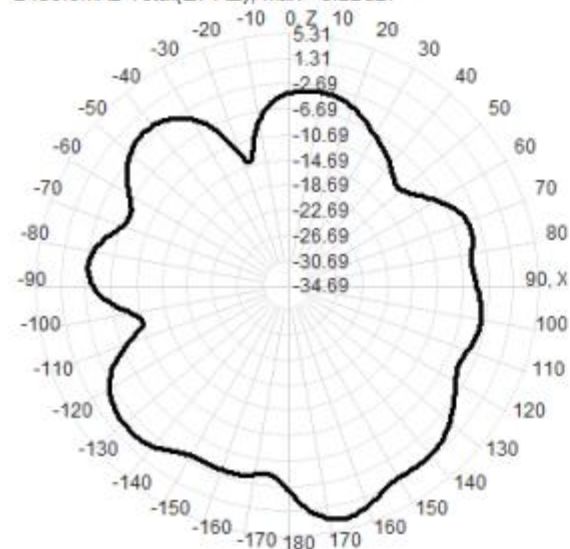
2450.0MHz Total, Eff: 47.9%



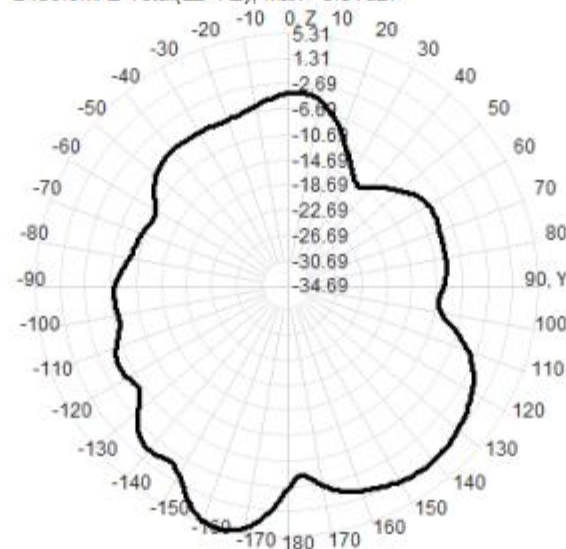
Back View



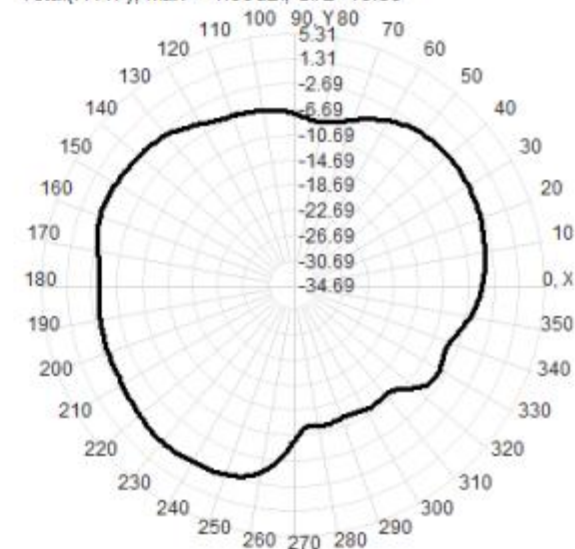
2450.0MHz Total(E1-XZ), Max= 3.22dBi



2450.0MHz Total(E2-YZ), Max= 5.31dBi

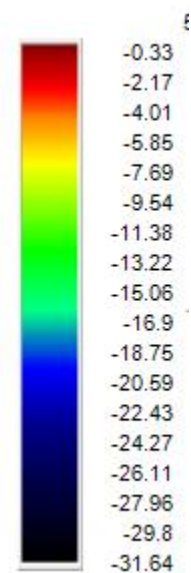
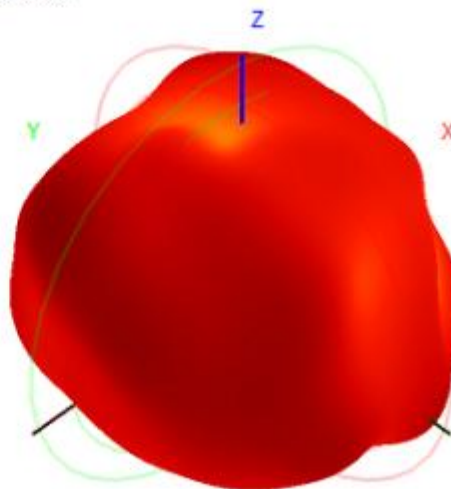
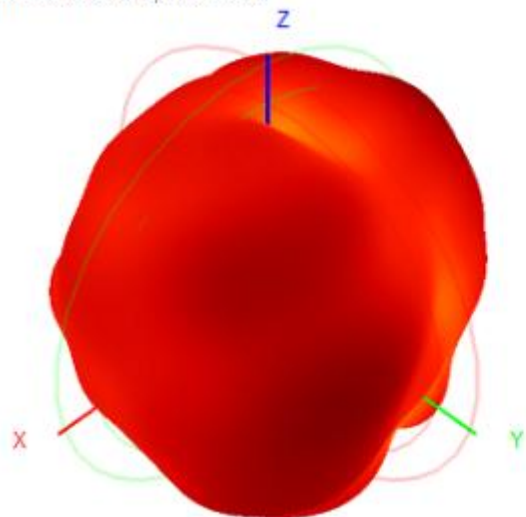


Total(H-XY), Max= -1.98dBi, CirD=10.50

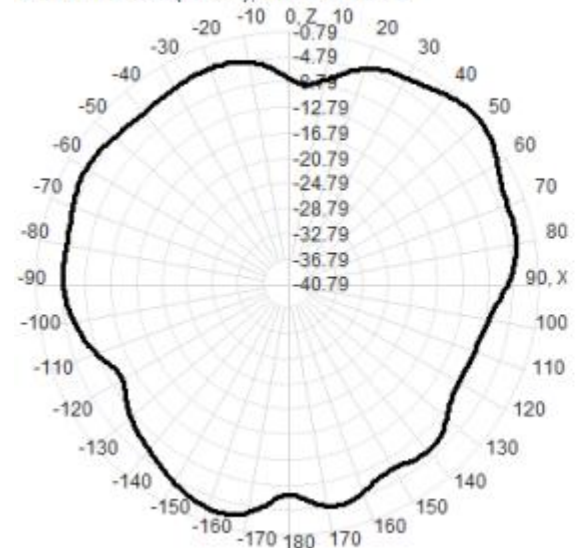


5780.0MHz Total, Eff: 33.3%

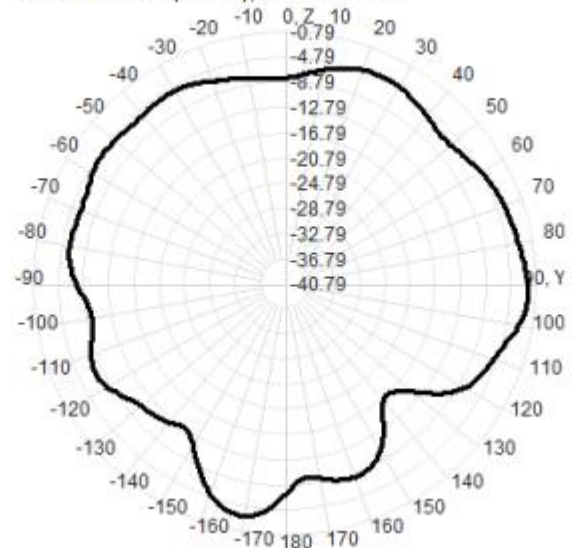
Back View



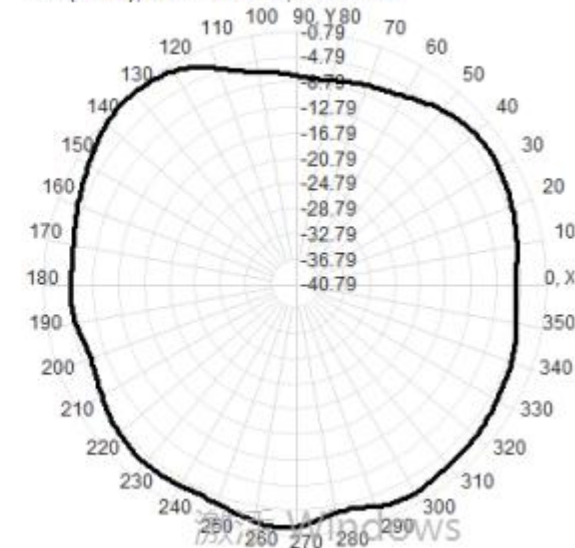
5780.0MHz Total(E1-XZ), Max=-0.79dBi



5780.0MHz Total(E2-YZ), Max=-2.31dBi



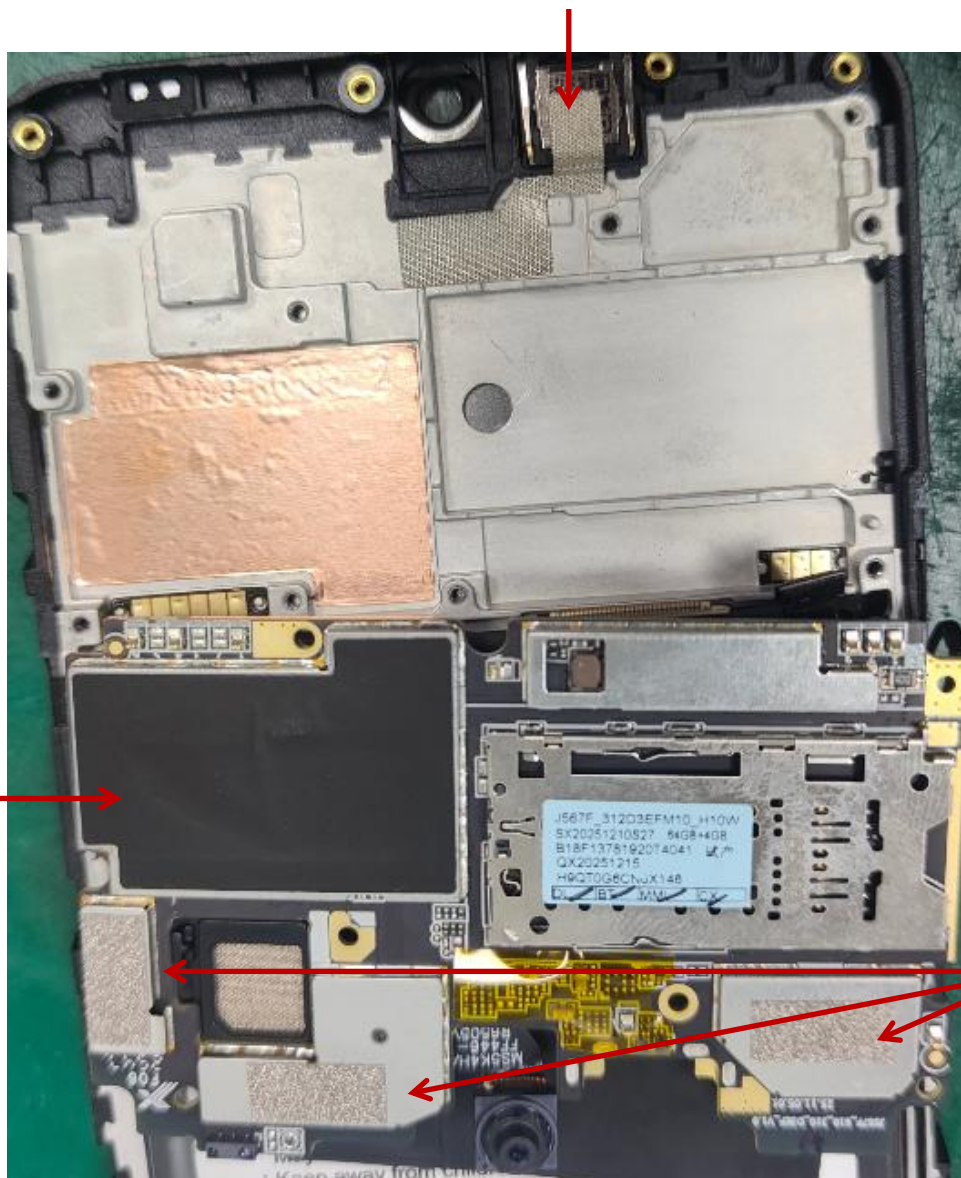
Total(H-XY), Max=-1.18dBi, CirD=6.94



屏按原有的环境处理不变。



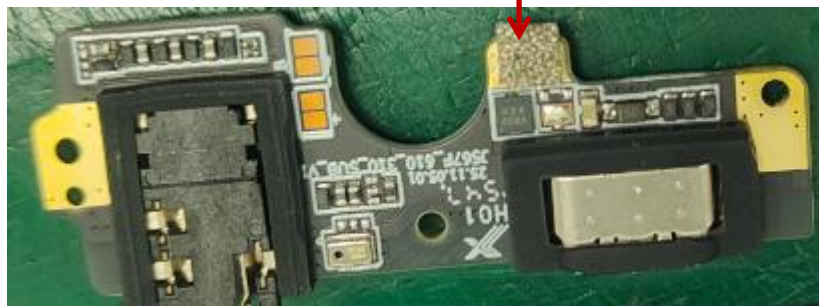
听筒贴导电布与金属中框接地。



这一块屏蔽盖贴
导石墨烯，提升
2.4G WIFI TIS。

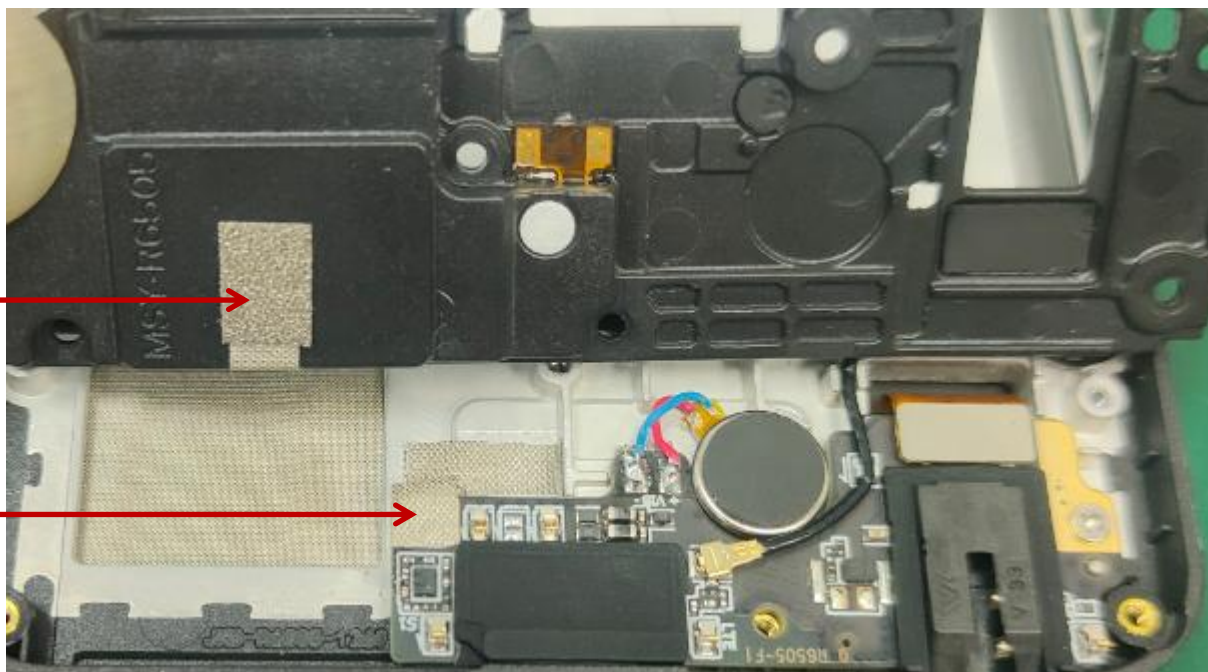
增加导电海绵高度到1mm.充分接地。

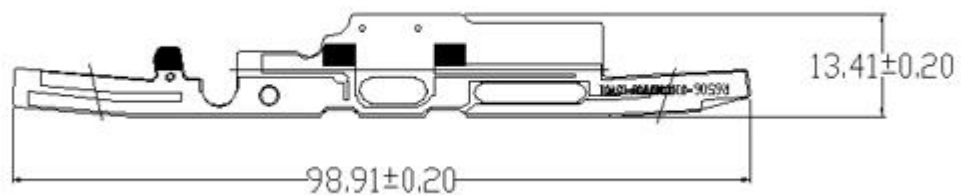
导电海绵要加厚到1mm。



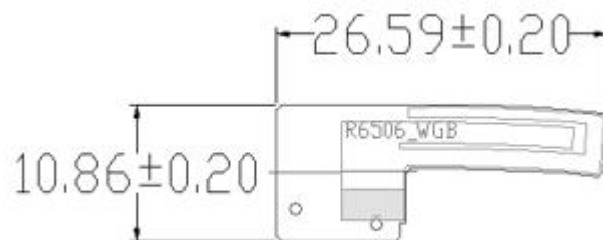
喇叭贴导电海绵接地。

这里增加一块导电布与中框充分接地。





主天线



三合一天线



分集天线